

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	INNOWAVE	
	Address	Building H, Jintu Zhizao Garden, No. 55 Shengchuang Road, Yushan Town, Kunshan City, Jiangsu Province	
Test location	Company name	INNOWAVE	
	Address	Building H, Jintu Zhizao Garden, No. 55 Shengchuang Road, Yushan Town, Kunshan City, Jiangsu Province	
Test Personnel	Name(Full name)	Yanchenglong	
	E-mail	yanchenglong@innowave.cn	
	Tel/Mobile	17754070643	
Testing date		2025/04/09	

Antenna Part number	Main	F001K6812111000
	Aux	F001K6812512000
	BT	F001K6813T13000

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	7.0GHz 6875-7125MHz
Main	Peak gain(dBi)	1.78	1.77	1.56	1.45	1.81	1.32	1.43	1.29	1.87	1.41
	cable loss (dB)	0.52	0.79	0.79	0.82	0.84	0.84	0.85	0.88	0.90	0.90
Aux	Peak gain(dBi)	1.79	1.58	1.69	1.44	1.88	1.81	1.33	1.74	1.69	1.26
	cable loss (dB)	0.31	0.48	0.49	0.50	0.51	0.51	0.52	0.53	0.54	0.55
BT	Peak gain(dBi)	1.51	NA	NA	NA	NA	NA	NA	NA	NA	NA
	cable loss (dB)	0.19	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
Main	S001K6802111000	215.9	1.13	50	康硕四代端子
Aux	S001K6802532000	131.9	1.13	50	康硕四代端子
BT	S001K6802T53000	80.2	1.13	50	康硕四代端子

* 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
Antenna Peak gain w/ cable loss (dBi)											

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

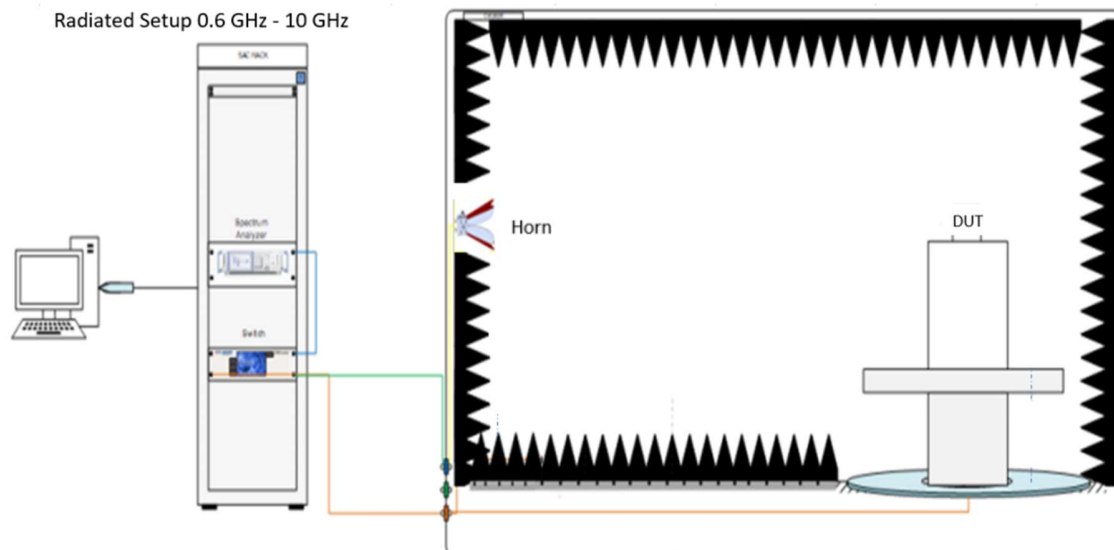
Revision #	Revision Details	Issued Date
Rev. 00	First Issue	2025.04.09

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

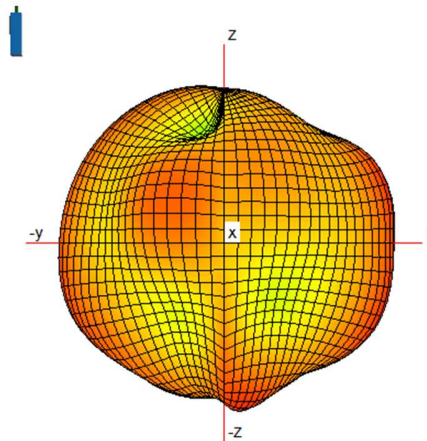
Number	Device	Type/Model	Serial	Manufacturer	Cal. Date	Cal. due. Date
1	Chamber	FATC3	5720	ETS-Lindgren	2024/12/25	2025/12/24
2	Turn table control box	ETS	-	ETS-Lindgren	N/A	N/A
3	Turn table control computer	Desktop	LPTPTOP-JQTTOKRA	LENOVO	N/A	N/A
4	Notwork Analyzer	5071C	5071C	Keysight	2024/12/25	2025/12/24
5	Hron Antenna	3117	E00157734	Bwant	2024/12/23	2025/12/22
6	Test system host	EMC Center	159757	ETS-Lindgren	N/A	N/A
7	RF Line TX	UFA147A-0-0480-200200	MFR64639223720	Micro-coax	2024/12/20	2025/12/19
8	RF Line RX	UFA147A-0-0480-200200	MFR64639223720	Micro-coax	2024/12/20	2025/12/19
9	Cable 2m 1GHz-8.5GHz	UFA147A-0-0480-200200	MFR64639223720	Micro-coax	2024/12/20	2025/12/19
10	Optical fiber line	RXY-00727-1603	-	Jmtt	N/A	N/A
11	Cable 2.5m 1GHz-8.5GHz	UFA147A-0-0480-200200	MFR64639223720	Micro-coax	2024/12/21	2025/12/20
12	Cable 1.2m 1GHz-8.5GHz	UFA147A-0-0480-200200	MFR64639223720	Micro-coax	2024/12/21	2025/12/20
13	Cable 1m 1GHz-8.5GHz	UFA147A-0-0480-200200	MFR64639223720	Micro-coax	2024/12/21	2025/12/20
14	Cable 2m 1GHz-8.5GHz	UFA147A-0-0480-200200	MFR64639223720	Micro-coax	2024/12/21	2025/12/20
15	Cable 1m 1GHz-8.5GHz	UFA147A-0-0480-200200	MFR64639223720	Micro-coax	2024/12/13	2025/12/12
16	Temp&Humidity Logger	RA12E-TH1-RAS	RA12-DOEB1A	Avtech	2024/12/20	2025/12/19

4. Radiation characteristics of antenna loaded in Host Platform

Main Antenna

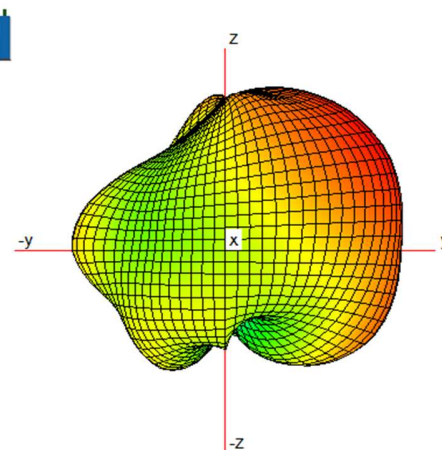
Max Antenna 3D Radiation Pattern 2400 – 2483.5 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
2400-2483.5	1.78



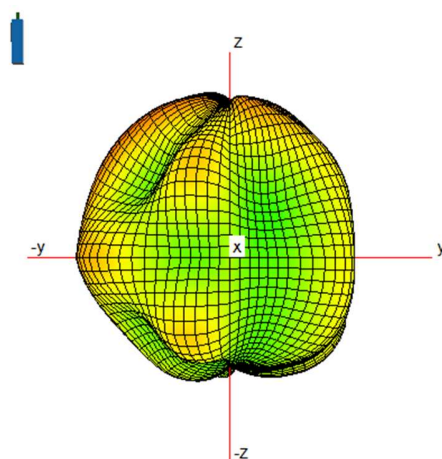
Max Antenna 3D Radiation Pattern 5150-5250 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5150-5250	1.77



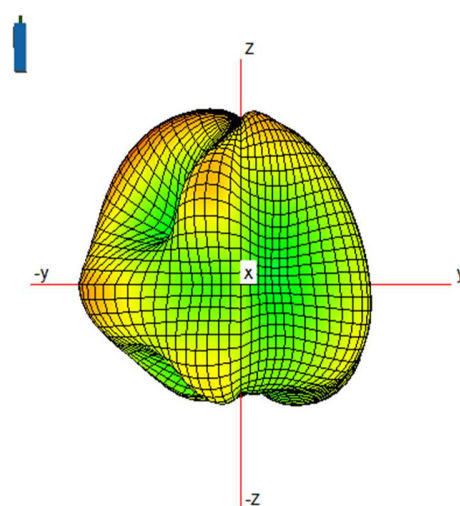
Max Antenna 3D Radiation Pattern 5250-5350 MHz

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



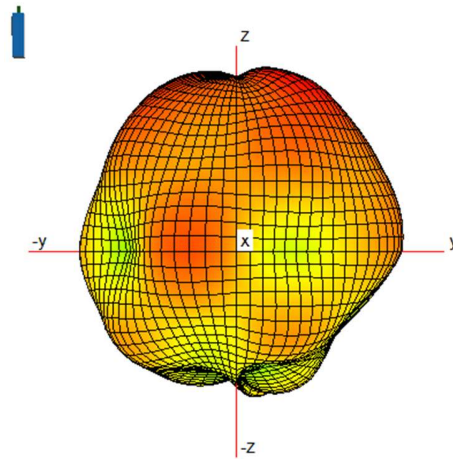
Max Antenna 3D Radiation Pattern 5470-5725 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5470-5725	1.45



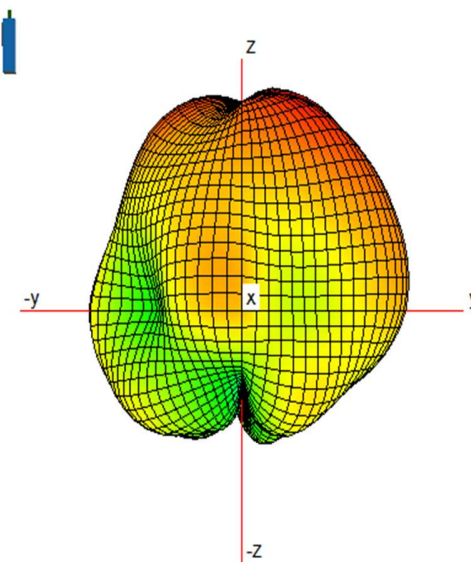
Max Antenna 3D Radiation Pattern 5725-5850 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5725-5850	1.81



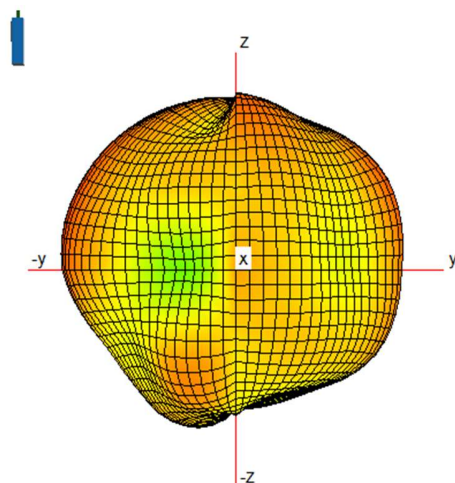
Max Antenna 3D Radiation Pattern 5850-5950 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5850-5950	1.32



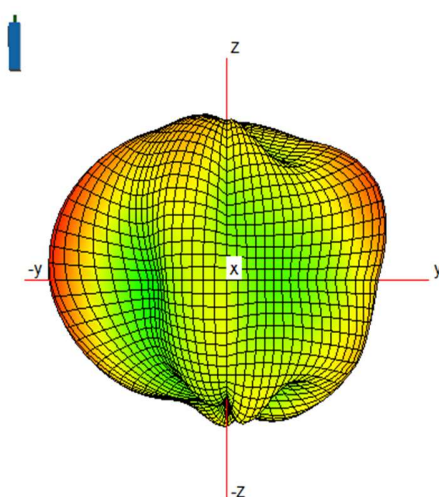
Max Antenna 3D Radiation Pattern 6150-6250 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6150-6250	1.43



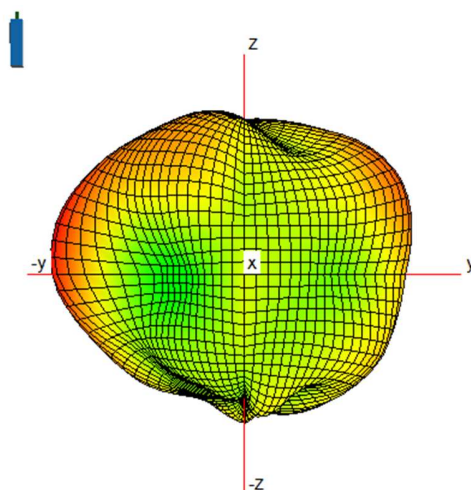
Max Antenna 3D Radiation Pattern 6450-6550 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6450-6550	1.29



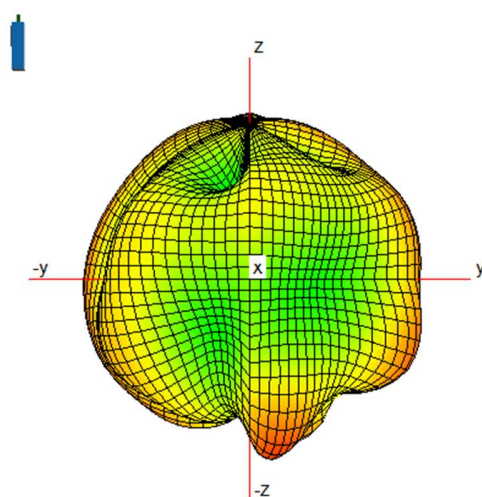
Max Antenna 3D Radiation Pattern 6650-6750 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6650-6750	1.87



Max Antenna 3D Radiation Pattern 6950-7050 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6950-7050	1.41

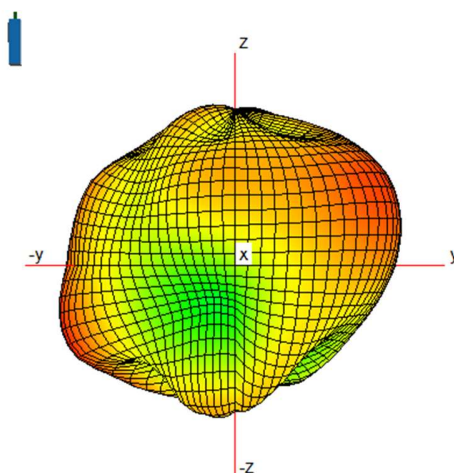


Auxiliary Antenna

Aux Antenna

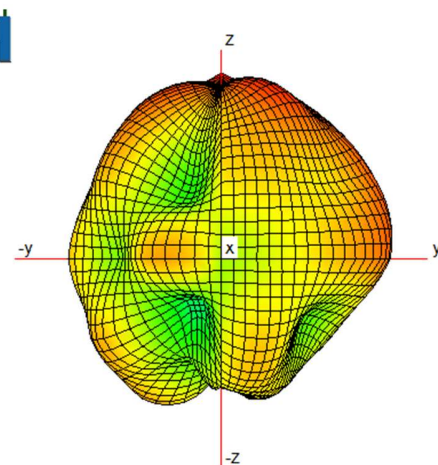
Max Antenna 3D Radiation Pattern 2400 – 2483.5 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
2400-2483.5	1.79



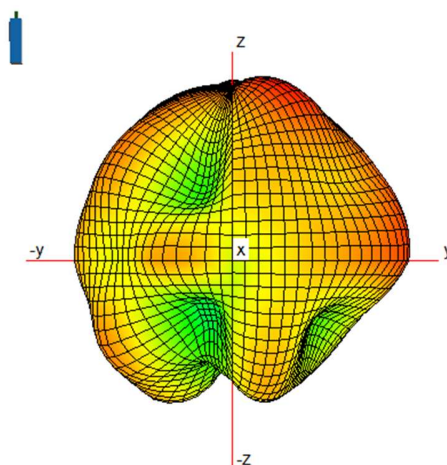
Max Antenna 3D Radiation Pattern 5150-5250 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5150-5250	1.58



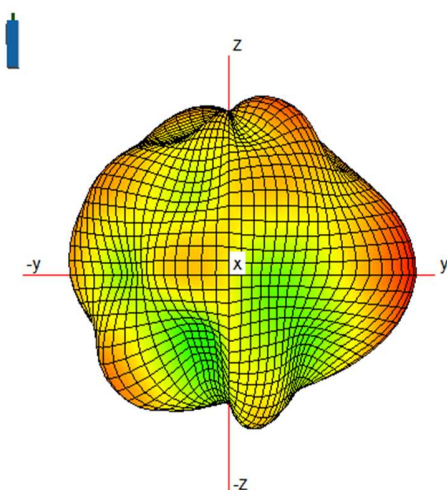
Max Antenna 3D Radiation Pattern 5250-5350 MHz

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



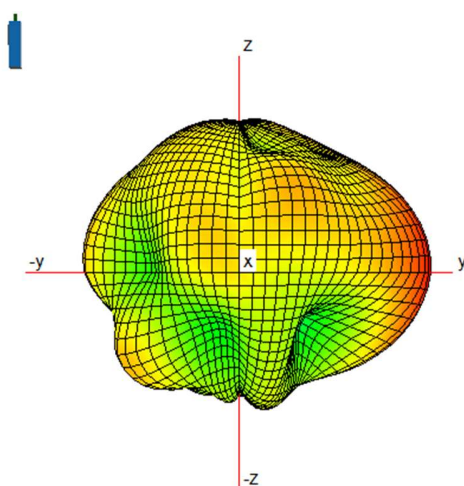
Max Antenna 3D Radiation Pattern 5470-5725 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5470-5725	1.44



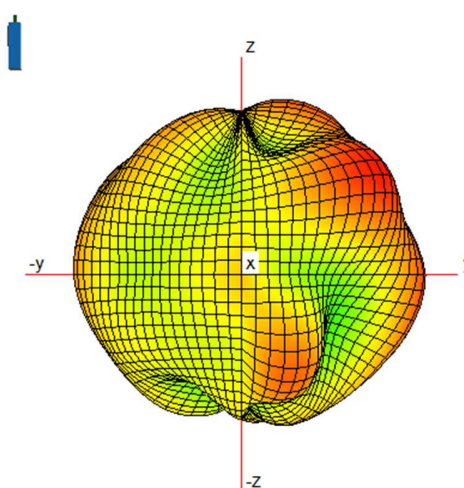
Max Antenna 3D Radiation Pattern 5725-5850 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5725-5850	1.88



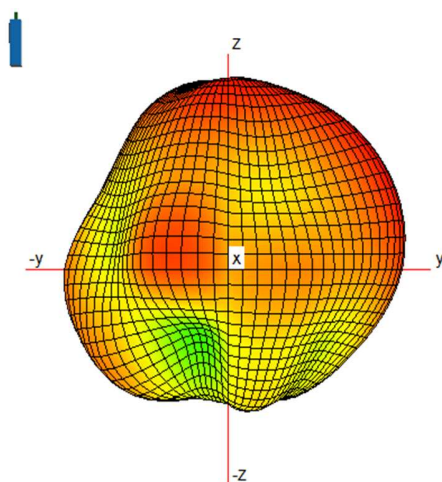
Max Antenna 3D Radiation Pattern 5850-5950 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5850-5950	1.81



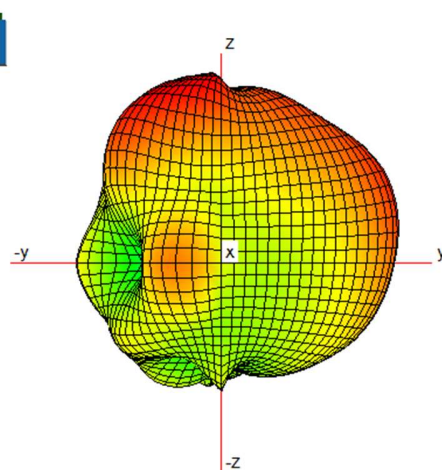
Max Antenna 3D Radiation Pattern 6150-6250 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6150-6250	1.33



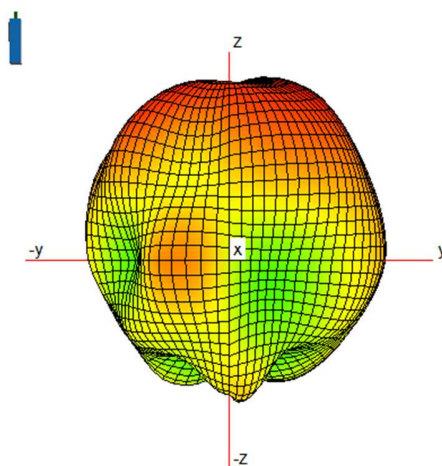
Max Antenna 3D Radiation Pattern 6450-6550 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6450-6550	1.74



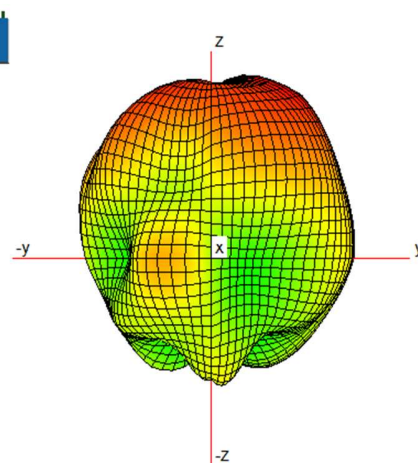
Max Antenna 3D Radiation Pattern 6650-6750 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6650-6750	1.69



Max Antenna 3D Radiation Pattern 6950-7050 MHz

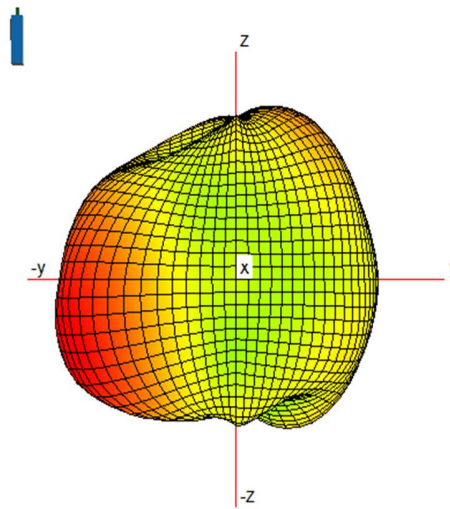
Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6950-7050	1.26



BT Antenna

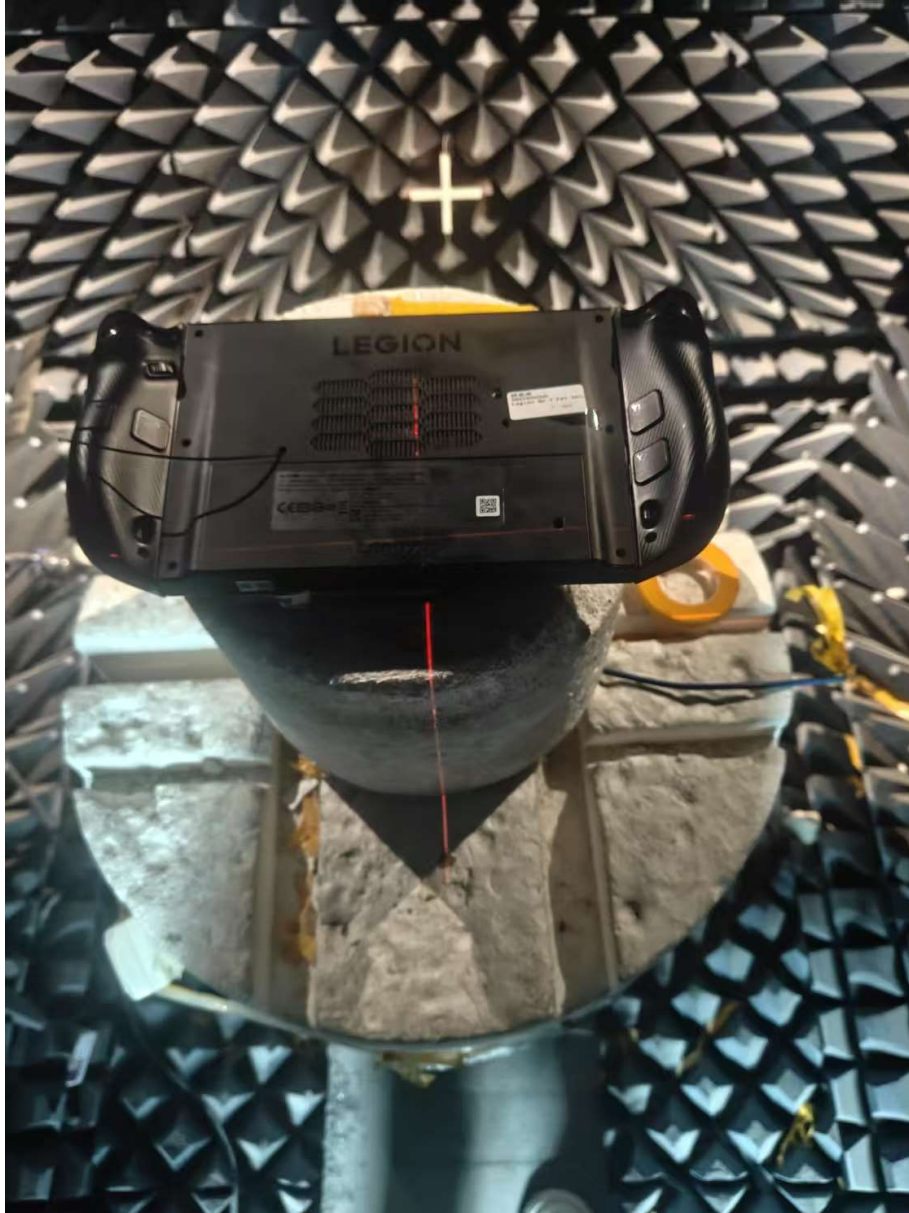
Max Antenna 3D Radiation Pattern 2400 – 2483.5 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
2400-2483.5	1.51



Annex A. Photographs

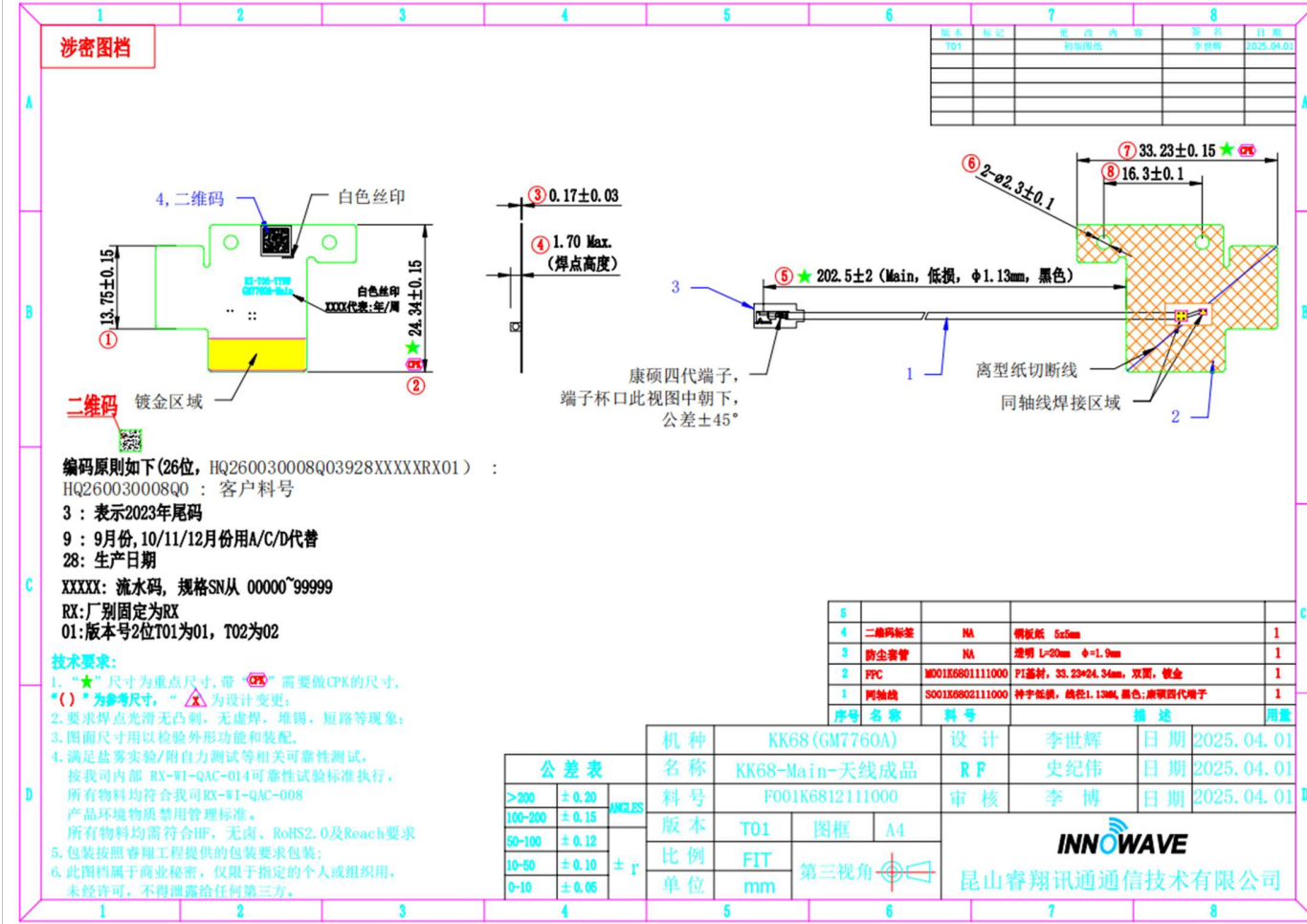
A.1 Setup Photo



A.2 Test sample

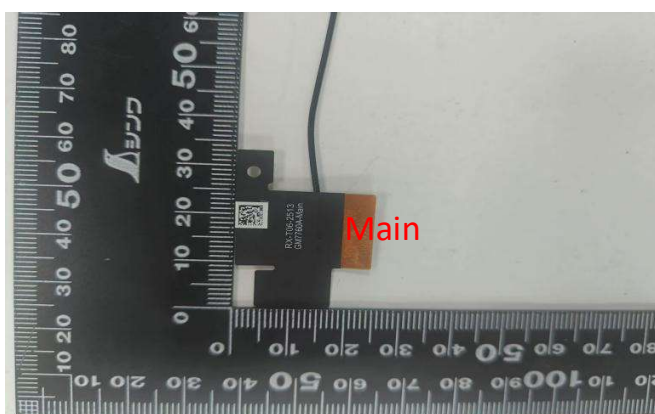
Main Antenna

Antenna Drawing

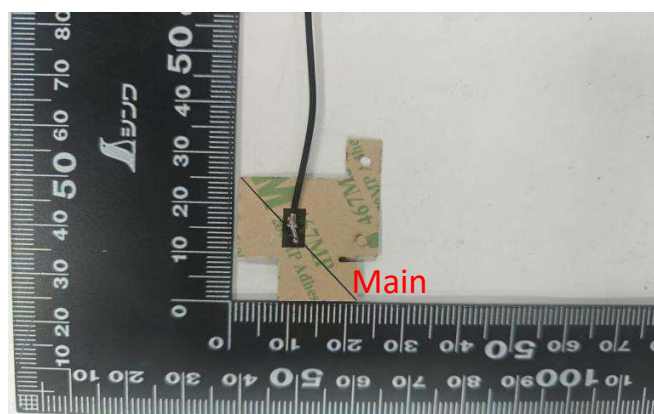


Antenna Photo

Front

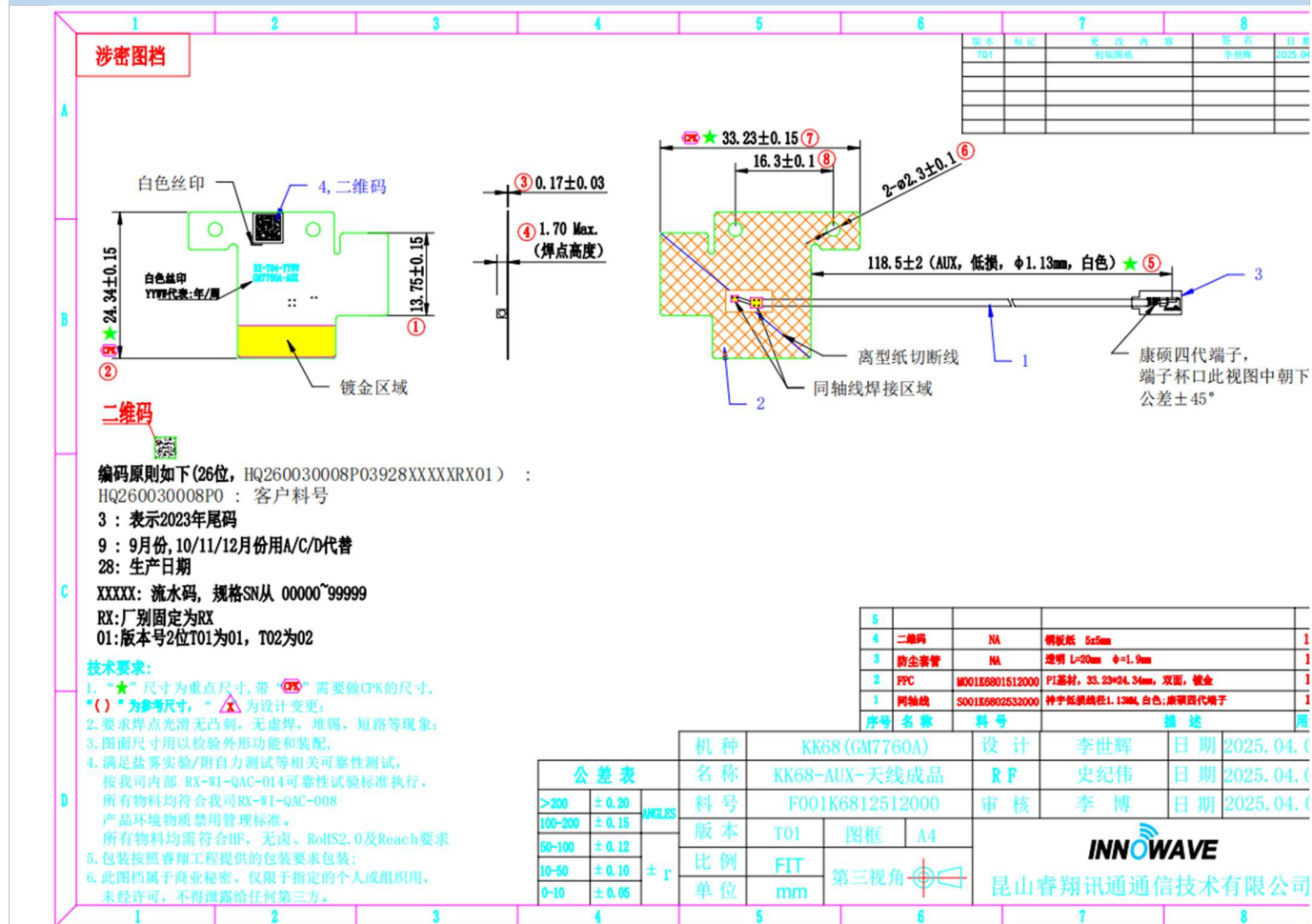


Back



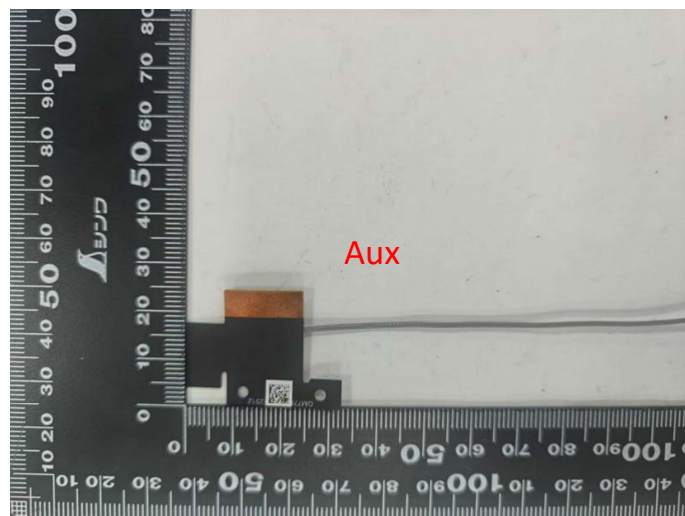
Aux Antenna

Antenna Drawing

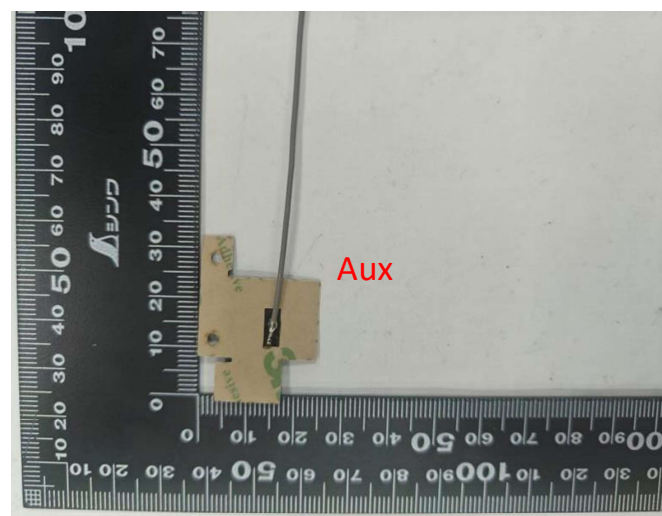


Antenna Photo

Front



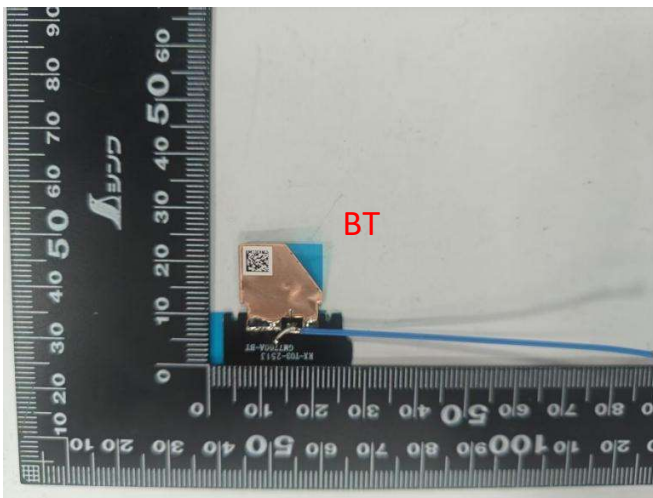
Back



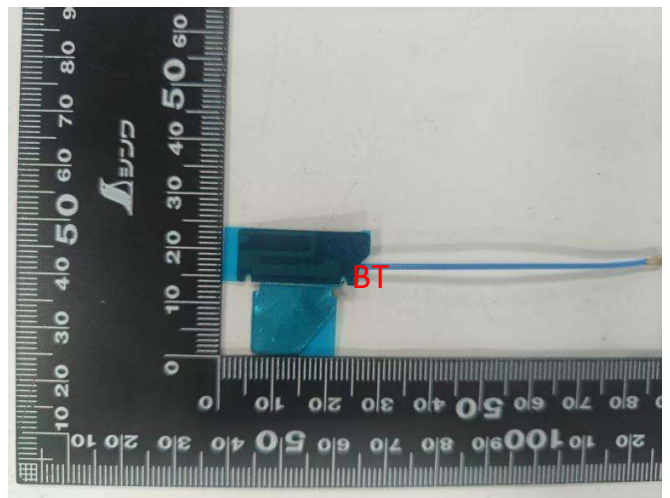
1	2	3	4	5	6	7	8																																			
涉密图档				<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>版本</th> <th>状态</th> <th>更改内容</th> <th>姓名</th> <th>日期</th> </tr> </thead> <tbody> <tr> <td>T01</td> <td></td> <td>初始版本</td> <td>李世辉</td> <td>2025.04.01</td> </tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>				版本	状态	更改内容	姓名	日期	T01		初始版本	李世辉	2025.04.01																									
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T01		初始版本	李世辉	2025.04.01																																						
康硕四代端子, 端子杯口此视图中朝下, 公差±30° 白色丝印 YYY代表: 年/周 同轴线焊接区域 铜箔焊接区域 离型纸抓手 二维码 ⑥ 65.5±1.5 (BT, 低损, φ1.13mm, 蓝色)★ ① 25±0.2 ② 10.00±0.2 ③ 13.31±1 ④ 15.9±0.5 ⑤ 19.00±1 4, 二维码				离型纸抓手 导电胶 离型纸 离型纸抓手 ⑦ 0.40±0.05 (PCB) ⑧ 0.10 (ADH) ⑨ 1.7 Max. (焊点高度) ⑩ 0.135 (Cu Foil+Mylar)																																						
编码原则如下(26位, HQ260030008R03928XXXXRX01) : HQ260030008R0 : 客户料号 3 : 表示2023年尾码 9 : 9月份, 10/11/12月份用A/C/D代替 28 : 生产日期 XXXXX : 流水码, 规格SN从 00000~99999 RX : 厂别固定为RX 01 : 版本号2位T01为01, T02为02				<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>序号</th> <th>名称</th> <th>料号</th> <th>描述</th> <th>用量</th> </tr> </thead> <tbody> <tr> <td>6</td> <td>塑胶</td> <td>M001K6819791000</td> <td>双面胶3M5535LP, 24.4*9.4mm, T=0.10mm</td> <td>1</td> </tr> <tr> <td>5</td> <td>导电铜箔</td> <td>M001K6859791000</td> <td>铜箔, 15.9*16.27mm, T=0.135mm</td> <td>1</td> </tr> <tr> <td>4</td> <td>二维码</td> <td>/</td> <td>铜板纸 5x5mm</td> <td>1</td> </tr> <tr> <td>3</td> <td>防尘套管</td> <td>/</td> <td>透明 L=50mm φ=1.9mm</td> <td>1</td> </tr> <tr> <td>2</td> <td>PCB</td> <td>M001K6836711000</td> <td>FR4, 25*10*0.4mm, 单面, 蓝色</td> <td>1</td> </tr> <tr> <td>1</td> <td>同轴线</td> <td>S001K6802753000</td> <td>神宇低损, 线径1.13mm, 蓝色: 康硕四代端子</td> <td>1</td> </tr> </tbody> </table>				序号	名称	料号	描述	用量	6	塑胶	M001K6819791000	双面胶3M5535LP, 24.4*9.4mm, T=0.10mm	1	5	导电铜箔	M001K6859791000	铜箔, 15.9*16.27mm, T=0.135mm	1	4	二维码	/	铜板纸 5x5mm	1	3	防尘套管	/	透明 L=50mm φ=1.9mm	1	2	PCB	M001K6836711000	FR4, 25*10*0.4mm, 单面, 蓝色	1	1	同轴线	S001K6802753000	神宇低损, 线径1.13mm, 蓝色: 康硕四代端子	1
序号	名称	料号	描述	用量																																						
6	塑胶	M001K6819791000	双面胶3M5535LP, 24.4*9.4mm, T=0.10mm	1																																						
5	导电铜箔	M001K6859791000	铜箔, 15.9*16.27mm, T=0.135mm	1																																						
4	二维码	/	铜板纸 5x5mm	1																																						
3	防尘套管	/	透明 L=50mm φ=1.9mm	1																																						
2	PCB	M001K6836711000	FR4, 25*10*0.4mm, 单面, 蓝色	1																																						
1	同轴线	S001K6802753000	神宇低损, 线径1.13mm, 蓝色: 康硕四代端子	1																																						
技术要求: 1. “★”尺寸为重点尺寸, 带“CPK”需要做CPK的尺寸, “()”为参考尺寸, “△”为设计变更; 2. 要求焊点光滑无凸刺, 无虚焊, 堆锡, 短路等现象; 3. 图面尺寸用以检验外形功能和装配; 4. 满足盐雾实验/附着力测试等相关可靠性测试; 按我司内部 RX-WI-QAC-014可靠性试验标准执行; 所有物料均符合我司 RX-WI-QAC-008 产品环境物质禁用管理标准。 所有物料均需符合RoHS, RoHS2.0及Reach要求 5. 包装按照春翔工程提供的包装要求包装; 6. 此图档属于商业秘密, 仅限于指定的个人或组织用, 未经许可, 不得泄露给任何第三方。				<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>机种</th> <th colspan="2">KK68 (GM7760A)</th> <th>设计</th> <th>李世辉</th> <th>日期</th> <th>2025.04.01</th> </tr> <tr> <th>名称</th> <th colspan="2">KK68-BT-天线成品</th> <th>RF</th> <th>史纪伟</th> <th>日期</th> <th>2025.04.01</th> </tr> <tr> <th>料号</th> <th colspan="2">F001K6813T13000</th> <th>审核</th> <th>李 博</th> <th>日期</th> <th>2025.04.01</th> </tr> <tr> <th>版本</th> <td>T01</td> <td>图框</td> <td>A4</td> <td colspan="3" rowspan="3" style="text-align: center;"> 第三视角 </td> </tr> <tr> <th>比例</th> <td colspan="2">FIT</td> </tr> <tr> <th>单位</th> <td colspan="2">mm</td> </tr> </thead> </table>				机种	KK68 (GM7760A)		设计	李世辉	日期	2025.04.01	名称	KK68-BT-天线成品		RF	史纪伟	日期	2025.04.01	料号	F001K6813T13000		审核	李 博	日期	2025.04.01	版本	T01	图框	A4	第三视角			比例	FIT		单位	mm		
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Antenna Photo

Front



Back

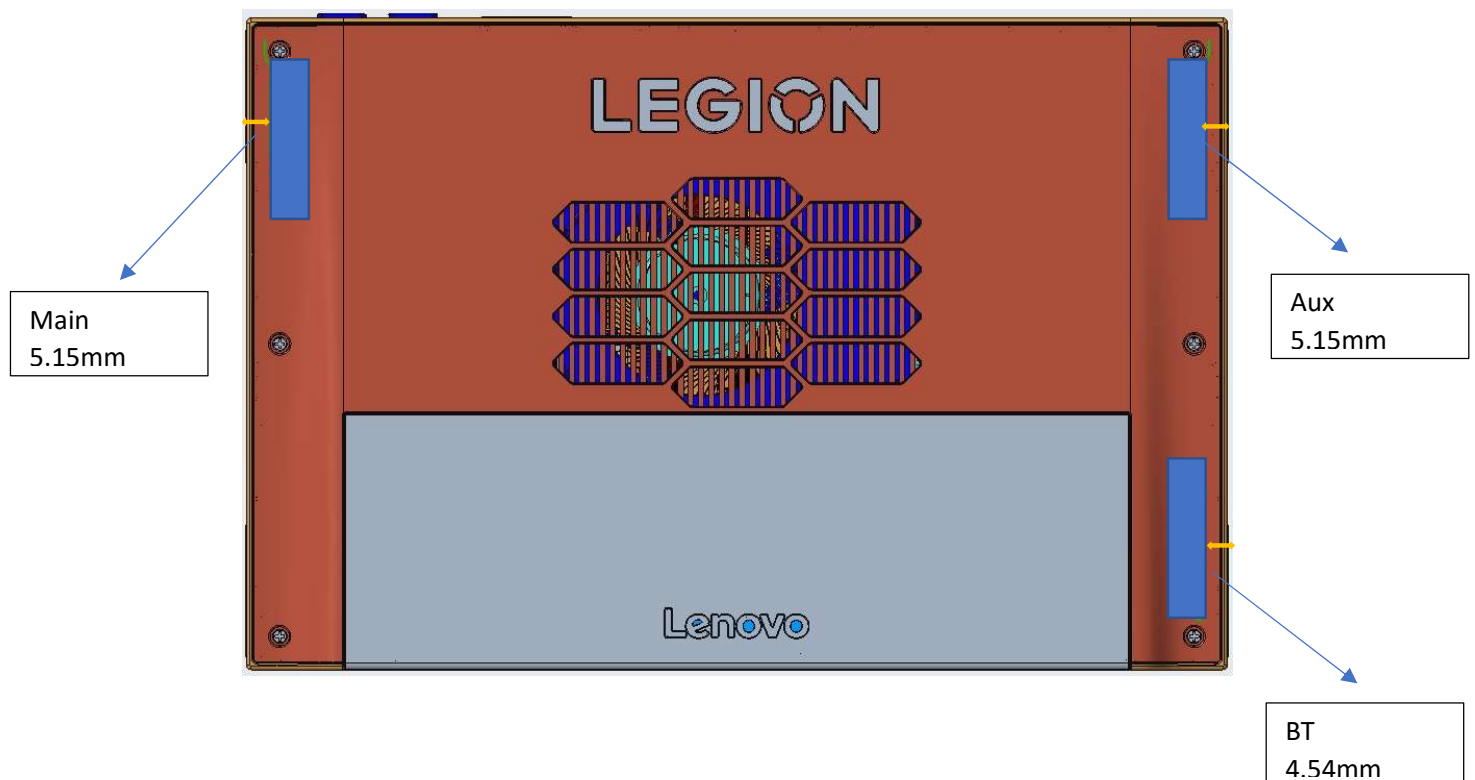


Annex B. Antenna Location

B.1 Antenna Host Platform Location Information

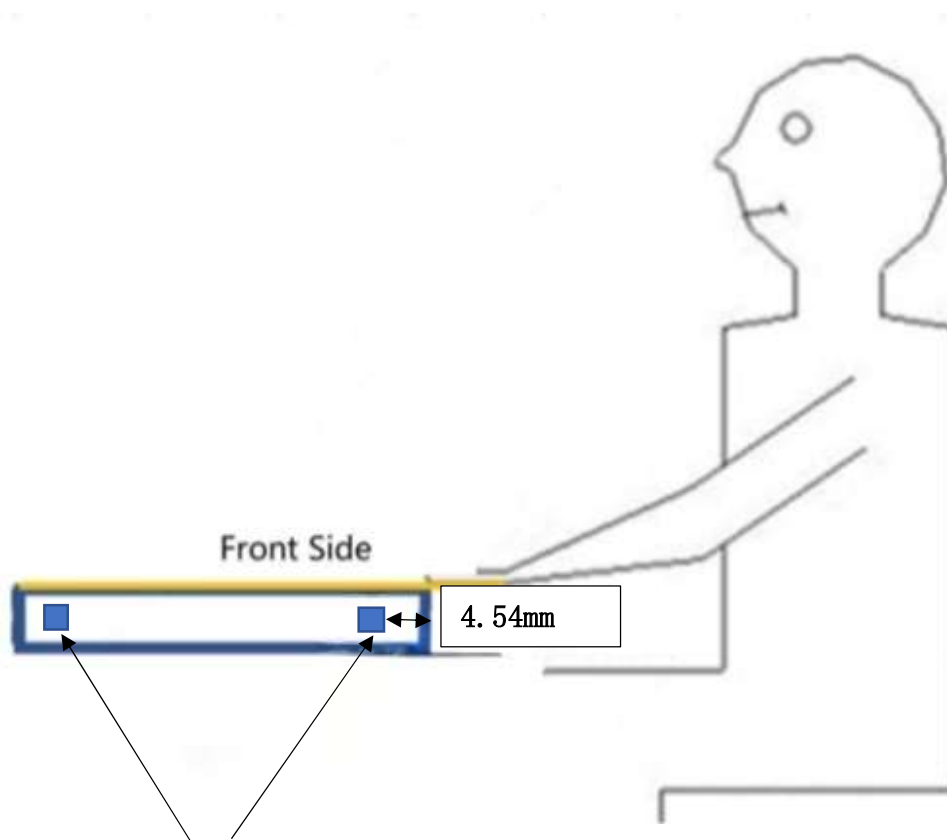
Include a dimensioned photo(s) or dimensioned drawing(s) of Main and Aux antenna placements (measurements are not required for receive-only antenna).

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