



Quectel Antenna Specification

Product No.: Y0HRY00A0AA

Version: 1.0

Date: 2024-04-12

Product Name: 4G External Antenna

Main Specification:

Frequency Range: 700-960MHz, 1710-2690MHz

Size: 209.23 × 42.0 × 13.0 mm

Efficiency: Max. 81%

Comply with RoHS Environmental Standards

IP65

1 Specifications

Test status: Free space - single antenna

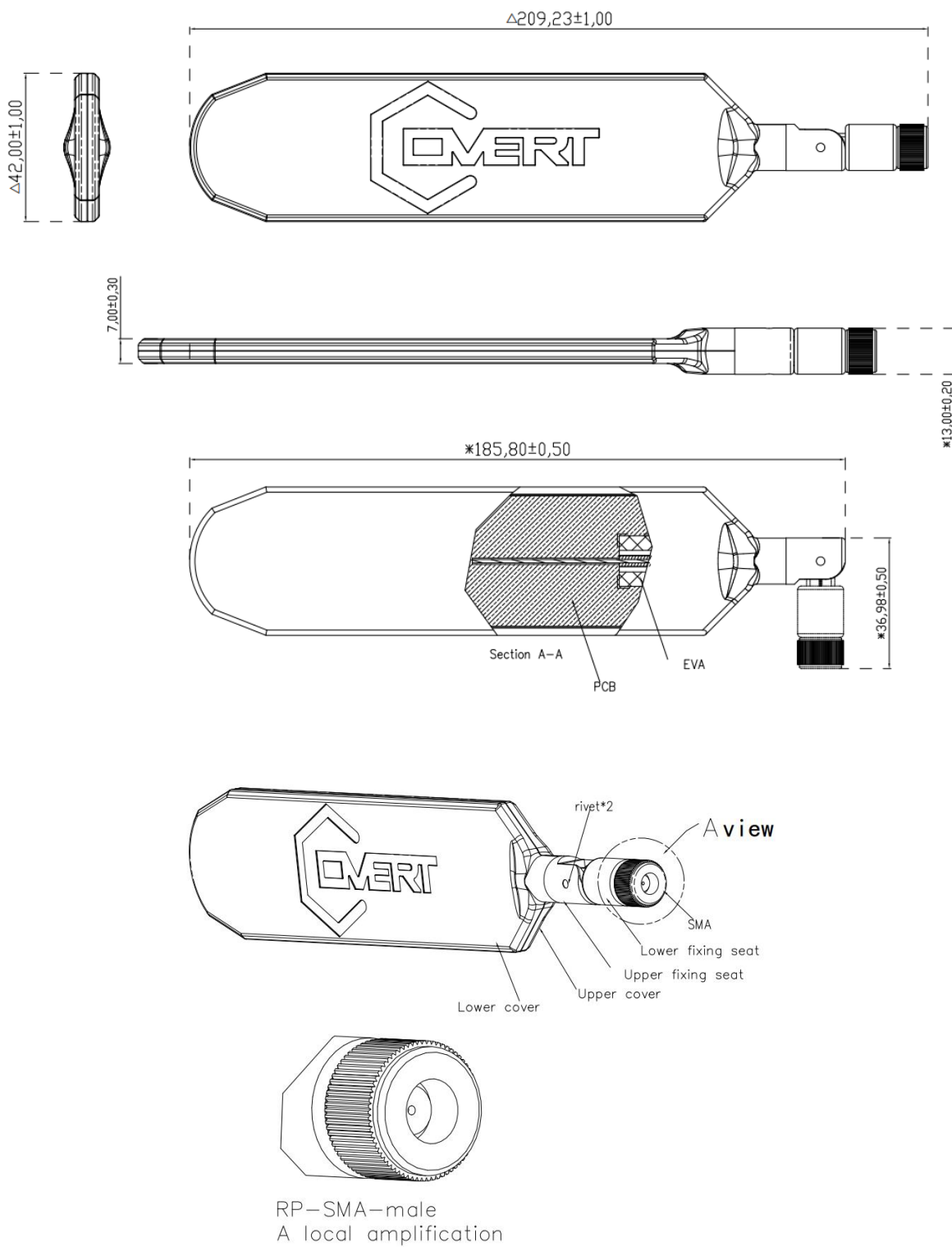
1.1. Electrical properties

Electrical Specifications	
Frequency Range	700-960MHz, 1710-2690MHz
Impedance	50 Ω
Polarization mode	Linear polarization
Radiation pattern	Omnidirectional
VSWR	≤ 5.1
Peak Gain	≤ 3.5 dBi

1.2. Mechanical and Environmental Characteristics

Mechanical	
Antenna Size	209.23 × 42.0 × 13.0 mm
Housing Material & Color	PC/ABS & Black
Connector Type	RP-SMA-Male
Weight	about 40.17 g
Installation Type	Nut locking
Environment	
Operating Temperature	-40 °C to +85 °C
Storage Temperature	-40 °C to +85 °C
Waterproof Level	IP65
Comply with Environmental Standards	RoHS

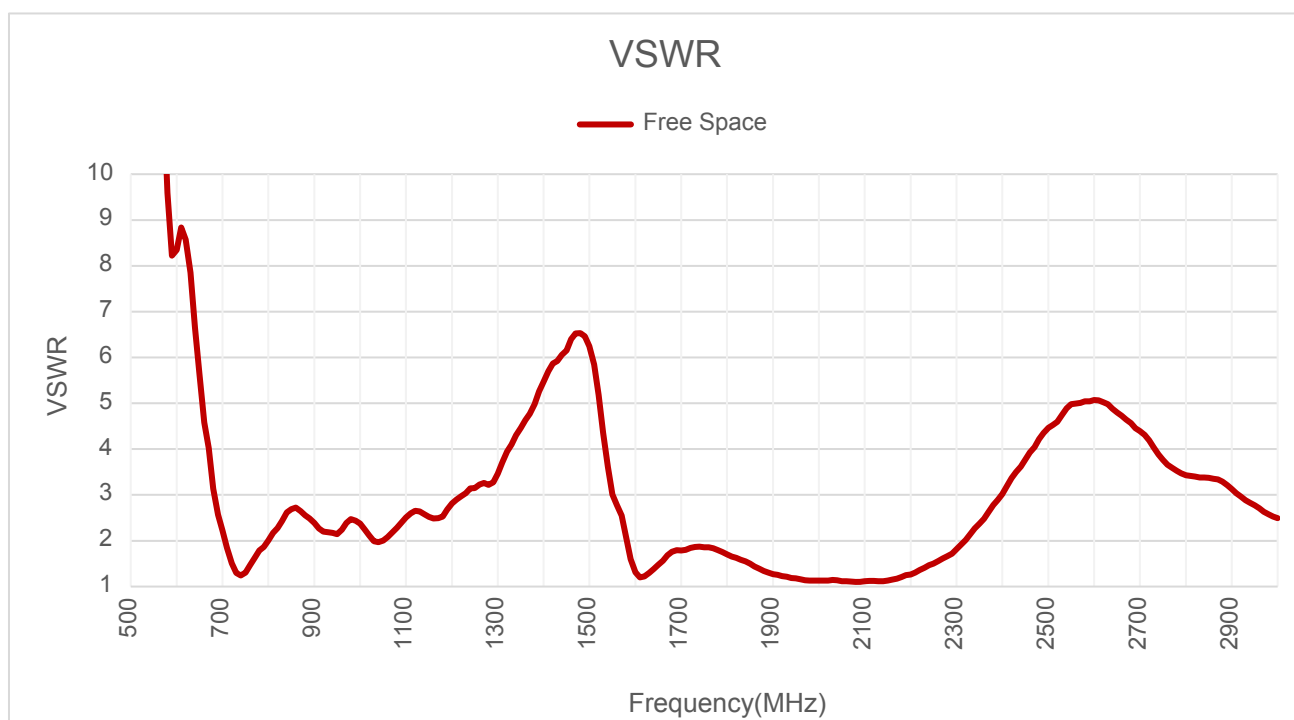
2 Drawing



3 Detailed Performance Parameters

3.1. S Parameter Test

3.1.1. VSWR

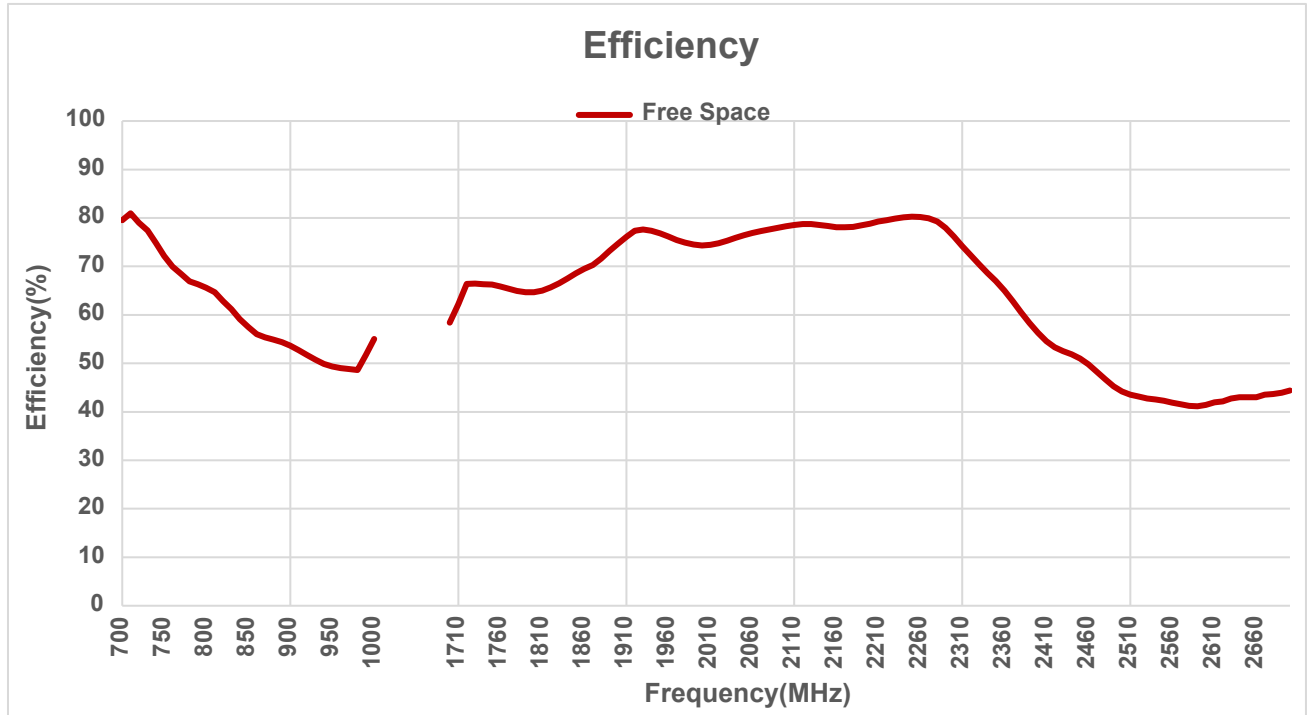


VSWR

F (MHz)	600	630	710	830	900	960	1440	1710	1740	1880
VSWR	-	-	1.8	2.4	2.4	2.2	-	1.8	1.9	1.3
F (MHz)	1950	2140	2350	2450	2600	2690	4700	5000	5500	6000
VSWR	1.2	1.1	2.4	3.8	5.1	4.5	-	-	-	-

3.2. Radiation Performance Test

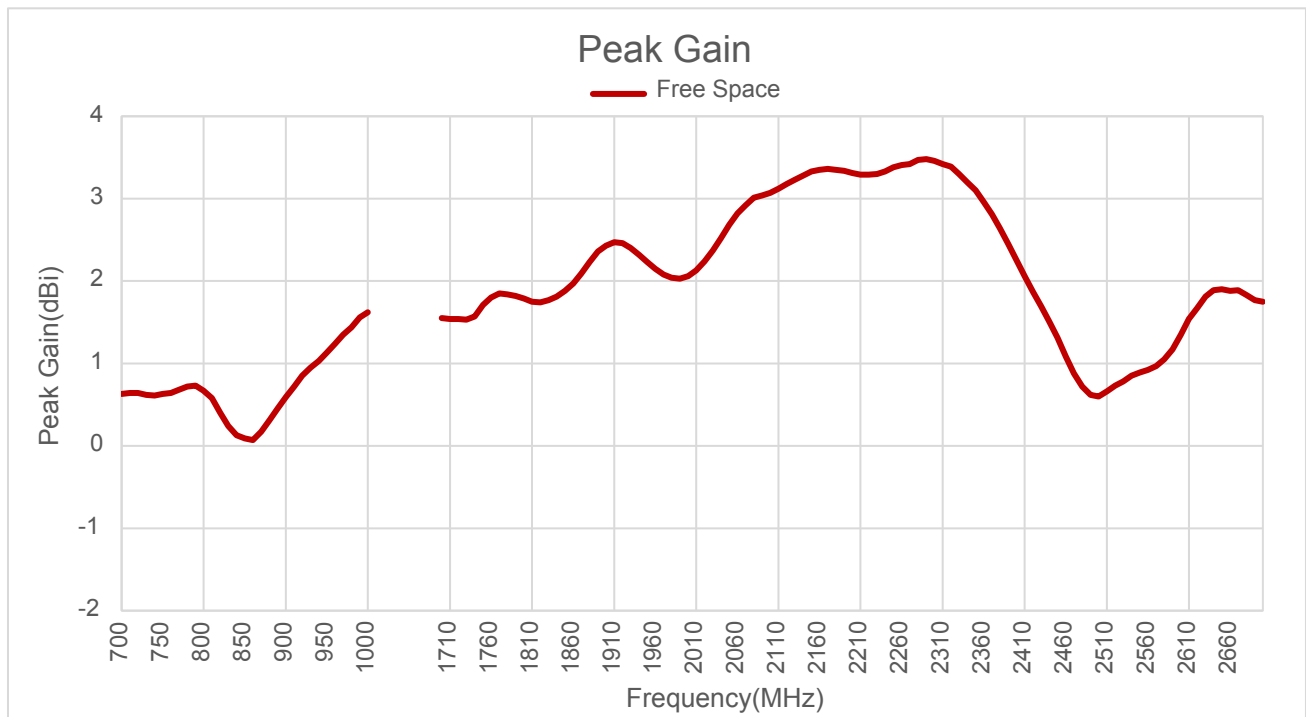
3.2.1. Efficiency



Efficiency (%)

F (MHz)	600	630	710	830	900	960	1440	1710	1740	1880
Efficiency(%)	-	-	81.0	61.2	53.6	49.0	-	62.2	66.4	71.6
F (MHz)	1950	2140	2350	2450	2600	2690	4700	5000	5500	6000
Efficiency(%)	76.9	78.5	67.0	51.0	41.4	43.9	-	-	-	-

3.2.2. Peak Gain

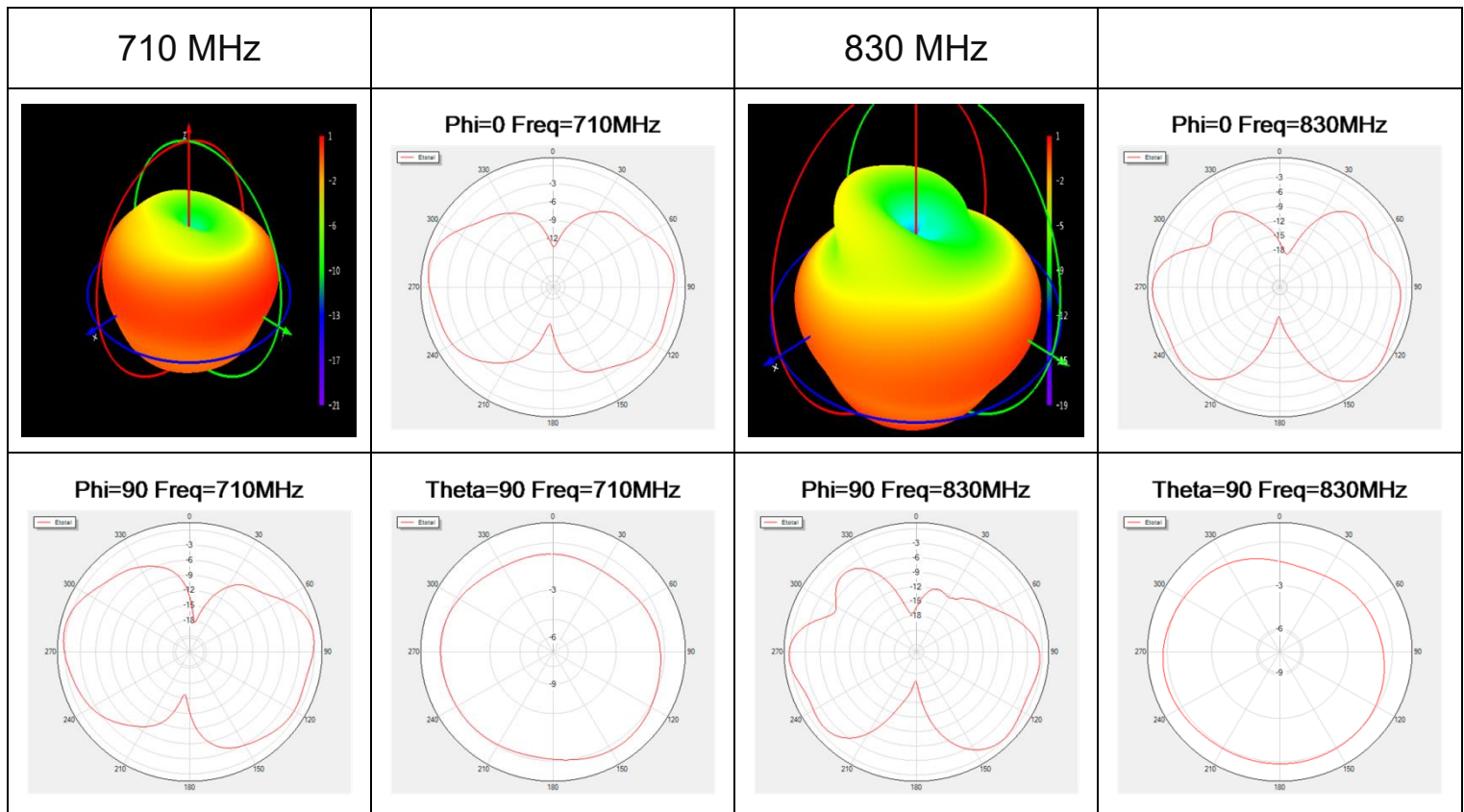
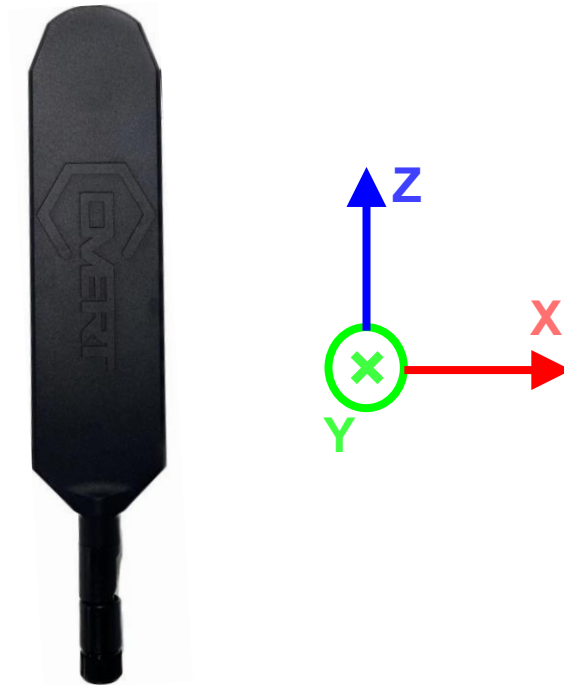


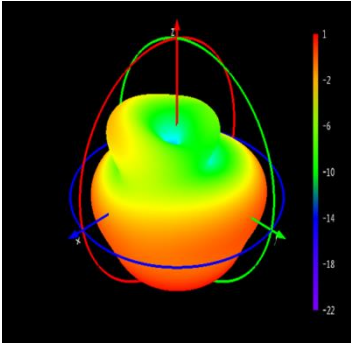
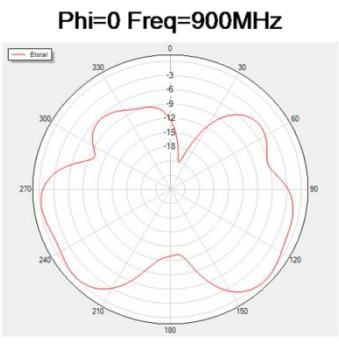
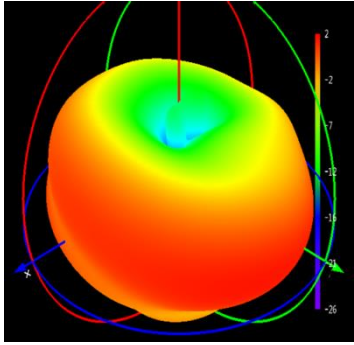
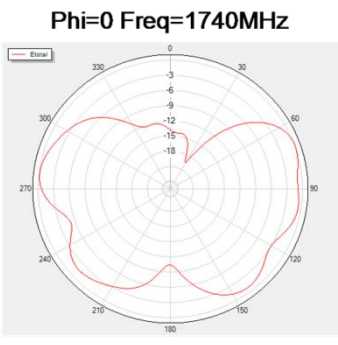
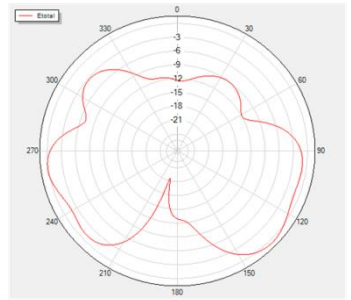
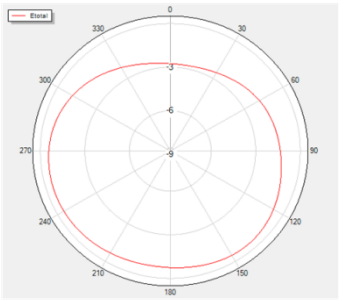
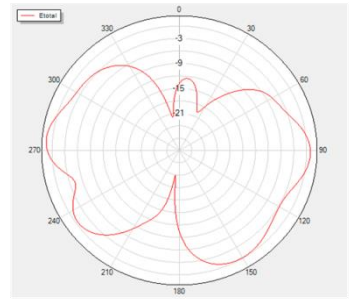
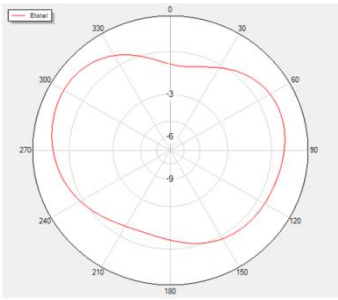
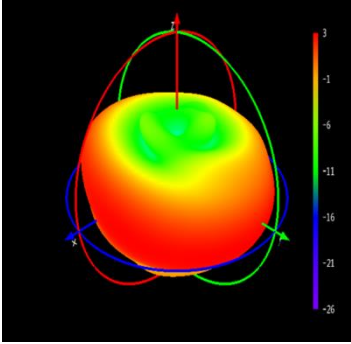
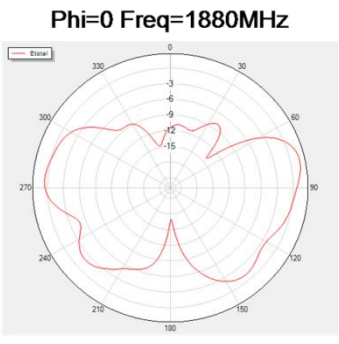
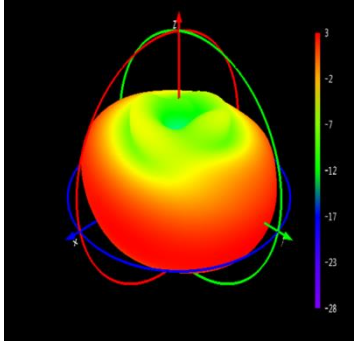
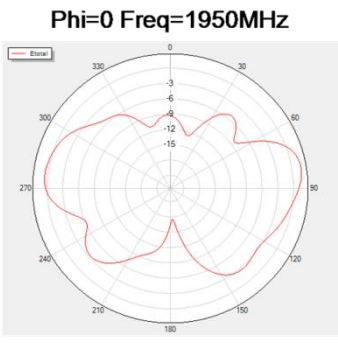
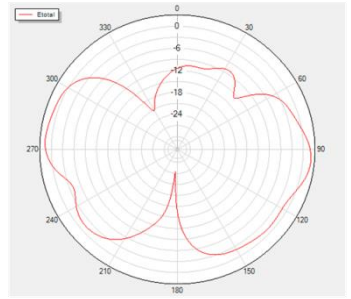
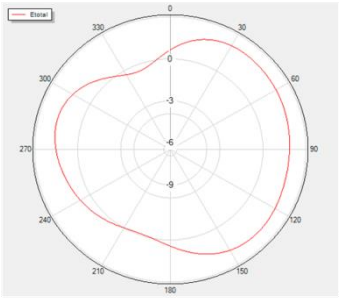
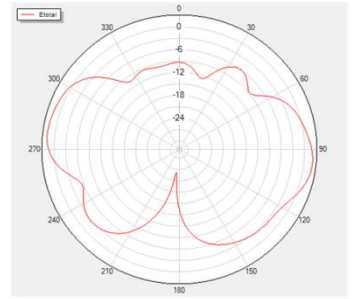
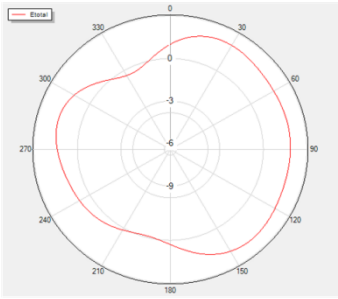
Peak Gain (dBi)

F (MHz)	600	630	710	830	900	960	1440	1710	1740	1880
Peak Gain (dBi)	-	-	0.6	0.2	0.6	1.2	-	1.5	1.6	2.2
F (MHz)	1950	2140	2350	2450	2600	2690	4700	5000	5500	6000
Peak Gain (dBi)	2.2	3.3	3.1	1.3	1.4	1.8	-	-	-	-

3.2.3. 2D Radiation Pattern

- Test status: Free space - single antenna
- Test Lab: SZ-S-1



900 MHz		1740 MHz	
			
			
1880 MHz		1950 MHz	
			
			
2140 MHz		2350 MHz	

