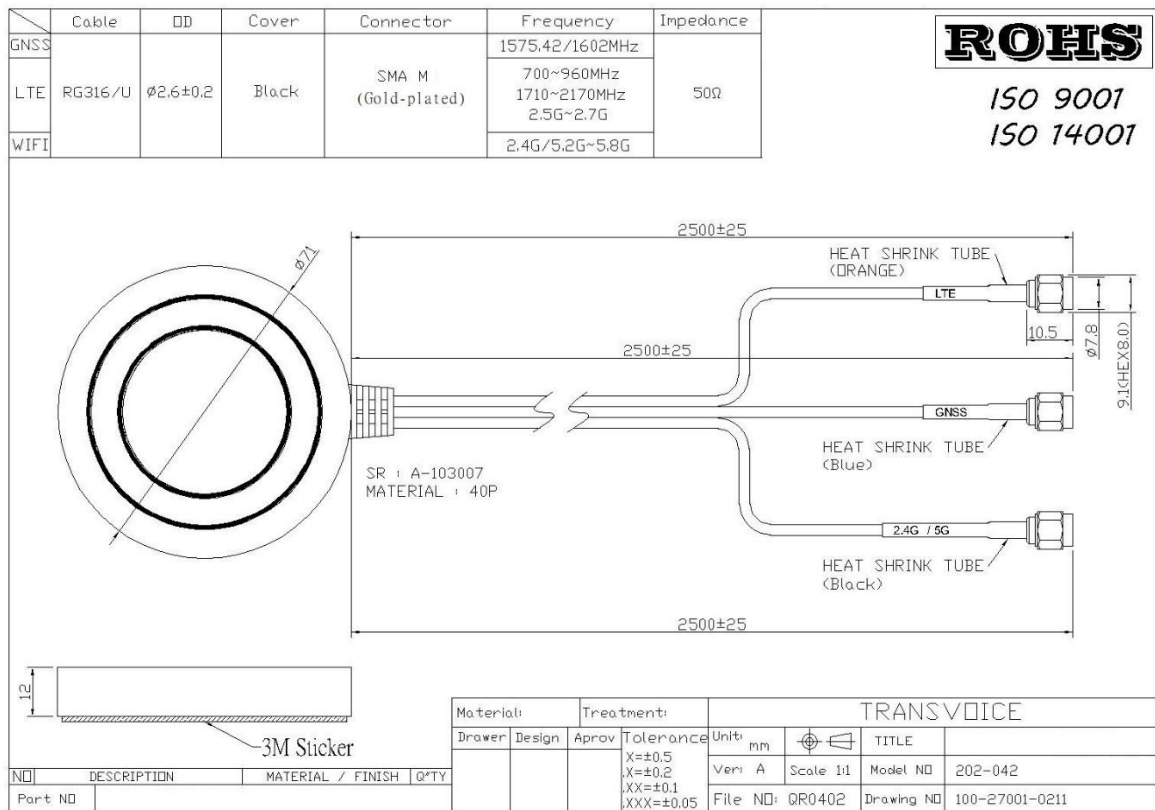


Specification

1. Product Type: GNSS+LTE+2.4/5.8G Antenna
 2. Part No: 202-042
 3. Frequency (GNSS): 1575.42/1602 MHz
 4. Frequency (LTE): 700~2700 MHz
 5. Frequency (2.4G/5.8G): 2.4/5.8 G
 6. Cable: RG316U
 7. Connector: SMA M
- ✳️RoHS Compliant



Frequency (MHz)	Return Loss (dB)	VSWR	Gain (dBi)
1575.42(GPS)	-17.69	1.30	33.94
1602(GLONASS)	-26.87	1.09	27.92

Frequency (MHz)	Return Loss (dB)	VSWR	Efficiency (%)	Gain (dBi)
700 (LTE)	-13.18	1.56	35.4	-0.04
824	-8.85	2.14	37.07	1.49
960	-7.45	2.47	22.23	-1.42
1710	-17.48	1.30	58.08	2.55
1880	-22.55	1.16	50.23	3.9
2170	-22.55	1.18	43.85	3.14
2600	-22.08	1.18	50	3.95
2700	-15.03	1.43	57.15	6.08
2400 (WIFI)	-18.95	1.25	69.02	5.72
2450	-21.72	1.18	65.16	6.74
2500	-22.39	1.20	55.46	5.83
5100	-15.82	1.38	45.5	3.83
5500	-13.76	1.54	35.16	1.58
5800	-11.44	1.73	30.97	1.88

Characteristics of Ceramic Antenna

1	Antenna model	25x25x4 mm
2	Frequency Range	1575.42 & 1602 MHz
3	VSWR	2.0 max
4	Band with	10 MHz Min(Return loss -10 dB)
5	Impedance	50 ohm
6	Gain	4dBic@zenith mounted on 70mmx70mm ground plane
7	Polarization	RHCP

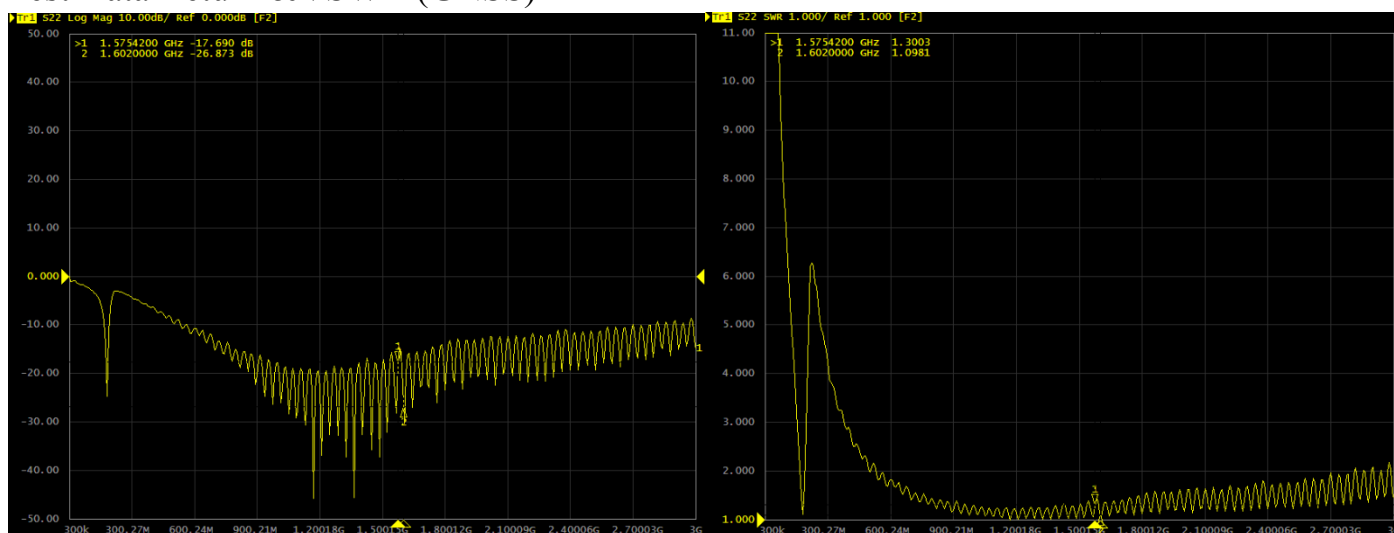
Characteristics of LNA

1	Frequency Range	1575.42 & 1602 MHz
2	DC current(max)	MAX 14 mA@3.3V
3	Noise Figure	1.5dB typ(+25°C±10°C)
4	LNA Gain	GPS 30dB±3dB:GLONASS 28±2dB
5	Output VSWR	1.5 max

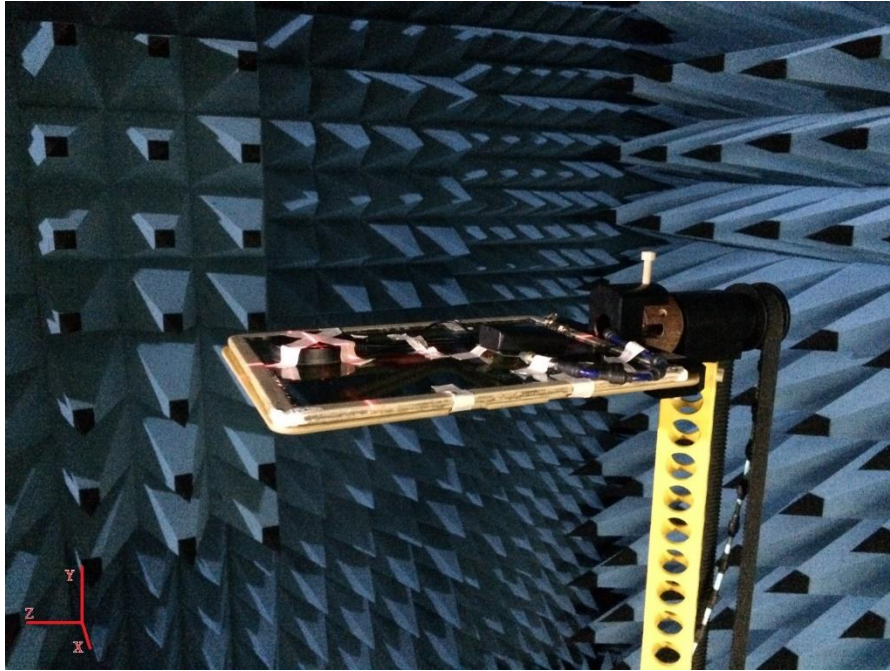
Characteristics of Antenna

1	Amplifiers Gain(dB)	GPS 30±3 / GLONASS 28±3
2	VSWR	< 2.0
3	Working Temp(°C)	-40~+80
4	Vibration	Sine sweep Lg(0~p)10~50~10 HZ each Axis
5	Noise Figure	<1.5

Test Data Return & VSWR (GNSS)

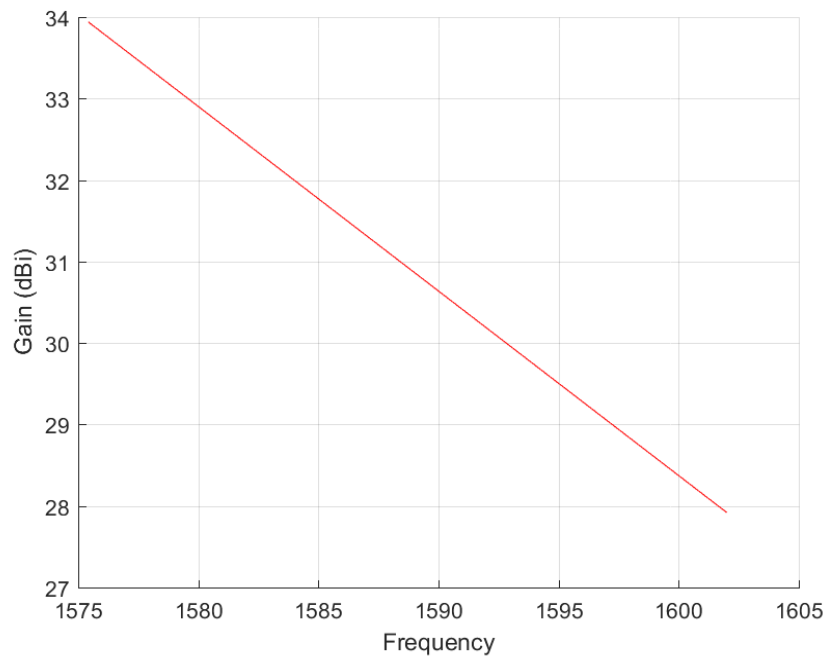


3D Test photo

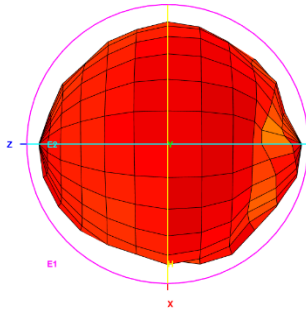


3D Test Data

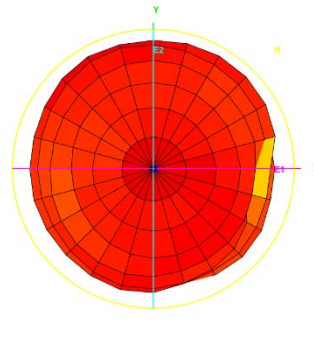
Total_Gain (dBi)



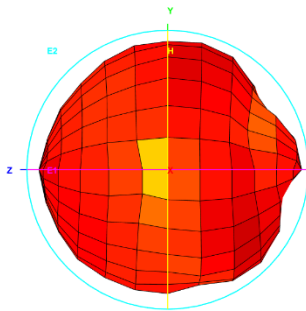
Total_3D_Top View_1.57542GHz



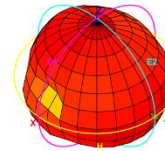
Total_3D_Front View_1.57542GHz



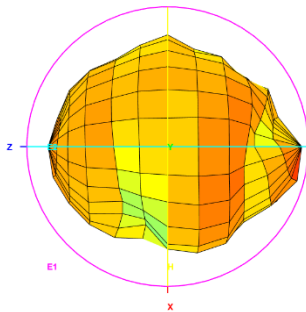
Total_3D_Left View_1.57542GHz



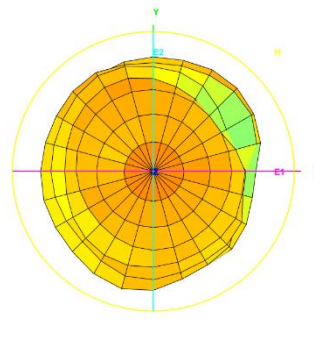
Total_3D_Side View 1_1.57542GHz



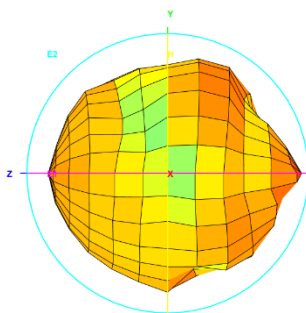
Total_3D_Top View_1.602GHz



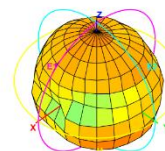
Total_3D_Front View_1.602GHz



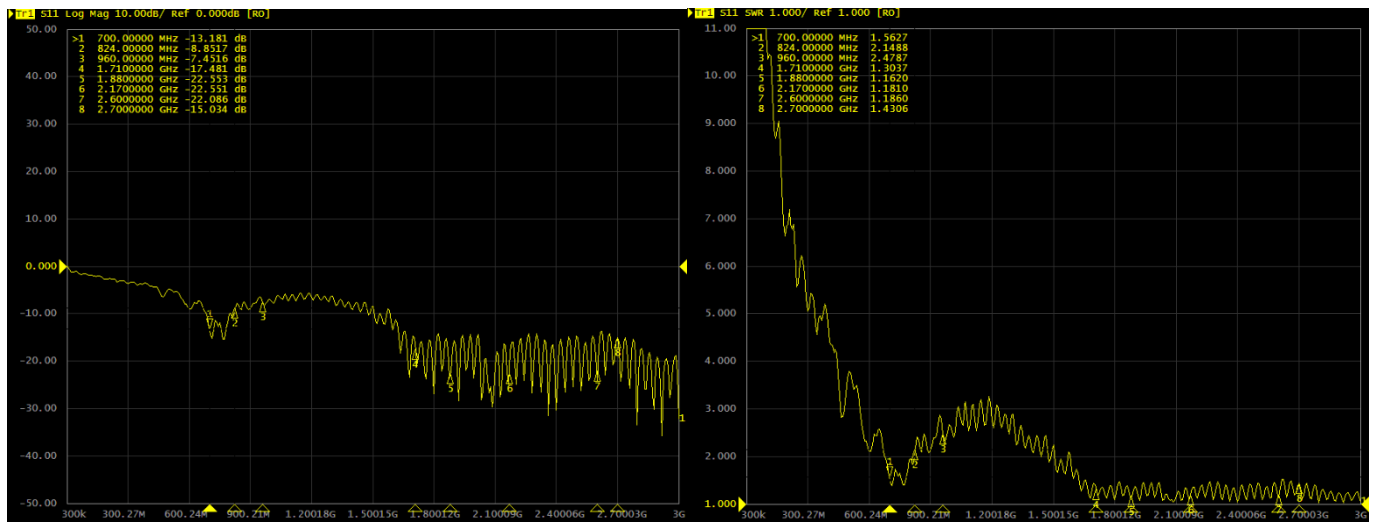
Total_3D_Left View_1.602GHz



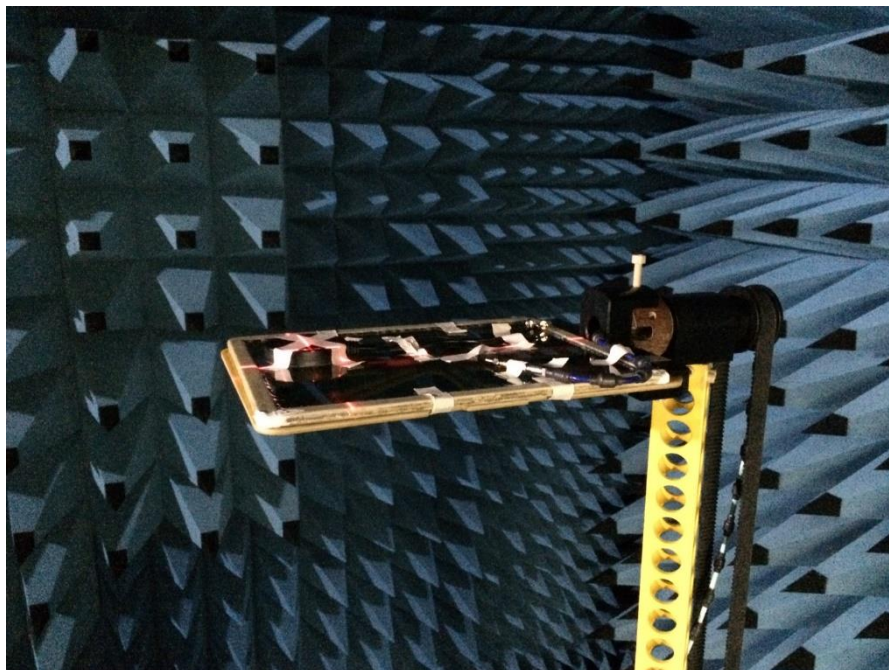
Total_3D_Side View 1_1.602GHz



Test Data Return & VSWR(4G/LTE)

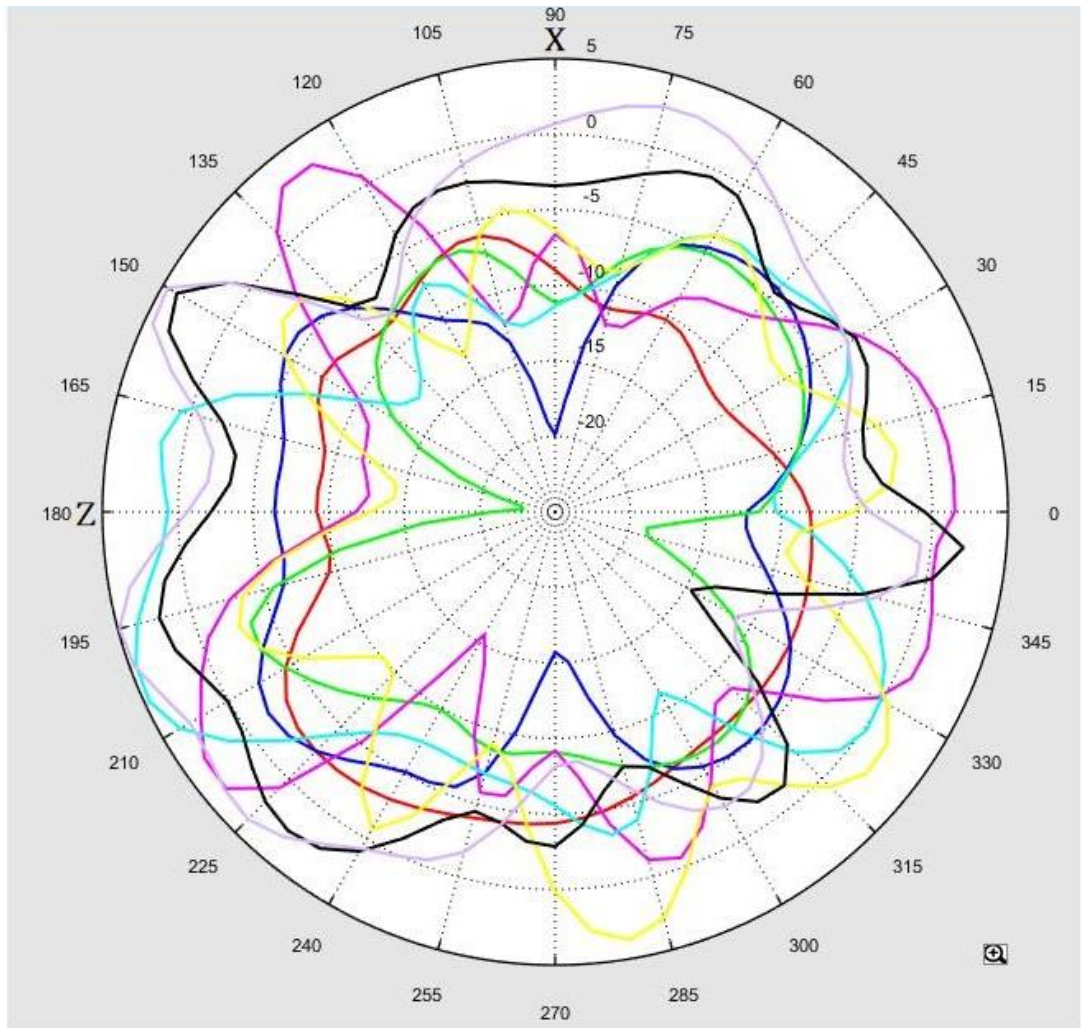


3D Test photo



3D Test Data

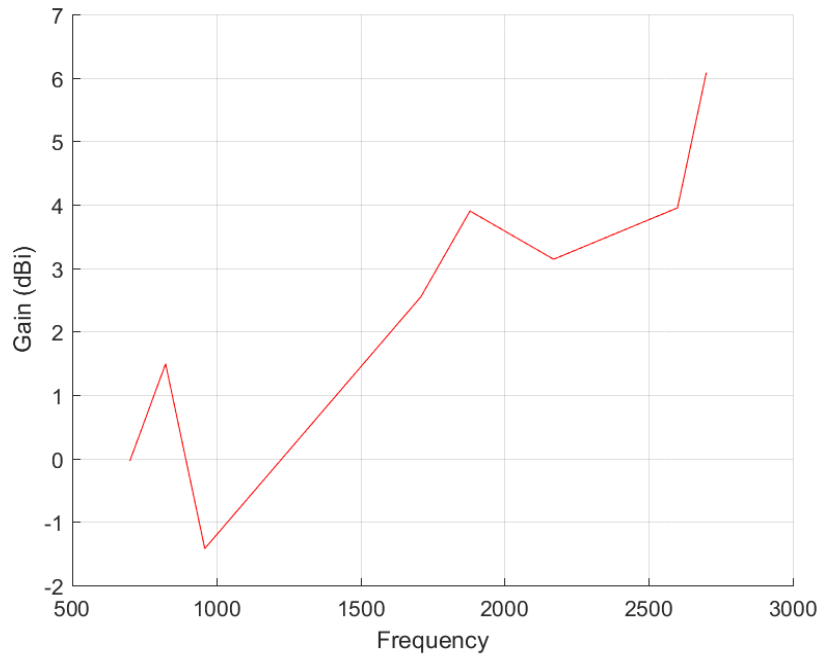
Freq. / Chan.	Color
700MHz	Red
824MHz	Blue
960MHz	Green
1.71GHz	Magenta
1.88GHz	Cyan
2.17GHz	Yellow
2.6GHz	Black
2.7GHz	Purple



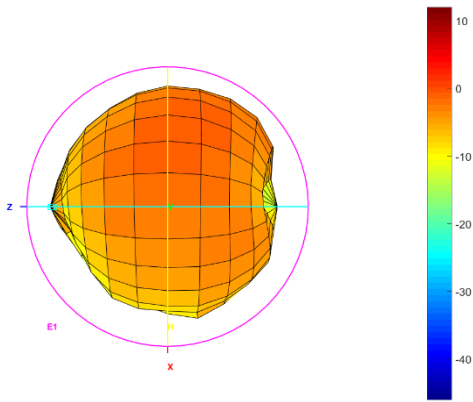
Total_Efficiency (%)



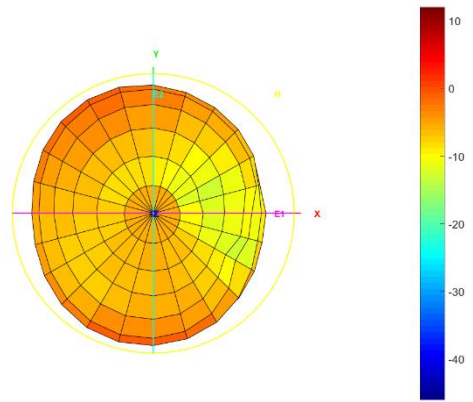
Total_Gain (dBi)



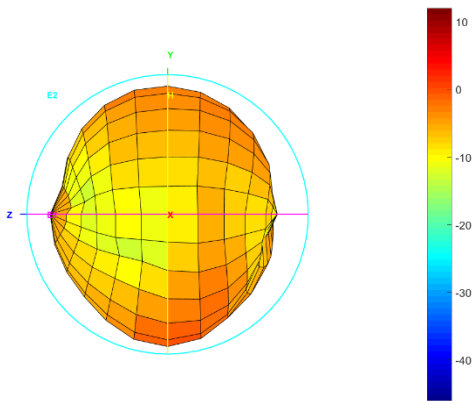
Total_3D_Top View_700MHz



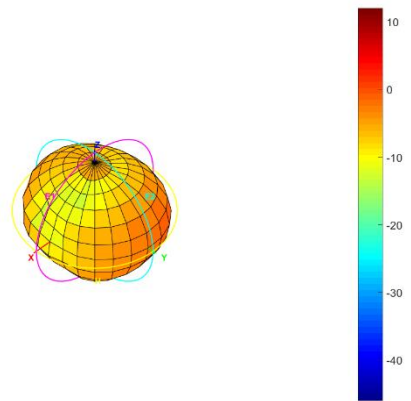
Total_3D_Front View_700MHz



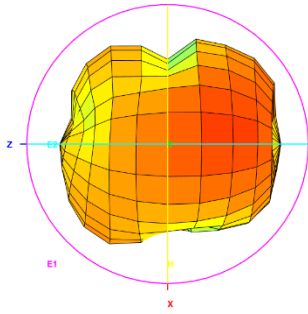
Total_3D_Left View_700MHz



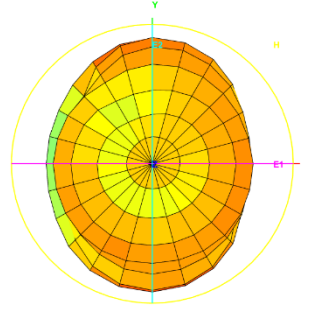
Total_3D_Side View 1_700MHz



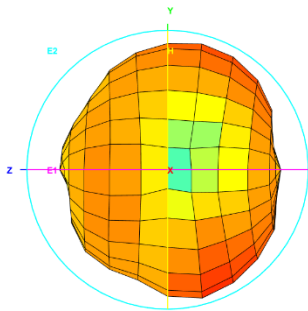
Total_3D_Top View_824MHz



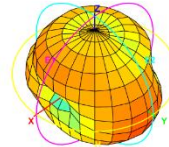
Total_3D_Front View_824MHz



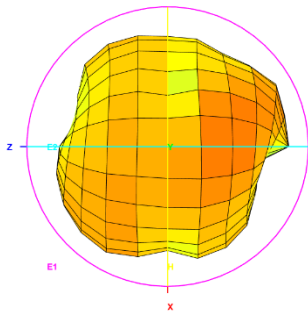
Total_3D_Left View_824MHz



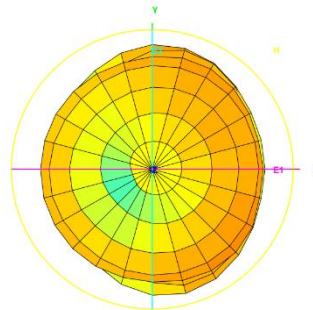
Total_3D_Side View 1_824MHz



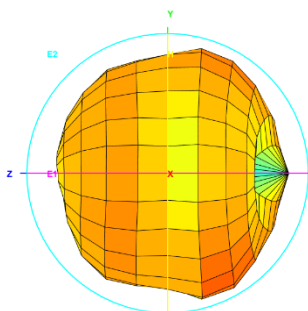
Total_3D_Top View_960MHz



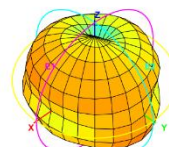
Total_3D_Front View_960MHz



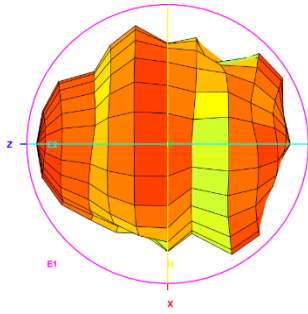
Total_3D_Left View_960MHz



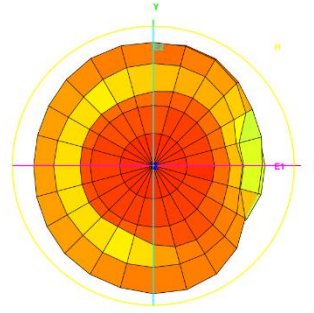
Total_3D_Side View 1_960MHz



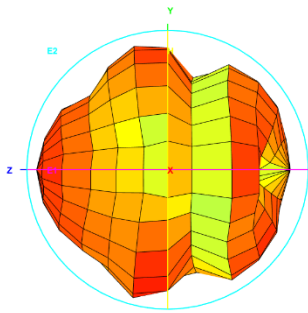
Total_3D_Top View_1.71GHz



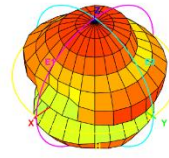
Total_3D_Front View_1.71GHz



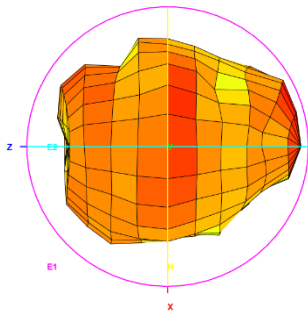
Total_3D_Left View_1.71GHz



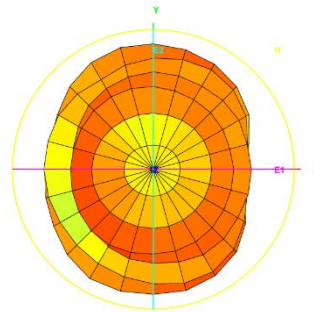
Total_3D_Side View_1.71GHz



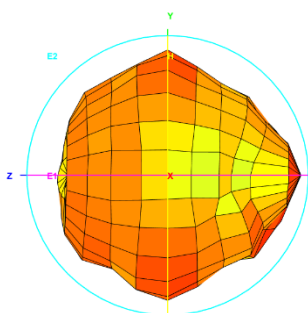
Total_3D_Top View_1.88GHz



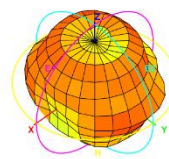
Total_3D_Front View_1.88GHz



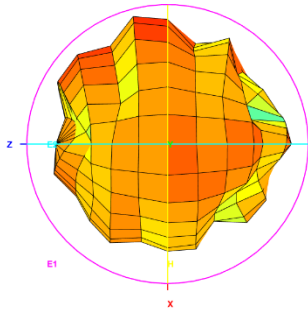
Total_3D_Left View_1.88GHz



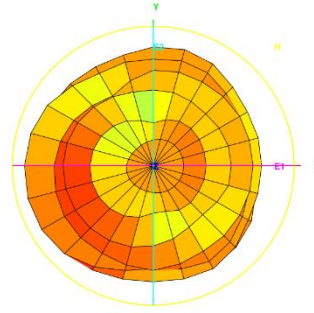
Total_3D_Side View_1.88GHz



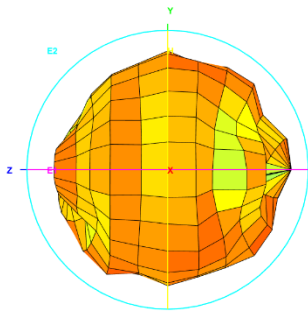
Total_3D_Top View_2.17GHz



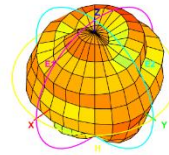
Total_3D_Front View_2.17GHz



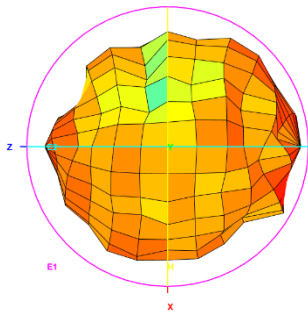
Total_3D_Left View_2.17GHz



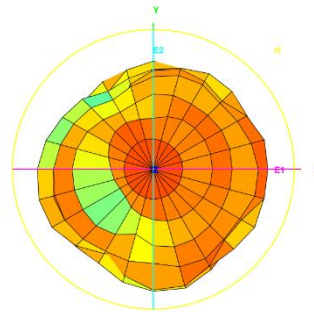
Total_3D_Side View 1_2.17GHz



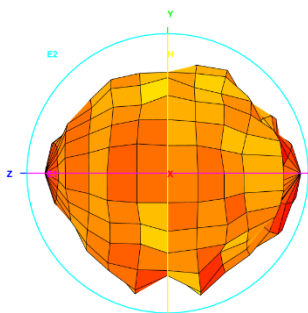
Total_3D_Top View_2.6GHz



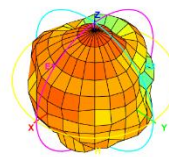
Total_3D_Front View_2.6GHz



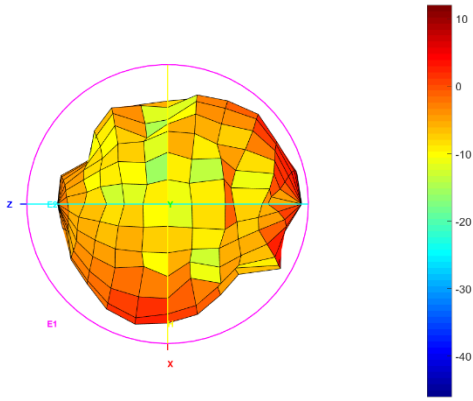
Total_3D_Left View_2.6GHz



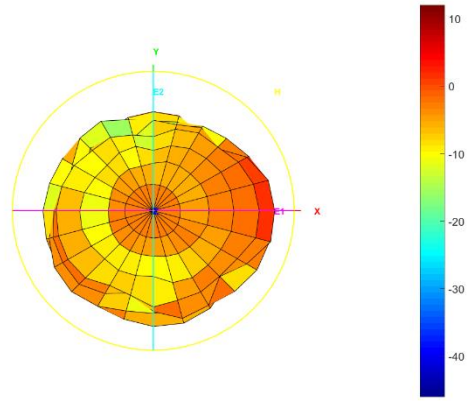
Total_3D_Side View 1_2.6GHz



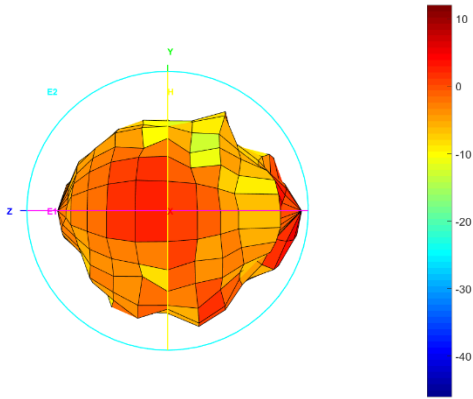
Total_3D_Top View_2.7GHz



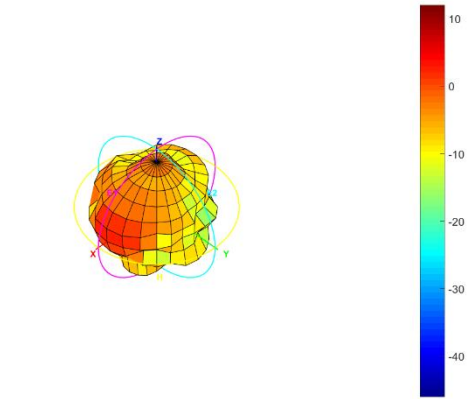
Total_3D_Front View_2.7GHz



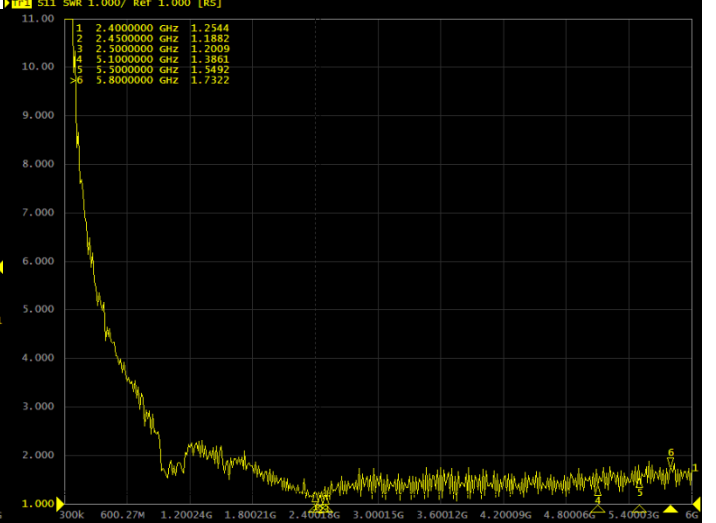
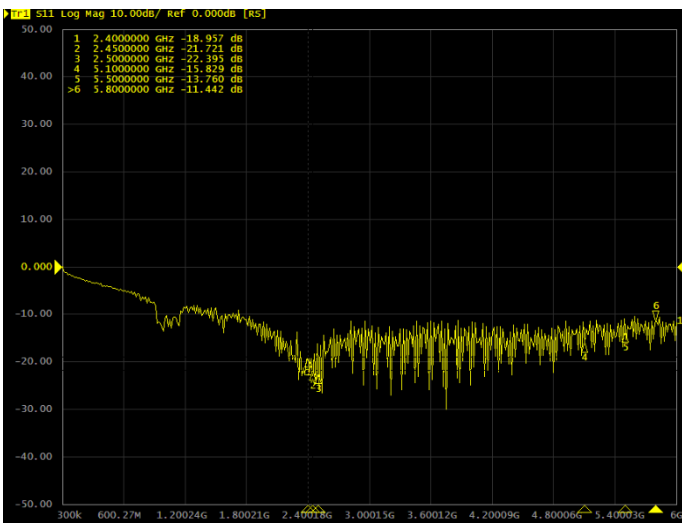
Total_3D_Left View_2.7GHz



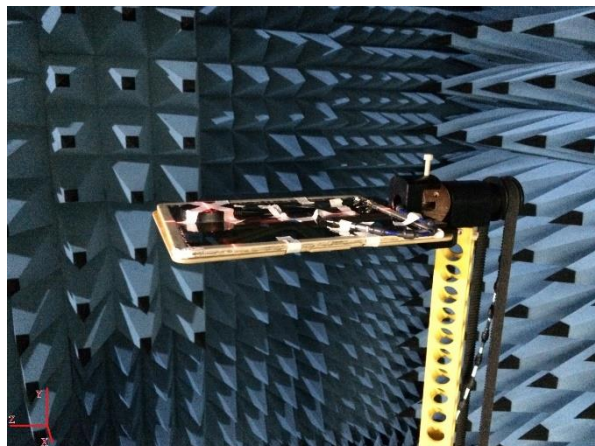
Total_3D_Side View 1_2.7GHz



Test Data Return & VSWR(2.4G/5.8G)

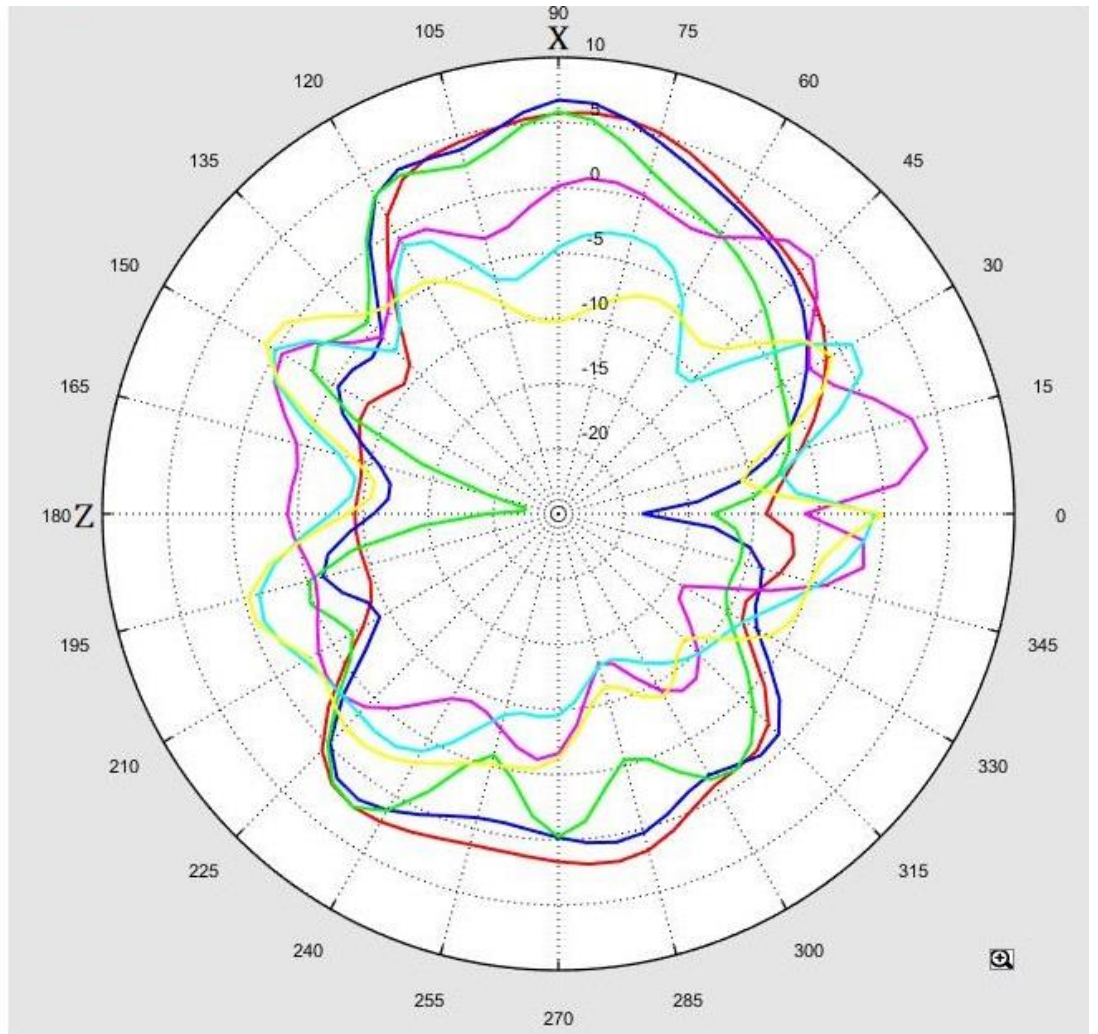


3D Test Photo

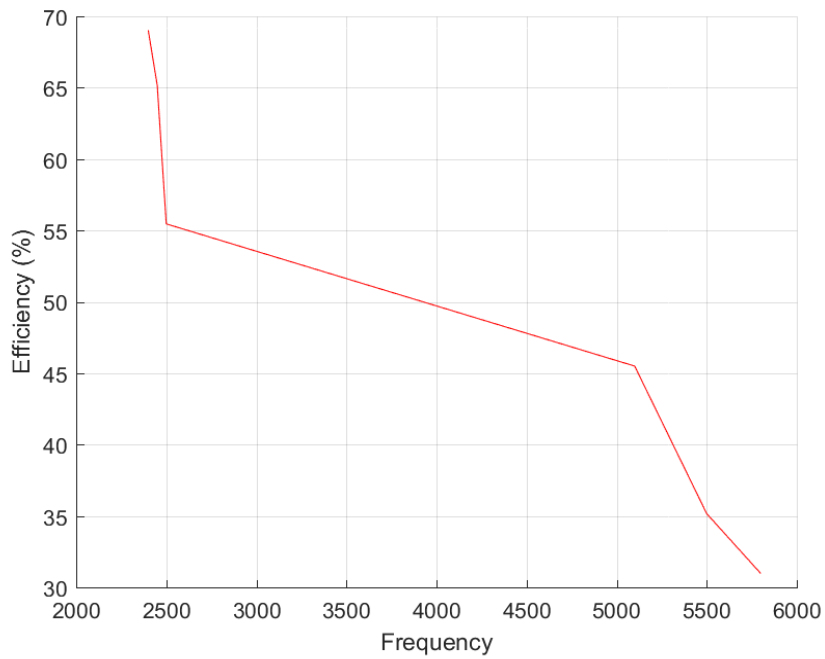


3D Test Data

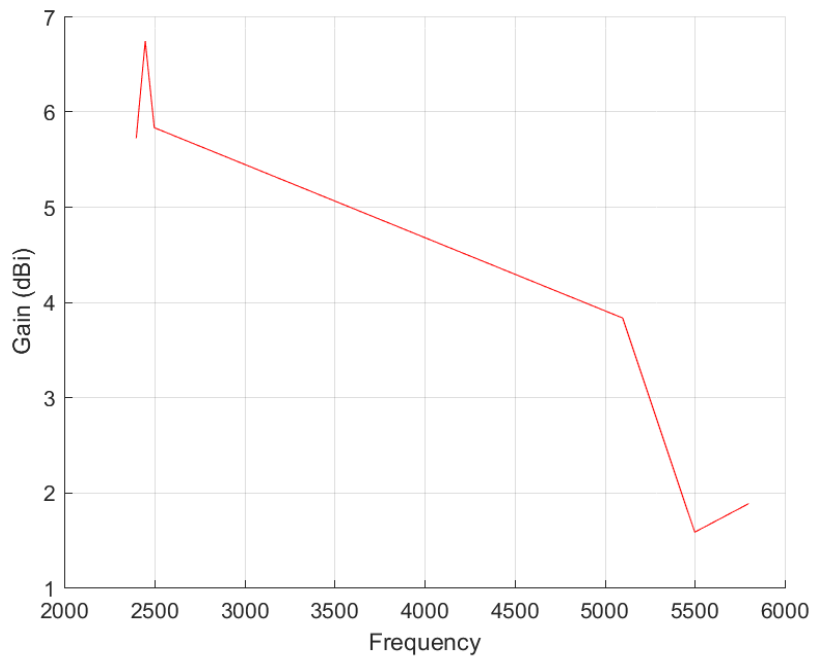
Freq. / Chan.	Color
2.4GHz	Red
2.45GHz	Blue
2.5GHz	Green
5.1GHz	Magenta
5.5GHz	Cyan
5.8GHz	Yellow



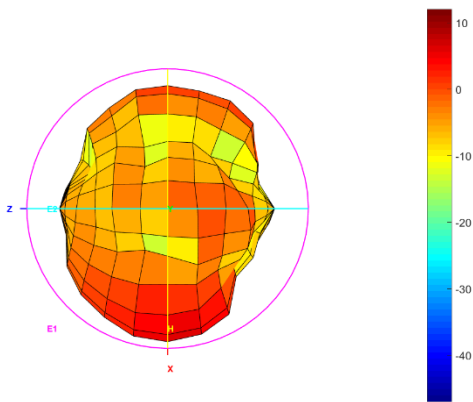
Total_Efficiency (%)



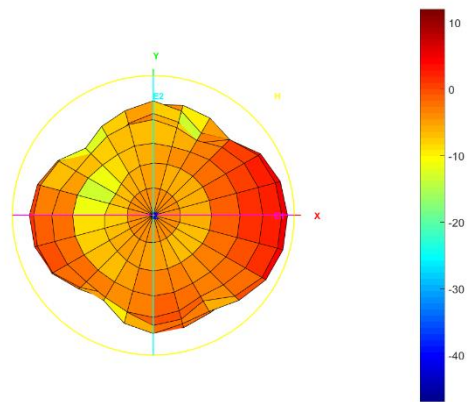
Total_Gain (dBi)



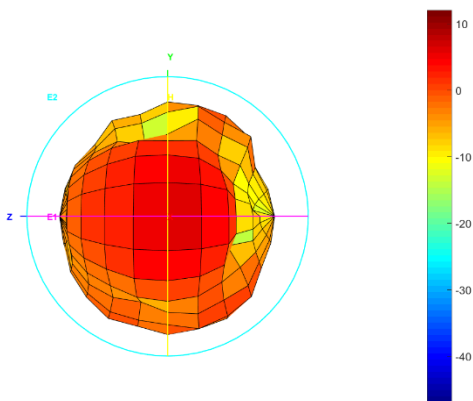
Total_3D_Top View_2.4GHz



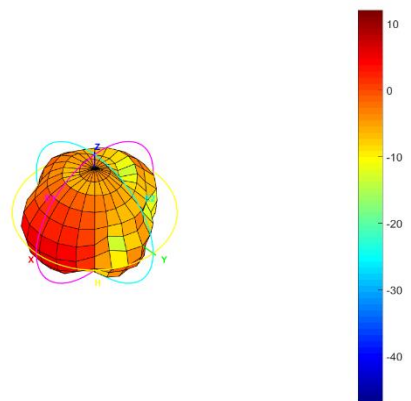
Total_3D_Front View_2.4GHz



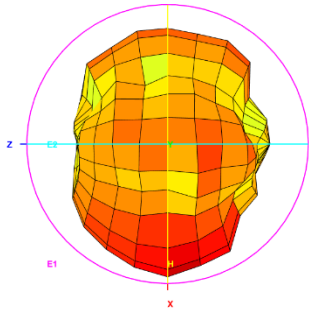
Total_3D_Left View_2.4GHz



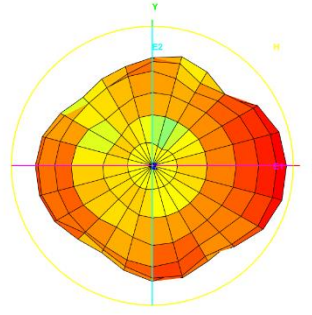
Total_3D_Side View 1_2.4GHz



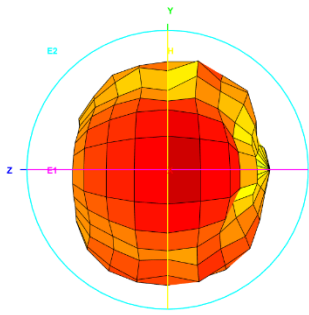
Total_3D_Top View_2.45GHz



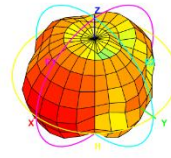
Total_3D_Front View_2.45GHz



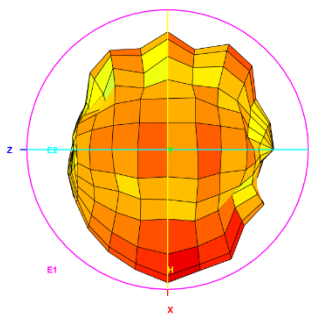
Total_3D_Left View_2.45GHz



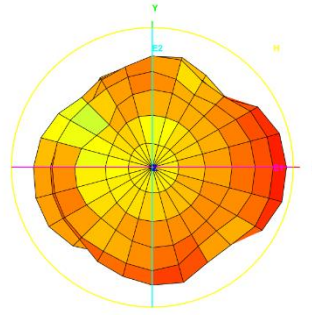
Total_3D_Side View 1_2.45GHz



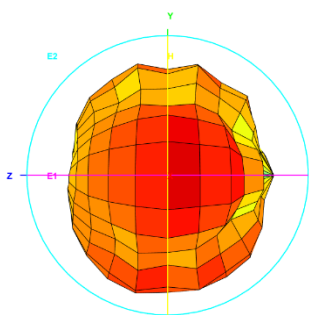
Total_3D_Top View_2.5GHz



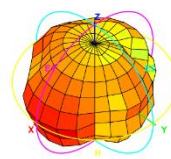
Total_3D_Front View_2.5GHz



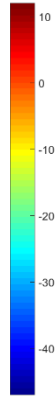
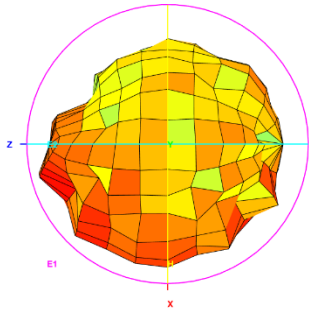
Total_3D_Left View_2.5GHz



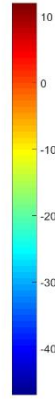
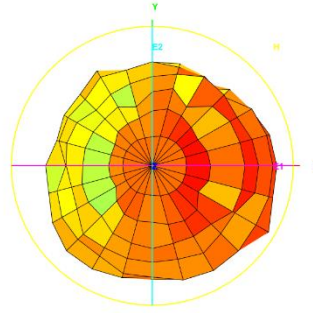
Total_3D_Side View 1_2.5GHz



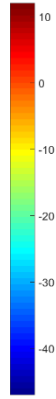
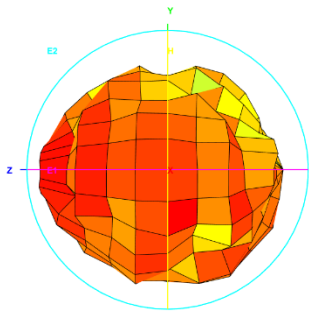
Total_3D_Top View_5.1GHz



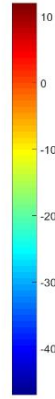
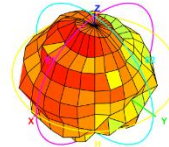
Total_3D_Front View_5.1GHz



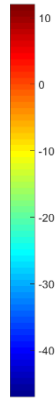
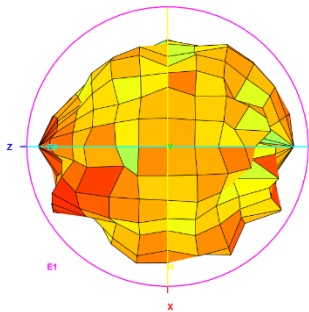
Total_3D_Left View_5.1GHz



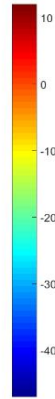
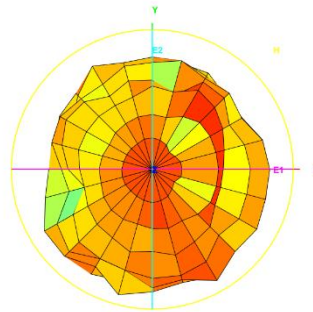
Total_3D_Side View 1_5.1GHz



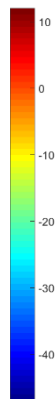
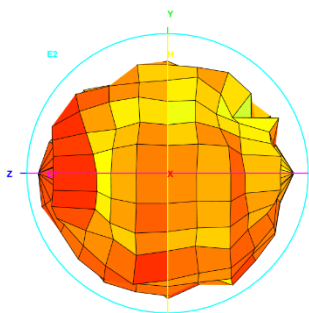
Total_3D_Top View_5.5GHz



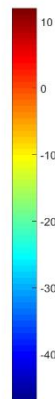
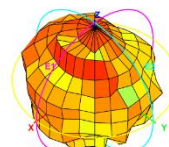
Total_3D_Front View_5.5GHz



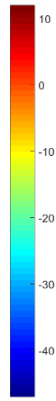
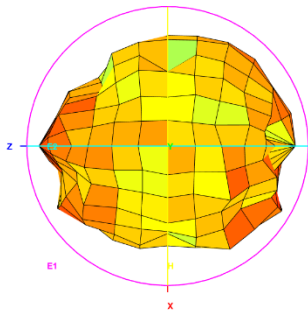
Total_3D_Left View_5.5GHz



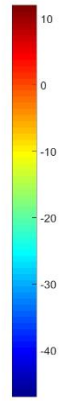
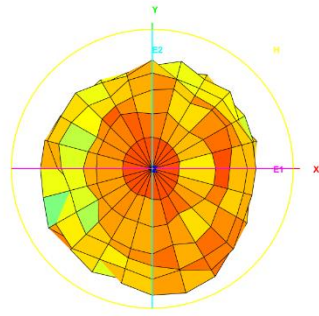
Total_3D_Side View 1_5.5GHz



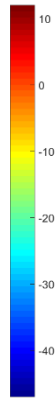
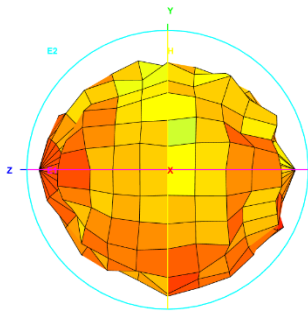
Total_3D_Top View_5.8GHz



Total_3D_Front View_5.8GHz



Total_3D_Left View_5.8GHz



Total_3D_Side View 1_5.8GHz

