

cANTENNA INFORMATION

OEM	Lenovo
ODM	LCFC
Platform model name	Yoga 9 2-in-1 16N1X11
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) NB Mode : 4.5mm ;Pad Mode : 0.9mm ISED (1g) NB Mode : 4.5mm ;Pad Mode : 0.9mm ISED (10g) 0.9mm

Antenna manufacturer	Company name	INPAQ
	Address	No.5, ChunQiu Road, Huangdai Town, Xiangcheng City, Suzhou
Test location	Company name	INPAQ
	Address	No.5, ChunQiu Road, Huangdai Town, Xiangcheng City, Suzhou
Test Personnel	Name(Full name)	Cai JinQi
	E-mail	Cary.Cai@inpaqgp.com
	Tel/Mobile	15951130763
Testing date		2026/03/03

Antenna Part number	Main	DC33002A100
	Aux	DC33002A100
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	2.52	2.28	2.99	2.22	3.35	3.02	2.35	3.17	2.26	2.28
Aux	2.27	0.36	0.43	1.39	2.28	1.33	2.21	1.46	2.11	2.23

Cable Assembly Part Number and Information					
	Cable PN	Cable length(mm)	Cable diameter(mm)	Impedance(ohm)	Connector type
Main	SY081/50-004	67	0.81	50	IPEX
Aux	SY081/50-003	143	0.81	50	IPEX

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

Antenna Assembly Specifications

1A Antenna Part Number	1B Manufacturer	1C Antenna Type	1D Cable Assembly Part Number and Information	Freq Range MHz	1E * Peak Gain W/ Cable loss (dBi)	1F Peak Gain w/o Cable Loss (dBi)	1G Max VSWR	1H Cable Loss (dB)
(P/N: DC33002A100 Main Antenna	INPAQ	PIFA Type Antenna	Connector type: IPEX Connector: IPEX (P/N: IPEX 4L 20572-001R-08) 50 ohm Coaxial length: 32mm diameter: 0.81mm	2400-2483.5	2.52	2.74	3	0.22
				5150-5250	2.28	2.59	3	0.31
				5250-5350	2.99	3.3	3	0.31
				5470-5725	2.22	2.55	3	0.33
				5725-5850	3.35	3.68	3	0.33
				5850-5895	3.02	3.36	3	0.34
				5925-6425	2.35	2.71	3	0.36
				6425-6525	3.17	3.54	3	0.37
				6525-6875	2.26	2.65	3	0.39
				6875-7125	2.28	2.69	3	0.41
(P/N: DC33002A100 Aux Antenna	INPAQ	PIFA Type Antenna	Connector type: IPEX Connector: IPEX (P/N: IPEX 4L 20572-001R-08) 50 ohm Coaxial length: 29mm diameter: 0.81mm	2400-2483.5	2.27	2.67	3	0.40
				5150-5250	0.36	0.92	3	0.56
				5250-5350	0.43	0.99	3	0.56
				5470-5725	1.39	1.97	3	0.58
				5725-5850	2.28	2.87	3	0.59
				5850-5895	1.33	1.94	3	0.61
				5925-6425	2.21	2.83	3	0.62
				6425-6525	1.46	2.1	3	0.64
				6525-6875	2.11	2.76	3	0.65
				6875-7125	2.23	2.9	3	0.67

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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
Monopole	From WiFi 7	2.83	4.57	4.44	4.95	4.95	4.43	4.87	4.91	4.91	4.79

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

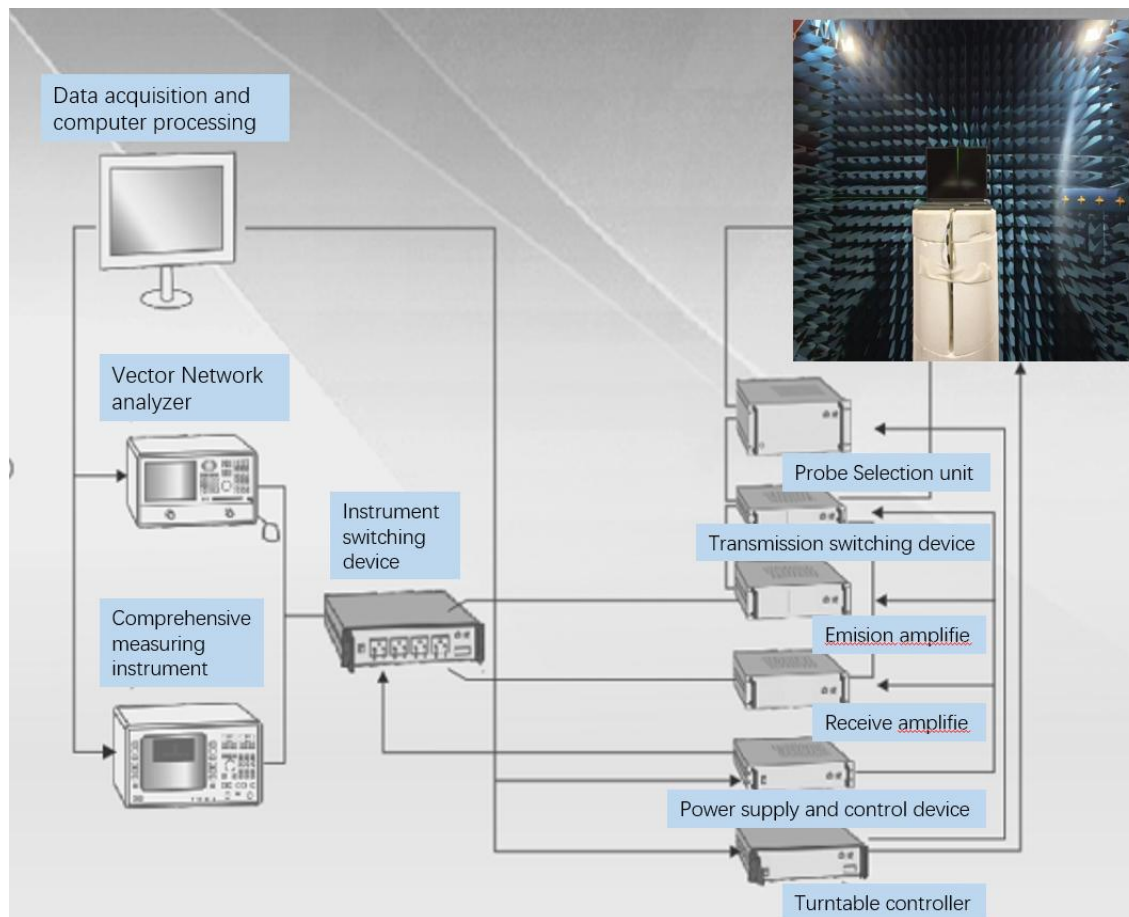
Revision #	Revision Details	Issued Date
Rev. 00	First Issue	2026/03/03

3. Test & System Description

3.1 Measurement Method and System

This test report is prepared by testing in a dark room that is completely silenced and shielded from external signals .

3.2 Test setup



3.3 Equipment list

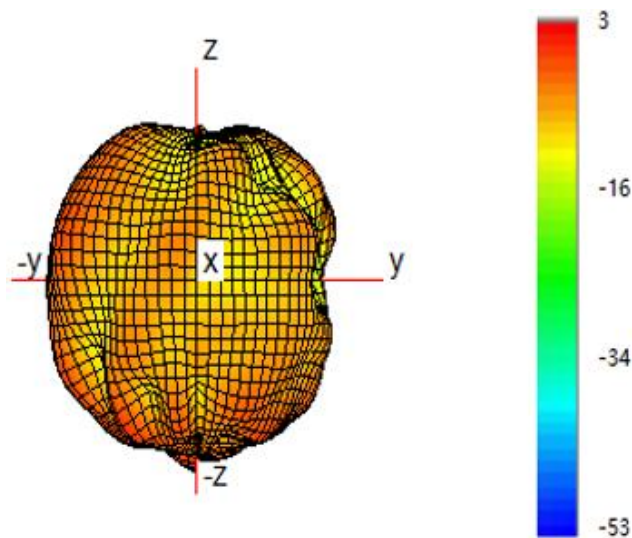
Number	Device	Manufacturer	Cal.Date	Cal.Due.Date
1	Anechoic Chamber	GTS	2025/5/13	2026/5/12
2	measurement antenna	GTS	2025/5/13	2026/5/12
3	Network Analyzer	Keysight	2025/5/13	2026/5/12
4	turn table control box	GTS	2025/5/13	2026/5/12
5	turn table control computer	GTS	2025/5/13	2026/5/12
6	test system host	GTS	N/A	N/A
7	RF line TX	Times	N/A	N/A
8	RF line RX	Times	N/A	N/A
9	cable 2m 1GHz-8.5GHz	Times	N/A	N/A
10	optical fiber line	Times	N/A	N/A

4. Radiation characteristics of antenna loaded in Host Platform

Main Antenna

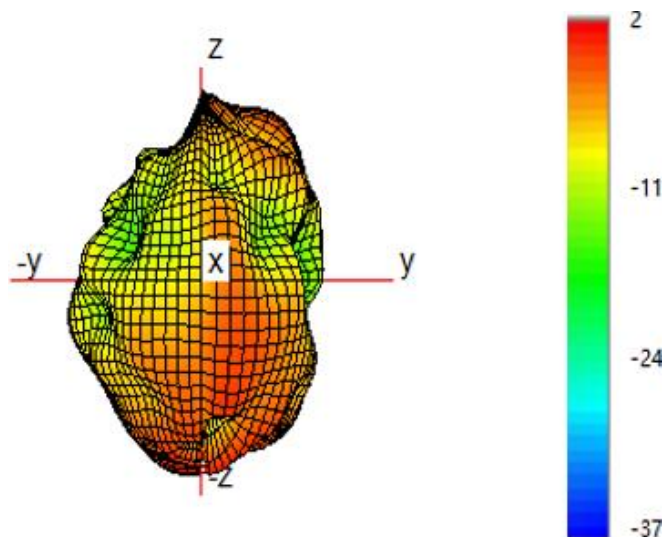
Max Antenna 3D Radiation Pattern 2400 – 2483.5 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
2400-2483.5	2.52



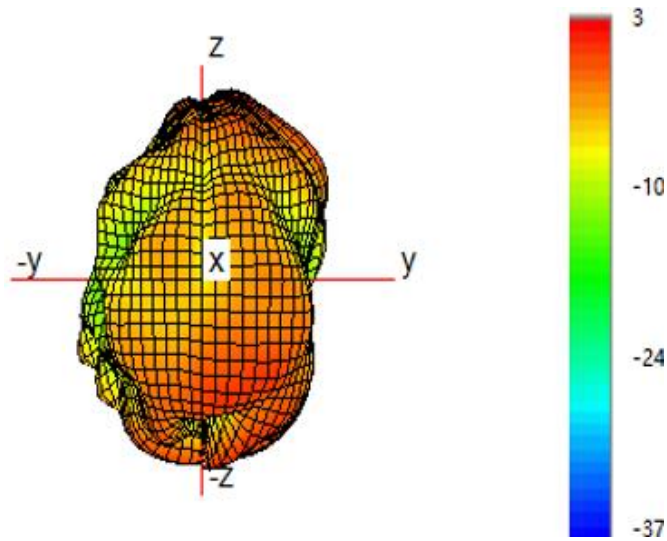
Max Antenna 3D Radiation Pattern 5150-5250 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5150-5250	2.28



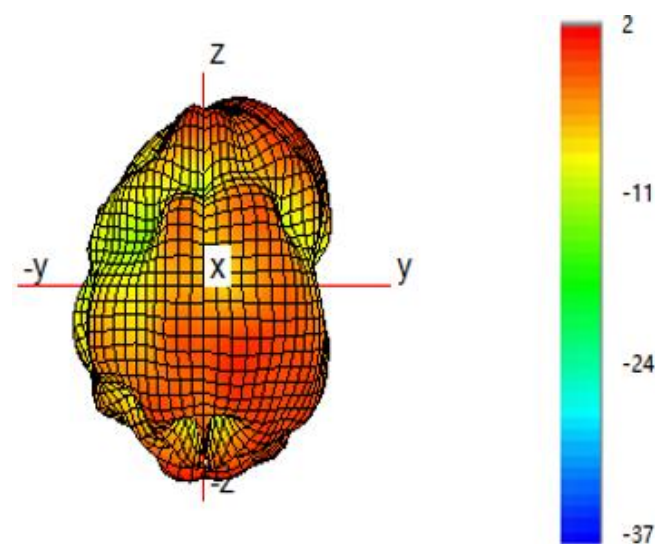
Max Antenna 3D Radiation Pattern 5250-5350 MHz

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



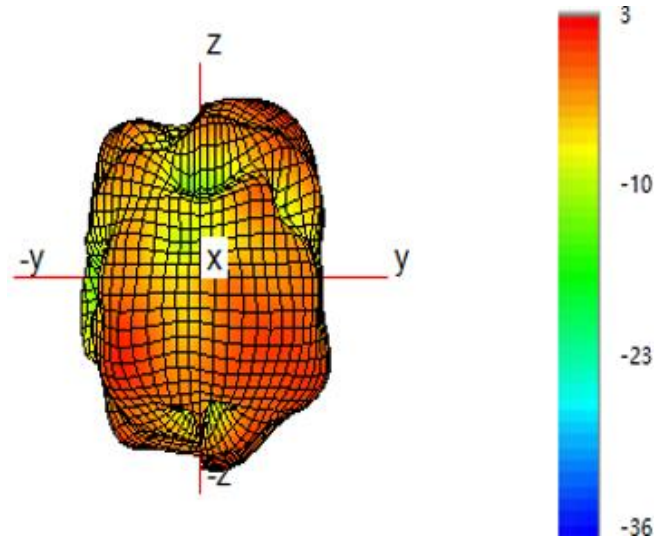
Max Antenna 3D Radiation Pattern 5470-5725 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5470-5725	2.22



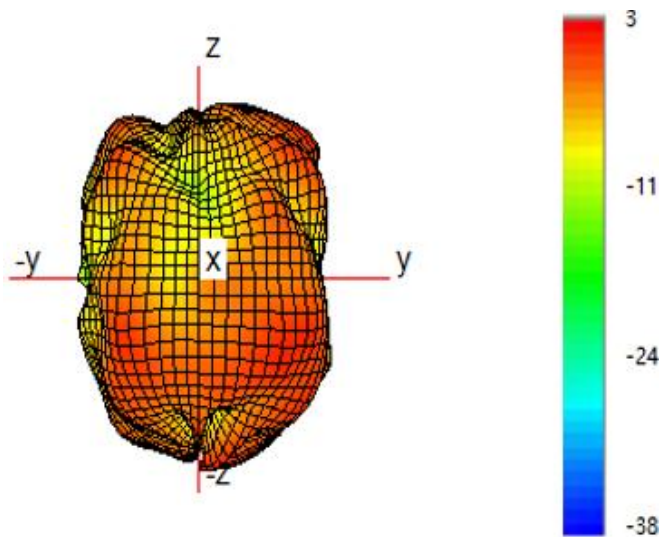
Max Antenna 3D Radiation Pattern 5725-5850 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5725-5850	3.35



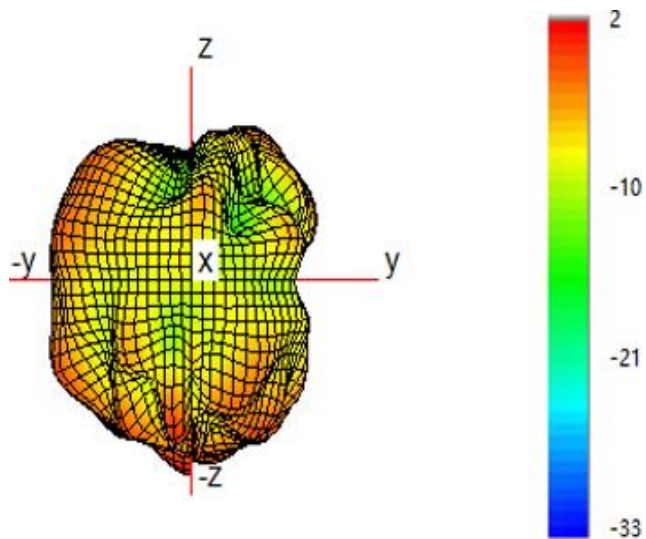
Max Antenna 3D Radiation Pattern 5850-5895 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5850-5895	3.02



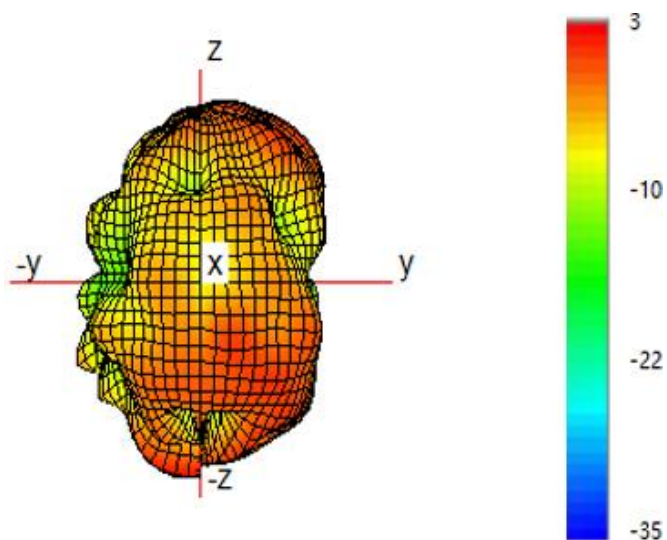
Max Antenna 3D Radiation Pattern 5925-6425 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5925-6425	2.35



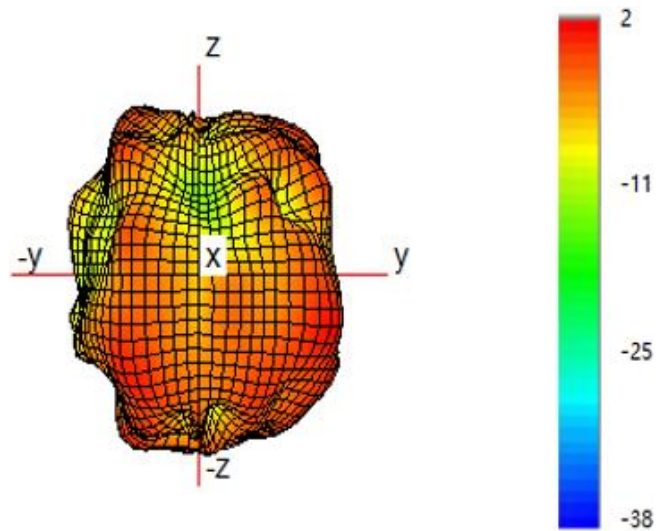
Max Antenna 3D Radiation Pattern 6425-6525 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6425-6525	3.17



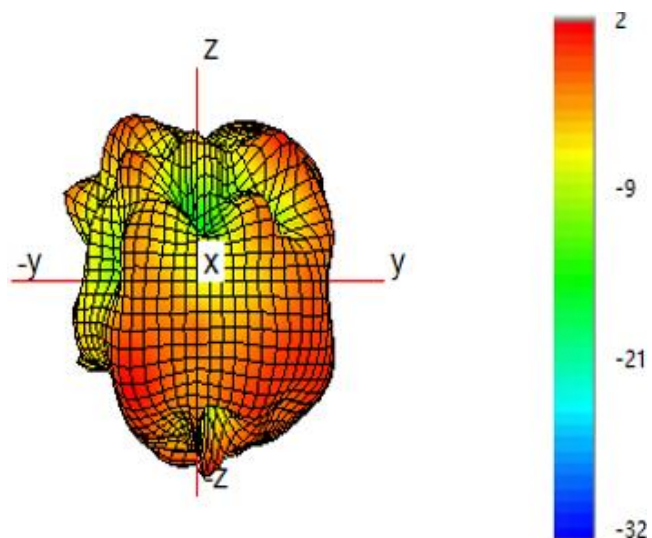
Max Antenna 3D Radiation Pattern 6525-6875 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6525-6875	2.26



Max Antenna 3D Radiation Pattern 6875-7125 MHz

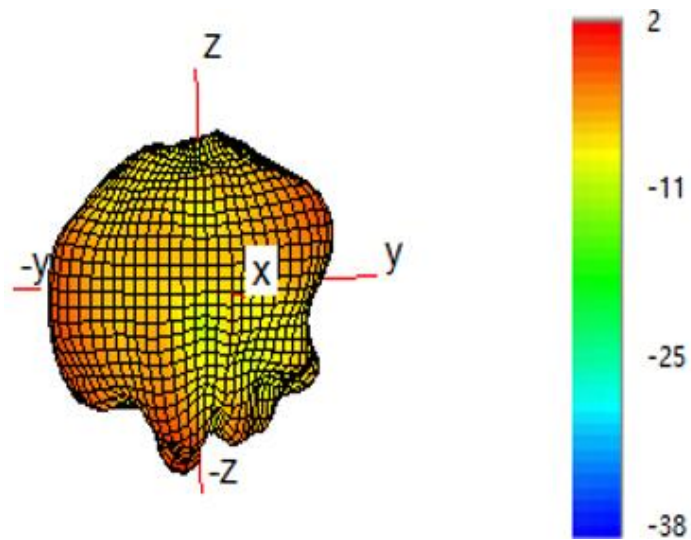
Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6875-7125	2.28



Auxiliary Antenna

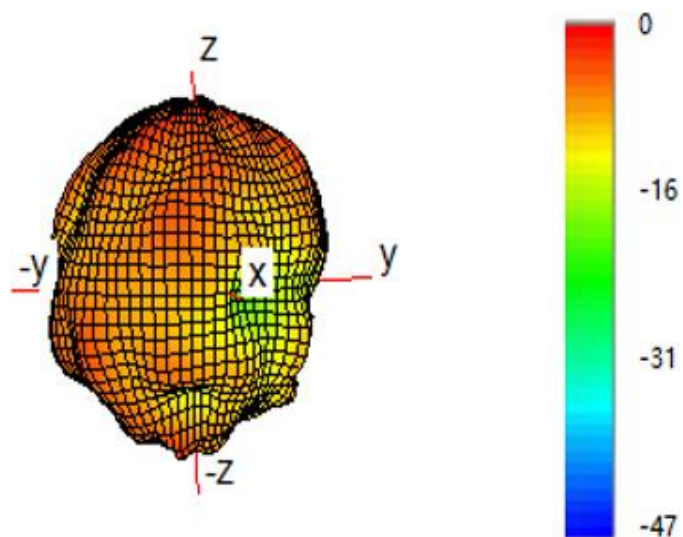
Max Antenna 3D Radiation Pattern 2400 – 2483.5 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
2400-2483.5	2.27



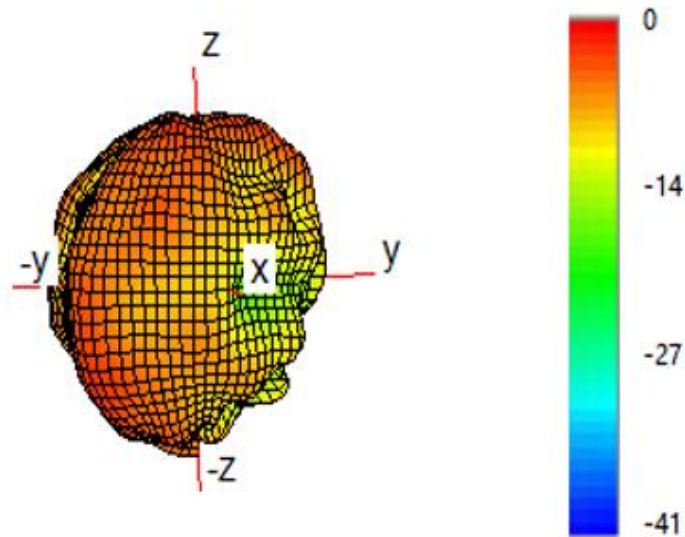
Max Antenna 3D Radiation Pattern 5150-5250 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5150-5250	0.36



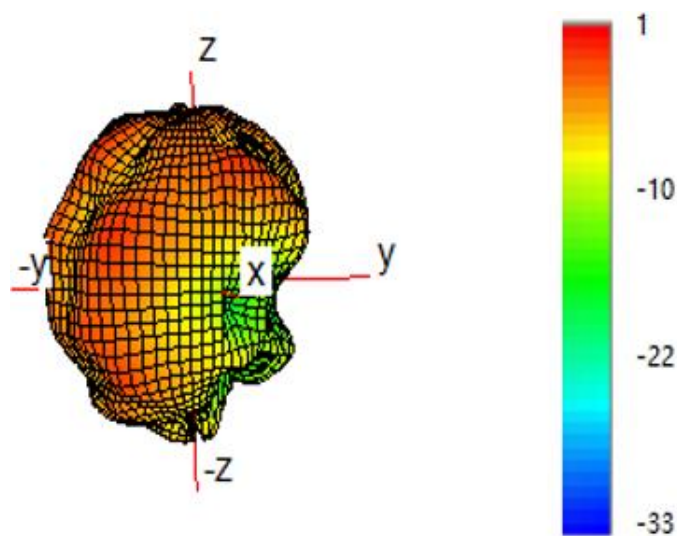
Max Antenna 3D Radiation Pattern 5250-5350 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5250-5350	0.43



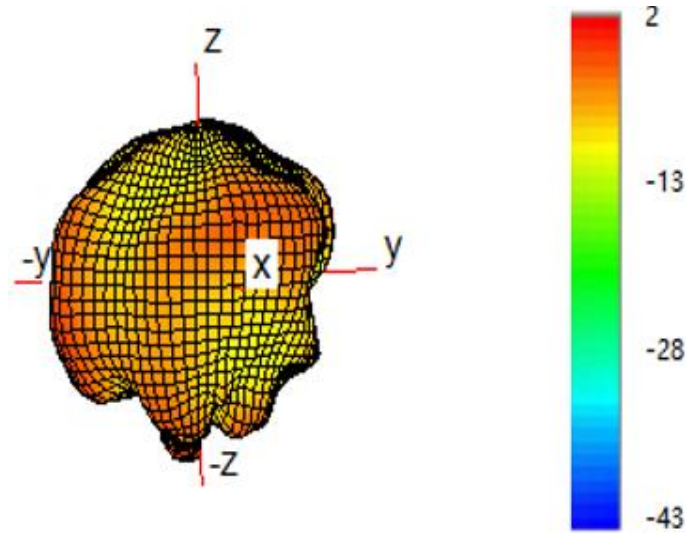
Max Antenna 3D Radiation Pattern 5470-5725 MHz

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



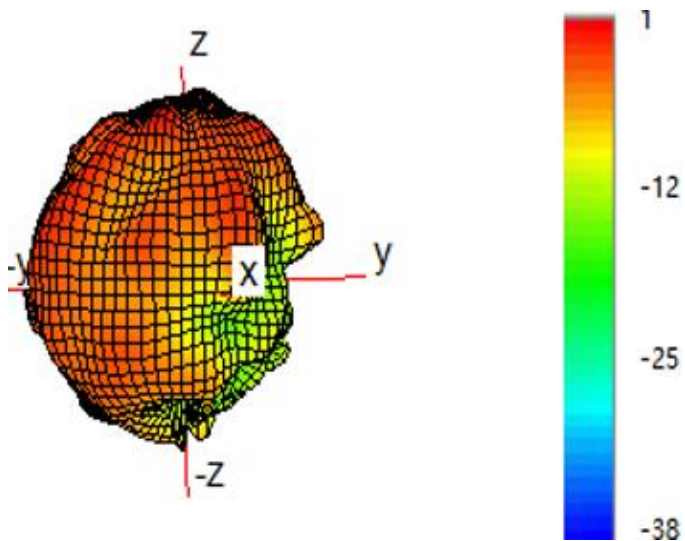
Max Antenna 3D Radiation Pattern 5725-5850 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5725-5850	2.28



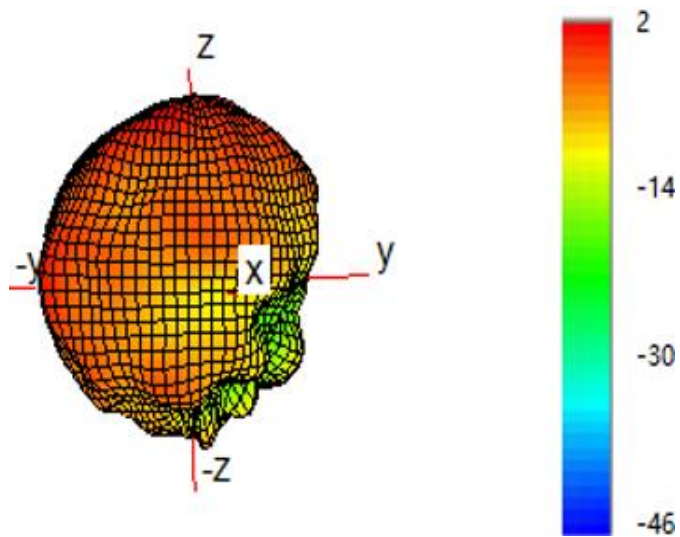
Max Antenna 3D Radiation Pattern 5850-5895 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5850-5895	1.33



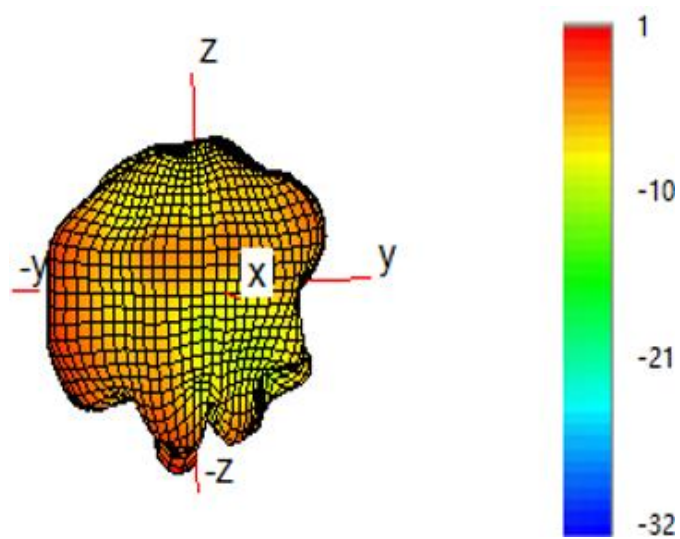
Max Antenna 3D Radiation Pattern 5925-6425 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5925-6425	2.21



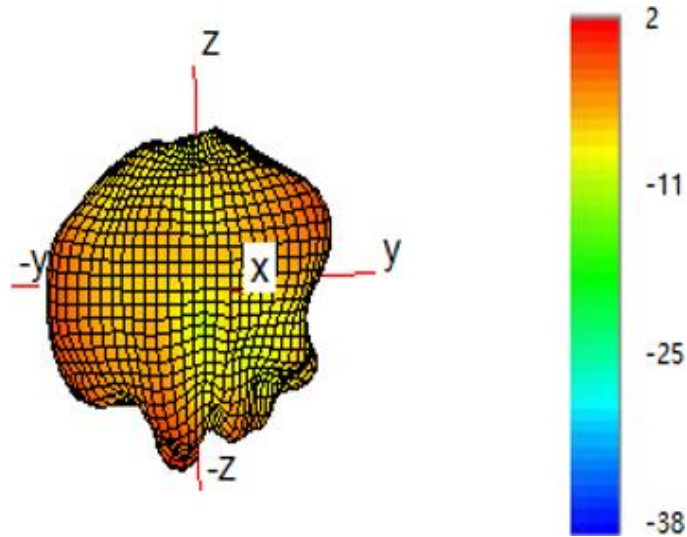
Max Antenna 3D Radiation Pattern 6425-6525 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6425-6525	1.46



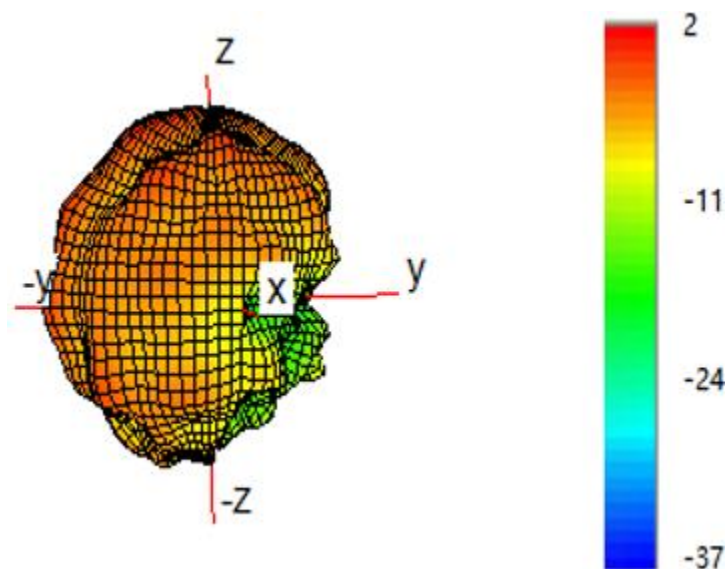
Max Antenna 3D Radiation Pattern 6525-6875 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6525-6875	2.11



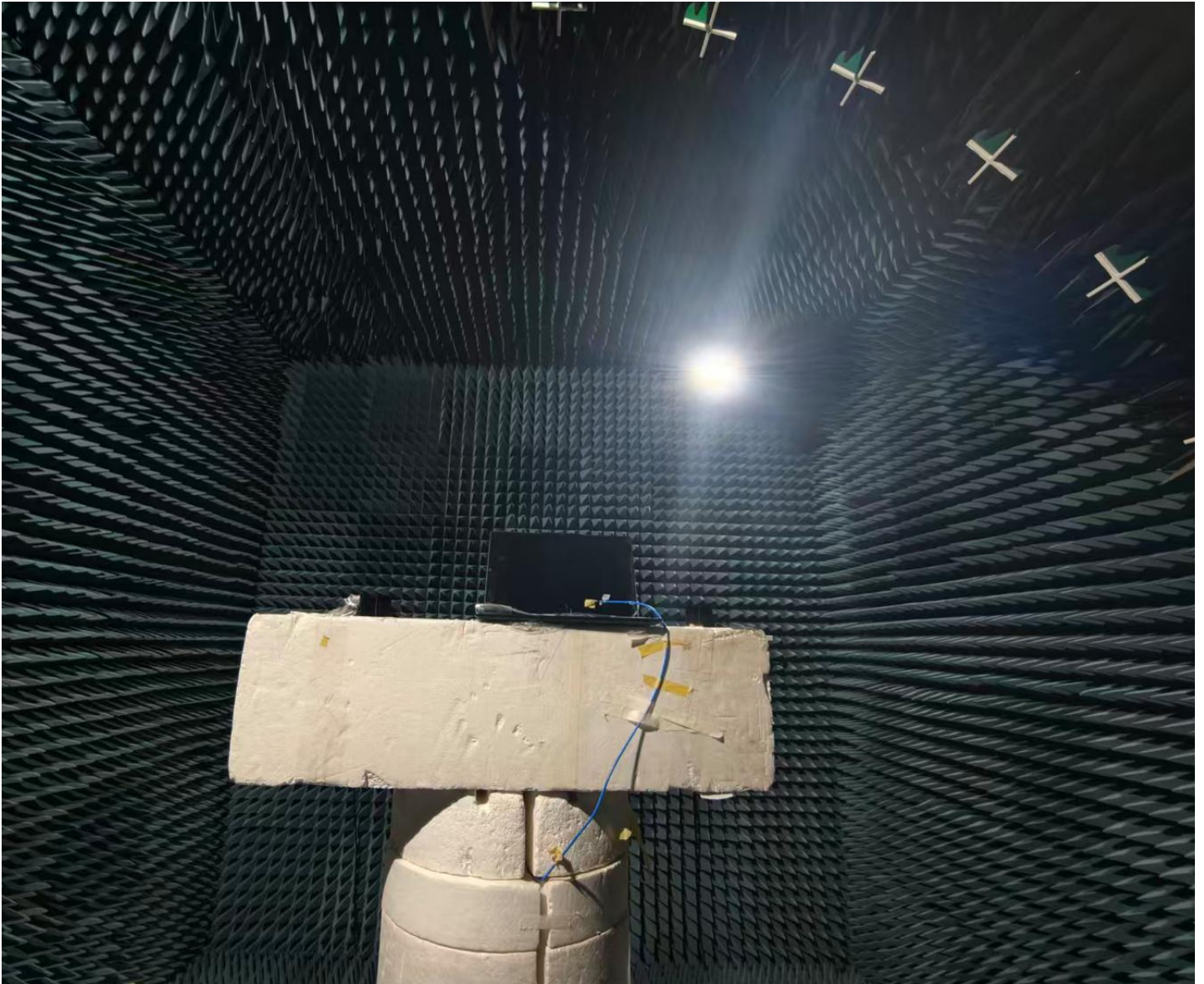
Max Antenna 3D Radiation Pattern 6875-7125 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6875-7125	2.23



Annex A. Photographs

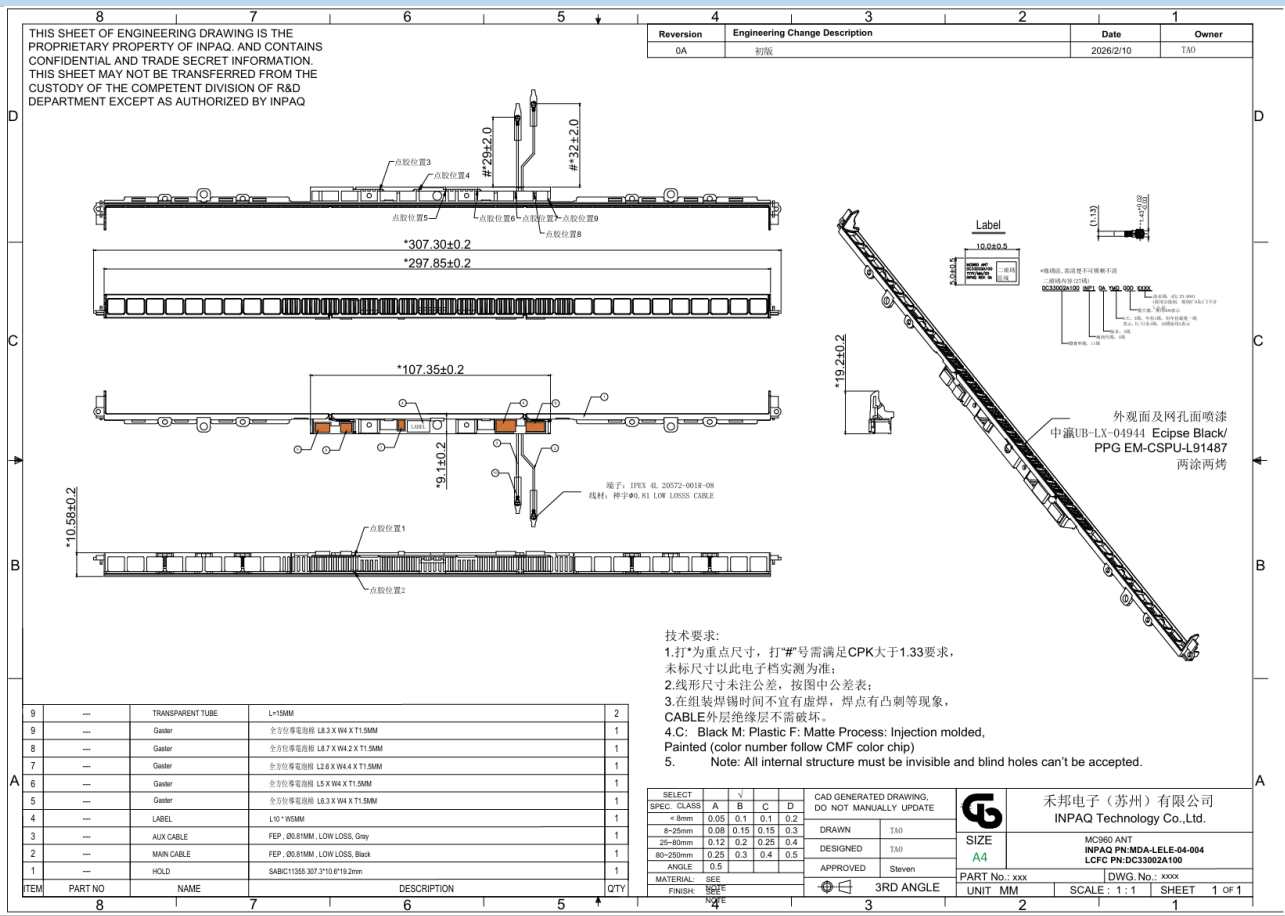
A.1 Setup Photo



A.2 Test sample

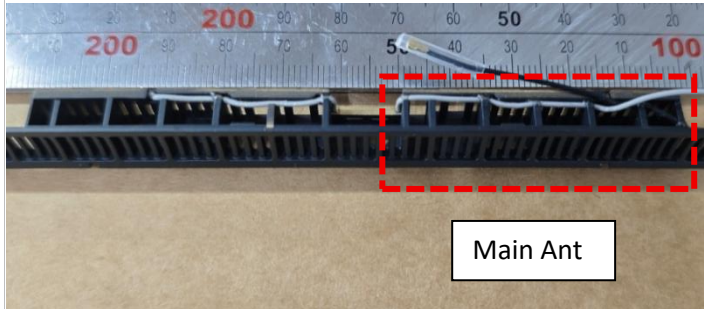
Main Antenna

Antenna Drawing

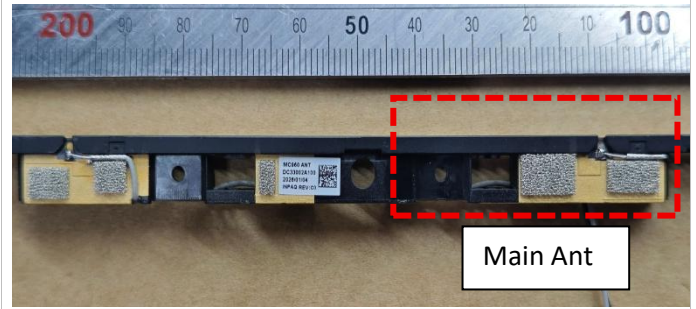


Antenna Photo

Front



Back



Note: antenna photo should include L type ruler

THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF INPAQ AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY INPAQ

技术要求:

- 打*为重点尺寸，打#号需满足CPK大于1.33要求，未标尺寸以此电子档实测为准；
- 线形尺寸未注公差，按图中公差表；
- 在组装焊接时间不宜有虚焊，焊点有凸刺等现象，CABLE外层绝缘层不需破坏。
- C: Black M; Plastic F; Matte Process; Injection molded, Painted (color number follow CMF color chip)
- Note: All internal structure must be invisible and blind holes can't be accepted.

ITEM	PART NO	NAME	DESCRIPTION	QTY
9	---	TRANSPARENT TUBE	L=15MM	2
9	---	Gasket	全密封等电位胶 L6.3 X W4.2 X T1.5MM	1
7	---	Gasket	全密封等电位胶 L6.7 X W4.2 X T1.5MM	1
8	---	Gasket	全密封等电位胶 L2.6 X W4.4 X T1.5MM	1
6	---	Gasket	全密封等电位胶 L5 X W4.4 X T1.5MM	1
5	---	Gasket	全密封等电位胶 L6.3 X W4 X T1.5MM	1
4	---	LABEL	L10*W6MM	1
3	---	AUX CABLE	FEP, Ø0.81MM, LOW LOSS, Gray	1
2	---	MAIN CABLE	FEP, Ø0.81MM, LOW LOSS, Black	1
1	---	HOLD	SABIC1155 307.3*10.1*10.2mm	1

SELECT	SPEC. CLASS	A	B	C	D
< 6mm	0.05	0.1	0.1	0.2	
6-25mm	0.08	0.15	0.15	0.3	
25-50mm	0.12	0.2	0.25	0.4	
50-200mm	0.25	0.3	0.4	0.5	
ANGLE	0.5				
MATERIAL	SEE FINISH				

REVISION	ENGINEERING CHANGE DESCRIPTION	DATE	OWNER
0A	初版	2026/2/10	TNO

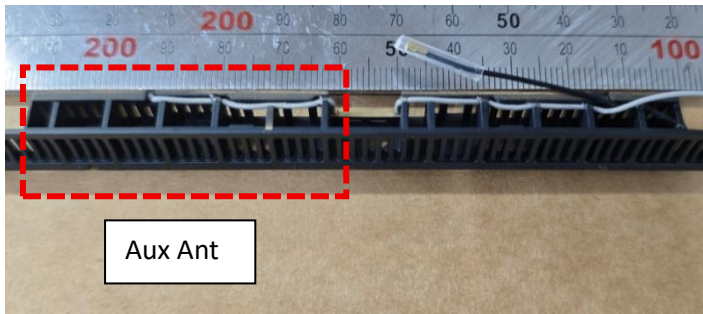
CAD GENERATED DRAWING, DO NOT MANUALLY UPDATE

DRAWN: TAO
DESIGNED: TAO
APPROVED: Steven
3RD ANGLE

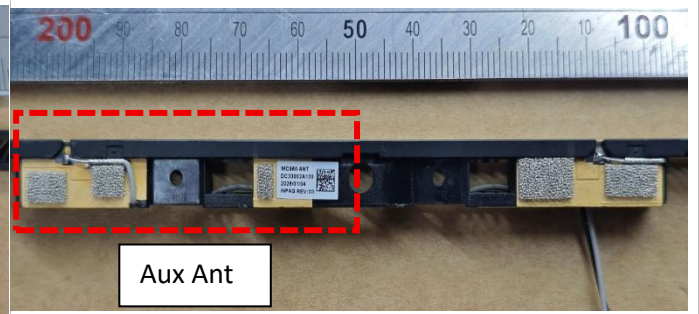
INPAQ Technology Co., Ltd.
M0560 ANT
INPAQ PN-MDA-LELE-04-004
LCFC PN-DCJ3003A100
PART No.: xxx
UNIT: MM
SCALE: 1:1
SHEET: 1 OF 1

Antenna Photo

Front



Back



Note: antenna photo should include L type ruler

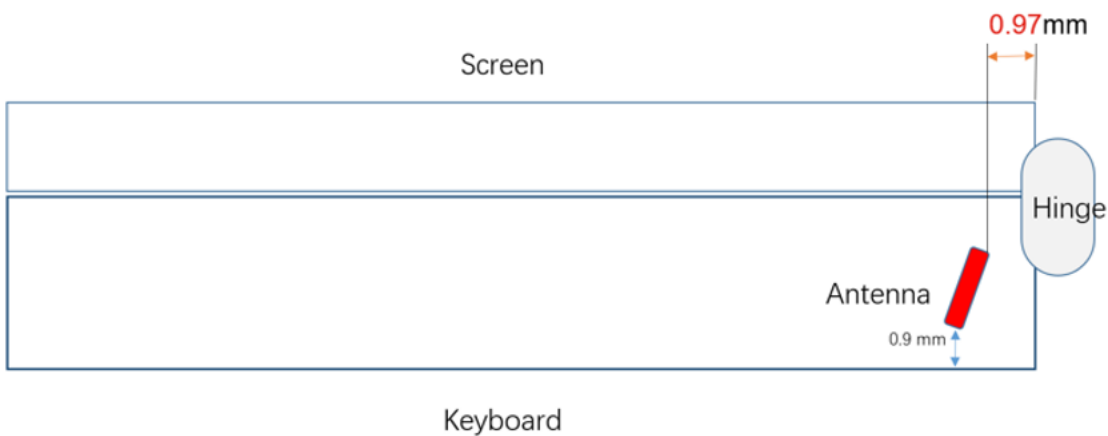
Annex B. Antenna Location

B.1 Antenna Host Platform Location Information

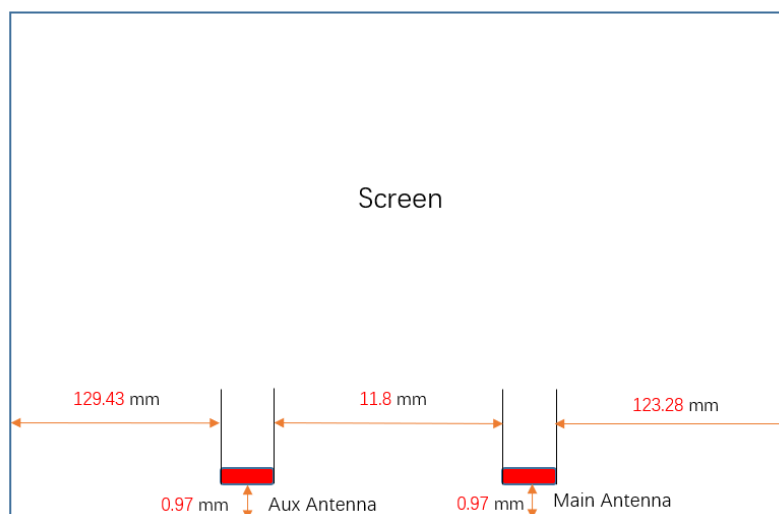
Include a dimensioned photo(s) or dimensioned drawing(s) of Main and Aux antenna placements (measurements are not required for receive-only antenna).

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.

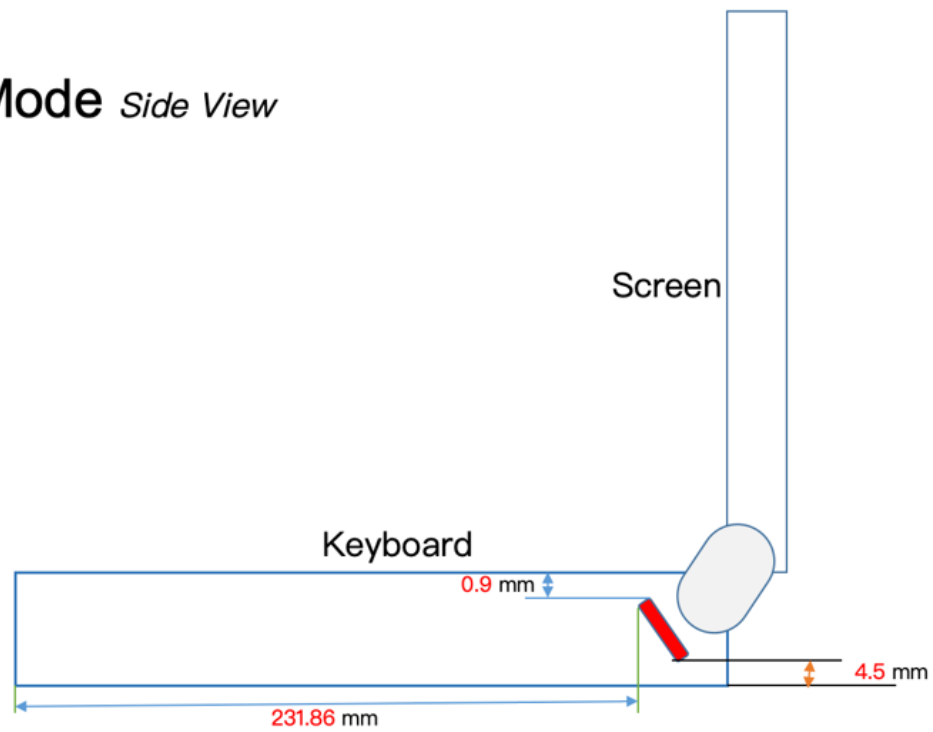
Tablet Mode *Side View*



Tablet Mode *Front View*



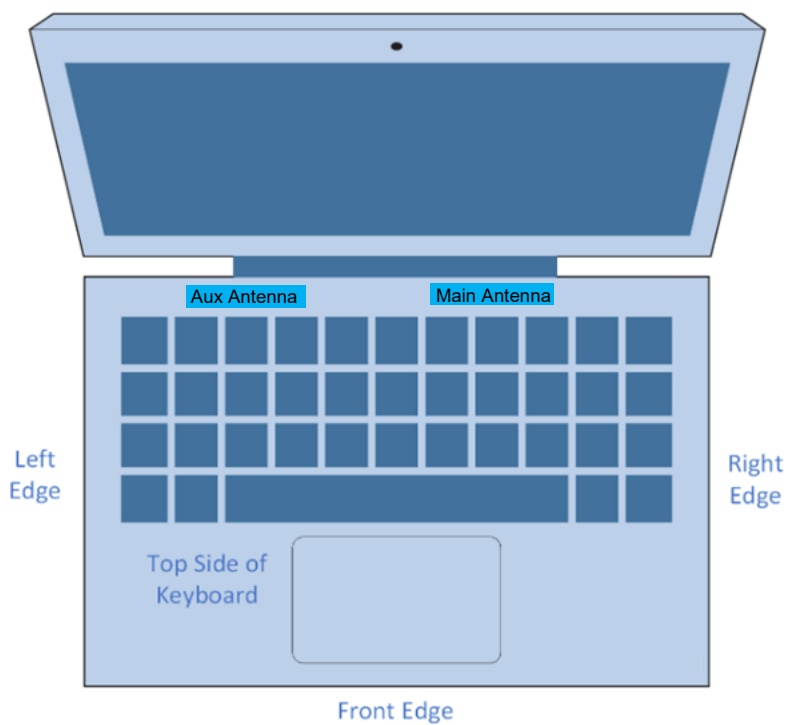
NB Mode *Side View*



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 keyboard section



Measuring Surface	Antenna	Separation Distance(antenna-to-Surface)(mm)	1g or 10g SAR
Bottom Side	Main	4.5	1g (FCC/ISED)
	Aux	4.5	1g (FCC/ISED)
Front Edge	Main	231.86	1g (ISED)
	Aux	231.86	1g (ISED)
Left Edge	Main	141.23	10g (ISED)
	Aux	129.43	10g (ISED)
Right Edge	Main	135.08	10g (ISED)
	Aux	161.23	10g (ISED)
Top side of Keyboard	Main	0.9	10g (ISED)
	Aux	0.9	10g (ISED)