SUNNYWAY

SWF012

PN: SW20274IB77



Features:

- Frequency bands from 600~ 6000MHz .
- 5G / 4G / 3G/ 2G.
- GNSS (GPS, Glonass, Galileo).
- Foldable for tight spaces.
- Impedance 50 Ohm.

Applications:

- Application of 5G/4G/3G/2G equipment.
- Remote monitoring.
- Network Devices.
- CPE/Gateway
- Telematics

Sunnyway Technology

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1. Electrical Specifications

Cable 1 Parameters

Standards	GPS & Glonass & Galileo	
Frequency range (MHz)	1575MHz	1602MHz
Peak Gain (dBi)	3.0	2.5
Average Gain (dB)	-2.7	-2.6
VSWR	1.2	1.1
Return Loss (dB)	-20.9	-25.4
Efficiency (%)	54.0	55.7
Polarization mode	Linear	Linear
Radiation pattern	Omni-Directional	Omni-Directional
Output impedance (Ω)	50	50
Max. Input Power(W)	25	25

Cable 2 Parameters

Standards	5G&4G&3G&2G		
Frequency range (MHz)	600~960MHz	1400~2700MHz	3000~6000MHz
Peak Gain (dBi)	0.4~3.1	2.3~5.4	1.0~4.8
Average Gain (dB)	-4.1~-1.4	-3.3~-1.6	-4.7~-2.1
VSWR	< 2.9	< 2.5	< 2.6
Return Loss(dB)	< -6.2	< -7.0	< -7.0
Efficiency (%)	38.6~72.9	46.3~69.8	33.7~61.1

Polarization mode	Linear	Linear	Linear
Radiation pattern	Omni-Directional	Omni-Directional	Omni-Directional
Output impedance (Ω)	50	50	50
Max. Input Power(W)	25	25	25

2. Mechanical and Environmental Specification

Mounting Type	Adhesive
Adhesive Type	3M467
Connector Type	U.FL Standard
Antenna size(mm)	151.00mm (L) x 25.00mm (W) x0.12mm (H)
Material	FPC
Cable length(mm)	100mm
Operating Temperature (˚C)	- 40 ˚C ~ 85 ˚C
Storage Temperature(˚C)	- 40 ˚C ~ 85 ˚C

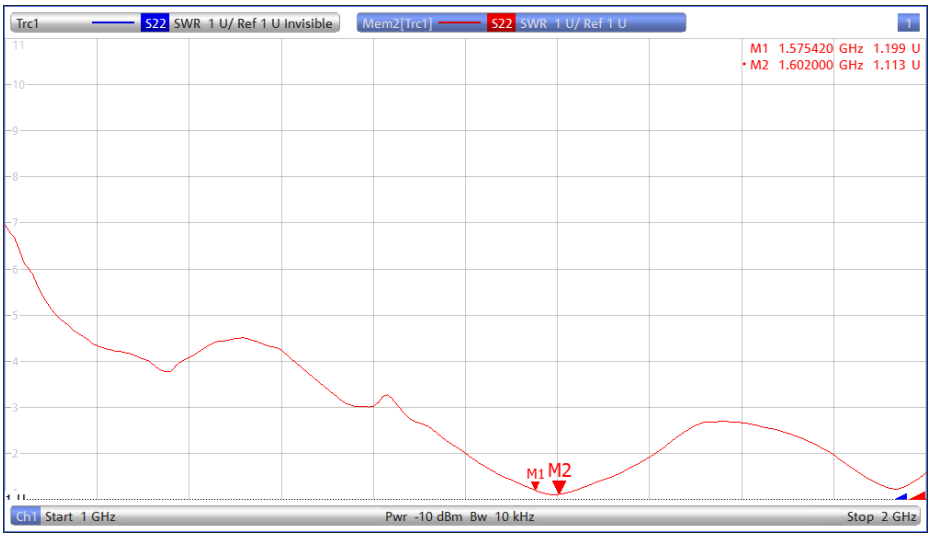
3. Antenna parameters

3.1 Cable 1: GPS&Glonass&Galileo

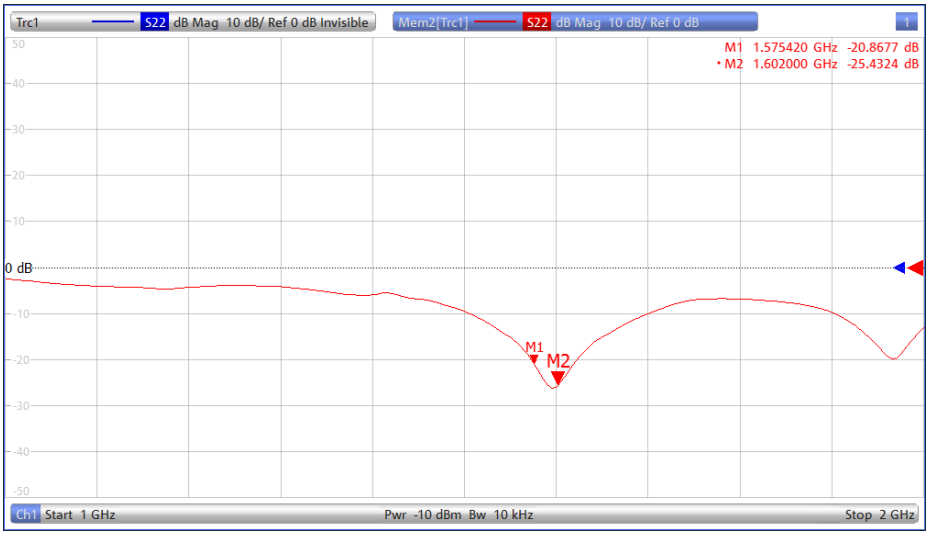
3.1.1 General Data

FRE (MHz)	1575	1602
VSWR	1.2	1.1
Return Loss	-20.9	-25.4
Eff (%)	54.0	55.7
Average Gain (dB)	-2.7	-2.6

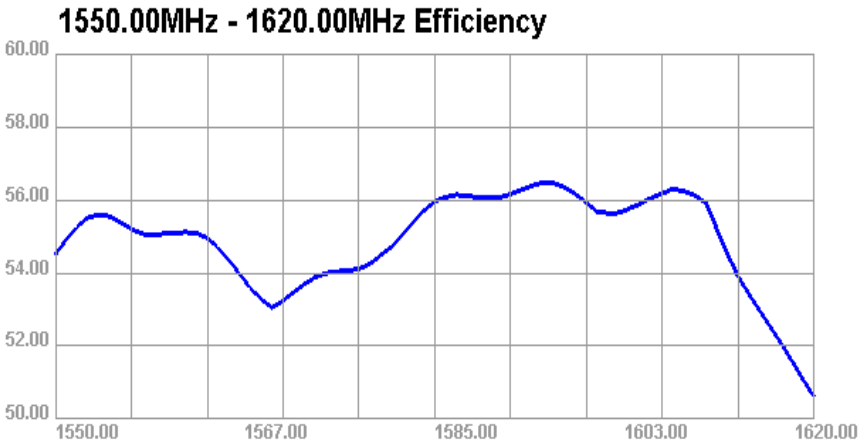
3.1.2 VSWR



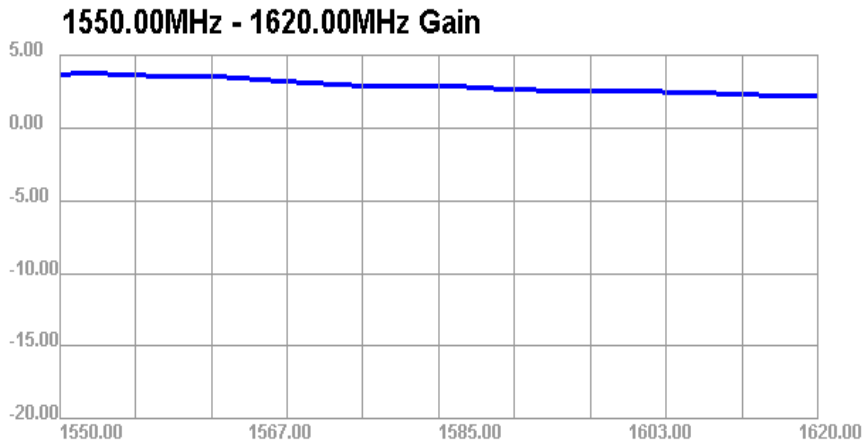
3.1.3 Return Loss



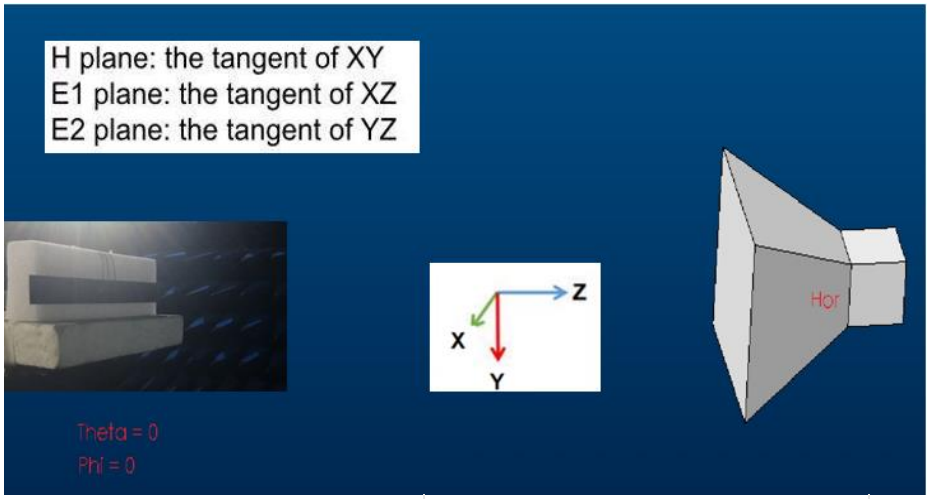
3.1.4 Efficiency

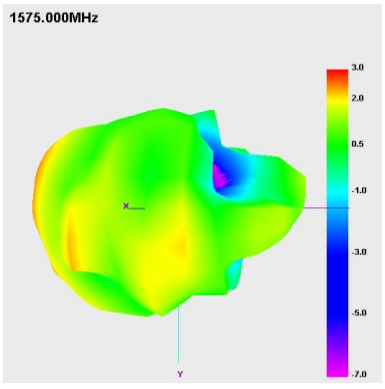


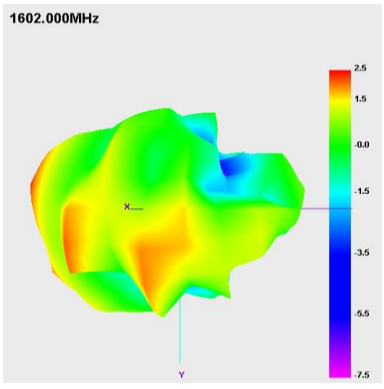
3.1.5 Gain

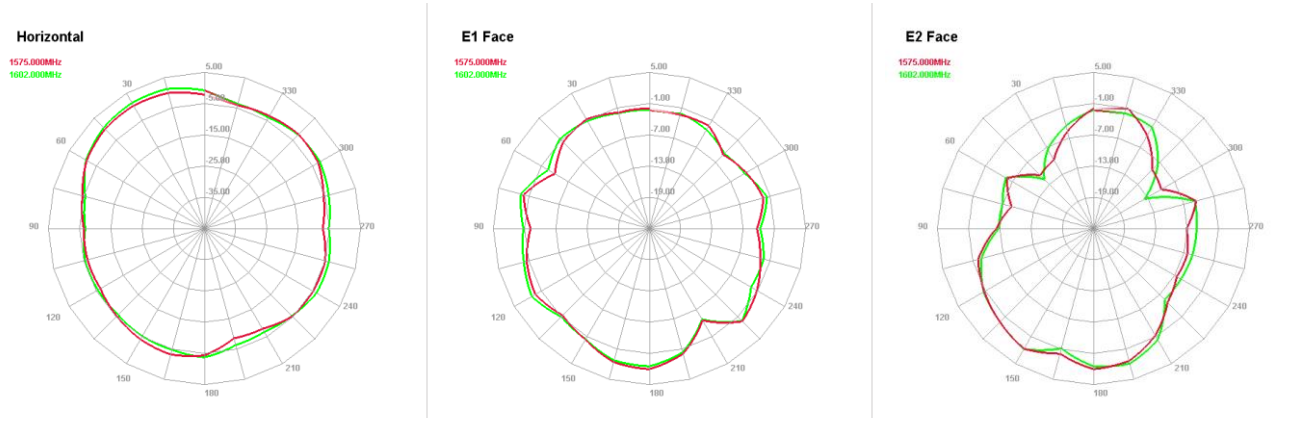


3.1.6 Directional pattern







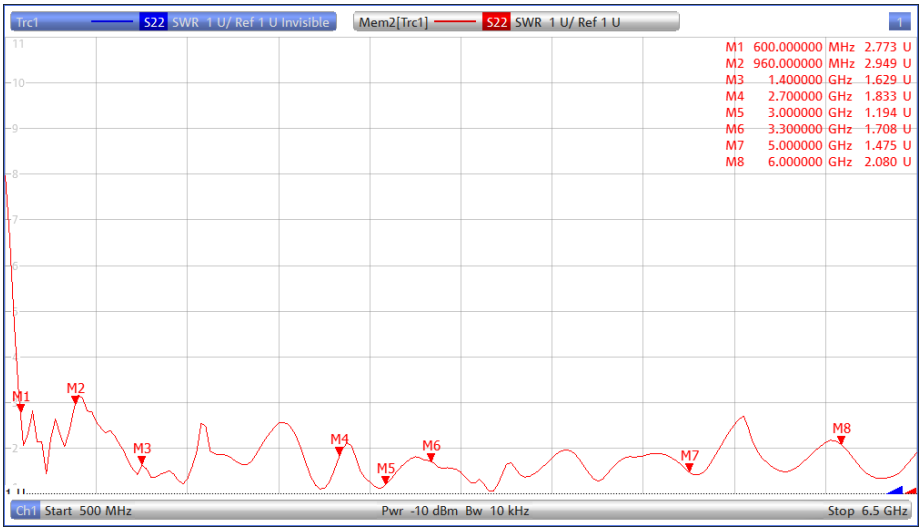


3.2 Cable 2: 5G&4G&3G&2G

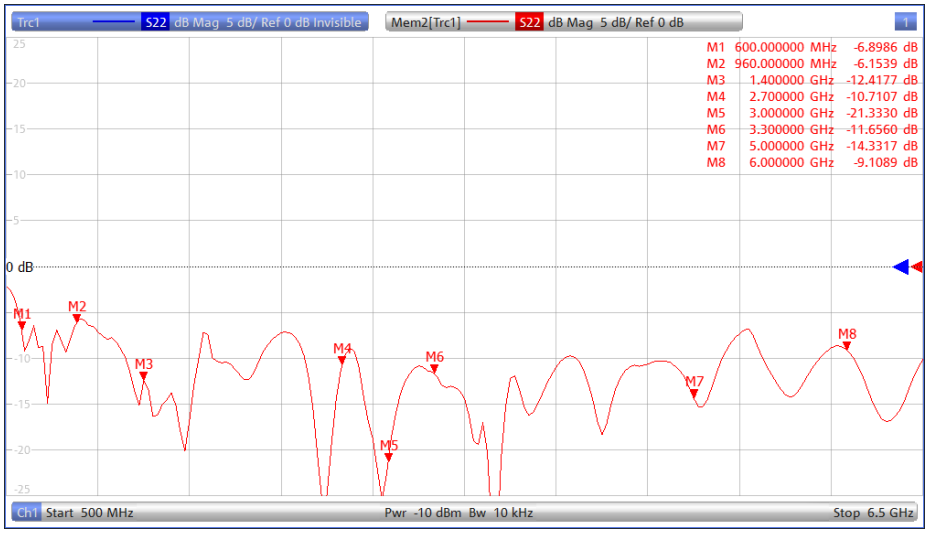
3.2.1 General Data

FRE (MHz)	600	960	1400	2700	3000	3300	5000	6000
VSWR	2.8	2.9	1.6	1.8	1.2	1.7	1.5	2.1
Return Loss	-6.9	-6.2	-12.4	-10.7	-21.3	-11.7	-14.3	-9.1
Eff (%)	38.6	58.9	52.6	49.5	54.3	45.6	49.9	39.7
Average Gain	-4.1	-2.3	-2.8	-3.1	-2.7	-3.4	-3.0	-4.0

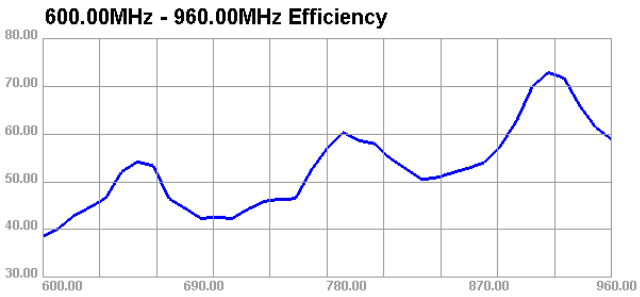
3.2.2 VSWR

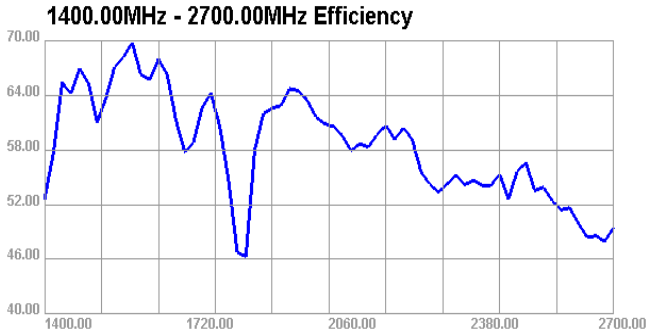


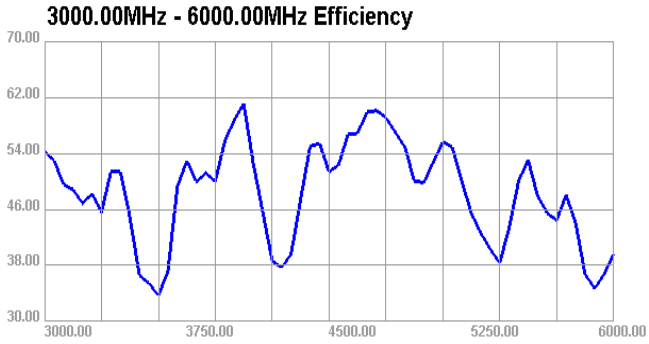
3.2.3 Return Loss



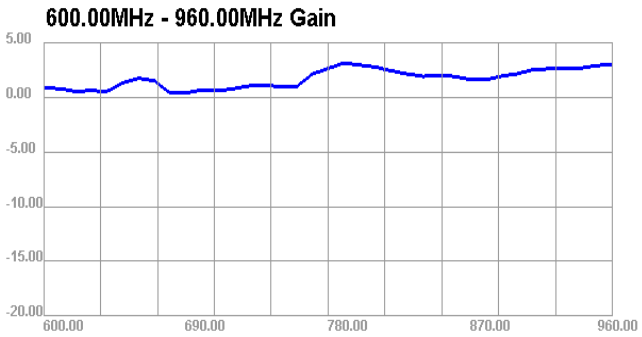
3.2.4 Efficiency

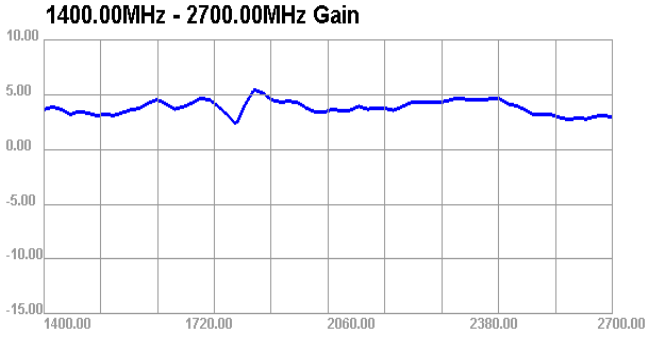


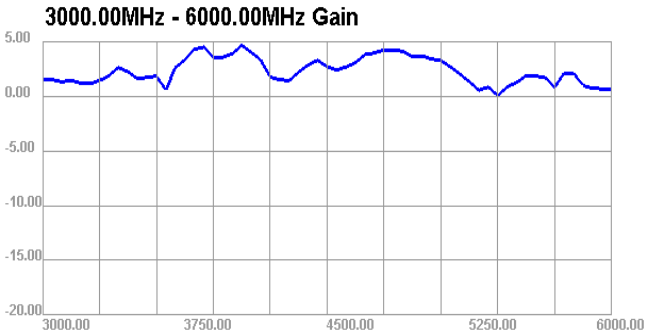




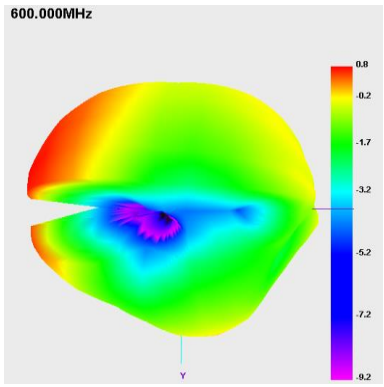
3.2.5 Gain

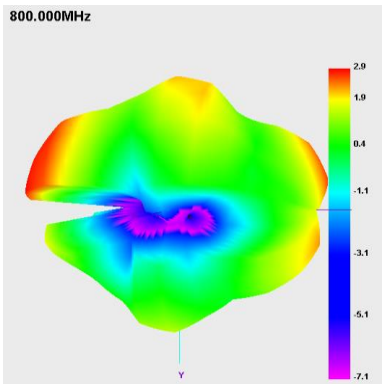

600.00MHz - 960.00MHz Gain
5.00
0.00
-5.00
-10.00
-15.00
-20.00
600.00
690.00
780.00
870.00
960.00

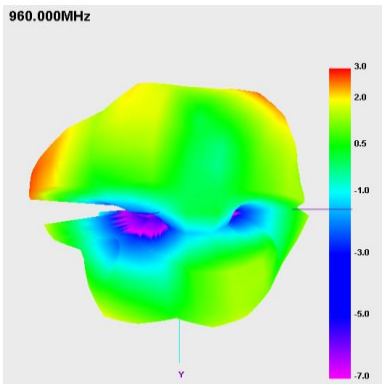

1400.00MHz - 2700.00MHz Gain
10.00
5.00
0.00
-5.00
-10.00
-15.00
1400.00
1720.00
2060.00
2380.00
2700.00

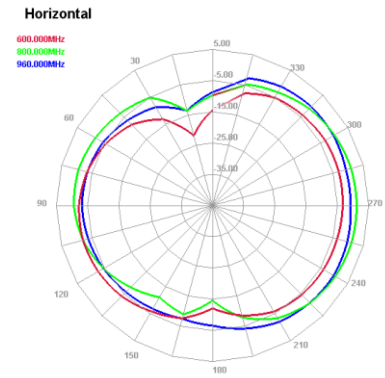

3000.00MHz - 6000.00MHz Gain
5.00
0.00
-5.00
-10.00
-15.00
-20.00
3000.00
3750.00
4500.00
5250.00
6000.00

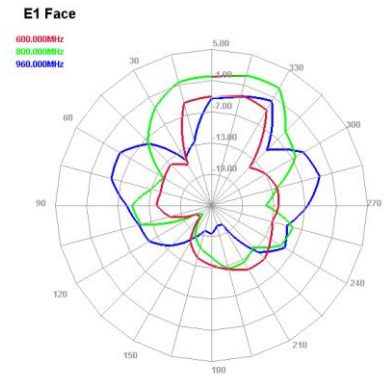
3.2.6 Directional pattern

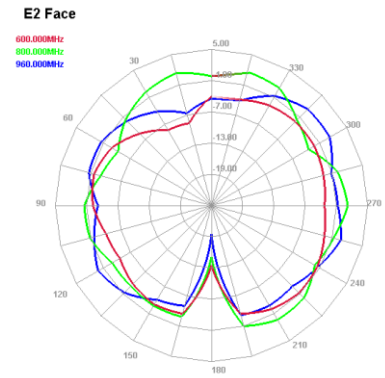


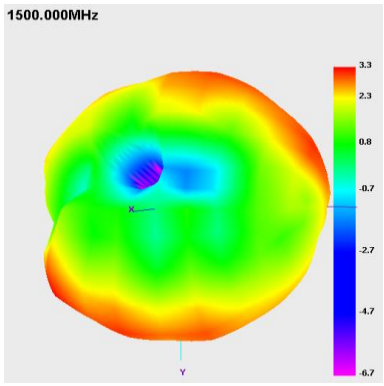


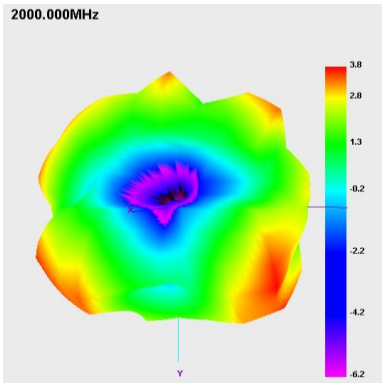


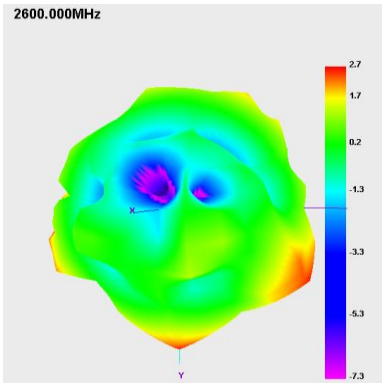


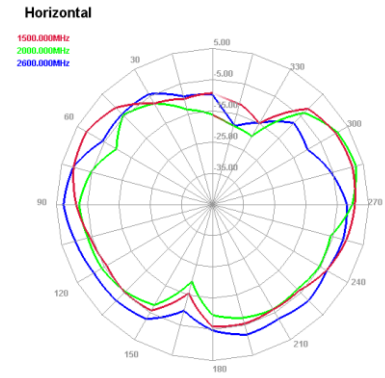


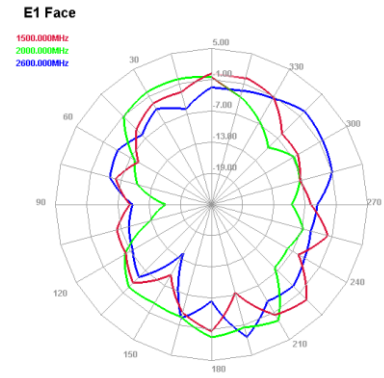


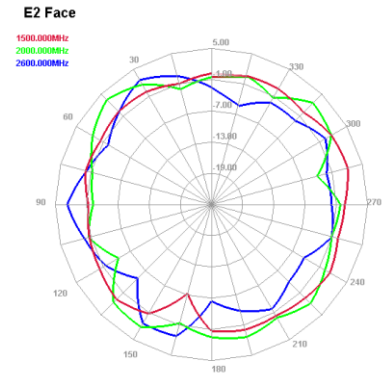


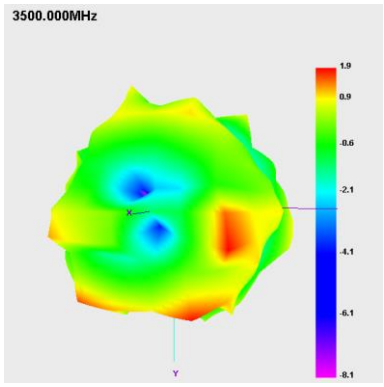


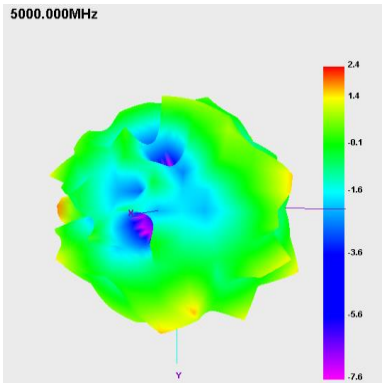


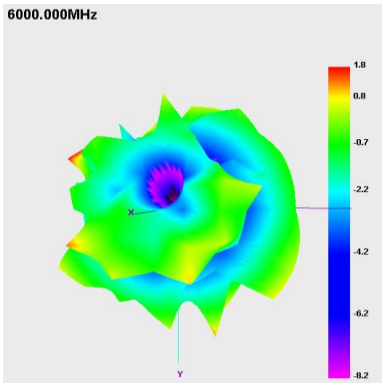


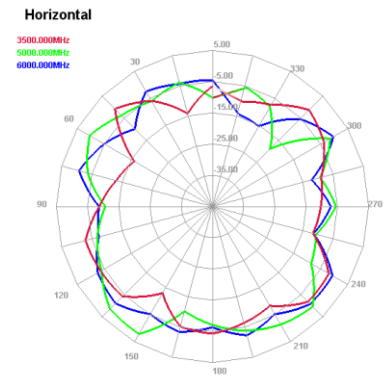


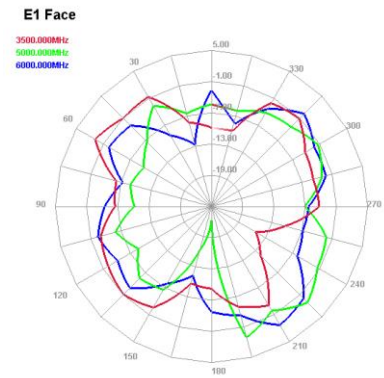


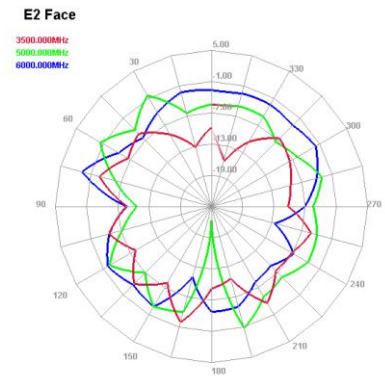






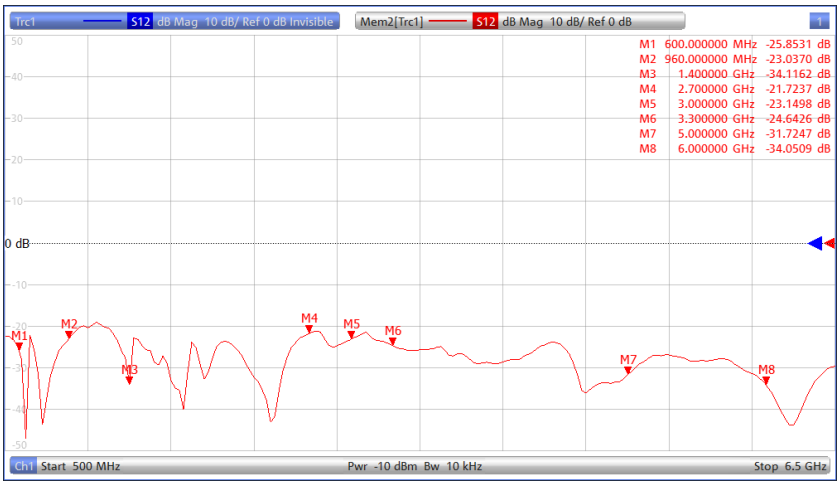






3.3 Isolation

Isolation of cables 1 and 2



4. Antenna Drawing

