

# Regulatory WLAN Antenna Information

\*\*\*\*\*Please fill in exact product model name and make sure the model name is visible on product cover or any parts for end users recognize for authority inspection.

Antenna information										
Manufacturer		Type		Antenna Part number (Main)			Antenna Part number (Aux)			
Speed Wireless Technical Co., LTD.		PIFA		F-0G-JV-0211-002-00			F-0G-JV-0211-001-00			
Address		No.138 Huize Road, Hi-Tech Industrial Park of East River, Zhongkai Hi-tech District, Huizhou City, Guangdong Province								
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
<b>Main</b>	1.84	3.78	3.78	3.91	3.39	3.77	4.45	4.27	4.27	4.02
<b>Aux</b>	1.42	3.42	3.42	2.39	2.39	2.40	3.45	3.50	3.50	2.49

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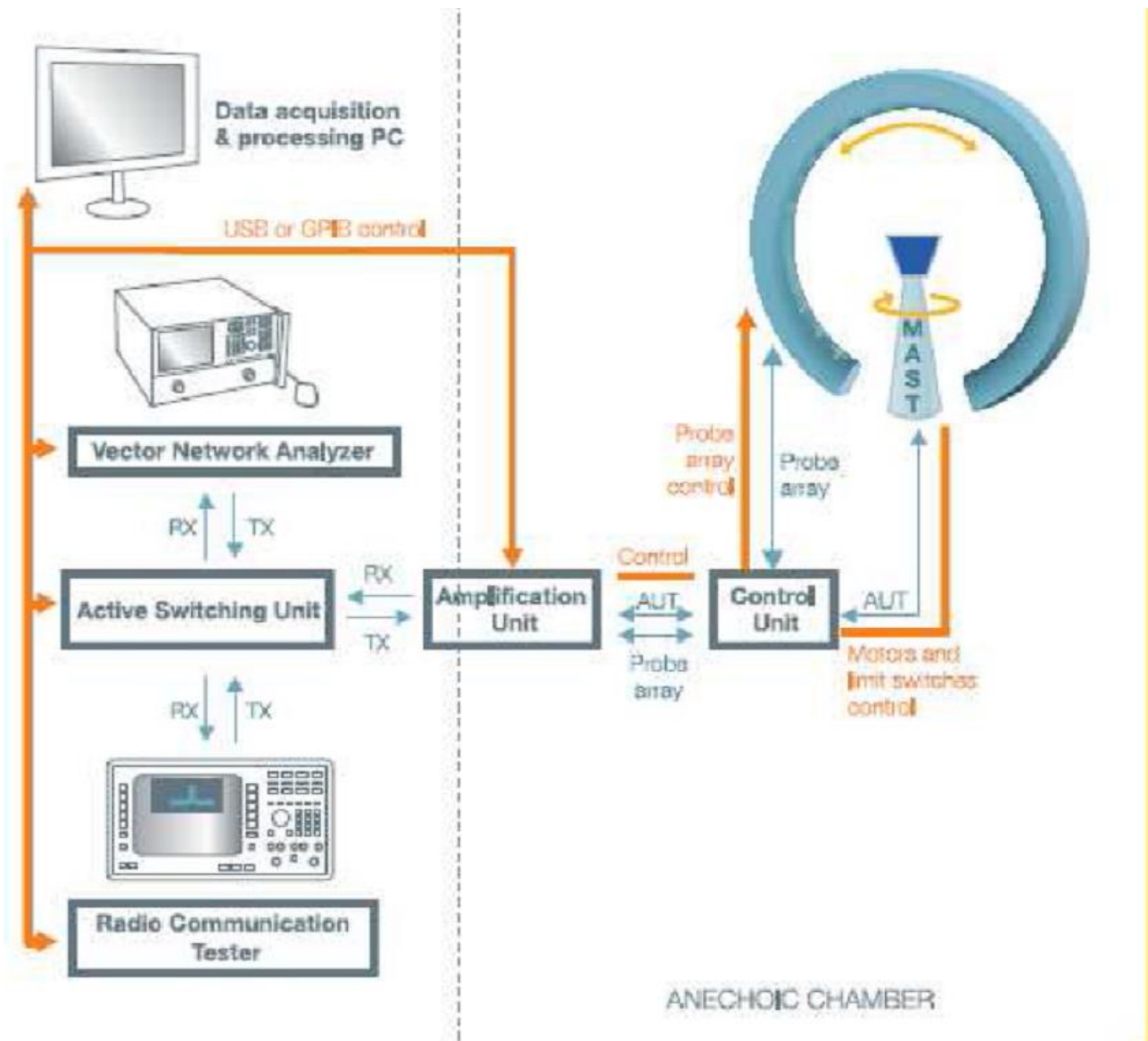
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1. **Applicable test methods**

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

2. **Test & System Description**

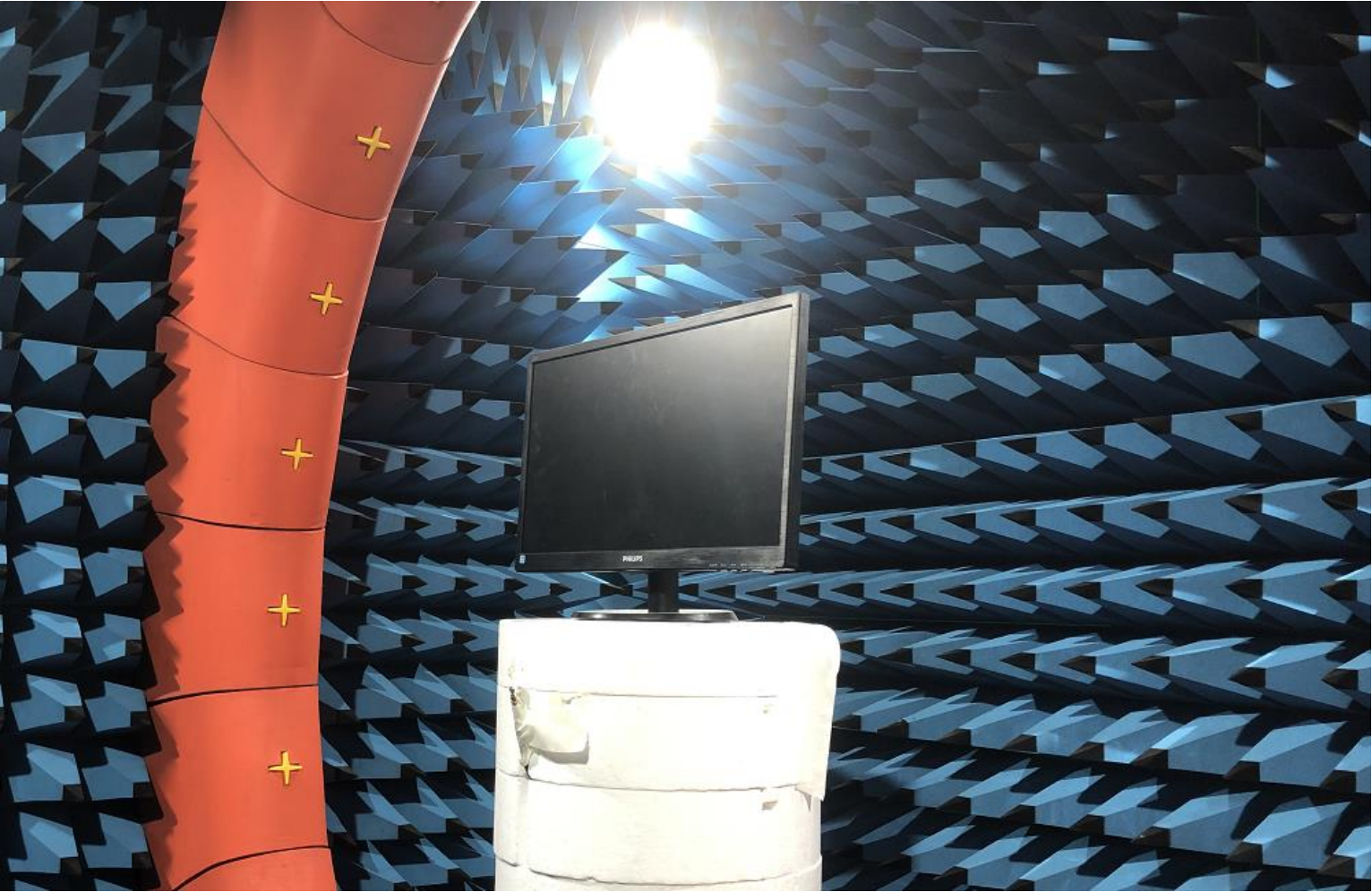
a. Test setup



## b. Equipment list

Number	Device	Manufacturer	Cal. Date	Cal. Due. Date
1	Turn table control box	EMT	2022/11/20	2023/11/20
2	Turn table control computer	EMT	2022/11/20	2023/11/20
3	TX/RX RF power and its control unit	EMT	N/A	N/A
4	Probe switch array	EMT	N/A	N/A
5	Test system host	EMT	N/A	N/A
6	Network analyzer	EMT	2022/11/20	2023/11/20
7	RF line TX	EMT	N/A	N/A
8	RF line RX	EMT	N/A	N/A
9	UPS uninterruptible power supply	EMT	N/A	N/A
10	Cable 2m 1GHz 8.5GHz	Atem	2022/11/20	2023/11/20
11	Chamber	EMT	2022/11/20	2023/11/20
12	Horn antenna	EMT	N/A	N/A

**3. Setup photo**



# Antenna Information

## Section 1. Antenna Assembly Specifications

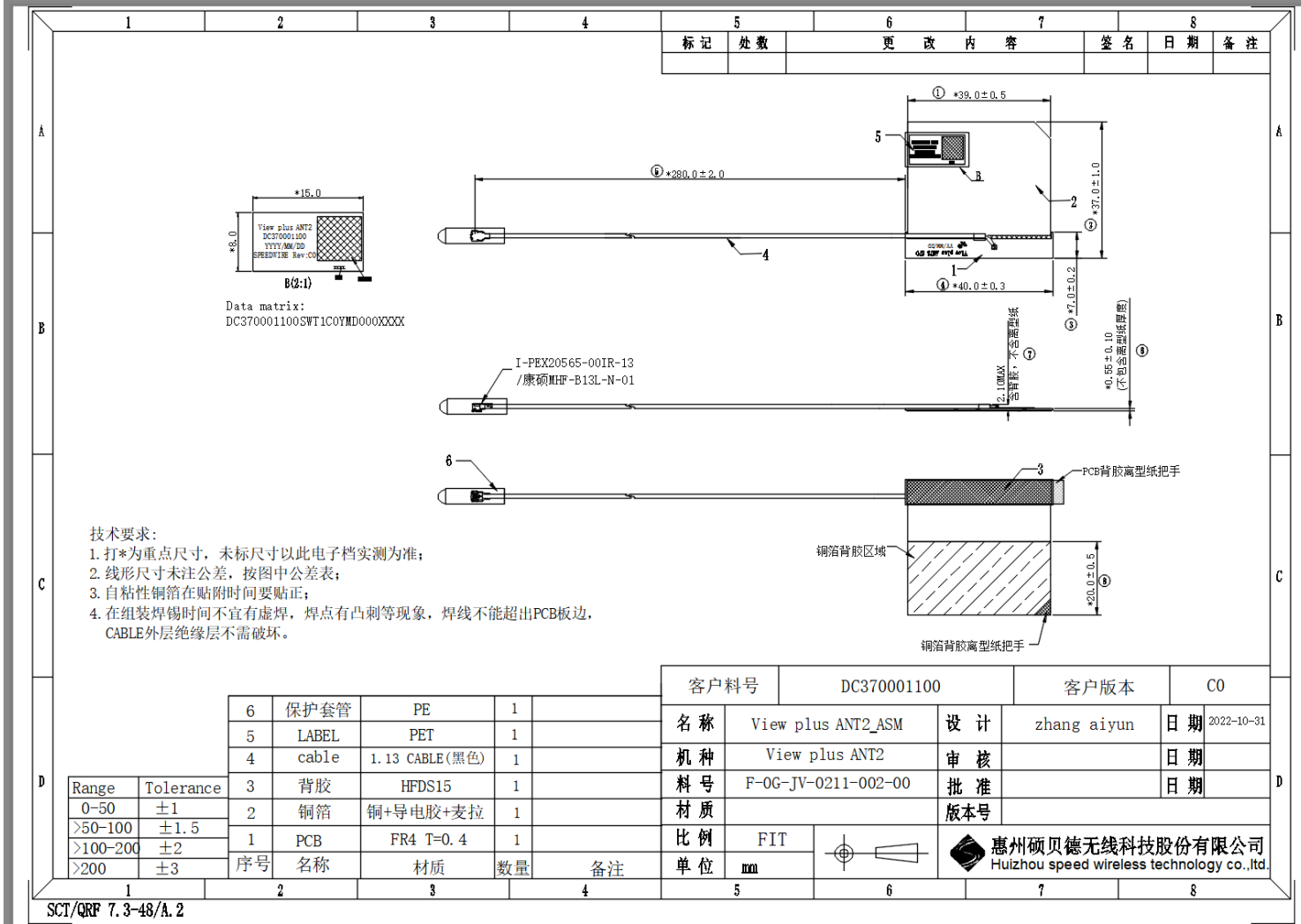
1A Antenna Part Number	1B Manufacturer	1C Antenna Type	1D Cable Assembly Part Number and Information	Freq Range MHz	1E * Peak Gain W/ Cable loss (dBi)	1F Peak Gain w/o Cable Loss (dBi)	1G Max VSWR	1H Cable Loss (dB)
(P/N: F-0G-JV-0211-002-00) Main Antenna	Speed Wireless Technical Co., LTD.	PIFA	(Connector: I-PEX 20565-00IR-13)  50 ohm Coaxial length: 28.0cm diameter: 1.13mm	2400-2483.5	1.84	2.53	1.81	0.69
				5150-5250	3.78	4.81	1.67	1.03
				5250-5350	3.78	4.82	1.71	1.04
				5470-5725	3.91	4.98	1.73	1.07
				5725-5850	3.39	4.47	1.38	1.08
				5850-5895	3.77	4.85	1.56	1.08
				5925-6425	4.45	5.56	1.42	1.11
				6425-6525	4.27	5.38	1.64	1.11
				6525-6875	4.27	5.39	1.81	1.12
				6875-7125	3.71	4.83	1.9	1.12
(P/N: F-0G-JV-0211-001-00) Aux Antenna	Speed Wireless Technical Co., LTD.	PIFA	(Connector: I-PEX 20565-00IR-13)  50 ohm Coaxial length:54.0cm diameter: 1.13mm	2400-2483.5	1.42	2.74	1.53	1.32
				5150-5250	3.42	5.41	1.53	1.99
				5250-5350	3.42	5.42	1.48	2
				5470-5725	2.39	4.45	1.79	2.06
				5725-5850	2.39	4.47	1.61	2.08
				5850-5895	2.40	4.49	1.86	2.09
				5925-6425	3.45	5.59	1.72	2.14
				6425-6525	3.50	5.64	1.65	2.14
				6525-6875	3.50	5.66	1.91	2.16
				6875-7125	2.49	4.66	1.91	2.17

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

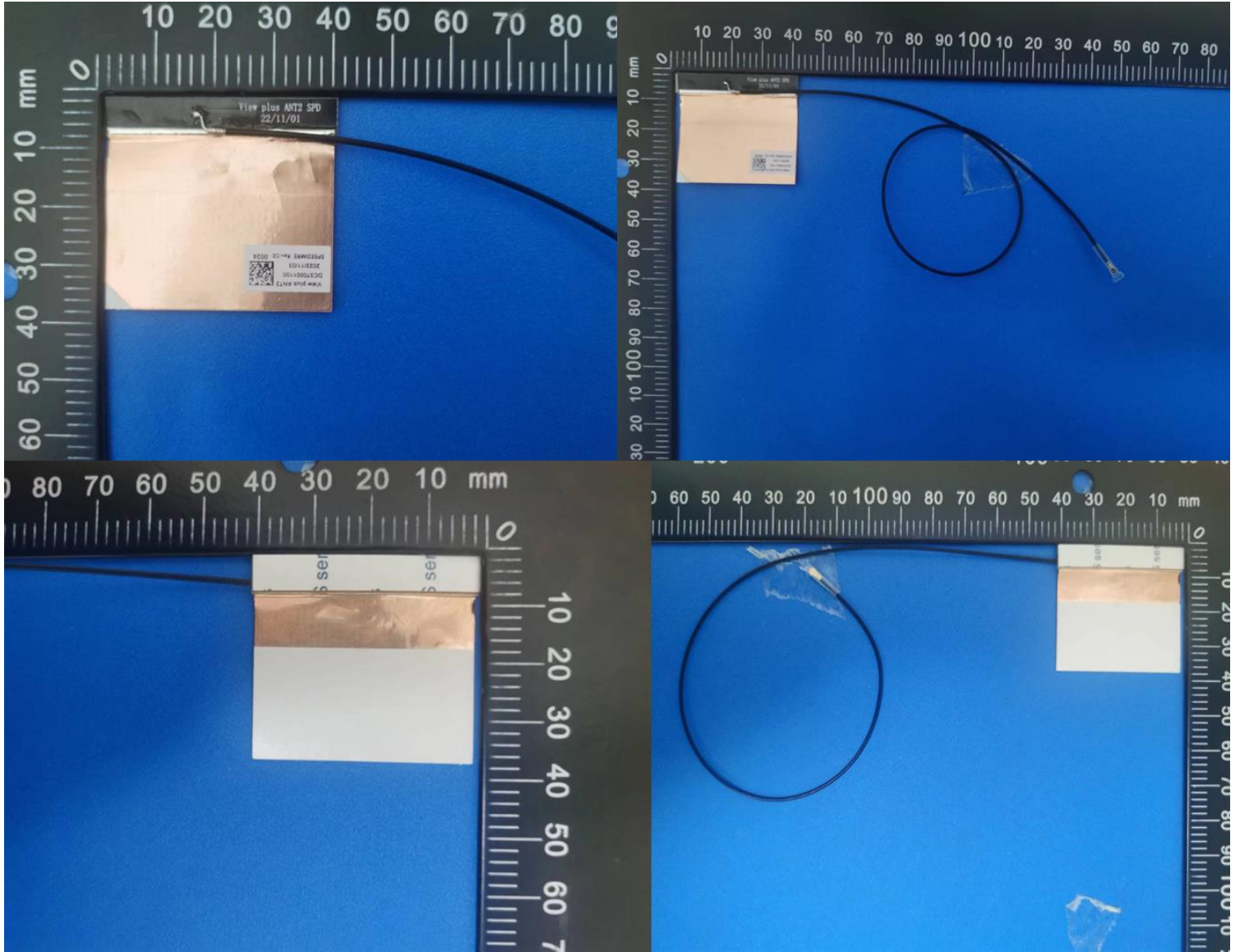
## Section 2. Dimensioned Photos and Drawings of Antennas

Include the dimensioned photo and drawing of Main antenna here.

### Main Antenna Drawing:



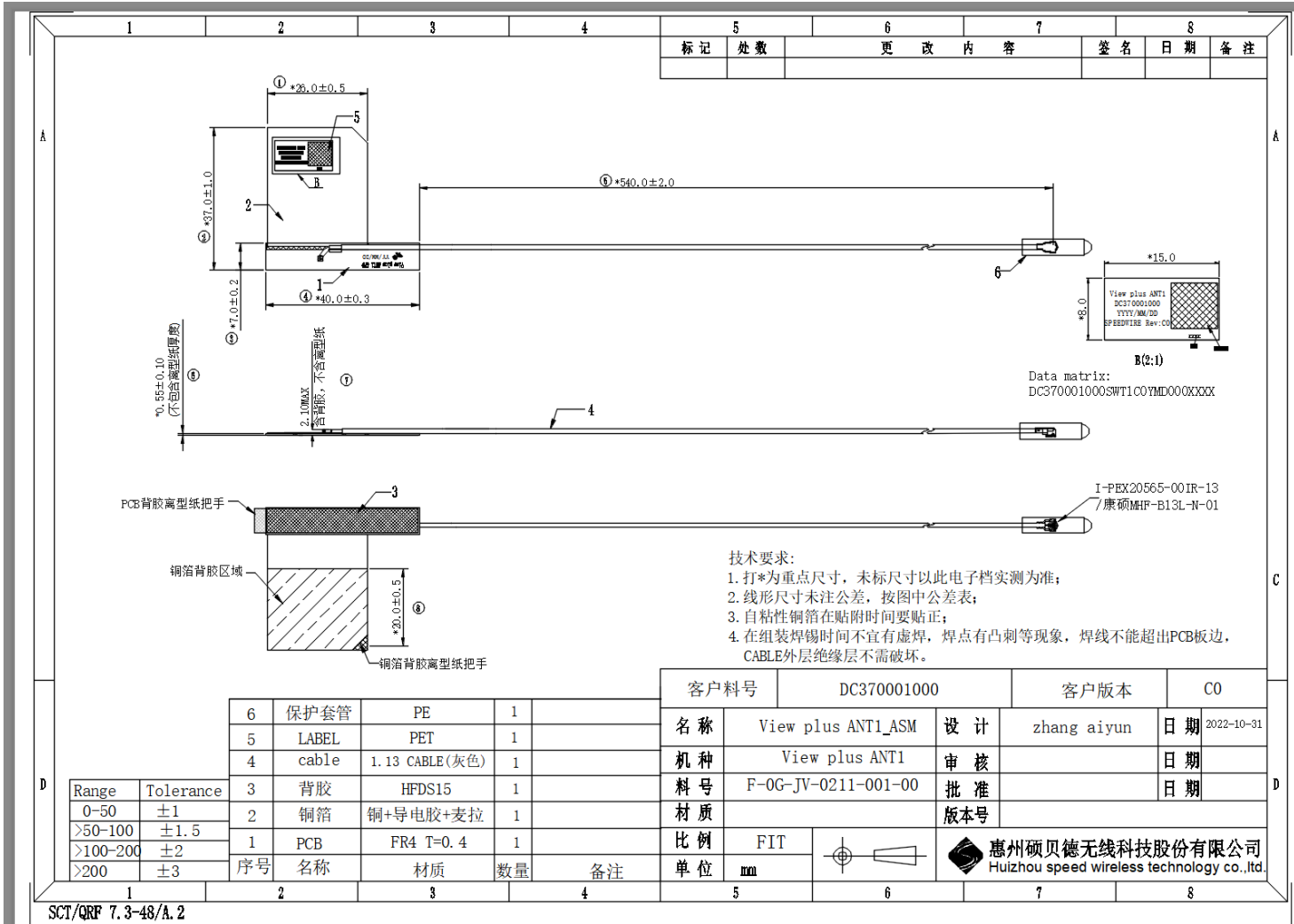
### Main Antenna Photo (Front/Back):



**Note: antenna photo should include L type ruler**

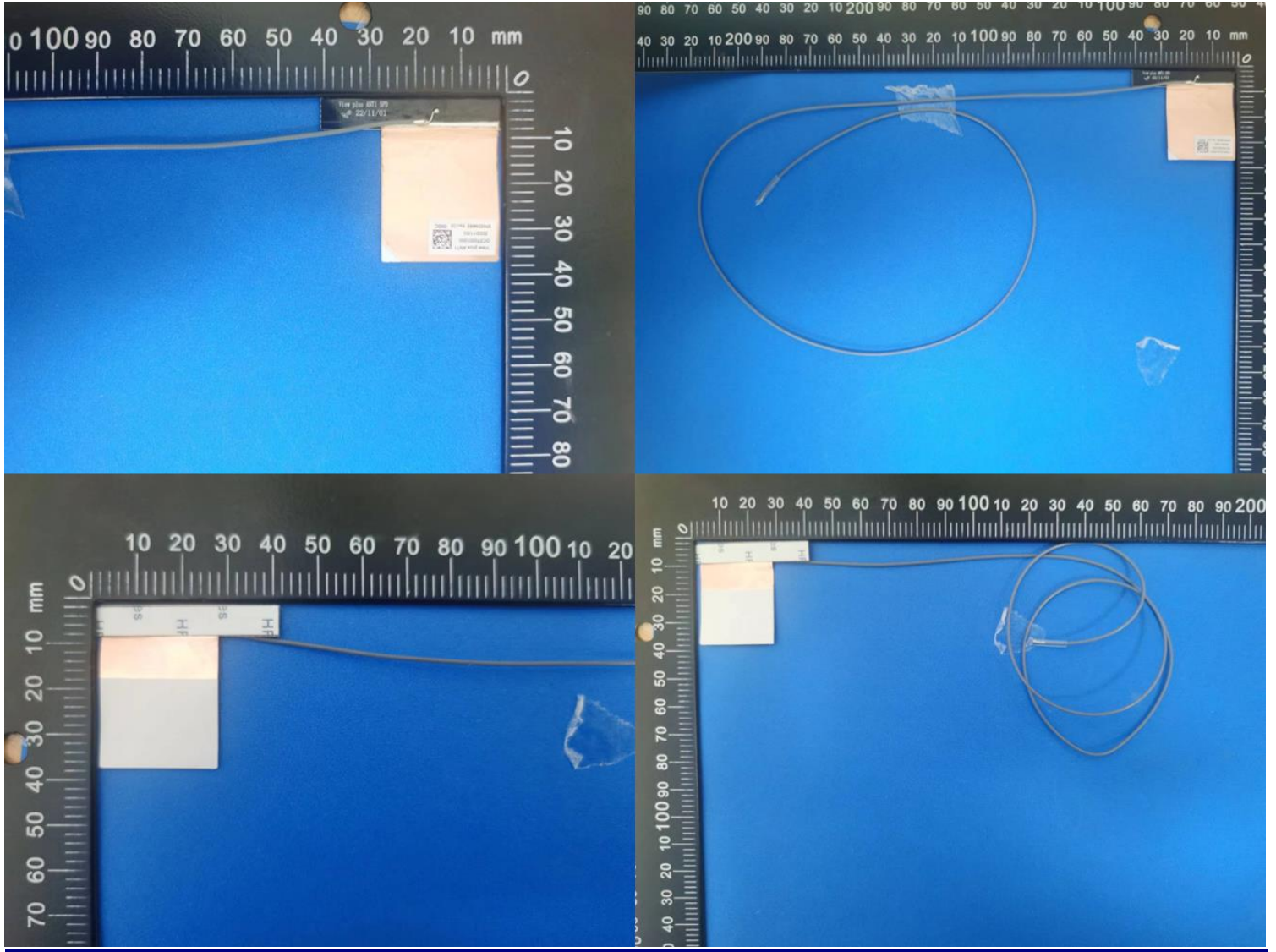
**Include the dimensioned photo and drawing of Aux antenna here.**

# Aux Antenna Drawing:



# Aux Antenna Photo (Front/Back):





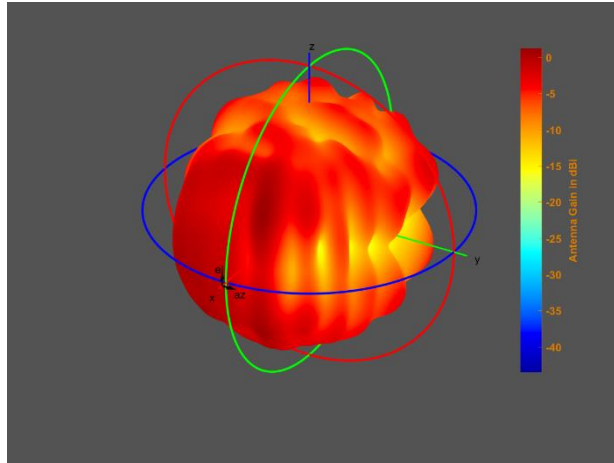
**Note: antenna photo should include L type ruler**

## Section 3. Radiation characteristics of antenna loaded in Host Platform

### Main Antenna

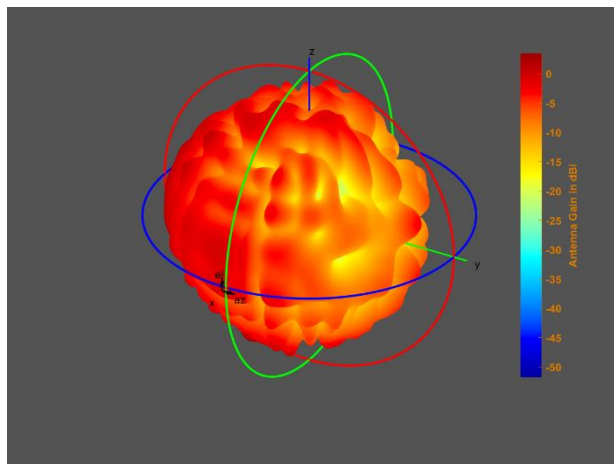
Max Antenna 3D Radiation Pattern 2400 – 2483.5 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
2400-2483.5	1.84



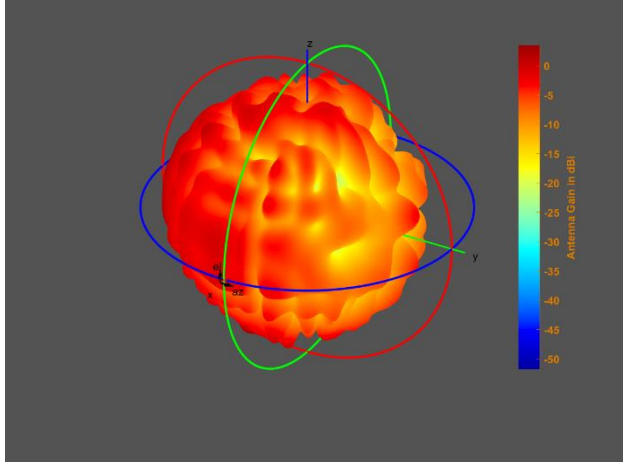
Max Antenna 3D Radiation Pattern 5150-5250 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5150-5250	3.78



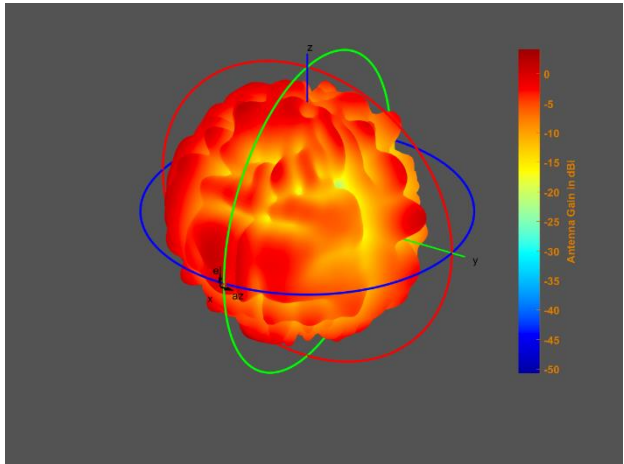
### Max Antenna 3D Radiation Pattern 5250-5350 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5250-5350	3.78



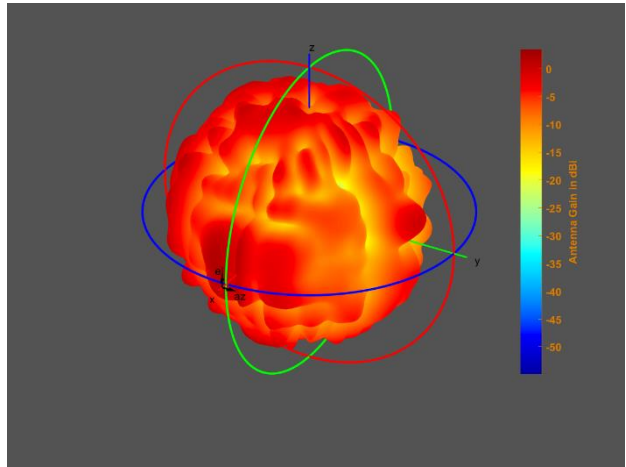
### Max Antenna 3D Radiation Pattern 5470-5725 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5470-5725	3.91



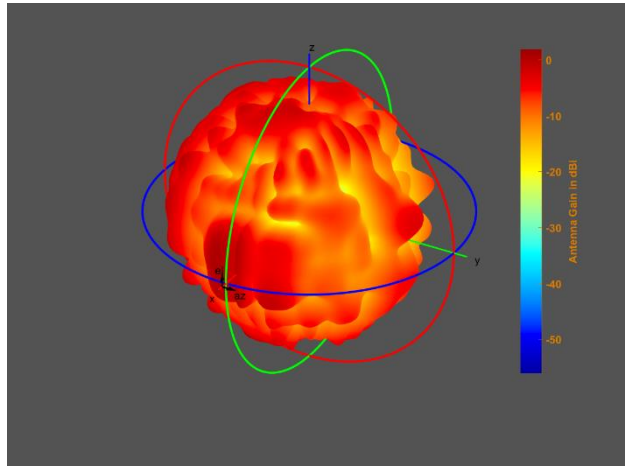
### Max Antenna 3D Radiation Pattern 5725-5850 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5725-5850	3.39



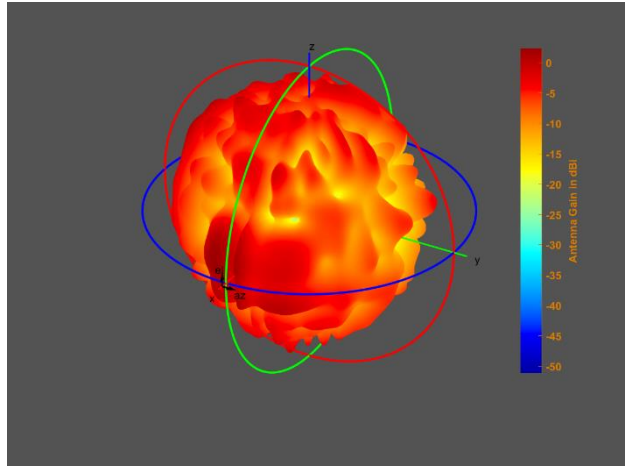
### Max Antenna 3D Radiation Pattern 5850-5895 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5850-5895	3.77



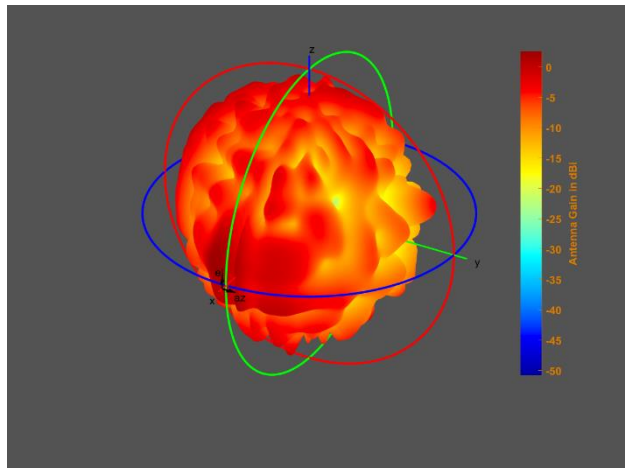
### Max Antenna 3D Radiation Pattern 5925-6425 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5925-6425	4.45



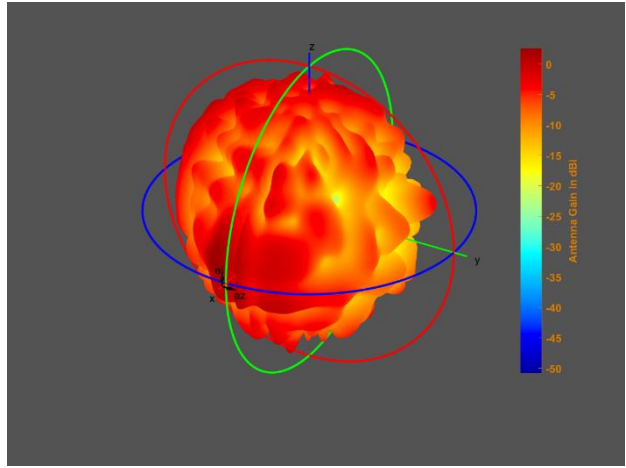
### Max Antenna 3D Radiation Pattern 6425-6525 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6425-6525	4.27



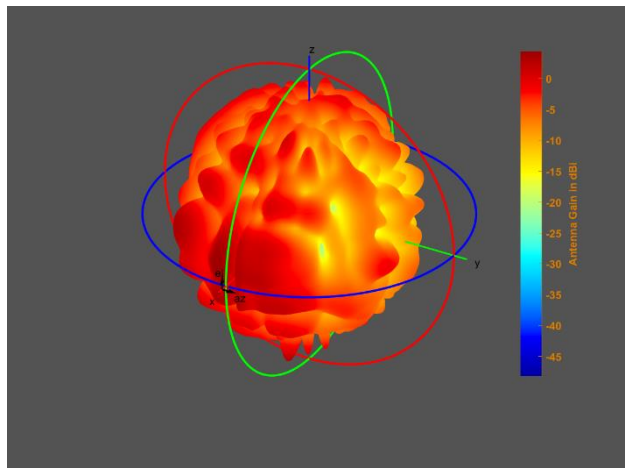
### Max Antenna 3D Radiation Pattern 6525-6875 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6525-6875	4.27



### Max Antenna 3D Radiation Pattern 6875-7125 MHz

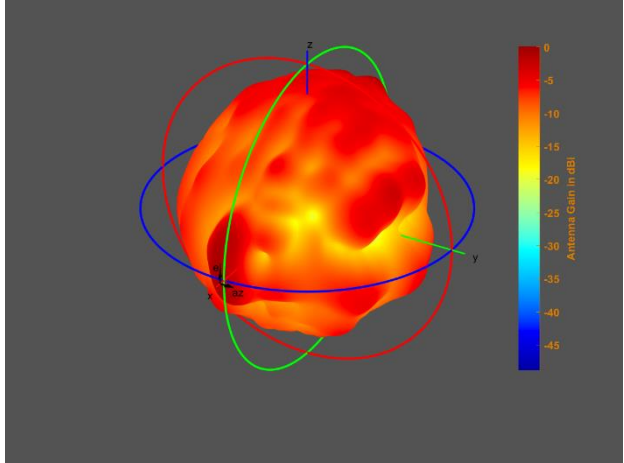
Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6875-7125	3.71



## Auxiliary Antenna

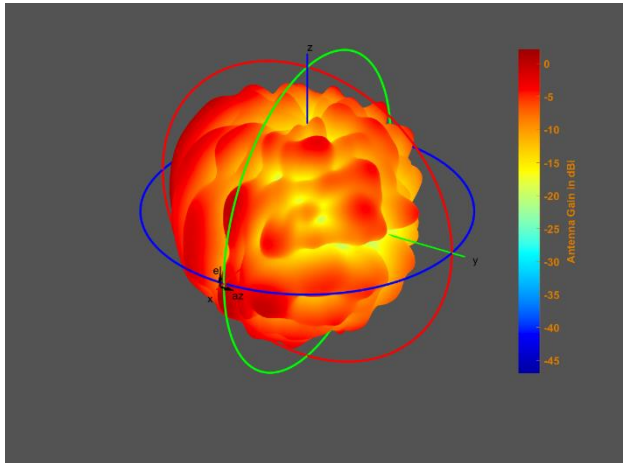
### Max Antenna 3D Radiation Pattern 2400 – 2483.5 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
2400-2483.5	1.42



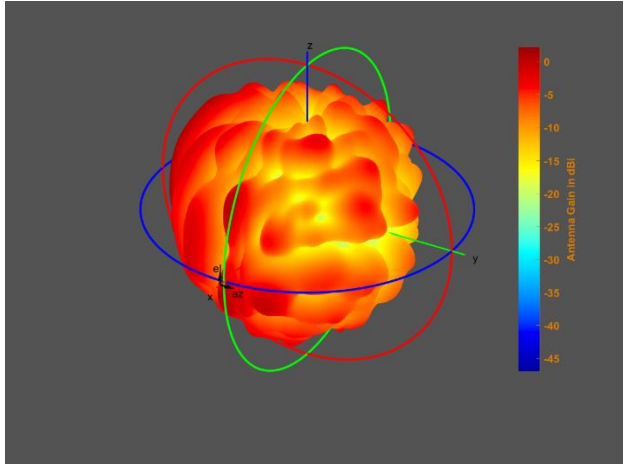
### Max Antenna 3D Radiation Pattern 5150-5250 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5150-5250	3.42



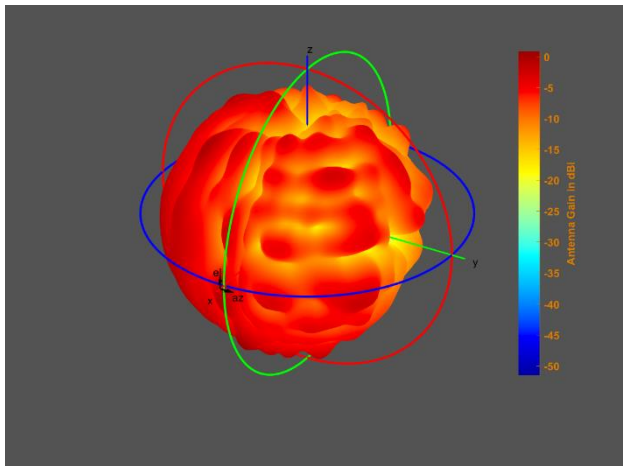
### Max Antenna 3D Radiation Pattern 5250-5350 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5250-5350	3.42



### Max Antenna 3D Radiation Pattern 5470-5725 MHz

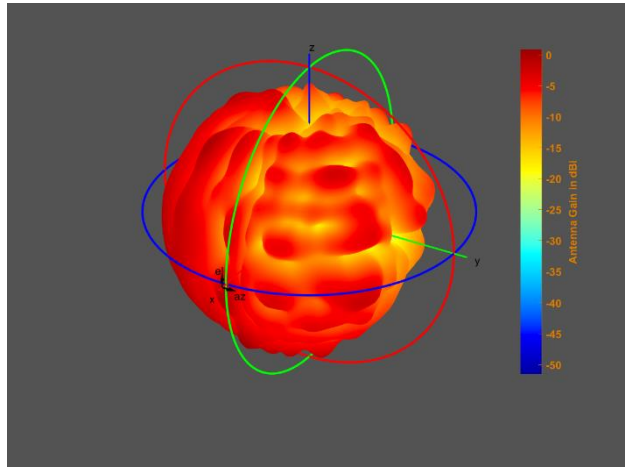
Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5470-5725	2.39





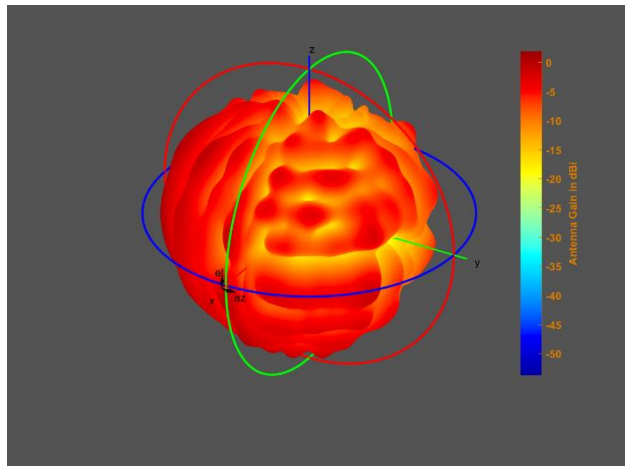
### Max Antenna 3D Radiation Pattern 5725-5850 MHz

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



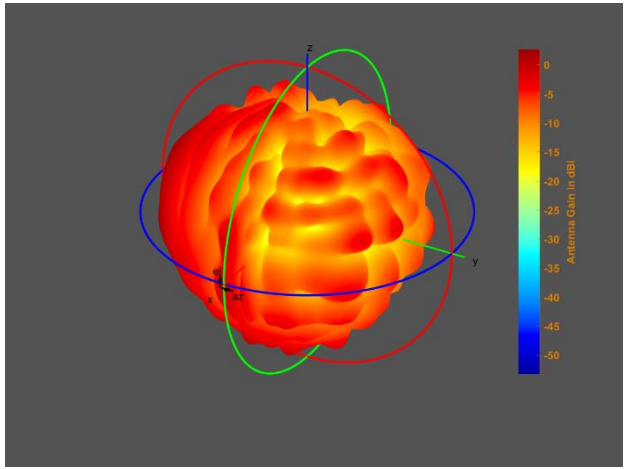
### Max Antenna 3D Radiation Pattern 5850-5895 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5850-5895	2.40



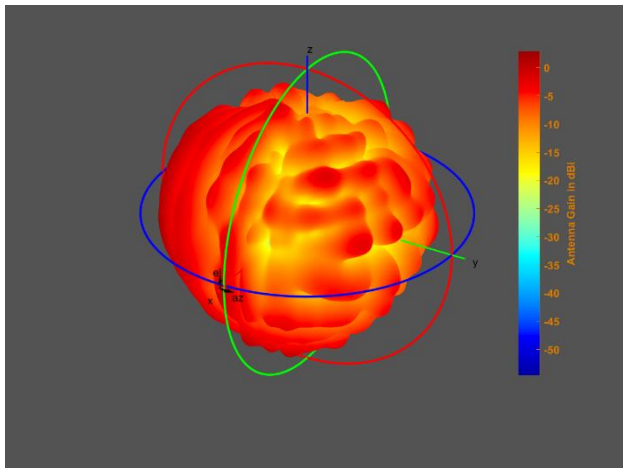
### Max Antenna 3D Radiation Pattern 5925-6425 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5925-6425	3.45



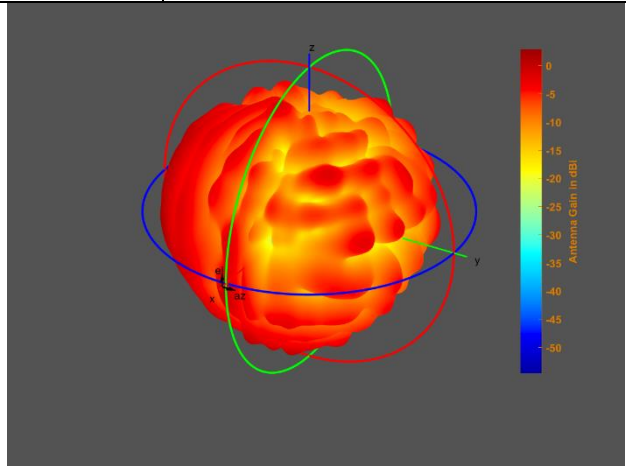
### Max Antenna 3D Radiation Pattern 6425-6525 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6425-6525	3.50



### Max Antenna 3D Radiation Pattern 6525-6875 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6525-6875	3.50



### Max Antenna 3D Radiation Pattern 6875-7125 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
6875-7125	2.49

