

# ANTENNA INFORMATION

OEM	DELL
ODM	Compal
Platform model name	P189G
Intel platform (ex: Yes, No or NA)	Yes
Platform type (ex: regular NB, convertible PC, AIO...etc)	Regular NB
SAR minimum separation (mm)	2.68mm (w/bumper) 0.9mm (w/o bumper)

Antenna manufacturer	Hong-Bo	
Address	4F.,No.143,Xinhu 1 <sup>st</sup> Rd.,Neihu Dist,Taipei City 11494,Taiwan	
Antenna Part number	Main: 330-24040(DC33002UO19)	Aux: 330-24040(DC33002UO19)
Antenna type (ex: PIFA, Dipole...etc)	Monopole	

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	2.63	2.44	2.39	2.57	2.55	2.14	2.70	1.39	1.45	1.66
Aux	2.10	1.85	1.85	2.63	2.59	2.13	3.61	3.63	3.80	0.36

Cable Assembly Part Number and Information					
	Cable PN	Cable length(mm)	Cable diameter(mm)	Impedance(ohm)	Connector type
Main	White 1.13SLLS SY113L/50-143	20mm	1.13	50 ohm	I-PEX MHF- 4L(20565-001R-13)
Aux	Black 1.13SLLS SY113L/50-118	44mm	1.13	50 ohm	I-PEX MHF- 4L(20565-001R-13)

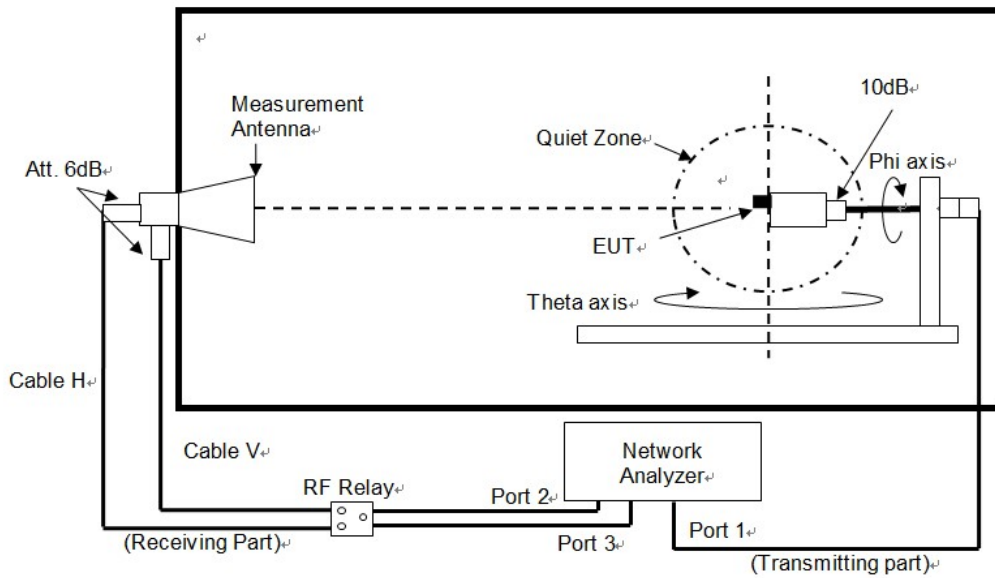
\* 3D Antenna Peak Gain required being test in system basis.

# 1. Test & System Description

## 1.1 Measurement Method and System

This test report is prepared for host antenna testing under a Full Anechoic Chamber.

## 1.2 Test setup



## 1.3 Equipment list

<insert test diagram here for test site utilized>

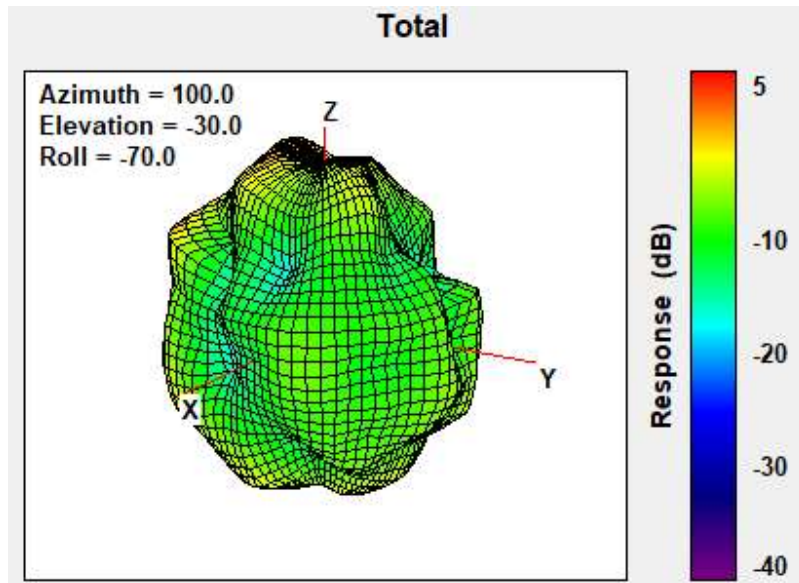
Name	Manufacturer	Type/Model	Serial Number
ENA Series Network Analyzer	Keysight	E5080B	MY59101211
RF Switch	Keysight	3499A	MY42000955
Multi-Axis Positioner Controller	ETS-Lindgren	2090	N/A
Medium-Duty Positioner	ETS-Lindgren	2015	N/A
Measurement Horn Antenna	EMCO	3164-08	00086722

## 2. Radiation characteristics of antenna loaded in Host Platform

### Main Antenna

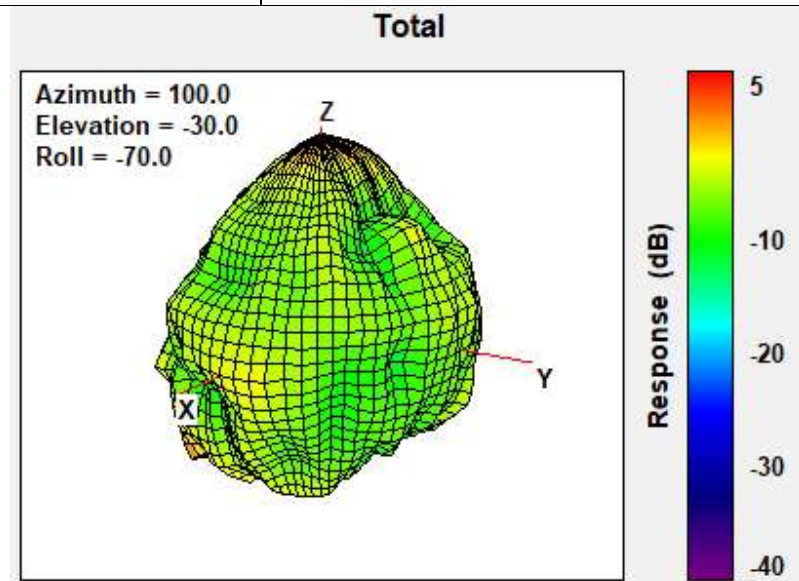
Max Antenna 3D Radiation Pattern 2400 – 2483.5 MHz

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



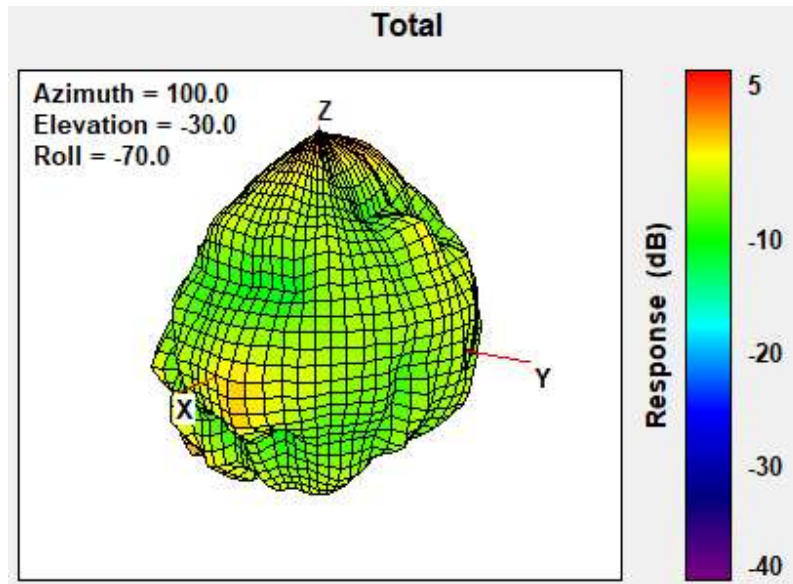
Max Antenna 3D Radiation Pattern 5150-5250 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5150-5250	2.44



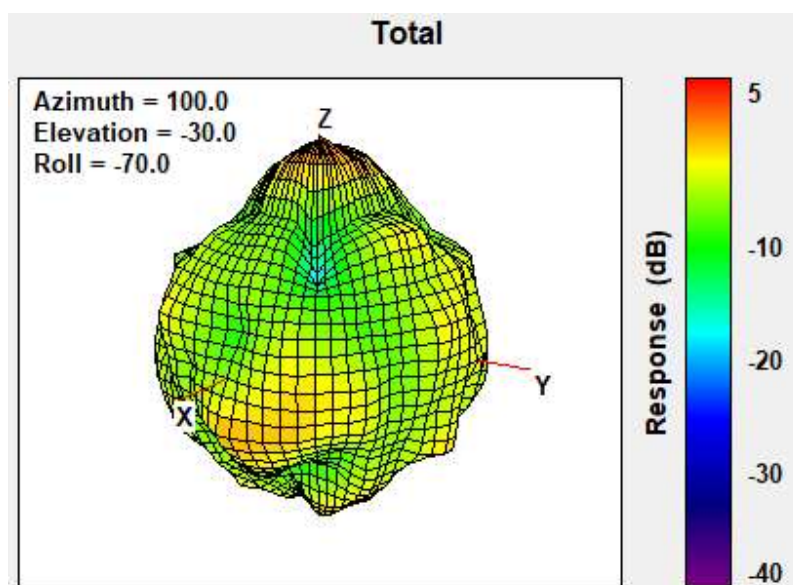
Max Antenna 3D Radiation Pattern 5250-5350 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5250-5350	2.39



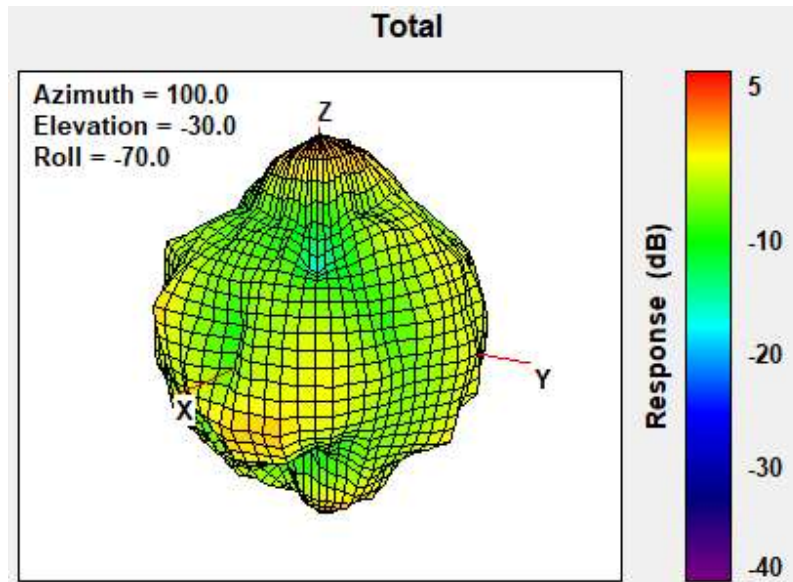
Max Antenna 3D Radiation Pattern 5470-5725 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5470-5725	2.57



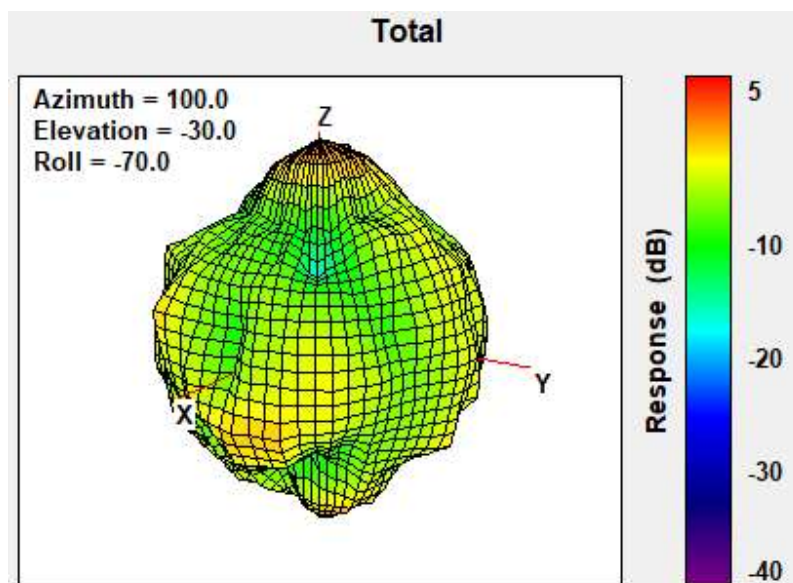
Max Antenna 3D Radiation Pattern 5725-5850 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5725-5850	2.55



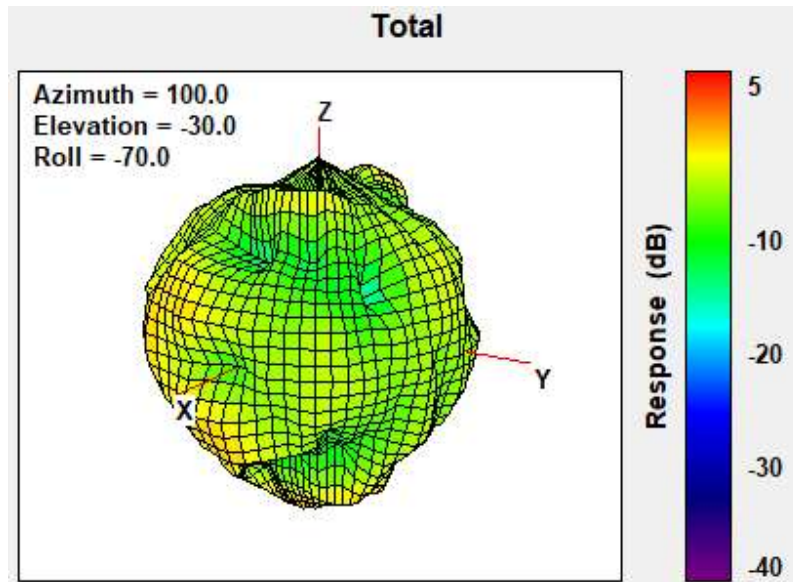
Max Antenna 3D Radiation Pattern 5850-5895 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5850-5895	2.14



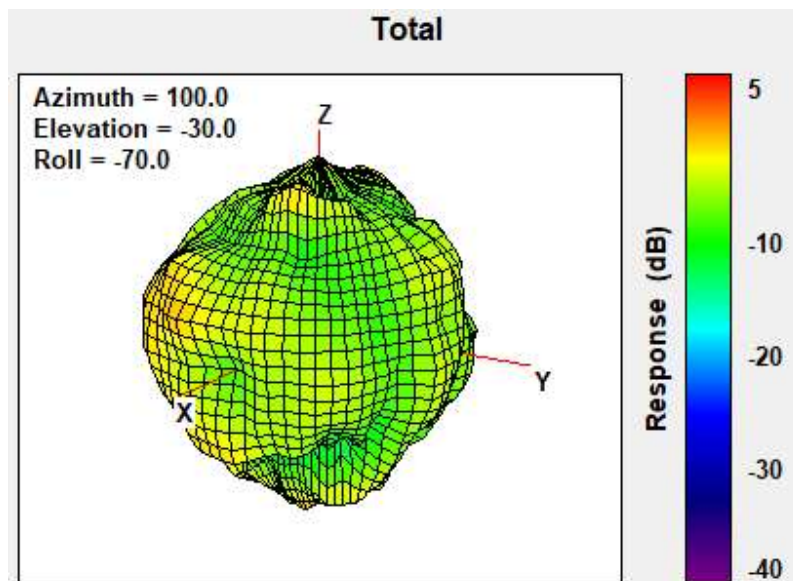
Max Antenna 3D Radiation Pattern 5925-6425 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5925-6425	2.70



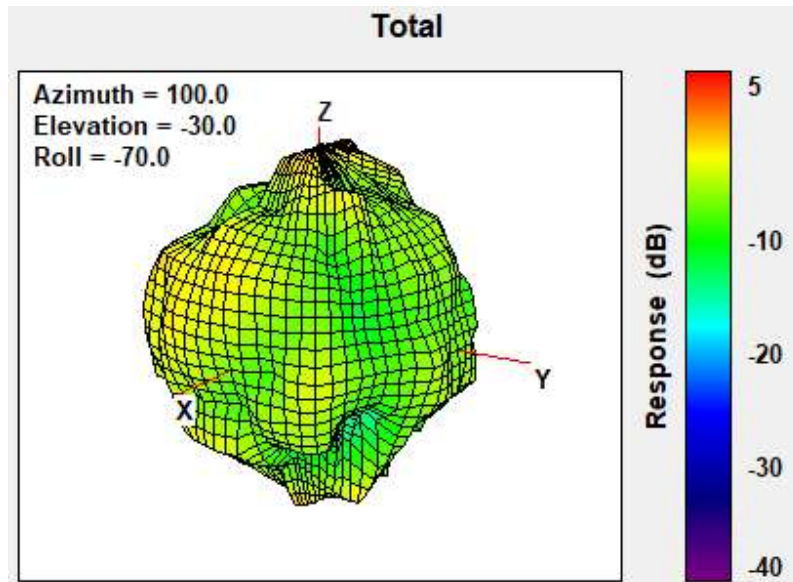
Max Antenna 3D Radiation Pattern 6425-6525 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6425-6525	1.39



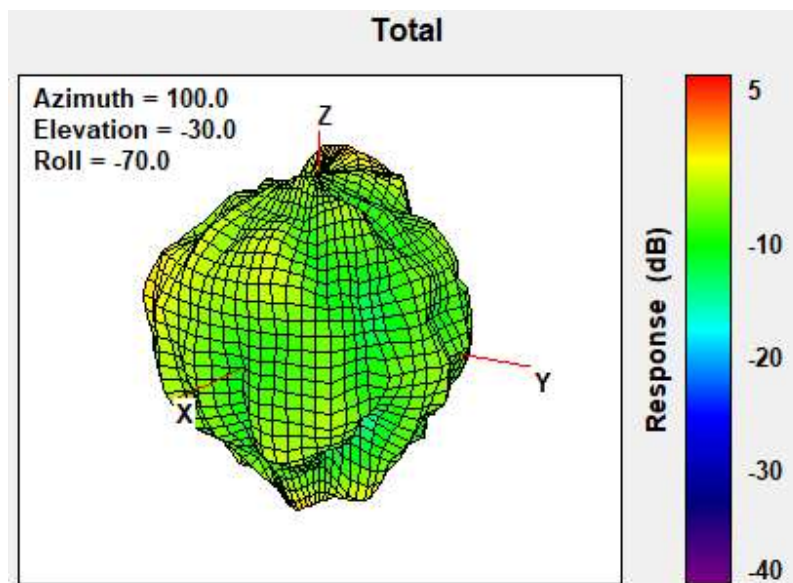
Max Antenna 3D Radiation Pattern 6525-6875 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6525-6875	1.45



Max Antenna 3D Radiation Pattern 6875-7125 MHz

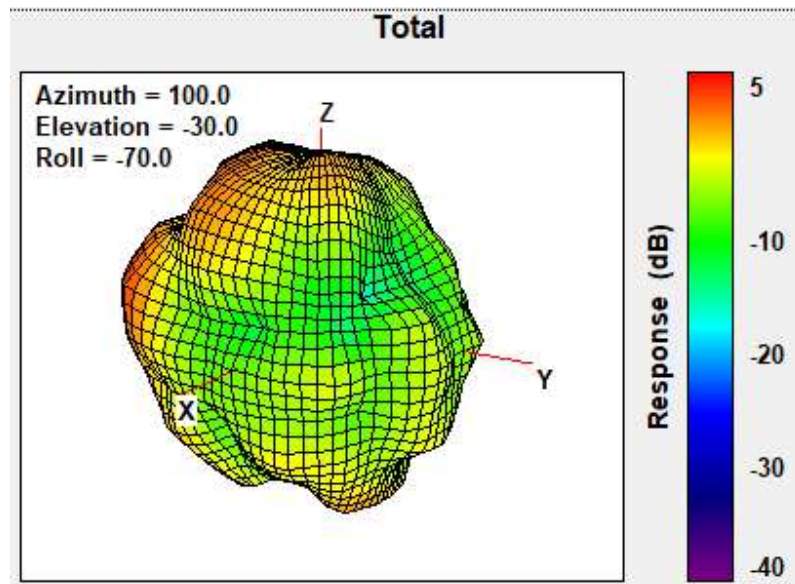
Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6875-7125	1.66



### Auxiliary Antenna

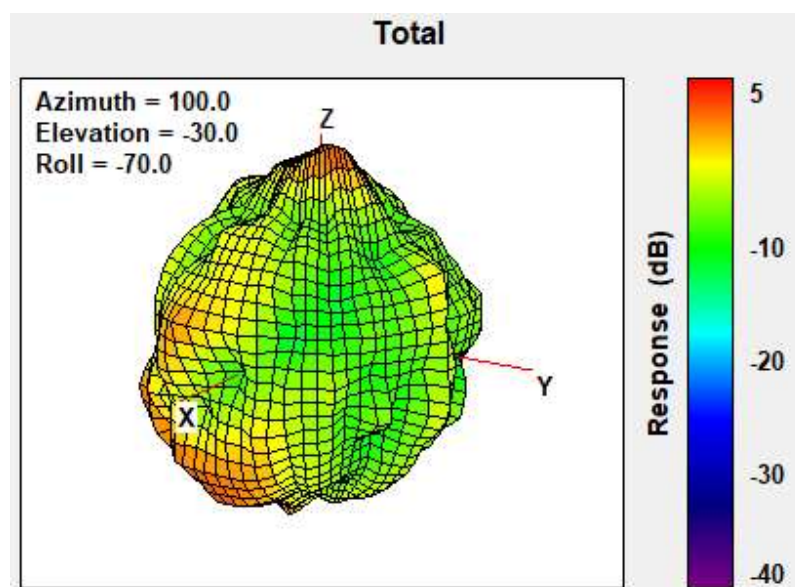
#### Max Antenna 3D Radiation Pattern 2400 – 2483.5 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
2400-2483.5	2.10



#### Max Antenna 3D Radiation Pattern 5150-5250 MHz

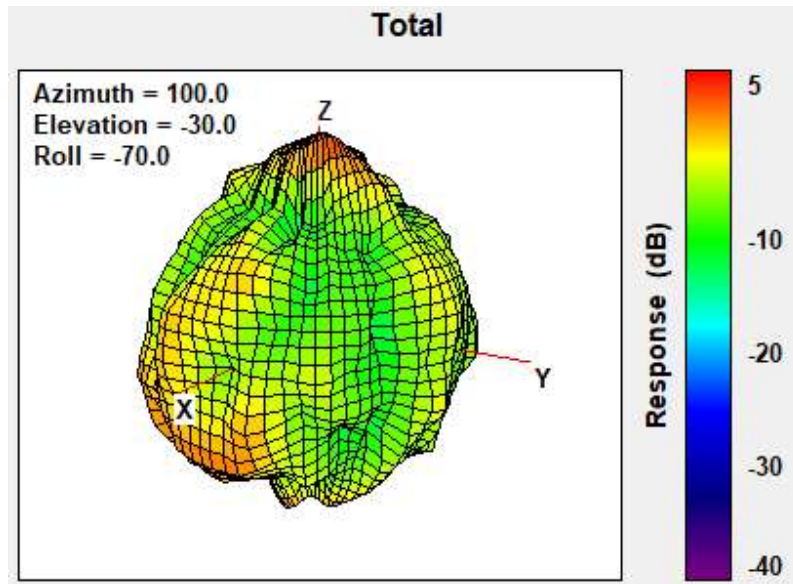
Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5150-5250	1.85





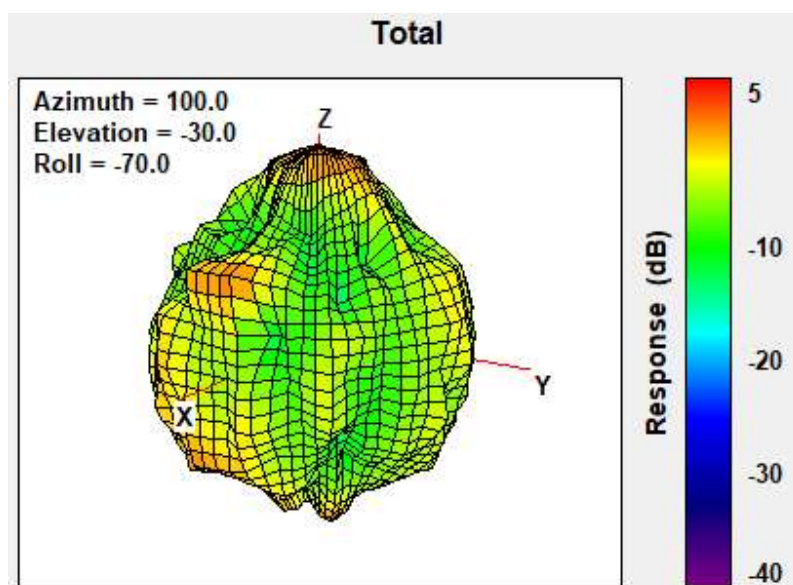
Max Antenna 3D Radiation Pattern 5250-5350 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5250-5350	1.85



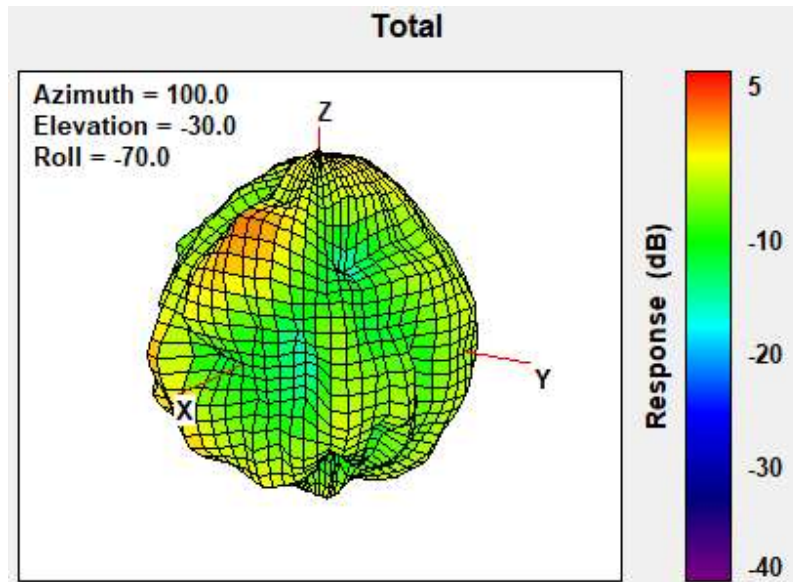
Max Antenna 3D Radiation Pattern 5470-5725 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5470-5725	2.63



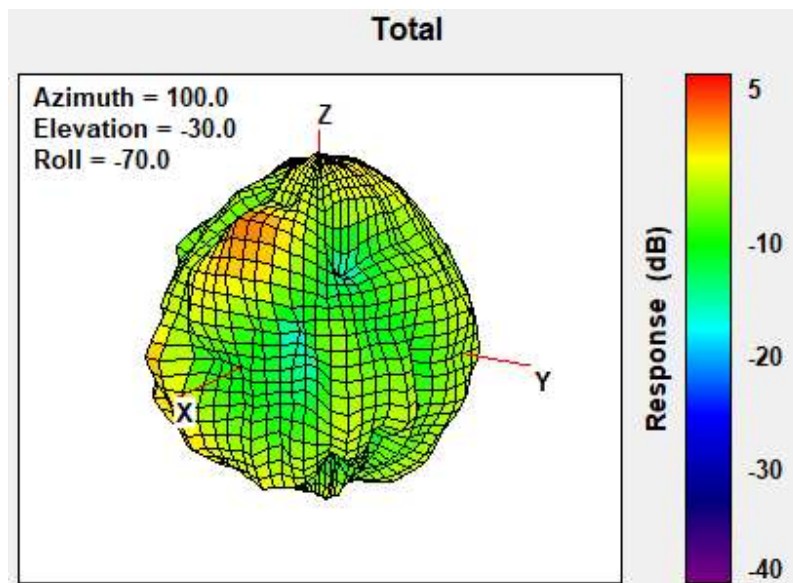
Max Antenna 3D Radiation Pattern 5725-5850 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5725-5850	2.59



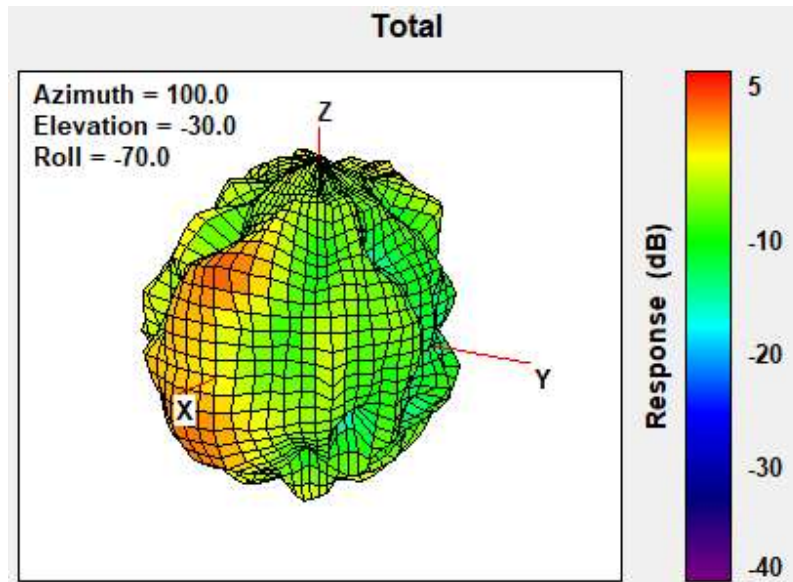
Max Antenna 3D Radiation Pattern 5850-5895 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5850-5895	2.13



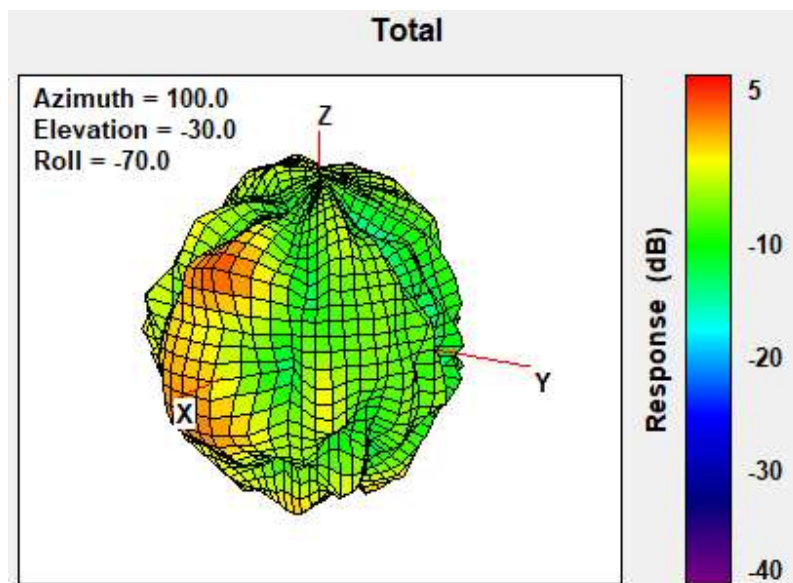
Max Antenna 3D Radiation Pattern 5925-6425 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5925-6425	3.61



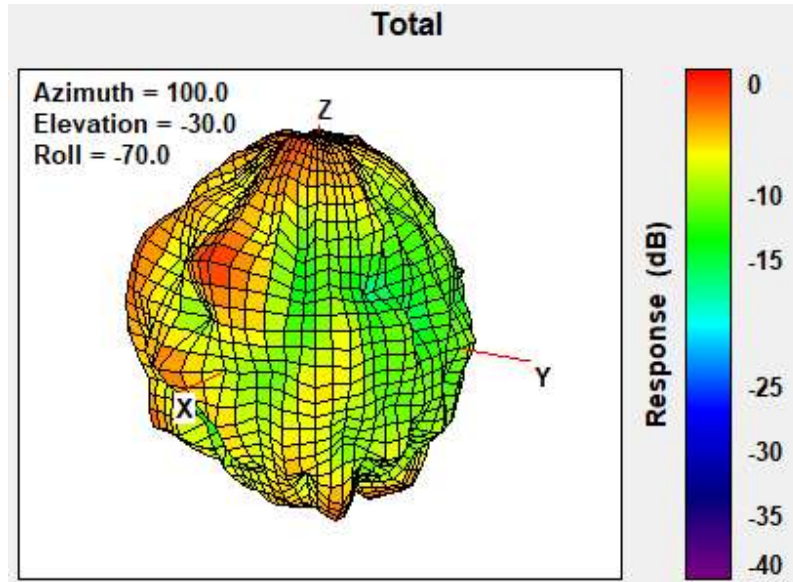
Max Antenna 3D Radiation Pattern 6425-6525 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6425-6525	3.63



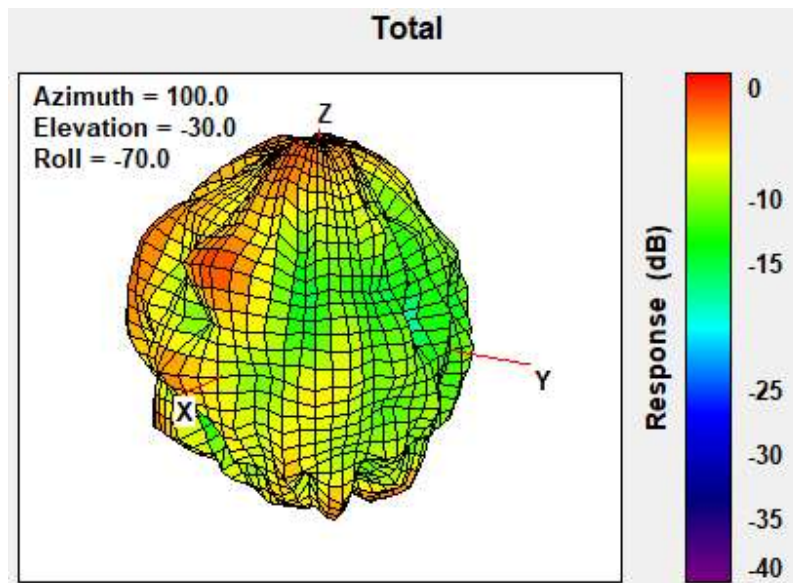
Max Antenna 3D Radiation Pattern 6525-6875 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6525-6875	3.80



Max Antenna 3D Radiation Pattern 6875-7125 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6875-7125	0.36



# Annex A. Photographs

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## A.1 Setup Photo

<insert test diagram here for test site utilized>

