



EWP43, HELIAX® Premium Elliptical Waveguide, 4.4–5.0 GHz, black PE jacket

## Product Classification

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

## General Specifications

<b>Jacket Color</b>	Black
<b>Performance Note</b>	Values typical, unless otherwise stated

## Dimensions

<b>Diameter Over Jacket (E Plane)</b>	71 mm   2.795 in
<b>Diameter Over Jacket (H Plane)</b>	41 mm   1.614 in
<b>Cable Volume</b>	1690 L/km   18.191 ft <sup>3</sup> /kft

## Electrical Specifications

<b>eTE11 Mode Cutoff</b>	2.78 GHz
<b>Group Delay at Frequency</b>	128 ns/100 ft @ 4.600 GHz   419 ns/100 m @ 4.600 GHz
<b>Operating Frequency Band</b>	4.4 – 5.0 GHz

## VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
4.4–5.0 GHz	1.07	29.42

## Attenuation

Frequency (GHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)	Average Power (kW)	Group Velocity %
4.4	2.983	0.909	9.52	77.5
4.5	2.948	0.899	9.632	78.6

4.6	2.917	0.889	9.734	79.7
4.7	2.889	0.881	9.827	80.6
4.8	2.864	0.873	9.912	81.5
4.9	2.842	0.866	9.99	82.3
5.0	2.822	0.86	10.061	83.1

## Material Specifications

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

## Mechanical Specifications

<b>Minimum Bend Radius, Multiple Bends (E Plane)</b>	381 mm   15 in
<b>Minimum Bend Radius, Multiple Bends (H Plane)</b>	1016 mm   40 in
<b>Minimum Bend Radius, Single Bend (E Plane)</b>	280 mm   11.024 in
<b>Minimum Bend Radius, Single Bend (H Plane)</b>	711 mm   27.992 in
<b>Maximum Twist</b>	1.64 °/m   0.5 °/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>	1.2 kg/m   0.806 lb/ft
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## Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Below maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
REACH-SVHC	Compliant as per SVHC revision on <a href="http://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a>
ROHS	Compliant

