Product Datasheet

CW-WZ-0053

5G External Antenna

Key Features

Frequency: 617-960 MHz/1575-2700MHZ/3300-3800MHZ/5125-5925MHZ

SMA Male Connector

External Rubber

Dimensions 221*27 mm

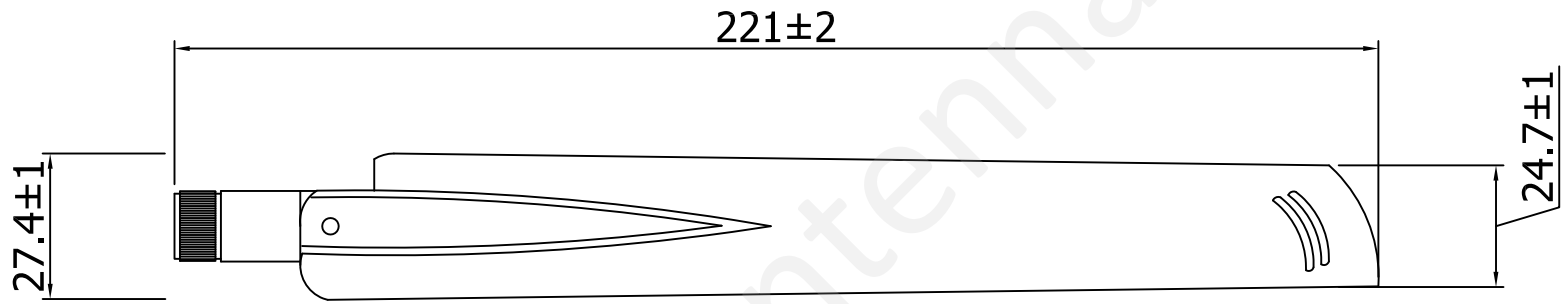
1. Antenna Electrical Characteristics

Band (MHz)				
Frequency (MHz)	617-960MHZ	1575-2700MHZ	3300-3800MHZ	5125-5925MHZ
VSWR	2.5:1	2.5:1	2.5:1	2:1
Efficiency (%)	68.79%	65.45%	61.66%	51.29%
Peak Gain (dBi)	3.53	3.57	2.84	5.02
Impendance (Ohm)	50			
Polarisation	Vertical			
Max. Input Power (W)	10			
Connector Type	SMA male			

2. Material and environmental characteristics

Material of PCB	FR4
Material of Plastic	PC+PBT/ABS
Cable Type	RG178
Connector Type	SMA male
Dimensions (mm)	221*27
Antenna color	Black
Operation Temperature	-40 to +80
Storage Temperature	-40 to +80
Antenna Storage life(year)	10
Substance Compliance	ROHS

REV	Date	Description
X1	2021/08/10	New issue



Specification(Free Test):

Frequency Range: 617-960MHZ/1575-2700NHZ
3300-3800MHZ/5125-5925MHZ

Impedance: 50Ω

V.S.W.R: ≤2.5/2.5/2.5/2

NO	Name	Description	Q'TY	Remark
5	Rod sleeve	Black ABS	1	
4	Fixed seat	Black PC+PBT	1	
3	PCB	FR4	1	
2	Cable	RG 178 single silver wire	1	
1	Connector	SMA male	1	

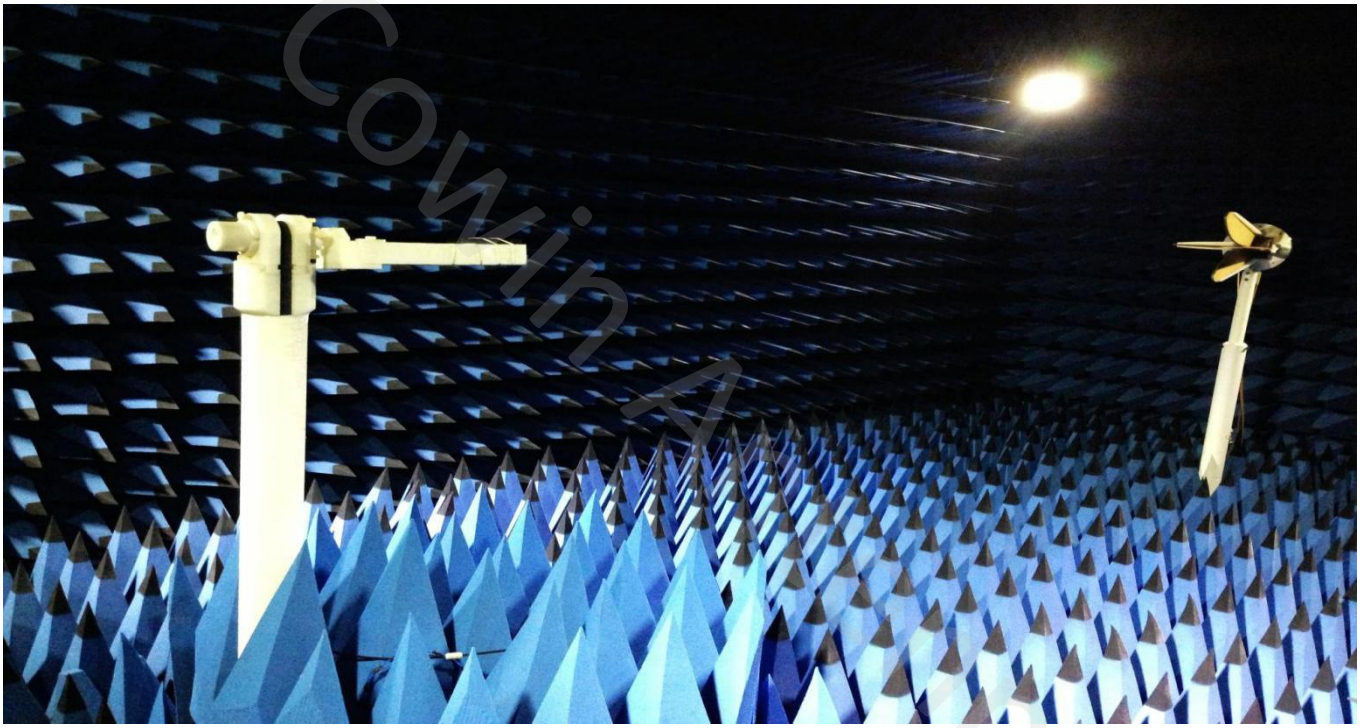
XX.	±5.0	Approved	Customer		
X.	±3.0		Part NO.		
.X	±1.0	Checked	Part name	External antenna	
.XX	±0.2		CW P/NO.	CW-WZ-0053	
.XXX	±0.1	Drawing	REV	Unit	File :
			X1	m/m	Sheet : 1/1

Cowin Antenna

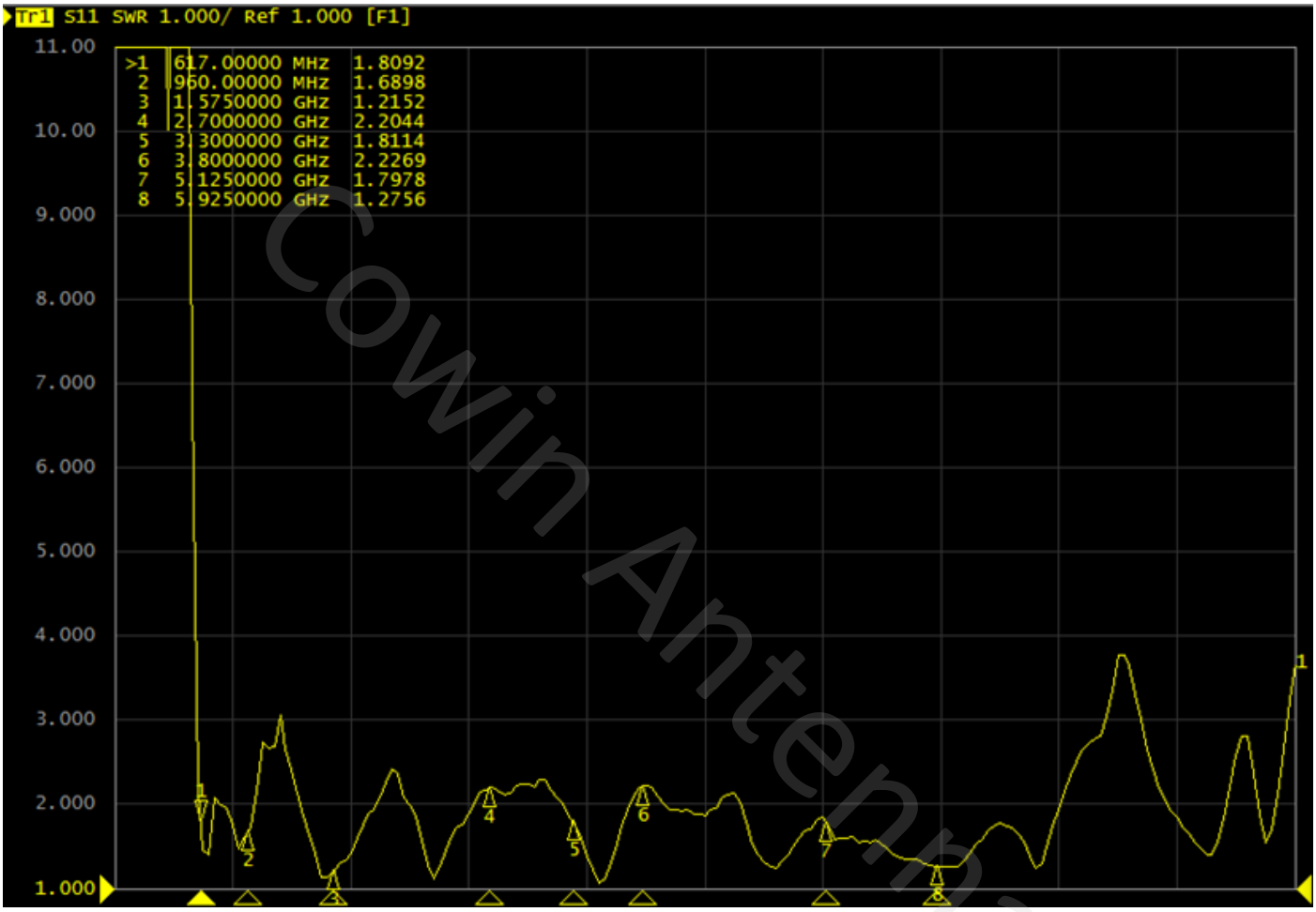
4. Antenna test parameters

Antenna Measurement Conditions:

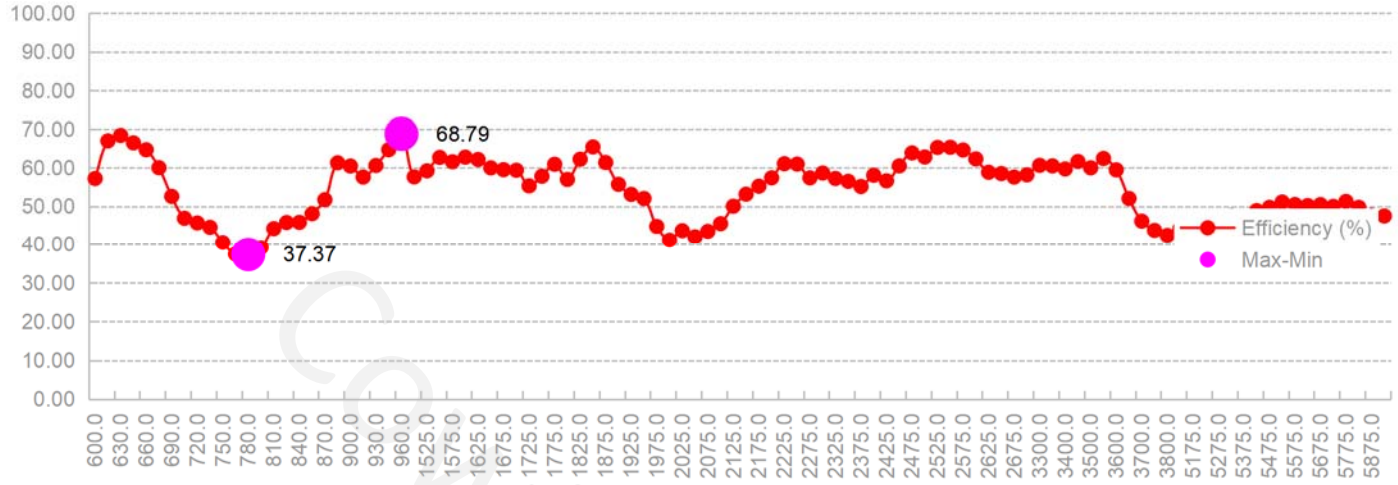
Mounted on Ground Plane of 280 x 80 mm
Measured in Certified 3D Anechoic Chamber
The network analyzer is Agilent 5071c
The comprehensive tester is Agilent cmv500



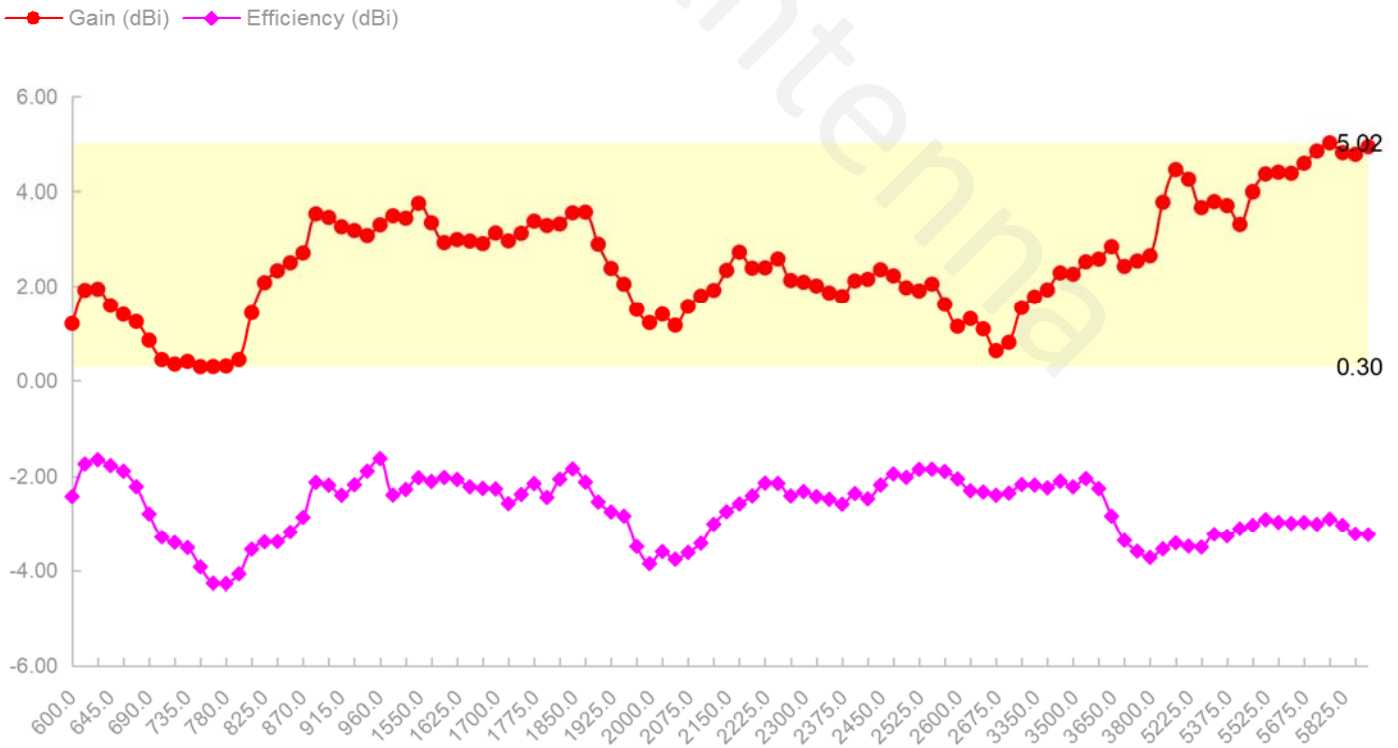
4.1 VSWR



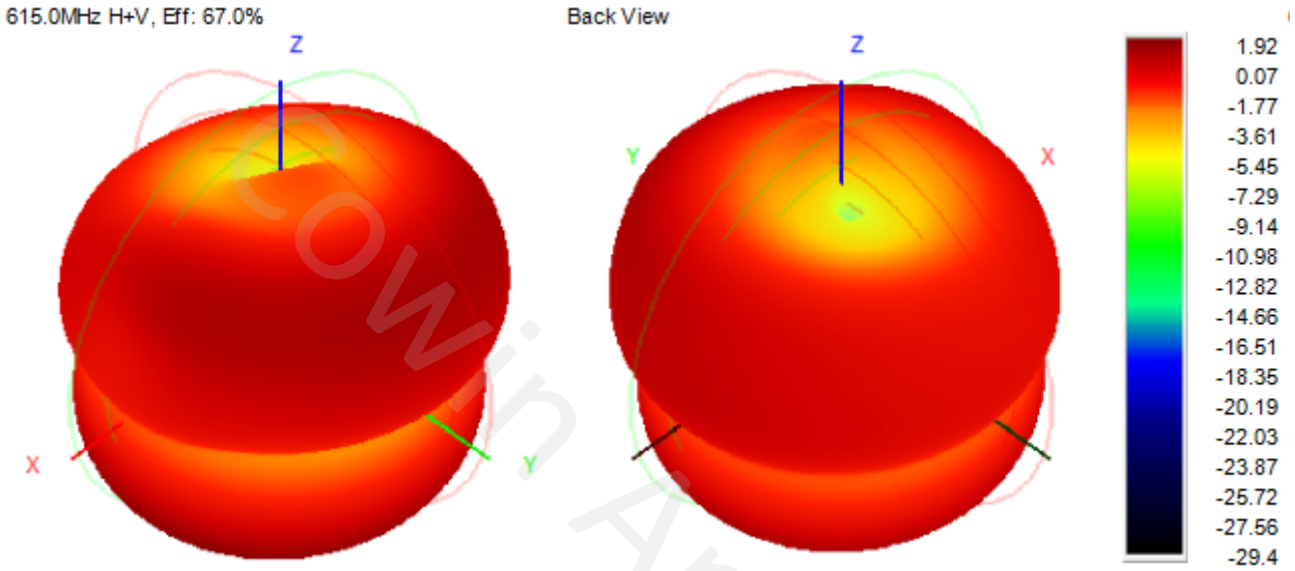
4.2 Efficiency

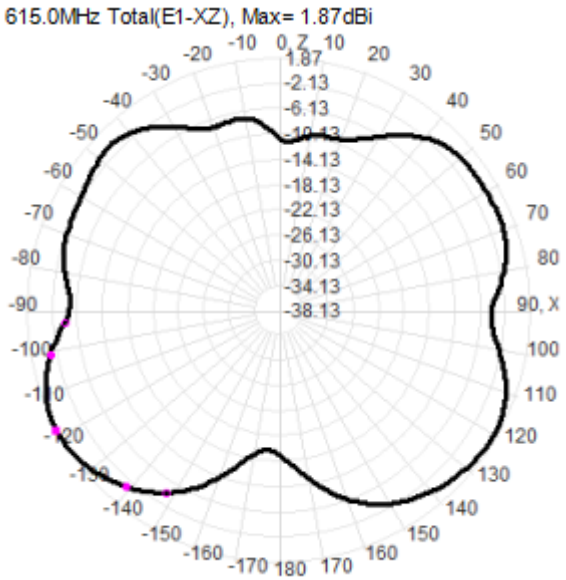


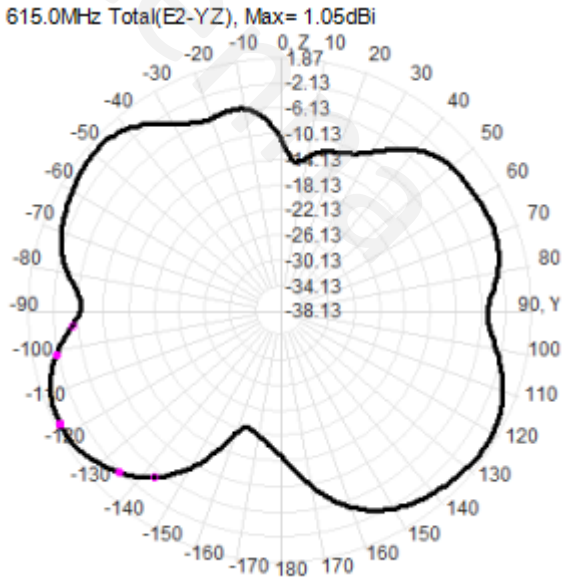
4.3 Peak gain



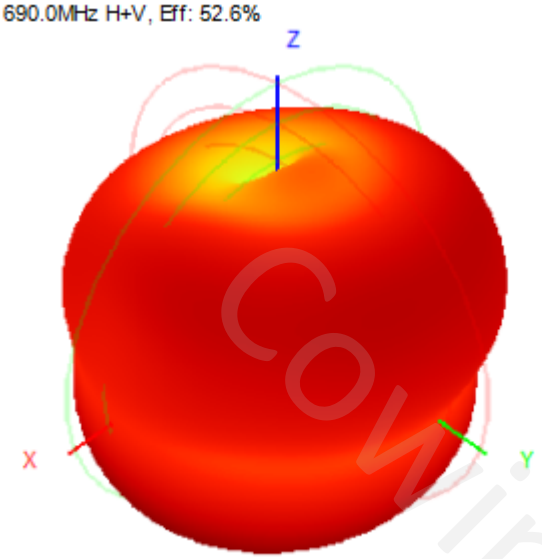
4.4 3D&2D Radiation Patterns



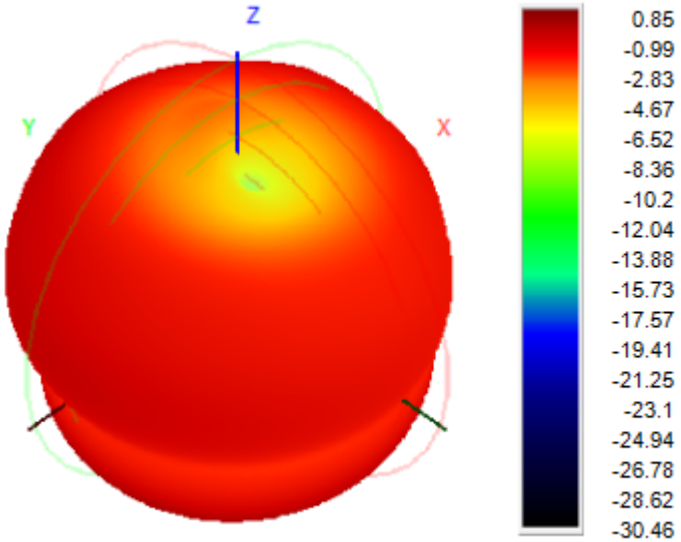




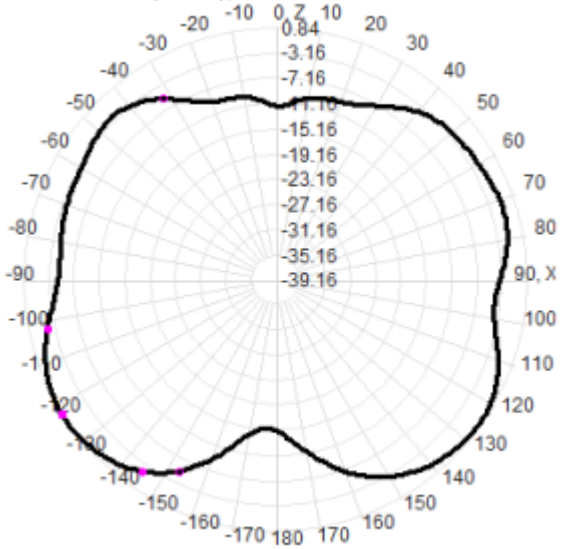
690.0MHz H+V, Eff: 52.6%



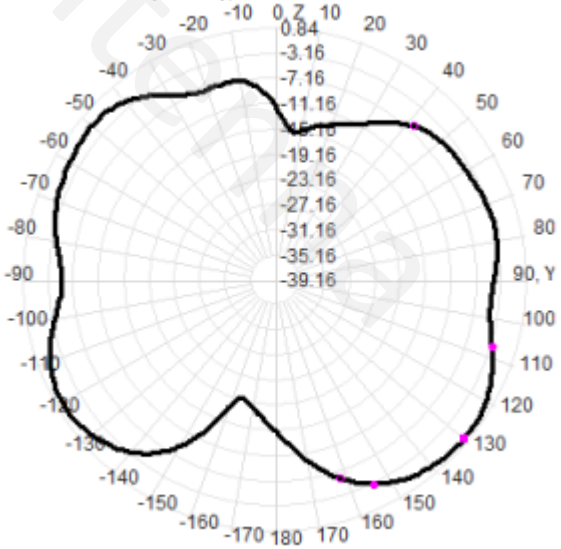
Back View



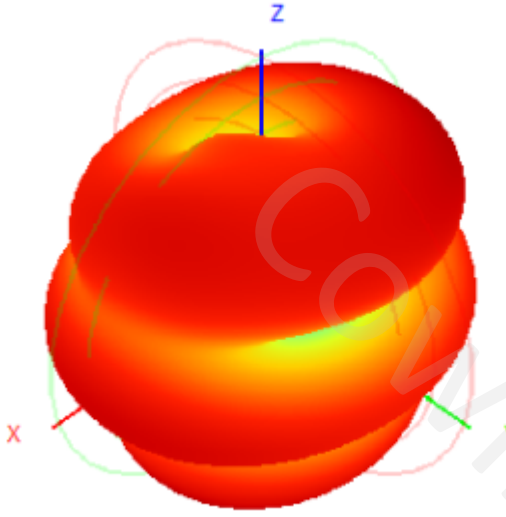
690.0MHz Total(E1-XZ), Max= 0.84dBi



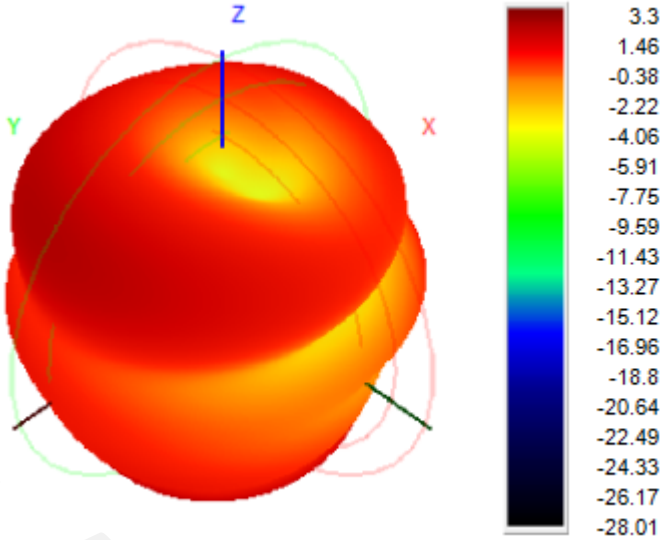
690.0MHz Total(E2-YZ), Max= -0.11dBi



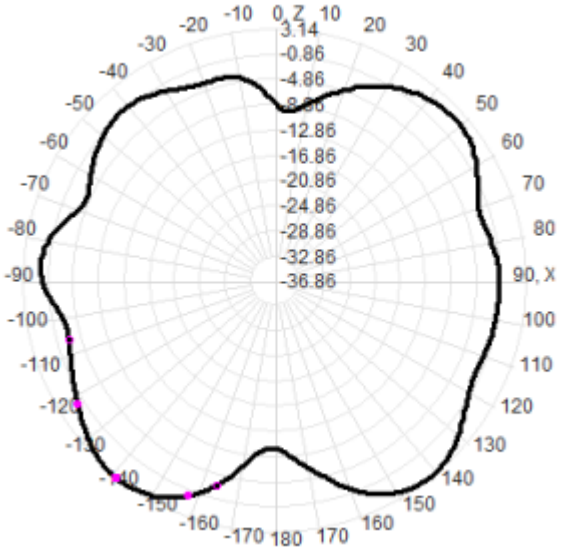
960.0MHz H+V, Eff: 68.8%



Back View



960.0MHz Total(E1-XZ), Max= 3.14dBi



960.0MHz Total(E2-YZ), Max= 2.31dBi