

Regulatory WLAN Antenna Information

(WLAN SKU_NB mode)

Platform information																		
Brand	ODM	RMN	Intel platform (ex: Yes, No or NA)		Platform type (ex: regular NB, convertible PC, AIO...etc)		*SAR minimum separation (mm)											
HP Inc.	Inventec	HSN-I46C	Yes		Convertible PC		206.84 mm											
*****Please fill in exact product model name and make sure the model name is visible on product cover or any parts for end users recognize for authority inspection.																		
Antenna information																		
Vendor		Type		Antenna Part number (Main/Tx2)			Antenna Part number (Aux/Tx1)											
WNC		PIFA		6036B0350501 (81EAB815.G22)			6036B0350401 (81EAB815.G21)											
Peak gain w/ cable loss (dBi)*																		
	2.4GHz 2400-2483.5 MHz	5.2GHz 5150-5250MHz	5.3GHz 5250-5350MHz	5.6GHz 5470-5725MHz	5.8GHz 5725-5850MHz	5.9GHz 5850-5895MHz	6.2GHz 5925-6425MHz	6.5GHz 6425-6525MHz	6.7GHz 6525-6875MHz	7.0 GHz 6875-7125MHz								
Main	-0.12	2.51	2.51	0.04	0.73	0.73	2.42	-0.39	-0.32	0.36								
Aux	1.11	2.72	2.72	1.06	-0.07	-0.07	1.88	-0.68	-1.60	-0.68								
Module Information																		
Model		Form factor and suffixes																
AX211NGW		Intel Garfield Peak 2 AX211 Wi-Fi 6e +Bluetooth 5.2 M.2 2230 160MHz CNVi WW WLAN																
Antenna vendor connect person																		
Antenna Vendor		WNC																
contact person		Annie Lo																
E-mail		annie.lo@wnc.com.tw																
Tel/Mobile		886-3-666-7799 ext: 3415																
Web address		https://www.wnc.com.tw																
Address		20 Park Avenue II, Hsinchu Science Park Hsinchu 300, Taiwan																

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1. **Applicable test methods**

ETS-Lindgren AMS-8500 system is 3D fully anechoic chamber, it is applied to the “Conical Cut test method”, the detail description is described as below.

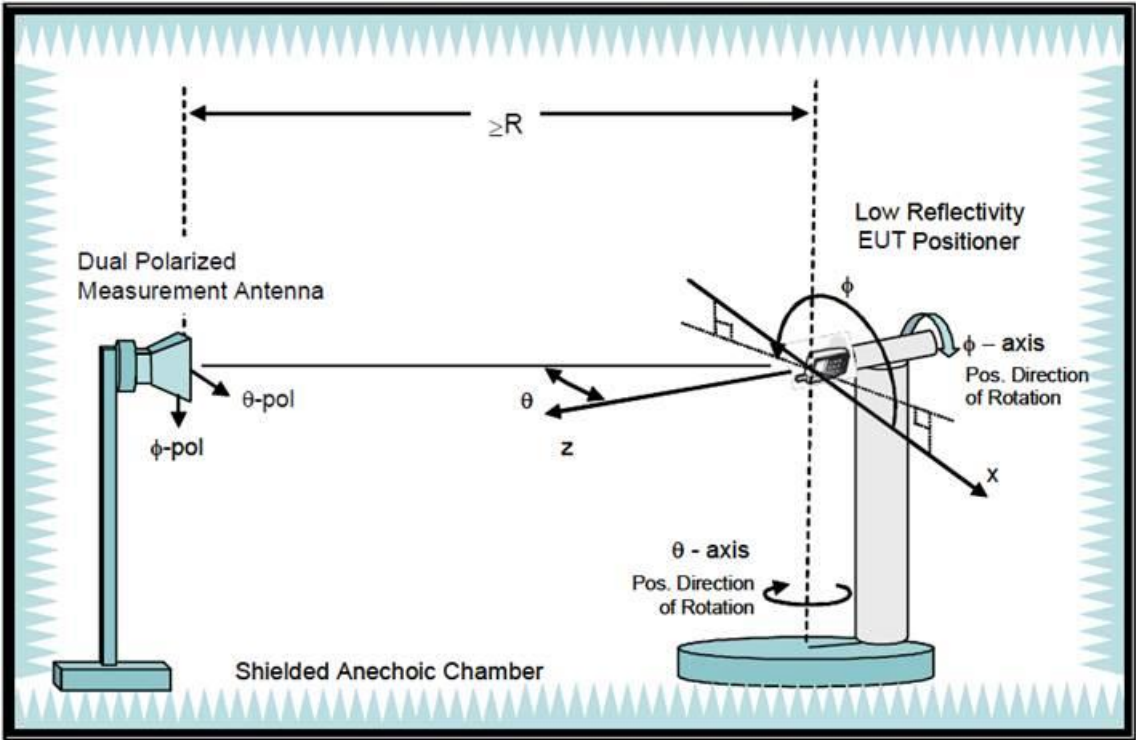
The Conical Cut method requires the ability of the Measurement Antenna to be physically rotated in the theta plane (overhead) of the EUT for implementations using a single Measurement Antenna, Eleven conical cuts are required to capture data at every 15 degrees from the EUT, with the top (0 degrees) and bottom (180 degrees) cuts not being measured. Typically, the EUT will remain affixed to a turntable during the entire measurement process. The Measurement Antenna will be positioned at a starting theta angle. The EUT will then be rotated around the full 360 degrees of phi rotation. The Measurement Antenna will then be positioned at the next theta angle, and the process repeated.

		θ -Axis	Φ -Axis
Passive	Step size	15°~165° step: 15°	0°~345° step: 15°
	N / M (Points)	12	24

2. **Test & System Description**

a. Test setup

Typical Setup for ETS-Lindgren AMS-8500:



Antenna Information

Section 1. Antenna Assembly Specifications

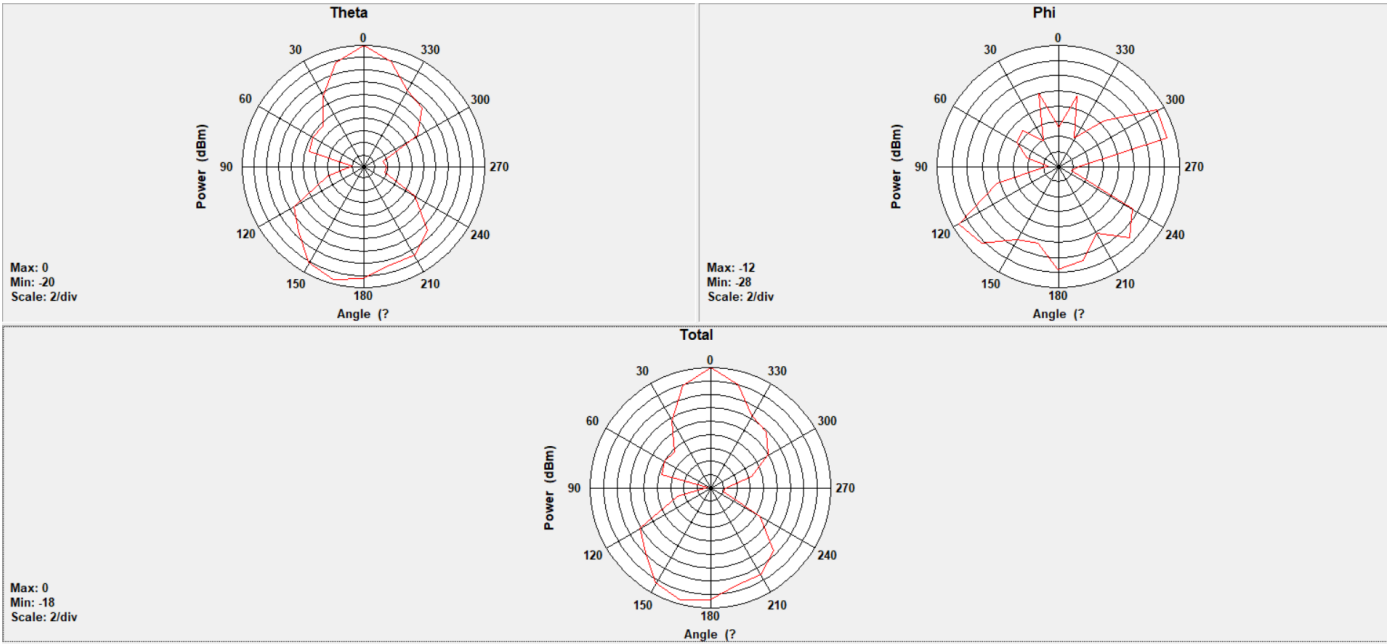
1A	1B	1C	1D		1E	1F	1G	1H
Antenna Part Number	Manufacturer	Antenna Type	Cable Assembly Part Number and Information	Freq Range MHz	* Peak Gain W/ Cable loss (dBi)	Peak Gain w/o Cable Loss (dBi)	Max VSWR	Cable Loss (dB)
P/N: 6036B0350501 (00-3302700350) Main Antenna (TX2)	WNC	PIFA	Connector: Vendor (P/N: SY113L/50-065,SHENYU) 50 ohm Coaxial length: 381mm diameter: 1.13mm	2400-2495	-0.12	0.94	3	1.06
				5150-5250	2.51	4.09	3	1.58
				5250-5350	2.51	4.11	3	1.60
				5470-5725	0.04	1.66	3	1.62
				5725-5850	0.73	2.38	3	1.65
				5850-5895	0.73	2.40	3	1.67
				5925-6425	2.42	4.13	3	1.71
				6425-6525	-0.39	1.37	3	1.76
				6525-6875	-0.32	1.48	3	1.80
				6875-7125	0.36	2.22	3	1.86
P/N: 6036B0350401 (00-3302700250) Aux Antenna (TX1)	WNC\	PIFA	Connector: Vendor (P/N: SY113L/50-065,SHENYU) 50 ohm Coaxial length: 525mm diameter: 1.13mm	2400-2495	1.11	2.57	3	1.46
				5150-5250	2.72	4.89	3	2.17
				5250-5350	2.72	4.91	3	2.19
				5470-5725	1.06	3.30	3	2.24
				5725-5850	-0.07	2.20	3	2.27
				5850-5895	-0.07	2.22	3	2.29
				5925-6425	1.88	4.23	3	2.35
				6425-6525	-0.68	1.75	3	2.43
				6525-6875	-1.60	0.89	3	2.49
				6875-7125	-0.68	1.88	3	2.56

Section 3. Radiation characteristics of antenna loaded in Host Platform

Main Antenna

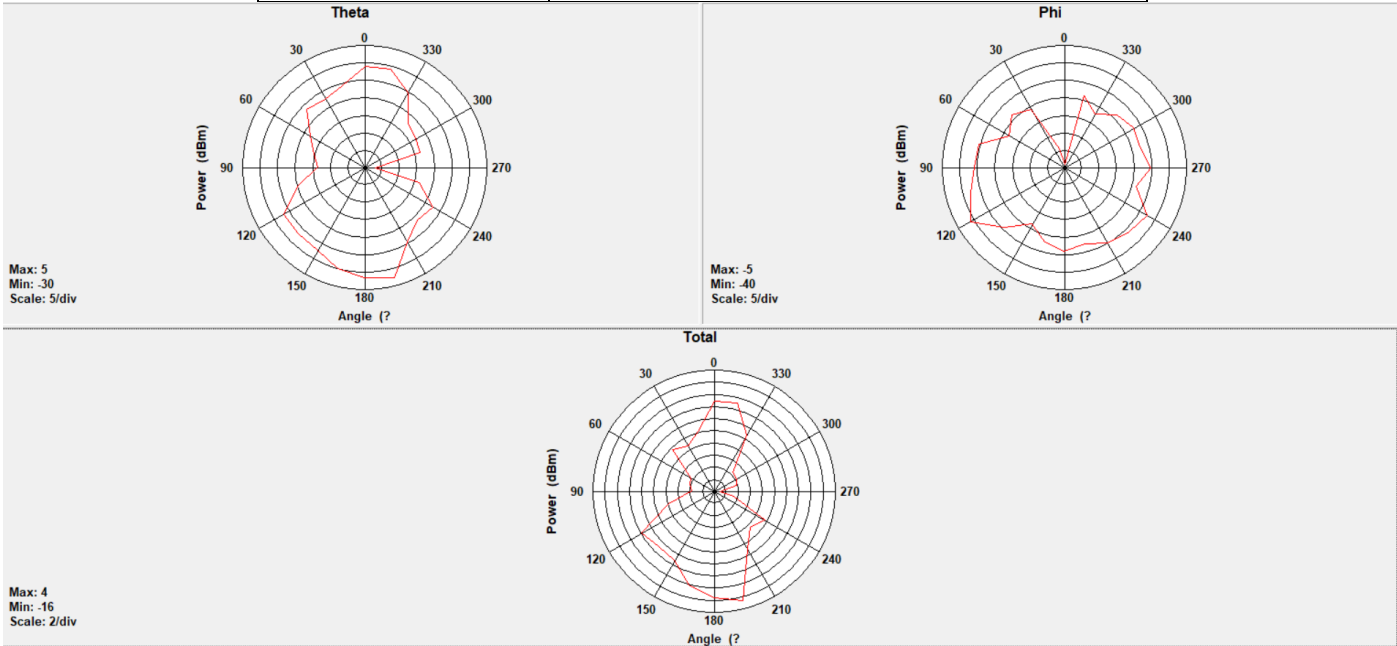
Max Antenna 2D Radiation Pattern 2400 – 2495 MHz

Frequency (MHz)	Horizontal+ Vertical (dBi) peak (dBi)
2400-2495	-0.12



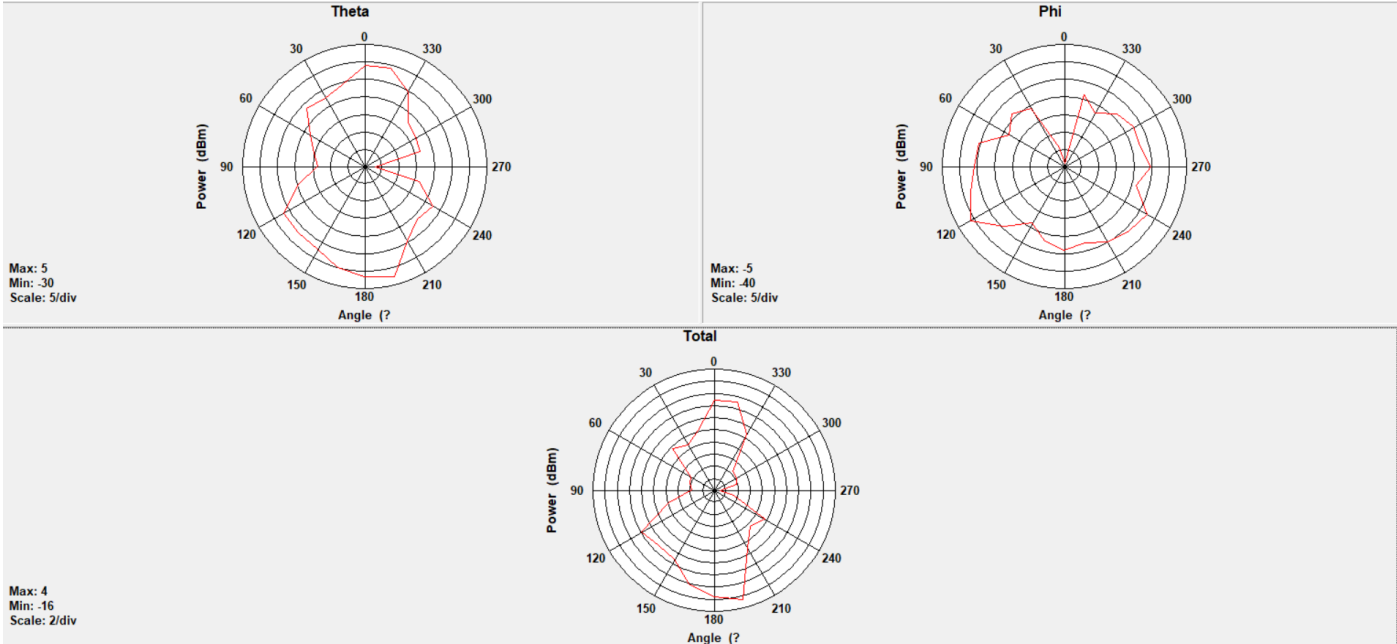
Max Antenna 2D Radiation Pattern 5150-5250 MHz

Frequency (MHz)	Horizontal+ Vertical (dBi) peak (dBi)
5150-5250	2.51



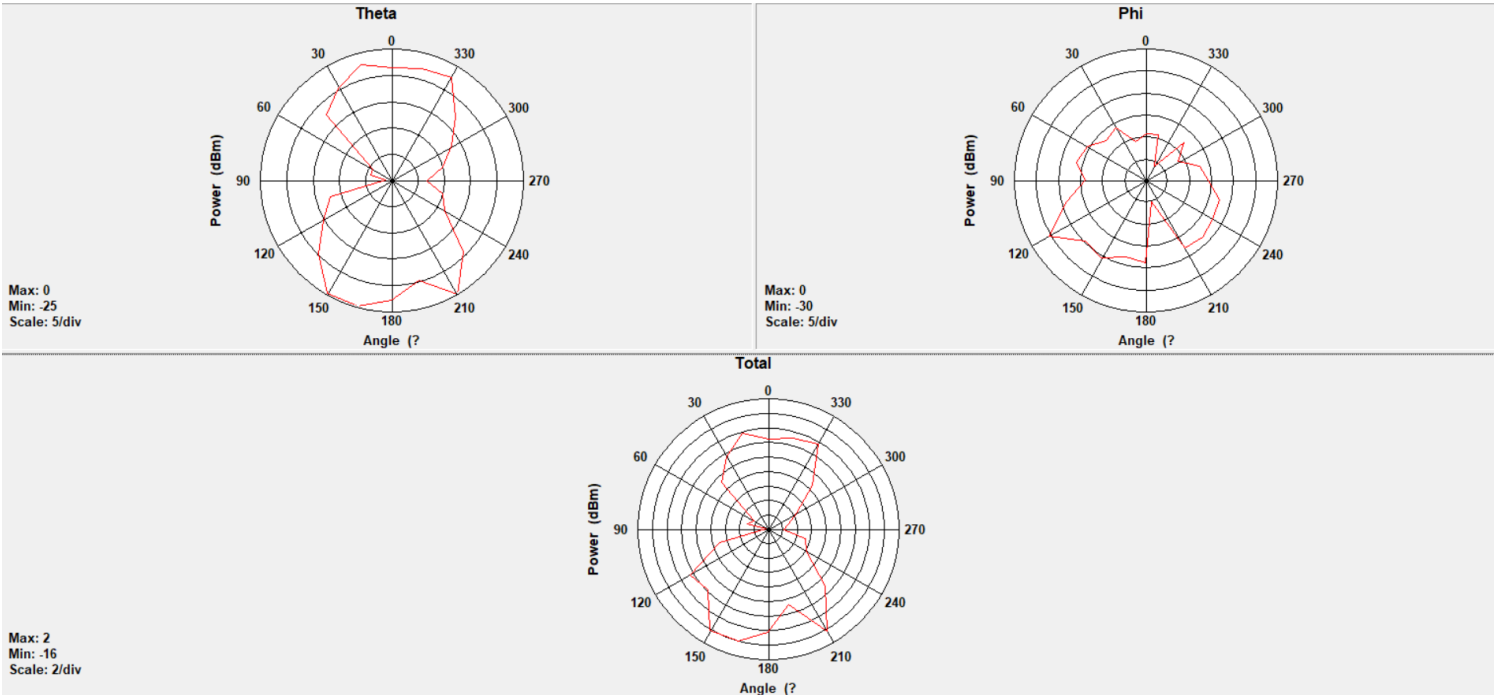
Max Antenna 2D Radiation Pattern 5250-5350 MHz

Frequency (MHz)	Horizontal+ Vertical (dBi) peak (dBi)
5250-5350	2.51

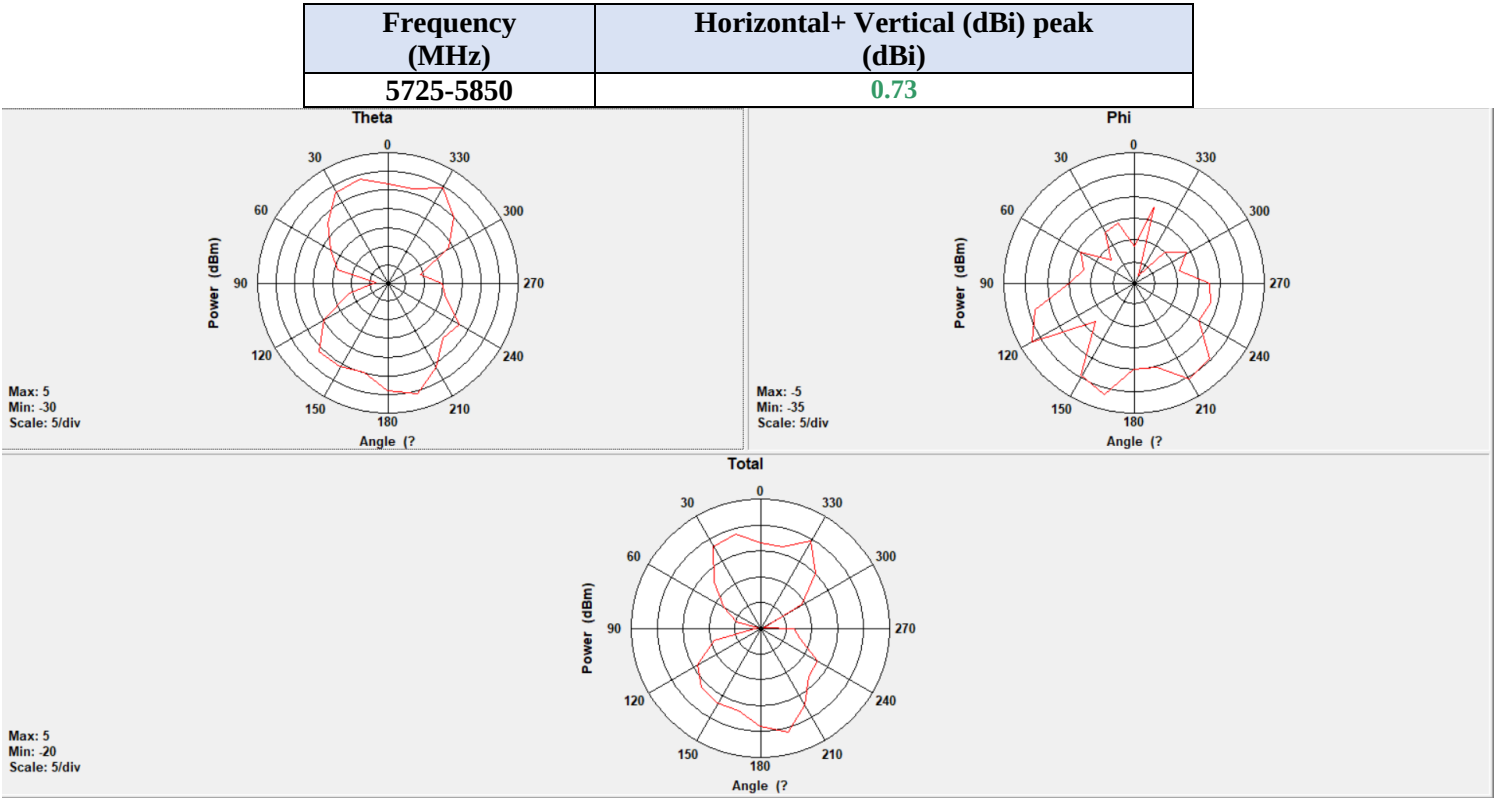


Max Antenna 2D Radiation Pattern 5470-5725 MHz

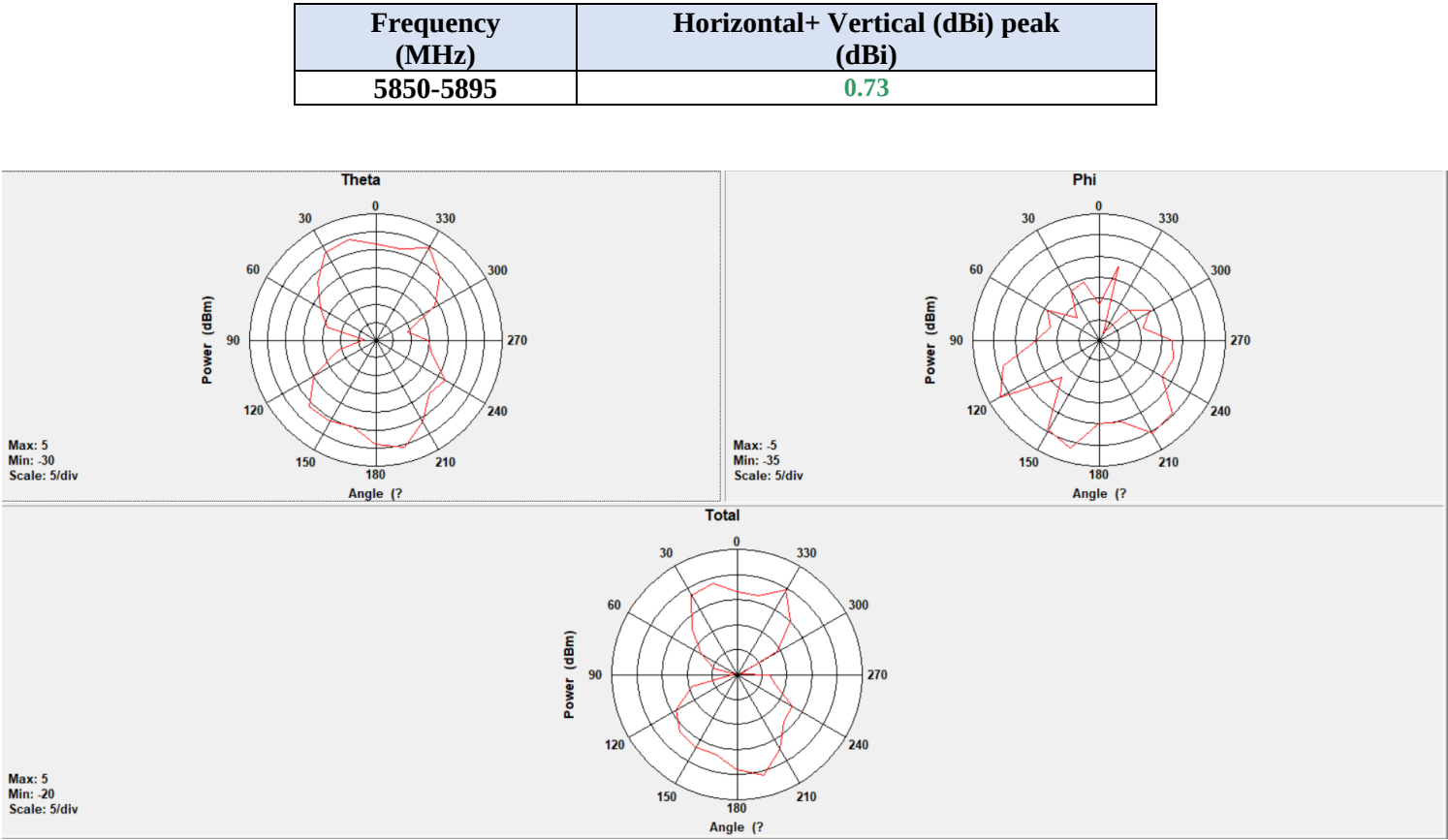
Frequency (MHz)	Horizontal+ Vertical (dBi) peak (dBi)
5470-5725	0.04



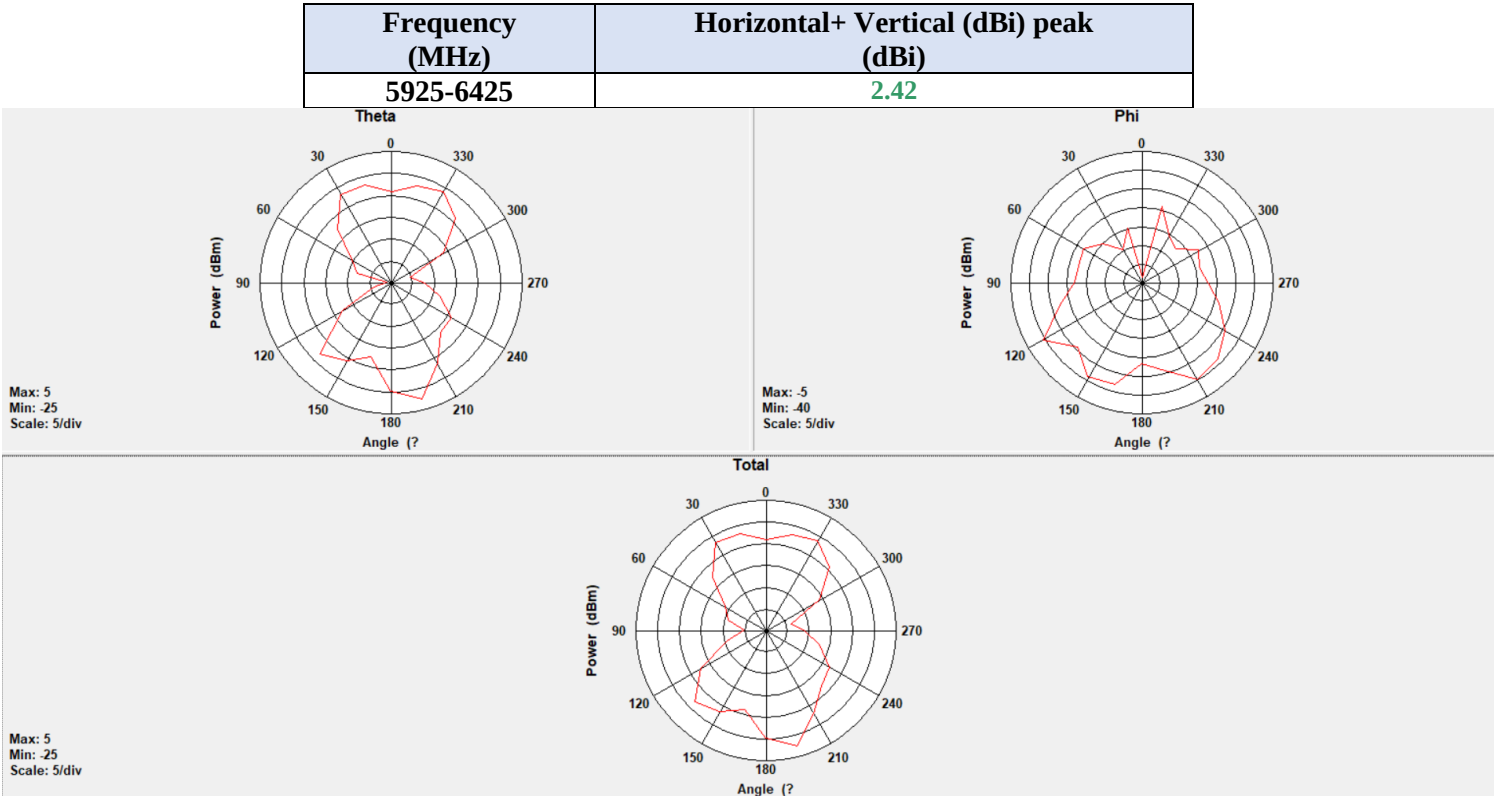
Max Antenna 2D Radiation Pattern 5725-5850 MHz



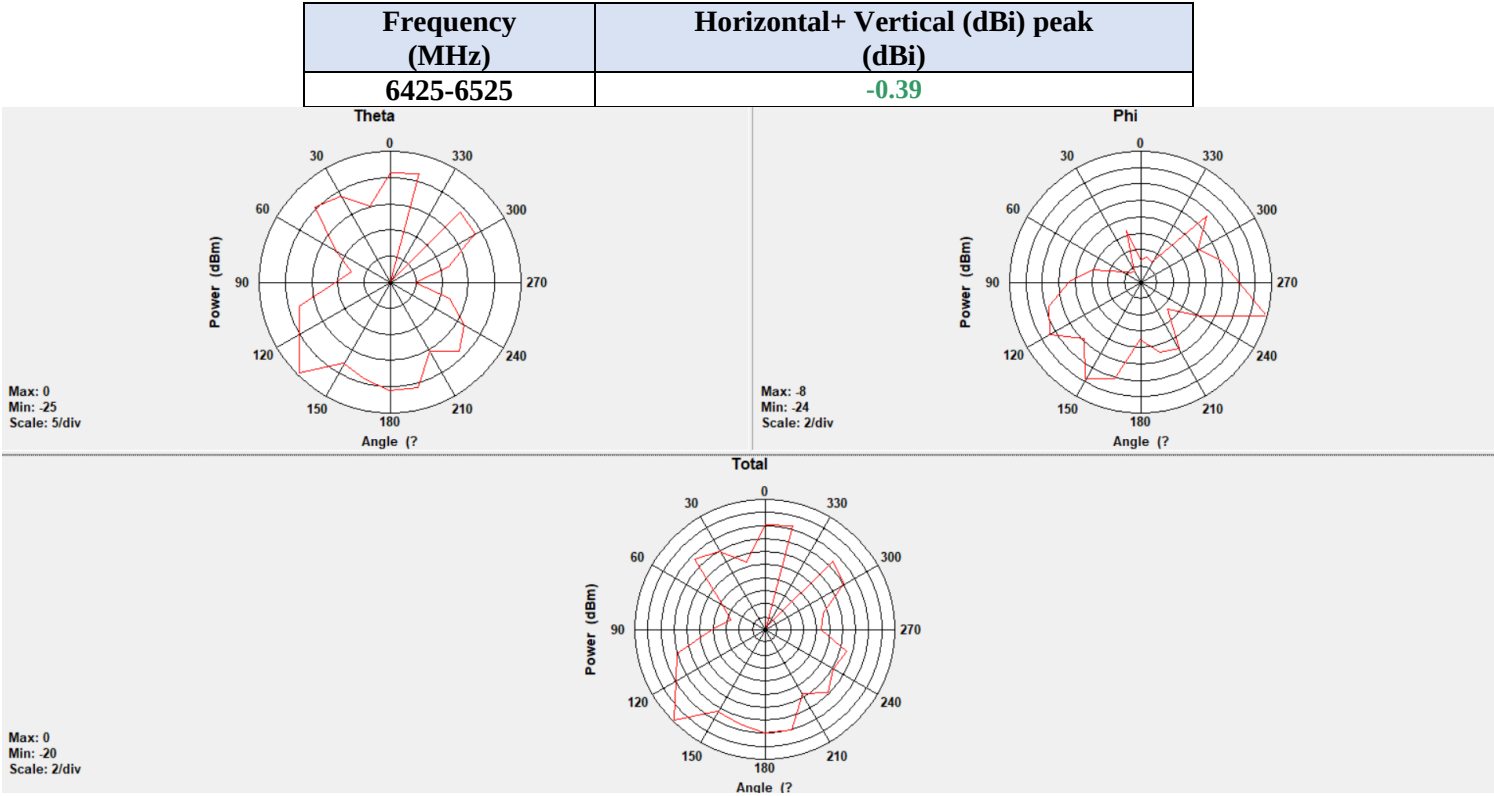
Max Antenna 2D Radiation Pattern 5850-5895 MHz



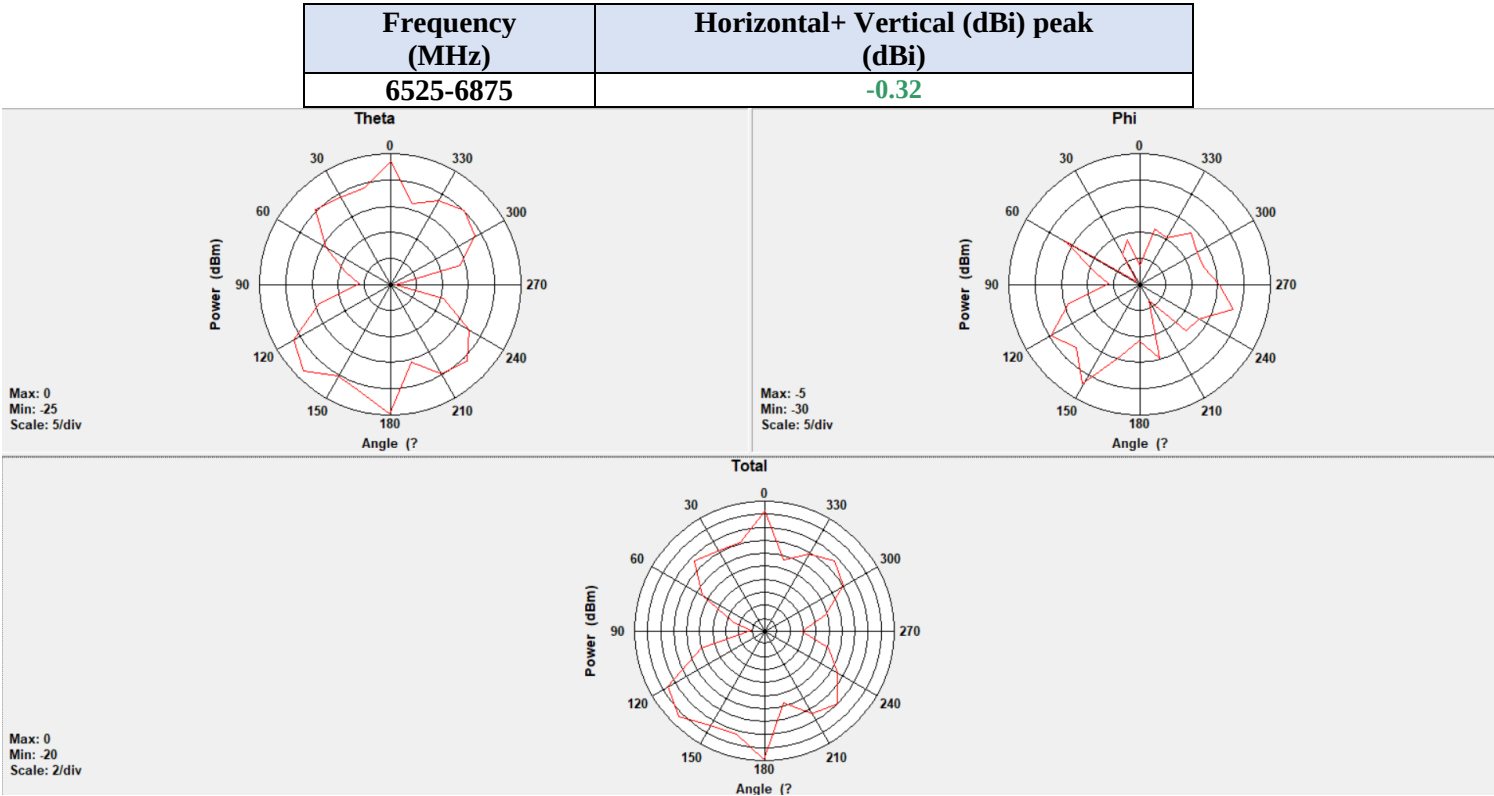
Max Antenna 2D Radiation Pattern 5925-6425 MHz



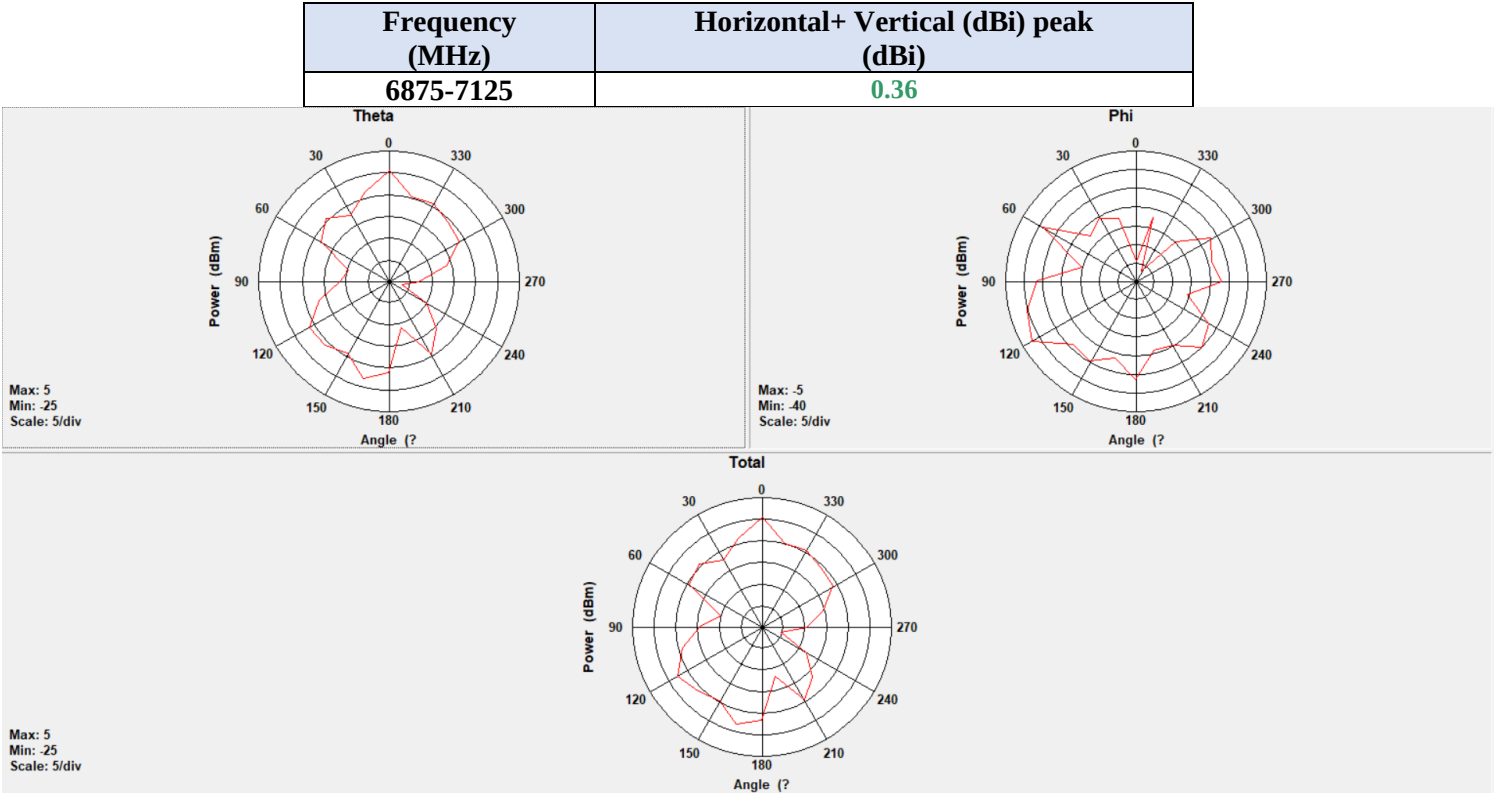
Max Antenna 2D Radiation Pattern 6425-6525 MHz



Max Antenna 2D Radiation Pattern 6525-6875 MHz



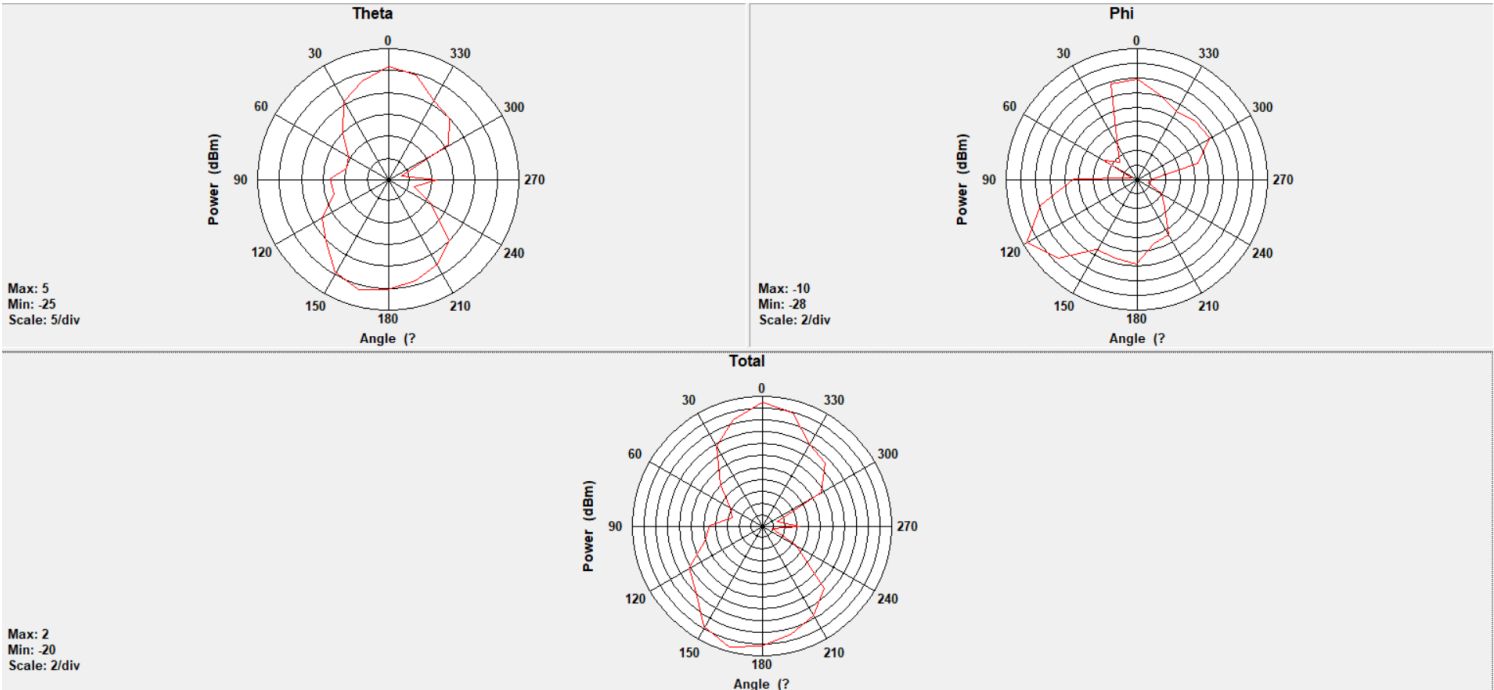
Max Antenna 2D Radiation Pattern 6875-7125 MHz



Auxiliary Antenna

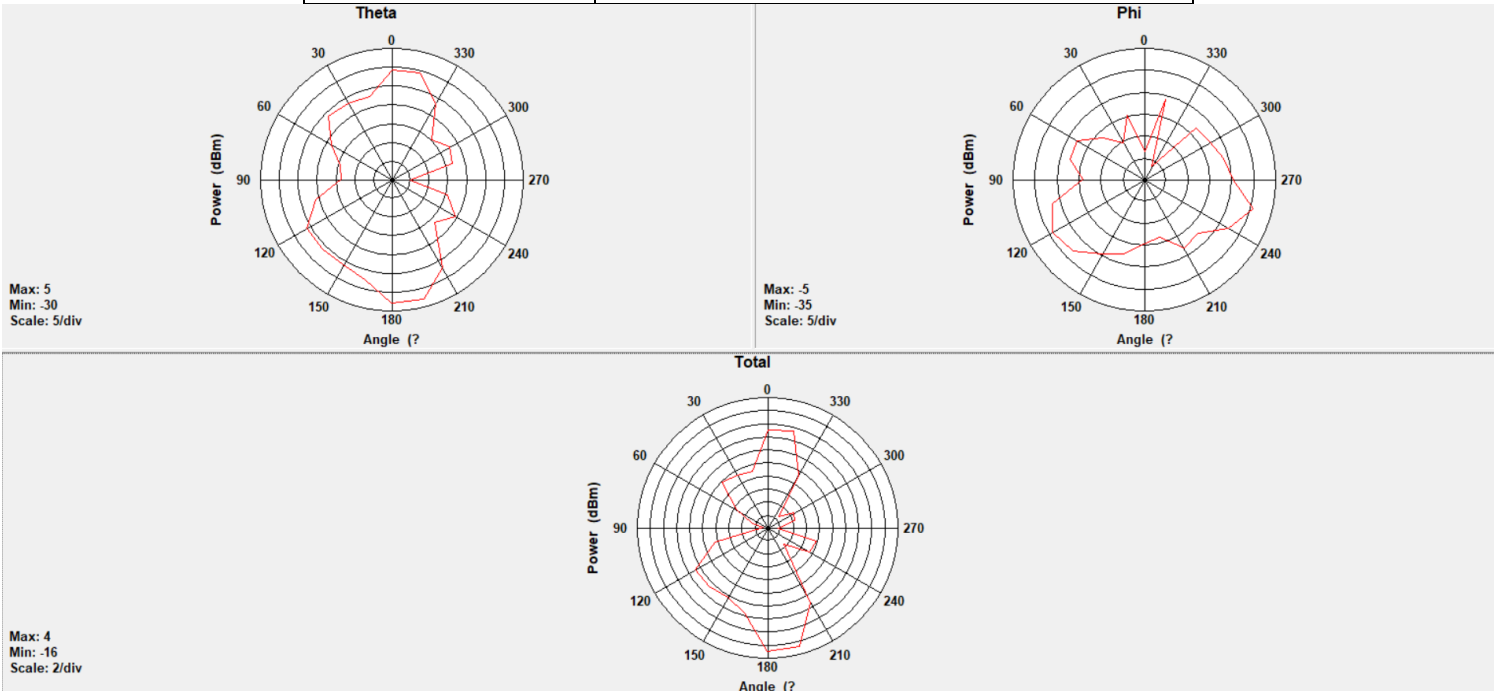
Max Antenna 2D Radiation Pattern 2400 – 2483.5 MHz

Frequency (MHz)	Horizontal+ Vertical (dBi) peak (dBi)
2400-2483.5	1.11

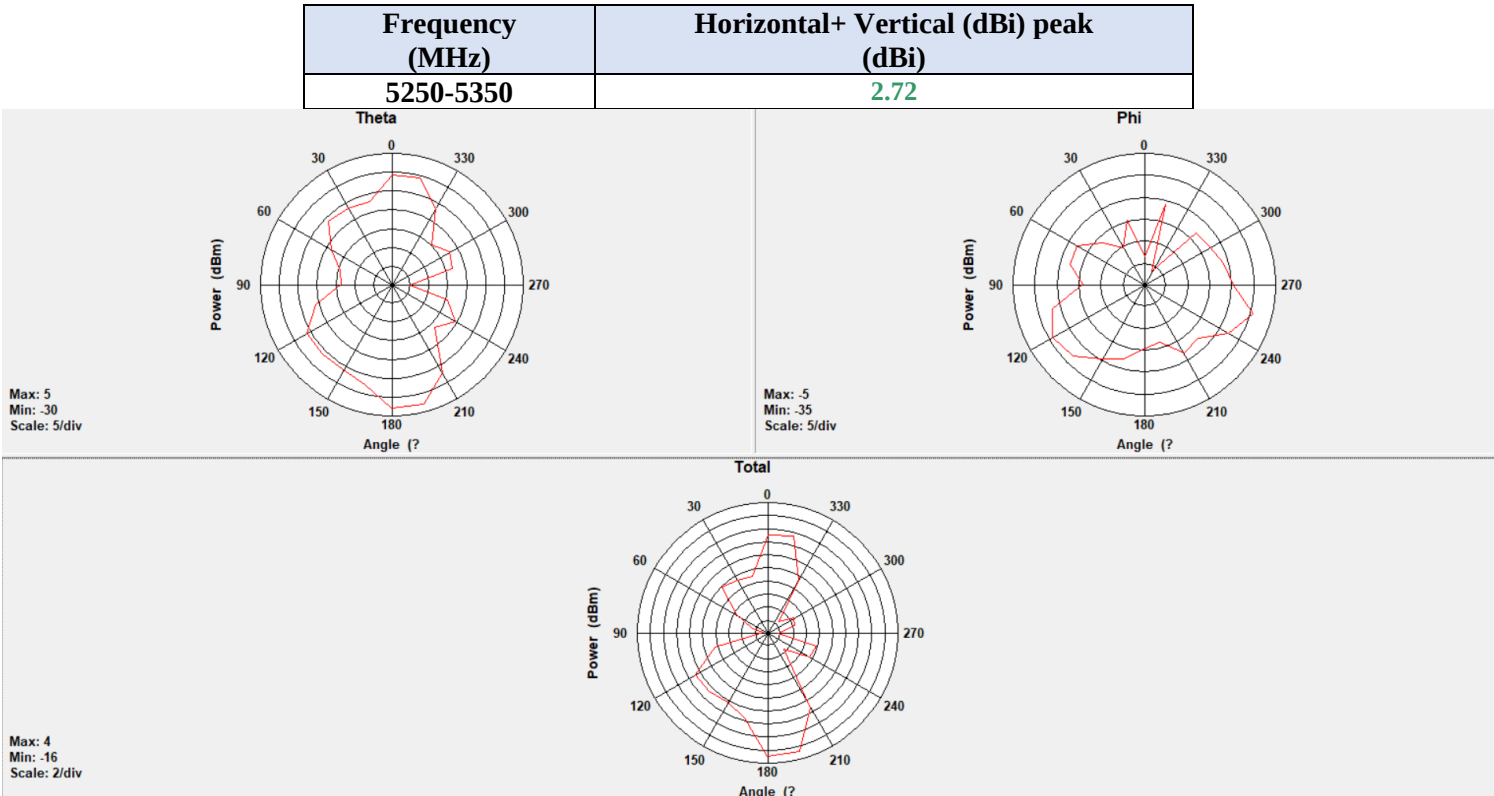


Max Antenna 2D Radiation Pattern 5150-5250 MHz

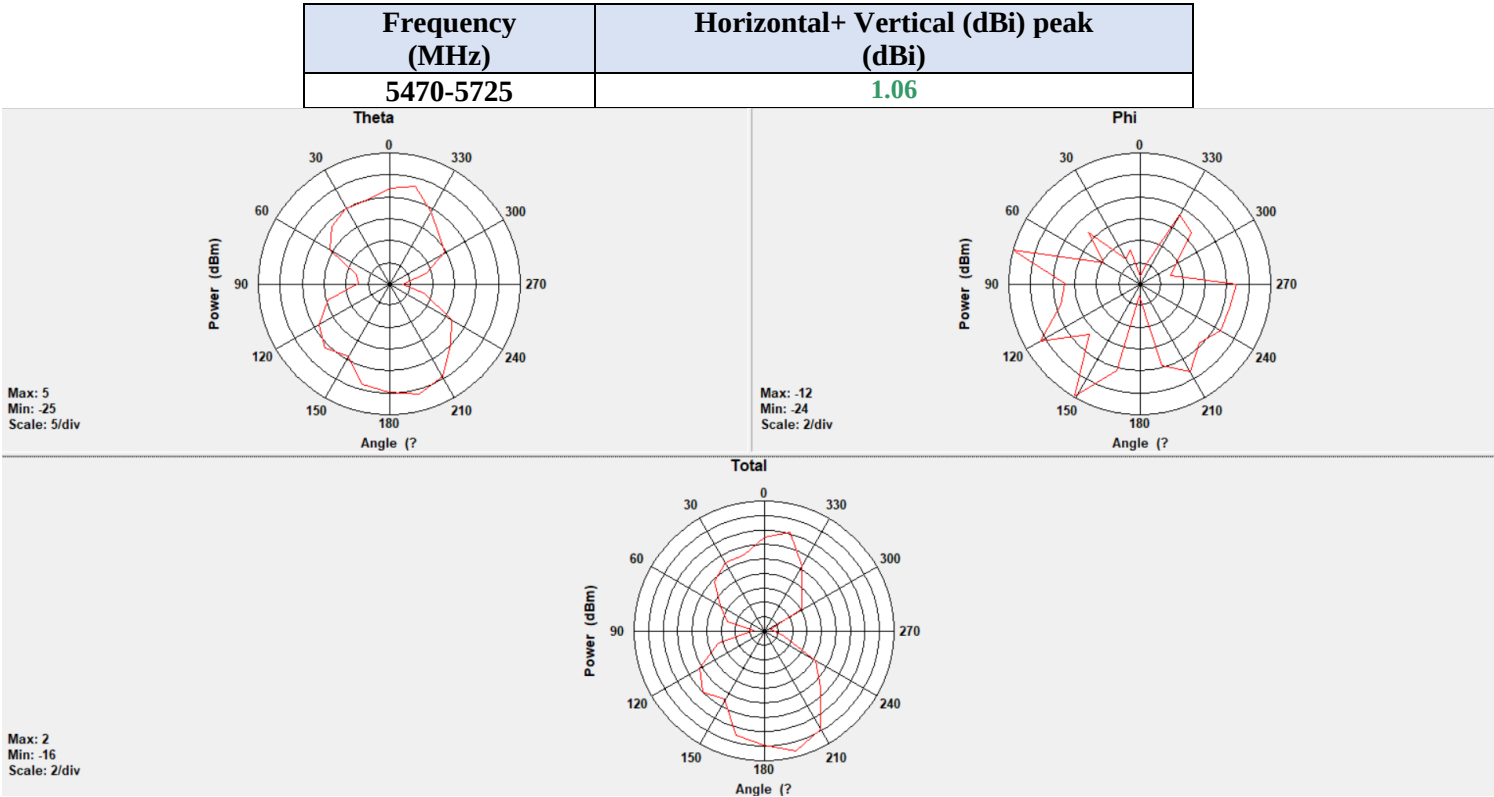
Frequency (MHz)	Horizontal+ Vertical (dBi) peak (dBi)
5150-5250	2.72



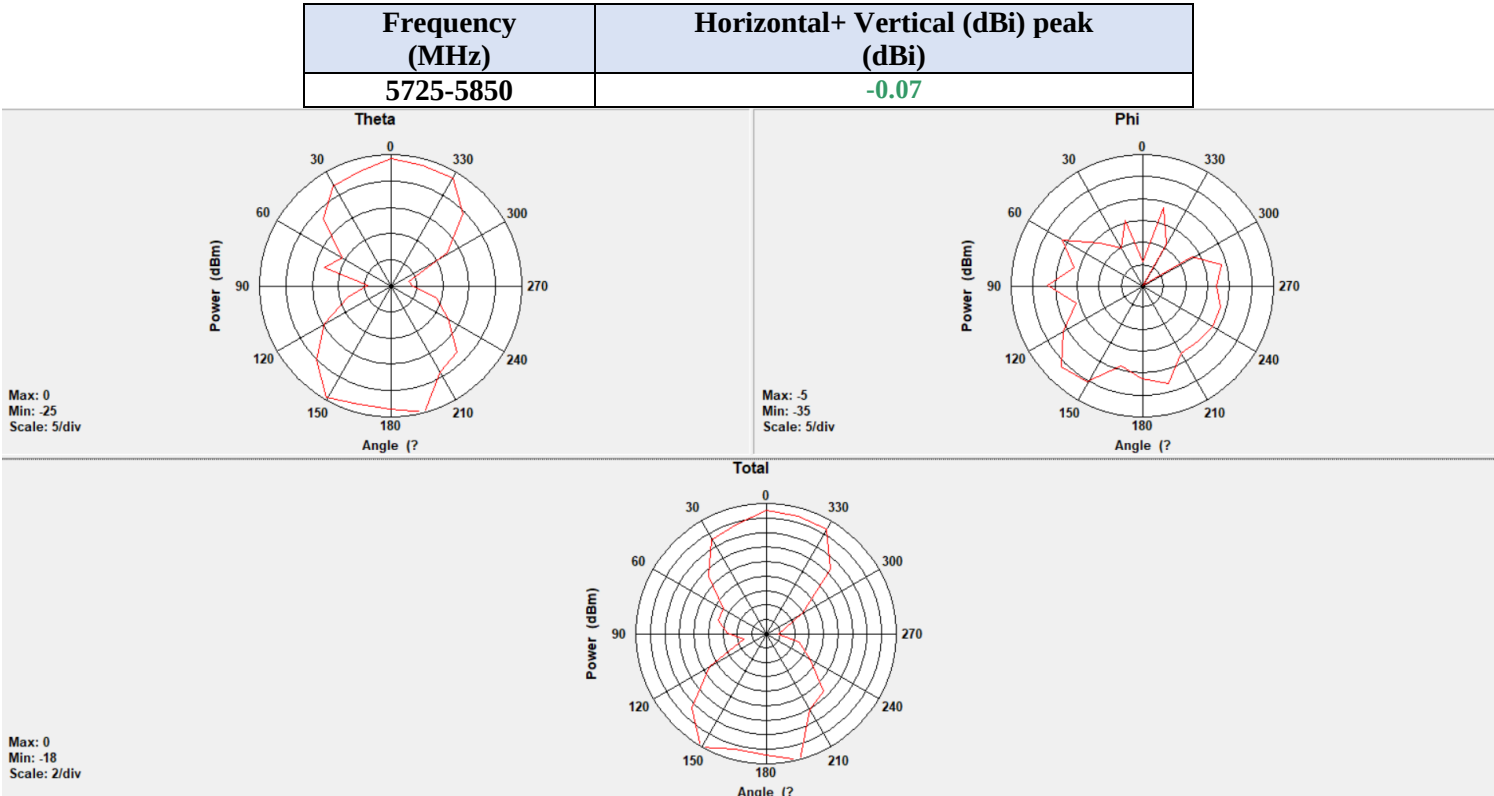
Max Antenna 2D Radiation Pattern 5250-5350 MHz



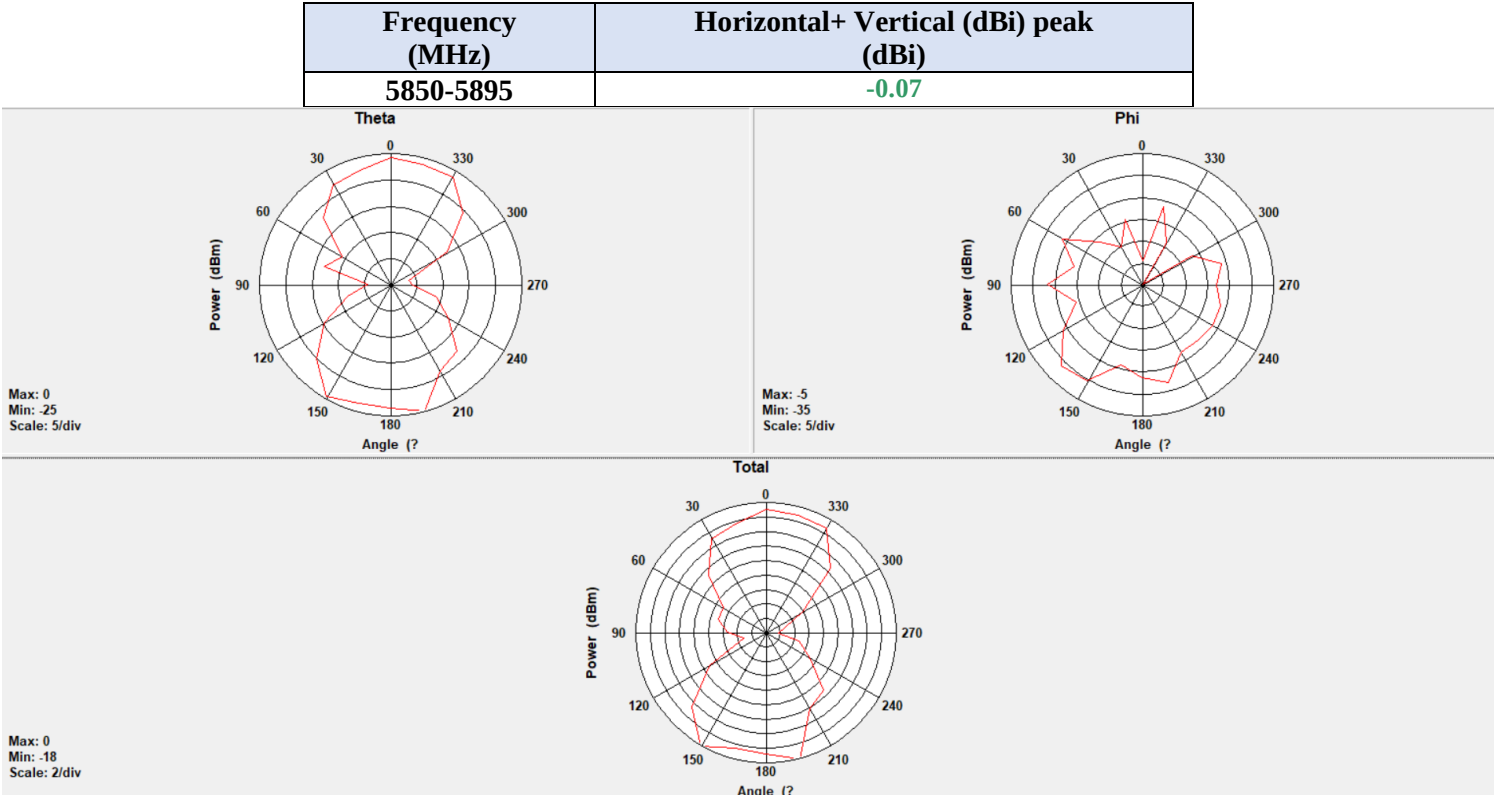
Max Antenna 2D Radiation Pattern 5470-5725 MHz



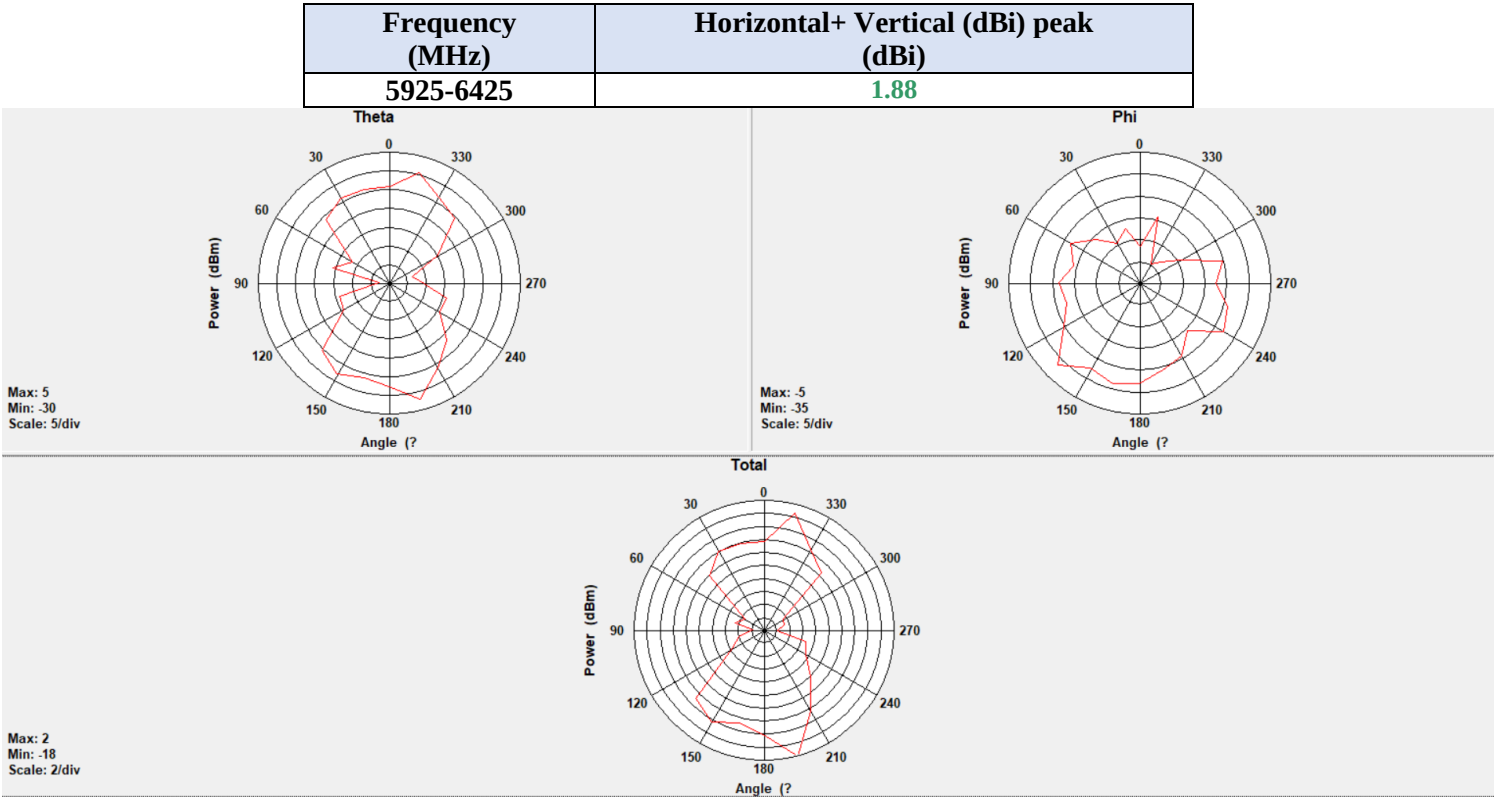
Max Antenna 2D Radiation Pattern 5725-5850 MHz



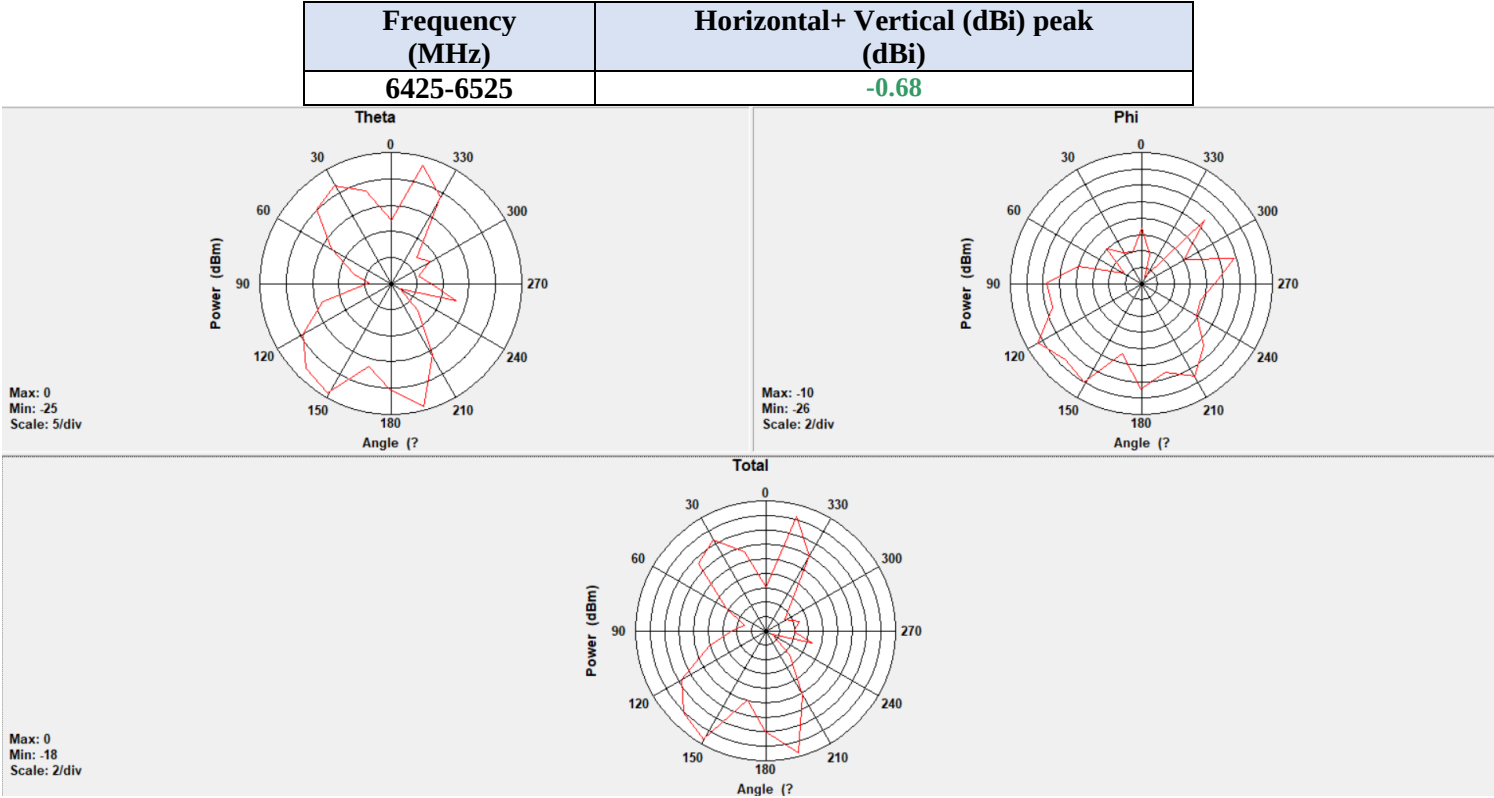
Max Antenna 2D Radiation Pattern 5850-5895 MHz



Max Antenna 2D Radiation Pattern 5925-6425 MHz

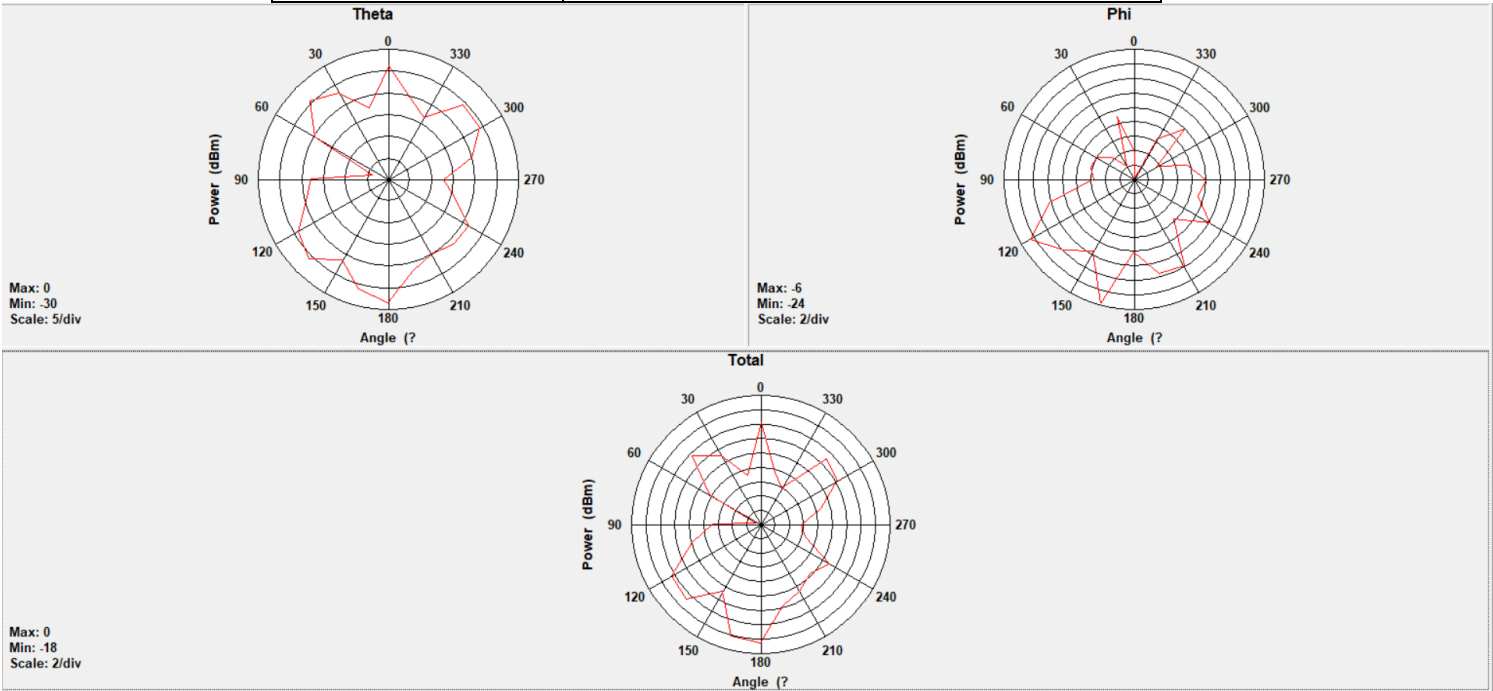


Max Antenna 2D Radiation Pattern 6425-6525 MHz



Max Antenna 2D Radiation Pattern 6525-6875 MHz

Frequency (MHz)	Horizontal+ Vertical (dBi) peak (dBi)
6525-6875	-1.6



Max Antenna 2D Radiation Pattern 6875-7125 MHz

Frequency (MHz)	Horizontal+ Vertical (dBi) peak (dBi)
6875-7125	-0.68

