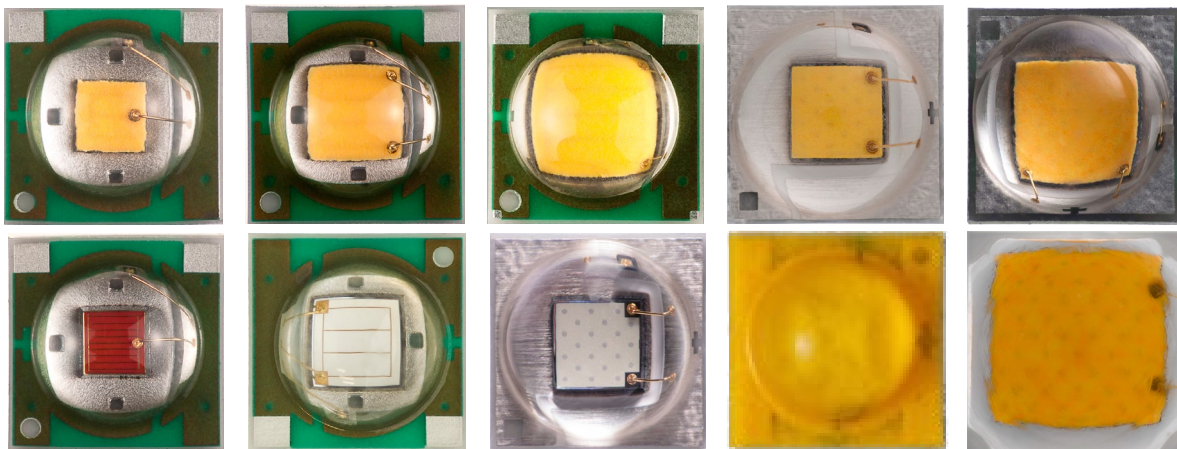


## Cree® XLamp® XP Family LEDs



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## INTRODUCTION

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This document describes the product nomenclature required to select and order Cree's XLamp® XP Family LEDs. XLamp XP Family LEDs are tested and sorted into bins which are then combined into orderable kits identified by an order code.

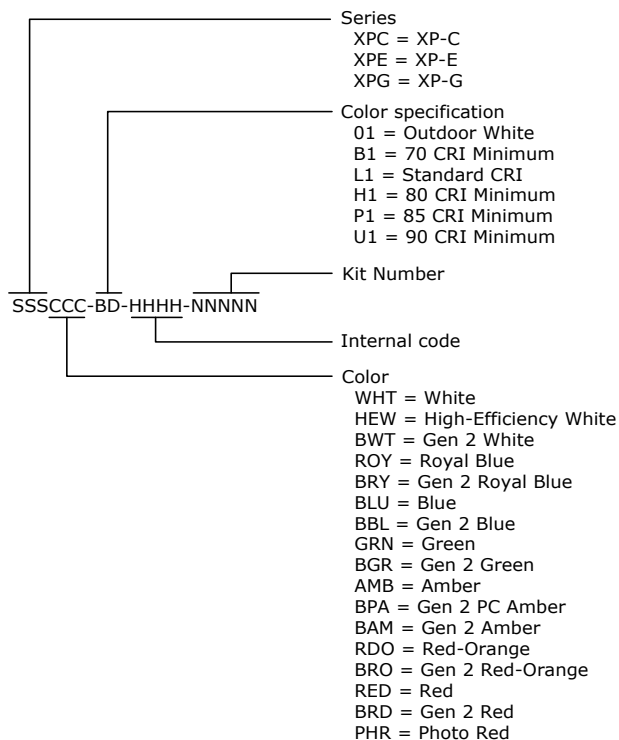
All XLamp LEDs are tested and sorted by color and brightness into a unique bin. Each bin contains LEDs from only one color and brightness group and is uniquely identified by a bin code. White XLamp LEDs are sorted by chromaticity (color) and luminous flux (brightness). High-Efficiency White (HEW) XLamp LEDs are additionally binned into forward voltage bins. Color XLamp LEDs are sorted by dominant or peak wavelength (color) and luminous or radiant flux (brightness). Amber, red-orange and red LEDs are additionally binned into forward voltage bins. LEDs are shipped on reels containing LEDs from one bin and are always labeled with the appropriate bin code.

Kits contain LEDs from a number of similar bins and are fully defined by their order codes. A full explanation of the order codes for XLamp XP Family LEDs, as well as a list of standard order codes, is provided in this document.

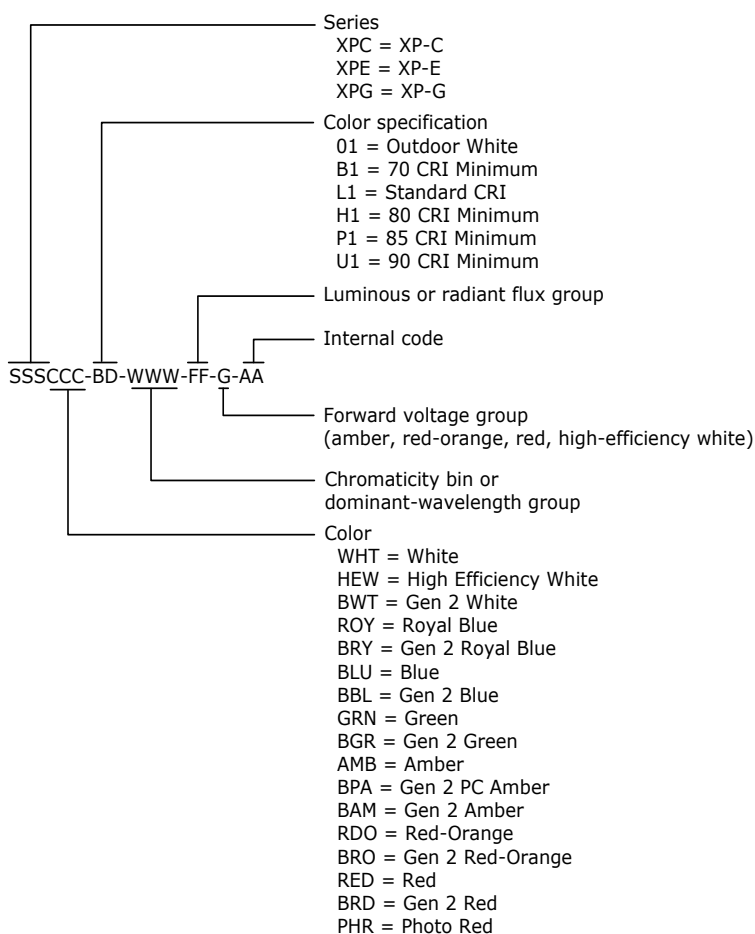
## BIN AND ORDER CODE FORMAT

XP-C, XP-E, XP-E2, XP-E HEW, XP-G and XP-G2 bin codes and order codes are configured in the following manner:

### Order Code



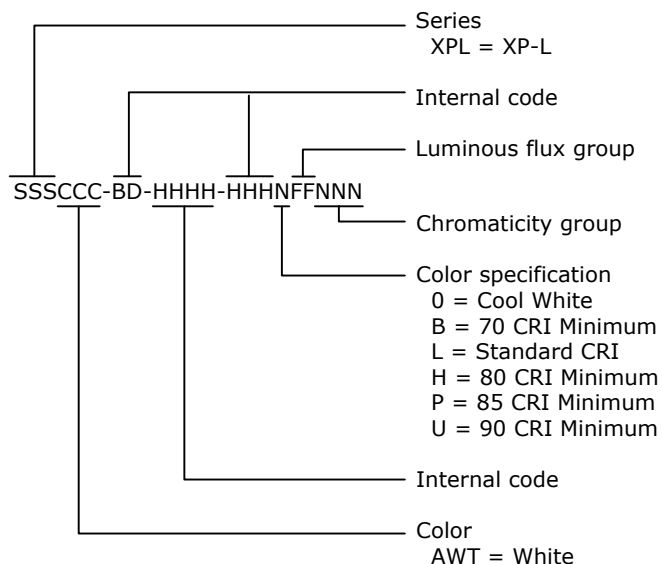
### Bin Code



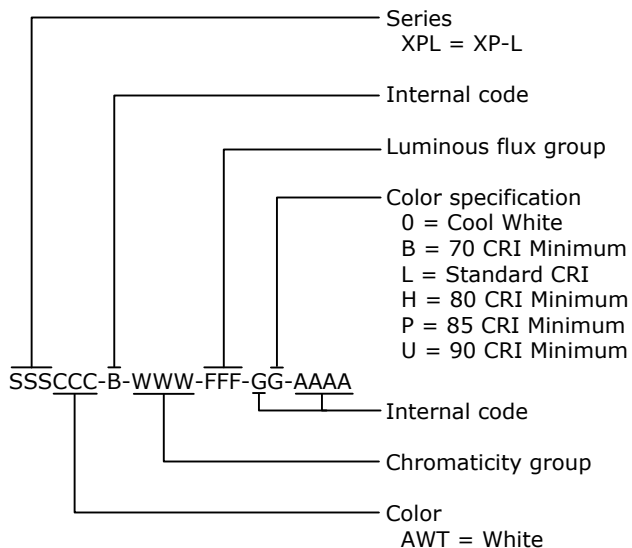
## BIN AND ORDER CODE FORMAT - CONTINUED

XP-L bin codes and order codes are configured in the following manner:

### Order Code



### Bin Code



## PERFORMANCE GROUPS – BRIGHTNESS

XLamp XP Family LEDs (except royal blue, photo red and XP-L) are tested for luminous flux and placed into one of the following luminous-flux groups:

| Group Code | Min. Luminous Flux<br>@ 350 mA (lm) | Max. Luminous Flux<br>@ 350 mA (lm) |
|------------|-------------------------------------|-------------------------------------|
| J          | 23.5                                | 30.6                                |
| K2         | 30.6                                | 35.2                                |
| K3         | 35.2                                | 39.8                                |
| M2         | 39.8                                | 45.7                                |
| M3         | 45.7                                | 51.7                                |
| N2         | 51.7                                | 56.8                                |
| N3         | 56.8                                | 62.0                                |
| N4         | 62.0                                | 67.2                                |
| P2         | 67.2                                | 73.9                                |
| P3         | 73.9                                | 80.6                                |
| P4         | 80.6                                | 87.4                                |
| Q2         | 87.4                                | 93.9                                |
| Q3         | 93.9                                | 100                                 |
| Q4         | 100                                 | 107                                 |
| Q5         | 107                                 | 114                                 |
| R2         | 114                                 | 122                                 |
| R3         | 122                                 | 130                                 |
| R4         | 130                                 | 139                                 |
| R5         | 139                                 | 148                                 |
| S2         | 148                                 | 156                                 |
| S3         | 156                                 | 164                                 |

XLamp XP-L LEDs are tested for luminous flux and placed into one of the following luminous-flux groups:

| Group Code | Min. Luminous Flux<br>@ 1050 mA (lm) | Max. Luminous Flux<br>@ 1050 mA (lm) |
|------------|--------------------------------------|--------------------------------------|
| T5         | 260                                  | 280                                  |
| T6         | 280                                  | 300                                  |
| U2         | 300                                  | 320                                  |
| U3         | 320                                  | 340                                  |
| U4         | 340                                  | 360                                  |
| U5         | 360                                  | 380                                  |
| U6         | 380                                  | 400                                  |
| V2         | 400                                  | 420                                  |
| V3         | 420                                  | 440                                  |
| V4         | 440                                  | 460                                  |
| V5         | 460                                  | 480                                  |
| V6         | 480                                  | 500                                  |

## PERFORMANCE GROUPS – RADIANT FLUX ( $T_j = 25\text{ °C}$ )

XLamp XP-C and XP-E royal blue and XP-E photo red LEDs are tested for radiant flux and sorted into one of the following radiant-flux bins:

| Group | Minimum Radiant Flux<br>(mW) @ 350 mA | Maximum Radiant Flux<br>(mW) @ 350 mA |
|-------|---------------------------------------|---------------------------------------|
| 12    | 250                                   | 300                                   |
| 13    | 300                                   | 350                                   |
| 14    | 350                                   | 425                                   |
| 15    | 425                                   | 500                                   |
| 16    | 500                                   | 600                                   |

XLamp XP-E2 royal blue LEDs are tested for radiant flux and placed into one the following bins:

| Group  | Minimum Radiant Flux<br>(mW) @ 350 mA | Maximum Radiant Flux<br>(mW) @ 350 mA |
|--------|---------------------------------------|---------------------------------------|
| 31 (K) | 475                                   | 500                                   |
| 32 (L) | 500                                   | 525                                   |
| 33 (M) | 525                                   | 550                                   |
| 34 (N) | 550                                   | 575                                   |
| 35 (P) | 575                                   | 600                                   |
| 36 (Q) | 600                                   | 625                                   |

## PERFORMANCE GROUPS – CHROMATICITY

White XLamp LEDs are tested for chromaticity and placed into one of the regions defined by the bounding coordinates on the following pages.

| Region | x    | y    | Region | x    | y    |
|--------|------|------|--------|------|------|
| WK     | .283 | .284 | WF     | .314 | .355 |
|        | .295 | .297 |        | .316 | .332 |
|        | .298 | .288 |        | .306 | .322 |
|        | .287 | .276 |        | .301 | .342 |
| WA     | .292 | .306 | WP     | .317 | .319 |
|        | .295 | .297 |        | .329 | .330 |
|        | .283 | .284 |        | .329 | .318 |
|        | .279 | .291 |        | .318 | .308 |
| WM     | .295 | .297 | WD     | .329 | .345 |
|        | .308 | .311 |        | .329 | .330 |
|        | .310 | .300 |        | .317 | .319 |
|        | .298 | .288 |        | .316 | .332 |
| WB     | .306 | .322 | WG     | .329 | .369 |
|        | .308 | .311 |        | .329 | .345 |
|        | .295 | .297 |        | .316 | .332 |
|        | .292 | .306 |        | .314 | .355 |
| WE     | .301 | .342 | WJ     | .329 | .330 |
|        | .306 | .322 |        | .329 | .345 |
|        | .292 | .306 |        | .346 | .359 |
|        | .287 | .321 |        | .344 | .342 |
| WN     | .308 | .311 | WH     | .348 | .384 |
|        | .317 | .319 |        | .346 | .359 |
|        | .318 | .308 |        | .329 | .345 |
|        | .310 | .300 |        | .329 | .369 |
| WC     | .316 | .332 |        |      |      |
|        | .317 | .319 |        |      |      |
|        | .308 | .311 |        |      |      |
|        | .306 | .322 |        |      |      |

**PERFORMANCE GROUPS – CHROMATICITY (CONTINUED)**

| Region | x      | y      | Region | x      | y      | Region | x      | y      | Region | x      | y      |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0A     | 0.2950 | 0.2970 | 0B     | 0.2920 | 0.3060 | 0C     | 0.2984 | 0.3133 | 0D     | 0.2984 | 0.3133 |
|        | 0.2920 | 0.3060 |        | 0.2895 | 0.3135 |        | 0.2962 | 0.3220 |        | 0.3048 | 0.3207 |
|        | 0.2984 | 0.3133 |        | 0.2962 | 0.3220 |        | 0.3028 | 0.3304 |        | 0.3068 | 0.3113 |
|        | 0.3009 | 0.3042 |        | 0.2984 | 0.3133 |        | 0.3048 | 0.3207 |        | 0.3009 | 0.3042 |
| 0R     | 0.2980 | 0.2880 | 0S     | 0.2895 | 0.3135 | 0T     | 0.2962 | 0.3220 | 0U     | 0.3037 | 0.2937 |
|        | 0.2950 | 0.2970 |        | 0.2870 | 0.3210 |        | 0.2937 | 0.3312 |        | 0.3009 | 0.3042 |
|        | 0.3009 | 0.3042 |        | 0.2937 | 0.3312 |        | 0.3005 | 0.3415 |        | 0.3068 | 0.3113 |
|        | 0.3037 | 0.2937 |        | 0.2962 | 0.3220 |        | 0.3028 | 0.3304 |        | 0.3093 | 0.2993 |
| 1A     | 0.3048 | 0.3207 | 1B     | 0.3028 | 0.3304 | 1C     | 0.3115 | 0.3391 | 1D     | 0.3130 | 0.3290 |
|        | 0.3130 | 0.3290 |        | 0.3115 | 0.3391 |        | 0.3205 | 0.3481 |        | 0.3213 | 0.3373 |
|        | 0.3144 | 0.3186 |        | 0.3130 | 0.3290 |        | 0.3213 | 0.3373 |        | 0.3221 | 0.3261 |
|        | 0.3068 | 0.3113 |        | 0.3048 | 0.3207 |        | 0.3130 | 0.3290 |        | 0.3144 | 0.3186 |
| 1R     | 0.3068 | 0.3113 | 1S     | 0.3005 | 0.3415 | 1T     | 0.3099 | 0.3509 | 1U     | 0.3144 | 0.3186 |
|        | 0.3144 | 0.3186 |        | 0.3099 | 0.3509 |        | 0.3196 | 0.3602 |        | 0.3221 | 0.3261 |
|        | 0.3161 | 0.3059 |        | 0.3115 | 0.3391 |        | 0.3205 | 0.3481 |        | 0.3231 | 0.3120 |
|        | 0.3093 | 0.2993 |        | 0.3028 | 0.3304 |        | 0.3115 | 0.3391 |        | 0.3161 | 0.3059 |
| 2A     | 0.3215 | 0.3350 | 2B     | 0.3207 | 0.3462 | 2C     | 0.3290 | 0.3538 | 2D     | 0.3290 | 0.3417 |
|        | 0.3290 | 0.3417 |        | 0.3290 | 0.3538 |        | 0.3376 | 0.3616 |        | 0.3371 | 0.3490 |
|        | 0.3290 | 0.3300 |        | 0.3290 | 0.3417 |        | 0.3371 | 0.3490 |        | 0.3366 | 0.3369 |
|        | 0.3222 | 0.3243 |        | 0.3215 | 0.3350 |        | 0.3290 | 0.3417 |        | 0.3290 | 0.3300 |
| 2R     | 0.3222 | 0.3243 | 2S     | 0.3196 | 0.3602 | 2T     | 0.3290 | 0.3690 | 2U     | 0.3290 | 0.3300 |
|        | 0.3290 | 0.3300 |        | 0.3290 | 0.3690 |        | 0.3381 | 0.3762 |        | 0.3366 | 0.3369 |
|        | 0.3290 | 0.3180 |        | 0.3290 | 0.3538 |        | 0.3376 | 0.3616 |        | 0.3361 | 0.3245 |
|        | 0.3231 | 0.3120 |        | 0.3207 | 0.3462 |        | 0.3290 | 0.3538 |        | 0.3290 | 0.3180 |
| 3A     | 0.3371 | 0.3490 | 3B     | 0.3376 | 0.3616 | 3C     | 0.3463 | 0.3687 | 3D     | 0.3451 | 0.3554 |
|        | 0.3451 | 0.3554 |        | 0.3463 | 0.3687 |        | 0.3551 | 0.3760 |        | 0.3533 | 0.3620 |
|        | 0.3440 | 0.3427 |        | 0.3451 | 0.3554 |        | 0.3533 | 0.3620 |        | 0.3515 | 0.3487 |
|        | 0.3366 | 0.3369 |        | 0.3371 | 0.3490 |        | 0.3451 | 0.3554 |        | 0.3440 | 0.3427 |
| 3R     | 0.3366 | 0.3369 | 3S     | 0.3381 | 0.3762 | 3T     | 0.3480 | 0.3840 | 3U     | 0.3440 | 0.3428 |
|        | 0.3440 | 0.3428 |        | 0.3480 | 0.3840 |        | 0.3571 | 0.3907 |        | 0.3515 | 0.3487 |
|        | 0.3429 | 0.3307 |        | 0.3463 | 0.3687 |        | 0.3551 | 0.3760 |        | 0.3495 | 0.3339 |
|        | 0.3361 | 0.3245 |        | 0.3376 | 0.3616 |        | 0.3463 | 0.3687 |        | 0.3429 | 0.3307 |
| 4A     | 0.3530 | 0.3597 | 4B     | 0.3548 | 0.3736 | 4C     | 0.3641 | 0.3804 | 4D     | 0.3615 | 0.3659 |
|        | 0.3615 | 0.3659 |        | 0.3641 | 0.3804 |        | 0.3736 | 0.3874 |        | 0.3702 | 0.3722 |
|        | 0.3590 | 0.3521 |        | 0.3615 | 0.3659 |        | 0.3702 | 0.3722 |        | 0.3670 | 0.3578 |
|        | 0.3512 | 0.3465 |        | 0.3530 | 0.3597 |        | 0.3615 | 0.3659 |        | 0.3590 | 0.3521 |
| 4R     | 0.3512 | 0.3465 | 4S     | 0.3571 | 0.3907 | 4T     | 0.3668 | 0.3957 | 4U     | 0.3590 | 0.3521 |
|        | 0.3590 | 0.3521 |        | 0.3668 | 0.3957 |        | 0.3771 | 0.4034 |        | 0.3670 | 0.3578 |
|        | 0.3567 | 0.3389 |        | 0.3641 | 0.3804 |        | 0.3736 | 0.3874 |        | 0.3640 | 0.3440 |
|        | 0.3495 | 0.3339 |        | 0.3548 | 0.3736 |        | 0.3641 | 0.3804 |        | 0.3567 | 0.3389 |



**PERFORMANCE GROUPS – CHROMATICITY (CONTINUED)**

| Region | x      | y      | Region | x      | y      | Region | x      | y      | Region | x      | y      |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 5A1    | 0.3670 | 0.3578 | 5A2    | 0.3686 | 0.3649 | 5A3    | 0.3744 | 0.3685 | 5A4    | 0.3726 | 0.3612 |
|        | 0.3686 | 0.3649 |        | 0.3702 | 0.3722 |        | 0.3763 | 0.3760 |        | 0.3744 | 0.3685 |
|        | 0.3744 | 0.3685 |        | 0.3763 | 0.3760 |        | 0.3825 | 0.3798 |        | 0.3804 | 0.3721 |
|        | 0.3726 | 0.3612 |        | 0.3744 | 0.3685 |        | 0.3804 | 0.3721 |        | 0.3783 | 0.3646 |
| 5B1    | 0.3702 | 0.3722 | 5B2    | 0.3719 | 0.3797 | 5B3    | 0.3782 | 0.3837 | 5B4    | 0.3763 | 0.3760 |
|        | 0.3719 | 0.3797 |        | 0.3736 | 0.3874 |        | 0.3802 | 0.3916 |        | 0.3782 | 0.3837 |
|        | 0.3782 | 0.3837 |        | 0.3802 | 0.3916 |        | 0.3869 | 0.3958 |        | 0.3847 | 0.3877 |
|        | 0.3763 | 0.3760 |        | 0.3782 | 0.3837 |        | 0.3847 | 0.3877 |        | 0.3825 | 0.3798 |
| 5C1    | 0.3825 | 0.3798 | 5C2    | 0.3847 | 0.3877 | 5C3    | 0.3912 | 0.3917 | 5C4    | 0.3887 | 0.3836 |
|        | 0.3847 | 0.3877 |        | 0.3869 | 0.3958 |        | 0.3937 | 0.4001 |        | 0.3912 | 0.3917 |
|        | 0.3912 | 0.3917 |        | 0.3937 | 0.4001 |        | 0.4006 | 0.4044 |        | 0.3978 | 0.3958 |
|        | 0.3887 | 0.3836 |        | 0.3912 | 0.3917 |        | 0.3978 | 0.3958 |        | 0.3950 | 0.3875 |
| 5D1    | 0.3783 | 0.3646 | 5D2    | 0.3804 | 0.3721 | 5D3    | 0.3863 | 0.3758 | 5D4    | 0.3840 | 0.3681 |
|        | 0.3804 | 0.3721 |        | 0.3825 | 0.3798 |        | 0.3887 | 0.3836 |        | 0.3863 | 0.3758 |
|        | 0.3863 | 0.3758 |        | 0.3887 | 0.3836 |        | 0.3950 | 0.3875 |        | 0.3924 | 0.3794 |
|        | 0.3840 | 0.3681 |        | 0.3863 | 0.3758 |        | 0.3924 | 0.3794 |        | 0.3898 | 0.3716 |
| 5R     | 0.3670 | 0.3578 | 5S     | 0.3771 | 0.4034 | 5T     | 0.3916 | 0.4127 | 5U     | 0.3783 | 0.3646 |
|        | 0.3783 | 0.3646 |        | 0.3916 | 0.4127 |        | 0.4064 | 0.4221 |        | 0.3898 | 0.3716 |
|        | 0.3743 | 0.3502 |        | 0.3869 | 0.3958 |        | 0.4006 | 0.4044 |        | 0.3848 | 0.3565 |
|        | 0.3640 | 0.3440 |        | 0.3736 | 0.3874 |        | 0.3869 | 0.3958 |        | 0.3743 | 0.3502 |
| 6A1    | 0.3889 | 0.3690 | 6A2    | 0.3915 | 0.3768 | 6A3    | 0.3981 | 0.3800 | 6A4    | 0.3953 | 0.3720 |
|        | 0.3915 | 0.3768 |        | 0.3941 | 0.3848 |        | 0.4010 | 0.3882 |        | 0.3981 | 0.3800 |
|        | 0.3981 | 0.3800 |        | 0.4010 | 0.3882 |        | 0.4080 | 0.3916 |        | 0.4048 | 0.3832 |
|        | 0.3953 | 0.3720 |        | 0.3981 | 0.3800 |        | 0.4048 | 0.3832 |        | 0.4017 | 0.3751 |
| 6B1    | 0.3941 | 0.3848 | 6B2    | 0.3968 | 0.3930 | 6B3    | 0.4040 | 0.3966 | 6B4    | 0.4010 | 0.3882 |
|        | 0.3968 | 0.3930 |        | 0.3996 | 0.4015 |        | 0.4071 | 0.4052 |        | 0.4040 | 0.3966 |
|        | 0.4040 | 0.3966 |        | 0.4071 | 0.4052 |        | 0.4146 | 0.4089 |        | 0.4113 | 0.4001 |
|        | 0.4010 | 0.3882 |        | 0.4040 | 0.3966 |        | 0.4113 | 0.4001 |        | 0.4080 | 0.3916 |
| 6C1    | 0.4080 | 0.3916 | 6C2    | 0.4113 | 0.4001 | 6C3    | 0.4186 | 0.4037 | 6C4    | 0.4150 | 0.3950 |
|        | 0.4113 | 0.4001 |        | 0.4146 | 0.4089 |        | 0.4222 | 0.4127 |        | 0.4186 | 0.4037 |
|        | 0.4186 | 0.4037 |        | 0.4222 | 0.4127 |        | 0.4299 | 0.4165 |        | 0.4259 | 0.4073 |
|        | 0.4150 | 0.3950 |        | 0.4186 | 0.4037 |        | 0.4259 | 0.4073 |        | 0.4221 | 0.3984 |
| 6D1    | 0.4017 | 0.3751 | 6D2    | 0.4048 | 0.3832 | 6D3    | 0.4116 | 0.3865 | 6D4    | 0.4082 | 0.3782 |
|        | 0.4048 | 0.3832 |        | 0.4080 | 0.3916 |        | 0.4150 | 0.3950 |        | 0.4116 | 0.3865 |
|        | 0.4116 | 0.3865 |        | 0.4150 | 0.3950 |        | 0.4221 | 0.3984 |        | 0.4183 | 0.3898 |
|        | 0.4082 | 0.3782 |        | 0.4116 | 0.3865 |        | 0.4183 | 0.3898 |        | 0.4147 | 0.3814 |
| 6R     | 0.3889 | 0.3690 | 6S     | 0.4054 | 0.4191 | 6T     | 0.4217 | 0.4273 | 6U     | 0.4017 | 0.3751 |
|        | 0.4017 | 0.3751 |        | 0.4217 | 0.4273 |        | 0.4382 | 0.4356 |        | 0.4147 | 0.3814 |
|        | 0.3957 | 0.3596 |        | 0.4146 | 0.4089 |        | 0.4299 | 0.4165 |        | 0.4077 | 0.3652 |
|        | 0.3840 | 0.3540 |        | 0.3996 | 0.4015 |        | 0.4146 | 0.4089 |        | 0.3957 | 0.3596 |

**PERFORMANCE GROUPS – CHROMATICITY (CONTINUED)**

| Region | x      | y      | Region | x      | y      | Region | x      | y      | Region | x      | y      |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 7A1    | 0.4147 | 0.3814 | 7A2    | 0.4183 | 0.3898 | 7A3    | 0.4242 | 0.3919 | 7A4    | 0.4203 | 0.3833 |
|        | 0.4183 | 0.3898 |        | 0.4221 | 0.3984 |        | 0.4281 | 0.4006 |        | 0.4242 | 0.3919 |
|        | 0.4242 | 0.3919 |        | 0.4281 | 0.4006 |        | 0.4342 | 0.4028 |        | 0.4300 | 0.3939 |
|        | 0.4203 | 0.3833 |        | 0.4242 | 0.3919 |        | 0.4300 | 0.3939 |        | 0.4259 | 0.3853 |
| 7B1    | 0.4221 | 0.3984 | 7B2    | 0.4259 | 0.4073 | 7B3    | 0.4322 | 0.4096 | 7B4    | 0.4281 | 0.4006 |
|        | 0.4259 | 0.4073 |        | 0.4299 | 0.4165 |        | 0.4364 | 0.4188 |        | 0.4322 | 0.4096 |
|        | 0.4322 | 0.4096 |        | 0.4364 | 0.4188 |        | 0.4430 | 0.4212 |        | 0.4385 | 0.4119 |
|        | 0.4281 | 0.4006 |        | 0.4322 | 0.4096 |        | 0.4385 | 0.4119 |        | 0.4342 | 0.4028 |
| 7C1    | 0.4342 | 0.4028 | 7C2    | 0.4385 | 0.4119 | 7C3    | 0.4449 | 0.4141 | 7C4    | 0.4403 | 0.4049 |
|        | 0.4385 | 0.4119 |        | 0.4430 | 0.4212 |        | 0.4496 | 0.4236 |        | 0.4449 | 0.4141 |
|        | 0.4449 | 0.4141 |        | 0.4496 | 0.4236 |        | 0.4562 | 0.4260 |        | 0.4513 | 0.4164 |
|        | 0.4403 | 0.4049 |        | 0.4449 | 0.4141 |        | 0.4513 | 0.4164 |        | 0.4465 | 0.4071 |
| 7D1    | 0.4259 | 0.3853 | 7D2    | 0.4300 | 0.3939 | 7D3    | 0.4359 | 0.3960 | 7D4    | 0.4316 | 0.3873 |
|        | 0.4300 | 0.3939 |        | 0.4342 | 0.4028 |        | 0.4403 | 0.4049 |        | 0.4359 | 0.3960 |
|        | 0.4359 | 0.3960 |        | 0.4403 | 0.4049 |        | 0.4465 | 0.4071 |        | 0.4418 | 0.3981 |
|        | 0.4316 | 0.3873 |        | 0.4359 | 0.3960 |        | 0.4418 | 0.3981 |        | 0.4373 | 0.3893 |
| 8A1    | 0.4373 | 0.3893 | 8A2    | 0.4418 | 0.3981 | 8A3    | 0.4475 | 0.3994 | 8A4    | 0.4428 | 0.3906 |
|        | 0.4418 | 0.3981 |        | 0.4465 | 0.4071 |        | 0.4523 | 0.4085 |        | 0.4475 | 0.3994 |
|        | 0.4475 | 0.3994 |        | 0.4523 | 0.4085 |        | 0.4582 | 0.4099 |        | 0.4532 | 0.4008 |
|        | 0.4428 | 0.3906 |        | 0.4475 | 0.3994 |        | 0.4532 | 0.4008 |        | 0.4483 | 0.3919 |
| 8B1    | 0.4465 | 0.4071 | 8B2    | 0.4513 | 0.4164 | 8B3    | 0.4573 | 0.4178 | 8B4    | 0.4523 | 0.4085 |
|        | 0.4513 | 0.4164 |        | 0.4562 | 0.4260 |        | 0.4624 | 0.4274 |        | 0.4573 | 0.4178 |
|        | 0.4573 | 0.4178 |        | 0.4624 | 0.4274 |        | 0.4687 | 0.4289 |        | 0.4634 | 0.4193 |
|        | 0.4523 | 0.4085 |        | 0.4573 | 0.4178 |        | 0.4634 | 0.4193 |        | 0.4582 | 0.4099 |
| 8C1    | 0.4582 | 0.4099 | 8C2    | 0.4634 | 0.4193 | 8C3    | 0.4695 | 0.4207 | 8C4    | 0.4641 | 0.4112 |
|        | 0.4634 | 0.4193 |        | 0.4687 | 0.4289 |        | 0.4750 | 0.4304 |        | 0.4695 | 0.4207 |
|        | 0.4695 | 0.4207 |        | 0.4750 | 0.4304 |        | 0.4813 | 0.4319 |        | 0.4756 | 0.4221 |
|        | 0.4641 | 0.4112 |        | 0.4695 | 0.4207 |        | 0.4756 | 0.4221 |        | 0.4700 | 0.4126 |
| 8D1    | 0.4483 | 0.3919 | 8D2    | 0.4532 | 0.4008 | 8D3    | 0.4589 | 0.4021 | 8D4    | 0.4538 | 0.3931 |
|        | 0.4532 | 0.4008 |        | 0.4582 | 0.4099 |        | 0.4641 | 0.4112 |        | 0.4589 | 0.4021 |
|        | 0.4589 | 0.4021 |        | 0.4641 | 0.4112 |        | 0.4700 | 0.4126 |        | 0.4646 | 0.4034 |
|        | 0.4538 | 0.3931 |        | 0.4589 | 0.4021 |        | 0.4646 | 0.4034 |        | 0.4593 | 0.3944 |
| AA1    | 0.4822 | 0.3973 | AA2    | 0.4884 | 0.4067 | AA3    | 0.4942 | 0.4066 | AA4    | 0.4879 | 0.3972 |
|        | 0.4884 | 0.4067 |        | 0.4946 | 0.4162 |        | 0.5006 | 0.4160 |        | 0.4942 | 0.4066 |
|        | 0.4942 | 0.4066 |        | 0.5006 | 0.4160 |        | 0.5066 | 0.4158 |        | 0.5001 | 0.4064 |
|        | 0.4879 | 0.3972 |        | 0.4942 | 0.4066 |        | 0.5001 | 0.4064 |        | 0.4936 | 0.3970 |
| AB1    | 0.4946 | 0.4162 | AB2    | 0.5008 | 0.4256 | AB3    | 0.5069 | 0.4254 | AB4    | 0.5006 | 0.4160 |
|        | 0.5008 | 0.4256 |        | 0.5070 | 0.4350 |        | 0.5133 | 0.4348 |        | 0.5069 | 0.4254 |
|        | 0.5069 | 0.4254 |        | 0.5133 | 0.4348 |        | 0.5196 | 0.4346 |        | 0.5131 | 0.4252 |
|        | 0.5006 | 0.4160 |        | 0.5069 | 0.4254 |        | 0.5131 | 0.4252 |        | 0.5066 | 0.4158 |

**PERFORMANCE GROUPS – CHROMATICITY (CONTINUED)**

| Region | x      | y      | Region | x      | y      | Region | x      | y      | Region | x      | y      |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| AC1    | 0.5066 | 0.4158 | AC2    | 0.5131 | 0.4252 | AC3    | 0.5192 | 0.4250 | AC4    | 0.5126 | 0.4156 |
|        | 0.5131 | 0.4252 |        | 0.5196 | 0.4346 |        | 0.5258 | 0.4343 |        | 0.5192 | 0.4250 |
|        | 0.5192 | 0.4250 |        | 0.5258 | 0.4343 |        | 0.5321 | 0.4341 |        | 0.5253 | 0.4248 |
|        | 0.5126 | 0.4156 |        | 0.5192 | 0.4250 |        | 0.5253 | 0.4248 |        | 0.5186 | 0.4154 |
| AD1    | 0.4936 | 0.3970 | AD2    | 0.5001 | 0.4064 | AD3    | 0.5059 | 0.4062 | AD4    | 0.4993 | 0.3969 |
|        | 0.5001 | 0.4064 |        | 0.5066 | 0.4158 |        | 0.5126 | 0.4156 |        | 0.5059 | 0.4062 |
|        | 0.5059 | 0.4062 |        | 0.5126 | 0.4156 |        | 0.5186 | 0.4154 |        | 0.5118 | 0.4061 |
|        | 0.4993 | 0.3969 |        | 0.5059 | 0.4062 |        | 0.5118 | 0.4061 |        | 0.5050 | 0.3967 |

XLamp XP-E2 PC amber LEDs are placed into the region defined by the following bounding coordinates.

| Region | x      | y      |
|--------|--------|--------|
| Y2     | 0.5469 | 0.4249 |
|        | 0.5700 | 0.4100 |
|        | 0.5900 | 0.4100 |
|        | 0.5610 | 0.4390 |

## PERFORMANCE GROUPS – DOMINANT WAVELENGTH

Color XLamp LEDs are tested for dominant wavelength (DWL) and sorted into one of the DWL bins defined below.

| Color      | DWL Group | Min. DWL (nm)<br>@ 350 mA | Max. DWL (nm)<br>@ 350 mA |
|------------|-----------|---------------------------|---------------------------|
| Royal Blue | D3        | 450                       | 455                       |
|            | D4        | 455                       | 460                       |
|            | D5        | 460                       | 465                       |
| Blue       | B3        | 465                       | 470                       |
|            | B4        | 470                       | 475                       |
|            | B5        | 475                       | 480                       |
|            | B6        | 480                       | 485                       |
| Green      | G2        | 520                       | 525                       |
|            | G3        | 525                       | 530                       |
|            | G4        | 530                       | 535                       |
| Amber      | A2        | 585                       | 590                       |
|            | A3        | 590                       | 595                       |
| Red-Orange | O3        | 610                       | 615                       |
|            | O4        | 615                       | 620                       |
| Red        | R2        | 620                       | 625                       |
|            | R3        | 625                       | 630                       |

## PERFORMANCE GROUPS – PEAK WAVELENGTH

Photo red XLamp LEDs are tested for peak wavelength (PWL) and sorted into one of the PWL bins defined below.

| Color     | PWL Group | Min. PWL (nm)<br>@ 350 mA | Max. PWL (nm)<br>@ 350 mA |
|-----------|-----------|---------------------------|---------------------------|
| Photo Red | P2        | 650                       | 655                       |
|           | P3        | 655                       | 660                       |
|           | P4        | 660                       | 665                       |
|           | P5        | 665                       | 670                       |

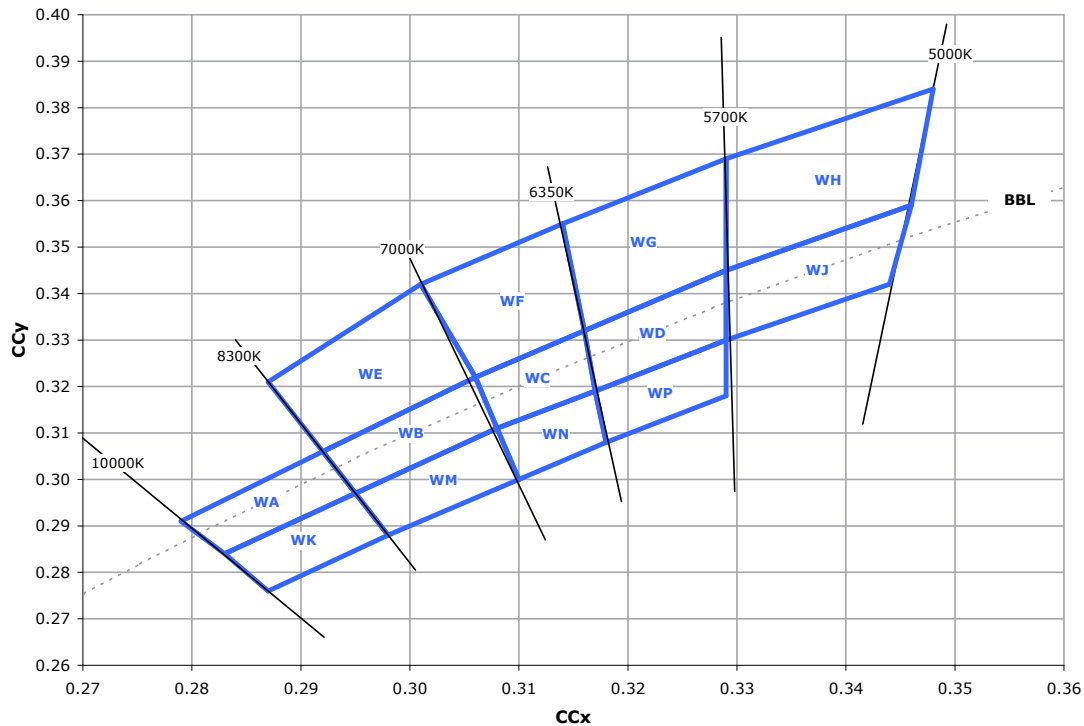
## PERFORMANCE GROUPS – FORWARD VOLTAGE

Amber, red-orange, red and High-Efficiency White XLamp LEDs are tested for forward voltage and sorted into one of the forward voltage bins defined below.

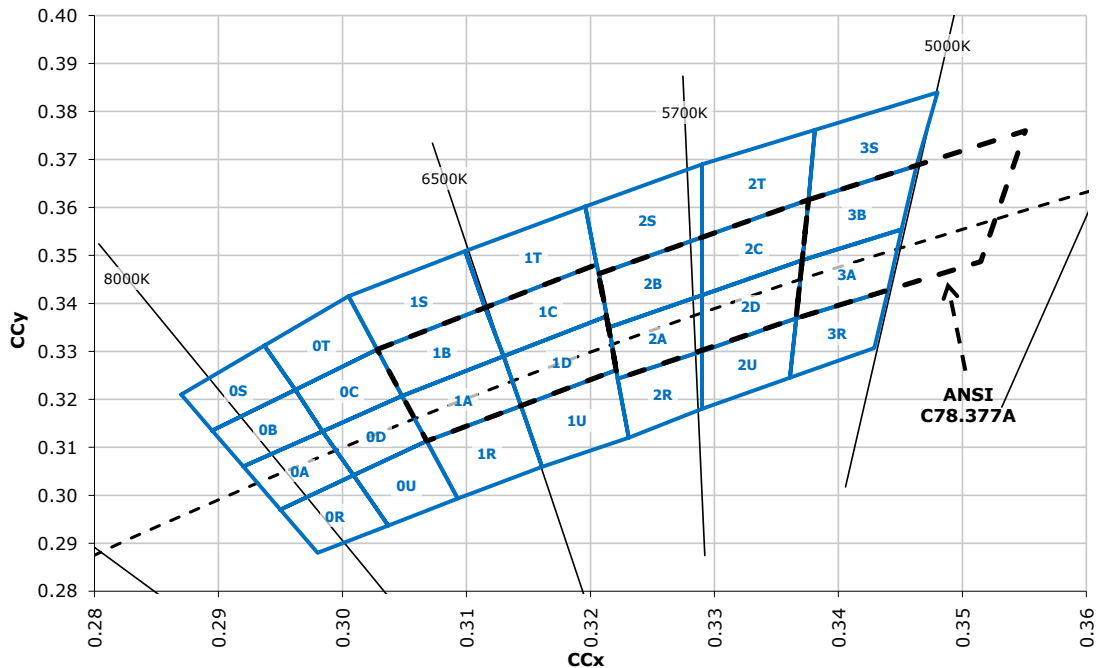
| Forward Voltage Group | Min. Forward Voltage @ 350 mA | Max. Forward Voltage @ 350 mA |
|-----------------------|-------------------------------|-------------------------------|
| B                     | 1.75                          | 2.0                           |
| C                     | 2.0                           | 2.25                          |
| D                     | 2.25                          | 2.5                           |
| E                     | 2.5                           | 2.75                          |
| F                     | 2.75                          | 3.0                           |
| G                     | 3.0                           | 3.25                          |
| H                     | 3.25                          | 3.5                           |
| J                     | 3.5                           | 3.75                          |

## CREE'S STANDARD CHROMATICITY REGIONS PLOTTED ON THE 1931 CIE CURVE

### Cool White

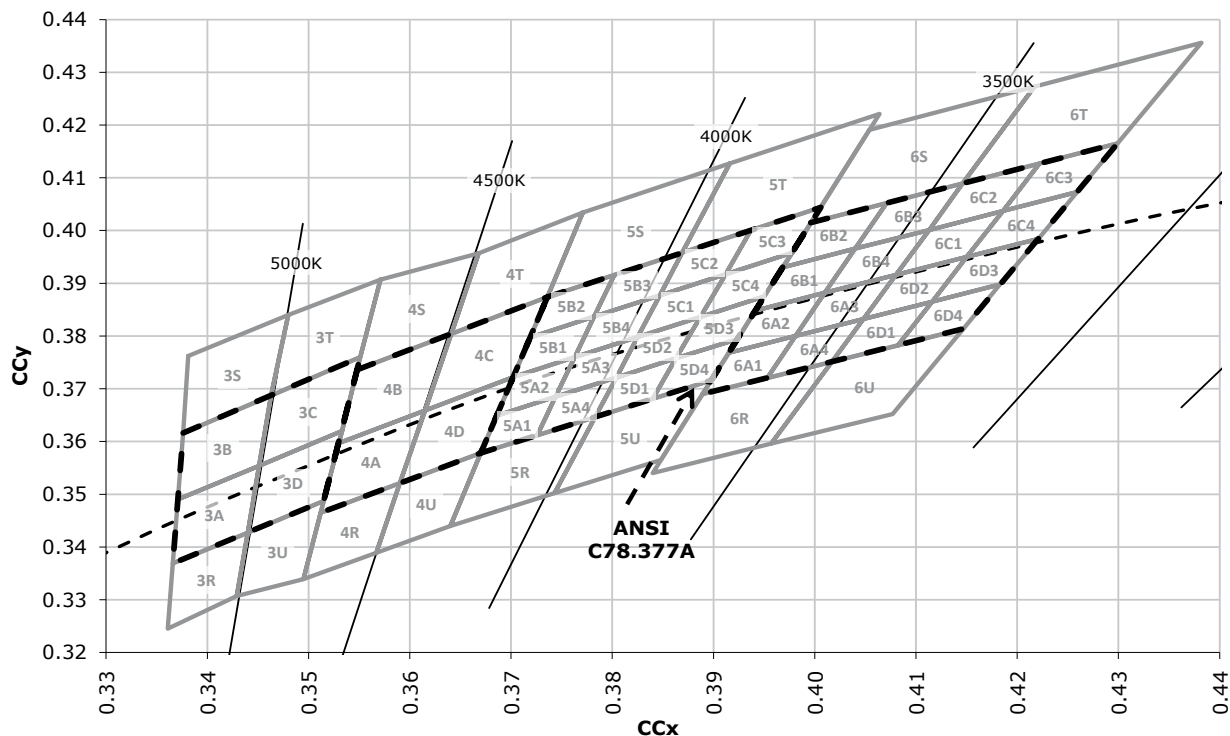


### ANSI Cool White

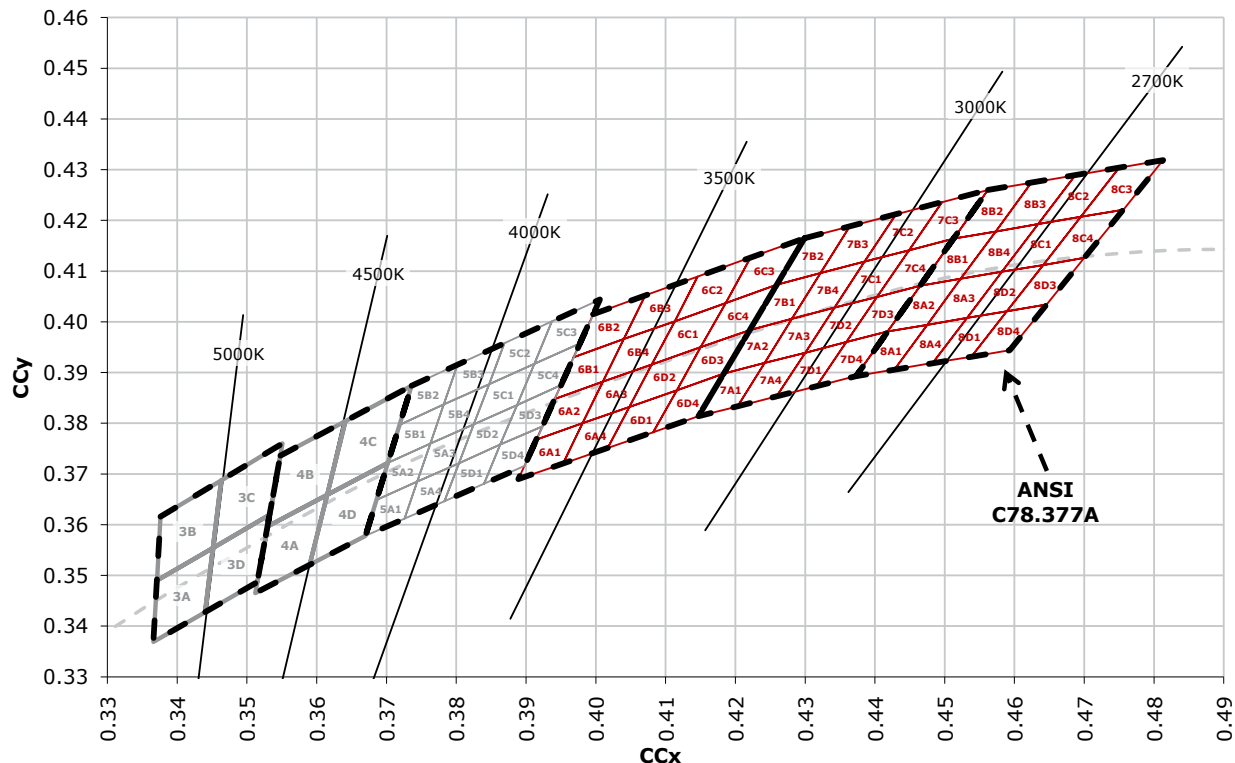


## CREE'S STANDARD CHROMATICITY REGIONS PLOTTED ON THE 1931 CIE CURVE (CONTINUED)

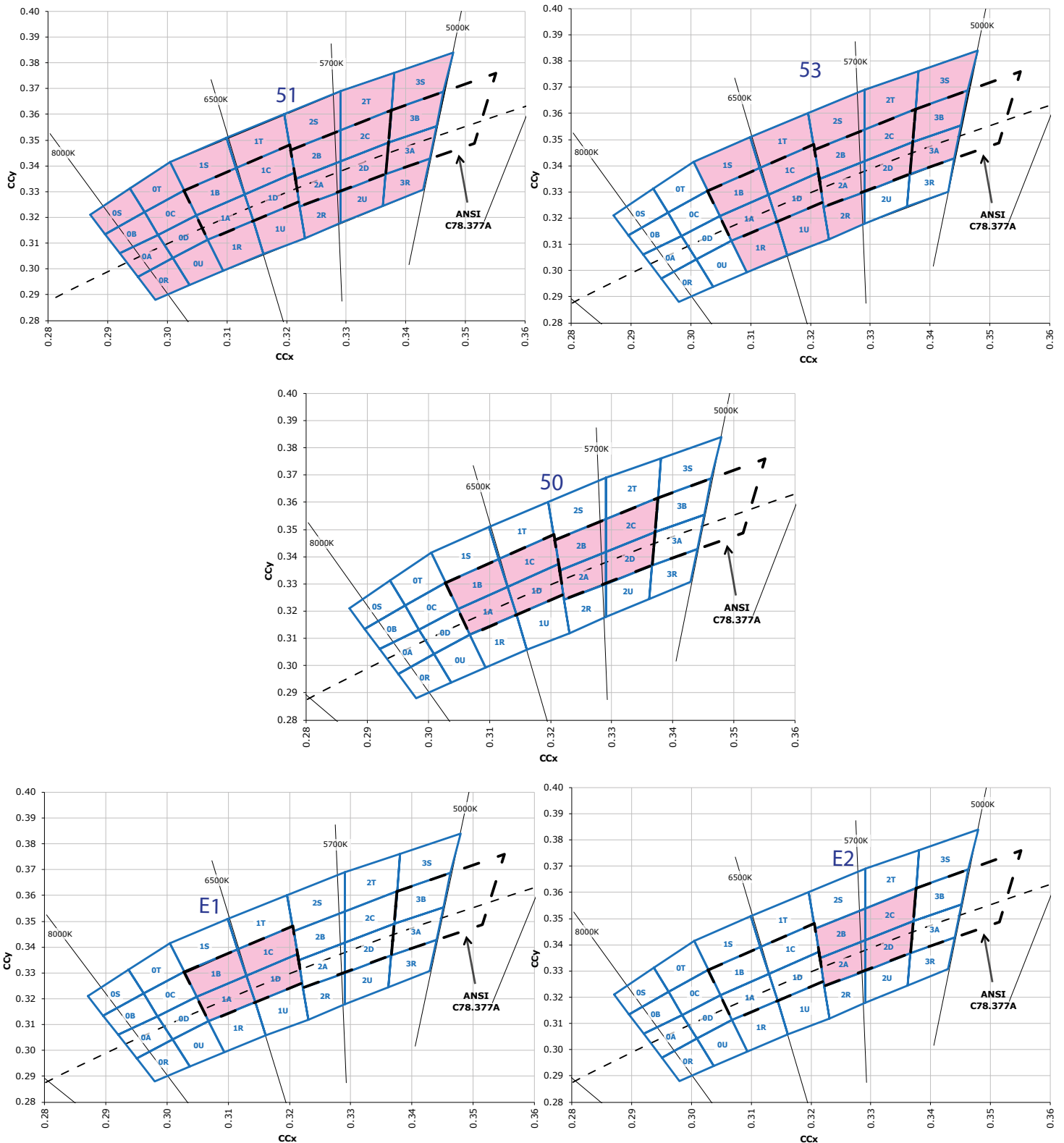
Neutral White



ANSI Neutral White and ANSI Warm White

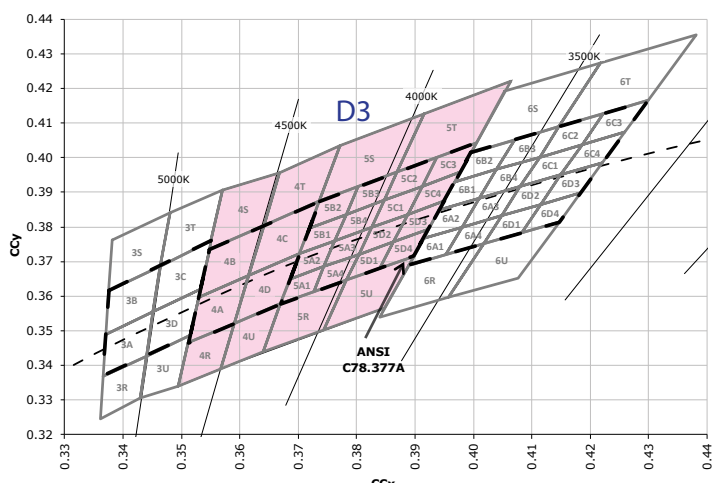
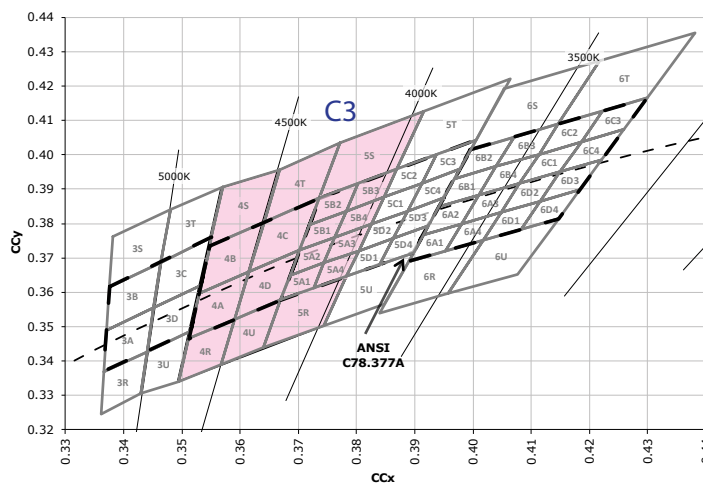
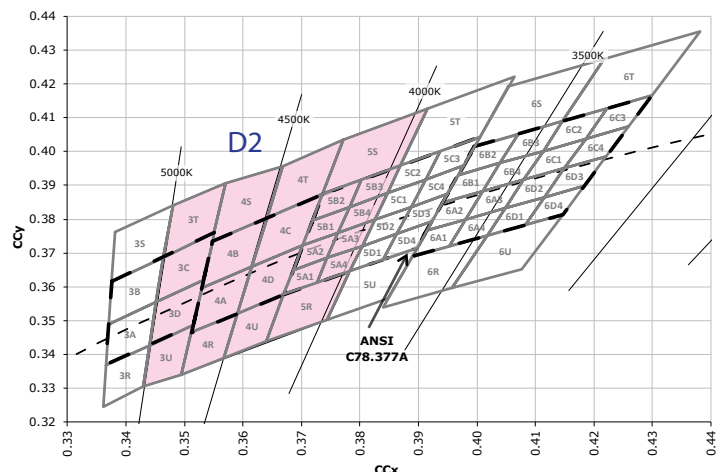
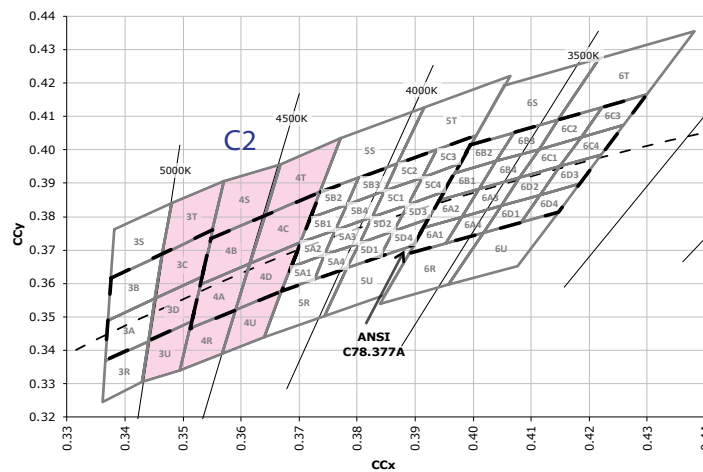
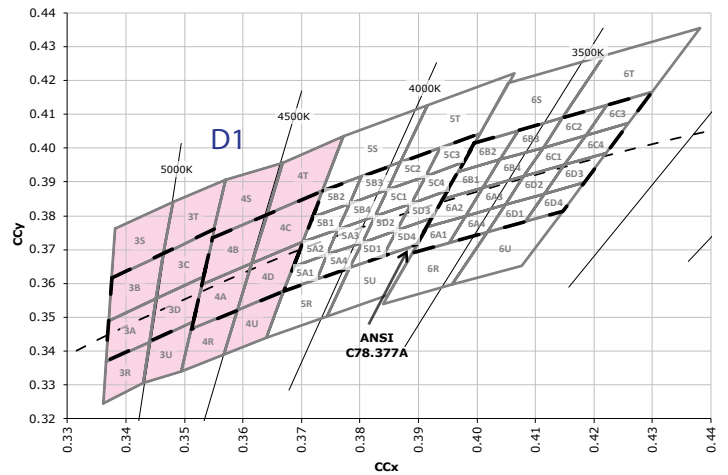
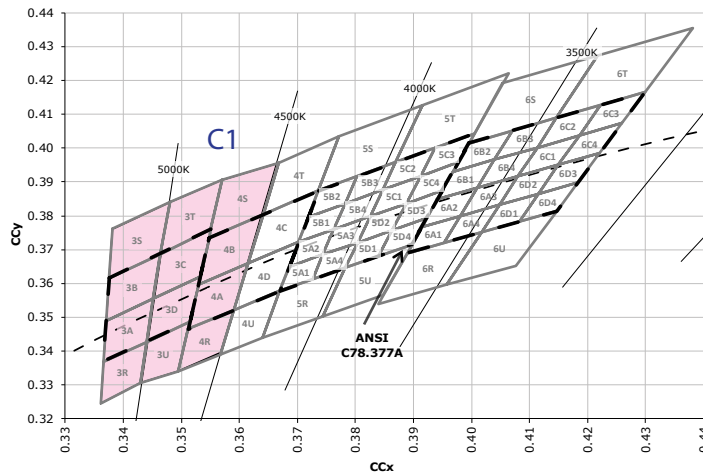


## CREE'S STANDARD COOL WHITE KITS PLOTTED ON ANSI STANDARD CHROMATICITY REGIONS

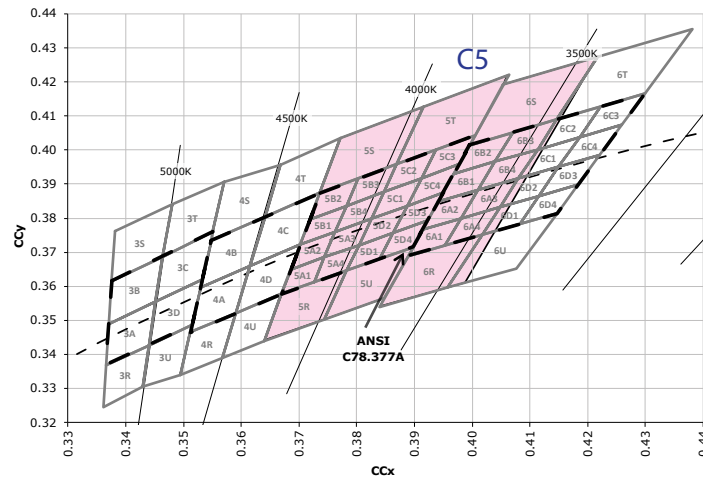
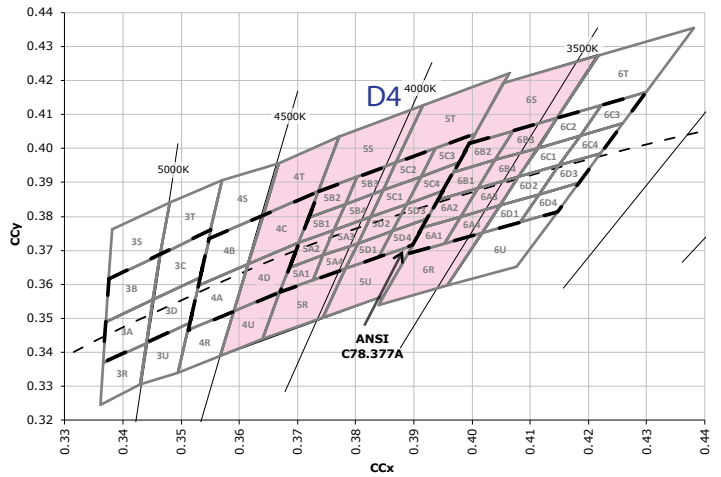
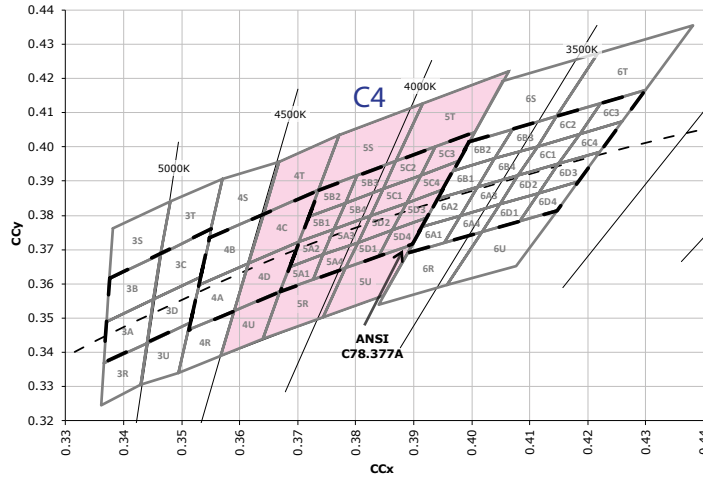




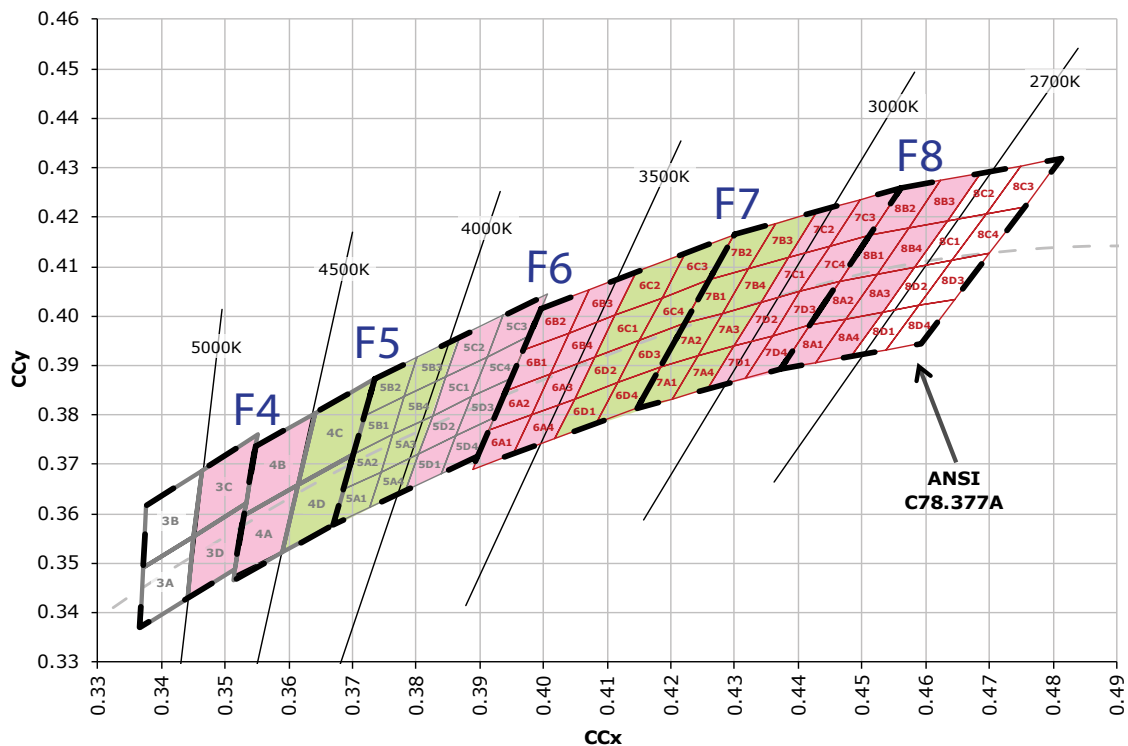
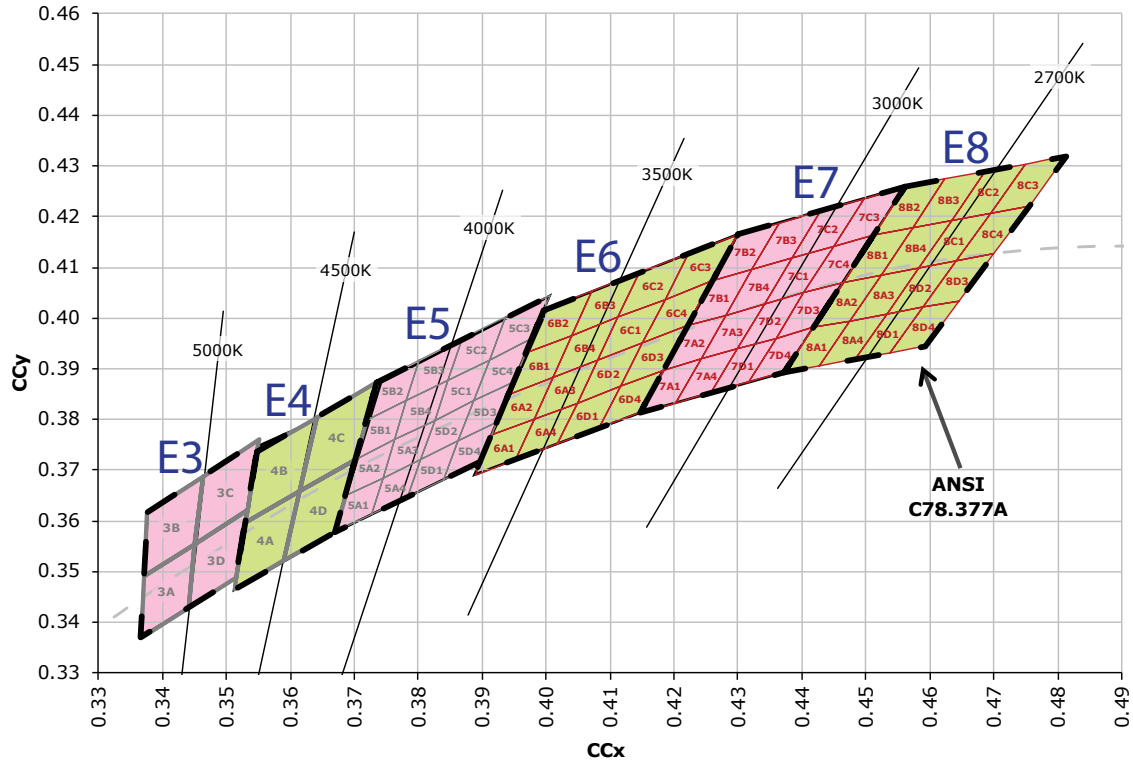
## CREE'S OUTDOOR WHITE KITS PLOTTED ON ANSI STANDARD CHROMATICITY REGIONS



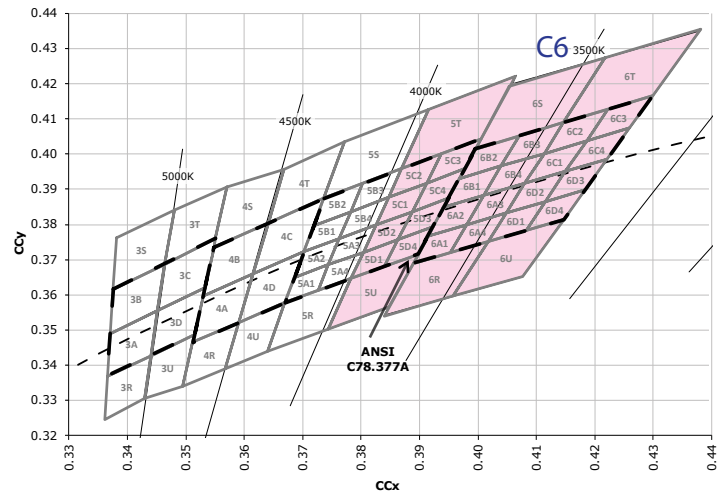
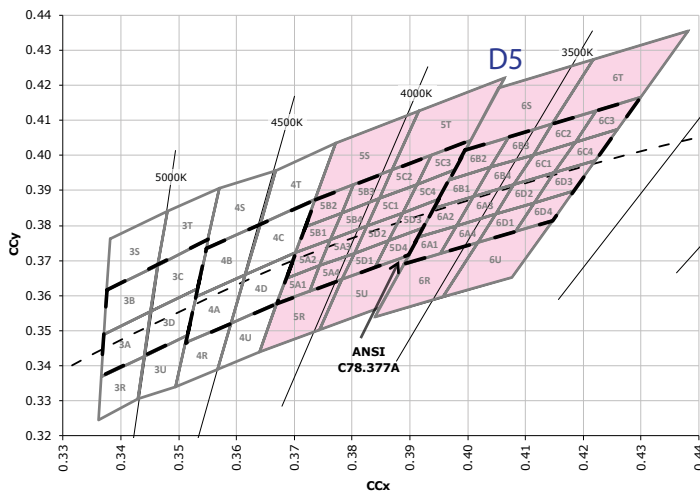
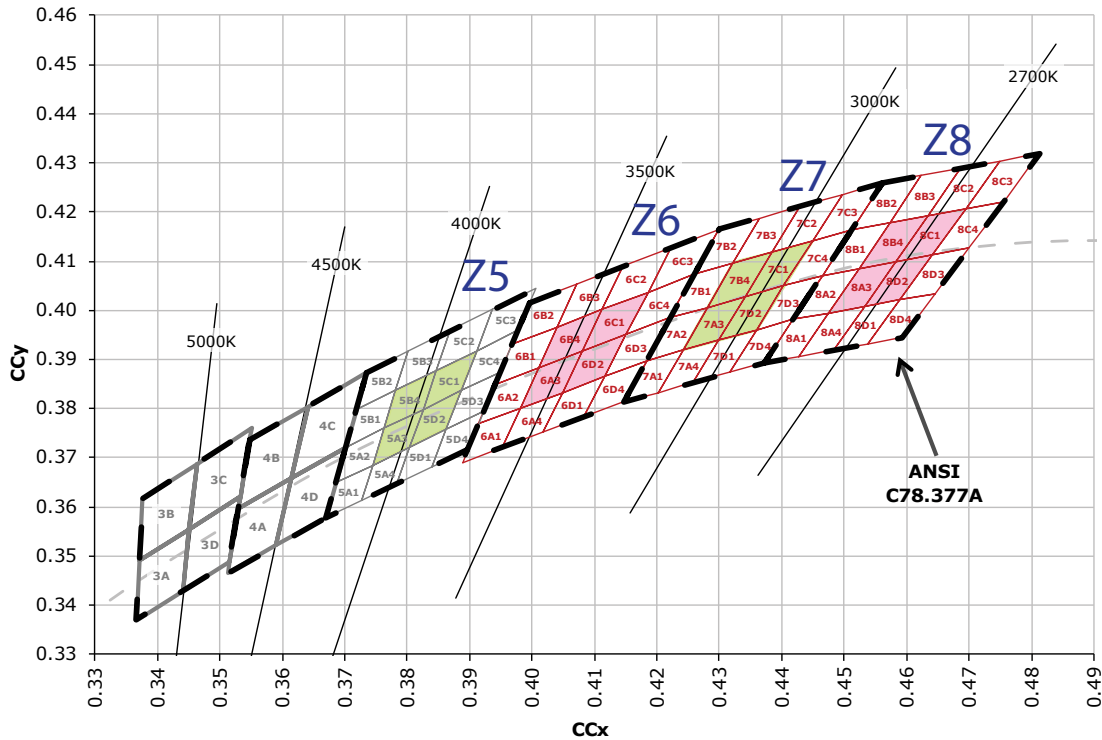
## CREE'S OUTDOOR WHITE KITS PLOTTED ON ANSI STANDARD CHROMATICITY REGIONS (CONTINUED)



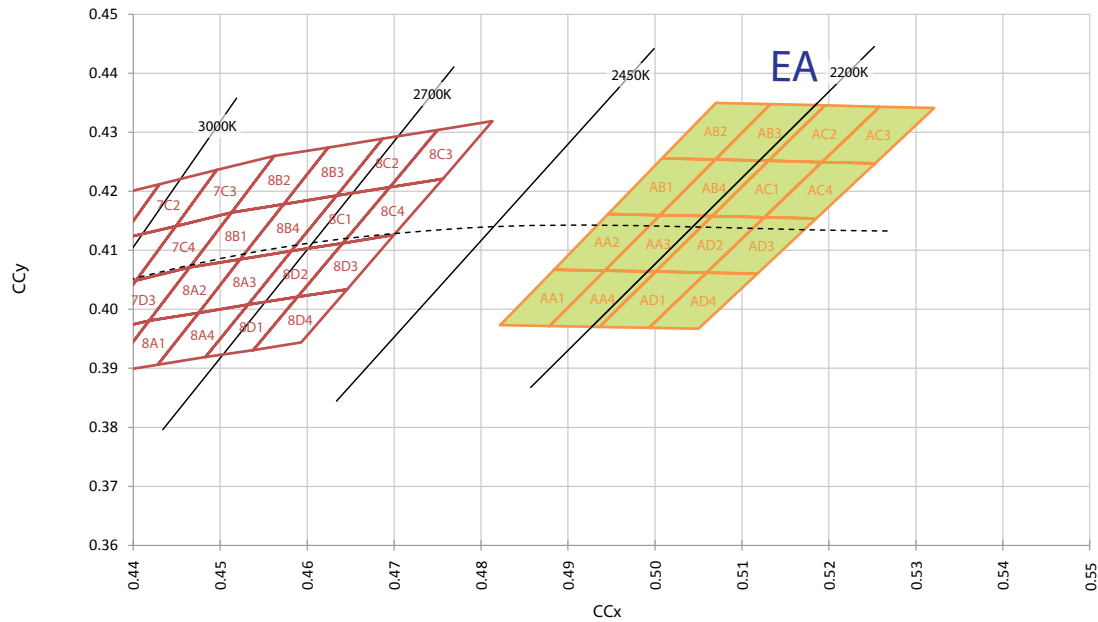
# **CREE'S STANDARD WARM AND NEUTRAL WHITE KITS PLOTTED ON ANSI STANDARD CHROMATICITY REGIONS**



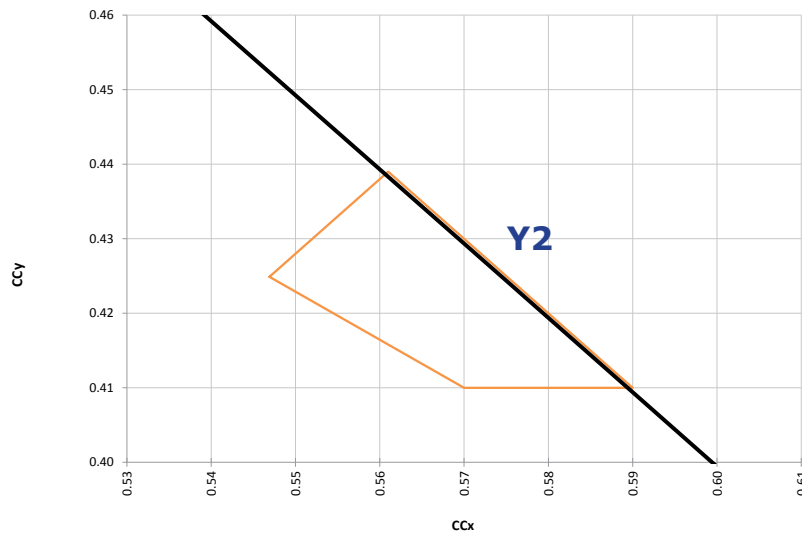
**CREE'S STANDARD WARM AND NEUTRAL WHITE KITS PLOTTED ON ANSI STANDARD CHROMATICITY REGIONS - CONTINUED**



## CREE'S 2200 K CCT WHITE KITS PLOTTED ON ANSI STANDARD CHROMATICITY REGIONS



## CREE'S PC AMBER KIT PLOTTED ON THE 1931 CIE CURVE



## CREE'S STANDARD CHROMATICITY KITS

The following table provides the chromaticity bins associated with chromaticity kits.

| Color         | CCT    | Kit | Chromaticity Bins                                                                                                                                                                              |
|---------------|--------|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Cool White    | 6200 K | S1  | 0A, 0B, 0C, 0D, 0R, 0S, 0T, 0U, 1A, 1B, 1C, 1D, 1R, 1S, 1T, 1U, 2A, 2B, 2C, 2D, 2R, 2S, 2T, 2U, 3A, 3B, 3R, 3S                                                                                 |
|               | 6000 K | S3  | 1A, 1B, 1C, 1D, 1R, 1S, 1T, 1U, 2A, 2B, 2C, 2D, 2R, 2S, 2T, 3A, 3B, 3S                                                                                                                         |
|               | 6200 K | S0  | 1A, 1B, 1C, 1D, 2A, 2B, 2C, 2D                                                                                                                                                                 |
|               | 6500 K | E1  | 1A, 1B, 1C, 1D                                                                                                                                                                                 |
|               | 5700 K | E2  | 2A, 2B, 2C, 2D                                                                                                                                                                                 |
| Neutral White | 5000 K | E3  | 3A, 3B, 3C, 3D                                                                                                                                                                                 |
|               | 5000 K | C1  | 3A, 3B, 3C, 3D, 3R, 3S, 3T, 3U, 4A, 4B, 4R, 4S                                                                                                                                                 |
|               | 4750 K | F4  | 3C, 3D, 4A, 4B                                                                                                                                                                                 |
|               | 4750 K | D1  | 3A, 3B, 3C, 3D, 3R, 3S, 3T, 3U, 4A, 4B, 4C, 4D, 4R, 4S, 4T, 4U                                                                                                                                 |
|               | 4500 K | E4  | 4A, 4B, 4C, 4D                                                                                                                                                                                 |
|               | 4500 K | D2  | 3C, 3D, 3T, 3U, 4A, 4B, 4C, 4D, 4R, 4S, 4T, 4U, 5A1, 5A2, 5A3, 5A4, 5B1, 5B2, 5B3, 5B4, 5R, 5S                                                                                                 |
|               | 4500 K | C2  | 3C, 3D, 3T, 3U, 4A, 4B, 4C, 4D, 4R, 4S, 4T, 4U                                                                                                                                                 |
|               | 4300 K | C3  | 4A, 4B, 4C, 4D, 4R, 4S, 4T, 4U, 5A1, 5A2, 5A3, 5A4, 5B1, 5B2, 5B3, 5B4, 5R, 5S                                                                                                                 |
|               | 4300 K | D3  | 4A, 4B, 4C, 4D, 4R, 4S, 4T, 4U, 5A1, 5A2, 5A3, 5A4, 5B1, 5B2, 5B3, 5B4, 5C1, 5C2, 5C3, 5C4, 5D1, 5D2, 5D3, 5D4, 5R, 5S, 5T, 5U                                                                 |
|               | 4250 K | F5  | 4C, 4D, 5A1, 5A2, 5A3, 5A4, 5B1, 5B2, 5B3, 5B4                                                                                                                                                 |
|               | 4100 K | C4  | 4C, 4D, 4T, 4U, 5A1, 5A2, 5A3, 5A4, 5B1, 5B2, 5B3, 5B4, 5C1, 5C2, 5C3, 5C4, 5D1, 5D2, 5D3, 5D4, 5R, 5S, 5T, 5U                                                                                 |
|               | 4000 K | D4  | 4C, 4D, 4T, 4U, 5A1, 5A2, 5A3, 5A4, 5B1, 5B2, 5B3, 5B4, 5C1, 5C2, 5C3, 5C4, 5D1, 5D2, 5D3, 5D4, 5R, 5S, 5T, 5U, 6A1, 6A2, 6A3, 6A4, 6B1, 6B2, 6B3, 6B4, 6R, 6S                                 |
|               | 4000 K | E5  | 5A1, 5A2, 5A3, 5A4, 5B1, 5B2, 5B3, 5B4, 5C1, 5C2, 5C3, 5C4, 5D1, 5D2, 5D3, 5D4                                                                                                                 |
|               | 4000 K | Z5  | 5A3, 5B4, 5C1, 5D2                                                                                                                                                                             |
|               | 3800 K | C5  | 5A1, 5A2, 5A3, 5A4, 5B1, 5B2, 5B3, 5B4, 5C1, 5C2, 5C3, 5C4, 5D1, 5D2, 5D3, 5D4, 5R, 5S, 5T, 5U, 6A1, 6A2, 6A3, 6A4, 6B1, 6B2, 6B3, 6B4, 6R, 6S                                                 |
| Warm White    | 3750 K | F6  | 5C1, 5C2, 5C3, 5C4, 5D1, 5D2, 5D3, 5D4, 6A1, 6A2, 6A3, 6A4, 6B1, 6B2, 6B3, 6B4                                                                                                                 |
|               | 3700 K | D5  | 5A1, 5A2, 5A3, 5A4, 5B1, 5B2, 5B3, 5B4, 5C1, 5C2, 5C3, 5C4, 5D1, 5D2, 5D3, 5D4, 5R, 5S, 5T, 5U, 6A1, 6A2, 6A3, 6A4, 6B1, 6B2, 6B3, 6B4, 6C1, 6C2, 6C3, 6C4, 6D1, 6D2, 6D3, 6D4, 6R, 6S, 6T, 6U |
|               | 3600 K | C6  | 5C1, 5C2, 5C3, 5C4, 5D1, 5D2, 5D3, 5D4, 5T, 5U, 6A1, 6A2, 6A3, 6A4, 6B1, 6B2, 6B3, 6B4, 6C1, 6C2, 6C3, 6C4, 6D1, 6D2, 6D3, 6D4, 6R, 6S, 6T, 6U                                                 |
|               | 3500 K | E6  | 6A1, 6A2, 6A3, 6A4, 6B1, 6B2, 6B3, 6B4, 6C1, 6C2, 6C3, 6C4, 6D1, 6D2, 6D3, 6D4                                                                                                                 |
|               | 3500 K | Z6  | 6A3, 6B4, 6C1, 6D2                                                                                                                                                                             |
|               | 3250 K | F7  | 6C1, 6C2, 6C3, 6C4, 6D1, 6D2, 6D3, 6D4, 7A1, 7A2, 7A3, 7A4, 7B1, 7B2, 7B3, 7B4                                                                                                                 |
|               | 3000 K | E7  | 7A1, 7A2, 7A3, 7A4, 7B1, 7B2, 7B3, 7B4, 7C1, 7C2, 7C3, 7C4, 7D1, 7D2, 7D3, 7D4                                                                                                                 |
|               | 3000 K | Z7  | 7A3, 7B4, 7C1, 7D2                                                                                                                                                                             |
|               | 2850 K | F8  | 7C1, 7C2, 7C3, 7C4, 7D1, 7D2, 7D3, 7D4, 8A1, 8A2, 8A3, 8A4, 8B1, 8B2, 8B3, 8B4                                                                                                                 |
|               | 2700 K | E8  | 8A1, 8A2, 8A3, 8A4, 8B1, 8B2, 8B3, 8B4, 8C1, 8C2, 8C3, 8C4, 8D1, 8D2, 8D3, 8D4                                                                                                                 |
|               | 2700 K | Z8  | 8A3, 8B4, 8C1, 8D2                                                                                                                                                                             |
|               | 2200 K | EA  | AA1, AA2, AA3, AA4, AB1, AB2, AB3, AB4, AC1, AC2, AC3, AC4, AD1, AD2, AD3, AD4                                                                                                                 |

The following tables of order codes list flux minimums and chromaticity regions for the various categories of XLamp XP LEDs. For other flux and chromaticity combinations, contact Cree or an authorized distributor.

**STANDARD ORDER CODES AND PRE-ANSI BINS (XP-C COOL WHITE, T<sub>j</sub> = 25 °C)**

| XLamp XP-C LED Standard Order Codes - White |           |                                                    |  |                      |
|---------------------------------------------|-----------|----------------------------------------------------|--|----------------------|
| Min. Luminous Flux (lm)<br>@ 350 mA*        |           | Chromaticity Regions                               |  | Order Codes          |
| Group                                       | Flux (lm) |                                                    |  |                      |
| Cool White (5000 K – 10,000 K)              |           |                                                    |  |                      |
| Q2                                          | 87.4      | WA, WB, WC, WD, WE, WF, WG, WH, WJ, WK, WM, WN, WP |  | XPCWHT-L1-0000-00A01 |
|                                             |           | WC, WD, WF, WG                                     |  | XPCWHT-L1-0000-00A02 |
|                                             |           | WC, WD, WF, WG, WH, WJ, WN, WP                     |  | XPCWHT-L1-0000-00A03 |
| Q3                                          | 93.9      | WA, WB, WC, WD, WE, WF, WG, WH, WJ, WK, WM, WN, WP |  | XPCWHT-L1-0000-00B01 |
|                                             |           | WC, WD, WF, WG                                     |  | XPCWHT-L1-0000-00B02 |
|                                             |           | WC, WD, WF, WG, WH, WJ, WN, WP                     |  | XPCWHT-L1-0000-00B03 |
| Q4                                          | 100       | WA, WB, WC, WD, WE, WF, WG, WH, WJ, WK, WM, WN, WP |  | XPCWHT-L1-0000-00C01 |
|                                             |           | WC, WD, WF, WG                                     |  | XPCWHT-L1-0000-00C02 |
|                                             |           | WC, WD, WF, WG, WH, WJ, WN, WP                     |  | XPCWHT-L1-0000-00C03 |
| Q5                                          | 107       | WA, WB, WC, WD, WE, WF, WG, WH, WJ, WK, WM, WN, WP |  | XPCWHT-L1-0000-00D01 |
|                                             |           | WC, WD, WF, WG                                     |  | XPCWHT-L1-0000-00D02 |
|                                             |           | WC, WD, WF, WG, WH, WJ, WN, WP                     |  | XPCWHT-L1-0000-00D03 |

**STANDARD ORDER CODES AND BINS (XP-C ANSI COOL WHITE, T<sub>j</sub> = 25 °C)**

| XLamp XP-C LED Standard Order Codes - White |        |                                      |           |                      |
|---------------------------------------------|--------|--------------------------------------|-----------|----------------------|
| Chromaticity                                |        | Minimum Luminous Flux (lm) @ 350 mA* |           | Order Codes          |
| Kit                                         | CCT    | Code                                 | Flux (lm) | 70 CRI Typical       |
| ANSI Cool White (5000 K – 8300 K)           |        |                                      |           |                      |
| 51                                          | 6200 K | Q5                                   | 107       | XPCWHT-L1-0000-00D51 |
|                                             |        | Q4                                   | 100       | XPCWHT-L1-0000-00C51 |
|                                             |        | Q3                                   | 93.9      | XPCWHT-L1-0000-00B51 |
|                                             |        | Q2                                   | 87.4      | XPCWHT-L1-0000-00A51 |
| 53                                          | 6000 K | Q5                                   | 107       | XPCWHT-L1-0000-00D53 |
|                                             |        | Q4                                   | 100       | XPCWHT-L1-0000-00C53 |
|                                             |        | Q3                                   | 93.9      | XPCWHT-L1-0000-00B53 |
|                                             |        | Q2                                   | 87.4      | XPCWHT-L1-0000-00A53 |
| 50                                          | 6200 K | Q5                                   | 107       | XPCWHT-L1-0000-00D50 |
|                                             |        | Q4                                   | 100       | XPCWHT-L1-0000-00C50 |
|                                             |        | Q3                                   | 93.9      | XPCWHT-L1-0000-00B50 |
|                                             |        | Q2                                   | 87.4      | XPCWHT-L1-0000-00A50 |
| E1                                          | 6500 K | Q5                                   | 107       | XPCWHT-L1-0000-00DE1 |
|                                             |        | Q4                                   | 100       | XPCWHT-L1-0000-00CE1 |
|                                             |        | Q3                                   | 93.9      | XPCWHT-L1-0000-00BE1 |
|                                             |        | Q2                                   | 87.4      | XPCWHT-L1-0000-00AE1 |
| E2                                          | 5700 K | Q5                                   | 107       | XPCWHT-L1-0000-00DE2 |
|                                             |        | Q4                                   | 100       | XPCWHT-L1-0000-00CE2 |
|                                             |        | Q3                                   | 93.9      | XPCWHT-L1-0000-00BE2 |
|                                             |        | Q2                                   | 87.4      | XPCWHT-L1-0000-00AE2 |

\* Cree XLamp XP Family LED order codes specify only a minimum flux bin and not a maximum. Cree may ship reels in flux bins higher than the minimum specified by the order code without advance notice. Shipments will always adhere to the chromaticity or DWL bin restrictions specified by the order code.

**STANDARD ORDER CODES AND BINS (XP-C NEUTRAL WHITE, T<sub>j</sub> = 25 °C)**

| XLamp XP-C LED Standard Kit Codes - White |        |                                      |           |                      |
|-------------------------------------------|--------|--------------------------------------|-----------|----------------------|
| Chromaticity                              |        | Minimum Luminous Flux (lm) @ 350 mA* |           | Order Codes          |
| Kit                                       | CCT    | Code                                 | Flux (lm) | 75 CRI Typical       |
| ANSI Neutral White (3700 K – 5000 K)      |        |                                      |           |                      |
| E3                                        | 5000 K | Q2                                   | 87.4      | XPCWHT-L1-0000-00AE3 |
|                                           |        | P4                                   | 80.6      | XPCWHT-L1-0000-009E3 |
|                                           |        | P3                                   | 73.9      | XPCWHT-L1-0000-008E3 |
| F4                                        | 4750 K | Q2                                   | 87.4      | XPCWHT-L1-0000-00AF4 |
|                                           |        | P4                                   | 80.6      | XPCWHT-L1-0000-009F4 |
|                                           |        | P3                                   | 73.9      | XPCWHT-L1-0000-008F4 |
| E4                                        | 4500 K | Q2                                   | 87.4      | XPCWHT-L1-0000-00AE4 |
|                                           |        | P4                                   | 80.6      | XPCWHT-L1-0000-009E4 |
|                                           |        | P3                                   | 73.9      | XPCWHT-L1-0000-008E4 |
| F5                                        | 4250 K | Q2                                   | 87.4      | XPCWHT-L1-0000-00AF5 |
|                                           |        | P4                                   | 80.6      | XPCWHT-L1-0000-009F5 |
|                                           |        | P3                                   | 73.9      | XPCWHT-L1-0000-008F5 |
|                                           |        | P2                                   | 67.2      | XPCWHT-L1-0000-007F5 |
| E5                                        | 4000 K | Q2                                   | 87.4      | XPCWHT-L1-0000-00AE5 |
|                                           |        | P4                                   | 80.6      | XPCWHT-L1-0000-009E5 |
|                                           |        | P3                                   | 73.9      | XPCWHT-L1-0000-008E5 |
|                                           |        | P2                                   | 67.2      | XPCWHT-L1-0000-007E5 |

\* Cree XLamp XP Family LED order codes specify only a minimum flux bin and not a maximum. Cree may ship reels in flux bins higher than the minimum specified by the order code without advance notice. Shipments will always adhere to the chromaticity or DWL bin restrictions specified by the order code.



**STANDARD ORDER CODES AND BINS (XP-C WARM WHITE,  $T_j = 25\text{ }^{\circ}\text{C}$ )**

| XLamp XP-C LED Standard Kit Codes - White |        |                                      |           |                      |
|-------------------------------------------|--------|--------------------------------------|-----------|----------------------|
| Chromaticity                              |        | Minimum Luminous Flux (lm) @ 350 mA* |           | Order Codes          |
| Kit                                       | CCT    | Code                                 | Flux (lm) | 80 CRI Typical       |
| ANSI Warm White (2700 K - 3750 K)         |        |                                      |           |                      |
| F6                                        | 3750 K | P4                                   | 80.6      | XPCWHT-L1-0000-009F6 |
|                                           |        | P3                                   | 73.9      | XPCWHT-L1-0000-008F6 |
|                                           |        | P2                                   | 67.2      | XPCWHT-L1-0000-007F6 |
| E6                                        | 3500 K | P4                                   | 80.6      | XPCWHT-L1-0000-009E6 |
|                                           |        | P3                                   | 73.9      | XPCWHT-L1-0000-008E6 |
|                                           |        | P2                                   | 67.2      | XPCWHT-L1-0000-007E6 |
| F7                                        | 3250 K | P3                                   | 73.9      | XPCWHT-L1-0000-008F7 |
|                                           |        | P2                                   | 67.2      | XPCWHT-L1-0000-007F7 |
|                                           |        | N4                                   | 62        | XPCWHT-L1-0000-006F7 |
| E7                                        | 3000 K | P3                                   | 73.9      | XPCWHT-L1-0000-008E7 |
|                                           |        | P2                                   | 67.2      | XPCWHT-L1-0000-007E7 |
|                                           |        | N4                                   | 62        | XPCWHT-L1-0000-006E7 |
| F8                                        | 2850 K | P2                                   | 67.2      | XPCWHT-L1-0000-007F8 |
|                                           |        | N4                                   | 62        | XPCWHT-L1-0000-006F8 |
|                                           |        | N3                                   | 56.8      | XPCWHT-L1-0000-005F8 |
| E8                                        | 2700 K | P2                                   | 67.2      | XPCWHT-L1-0000-007E8 |
|                                           |        | N4                                   | 62        | XPCWHT-L1-0000-006E8 |
|                                           |        | N3                                   | 56.8      | XPCWHT-L1-0000-005E8 |

**STANDARD ORDER CODES AND BINS (XP-C COLOR,  $T_j = 25\text{ }^{\circ}\text{C}$ )**

| XLamp XP-C LED Standard Order Codes - Royal Blue |                                     |           |                                                 |                          |          |       |          |                      |
|--------------------------------------------------|-------------------------------------|-----------|-------------------------------------------------|--------------------------|----------|-------|----------|----------------------|
| Color                                            | Min. Radiant Flux (mW)<br>@ 350 mA* |           | Calculated Min. Radiant<br>Flux (mW) @ 125 mA** | Dominant Wavelength (nm) |          |       |          | Order Codes          |
|                                                  | Group                               | Flux (mW) |                                                 | Min.                     |          | Max.  |          |                      |
|                                                  |                                     |           |                                                 | Group                    | DWL (nm) | Group | DWL (nm) |                      |
| Royal Blue                                       | 12                                  | 250       | 104                                             | D3                       | 450      | D5    | 465      | XPCROY-L1-0000-00701 |
|                                                  |                                     |           |                                                 | D3                       | 450      | D4    | 460      | XPCROY-L1-0000-00702 |
|                                                  |                                     |           |                                                 | D4                       | 455      | D5    | 465      | XPCROY-L1-0000-00703 |
|                                                  | 13                                  | 300       | 124                                             | D3                       | 450      | D5    | 465      | XPCROY-L1-0000-00801 |
|                                                  |                                     |           |                                                 | D3                       | 450      | D4    | 460      | XPCROY-L1-0000-00802 |
|                                                  |                                     |           |                                                 | D4                       | 455      | D5    | 465      | XPCROY-L1-0000-00803 |
|                                                  | 14                                  | 350       | 145                                             | D3                       | 450      | D5    | 465      | XPCROY-L1-0000-00901 |
|                                                  |                                     |           |                                                 | D3                       | 450      | D4    | 460      | XPCROY-L1-0000-00902 |

\*\* Calculated values for reference only

\* Cree XLamp XP Family LED order codes specify only a minimum flux bin and not a maximum. Cree may ship reels in flux bins higher than the minimum specified by the order code without advance notice. Shipments will always adhere to the chromaticity or DWL bin restrictions specified by the order code.

**STANDARD ORDER CODES AND BINS (XP-C COLOR, T<sub>j</sub> = 25 °C) - CONTINUED**

| XLamp XP-C LED Standard Order Codes - Color |                                      |           |                                                  |                          |          |       |          |                      |
|---------------------------------------------|--------------------------------------|-----------|--------------------------------------------------|--------------------------|----------|-------|----------|----------------------|
| Color                                       | Min. Luminous Flux (lm)<br>@ 350 mA* |           | Calculated Min. Luminous Flux (lm)<br>@ 125 mA** | Dominant Wavelength (nm) |          |       |          | Order Codes          |
|                                             |                                      |           |                                                  | Min.                     |          | Max.  |          |                      |
|                                             | Group                                | Flux (lm) | Flux (lm)                                        | Group                    | DWL (nm) | Group | DWL (nm) |                      |
| Blue                                        | J                                    | 23.5      | 10.8                                             | B3                       | 465      | B6    | 485      | XPCBLU-L1-0000-00W01 |
|                                             |                                      |           |                                                  | B3                       | 465      | B5    | 480      | XPCBLU-L1-0000-00W02 |
|                                             |                                      |           |                                                  | B4                       | 470      | B5    | 480      | XPCBLU-L1-0000-00W05 |
|                                             | K2                                   | 30.6      | 13.8                                             | B3                       | 465      | B6    | 485      | XPCBLU-L1-0000-00Y01 |
|                                             |                                      |           |                                                  | B3                       | 465      | B5    | 480      | XPCBLU-L1-0000-00Y02 |
|                                             |                                      |           |                                                  | B4                       | 470      | B5    | 480      | XPCBLU-L1-0000-00Y05 |
| Green                                       | N3                                   | 56.8      | 28.2                                             | G2                       | 520      | G4    | 535      | XPCGRN-L1-0000-00501 |
|                                             |                                      |           |                                                  | G2                       | 520      | G3    | 530      | XPCGRN-L1-0000-00502 |
|                                             |                                      |           |                                                  | G3                       | 525      | G4    | 535      | XPCGRN-L1-0000-00503 |
|                                             | N4                                   | 62.0      | 30.8                                             | G2                       | 520      | G4    | 535      | XPCGRN-L1-0000-00601 |
|                                             |                                      |           |                                                  | G2                       | 520      | G3    | 530      | XPCGRN-L1-0000-00602 |
|                                             |                                      |           |                                                  | G3                       | 525      | G4    | 535      | XPCGRN-L1-0000-00603 |
|                                             | P2                                   | 67.2      | 33.3                                             | G2                       | 520      | G4    | 535      | XPCGRN-L1-0000-00701 |
|                                             |                                      |           |                                                  | G2                       | 520      | G3    | 530      | XPCGRN-L1-0000-00702 |
|                                             |                                      |           |                                                  | G3                       | 525      | G4    | 535      | XPCGRN-L1-0000-00703 |
|                                             | P3                                   | 73.9      | 36.7                                             | G2                       | 520      | G4    | 535      | XPCGRN-L1-0000-00801 |
|                                             |                                      |           |                                                  | G2                       | 520      | G3    | 530      | XPCGRN-L1-0000-00802 |
|                                             |                                      |           |                                                  | G3                       | 525      | G4    | 535      | XPCGRN-L1-0000-00803 |
| Amber                                       | M2                                   | 39.8      | 14.9                                             | A2                       | 585      | A3    | 595      | XPCAMB-L1-0000-00201 |
|                                             | M3                                   | 45.7      | 17.1                                             | A2                       | 585      | A3    | 595      | XPCAMB-L1-0000-00301 |
|                                             | N2                                   | 51.7      | 19.4                                             | A2                       | 585      | A3    | 595      | XPCAMB-L1-0000-00401 |
|                                             | N3                                   | 56.8      | 21.3                                             | A2                       | 585      | A3    | 595      | XPCAMB-L1-0000-00501 |
| Red-Orange                                  | N2                                   | 51.7      | 19.8                                             | O3                       | 610      | O4    | 620      | XPCRDO-L1-0000-00401 |
|                                             | N3                                   | 56.8      | 21.7                                             | O3                       | 610      | O4    | 620      | XPCRDO-L1-0000-00501 |
|                                             | N4                                   | 62.0      | 23.7                                             | O3                       | 610      | O4    | 620      | XPCRDO-L1-0000-00601 |
|                                             | P2                                   | 67.2      | 25.7                                             | O3                       | 610      | O4    | 620      | XPCRDO-L1-0000-00701 |
| Red                                         | M2                                   | 39.8      | 15.2                                             | R2                       | 620      | R3    | 630      | XPCRED-L1-0000-00201 |
|                                             | M3                                   | 45.7      | 17.5                                             | R2                       | 620      | R3    | 630      | XPCRED-L1-0000-00301 |
|                                             | N2                                   | 51.7      | 19.7                                             | R2                       | 620      | R3    | 630      | XPCRED-L1-0000-00401 |
|                                             | N3                                   | 56.8      | 21.7                                             | R2                       | 620      | R3    | 630      | XPCRED-L1-0000-00501 |

\*\* Calculated values for reference only

\* Cree XLamp XP Family LED order codes specify only a minimum flux bin and not a maximum. Cree may ship reels in flux bins higher than the minimum specified by the order code without advance notice. Shipments will always adhere to the chromaticity or DWL bin restrictions specified by the order code.

**STANDARD ORDER CODES AND BINS (XP-E COOL WHITE,  $T_j = 25\text{ }^{\circ}\text{C}$ )**

| XLamp XP-E LED Standard Order Codes - White |           |                                                    |  |                      |
|---------------------------------------------|-----------|----------------------------------------------------|--|----------------------|
| Minimum Luminous Flux (lm) @ 350 mA*        |           | Chromaticity Regions                               |  | Order Codes          |
| Group                                       | Flux (lm) |                                                    |  | 70 CRI Typical       |
| Cool White (5000 K – 10,000 K)              |           |                                                    |  |                      |
| Q4                                          | 100       | WA, WB, WC, WD, WE, WF, WG, WH, WJ, WK, WM, WN, WP |  | XPEWHT-L1-0000-00C01 |
|                                             |           | WC, WD, WF, WG                                     |  | XPEWHT-L1-0000-00C02 |
|                                             |           | WC, WD, WF, WG, WH, WJ, WN, WP                     |  | XPEWHT-L1-0000-00C03 |
| Q5                                          | 107       | WA, WB, WC, WD, WE, WF, WG, WH, WJ, WK, WM, WN, WP |  | XPEWHT-L1-0000-00D01 |
|                                             |           | WC, WD, WF, WG                                     |  | XPEWHT-L1-0000-00D02 |
|                                             |           | WC, WD, WF, WG, WH, WJ, WN, WP                     |  | XPEWHT-L1-0000-00D03 |
| R2                                          | 114       | WA, WB, WC, WD, WE, WF, WG, WH, WJ, WK, WM, WN, WP |  | XPEWHT-L1-0000-00E01 |
|                                             |           | WC, WD, WF, WG                                     |  | XPEWHT-L1-0000-00E02 |
|                                             |           | WC, WD, WF, WG, WH, WJ, WN, WP                     |  | XPEWHT-L1-0000-00E03 |
| R3                                          | 122       | WA, WB, WC, WD, WE, WF, WG, WH, WJ, WK, WM, WN, WP |  | XPEWHT-L1-0000-00F01 |
|                                             |           | WC, WD, WF, WG                                     |  | XPEWHT-L1-0000-00F02 |
|                                             |           | WC, WD, WF, WG, WH, WJ, WN, WP                     |  | XPEWHT-L1-0000-00F03 |

**STANDARD ORDER CODES AND BINS (XP-E ANSI COOL WHITE,  $T_j = 25\text{ }^{\circ}\text{C}$ )**

| XLamp XP-E LED Standard Order Codes - White |        |                                      |           |                      |
|---------------------------------------------|--------|--------------------------------------|-----------|----------------------|
| Chromaticity                                |        | Minimum Luminous Flux (lm) @ 350 mA* |           | Order Codes          |
| Kit                                         | CCT    | Code                                 | Flux (lm) | 70 CRI Typical       |
| ANSI Cool White (5000 K – 8300 K)           |        |                                      |           |                      |
| 51                                          | 6200 K | R3                                   | 122       | XPEWHT-L1-0000-00F51 |
|                                             |        | R2                                   | 114       | XPEWHT-L1-0000-00E51 |
|                                             |        | Q5                                   | 107       | XPEWHT-L1-0000-00D51 |
|                                             |        | Q4                                   | 100       | XPEWHT-L1-0000-00C51 |
| 53                                          | 6000 K | R3                                   | 122       | XPEWHT-L1-0000-00F53 |
|                                             |        | R2                                   | 114       | XPEWHT-L1-0000-00E53 |
|                                             |        | Q5                                   | 107       | XPEWHT-L1-0000-00D53 |
|                                             |        | Q4                                   | 100       | XPEWHT-L1-0000-00C53 |
| 50                                          | 6200 K | R3                                   | 122       | XPEWHT-L1-0000-00F50 |
|                                             |        | R2                                   | 114       | XPEWHT-L1-0000-00E50 |
|                                             |        | Q5                                   | 107       | XPEWHT-L1-0000-00D50 |
|                                             |        | Q4                                   | 100       | XPEWHT-L1-0000-00C50 |
| E1                                          | 6500 K | R3                                   | 122       | XPEWHT-L1-0000-00FE1 |
|                                             |        | R2                                   | 114       | XPEWHT-L1-0000-00EE1 |
|                                             |        | Q5                                   | 107       | XPEWHT-L1-0000-00DE1 |
|                                             |        | Q4                                   | 100       | XPEWHT-L1-0000-00CE1 |
| E2                                          | 5700 K | R3                                   | 122       | XPEWHT-L1-0000-00FE2 |
|                                             |        | R2                                   | 114       | XPEWHT-L1-0000-00EE2 |
|                                             |        | Q5                                   | 107       | XPEWHT-L1-0000-00DE2 |
|                                             |        | Q4                                   | 100       | XPEWHT-L1-0000-00CE2 |

\* Cree XLamp XP Family LED order codes specify only a minimum flux bin and not a maximum. Cree may ship reels in flux bins higher than the minimum specified by the order code without advance notice. Shipments will always adhere to the chromaticity or DWL bin restrictions specified by the order code.

**STANDARD ORDER CODES AND BINS (XP-E NEUTRAL WHITE, OUTDOOR WHITE, T<sub>j</sub> = 25 °C)**

| XLamp XP-E LED Standard Kit Codes - White |        |                                      |           |                      |                      |                      |
|-------------------------------------------|--------|--------------------------------------|-----------|----------------------|----------------------|----------------------|
| Chromaticity                              |        | Minimum Luminous Flux (lm) @ 350 mA* |           | Order Codes          |                      |                      |
| Kit                                       | CCT    | Code                                 | Flux (lm) | 70 CRI Typical       | 75 CRI Typical       | 80 CRI Minimum       |
| ANSI Neutral White (3700 K – 5000 K)      |        |                                      |           |                      |                      |                      |
| E3                                        | 5000 K | Q5                                   | 107       |                      | XPEWHT-L1-0000-00DE3 |                      |
|                                           |        | Q4                                   | 100       |                      | XPEWHT-L1-0000-00CE3 |                      |
|                                           |        | Q3                                   | 93.9      |                      | XPEWHT-L1-0000-00BE3 |                      |
| C1                                        | 5000 K | R3                                   | 122       | XPEWHT-01-0000-00FC1 |                      |                      |
|                                           |        | R2                                   | 114       | XPEWHT-01-0000-00EC1 |                      |                      |
|                                           |        | Q5                                   | 107       | XPEWHT-01-0000-00DC1 |                      |                      |
|                                           |        | Q4                                   | 100       | XPEWHT-01-0000-00CC1 |                      |                      |
| F4                                        | 4750 K | Q5                                   | 107       |                      | XPEWHT-L1-0000-00DF4 |                      |
|                                           |        | Q4                                   | 100       |                      | XPEWHT-L1-0000-00CF4 |                      |
|                                           |        | Q3                                   | 93.9      |                      | XPEWHT-L1-0000-00BF4 |                      |
| D1                                        | 4750 K | R3                                   | 122       | XPEWHT-01-0000-00FD1 |                      |                      |
|                                           |        | R2                                   | 114       | XPEWHT-01-0000-00ED1 |                      |                      |
|                                           |        | Q5                                   | 107       | XPEWHT-01-0000-00DD1 |                      |                      |
|                                           |        | Q4                                   | 100       | XPEWHT-01-0000-00CD1 |                      |                      |
| E4                                        | 4500 K | Q5                                   | 107       |                      | XPEWHT-L1-0000-00DE4 |                      |
|                                           |        | Q4                                   | 100       |                      | XPEWHT-L1-0000-00CE4 |                      |
|                                           |        | Q3                                   | 93.9      |                      | XPEWHT-L1-0000-00BE4 |                      |
| D2                                        | 4500 K | R3                                   | 122       | XPEWHT-01-0000-00FD2 |                      |                      |
|                                           |        | R2                                   | 114       | XPEWHT-01-0000-00ED2 |                      |                      |
|                                           |        | Q5                                   | 107       | XPEWHT-01-0000-00DD2 |                      |                      |
|                                           |        | Q4                                   | 100       | XPEWHT-01-0000-00CD2 |                      |                      |
| C2                                        | 4500 K | R3                                   | 122       | XPEWHT-01-0000-00FC2 |                      |                      |
|                                           |        | R2                                   | 114       | XPEWHT-01-0000-00EC2 |                      |                      |
|                                           |        | Q5                                   | 107       | XPEWHT-01-0000-00DC2 |                      |                      |
|                                           |        | Q4                                   | 100       | XPEWHT-01-0000-00CC2 |                      |                      |
| C3                                        | 4300 K | R3                                   | 122       | XPEWHT-01-0000-00FC3 |                      |                      |
|                                           |        | R2                                   | 114       | XPEWHT-01-0000-00EC3 |                      |                      |
|                                           |        | Q5                                   | 107       | XPEWHT-01-0000-00DC3 |                      |                      |
|                                           |        | Q4                                   | 100       | XPEWHT-01-0000-00CC3 |                      |                      |
| F5                                        | 4250 K | Q5                                   | 107       |                      | XPEWHT-L1-0000-00DF5 |                      |
|                                           |        | Q4                                   | 100       |                      | XPEWHT-L1-0000-00CF5 |                      |
|                                           |        | Q3                                   | 93.9      |                      | XPEWHT-L1-0000-00BF5 |                      |
|                                           |        | Q2                                   | 87.4      |                      | XPEWHT-L1-0000-00AF5 |                      |
| E5                                        | 4000 K | Q5                                   | 107       |                      | XPEWHT-L1-0000-00DE5 |                      |
|                                           |        | Q4                                   | 100       |                      | XPEWHT-L1-0000-00CE5 | XPEWHT-H1-0000-00CE5 |
|                                           |        | Q3                                   | 93.9      |                      | XPEWHT-L1-0000-00BE5 | XPEWHT-H1-0000-00BE5 |
|                                           |        | Q2                                   | 87.4      |                      | XPEWHT-L1-0000-00AE5 | XPEWHT-H1-0000-00AE5 |
| Z5                                        | 4000 K | Q4                                   | 100       |                      | XPEWHT-L1-0000-00CZ5 |                      |
|                                           |        | Q3                                   | 93.9      |                      | XPEWHT-L1-0000-00BZ5 | XPEWHT-H1-0000-00BZ5 |
|                                           |        | Q2                                   | 87.4      |                      | XPEWHT-L1-0000-00AZ5 | XPEWHT-H1-0000-00AZ5 |

\* Cree XLamp XP Family LED order codes specify only a minimum flux bin and not a maximum. Cree may ship reels in flux bins higher than the minimum specified by the order code without advance notice. Shipments will always adhere to the chromaticity or DWL bin restrictions specified by the order code.

**STANDARD ORDER CODES AND BINS (XP-E WARM WHITE, T<sub>j</sub> = 25 °C)**

| XLamp XP-E LED Standard Kit Codes - White |        |                                      |           |                      |                      |                      |                      |
|-------------------------------------------|--------|--------------------------------------|-----------|----------------------|----------------------|----------------------|----------------------|
| Chromaticity                              |        | Minimum Luminous Flux (lm) @ 350 mA* |           | Order Codes          |                      |                      |                      |
| Kit                                       | CCT    | Code                                 | Flux (lm) | 80 CRI Typical       | 80 CRI Minimum       | 85 CRI Minimum       | 90 CRI Minimum       |
| ANSI Warm White (2700 K - 3750 K)         |        |                                      |           |                      |                      |                      |                      |
| F6                                        | 3750 K | Q4                                   | 100       | XPEWHT-L1-0000-00CF6 |                      |                      |                      |
|                                           |        | Q3                                   | 93.9      | XPEWHT-L1-0000-00BF6 | XPEWHT-H1-0000-00BF6 |                      |                      |
|                                           |        | Q2                                   | 87.4      | XPEWHT-L1-0000-00AF6 | XPEWHT-H1-0000-00AF6 |                      |                      |
|                                           |        | P4                                   | 80.6      | XPEWHT-L1-0000-009F6 | XPEWHT-H1-0000-009F6 |                      |                      |
| E6                                        | 3500 K | Q4                                   | 100       | XPEWHT-L1-0000-00CE6 |                      |                      |                      |
|                                           |        | Q3                                   | 93.9      | XPEWHT-L1-0000-00BE6 | XPEWHT-H1-0000-00BE6 |                      |                      |
|                                           |        | Q2                                   | 87.4      | XPEWHT-L1-0000-00AE6 | XPEWHT-H1-0000-00AE6 |                      |                      |
|                                           |        | P4                                   | 80.6      | XPEWHT-L1-0000-009E6 | XPEWHT-H1-0000-009E6 |                      |                      |
| Z6                                        | 3500 K | Q3                                   | 93.9      | XPEWHT-L1-0000-00BZ6 |                      |                      |                      |
|                                           |        | Q2                                   | 87.4      | XPEWHT-L1-0000-00AZ6 | XPEWHT-H1-0000-00AZ6 |                      |                      |
|                                           |        | P4                                   | 80.6      | XPEWHT-L1-0000-009Z6 | XPEWHT-H1-0000-009Z6 |                      |                      |
| F7                                        | 3250 K | Q3                                   | 93.9      | XPEWHT-L1-0000-00BF7 |                      |                      |                      |
|                                           |        | Q2                                   | 87.4      | XPEWHT-L1-0000-00AF7 | XPEWHT-H1-0000-00AF7 |                      |                      |
|                                           |        | P4                                   | 80.6      | XPEWHT-L1-0000-009F7 | XPEWHT-H1-0000-009F7 |                      |                      |
| E7                                        | 3000 K | Q3                                   | 93.9      | XPEWHT-L1-0000-00BE7 |                      |                      |                      |
|                                           |        | Q2                                   | 87.4      | XPEWHT-L1-0000-00AE7 | XPEWHT-H1-0000-00AE7 |                      |                      |
|                                           |        | P4                                   | 80.6      | XPEWHT-L1-0000-009E7 | XPEWHT-H1-0000-009E7 | XPEWHT-P1-0000-009E7 |                      |
|                                           |        | P3                                   | 73.9      |                      |                      | XPEWHT-P1-0000-008E7 | XPEWHT-U1-0000-008E7 |
|                                           |        | P2                                   | 67.2      |                      |                      | XPEWHT-P1-0000-007E7 | XPEWHT-U1-0000-007E7 |
|                                           |        | N4                                   | 62        |                      |                      | XPEWHT-P1-0000-006E7 | XPEWHT-U1-0000-006E7 |
| Z7                                        | 3000 K | Q2                                   | 87.4      | XPEWHT-L1-0000-00AZ7 | XPEWHT-H1-0000-00AZ7 |                      |                      |
|                                           |        | P4                                   | 80.6      | XPEWHT-L1-0000-009Z7 | XPEWHT-H1-0000-009Z7 |                      |                      |
|                                           |        | P3                                   | 73.9      |                      |                      | XPEWHT-P1-0000-008Z7 |                      |
|                                           |        | P2                                   | 67.2      |                      |                      | XPEWHT-P1-0000-007Z7 | XPEWHT-U1-0000-007Z7 |
|                                           |        | N4                                   | 62        |                      |                      | XPEWHT-P1-0000-006Z7 | XPEWHT-U1-0000-006Z7 |
| F8                                        | 2850 K | Q2                                   | 87.4      | XPEWHT-L1-0000-00AF8 |                      |                      |                      |
|                                           |        | P4                                   | 80.6      | XPEWHT-L1-0000-009F8 | XPEWHT-H1-0000-009F8 |                      |                      |
|                                           |        | P3                                   | 73.9      | XPEWHT-L1-0000-008F8 | XPEWHT-H1-0000-008F8 | XPEWHT-P1-0000-008F8 |                      |
|                                           |        | P2                                   | 67.2      |                      |                      | XPEWHT-P1-0000-007F8 | XPEWHT-U1-0000-007F8 |
|                                           |        | N4                                   | 62        |                      |                      | XPEWHT-P1-0000-006F8 | XPEWHT-U1-0000-006F8 |
|                                           |        | N3                                   | 56.8      |                      |                      | XPEWHT-P1-0000-005F8 | XPEWHT-U1-0000-005F8 |
| E8                                        | 2700 K | Q2                                   | 87.4      | XPEWHT-L1-0000-00AE8 |                      |                      |                      |
|                                           |        | P4                                   | 80.6      | XPEWHT-L1-0000-009E8 | XPEWHT-H1-0000-009E8 |                      |                      |
|                                           |        | P3                                   | 73.9      | XPEWHT-L1-0000-008E8 | XPEWHT-H1-0000-008E8 | XPEWHT-P1-0000-008E8 |                      |
|                                           |        | P2                                   | 67.2      |                      |                      | XPEWHT-P1-0000-007E8 | XPEWHT-U1-0000-007E8 |
|                                           |        | N4                                   | 62        |                      |                      | XPEWHT-P1-0000-006E8 | XPEWHT-U1-0000-006E8 |
|                                           |        | N3                                   | 56.8      |                      |                      | XPEWHT-P1-0000-005E8 | XPEWHT-U1-0000-005E8 |
| Z8                                        | 2700 K | P4                                   | 80.6      | XPEWHT-L1-0000-009Z8 | XPEWHT-H1-0000-009Z8 |                      |                      |
|                                           |        | P3                                   | 73.9      | XPEWHT-L1-0000-008Z8 | XPEWHT-H1-0000-008Z8 |                      |                      |
|                                           |        | P2                                   | 67.2      |                      |                      | XPEWHT-P1-0000-007Z8 |                      |
|                                           |        | N4                                   | 62        |                      |                      | XPEWHT-P1-0000-006Z8 | XPEWHT-U1-0000-006Z8 |
|                                           |        | N3                                   | 56.8      |                      |                      | XPEWHT-P1-0000-005Z8 | XPEWHT-U1-0000-005Z8 |

\* Cree XLamp XP Family LED order codes specify only a minimum flux bin and not a maximum. Cree may ship reels in flux bins higher than the minimum specified by the order code without advance notice. Shipments will always adhere to the chromaticity or DWL bin restrictions specified by the order code.

**STANDARD ORDER CODES AND BINS (XP-E COLOR,  $T_j = 25\text{ }^{\circ}\text{C}$ )**

| XLamp XP-E LED Standard Order Codes - Royal Blue |                                  |           |                          |          |       |          |                      |
|--------------------------------------------------|----------------------------------|-----------|--------------------------|----------|-------|----------|----------------------|
| Color                                            | Min. Radiant Flux (mW) @ 350 mA* |           | Dominant Wavelength (nm) |          |       |          | Order Codes          |
|                                                  |                                  |           | Min.                     |          | Max.  |          |                      |
|                                                  | Group                            | Flux (mW) | Group                    | DWL (nm) | Group | DWL (nm) |                      |
| Royal Blue                                       | 14                               | 350       | D3                       | 450      | D5    | 465      | XPEROY-L1-0000-00901 |
|                                                  |                                  |           | D3                       | 450      | D4    | 460      | XPEROY-L1-0000-00902 |
|                                                  |                                  |           | D4                       | 455      | D5    | 465      | XPEROY-L1-0000-00903 |
|                                                  | 15                               | 425       | D3                       | 450      | D5    | 465      | XPEROY-L1-0000-00A01 |
|                                                  |                                  |           | D3                       | 450      | D4    | 460      | XPEROY-L1-0000-00A02 |
|                                                  |                                  |           | D4                       | 455      | D5    | 465      | XPEROY-L1-0000-00A03 |
|                                                  | 16                               | 500       | D3                       | 450      | D5    | 465      | XPEROY-L1-0000-00B01 |
|                                                  |                                  |           | D3                       | 450      | D4    | 460      | XPEROY-L1-0000-00B02 |

| XLamp XP-E LED Standard Order Codes - Color |                                  |           |                          |          |       |          |                      |
|---------------------------------------------|----------------------------------|-----------|--------------------------|----------|-------|----------|----------------------|
| Color                                       | Min. Luminous Flux (lm)@ 350 mA* |           | Dominant Wavelength (nm) |          |       |          | Order Codes          |
|                                             |                                  |           | Min.                     |          | Max.  |          |                      |
|                                             | Group                            | Flux (lm) | Group                    | DWL (nm) | Group | DWL (nm) |                      |
| Blue                                        | K2                               | 30.6      | B3                       | 465      | B6    | 485      | XPEBLU-L1-0000-00Y01 |
|                                             |                                  |           | B3                       | 465      | B5    | 480      | XPEBLU-L1-0000-00Y02 |
|                                             |                                  |           | B4                       | 470      | B5    | 480      | XPEBLU-L1-0000-00Y05 |
|                                             | K3                               | 35.2      | B3                       | 465      | B6    | 485      | XPEBLU-L1-0000-00Z01 |
|                                             |                                  |           | B3                       | 465      | B5    | 480      | XPEBLU-L1-0000-00Z02 |
|                                             |                                  |           | B4                       | 470      | B5    | 480      | XPEBLU-L1-0000-00Z05 |
|                                             | M2                               | 39.8      | B3                       | 465      | B6    | 485      | XPEBLU-L1-0000-00201 |
|                                             |                                  |           | B3                       | 465      | B5    | 480      | XPEBLU-L1-0000-00202 |
|                                             |                                  |           | B4                       | 470      | B5    | 480      | XPEBLU-L1-0000-00205 |

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**STANDARD ORDER CODES AND BINS (XP-E COLOR, T<sub>j</sub> = 25 °C) - CONTINUED**

| XLamp XP-E LED Standard Order Codes - Color |                                  |           |                          |          |       |          |                      |
|---------------------------------------------|----------------------------------|-----------|--------------------------|----------|-------|----------|----------------------|
| Color                                       | Min. Luminous Flux (lm)@ 350 mA* |           | Dominant Wavelength (nm) |          |       |          | Order Codes          |
|                                             |                                  |           | Min.                     |          | Max.  |          |                      |
|                                             | Group                            | Flux (lm) | Group                    | DWL (nm) | Group | DWL (nm) |                      |
| Green                                       | P4                               | 80.6      | G2                       | 520      | G4    | 535      | XPEGRN-L1-0000-00901 |
|                                             |                                  |           | G2                       | 520      | G3    | 530      | XPEGRN-L1-0000-00902 |
|                                             |                                  |           | G3                       | 525      | G4    | 535      | XPEGRN-L1-0000-00903 |
|                                             | Q2                               | 87.4      | G2                       | 520      | G4    | 535      | XPEGRN-L1-0000-00A01 |
|                                             |                                  |           | G2                       | 520      | G3    | 530      | XPEGRN-L1-0000-00A02 |
|                                             |                                  |           | G3                       | 525      | G4    | 535      | XPEGRN-L1-0000-00A03 |
|                                             | Q3                               | 93.9      | G2                       | 520      | G4    | 535      | XPEGRN-L1-0000-00B01 |
|                                             |                                  |           | G2                       | 520      | G3    | 530      | XPEGRN-L1-0000-00B02 |
|                                             |                                  |           | G3                       | 525      | G4    | 535      | XPEGRN-L1-0000-00B03 |
|                                             | Q4                               | 100       | G2                       | 520      | G4    | 535      | XPEGRN-L1-0000-00C01 |
|                                             |                                  |           | G2                       | 520      | G3    | 530      | XPEGRN-L1-0000-00C02 |
|                                             |                                  |           | G3                       | 525      | G4    | 535      | XPEGRN-L1-0000-00C03 |
|                                             | Q5                               | 107       | G2                       | 520      | G4    | 535      | XPEGRN-L1-0000-00D01 |
|                                             |                                  |           | G2                       | 520      | G3    | 530      | XPEGRN-L1-0000-00D02 |
|                                             |                                  |           | G3                       | 525      | G4    | 535      | XPEGRN-L1-0000-00D03 |
|                                             | R2                               | 114       | G2                       | 520      | G4    | 535      | XPEGRN-L1-0000-00E01 |
|                                             |                                  |           | G2                       | 520      | G3    | 530      | XPEGRN-L1-0000-00E02 |
|                                             |                                  |           | G3                       | 525      | G4    | 535      | XPEGRN-L1-0000-00E03 |
| Amber                                       | M3                               | 45.7      | A2                       | 585      | A3    | 595      | XPEAMB-L1-0000-00301 |
|                                             | N2                               | 51.7      | A2                       | 585      | A3    | 595      | XPEAMB-L1-0000-00401 |
|                                             | N3                               | 56.8      | A2                       | 585      | A3    | 595      | XPEAMB-L1-0000-00501 |
|                                             | N4                               | 62.0      | A2                       | 585      | A3    | 595      | XPEAMB-L1-0000-00601 |
|                                             | P2                               | 67.2      | A2                       | 585      | A3    | 595      | XPEAMB-L1-0000-00701 |
|                                             | P3                               | 73.9      | A2                       | 585      | A3    | 595      | XPEAMB-L1-0000-00801 |
|                                             | P4                               | 80.6      | A2                       | 585      | A3    | 595      | XPEAMB-L1-0000-00901 |
| Red-Orange                                  | N3                               | 56.8      | O3                       | 610      | O4    | 620      | XPERDO-L1-0000-00501 |
|                                             | N4                               | 62.0      | O3                       | 610      | O4    | 620      | XPERDO-L1-0000-00601 |
|                                             | P2                               | 67.2      | O3                       | 610      | O4    | 620      | XPERDO-L1-0000-00701 |
|                                             | P3                               | 73.9      | O3                       | 610      | O4    | 620      | XPERDO-L1-0000-00801 |
|                                             | P4                               | 80.6      | O3                       | 610      | O4    | 620      | XPERDO-L1-0000-00901 |
|                                             | Q2                               | 87.4      | O3                       | 610      | O4    | 620      | XPERDO-L1-0000-00A01 |
| Red                                         | M3                               | 45.7      | R2                       | 620      | R3    | 630      | XPERED-L1-0000-00301 |
|                                             | N2                               | 51.7      | R2                       | 620      | R3    | 630      | XPERED-L1-0000-00401 |
|                                             | N3                               | 56.8      | R2                       | 620      | R3    | 630      | XPERED-L1-0000-00501 |
|                                             | N4                               | 62        | R2                       | 620      | R3    | 630      | XPERED-L1-0000-00601 |
|                                             | P2                               | 67.2      | R2                       | 620      | R3    | 630      | XPERED-L1-0000-00701 |
|                                             | P3                               | 73.9      | R2                       | 620      | R3    | 630      | XPERED-L1-0000-00801 |

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**STANDARD ORDER CODES AND BINS (XP-E COLOR,  $T_j = 25\text{ }^{\circ}\text{C}$ ) - CONTINUED**

| XLamp XP-E LED Standard Order Codes - Color |                                 |           |                      |          |       |          |                      |
|---------------------------------------------|---------------------------------|-----------|----------------------|----------|-------|----------|----------------------|
| Color                                       | Min. Radiant Flux (mW)@ 350 mA* |           | Peak Wavelength (nm) |          |       |          | Order Codes          |
|                                             |                                 |           | Min.                 |          | Max.  |          |                      |
|                                             | Group                           | Flux (mW) | Group                | PWL (nm) | Group | PWL (nm) |                      |
| Photo Red                                   | 13                              | 300       | P2                   | 650      | P5    | 670      | XPEPHR-L1-0000-00801 |
|                                             | 14                              | 350       | P2                   | 650      | P5    | 670      | XPEPHR-L1-0000-00901 |

**STANDARD ORDER CODES AND BINS (XP-E2 ANSI COOL WHITE,  $T_j = 85\text{ }^{\circ}\text{C}$ )**

| XLamp XP-E2 LED Standard Order Codes - White |        |                                      |           |                      |  |
|----------------------------------------------|--------|--------------------------------------|-----------|----------------------|--|
| Chromaticity                                 |        | Minimum Luminous Flux (lm) @ 350 mA* |           | Order Codes          |  |
| Kit                                          | CCT    | Code                                 | Flux (lm) | 70 CRI Typical       |  |
| ANSI Cool White (5000 K – 8300 K)            |        |                                      |           |                      |  |
| 51                                           | 6200 K | R3                                   | 122       | XPEBWT-L1-0000-00F51 |  |
|                                              |        | R2                                   | 114       | XPEBWT-L1-0000-00E51 |  |
|                                              |        | Q5                                   | 107       | XPEBWT-L1-0000-00D51 |  |
|                                              |        | Q4                                   | 100       | XPEBWT-L1-0000-00C51 |  |
| 53                                           | 6000 K | R3                                   | 122       | XPEBWT-L1-0000-00F53 |  |
|                                              |        | R2                                   | 114       | XPEBWT-L1-0000-00E53 |  |
|                                              |        | Q5                                   | 107       | XPEBWT-L1-0000-00D53 |  |
|                                              |        | Q4                                   | 100       | XPEBWT-L1-0000-00C53 |  |
| 50                                           | 6200 K | R3                                   | 122       | XPEBWT-L1-0000-00F50 |  |
|                                              |        | R2                                   | 114       | XPEBWT-L1-0000-00E50 |  |
|                                              |        | Q5                                   | 107       | XPEBWT-L1-0000-00D50 |  |
|                                              |        | Q4                                   | 100       | XPEBWT-L1-0000-00C50 |  |
| E1                                           | 6500 K | R3                                   | 122       | XPEBWT-L1-0000-00FE1 |  |
|                                              |        | R2                                   | 114       | XPEBWT-L1-0000-00EE1 |  |
|                                              |        | Q5                                   | 107       | XPEBWT-L1-0000-00DE1 |  |
|                                              |        | Q4                                   | 100       | XPEBWT-L1-0000-00CE1 |  |
| E2                                           | 5700 K | R3                                   | 122       | XPEBWT-L1-0000-00FE2 |  |
|                                              |        | R2                                   | 114       | XPEBWT-L1-0000-00EE2 |  |
|                                              |        | Q5                                   | 107       | XPEBWT-L1-0000-00DE2 |  |
|                                              |        | Q4                                   | 100       | XPEBWT-L1-0000-00CE2 |  |

\* Cree XLamp XP Family LED order codes specify only a minimum flux bin and not a maximum. Cree may ship reels in flux bins higher than the minimum specified by the order code without advance notice. Shipments will always adhere to the chromaticity or DWL bin restrictions specified by the order code.



**STANDARD ORDER CODES AND BINS (XP-E2 NEUTRAL WHITE, OUTDOOR WHITE, T<sub>j</sub> = 85 °C)**

| XLamp XP-E2 LED Standard Kit Codes - White |        |                                      |           |                      |                      |                      |
|--------------------------------------------|--------|--------------------------------------|-----------|----------------------|----------------------|----------------------|
| Chromaticity                               |        | Minimum Luminous Flux (lm) @ 350 mA* |           | Order Codes          |                      |                      |
| Kit                                        | CCT    | Code                                 | Flux (lm) | 70 CRI Typical       | 75 CRI Typical       | 80 CRI Minimum       |
| ANSI Neutral White (3700 K – 5000 K)       |        |                                      |           |                      |                      |                      |
| E3                                         | 5000 K | R2                                   | 114       |                      | XPEBWT-L1-0000-00EE3 |                      |
|                                            |        | Q5                                   | 107       |                      | XPEBWT-L1-0000-00DE3 |                      |
|                                            |        | Q4                                   | 100       |                      | XPEBWT-L1-0000-00CE3 |                      |
| C1                                         | 5000 K | R3                                   | 122       | XPEBWT-01-0000-00FC1 |                      |                      |
|                                            |        | R2                                   | 114       | XPEBWT-01-0000-00EC1 |                      |                      |
|                                            |        | Q5                                   | 107       | XPEBWT-01-0000-00DC1 |                      |                      |
|                                            |        | Q4                                   | 100       | XPEBWT-01-0000-00CC1 |                      |                      |
| F4                                         | 4750 K | R2                                   | 114       |                      | XPEBWT-L1-0000-00EF4 |                      |
|                                            |        | Q5                                   | 107       |                      | XPEBWT-L1-0000-00DF4 |                      |
|                                            |        | Q4                                   | 100       |                      | XPEBWT-L1-0000-00CF4 |                      |
| D1                                         | 4750 K | R3                                   | 122       | XPEBWT-01-0000-00FD1 |                      |                      |
|                                            |        | R2                                   | 114       | XPEBWT-01-0000-00ED1 |                      |                      |
|                                            |        | Q5                                   | 107       | XPEBWT-01-0000-00DD1 |                      |                      |
|                                            |        | Q4                                   | 100       | XPEBWT-01-0000-00CD1 |                      |                      |
| E4                                         | 4500 K | R2                                   | 114       |                      | XPEBWT-L1-0000-00EE4 |                      |
|                                            |        | Q5                                   | 107       |                      | XPEBWT-L1-0000-00DE4 |                      |
|                                            |        | Q4                                   | 100       |                      | XPEBWT-L1-0000-00CE4 |                      |
| D2                                         | 4500 K | R3                                   | 122       | XPEBWT-01-0000-00FD2 |                      |                      |
|                                            |        | R2                                   | 114       | XPEBWT-01-0000-00ED2 |                      |                      |
|                                            |        | Q5                                   | 107       | XPEBWT-01-0000-00DD2 |                      |                      |
|                                            |        | Q4                                   | 100       | XPEBWT-01-0000-00CD2 |                      |                      |
| C2                                         | 4500 K | R3                                   | 122       | XPEBWT-01-0000-00FC2 |                      |                      |
|                                            |        | R2                                   | 114       | XPEBWT-01-0000-00EC2 |                      |                      |
|                                            |        | Q5                                   | 107       | XPEBWT-01-0000-00DC2 |                      |                      |
|                                            |        | Q4                                   | 100       | XPEBWT-01-0000-00CC2 |                      |                      |
| C3                                         | 4300 K | R3                                   | 122       | XPEBWT-01-0000-00FC3 |                      |                      |
|                                            |        | R2                                   | 114       | XPEBWT-01-0000-00EC3 |                      |                      |
|                                            |        | Q5                                   | 107       | XPEBWT-01-0000-00DC3 |                      |                      |
|                                            |        | Q4                                   | 100       | XPEBWT-01-0000-00CC3 |                      |                      |
| F5                                         | 4250 K | R2                                   | 114       |                      | XPEBWT-L1-0000-00EF5 |                      |
|                                            |        | Q5                                   | 107       |                      | XPEBWT-L1-0000-00DF5 |                      |
|                                            |        | Q4                                   | 100       |                      | XPEBWT-L1-0000-00CF5 |                      |
|                                            |        | Q3                                   | 93.9      |                      | XPEBWT-L1-0000-00BF5 |                      |
| E5                                         | 4000 K | R2                                   | 114       |                      | XPEBWT-L1-0000-00EE5 |                      |
|                                            |        | Q5                                   | 107       |                      | XPEBWT-L1-0000-00DE5 | XPEBWT-H1-0000-00DE5 |
|                                            |        | Q4                                   | 100       |                      | XPEBWT-L1-0000-00CE5 | XPEBWT-H1-0000-00CE5 |
|                                            |        | Q3                                   | 93.9      |                      | XPEBWT-L1-0000-00BE5 | XPEBWT-H1-0000-00BE5 |
| Z5                                         | 4000 K | Q5                                   | 107       |                      | XPEBWT-L1-0000-00DZ5 |                      |
|                                            |        | Q4                                   | 100       |                      | XPEBWT-L1-0000-00CZ5 | XPEBWT-H1-0000-00CZ5 |
|                                            |        | Q3                                   | 93.9      |                      | XPEBWT-L1-0000-00BZ5 | XPEBWT-H1-0000-00BZ5 |

\* Cree XLamp XP Family LED order codes specify only a minimum flux bin and not a maximum. Cree may ship reels in flux bins higher than the minimum specified by the order code without advance notice. Shipments will always adhere to the chromaticity or DWL bin restrictions specified by the order code.

**STANDARD ORDER CODES AND BINS (XP-E2 WARM WHITE, T<sub>j</sub> = 85 °C)**

| XLamp XP-E2 LED Standard Kit Codes - White |        |                                      |           |                      |                      |                      |                      |
|--------------------------------------------|--------|--------------------------------------|-----------|----------------------|----------------------|----------------------|----------------------|
| Chromaticity                               |        | Minimum Luminous Flux (lm) @ 350 mA* |           | Order Codes          |                      |                      |                      |
| Kit                                        | CCT    | Code                                 | Flux (lm) | 80 CRI Typical       | 80 CRI Minimum       | 85 CRI Minimum       | 90 CRI Minimum       |
| ANSI Warm White (2700 K - 3750 K)          |        |                                      |           |                      |                      |                      |                      |
| F6                                         | 3750 K | Q5                                   | 107       | XPEBWT-L1-0000-00DF6 |                      |                      |                      |
|                                            |        | Q4                                   | 100       | XPEBWT-L1-0000-00CF6 | XPEBWT-H1-0000-00CF6 |                      |                      |
|                                            |        | Q3                                   | 93.9      | XPEBWT-L1-0000-00BF6 | XPEBWT-H1-0000-00BF6 |                      |                      |
|                                            |        | Q2                                   | 87.4      | XPEBWT-L1-0000-00AF6 | XPEBWT-H1-0000-00AF6 |                      |                      |
| E6                                         | 3500 K | Q5                                   | 107       | XPEBWT-L1-0000-00DE6 |                      |                      |                      |
|                                            |        | Q4                                   | 100       | XPEBWT-L1-0000-00CE6 | XPEBWT-H1-0000-00CE6 |                      |                      |
|                                            |        | Q3                                   | 93.9      | XPEBWT-L1-0000-00BE6 | XPEBWT-H1-0000-00BE6 |                      |                      |
|                                            |        | Q2                                   | 87.4      | XPEBWT-L1-0000-00AE6 | XPEBWT-H1-0000-00AE6 |                      |                      |
| Z6                                         | 3500 K | Q4                                   | 100       | XPEBWT-L1-0000-00CZ6 |                      |                      |                      |
|                                            |        | Q3                                   | 93.9      | XPEBWT-L1-0000-00BZ6 | XPEBWT-H1-0000-00BZ6 |                      |                      |
|                                            |        | Q2                                   | 87.4      | XPEBWT-L1-0000-00AZ6 | XPEBWT-H1-0000-00AZ6 |                      |                      |
| F7                                         | 3250 K | Q4                                   | 100       | XPEBWT-L1-0000-00CF7 |                      |                      |                      |
|                                            |        | Q3                                   | 93.9      | XPEBWT-L1-0000-00BF7 | XPEBWT-H1-0000-00BF7 |                      |                      |
|                                            |        | Q2                                   | 87.4      | XPEBWT-L1-0000-00AF7 | XPEBWT-H1-0000-00AF7 |                      |                      |
| E7                                         | 3000 K | Q4                                   | 100       | XPEBWT-L1-0000-00CE7 |                      |                      |                      |
|                                            |        | Q3                                   | 93.9      | XPEBWT-L1-0000-00BE7 | XPEBWT-H1-0000-00BE7 |                      |                      |
|                                            |        | Q2                                   | 87.4      | XPEBWT-L1-0000-00AE7 | XPEBWT-H1-0000-00AE7 |                      |                      |
|                                            |        | P4                                   | 80.6      |                      |                      | XPEBWT-P1-0000-009E7 | XPEBWT-U1-0000-009E7 |
|                                            |        | P3                                   | 73.9      |                      |                      | XPEBWT-P1-0000-008E7 | XPEBWT-U1-0000-008E7 |
|                                            |        | P2                                   | 67.2      |                      |                      | XPEBWT-P1-0000-007E7 | XPEBWT-U1-0000-007E7 |
| Z7                                         | 3000 K | Q3                                   | 93.9      | XPEBWT-L1-0000-00BZ7 | XPEBWT-H1-0000-00BZ7 |                      |                      |
|                                            |        | Q2                                   | 87.4      | XPEBWT-L1-0000-00AZ7 | XPEBWT-H1-0000-00AZ7 |                      |                      |
|                                            |        | P4                                   | 80.6      |                      |                      | XPEBWT-P1-0000-009Z7 |                      |
|                                            |        | P3                                   | 73.9      |                      |                      | XPEBWT-P1-0000-008Z7 | XPEBWT-U1-0000-008Z7 |
|                                            |        | P2                                   | 67.2      |                      |                      | XPEBWT-P1-0000-007Z7 | XPEBWT-U1-0000-007Z7 |
| F8                                         | 2850 K | Q3                                   | 93.9      | XPEBWT-L1-0000-00BF8 |                      |                      |                      |
|                                            |        | Q2                                   | 87.4      | XPEBWT-L1-0000-00AF8 | XPEBWT-H1-0000-00AF8 |                      |                      |
|                                            |        | P4                                   | 80.6      | XPEBWT-L1-0000-009F8 | XPEBWT-H1-0000-009F8 | XPEBWT-P1-0000-009F8 |                      |
|                                            |        | P3                                   | 73.9      |                      |                      | XPEBWT-P1-0000-008F8 | XPEBWT-U1-0000-008F8 |
|                                            |        | P2                                   | 67.2      |                      |                      | XPEBWT-P1-0000-007F8 | XPEBWT-U1-0000-007F8 |
|                                            |        | N4                                   | 62        |                      |                      | XPEBWT-P1-0000-006F8 | XPEBWT-U1-0000-006F8 |
| E8                                         | 2700 K | Q3                                   | 93.9      | XPEBWT-L1-0000-00BE8 |                      |                      |                      |
|                                            |        | Q2                                   | 87.4      | XPEBWT-L1-0000-00AE8 | XPEBWT-H1-0000-00AE8 |                      |                      |
|                                            |        | P4                                   | 80.6      | XPEBWT-L1-0000-009E8 | XPEBWT-H1-0000-009E8 |                      |                      |
|                                            |        | P3                                   | 73.9      |                      |                      | XPEBWT-P1-0000-008E8 | XPEBWT-U1-0000-008E8 |
|                                            |        | P2                                   | 67.2      |                      |                      | XPEBWT-P1-0000-007E8 | XPEBWT-U1-0000-007E8 |
|                                            |        | N4                                   | 62        |                      |                      | XPEBWT-P1-0000-006E8 | XPEBWT-U1-0000-006E8 |

\* Cree XLamp XP Family LED order codes specify only a minimum flux bin and not a maximum. Cree may ship reels in flux bins higher than the minimum specified by the order code without advance notice. Shipments will always adhere to the chromaticity or DWL bin restrictions specified by the order code.

**STANDARD ORDER CODES AND BINS (XP-E2 WARM WHITE,  $T_j = 85\text{ }^{\circ}\text{C}$ ) - CONTINUED**

| XLamp XP-E2 LED Standard Kit Codes - White |        |                                      |           |                      |                      |                      |                      |
|--------------------------------------------|--------|--------------------------------------|-----------|----------------------|----------------------|----------------------|----------------------|
| Chromaticity                               |        | Minimum Luminous Flux (lm) @ 350 mA* |           | Order Codes          |                      |                      |                      |
| Kit                                        | CCT    | Code                                 | Flux (lm) | 80 CRI Typical       | 80 CRI Minimum       | 85 CRI Minimum       | 90 CRI Minimum       |
| ANSI Warm White (2700 K - 3750 K)          |        |                                      |           |                      |                      |                      |                      |
| Z8                                         | 2700 K | Q2                                   | 87.4      | XPEBWT-L1-0000-00AZ8 | XPEBWT-H1-0000-00AZ8 |                      |                      |
|                                            |        | P4                                   | 80.6      | XPEBWT-L1-0000-009Z8 | XPEBWT-H1-0000-009Z8 |                      |                      |
|                                            |        | P3                                   | 73.9      |                      |                      | XPEBWT-P1-0000-008Z8 |                      |
|                                            |        | P2                                   | 67.2      |                      |                      | XPEBWT-P1-0000-007Z8 | XPEBWT-U1-0000-007Z8 |
|                                            |        | N4                                   | 62        |                      |                      | XPEBWT-P1-0000-006Z8 | XPEBWT-U1-0000-006Z8 |
| EA                                         | 2200 K | P2                                   | 67.2      | XPEBWT-L1-0000-007EA | XPEBWT-H1-0000-007EA |                      |                      |
|                                            |        | N4                                   | 62        | XPEBWT-L1-0000-006EA | XPEBWT-H1-0000-006EA |                      |                      |

\* Cree XLamp XP Family LED order codes specify only a minimum flux bin and not a maximum. Cree may ship reels in flux bins higher than the minimum specified by the order code without advance notice. Shipments will always adhere to the chromaticity or DWL bin restrictions specified by the order code.

**STANDARD ORDER CODES AND BINS (XP-E2 COLOR, T<sub>j</sub> = 25 °C)**

| XLamp XP-E2 LED Standard Order Codes - Royal Blue |                               |           |                          |          |       |          |                      |
|---------------------------------------------------|-------------------------------|-----------|--------------------------|----------|-------|----------|----------------------|
| Color                                             | Minimum Radiant Flux @ 350 mA |           | Dominant Wavelength (nm) |          |       |          | Order Codes          |
|                                                   |                               |           | Min.                     |          | Max.  |          |                      |
|                                                   | Group                         | Flux (mW) | Group                    | DWL (nm) | Group | DWL (nm) |                      |
| Royal Blue                                        | 30                            | 450       | D3                       | 450      | D5    | 465      | XPEBRY-L1-0000-00J01 |
|                                                   |                               |           | D3                       | 450      | D4    | 460      | XPEBRY-L1-0000-00J02 |
|                                                   |                               |           | D4                       | 455      | D5    | 465      | XPEBRY-L1-0000-00J03 |
|                                                   | 31                            | 475       | D3                       | 450      | D5    | 455      | XPEBRY-L1-0000-00K01 |
|                                                   |                               |           | D3                       | 450      | D4    | 460      | XPEBRY-L1-0000-00K02 |
|                                                   |                               |           | D4                       | 455      | D5    | 465      | XPEBRY-L1-0000-00K03 |
|                                                   | 32                            | 500       | D3                       | 450      | D5    | 455      | XPEBRY-L1-0000-00L01 |
|                                                   |                               |           | D3                       | 450      | D4    | 460      | XPEBRY-L1-0000-00L02 |
|                                                   |                               |           | D4                       | 455      | D5    | 465      | XPEBRY-L1-0000-00L03 |
|                                                   | 33                            | 525       | D3                       | 450      | D5    | 455      | XPEBRY-L1-0000-00M01 |
|                                                   |                               |           | D3                       | 450      | D4    | 460      | XPEBRY-L1-0000-00M02 |
|                                                   |                               |           | D4                       | 455      | D5    | 465      | XPEBRY-L1-0000-00M03 |
|                                                   | 34                            | 550       | D3                       | 450      | D5    | 455      | XPEBRY-L1-0000-00N01 |
|                                                   |                               |           | D3                       | 450      | D4    | 460      | XPEBRY-L1-0000-00N02 |
|                                                   |                               |           | D4                       | 455      | D5    | 465      | XPEBRY-L1-0000-00N03 |
|                                                   | 35                            | 575       | D3                       | 450      | D5    | 465      | XPEBRY-L1-0000-00P01 |
|                                                   |                               |           | D3                       | 450      | D4    | 460      | XPEBRY-L1-0000-00P02 |
|                                                   |                               |           | D4                       | 455      | D5    | 465      | XPEBRY-L1-0000-00P03 |
|                                                   | 36                            | 600       | D3                       | 450      | D5    | 465      | XPEBRY-L1-0000-00Q01 |
|                                                   |                               |           | D3                       | 450      | D4    | 460      | XPEBRY-L1-0000-00Q02 |

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**STANDARD ORDER CODES AND BINS (XP-E2 COLOR, T<sub>j</sub> = 25 °C) - CONTINUED**

| XLamp XP-E2 LED Standard Order Codes - Color |                                   |           |                          |          |       |          |                      |
|----------------------------------------------|-----------------------------------|-----------|--------------------------|----------|-------|----------|----------------------|
| Color                                        | Min. Luminous Flux (lm) @ 350 mA* |           | Dominant Wavelength (nm) |          |       |          | Order Codes          |
|                                              |                                   |           | Min.                     |          | Max.  |          |                      |
|                                              | Group                             | Flux (lm) | Group                    | DWL (nm) | Group | DWL (nm) |                      |
| Blue                                         | K2                                | 30.6      | B3                       | 465      | B6    | 485      | XPEBBL-L1-0000-00Y01 |
|                                              |                                   |           | B3                       | 465      | B5    | 480      | XPEBBL-L1-0000-00Y02 |
|                                              |                                   |           | B4                       | 470      | B5    | 480      | XPEBBL-L1-0000-00Y05 |
|                                              | K3                                | 35.2      | B3                       | 465      | B6    | 485      | XPEBBL-L1-0000-00Z01 |
|                                              |                                   |           | B3                       | 465      | B5    | 480      | XPEBBL-L1-0000-00Z02 |
|                                              |                                   |           | B4                       | 470      | B5    | 480      | XPEBBL-L1-0000-00Z05 |
|                                              | M2                                | 39.8      | B3                       | 465      | B6    | 485      | XPEBBL-L1-0000-00201 |
|                                              |                                   |           | B3                       | 465      | B5    | 480      | XPEBBL-L1-0000-00202 |
|                                              |                                   |           | B4                       | 470      | B5    | 480      | XPEBBL-L1-0000-00205 |
|                                              | M3                                | 45.7      | B3                       | 465      | B6    | 485      | XPEBBL-L1-0000-00301 |
|                                              |                                   |           | B3                       | 465      | B5    | 480      | XPEBBL-L1-0000-00302 |
|                                              |                                   |           | B4                       | 470      | B5    | 480      | XPEBBL-L1-0000-00305 |
| Green                                        | Q2                                | 87.4      | G2                       | 520      | G4    | 535      | XPEBGR-L1-0000-00A01 |
|                                              |                                   |           | G2                       | 520      | G3    | 530      | XPEBGR-L1-0000-00A02 |
|                                              |                                   |           | G3                       | 525      | G4    | 535      | XPEBGR-L1-0000-00A03 |
|                                              | Q3                                | 93.9      | G2                       | 520      | G4    | 535      | XPEBGR-L1-0000-00B01 |
|                                              |                                   |           | G2                       | 520      | G3    | 530      | XPEBGR-L1-0000-00B02 |
|                                              |                                   |           | G3                       | 525      | G4    | 535      | XPEBGR-L1-0000-00B03 |
|                                              | Q4                                | 100       | G2                       | 520      | G4    | 535      | XPEBGR-L1-0000-00C01 |
|                                              |                                   |           | G2                       | 520      | G3    | 530      | XPEBGR-L1-0000-00C02 |
|                                              |                                   |           | G3                       | 525      | G4    | 535      | XPEBGR-L1-0000-00C03 |
|                                              | Q5                                | 107       | G2                       | 520      | G4    | 535      | XPEBGR-L1-0000-00D01 |
|                                              |                                   |           | G2                       | 520      | G3    | 530      | XPEBGR-L1-0000-00D02 |
|                                              |                                   |           | G3                       | 525      | G4    | 535      | XPEBGR-L1-0000-00D03 |
|                                              | R2                                | 114       | G2                       | 520      | G4    | 535      | XPEBGR-L1-0000-00E01 |
|                                              |                                   |           | G2                       | 520      | G3    | 530      | XPEBGR-L1-0000-00E02 |
|                                              |                                   |           | G3                       | 525      | G4    | 535      | XPEBGR-L1-0000-00E03 |
|                                              | R3                                | 122       | G2                       | 520      | G4    | 535      | XPEBGR-L1-0000-00F01 |
|                                              |                                   |           | G2                       | 520      | G3    | 530      | XPEBGR-L1-0000-00F02 |

| Color    | Color Bin | Min. Luminous Flux (lm) @ 350 mA |           | Order Codes          |
|----------|-----------|----------------------------------|-----------|----------------------|
|          |           | Group                            | Flux (lm) |                      |
| PC Amber | Y2        | Q2                               | 87.4      | XPEBPA-L1-0000-00A01 |
|          |           | Q3                               | 93.9      | XPEBPA-L1-0000-00B01 |
|          |           | Q4                               | 100       | XPEBPA-L1-0000-00C01 |

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**STANDARD ORDER CODES AND BINS (XP-E2 COLOR, T<sub>j</sub> = 25 °C) - CONTINUED**

| XLamp XP-E2 LED Standard Order Codes - Color |                                   |           |                          |          |       |          |                      |
|----------------------------------------------|-----------------------------------|-----------|--------------------------|----------|-------|----------|----------------------|
| Color                                        | Min. Luminous Flux (lm) @ 350 mA* |           | Dominant Wavelength (nm) |          |       |          | Order Codes          |
|                                              |                                   |           | Min.                     |          | Max.  |          |                      |
|                                              | Group                             | Flux (lm) | Group                    | DWL (nm) | Group | DWL (nm) |                      |
| Amber                                        | N4                                | 62.0      | A2                       | 585      | A3    | 595      | XPEBAM-L1-0000-00601 |
|                                              |                                   |           | A2                       | 585      | A2    | 590      | XPEBAM-L1-0000-00602 |
|                                              |                                   |           | A3                       | 590      | A3    | 595      | XPEBAM-L1-0000-00603 |
|                                              | P2                                | 67.2      | A2                       | 585      | A3    | 595      | XPEBAM-L1-0000-00701 |
|                                              |                                   |           | A2                       | 585      | A2    | 590      | XPEBAM-L1-0000-00702 |
|                                              |                                   |           | A3                       | 590      | A3    | 595      | XPEBAM-L1-0000-00703 |
|                                              | P3                                | 73.9      | A2                       | 585      | A3    | 595      | XPEBAM-L1-0000-00801 |
|                                              |                                   |           | A2                       | 585      | A2    | 590      | XPEBAM-L1-0000-00802 |
|                                              |                                   |           | A3                       | 590      | A3    | 595      | XPEBAM-L1-0000-00803 |
|                                              | P4                                | 80.6      | A2                       | 585      | A3    | 595      | XPEBAM-L1-0000-00901 |
|                                              |                                   |           | A3                       | 590      | A3    | 595      | XPEBAM-L1-0000-00903 |
| Red-Orange                                   | P2                                | 67.2      | O3                       | 610      | O4    | 620      | XPEBRO-L1-0000-00701 |
|                                              |                                   |           | O3                       | 610      | O3    | 615      | XPEBRO-L1-0000-00702 |
|                                              |                                   |           | O4                       | 615      | O4    | 620      | XPEBRO-L1-0000-00703 |
|                                              | P3                                | 73.9      | O3                       | 610      | O4    | 620      | XPEBRO-L1-0000-00801 |
|                                              |                                   |           | O3                       | 610      | O3    | 615      | XPEBRO-L1-0000-00802 |
|                                              |                                   |           | O4                       | 615      | O4    | 620      | XPEBRO-L1-0000-00803 |
|                                              | P4                                | 80.6      | O3                       | 610      | O4    | 620      | XPEBRO-L1-0000-00901 |
|                                              |                                   |           | O3                       | 610      | O3    | 615      | XPEBRO-L1-0000-00902 |
|                                              |                                   |           | O4                       | 615      | O4    | 620      | XPEBRO-L1-0000-00903 |
|                                              | Q2                                | 87.4      | O3                       | 610      | O4    | 620      | XPEBRO-L1-0000-00A01 |
|                                              |                                   |           | O3                       | 610      | O3    | 615      | XPEBRO-L1-0000-00A02 |
|                                              |                                   |           | O4                       | 615      | O4    | 620      | XPEBRO-L1-0000-00A03 |
|                                              | Q3                                | 93.9      | O3                       | 610      | O4    | 620      | XPEBRO-L1-0000-00B01 |
|                                              |                                   |           | O3                       | 610      | O3    | 615      | XPEBRO-L1-0000-00B02 |
|                                              | Q4                                | 100       | O3                       | 610      | O4    | 620      | XPEBRO-L1-0000-00C01 |
|                                              |                                   |           | O3                       | 610      | O3    | 615      | XPEBRO-L1-0000-00C02 |
|                                              | Q5                                | 107       | O3                       | 610      | O4    | 620      | XPEBRO-L1-0000-00D01 |
|                                              |                                   |           | O3                       | 610      | O3    | 615      | XPEBRO-L1-0000-00D02 |
| Red                                          | N3                                | 56.8      | R2                       | 620      | R3    | 630      | XPEBRD-L1-0000-00501 |
|                                              |                                   |           | R2                       | 620      | R2    | 625      | XPEBRD-L1-0000-00502 |
|                                              | N4                                | 62        | R2                       | 620      | R3    | 630      | XPEBRD-L1-0000-00601 |
|                                              |                                   |           | R2                       | 620      | R2    | 625      | XPEBRD-L1-0000-00602 |
|                                              | P2                                | 67.2      | R2                       | 620      | R3    | 630      | XPEBRD-L1-0000-00701 |
|                                              |                                   |           | R2                       | 620      | R2    | 625      | XPEBRD-L1-0000-00702 |
|                                              | P3                                | 73.9      | R2                       | 620      | R3    | 630      | XPEBRD-L1-0000-00801 |
|                                              |                                   |           | R2                       | 620      | R2    | 625      | XPEBRD-L1-0000-00802 |

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**STANDARD ORDER CODES AND BINS (XP-E HEW ANSI COOL WHITE,  $T_j = 25\text{ }^{\circ}\text{C}$ )**

| XLamp XP-E High Efficiency White LED Order Codes - White |        |                                      |           |                      |
|----------------------------------------------------------|--------|--------------------------------------|-----------|----------------------|
| Chromaticity                                             |        | Minimum Luminous Flux (lm) @ 350 mA* |           | Order Codes          |
| Kit                                                      | CCT    | Code                                 | Flux (lm) | 68 CRI Typical       |
| ANSI Cool White (5000 K – 8300 K)                        |        |                                      |           |                      |
| 51                                                       | 6200 K | R5                                   | 139       | XPEHEW-L1-0000-00H51 |
|                                                          |        | R4                                   | 130       | XPEHEW-L1-0000-00G51 |
|                                                          |        | R3                                   | 122       | XPEHEW-L1-0000-00F51 |
| 53                                                       | 6000 K | R5                                   | 139       | XPEHEW-L1-0000-00H53 |
|                                                          |        | R4                                   | 130       | XPEHEW-L1-0000-00G53 |
|                                                          |        | R3                                   | 122       | XPEHEW-L1-0000-00F53 |
| 50                                                       | 6200 K | R5                                   | 139       | XPEHEW-L1-0000-00H50 |
|                                                          |        | R4                                   | 130       | XPEHEW-L1-0000-00G50 |
|                                                          |        | R3                                   | 122       | XPEHEW-L1-0000-00F50 |

**STANDARD ORDER CODES AND BINS (XP-E HEW NEUTRAL WHITE, OUTDOOR WHITE,  $T_j = 25\text{ }^{\circ}\text{C}$ )**

| XLamp XP-E High Efficiency White LED Standard Kit Codes - White |        |                                      |           |                      |                      |                |
|-----------------------------------------------------------------|--------|--------------------------------------|-----------|----------------------|----------------------|----------------|
| Chromaticity                                                    |        | Minimum Luminous Flux (lm) @ 350 mA* |           | Order Codes          |                      |                |
| Kit                                                             | CCT    | Code                                 | Flux (lm) | 70 CRI Typical       | 75 CRI Typical       | 80 CRI Minimum |
| ANSI Neutral White (3700 K – 5000 K)                            |        |                                      |           |                      |                      |                |
| E3                                                              | 5000 K | R3                                   | 122       | XPEHEW-01-0000-00FE3 | XPEHEW-L1-0000-00FE3 |                |
|                                                                 |        | R2                                   | 114       | XPEHEW-01-0000-00EE3 | XPEHEW-L1-0000-00EE3 |                |
|                                                                 |        | Q5                                   | 107       |                      | XPEHEW-L1-0000-00DE3 |                |
| C1                                                              | 5000 K | R4                                   | 130       | XPEHEW-01-0000-00GC1 |                      |                |
|                                                                 |        | R3                                   | 122       | XPEHEW-01-0000-00FC1 |                      |                |
|                                                                 |        | R2                                   | 114       | XPEHEW-01-0000-00EC1 |                      |                |
| F4                                                              | 4750 K | R3                                   | 122       | XPEHEW-01-0000-00FF4 | XPEHEW-L1-0000-00FF4 |                |
|                                                                 |        | R2                                   | 114       | XPEHEW-01-0000-00EF4 | XPEHEW-L1-0000-00EF4 |                |
|                                                                 |        | Q5                                   | 107       |                      | XPEHEW-L1-0000-00DF4 |                |
| D1                                                              | 4750 K | R4                                   | 130       | XPEHEW-01-0000-00GD1 |                      |                |
|                                                                 |        | R3                                   | 122       | XPEHEW-01-0000-00FD1 |                      |                |
|                                                                 |        | R2                                   | 114       | XPEHEW-01-0000-00ED1 |                      |                |
| E4                                                              | 4500 K | R3                                   | 122       | XPEHEW-01-0000-00FE4 | XPEHEW-L1-0000-00FE4 |                |
|                                                                 |        | R2                                   | 114       | XPEHEW-01-0000-00EE4 | XPEHEW-L1-0000-00EE4 |                |
|                                                                 |        | Q5                                   | 107       |                      | XPEHEW-L1-0000-00DE4 |                |
| D2                                                              | 4500 K | R4                                   | 130       | XPEHEW-01-0000-00GD2 |                      |                |
|                                                                 |        | R3                                   | 122       | XPEHEW-01-0000-00FD2 |                      |                |
|                                                                 |        | R2                                   | 114       | XPEHEW-01-0000-00ED2 |                      |                |
| C2                                                              | 4500 K | R4                                   | 130       | XPEHEW-01-0000-00GC2 |                      |                |
|                                                                 |        | R3                                   | 122       | XPEHEW-01-0000-00FC2 |                      |                |
|                                                                 |        | R2                                   | 114       | XPEHEW-01-0000-00EC2 |                      |                |

\* Cree XLamp XP Family LED order codes specify only a minimum flux bin and not a maximum. Cree may ship reels in flux bins higher than the minimum specified by the order code without advance notice. Shipments will always adhere to the chromaticity or DWL bin restrictions specified by the order code.

**STANDARD ORDER CODES AND BINS (XP-E HEW NEUTRAL WHITE, OUTDOOR WHITE, T<sub>j</sub> = 25 °C) - CONTINUED**

| XLamp XP-E High Efficiency White LED Standard Kit Codes - White |        |                                      |           |                      |                      |                      |
|-----------------------------------------------------------------|--------|--------------------------------------|-----------|----------------------|----------------------|----------------------|
| Chromaticity                                                    |        | Minimum Luminous Flux (lm) @ 350 mA* |           | Order Codes          |                      |                      |
| Kit                                                             | CCT    | Code                                 | Flux (lm) | 70 CRI Typical       | 75 CRI Typical       | 80 CRI Minimum       |
| ANSI Neutral White (3700 K – 5000 K)                            |        |                                      |           |                      |                      |                      |
| C3                                                              | 4300 K | R4                                   | 130       | XPEHEW-01-0000-00GC3 |                      |                      |
|                                                                 |        | R3                                   | 122       | XPEHEW-01-0000-00FC3 |                      |                      |
|                                                                 |        | R2                                   | 114       | XPEHEW-01-0000-00EC3 |                      |                      |
| F5                                                              | 4250 K | R3                                   | 122       | XPEHEW-01-0000-00FF5 | XPEHEW-L1-0000-00FF5 |                      |
|                                                                 |        | R2                                   | 114       | XPEHEW-01-0000-00EF5 | XPEHEW-L1-0000-00EF5 |                      |
|                                                                 |        | Q5                                   | 107       |                      | XPEHEW-L1-0000-00DF5 |                      |
| E5                                                              | 4000 K | R3                                   | 122       | XPEHEW-01-0000-00FE5 | XPEHEW-L1-0000-00FE5 |                      |
|                                                                 |        | R2                                   | 114       | XPEHEW-01-0000-00EE5 | XPEHEW-L1-0000-00EE5 | XPEHEW-H1-0000-00EE5 |
|                                                                 |        | Q5                                   | 107       |                      | XPEHEW-L1-0000-00DE5 | XPEHEW-H1-0000-00DE5 |

**STANDARD ORDER CODES AND BINS (XP-E HEW NEUTRAL WHITE, OUTDOOR WHITE, T<sub>j</sub> = 25 °C) - CONTINUED**

| XLamp XP-E High Efficiency White LED Standard Kit Codes - White |        |                                      |           |                      |                      |                      |                      |                      |
|-----------------------------------------------------------------|--------|--------------------------------------|-----------|----------------------|----------------------|----------------------|----------------------|----------------------|
| Chromaticity                                                    |        | Minimum Luminous Flux (lm) @ 350 mA* |           | Order Codes          |                      |                      |                      |                      |
| Kit                                                             | CCT    | Code                                 | Flux (lm) | 70 CRI Typical       | 80 CRI Typical       | 80 CRI Minimum       | 85 CRI Minimum       | 90 CRI Minimum       |
| ANSI Warm White (2700 K - 3750 K)                               |        |                                      |           |                      |                      |                      |                      |                      |
| F6                                                              | 3750 K | R2                                   | 114       | XPEHEW-01-0000-00EF6 | XPEHEW-L1-0000-00EF6 | XPEHEW-H1-0000-00EF6 |                      |                      |
|                                                                 |        | Q5                                   | 107       | XPEHEW-01-0000-00DF6 | XPEHEW-L1-0000-00DF6 | XPEHEW-H1-0000-00DF6 |                      |                      |
|                                                                 |        | Q4                                   | 100       |                      | XPEHEW-L1-0000-00CF6 | XPEHEW-H1-0000-00CF6 |                      |                      |
| E6                                                              | 3500 K | R2                                   | 114       | XPEHEW-01-0000-00EE6 | XPEHEW-L1-0000-00EE6 |                      |                      |                      |
|                                                                 |        | Q5                                   | 107       | XPEHEW-01-0000-00DE6 | XPEHEW-L1-0000-00DE6 | XPEHEW-H1-0000-00DE6 |                      |                      |
|                                                                 |        | Q4                                   | 100       |                      | XPEHEW-L1-0000-00CE6 | XPEHEW-H1-0000-00CE6 |                      |                      |
| F7                                                              | 3250 K | R2                                   | 114       | XPEHEW-01-0000-00EF7 |                      |                      |                      |                      |
|                                                                 |        | Q5                                   | 107       | XPEHEW-01-0000-00DF7 | XPEHEW-L1-0000-00DF7 | XPEHEW-H1-0000-00DF7 |                      |                      |
|                                                                 |        | Q4                                   | 100       | XPEHEW-01-0000-00CF7 | XPEHEW-L1-0000-00CF7 | XPEHEW-H1-0000-00CF7 |                      |                      |
|                                                                 |        | Q3                                   | 93.9      |                      | XPEHEW-L1-0000-00BF7 | XPEHEW-H1-0000-00BF7 |                      |                      |
|                                                                 |        | P3                                   | 73.9      |                      |                      |                      |                      |                      |
| E7                                                              | 3000 K | R2                                   | 114       | XPEHEW-01-0000-00EE7 |                      |                      |                      |                      |
|                                                                 |        | Q5                                   | 107       | XPEHEW-01-0000-00DE7 | XPEHEW-L1-0000-00DE7 |                      |                      |                      |
|                                                                 |        | Q4                                   | 100       | XPEHEW-01-0000-00CE7 | XPEHEW-L1-0000-00CE7 | XPEHEW-H1-0000-00CE7 |                      |                      |
|                                                                 |        | Q3                                   | 93.9      |                      | XPEHEW-L1-0000-00BE7 | XPEHEW-H1-0000-00BE7 | XPEHEW-P1-0000-00BE7 |                      |
|                                                                 |        | Q2                                   | 87.4      |                      |                      |                      | XPEHEW-P1-0000-00AE7 | XPEHEW-U1-0000-00AE7 |
|                                                                 |        | P4                                   | 80.6      |                      |                      |                      | XPEHEW-P1-0000-009E7 | XPEHEW-U1-0000-009E7 |

\* Cree XLamp XP Family LED order codes specify only a minimum flux bin and not a maximum. Cree may ship reels in flux bins higher than the minimum specified by the order code without advance notice. Shipments will always adhere to the chromaticity or DWL bin restrictions specified by the order code.



**STANDARD ORDER CODES AND BINS (XP-E HEW NEUTRAL WHITE, OUTDOOR WHITE,  
T<sub>j</sub> = 25 °C) - CONTINUED**

| XLamp XP-E High Efficiency White LED Standard Kit Codes - White |        |                                      |           |                      |                      |                      |                      |                      |
|-----------------------------------------------------------------|--------|--------------------------------------|-----------|----------------------|----------------------|----------------------|----------------------|----------------------|
| Chromaticity                                                    |        | Minimum Luminous Flux (lm) @ 350 mA* |           | Order Codes          |                      |                      |                      |                      |
| Kit                                                             | CCT    | Code                                 | Flux (lm) | 70 CRI Typical       | 80 CRI Typical       | 80 CRI Minimum       | 85 CRI Minimum       | 90 CRI Minimum       |
| ANSI Warm White (2700 K - 3750 K)                               |        |                                      |           |                      |                      |                      |                      |                      |
| F8                                                              | 2850 K | Q5                                   | 107       | XPEHEW-01-0000-00DF8 |                      |                      |                      |                      |
|                                                                 |        | Q4                                   | 100       | XPEHEW-01-0000-00CF8 | XPEHEW-L1-0000-00CF8 | XPEHEW-H1-0000-00CF8 |                      |                      |
|                                                                 |        | Q3                                   | 93.9      |                      | XPEHEW-L1-0000-00BF8 | XPEHEW-H1-0000-00BF8 |                      |                      |
|                                                                 |        | Q2                                   | 87.4      |                      | XPEHEW-L1-0000-00AF8 | XPEHEW-H1-0000-00AF8 | XPEHEW-P1-0000-00AF8 | XPEHEW-U1-0000-00AF8 |
|                                                                 |        | P4                                   | 80.6      |                      |                      |                      | XPEHEW-P1-0000-009F8 | XPEHEW-U1-0000-009F8 |
|                                                                 |        | P3                                   | 73.9      |                      |                      |                      | XPEHEW-P1-0000-008F8 | XPEHEW-U1-0000-008F8 |
| E8                                                              | 2700 K | Q5                                   | 107       | XPEHEW-01-0000-00DE8 |                      |                      |                      |                      |
|                                                                 |        | Q4                                   | 100       | XPEHEW-01-0000-00CE8 | XPEHEW-L1-0000-00CE8 |                      |                      |                      |
|                                                                 |        | Q3                                   | 93.9      |                      | XPEHEW-L1-0000-00BE8 | XPEHEW-H1-0000-00BE8 |                      |                      |
|                                                                 |        | Q2                                   | 87.4      |                      | XPEHEW-L1-0000-00AE8 | XPEHEW-H1-0000-00AE8 | XPEHEW-P1-0000-00AE8 |                      |
|                                                                 |        | P4                                   | 80.6      |                      |                      |                      | XPEHEW-P1-0000-009E8 | XPEHEW-U1-0000-009E8 |
|                                                                 |        | P3                                   | 73.9      |                      |                      |                      | XPEHEW-P1-0000-008E8 | XPEHEW-U1-0000-008E8 |

\* Cree XLamp XP Family LED order codes specify only a minimum flux bin and not a maximum. Cree may ship reels in flux bins higher than the minimum specified by the order code without advance notice. Shipments will always adhere to the chromaticity or DWL bin restrictions specified by the order code.

**STANDARD ORDER CODES AND BINS (XP-G ANSI COOL WHITE, T<sub>j</sub> = 25 °C)**

| XLamp XP-G LED Standard Order Codes - White |        |                                      |           |                      |
|---------------------------------------------|--------|--------------------------------------|-----------|----------------------|
| Chromaticity                                |        | Minimum Luminous Flux (lm) @ 350 mA* |           | Order Codes          |
| Kit                                         | CCT    | Code                                 | Flux (lm) | 70 CRI Typical       |
| ANSI Cool White (5000 K – 8300 K)           |        |                                      |           |                      |
| 51                                          | 6200 K | R5                                   | 139       | XPGWHT-L1-0000-00H51 |
|                                             |        | R4                                   | 130       | XPGWHT-L1-0000-00G51 |
|                                             |        | R3                                   | 122       | XPGWHT-L1-0000-00F51 |
| 53                                          | 6000 K | R5                                   | 139       | XPGWHT-L1-0000-00H53 |
|                                             |        | R4                                   | 130       | XPGWHT-L1-0000-00G53 |
|                                             |        | R3                                   | 122       | XPGWHT-L1-0000-00F53 |
| 50                                          | 6200 K | R5                                   | 139       | XPGWHT-L1-0000-00H50 |
|                                             |        | R4                                   | 130       | XPGWHT-L1-0000-00G50 |
|                                             |        | R3                                   | 122       | XPGWHT-L1-0000-00F50 |
| E1                                          | 6500 K | R5                                   | 139       | XPGWHT-L1-0000-00HE1 |
|                                             |        | R4                                   | 130       | XPGWHT-L1-0000-00GE1 |
|                                             |        | R3                                   | 122       | XPGWHT-L1-0000-00FE1 |
| E2                                          | 5700 K | R5                                   | 139       | XPGWHT-L1-0000-00HE2 |
|                                             |        | R4                                   | 130       | XPGWHT-L1-0000-00GE2 |
|                                             |        | R3                                   | 122       | XPGWHT-L1-0000-00FE2 |

\* Cree XLamp XP Family LED order codes specify only a minimum flux bin and not a maximum. Cree may ship reels in flux bins higher than the minimum specified by the order code without advance notice. Shipments will always adhere to the chromaticity or DWL bin restrictions specified by the order code.

**STANDARD ORDER CODES AND BINS (XP-G NEUTRAL WHITE, OUTDOOR WHITE, T<sub>j</sub> = 25 °C)**

| XLamp XP-G LED Standard Kit Codes - White |        |                                      |           |                      |                      |                |
|-------------------------------------------|--------|--------------------------------------|-----------|----------------------|----------------------|----------------|
| Chromaticity                              |        | Minimum Luminous Flux (lm) @ 350 mA* |           | Order Codes          |                      |                |
| Kit                                       | CCT    | Code                                 | Flux (lm) | 70 CRI Typical       | 75 CRI Typical       | 80 CRI Minimum |
| ANSI Neutral White (3700 K – 5000 K)      |        |                                      |           |                      |                      |                |
| E3                                        | 5000 K | R5                                   | 139       | XPGWHT-01-0000-00HE3 |                      |                |
|                                           |        | R4                                   | 130       | XPGWHT-01-0000-00GE3 |                      |                |
|                                           |        | R3                                   | 122       | XPGWHT-01-0000-00FE3 | XPGWHT-L1-0000-00FE3 |                |
|                                           |        | R2                                   | 114       | XPGWHT-01-0000-00EE3 | XPGWHT-L1-0000-00EE3 |                |
|                                           |        | Q5                                   | 107       |                      | XPGWHT-L1-0000-00DE3 |                |
| C1                                        | 5000 K | R5                                   | 139       | XPGWHT-01-0000-00HC1 |                      |                |
|                                           |        | R4                                   | 130       | XPGWHT-01-0000-00GC1 |                      |                |
|                                           |        | R3                                   | 122       | XPGWHT-01-0000-00FC1 |                      |                |
|                                           |        | R2                                   | 114       | XPGWHT-01-0000-00EC1 |                      |                |
| F4                                        | 4750 K | R5                                   | 139       | XPGWHT-01-0000-00HF4 |                      |                |
|                                           |        | R4                                   | 130       | XPGWHT-01-0000-00GF4 |                      |                |
|                                           |        | R3                                   | 122       | XPGWHT-01-0000-00FF4 | XPGWHT-L1-0000-00FF4 |                |
|                                           |        | R2                                   | 114       | XPGWHT-01-0000-00EF4 | XPGWHT-L1-0000-00EF4 |                |
|                                           |        | Q5                                   | 107       |                      | XPGWHT-L1-0000-00DF4 |                |
| D1                                        | 4750 K | R5                                   | 139       | XPGWHT-01-0000-00HD1 |                      |                |
|                                           |        | R4                                   | 130       | XPGWHT-01-0000-00GD1 |                      |                |
|                                           |        | R3                                   | 122       | XPGWHT-01-0000-00FD1 |                      |                |
|                                           |        | R2                                   | 114       | XPGWHT-01-0000-00ED1 |                      |                |
| E4                                        | 4500 K | R5                                   | 139       | XPGWHT-01-0000-00HE4 |                      |                |
|                                           |        | R4                                   | 130       | XPGWHT-01-0000-00GE4 |                      |                |
|                                           |        | R3                                   | 122       | XPGWHT-01-0000-00FE4 | XPGWHT-L1-0000-00FE4 |                |
|                                           |        | R2                                   | 114       | XPGWHT-01-0000-00EE4 | XPGWHT-L1-0000-00EE4 |                |
|                                           |        | Q5                                   | 107       |                      | XPGWHT-L1-0000-00DE4 |                |
| D2                                        | 4500 K | R5                                   | 139       | XPGWHT-01-0000-00HD2 |                      |                |
|                                           |        | R4                                   | 130       | XPGWHT-01-0000-00GD2 |                      |                |
|                                           |        | R3                                   | 122       | XPGWHT-01-0000-00FD2 |                      |                |
|                                           |        | R2                                   | 114       | XPGWHT-01-0000-00ED2 |                      |                |
| C2                                        | 4500 K | R5                                   | 139       | XPGWHT-01-0000-00HC2 |                      |                |
|                                           |        | R4                                   | 130       | XPGWHT-01-0000-00GC2 |                      |                |
|                                           |        | R3                                   | 122       | XPGWHT-01-0000-00FC2 |                      |                |
|                                           |        | R2                                   | 114       | XPGWHT-01-0000-00EC2 |                      |                |
| C3                                        | 4300 K | R4                                   | 130       | XPGWHT-01-0000-00GC3 |                      |                |
|                                           |        | R3                                   | 122       | XPGWHT-01-0000-00FC3 |                      |                |
|                                           |        | R2                                   | 114       | XPGWHT-01-0000-00EC3 |                      |                |
| D3                                        | 4300 K | R4                                   | 130       | XPGWHT-01-0000-00GD3 |                      |                |
|                                           |        | R3                                   | 122       | XPGWHT-01-0000-00FD3 |                      |                |
|                                           |        | R2                                   | 114       | XPGWHT-01-0000-00ED3 |                      |                |

\* Cree XLamp XP Family LED order codes specify only a minimum flux bin and not a maximum. Cree may ship reels in flux bins higher than the minimum specified by the order code without advance notice. Shipments will always adhere to the chromaticity or DWL bin restrictions specified by the order code.

## STANDARD ORDER CODES AND BINS (XP-G NEUTRAL WHITE, OUTDOOR WHITE, T<sub>j</sub> = 25 °C) - CONTINUED

| XLamp XP-G LED Standard Kit Codes - White |        |                                      |           |                      |                      |                      |
|-------------------------------------------|--------|--------------------------------------|-----------|----------------------|----------------------|----------------------|
| Chromaticity                              |        | Minimum Luminous Flux (lm) @ 350 mA* |           | Order Codes          |                      |                      |
| Kit                                       | CCT    | Code                                 | Flux (lm) | 70 CRI Typical       | 75 CRI Typical       | 80 CRI Minimum       |
| ANSI Neutral White (3700 K – 5000 K)      |        |                                      |           |                      |                      |                      |
| F5                                        | 4250 K | R4                                   | 130       | XPGWHT-01-0000-00GF5 |                      |                      |
|                                           |        | R3                                   | 122       | XPGWHT-01-0000-00FF5 | XPGWHT-L1-0000-00FF5 |                      |
|                                           |        | R2                                   | 114       | XPGWHT-01-0000-00EF5 | XPGWHT-L1-0000-00EF5 |                      |
|                                           |        | Q5                                   | 107       |                      | XPGWHT-L1-0000-00DF5 |                      |
| C4                                        | 4100 K | R3                                   | 122       | XPGWHT-01-0000-00FC4 |                      |                      |
|                                           |        | R2                                   | 114       | XPGWHT-01-0000-00EC4 |                      |                      |
|                                           |        | Q5                                   | 107       | XPGWHT-01-0000-00DC4 |                      |                      |
| D4                                        | 4000 K | R3                                   | 122       | XPGWHT-01-0000-00FD4 |                      |                      |
|                                           |        | R2                                   | 114       | XPGWHT-01-0000-00ED4 |                      |                      |
|                                           |        | Q5                                   | 107       | XPGWHT-01-0000-00DD4 |                      |                      |
| E5                                        | 4000 K | R4                                   | 130       | XPGWHT-01-0000-00GE5 |                      |                      |
|                                           |        | R3                                   | 122       | XPGWHT-01-0000-00FE5 | XPGWHT-L1-0000-00FE5 |                      |
|                                           |        | R2                                   | 114       | XPGWHT-01-0000-00EE5 | XPGWHT-L1-0000-00EE5 | XPGWHT-H1-0000-00EE5 |
|                                           |        | Q5                                   | 107       |                      | XPGWHT-L1-0000-00DE5 | XPGWHT-H1-0000-00DE5 |
| Z5                                        | 4000 K | R2                                   | 114       |                      | XPGWHT-L1-0000-00EZ5 | XPGWHT-H1-0000-00EZ5 |
|                                           |        | Q5                                   | 107       |                      | XPGWHT-L1-0000-00DZ5 | XPGWHT-H1-0000-00DZ5 |
| C5                                        | 3800 K | R3                                   | 122       | XPGWHT-01-0000-00FC5 |                      |                      |
|                                           |        | R2                                   | 114       | XPGWHT-01-0000-00EC5 |                      |                      |
|                                           |        | Q5                                   | 107       | XPGWHT-01-0000-00DC5 |                      |                      |

\* Cree XLamp XP Family LED order codes specify only a minimum flux bin and not a maximum. Cree may ship reels in flux bins higher than the minimum specified by the order code without advance notice. Shipments will always adhere to the chromaticity or DWL bin restrictions specified by the order code.

**STANDARD ORDER CODES AND BINS (XP-G WARM WHITE, T<sub>j</sub> = 25 °C)**

| XLamp XP-G LED Standard Kit Codes - White |        |                                      |           |                      |                      |                      |                      |                      |
|-------------------------------------------|--------|--------------------------------------|-----------|----------------------|----------------------|----------------------|----------------------|----------------------|
| Chromaticity                              |        | Minimum Luminous Flux (lm) @ 350 mA* |           | Order Codes          |                      |                      |                      |                      |
| Kit                                       | CCT    | Code                                 | Flux (lm) | 70 CRI Typical       | 80 CRI Typical       | 80 CRI Minimum       | 85 CRI Minimum       | 90 CRI Minimum       |
| ANSI Warm White (2700 K - 3750 K)         |        |                                      |           |                      |                      |                      |                      |                      |
| F6                                        | 3750 K | R3                                   | 122       | XPGWHT-01-0000-00FF6 |                      |                      |                      |                      |
|                                           |        | R2                                   | 114       | XPGWHT-01-0000-00EF6 | XPGWHT-L1-0000-00EF6 | XPGWHT-H1-0000-00EF6 |                      |                      |
|                                           |        | Q5                                   | 107       | XPGWHT-01-0000-00DF6 | XPGWHT-L1-0000-00DF6 | XPGWHT-H1-0000-00DF6 |                      |                      |
|                                           |        | Q4                                   | 100       |                      | XPGWHT-L1-0000-00CF6 | XPGWHT-H1-0000-00CF6 |                      |                      |
| D5                                        | 3700 K | R3                                   | 122       | XPGWHT-01-0000-00FD5 |                      |                      |                      |                      |
|                                           |        | R2                                   | 114       | XPGWHT-01-0000-00ED5 |                      |                      |                      |                      |
|                                           |        | Q5                                   | 107       | XPGWHT-01-0000-00DD5 |                      |                      |                      |                      |
| C6                                        | 3600 K | R3                                   | 122       | XPGWHT-01-0000-00FC6 |                      |                      |                      |                      |
|                                           |        | R2                                   | 114       | XPGWHT-01-0000-00EC6 |                      |                      |                      |                      |
|                                           |        | Q5                                   | 107       | XPGWHT-01-0000-00DC6 |                      |                      |                      |                      |
| E6                                        | 3500 K | R3                                   | 122       | XPGWHT-01-0000-00FE6 |                      |                      |                      |                      |
|                                           |        | R2                                   | 114       | XPGWHT-01-0000-00EE6 | XPGWHT-L1-0000-00EE6 |                      |                      |                      |
|                                           |        | Q5                                   | 107       | XPGWHT-01-0000-00DE6 | XPGWHT-L1-0000-00DE6 | XPGWHT-H1-0000-00DE6 |                      |                      |
|                                           |        | Q4                                   | 100       |                      | XPGWHT-L1-0000-00CE6 | XPGWHT-H1-0000-00CE6 |                      |                      |
| Z6                                        | 3500 K | Q5                                   | 107       |                      | XPGWHT-L1-0000-00DZ6 | XPGWHT-H1-0000-00DZ6 |                      |                      |
|                                           |        | Q4                                   | 100       |                      | XPGWHT-L1-0000-00CZ6 | XPGWHT-H1-0000-00CZ6 |                      |                      |
| F7                                        | 3250 K | R2                                   | 114       |                      | XPGWHT-L1-0000-00EF7 |                      |                      |                      |
|                                           |        | Q5                                   | 107       |                      | XPGWHT-L1-0000-00DF7 | XPGWHT-H1-0000-00DF7 |                      |                      |
|                                           |        | Q4                                   | 100       |                      | XPGWHT-L1-0000-00CF7 | XPGWHT-H1-0000-00CF7 |                      |                      |
|                                           |        | Q3                                   | 93.9      |                      | XPGWHT-L1-0000-00BF7 | XPGWHT-H1-0000-00BF7 |                      |                      |
| E7                                        | 3000 K | R2                                   | 114       |                      | XPGWHT-L1-0000-00EE7 |                      |                      |                      |
|                                           |        | Q5                                   | 107       |                      | XPGWHT-L1-0000-00DE7 | XPGWHT-H1-0000-00DE7 |                      |                      |
|                                           |        | Q4                                   | 100       |                      | XPGWHT-L1-0000-00CE7 | XPGWHT-H1-0000-00CE7 |                      |                      |
|                                           |        | Q3                                   | 93.9      |                      | XPGWHT-L1-0000-00BE7 | XPGWHT-H1-0000-00BE7 | XPGWHT-P1-0000-00BE7 |                      |
|                                           |        | Q2                                   | 87.4      |                      |                      |                      | XPGWHT-P1-0000-00AE7 | XPGWHT-U1-0000-00AE7 |
|                                           |        | P4                                   | 80.6      |                      |                      |                      | XPGWHT-P1-0000-009E7 | XPGWHT-U1-0000-009E7 |
|                                           |        | P3                                   | 73.9      |                      |                      |                      | XPGWHT-P1-0000-008E7 | XPGWHT-U1-0000-008E7 |
| Z7                                        | 3000 K | Q5                                   | 107       |                      | XPGWHT-L1-0000-00DZ7 | XPGWHT-H1-0000-00DZ7 |                      |                      |
|                                           |        | Q4                                   | 100       |                      | XPGWHT-L1-0000-00CZ7 | XPGWHT-H1-0000-00CZ7 |                      |                      |
|                                           |        | Q3                                   | 93.9      |                      | XPGWHT-L1-0000-00BZ7 | XPGWHT-H1-0000-00BZ7 |                      |                      |
|                                           |        | Q2                                   | 87.4      |                      |                      |                      | XPGWHT-P1-0000-00AZ7 |                      |
|                                           |        | P4                                   | 80.6      |                      |                      |                      | XPGWHT-P1-0000-009Z7 | XPGWHT-U1-0000-009Z7 |
|                                           |        | P3                                   | 73.9      |                      |                      |                      | XPGWHT-P1-0000-008Z7 | XPGWHT-U1-0000-008Z7 |
| F8                                        | 2850 K | Q5                                   | 107       |                      | XPGWHT-L1-0000-00DF8 |                      |                      |                      |
|                                           |        | Q4                                   | 100       |                      | XPGWHT-L1-0000-00CF8 | XPGWHT-H1-0000-00CF8 |                      |                      |
|                                           |        | Q3                                   | 93.9      |                      | XPGWHT-L1-0000-00BF8 | XPGWHT-H1-0000-00BF8 |                      |                      |
|                                           |        | Q2                                   | 87.4      |                      | XPGWHT-L1-0000-00AF8 | XPGWHT-H1-0000-00AF8 | XPGWHT-P1-0000-00AF8 |                      |
|                                           |        | P4                                   | 80.6      |                      |                      |                      | XPGWHT-P1-0000-009F8 | XPGWHT-U1-0000-009F8 |
|                                           |        | P3                                   | 73.9      |                      |                      |                      | XPGWHT-P1-0000-008F8 | XPGWHT-U1-0000-008F8 |
|                                           |        | P2                                   | 67.2      |                      |                      |                      | XPGWHT-P1-0000-007F8 | XPGWHT-U1-0000-007F8 |

\* Cree XLamp XP Family LED order codes specify only a minimum flux bin and not a maximum. Cree may ship reels in flux bins higher than the minimum specified by the order code without advance notice. Shipments will always adhere to the chromaticity or DWL bin restrictions specified by the order code.

**STANDARD ORDER CODES AND BINS (XP-G WARM WHITE, T<sub>j</sub> = 25 °C) - CONTINUED**

| XLamp XP-G LED Standard Kit Codes - White |        |                                      |           |                |                      |                      |                      |                      |
|-------------------------------------------|--------|--------------------------------------|-----------|----------------|----------------------|----------------------|----------------------|----------------------|
| Chromaticity                              |        | Minimum Luminous Flux (lm) @ 350 mA* |           | Order Codes    |                      |                      |                      |                      |
| Kit                                       | CCT    | Code                                 | Flux (lm) | 70 CRI Typical | 80 CRI Typical       | 80 CRI Minimum       | 85 CRI Minimum       | 90 CRI Minimum       |
| ANSI Warm White (2700 K - 3750 K)         |        |                                      |           |                |                      |                      |                      |                      |
| E8                                        | 2700 K | Q5                                   | 107       |                | XPGWHT-L1-0000-00DE8 |                      |                      |                      |
|                                           |        | Q4                                   | 100       |                | XPGWHT-L1-0000-00CE8 | XPGWHT-H1-0000-00CE8 |                      |                      |
|                                           |        | Q3                                   | 93.9      |                | XPGWHT-L1-0000-00BE8 | XPGWHT-H1-0000-00BE8 |                      |                      |
|                                           |        | Q2                                   | 87.4      |                | XPGWHT-L1-0000-00AE8 | XPGWHT-H1-0000-00AE8 | XPGWHT-P1-0000-00AE8 |                      |
|                                           |        | P4                                   | 80.6      |                |                      |                      | XPGWHT-P1-0000-009E8 | XPGWHT-U1-0000-009E8 |
|                                           |        | P3                                   | 73.9      |                |                      |                      | XPGWHT-P1-0000-008E8 | XPGWHT-U1-0000-008E8 |
|                                           |        | P2                                   | 67.2      |                |                      |                      | XPGWHT-P1-0000-007E8 | XPGWHT-U1-0000-007E8 |
| Z8                                        | 2700 K | Q4                                   | 100       |                | XPGWHT-L1-0000-00CZ8 | XPGWHT-H1-0000-00CZ8 |                      |                      |
|                                           |        | Q3                                   | 93.9      |                | XPGWHT-L1-0000-00BZ8 | XPGWHT-H1-0000-00BZ8 |                      |                      |
|                                           |        | Q2                                   | 87.4      |                | XPGWHT-L1-0000-00AZ8 | XPGWHT-H1-0000-00AZ8 |                      |                      |
|                                           |        | P4                                   | 80.6      |                |                      |                      | XPGWHT-P1-0000-009Z8 |                      |
|                                           |        | P3                                   | 73.9      |                |                      |                      | XPGWHT-P1-0000-008Z8 | XPGWHT-U1-0000-008Z8 |
|                                           |        | P2                                   | 67.2      |                |                      |                      | XPGWHT-P1-0000-007Z8 | XPGWHT-U1-0000-007Z8 |

\* Cree XLamp XP Family LED order codes specify only a minimum flux bin and not a maximum. Cree may ship reels in flux bins higher than the minimum specified by the order code without advance notice. Shipments will always adhere to the chromaticity or DWL bin restrictions specified by the order code.

**STANDARD ORDER CODES AND BINS (XP-G2 ANSI COOL WHITE, T<sub>j</sub> = 85 °C)**

| XLamp XP-G2 LED Standard Order Codes - White |        |                                      |           |                      |
|----------------------------------------------|--------|--------------------------------------|-----------|----------------------|
| Chromaticity                                 |        | Minimum Luminous Flux (lm) @ 350 mA* |           | Order Codes          |
| Kit                                          | CCT    | Code                                 | Flux (lm) | 70 CRI Typical       |
| ANSI Cool White (5000 K – 8300 K)            |        |                                      |           |                      |
| 51                                           | 6200 K | S2                                   | 148       | XPGBWT-L1-0000-00J51 |
|                                              |        | R5                                   | 139       | XPGBWT-L1-0000-00H51 |
|                                              |        | R4                                   | 130       | XPGBWT-L1-0000-00G51 |
|                                              |        | R3                                   | 122       | XPGBWT-L1-0000-00F51 |
| 53                                           | 6000 K | S2                                   | 148       | XPGBWT-L1-0000-00J53 |
|                                              |        | R5                                   | 139       | XPGBWT-L1-0000-00H53 |
|                                              |        | R4                                   | 130       | XPGBWT-L1-0000-00G53 |
|                                              |        | R3                                   | 122       | XPGBWT-L1-0000-00F53 |
| 50                                           | 6200 K | S2                                   | 148       | XPGBWT-L1-0000-00J50 |
|                                              |        | R5                                   | 139       | XPGBWT-L1-0000-00H50 |
|                                              |        | R4                                   | 130       | XPGBWT-L1-0000-00G50 |
|                                              |        | R3                                   | 122       | XPGBWT-L1-0000-00F50 |
| E1                                           | 6500 K | S2                                   | 148       | XPGBWT-L1-0000-00JE1 |
|                                              |        | R5                                   | 139       | XPGBWT-L1-0000-00HE1 |
|                                              |        | R4                                   | 130       | XPGBWT-L1-0000-00GE1 |
|                                              |        | R3                                   | 122       | XPGBWT-L1-0000-00FE1 |
| E2                                           | 5700 K | S2                                   | 148       | XPGBWT-L1-0000-00JE2 |
|                                              |        | R5                                   | 139       | XPGBWT-L1-0000-00HE2 |
|                                              |        | R4                                   | 130       | XPGBWT-L1-0000-00GE2 |
|                                              |        | R3                                   | 122       | XPGBWT-L1-0000-00FE2 |

\* Cree XLamp XP Family LED order codes specify only a minimum flux bin and not a maximum. Cree may ship reels in flux bins higher than the minimum specified by the order code without advance notice. Shipments will always adhere to the chromaticity or DWL bin restrictions specified by the order code.

**STANDARD ORDER CODES AND BINS (XP-G2 NEUTRAL WHITE, OUTDOOR WHITE, T<sub>j</sub> = 85 °C)**

| XLamp XP-G2 LED Standard Kit Codes - White |        |                                      |           |                      |                      |                |
|--------------------------------------------|--------|--------------------------------------|-----------|----------------------|----------------------|----------------|
| Chromaticity                               |        | Minimum Luminous Flux (lm) @ 350 mA* |           | Order Codes          |                      |                |
| Kit                                        | CCT    | Code                                 | Flux (lm) | 70 CRI Typical       | 75 CRI Typical       | 80 CRI Minimum |
| ANSI Neutral White (3700 K – 5000 K)       |        |                                      |           |                      |                      |                |
| E3                                         | 5000 K | R5                                   | 139       | XPGBWT-01-0000-00HE3 |                      |                |
|                                            |        | R4                                   | 130       | XPGBWT-01-0000-00GE3 | XPGBWT-L1-0000-00GE3 |                |
|                                            |        | R3                                   | 122       | XPGBWT-01-0000-00FE3 | XPGBWT-L1-0000-00FE3 |                |
|                                            |        | R2                                   | 114       | XPGBWT-01-0000-00EE3 | XPGBWT-L1-0000-00EE3 |                |
|                                            |        | Q5                                   | 107       |                      | XPGBWT-L1-0000-00DE3 |                |
| C1                                         | 5000 K | R5                                   | 139       | XPGBWT-01-0000-00HC1 |                      |                |
|                                            |        | R4                                   | 130       | XPGBWT-01-0000-00GC1 |                      |                |
|                                            |        | R3                                   | 122       | XPGBWT-01-0000-00FC1 |                      |                |
|                                            |        | R2                                   | 114       | XPGBWT-01-0000-00EC1 |                      |                |
| F4                                         | 4750 K | R5                                   | 139       | XPGBWT-01-0000-00HF4 |                      |                |
|                                            |        | R4                                   | 130       | XPGBWT-01-0000-00GF4 | XPGBWT-L1-0000-00GF4 |                |
|                                            |        | R3                                   | 122       | XPGBWT-01-0000-00FF4 | XPGBWT-L1-0000-00FF4 |                |
|                                            |        | R2                                   | 114       | XPGBWT-01-0000-00EF4 | XPGBWT-L1-0000-00EF4 |                |
|                                            |        | Q5                                   | 107       |                      | XPGBWT-L1-0000-00DF4 |                |
| D1                                         | 4750 K | R5                                   | 139       | XPGBWT-01-0000-00HD1 |                      |                |
|                                            |        | R4                                   | 130       | XPGBWT-01-0000-00GD1 |                      |                |
|                                            |        | R3                                   | 122       | XPGBWT-01-0000-00FD1 |                      |                |
|                                            |        | R2                                   | 114       | XPGBWT-01-0000-00ED1 |                      |                |
| E4                                         | 4500 K | R5                                   | 139       | XPGBWT-01-0000-00HE4 |                      |                |
|                                            |        | R4                                   | 130       | XPGBWT-01-0000-00GE4 | XPGBWT-L1-0000-00GE4 |                |
|                                            |        | R3                                   | 122       | XPGBWT-01-0000-00FE4 | XPGBWT-L1-0000-00FE4 |                |
|                                            |        | R2                                   | 114       | XPGBWT-01-0000-00EE4 | XPGBWT-L1-0000-00EE4 |                |
|                                            |        | Q5                                   | 107       |                      | XPGBWT-L1-0000-00DE4 |                |
| D2                                         | 4500 K | R5                                   | 139       | XPGBWT-01-0000-00HD2 |                      |                |
|                                            |        | R4                                   | 130       | XPGBWT-01-0000-00GD2 |                      |                |
|                                            |        | R3                                   | 122       | XPGBWT-01-0000-00FD2 |                      |                |
|                                            |        | R2                                   | 114       | XPGBWT-01-0000-00ED2 |                      |                |
| C2                                         | 4500 K | R5                                   | 139       | XPGBWT-01-0000-00HC2 |                      |                |
|                                            |        | R4                                   | 130       | XPGBWT-01-0000-00GC2 |                      |                |
|                                            |        | R3                                   | 122       | XPGBWT-01-0000-00FC2 |                      |                |
|                                            |        | R2                                   | 114       | XPGBWT-01-0000-00EC2 |                      |                |
| C3                                         | 4300 K | R5                                   | 139       | XPGBWT-01-0000-00HC3 |                      |                |
|                                            |        | R4                                   | 130       | XPGBWT-01-0000-00GC3 |                      |                |
|                                            |        | R3                                   | 122       | XPGBWT-01-0000-00FC3 |                      |                |
|                                            |        | R2                                   | 114       | XPGBWT-01-0000-00EC3 |                      |                |
| D3                                         | 4300 K | R5                                   | 139       | XPGBWT-01-0000-00HD3 |                      |                |
|                                            |        | R4                                   | 130       | XPGBWT-01-0000-00GD3 |                      |                |
|                                            |        | R3                                   | 122       | XPGBWT-01-0000-00FD3 |                      |                |
|                                            |        | R2                                   | 114       | XPGBWT-01-0000-00ED3 |                      |                |

\* Cree XLamp XP Family LED order codes specify only a minimum flux bin and not a maximum. Cree may ship reels in flux bins higher than the minimum specified by the order code without advance notice. Shipments will always adhere to the chromaticity or DWL bin restrictions specified by the order code.



**STANDARD ORDER CODES AND BINS (XP-G2 NEUTRAL WHITE, OUTDOOR WHITE, T<sub>j</sub> = 85 °C - CONTINUED)**

| XLamp XP-G2 LED Standard Kit Codes - White |        |                                      |           |                      |                      |                      |
|--------------------------------------------|--------|--------------------------------------|-----------|----------------------|----------------------|----------------------|
| Chromaticity                               |        | Minimum Luminous Flux (lm) @ 350 mA* |           | Order Codes          |                      |                      |
| Kit                                        | CCT    | Code                                 | Flux (lm) | 70 CRI Typical       | 75 CRI Typical       | 80 CRI Minimum       |
| ANSI Neutral White (3700 K – 5000 K)       |        |                                      |           |                      |                      |                      |
| F5                                         | 4250 K | R5                                   | 139       | XPGBWT-01-0000-00HF5 |                      |                      |
|                                            |        | R4                                   | 130       | XPGBWT-01-0000-00GF5 | XPGBWT-L1-0000-00GF5 |                      |
|                                            |        | R3                                   | 122       | XPGBWT-01-0000-00FF5 | XPGBWT-L1-0000-00FF5 |                      |
|                                            |        | R2                                   | 114       | XPGBWT-01-0000-00EF5 | XPGBWT-L1-0000-00EF5 |                      |
|                                            |        | Q5                                   | 107       |                      | XPGBWT-L1-0000-00DF5 |                      |
| C4                                         | 4100 K | R5                                   | 139       | XPGBWT-01-0000-00HC4 |                      |                      |
|                                            |        | R4                                   | 130       | XPGBWT-01-0000-00GC4 |                      |                      |
|                                            |        | R3                                   | 122       | XPGBWT-01-0000-00FC4 |                      |                      |
|                                            |        | R2                                   | 114       | XPGBWT-01-0000-00EC4 |                      |                      |
| D4                                         | 4000 K | R5                                   | 139       | XPGBWT-01-0000-00HD4 |                      |                      |
|                                            |        | R4                                   | 130       | XPGBWT-01-0000-00GD4 |                      |                      |
|                                            |        | R3                                   | 122       | XPGBWT-01-0000-00FD4 |                      |                      |
|                                            |        | R2                                   | 114       | XPGBWT-01-0000-00ED4 |                      |                      |
| E5                                         | 4000 K | R5                                   | 139       | XPGBWT-01-0000-00HE5 |                      |                      |
|                                            |        | R4                                   | 130       | XPGBWT-01-0000-00GE5 | XPGBWT-L1-0000-00GE5 |                      |
|                                            |        | R3                                   | 122       | XPGBWT-01-0000-00FE5 | XPGBWT-L1-0000-00FE5 | XPGBWT-H1-0000-00FE5 |
|                                            |        | R2                                   | 114       | XPGBWT-01-0000-00EE5 | XPGBWT-L1-0000-00EE5 | XPGBWT-H1-0000-00EE5 |
|                                            |        | Q5                                   | 107       |                      | XPGBWT-L1-0000-00DE5 | XPGBWT-H1-0000-00DE5 |
| Z5                                         | 4000 K | R3                                   | 122       |                      | XPGBWT-L1-0000-00FZ5 | XPGBWT-H1-0000-00FZ5 |
|                                            |        | R2                                   | 114       |                      | XPGBWT-L1-0000-00EZ5 | XPGBWT-H1-0000-00EZ5 |
|                                            |        | Q5                                   | 107       |                      | XPGBWT-L1-0000-00DZ5 | XPGBWT-H1-0000-00DZ5 |
| C5                                         | 3800 K | R5                                   | 139       | XPGBWT-01-0000-00HC5 |                      |                      |
|                                            |        | R4                                   | 130       | XPGBWT-01-0000-00GC5 |                      |                      |
|                                            |        | R3                                   | 122       | XPGBWT-01-0000-00FC5 |                      |                      |
|                                            |        | R2                                   | 114       | XPGBWT-01-0000-00EC5 |                      |                      |
|                                            |        | Q5                                   | 107       | XPGBWT-01-0000-00DC5 |                      |                      |

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**STANDARD ORDER CODES AND BINS (XP-G2 WARM WHITE, T<sub>j</sub> = 85 °C)**

| XLamp XP-G2 LED Standard Kit Codes - White |        |                                      |           |                      |                      |                      |                      |                      |
|--------------------------------------------|--------|--------------------------------------|-----------|----------------------|----------------------|----------------------|----------------------|----------------------|
| Chromaticity                               |        | Minimum Luminous Flux (lm) @ 350 mA* |           | Order Codes          |                      |                      |                      |                      |
| Kit                                        | CCT    | Code                                 | Flux (lm) | 70 CRI Typical       | 80 CRI Typical       | 80 CRI Minimum       | 85 CRI Minimum       | 90 CRI Minimum       |
| ANSI Warm White (2700 K - 3750 K)          |        |                                      |           |                      |                      |                      |                      |                      |
| F6                                         | 3750 K | R5                                   | 139       | XPGBWT-01-0000-00HF6 |                      |                      |                      |                      |
|                                            |        | R4                                   | 130       | XPGBWT-01-0000-00GF6 | XPGBWT-L1-0000-00GF6 | XPGBWT-H1-0000-00GF6 |                      |                      |
|                                            |        | R3                                   | 122       | XPGBWT-01-0000-00FF6 | XPGBWT-L1-0000-00FF6 | XPGBWT-H1-0000-00FF6 |                      |                      |
|                                            |        | R2                                   | 114       | XPGBWT-01-0000-00EF6 | XPGBWT-L1-0000-00EF6 | XPGBWT-H1-0000-00EF6 |                      |                      |
|                                            |        | Q5                                   | 107       | XPGBWT-01-0000-00DF6 | XPGBWT-L1-0000-00DF6 | XPGBWT-H1-0000-00DF6 |                      |                      |
| D5                                         | 3700 K | R4                                   | 130       | XPGBWT-01-0000-00GD5 |                      |                      |                      |                      |
|                                            |        | R3                                   | 122       | XPGBWT-01-0000-00FD5 |                      |                      |                      |                      |
|                                            |        | R2                                   | 114       | XPGBWT-01-0000-00ED5 |                      |                      |                      |                      |
|                                            |        | Q5                                   | 107       | XPGBWT-01-0000-00DD5 |                      |                      |                      |                      |
| C6                                         | 3600 K | R4                                   | 130       | XPGBWT-01-0000-00GC6 |                      |                      |                      |                      |
|                                            |        | R3                                   | 122       | XPGBWT-01-0000-00FC6 |                      |                      |                      |                      |
|                                            |        | R2                                   | 114       | XPGBWT-01-0000-00EC6 |                      |                      |                      |                      |
|                                            |        | Q5                                   | 107       | XPGBWT-01-0000-00DC6 |                      |                      |                      |                      |
| E6                                         | 3500 K | R4                                   | 130       | XPGBWT-01-0000-00GE6 | XPGBWT-L1-0000-00GE6 | XPGBWT-H1-0000-00GE6 |                      |                      |
|                                            |        | R3                                   | 122       | XPGBWT-01-0000-00FE6 | XPGBWT-L1-0000-00FE6 | XPGBWT-H1-0000-00FE6 |                      |                      |
|                                            |        | R2                                   | 114       | XPGBWT-01-0000-00EE6 | XPGBWT-L1-0000-00EE6 | XPGBWT-H1-0000-00EE6 |                      |                      |
|                                            |        | Q5                                   | 107       | XPGBWT-01-0000-00DE6 | XPGBWT-L1-0000-00DE6 | XPGBWT-H1-0000-00DE6 |                      |                      |
| Z6                                         | 3500 K | R3                                   | 122       |                      | XPGBWT-L1-0000-00FZ6 | XPGBWT-H1-0000-00FZ6 |                      |                      |
|                                            |        | R2                                   | 114       |                      | XPGBWT-L1-0000-00EZ6 | XPGBWT-H1-0000-00EZ6 |                      |                      |
|                                            |        | Q5                                   | 107       |                      | XPGBWT-L1-0000-00DZ6 | XPGBWT-H1-0000-00DZ6 |                      |                      |
| F7                                         | 3250 K | R4                                   | 130       |                      | XPGBWT-L1-0000-00GF7 | XPGBWT-H1-0000-00GF7 |                      |                      |
|                                            |        | R3                                   | 122       |                      | XPGBWT-L1-0000-00FF7 | XPGBWT-H1-0000-00FF7 |                      |                      |
|                                            |        | R2                                   | 114       |                      | XPGBWT-L1-0000-00EF7 | XPGBWT-H1-0000-00EF7 |                      |                      |
|                                            |        | Q5                                   | 107       |                      | XPGBWT-L1-0000-00DF7 | XPGBWT-H1-0000-00DF7 |                      |                      |
|                                            |        | Q4                                   | 100       |                      |                      | XPGBWT-H1-0000-00CF7 |                      |                      |
| E7                                         | 3000 K | R4                                   | 130       | XPGBWT-01-0000-00GE7 | XPGBWT-L1-0000-00GE7 | XPGBWT-H1-0000-00GE7 |                      |                      |
|                                            |        | R3                                   | 122       | XPGBWT-01-0000-00FE7 | XPGBWT-L1-0000-00FE7 | XPGBWT-H1-0000-00FE7 |                      |                      |
|                                            |        | R2                                   | 114       | XPGBWT-01-0000-00EE7 | XPGBWT-L1-0000-00EE7 | XPGBWT-H1-0000-00EE7 |                      |                      |
|                                            |        | Q5                                   | 107       |                      | XPGBWT-L1-0000-00DE7 | XPGBWT-H1-0000-00DE7 |                      |                      |
|                                            |        | Q4                                   | 100       |                      | XPGBWT-L1-0000-00CE7 | XPGBWT-H1-0000-00CE7 |                      |                      |
|                                            |        | Q3                                   | 93.9      |                      |                      |                      | XPGBWT-P1-0000-00BE7 | XPGBWT-U1-0000-00BE7 |
|                                            |        | Q2                                   | 87.4      |                      |                      |                      | XPGBWT-P1-0000-00AE7 | XPGBWT-U1-0000-00AE7 |
|                                            |        | P4                                   | 80.6      |                      |                      |                      | XPGBWT-P1-0000-009E7 | XPGBWT-U1-0000-009E7 |
|                                            |        | P3                                   | 73.9      |                      |                      |                      | XPGBWT-P1-0000-008E7 | XPGBWT-U1-0000-008E7 |

\* Cree XLamp XP Family LED order codes specify only a minimum flux bin and not a maximum. Cree may ship reels in flux bins higher than the minimum specified by the order code without advance notice. Shipments will always adhere to the chromaticity or DWL bin restrictions specified by the order code.

**STANDARD ORDER CODES AND BINS (XP-G2 WARM WHITE T<sub>j</sub> = 85 °C) - CONTINUED**

| XLamp XP-G2 LED Standard Kit Codes - White |        |                                      |           |                |                      |                      |                      |                      |
|--------------------------------------------|--------|--------------------------------------|-----------|----------------|----------------------|----------------------|----------------------|----------------------|
| Chromaticity                               |        | Minimum Luminous Flux (lm) @ 350 mA* |           | Order Codes    |                      |                      |                      |                      |
| Kit                                        | CCT    | Code                                 | Flux (lm) | 70 CRI Typical | 80 CRI Typical       | 80 CRI Minimum       | 85 CRI Minimum       | 90 CRI Minimum       |
| ANSI Warm White (2700 K - 3750 K)          |        |                                      |           |                |                      |                      |                      |                      |
| Z7                                         | 3000 K | R3                                   | 122       |                | XPGBWT-L1-0000-00FZ7 | XPGBWT-H1-0000-00FZ7 |                      |                      |
|                                            |        | R2                                   | 114       |                | XPGBWT-L1-0000-00EZ7 | XPGBWT-H1-0000-00EZ7 |                      |                      |
|                                            |        | Q5                                   | 107       |                | XPGBWT-L1-0000-00DZ7 | XPGBWT-H1-0000-00DZ7 |                      |                      |
|                                            |        | Q4                                   | 100       |                | XPGBWT-L1-0000-00CZ7 | XPGBWT-H1-0000-00CZ7 |                      |                      |
|                                            |        | Q3                                   | 93.9      |                |                      |                      |                      |                      |
|                                            |        | Q2                                   | 87.4      |                |                      |                      | XPGBWT-P1-0000-00AZ7 | XPGBWT-U1-0000-00AZ7 |
|                                            |        | P4                                   | 80.6      |                |                      |                      | XPGBWT-P1-0000-009Z7 | XPGBWT-U1-0000-009Z7 |
|                                            |        | P3                                   | 73.9      |                |                      |                      | XPGBWT-P1-0000-008Z7 | XPGBWT-U1-0000-008Z7 |
| F8                                         | 2850 K | R2                                   | 114       |                | XPGBWT-L1-0000-00EF8 | XPGBWT-H1-0000-00EF8 |                      |                      |
|                                            |        | Q5                                   | 107       |                | XPGBWT-L1-0000-00DF8 | XPGBWT-H1-0000-00DF8 |                      |                      |
|                                            |        | Q4                                   | 100       |                | XPGBWT-L1-0000-00CF8 | XPGBWT-H1-0000-00CF8 |                      |                      |
|                                            |        | Q3                                   | 93.9      |                | XPGBWT-L1-0000-00BF8 | XPGBWT-H1-0000-00BF8 | XPGBWT-P1-0000-00BF8 |                      |
|                                            |        | Q2                                   | 87.4      |                |                      |                      | XPGBWT-P1-0000-00AF8 | XPGBWT-U1-0000-00AF8 |
|                                            |        | P4                                   | 80.6      |                |                      |                      | XPGBWT-P1-0000-009F8 | XPGBWT-U1-0000-009F8 |
|                                            |        | P3                                   | 73.9      |                |                      |                      | XPGBWT-P1-0000-008F8 | XPGBWT-U1-0000-008F8 |
|                                            |        | P2                                   | 67.2      |                |                      |                      | XPGBWT-P1-0000-007F8 | XPGBWT-U1-0000-007F8 |
| E8                                         | 2700 K | R3                                   | 122       |                | XPGBWT-L1-0000-00FE8 | XPGBWT-H1-0000-00FE8 |                      |                      |
|                                            |        | R2                                   | 114       |                | XPGBWT-L1-0000-00EE8 | XPGBWT-H1-0000-00EE8 |                      |                      |
|                                            |        | Q5                                   | 107       |                | XPGBWT-L1-0000-00DE8 | XPGBWT-H1-0000-00DE8 |                      |                      |
|                                            |        | Q4                                   | 100       |                | XPGBWT-L1-0000-00CE8 | XPGBWT-H1-0000-00CE8 |                      |                      |
|                                            |        | Q3                                   | 93.9      |                | XPGBWT-L1-0000-00BE8 | XPGBWT-H1-0000-00BE8 |                      |                      |
|                                            |        | Q2                                   | 87.4      |                |                      |                      | XPGBWT-P1-0000-00AE8 | XPGBWT-U1-0000-00AE8 |
|                                            |        | P4                                   | 80.6      |                |                      |                      | XPGBWT-P1-0000-009E8 | XPGBWT-U1-0000-009E8 |
|                                            |        | P3                                   | 73.9      |                |                      |                      | XPGBWT-P1-0000-008E8 | XPGBWT-U1-0000-008E8 |
| Z8                                         | 2700 K | P2                                   | 67.2      |                |                      |                      | XPGBWT-P1-0000-007E8 | XPGBWT-U1-0000-007E8 |
|                                            |        | R2                                   | 114       |                | XPGBWT-L1-0000-00EZ8 | XPGBWT-H1-0000-00EZ8 |                      |                      |
|                                            |        | Q5                                   | 107       |                | XPGBWT-L1-0000-00DZ8 | XPGBWT-H1-0000-00DZ8 |                      |                      |
|                                            |        | Q4                                   | 100       |                | XPGBWT-L1-0000-00CZ8 | XPGBWT-H1-0000-00CZ8 |                      |                      |
|                                            |        | Q3                                   | 93.9      |                | XPGBWT-L1-0000-00BZ8 | XPGBWT-H1-0000-00BZ8 |                      |                      |
|                                            |        | Q2                                   | 87.4      |                |                      |                      |                      |                      |
|                                            |        | P4                                   | 80.6      |                |                      |                      | XPGBWT-P1-0000-009Z8 | XPGBWT-U1-0000-009Z8 |
|                                            |        | P3                                   | 73.9      |                |                      |                      | XPGBWT-P1-0000-008Z8 | XPGBWT-U1-0000-008Z8 |
|                                            |        | P2                                   | 67.2      |                |                      |                      | XPGBWT-P1-0000-007Z8 | XPGBWT-U1-0000-007Z8 |

\* Cree XLamp XP Family LED order codes specify only a minimum flux bin and not a maximum. Cree may ship reels in flux bins higher than the minimum specified by the order code without advance notice. Shipments will always adhere to the chromaticity or DWL bin restrictions specified by the order code.

**STANDARD ORDER CODES AND BINS (XP-L ANSI COOL WHITE,  $T_j = 85\text{ }^{\circ}\text{C}$ )**

| XLamp XP-L LED Standard Order Codes - White |        |                                       |           |                          |
|---------------------------------------------|--------|---------------------------------------|-----------|--------------------------|
| Chromaticity                                |        | Minimum Luminous Flux (lm) @ 1050 mA* |           | Order Codes              |
| Kit                                         | CCT    | Code                                  | Flux (lm) | 65 CRI Typical           |
| ANSI Cool White (5000 K – 8300 K)           |        |                                       |           |                          |
| 51                                          | 6200 K | V5                                    | 460       | XPLAWT-00-0000-0000V5051 |
|                                             |        | V4                                    | 440       | XPLAWT-00-0000-0000V4051 |
|                                             |        | V3                                    | 420       | XPLAWT-00-0000-0000V3051 |
| 53                                          | 6000 K | V5                                    | 460       | XPLAWT-00-0000-0000V5053 |
|                                             |        | V4                                    | 440       | XPLAWT-00-0000-0000V4053 |
|                                             |        | V3                                    | 420       | XPLAWT-00-0000-0000V3053 |
| 50                                          | 6200 K | V5                                    | 460       | XPLAWT-00-0000-0000V5050 |
|                                             |        | V4                                    | 440       | XPLAWT-00-0000-0000V4050 |
|                                             |        | V3                                    | 420       | XPLAWT-00-0000-0000V3050 |
| E1                                          | 6500 K | V5                                    | 460       | XPLAWT-00-0000-0000V50E1 |
|                                             |        | V4                                    | 440       | XPLAWT-00-0000-0000V40E1 |
|                                             |        | V3                                    | 420       | XPLAWT-00-0000-0000V30E1 |
| E2                                          | 5700 K | V5                                    | 460       | XPLAWT-00-0000-0000V50E2 |
|                                             |        | V4                                    | 440       | XPLAWT-00-0000-0000V40E2 |
|                                             |        | V3                                    | 420       | XPLAWT-00-0000-0000V30E2 |

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**STANDARD ORDER CODES AND BINS (XP-L NEUTRAL WHITE,  $T_j = 85\text{ }^{\circ}\text{C}$ )**

| XLamp XP-L LED Standard Kit Codes - White |        |                                       |           |                          |                          |                          |
|-------------------------------------------|--------|---------------------------------------|-----------|--------------------------|--------------------------|--------------------------|
| Chromaticity                              |        | Minimum Luminous Flux (lm) @ 1050 mA* |           | Order Codes              |                          |                          |
| Kit                                       | CCT    | Code                                  | Flux (lm) | 70 CRI Minimum           | 75 CRI Typical           | 80 CRI Minimum           |
| ANSI Neutral White (3700 K – 5000 K)      |        |                                       |           |                          |                          |                          |
| E3                                        | 5000 K | V4                                    | 440       | XPLAWT-00-0000-000BV40E3 | XPLAWT-00-0000-000LV40E3 |                          |
|                                           |        | V3                                    | 420       | XPLAWT-00-0000-000BV30E3 | XPLAWT-00-0000-000LV30E3 |                          |
|                                           |        | V2                                    | 400       | XPLAWT-00-0000-000BV20E3 | XPLAWT-00-0000-000LV20E3 |                          |
| F4                                        | 4750 K | V4                                    | 440       | XPLAWT-00-0000-000BV40F4 | XPLAWT-00-0000-000LV40F4 |                          |
|                                           |        | V3                                    | 420       | XPLAWT-00-0000-000BV30F4 | XPLAWT-00-0000-000LV30F4 |                          |
|                                           |        | V2                                    | 400       | XPLAWT-00-0000-000BV20F4 | XPLAWT-00-0000-000LV20F4 |                          |
| E4                                        | 4500 K | V4                                    | 440       | XPLAWT-00-0000-000BV40E4 | XPLAWT-00-0000-000LV40E4 |                          |
|                                           |        | V3                                    | 420       | XPLAWT-00-0000-000BV30E4 | XPLAWT-00-0000-000LV30E4 |                          |
|                                           |        | V2                                    | 400       | XPLAWT-00-0000-000BV20E4 | XPLAWT-00-0000-000LV20E4 |                          |
| F5                                        | 4250 K | V4                                    | 440       | XPLAWT-00-0000-000BV40F5 | XPLAWT-00-0000-000LV40F5 |                          |
|                                           |        | V3                                    | 420       | XPLAWT-00-0000-000BV30F5 | XPLAWT-00-0000-000LV30F5 |                          |
|                                           |        | V2                                    | 400       | XPLAWT-00-0000-000BV20F5 | XPLAWT-00-0000-000LV20F5 |                          |
| E5                                        | 4000 K | V4                                    | 440       | XPLAWT-00-0000-000BV40E5 | XPLAWT-00-0000-000LV40E5 |                          |
|                                           |        | V3                                    | 420       | XPLAWT-00-0000-000BV30E5 | XPLAWT-00-0000-000LV30E5 | XPLAWT-00-0000-000HV30E5 |
|                                           |        | V2                                    | 400       | XPLAWT-00-0000-000BV20E5 | XPLAWT-00-0000-000LV20E5 | XPLAWT-00-0000-000HV20E5 |
|                                           |        | U6                                    | 380       | XPLAWT-00-0000-000BU60E5 | XPLAWT-00-0000-000LU60E5 | XPLAWT-00-0000-000HU60E5 |
| Z5                                        | 4000 K | V4                                    | 440       | XPLAWT-00-0000-000BV40Z5 |                          |                          |
|                                           |        | V3                                    | 420       | XPLAWT-00-0000-000BV30Z5 | XPLAWT-00-0000-000LV30Z5 | XPLAWT-00-0000-000HV30Z5 |
|                                           |        | V2                                    | 400       | XPLAWT-00-0000-000BV20Z5 | XPLAWT-00-0000-000LV20Z5 | XPLAWT-00-0000-000HV20Z5 |
|                                           |        | U6                                    | 380       | XPLAWT-00-0000-000BU60Z5 | XPLAWT-00-0000-000LU60Z5 | XPLAWT-00-0000-000HU60Z5 |
| F6                                        | 3700 K | V2                                    | 400       |                          | XPLAWT-00-0000-000LV20F6 | XPLAWT-00-0000-000LV20F6 |
|                                           |        | U6                                    | 380       |                          | XPLAWT-00-0000-000LU60F6 | XPLAWT-00-0000-000LU60F6 |
|                                           |        | U5                                    | 360       |                          | XPLAWT-00-0000-000LU50F6 | XPLAWT-00-0000-000LU50F6 |

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**STANDARD ORDER CODES AND BINS (XP-L WARM WHITE, T<sub>j</sub> = 85 °C)**

| XLamp XP-L LED Standard Kit Codes - White |        |                                       |           |                          |                          |                          |                          |
|-------------------------------------------|--------|---------------------------------------|-----------|--------------------------|--------------------------|--------------------------|--------------------------|
| Chromaticity                              |        | Minimum Luminous Flux (lm) @ 1050 mA* |           | Order Codes              |                          |                          |                          |
| Kit                                       | CCT    | Code                                  | Flux (lm) | 80 CRI Typical           | 80 CRI Minimum           | 85 CRI Minimum           | 90 CRI Minimum           |
| ANSI Warm White (2700 K - 3500 K)         |        |                                       |           |                          |                          |                          |                          |
| E6                                        | 3500 K | V2                                    | 400       | XPLAWT-00-0000-000LV20E6 | XPLAWT-00-0000-000HV20E6 |                          |                          |
|                                           |        | U6                                    | 380       | XPLAWT-00-0000-000LU60E6 | XPLAWT-00-0000-000HU60E6 |                          |                          |
|                                           |        | U5                                    | 360       | XPLAWT-00-0000-000LU50E6 | XPLAWT-00-0000-000HU50E6 |                          |                          |
| Z6                                        | 3500 K | U6                                    | 380       | XPLAWT-00-0000-000LU60Z6 | XPLAWT-00-0000-000HU60Z6 |                          |                          |
|                                           |        | U5                                    | 360       | XPLAWT-00-0000-000LU50Z6 | XPLAWT-00-0000-000HU50Z6 |                          |                          |
| F7                                        | 3250 K | U6                                    | 380       | XPLAWT-00-0000-000LU60F7 | XPLAWT-00-0000-000HU60F7 |                          |                          |
|                                           |        | U5                                    | 360       | XPLAWT-00-0000-000LU50F7 | XPLAWT-00-0000-000HU50F7 |                          |                          |
|                                           |        | U4                                    | 340       | XPLAWT-00-0000-000LU40F7 | XPLAWT-00-0000-000HU40F7 |                          |                          |
| E7                                        | 3000 K | U6                                    | 380       | XPLAWT-00-0000-000LU60E7 | XPLAWT-00-0000-000HU60E7 |                          |                          |
|                                           |        | U5                                    | 360       | XPLAWT-00-0000-000LU50E7 | XPLAWT-00-0000-000HU50E7 |                          |                          |
|                                           |        | U4                                    | 340       | XPLAWT-00-0000-000LU40E7 | XPLAWT-00-0000-000HU40E7 |                          |                          |
|                                           |        | U3                                    | 320       |                          |                          | XPLAWT-00-0000-000PU30E7 | XPLAWT-00-0000-000UU30E7 |
|                                           |        | U2                                    | 300       |                          |                          | XPLAWT-00-0000-000PU20E7 | XPLAWT-00-0000-000UU20E7 |
|                                           |        | T6                                    | 280       |                          |                          | XPLAWT-00-0000-000PT60E7 | XPLAWT-00-0000-000UT60E7 |
| Z7                                        | 3000 K | U6                                    | 380       | XPLAWT-00-0000-000LU60Z7 | XPLAWT-00-0000-000HU60Z7 |                          |                          |
|                                           |        | U5                                    | 360       | XPLAWT-00-0000-000LU50Z7 | XPLAWT-00-0000-000HU50Z7 |                          |                          |
|                                           |        | U4                                    | 340       | XPLAWT-00-0000-000LU40Z7 | XPLAWT-00-0000-000HU40Z7 |                          |                          |
|                                           |        | U2                                    | 300       |                          |                          | XPLAWT-00-0000-000PU20Z7 | XPLAWT-00-0000-000UU20Z7 |
|                                           |        | T6                                    | 280       |                          |                          | XPLAWT-00-0000-000PT60Z7 | XPLAWT-00-0000-000UT60Z7 |
| F8                                        | 2850 K | U6                                    | 380       | XPLAWT-00-0000-000LU60F8 | XPLAWT-00-0000-000HU60F8 |                          |                          |
|                                           |        | U5                                    | 360       | XPLAWT-00-0000-000LU50F8 | XPLAWT-00-0000-000HU50F8 |                          |                          |
|                                           |        | U4                                    | 340       | XPLAWT-00-0000-000LU40F8 | XPLAWT-00-0000-000HU40F8 |                          |                          |
|                                           |        | U3                                    | 320       |                          |                          | XPLAWT-00-0000-000PU30F8 | XPLAWT-00-0000-000UU30F8 |
|                                           |        | U2                                    | 300       |                          |                          | XPLAWT-00-0000-000PU20F8 | XPLAWT-00-0000-000UU20F8 |
|                                           |        | T6                                    | 280       |                          |                          | XPLAWT-00-0000-000PT60F8 | XPLAWT-00-0000-000UT60F8 |
|                                           |        | T5                                    | 260       |                          |                          | XPLAWT-00-0000-000PT50F8 | XPLAWT-00-0000-000UT50F8 |
| E8                                        | 2700 K | U6                                    | 380       | XPLAWT-00-0000-000LU60E8 |                          |                          |                          |
|                                           |        | U5                                    | 360       | XPLAWT-00-0000-000LU50E8 | XPLAWT-00-0000-000HU50E8 |                          |                          |
|                                           |        | U4                                    | 340       | XPLAWT-00-0000-000LU40E8 | XPLAWT-00-0000-000HU40E8 |                          |                          |
|                                           |        | U3                                    | 320       |                          |                          | XPLAWT-00-0000-000PU30E8 | XPLAWT-00-0000-000UU30E8 |
|                                           |        | U2                                    | 300       |                          |                          | XPLAWT-00-0000-000PU20E8 | XPLAWT-00-0000-000UU20E8 |
|                                           |        | T6                                    | 280       |                          |                          | XPLAWT-00-0000-000PT60E8 | XPLAWT-00-0000-000UT60E8 |
| Z8                                        | 2700 K | T5                                    | 260       |                          |                          | XPLAWT-00-0000-000PT50E8 | XPLAWT-00-0000-000UT50E8 |
|                                           |        | U5                                    | 360       | XPLAWT-00-0000-000LU50Z8 | XPLAWT-00-0000-000HU50Z8 |                          |                          |
|                                           |        | U4                                    | 340       | XPLAWT-00-0000-000LU40Z8 | XPLAWT-00-0000-000HU40Z8 |                          |                          |
|                                           |        | U2                                    | 300       |                          |                          | XPLAWT-00-0000-000PU20Z8 |                          |
|                                           |        | T6                                    | 280       |                          |                          | XPLAWT-00-0000-000PT60Z8 | XPLAWT-00-0000-000UT60Z8 |
|                                           |        | T5                                    | 260       |                          |                          | XPLAWT-00-0000-000PT50Z8 | XPLAWT-00-0000-000UT50Z8 |

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