

ANTENNA INFORMATION

OEM	Dell Inc.		
ODM	Compal Electronics Inc.		
Platform model name			
Intel platform (ex: Yes, No or NA)	No		
Platform type (ex: regular NB, convertible PC, AIO...etc)	Convertible PC		
SAR minimum separation (mm)	FCC (1g)	19.45 mm (w/bumper)	
		17.65 mm (w/o bumper)	
	ISED (1g)	19.45 mm (w/bumper)	
	ISED (10g)	17.65 mm (w/o bumper)	

Antenna manufacturer	Company name	Hongbo
	Address	4F., No. 143, Xinhua 1st Rd., Neihu Dist., Taipei City 114758 , Taiwan (R.O.C.)
Test location	Company name	SPORTON
	Address	No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)
Test Personnel	Name(Full name)	Robintseng
	E-mail	Robintseng@hong-bo.com.tw
	Tel/Mobile	03-6688-340 #206
Testing date	2025/04/08	

Antenna Part number	Main	260-24465 (DC330031N0L)
	Aux	260-24465 (DC330031N0L)
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	-0.14	0.99	0.99	1.28	2.15	1.93	2.48	1.00	1.20	0.98
Aux	1.14	-0.47	-0.34	0.21	0.79	1.19	1.09	1.05	1.03	1.37

Cable Assembly Part Number and Information					
	Cable PN	Cable length(mm)	Cable diameter(mm)	Impedance(ohm)	Connector type
Main	Main	398mm	1.13mm	50.00	四代 PLUG FOR O.D. 1.13mm(IPEX 20565-001R-13)
Aux	Aux	579mm	1.13mm	50.00	四代 PLUG FOR O.D. 1.13mm(IPEX 20565-001R-13)

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

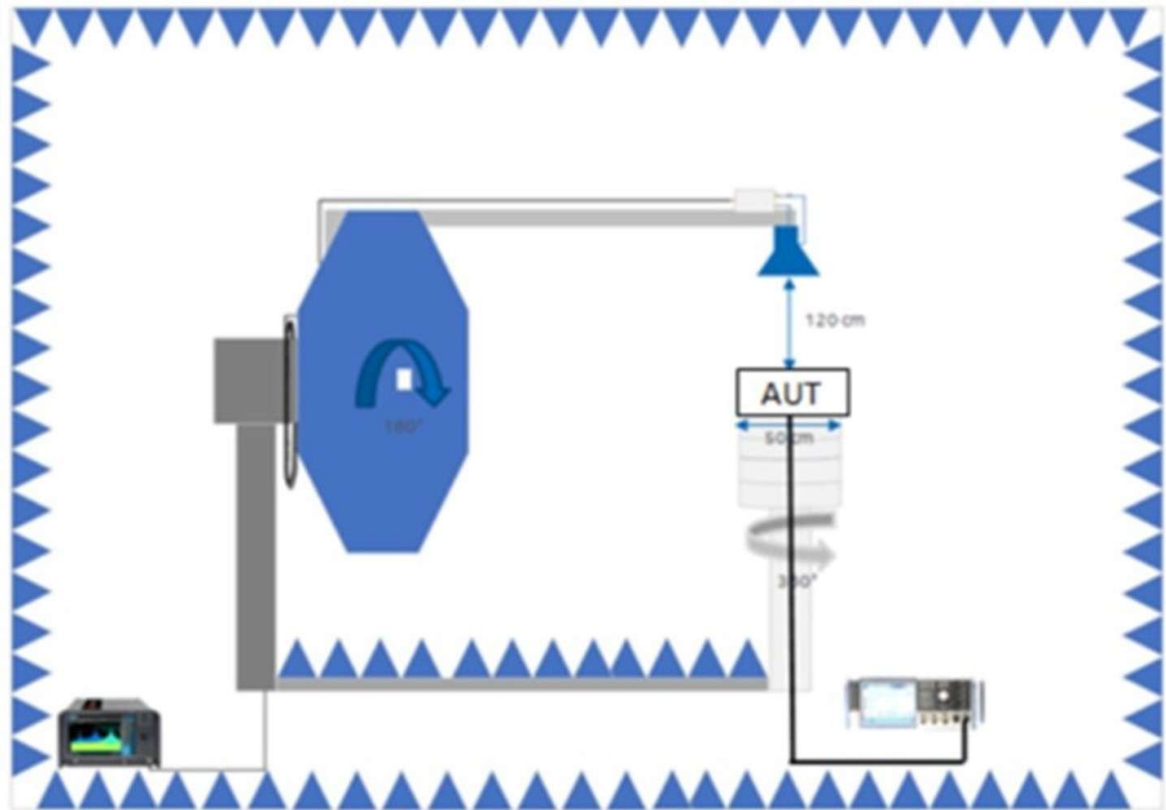
Cable loss (dB)										
	2.4GHz 2400-2483.5 MHz	5.2GHz 5150-5250MHz	5.3GHz 5250-5350MHz	5.6GHz 5470-5725MHz	5.8GHz 5725-5850MHz	5.9GHz 5850-5895MHz	6.2GHz 5925-6425MHz	6.5GHz 6425-6525MHz	6.7GHz 6525-6875MHz	7.0 GHz 6875-7125MHz
Main										
Aux										

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1. Test & System Description

1.1 Measurement Method and System



1.3 Equipment list

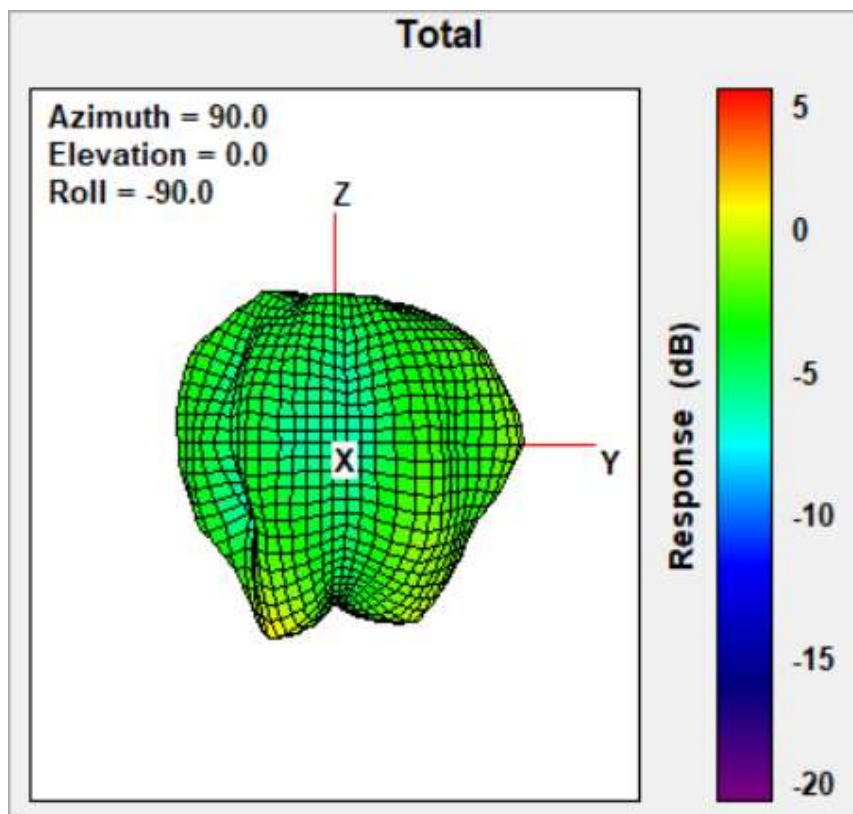
Test Equipment List					
ID	Model Name	Manufacturer	Serial Number	Calibration Date	Calibration Due Date
Anechoic Chamber	AMS8500	ETS-Lindgren	1047.00	2024-02-18	2025/8/18
Turn Table	ETS	ETS-Lindgren		N/A	N/A
Rotate controller	2090	ETS-Lindgren	NA	N/A	N/A
Horn antenna	HAD-0710	EMCO	111025-02	2025-01-13	2027/1/13
Vector Network Analyzer	E5071C	Keysight	MY46900218	2025-01-15	2028/1/15
Cable 40cm 18 GHz	201EH012010400	Worken Technology Inc.	NA	2025-01-20	2026/1/20
Cable 6m 18 GHz	201EH012016000	Worken Technology Inc.	NA	2025-01-20	2026/1/20
Cable 6m 18 GHz	201EH012016000	Worken Technology Inc.	NA	2025-01-20	2026/1/20
Cable 3.5m 18 GHz	201EH012013500	Worken Technology Inc.	NA	2025-01-20	2026/1/20
Cable 1.5m 18 GHz	201EH012011500	Worken Technology Inc.	NA	2025-01-20	2026/1/20

2. Radiation characteristics of antenna loaded in Host Platform

Main Antenna

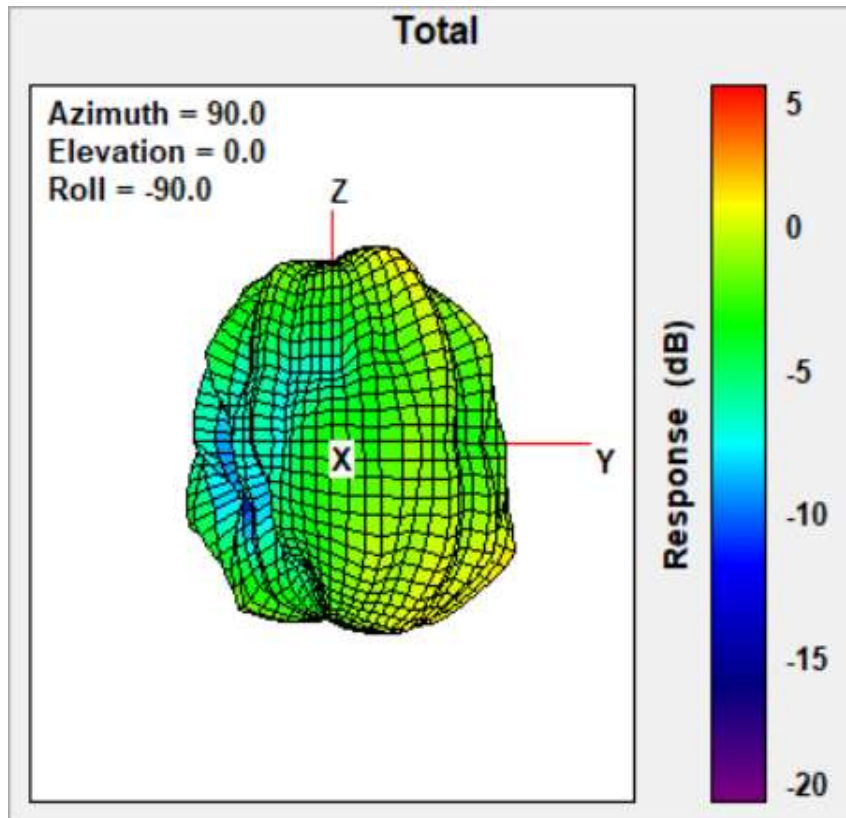
Max Antenna 3D Radiation Pattern 2400 – 2483.5 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
2400-2483.5	-0.14



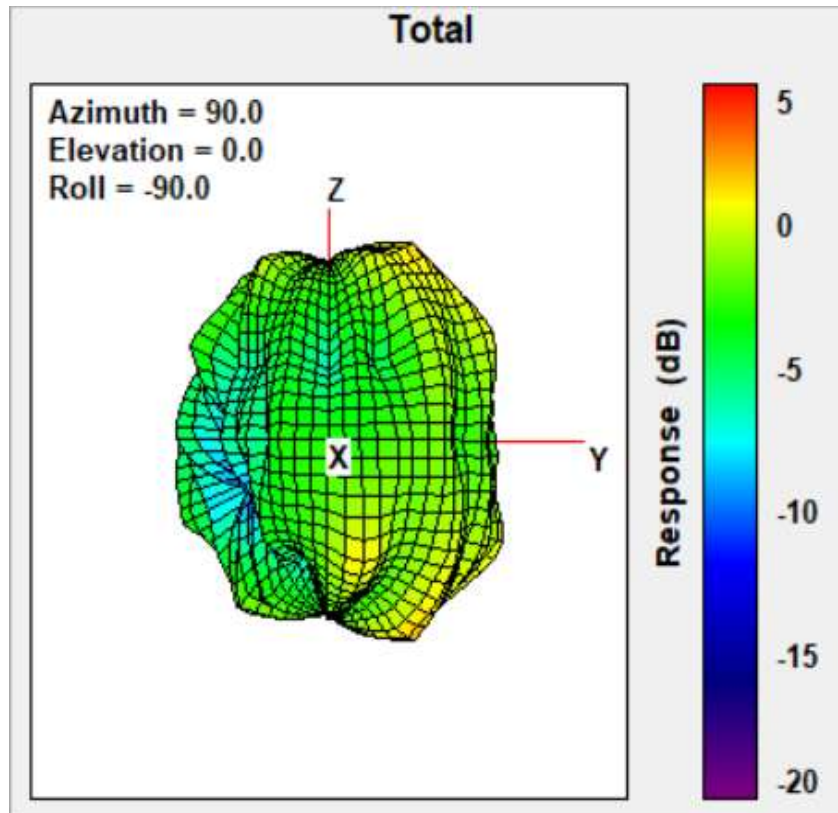
Max Antenna 3D Radiation Pattern 5150-5250 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5150-5250	0.99



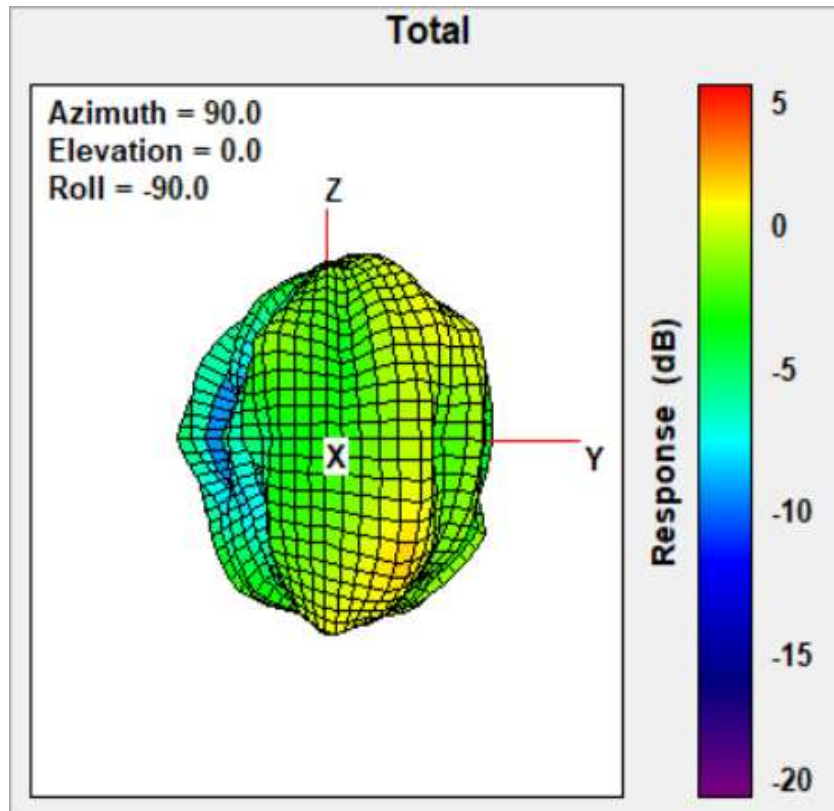
Max Antenna 3D Radiation Pattern 5250-5350 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5250-5350	0.99



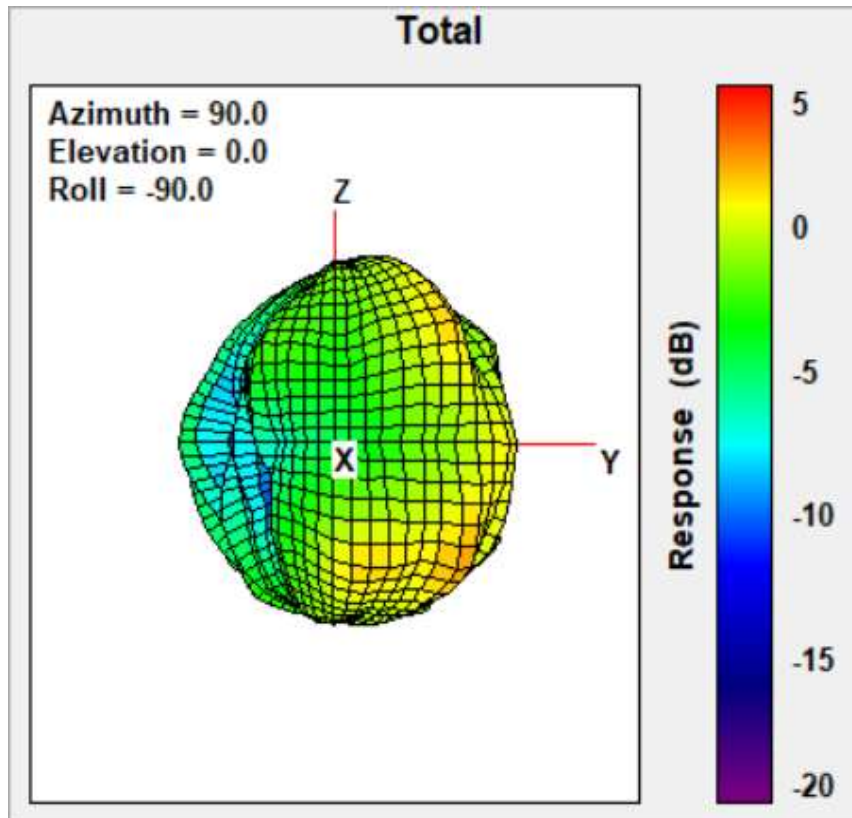
Max Antenna 3D Radiation Pattern 5470-5725 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5470-5725	1.28



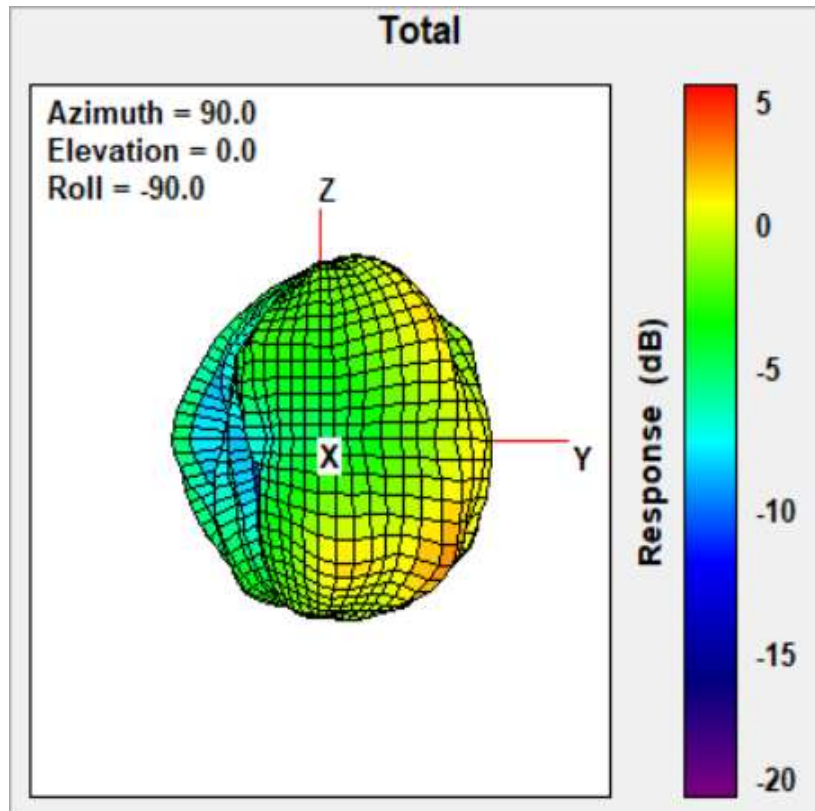
Max Antenna 3D Radiation Pattern 5725-5850 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5725-5850	2.15



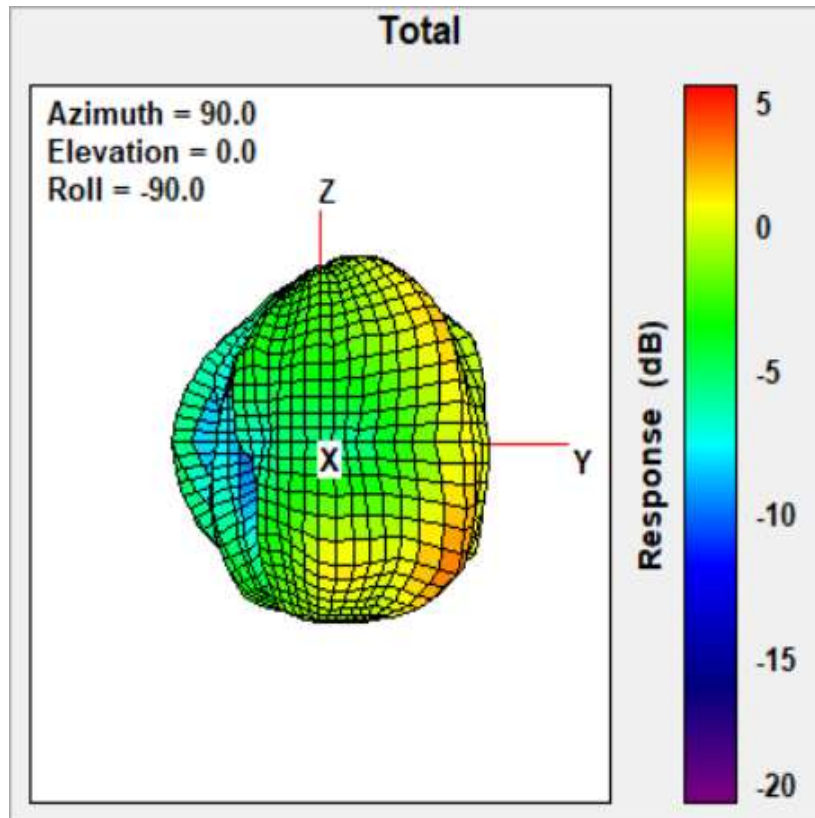
Max Antenna 3D Radiation Pattern 5850-5895 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5850-5895	1.93



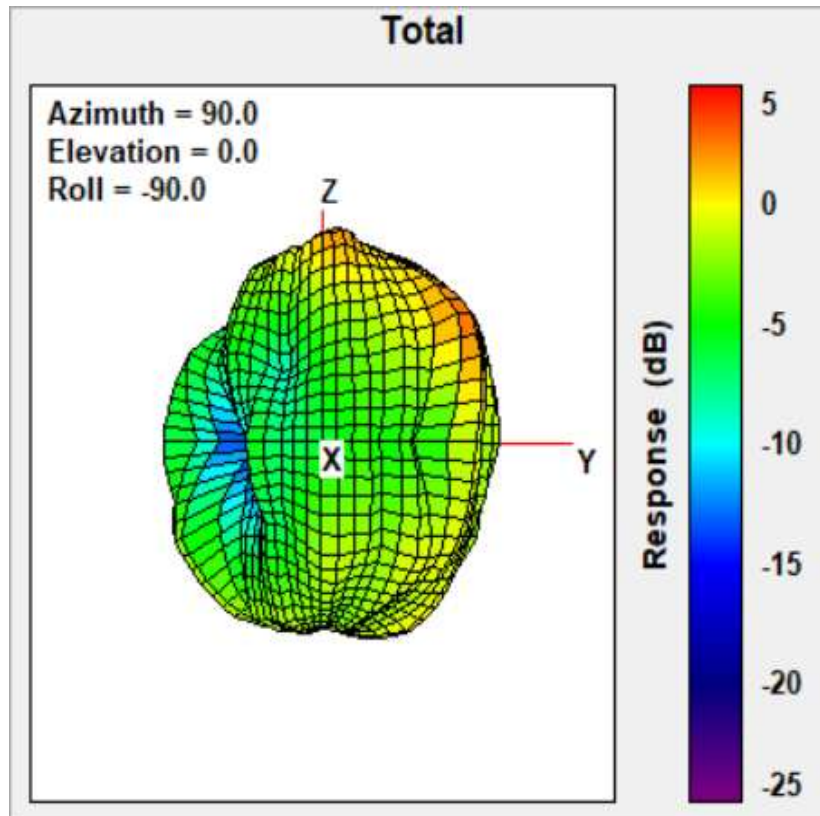
Max Antenna 3D Radiation Pattern 5925-6425 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5925-6425	2.48



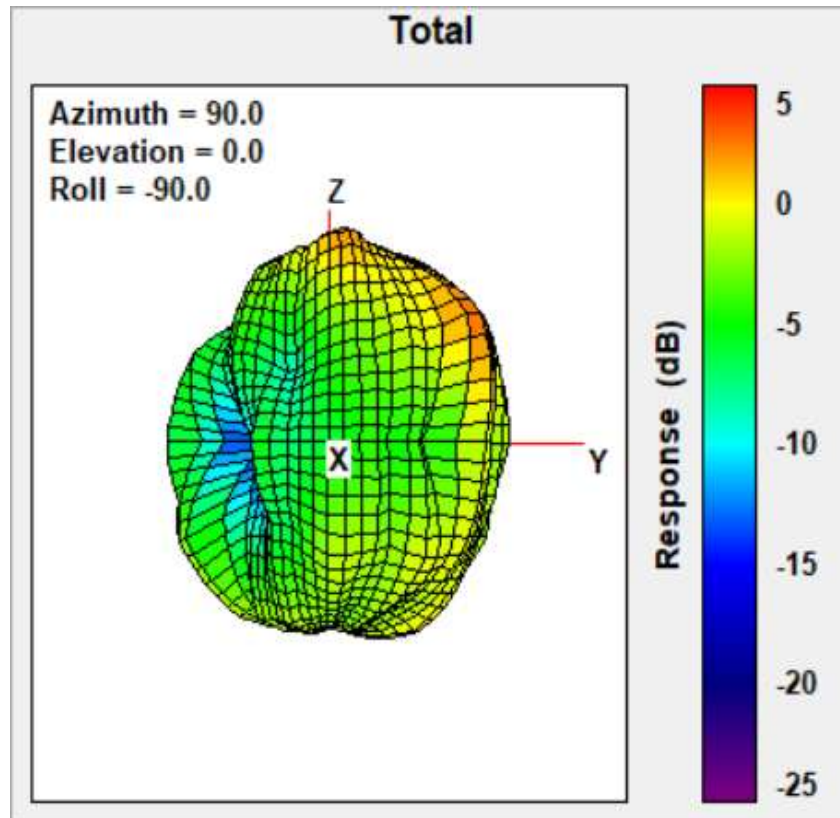
Max Antenna 3D Radiation Pattern 6425-6525 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6425-6525	1.00



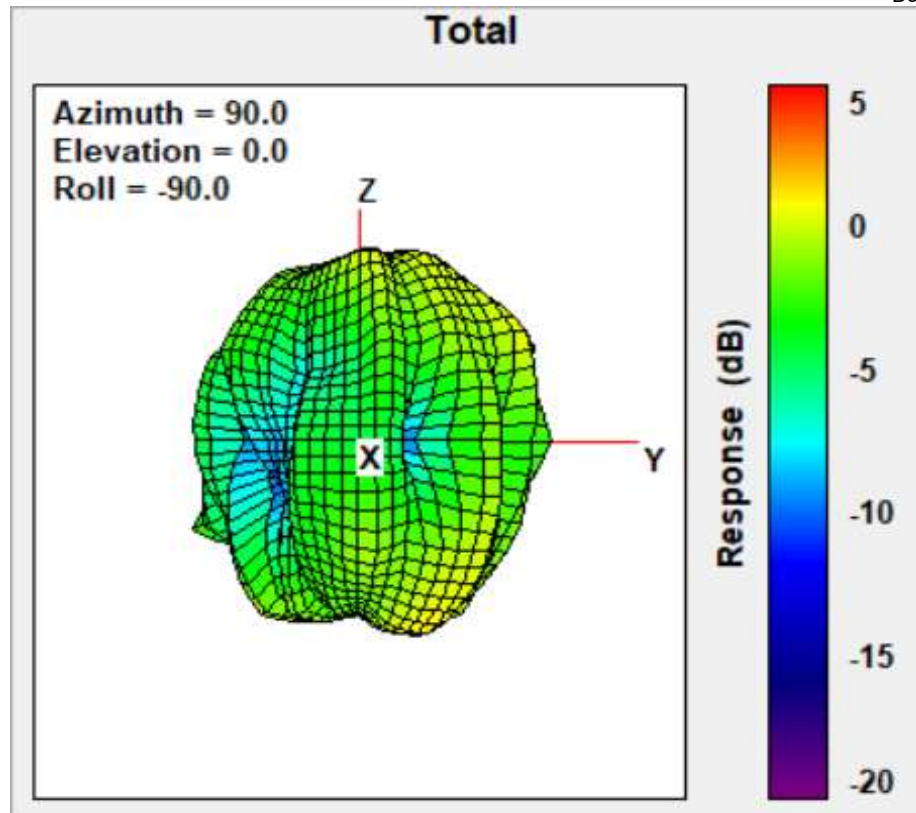
Max Antenna 3D Radiation Pattern 6525-6875 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6525-6875	1.20



Max Antenna 3D Radiation Pattern 6875-7125 MHz

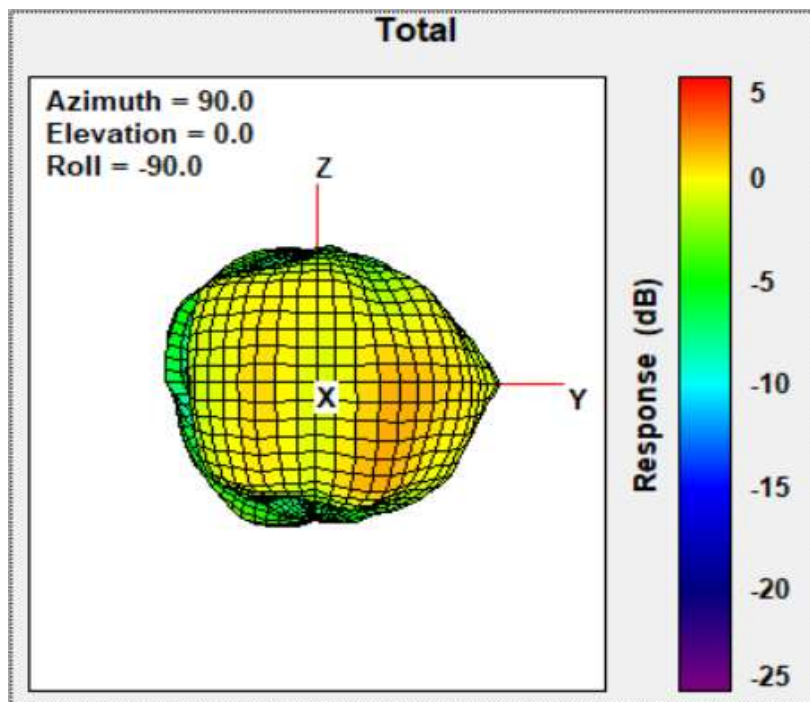
Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6875-7125	0.98



Auxiliary Antenna

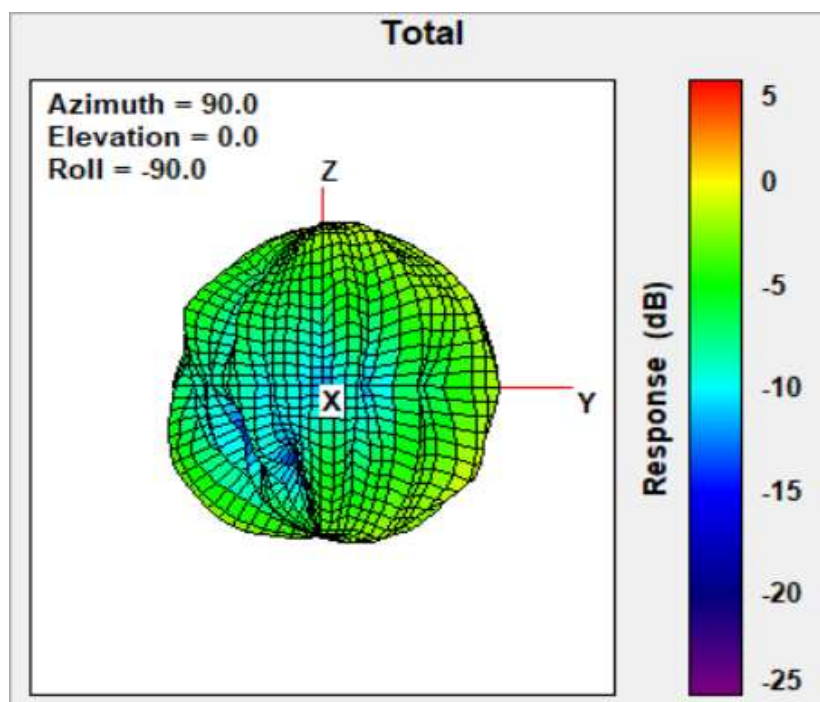
Max Antenna 3D Radiation Pattern 2400 – 2483.5 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
2400-2483.5	1.14



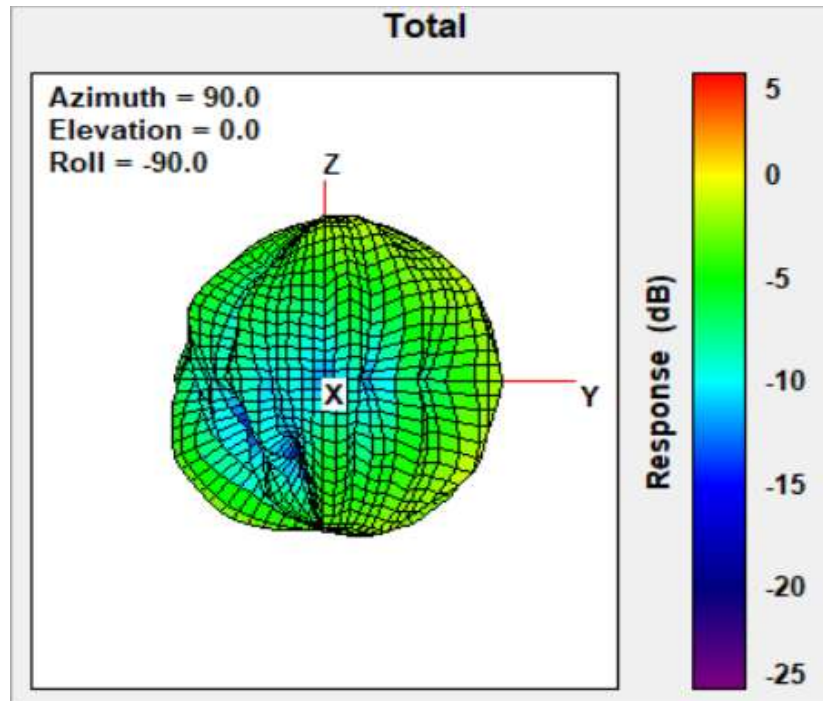
Max Antenna 3D Radiation Pattern 5150-5250 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5150-5250	-0.47



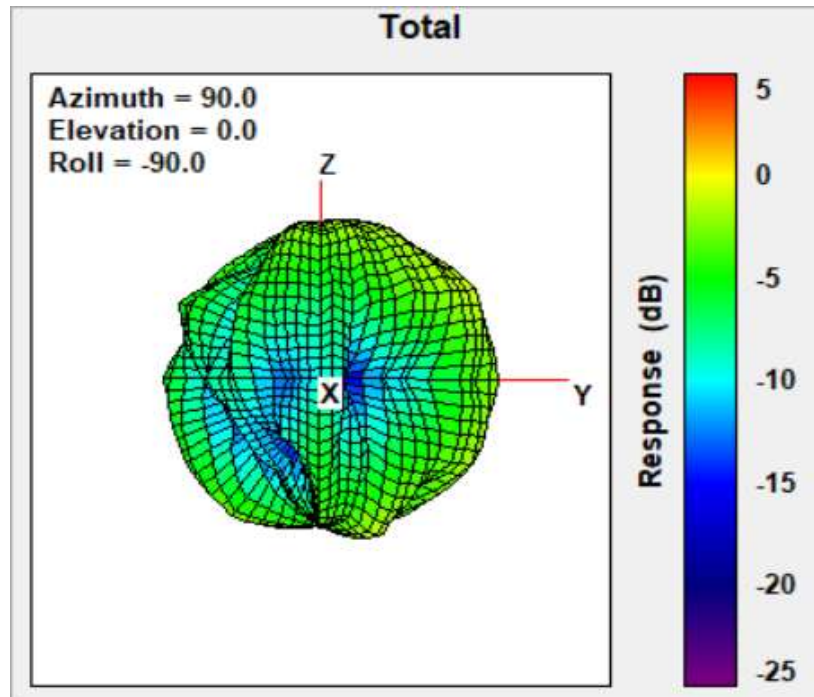
Max Antenna 3D Radiation Pattern 5250-5350 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5250-5350	-0.34



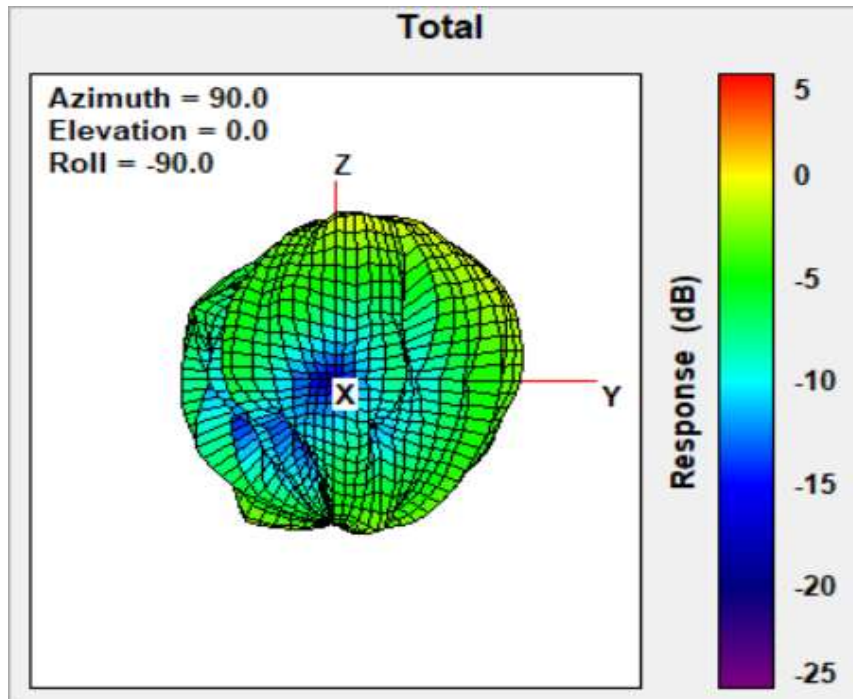
Max Antenna 3D Radiation Pattern 5470-5725 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5470-5725	0.21



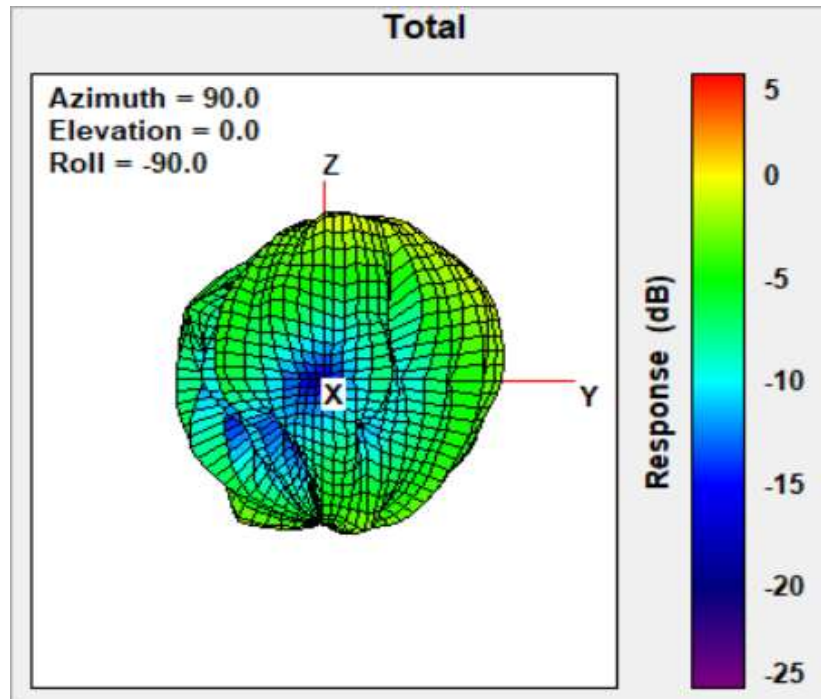
Max Antenna 3D Radiation Pattern 5725-5850 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5725-5850	0.79



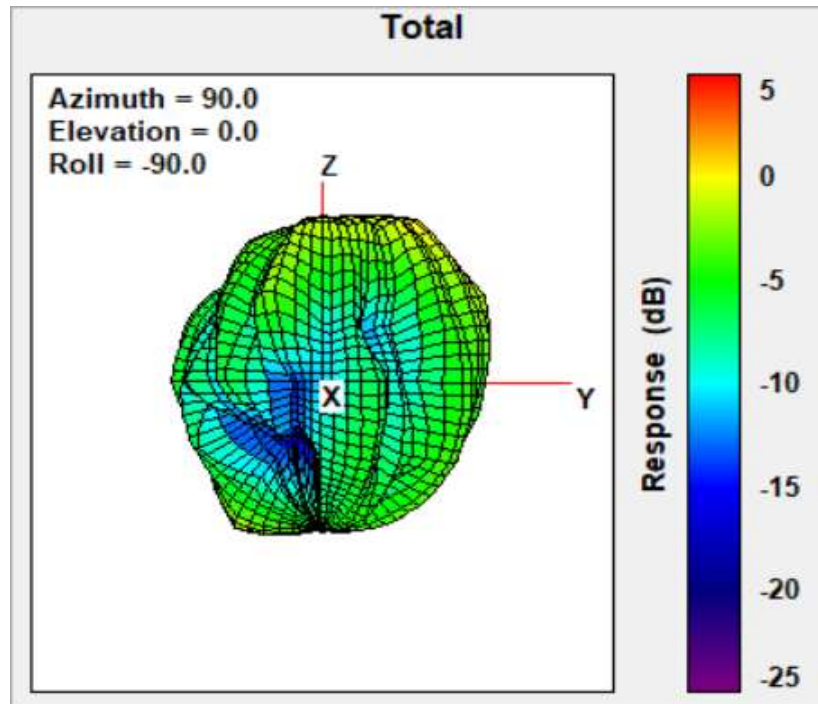
Max Antenna 3D Radiation Pattern 5850-5895 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5850-5895	1.19



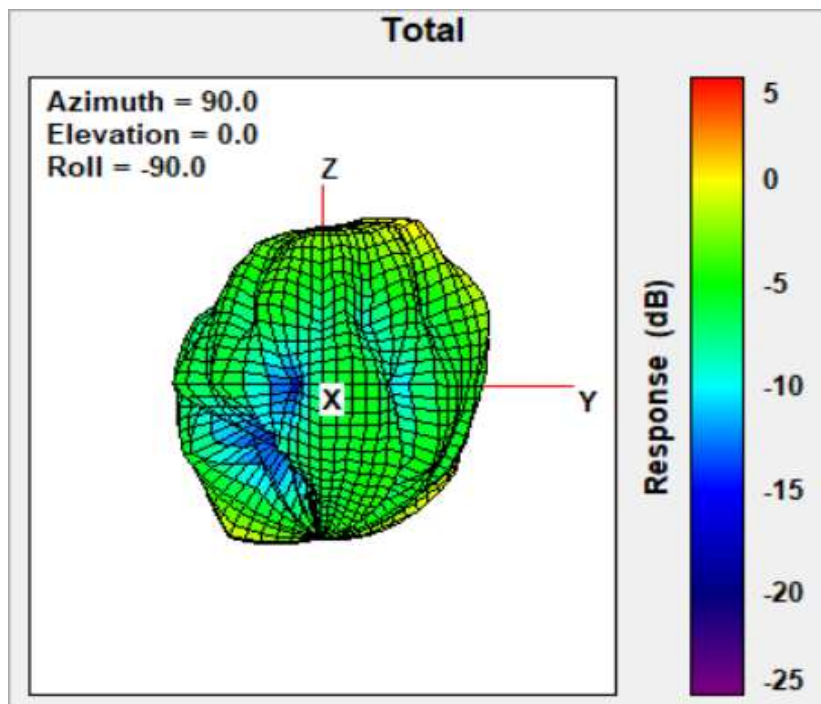
Max Antenna 3D Radiation Pattern 5925-6425 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5925-6425	1.09



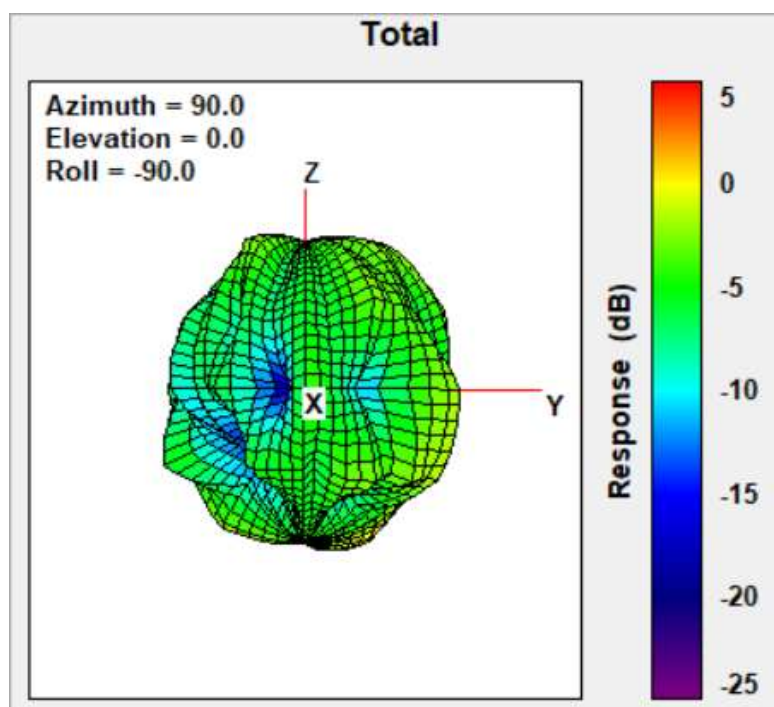
Max Antenna 3D Radiation Pattern 6425-6525 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6425-6525	1.05



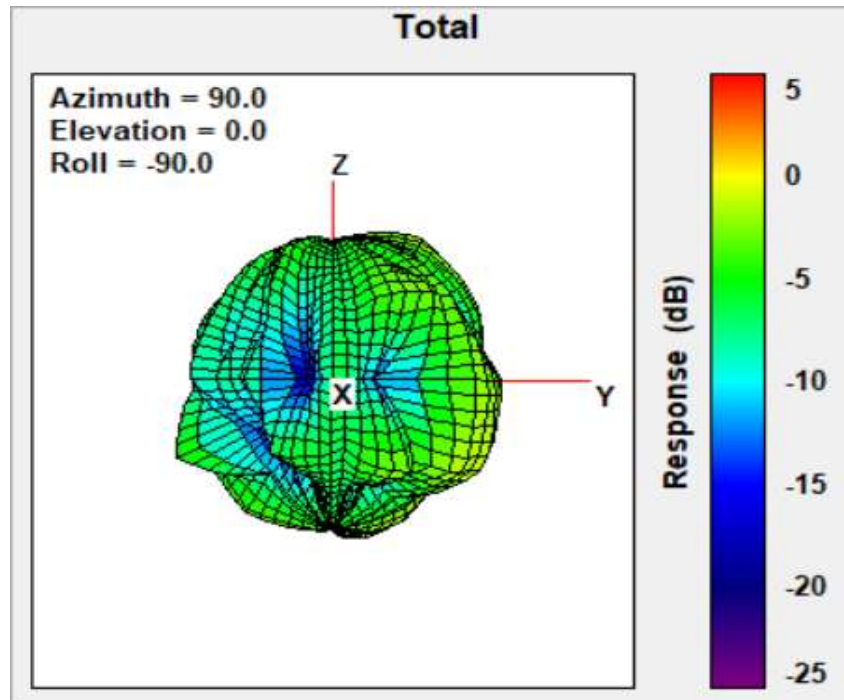
Max Antenna 3D Radiation Pattern 6525-6875 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6525-6875	1.03



Max Antenna 3D Radiation Pattern 6875-7125 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6875-7125	1.37



Main Antenna

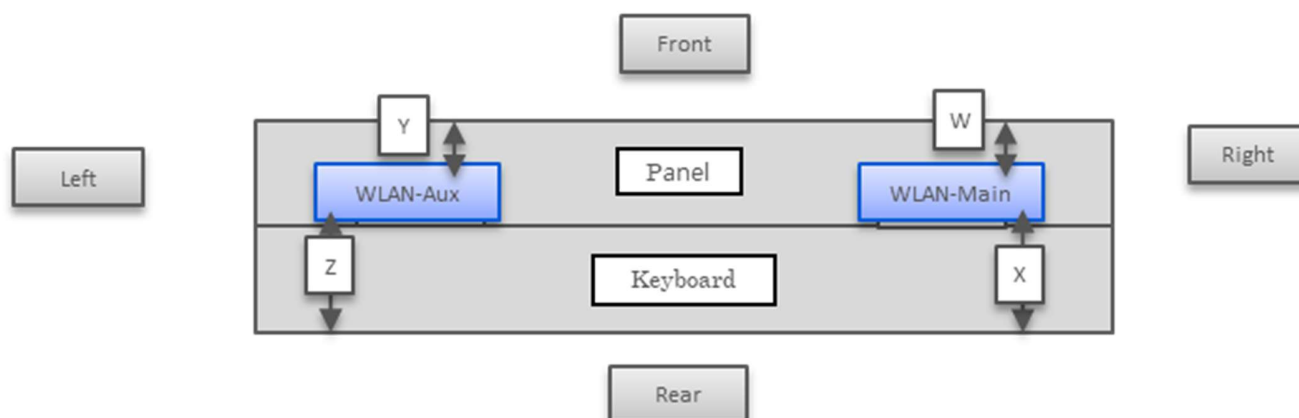
[illegible][illegible]

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.



Minimum Separation Distance			
Item	Antenna	Position	Distance (mm)
W	WLAN-Main	to Front	5.65
X		to Rear	18.45
Y	WLAN-Aux	to Front	5.65
Z		to Rear	18.45

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

