ANTENNA INFORMATION

OEM	Lenovo
ODM	Huaqin
Platform model name	IdeaPad 5 2-in-1 14Q8X9
Intel platform (ex: Yes, No or NA)	NA
Platform type (ex: regular NB, convertible PC, AIO…etc)	Convertible PC
SAR minimum separation (mm)	NB mode：6.37mm Pad mode 4.9mm

Antenna manufacturer	Company name	AWAN
	Address	No.925 Huayuan Road,Zhangpu Town,Kunshan City,Jiangsu Province
Test location	Company name	AWAN
	Address	No.925 Huayuan Road,Zhangpu Town,Kunshan City,Jiangsu Province
Test Personnel	Name(Full name)	Dean.liu
	E-mail	Dean.liu@awan-ant.com
	Tel/Mobile	18326839121
Testing date		2024/06/24

Antenna Part number	Main	AYP6Y-100530
	Aux	AYP6Y-100531
Antenna type (ex: PIFA, Dipole…etc)		PIFA

Antenna 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	Peak gain(dBi)	1.79	2.34	1.79	1.99	1.44	1.66	2.49	2.70	2.55	2.63
	cable loss (dB)	0.67	1.05	1.08	1.09	1.12	1.14	1.56	1.58	1.74	1.84
Aux	Peak gain(dBi)	1.35	2.29	2.46	2.41	2.00	1.89	2.89	2.41	1.93	1.41
	cable loss (dB)	1.18	1.86	1.88	1.91	1.98	2.07	2.19	2.52	2.59	2.68

Cable Assembly Part Number and Information

	Cable PN	Cable length(mm)	Cable diameter(mm)	Impedance(ohm)	Connector type Brand/ Part Number	Connector type
Main	YCB00113-V000916	192	1.13	50	I-PEX NGFF:20565-001R-13/KangsuoNGFF :MHF-B13-N-01	I-PEX4
Aux	YCB00113-V030916	363	1.13	50	I-PEX NGFF:20565-001R-13/KangsuoNGFF :MHF-B13-N-01	I-PEX4

* 3D Antenna Peak Gain required being test in system basis.

Table of Contents

1. Intel Reference Gain and Type

NA

2. Document Revision History

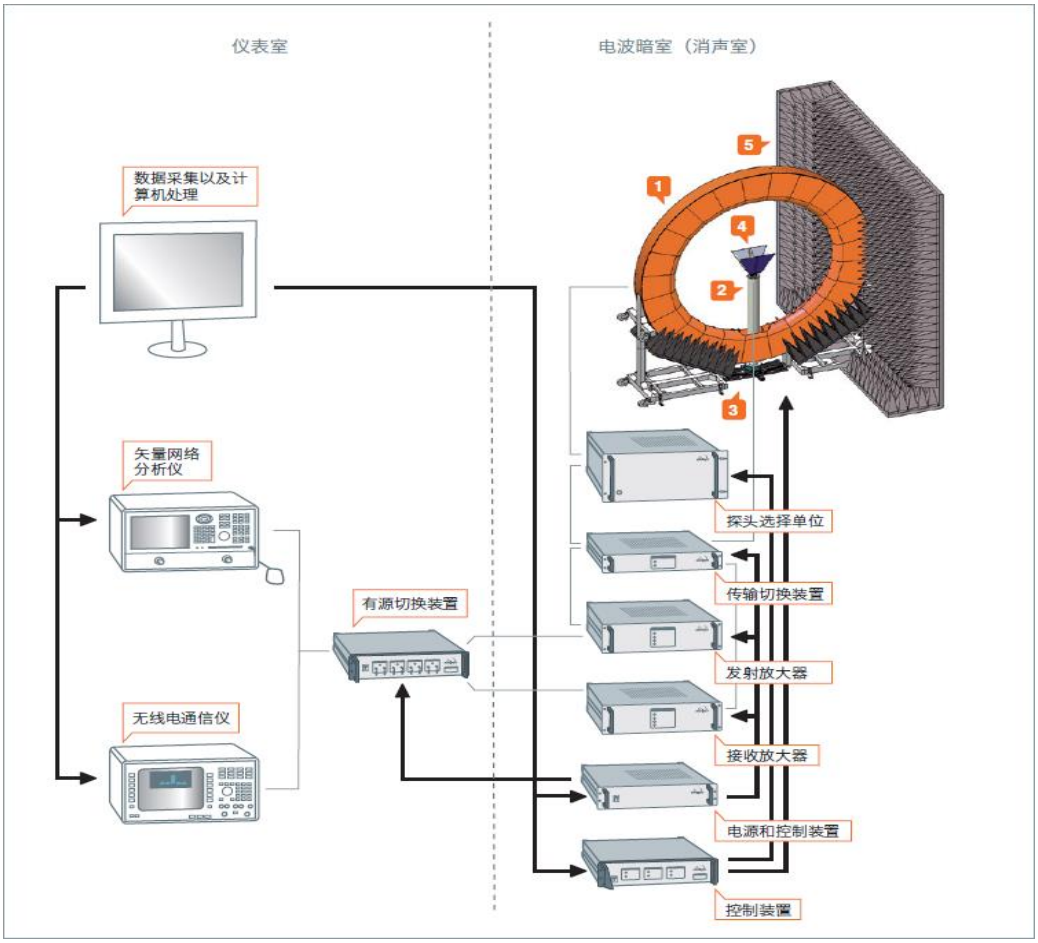
Revision #	Revision Details	Issued Date
Rev. 00	First Issue	2024.6.26

3. Test & System Description

3.1 Measurement Method and System

This test report is prepared for host antenna testing under a Full Anechoic Chamber.

3.2 Test setup



3.3 Equipment list

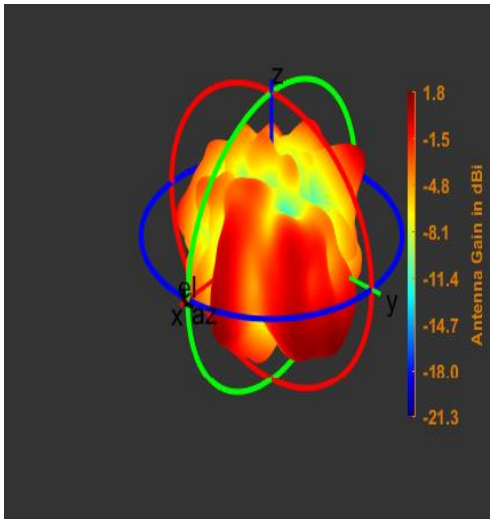
Number	Devic	Manufacter	Cal.Date	Cal.Due.Date
1	Chamber	SATIMO	2023/10/28	2024/10/27
2	Hron Antenna	EM-Pro	2023/10/28	2024/10/27
3	Notwork Analyzer	Keysight	2024/3/12	2025/3/11
4	TX/RX Amplifier	EM-Pro	2023/10/28	2024/10/27
5	Probe Switcher	EM-Pro	2023/10/28	2024/10/27
6	Turntable Controller	EM-Pro	2023/10/28	2024/10/27
7	UPS	SANTAK	NA	NA
8	Test System Host	SATIMO	NA	NA

4. Radiation characteristics of antenna loaded in Host Platform

Main Antenna

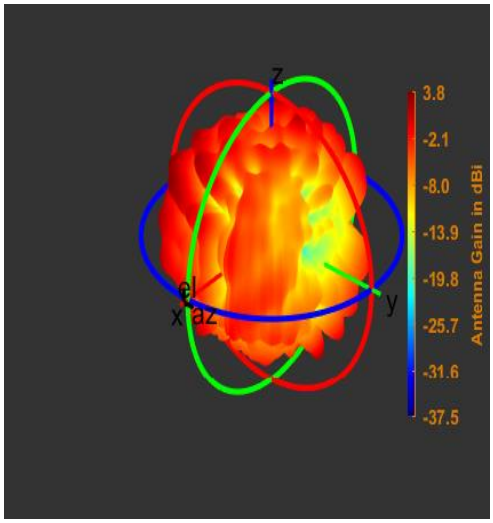
Max Antenna 3D Radiation Pattern 2400 – 2483.5 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
2400-2483.5	1.79



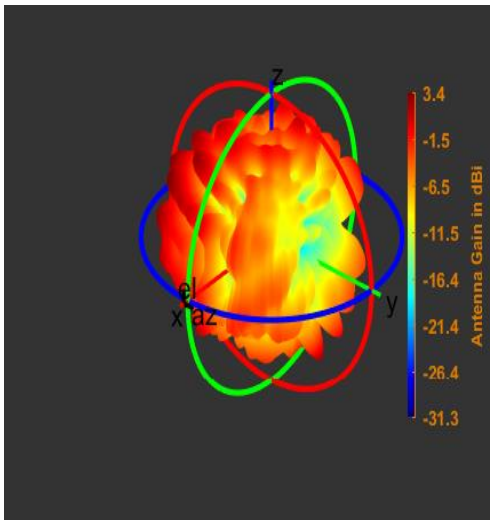
Max Antenna 3D Radiation Pattern 5150-5250 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5150-5250	2.34



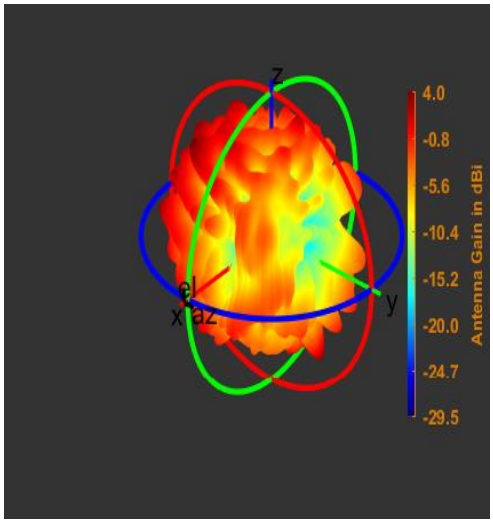
Max Antenna 3D Radiation Pattern 5250-5350 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5250-5350	1.79



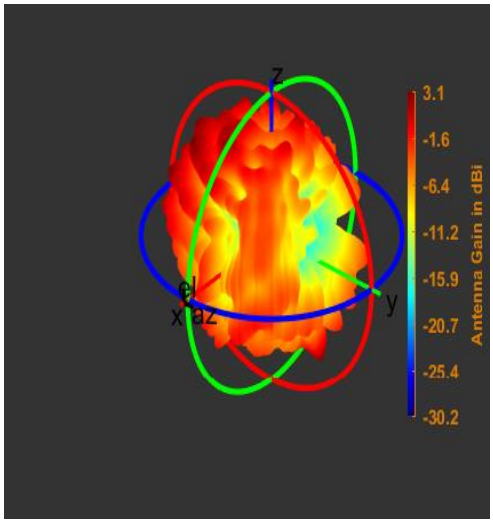
Max Antenna 3D Radiation Pattern 5470-5725 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5470-5725	1.99



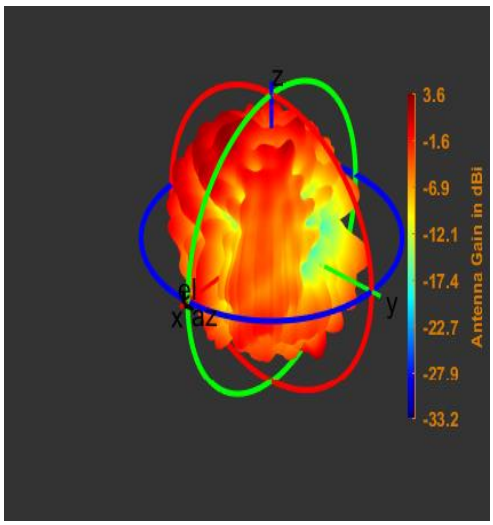
Max Antenna 3D Radiation Pattern 5725-5850 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5725-5850	1.44



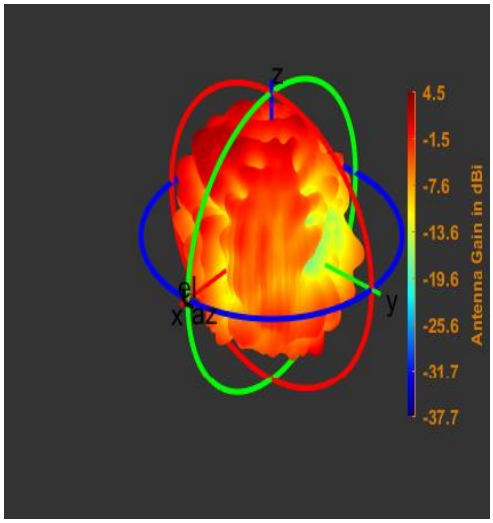
Max Antenna 3D Radiation Pattern 5850-5895 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5850-5895	1.66



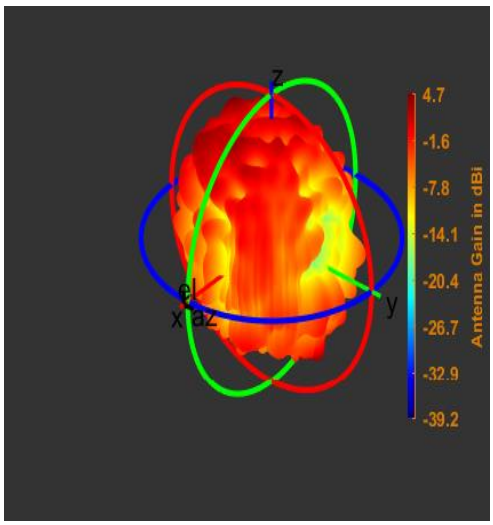
Max Antenna 3D Radiation Pattern 5925-6425 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5925-6425	2.49



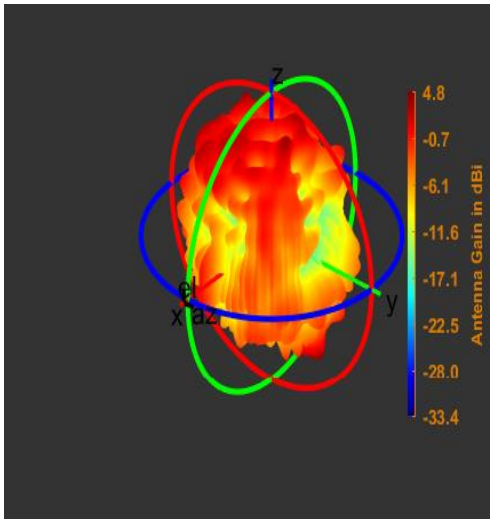
Max Antenna 3D Radiation Pattern 6425-6525 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6425-6525	2.70



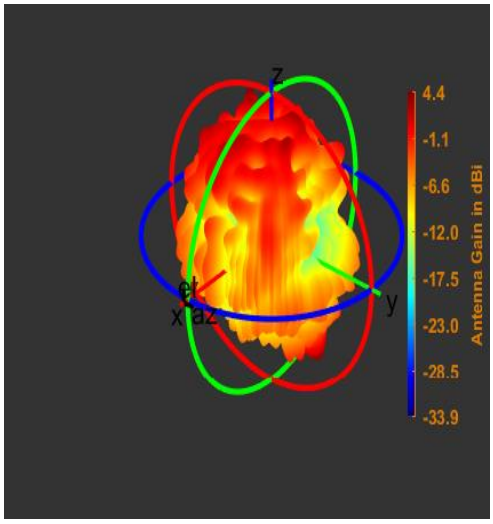
Max Antenna 3D Radiation Pattern 6525-6875 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6525-6875	2.55



Max Antenna 3D Radiation Pattern 6875-7125 MHz

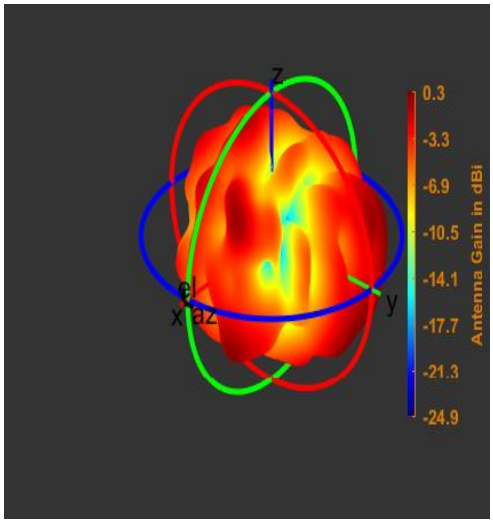
Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6875-7125	2.63



Auxiliary Antenna

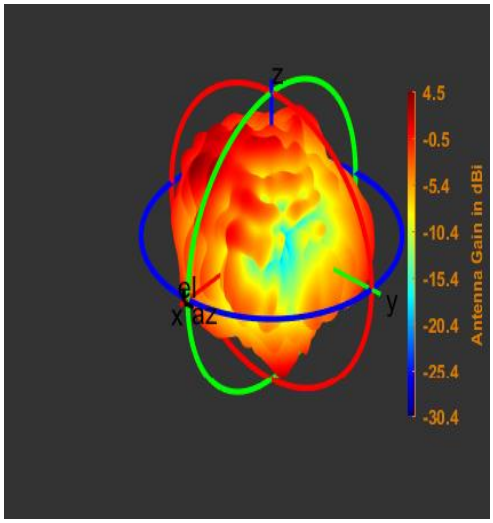
Max Antenna 3D Radiation Pattern 2400 – 2483.5 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
2400-2483.5	1.35



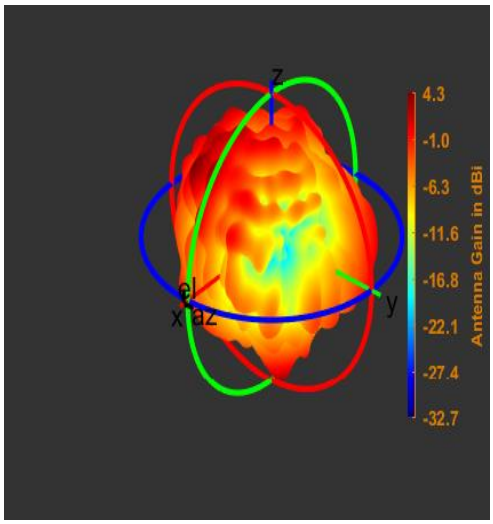
Max Antenna 3D Radiation Pattern 5150-5250 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5150-5250	2.29



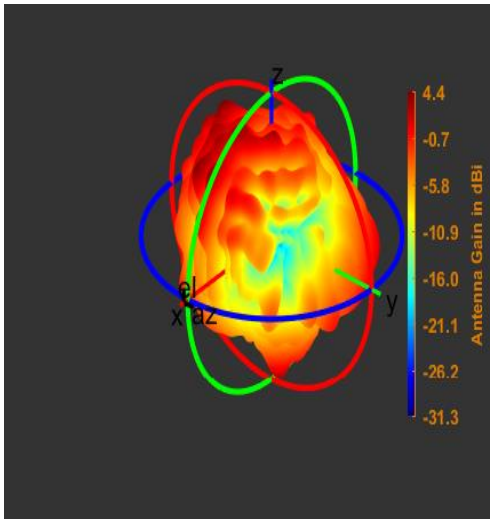
Max Antenna 3D Radiation Pattern 5250-5350 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5250-5350	2.46



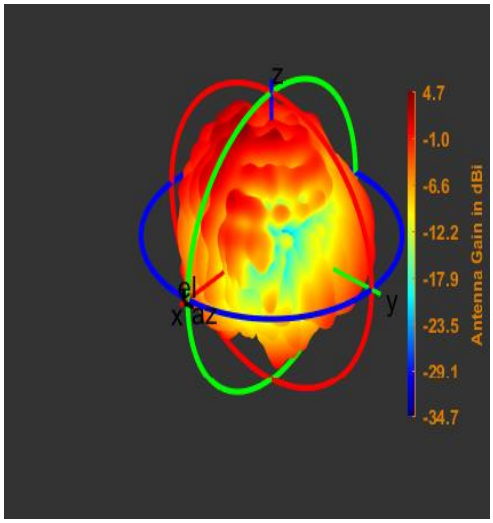
Max Antenna 3D Radiation Pattern 5470-5725 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5470-5725	2.41



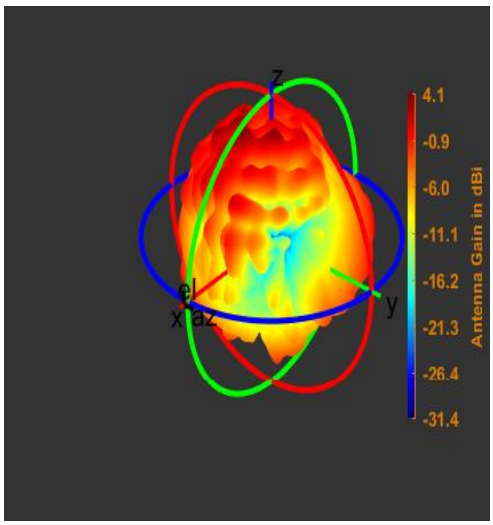
Max Antenna 3D Radiation Pattern 5725-5850 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5725-5850	2.00



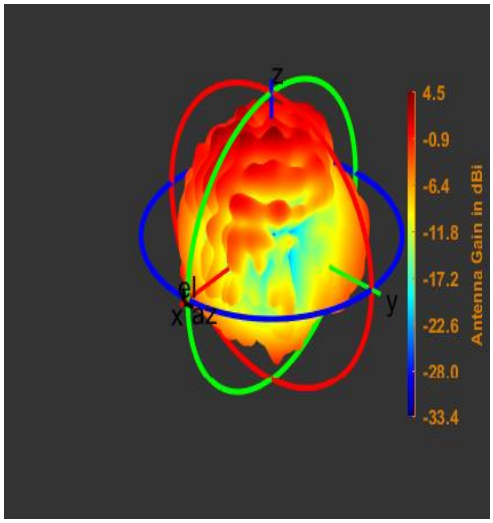
Max Antenna 3D Radiation Pattern 5850-5895 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5850-5895	1.89



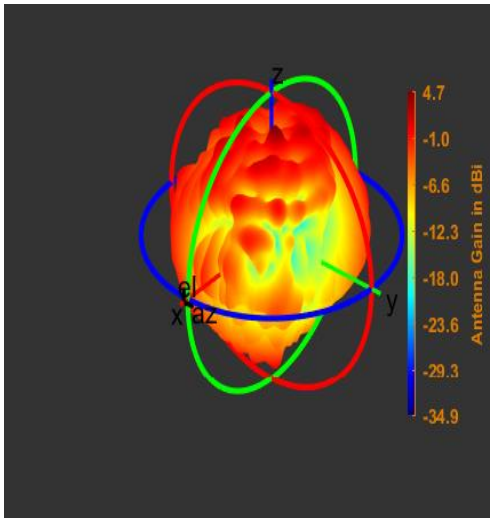
Max Antenna 3D Radiation Pattern 5925-6425 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5925-6425	2.89



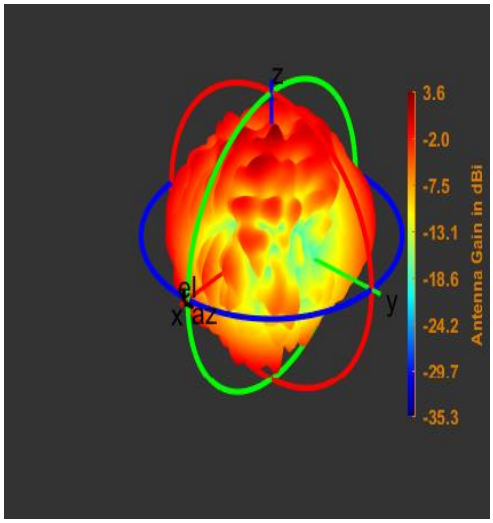
Max Antenna 3D Radiation Pattern 6425-6525 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6425-6525	2.41



Max Antenna 3D Radiation Pattern 6525-6875 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6525-6875	1.93



Max Antenna 3D Radiation Pattern 6875-7125 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6875-7125	1.41