

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)	205.17 mm (w/bumper)
		203.37 mm (w/o bumper)
	ISED (1g)	205.17 mm (w/bumper)
	ISED (10g)	203.37 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	1.97	1.56	1.56	2.75	2.75	2.30	2.80	1.21	2.51	2.79
Aux	2.56	0.56	0.48	2.24	2.24	1.57	1.35	1.35	1.35	0.63

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.

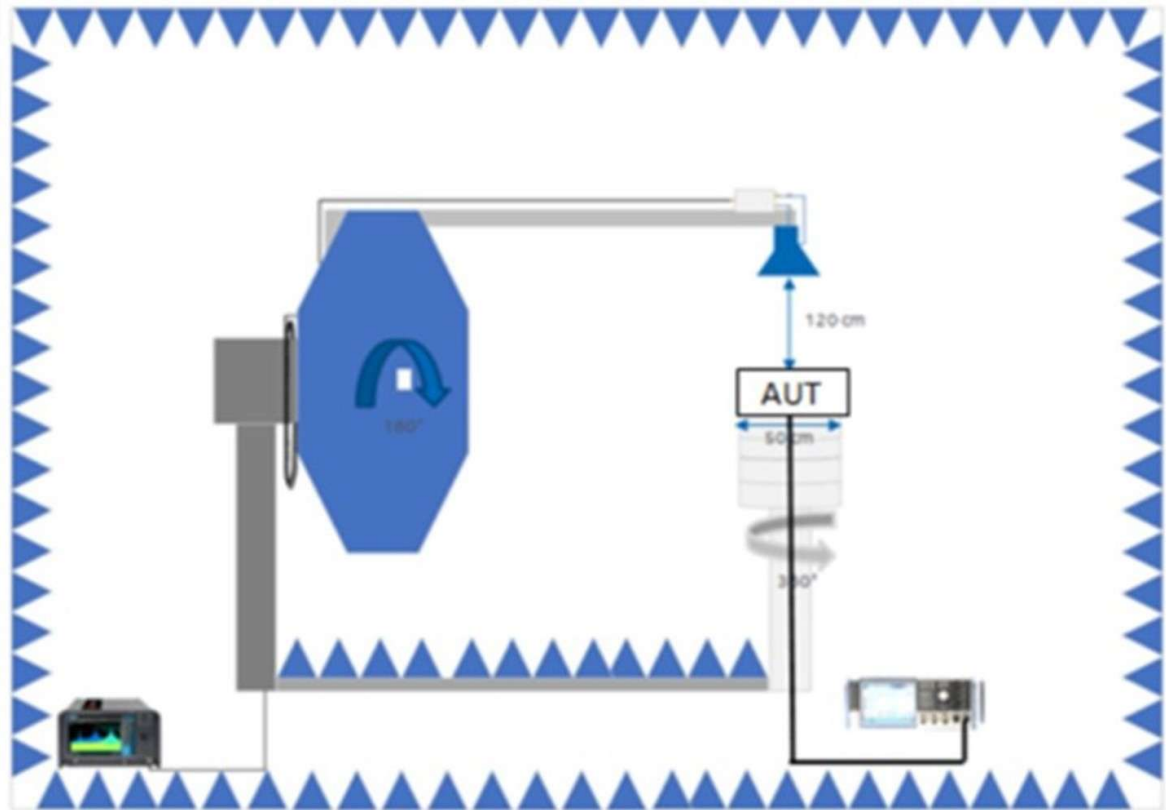
Cable loss (dB)										
	2.4GHz 2400-2483.5 MHz	5.2GHz 5150-5250MHz	5.3GHz 5250-5350MHz	5.6GHz 5470-5725MHz	5.8GHz 5725-5850MHz	5.9GHz 5850-5895MHz	6.2GHz 5925-6425MHz	6.5GHz 6425-6525MHz	6.7GHz 6525-6875MHz	7.0 GHz 6875-7125MHz
Main										
Aux										

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1. Test & System Description

1.1 Measurement Method and System



1.3 Equipment list

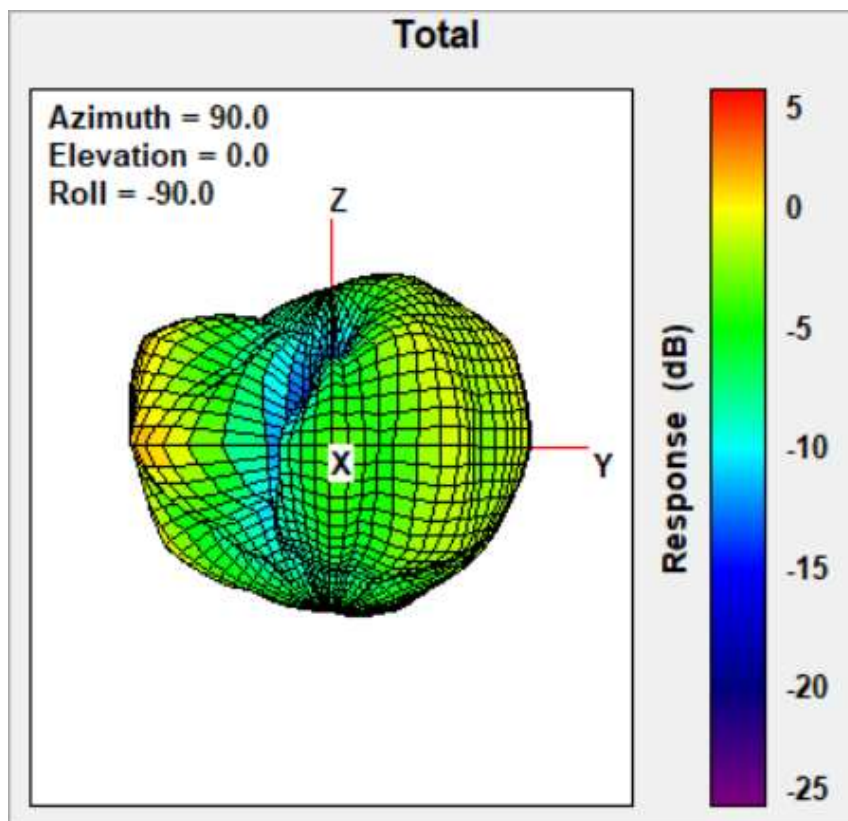
Test Equipment List					
ID	Model Name	Manufacturer	Serial Number	Calibration Date	Calibration Due Date
Anechoic Chamber	AMS8500	ETS-Lindgren	1047.00	2024-02-18	2025/8/18
Turn Table	ETS	ETS-Lindgren		N/A	N/A
Rotate controller	2090	ETS-Lindgren	NA	N/A	N/A
Horn antenna	HAD-0710	EMCO	111025-02	2025-01-13	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

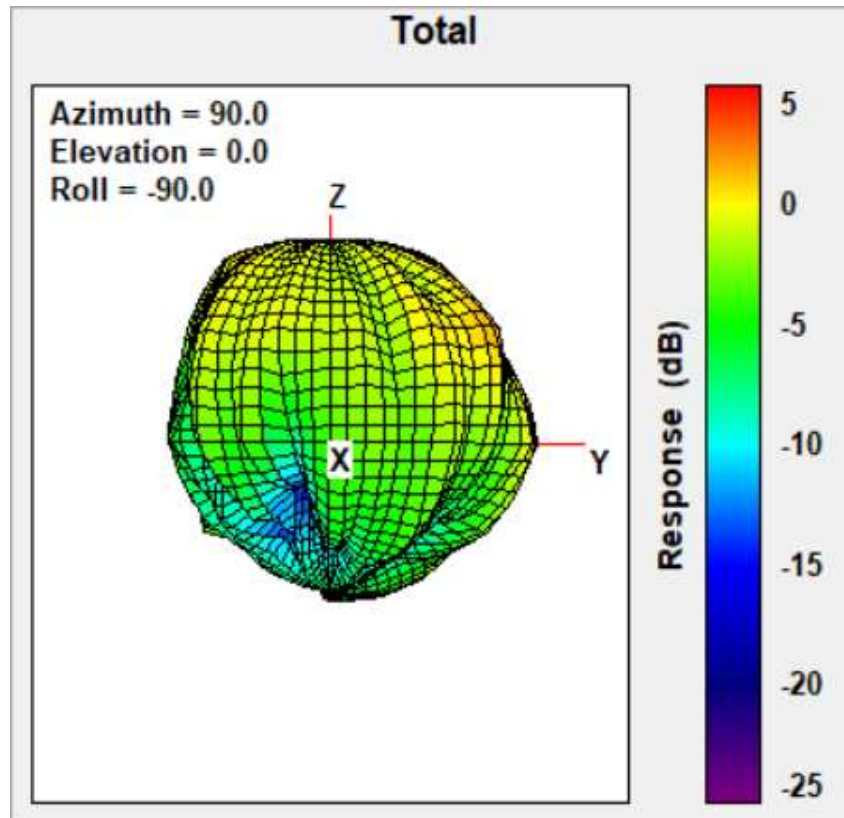
Max Antenna 3D Radiation Pattern 2400 – 2483.5 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
2400-2483.5	1.97



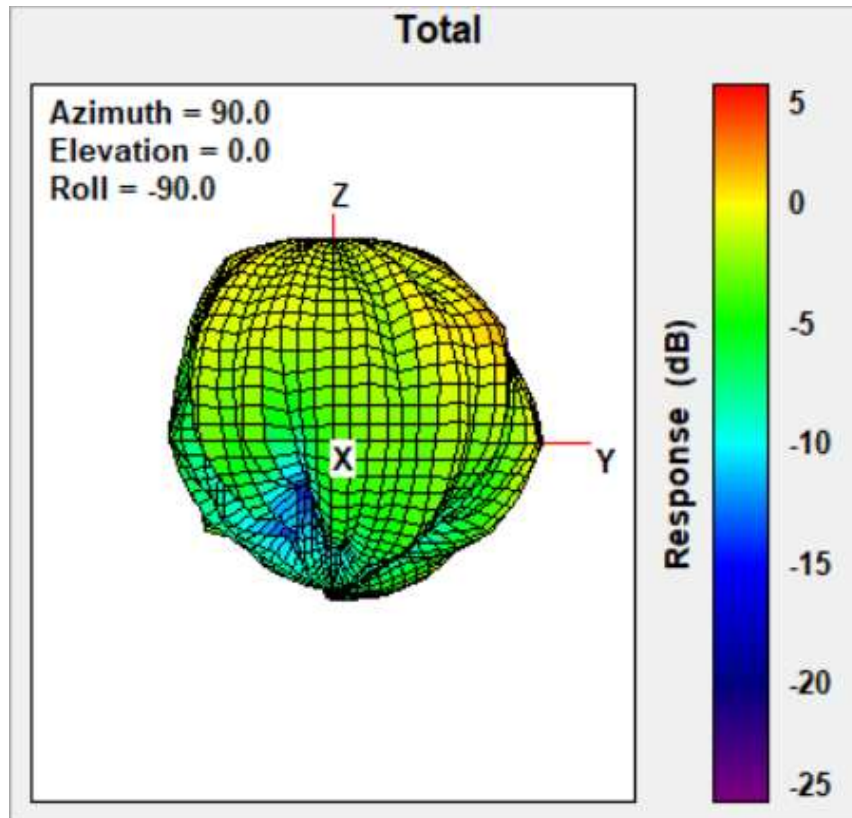
Max Antenna 3D Radiation Pattern 5150-5250 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5150-5250	1.56



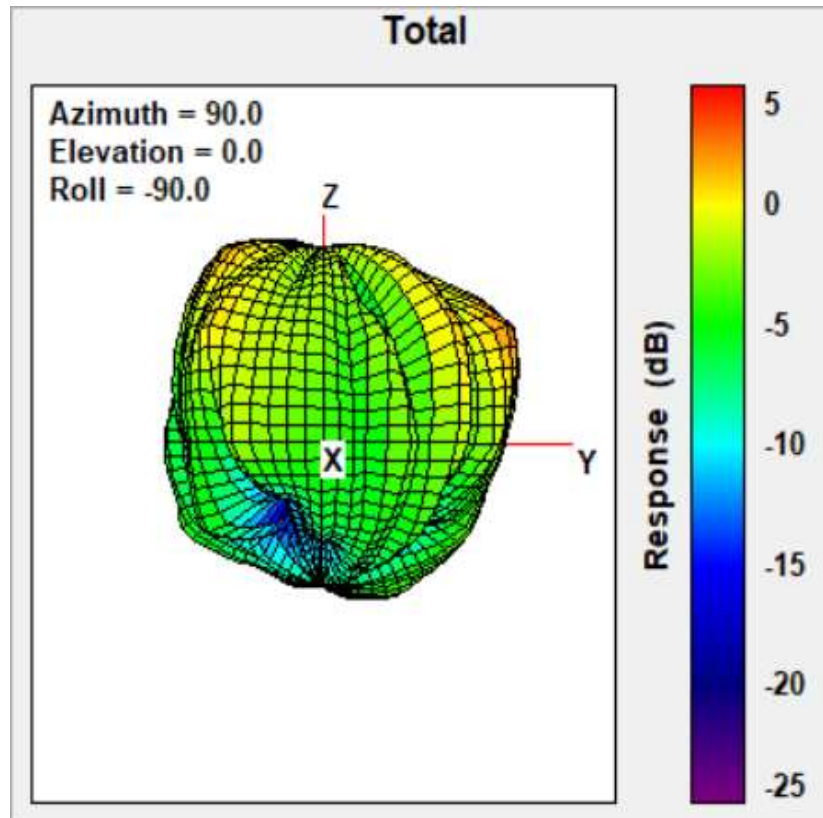
Max Antenna 3D Radiation Pattern 5250-5350 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5250-5350	1.56



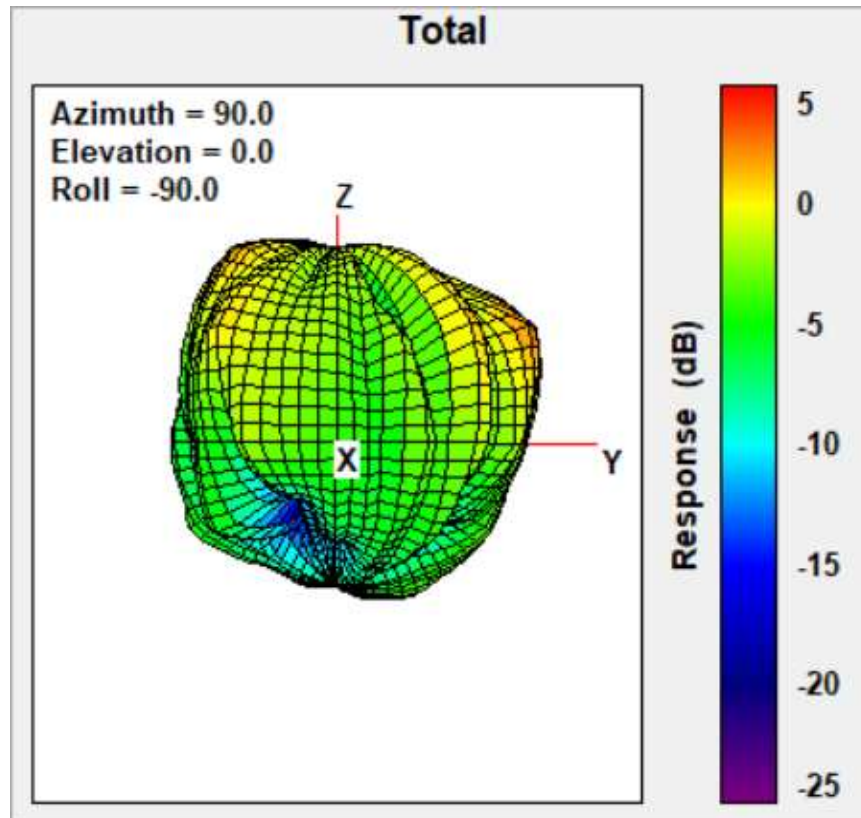
Max Antenna 3D Radiation Pattern 5470-5725 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5470-5725	2.75



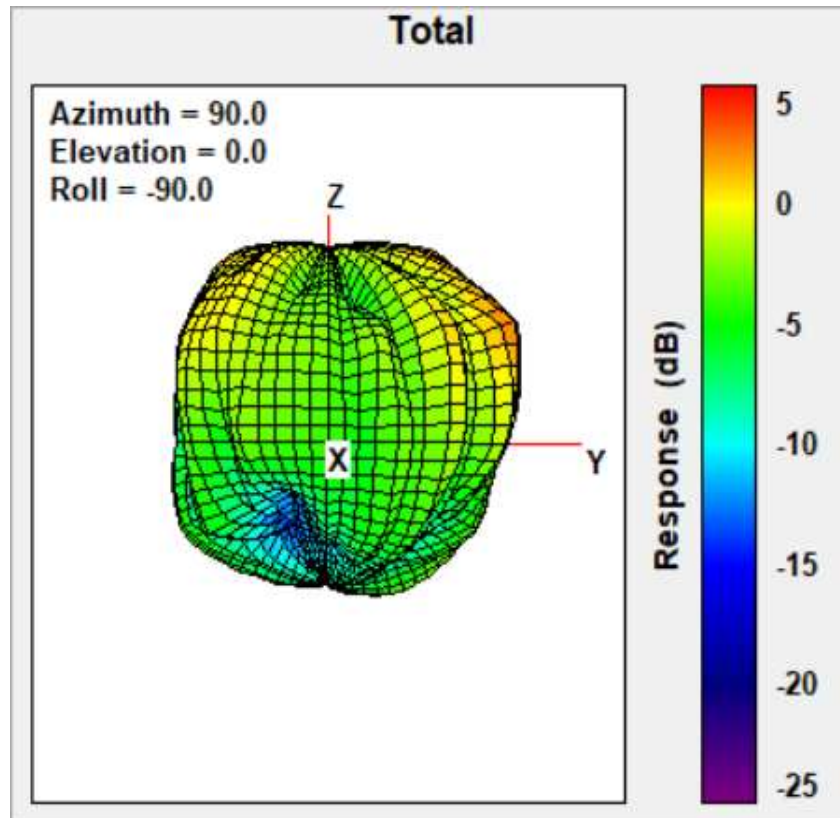
Max Antenna 3D Radiation Pattern 5725-5850 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5725-5850	2.75



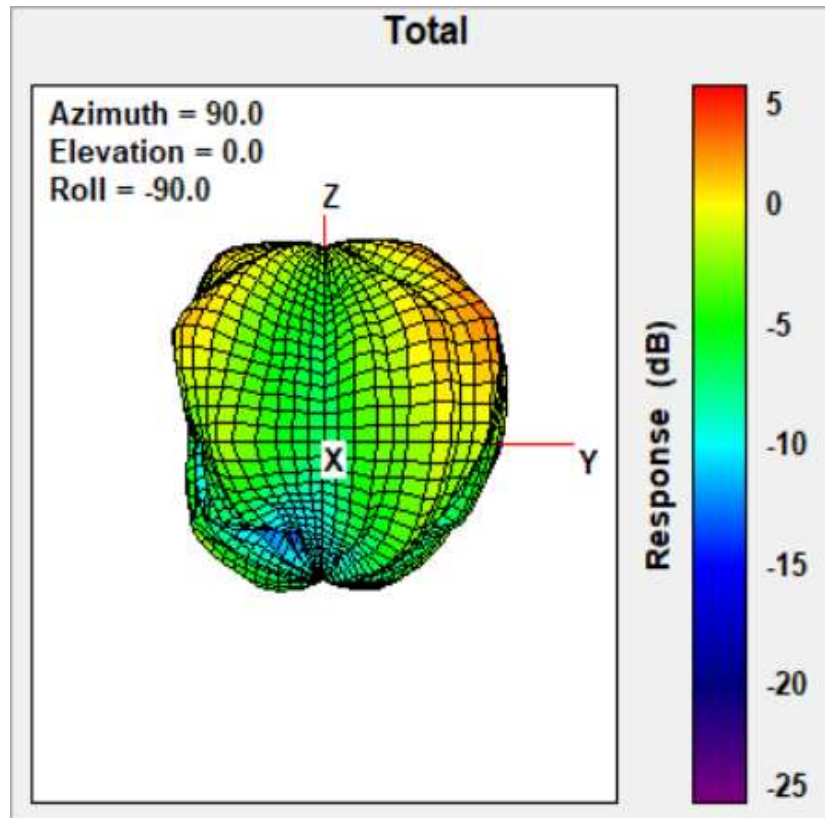
Max Antenna 3D Radiation Pattern 5850-5895 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5850-5895	2.30



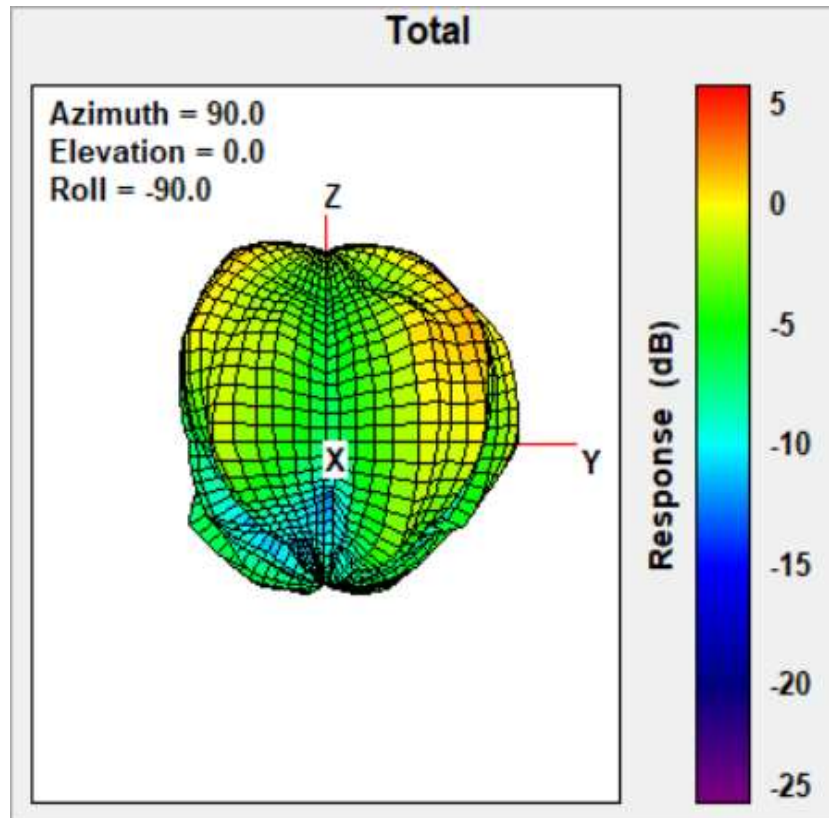
Max Antenna 3D Radiation Pattern 5925-6425 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5925-6425	2.8



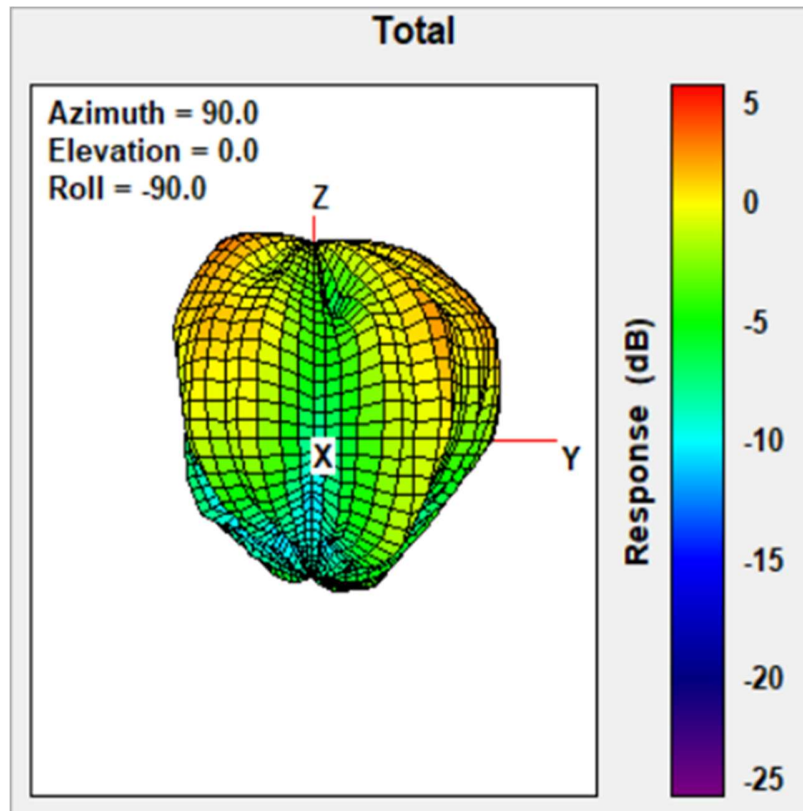
Max Antenna 3D Radiation Pattern 6425-6525 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6425-6525	1.21



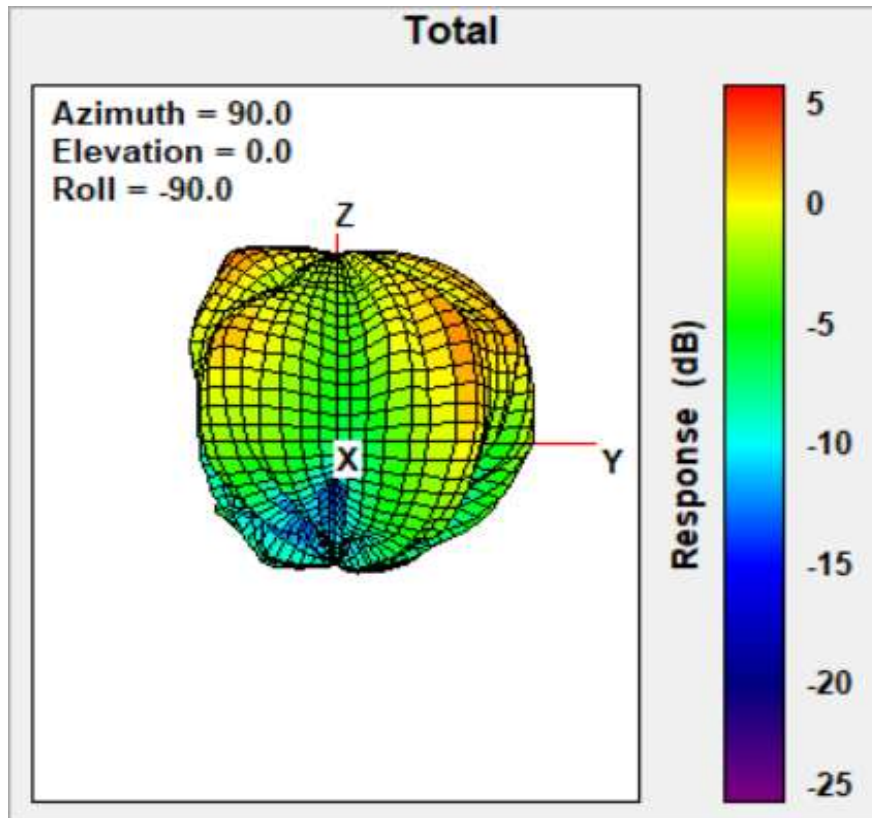
Max Antenna 3D Radiation Pattern 6525-6875 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6525-6875	2.51



Max Antenna 3D Radiation Pattern 6875-7125 MHz

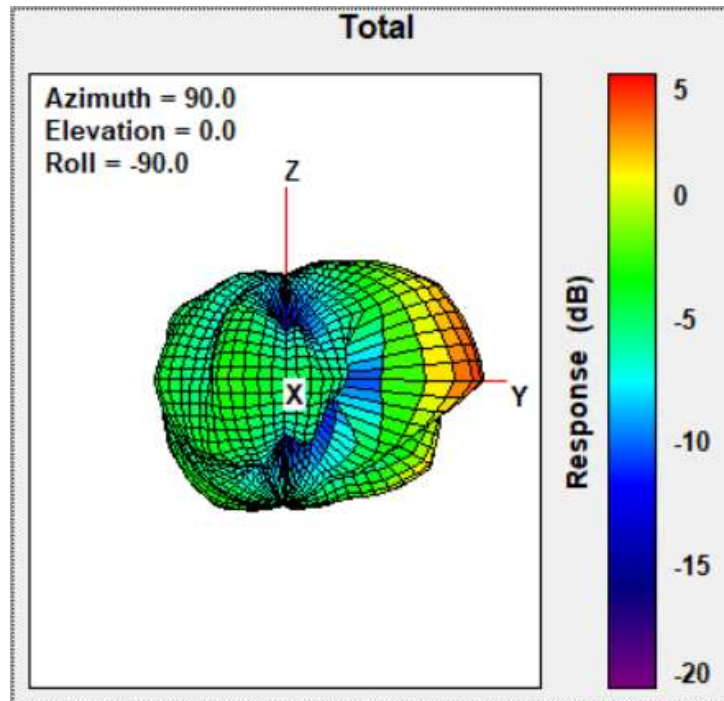
Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6875-7125	2.79



Auxiliary Antenna

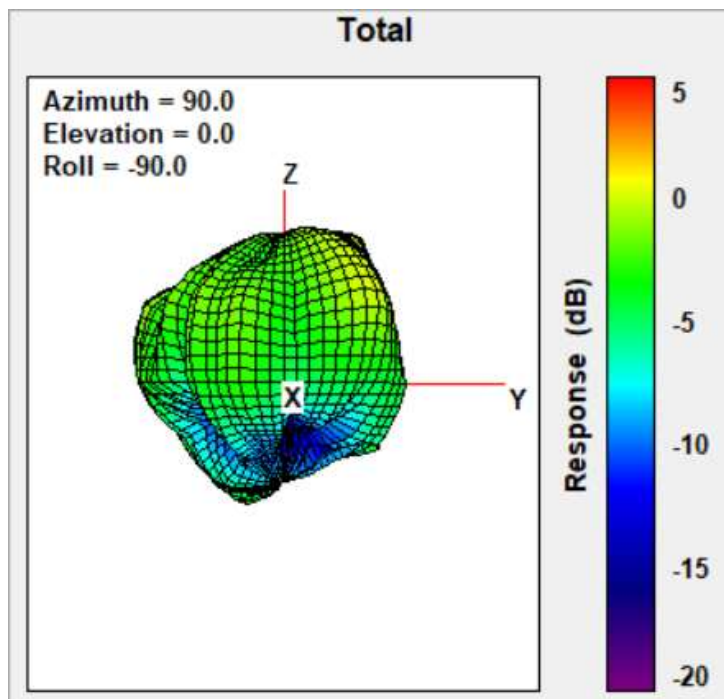
Max Antenna 3D Radiation Pattern 2400 – 2483.5 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
2400-2483.5	2.56



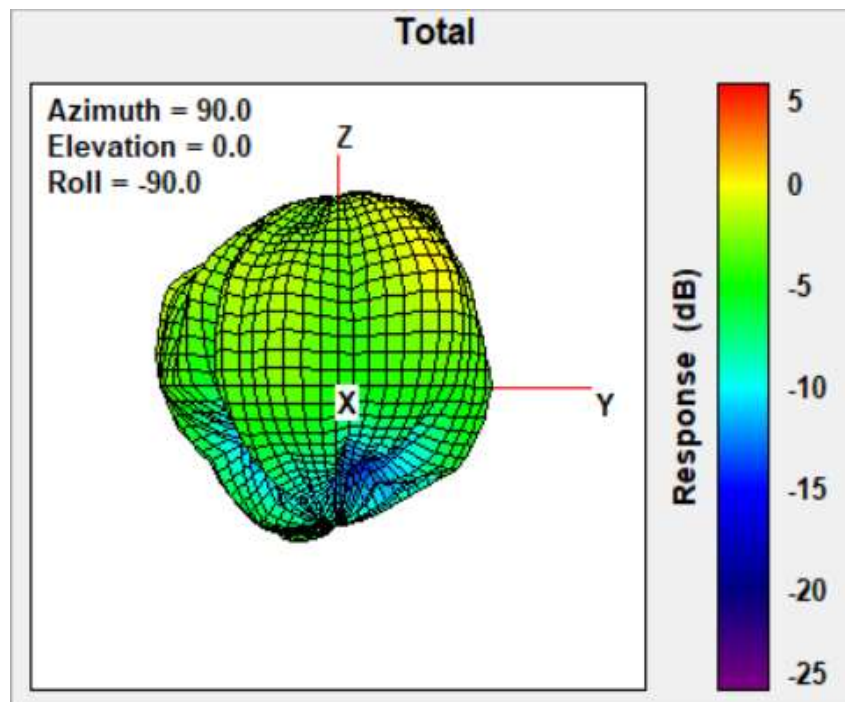
Max Antenna 3D Radiation Pattern 5150-5250 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5150-5250	0.56



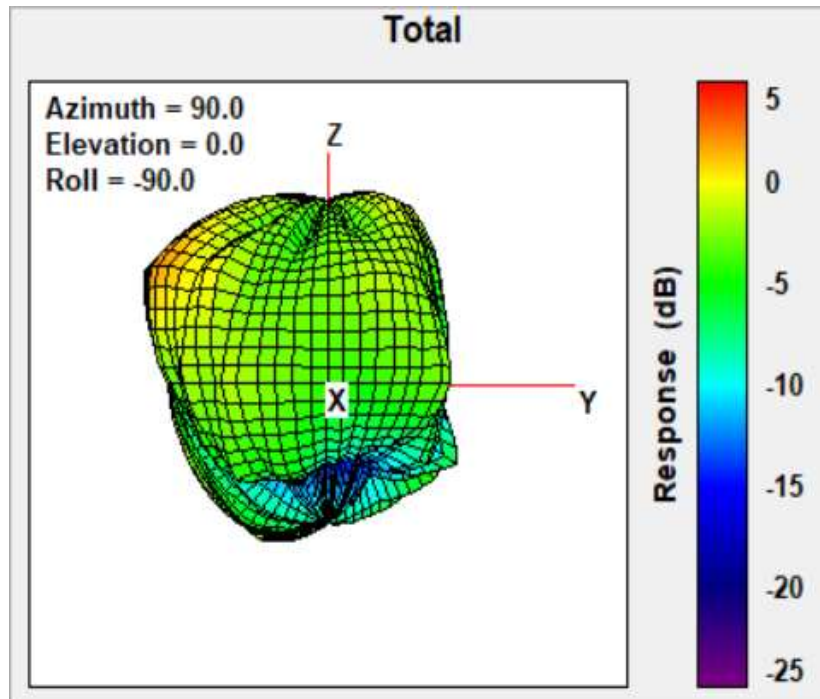
Max Antenna 3D Radiation Pattern 5250-5350 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5250-5350	0.48



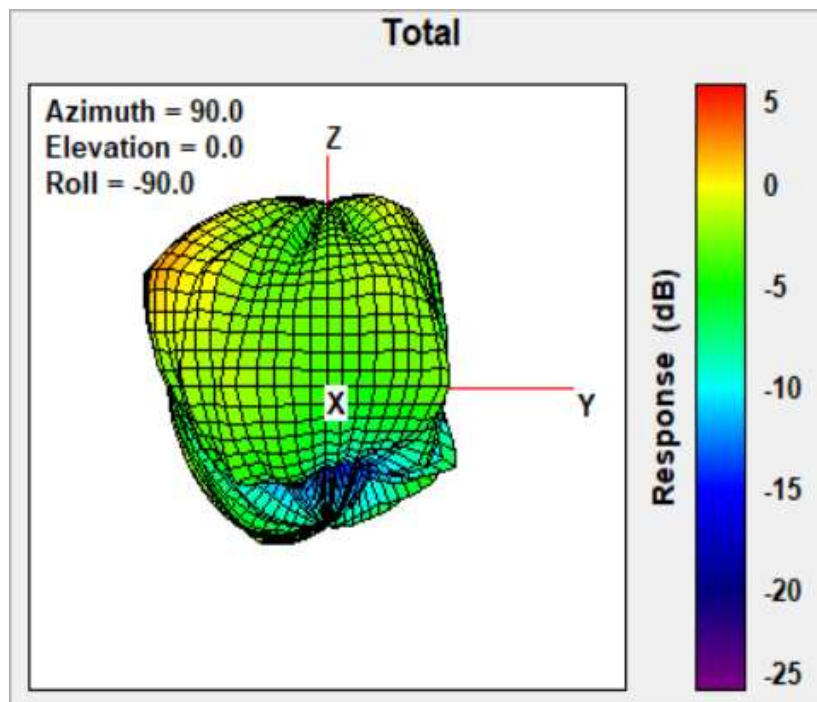
Max Antenna 3D Radiation Pattern 5470-5725 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5470-5725	2.24



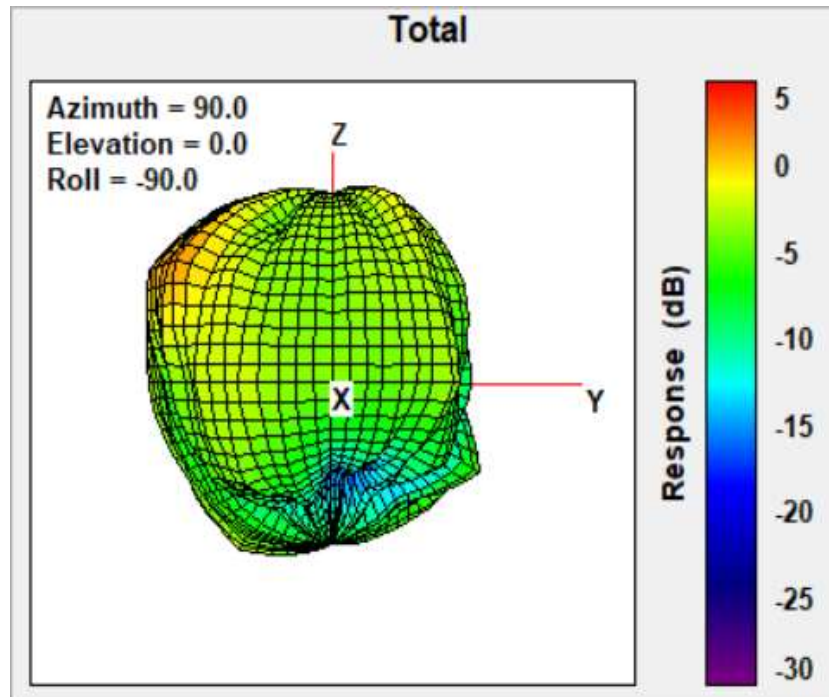
Max Antenna 3D Radiation Pattern 5725-5850 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5725-5850	2.24



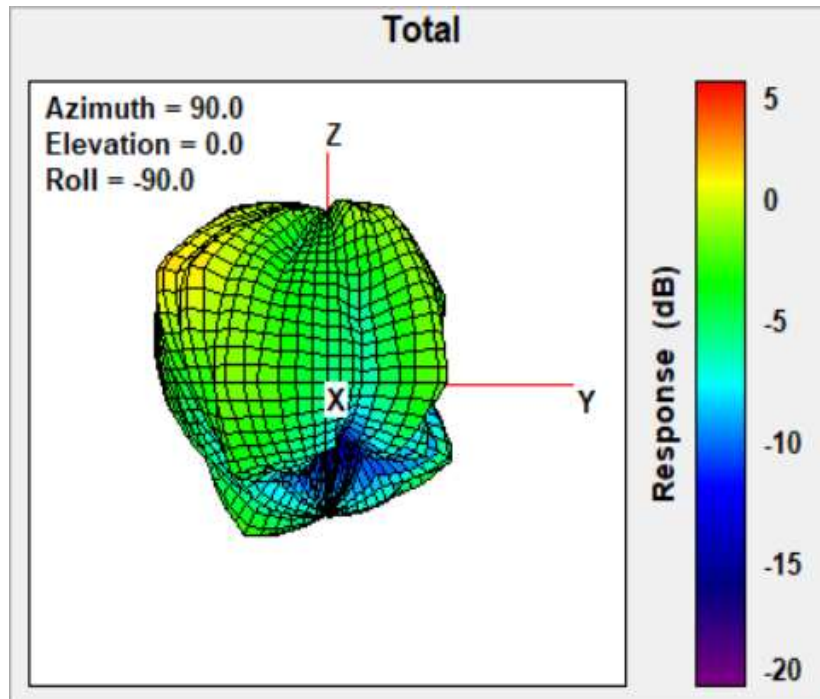
Max Antenna 3D Radiation Pattern 5850-5895 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5850-5895	1.57



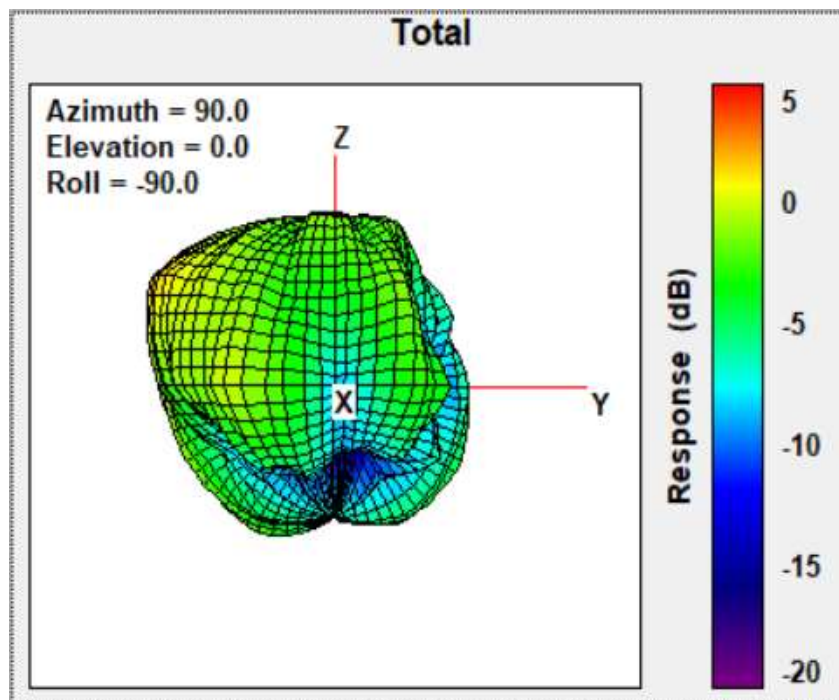
Max Antenna 3D Radiation Pattern 5925-6425 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5925-6425	1.35



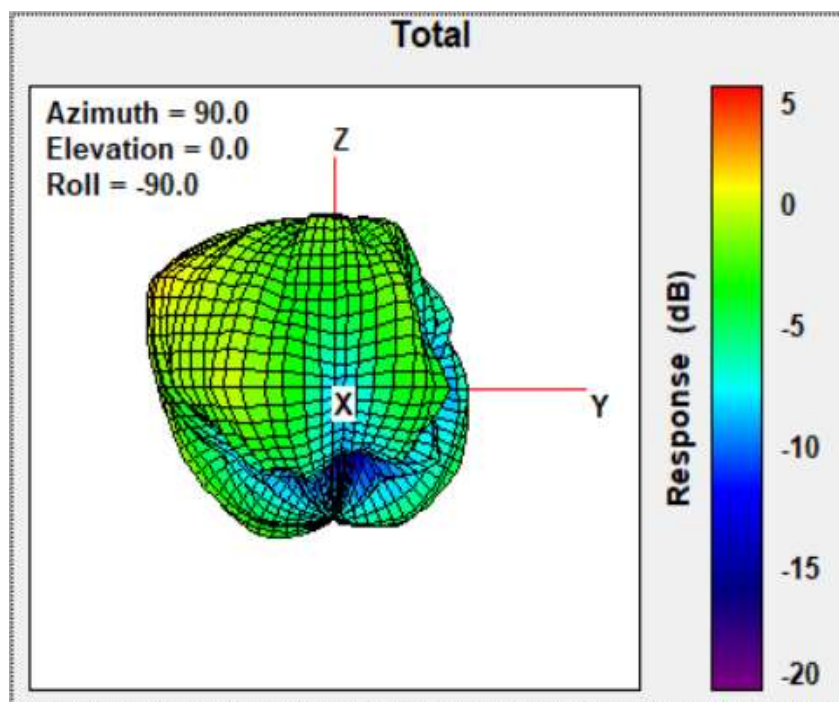
Max Antenna 3D Radiation Pattern 6425-6525 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6425-6525	1.35



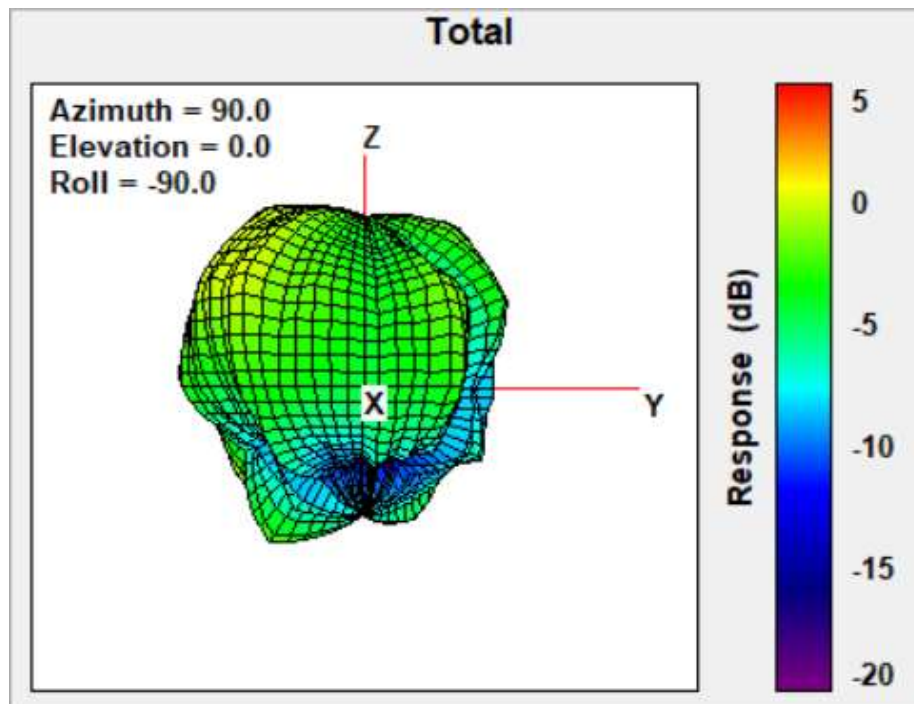
Max Antenna 3D Radiation Pattern 6525-6875 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6525-6875	1.35



Max Antenna 3D Radiation Pattern 6875-7125 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6875-7125	0.63

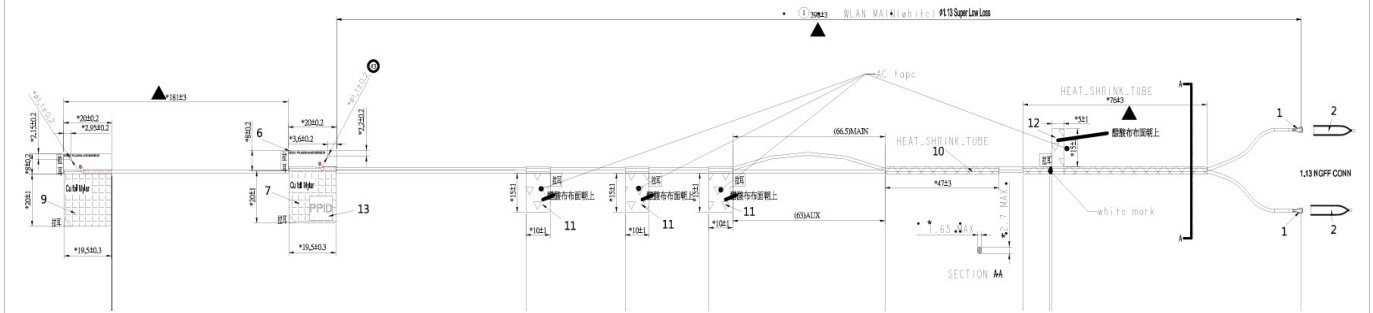


Annex A. Photographs

A.2 Test sample

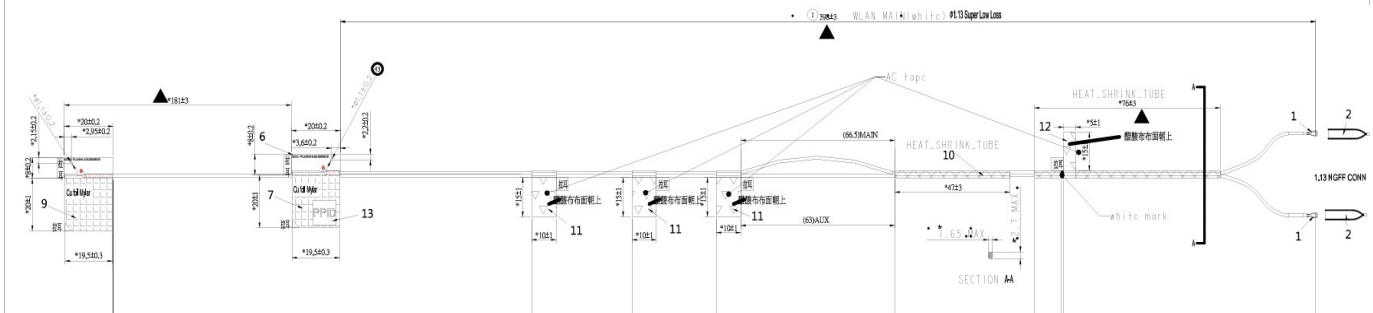
Main Antenna

Antenna Drawing



Aux Antenna

Antenna Drawing

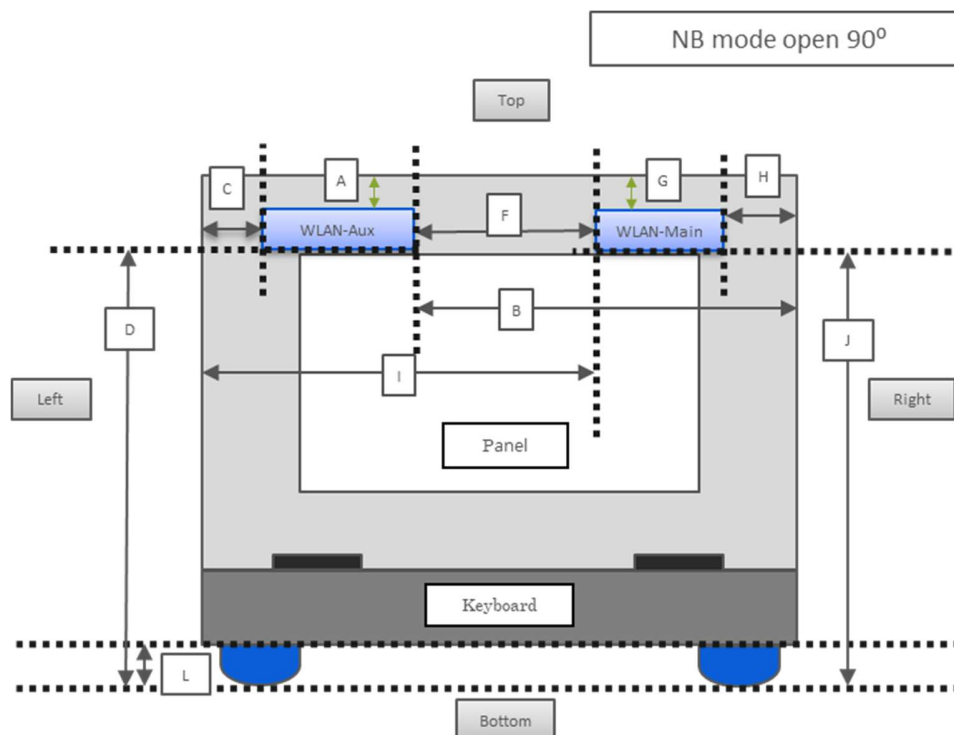


Annex B. Antenna Location

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)
A	WLAN-Main	to Top	6.0
B		to Right	48.25
C		to Left	231.65
D		to Bottom	205.17
F	Main-Aux	Main to Aux	163.4
G	WLAN-Aux	to Top	6.0
H		to Right	231.65
I		to Left	48.25
J		to Bottom	205.17
L	NB	Bumper thickness	1.8

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

