

EW20, HELIAX® Standard Elliptical Waveguide, 2.3–2.4 GHz, unjacketed

## Product Classification

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

## Construction Materials

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

## Dimensions

<b>Cable Volume</b>	5621.0 L/km   60.5 ft <sup>3</sup> /kft
<b>Cable Weight</b>	2.76 kg/m   1.85 lb/ft
<b>Diameter Over Jacket (E Plane)</b>	127.50 mm   5.02 in
<b>Diameter Over Jacket (H Plane)</b>	71.90 mm   2.83 in

## Electrical Specifications

<b>Operating Frequency Band</b>	2.3 – 2.4 GHz
<b>eTE11 Mode Cutoff</b>	1.570 GHz
<b>Group Delay</b>	128 ns/100 ft @ 2.600 GHz 418 ns/100 m @ 2.600 GHz

## 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)

## Mechanical Specifications

<b>Maximum Twist</b>	0.75 °/m   0.03 °/ft
<b>Minimum Bend Radius, Multiple Bends (E Plane)</b>	660.00 mm   26.00 in
<b>Minimum Bend Radius, Multiple Bends (H Plane)</b>	1800.00 mm   71.00 in
<b>Minimum Bend Radius, Single Bend (E Plane)</b>	460.00 mm   18.00 in
<b>Minimum Bend Radius, Single Bend (H Plane)</b>	1270.00 mm   50.00 in

## Note

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

<b>Frequency Band</b>	<b>VSWR</b>	<b>Return Loss (dB)</b>
2.3–2.4 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

<b>Frequency (GHz)</b>	<b>Attenuation (dB/100 ft)</b>	<b>Attenuation (dB/100 m)</b>	<b>Average Power (kW)</b>	<b>Group Velocity %</b>
2.3	0.468	1.534	31.501	73.1
2.4	0.452	1.484	32.559	75.6

## Regulatory Compliance/Certifications

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

