

UWB ANT Gain Table

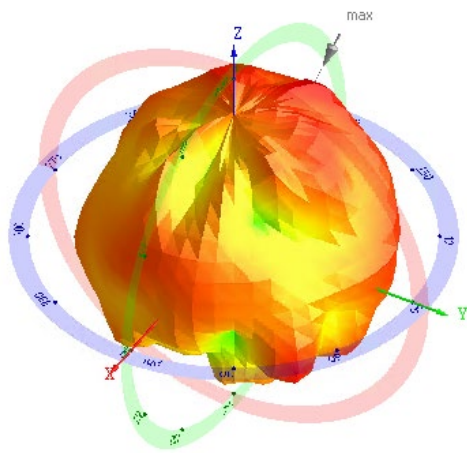
A3LSMF976JPN

Date : 2026. 04. 15

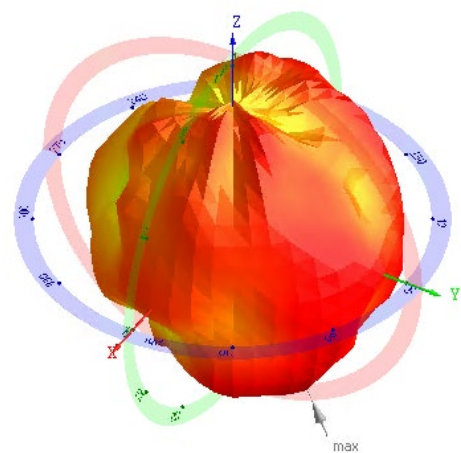
A3LSMF976JPN UWB ANT1 (Sub2, Inverted-F Antenna)

Metal ANT	Frequency	Avg. Gain (dB)	Peak Gain (dB)
CH 5	6.25 GHz	-15.21	-12.99
	6.50 GHz	-14.64	-12.10
	6.75 GHz	-15.29	-12.44
CH 9	7.75 GHz	-14.37	-8.53
	8.00 GHz	-13.78	-7.76
	8.25 GHz	-12.27	-6.50

Radiation plots for max gain plane (3D)



6500MHz

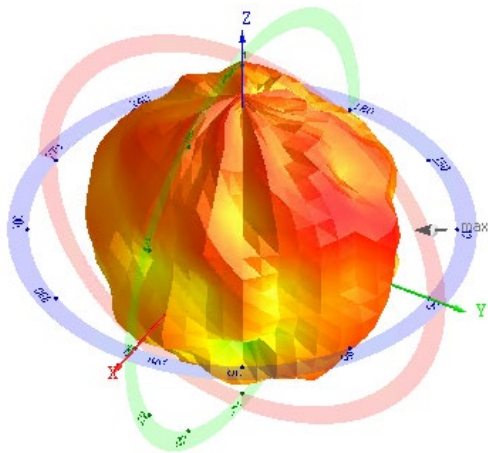


8000MHz

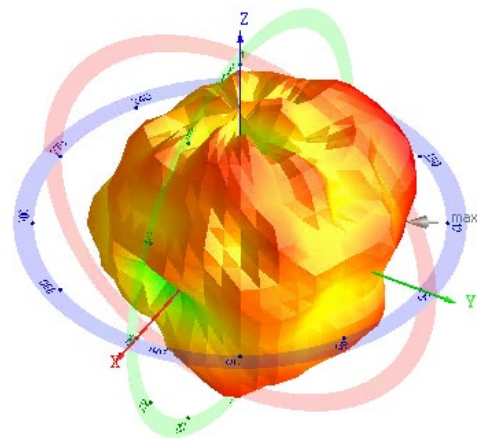
A3LSMF976JPN UWB ANT2 (SUB3, Inverted-F Antenna)

Metal ANT	Frequency	Avg. Gain (dB)	Peak Gain (dB)
CH 5	6.25 GHz	-14.17	-10.60
	6.50 GHz	-12.89	-9.42
	6.75 GHz	-13.07	-8.50
CH 9	7.75 GHz	-10.70	-5.70
	8.00 GHz	-11.64	-5.00
	8.25 GHz	-11.15	-4.54

Radiation plots for max gain plane (3D)



6500MHz



8000MHz

Radiation Pattern Test

Antennas tested for Gain and Efficiency must be assembled into the enclosure and tested in the fully assembled and operation **SC-56G, SCG39** handset. The antenna is tested in free space in the anechoic chamber in the H, E1 and E2 planes. The radiation patterns are measured at the center of transmit and receive bands.



Figure 1 : Geometry for SC-56G, SCG39 for Radiation patterns

Chamber Information

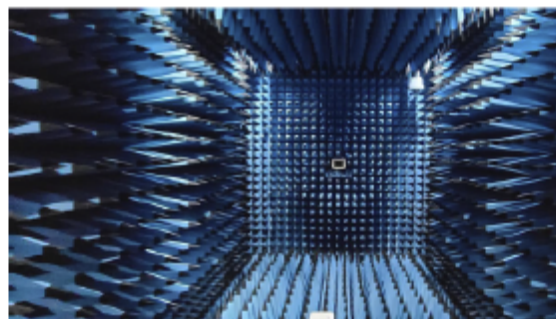
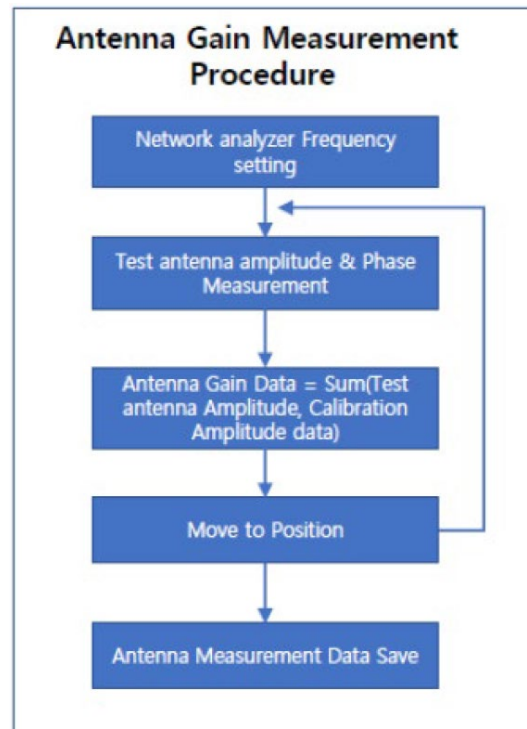


Figure 2: Geometry of Anechoic Chamber for Radiation patterns.

- ✓ Location : Samsung R&D Center R5 bld.
- ✓ Size : 4m x 2.5 x 2.5m (L x W x H)
- ✓ Frequency : 600 MHz -18GHz
- ✓ TX Antenna : 2GHz -18GHz Dual Polarization
- ✓ Quiet zone : 22cm @ 6GHz (Far-Field Length 2m)
- ✓ 2-axis DUT positioner -360°continuous rotation

Antenna Gain Measurement Procedure



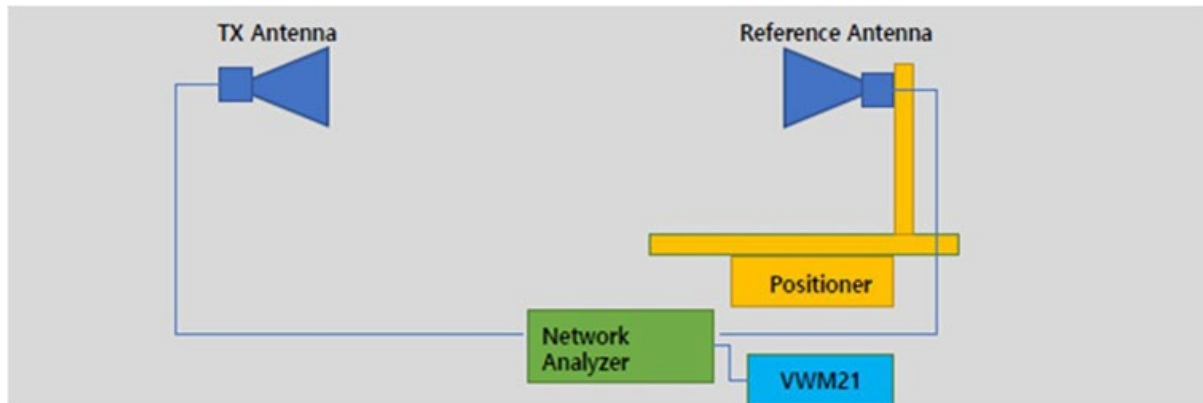
Detail antenna description

The antenna gain report test setup photos includes location of the antennas.

Table of calibrated equipment

Test date

2026. 04. 03



Part	Model Name	Specification	
Tx Antenna	QRH-006M-006G	600MHz to 6GHz	
	QRH-002G-018G	2GHz to 18GHz	
Reference Antenna	BBHA9120LFA	680MHz to 6500MHz	Calibration Frequency(680MHzto 6GHz)
	BBHA9120C	2GHz to 18GHz	Calibration Frequency(2GHz to 8.5GHz)
Network Analyzer	Agilent 5071B	300KHz to 8.5GHz	Cal. Due : 2027.03. 30
Measurement software	VWM21		MTG Visual Wave-Mobile(Ver.2.1)

Name of test personnel

Hyun-jeong Lee

Names of commercial test software being used

MTG Visual Wave-Mobile (Ver.2.1)