

# 222040-9

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EWP64-65, HELIAX® Premium Elliptical Waveguide, 6.425–7.125 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>	48.5 mm   1.909 in
<b>Diameter Over Jacket (H Plane)</b>	28.4 mm   1.118 in
<b>Cable Volume</b>	725 L/km   7.804 ft <sup>3</sup> /kft

## Electrical Specifications

<b>eTE11 Mode Cutoff</b>	4.32 GHz
<b>Group Delay at Frequency</b>	125 ns/100 ft @ 7.400 GHz   411 ns/100 m @ 7.400 GHz
<b>Operating Frequency Band</b>	6.425 – 7.125 GHz

## VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
6.425–7.125 GHz	1.06	30.72

## Attenuation

Frequency (GHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)	Average Power (kW)	Group Velocity %
6.425	5.276	1.608	3.917	74
6.63	5.139	1.566	4.022	75.9
6.83	5.028	1.533	4.111	77.5
7.03	4.934	1.504	4.189	78.9

## Material Specifications

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

## Mechanical Specifications

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<b>Minimum Bend Radius, Multiple Bends (E Plane)</b>	260 mm   10.236 in
<b>Minimum Bend Radius, Multiple Bends (H Plane)</b>	685 mm   26.969 in
<b>Minimum Bend Radius, Single Bend (E Plane)</b>	260 mm   10.236 in
<b>Minimum Bend Radius, Single Bend (H Plane)</b>	685 mm   26.969 in
<b>Maximum Twist</b>	3.281 °/m   1 °/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>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>	0.73 kg/m   0.491 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

