ANTENNA INFORMATION

OEM	Acer
ODM	Compal
Platform model name	Craaskov_ADN(JH2GN)
Intel platform (ex: Yes, No or NA)	Yes
Platform type (ex: regular NB, convertible PC, AIO…etc)	Convertible
SAR minimum separation (mm)	200mm (with bumper) 198.35mm (without bumper)

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)	Justin Huang
	E-mail	Justin.Huang@wnc.com.tw
	Tel/Mobile	03-6667799
Testing date		2024/03/07

Antenna Part number	Main	81EAB515.G57(DC33002XD00)
	Aux	81EAB515.G58(DC33002XD10)
Antenna type (ex: PIFA, Dipole…etc)		PIFA

Antenna Peak gain w/ cable loss (dBi)* NB mode										
	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	2.63	2.90	2.87	2.89	2.09	1.88	2.90	2.87	2.84	2.56
Aux	1.79	2.90	2.90	2.83	2.83	2.37	2.42	0.92	1.34	2.54
Antenna Peak gain w/ cable loss (dBi)* TB mode										
	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	1.02	0.09	0.47	2.01	2.01	0.94	2.43	2.19	2.35	1.72
Aux	0.01	1.15	0.03	1.20	0.40	0.69	2.78	1.88	2.33	2.33

Cable Assembly Part Number and Information					
	Cable PN	**Cable length**(mm)	**Cable diameter**(mm)	**Impedance**(ohm)	**Connector type**
Main	50.2EL8U.175	432	1.13	50	I-pex MHF4L
Aux	50.EKW01.313	599	1.13	50	I-pex MHF4L

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

Table of Contents

1. Test & System Description

1.1 Measurement Method and System

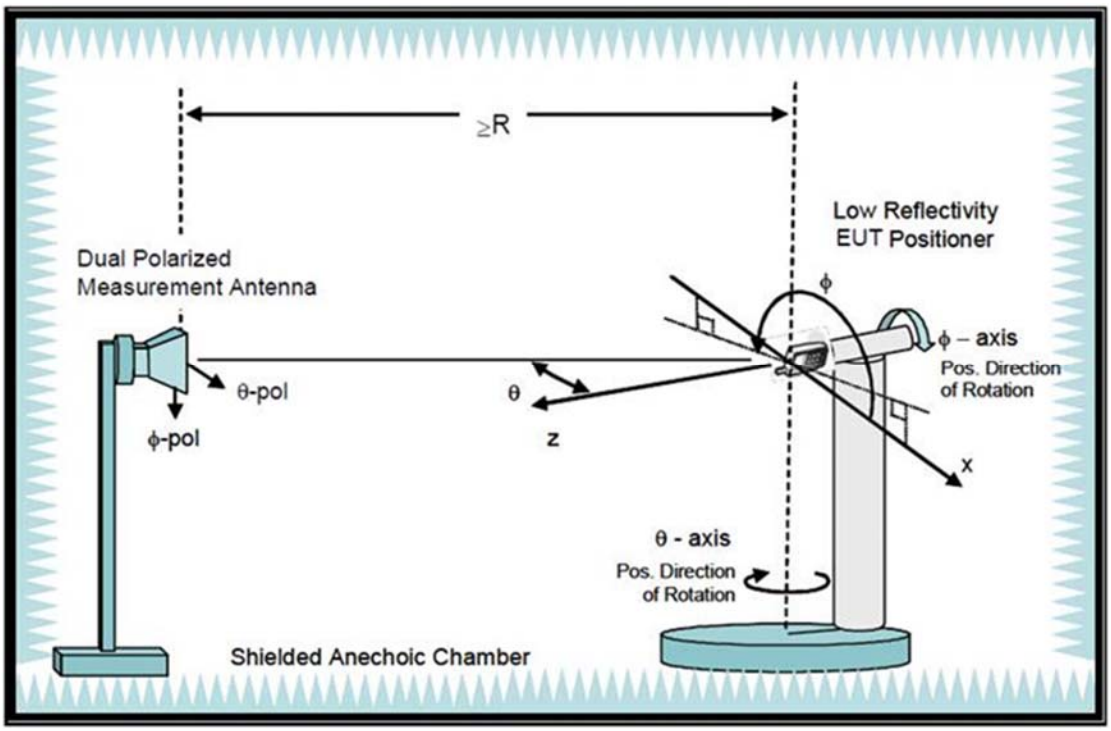
<insert test description here for test method>

This Craaskov_ADN(JH2GN) test report is prepared for host antenna testing under a Full Anechoic Chamber(WNC's ETS8500).

1.2 Test setup

<insert test diagram here for test site utilized>

Typical Setup for ETS-Lindgren AMS-8500:



1.3 Equipment list

<insert test diagram here for test site utilized>

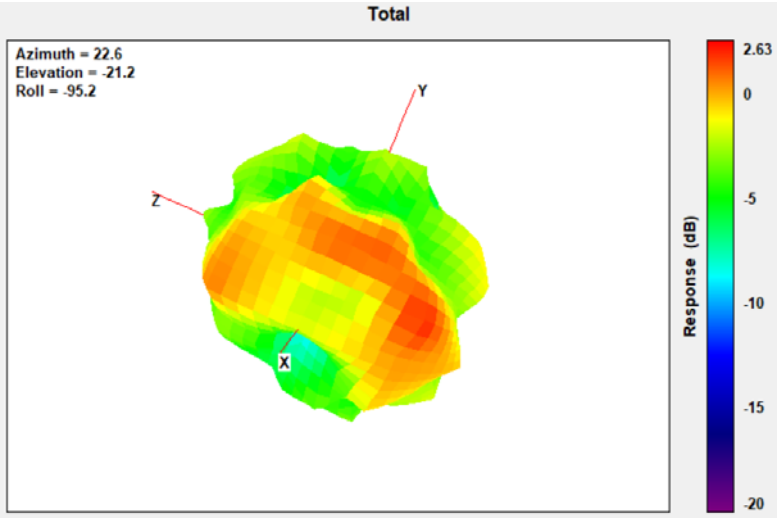
Item	Device	Type/Model	Serial#	Manufacturer	Cal. Date	Cal. Due Date
1	Anechoic Chamber	ETS-AMS	8500	ETS-Lindgren	2023/04	2024/04
2	Turn Table	ETS	-	ETS-Lindgren	2023/04	2024/04
3	Multi-Device Positioning Controller	Model 2090	00142407	ETS-Lindgren	2023/04	2024/04
4	Network Analyzer	E5071C	0171E5485A6J	Keysight	2023/05	2024/05
5	Horn antenna	3164-08	00140264	ETS-Lindgren	2023/04	2024/04
6	Cable 7.5m 400MHz to 18GHz (H-pol)	SS402	0100A1F5A1XXS	WOKEN	2023/04	2024/04
7	Cable 7.5m 400MHz to 18GHz (V-pol)	SS402	0100A1F5A1XXS	WOKEN	2023/04	2024/04
8	Cable 14m 400MHz to 18GHz	SS402	0100A1F5A1XXS	WOKEN	2023/04	2024/04
9	Temperature & Humidity Meter	HTC-01	-	METRAVI	2023/04	2024/04

2. Radiation characteristics of antenna loaded in Host Platform

Open Mode Main Antenna

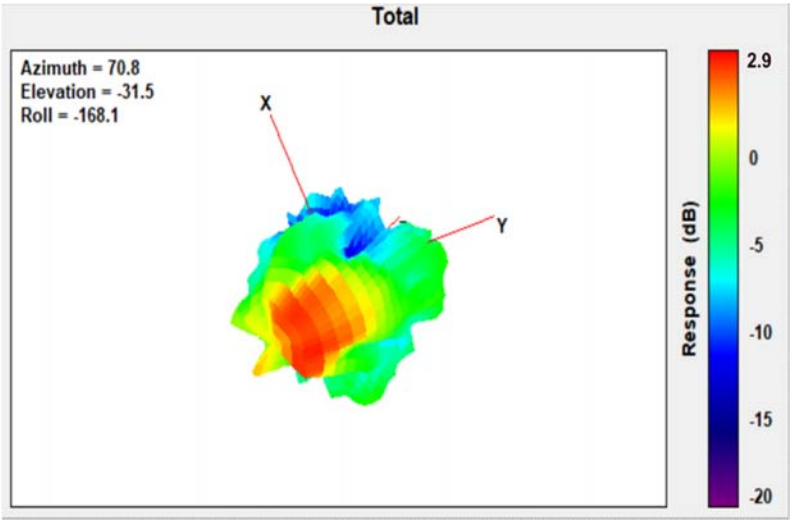
Max Antenna 3D Radiation Pattern 2400 – 2483.5 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
2400-2483.5	2.63



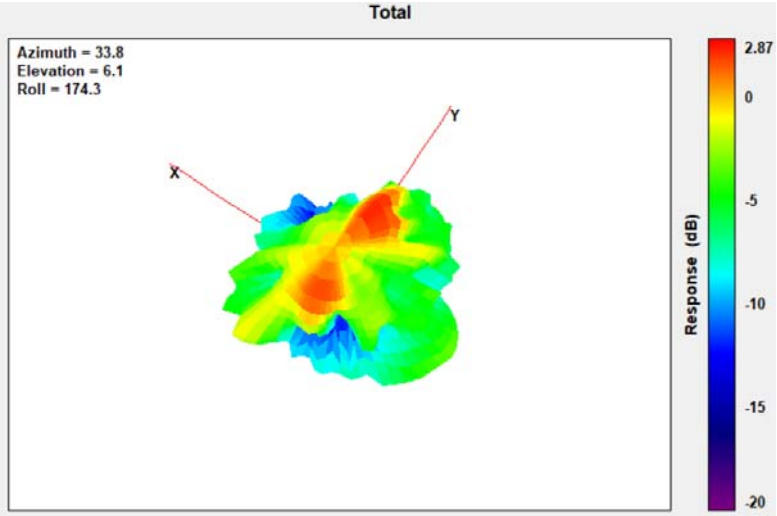
Max Antenna 3D Radiation Pattern 5150-5250 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5150-5250	2.90



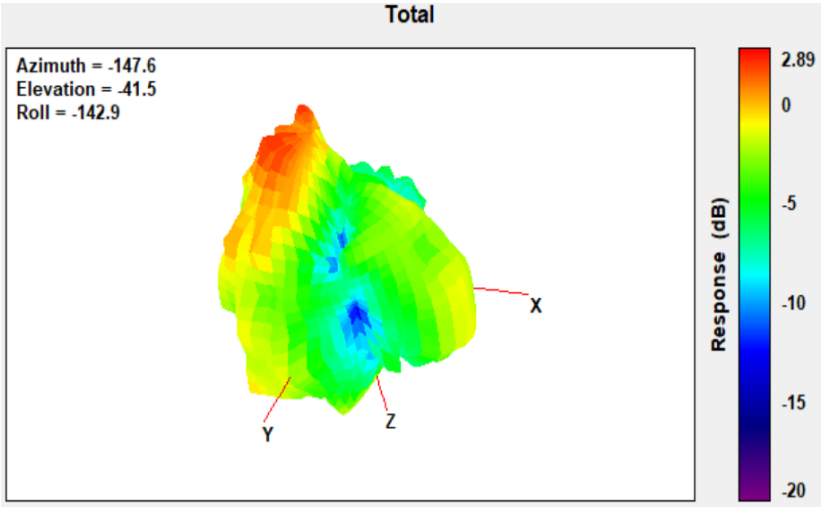
Max Antenna 3D Radiation Pattern 5250-5350 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5250-5350	2.87



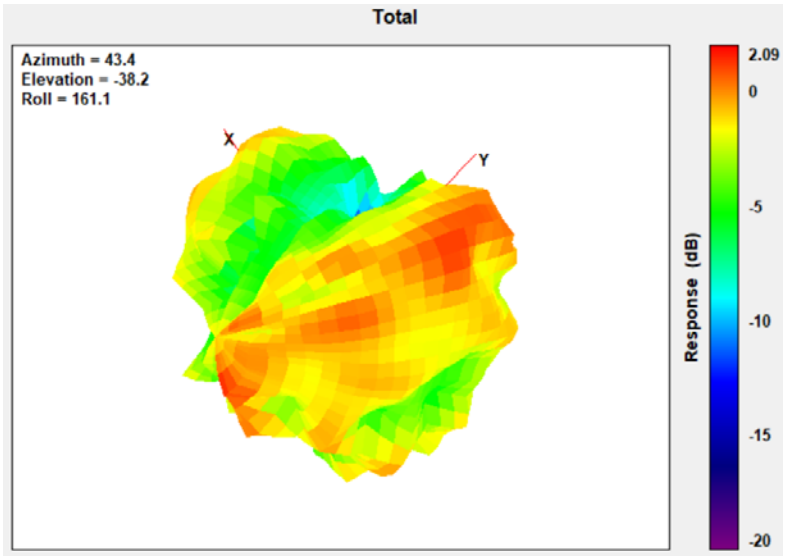
Max Antenna 3D Radiation Pattern 5470-5725 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5470-5725	2.89



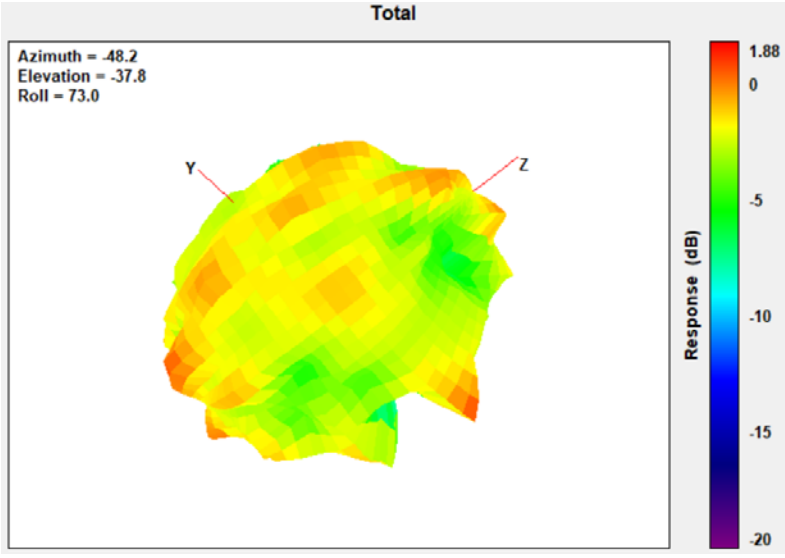
Max Antenna 3D Radiation Pattern 5725-5850 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5725-5850	2.09



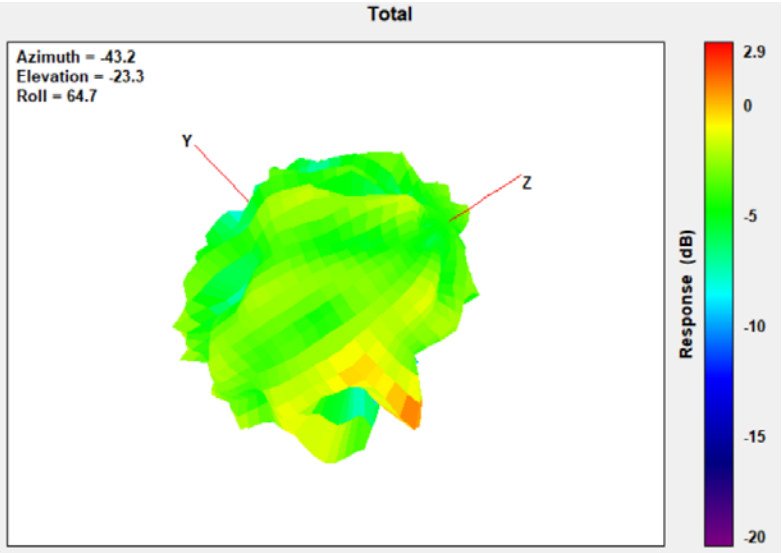
Max Antenna 3D Radiation Pattern 5850-5895 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5850-5895	1.88



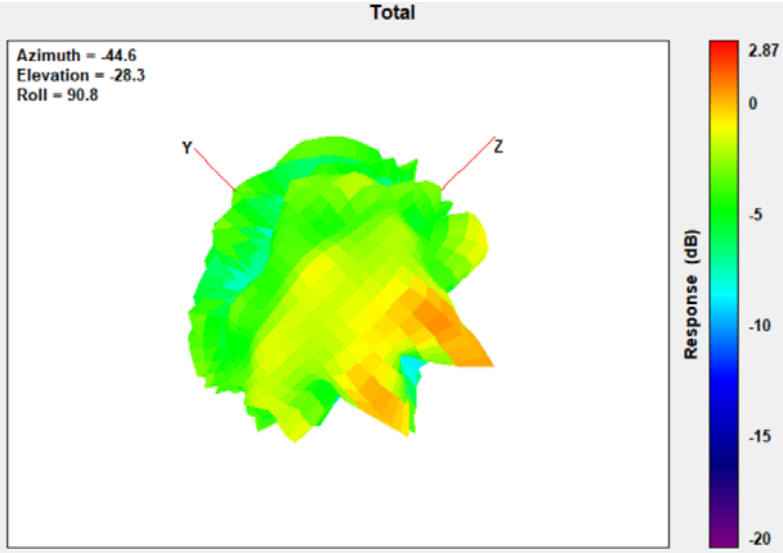
Max Antenna 3D Radiation Pattern 5925-6425 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5925-6425	2.90



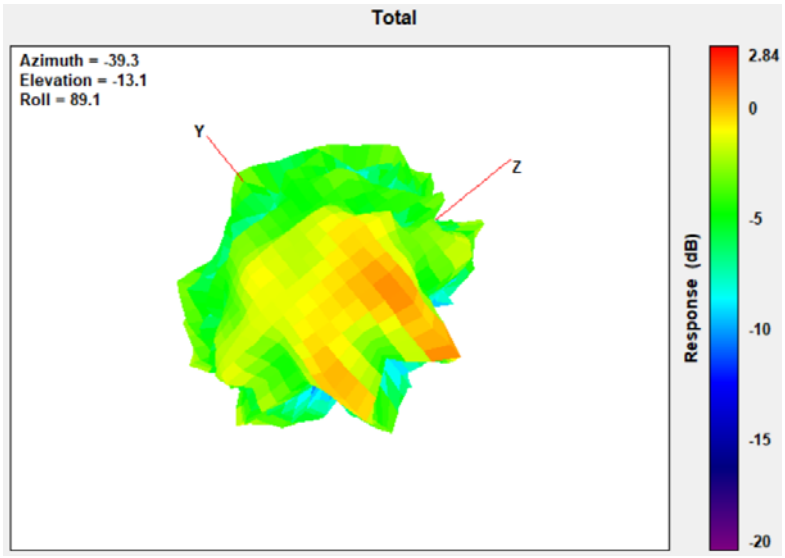
Max Antenna 3D Radiation Pattern 6425-6525 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6425-6525	2.87



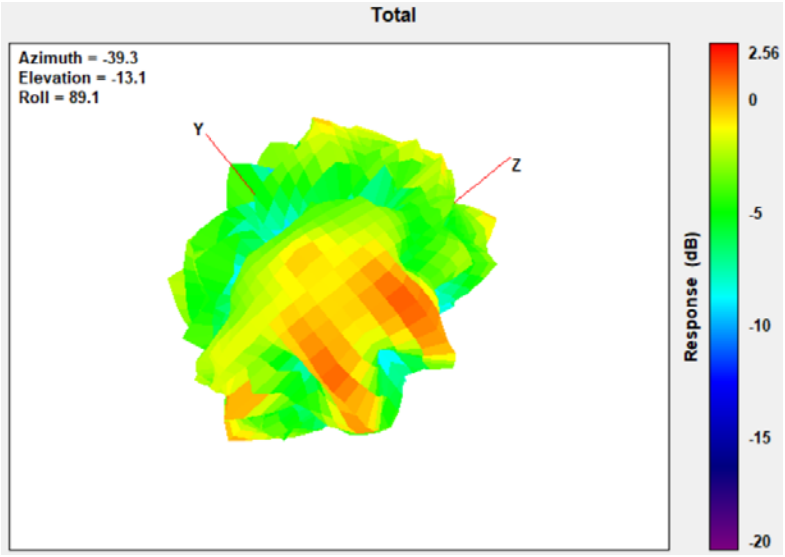
Max Antenna 3D Radiation Pattern 6525-6875 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6525-6875	2.84



Max Antenna 3D Radiation Pattern 6875-7125 MHz

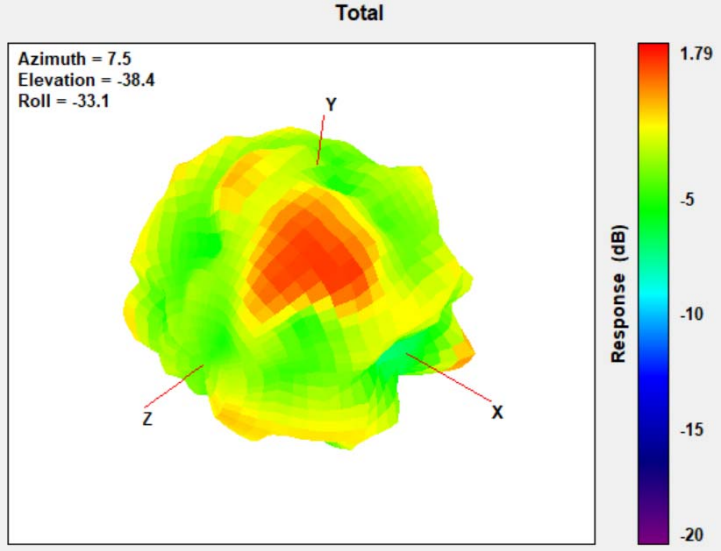
Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6875-7125	2.56



Open Mode Auxiliary Antenna

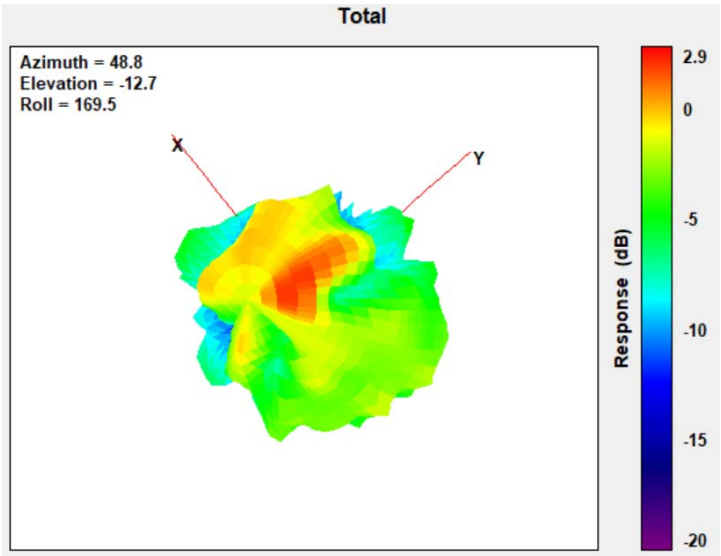
Max Antenna 3D Radiation Pattern 2400 – 2483.5 MHz

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



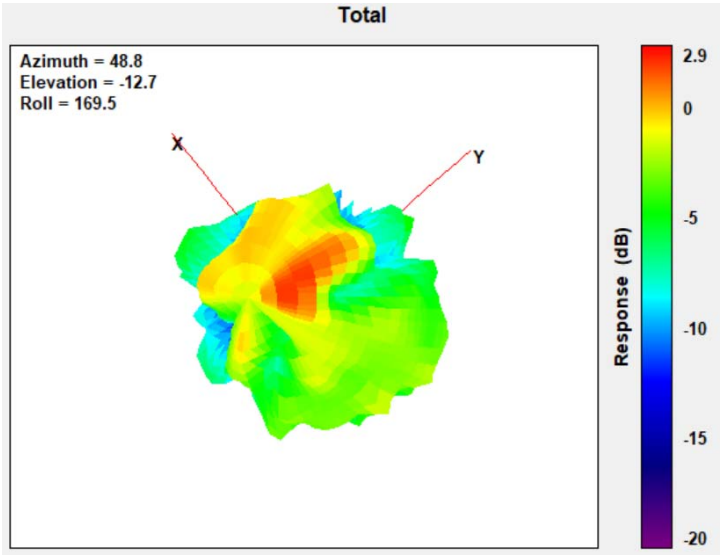
Max Antenna 3D Radiation Pattern 5150-5250 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5150-5250	2.90



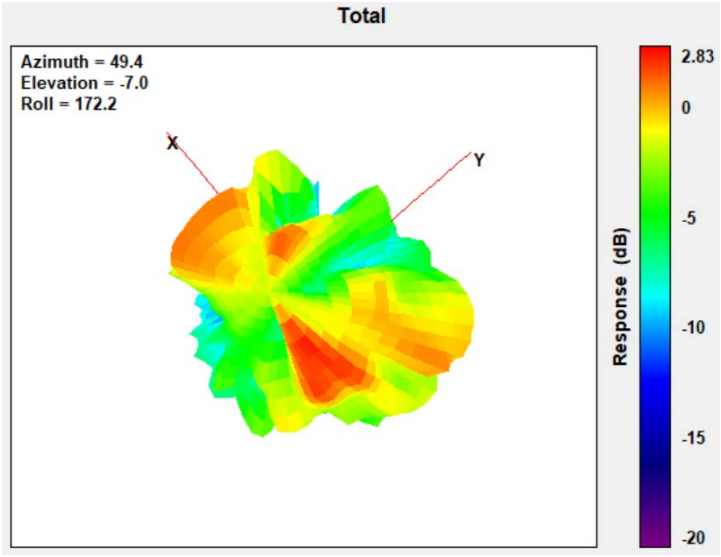
Max Antenna 3D Radiation Pattern 5250-5350 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5250-5350	2.90



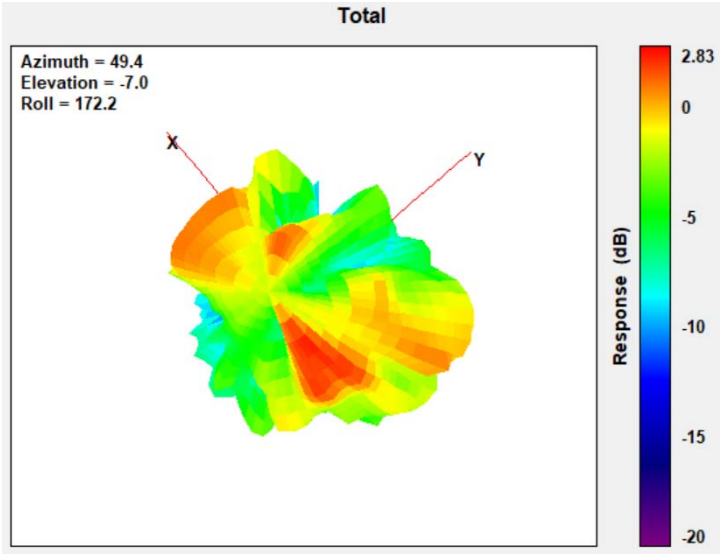
Max Antenna 3D Radiation Pattern 5470-5725 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5470-5725	2.83



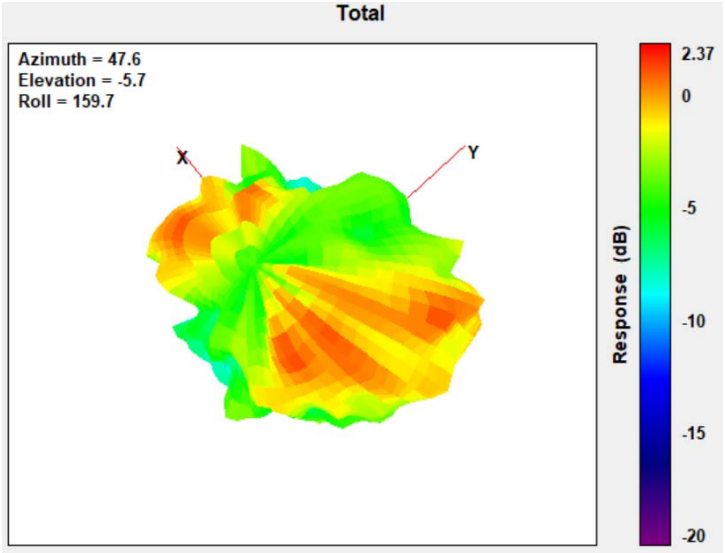
Max Antenna 3D Radiation Pattern 5725-5850 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5725-5850	2.83



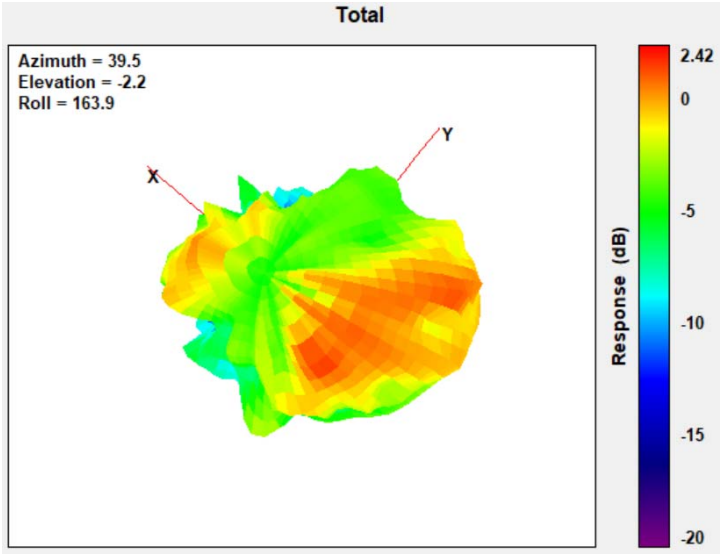
Max Antenna 3D Radiation Pattern 5850-5895 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5850-5895	2.37



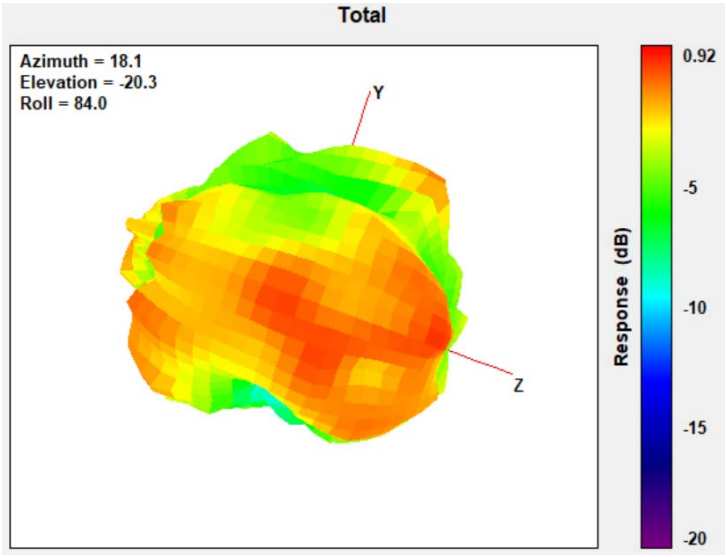
Max Antenna 3D Radiation Pattern 5925-6425 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5925-6425	2.42



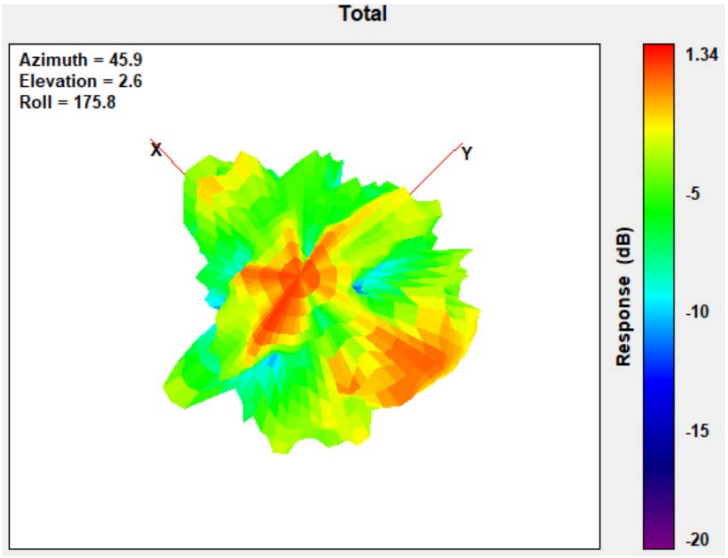
Max Antenna 3D Radiation Pattern 6425-6525 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6425-6525	0.92



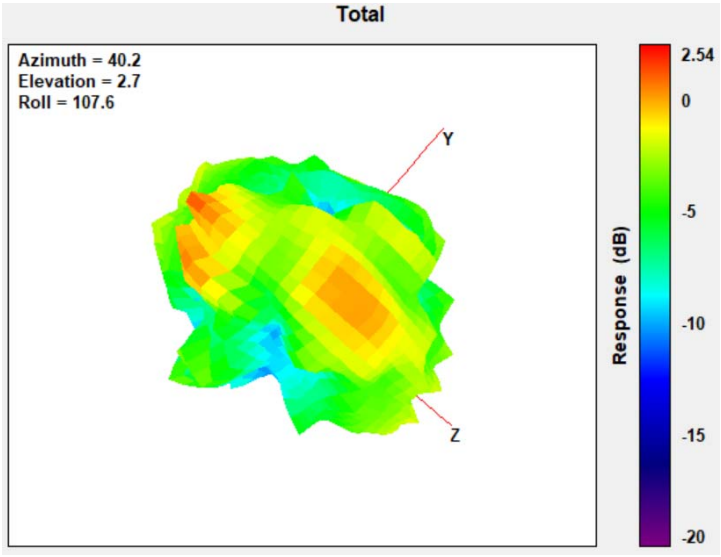
Max Antenna 3D Radiation Pattern 6525-6875 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6525-6875	1.34



Max Antenna 3D Radiation Pattern 6875-7125 MHz

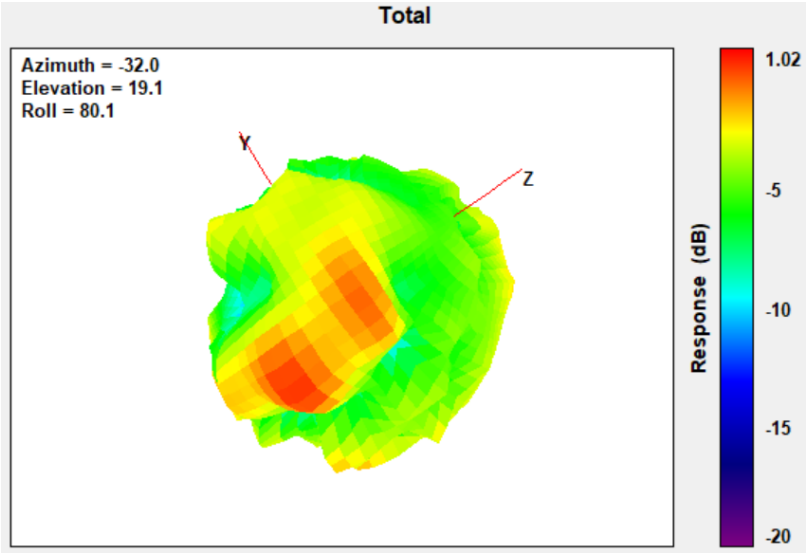
Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6875-7125	2.54



TB Mode Main Antenna

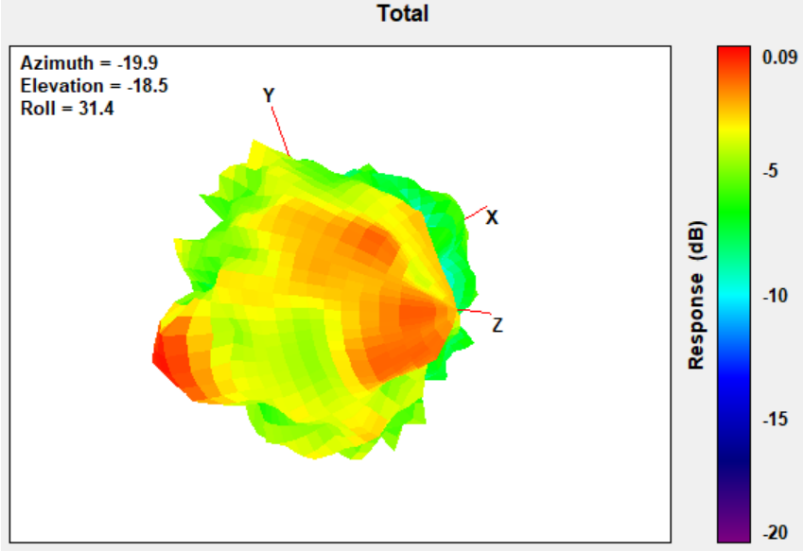
Max Antenna 3D Radiation Pattern 2400 – 2483.5 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
2400-2483.5	1.02



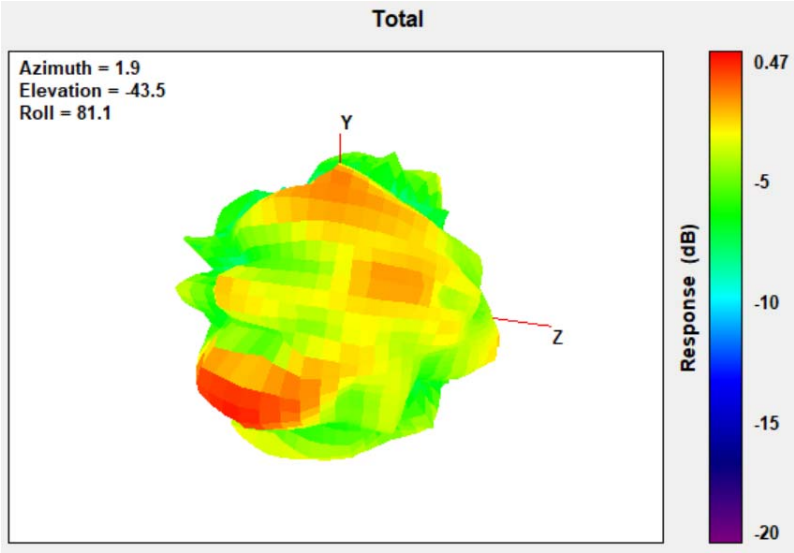
Max Antenna 3D Radiation Pattern 5150-5250 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5150-5250	0.09



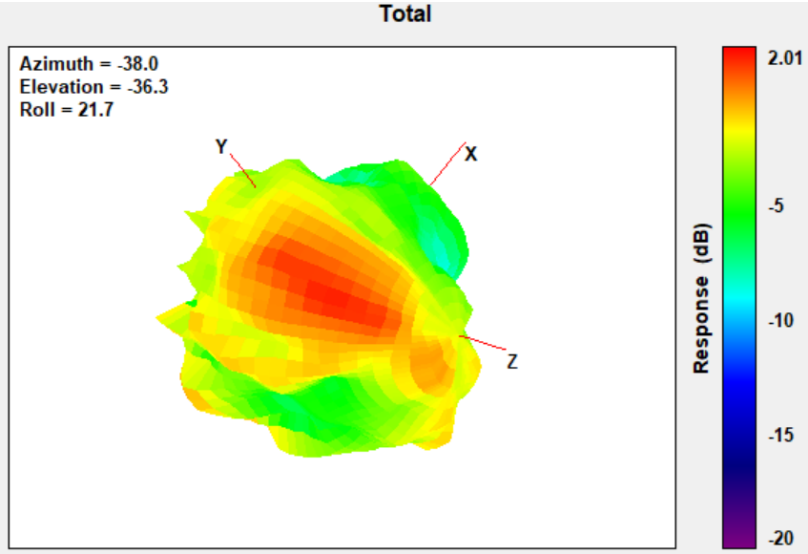
Max Antenna 3D Radiation Pattern 5250-5350 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5250-5350	0.47



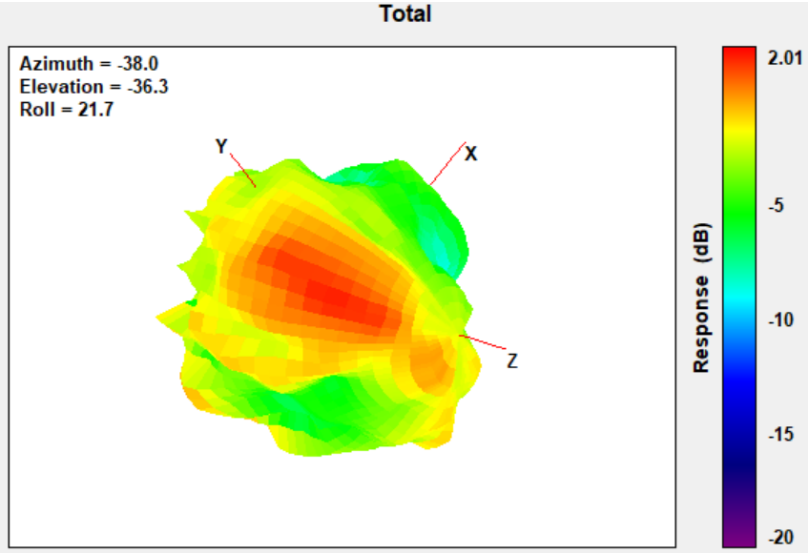
Max Antenna 3D Radiation Pattern 5470-5725 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5470-5725	2.01



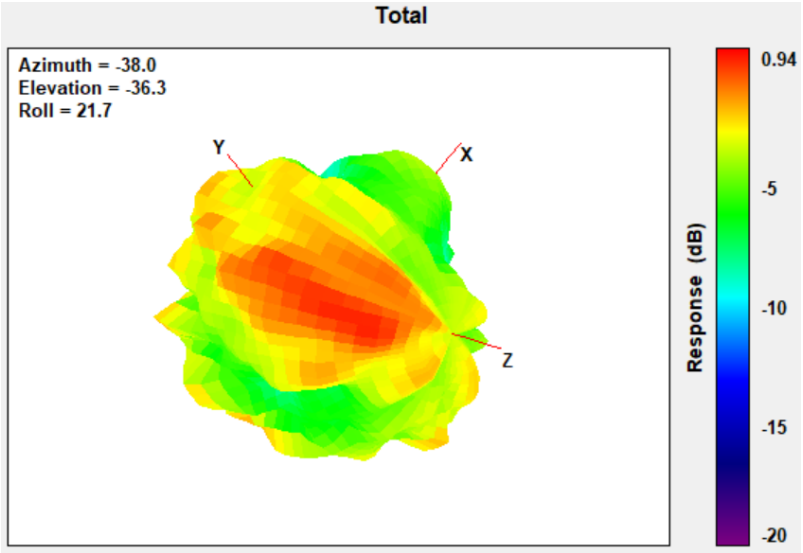
Max Antenna 3D Radiation Pattern 5725-5850 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5725-5850	2.01



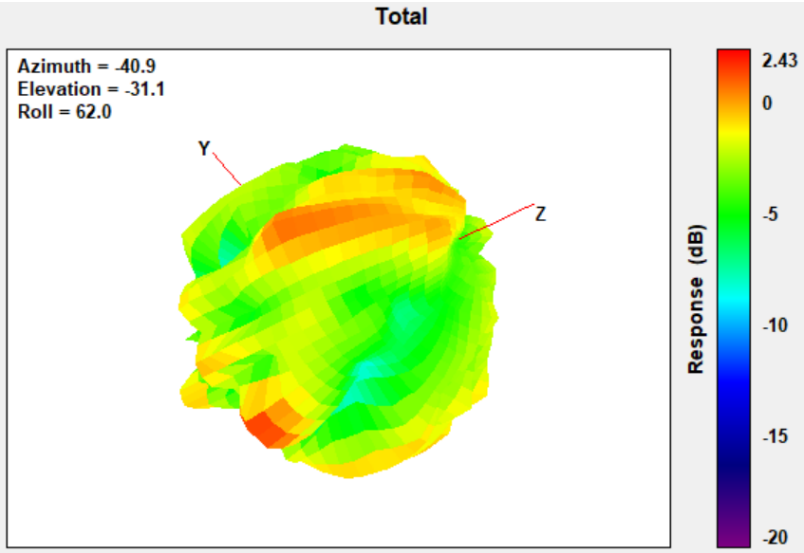
Max Antenna 3D Radiation Pattern 5850-5895 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5850-5895	0.94



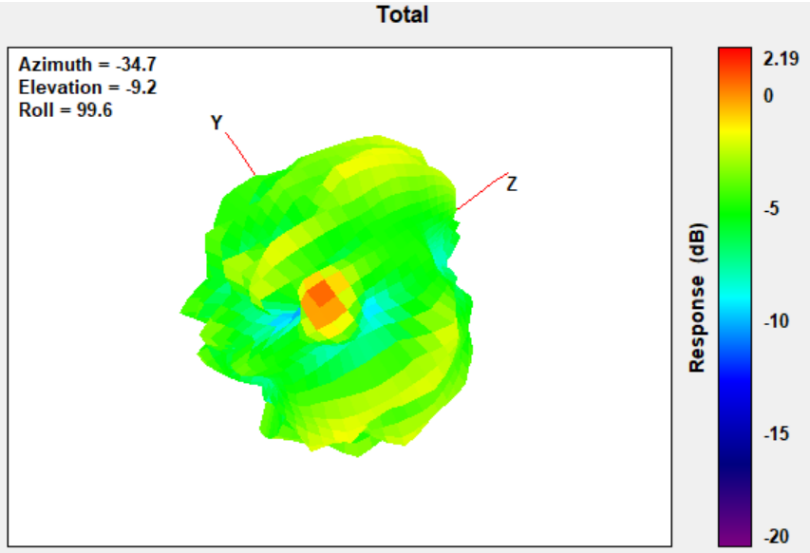
Max Antenna 3D Radiation Pattern 5925-6425 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5925-6425	2.43



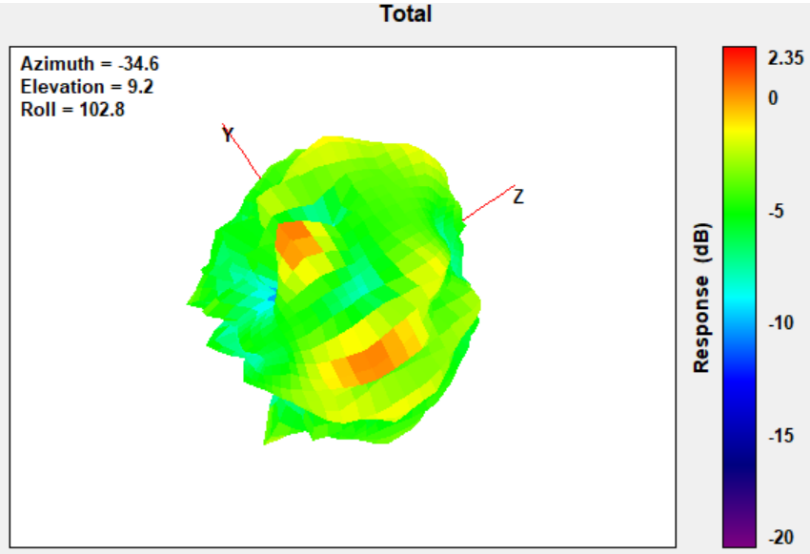
Max Antenna 3D Radiation Pattern 6425-6525 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6425-6525	2.19



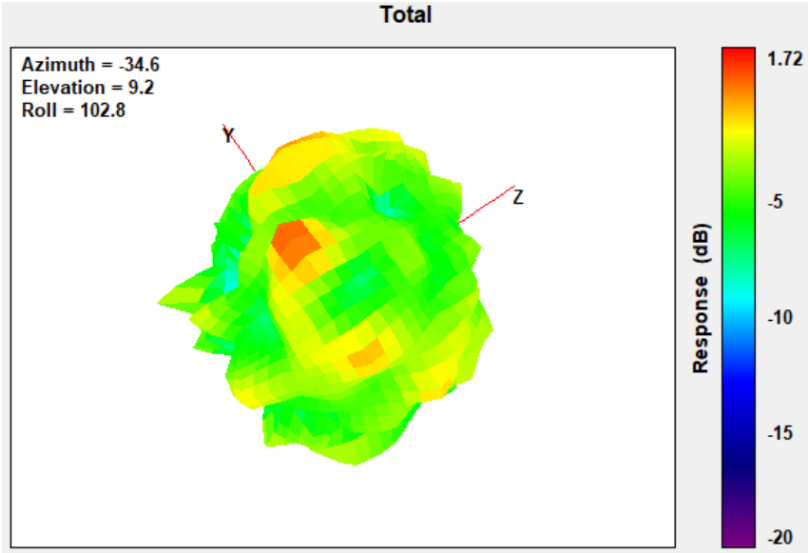
Max Antenna 3D Radiation Pattern 6525-6875 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6525-6875	2.35



Max Antenna 3D Radiation Pattern 6875-7125 MHz

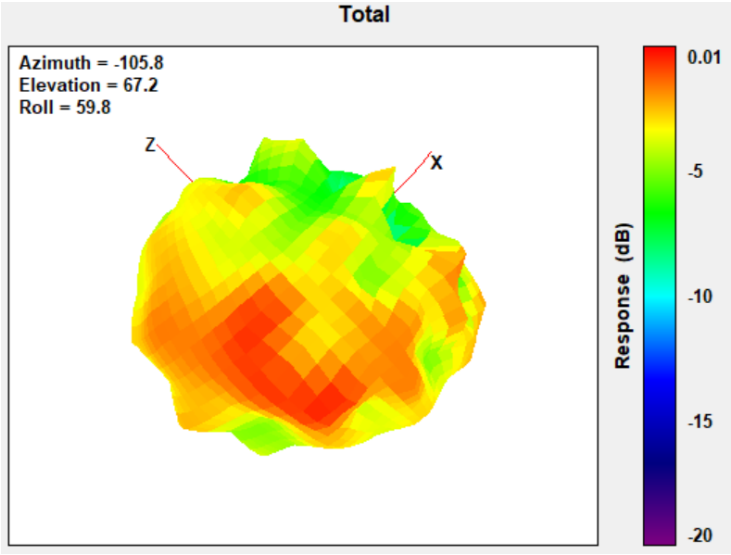
Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6875-7125	1.72



TB Mode Auxiliary Antenna

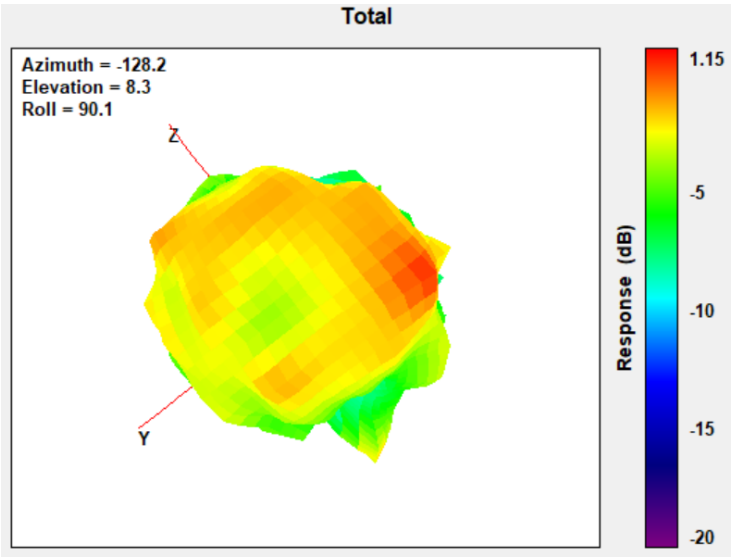
Max Antenna 3D Radiation Pattern 2400 – 2483.5 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
2400-2483.5	0.01



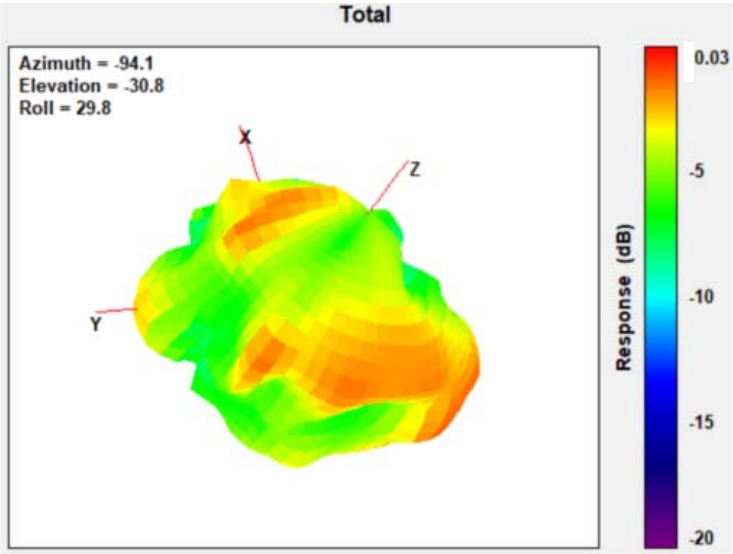
Max Antenna 3D Radiation Pattern 5150-5250 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5150-5250	1.15



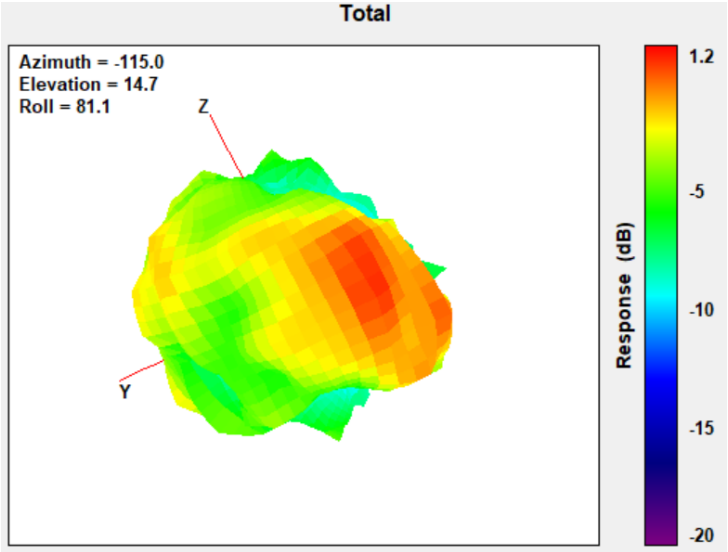
Max Antenna 3D Radiation Pattern 5250-5350 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5250-5350	0.03



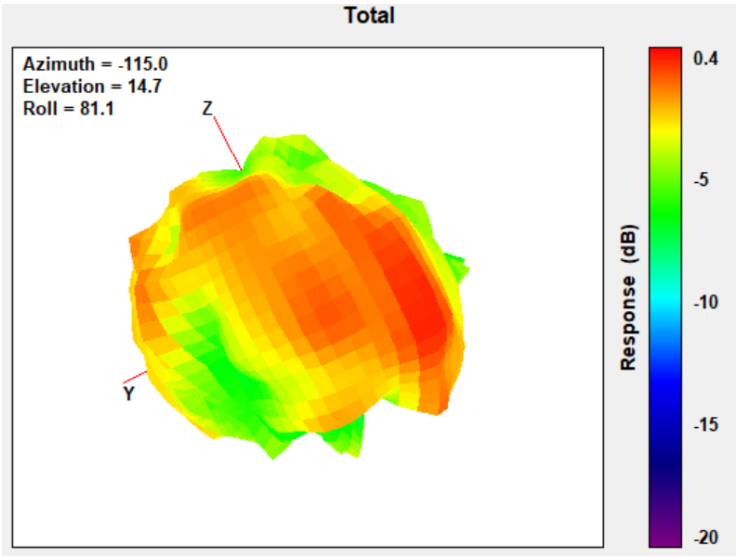
Max Antenna 3D Radiation Pattern 5470-5725 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5470-5725	1.20



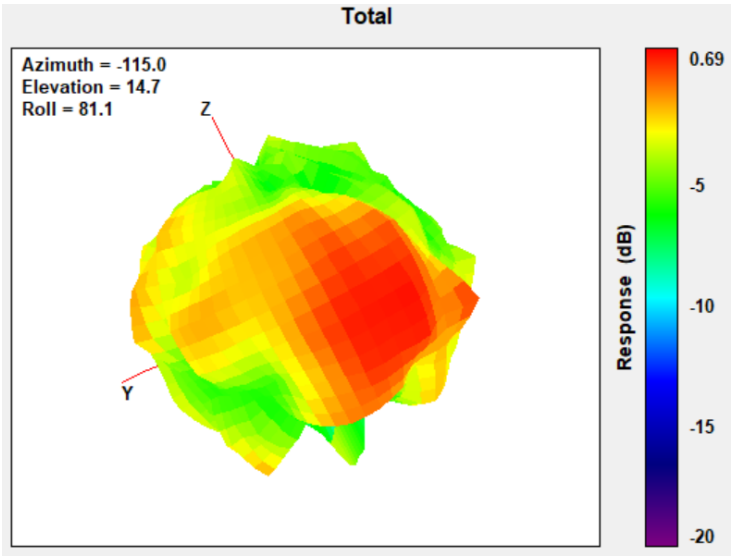
Max Antenna 3D Radiation Pattern 5725-5850 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5725-5850	0.40



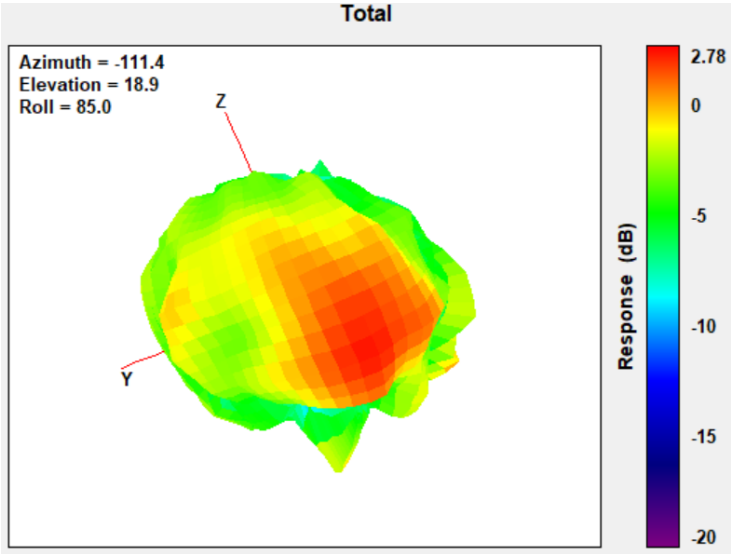
Max Antenna 3D Radiation Pattern 5850-5895 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5850-5895	0.69



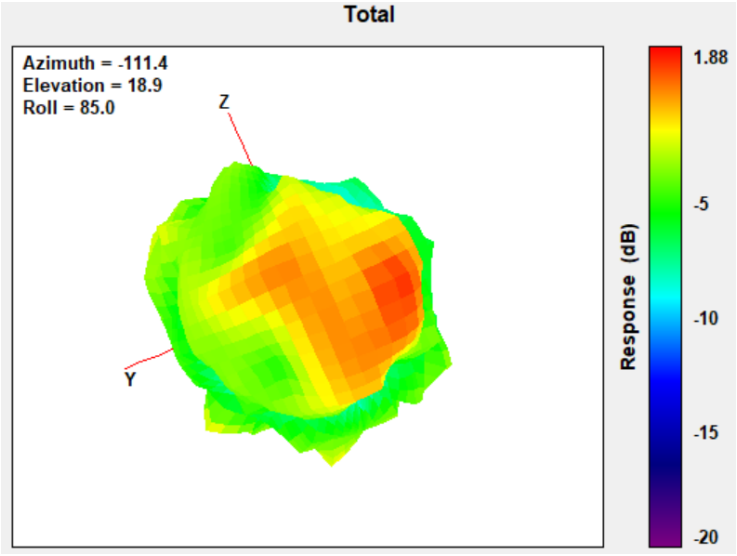
Max Antenna 3D Radiation Pattern 5925-6425 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5925-6425	2.78



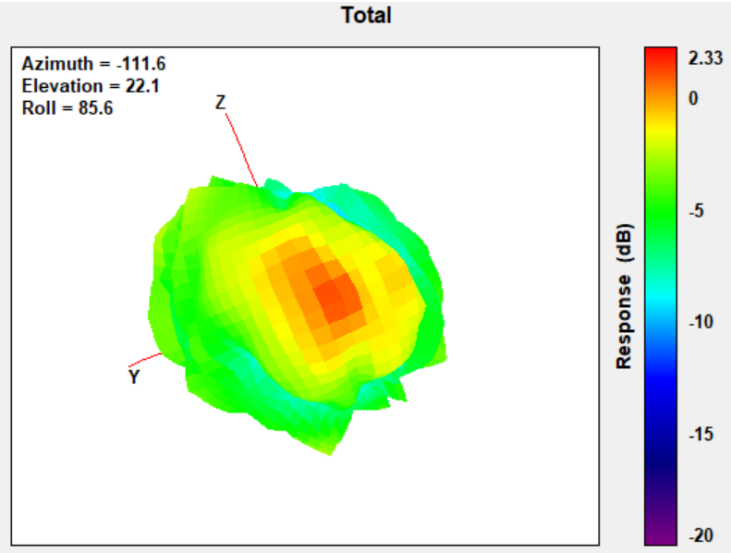
Max Antenna 3D Radiation Pattern 6425-6525 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6425-6525	1.88



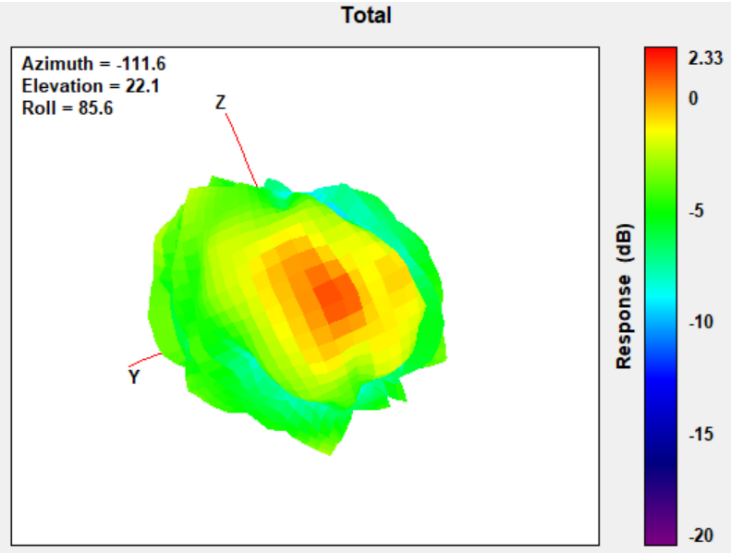
Max Antenna 3D Radiation Pattern 6525-6875 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6525-6875	2.33



Max Antenna 3D Radiation Pattern 6875-7125 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6875-7125	2.33

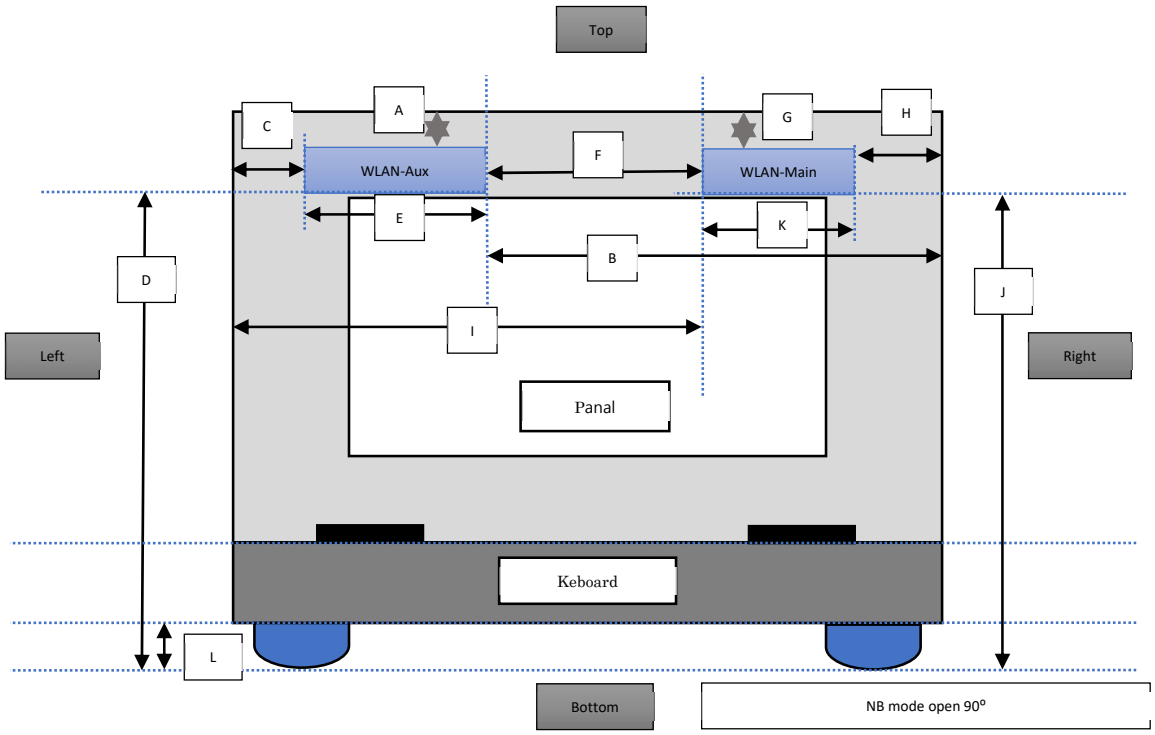


Annex B. Antenna Location

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.



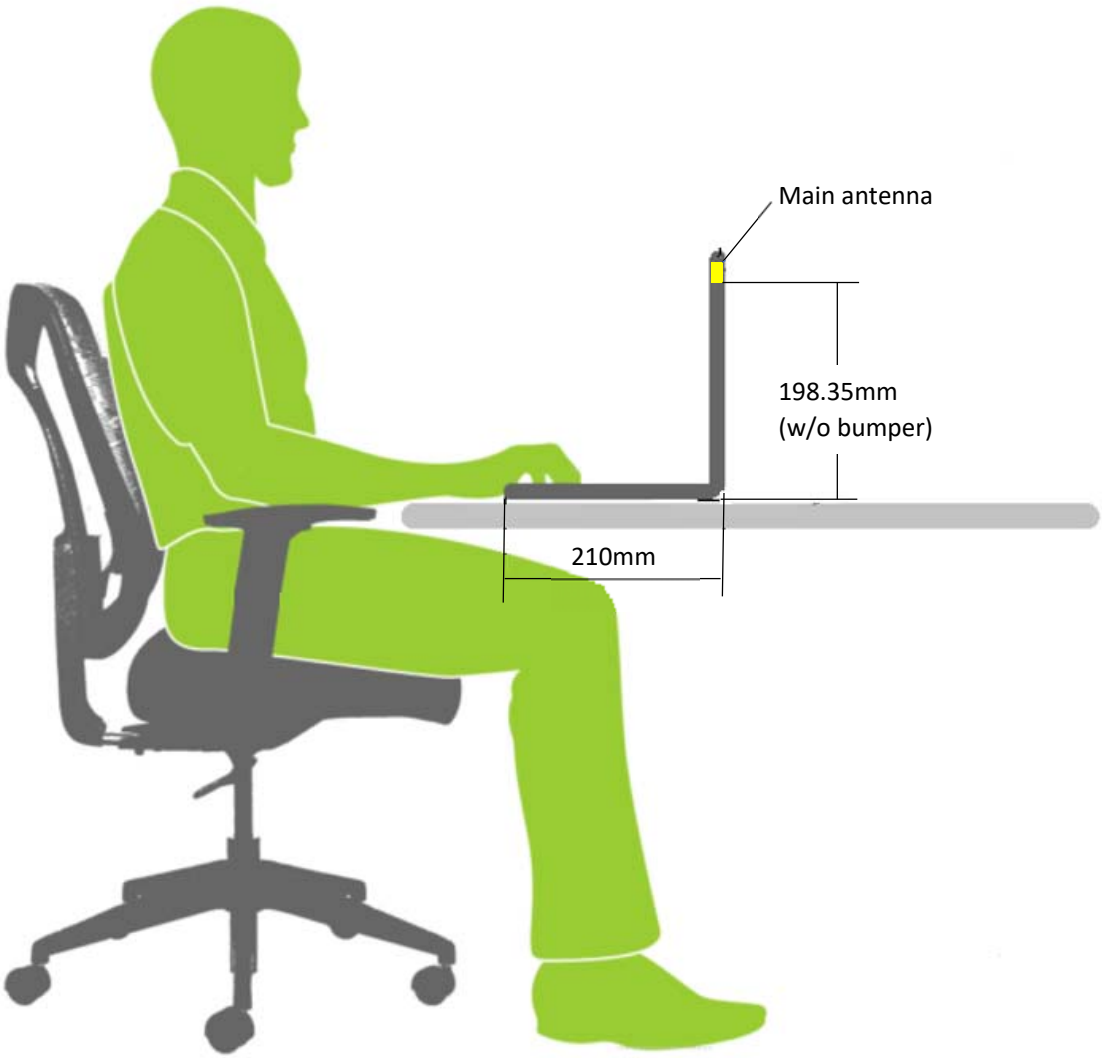
Minimum Separation Distance			
Item	Antenna	Position	Distance (mm)
A	WLAN-Aux	to Top	3
B	WLAN- Aux	to Right	210.25
C	WLAN- Aux	to Left	43.65
D	WLAN- Aux	to Bottom	200.46
E	WLAN- Aux	Aux Antenna Length	35
F	Main-Aux	Main to Aux	131.6
G	WLAN- Main	to Top	3

H	WLAN- Main	to Right	43.65
I	WLAN- Main	to Left	210.25
J	WLAN- Main	to Bottom	200.46
K	WLAN- Main	Main Antenna Length	35
L	NB	Bumper thickness	1.65

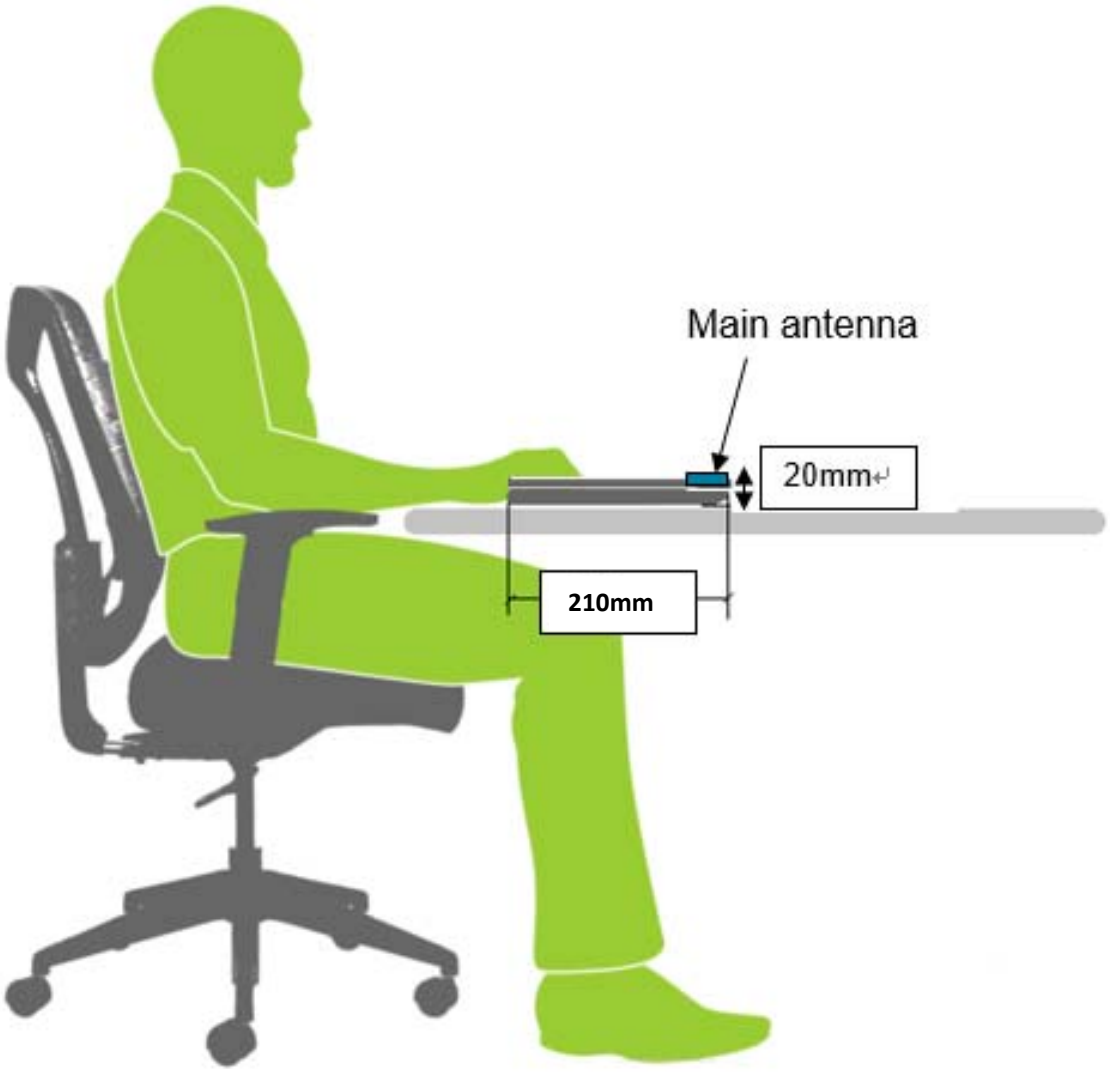
B.2 Antenna dimensional information for SAR evaluation

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.

Clamshell Mode



Tablet Mode



Annex C. Antenna Information

C.1 Antenna Assembly Specifications

Open Mode

1A	1B	1C	1D	Freq Range MHz	1E	1F	1G	1H
Antenna Part Number	Manufacturer	Antenna Type	Cable Assembly Part Number and Information		*Peak Gain W/ Cable loss (dBi)	Peak Gain w/o Cable Loss (dBi)	Max VSWR	Cable Loss (dB)
DQ33002XD00 (P/N:81EABU15.G57) Main Antenna	WNC	PIFA	(P/N: 50.2EL8U.175) I-pex MHF4L 50 ohm Coaxial length: 432mm diameter: 1.13mm	2400-2483.5	2.63	4.06	3.0	1.43
				5150-5250	2.90	4.90	3.0	2.00
				5250-5350	2.87	4.97	3.0	2.10
				5470-5725	2.89	5.07	3.0	2.18
				5725-5850	2.09	4.31	3.0	2.22
				5850-5895	1.88	4.14	3.0	2.26
				5925-6425	2.90	5.21	3.0	2.31
				6425-6525	2.87	5.26	3.0	2.39
				6525-6875	2.84	5.30	3.0	2.46
				6875-7125	2.56	5.10	3.0	2.54
DQ33002XD10 (P/N:81EABU15.G58) Aux Antenna	WNC	PIFA	(P/N: 50.EKW01.313) I-pex MHF4L 50 ohm Coaxial length: 599mm diameter: 1.13mm	2400-2483.5	1.79	3.36	3.0	1.57
				5150-5250	2.90	5.20	3.0	2.30
				5250-5350	2.90	5.23	3.0	2.33
				5470-5725	2.83	5.23	3.0	2.40
				5725-5850	2.83	5.27	3.0	2.44
				5850-5895	2.37	4.85	3.0	2.48
				5925-6425	2.42	4.95	3.0	2.53
				6425-6525	0.92	3.53	3.0	2.61
				6525-6875	1.34	4.01	3.0	2.67
				6875-7125	2.54	5.29	3.0	2.75

TB Mode

1A	1B	1C	1D	Freq Range MHz	1E	1F	1G	1H
Antenna Part Number	Manufacturer	Antenna Type	Cable Assembly Part Number and Information		*Peak Gain W/ Cable loss (dBi)	Peak Gain w/o Cable Loss (dBi)	Max VSWR	Cable Loss (dB)
DQ33002XD00 (P/N:81EABU15.G57) Main Antenna	WNC	PIFA	(P/N: 50.2EL8U.175) I-pex MHF4L 50 ohm Coaxial length: 432mm diameter: 1.13mm	2400-2483.5	1.02	2.45	3.0	1.43
				5150-5250	0.09	2.09	3.0	2.00
				5250-5350	0.47	2.57	3.0	2.10
				5470-5725	2.01	4.19	3.0	2.18
				5725-5850	2.01	4.23	3.0	2.22
				5850-5895	0.94	3.20	3.0	2.26
				5925-6425	2.43	4.74	3.0	2.31
				6425-6525	2.19	4.58	3.0	2.39
				6525-6875	2.35	4.81	3.0	2.46
				6875-7125	1.72	4.26	3.0	2.54
DQ33002XD10 (P/N:81EABU15.G58) Aux Antenna	WNC	PIFA	(P/N: 50.EKW01.313) I-pex MHF4L 50 ohm Coaxial length: 599mm diameter: 1.13mm	2400-2483.5	0.01	1.58	3.0	1.57
				5150-5250	1.15	3.45	3.0	2.30
				5250-5350	0.03	2.36	3.0	2.33
				5470-5725	1.20	3.60	3.0	2.40
				5725-5850	0.40	2.84	3.0	2.44
				5850-5895	0.69	3.17	3.0	2.48
				5925-6425	2.78	5.31	3.0	2.53
				6425-6525	1.88	4.49	3.0	2.61
				6525-6875	2.33	5.00	3.0	2.67
				6875-7125	2.33	5.08	3.0	2.75