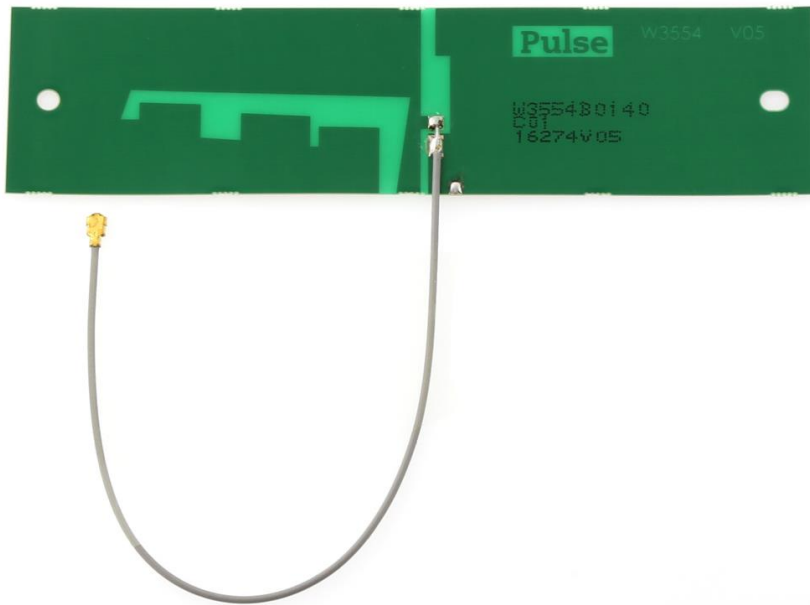


**Description:** High Efficiency Ultra Wideband  
Dipole Antenna 698-6000MHz

**PART NUMBER: W3554XXXXX**

## 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: 1812

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

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Herrenberg, Germany  
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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 1.13mm 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

Issue: 1812

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**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 $\Omega$
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

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

**PART NUMBER: W3554XXXXX**

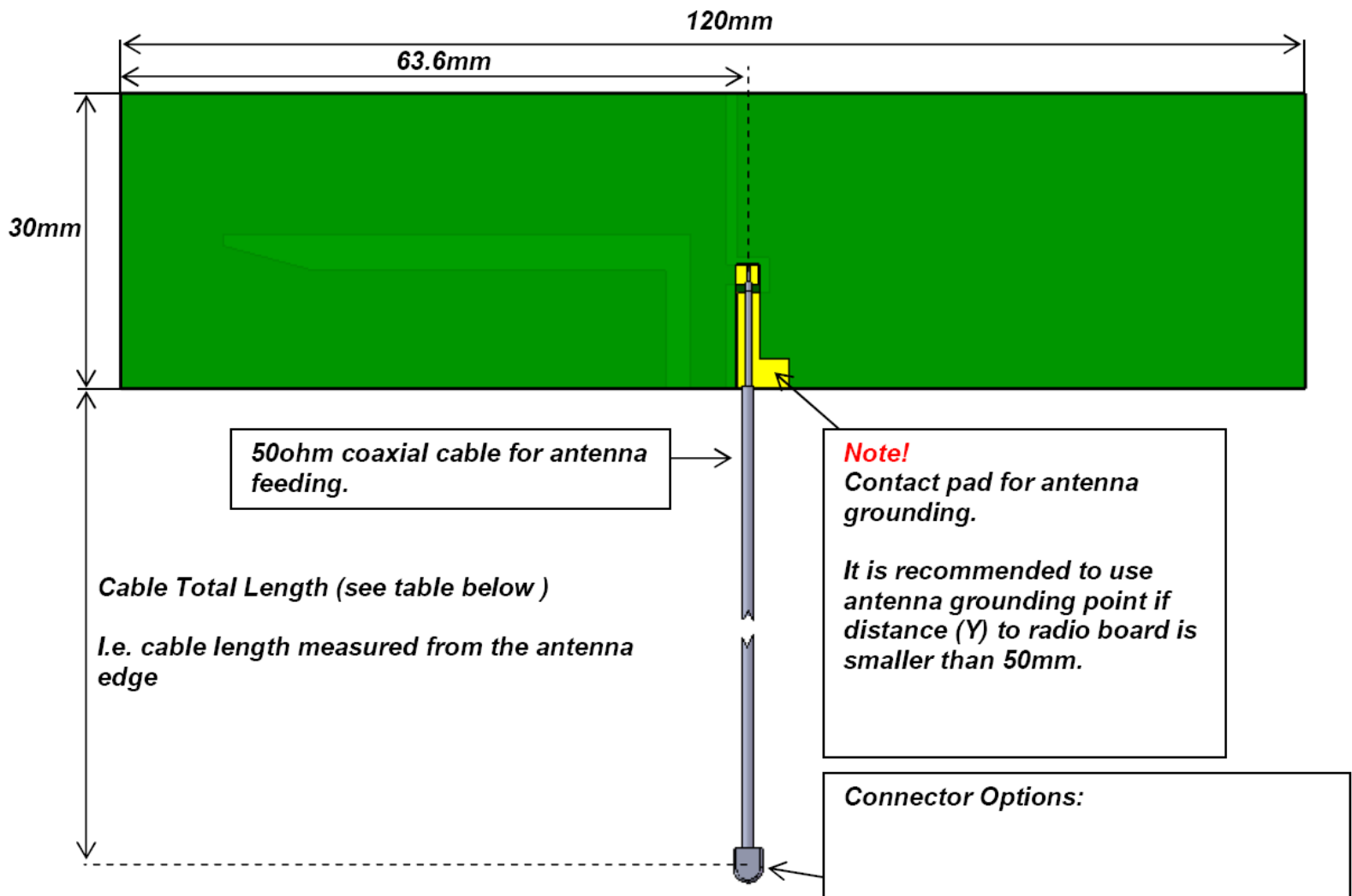
### MECHANICAL SPECIFICATIONS

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	

## MECHANICAL DRAWING

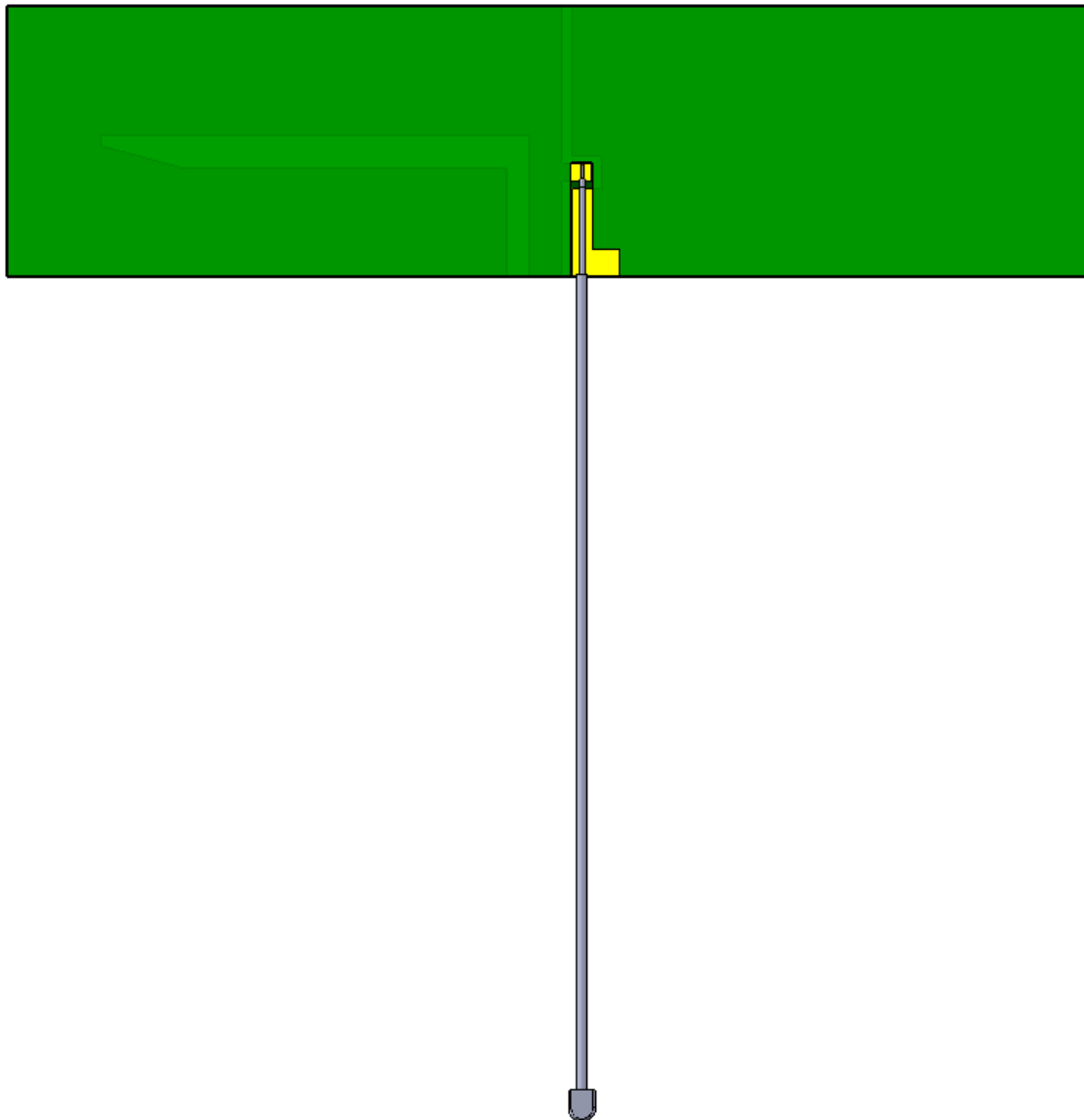


**Description:** High Efficiency Ultra Wideband  
Dipole Antenna 698-6000MHz

**PART NUMBER: W3554XXXXX**

## TEST SETUP

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



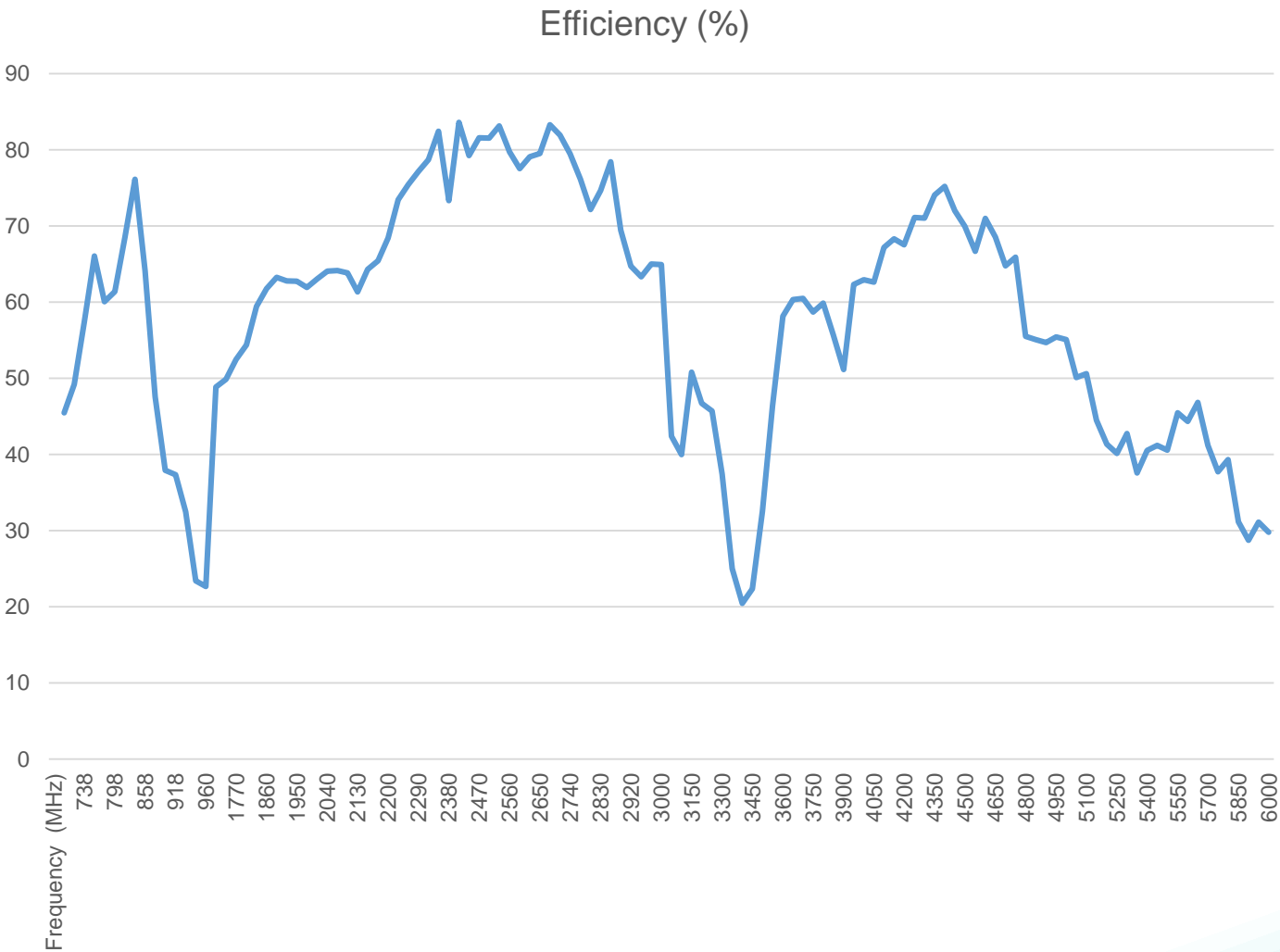
## CHARTS

### Return Loss



CHARTS

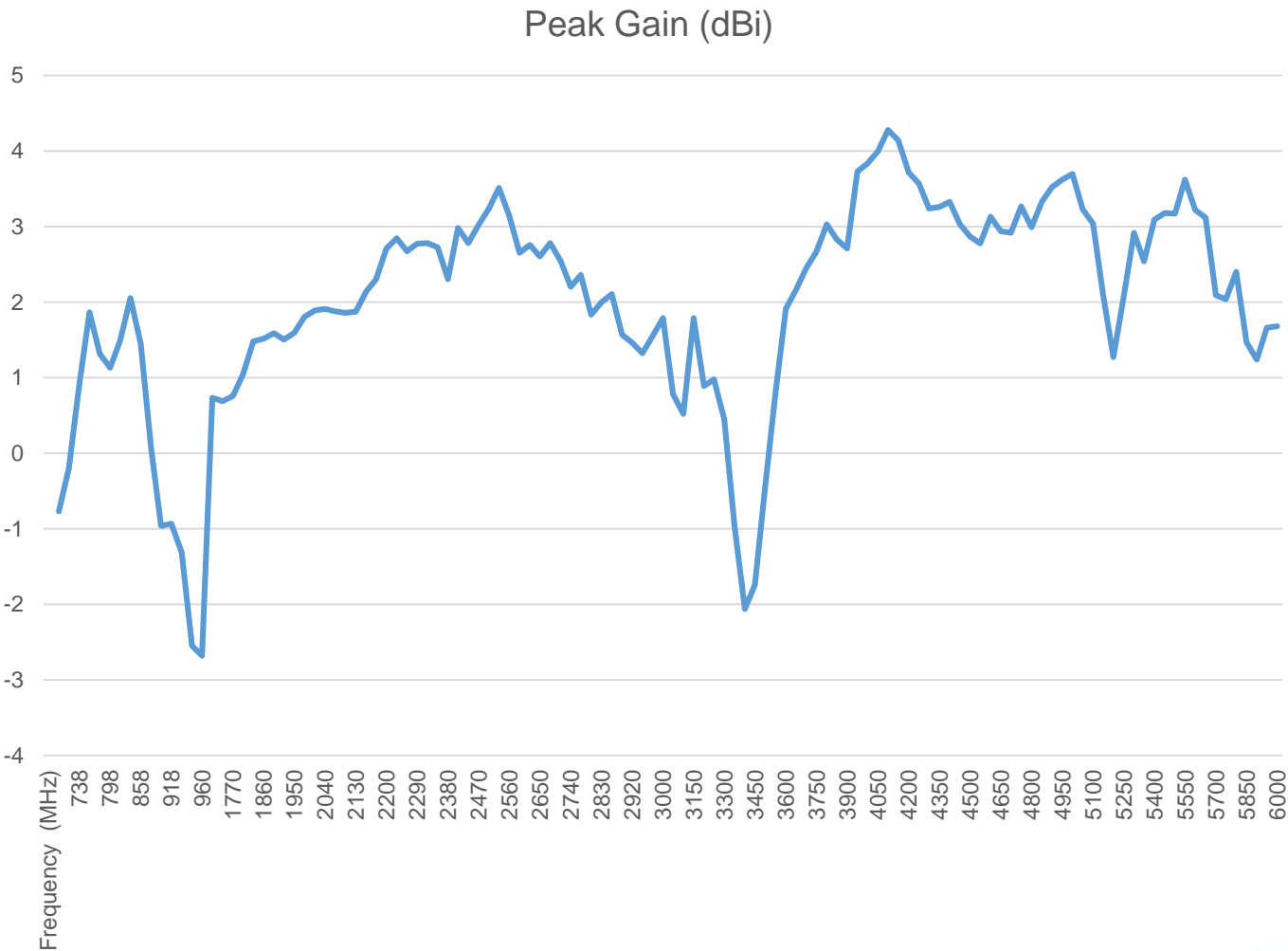
Efficiency





CHARTS

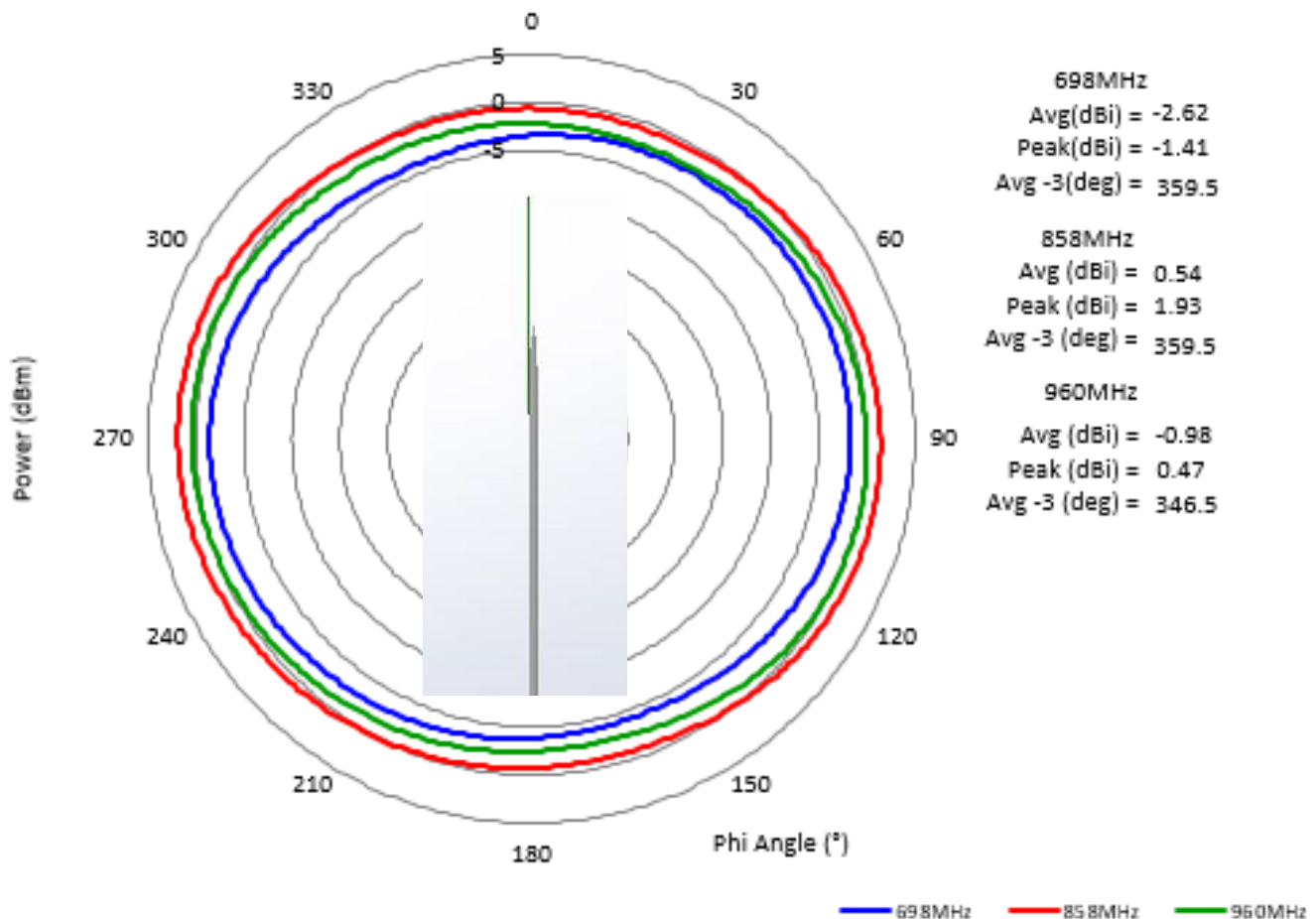
Peak Gain



## CHARTS

### Free Space Radiation Pattern

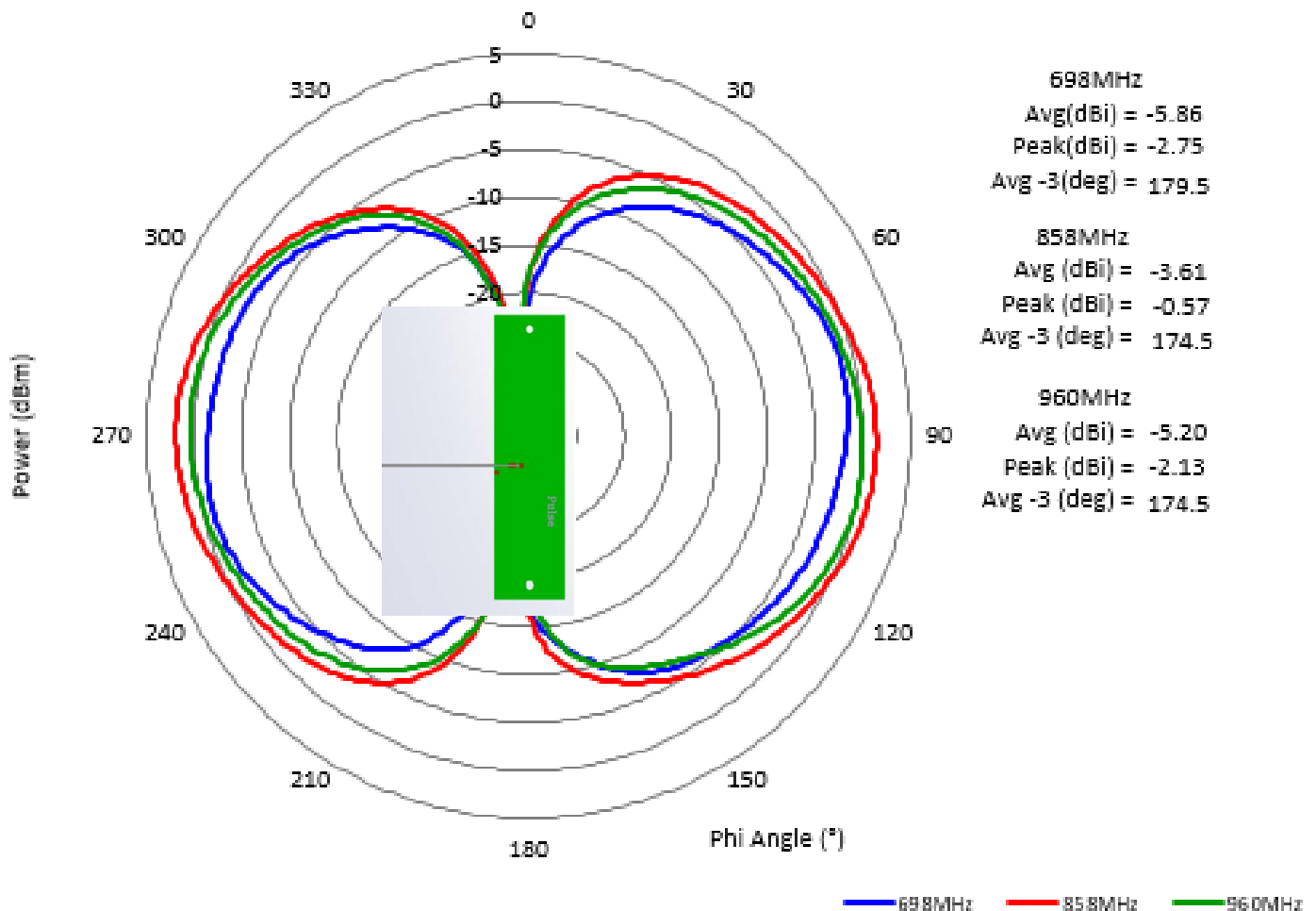
#### Horizontal Plane



## CHARTS

### Free Space Radiation Pattern

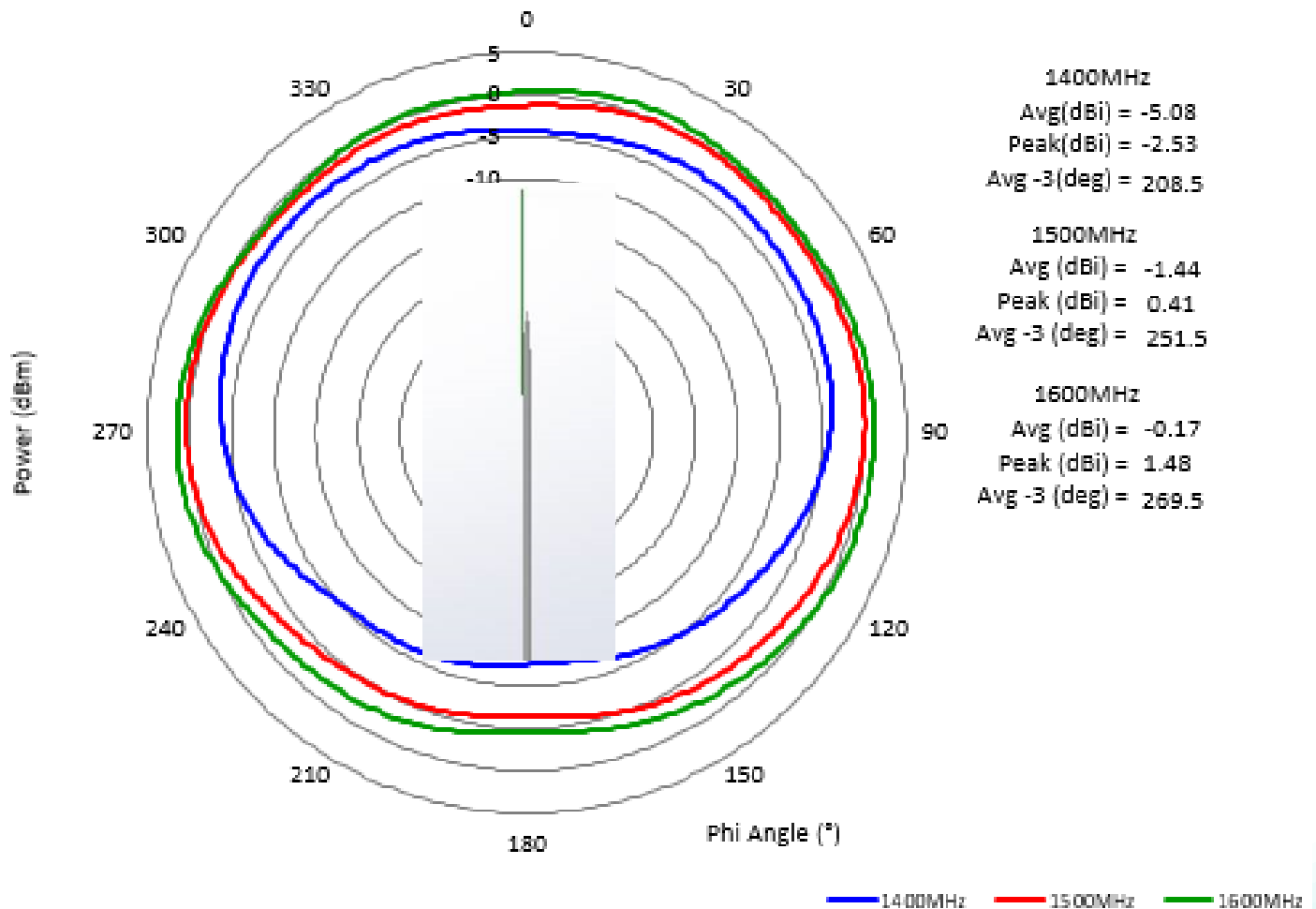
#### Elevation Plane



## CHARTS

### Free Space Radiation Pattern

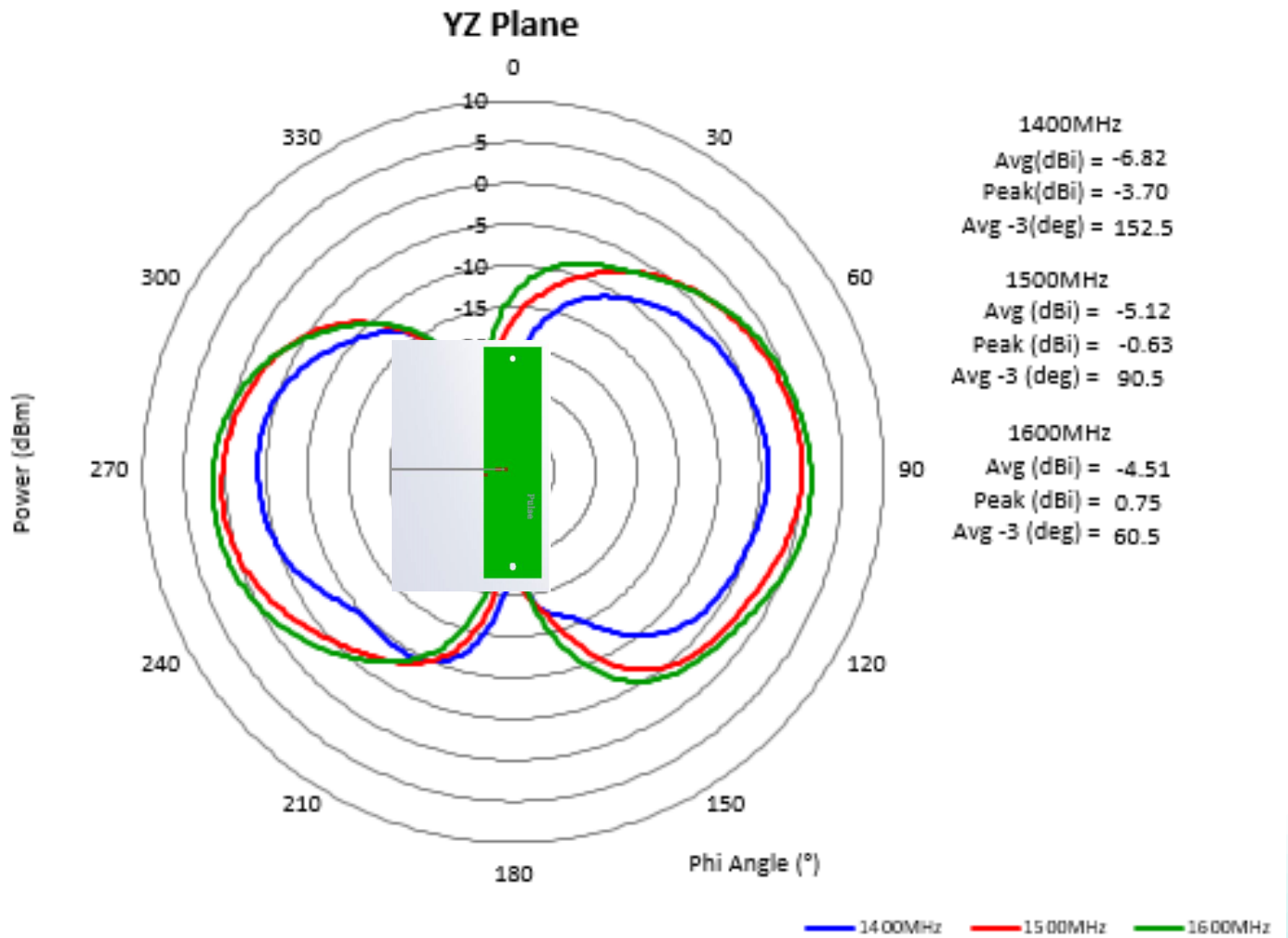
#### Horizontal Plane



## CHARTS

### Free Space Radiation Pattern

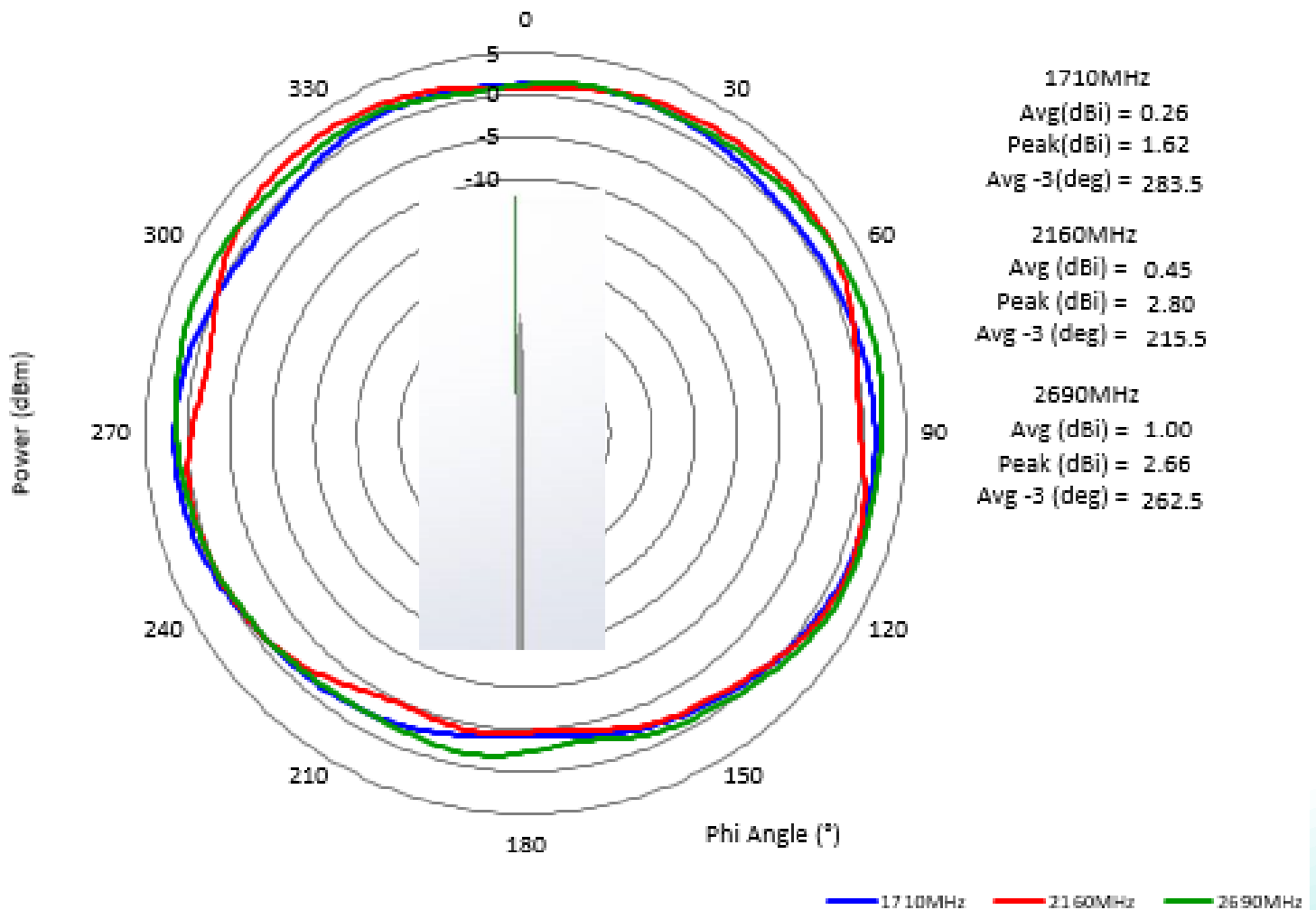
#### Elevation Plane



## CHARTS

### Free Space Radiation Pattern

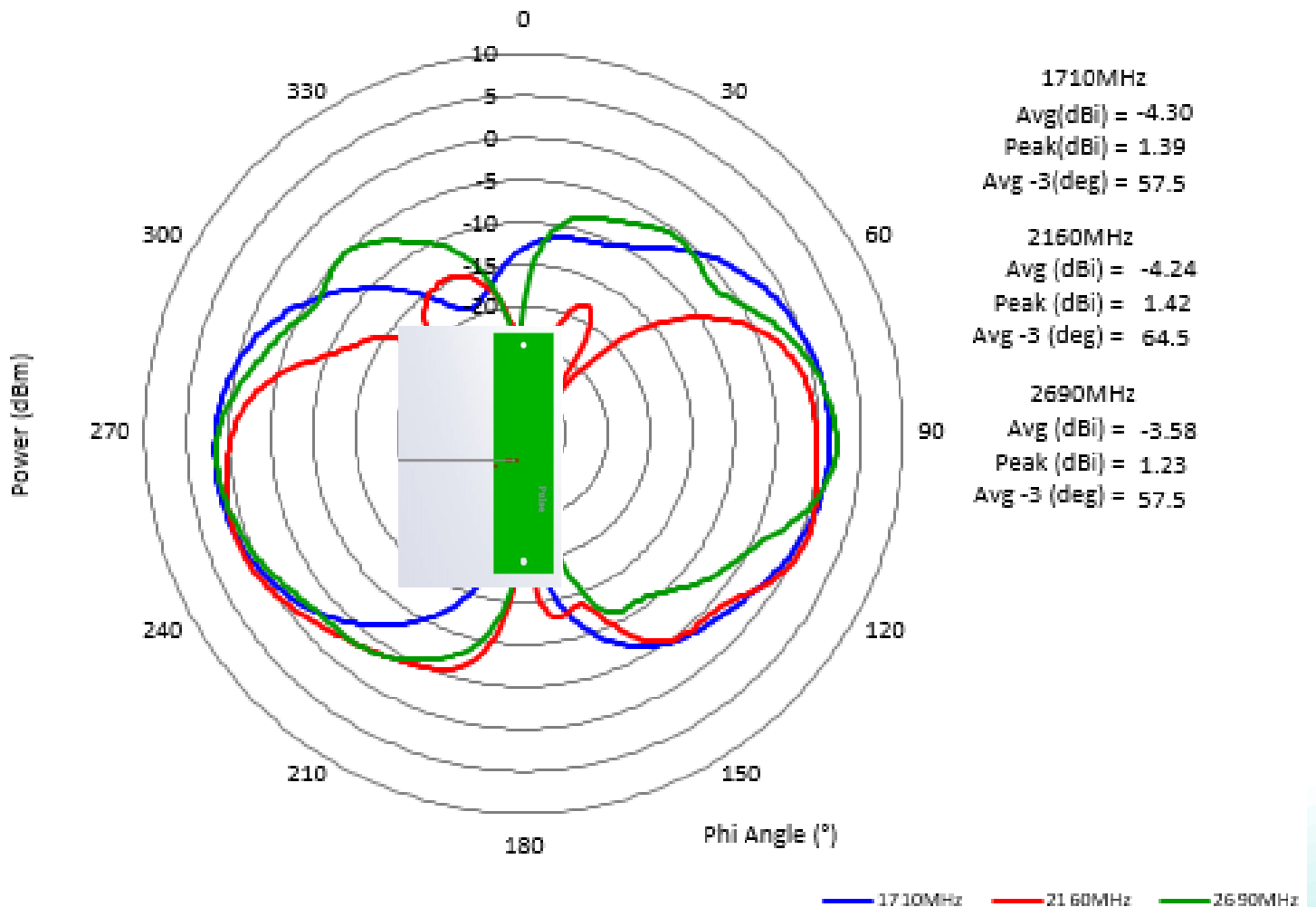
#### Horizontal Plane



## CHARTS

### Free Space Radiation Pattern

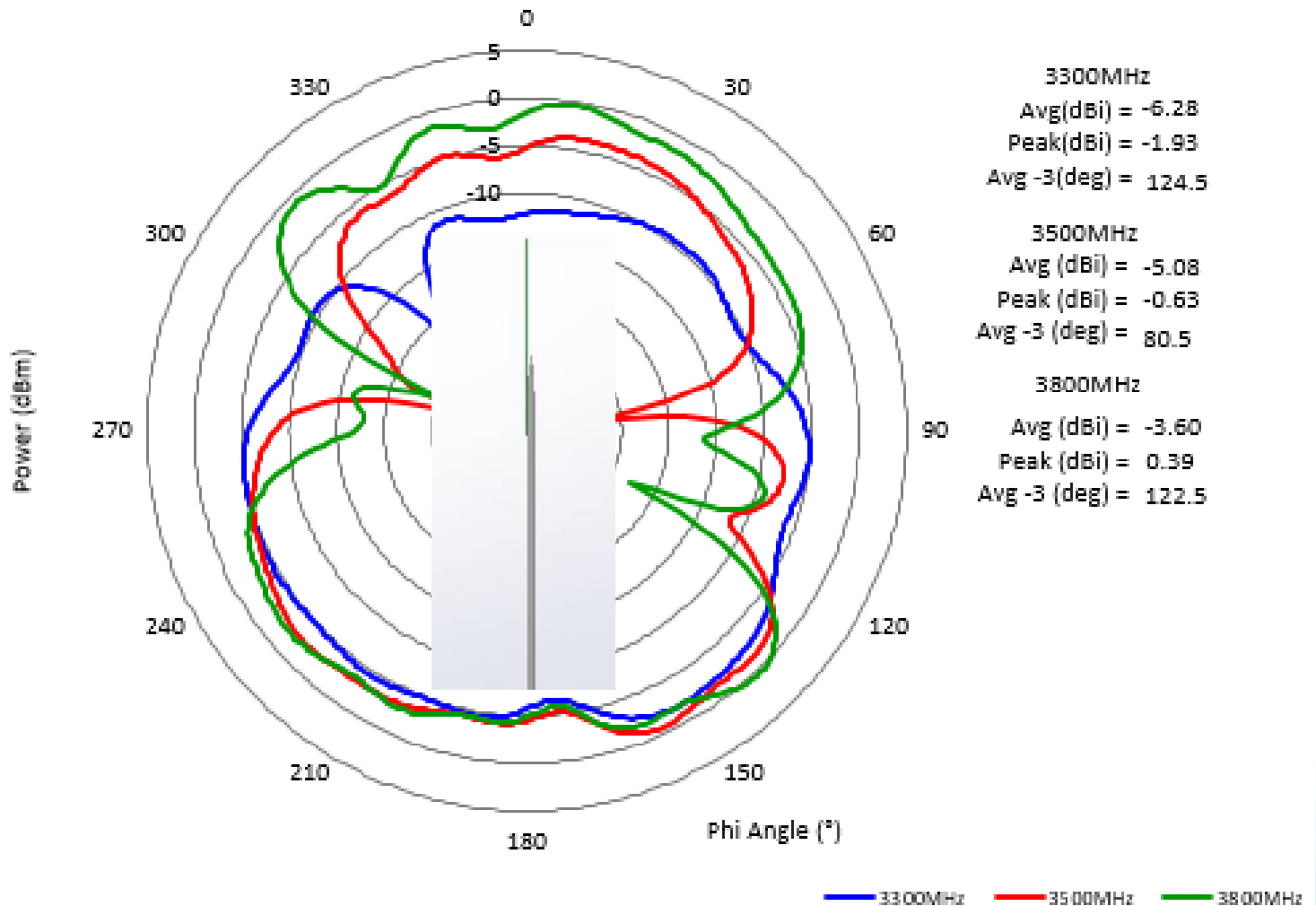
#### Elevation Plane



## CHARTS

### Free Space Radiation Pattern

#### Horizontal Plane

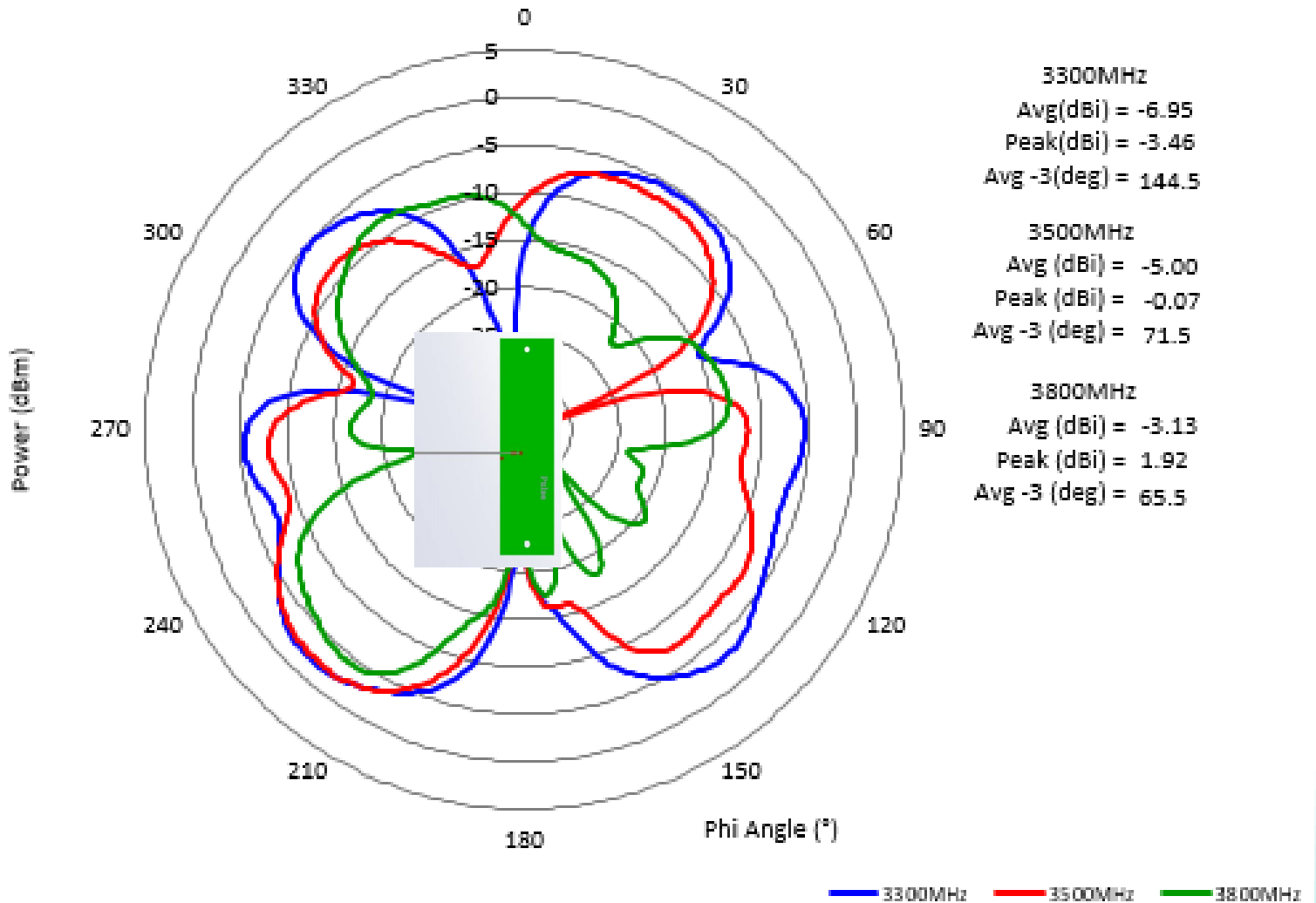




## CHARTS

### Free Space Radiation Pattern

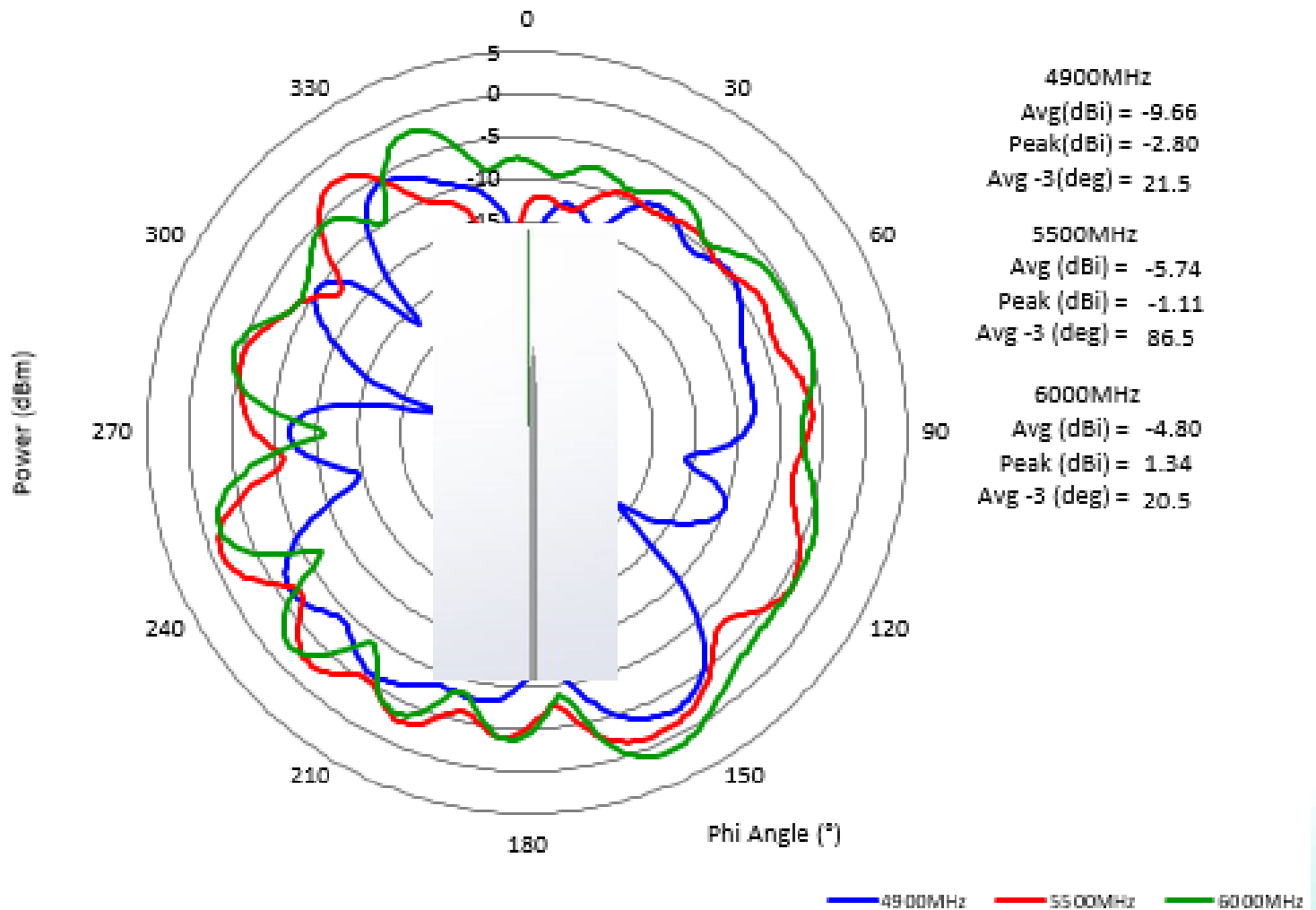
#### Elevation Plane



## CHARTS

### Free Space Radiation Pattern

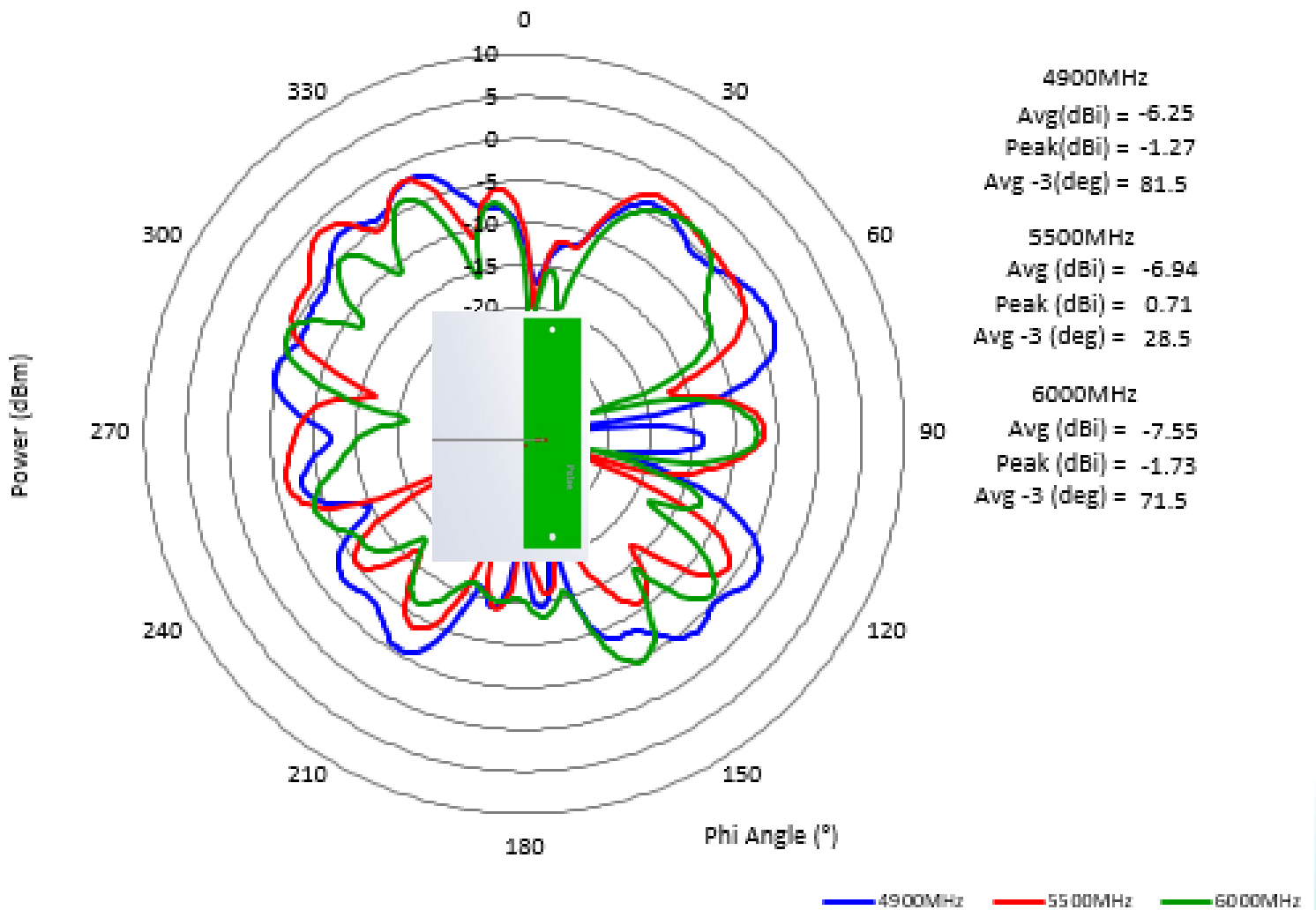
#### Horizontal Plane



## CHARTS

### Free Space Radiation Pattern

#### Elevation Plane



## PACKAGING

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

