

# 222040-3

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EWP52S, HELIAX® Super Premium Elliptical Waveguide, 5.925–6.425 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>	57.2 mm   2.252 in
<b>Diameter Over Jacket (H Plane)</b>	33.3 mm   1.311 in
<b>Cable Volume</b>	1045 L/km   11.248 ft <sup>3</sup> /kft

## Electrical Specifications

<b>eTE11 Mode Cutoff</b>	3.65 GHz
<b>Group Delay at Frequency</b>	126 ns/100 ft @ 6.200 GHz   413 ns/100 m @ 6.200 GHz
<b>Operating Frequency Band</b>	5.925 – 6.425 GHz

## VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
5.925–6.425 GHz	1.05	32.3

## Attenuation

Frequency (GHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)	Average Power (kW)	Group Velocity %
5.925	3.965	1.209	5.917	78.8
6.18	3.87	1.179	6.064	80.7

## Material Specifications

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

## Mechanical Specifications

<b>Minimum Bend Radius, Multiple Bends (E Plane)</b>	305 mm   12.008 in
<b>Minimum Bend Radius, Multiple Bends (H Plane)</b>	810 mm   31.89 in

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<b>Minimum Bend Radius, Single Bend (E Plane)</b>	200 mm   7.874 in
<b>Minimum Bend Radius, Single Bend (H Plane)</b>	560 mm   22.047 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>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>	0.88 kg/m   0.591 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

