

ANTENNA INFORMATION

OEM	Lenovo		
ODM	Compal Electronics Inc.		
Platform model name	IdeaCentre AIO 24IWC11 ThinkCentre neo 50a 24 Gen 7 IdeaCentre AIO 27IWC11 ThinkCentre neo 50a 27 Gen 7		
Intel platform (ex: Yes, No or NA)	Yes		
Platform type (ex: regular NB, convertible PC, AIO...etc)	AIO		
SAR minimum separation (mm)	FCC (1g)	over 200 mm (w/bumper)	
	ISED (1g)	over 200 mm (w/o bumper)	
	ISED (10g)	over 200 mm (w/bumper) over 200 mm (w/o bumper) over 200 mm	

Antenna manufacturer	Company name	High-Tek Electronics Co., Ltd
	Address	17F., No.100, Sec. 1, Xintai 5th Rd., Xizhi Dist., New Taipei City
Test location	Company name	High-Tek Electronics Co., Ltd
	Address	17F., No.100, Sec. 1, Xintai 5th Rd., Xizhi Dist., New Taipei City
Test Personnel	Name(Full name)	Lawren Liao
	E-mail	lawren_liao@hightek.com.tw
	Tel/Mobile	886-2-2696-1996 EXT:5225
Testing date	2026/3/27	

Antenna Part number	Main	0ACMYL26003N (DC330036U00)
	Aux	0ACMYL26004N (DC330036U10)
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	2.29	2.98	2.99	2.83	2.9	2.9	3.99	3.78	3.92	3.96
Aux	2.92	2.58	2.69	2.89	2.99	2.93	3.99	3.91	3.96	3.97

Cable Assembly Part Number and Information					
	Cable PN	Cable length(mm)	Cable diameter(mm)	Impedance(ohm)	Connector type
Main	XGN113/50	230	1.13	50	SpeedTech
Aux	XGN113/50	280	1.13	50	SpeedTech

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

Cable loss (dB)										
	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	0.64	0.99	0.99	1.05	1.08	1.08	1.10	1.14	1.16	1.20
Aux	0.78	1.20	1.21	1.30	1.30	1.31	1.34	1.37	1.41	1.46

Table of Contents

Cover page.....	1
1. Test & System Description	
1.1 Measurement Method and System.....	4
1.2 Test setup.....	4
1.3 Equipment list.....	5
2. Radiation characteristics of antenna loaded in Host Platform.....	6
Annex A. Photographs	
A.1 Setup Photo.....	16
A.2 Test sample.....	17
Annex B. Antenna Location	
B.1 Antenna Host Platform Location Information.....	19
B.2 Antenna dimensional information for SAR evaluation.....	20

1.3 Equipment list

The equipment for the antenna measurement we used is as follows:

- A. Network Analyzer, support up to 8GHz, to measure the VSWR and input impedance of antenna.
- B. Three-dimensional anechoic chamber to measure antenna gain and radiation pattern(Standard horn antenna was used to calibrate the chamber)
- C. Digital caliper to measure the dimensions.
- D. Climatic chamber for mechanical tests.

Radiated Setup

item	Device	Type/Model	manufacturer	Cal. Date	Cal. Due Date
1	Anechoic Chamber	AMS-8500	ETS-Lindgren	2025/06/20	2026/06/20
2	Turn Table	ETS	ETS-Lindgren	N/A	N/A
3	Measurement SW	EMQuest1.08	ETS-Lindgren	N/A	N/A
4	Vector Network Analyzer	Agilent E5071B	Agilent	2025/06/20	2026/06/20
5	Receive Antenna Absorber Nested Dual- Polarized Dual-Vivaldi Array Antenna 700MHz to 6GHz	EMCO 3164-08	ETS-Lindgren	N/A	N/A
6	Multi Axis Positioning System (MAPS™)	EMCO 2115CR	ETS-Lindgren	N/A	N/A
7	MAPS™ Controller	MECO 2090	ETS-Lindgren	N/A	N/A
8	Horn antenna	3164-08	ETS-Lindgren	2025/06/20	2026/06/20
9	Cable 0.5m - 700MHz~10GHz	RG316	Senyu	2025/06/20	2026/06/20

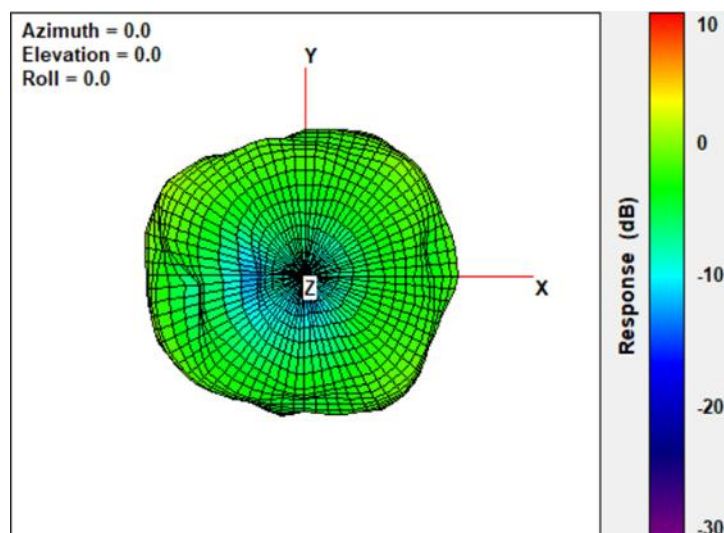
N/A : Not Applicable

2. Radiation characteristics of antenna loaded in Host Platform

Main Antenna

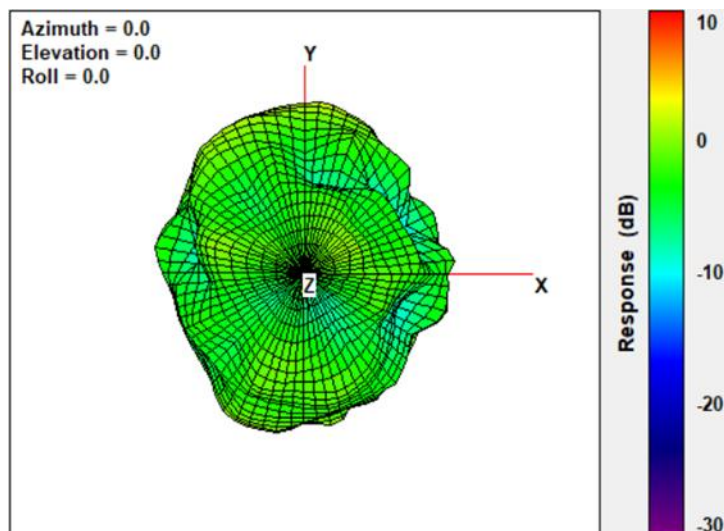
Max Antenna 3D Radiation Pattern 2400 – 2483.5 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
2400-2483.5	2.29



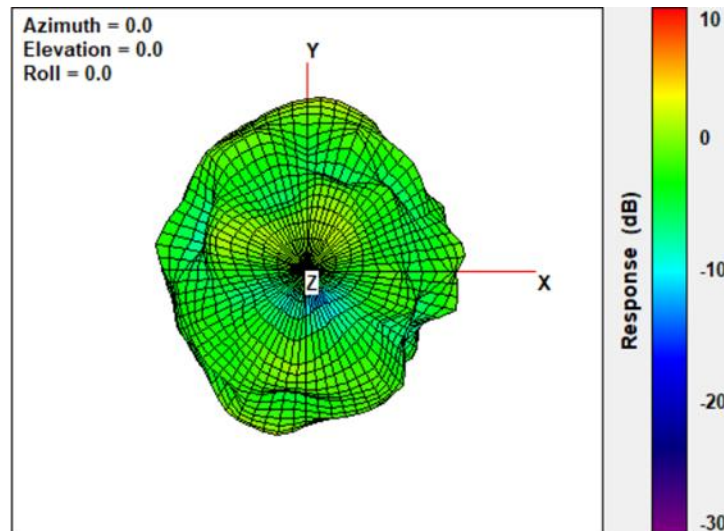
Max Antenna 3D Radiation Pattern 5150-5250 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5150-5250	2.98



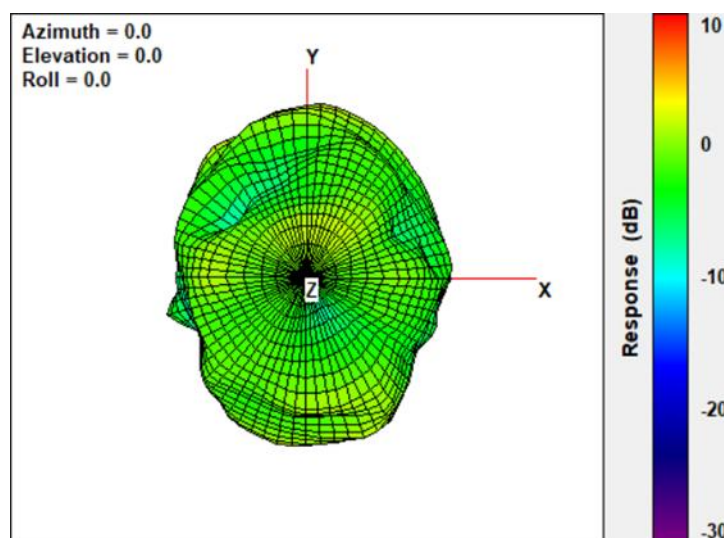
Max Antenna 3D Radiation Pattern 5250-5350 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5250-5350	2.99



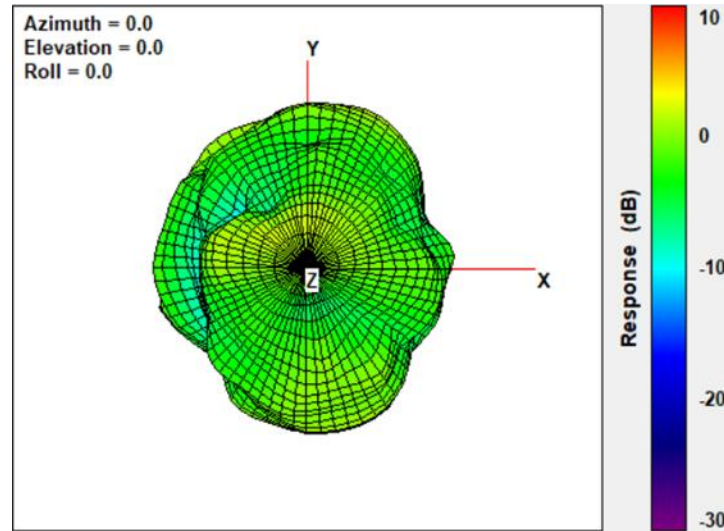
Max Antenna 3D Radiation Pattern 5470-5725 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5470-5725	2.83



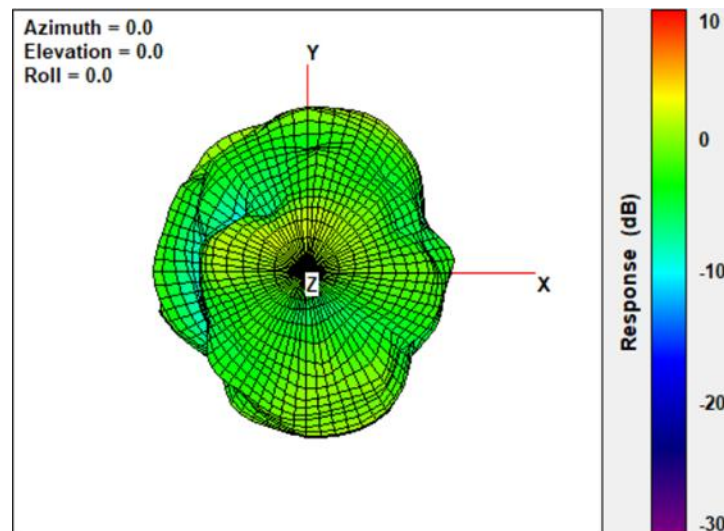
Max Antenna 3D Radiation Pattern 5725-5850 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5725-5850	2.9



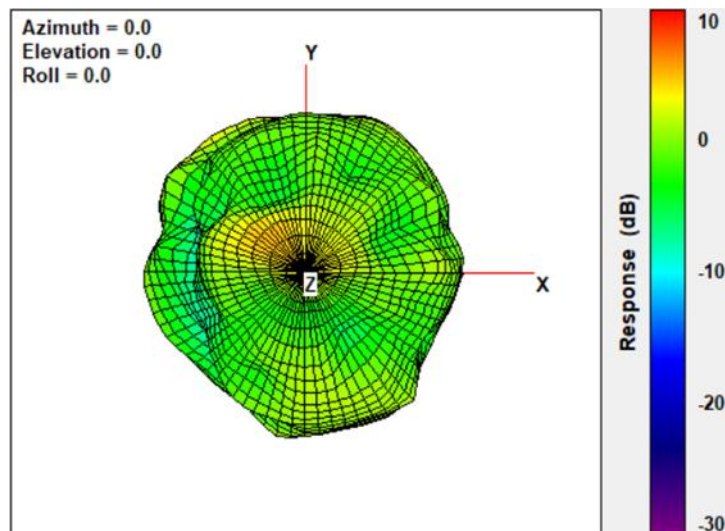
Max Antenna 3D Radiation Pattern 5850-5895 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5850-5895	2.9



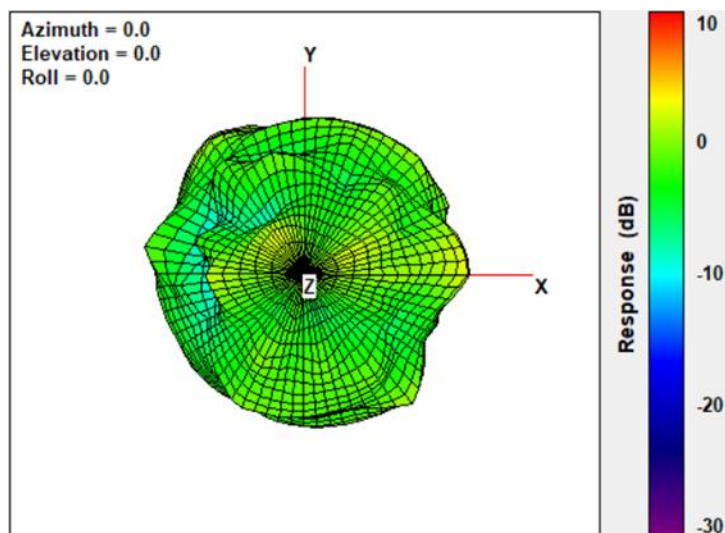
Max Antenna 3D Radiation Pattern 5925-6425 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5925-6425	3.99



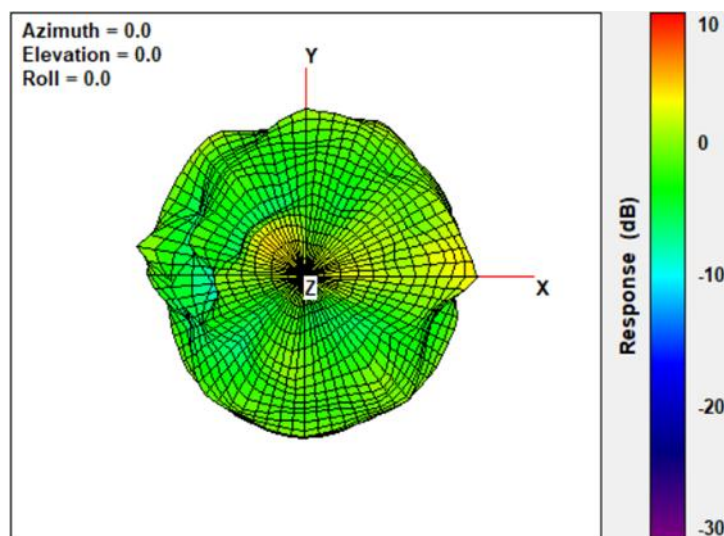
Max Antenna 3D Radiation Pattern 6425-6525 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6425-6525	3.78



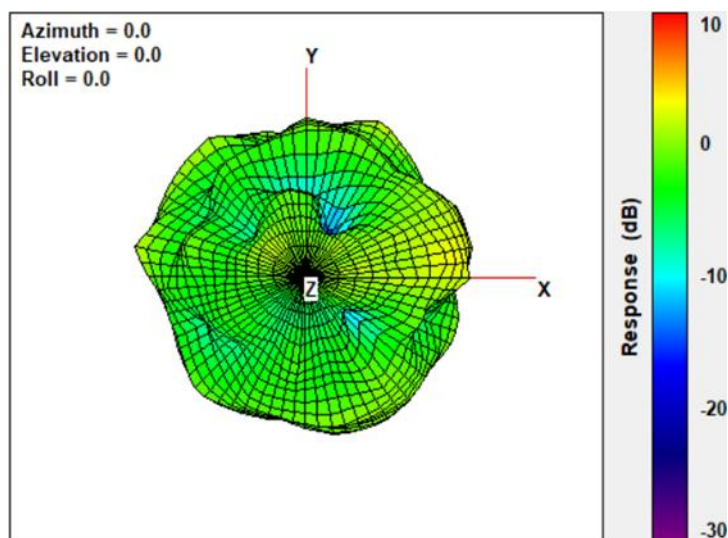
Max Antenna 3D Radiation Pattern 6525-6875 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6525-6875	3.92



Max Antenna 3D Radiation Pattern 6875-7125 MHz

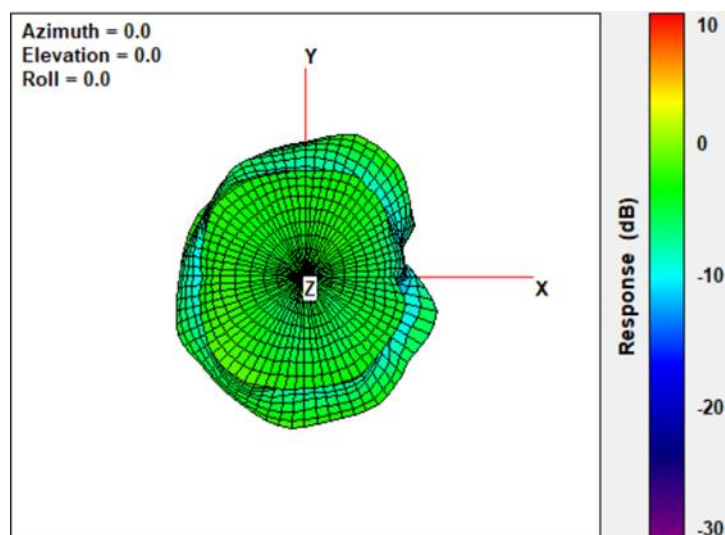
Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6875-7125	3.96



Auxiliary Antenna

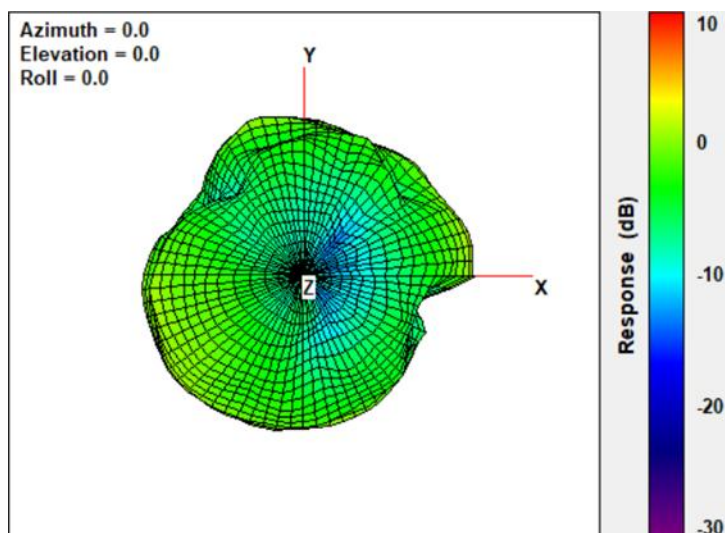
Max Antenna 3D Radiation Pattern 2400 – 2483.5 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
2400-2483.5	2.92



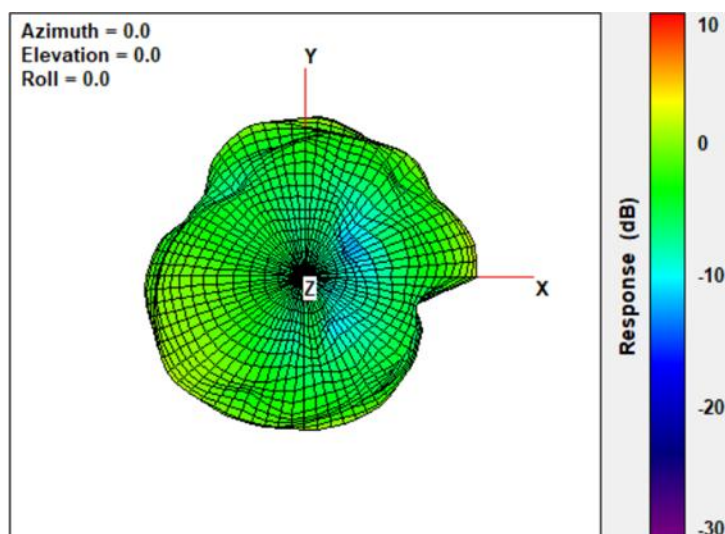
Max Antenna 3D Radiation Pattern 5150-5250 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5150-5250	2.58



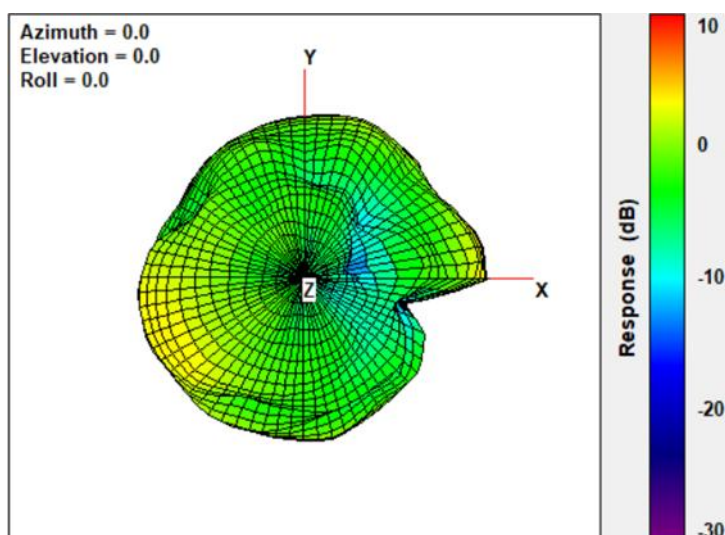
Max Antenna 3D Radiation Pattern 5250-5350 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5250-5350	2.69



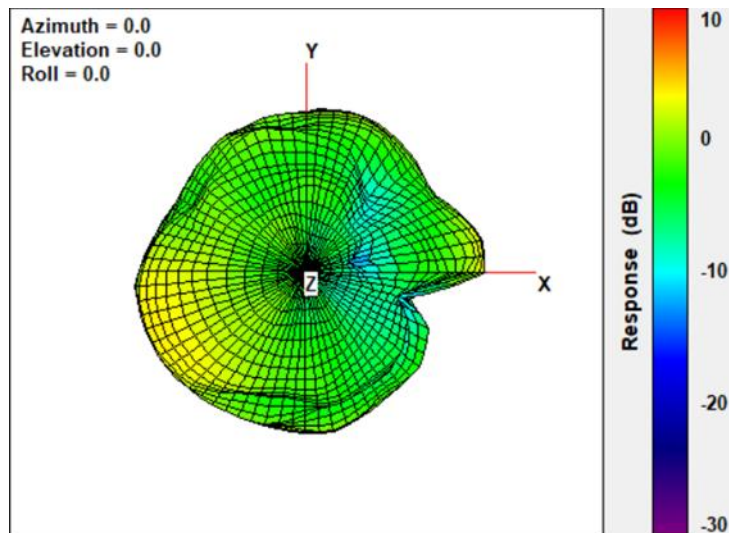
Max Antenna 3D Radiation Pattern 5470-5725 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5470-5725	2.89



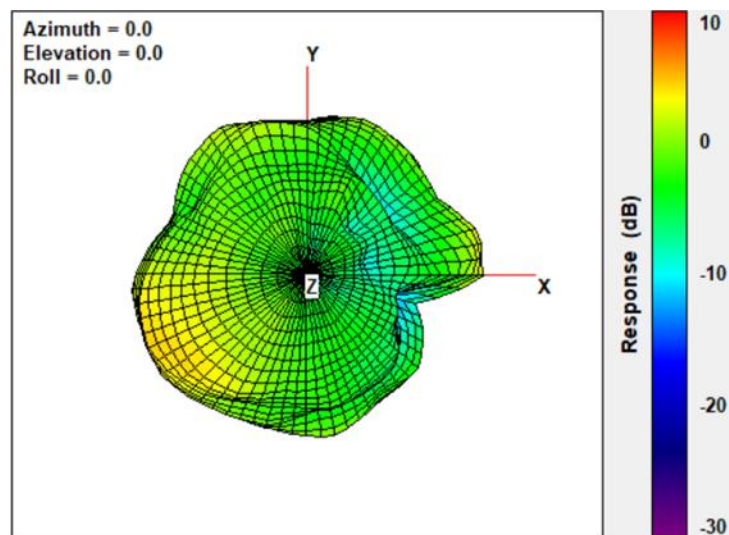
Max Antenna 3D Radiation Pattern 5725-5850 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5725-5850	2.99



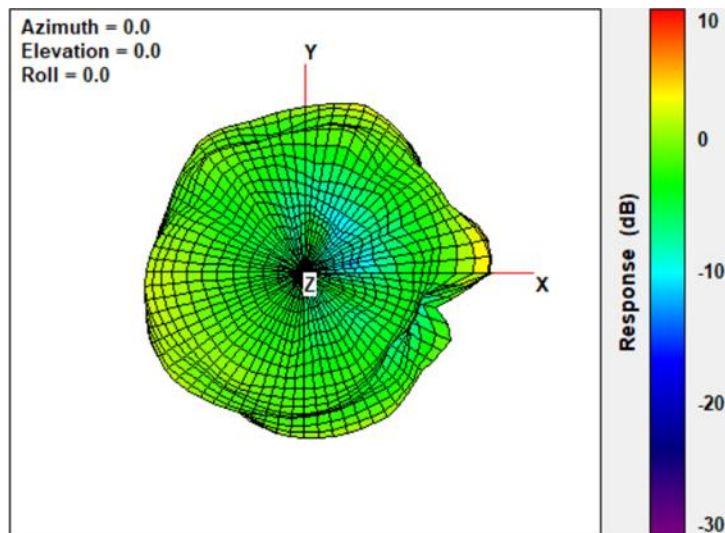
Max Antenna 3D Radiation Pattern 5850-5895 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5850-5895	2.93



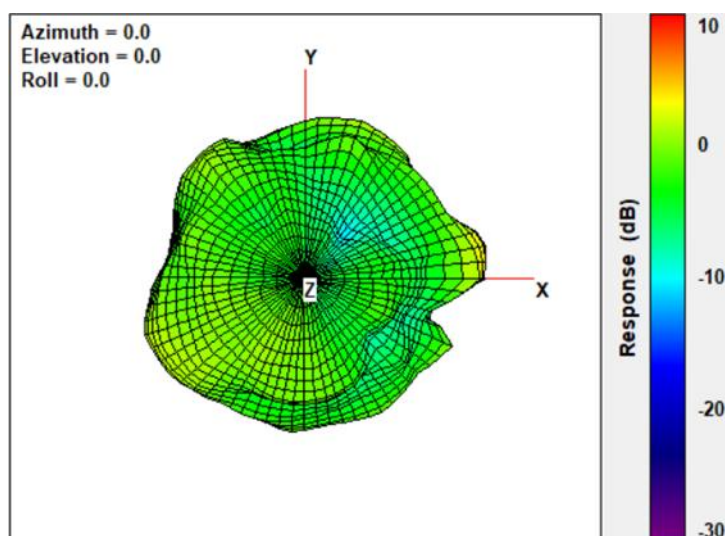
Max Antenna 3D Radiation Pattern 5925-6425 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5925-6425	3.99



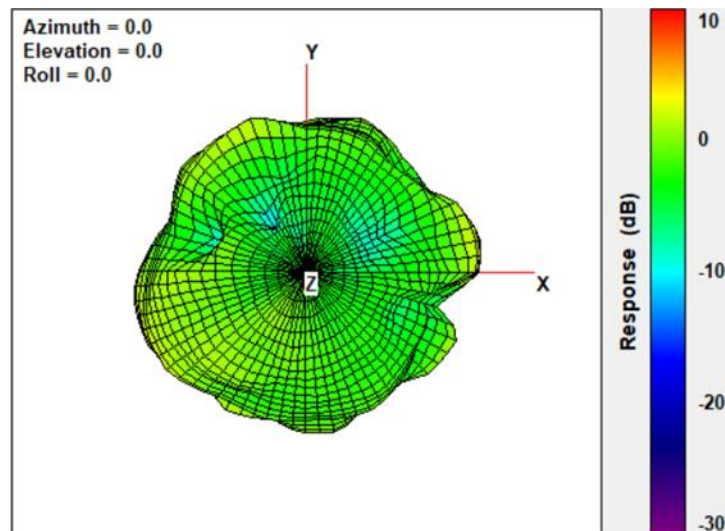
Max Antenna 3D Radiation Pattern 6425-6525 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6425-6525	3.91



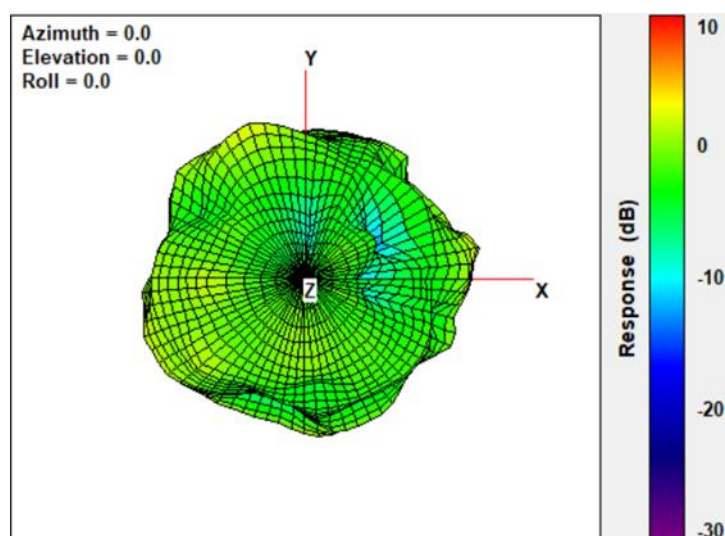
Max Antenna 3D Radiation Pattern 6525-6875 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6525-6875	3.96



Max Antenna 3D Radiation Pattern 6875-7125 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6875-7125	3.97

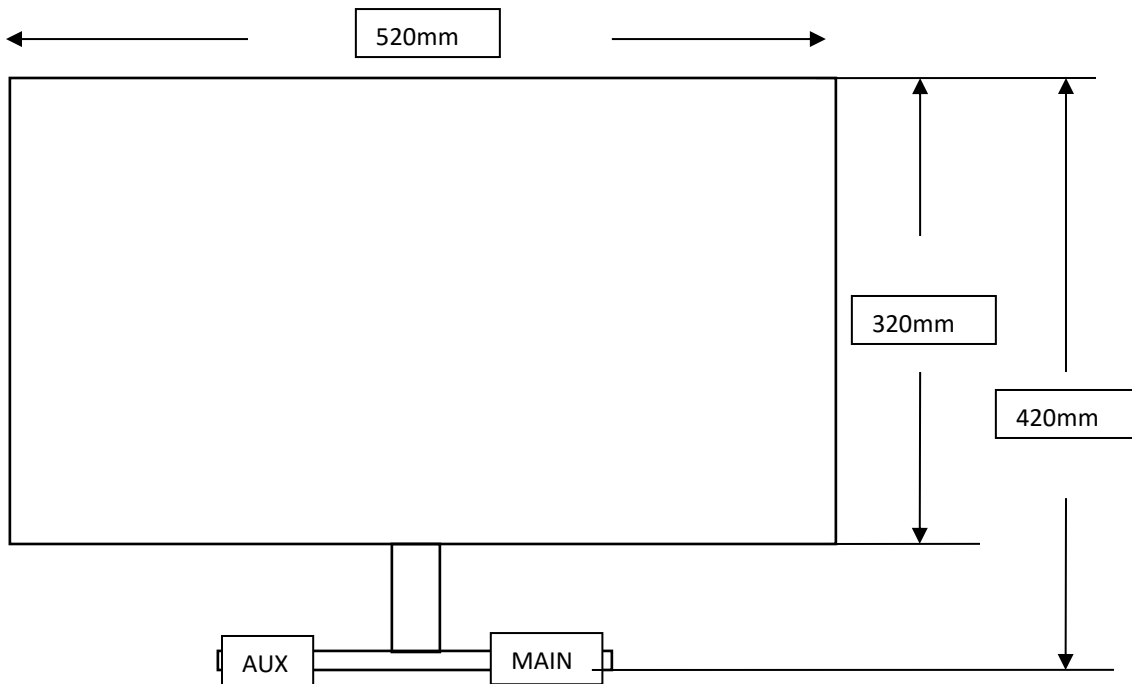


Annex B. Antenna Location

B.1 Antenna Host Platform Location Information

Include a dimensioned photo(s) or dimensioned drawing(s) of Main and Aux antenna placements (measurements are not required for receive-only antenna).

Any antenna that transmits must show dimensions to bottom of laptop. Provide a description of the materials that are used for supporting or surrounding transmit antennas; for example, non-conductive plastics vs. conductive coated plastic or metallic materials.



B.2 Antenna dimensional information for SAR evaluation

Include a dimensioned photo(s) or dimensioned drawing(s) showing the distance (mm) between the transmit antennas and the user. For notebook/laptop hosts show lapheld position (example below). For tablet hosts show all orientations including lapheld, primary & secondary portrait, primary & secondary landscape positions. Include a description of any proximity sensors or power throttling implementations that limit or exclude use of any host orientation.

Antennas on the panel section

