

ANTENNA INFORMATION

OEM	Lenovo
ODM	Huaqin
Platform model name	Legion Go2
Intel platform (ex: Yes, No or NA)	NA
Platform type (ex: regular NB, convertible PC, AIO...etc)	Gaming
SAR minimum separation (mm)	FCC (1g) 4.54
	ISED (1g) 4.54
	ISED (10g) 4.54

Antenna manufacturer	Company name	Everwin - Kunshan Hubble Electronics Technology Co.,LTD
	Address	2F, Building 2, No. 100, Binjiang North Road, Zhangpu Town, Kunshan City, Jiangsu Province
Test location	Company name	Everwin - Kunshan Hubble Electronics Technology Co.,LTD
	Address	2F, Building 2, No. 100, Binjiang North Road, Zhangpu Town, Kunshan City, Jiangsu Province
Test Personnel	Name(Full name)	HanYu
	E-mail	sam.han@ewpt-hubble.com
	Tel/Mobile	(+086) 15843802914
Testing date		2025/04/07

Antenna Part number	Main	3.6.04.0220
	Aux	3.6.04.0221
	BT	3.6.02.0423
Antenna type (ex: PIFA, Dipole...etc)		PIFA

Antenna Peak gain w/ cable loss*											
		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)	1.92	1.82	1.69	1.39	1.65	1.65	1.28	1.65	1.58	1.23
	cable loss (dB)	0.63	0.98	1.02	1.02	1.04	1.06	1.08	1.09	1.10	1.11
Aux	Peak gain(dBi)	1.89	1.62	1.58	1.35	1.68	1.62	1.25	1.62	1.55	1.13
	cable loss (dB)	0.38	0.60	0.61	0.63	0.64	0.66	0.68	0.69	0.70	0.72
BT	Peak gain(dBi)	1.34	NA	NA	NA	NA	NA	NA	NA	NA	NA
	cable loss (dB)	0.20	NA	NA	NA	NA	NA	NA	NA	NA	NA

Cable Assembly Part Number and Information						
	Cable PN	Cable length(mm)	Cable diameter(mm)	Impedance(ohm)	Connector type Brand/ Part Number	Connector type
Main	2.9.01.0213	215.11	1.13	50	Kangsuo NGFF: MHF-B13-N-01	MHF-4L
Aux	2.9.01.0214	131.29	1.13	50	Kangsuo NGFF: MHF-B13-N-01	MHF-4L
BT	2.9.01.0215	69.5	1.13	50	Kangsuo NGFF: MHF-B13-N-01	MHF-4L

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

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1. Intel Reference Gain and Type

Antenna Peak gain w/ cable loss (dBi)											
Band/Frequency		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
Design	EU/UK	3.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
PIFA	For WiFi 6E and earlier	3.24	3.64	3.73	4.77	4.97	4.72	4.83	4.30	5.37	5.59
	From WiFi 7	2.95	5.11	4.55	5.15	5.13	4.45	5.02	5.02	4.96	4.96
Dipole	For WiFi 6E and earlier	2.89	2.92	3.19	4.41	4.22	4.22	4.83	4.30	4.49	5.34
	From WiFi 7	2.95	4.03	4.11	5.15	5.13	4.45	5.02	4.71	4.49	4.96

3D Peak Antenna gain should be equal or greater than -2 dBi

If a host integrator plans to use a lower gain antenna of the same type, additional CBP(FCC)/EDT(EU) testing need to be performed while the module is installed in the host.

2. Document Revision History

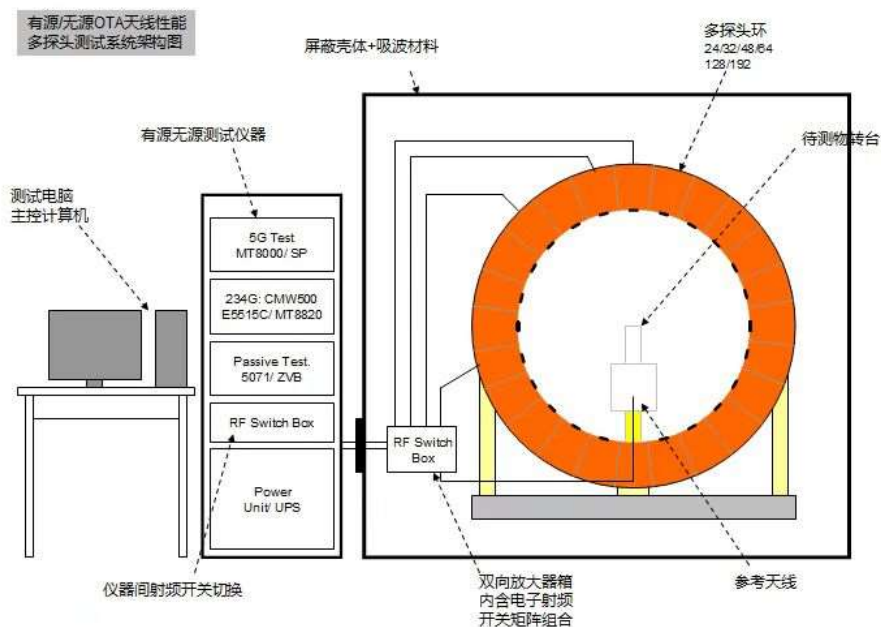
Revision #	Revision Details	Issued Date
Rev. 00	First Issue	2025.04.07

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

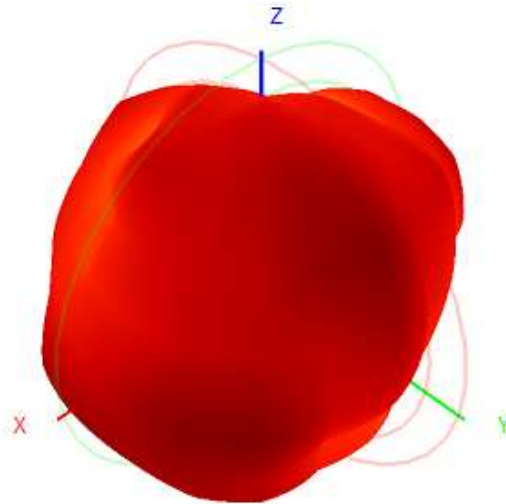
ID#	Device	Type/Model	Serial #	Manufacturer
009-000	Spherical full anechoic chamber	WPTC	P28765-00651-001-PRB	Rohde & Schwarz
009-001	Measurement software (v11.30)	AMS32	100084	Rohde & Schwarz
152-000	Cross-polarized vivaldi antenna	TC-TA85CP	101018	Rohde & Schwarz
345-000	Switch unit + LNA	TC-ELAMP-D	1533.6350.02	Rohde & Schwarz
335-000	Positionner	NCD	173167577	Maturo
143-000	Spectrum analyser	UXA N9040B	US57212210	Keysight
130-000	Signal generator	SMB 100A	178217	Rohde & Schwarz

4. Radiation characteristics of antenna loaded in Host Platform

Main Antenna

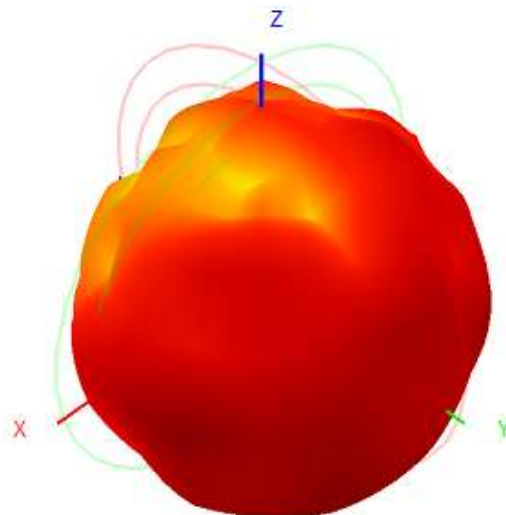
Max Antenna 3D Radiation Pattern 2400 – 2483.5 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
2400-2483.5	1.92



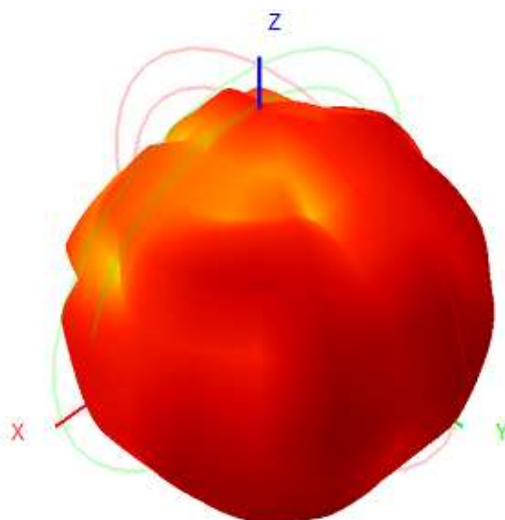
Max Antenna 3D Radiation Pattern 5150-5250 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5150-5250	1.82



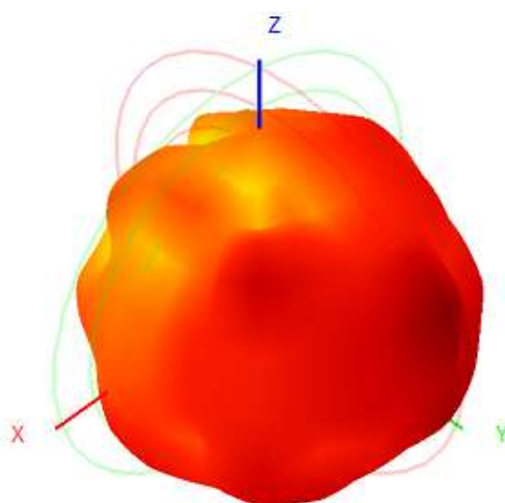
Max Antenna 3D Radiation Pattern 5250-5350 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5250-5350	1.69



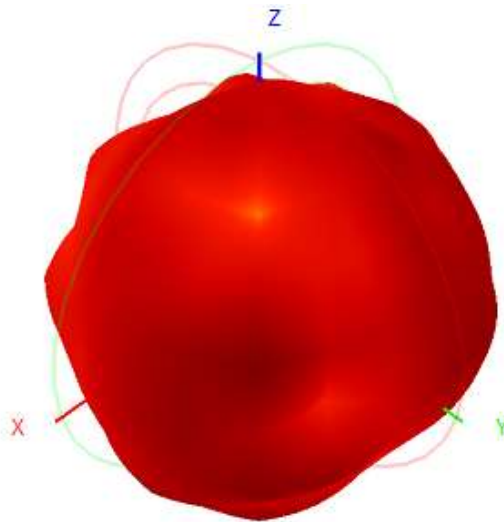
Max Antenna 3D Radiation Pattern 5470-5725 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5470-5725	1.39



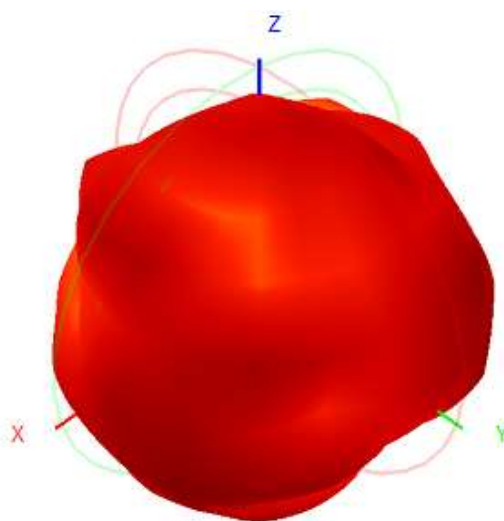
Max Antenna 3D Radiation Pattern 5725-5850 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5725-5850	1.65



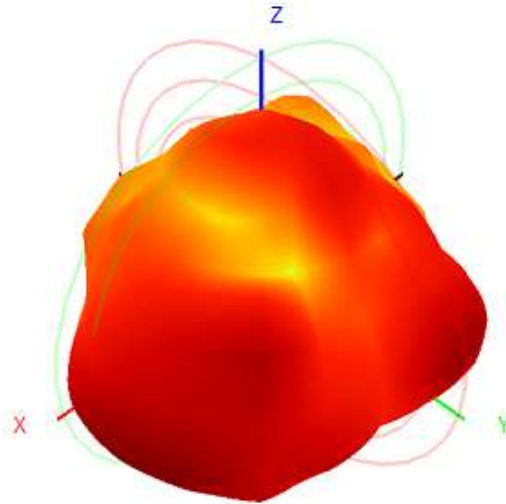
Max Antenna 3D Radiation Pattern 5850-5950 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5850-5950	1.65



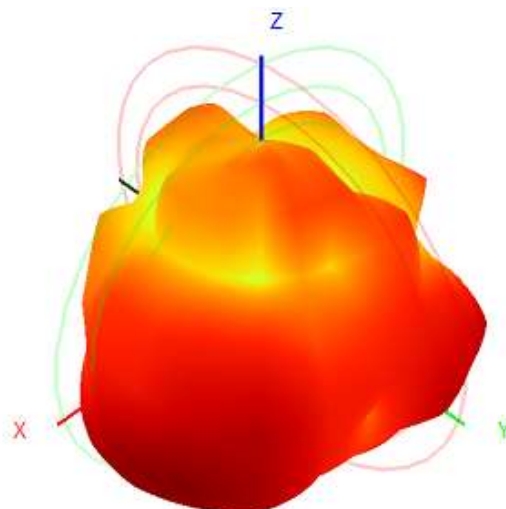
Max Antenna 3D Radiation Pattern 6150-6250 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6150-6250	1.28



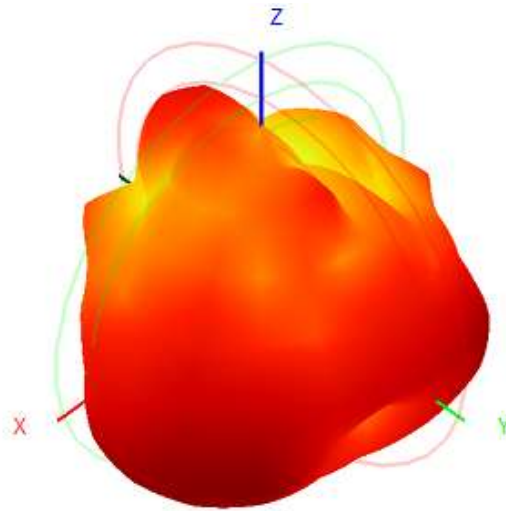
Max Antenna 3D Radiation Pattern 6450-6550 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6450-6550	1.65



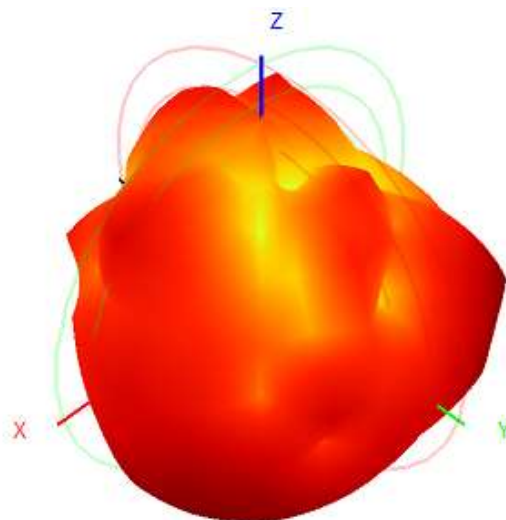
Max Antenna 3D Radiation Pattern 6650-6750 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6650-6750	1.58



Max Antenna 3D Radiation Pattern 6950-7050 MHz

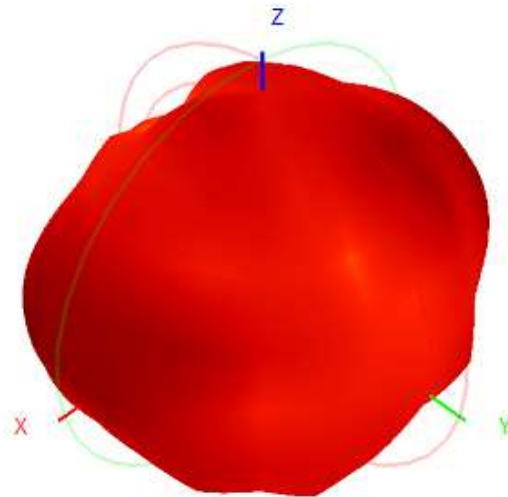
Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6950-7050	1.23



Auxiliary Antenna

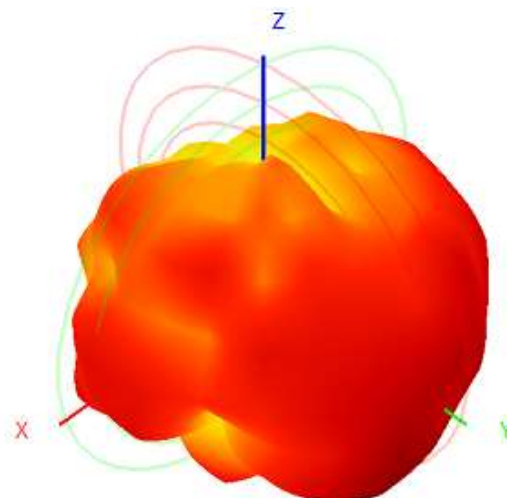
Max Antenna 3D Radiation Pattern 2400 – 2483.5 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
2400-2483.5	1.89



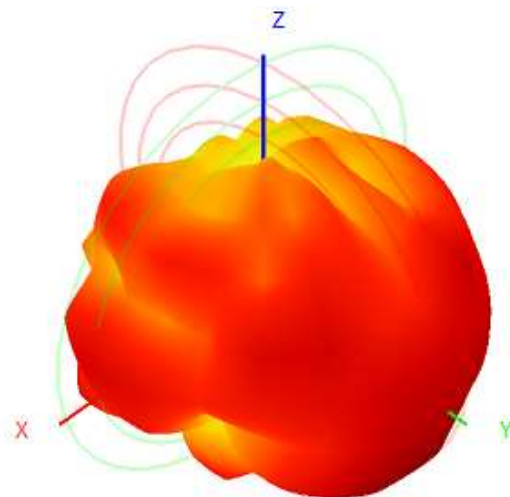
Max Antenna 3D Radiation Pattern 5150-5250 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5150-5250	1.62



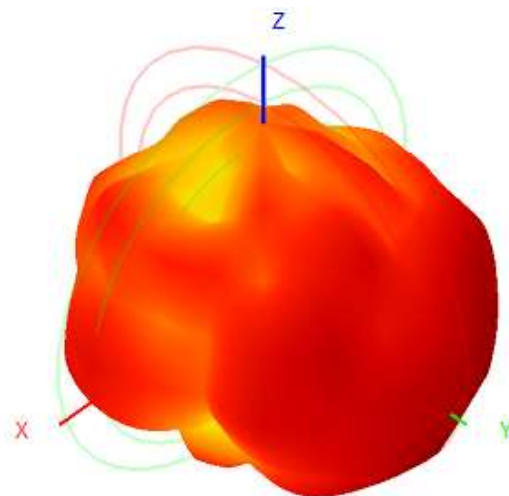
Max Antenna 3D Radiation Pattern 5250-5350 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5250-5350	1.58



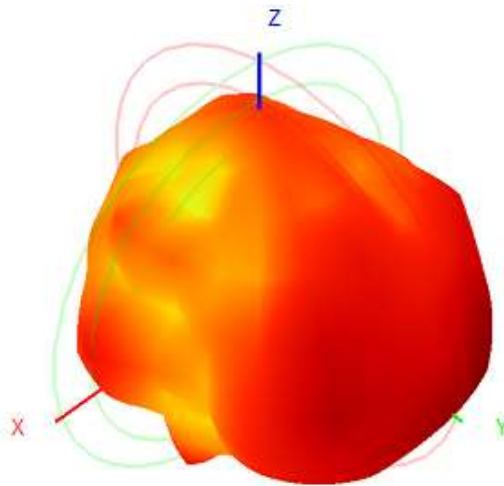
Max Antenna 3D Radiation Pattern 5470-5725 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5470-5725	1.35



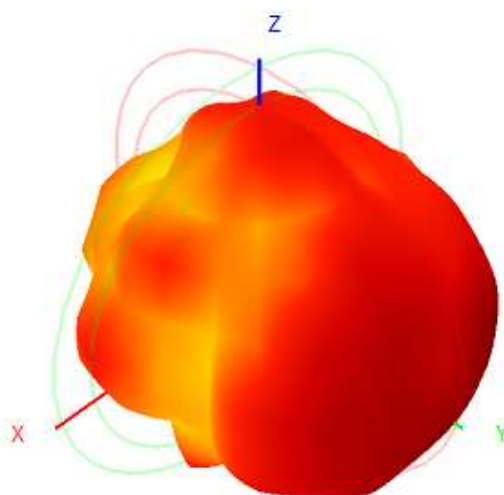
Max Antenna 3D Radiation Pattern 5725-5850 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5725-5850	1.68



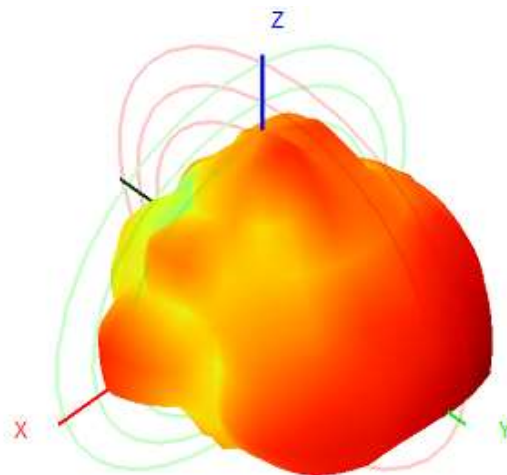
Max Antenna 3D Radiation Pattern 5850-5950 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5850-5950	1.62



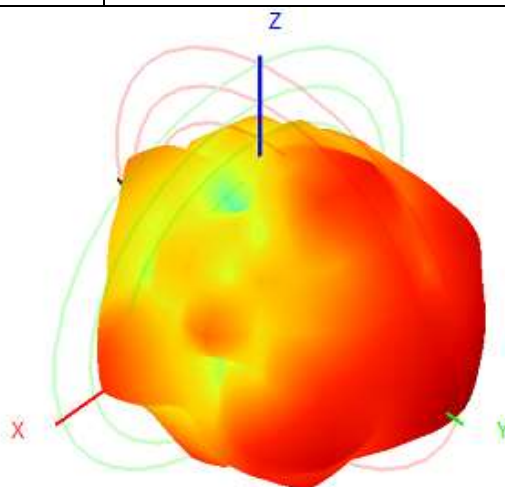
Max Antenna 3D Radiation Pattern 6150-6250 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6150-6250	1.25



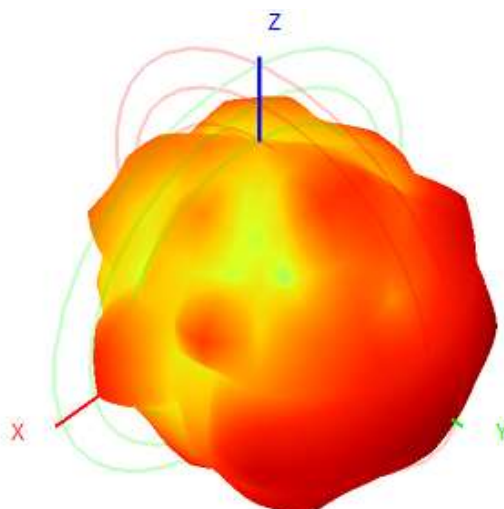
Max Antenna 3D Radiation Pattern 6450-6550 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6450-6550	1.62



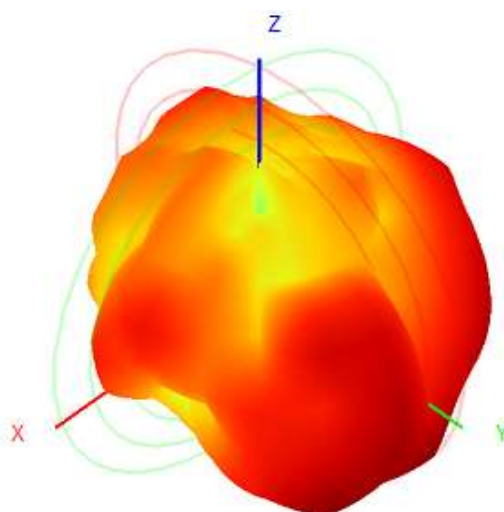
Max Antenna 3D Radiation Pattern 6650-6750 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6650-6750	1.55



Max Antenna 3D Radiation Pattern 6950-7050 MHz

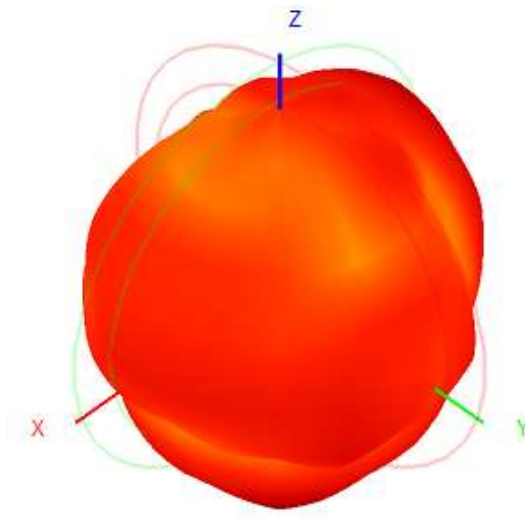
Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6950-7050	1.13



BT Antenna

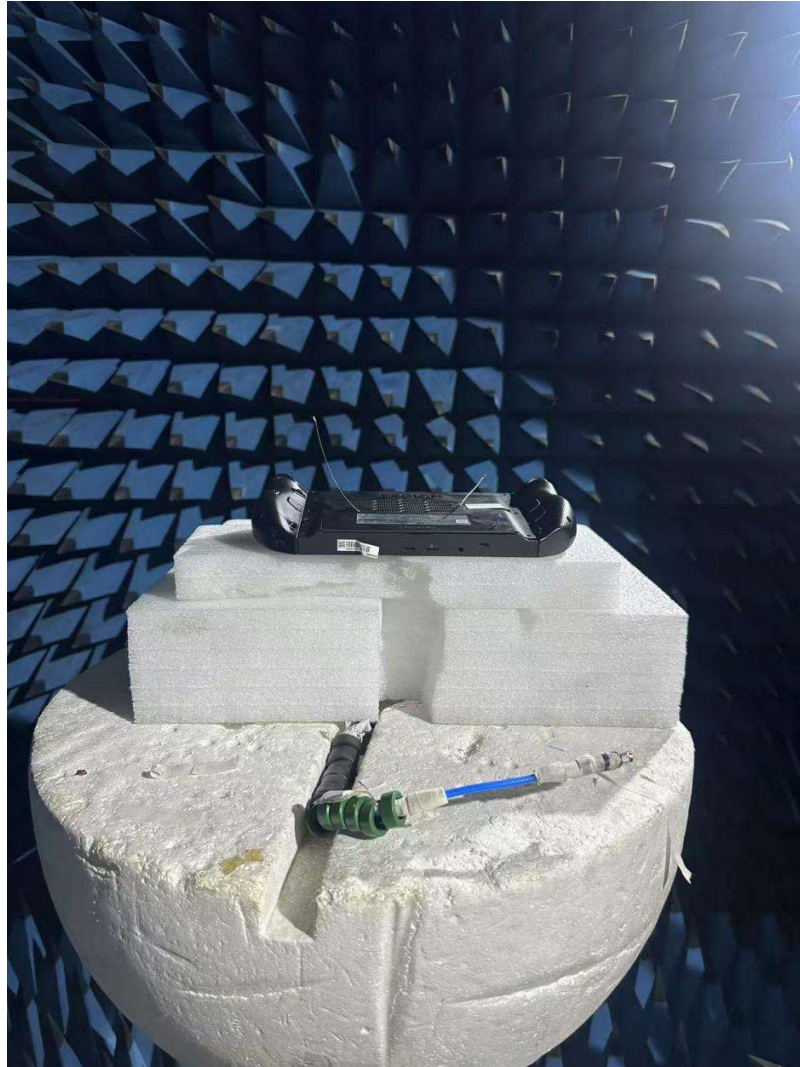
Max Antenna 3D Radiation Pattern 2400 – 2483.5 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
2400-2483.5	1.34



Annex A. Photographs

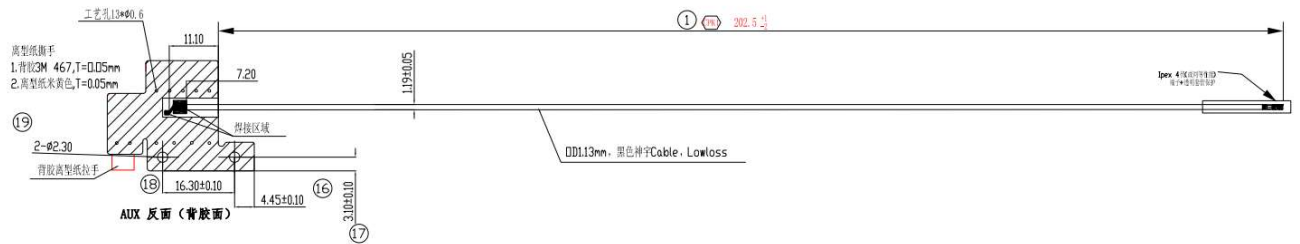
A.1 Setup Photo



A.2 Test sample

Main Antenna

Antenna Drawing

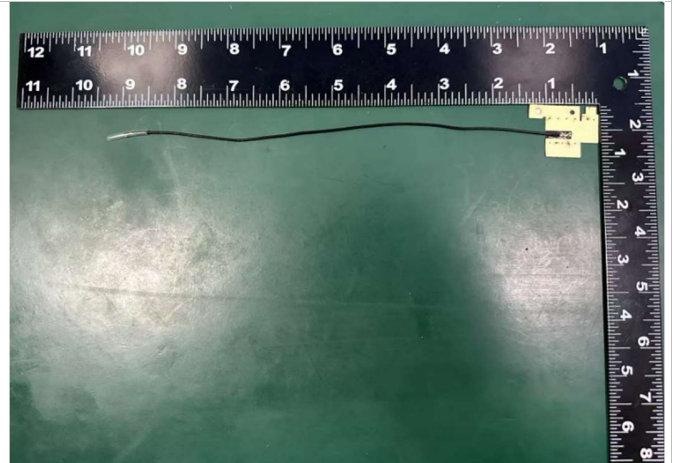


Antenna Photo

Front

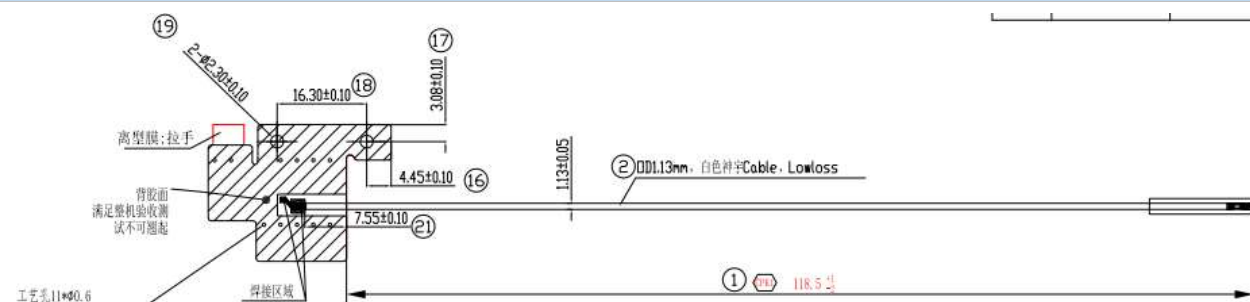


Back



Aux Antenna

Antenna Drawing

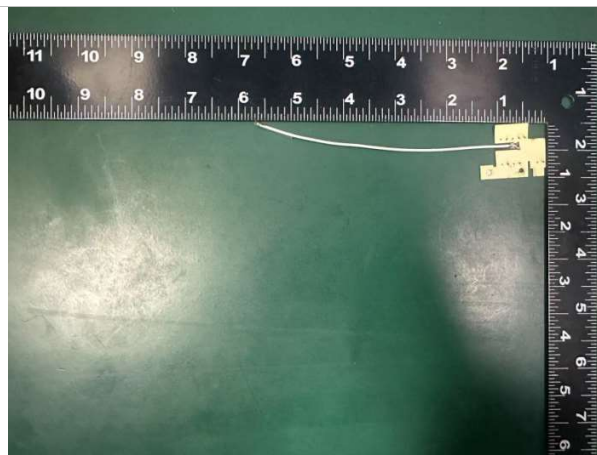


Antenna Photo

Front

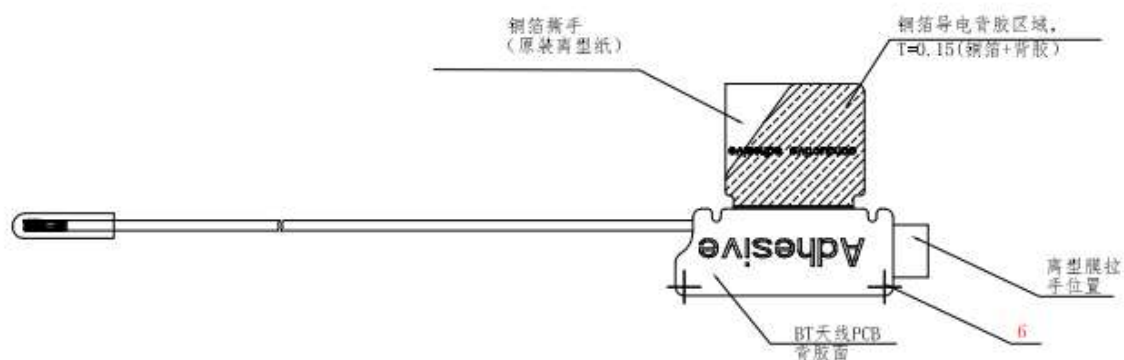


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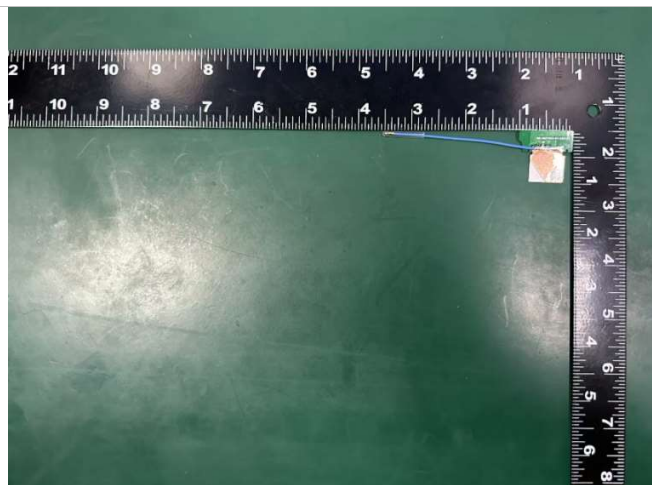
BT Antenna

Antenna Drawing



Antenna Photo

Front



Back

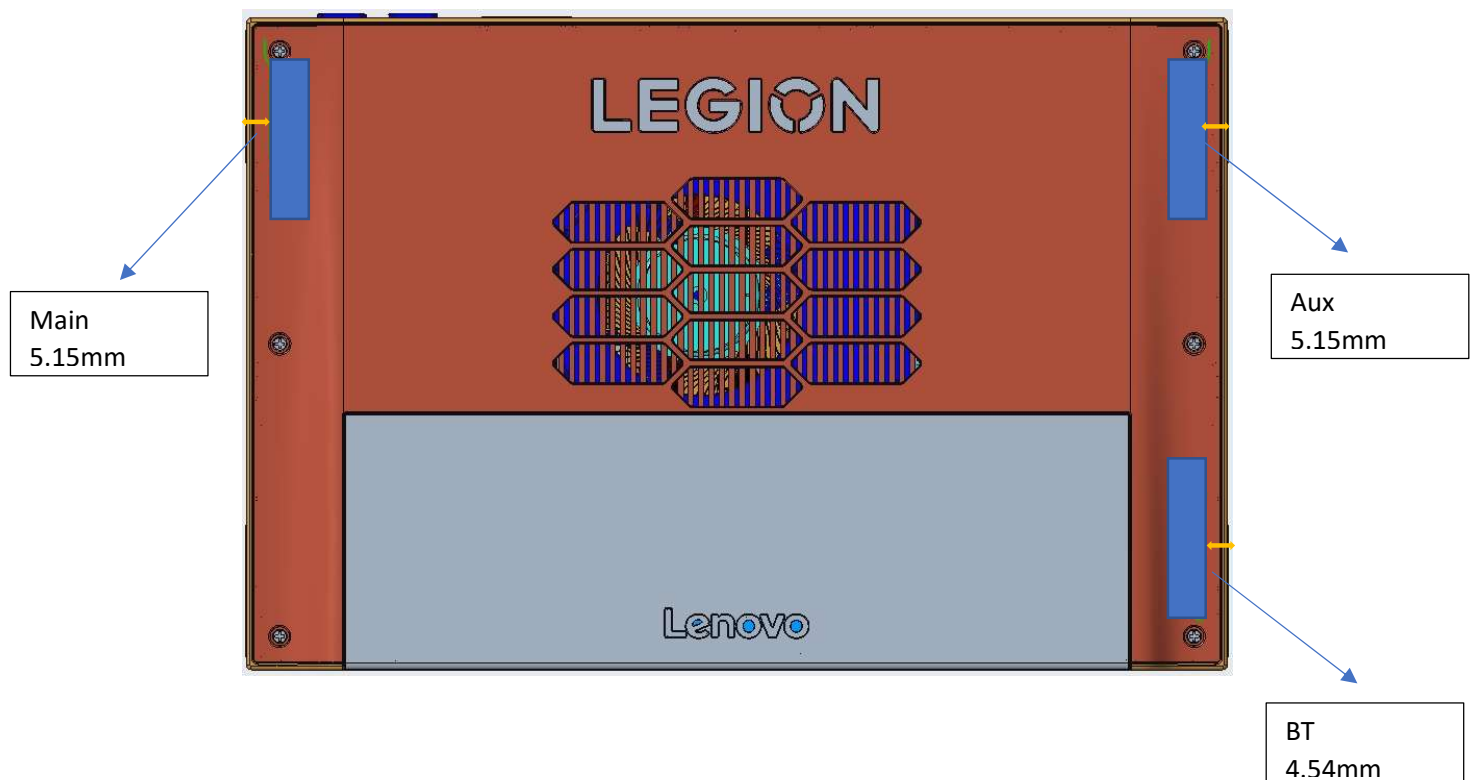


Annex B. Antenna Location

B.1 Antenna Host Platform Location Information

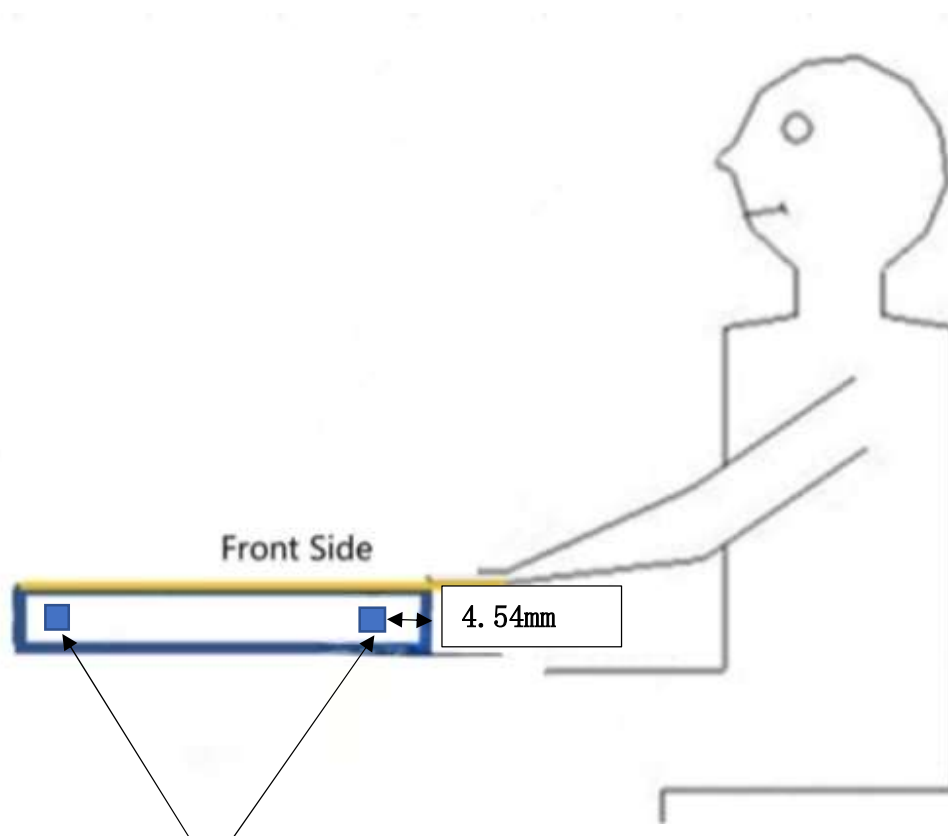
Include a dimensioned photo(s) or dimensioned drawing(s) of Main and Aux antenna placements (measurements are not required for receive-only antenna).

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.



Antenna Position