

## Features:

- 698-6000MHz
- Size W x L x H (30mm x 120mm x 0.2mm)
- Low Weight (1.5g)
- RoHS Compliant
- Coaxial Cable feed
- Connector options:
  - U-FL
  - SMA
  - MMCX
  - Per request

## Applications:

- 2G/3G/4G/5G
- GNSS
- WiFi
- Bluetooth, BLE, Zigbee
- ISM 868, 915, 2400, 5000MHz

Issue: 1835

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For more information:

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

Pulse/Larsen Antennas  
18110 SE 34<sup>th</sup> St Bldg 2 Suite 250  
Vancouver, WA 98683  
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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



Series: Internal PCB Antenna

Description: High Efficiency Ultra Wideband Dipole Antenna 698-6000MHz

PART NUMBER: W3554XXXXX

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

W3554B0140	143mm 1.13mm OD cable	U.FL compatible connector
W3554B0140T	143mm 1.13mm OD cable	U.FL compatible connector with ADH
W3554B0170	170mm 1.13mm OD cable	U.FL compatible connector
W3554B0293	293mm 1.13mm OD cable	U.FL compatible connector
W3554E0193	193mm 1.13mm OD cable	Right angle MMCX male connector
W3554G0100	100mm 1.13mm OD cable	SMA male connector
W3554G0254	254mm 1.13mm OD cable	SMA male connector
W3554G0384	384mm 1.37mm OD cable	SMA male connector
W3554G0457	457mm 1.13mm OD cable	SMA male connector
W3554K0153	153mm 1.37mm OD cable	Right angle SMA male connector

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Series: Internal PCB Antenna

Description: High Efficiency Ultra Wideband Dipole Antenna 698-6000MHz

PART NUMBER: W3554XXXXX

**ELECTRICAL SPECIFICATIONS**

Frequency	698-960MHz, 1400-1600MHz, 1710-2690MHz, 3300-3800MHz, 4900-6000MHz
Nominal Impedance	50 Ω
Return Loss(698-960MHz)	-4dB
Return Loss(1400-1600MHz)	-3dB
Return Loss(1710-2690MHz)	-6dB
Return Loss(3300-3800MHz)	-5dB
Return Loss(4900-6000MHz)	-4dB
Radiation Pattern	Omni
Peak Gain(698-960MHz)	1.9dBi
Peak Gain(1400-1600MHz)	2.5dBi
Peak Gain(1710-2690MHz)	3.2dBi
Peak Gain(3300-3800MHz)	3.3dBi
Peak Gain(4900-6000MHz)	3.5dBi
Average Efficiency(698-960MHz)	45%
Average Efficiency(1400-1600MHz)	53%
Average Efficiency(1710-2690MHz)	66%
Average Efficiency(3300-3800MHz)	57%
Average Efficiency(4900-6000MHz)	37%
Polarization	Vertical
Power Withstanding	5W

Series: Internal PCB Antenna

Description: High Efficiency Ultra Wideband  
Dipole Antenna 698-6000MHz

PART NUMBER: W3554XXXXX

### MECHANICAL SPECIFICATIONS

PCB size W x L x H	30 x 120 x 0.2	mm
Weight	1.5	g
Connector type	Optional	
Cable type	Optional	
Cable length	Optional	

### ENVIRONMENTAL SPECIFICATIONS

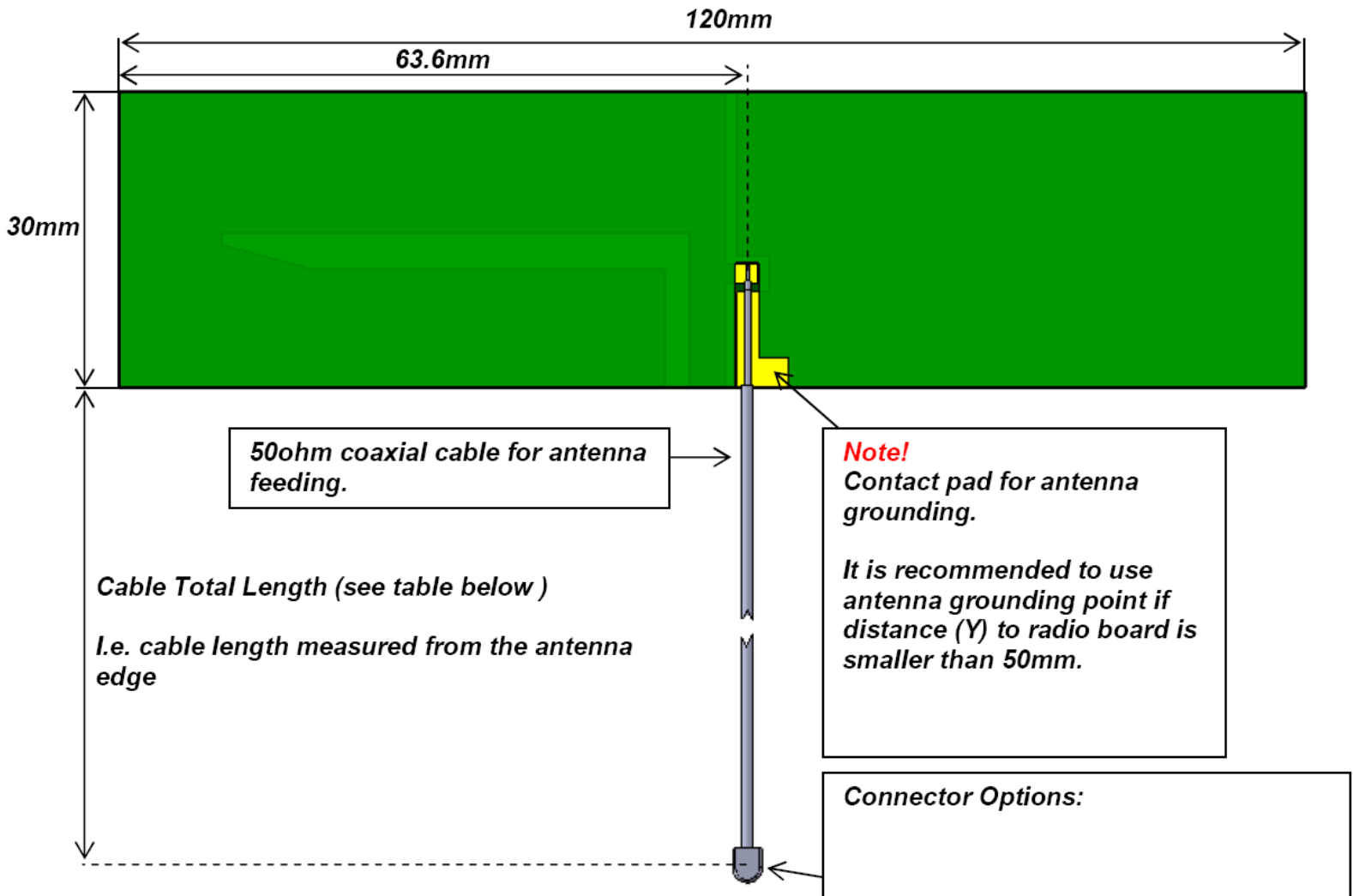
Operating Temperature	-40/+85	° C
Storage Temperature	-40/+85	° C
RoHS Compliant		Yes

Series: Internal PCB Antenna

Description: High Efficiency Ultra Wideband Dipole Antenna 698-6000MHz

PART NUMBER: W3554XXXXX

MECHANICAL DRAWING



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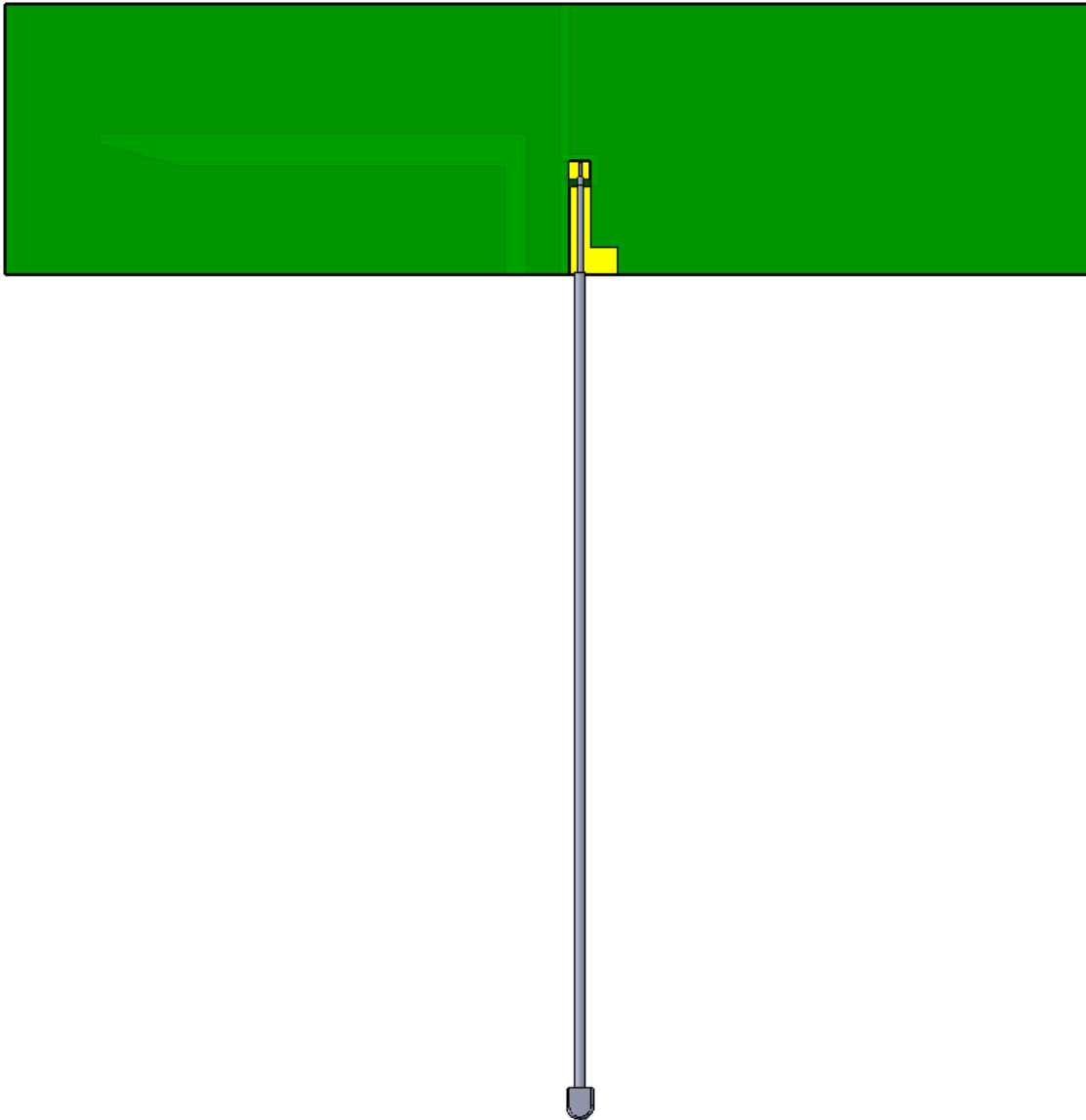
Series: Internal PCB Antenna

Description: High Efficiency Ultra Wideband  
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PART NUMBER: W3554XXXXX

TEST SETUP

*Antenna was measured in Free Space Environment (FS) without test board presence.*



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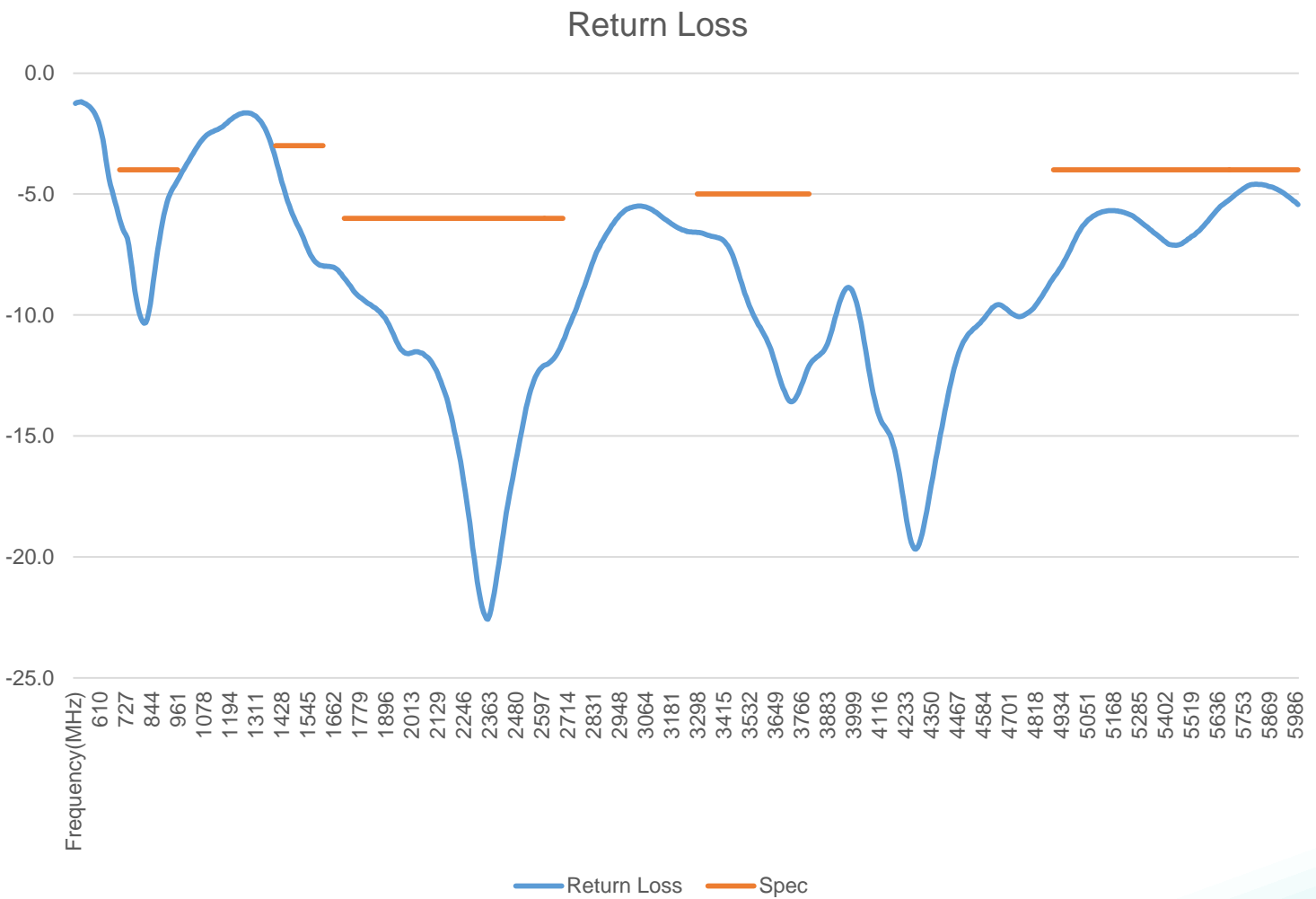
**Description:** High Efficiency Ultra Wideband Dipole Antenna 698-6000MHz

**Series:** Internal PCB Antenna

**PART NUMBER:** W3554XXXXX

CHARTS

Return Loss



Issue: 1835

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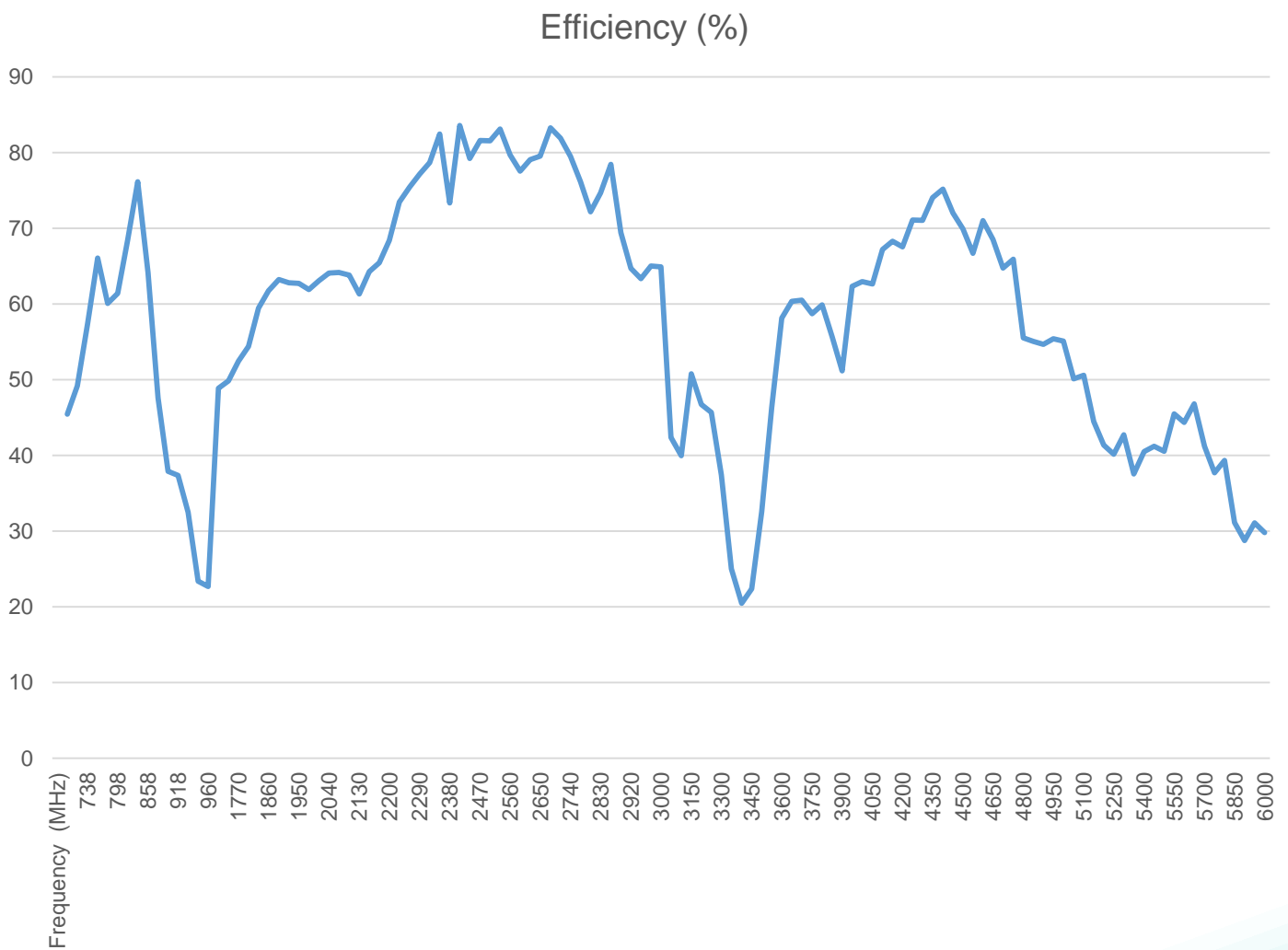
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**PART NUMBER:** W3554XXXXX

CHARTS

Efficiency



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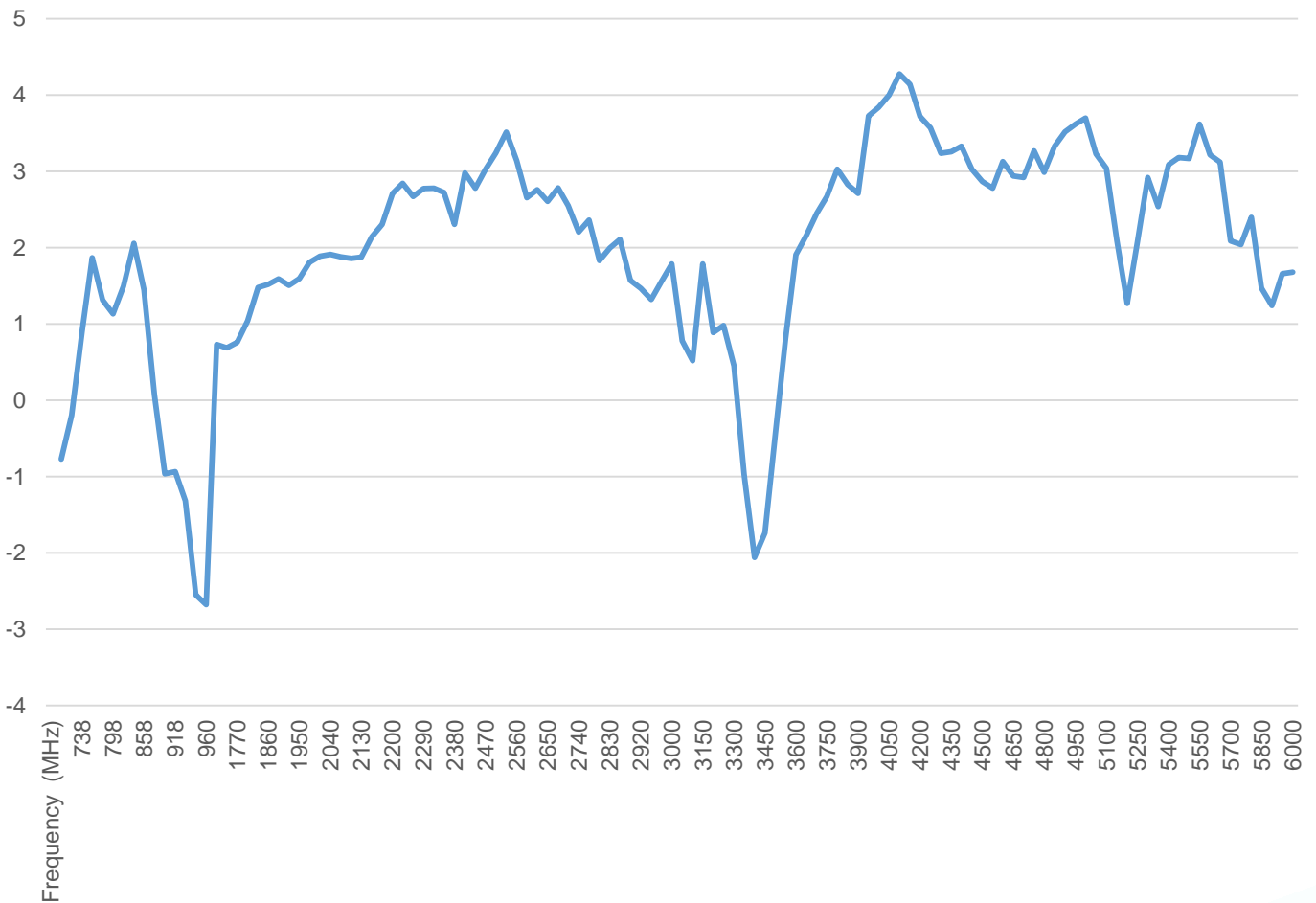
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**PART NUMBER:** W3554XXXXX

CHARTS

Peak Gain

Peak Gain (dBi)



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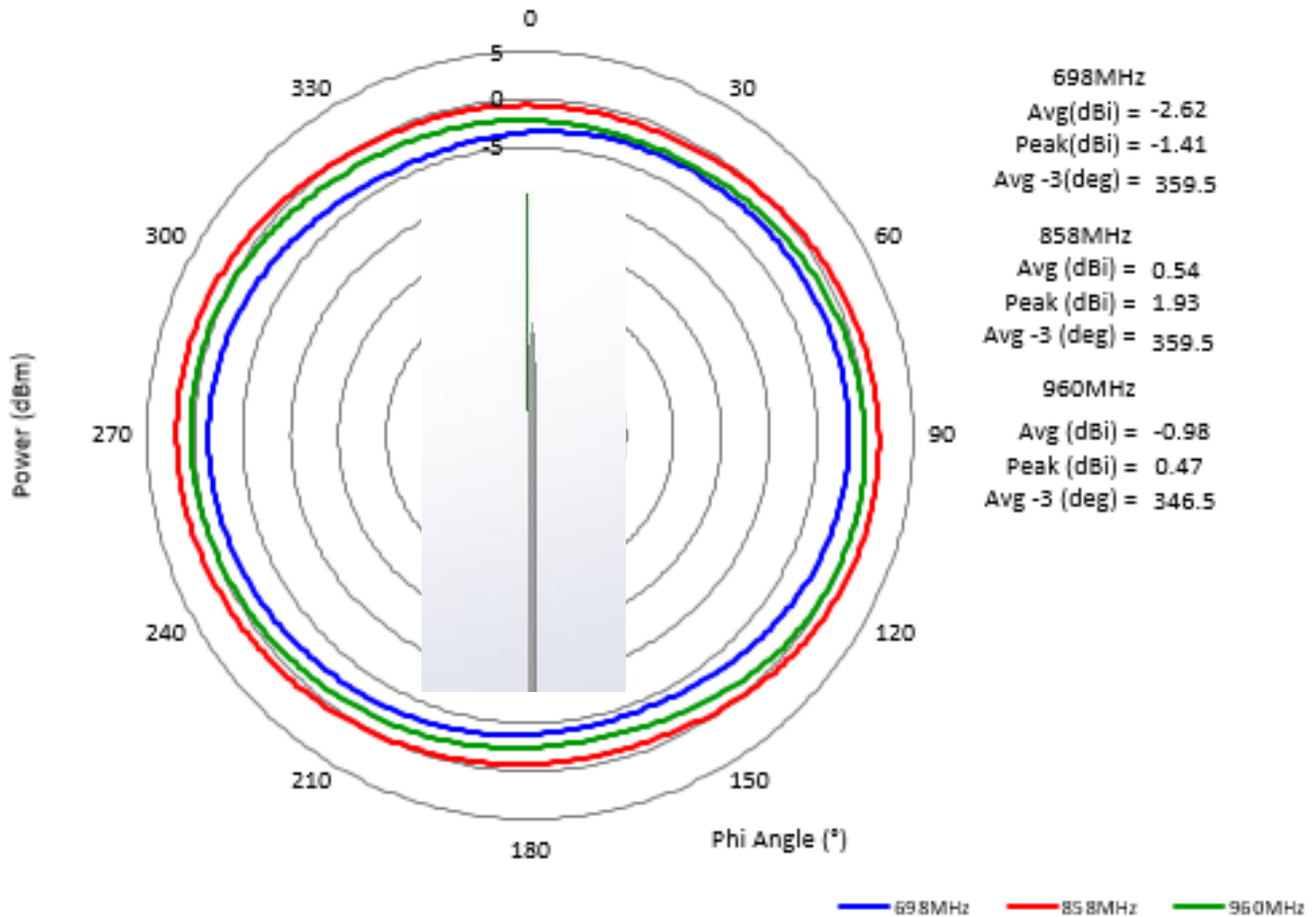
Description: High Efficiency Ultra Wideband Dipole Antenna 698-6000MHz

PART NUMBER: W3554XXXXX

CHARTS

Free Space Radiation Pattern

Horizontal Plane



Issue: 1835

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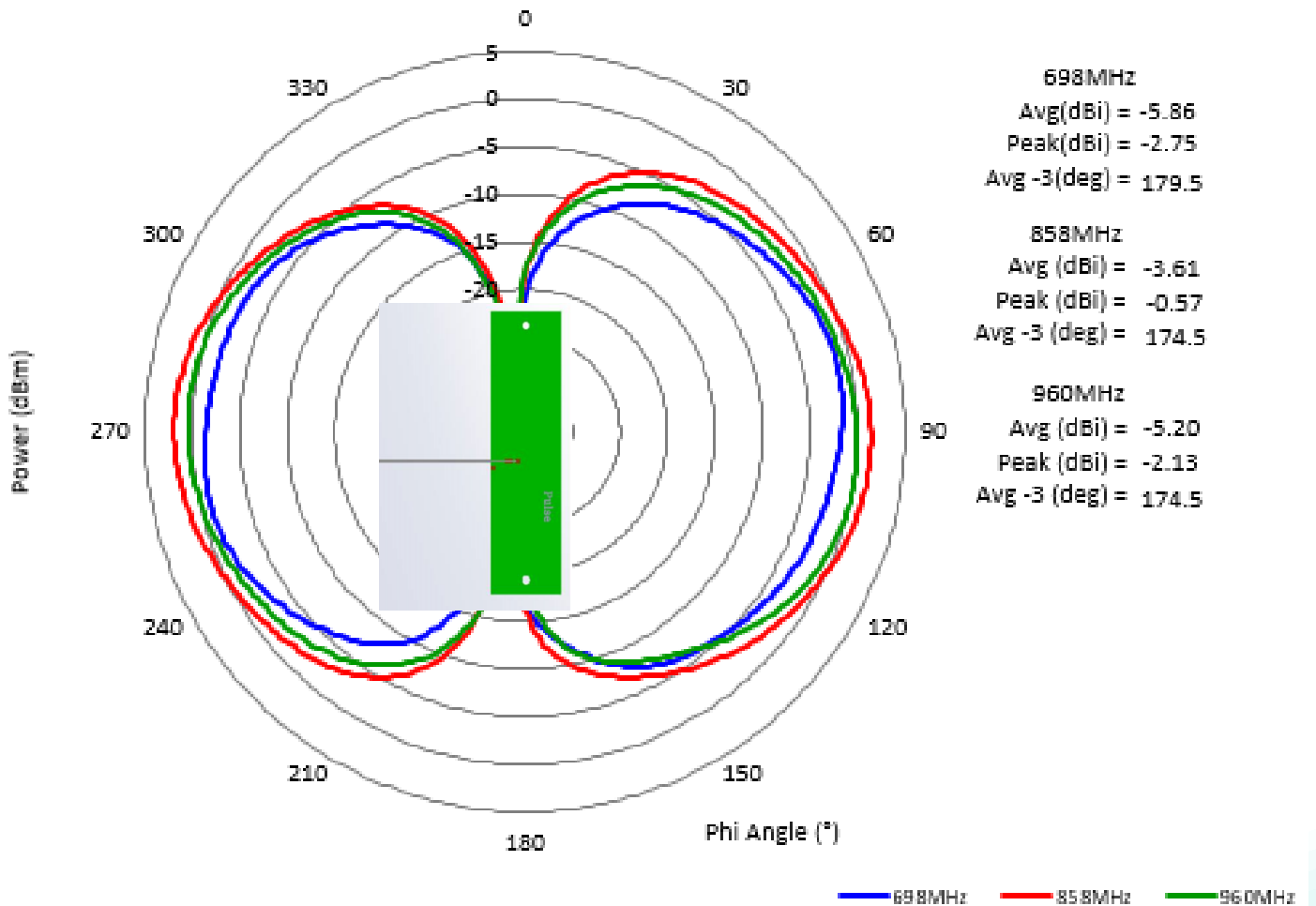
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CHARTS

Free Space Radiation Pattern

Elevation Plane



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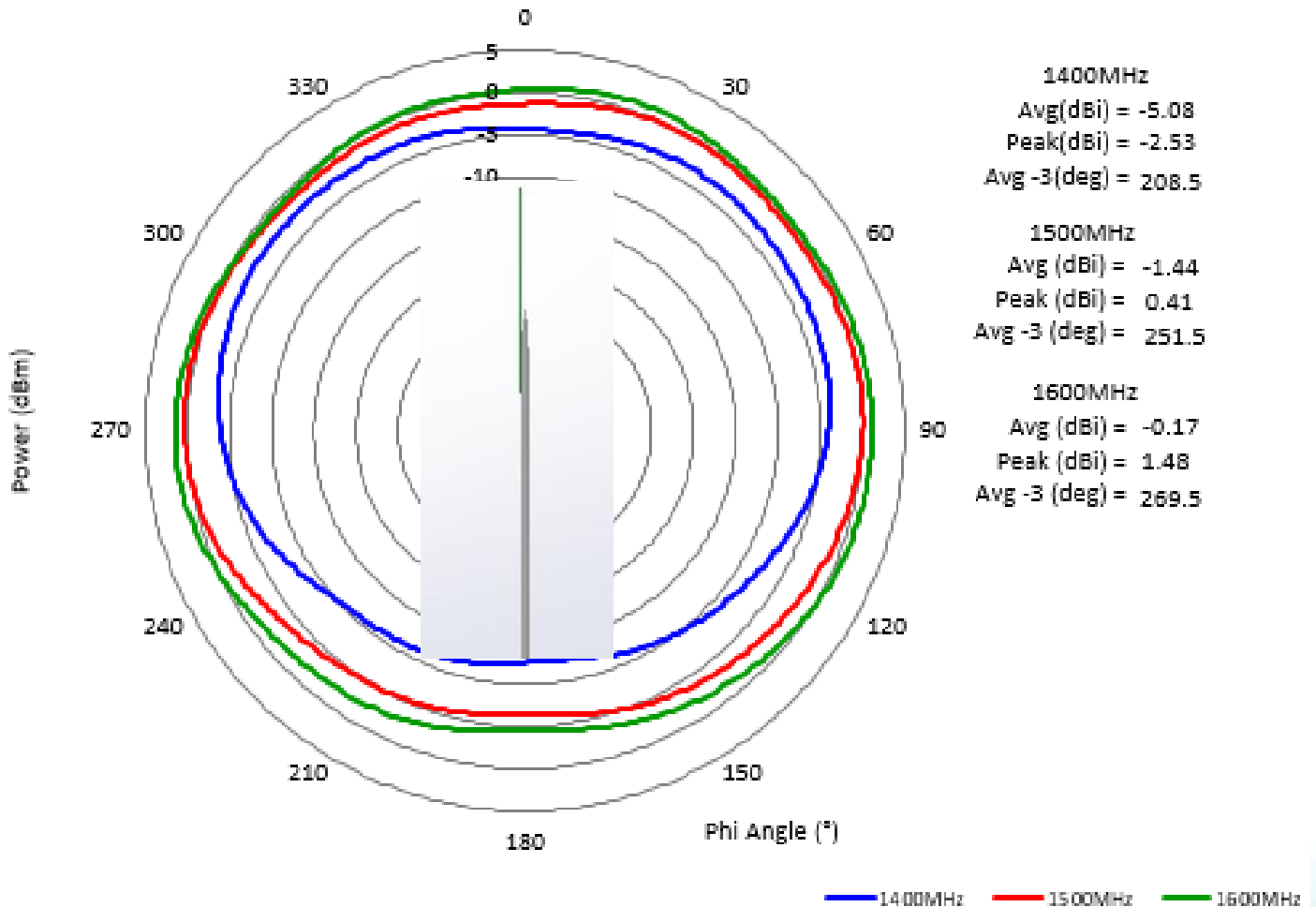
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CHARTS

Free Space Radiation Pattern

Horizontal Plane



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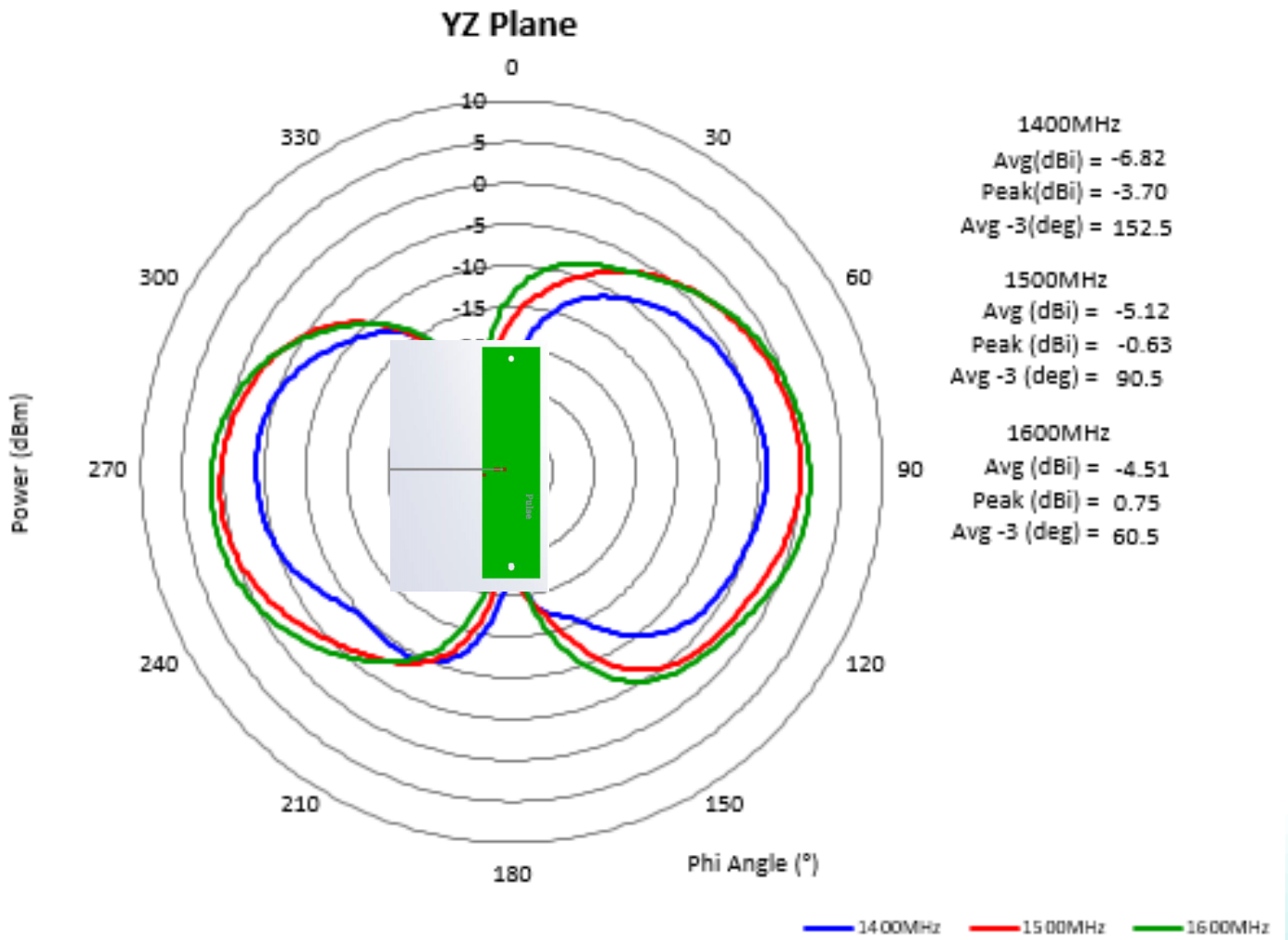
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CHARTS

Free Space Radiation Pattern

Elevation Plane



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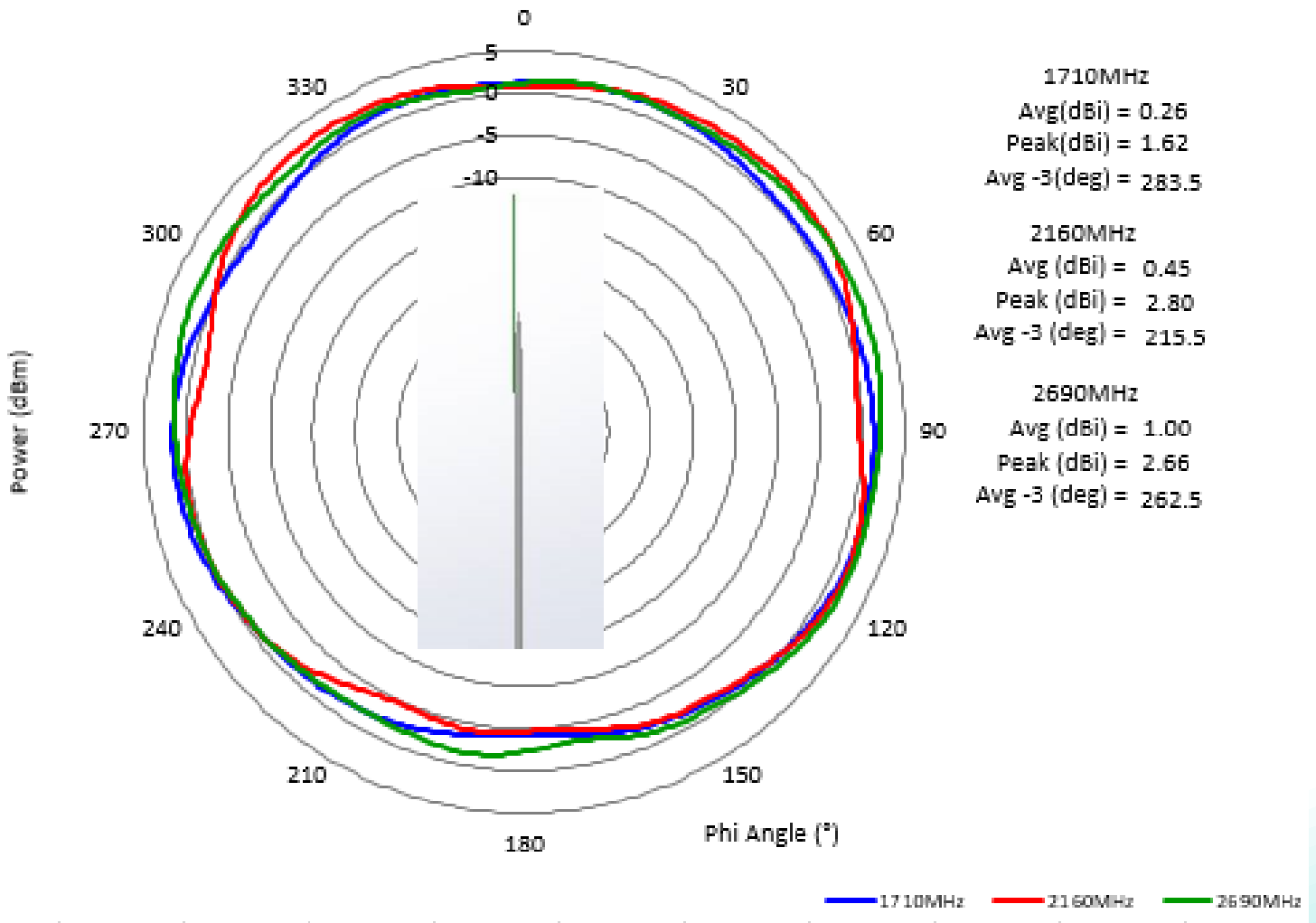
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CHARTS

Free Space Radiation Pattern

Horizontal Plane



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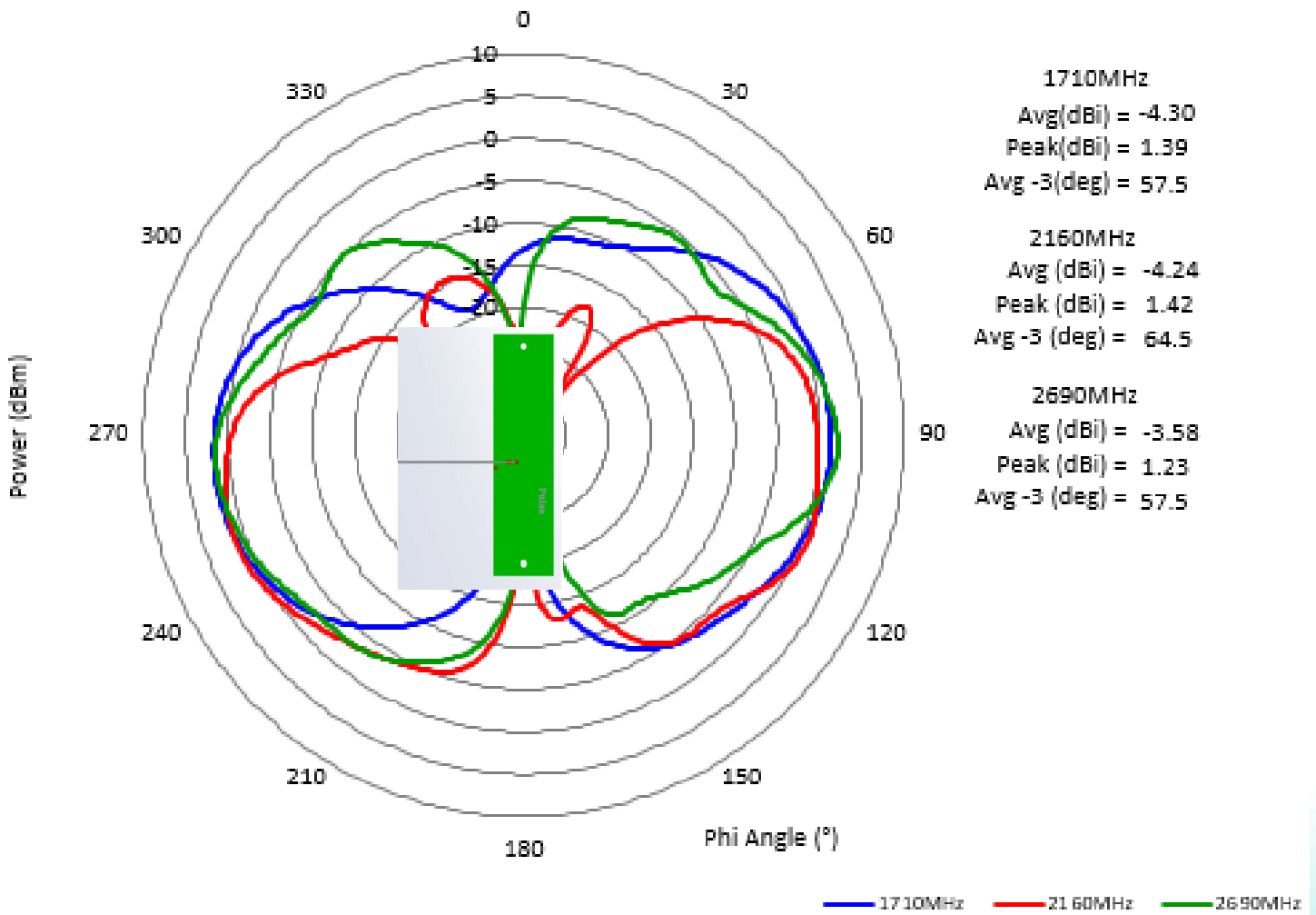
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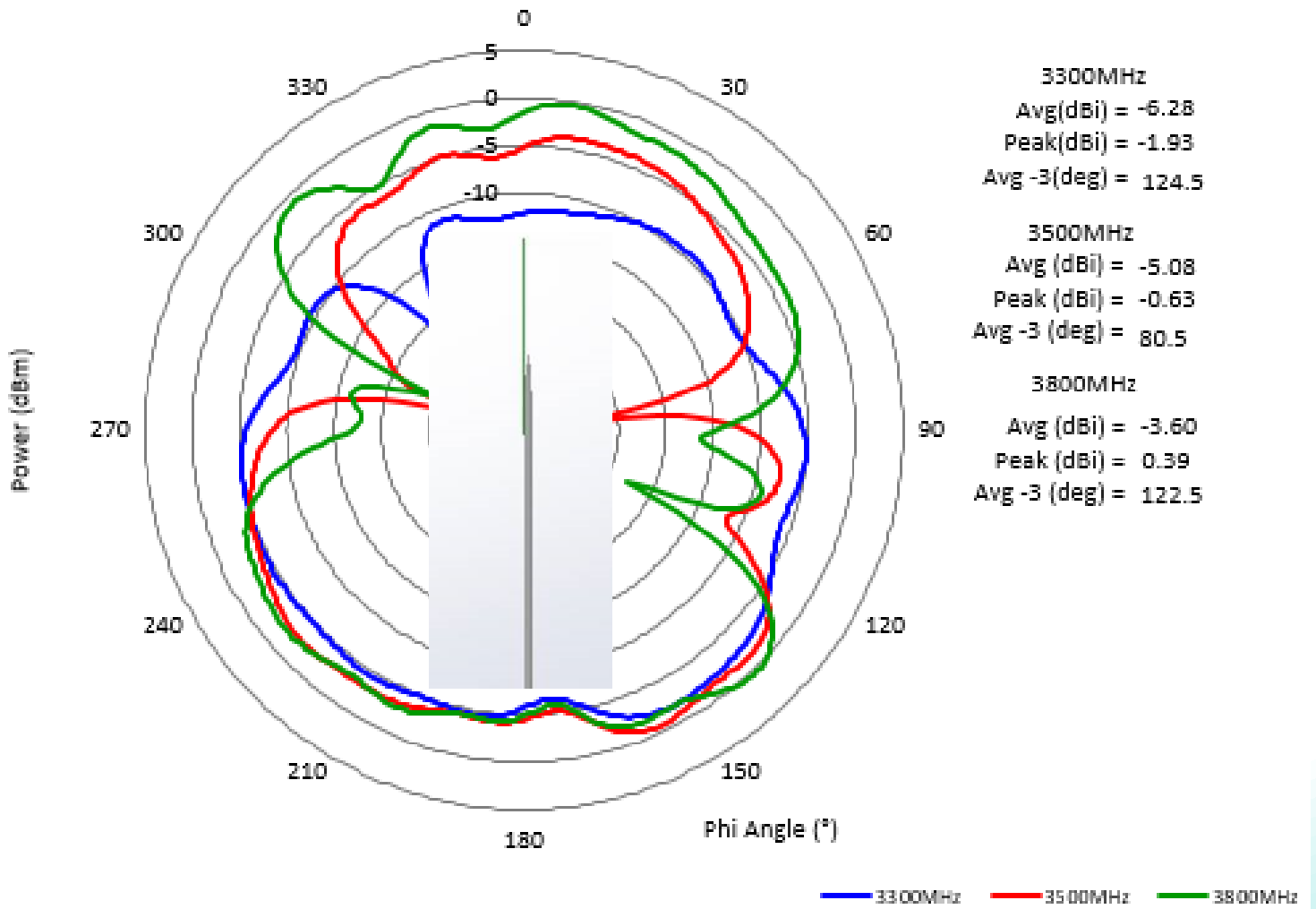
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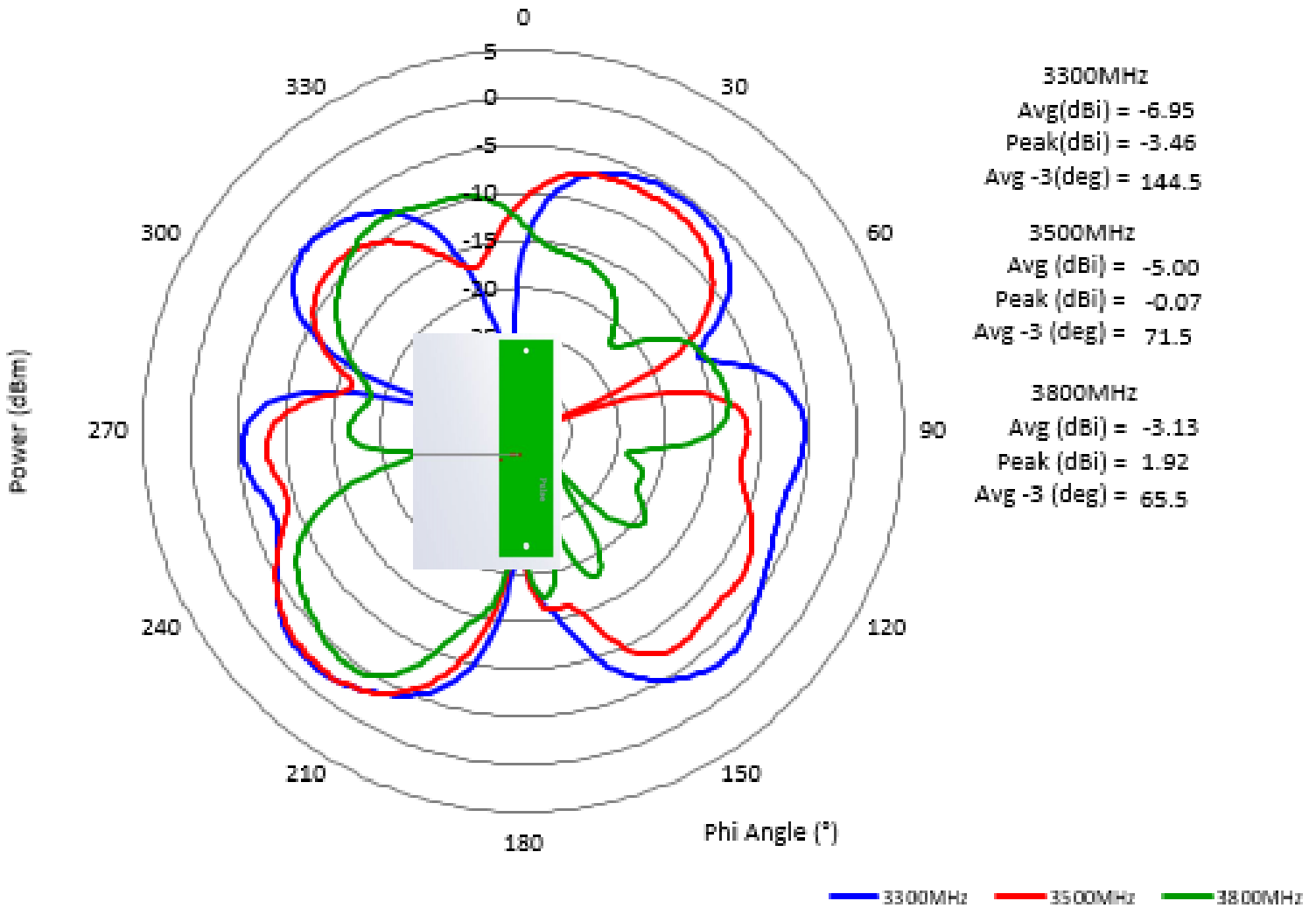
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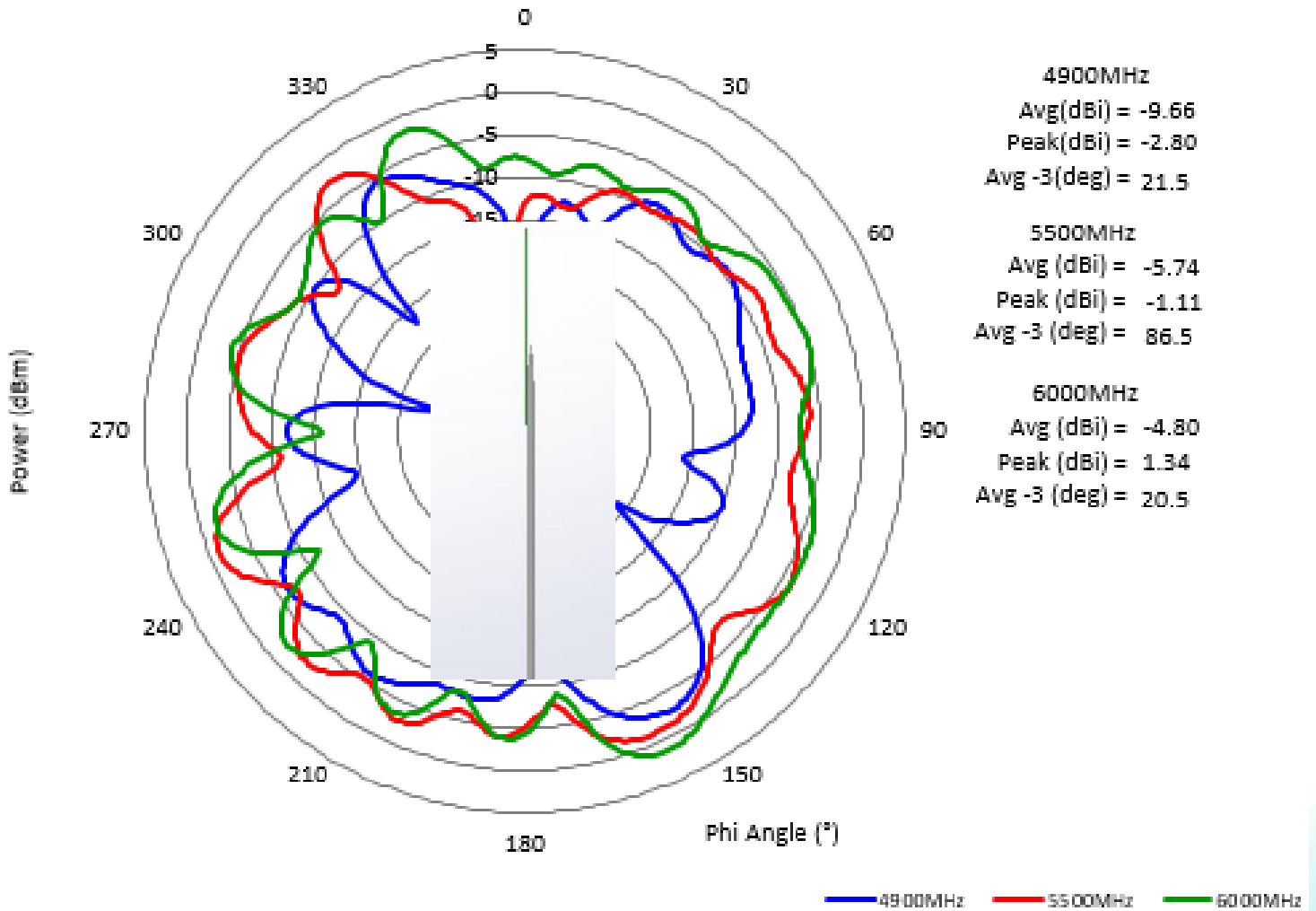
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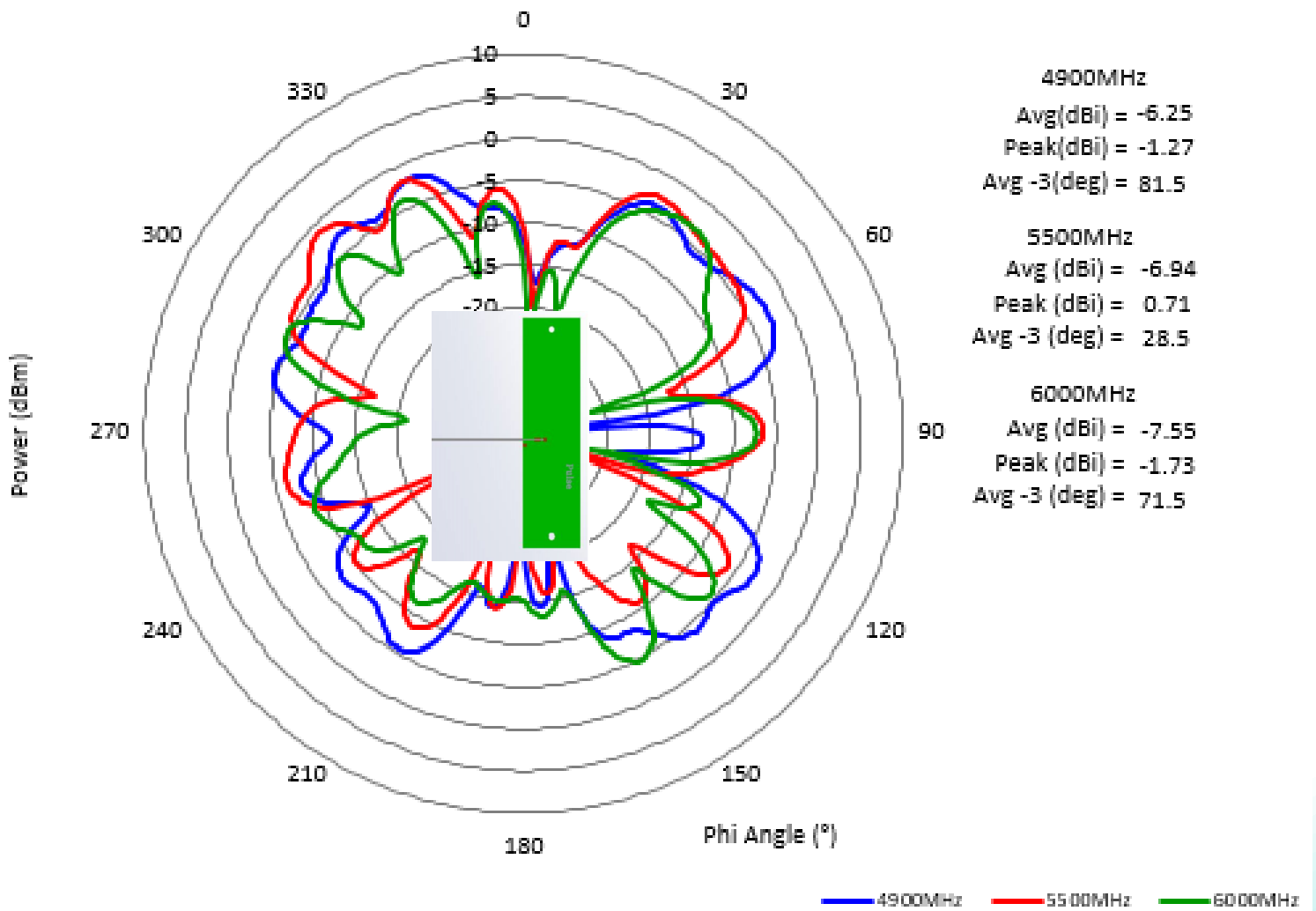
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PACKAGING

- 5PCS/PE bag
- 20PCS PE bag/Foam bag
- 10PCS foam bag/Carton box
- Total: 1000PCS/Carton box

