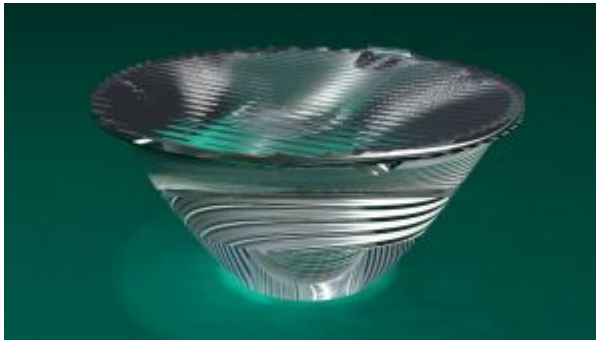



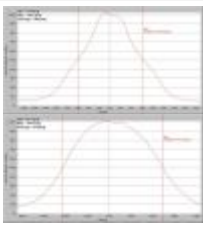


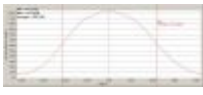
26.5MM ELLIPTICAL RAMP TIR

Status	Production
Part no.	10234
Drawing no.	60455
Product type	Optic
Type	TIR
Pieces	1
Diameter	26.5
Height	13.90
Beam	Elliptical Ramp
Flange	Yes
Files	Customer drawing (PDF) Customer 3D model (.igs)



LEDs & Performances	Eff.	FWHM	Cd/lm	Spot	Cross-section	Files
Cree XR XLamp White	86.3%	44.6 x 13.8	3.8			10234_cree_XR_white_250408.ies
Cree XR-E XLamp White	87.0%	46 x 8.8	5.5			10234_Cree_XRE_White_250408.Idt
Cree XR-C XLamp White	86.7%	45.7 x 9.1	6.2			10234_Cree_XRC_White_250408.ies
Cree XP-E XLamp White	82.4%	44.9 x 6	7.8			10234_cree_xpe_white_250408.ies
Cree XP-G XLamp White	81.2%	45.6 x 8.9	6.1			10234_cree_xpg_white_250408.ies
Cree MX-6 XLamp White	80.9%	44.7 x 13.3	4.4			10234_cree_MX6_white_250408.ies
SSC Z1 Z - Power White	84.1%	44.3 x 15	3.6			10234_Seoul_Z1_white_250408.ies
Osram Golden Dragon W5SG Dragon White	86.0%	46x7.6	5.4			10234_Golden_Dragon_W5SG_White_250408.Idt 10234_Golden_Dragon_W5SG_White_250408.ies
Osram SSL 80 degree Oslon Ultra White	86.2%	46.4x6.7	8.0			10234_Oslon_wht_250408.Idt 10234_Oslon_wht_250408.ies
Nichia NFSW 036 Top Emitting Cool White	85.9%	44.4X8.8	5.5			10234_Nichia_036_CoolWhite_250408.ies
Nichia NCSL 119-H3 Top Emitting Warm White	82.5%	45.9x7.5	7.5			10234_Nichia_119_WarmWhite_250408.ies

Nichia NS3W 183T Top Emitting White	81.3%	44.8x15.6	3.7			10234_Nichia_183_White_250408.ies
SSC Z5 Z - Power Cool White	87.2%	46.5 x 6.6	8.9			10234_Seoul_Z5_white_250408.ies
LedEngin 3W White	81.2%	44.7 x 12.2	4.3			10234_LedEngin_3W_white_250408.ies
LedEngin 5W White	80.4%	45.2 x 11.4	4.7			10234_LedEngin_5W_white_250408.ies
Everlight Shuen Warm White	86.1%	45.2	6.2			10234_Shuen_wwht_250408.ies
Everlight Shuen Cool White	85.4%	46.4	5.8			10234_Shuen_cwht_250408.ies
Avago Aveon Cool White	80.0%	45.6 x 7.8	5.6			10234_Avago_Aveon_cool white_250408.ies
Avago Jade Cool White	85.1%	45.2 x 10.9	5.3			10234_Avago_Jade_cool white_250408.ies
Samsung WH5 White	84.6%	45.2 x 13.4	4.1			10234_Sunnix Samsung_SLHNN WH5_cWhite_250408.ies
Lumileds Rebel ES Luxeon Cool White	82.6%	45.9 x 9.21	6.4			10234_Luxeon_Rebel_ES_cool_white_070311.ies
Lumileds C Luxeon Cool White	81.4%	46.8 x 6.4	6.0			10234_Luxeon C_white_250408.ies
SSC P4 White	86.0%	45.6 x 10.6	5.0			10234_Seoul_New_P4_Pure_White_250408.ies
Cree XM-L XLamp White	81.9%	44.2 x 13	4.7			10234_Cree_XM-L_white_31-01-11.ies
Cree XP-C XLamp White	86.2%	46.9 x 4.8	11.3			10234_Cree_XP-C_white_290611.ies

SSC Z5P Z - Power Pure White	%	47.5 x 7.1	7.8			10234_Z5P_purewhite_280911.ies
Lumileds M Luxeon White	%	45.3x23.3	2.9			10234_Luxeon M_160212.ies
SSC Z5M Z - Power White	%	45.4 X 9.3	6.2			10234_SeoulZ5M_warm white_250612.ies
Lumileds R Luxeon	82.6%	45.9 x 9.21	6.4			10234_Luxeon_R_cool_white_070311.ies
Cree XPG-Gen2 XLamp Warm White	%	45.0 x 8.3	7.4			10234_XPG-Gen2_190712.ies
Samsung 3535 White	%	48.4x8.5	7.1			10234_Samsung 3535_cool white_071111.ies
Nichia 219 Warm White	%	46.1 X 9.4	6.3			26.5mm_10234_Nichia 219_120213.ies
LG 3535 Cool White	%	46.9 x 8.9	7.0			10234_LEMWA33X70GW00_Cold white_130412.ies
Cree MK-R XLamp White	%	43.1 X 23.5	3.2			10234_Elliptical Ramp_Cree MKR_180213.ies
Stanley 6J White	%	44.1 x 17.6	3.8			10234_Stanley 6J pure white_151012.ies
Stanley 1N White	%	44.3 x 17.4	3.9			10234_Elliptical Ramp_Stanley 1N_270912.ies
Lumileds T Luxeon	82.6%	45.9X9.2	6.4			10234_Luxeon_Rebel_ES_cool_white_070311.ies

Related Holders & LEDs	Avago Aveon Cool White	Avago Jade Cool White	Cree MK-RMX-6 XLamp White	Cree XM-Lamp White	Cree XP-C White	Cree XP-E White	Cree XP-G White	Cree XPG-Gen XLamp Warm White	Cree XR-C White	Cree XR-E White	Cree XR White	Everlight Shuer Cool White	Everlight Shuer Warm White	Everlight 3W White	Everlight 5W White	LG 3535 Cool White	Lumileds C Luxeon Cool White	Lumileds M Luxeon White	Lumileds R Luxeon White	Lumileds Rebel ES Cool White	Lumileds Rebel White	Lumileds T Luxeon White	Nichia 219 Warm White	Nichia 119-H036 Top Warm White	Nichia 183 Top Cool White	Nichia 183 Top Warm White
10440 26.5mm Round - Locator Pins White																✓										✓
10441 26.5mm Round - Locator Pins White		✓												✓												
10442 26.5mm Round - Locator Pins White						✓					✓	✓			✓					✓	✓	✓			✓	
10443 26.5mm Round - Locator Pins White					✓												✓									
10445 26.5mm Round - Locator Pins White				✓			✓		✓	✓	✓															
10446 26.5mm Round - Locator Pins White																										
10447 26.5mm Round - Locator Pins White			✓																							✓
10449 26.5mm Round - Locator Pins White	✓																									
10450 26.5mm Round - Locator Pins White																✓										✓
10451 26.5mm Round - Locator Pins White		✓												✓												
10452 26.5mm Round - Locator Pins White						✓						✓	✓		✓					✓	✓	✓				
10453 26.5mm Round - Locator Pins White					✓												✓									
10455 26.5mm Round - Locator Pins White				✓			✓		✓	✓	✓															
10456 26.5mm Round - Locator Pins White																										
10457 26.5mm Round - Locator Pins White			✓																							✓
10459 26.5mm Round - Locator Pins White	✓																									
10460 26.5mm Round - Locator Pins White																✓										✓
10461 26.5mm Round - Locator Pins White		✓												✓												
10462 26.5mm Round - Locator Pins White						✓						✓	✓		✓					✓	✓	✓	✓	✓	✓	
10463 26.5mm Round - Locator Pins White					✓			✓									✓									
10464 26.5mm Round - Locator Pins White																										
10465 26.5mm Round - Locator Pins White				✓			✓		✓	✓	✓															
10466 26.5mm Round - Locator Pins White																										
10467 26.5mm Round - Locator Pins White			✓																							✓
10469 26.5mm Round - Locator Pins White	✓																									
10470 26.5mm Round - Locator Pins Black																✓										✓
10471 26.5mm Round - Locator Pins Black		✓												✓												
10472 26.5mm Round - Locator Pins Black						✓						✓	✓		✓					✓	✓	✓			✓	
10473 26.5mm Round - Locator Pins Black					✓												✓									
10475 26.5mm Round - Locator Pins Black				✓			✓		✓	✓	✓															
10476 26.5mm Round - Locator Pins Black																										

[illegible]

Carclo Optics endeavours to continuously improve and renew its products; for this reason the technical data and contents of this catalogue may undergo variations without prior notice. For correct and up to date information, Carclo suggest using the Opticselect tool on our website <http://www.carclo-optics.com>.
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General Instruction - Optics & Holders

Handling instructions

- Do not handle or install lenses without wearing gloves, skin oils may damage the lens or the light transmission.
- Clean lenses with a mild soap and water and dry with a clean soft cloth.
- Do not use any commercial solvents on lenses.
- Mount holders with low Odour epoxies and allow time for them to out gas to stop lenses fogging.

Disclaimer - Optics & Holders

Please note that flow lines, weld lines, surface scratches and small black or white inclusions within the lenses are acceptable if the optical performance of the lens is within the specification described below:

For optics that have FWHMs of 20 degrees or less, the general tolerance is ± 2 degrees OR the tolerances stated below - whichever is the greater.

For all optics except Rippled and Frosted;

- FWHM = Datasheet Value $\pm 10\%$.

For all Rippled and Frosted Optics;

- FWHM = Datasheet Value $\pm 20\%$

For all Optics;

- Efficiency = Datasheet Value $\pm 10\%$

The yellowing / browning of polycarbonate lenses and holders can occur due to the natural ageing process and exposure to heat and UV and as such is not covered by Carclo's warranty.

General Instruction - Taped Holders

Click here to view the 3M Technical Data Sheet

- When assembling the pre-taped holder onto the mating surface, the application must be made straight and square, so that the tape bonds consistently with mating surface. Assembly at an angle might cause an imperfect bond to the mating surface.
- Remember to ascertain the compatibility of the different substrates with the tape, as humidity and temperature fluctuations will weaken it's adhesive.
- To obtain optimum adhesion, the bonding surfaces must be clean, dry, free from grease and dirt and must be well unified.
- Some typical surface cleaning solvents are isopropyl alcohol or heptane. *
- ** If cleaning of PCB or LED surfaces is required, please follow strictly the cleaning instructions recommended by your PCB and/or LED manufacturer - this is important to note, as cleaning in some circumstances can damage LEDs or other electronic components on the PCB. Please also note that optical components should not be cleaned using any chemicals - only a micro fibre cloth should be used to remove fingerprints or other traces from handling.*
- ** Carefully read and follow the manufacturer's precautions and directions for use when working with solvents. These cleaning recommendations may not be compliant with the rules of certain Air Quality Management Districts in California; consult applicable rules before use.*

Bond strength is dependent upon the amount of adhesive-to-surface contact developed. Firm application pressure and moderate heat, from 100°F (38°C) to 130°F (54°C), will assist the adhesive in developing intimate contact with the bonding surface.

Ideal tape application temperature range is 70°F to 100°F (21°C to 38°C). Initial tape application to surfaces at temperatures below 50°F (10°C) is not recommended because the adhesive becomes too firm to adhere readily. However, once properly applied, low temperature holding is generally satisfactory.

During assembly the optic when placed on the PCB should be firmly held for 1-5 seconds to ensure the best possible bond. The tape will reach its final strength in 72 hours, dependent on the material and ambient conditions.

Carclo Optics 103 Buckingham Ave, Slough, Berkshire, SL1 4PF ENGLAND

We request that the customer ensures (and fully tests) the suitability and sufficiency of the bond in his product. For example, mechanical stress,

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vibration and holes on the surface of the circuit board can weaken the strength of the tape.

Disclaimer - Taped Holders

Shelf Life - There is 1 year expected shelf life from the date of purchase direct from Carclo.

All Carclo lenses supplied with tape use the same high strength double-coated tape (unless otherwise mentioned in the datasheet). This tape is specifically selected for this application.

These tapes generally work well together with PCBs and LEDs on the market. The customer must take the necessary measures to ensure complete compatibility with their particular application, product, PCB, LED and/or other components.

Testing and verifying of the adhesives and their combinations is the responsibility of the customer.

The customer is solely responsible for evaluating the application of double sided tape to Carclo Holders and the adhesion of double sided tape holders to determine whether such double-sided tape is fit for a particular purpose and suitable for the users method of application. The selection of double-sided tape in the adhesion of double sided tape holders is not covered by Carclo's warranty.

Carclo cannot take responsibility for the results obtained by others whose methods we cannot control. It is always the customer's responsibility to determine the adhesive's suitability for their product and to take precautions for protection of property and persons against any hazards that may be involved in the handling and use of adhesives. Carclo disclaims all warranties, including warranties of merchantability or suitability for a particular purpose, arising from use of any adhesive product. Carclo disclaims any liability for consequential or incidental damages of any kind, including lost profits.

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