



CHINMORE INDUSTRY CO.,LTD


Specification

1. Combined Antenna for GPS and GSM (2-in-1 Antenna)
2. *Chinmore's* No: GP-GPSGSMR32-004
3. Frequency for GPS: 1575.42 MHz
4. Frequency for GSM(3G): 850/900/1800/1900/2100 MHz
5. VSWR: 2.0:1
6. Gain for GPS: 32 dBi
7. Gain for GSM: 0 dBi
8. Cable: RG-174 5M
9. Connector: SMA (M) ST and FME F

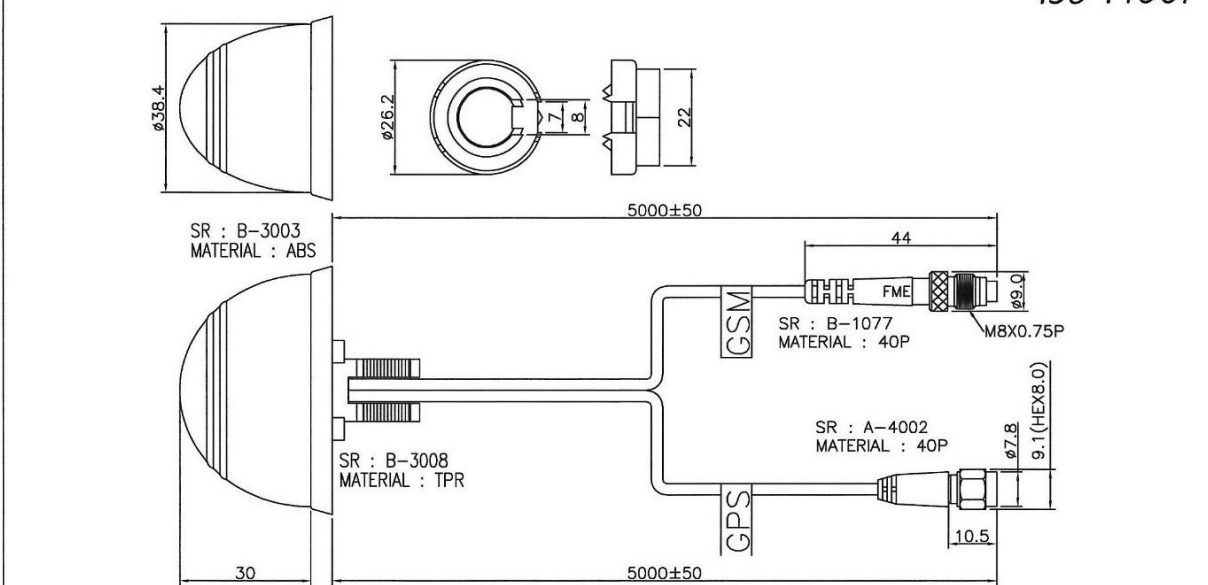
✘RoHS Compliant

✘ISO 9001 & ISO 14001

	Cable	OD	Cover	Connector	Frequency	Impedance	V.S.W.R	Gain
GPS	RG174/U	ø2.7±0.15	Black (黑)	SMA M (Gold 鍍金)	1575.42MHz	50Ω	2.0:1	30 dB
GSM				FME F (Ni 鍍鎳)	850~900MHz 1800~1900~2100MHz			0 dB



ISO 9001
ISO 14001



Technical drawing details:
 - Antenna diameter: ø38.4
 - Cable diameter: ø26.2
 - SMA connector length: 22
 - SMA connector offset: 7, 8
 - Cable length: 5000±50
 - Antenna SR: B-3003, MATERIAL: ABS
 - Antenna SR: B-3008, MATERIAL: TPR
 - GPS connector SR: B-1077, MATERIAL: 40P
 - GSM connector SR: A-4002, MATERIAL: 40P
 - GPS connector offset: 44
 - GPS connector diameter: ø9.0
 - GPS connector length: 10.5
 - GPS connector offset: ø7.8, 9.1 (HEX8.0)

Frequency (MHz)	Return Loss (dBi)	VSWR	Efficiency (%)	Gain (dBi)
1575.42 MHz	-32.49	1.04	-----	32.59
850 MHz	-13.75	1.57	21.73	-0.76
900 MHz	-13.87	1.51	25.47	1.3
1800 MHz	-12.96	1.57	48.53	0.55
1900 MHz	-16.10	1.37	29.11	-0.85
2100 MHz	-18.51	1.27	12.56	-3.79

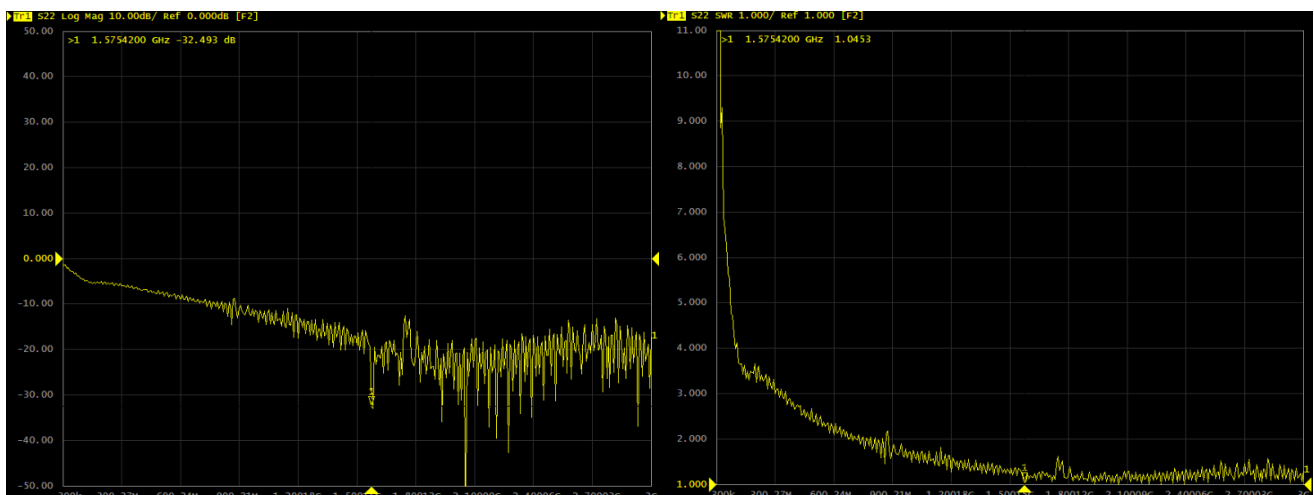
Patch

Characteristics	Specification
Center Frequency	1575.42±1.023 MHz (when covered with a radome and measured by LNA ground plane)
Bandwidth (10dB return loss)	10 MHz min
Gain at Zenith	0.5 dBic typ
Gain at 10° elevation	- 6 dBic typ
Polarization	R.H.C.P
Axial Ratio	1.0 dB typ

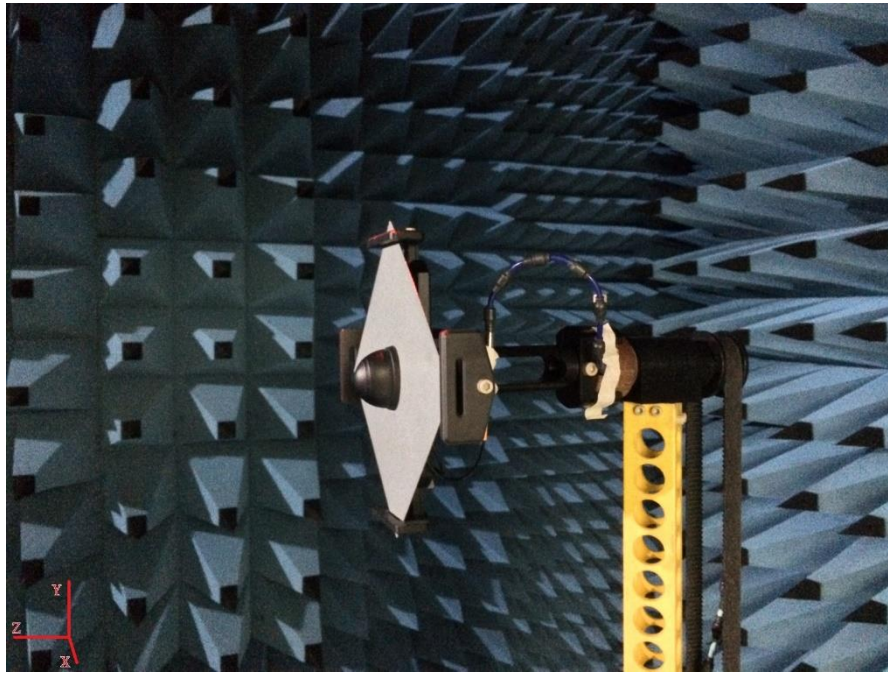
Filter / LNA

Characteristics	Specification
Center Frequency	1575.42 ±1.023 MHz
Gain	30~37dB (ps:3v / 32dB)
Noise Figure	1.5 dB typ (ps: 3v / 1.5dB)
Filter (Out of band attenuation)	Dielectric filter 7dB min fo±20MHz 20dB min fo±50MHz 30dB min fo±100MHz (fo=1575.42MHz)
Output V.S.W.R	2.0 max
Voltage	DC = 2.5~5.5V
Current	DC = 8~23mA (ps: 3v / 10mA)

Test Report(Return Loss & VSWR)

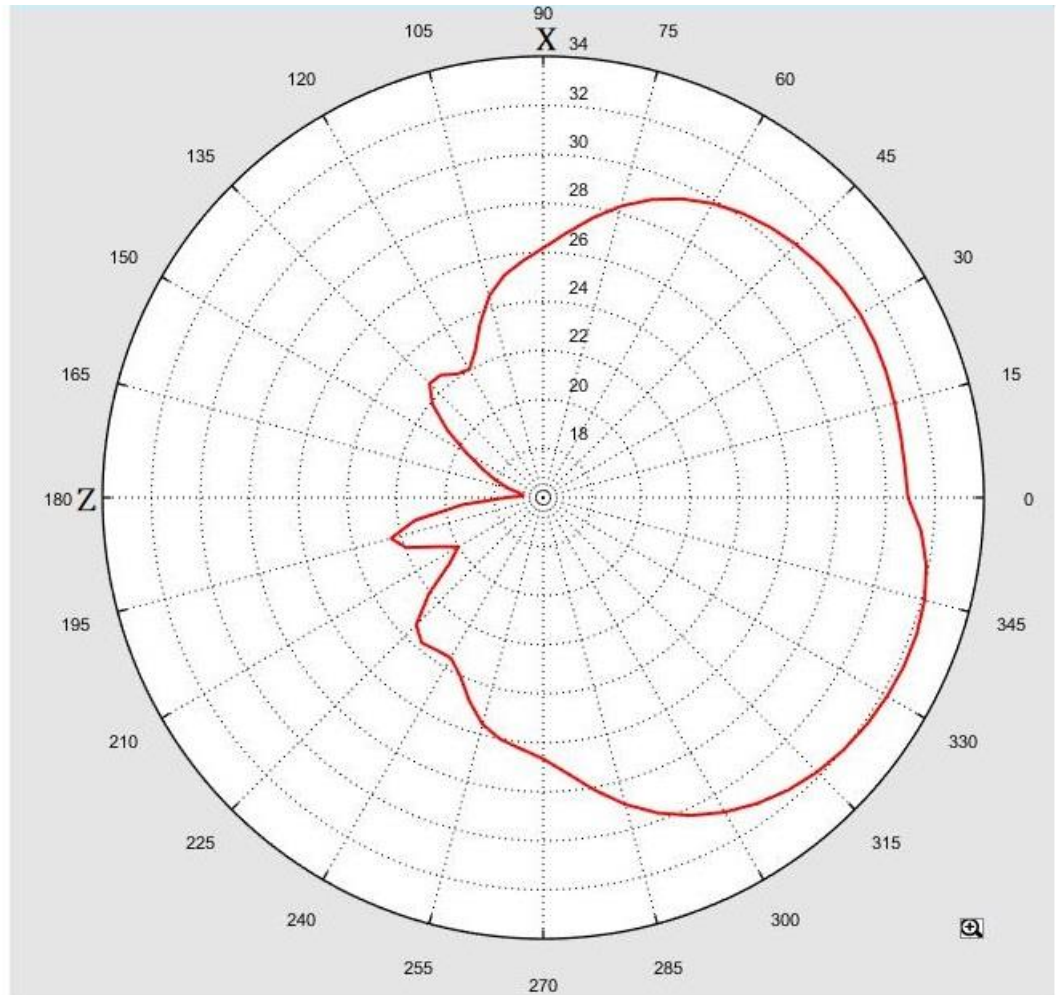


3D Test Photo

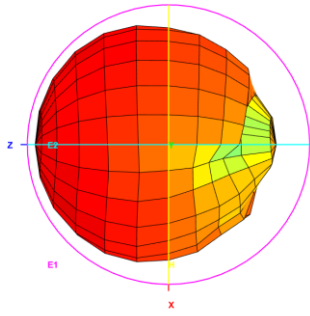


3D Test Data

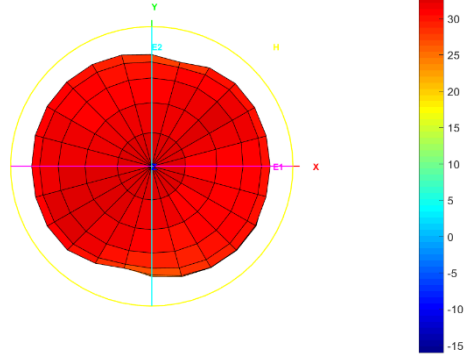
Freq. / Chan.	Color
1.57542GHz	Red



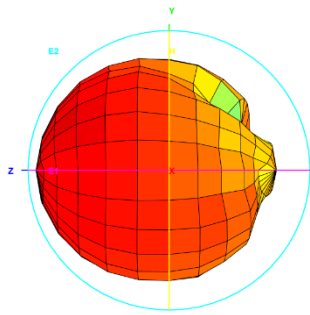
Total_3D_Top View_1.57542GHz



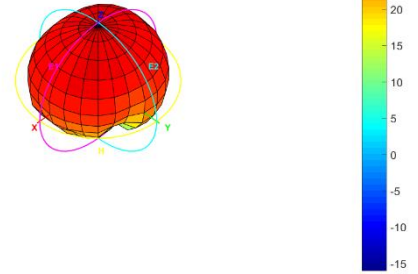
Total_3D_Front View_1.57542GHz



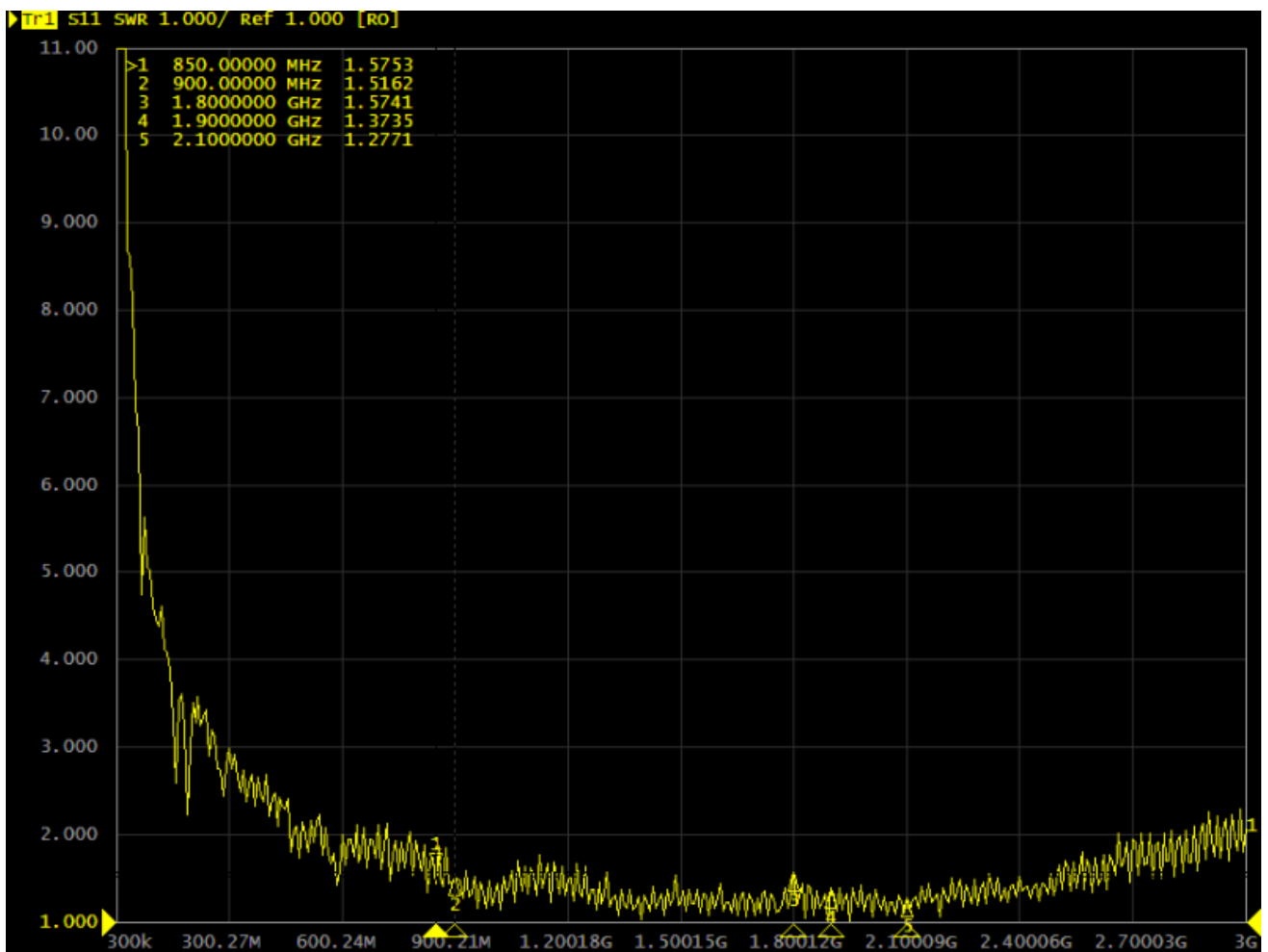
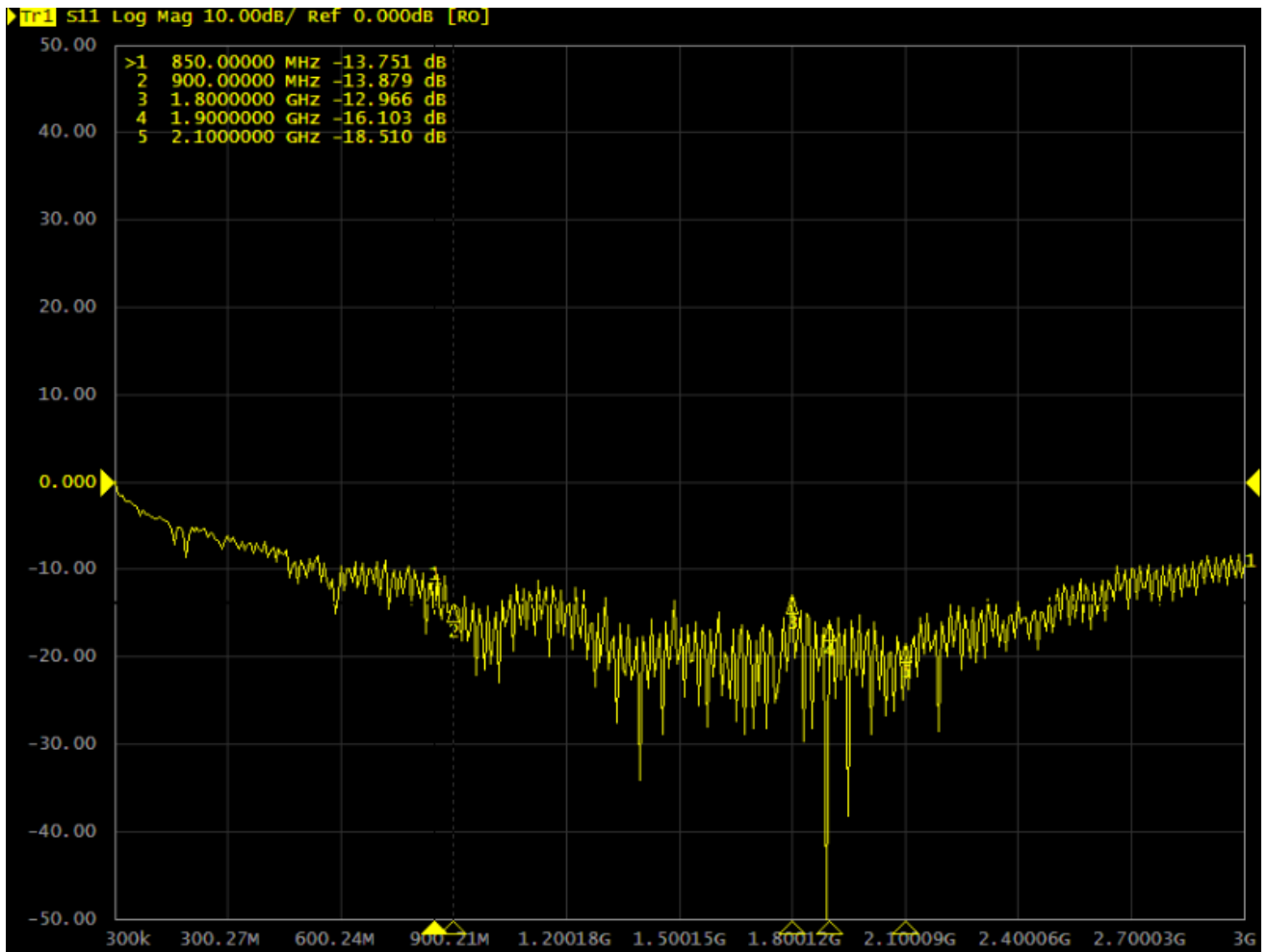
Total_3D_Left View_1.57542GHz



Total_3D_Side View 1_1.57542GHz

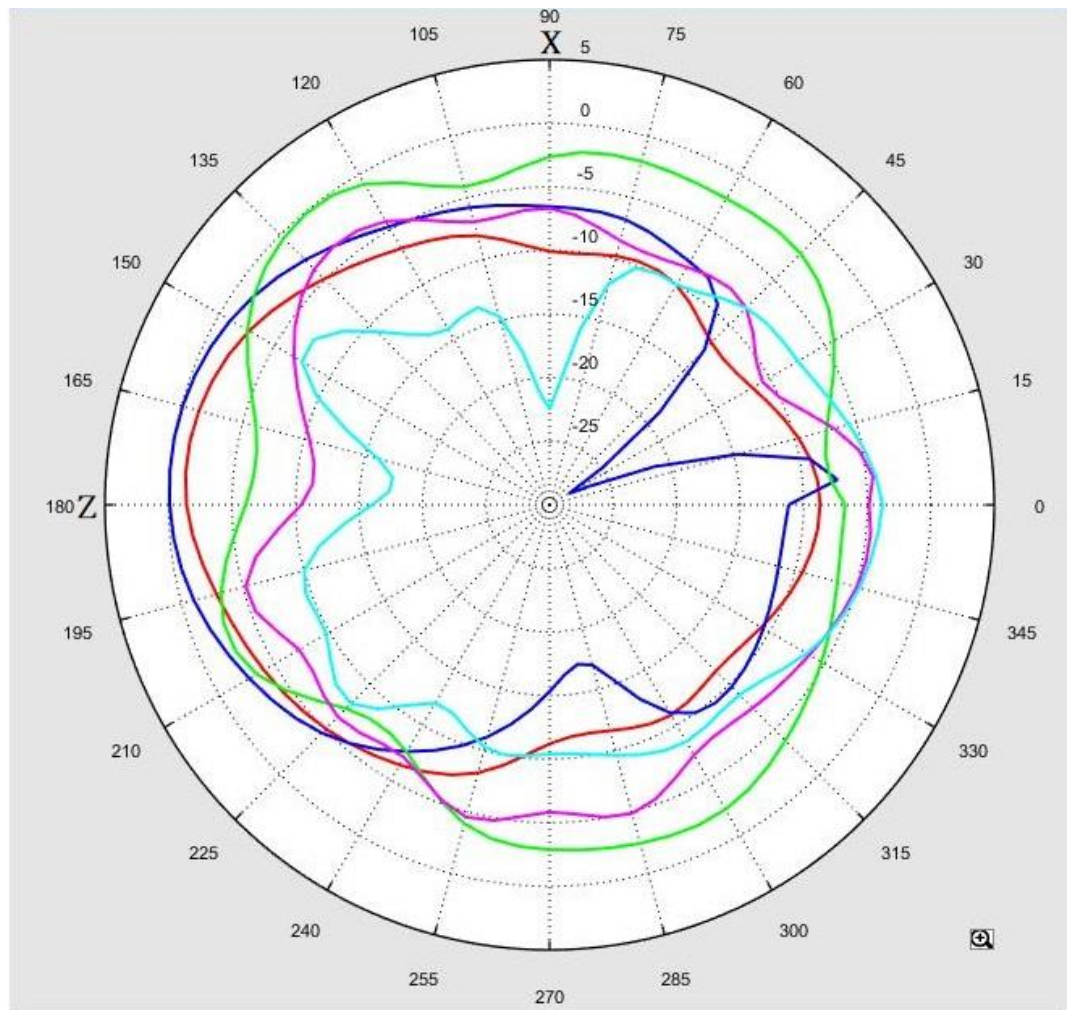


Test Report(Return Loss & VSWR)(3G)

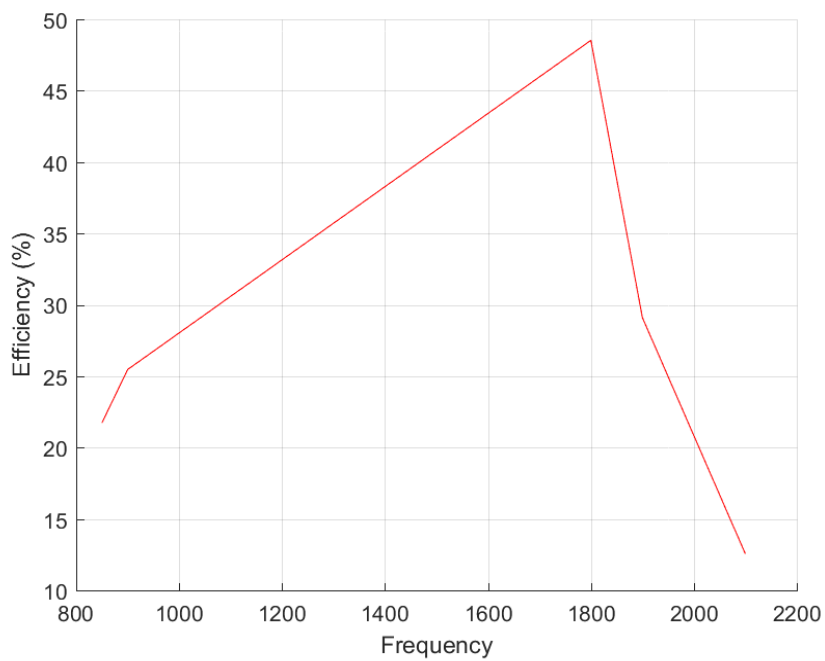


3D Test Data

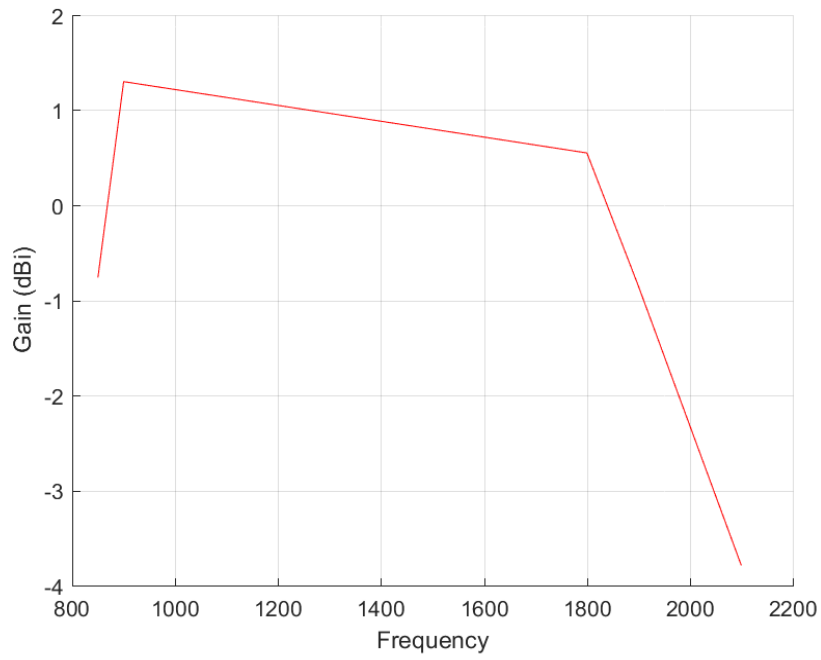
Freq. / Chan.	Color
850MHz	Red
900MHz	Blue
1.8GHz	Green
1.9GHz	Magenta
2.1GHz	Cyan



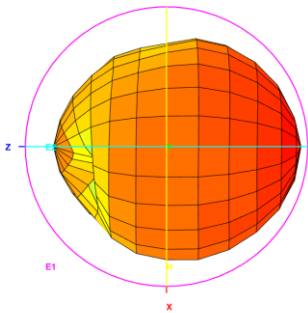
Total_Efficiency (%)



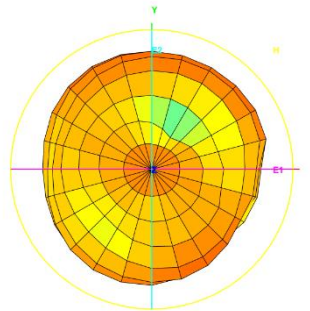
Total_Gain (dBi)



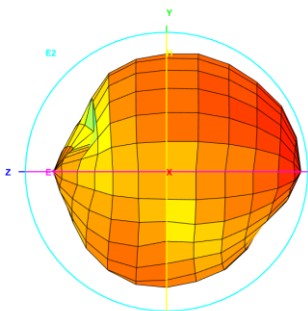
Total_3D_Top View_850MHz



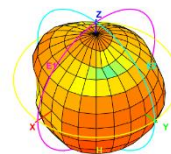
Total_3D_Front View_850MHz



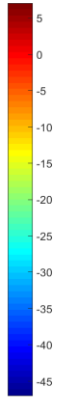
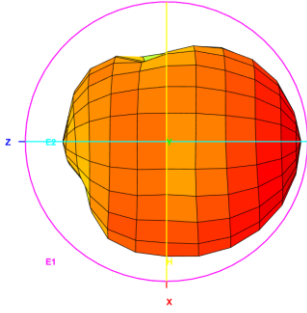
Total_3D_Left View_850MHz



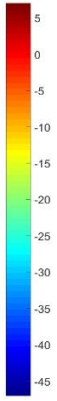
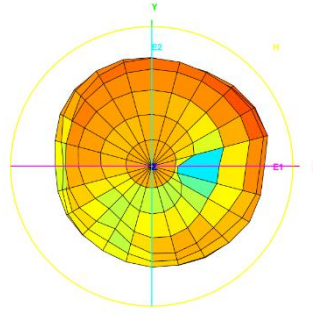
Total_3D_Side View 1_850MHz



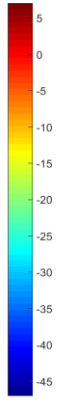
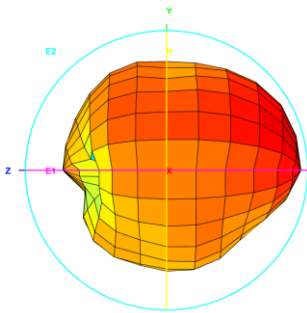
Total_3D_Top View_900MHz



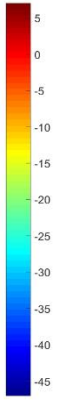
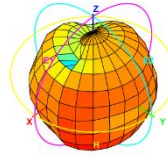
Total_3D_Front View_900MHz



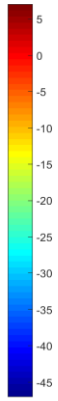
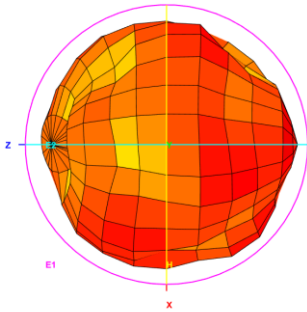
Total_3D_Left View_900MHz



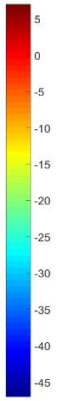
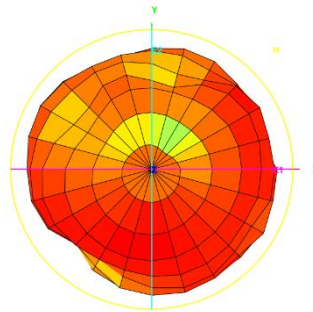
Total_3D_Side View 1_900MHz



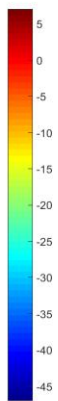
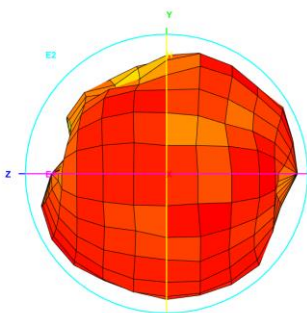
Total_3D_Top View_1.8GHz



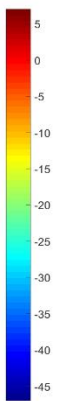
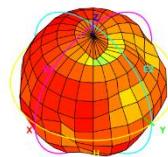
Total_3D_Front View_1.8GHz



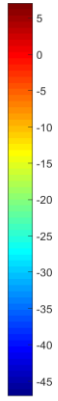
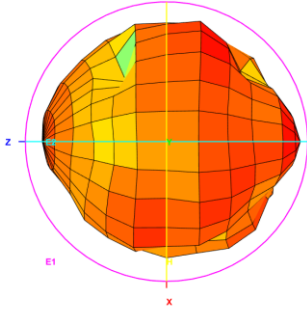
Total_3D_Left View_1.8GHz



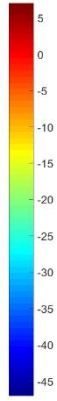
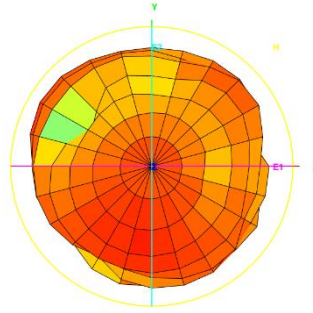
Total_3D_Side View 1_1.8GHz



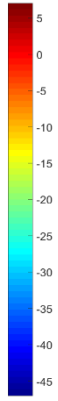
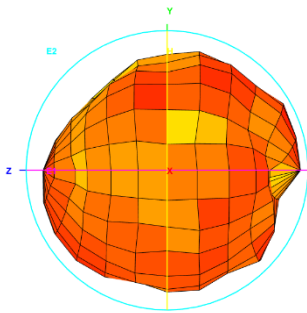
Total_3D_Top View_1.9GHz



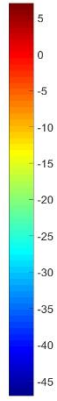
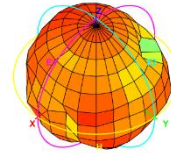
Total_3D_Front View_1.9GHz



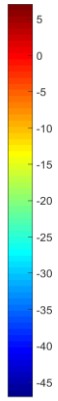
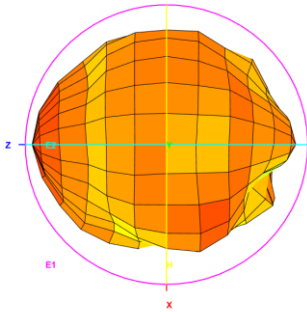
Total_3D_Left View_1.9GHz



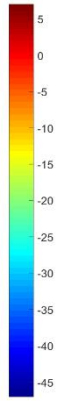
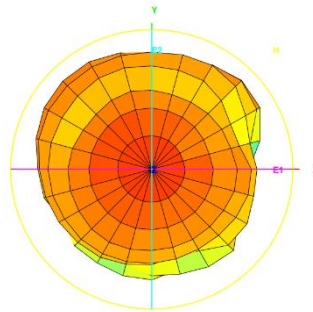
Total_3D_Side View 1_1.9GHz



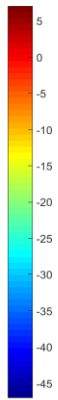
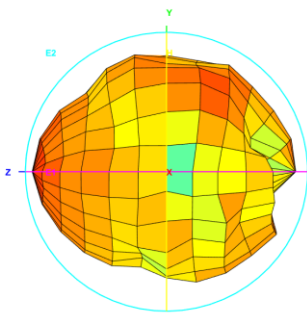
Total_3D_Top View_2.1GHz



Total_3D_Front View_2.1GHz



Total_3D_Left View_2.1GHz



Total_3D_Side View 1_2.1GHz

