

Description: 5G FPC antenna

Series: Internal Antenna

PART NUMBER: W3920XXXX



### Features:

- 4900-5925 MHz
- Size 12.5 X 7.6 X 0.15 mm
- Efficiency > 60%
- VSWR < 2
- Nominal impedance 50  $\Omega$
- Cable and connector can be customized

### Applications:

- WiFi 5GHz
- DSRC
- ISM band 5GHz radios
- IoT, M2M

All dimensions are in mm / inches

Issue: 1714

In the effort to improve our products, we reserve the right to make changes judged to be necessary.

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For more information:

Pulse Worldwide Headquarters  
15255 Innovation Drive #100  
San Diego, CA 92128  
USA  
Tel: 1-858-674-8100

Pulse/Larsen Antennas  
18110 SE 34<sup>th</sup> St Bldg 2 Suite 250  
Vancouver, WA 98683  
USA  
Tel: 1-360-944-7551

Europe Headquarters  
Pulse GmbH & Do, KG  
Zeppelinstrasse 15  
Herrenberg, Germany  
Tel: 49 7032 7806 0

Pulse (Suzhou) Wireless Products Co, Inc.  
99 Huo Ju Road(#29 Bldg,4<sup>th</sup> Phase  
Suzhou New District  
Jiangsu Province, Suzhou 215009 PR China  
Tel: 86 512 6807 9998



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**This document covers all product variants of the following product family:**

W3920B0050	50mm 1.13mm OD cable	U.FL compatible connector
W3920b0100	100mm 1.13mm OD cable	U.FL compatible connector

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**Description: 5G FPC antenna****Series: Internal Antenna****PART NUMBER: W3920XXXX****ELECTRICAL SPECIFICATIONS**

Frequency	4900-5925 MHz
Nominal Impedance	50 $\Omega$
VSWR	< 2
Gain	3 dBi +/- 1 dB
Efficiency	60 %
Radiation Pattern	Omni
Polarization	Linear
Power withstanding	2 W
Connector	U.FL compatible connector
Cable type	1.13mm coaxial cable black
Cable length	Optional

***(\*) All RF parameters measured on 2mm thick PC plate***

**Description: 5G FPC antenna****Series: Internal Antenna****PART NUMBER: W3920XXXX****MECHANICAL SPECIFICATIONS**

Radiator material	FPC
Color	Black
Adhesive	3M467
Thickness(with adhesive, no liner)	0.15 mm
FPC size(L X W X T)	12.5 X 7.6 X 0.15 mm

**ENVIRONMENTAL SPECIFICATIONS**

Operating temperature	-40/+85 ° C
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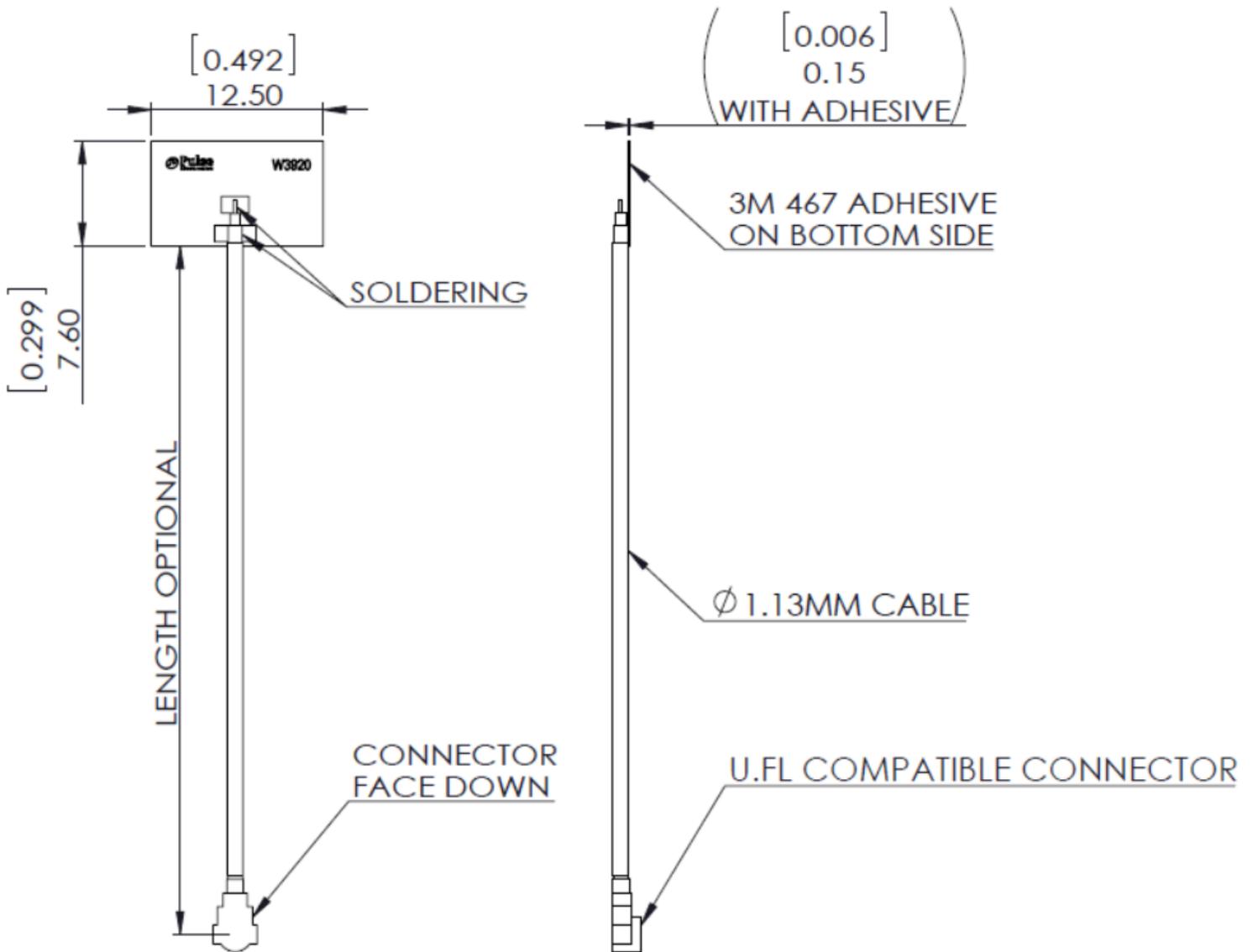
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MECHANICAL DRAWING



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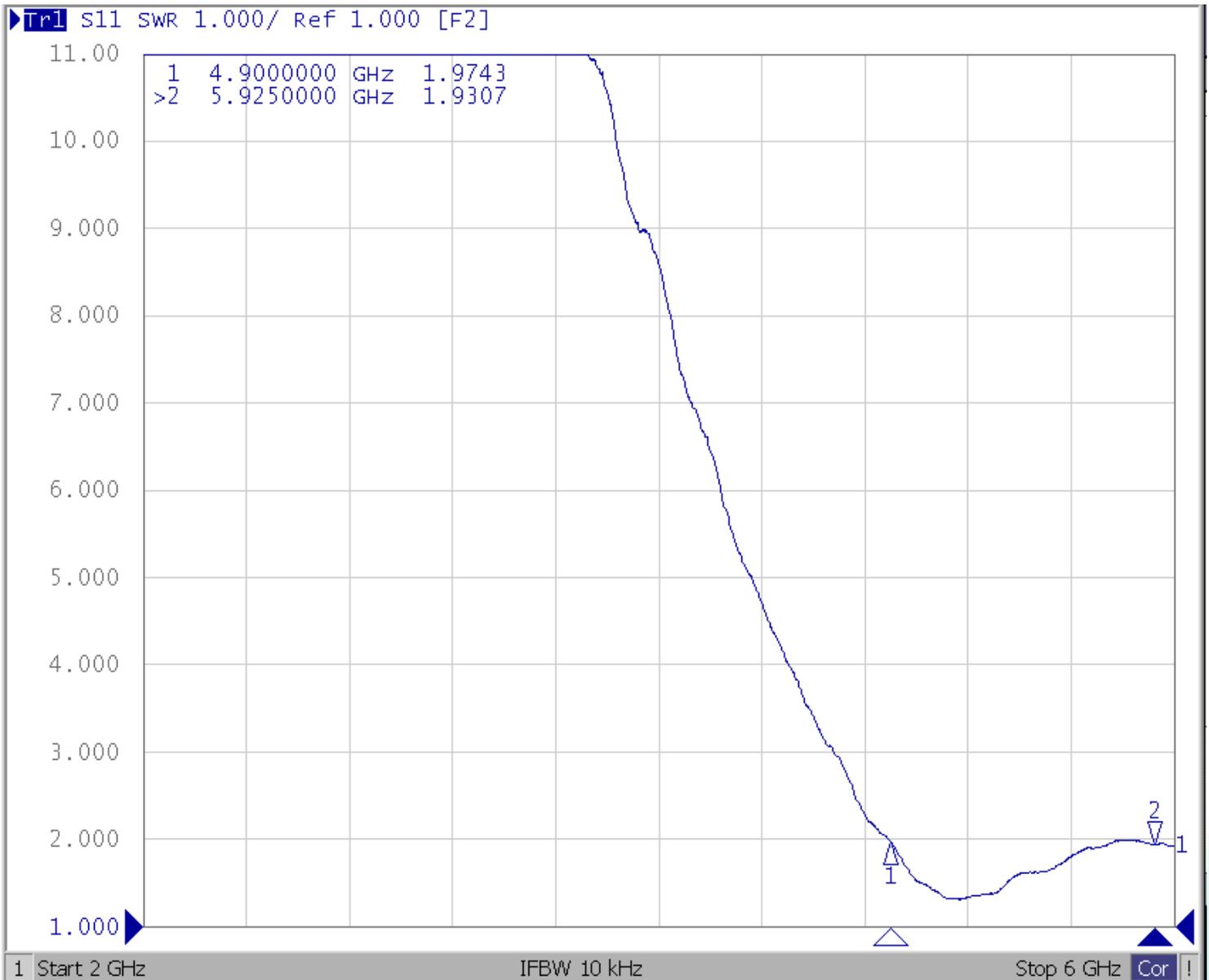
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CHARTS

(\* ) All RF parameters measured on 2mm thick PC plate

Typical free space Return Loss



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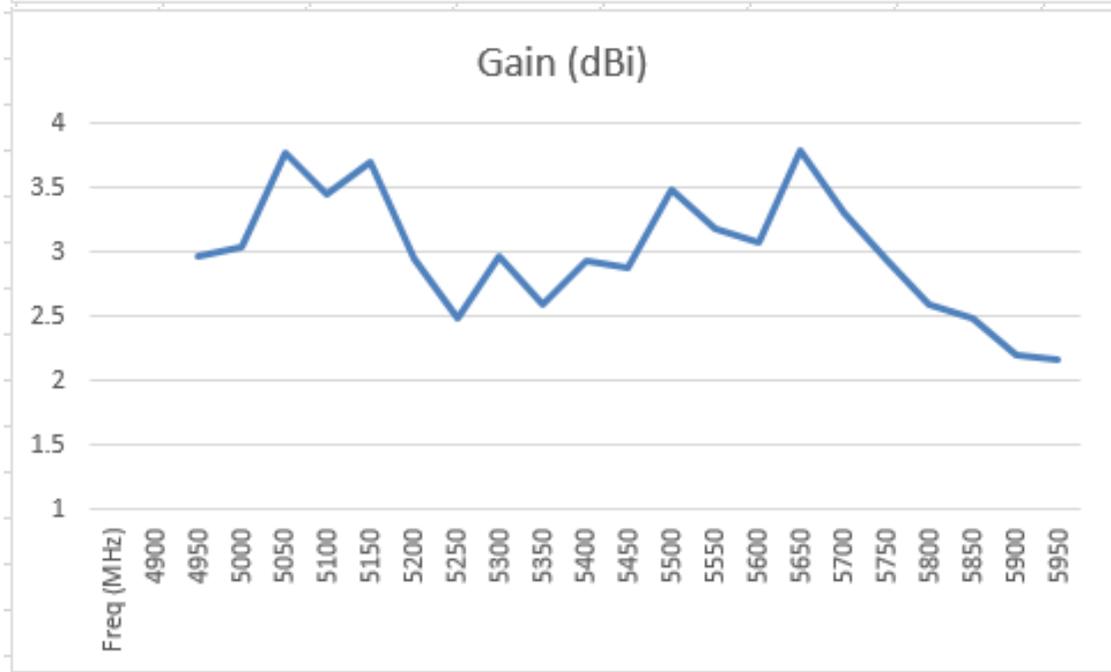
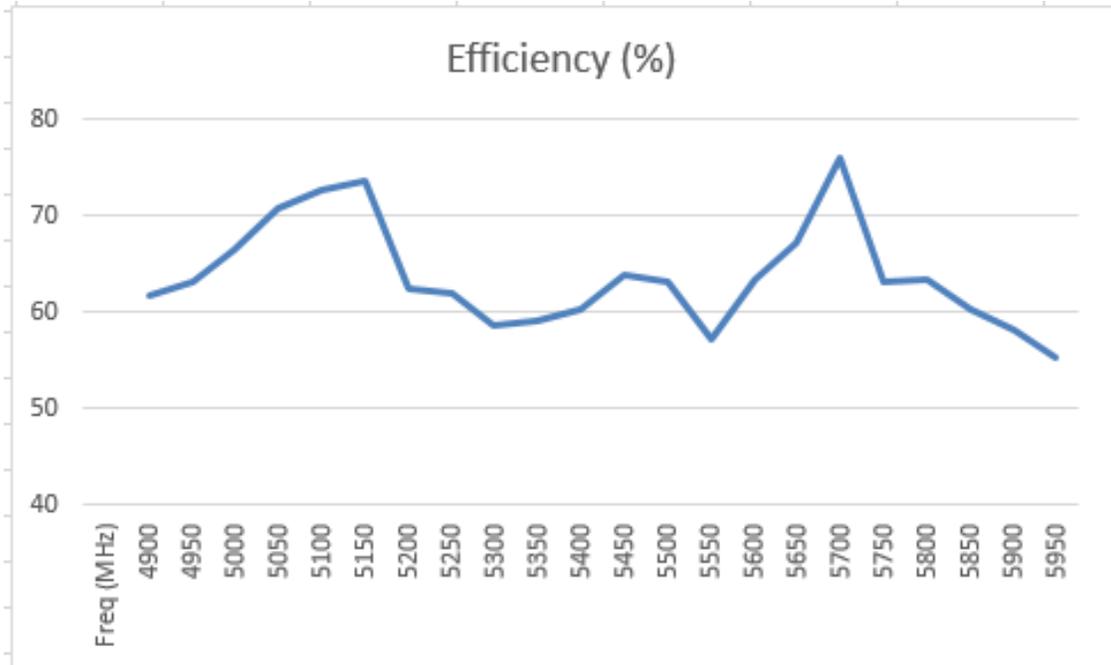
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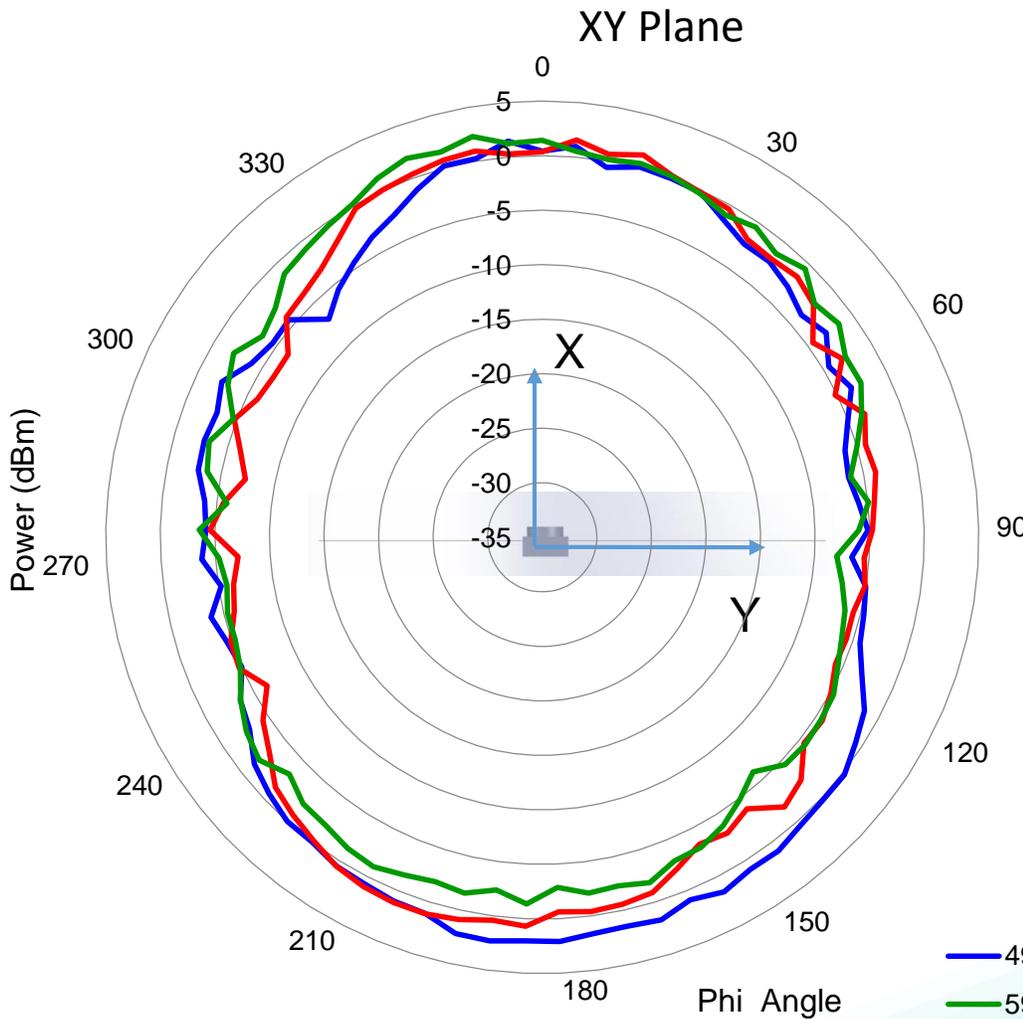
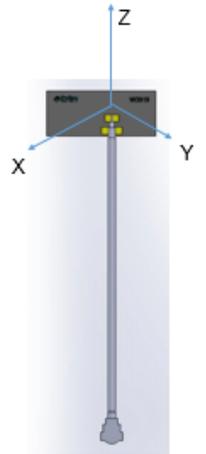
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CHARTS

Typical free space radiation pattern  
WIFI 5GHz

(\* All RF parameters measured on 2mm thick PC plate



4900MHz	Avg (dBi) = -1.94
	Peak (dBi) = 2.33
	Avg -3 (deg) = 15
	0
5500MHz	Avg (dBi) = -2.67
	Peak (dBi) = 1.56
	Avg -3 (deg) = 11
	5
5950MHz	Avg (dBi) = -2.69
	Peak (dBi) = 2.31
	Avg -3 (deg) = 70

— 4900MHz — 5500MHz — 5950MHz

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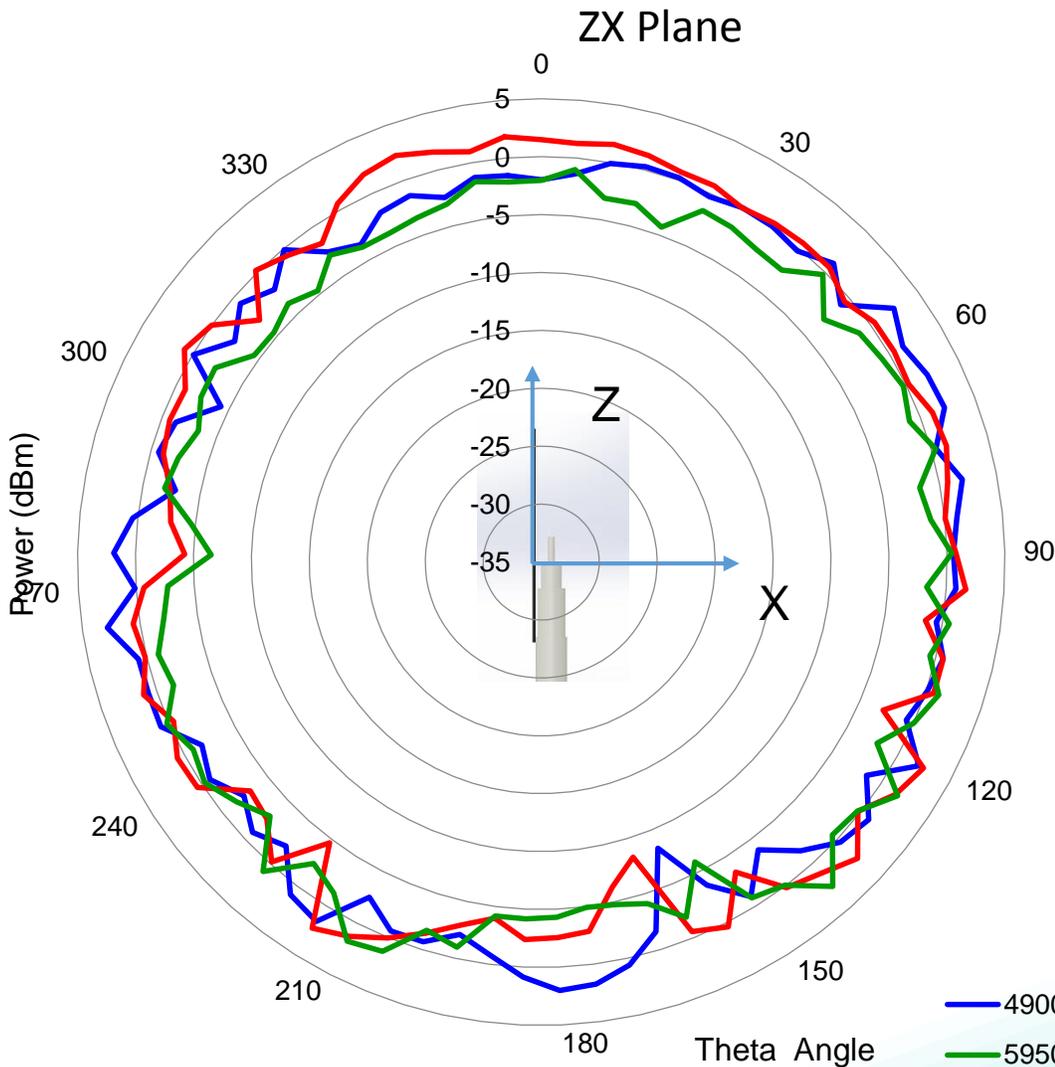
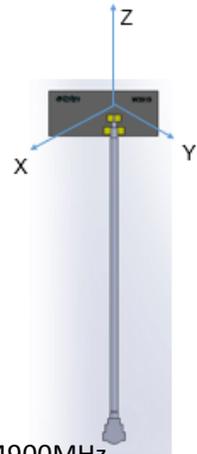
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CHARTS

Typical free space radiation pattern  
WIFI 5GHz

(\* All RF parameters measured on 2mm thick PC plate



4900MHz	Avg (dBi) = -0.50
	Peak (dBi) = 2.86
	Avg -3 (deg) = 85
5500MHz	Avg (dBi) = -0.37
	Peak (dBi) = 2.46
	Avg -3 (deg) = 11
	7.5
5950MHz	Avg (dBi) = -1.93
	Peak (dBi) = 2.65
	Avg -3 (deg) = 37.
	5

— 4900MHz — 5500MHz  
— 5950MHz

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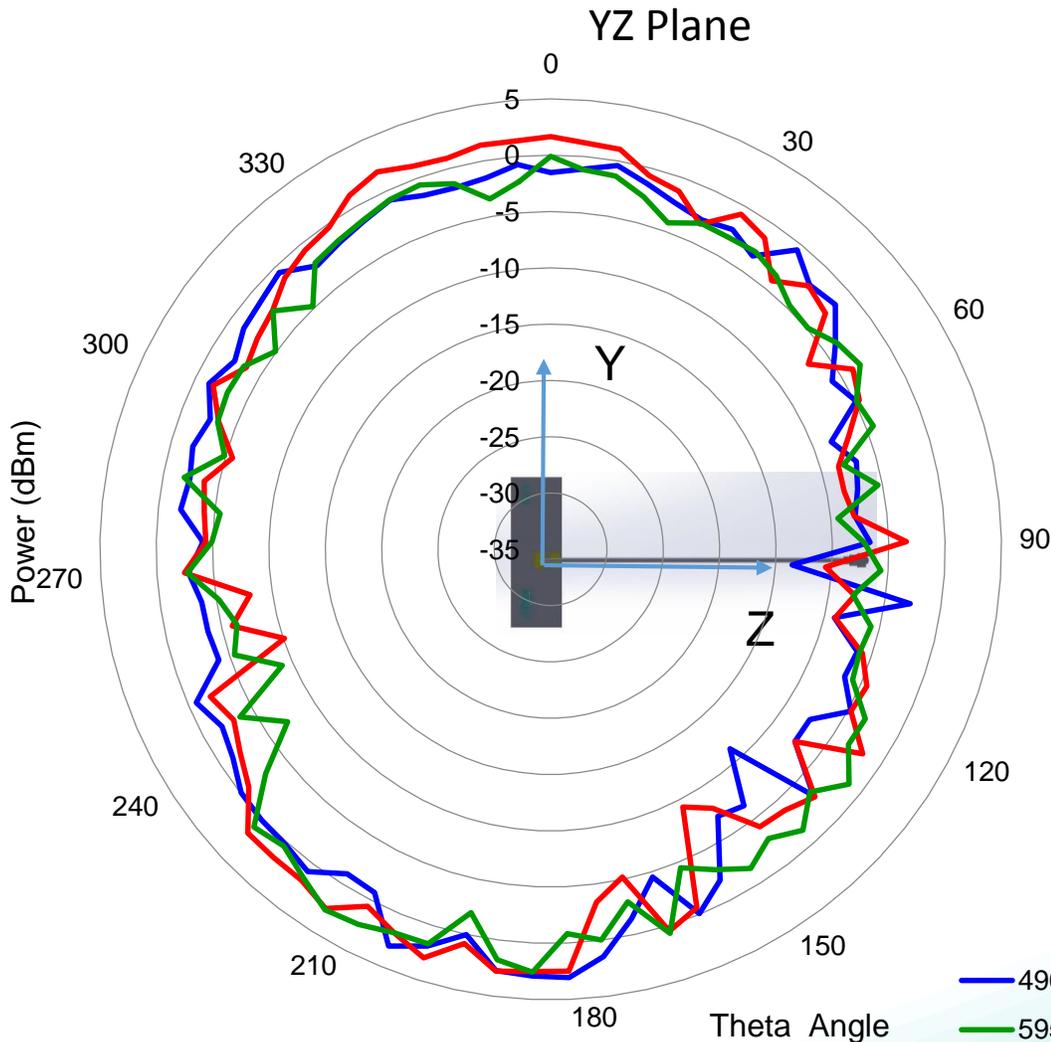
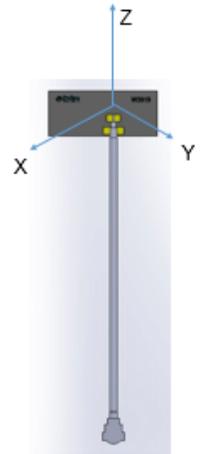
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CHARTS

Typical free space radiation pattern  
WIFI 5GHz

**(\*) All RF parameters measured on 2mm thick PC plate**



4900MHz	Avg (dBi) = -2.73
	Peak (dBi) = 3.05
	Avg -3 (deg) = 20
5500MHz	Avg (dBi) = -2.60
	Peak (dBi) = 2.99
	Avg -3 (deg) = 50
5950MHz	Avg (dBi) = -3.03
	Peak (dBi) = 2.76
	Avg -3 (deg) = 27.5

— 4900MHz — 5500MHz  
— 5950MHz

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## PACKAGING

10PCS/PE bag  
10 PE bag/foam bag  
50 foam bag/ carton box

Total 5000PCS/Carton box



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