

222040-7

EWP132-144, HELIAX® Premium Elliptical Waveguide, 14.4–15.35 GHz, unjacketed

Product Classification

Product Type Elliptical waveguide

Product Brand HELIAX®

General Specifications

Performance Note Values typical, unless otherwise stated

Dimensions

Diameter Over Jacket (E Plane) 24.4 mm | 0.961 in

Diameter Over Jacket (H Plane) 15.5 mm | 0.61 in

Cable Volume 167 L/km | 1.798 ft³/kft

Electrical Specifications

eTE11 Mode Cutoff 9.22 GHz

Group Delay at Frequency 131 ns/100 ft @ 14.700 GHz | 428 ns/100 m @ 14.700 GHz

Operating Frequency Band 14.4 – 15.35 GHz

VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
14.4–15.35 GHz	1.05	32.26

Attenuation

Frequency (GHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)	Average Power (kW)	Group Velocity %
14.4	16.018	4.882	0.843	76.8
14.6	15.874	4.838	0.85	77.5
14.8	15.74	4.798	0.858	78.2
15.0	15.616	4.76	0.865	78.9
15.2	15.501	4.725	0.871	79.5

Material Specifications

Conductor Material Corrugated copper

Jacket Material Unjacketed

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Mechanical Specifications

Minimum Bend Radius, Multiple Bends (E Plane)	130 mm 5.118 in
Minimum Bend Radius, Multiple Bends (H Plane)	360 mm 14.173 in
Minimum Bend Radius, Single Bend (E Plane)	130 mm 5.118 in
Minimum Bend Radius, Single Bend (H Plane)	360 mm 14.173 in
Maximum Twist	6.562 °/m 2 °/ft

Environmental Specifications

Installation temperature	-40 °C to +60 °C (-40 °F to +140 °F)
Operating Temperature	-55 °C to +85 °C (-67 °F to +185 °F)
Storage Temperature	-70 °C to +85 °C (-94 °F to +185 °F)
Average Power, Ambient Temperature	104 °F 40 °C
Average Power, Temperature Rise	42 °C 107.6 °F

Packaging and Weights

Cable weight	0.33 kg/m 0.222 lb/ft
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Regulatory Compliance/Certifications

Agency	Classification
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system

