ANTENNA INFORMATION

Antenna manufacturer	Company name	SPEEDWIRE
	Address	No. 138, Hi-tech District East-river, Huizhou, Guangdong, China
Test location	Company name	SPEEDWIRE
	Address	No. 138, Hi-tech District East-river, Huizhou, Guangdong, China
Test Personnel	Name(Full name)	Jason1_fang
	E-mail	Jason1_fang @speed-hz.com
	Tel/Mobile	+886-3-3253361 ext 227
Testing date		2024/12/16

Antenna Part number	Main	025.902K5.0001
	Aux	N/A
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	1.98	2.31	2.63	2.51	2.39	2.39	2.43	2.43	2.89	2.83
Aux	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Cable Assembly Part Number and Information					
	Cable PN	**Cable length**(mm)	**Cable diameter**(mm)	**Impedance**(ohm)	**Connector type**
Main	KB113/50-130	50	1.13	50	C87P115 or equivalent
	N/A	N/A	N/A	N/A	N/A

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

Table of Contents

1. Document Revision History

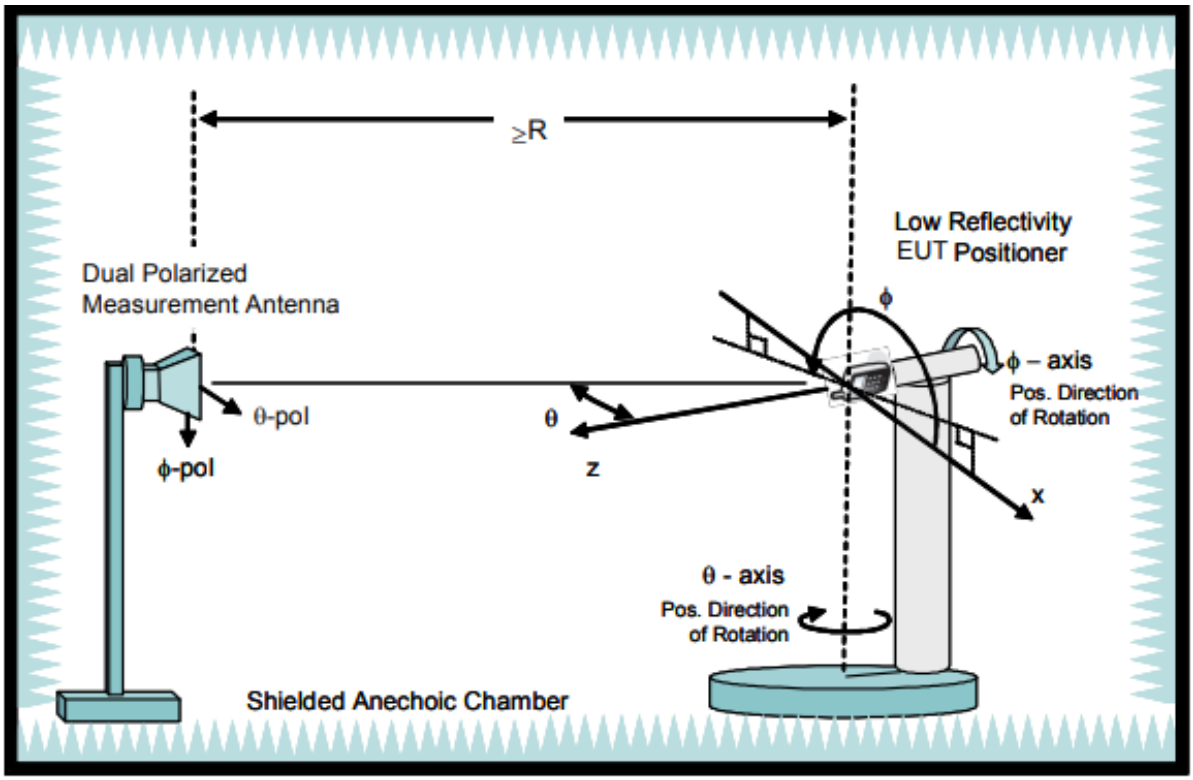
Revision #	Revision Details	Issued Date
Rev. 00	First Issue	2025/4/25

2. Test & System Description

3.1 Measurement Method and System

The testing of antenna gain should be made at a CTIA qualified lab with an RF anechoic chamber with at least 3-meter separation from the receive antenna to the antenna under test. The antenna gain report from unqualified lab can't be referenced a passing. Besides, all test equipment including horn antennas, adapters, cables, network analyzers, and receivers shall be calibrated per manufacturer's minimum calibration requirements.

3.2 Test setup



3.3 Equipment list

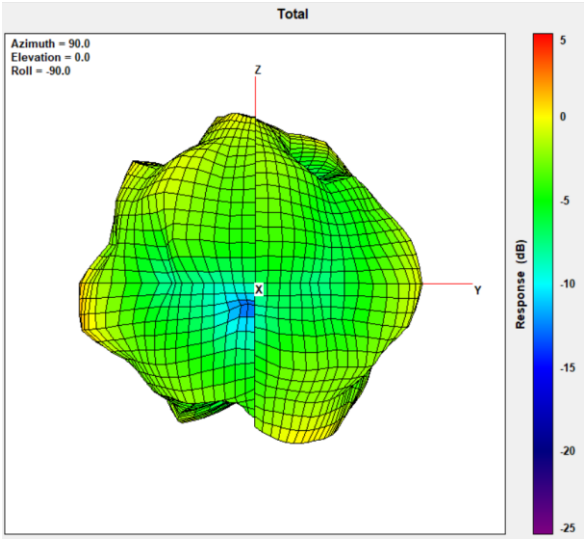
Device	Type/Model	Serial #	Manufacturer	Cal. Date	Cal. Due Date
Anechoic Chamber	AMS8500	-	ETS-Lindgren	22-Jun-23	10-Jul-25
Turn Table	2117-7200	SN00231447	ETS-Lindgren	22-Jun-23	10-Jul-25
Switch & Positioning systems	EMCenter	SN00242606	ETS-Lindgren	22-Jun-23	10-Jul-25
Measurement SW	EMQuest V1.15 build 27347	SN1802	ETS-Lindgren	22-Jun-23	10-Jul-25
Horn antenna	3164-10	SN00246202	ETS-Lindgren	22-Jun-23	10-Jul-25
Vector Network Analyzer	E5071C	PN5188-4462	Keysight	30-May-23	30-Nov-25
Cable 7.5m 400MHz to 18GHz(H-pol)	SS402	00100A1F5A1XXS	WOKEN	22-Jun-23	10-Nov-25
Cable 7.5m 400MHz to 18GHz(V-pol)	SS402	00100A1F5A1XXS	WOKEN	22-Jun-23	10-Nov-25
Cable 14m 400MHz to 18GHz	SS402	00100A1F5A1XXS	WOKEN	22-Jun-23	10-Nov-25
Temp & Humidity Logger	830	SN84972	PROVA	16-Jul-23	10-Jul-25

3. Radiation characteristics of antenna loaded in Host Platform

Main Antenna

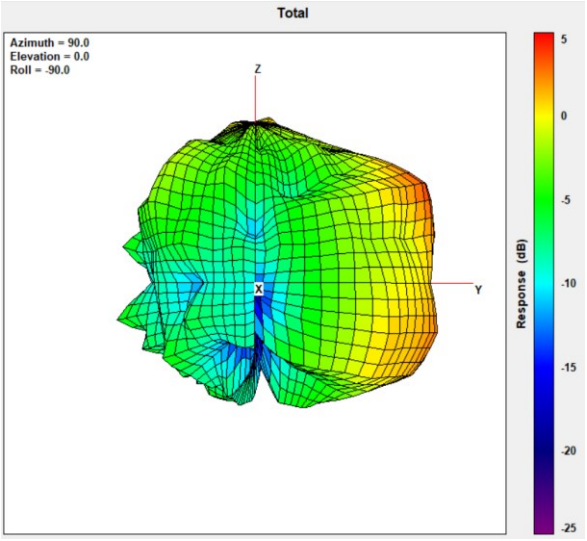
Max Antenna 3D Radiation Pattern 2400 – 2483.5 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
2400-2483.5	1.98



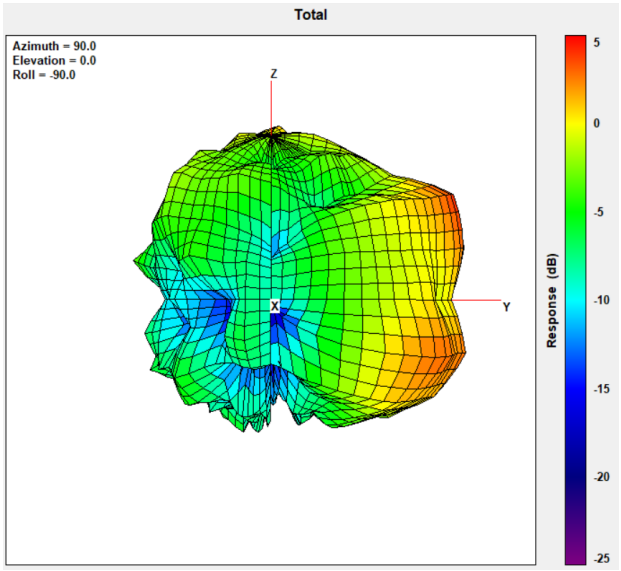
Max Antenna 3D Radiation Pattern 5150-5250 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5150-5250	2.31



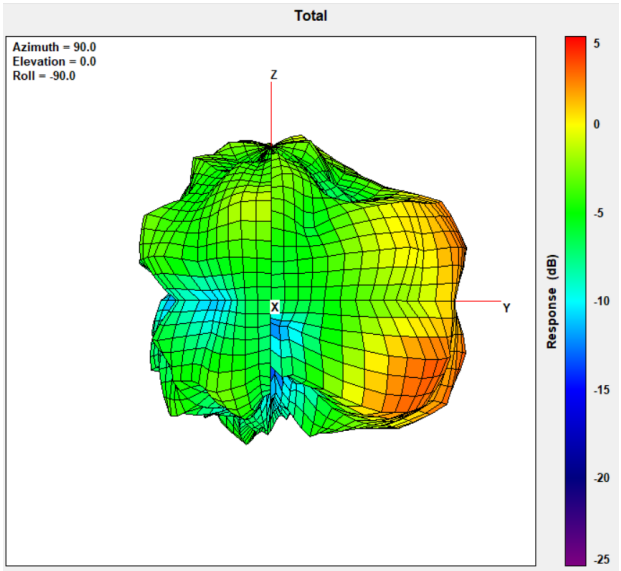
Max Antenna 3D Radiation Pattern 5250-5350 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5250-5350	2.63



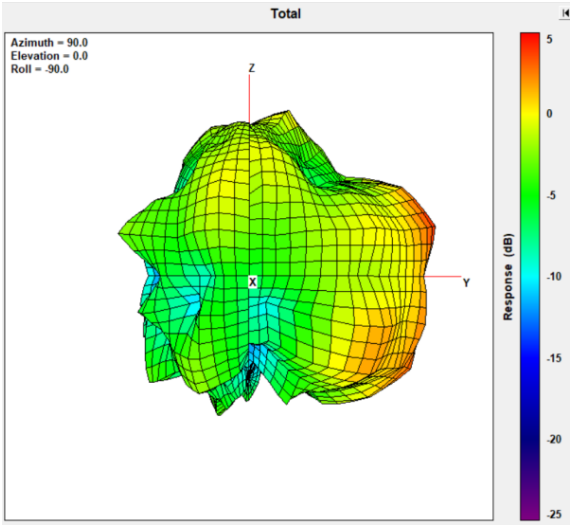
Max Antenna 3D Radiation Pattern 5470-5725 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5470-5725	2.51



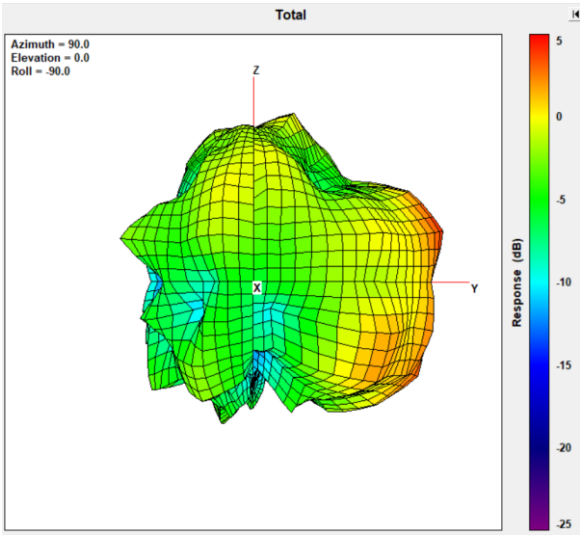
Max Antenna 3D Radiation Pattern 5725-5850 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5725-5850	2.39



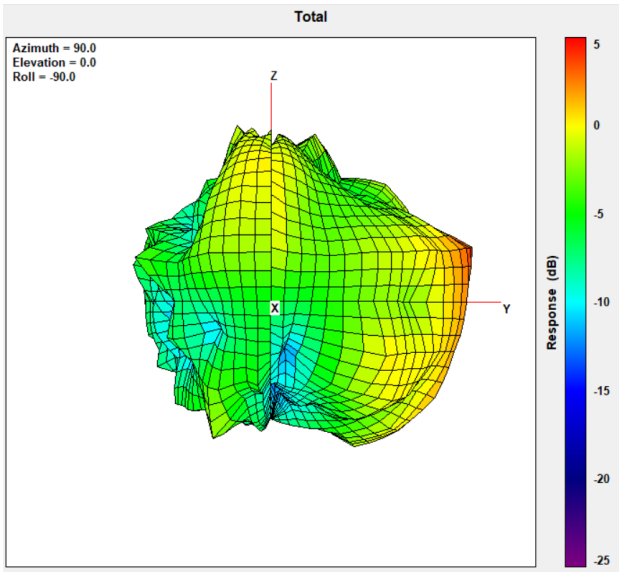
Max Antenna 3D Radiation Pattern 5850-5895 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5850-5895	2.39



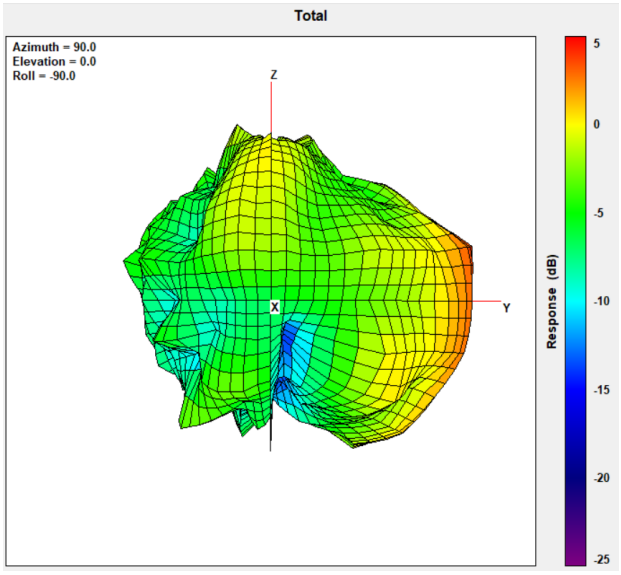
Max Antenna 3D Radiation Pattern 5925-6425 MHz

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



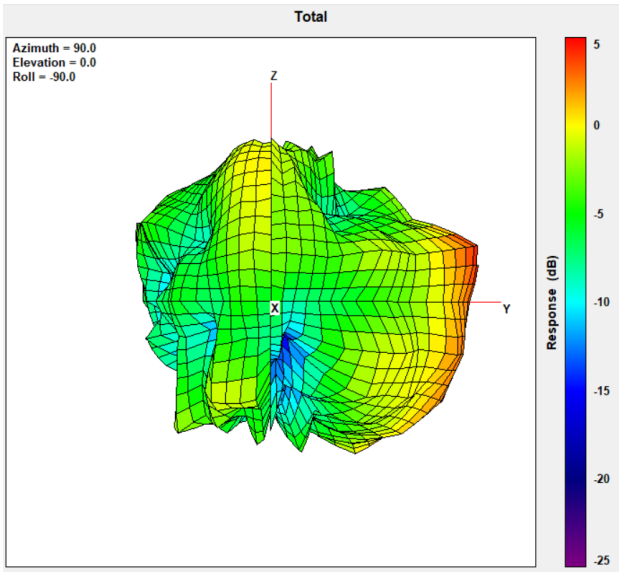
Max Antenna 3D Radiation Pattern 6425-6525 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6425-6525	2.43



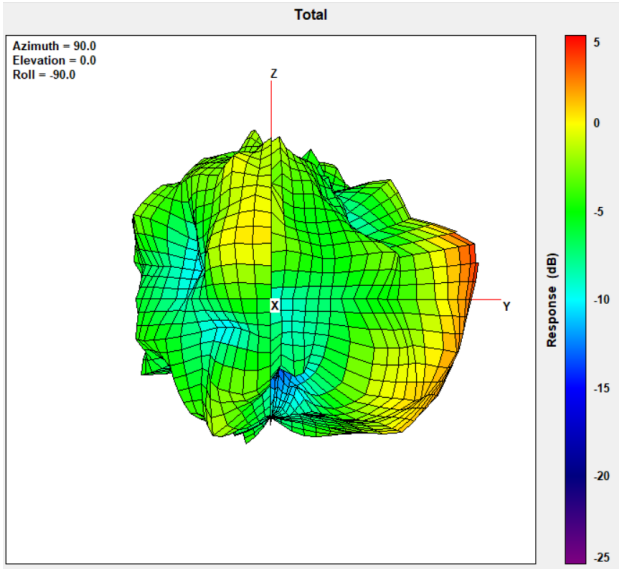
Max Antenna 3D Radiation Pattern 6525-6875 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6525-6875	2.89



Max Antenna 3D Radiation Pattern 6875-7125 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6875-7125	2.83



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.