

Description: WiFi 2.4/5GHz/DSRC Antenna

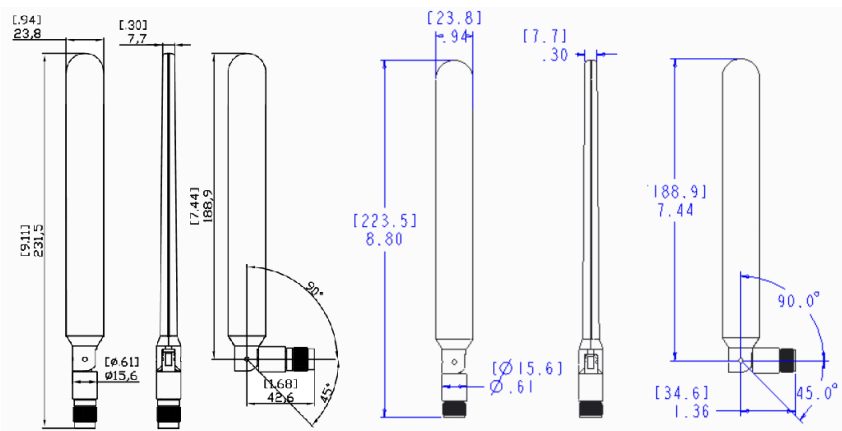
Series: IceBlade

PART NUMBER: ICEBLADEWx



Features:

- Multi Band Swivel Mount Dipole
- Transparent antenna
- ICEBLADEWT: TNC Male Connector
- ICEBLADEWS: SMA Male Connector



Applications:

- 2.4GHz/6GHz radios
- WiFi Routers, Access points
- Zigbee, BLE, BT
- Metering, Security, IoT, M2M Applications
- DSRC

All dimensions are in mm / inches

Issue: 1816

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  
12220 World Trade Drive  
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



Description: WiFi 2.4/5Ghz/DSRC Antenna

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

ICEBLADEWT: TNC Connector

ICEBLADEWS: SMA Connector

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**ELECTRICAL SPECIFICATIONS**

P/N	Frequency (MHz)	Peak Gain (dBi)	Efficiency (%)	VSWR	Power Standing
ICEBLADEWT	2400-2500	4.2+/-1dB	55	2.3:1	5W
	4900-6000	5.3+/-1dB	80	2.3:1	
ICEBLADEWS	2400-2500	4.2+/-1dB	55	2:1	5W
	4900-6000	5.3+/-1dB	80	2:1	

**Typical performance measured in free space**

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**Description: WiFi 2.4/5Ghz/DSRC Antenna****Series: IceBlade****PART NUMBER: ICEBLADEWx****MECHANICAL SPECIFICATIONS**

Plastic radome	PC945A
Color	Clarity
Flammability(Radome)	UL94 V-0
Weight	45.4g
Positions	0°, 45° & 90°
Overall length	8.8 INCHES
Fixing system	° ± 2 °
Azimuth adjustment	° ± 4°
Elevation adjustment	° ± 4°

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**ENVIRONMENTAL SPECIFICATIONS**

Operating temperature	-30/+70° C
Temperature	
Stationary	-40/+85° C
Cyclic	Rate 5°C/min, 16 hours
Humidity	
Stationary	95% @ 25° C
Cyclic	12 hours
Salt mist	96 hours

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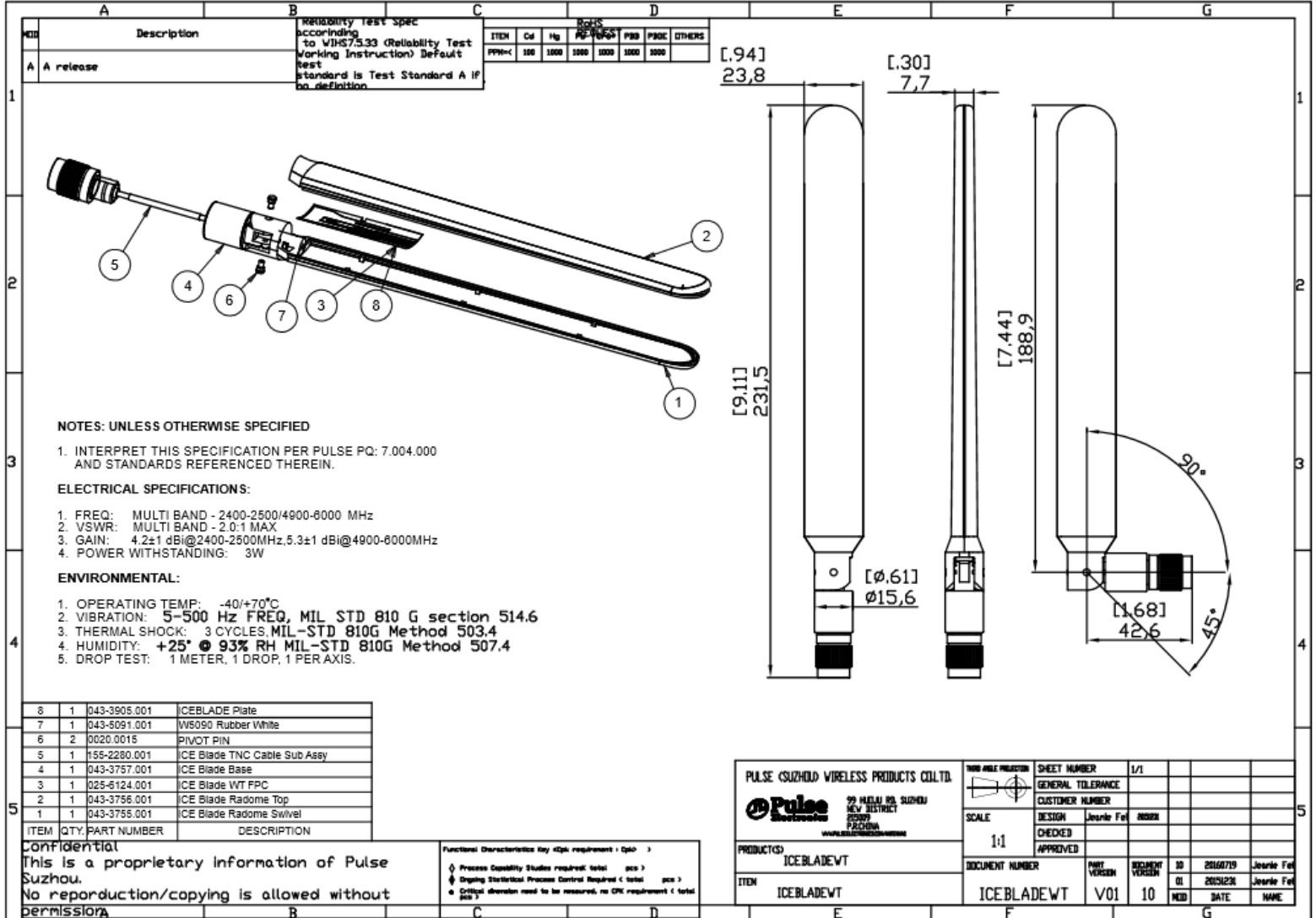
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MECHANICAL DRAWING

ICEBLADEWT: TNC Connector



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MECHANICAL DRAWING

ICEBLADEWS: SMA Connector

A	B	C	D	E	F	G																																				
Description		Reliability Test Spec according to WHS7.3.33 (Reliability Test Working Instruction) Default Test Standard is Test Standard A if no definition.	<table border="1" style="font-size: 8px;"> <thead> <tr> <th>ITEM</th> <th>Col</th> <th>Hg</th> <th>RE</th> <th>PHOS</th> <th>PBR</th> <th>PRDC</th> <th>OTHERS</th> </tr> </thead> <tbody> <tr> <td>PPM&lt;</td> <td>100</td> <td>1000</td> <td>1000</td> <td>1000</td> <td>1000</td> <td>1000</td> <td></td> </tr> </tbody> </table>	ITEM	Col	Hg	RE	PHOS	PBR	PRDC	OTHERS	PPM<	100	1000	1000	1000	1000	1000																								
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<p>NOTES: UNLESS OTHERWISE SPECIFIED</p> <p>1. INTERPRET THIS SPECIFICATION PER PULSE PQ: 7.004.000 AND STANDARDS REFERENCED THEREIN.</p> <p>ELECTRICAL SPECIFICATIONS:</p> <p>1. FREQ: MULTI BAND - 2400-2500/4900-8000 MHz                  2. VSWR: MULTI BAND - 2.0:1 MAX                  3. GAIN: 4.2±1 dBi@2400-2500MHz, 5.3±1 dBi@4900-8000MHz                  4. POWER WITHSTANDING: 3W</p> <p>ENVIRONMENTAL:</p> <p>1. OPERATING TEMP: -40/+70°C                  2. VIBRATION: 5-500 Hz FREQ, MIL STD 810 G section 514.6                  3. THERMAL SHOCK: 3 CYCLES, MIL-STD 810G Method 503.4                  4. HUMIDITY: +25° @ 93% RH MIL-STD 810G Method 507.4                  5. DROP TEST: 1 METER, 1 DROP, 1 PER AXIS.</p>																																										
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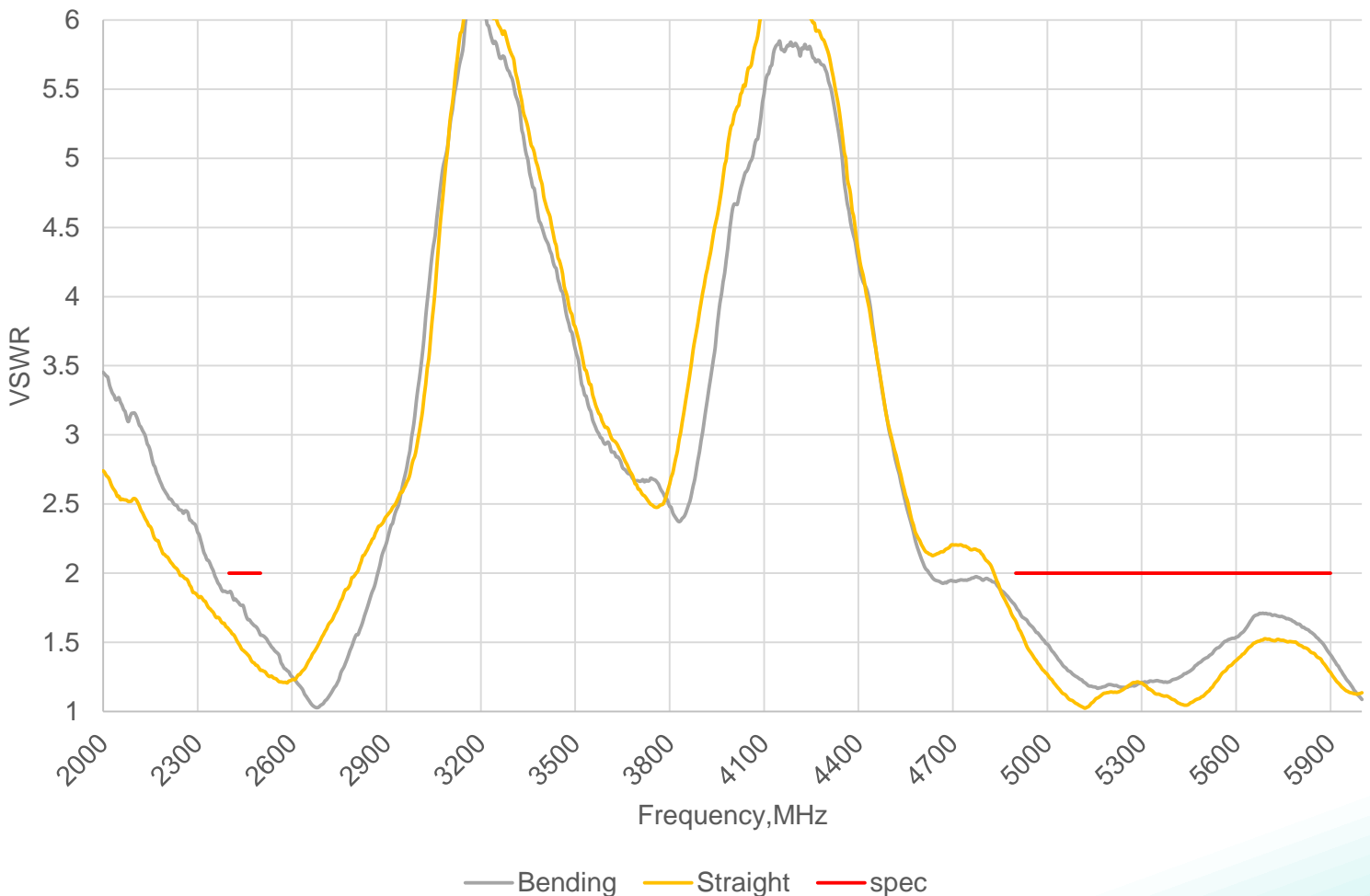
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OTHER SPECIFICATIONS

VSWR

VSWR vs Frequency measured in free space



**Note: Performance of ICEBLADEWS tested in free space**

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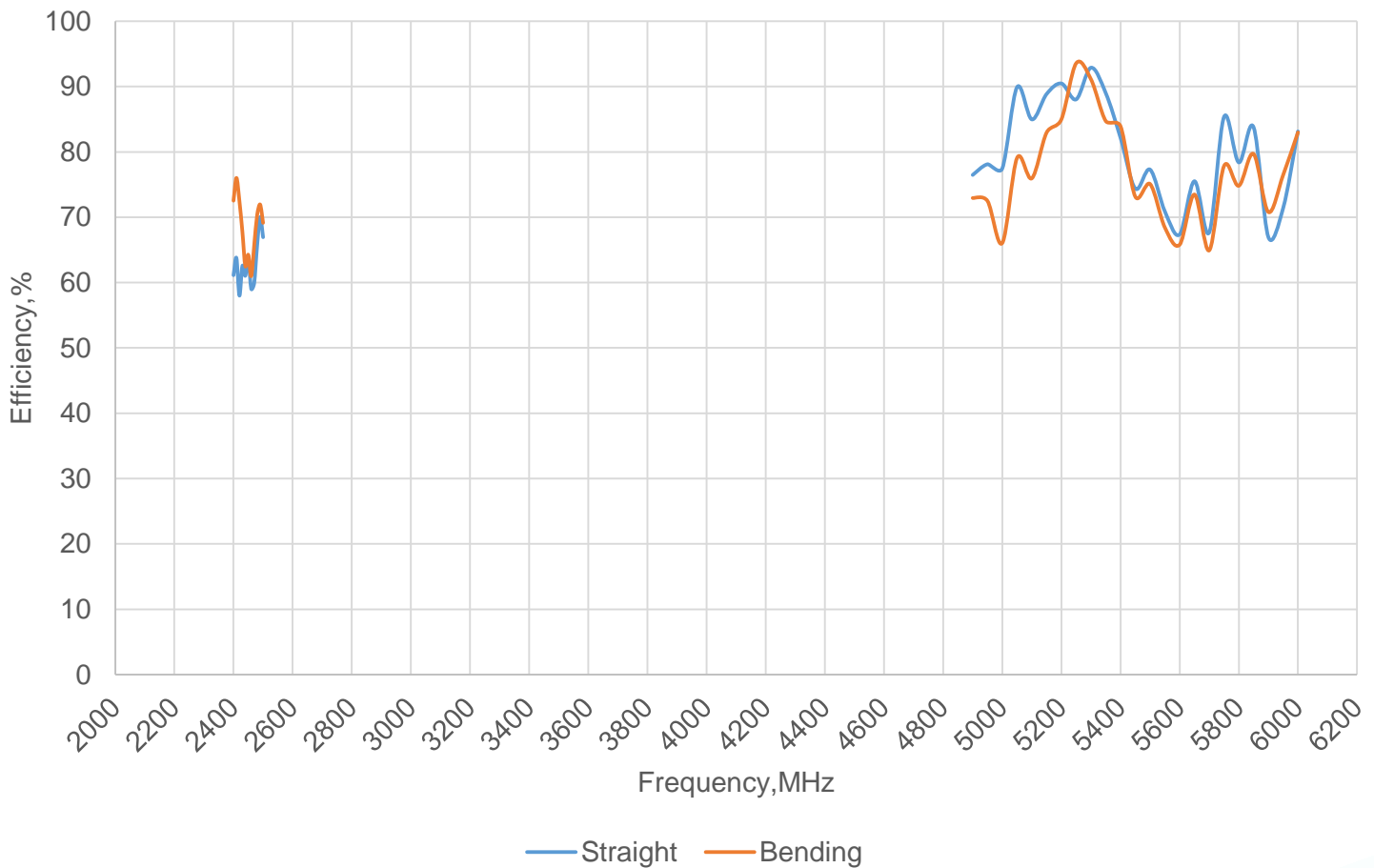
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CHARTS

Efficiency

Efficiency vs Frequency measured in free space



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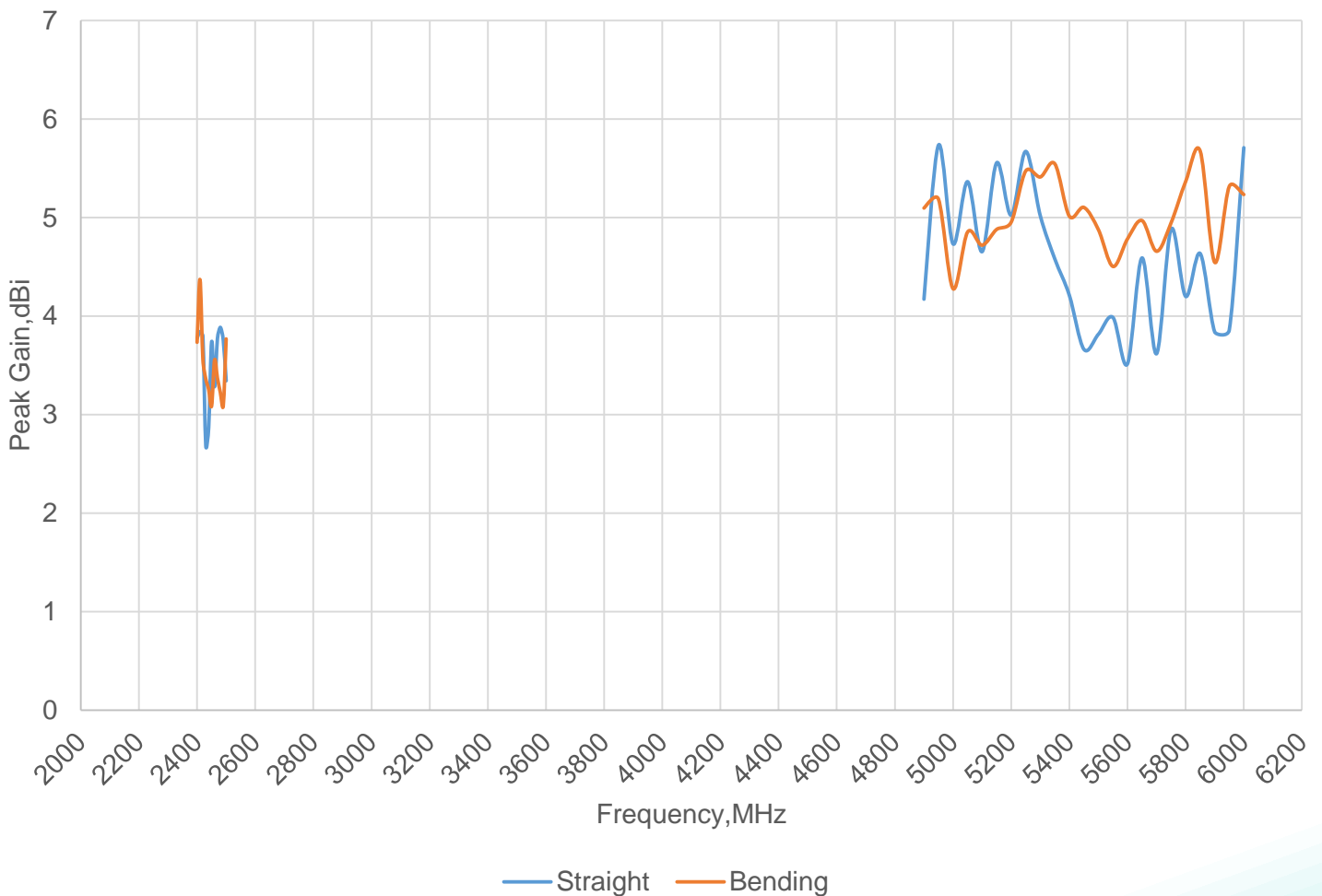
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CHARTS

Peak Gain

Peak Gain vs Frequency measured in free space



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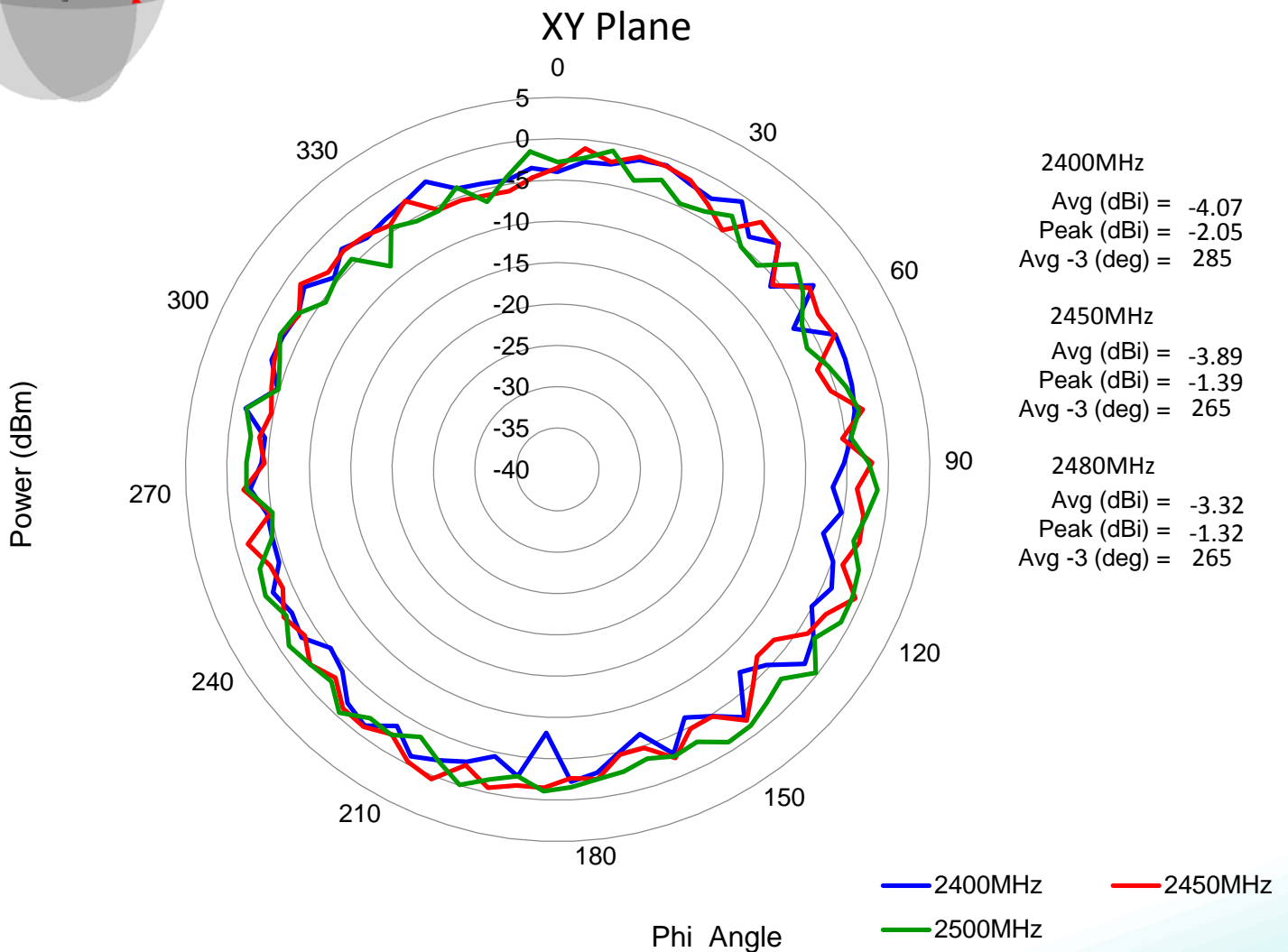
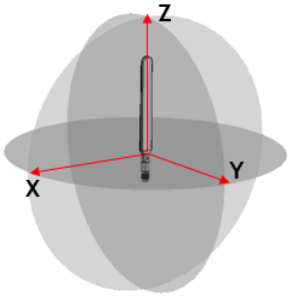
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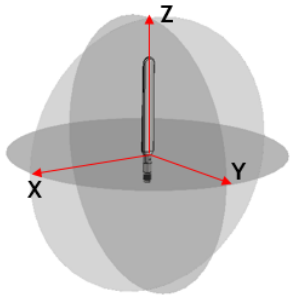
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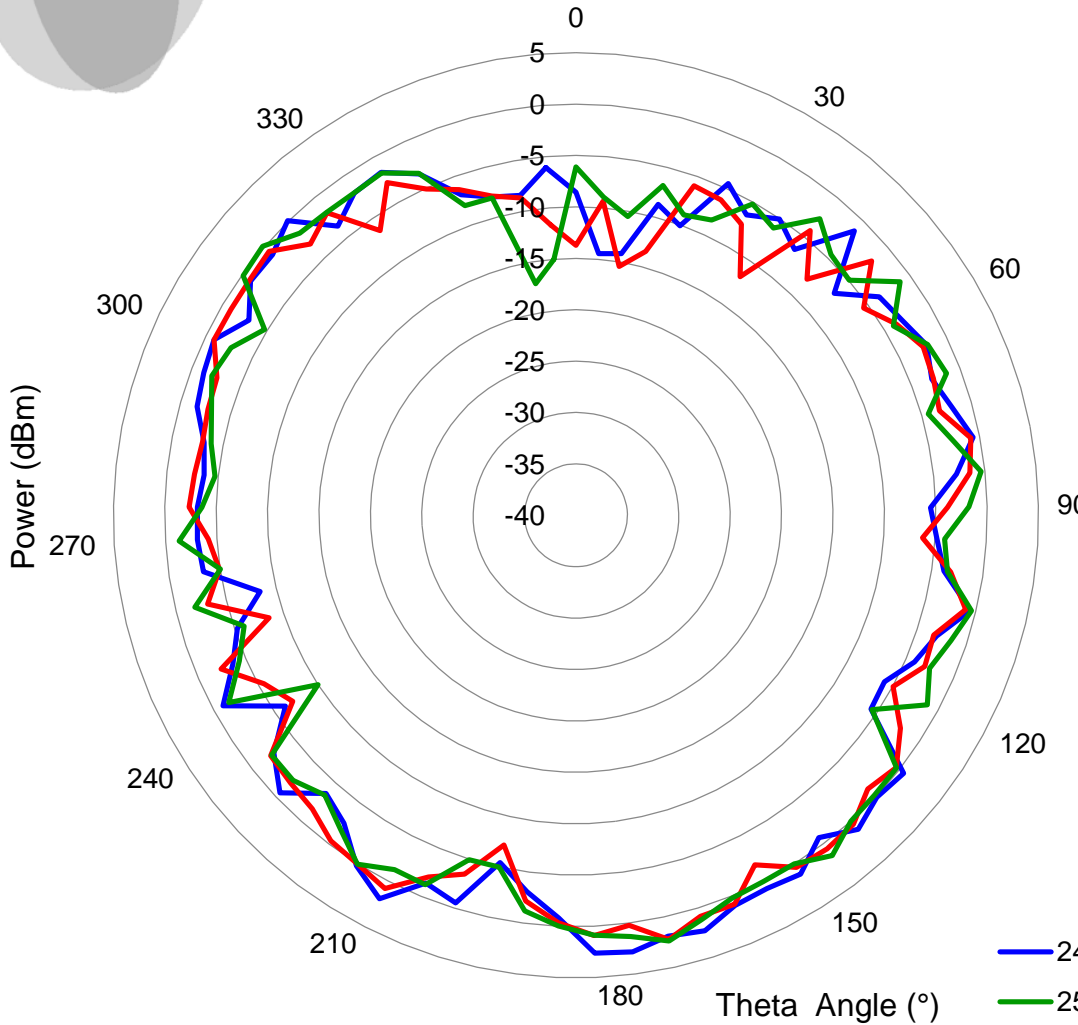
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CHARTS



ZX Plane



2400MHz  
Avg (dBi) = -4.38  
Peak (dBi) = 1.16  
Avg -3 (deg) = 110

2450MHz  
Avg (dBi) = -4.99  
Peak (dBi) = -0.27  
Avg -3 (deg) = 165

2480MHz  
Avg (dBi) = -4.66  
Peak (dBi) = 0.27  
Avg -3 (deg) = 140

— 2400MHz — 2450MHz  
— 2500MHz

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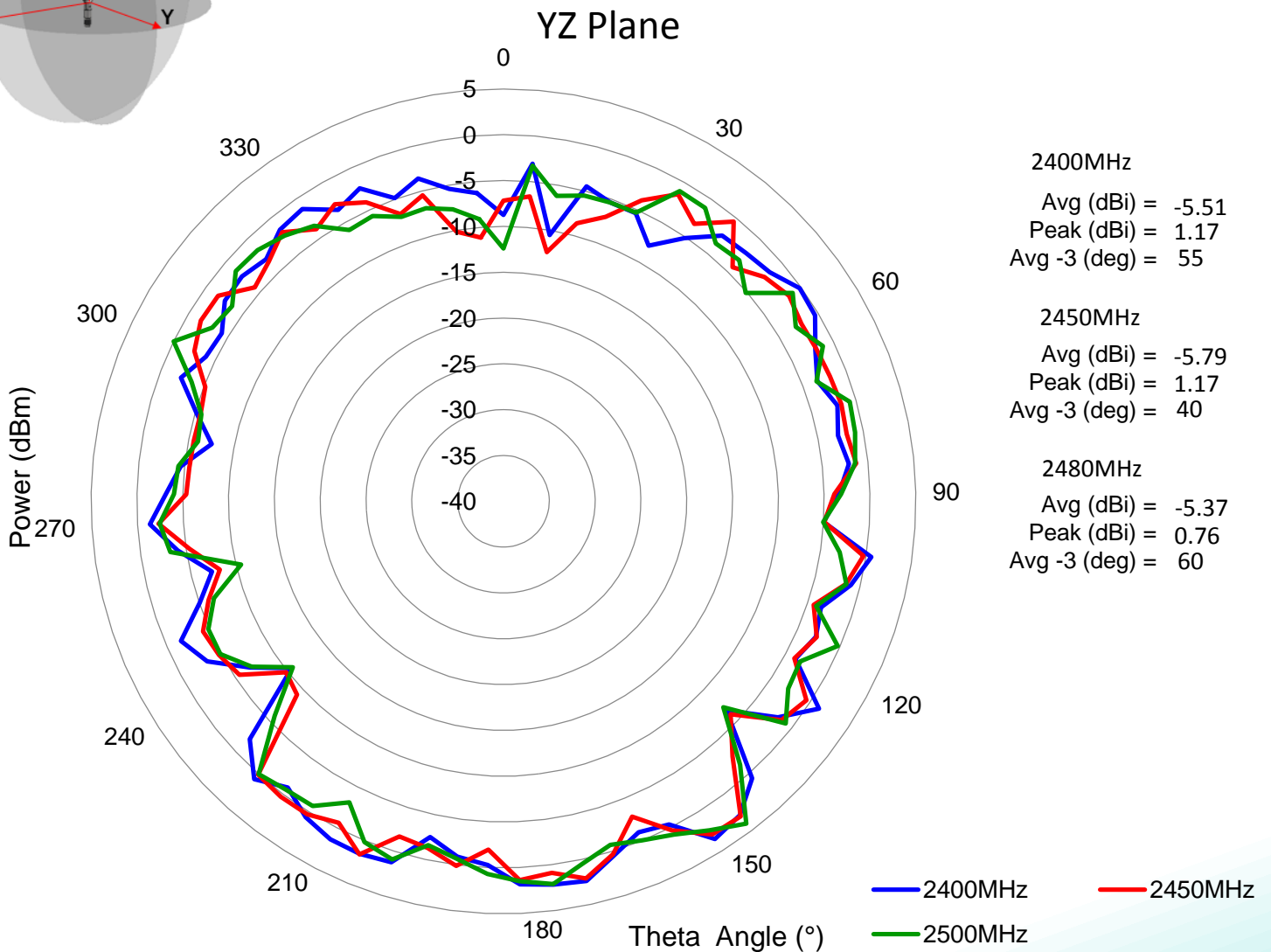
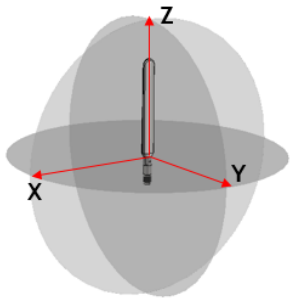
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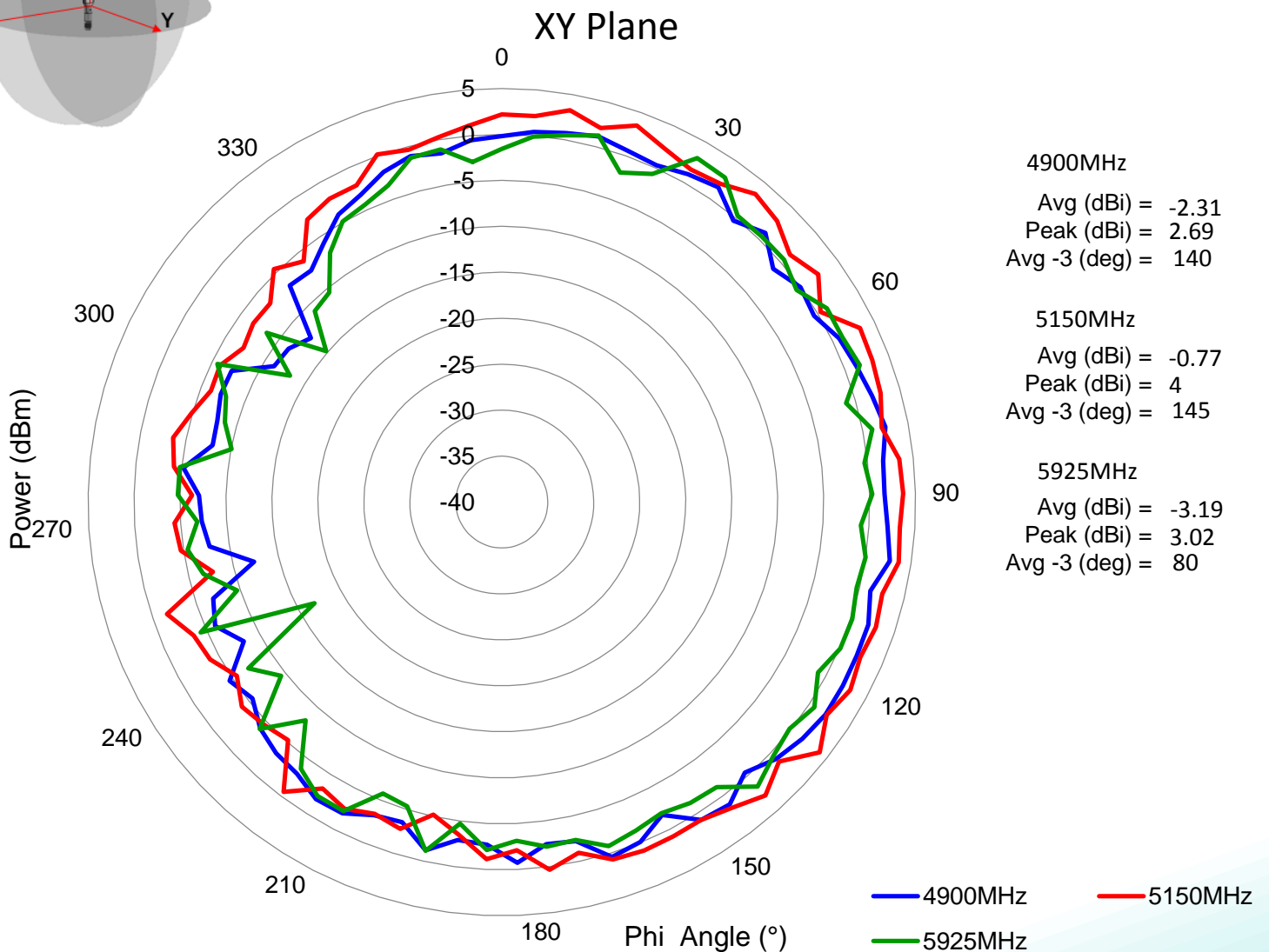
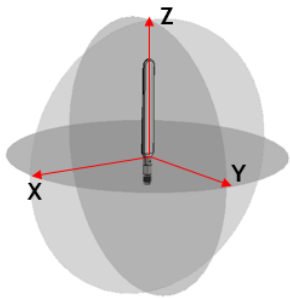
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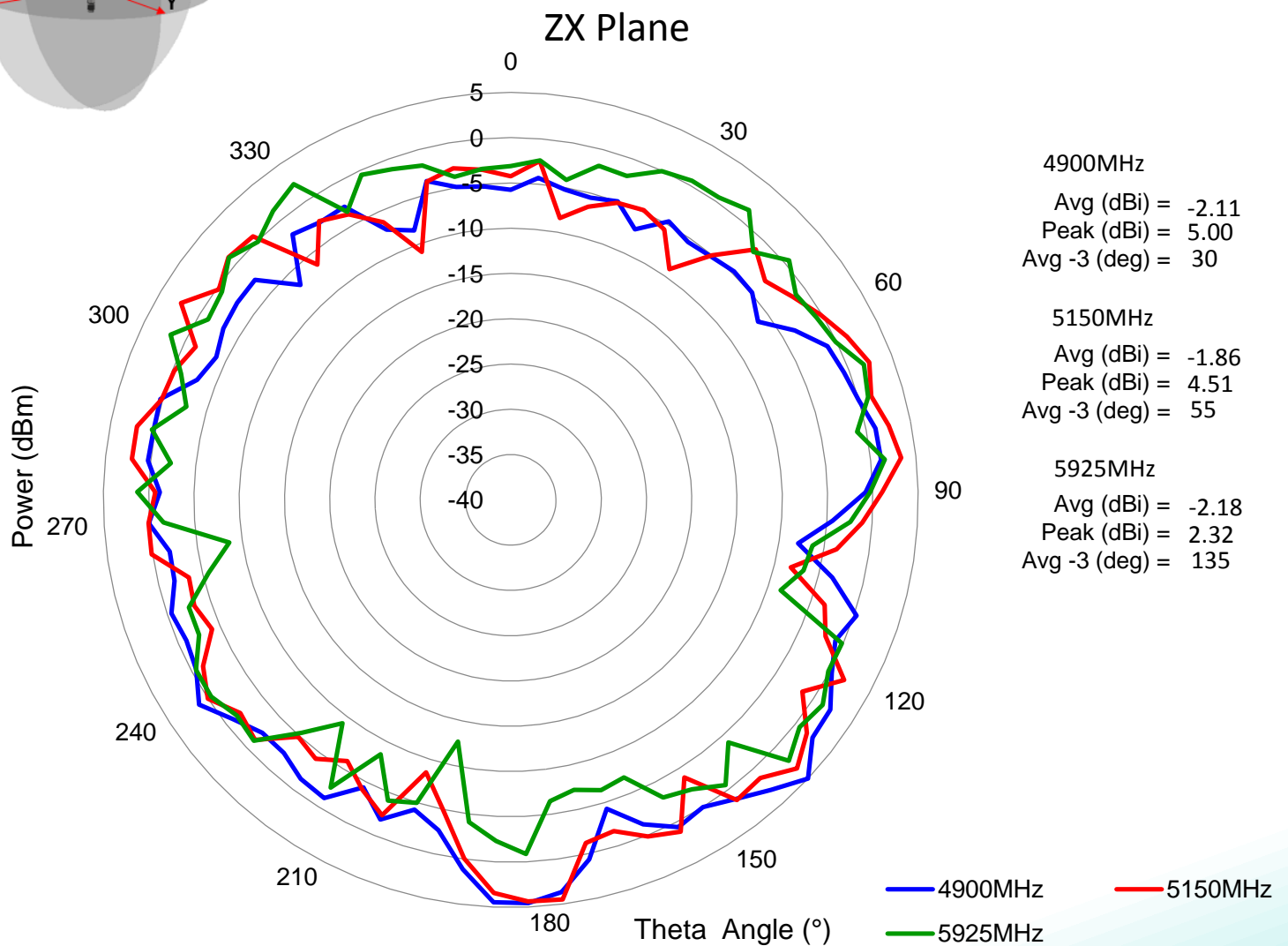
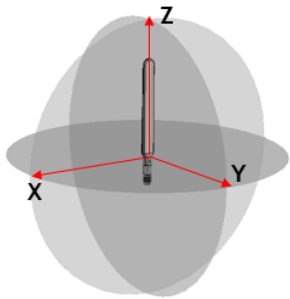
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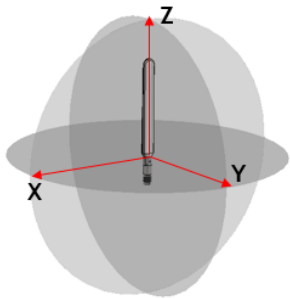


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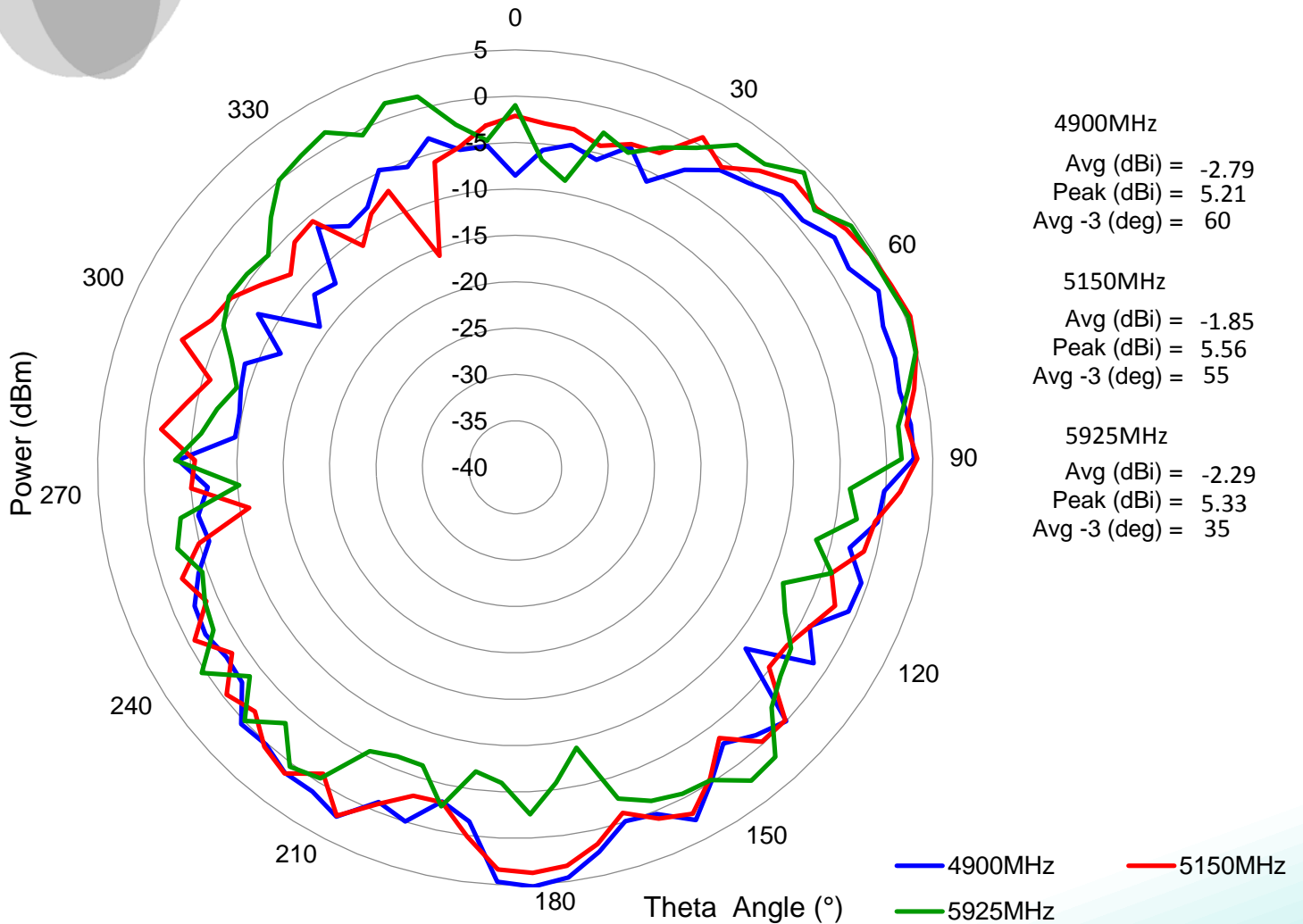
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CHARTS



YZ Plane



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