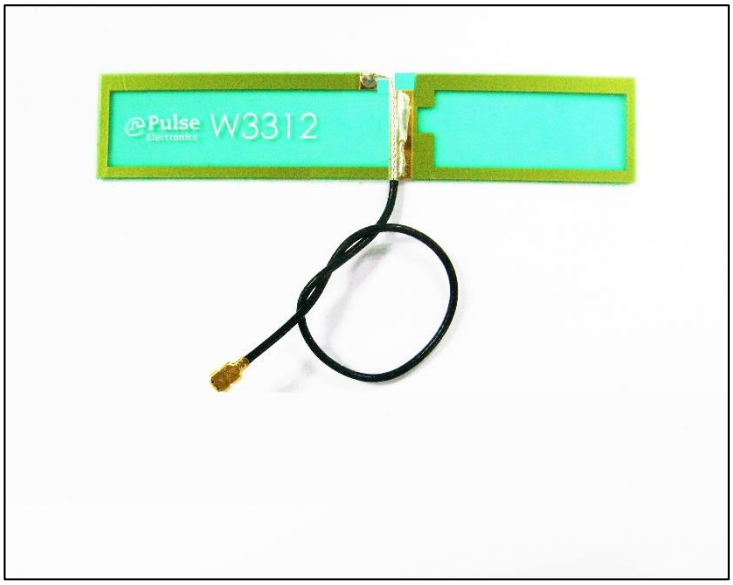
Pulse | LARSEN Antennas
A YAGEO Company

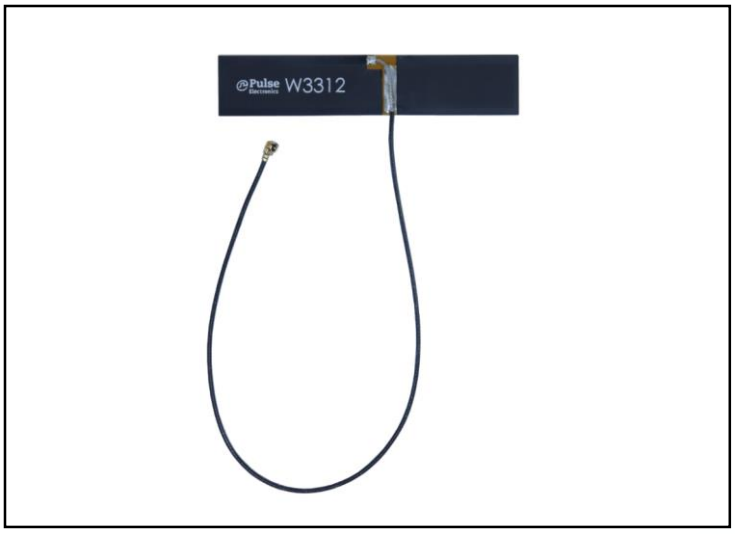
TECHNICAL DATA SHEET

Description: ISM 868/915MHz PCB Antenna with coax feed

Series: Internal Antenna

PART NUMBER: W3312XXXXXX





Features:

- 863-928MHz
- Size 75x15 mm
- Flexible PCB thickness 0.1 mm with adhesive tape
- Mounting with 3M467 adhesive tape on back side
- 100mm 1.13mm OD coax cable with U.FL connector

Applications:

- Devices with ISM 868MHz / 915MHz radios
- M2M, IoT
- Metering, Industry automation
- Instrumentation

All dimensions are in mm / inches

Issue: 1912

RoHS COMPLIANT

For more information:

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San Diego, CA 92128
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99 Huo Ju Road(#29 Bldg,4th Phase
Suzhou New District
Jiangsu Province, Suzhou 215009 PR China
Tel: 86 512 6807 9998

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ELECTRINIC SPECIFICATIONS

Frequency	863-928	MHz
Nominal Impedance	50	Ω
Return loss	-8	dB
Efficiency	45	%
Peak Gain	0.8	dBi +/- 1 dB
Polarization:	linear	
Power withstanding	2	W

Note: All RF data measured with 1.5mm polycarbonate plate to simulate loading effect of real device housing.

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This document covers all product variants of the following product family

Antennas	Color	Connector
W3312B0100	Green	1.13mm OD coax cable with U.FL connector
W3312BB0100	BLACK	

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MECHANICAL SPECIFICATIONS

PCB type	Flexible
Radiator size	15[0.59] x 75[2.95] mm[inch]
Adhesive	3M467
Total thickness (Radiator+adhesive)	0.1[0.004] mm[inch]
Weight	0.74g
Cable type	OD 1.13mm coax
Cable length	100[3.94] mm[inch]
Connector	U.FL compatible

ENVIRONMENTAL SPECIFICATIONS

Operating temperature	-40/+85 ° C

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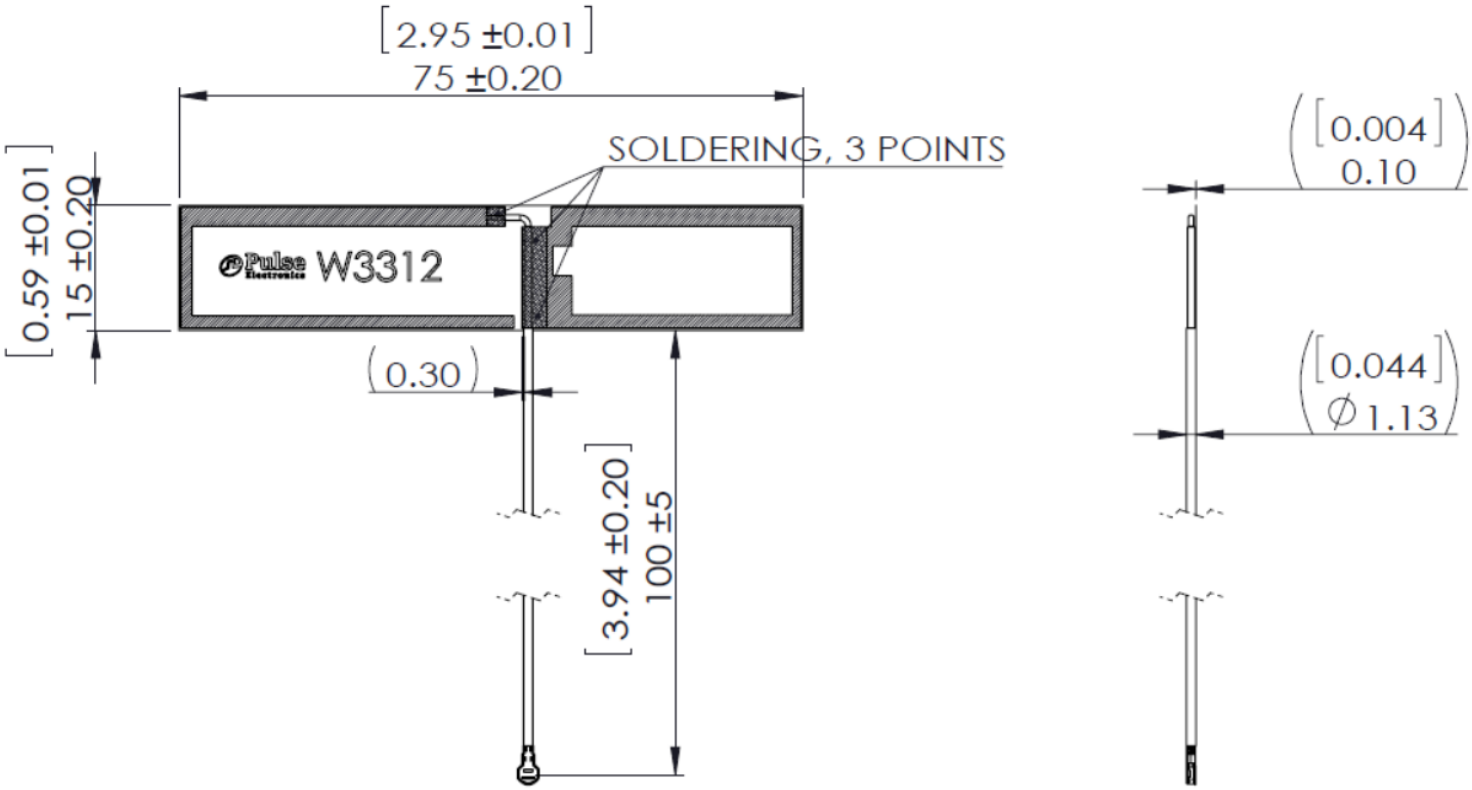
MECHANICAL DRAWING



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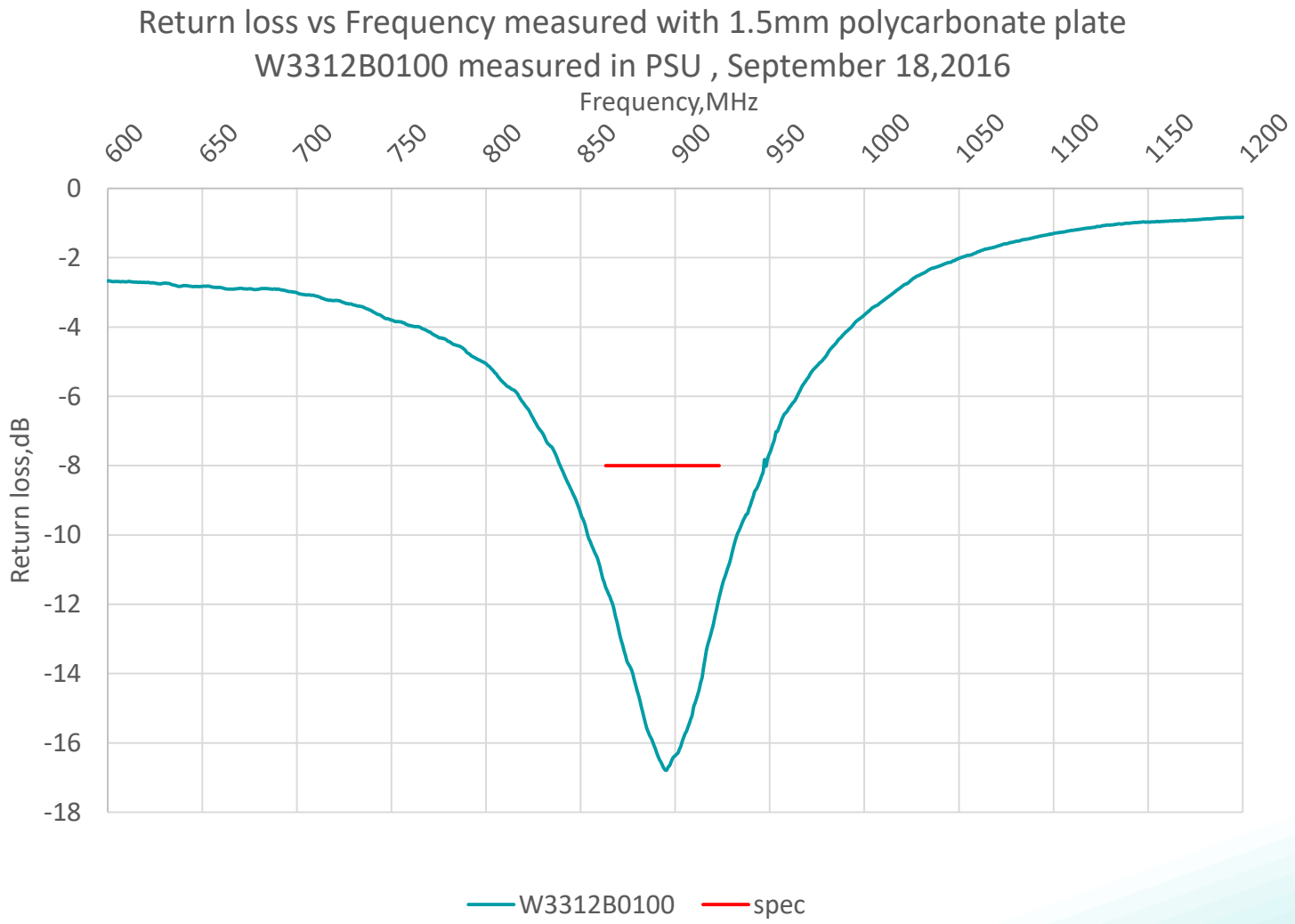
CHARTS

Return loss



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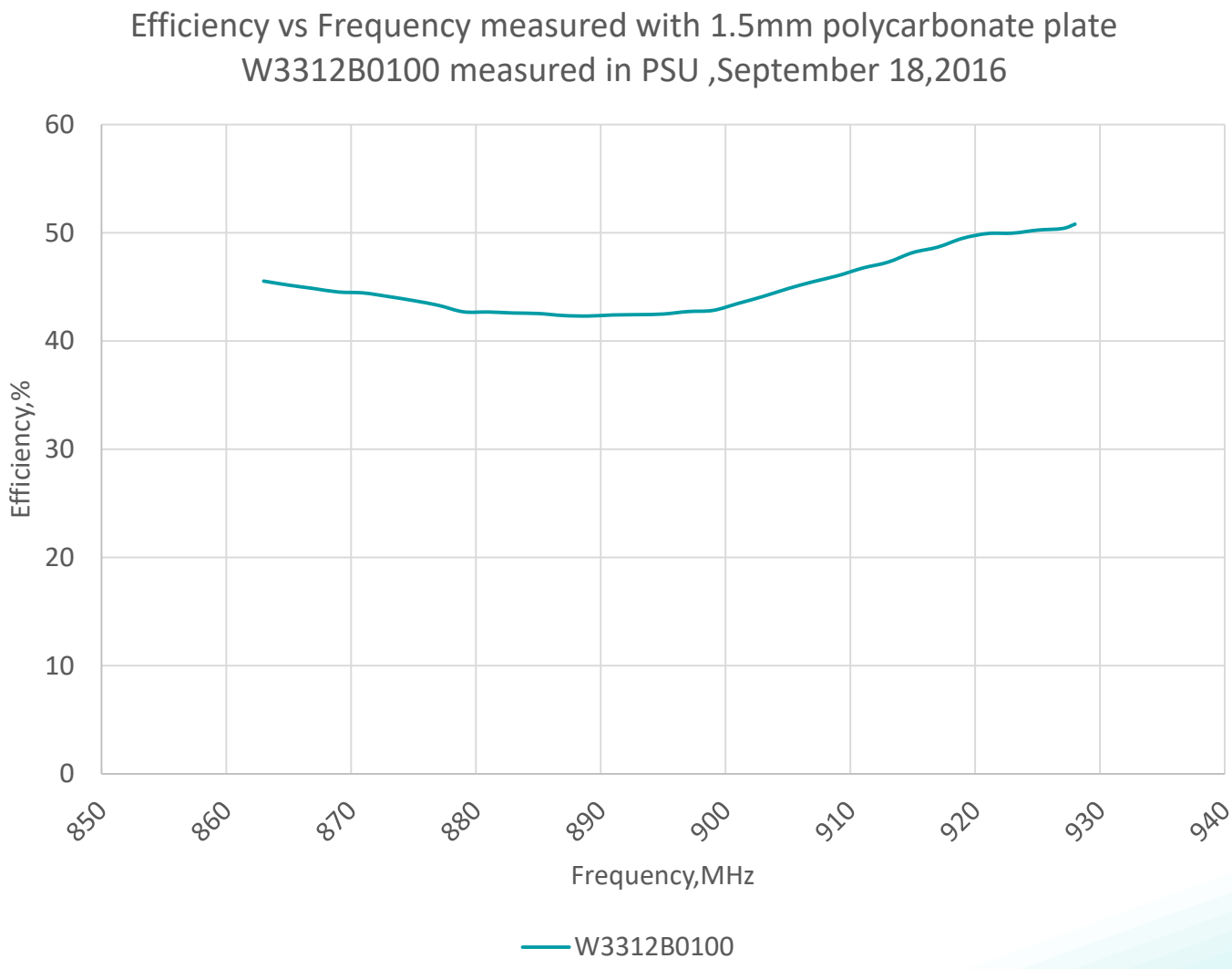
Efficiency



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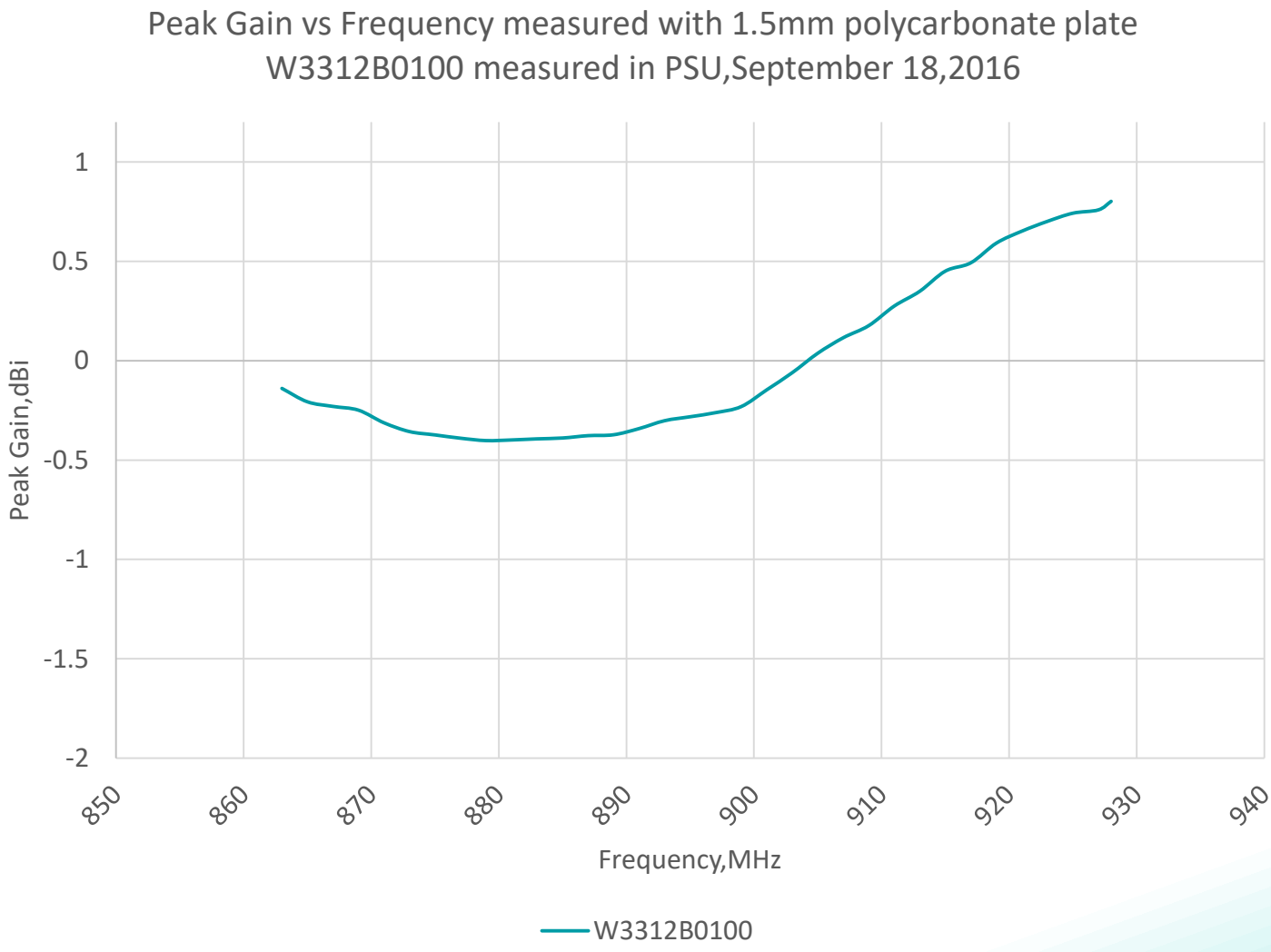
Peak Gain



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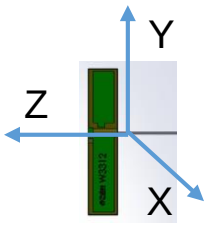
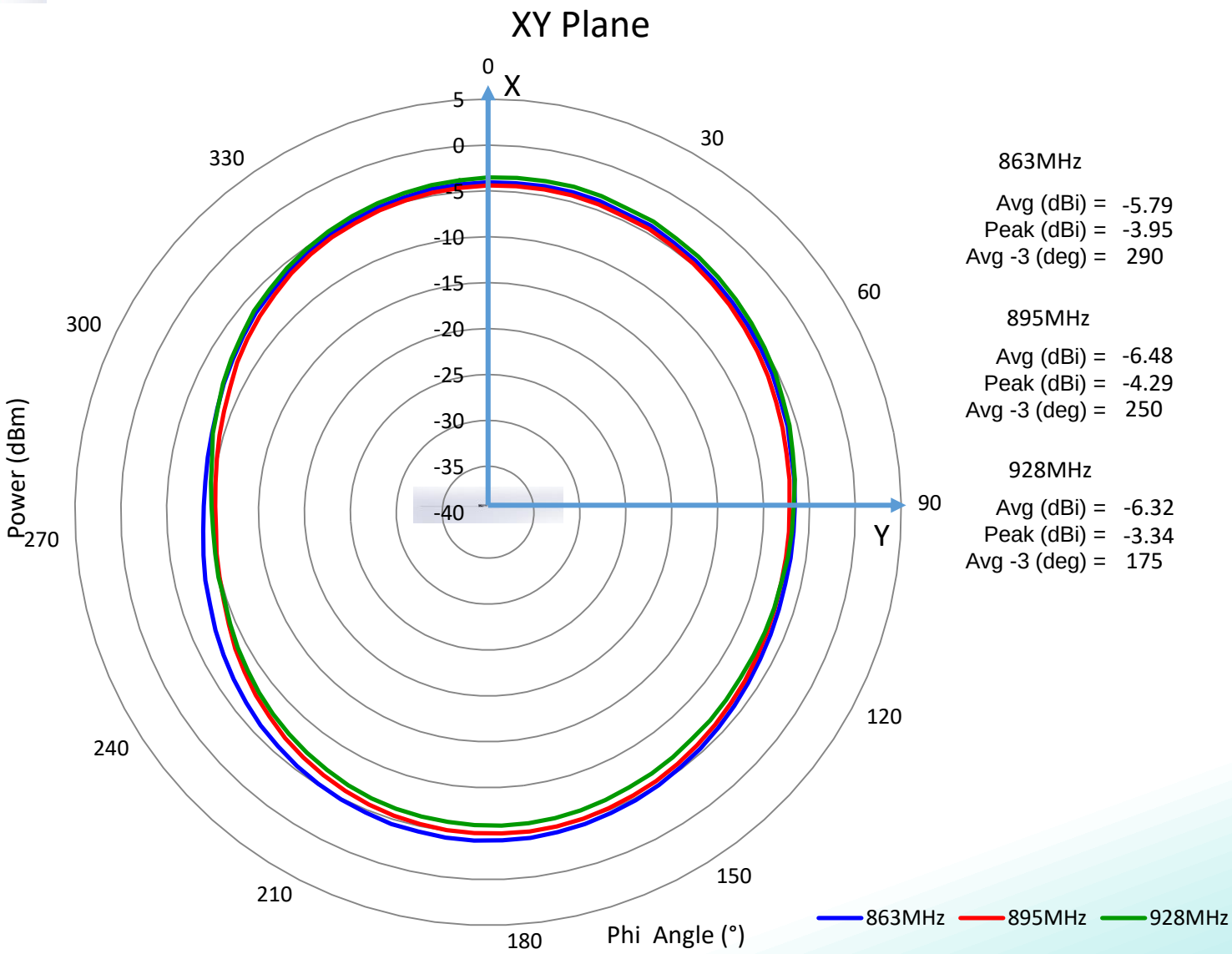


Gain Plots



863MHz

Avg (dBi) = -5.79
Peak (dBi) = -3.95
Avg -3 (deg) = 290

895MHz

Avg (dBi) = -6.48
Peak (dBi) = -4.29
Avg -3 (deg) = 250

928MHz

Avg (dBi) = -6.32
Peak (dBi) = -3.34
Avg -3 (deg) = 175

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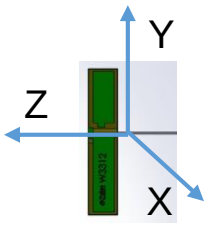
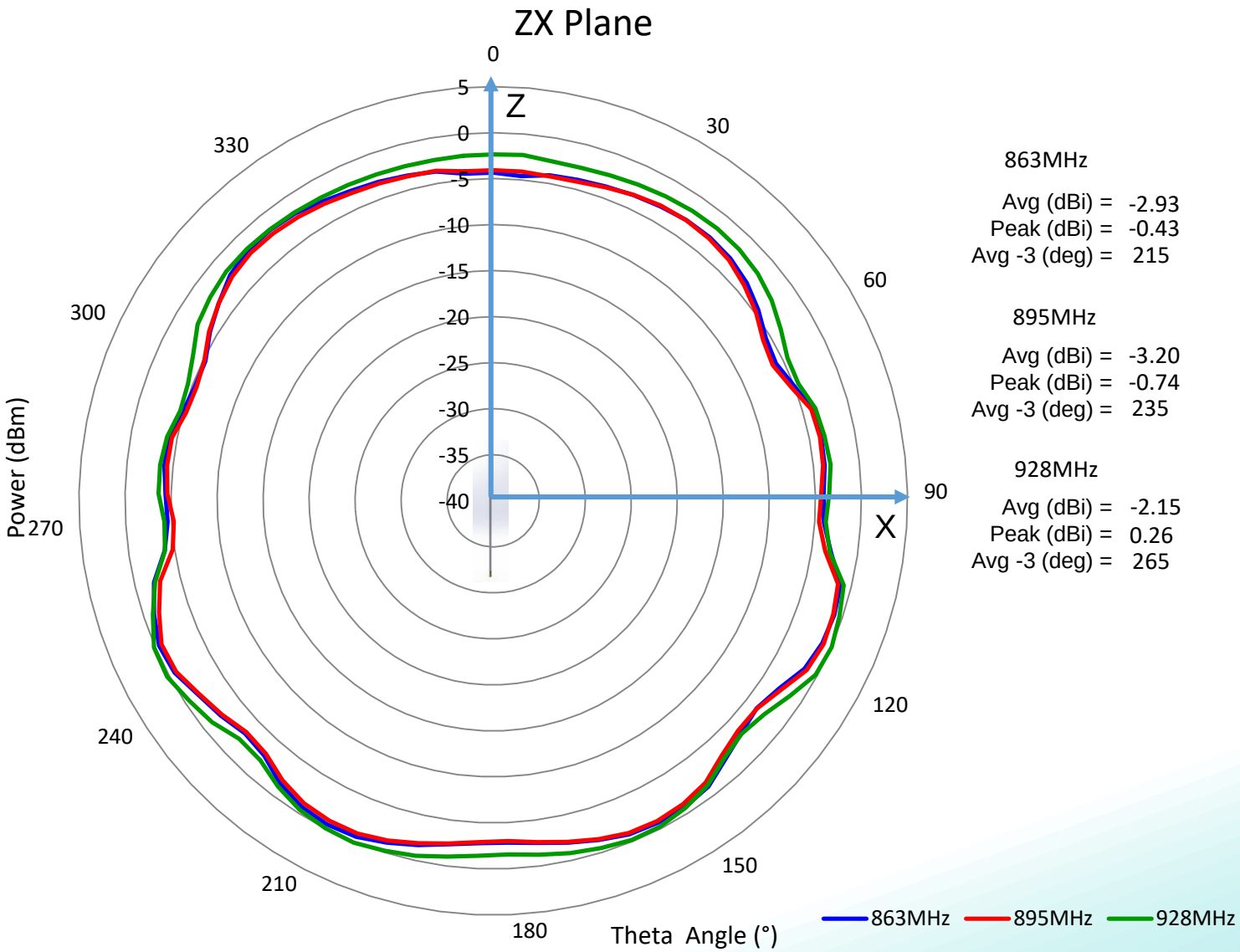


Gain Plots



863MHz

Avg (dBi) = -2.93
Peak (dBi) = -0.43
Avg -3 (deg) = 215

895MHz

Avg (dBi) = -3.20
Peak (dBi) = -0.74
Avg -3 (deg) = 235

928MHz

Avg (dBi) = -2.15
Peak (dBi) = 0.26
Avg -3 (deg) = 265

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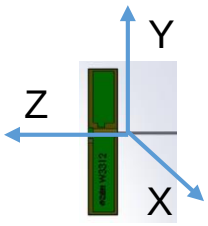
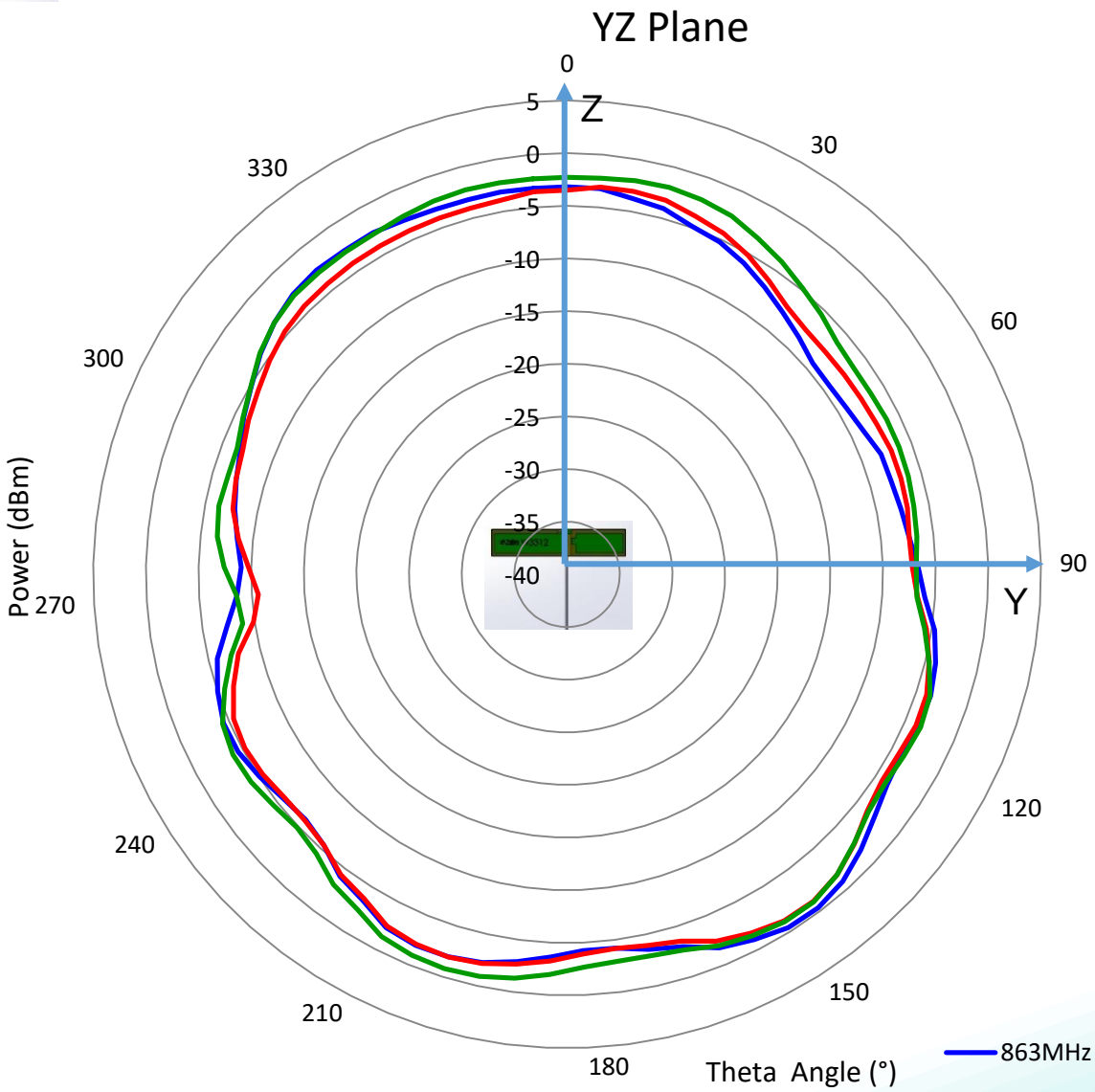


Gain Plots



863MHz

Avg (dBi) = -4.76
Peak (dBi) = -0.36
Avg -3 (deg) = 120

895MHz

Avg (dBi) = -5.11
Peak (dBi) = -1.14
Avg -3 (deg) = 150

928MHz

Avg (dBi) = -4.07
Peak (dBi) = -0.77
Avg -3 (deg) = 190

RoHS COMPLIANT