



EWP52-59, HELIAX® Premium Elliptical Waveguide, 5.925–6.425 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>	1045.0 L/km   11.3 ft <sup>3</sup> /kft
<b>Cable Weight</b>	0.88 kg/m   0.59 lb/ft
<b>Diameter Over Jacket (E Plane)</b>	57.20 mm   2.25 in
<b>Diameter Over Jacket (H Plane)</b>	33.30 mm   1.31 in

## Electrical Specifications

<b>Operating Frequency Band</b>	5.925 – 6.425 GHz
<b>eTE11 Mode Cutoff</b>	3.650 GHz
<b>Group Delay</b>	126 ns/100 ft @ 6.200 GHz 413 ns/100 m @ 6.200 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>	3.00 °/m   1.00 °/ft
<b>Minimum Bend Radius, Multiple Bends (E Plane)</b>	305.00 mm   12.00 in
<b>Minimum Bend Radius, Multiple Bends (H Plane)</b>	810.00 mm   32.00 in
<b>Minimum Bend Radius, Single Bend (E Plane)</b>	200.00 mm   8.00 in
<b>Minimum Bend Radius, Single Bend (H Plane)</b>	560.00 mm   22.00 in
<b>Toxicity Index Test Method</b>	IEC 60754-2

## Note

### Performance Note

Values typical, unless otherwise stated

## Standard Conditions

<b>Attenuation, Ambient Temperature</b>	24 °C   75 °F
<b>Average Power, Ambient Temperature</b>	40 °C   104 °F
<b>Average Power, Temperature Rise</b>	42 °C   76 °F

## Return Loss/VSWR

Frequency Band	VSWR	Return Loss (dB)
5.925–6.425 GHz	1.06	30.70

\* 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 %
5.9	1.209	3.965	5.917	78.8
6.1	1.186	3.89	6.032	80.3
6.3	1.166	3.825	6.134	81.6

## Regulatory Compliance/Certifications

### Agency

UL/ETL Certification

RoHS 2011/65/EU

ISO 9001:2015

China RoHS SJ/T 11364-2014

### Classification

CATVR/CMR

Compliant

Designed, manufactured and/or distributed under this quality management system

Below Maximum Concentration Value (MCV)

