PulseLARSEN Antennas

TECHNICAL DATA SHEET

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 Ω
- Cable and connector can be customized

Applications:

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

All dimensions are in mm / inches

Issue: 1714

RoHS COMPLIANT

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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 34th 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,4th 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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ELECTRICAL SPECIFICATIONS

Frequency	4900-5925 MHz
Nominal Impedance	50 Ω
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

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RoHS COMPLIANT

Description: 5G FPC antenna

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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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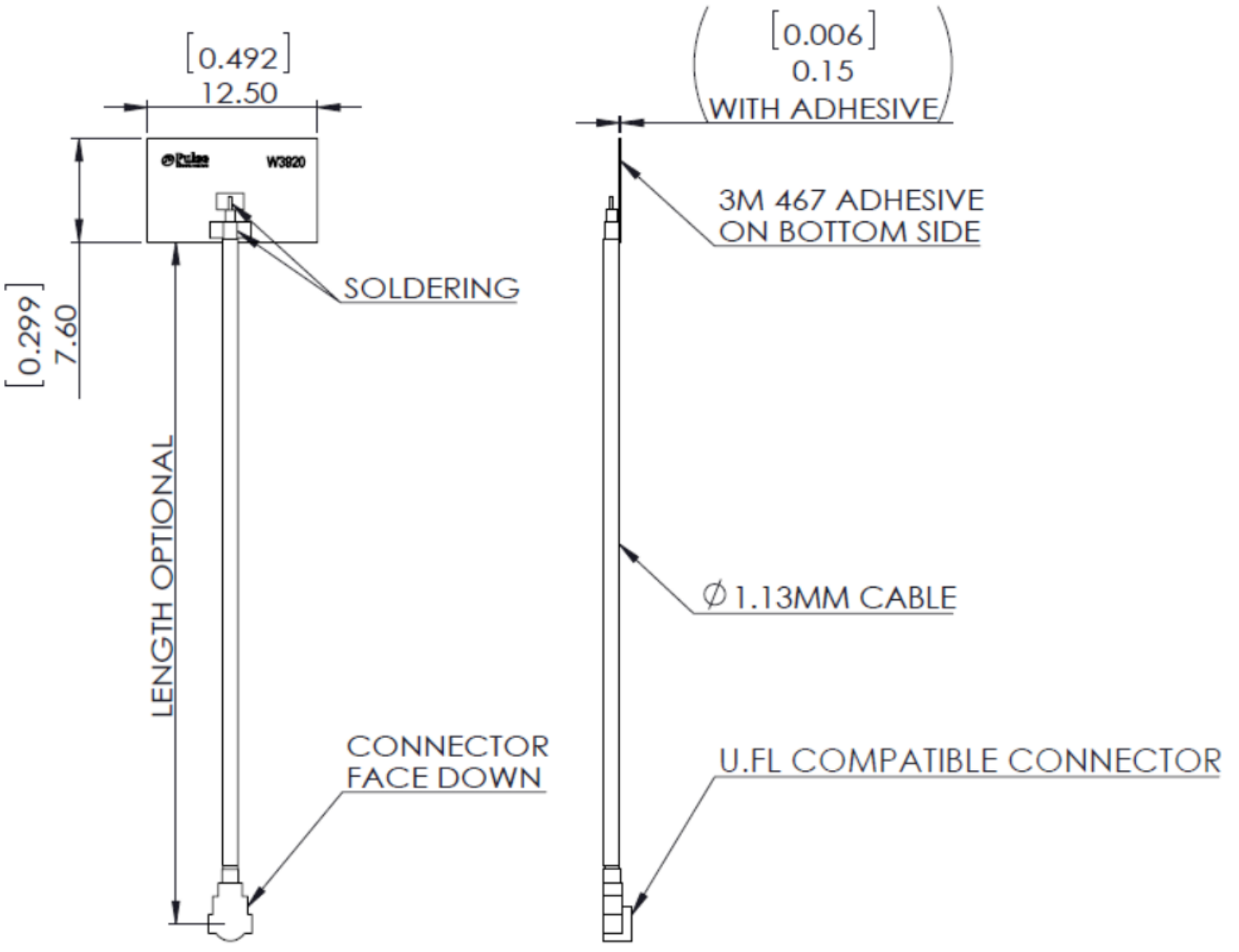
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MECHANICAL DRAWING



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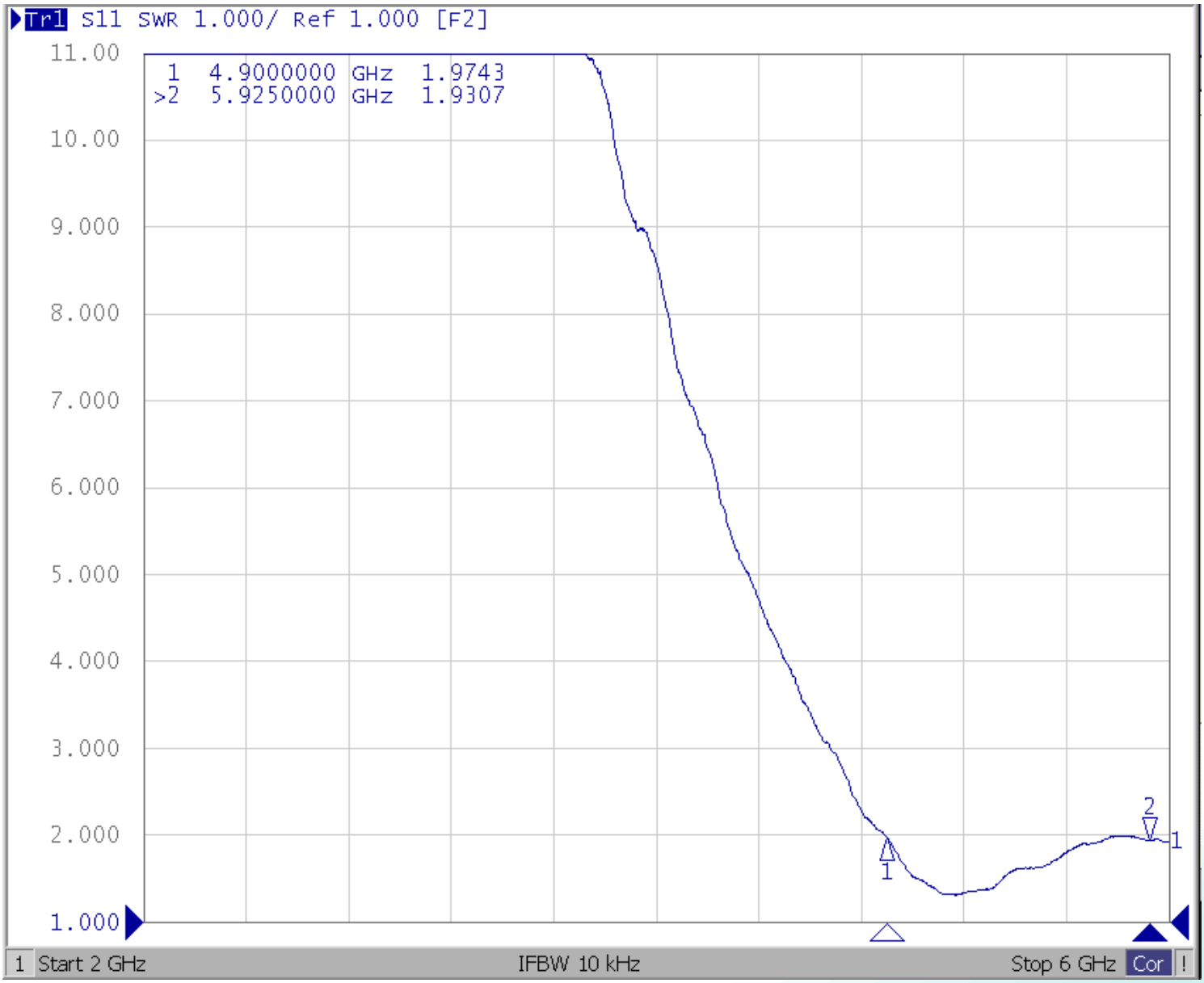
Series: Internal Antenna

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CHARTS

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

Typical free space Return Loss



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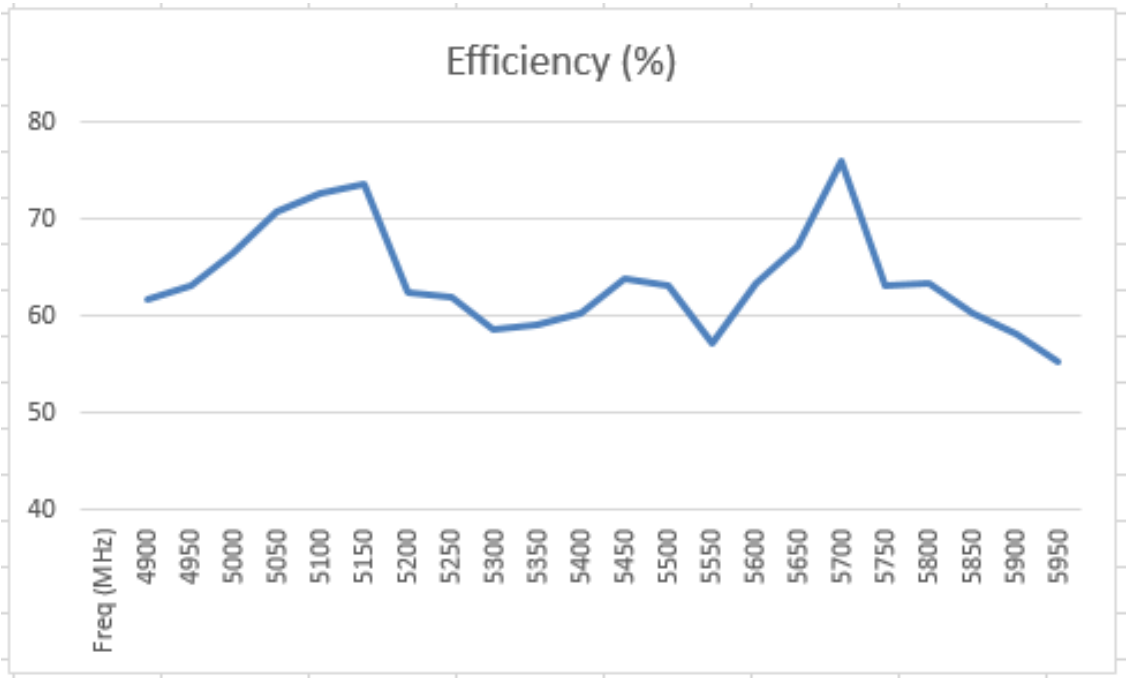
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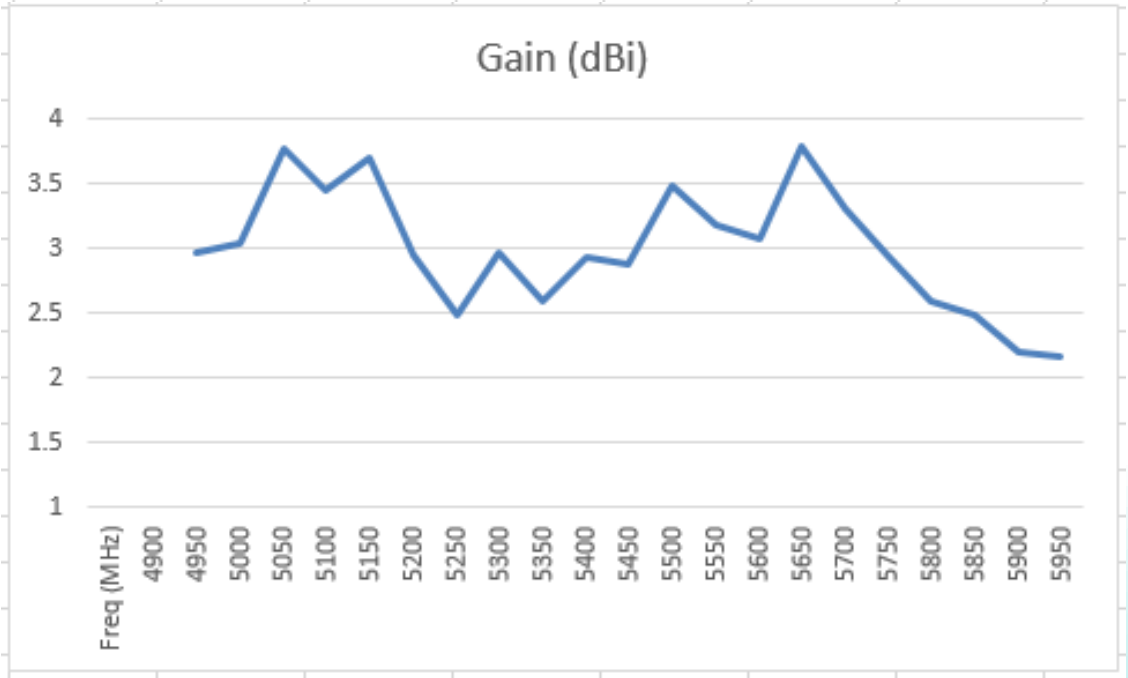
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CHARTS

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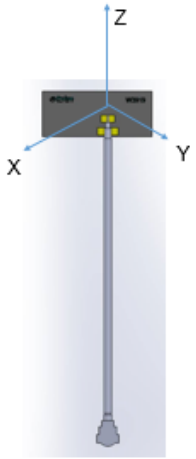
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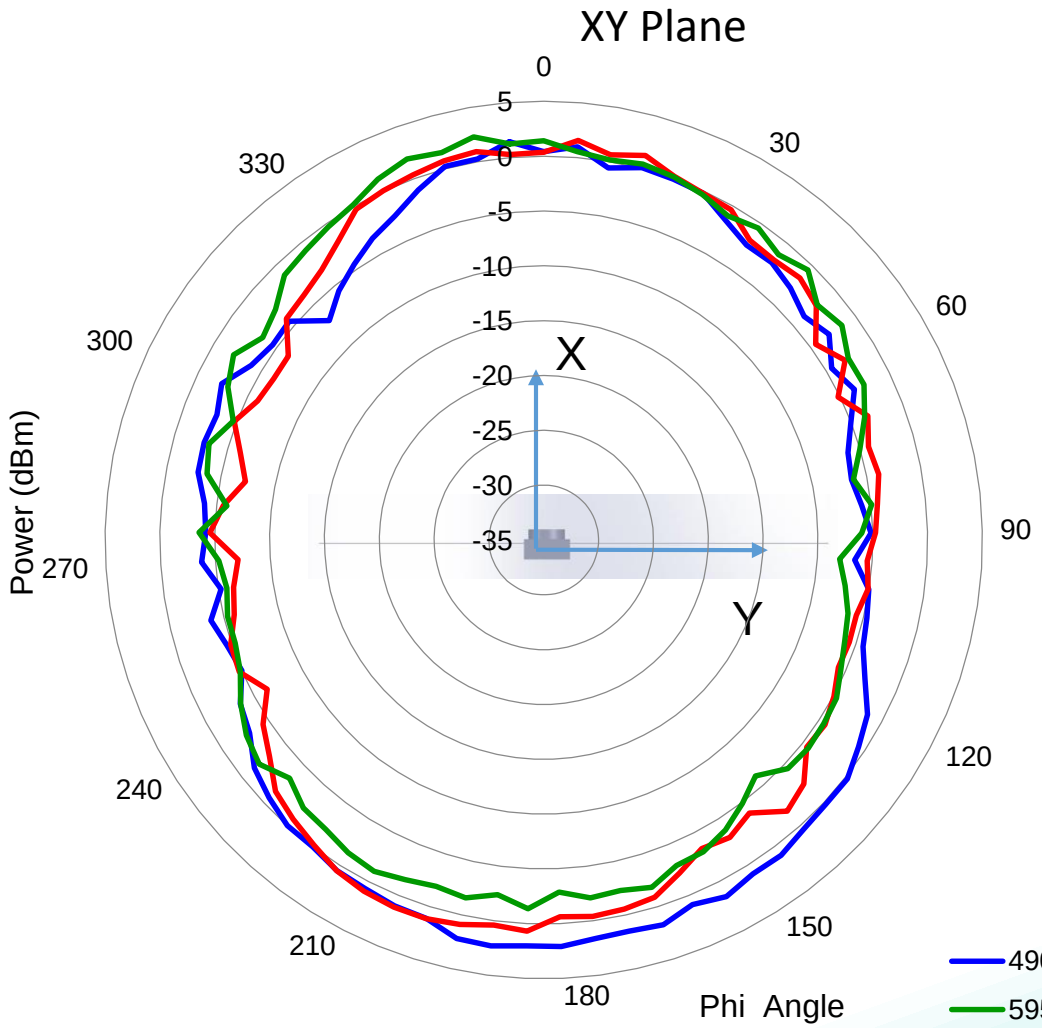
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PART NUMBER: W3920XXXX

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) = 150

5500MHz
Avg (dBi) = -2.67
Peak (dBi) = 1.56
Avg -3 (deg) = 115

5950MHz
Avg (dBi) = -2.69
Peak (dBi) = 2.31
Avg -3 (deg) = 70

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RoHS COMPLIANT

Description: 5G FPC antenna

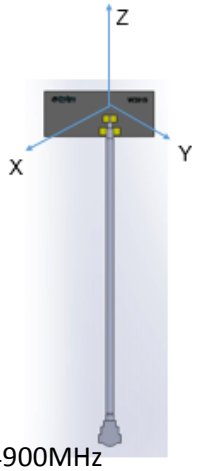
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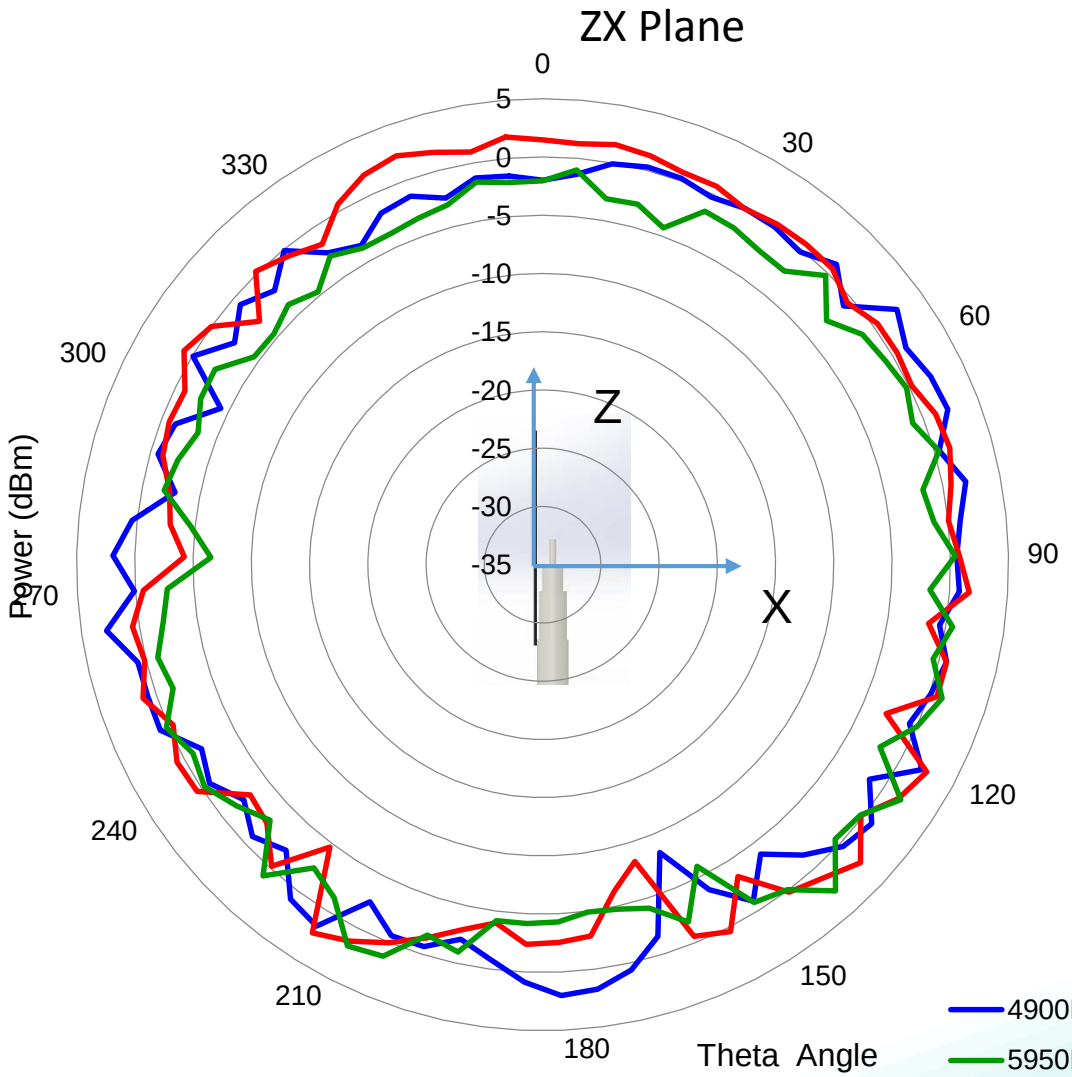
PART NUMBER: W3920XXXX

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

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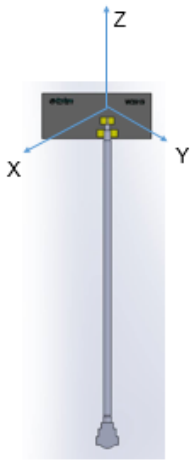
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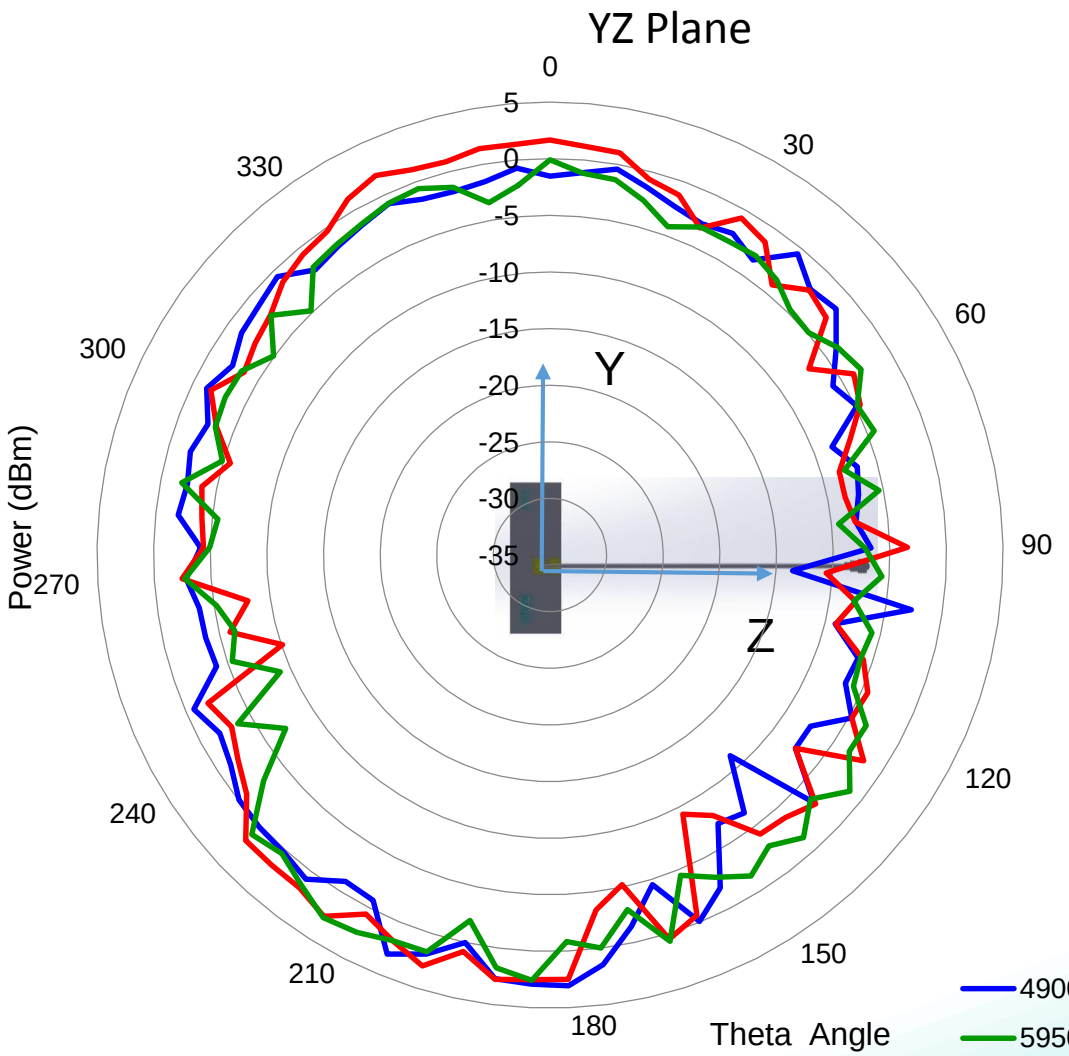
Series: Internal Antenna

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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

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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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