

ANTENNA INFORMATION

Antenna manufacturer	Company name	ADVANCED WIRELESS & ANTENNA INC. (AWAN)
	Address	5F., No. 225, Sec. 3, Beixin Rd., Xindian Dist., New Taipei City 231 , Taiwan
Test location	Company name	SGS, Taiwan
	Address	No.2, Keji 1st Rd., Guishan District, Taoyuan City, 33383, Taiwan.
Test Personnel	Name(Full name)	George Cho
	E-mail	george_cho@pegatroncorp.com
	Tel/Mobile	+886-937736900
Testing date		2025/12/09

Antenna Part number	Main	1415-0BHQ0QS
	Aux	1415-0BHQ0QS
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	3.73	5.97	7.11	7.33	7.41	7.53	7.53	7.32	7.32	7.64
Aux	4.10	6.48	6.23	6.68	6.86	6.85	7.44	7.15	7.15	7.57

Cable Assembly Part Number and Information					
	Cable PN	Cable length(mm)	Cable diameter(mm)	Impedance(ohm)	Connector type
Main	SY113L/50-001	145	1.13	50 ohm	I-PEX MHF4-L (20565-001R-13)
Aux	SY113L/50-001	149	1.13	50 ohm	I-PEX MHF4-L (20565-001R-13)

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

Antenna manufacturer	Company name	Shanghai Amphenol Airwave Communication Electronics Co., Ltd
	Address	No.689 Shen Nan Road, Xin Zhuang Industry Park, Shanghai, PR China 201108
Test location	Company name	SGS, Taiwan
	Address	No.2, Keji 1st Rd., Guishan District, Taoyuan City, 33383, Taiwan.
Test Personnel	Name(Full name)	George Cho
	E-mail	george_cho@pegatroncorp.com
	Tel/Mobile	+886-937736900
Testing date		2025/12/09

Antenna Part number	Main	1415-0BHP0QS
	Aux	1415-0BHP0QS
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	3.55	5.84	6.97	7.27	7.31	7.39	7.38	7.14	7.27	7.30
Aux	4.10	6.46	6.11	6.42	6.29	6.75	7.42	6.92	7.16	7.35

Cable Assembly Part Number and Information					
	Cable PN	Cable length(mm)	Cable diameter(mm)	Impedance(ohm)	Connector type
Main	SY113L/50-001	145	1.13	50 ohm	I-PEX MHF4-L (20565-001R-13)
Aux	SY113L/50-001	149	1.13	50 ohm	I-PEX MHF4-L (20565-001R-13)

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

Table of Contents

Cover page..... 1

1. Document Revision History..... 4

2. Test & System Description

2.1 Measurement Method and System..... 5

2.2 Test setup..... 5

2.3 Equipment list..... 5

3. Radiation characteristics of antenna loaded in Host Platform..... 6

Annex A. Photographs

A.1 Setup Photo..... 26

A.2 Test sample..... 27

Annex B. Antenna Location

B.1 Antenna Host Platform Location Information.....29

B.2 Antenna dimensional information for SAR evaluation..... 30

1. Document Revision History

Revision #	Revision Details	Issued Date
Rev. 00	First Release	

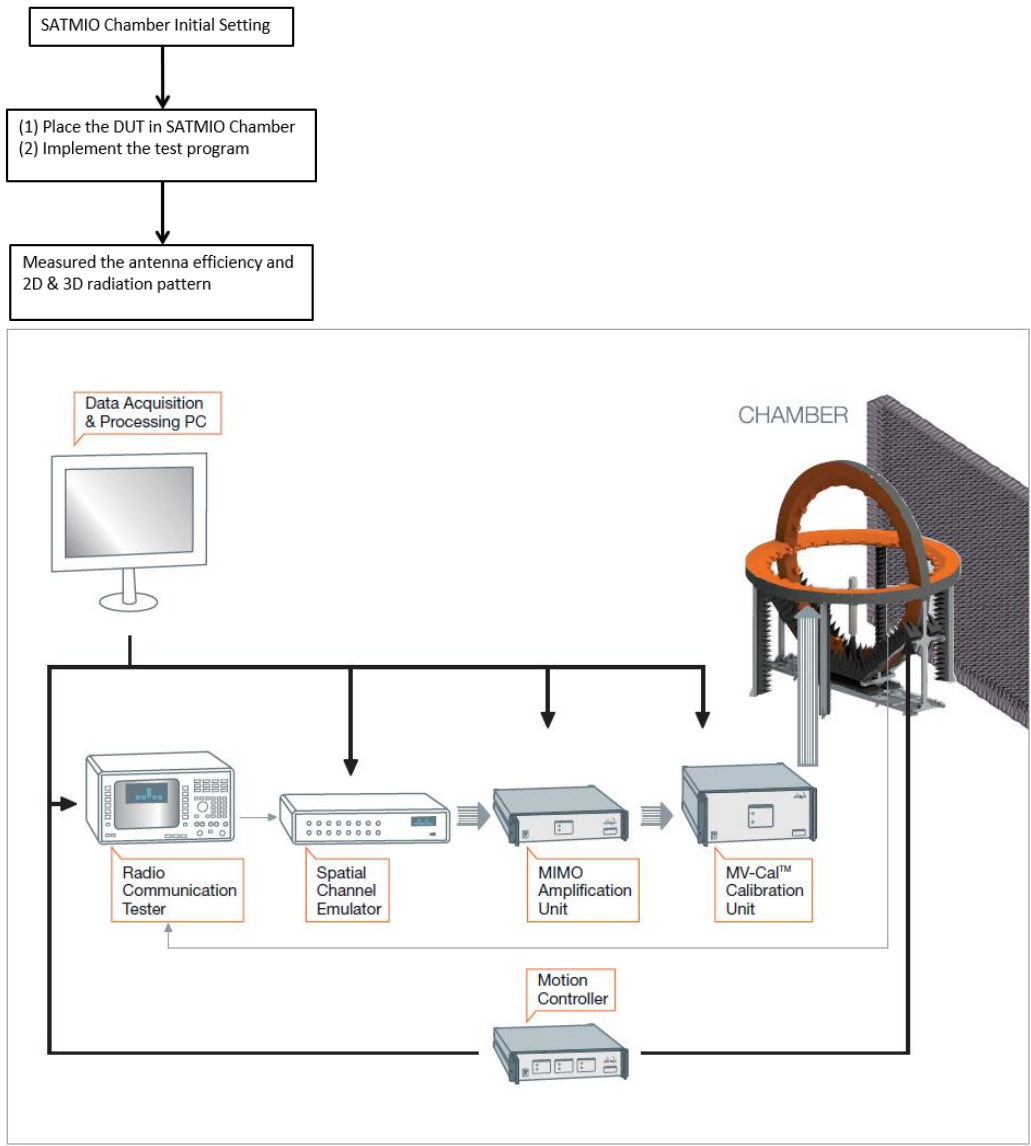
2. Test & System Description

2.1 Measurement Method and System

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

2.2 Test setup

Diagram



2.3 Equipment list

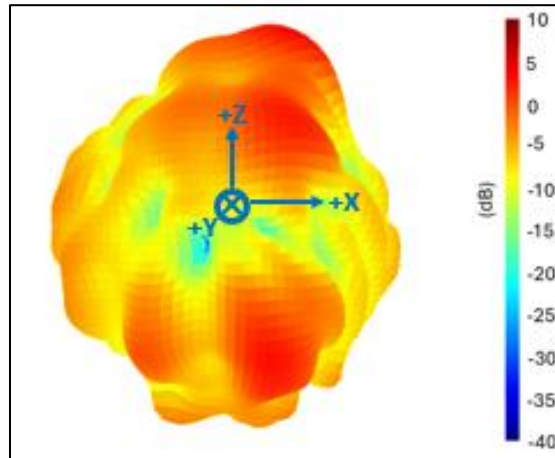
	Device	Model	Manufacturer	Cal. Date	Cal. Due Date
1	SATIMO Chamber	MVG	StarMIMO	2025/8/4	2026/8/3
2	Network Analyzer	Keysight	E5071C	2025/8/4	2026/8/3

3. Radiation characteristics of antenna loaded in Host Platform

AWAN Main Antenna

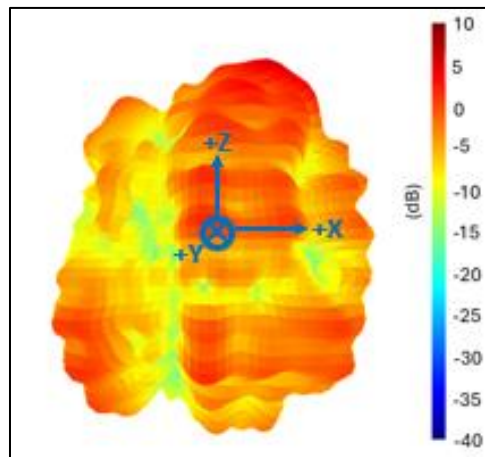
Max Antenna 3D Radiation Pattern 2400 – 2483.5 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
2400-2483.5	3.73



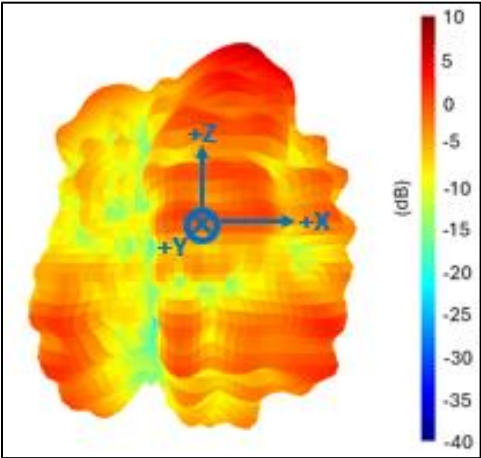
Max Antenna 3D Radiation Pattern 5150-5250 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5150-5250	5.97



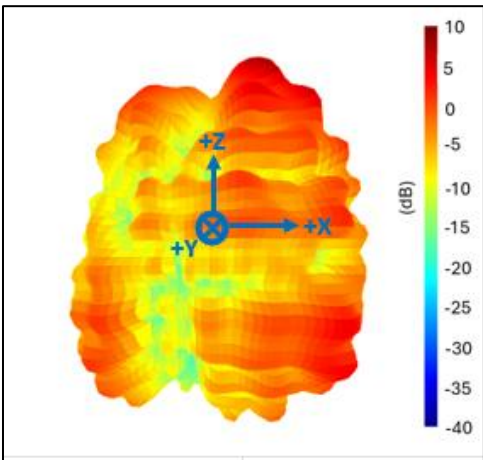
Max Antenna 3D Radiation Pattern 5250-5350 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5250-5350	7.11



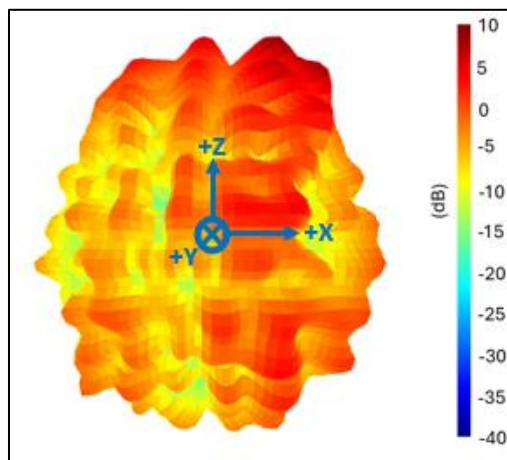
Max Antenna 3D Radiation Pattern 5470-5725 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5470-5725	7.33



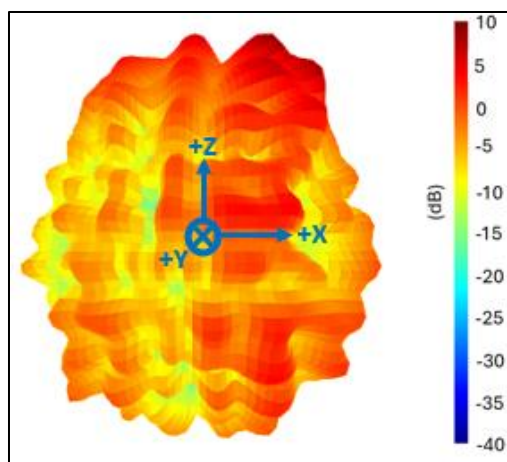
Max Antenna 3D Radiation Pattern 5725-5850 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5725-5850	7.41



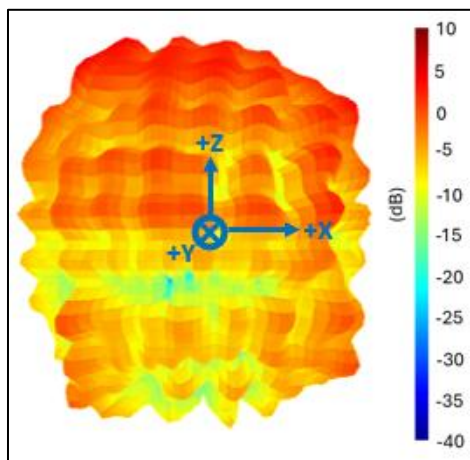
Max Antenna 3D Radiation Pattern 5850-5895 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5850-5895	7.53



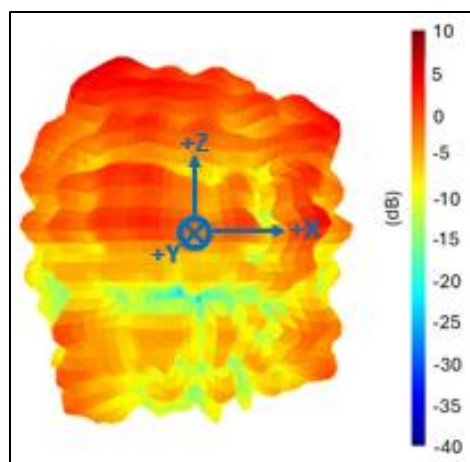
Max Antenna 3D Radiation Pattern 5925-6425 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5925-6425	7.53



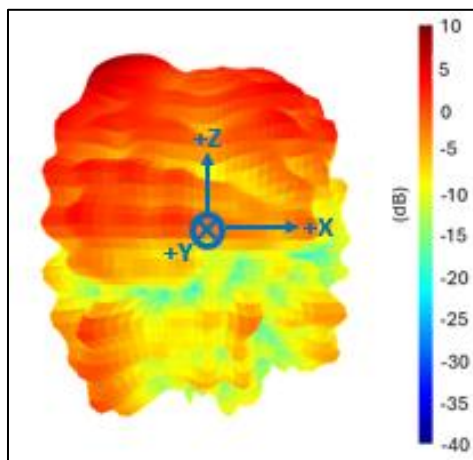
Max Antenna 3D Radiation Pattern 6425-6525 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6425-6525	7.32



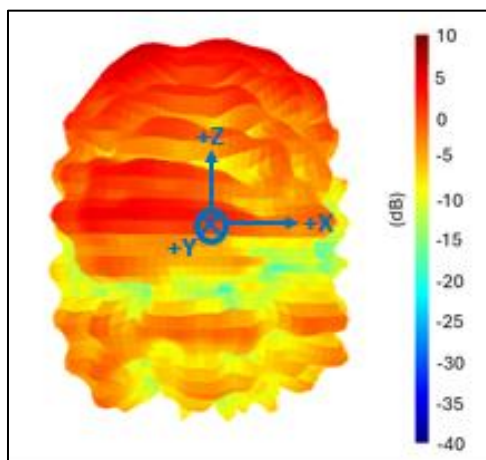
Max Antenna 3D Radiation Pattern 6525-6875 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6525-6875	7.32



Max Antenna 3D Radiation Pattern 6875-7125 MHz

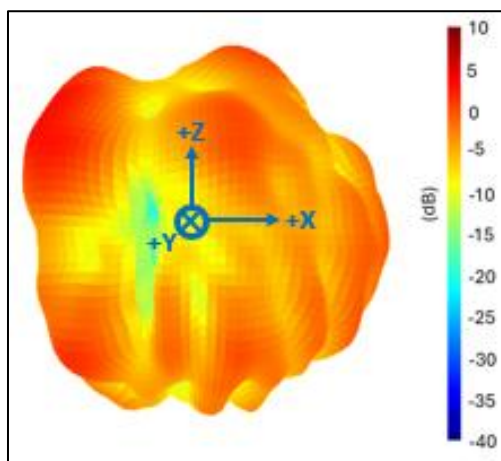
Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6875-7125	7.64



AWAN Auxiliary Antenna

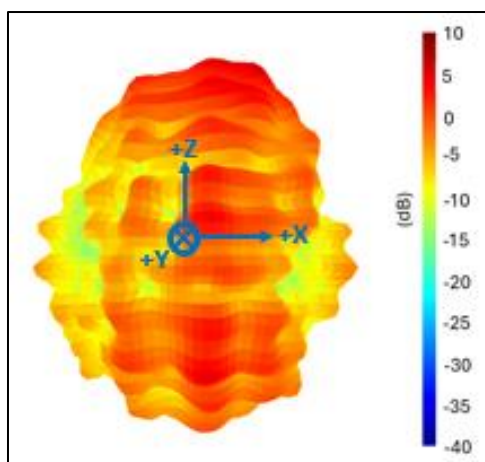
Max Antenna 3D Radiation Pattern 2400 – 2483.5 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
2400-2483.5	4.10



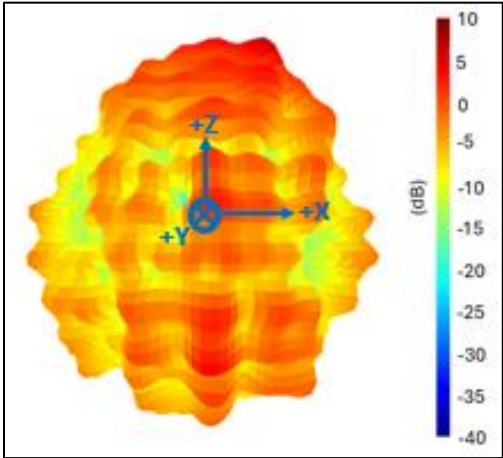
Max Antenna 3D Radiation Pattern 5150-5250 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5150-5250	6.48



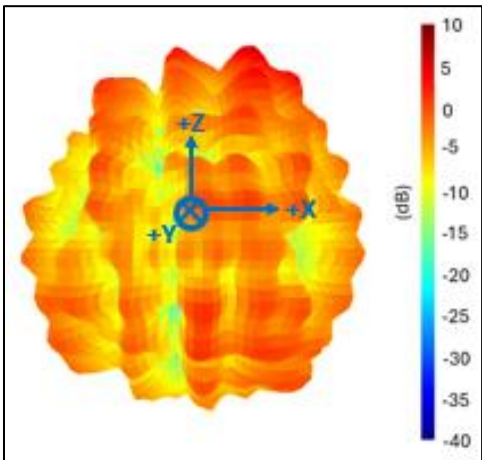
Max Antenna 3D Radiation Pattern 5250-5350 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5250-5350	6.23



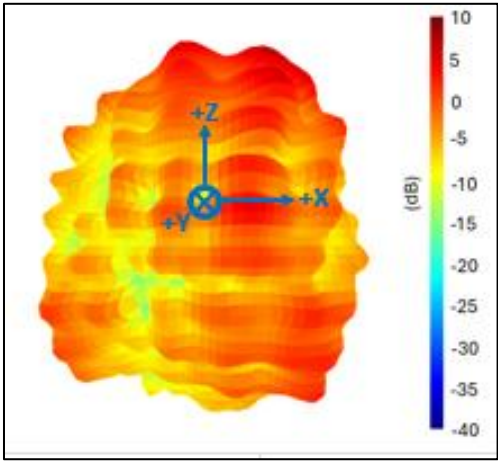
Max Antenna 3D Radiation Pattern 5470-5725 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5470-5725	6.68



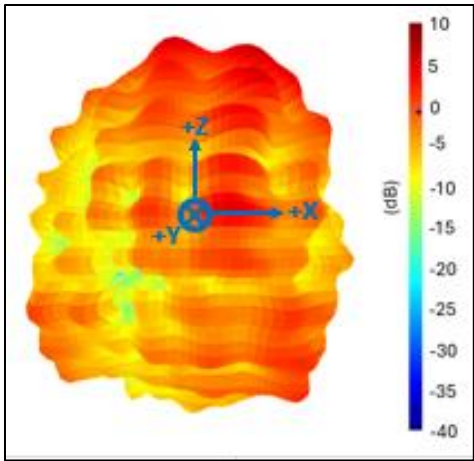
Max Antenna 3D Radiation Pattern 5725-5850 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5725-5850	6.86



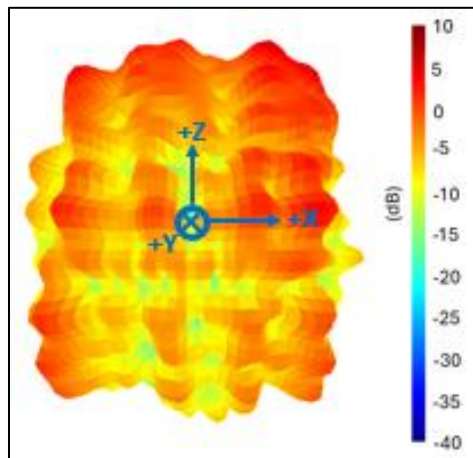
Max Antenna 3D Radiation Pattern 5850-5895 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5850-5895	6.85



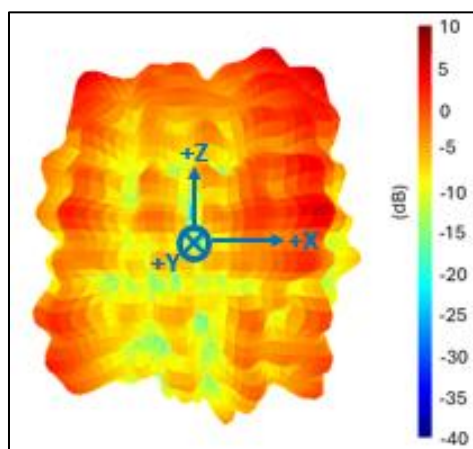
Max Antenna 3D Radiation Pattern 5925-6425 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5925-6425	7.44



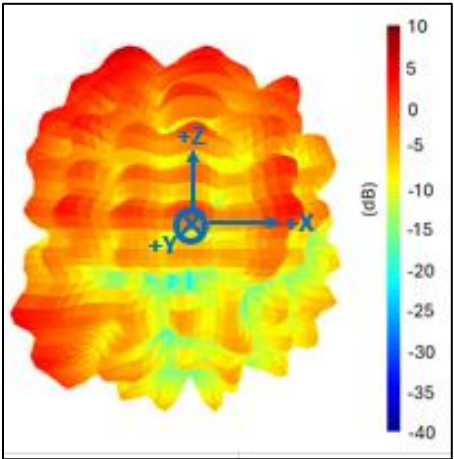
Max Antenna 3D Radiation Pattern 6425-6525 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6425-6525	7.15



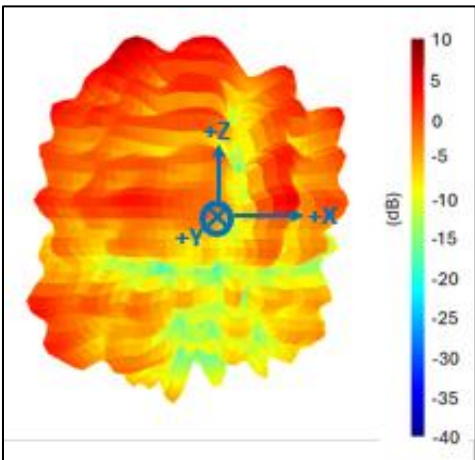
Max Antenna 3D Radiation Pattern 6525-6875 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6525-6875	7.15



Max Antenna 3D Radiation Pattern 6875-7125 MHz

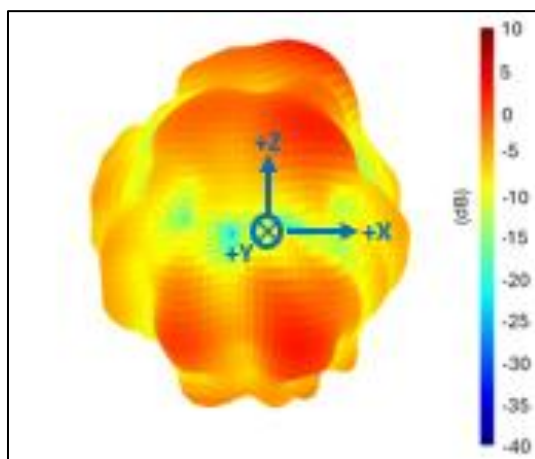
Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6875-7125	7.57



Amphenol Main Antenna

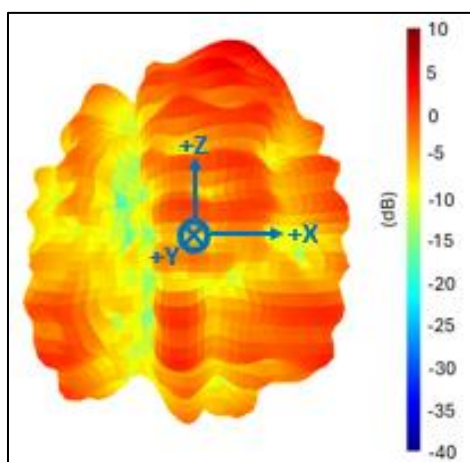
Max Antenna 3D Radiation Pattern 2400 – 2483.5 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
2400-2483.5	3.55



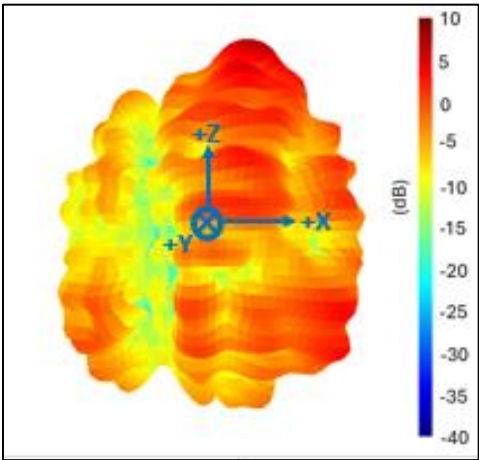
Max Antenna 3D Radiation Pattern 5150-5250 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5150-5250	5.84



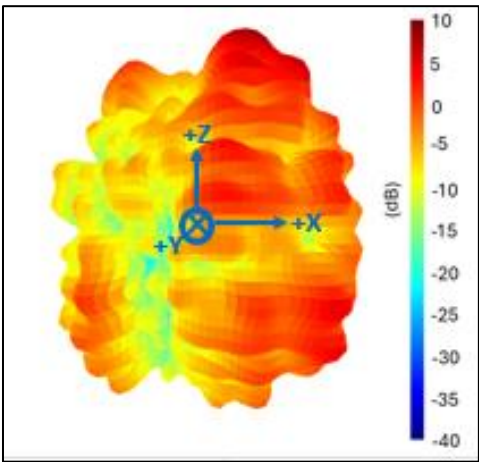
Max Antenna 3D Radiation Pattern 5250-5350 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5250-5350	6.97



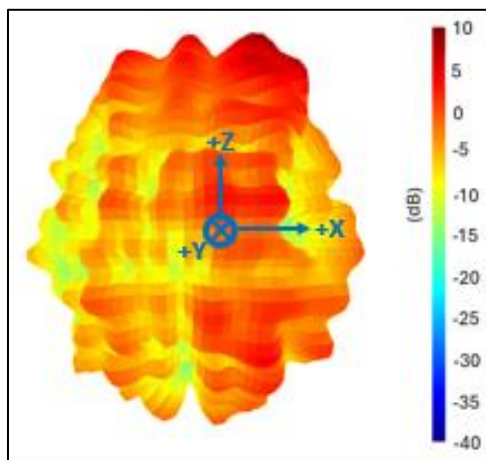
Max Antenna 3D Radiation Pattern 5470-5725 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5470-5725	7.27



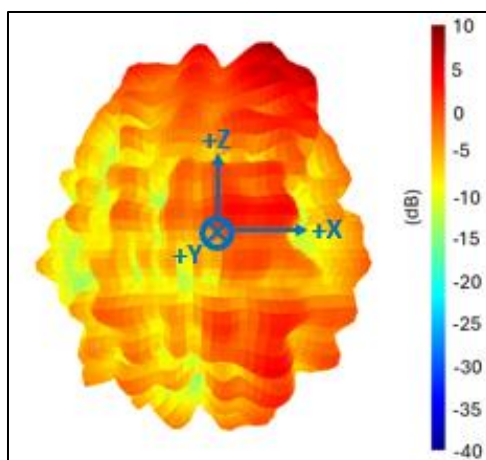
Max Antenna 3D Radiation Pattern 5725-5850 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5725-5850	7.31



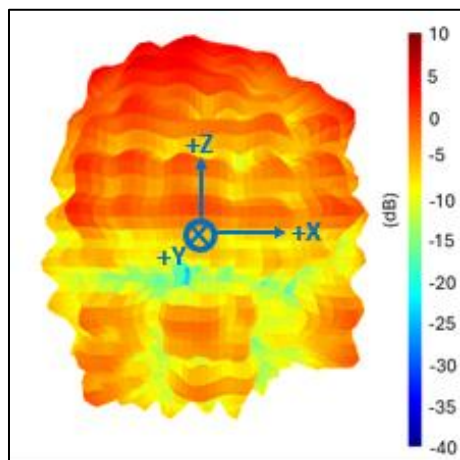
Max Antenna 3D Radiation Pattern 5850-5895 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5850-5895	7.39



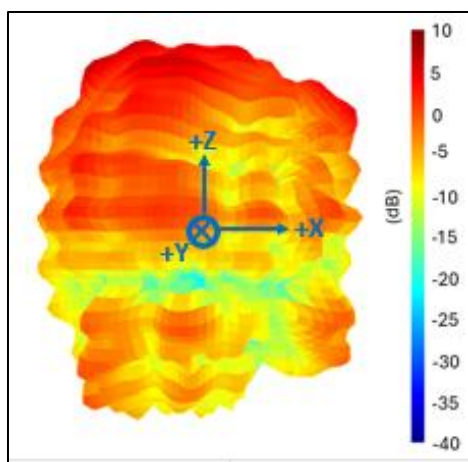
Max Antenna 3D Radiation Pattern 5925-6425 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5925-6425	7.38



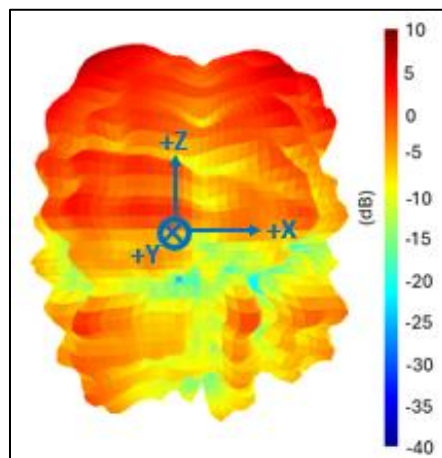
Max Antenna 3D Radiation Pattern 6425-6525 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6425-6525	7.14



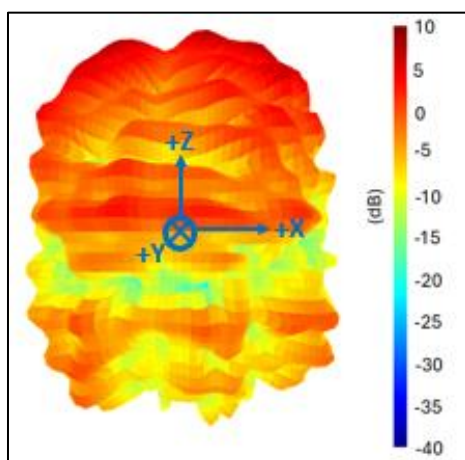
Max Antenna 3D Radiation Pattern 6525-6875 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6525-6875	7.27



Max Antenna 3D Radiation Pattern 6875-7125 MHz

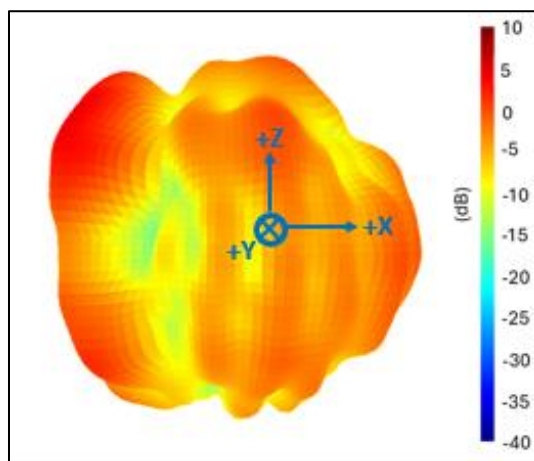
Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6875-7125	7.30



Amphenol Auxiliary Antenna

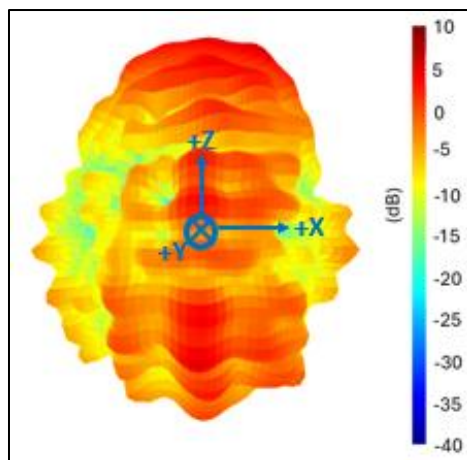
Max Antenna 3D Radiation Pattern 2400 – 2483.5 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
2400-2483.5	4.10



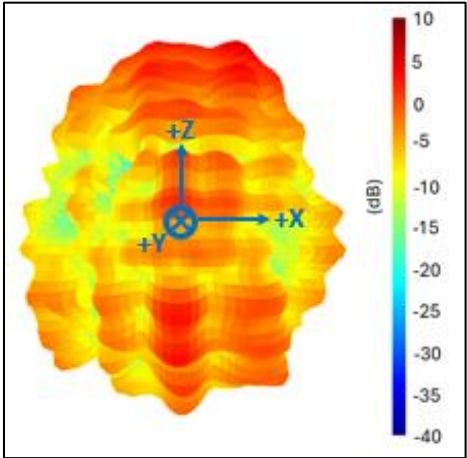
Max Antenna 3D Radiation Pattern 5150-5250 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5150-5250	6.46



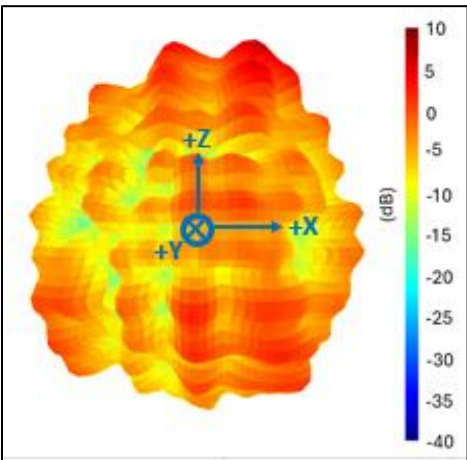
Max Antenna 3D Radiation Pattern 5250-5350 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5250-5350	6.11



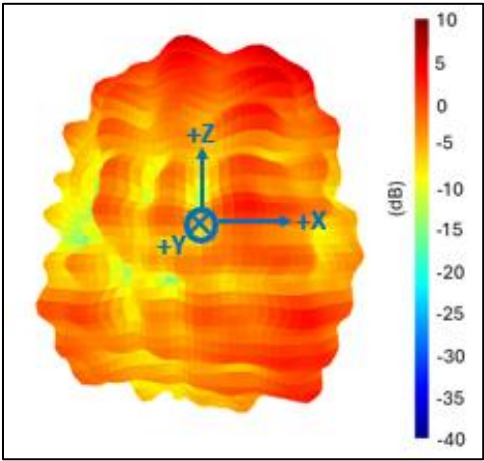
Max Antenna 3D Radiation Pattern 5470-5725 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5470-5725	6.42



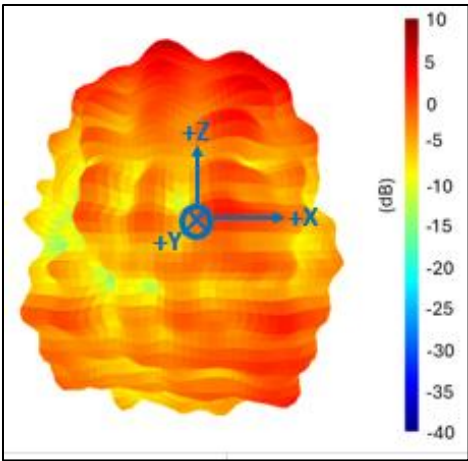
Max Antenna 3D Radiation Pattern 5725-5850 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5725-5850	6.29



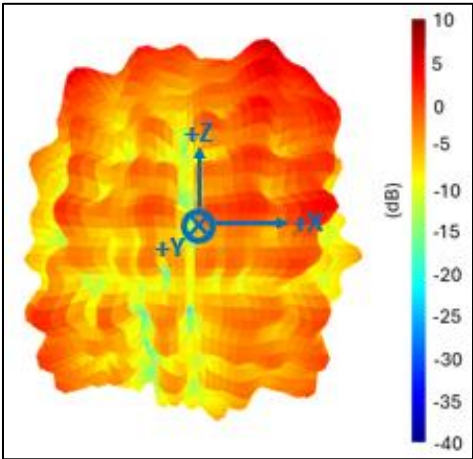
Max Antenna 3D Radiation Pattern 5850-5895 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5850-5895	6.75



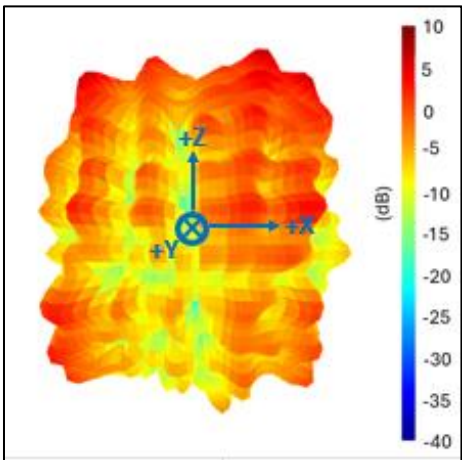
Max Antenna 3D Radiation Pattern 5925-6425 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5925-6425	7.42



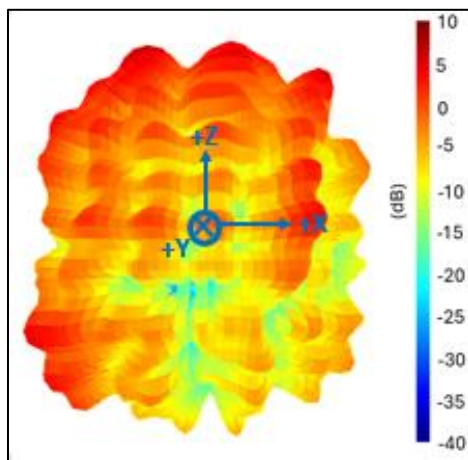
Max Antenna 3D Radiation Pattern 6425-6525 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6425-6525	6.92



Max Antenna 3D Radiation Pattern 6525-6875 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6525-6875	7.16



Max Antenna 3D Radiation Pattern 6875-7125 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6875-7125	7.35

