

ANTENNA INFORMATION

OEM	Acer
ODM	HuaQin
Platform model name	Voltorb2(NB7229)
Intel platform (ex: Yes, No or NA)	No
Platform type (ex: regular NB, convertible PC, AIO...etc)	NB
SAR minimum separation (mm)	5mm

Antenna manufacturer	Company name	Wistron Neweb Corporation
	Address	20 Park Ave.II , Hsinchu Science Park,Hsinchu 308,Taiwan
Test location	Company name	Wistron Neweb Corporation
	Address	20 Park Ave.II , Hsinchu Science Park,Hsinchu 308,Taiwan
Test Personnel	Name(Full name)	Olli Hsu
	E-mail	Olli.Hsu@wnc.com.tw
	Tel/Mobile	03-6667799 #7683
Testing date		2024/7/23

Antenna Part number	Main	81EACB15.G02(HQ260060005U0)
	Aux	81EACB15.G02(HQ260060005U0)
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					
Main	1.07	1.23	1.68	1.61	1.30					
Aux	1.33	0.98	0.71	1.37	1.37					

Antenna Peak gain w/ cable loss (dBi)* TB										
	2.4GHz 2400-2483.5 MHz	5.2GHz 5150-5250MHz	5.3GHz 5250-5350MHz	5.6GHz 5470-5725MHz	5.8GHz 5725-5850MHz					
Main	0.37	0.96	2.08	2.78	2.32					
Aux	0.12	0.06	0.06	1.38	0.14					

Cable Assembly Part Number and Information					
	Cable PN	Cable length(mm)	Cable diameter(mm)	Impedance(ohm)	Connector type
Main	50.2EL8U.009	446	1.13	50	I-PEX MHF4L (20565-001R-13)
Aux	50.2EL8U.011	604	1.13	50	I-PEX MHF4L (20565-001R-13)

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

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1. Intel Reference Gain and Type**NA****2. Document Revision History**

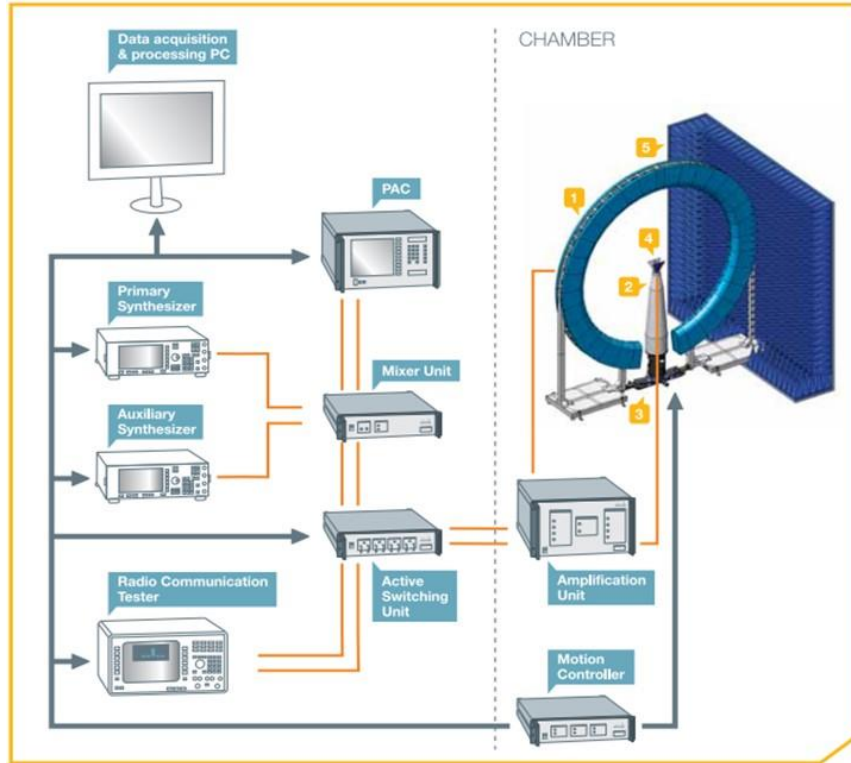
Revision #	Revision Details	Issued Date
Rev. 00	First Issue	2024.05.10

3. Test & System Description

3.1 Measurement Method and System

This Voltorb2(NB7229) test report is prepared for host antenna testing under a Full Anechoic Chamber (WNC's SG64)

3.2 Test setup



3.3 Equipment list

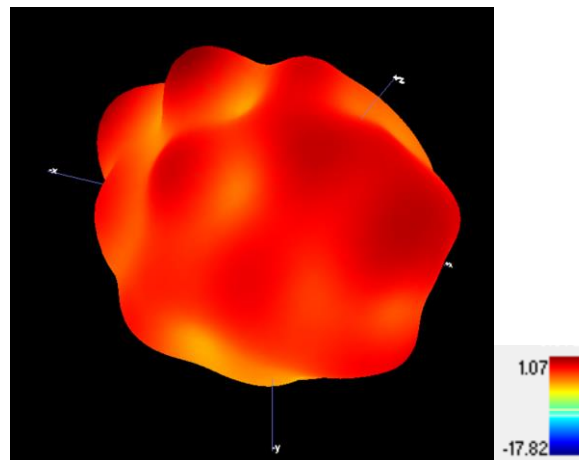
Device	Type / Model	Serial #	Manufacture	Characteristics	Cal. Date	Cal. Until
SG64 Chamber	Standard	SG64	MVG	400MHz~6GHz	2024/3/30	2025/3/30
Turn Table	Customization	-	Machinery Dept.	-	2024/3/30	2025/3/30
New Probe Array Controller	N/A	1102341-4535	MVG	400MHz~6GHz	2024/3/30	2025/3/30
Power Supply Unit	N/A	1103211-13204	MVG	-	2024/3/30	2025/3/30
Active Switching Unit	N/A	1102347-7214	MVG	400MHz~6GHz	2024/3/30	2025/3/30
TX Amplification Unit	N/A	1102527-5909	MVG	400MHz~6GHz	2024/3/30	2025/3/30
RX Amplification Unit	N/A	1102536-3823	MVG	400MHz~6GHz	2024/3/30	2025/3/30
Transfer Switctl Unit	N/A	1102183-3351	MVG	400MHz~6GHz	2024/3/30	2025/3/30
Mixer Unit	N/A	1102545-7208	MVG	400MHz~6GHz	2024/3/30	2025/3/30
Power And Control Unit	N/A	1102706-7209	MVG	-	2024/3/30	2025/3/30
Antenna Probe	DP 400-6000	-	MVG	400MHz~6GHz	2024/3/30	2025/3/30
Cable 13.7m - 400MHz to 18GHz	SS402	00100A1F5A1XXS	Woken	-	2024/3/30	2025/3/30
Temperature & Humidity Meter	HTC-01	-	MetraVi	-	2024/3/30	2025/3/30

4. Radiation characteristics of antenna loaded in Host Platform

Open Mode Main Antenna

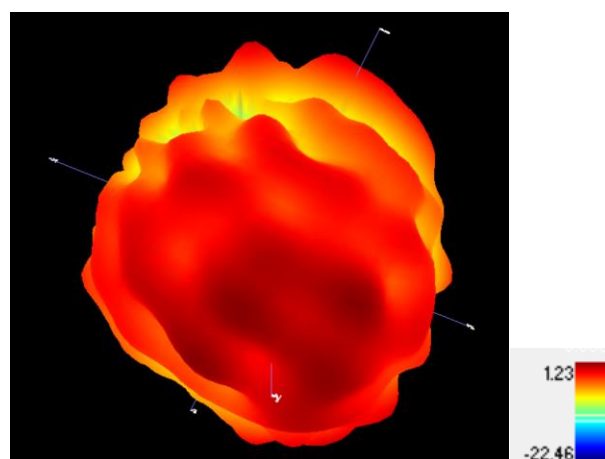
Max Antenna 3D Radiation Pattern 2400 – 2483.5 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
2400-2483.5	1.07



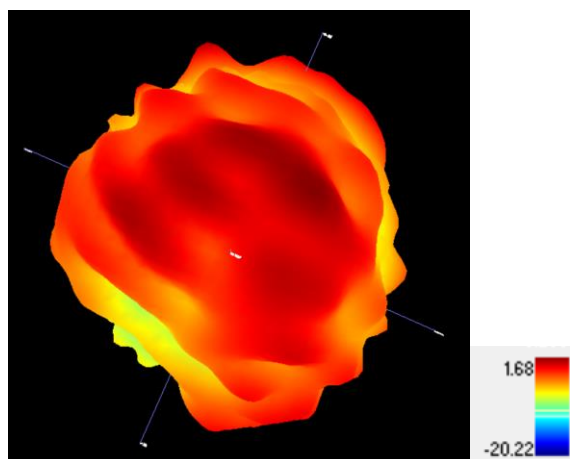
Max Antenna 3D Radiation Pattern 5150-5250 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5150-5250	1.23



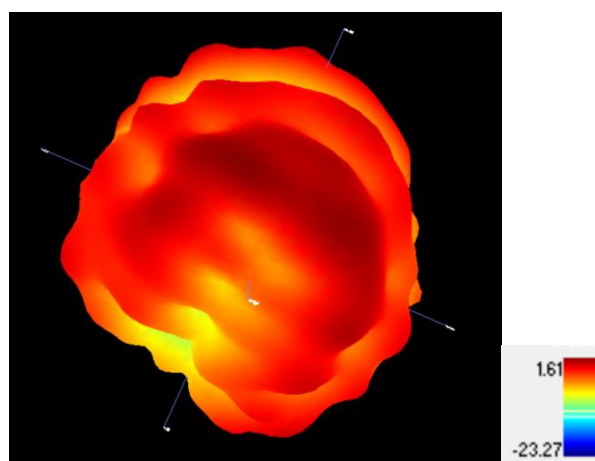
Max Antenna 3D Radiation Pattern 5250-5350 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5250-5350	1.68



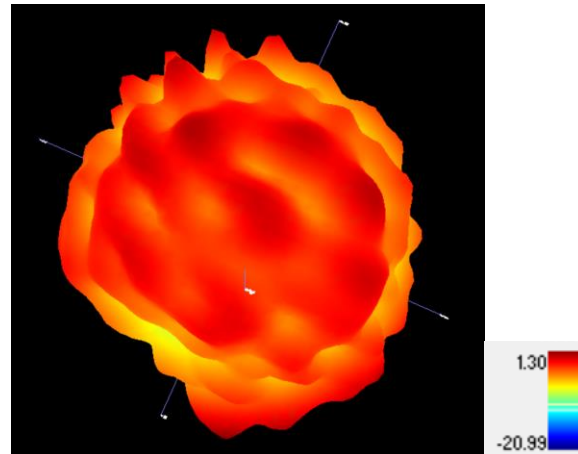
Max Antenna 3D Radiation Pattern 5470-5725 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5470-5725	1.61



Max Antenna 3D Radiation Pattern 5725-5850 MHz

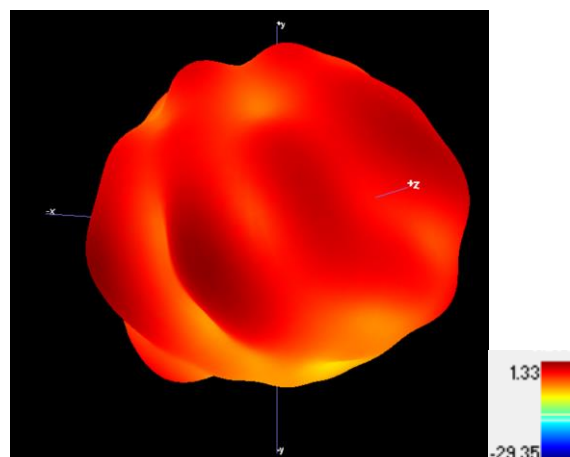
Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5725-5850	1.30



Open Mode Auxiliary Antenna

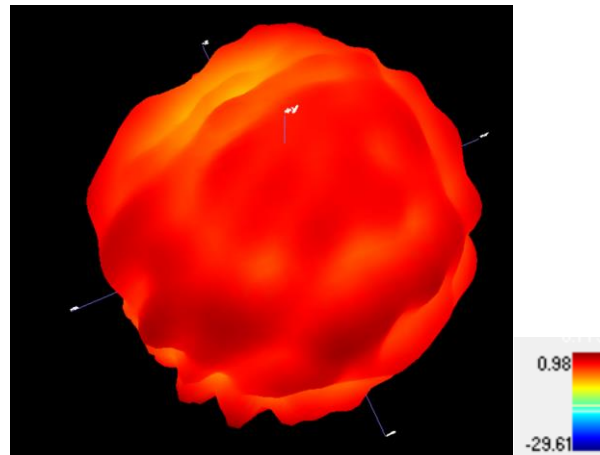
Max Antenna 3D Radiation Pattern 2400 – 2483.5 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
2400-2483.5	1.33



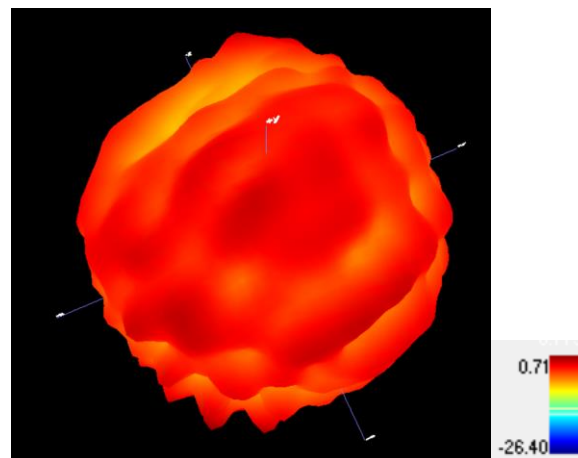
Max Antenna 3D Radiation Pattern 5150-5250 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5150-5250	0.98



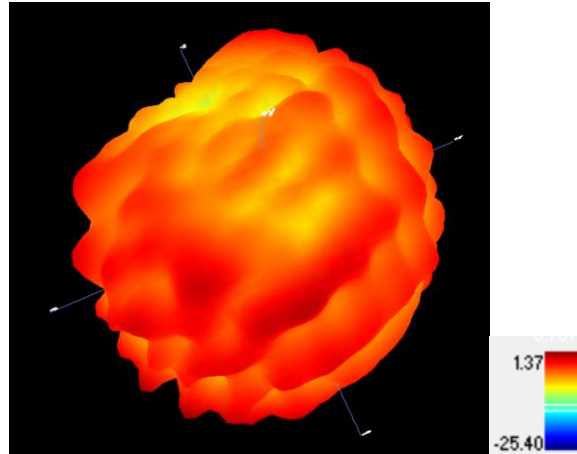
Max Antenna 3D Radiation Pattern 5250-5350 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5250-5350	0.71



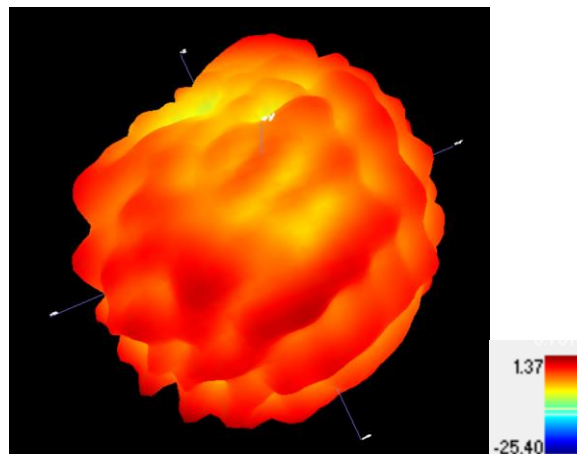
Max Antenna 3D Radiation Pattern 5470-5725 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5470-5725	1.37



Max Antenna 3D Radiation Pattern 5725-5850 MHz

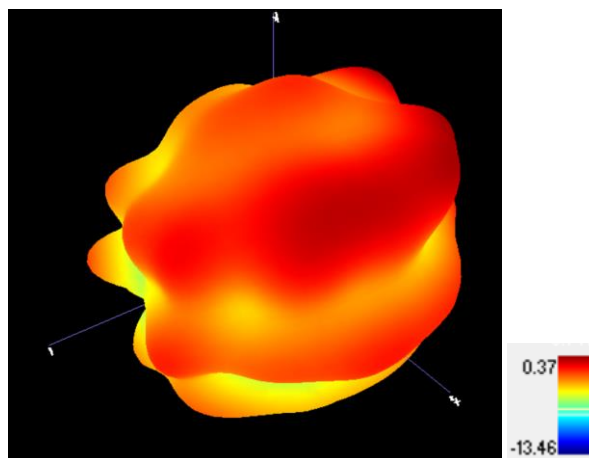
Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5725-5850	1.37



TB Mode Main Antenna

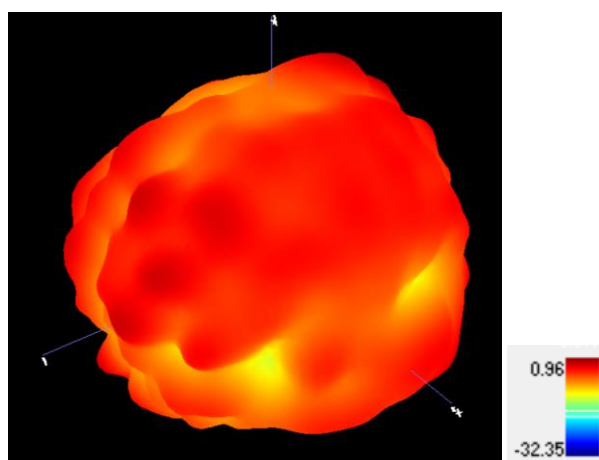
Max Antenna 3D Radiation Pattern 2400 – 2483.5 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
2400-2483.5	0.37



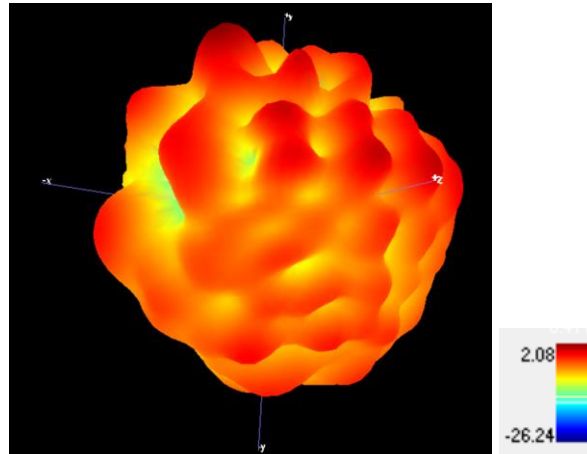
Max Antenna 3D Radiation Pattern 5150-5250 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5150-5250	0.96



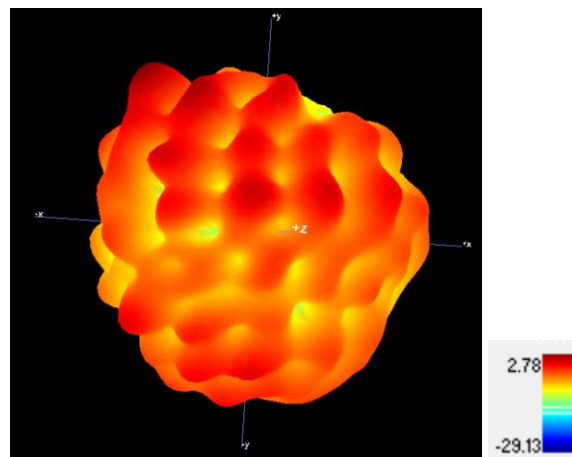
Max Antenna 3D Radiation Pattern 5250-5350 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5250-5350	2.08



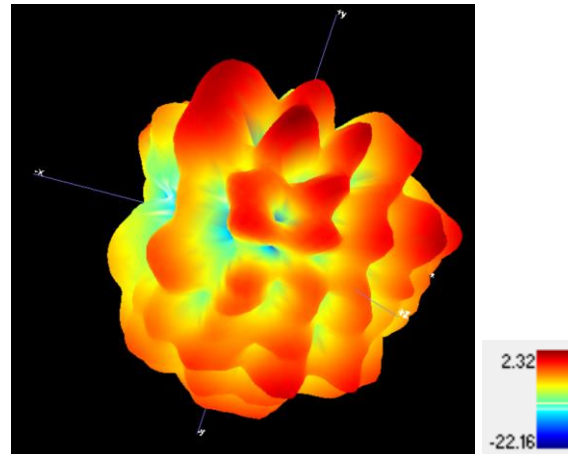
Max Antenna 3D Radiation Pattern 5470-5725 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5470-5725	2.78



Max Antenna 3D Radiation Pattern 5725-5850 MHz

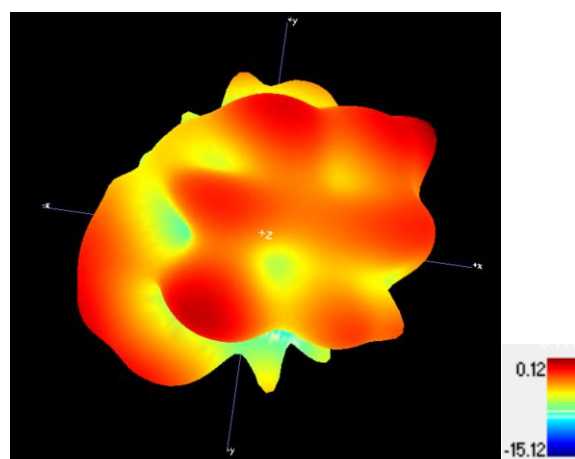
Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5725-5850	2.32



TB Mode Auxiliary Antenna

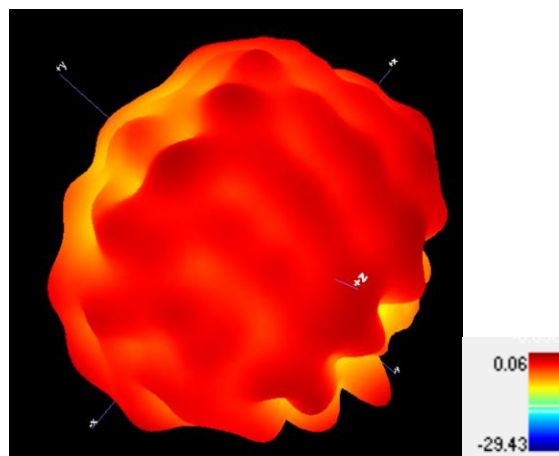
Max Antenna 3D Radiation Pattern 2400 – 2483.5 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
2400-2483.5	0.12



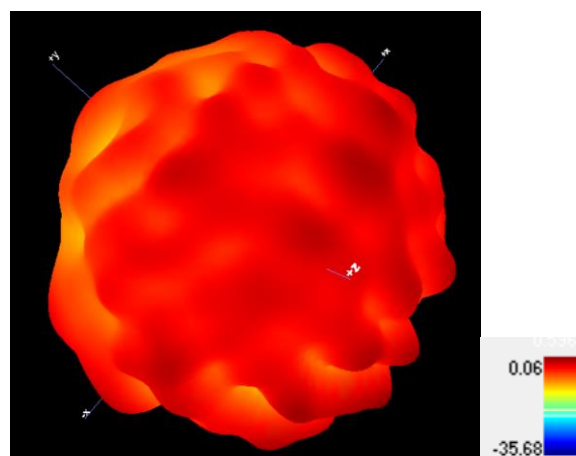
Max Antenna 3D Radiation Pattern 5150-5250 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5150-5250	0.06



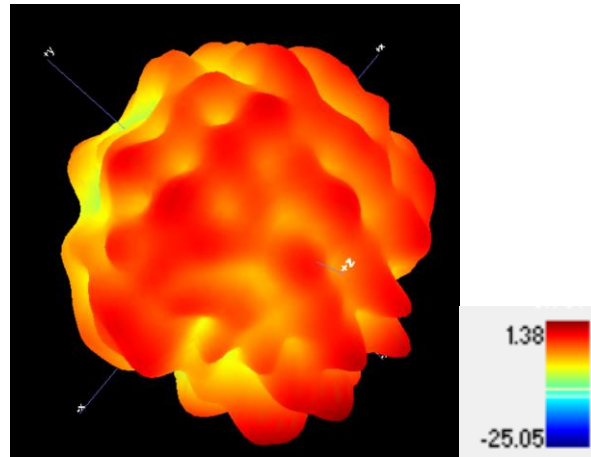
Max Antenna 3D Radiation Pattern 5250-5350 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5250-5350	0.06



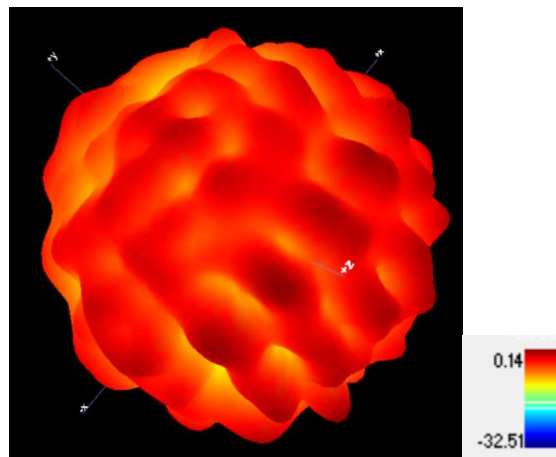
Max Antenna 3D Radiation Pattern 5470-5725 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5470-5725	1.38



Max Antenna 3D Radiation Pattern 5725-5850 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5725-5850	0.14

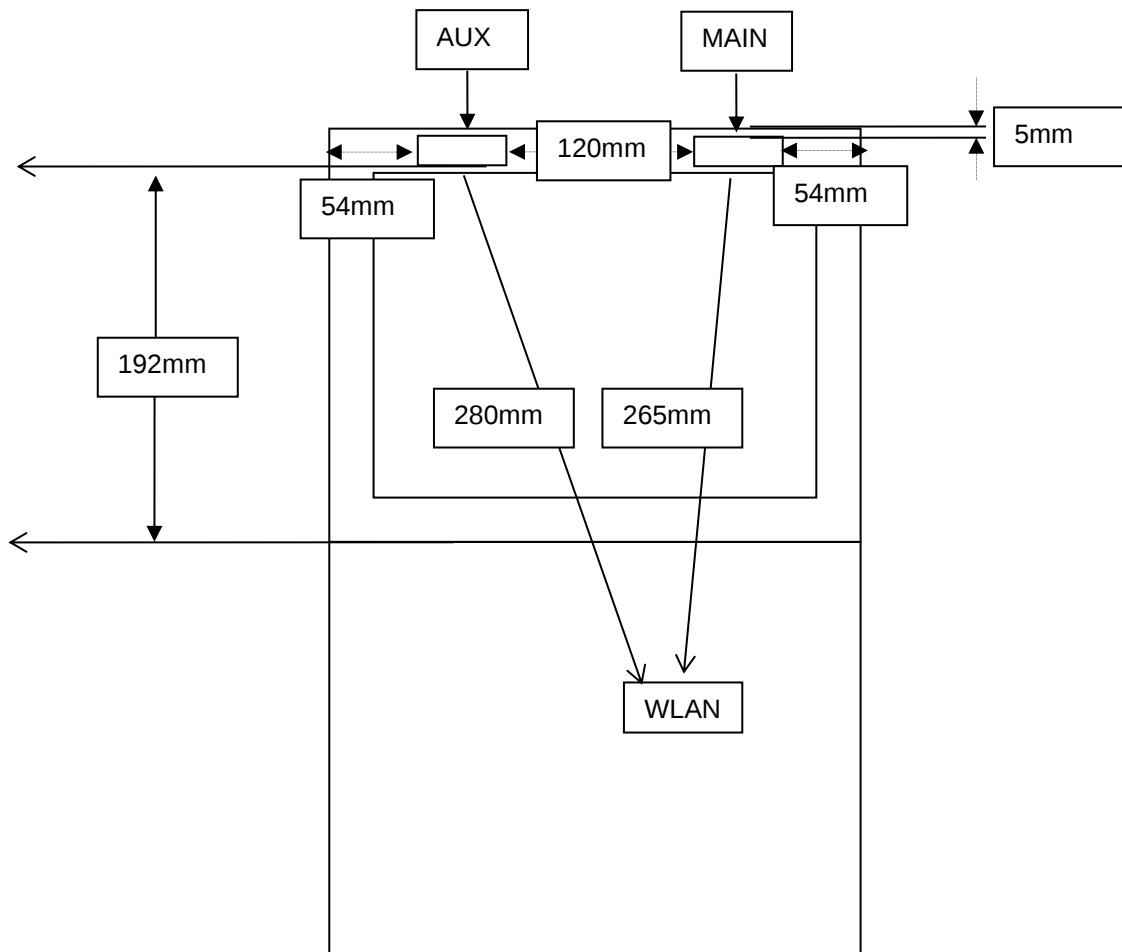


Annex B. Antenna Location

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.

Tablet mode

