

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

## Product Classification

<b>Product Type</b>	Elliptical waveguide
<b>Product Brand</b>	HELIAX®

## General Specifications

<b>Performance Note</b>	Values typical, unless otherwise stated
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## Dimensions

<b>Diameter Over Jacket (E Plane)</b>	24.4 mm   0.961 in
<b>Diameter Over Jacket (H Plane)</b>	15.5 mm   0.61 in
<b>Cable Volume</b>	167 L/km   1.798 ft <sup>3</sup> /kft

## Electrical Specifications

<b>eTE11 Mode Cutoff</b>	9.22 GHz
<b>Group Delay at Frequency</b>	131 ns/100 ft @ 14.700 GHz   428 ns/100 m @ 14.700 GHz
<b>Operating Frequency Band</b>	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

<b>Conductor Material</b>	Corrugated copper
<b>Jacket Material</b>	Unjacketed

## Mechanical Specifications

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

## Environmental Specifications

<b>Installation temperature</b>	-40 °C to +60 °C (-40 °F to +140 °F)
<b>Operating Temperature</b>	-55 °C to +85 °C (-67 °F to +185 °F)
<b>Storage Temperature</b>	-70 °C to +85 °C (-94 °F to +185 °F)
<b>Attenuation, Ambient Temperature</b>	75 °F   23.889 °C
<b>Average Power, Ambient Temperature</b>	104 °F   40 °C
<b>Average Power, Temperature Rise</b>	42 °C   107.6 °F

## Packaging and Weights

<b>Cable weight</b>	0.33 kg/m   0.222 lb/ft
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## Regulatory Compliance/Certifications

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

