ANTENNA INFORMATION

OEM		Lenovo
ODM		Huaqin
Platform model name		Legion Go S 8ARP1
Intel platform (ex: Yes, No or NA)		NA
Platform type (ex: regular NB, convertible PC, AIO…etc)		Gaming
SAR minimum separation (mm)	FCC (1g)	3.95
	ISED (1g)	3.95
	ISED (10g)	

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		2024/08/6

Antenna Part number	Main	3.6.04.0197
	Aux	3.6.04.0198
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)	-0.22	1.4	1.58	2.64	1.63	0.67	1.67	1.95	0.24	1.00
	cable loss (dB)	0.47	0.61	0.62	0.65	0.67	0.72	0.74	0.75	0.77	0.78
Aux	Peak gain(dBi)	-0.34	0.52	1.81	2.49	1.83	1.73	2.08	2.13	1.19	-0.61
	cable loss (dB)	1.08	1.73	1.77	1.79	1.82	1.89	1.92	1.94	1.96	1.98

Cable Assembly Part Number and Information

	Cable PN	**Cable length**(mm)	**Cable diameter**(mm)	**Impedance**(ohm)	**Connector type Brand/ Part Number**	**Connector type**
Main	2.9.01.0161	104.8	1.13	50	Kangsuo NGFF: MHF-B13-N-01	MHF-4L
Aux	2.9.01.0162	306.5	1.13	50	Kangsuo NGFF: MHF-B13-N-01	MHF-4L

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

Table of Contents

1. Intel Reference Gain and Type

NA

2. Document Revision History

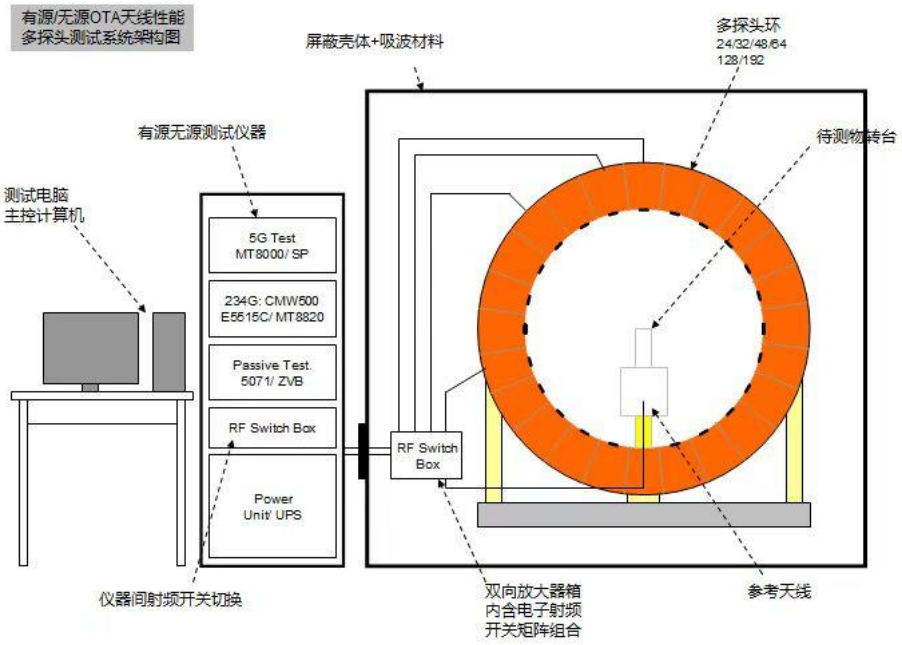
Revision #	Revision Details	Issued Date
Rev. 00	First Issue	2024.08.05

3. Test & System Description

3.1 Measurement Method and System

[example] This test report is prepared for host antenna testing under a Full Anechoic Chamber.

3.2 Test setup



3.3 Equipment list

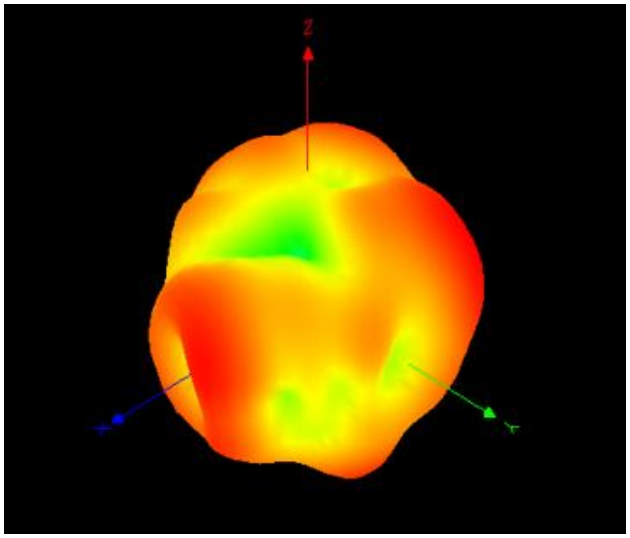
ID#	Device	Type/Model	Serial #	Manufacturer
009-000	Spherical full anechoic chamber	WPTC	P28765-00651-001-PRB	Rohde & Schwarz
009-001	Measurement software (v11.30)	AMS32	100084	Rohde & Schwarz
152-000	Cross-polarized vivaldi antenna	TC-TA85CP	101018	Rohde & Schwarz
345-000	Switch unit + LNA	TC-ELAMP-D	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

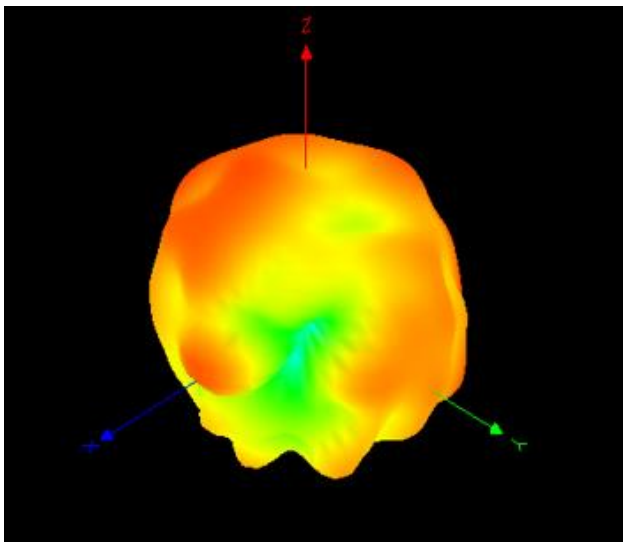
Max Antenna 3D Radiation Pattern 2400 – 2483.5 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
2400-2483.5	-0.22



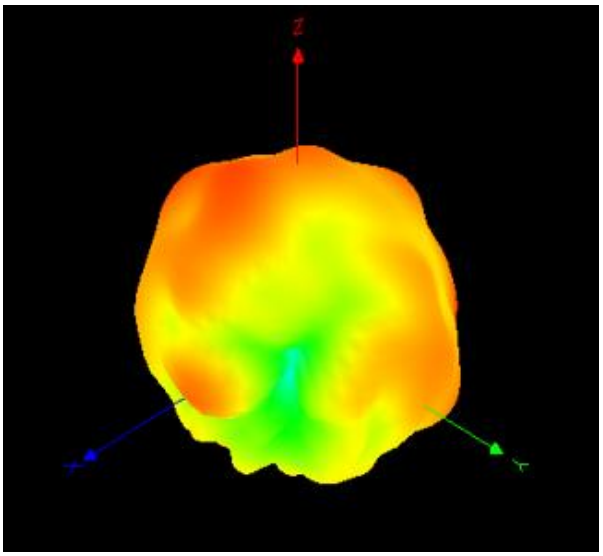
Max Antenna 3D Radiation Pattern 5150-5250 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5150-5250	1.4



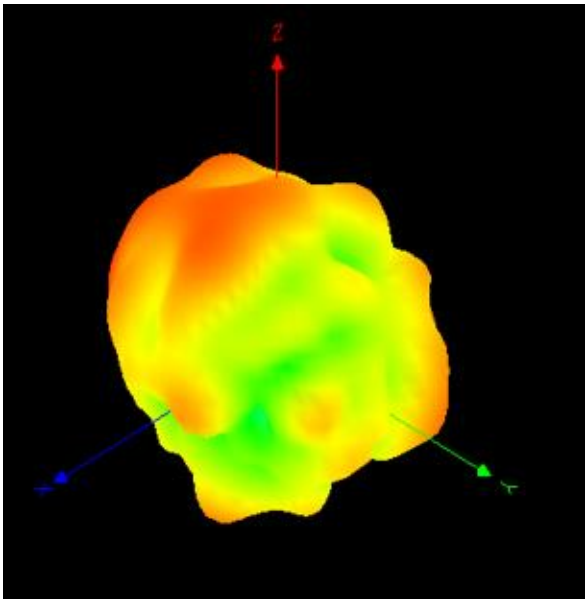
Max Antenna 3D Radiation Pattern 5250-5350 MHz

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



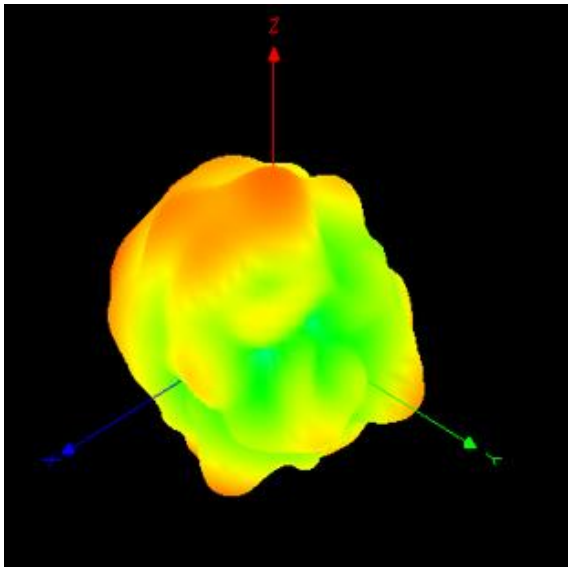
Max Antenna 3D Radiation Pattern 5470-5725 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5470-5725	2.64



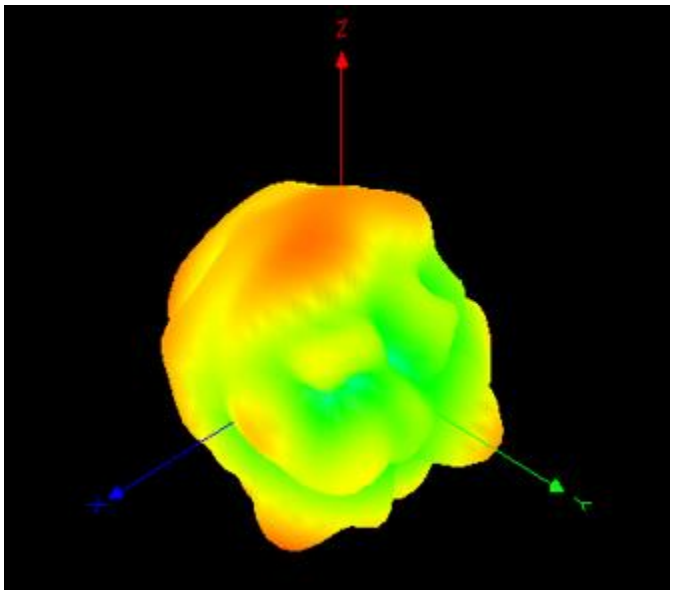
Max Antenna 3D Radiation Pattern 5725-5850 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5725-5850	1.63



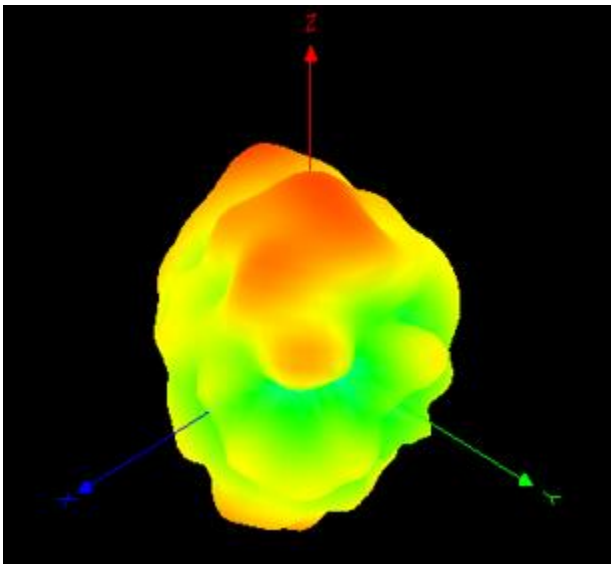
Max Antenna 3D Radiation Pattern 5850-5950 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5850-5950	0.67



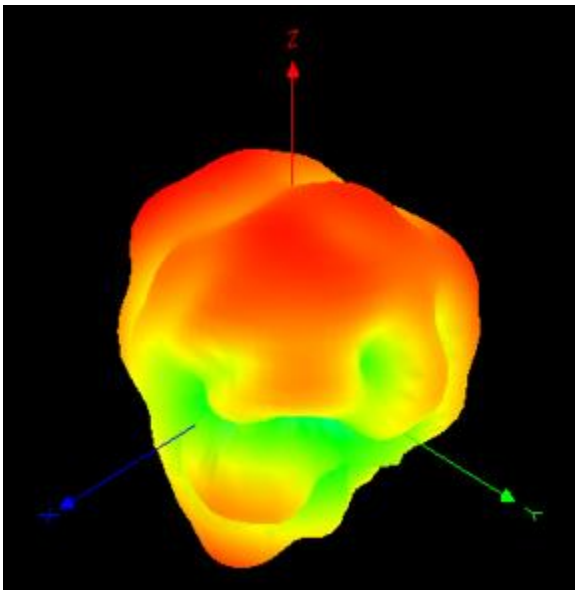
Max Antenna 3D Radiation Pattern 6150-6250 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6150-6250	1.67



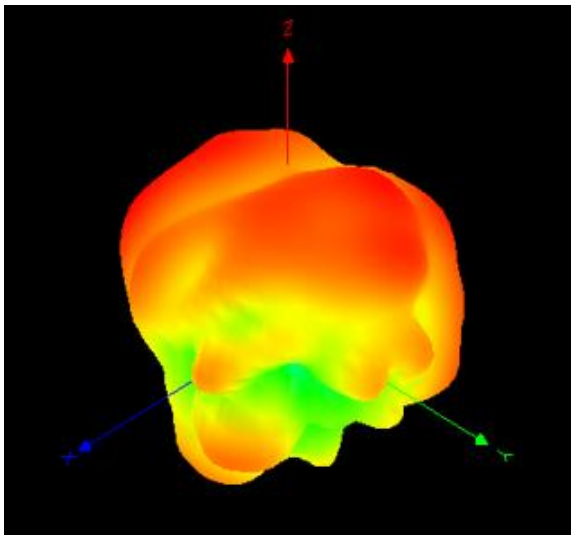
Max Antenna 3D Radiation Pattern 6450-6550 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6450-6550	1.95



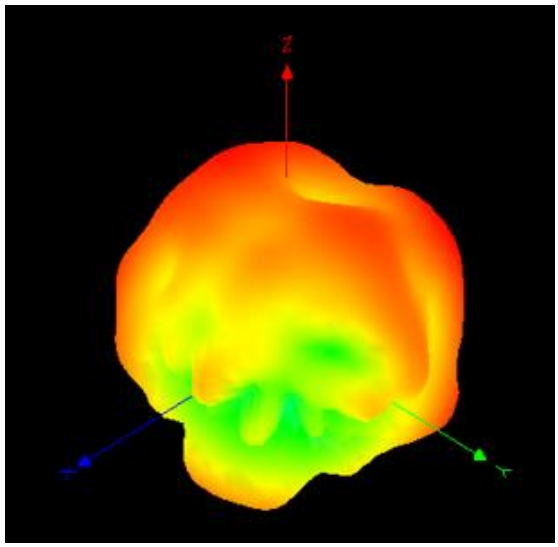
Max Antenna 3D Radiation Pattern 6650-6750 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6650-6750	0.24



Max Antenna 3D Radiation Pattern 6950-7050 MHz

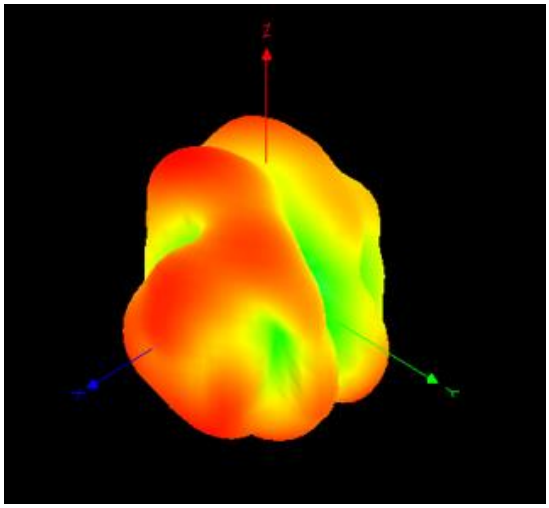
Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6950-7050	1.00



Auxiliary Antenna

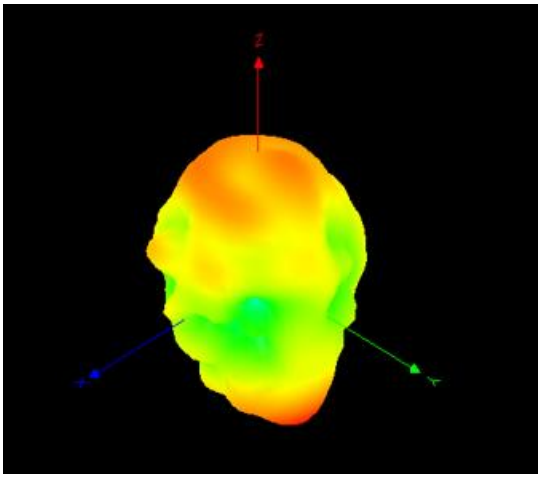
Max Antenna 3D Radiation Pattern 2400 – 2483.5 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
2400-2483.5	-0.34



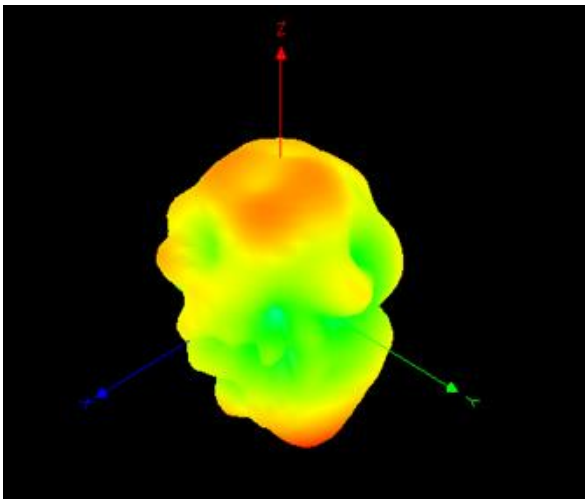
Max Antenna 3D Radiation Pattern 5150-5250 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5150-5250	0.52



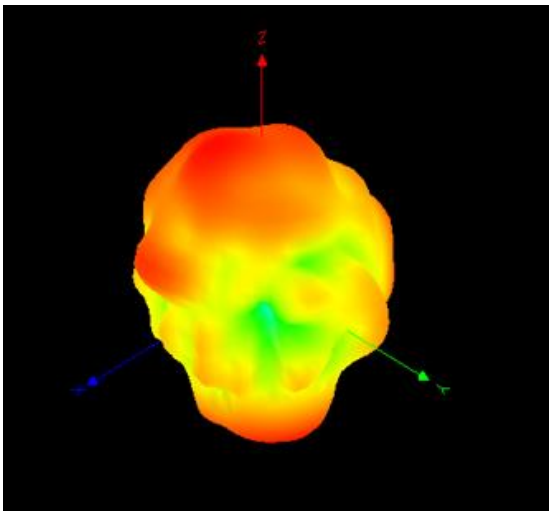
Max Antenna 3D Radiation Pattern 5250-5350 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5250-5350	1.81



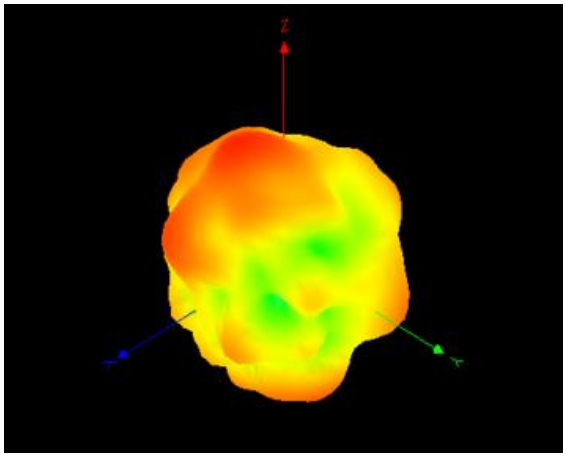
Max Antenna 3D Radiation Pattern 5470-5725 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5470-5725	2.49



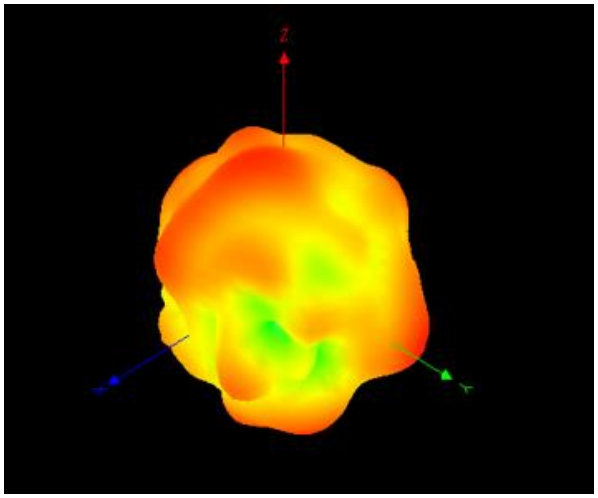
Max Antenna 3D Radiation Pattern 5725-5850 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5725-5850	1.83



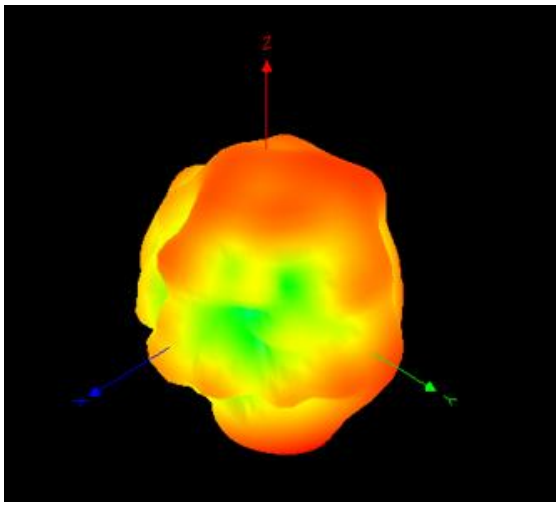
Max Antenna 3D Radiation Pattern 5850-5950 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5850-5950	1.73



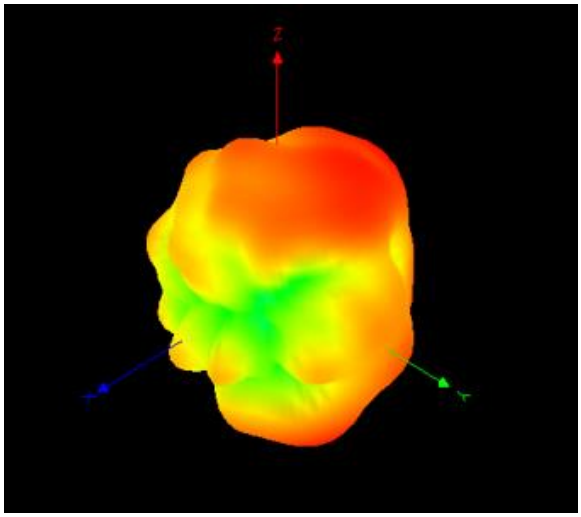
Max Antenna 3D Radiation Pattern 6150-6250 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6150-6250	2.08



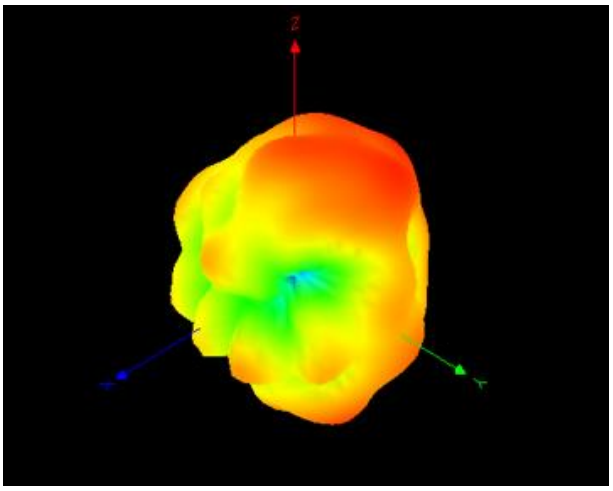
Max Antenna 3D Radiation Pattern 6450-6550 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6450-6550	2.13



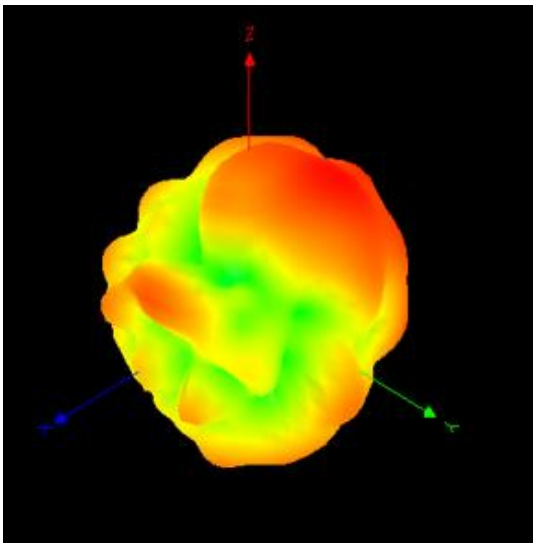
Max Antenna 3D Radiation Pattern 6650-6750 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6650-6750	1.19



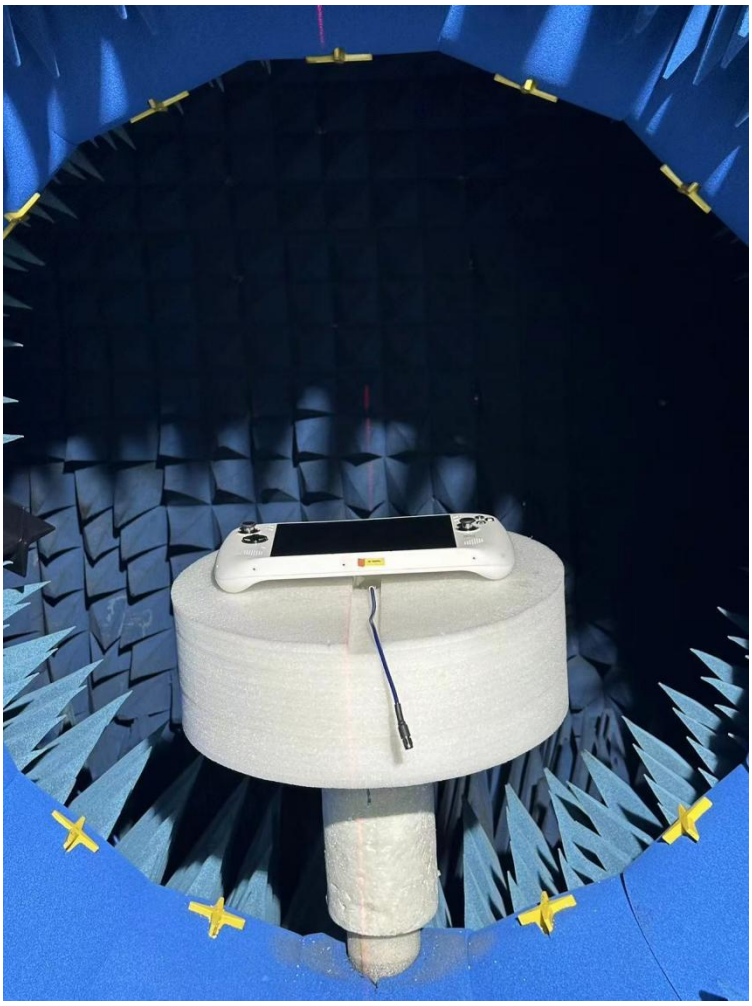
Max Antenna 3D Radiation Pattern 6950-7050 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6950-7050	-0.61



Annex A. Photographs

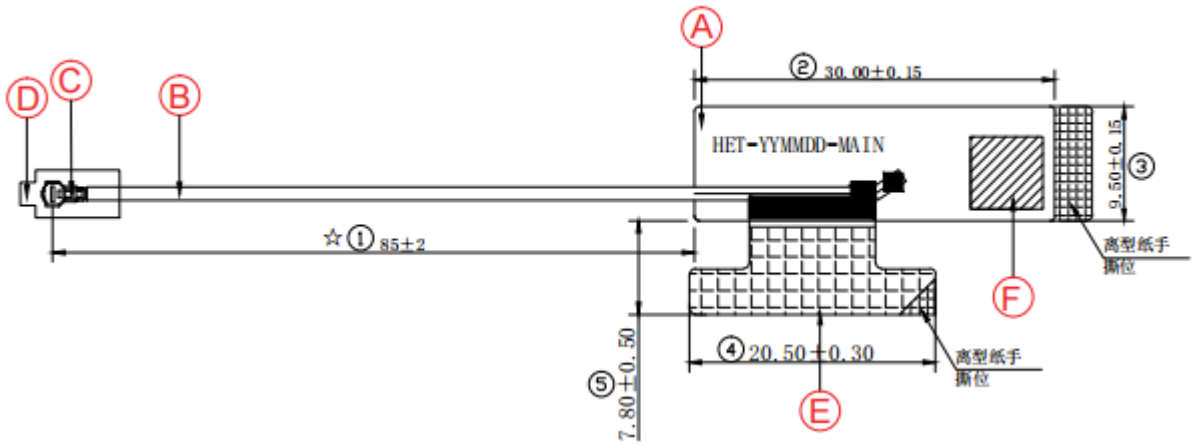
A.1 Setup Photo



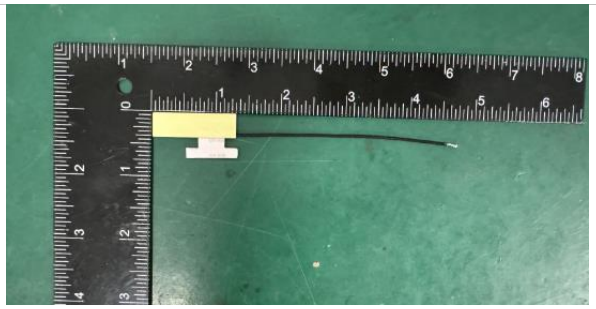
A.2 Test sample

Main Antenna

Antenna Drawing



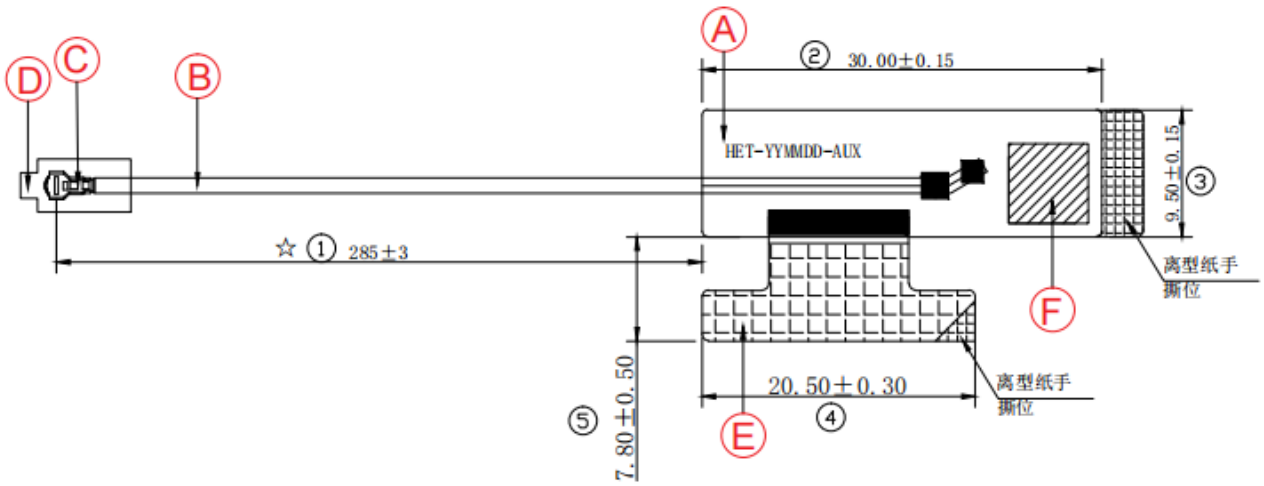
Antenna Photo

Front	Back
	

Note: antenna photo should include L type ruler

Aux Antenna

Antenna Drawing



Antenna Photo

Front	Back
	

Note: antenna photo should include L type ruler

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.