



EW132-144, HELIAX® Standard Elliptical Waveguide, 14.4–15.35 GHz, black non-halogenated, fire retardant polyolefin jacket

## Product Classification

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

## Construction Materials

<b>Jacket Material</b>	Non-halogenated, fire retardant polyolefin
<b>Conductor Material</b>	Corrugated copper
<b>Jacket Color</b>	Black

## Dimensions

<b>Cable Volume</b>	167.0 L/km   1.8 ft <sup>3</sup> /kft
<b>Cable Weight</b>	0.33 kg/m   0.22 lb/ft
<b>Diameter Over Jacket (E Plane)</b>	24.40 mm   0.96 in
<b>Diameter Over Jacket (H Plane)</b>	15.50 mm   0.61 in

## Electrical Specifications

<b>Operating Frequency Band</b>	14.4 – 15.35 GHz
<b>eTE11 Mode Cutoff</b>	9.220 GHz
<b>Group Delay</b>	131 ns/100 ft @ 14.700 GHz 428 ns/100 m @ 14.700 GHz
<b>Group Delay (temporary)</b>	131 ns/100 ft @ 14.700 GHz   428 ns/100 m @ 14.700 GHz

## Environmental Specifications

<b>Installation Temperature</b>	-25 °C to +60 °C (-13 °F to +140 °F)
<b>Operating Temperature</b>	-30 °C to +80 °C (-22 °F to +176 °F)
<b>Storage Temperature</b>	-30 °C to +80 °C (-22 °F to +176 °F)

## Mechanical Specifications

<b>Fire Retardancy Test Method</b>	UL 1666/CATVR/CMR
<b>Maximum Twist</b>	6.00 °/m   2.00 °/ft
<b>Minimum Bend Radius, Multiple Bends (E Plane)</b>	130.00 mm   5.00 in
<b>Minimum Bend Radius, Multiple Bends (H Plane)</b>	360.00 mm   14.00 in
<b>Minimum Bend Radius, Single Bend (E Plane)</b>	130.00 mm   5.00 in
<b>Minimum Bend Radius, Single Bend (H Plane)</b>	360.00 mm   14.00 in

**Toxicity Index Test Method** IEC 60754-2

## Note

**Performance Note** Values typical, unless otherwise stated

## Standard Conditions

**Attenuation, Ambient Temperature** 24 °C | 75 °F  
**Average Power, Ambient Temperature** 40 °C | 104 °F  
**Average Power, Temperature Rise** 42 °C | 76 °F

## Return Loss/VSWR

Frequency Band	VSWR	Return Loss (dB)
14.4–15.35 GHz	1.15	23.10

\* VSWR/Return Loss indicated is for lengths up to 300 ft (91.4 m)

\* VSWR/Return Loss is guaranteed for factory-fit and typical for field-fit assemblies

\* Custom length performance: Call 828-324-2200 or 1-800-982-1708 (toll free), or your local CommScope representative

## Attenuation

Frequency (GHz)	Attenuation (dB/100 ft)	Attenuation (dB/100 m)	Average Power (kW)	Group Velocity %
14.4	4.882	16.018	0.843	76.8
14.6	4.838	15.874	0.85	77.5
14.8	4.798	15.74	0.858	78.2
15	4.76	15.616	0.865	78.9
15.2	4.725	15.501	0.871	79.5

## Regulatory Compliance/Certifications

Agency	Classification
UL/ETL Certification	CATVR/CMR
RoHS 2011/65/EU	Compliant
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
China RoHS SJ/T 11364-2014	Below Maximum Concentration Value (MCV)

