Product Datasheet

CW-NZ-0336

4G Internal Antenna

Cowin Antenna

Key Features

Frequency: 698-960/1710-2700MHz

Connector: SMA Male

Cable Type: RF1.37 Low loss cable/L=160mm

Dimensions: 50.9*13.8*0.1mm

1. Antenna Electrical Characteristics

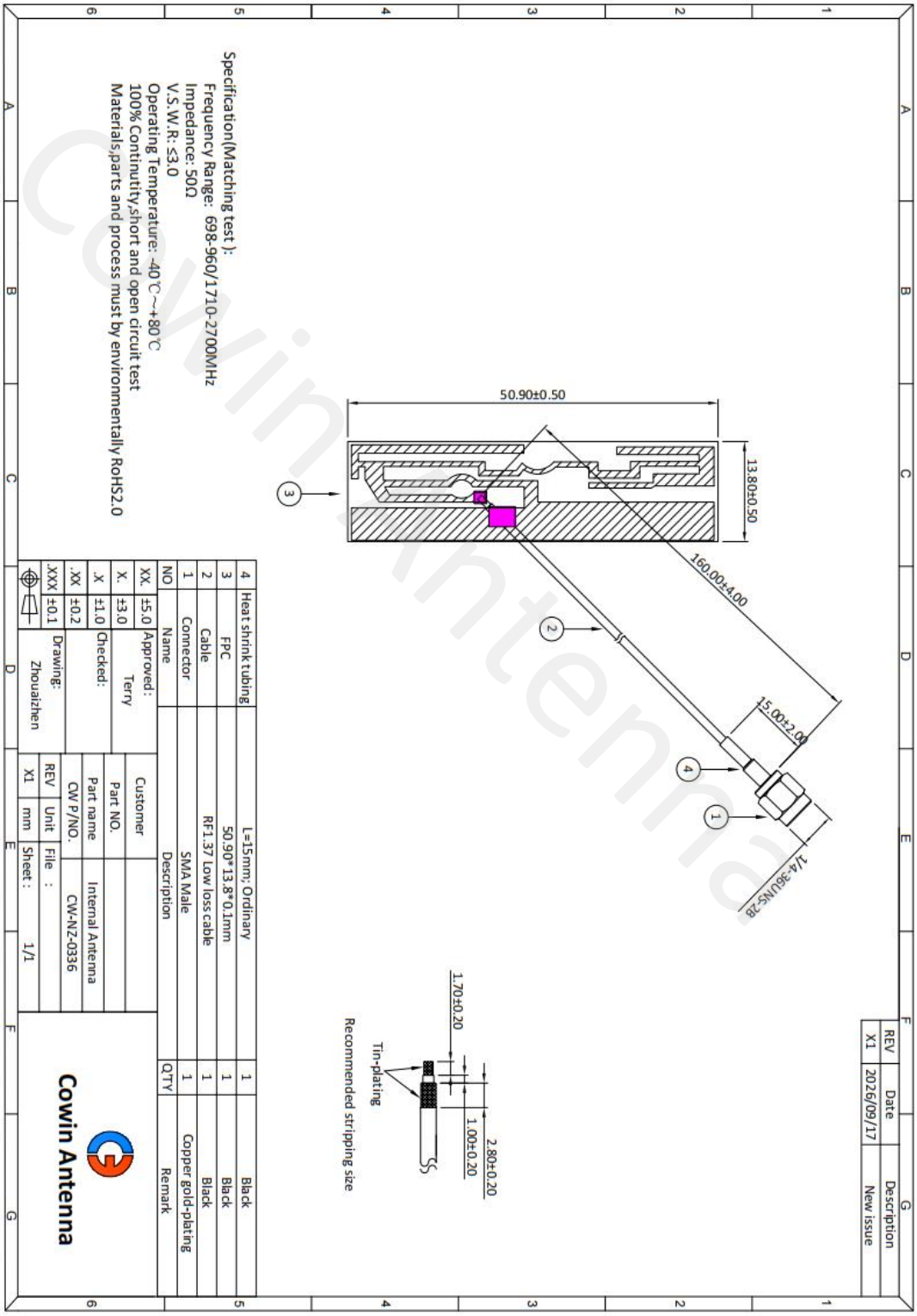
Band (MHz)	
Frequency (MHz)	698-960/1710-2700
VSWR	≤3.0
Efficiency (%)	44.07/70.58
Peak Gain (dBi)	1.64/3.95
Impedance (Ohm)	50
Polarisation	Vertical
Max. Input Power (W)	10

2. Material and environmental characteristics

External Structure	N/A
Inner Structure	FPC
Cable Type	RF1.37 Low loss cable
Connector Type	SMA Male
Dimensions (mm)	50.9*13.8*0.1
Antenna Colour	Black
Operation Temperature	-40℃ to +80℃
Storage Temperature	-40℃ to +80℃
Antenna Storage Life(year)	10
Substance Compliance	RoHS2.0

Cowin Antenna

3. Antenna drawing



4. Antenna test parameters

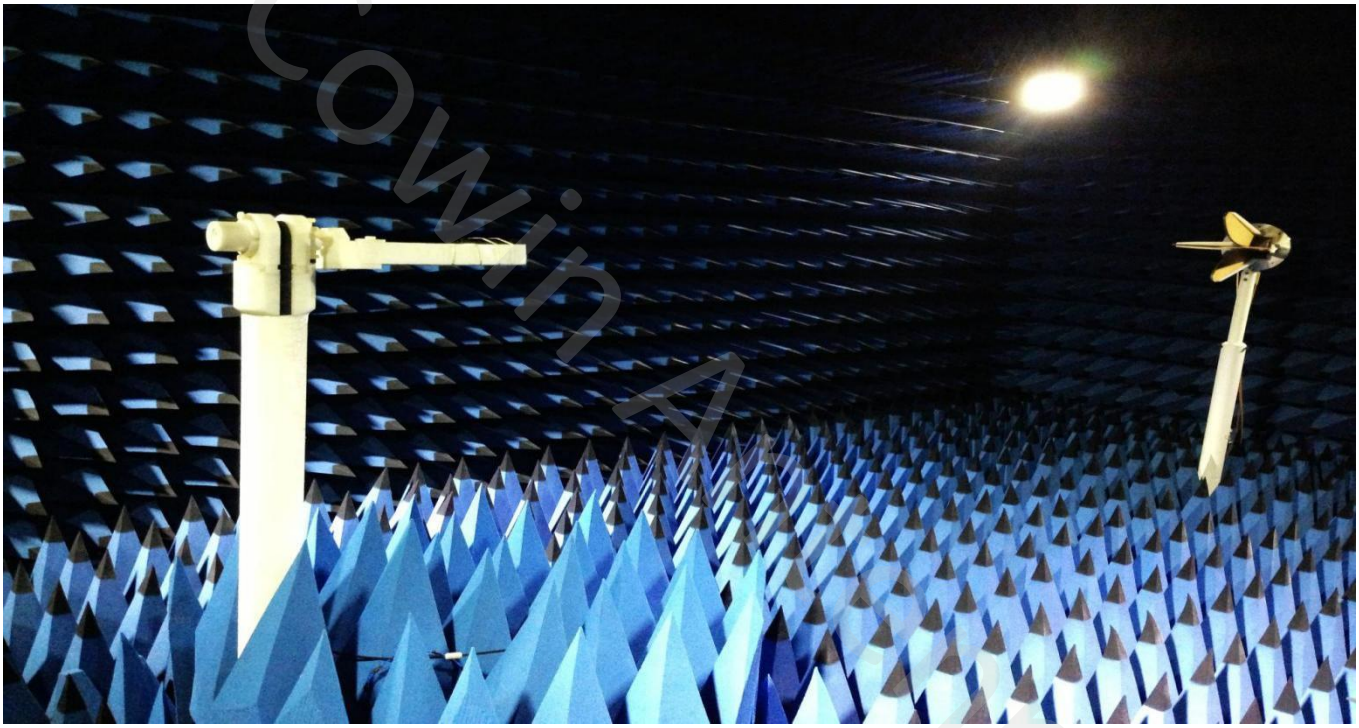
Antenna Measurement Conditions:

Mounted on Ground Plane of 280 x 80 mm

Measured in Certified 3D Anechoic Chamber

The network analyzer is Agilent 5071c

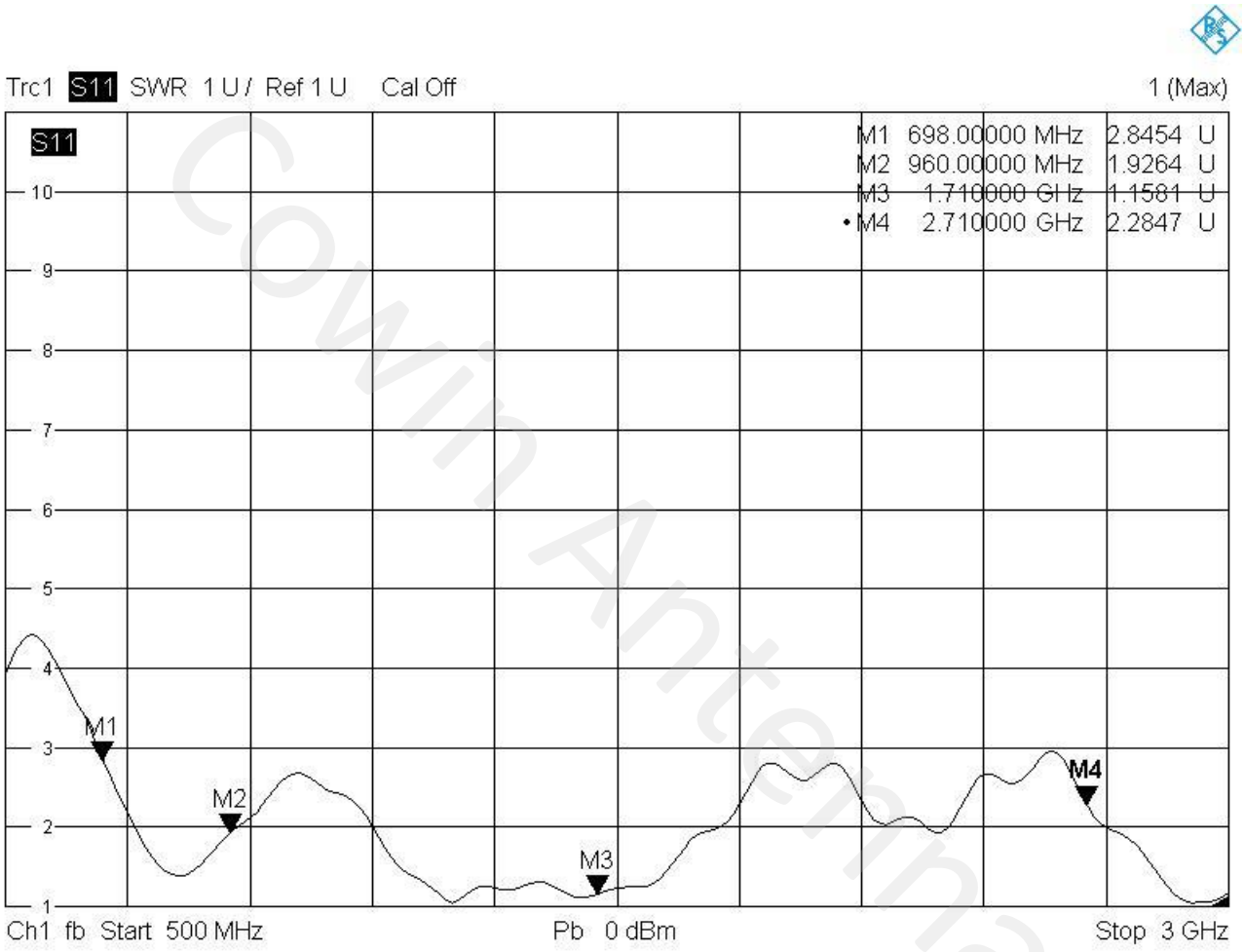
The comprehensive tester is Agilent cmv500







4.1 VSWR



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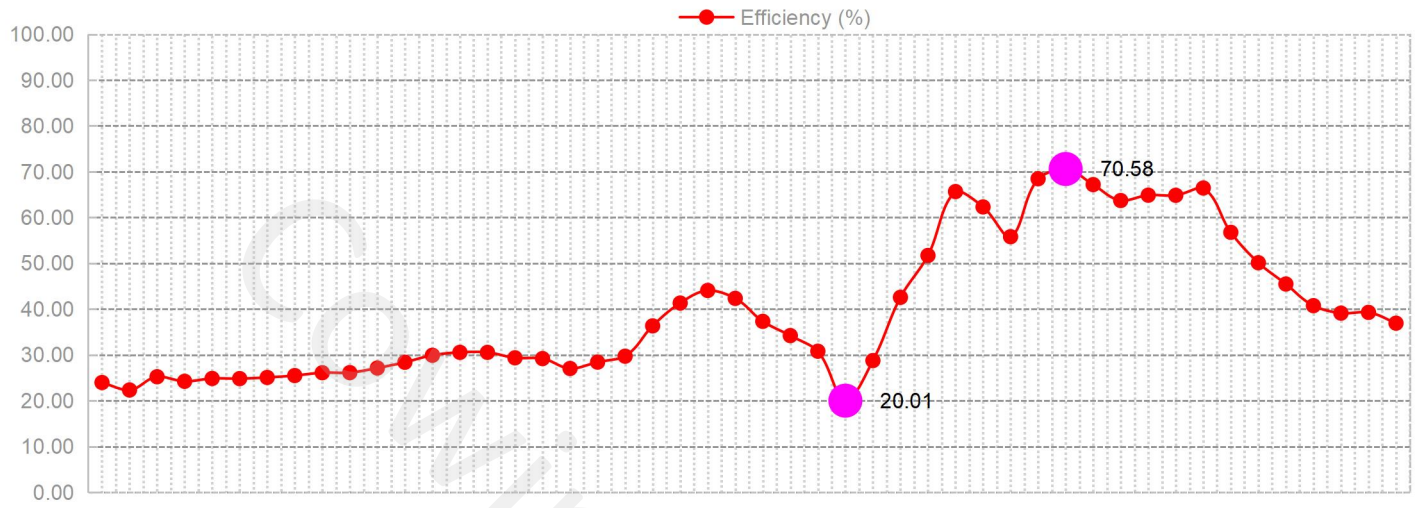
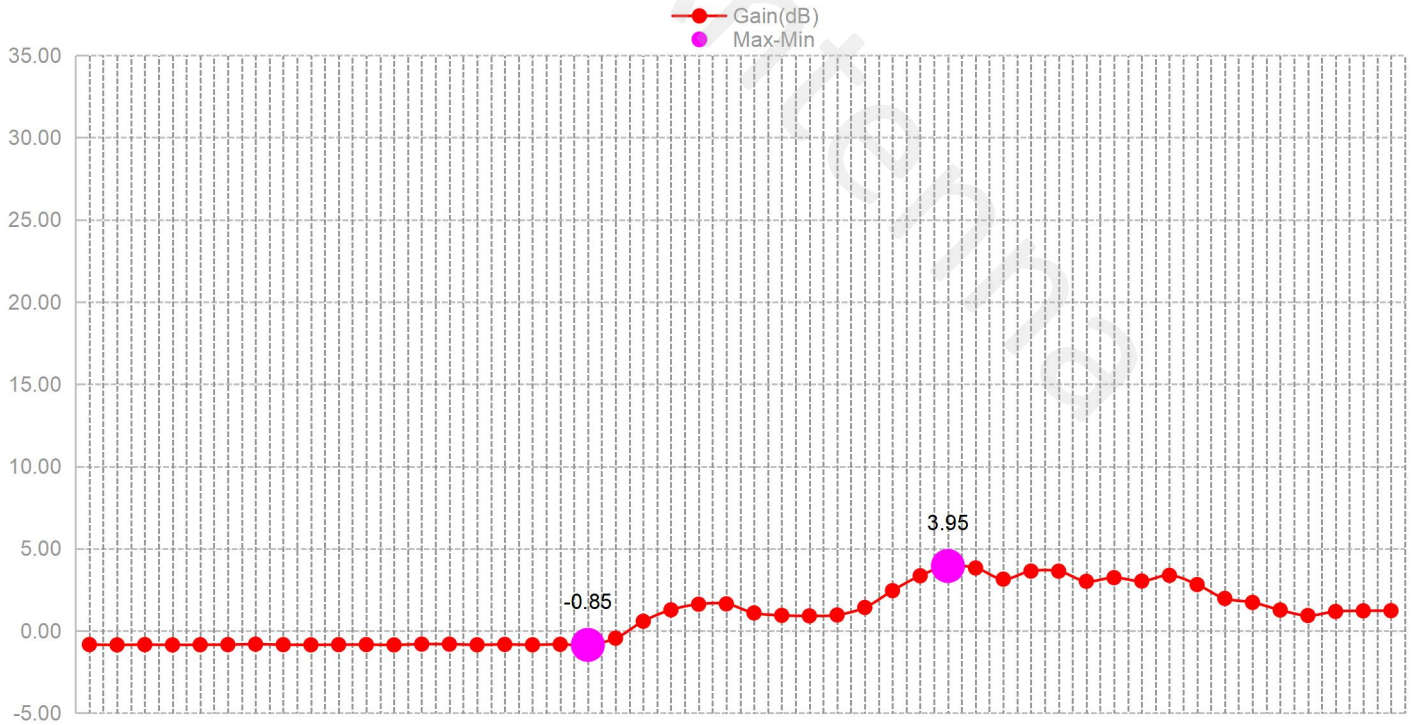
4.2 Efficiency



4.3 Peak gain



Gain Antenna

4.4 Data summary

Frequency (MHz)	Gain (dBi)	Efficiency (%)
700.0	-0.83	23.97
710.0	-0.85	22.35
720.0	-0.84	25.24
730.0	-0.85	24.24
740.0	-0.84	24.86
750.0	-0.84	24.83
760.0	-0.81	25.08
770.0	-0.84	25.50
780.0	-0.85	26.12
790.0	-0.84	26.14
800.0	-0.83	27.14
810.0	-0.85	28.40
820.0	-0.81	29.92
830.0	-0.81	30.56
840.0	-0.85	30.56
850.0	-0.82	29.37
860.0	-0.85	29.20
870.0	-0.82	27.04
880.0	-0.85	28.42
890.0	-0.45	29.72
900.0	0.58	36.34
910.0	1.28	41.32
920.0	1.62	44.07
930.0	1.64	42.34
940.0	1.09	37.32
950.0	0.94	34.22
960.0	0.91	30.80

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Frequency (MHz)	Gain (dBi)	Efficiency (%)
1710.0	0.97	20.01
1760.0	1.42	28.77
1810.0	2.45	42.58
1860.0	3.35	51.71
1910.0	3.95	65.65
1960.0	3.83	62.30
2010.0	3.15	55.80
2060.0	3.63	68.45
2110.0	3.63	70.58
2160.0	3.01	67.17
2210.0	3.24	63.70
2260.0	3.03	64.86
2310.0	3.38	64.84
2360.0	2.82	66.43
2410.0	1.97	56.75
2460.0	1.73	50.12
2510.0	1.27	45.48
2560.0	0.93	40.75
2610.0	1.18	39.12
2660.0	1.22	39.28
2710.0	1.23	39.93

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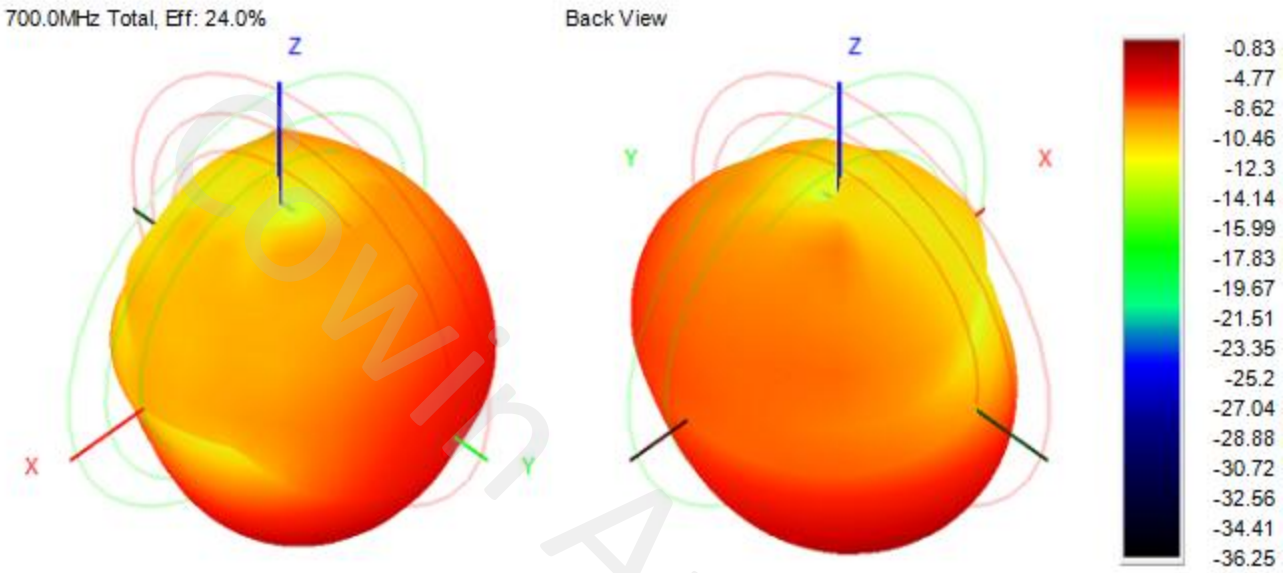
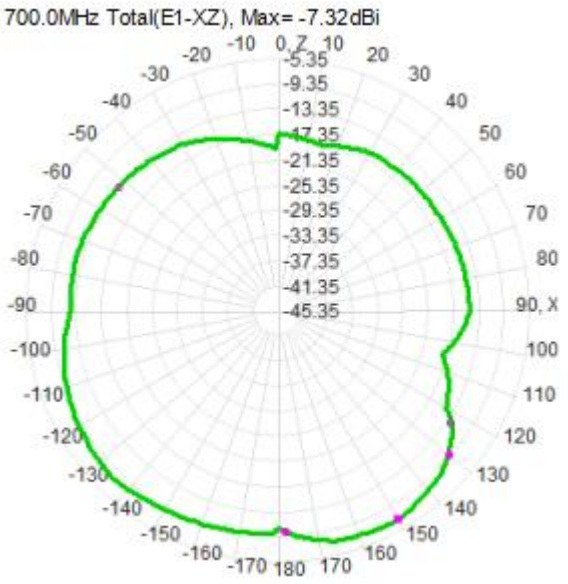
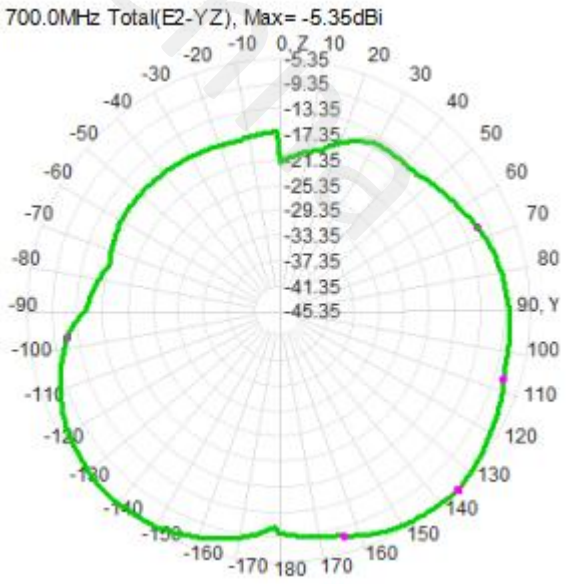
4.5 3D&2D Radiation Patterns







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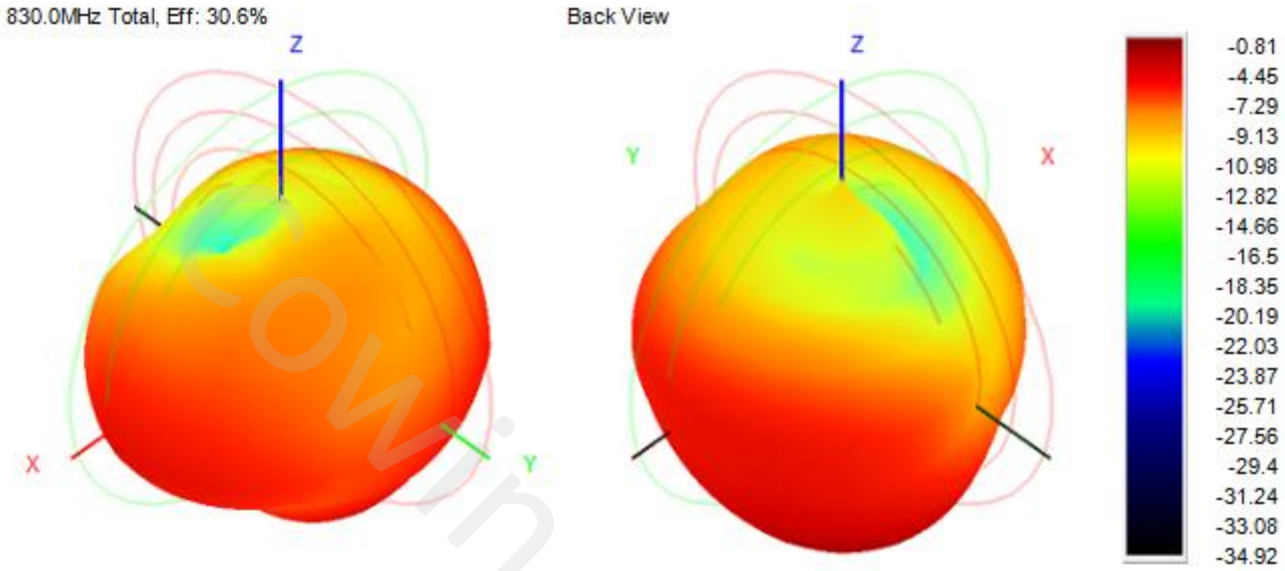

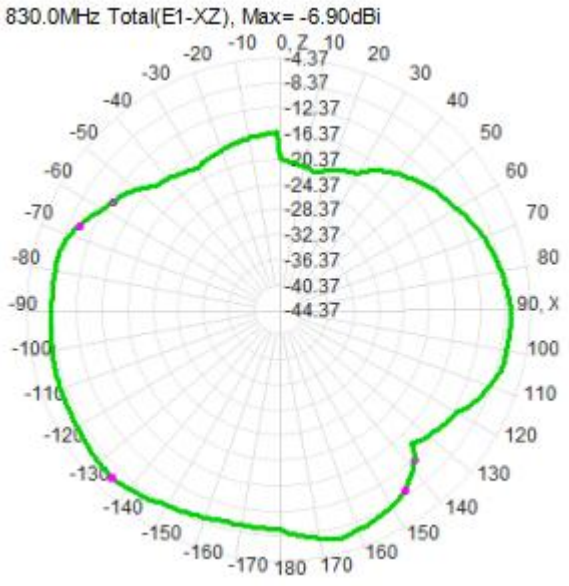

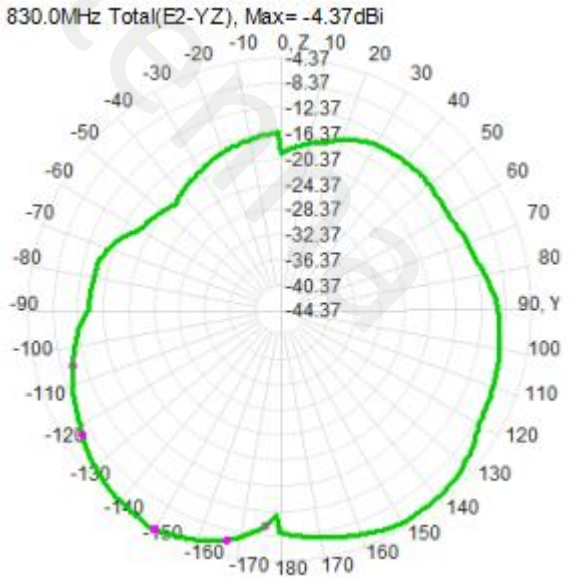

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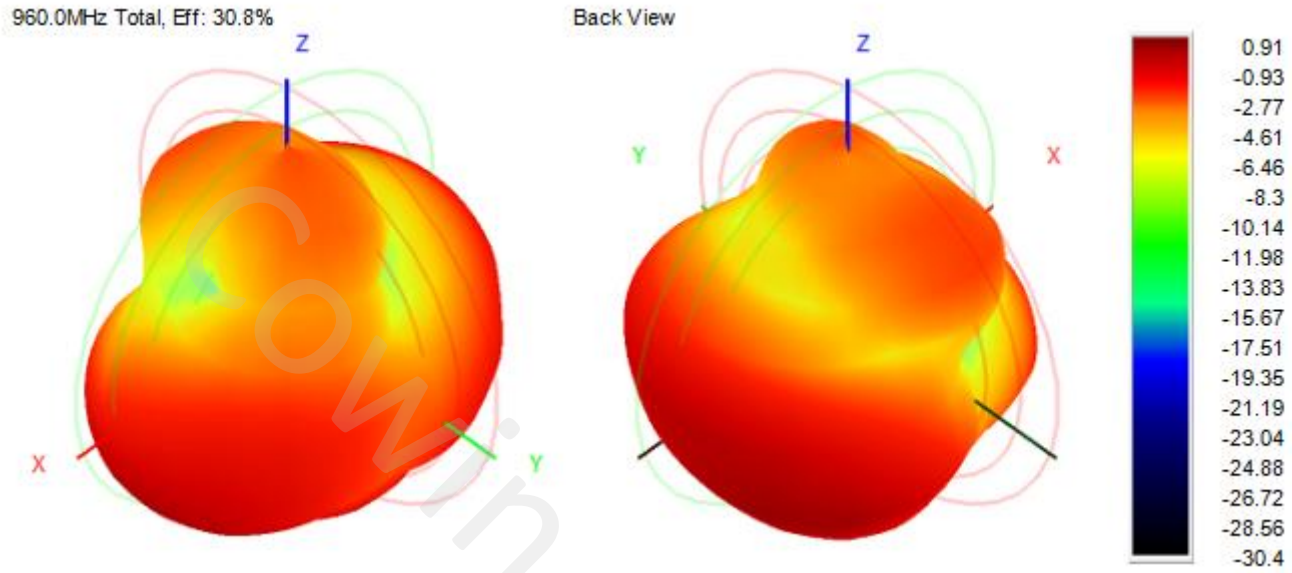

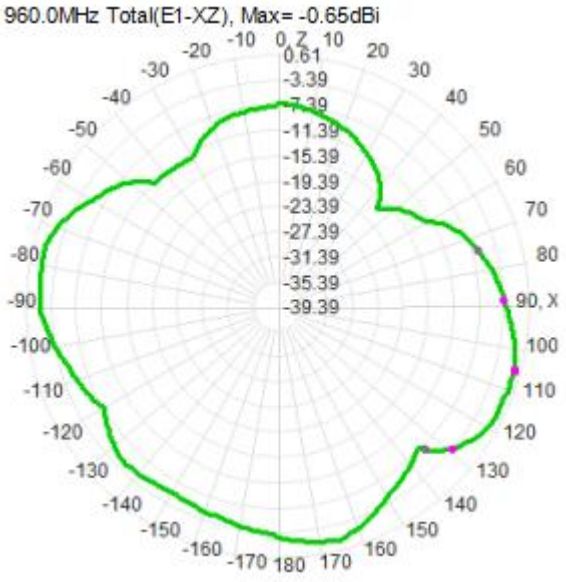

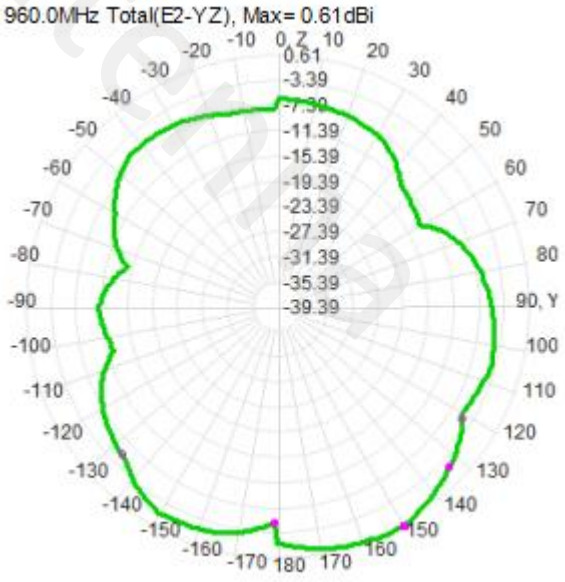

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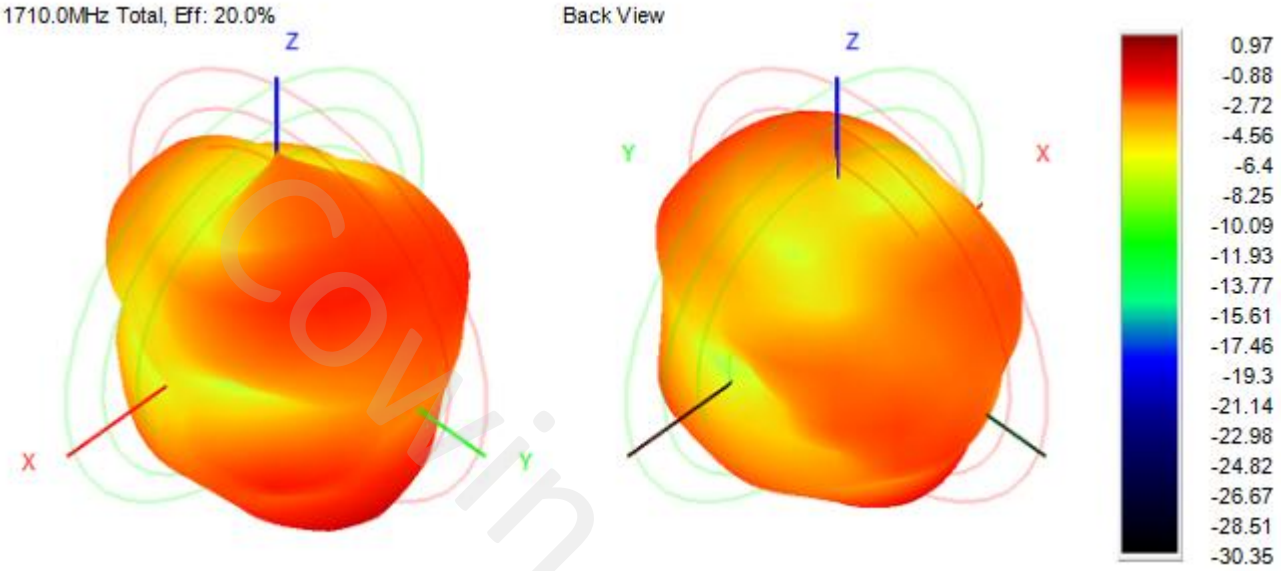

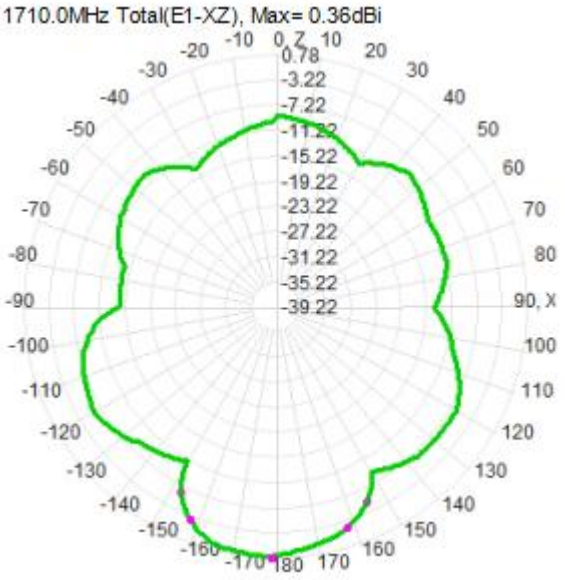

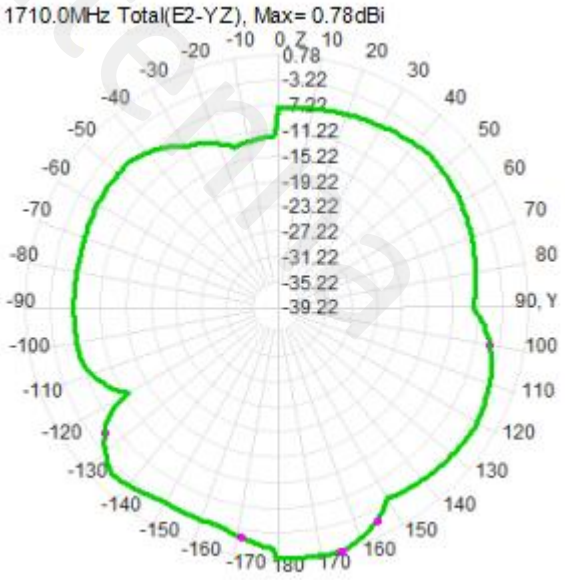

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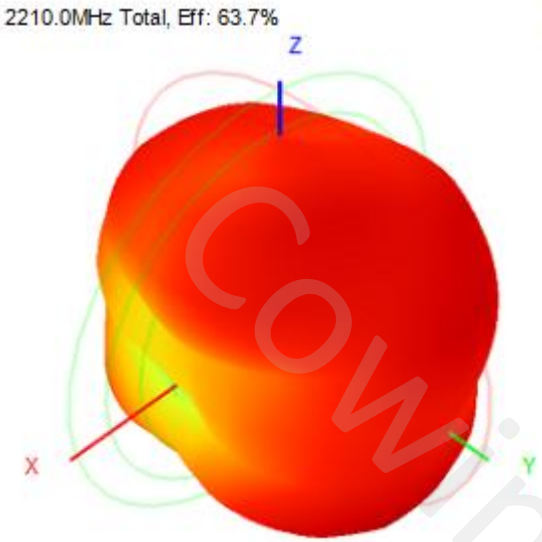

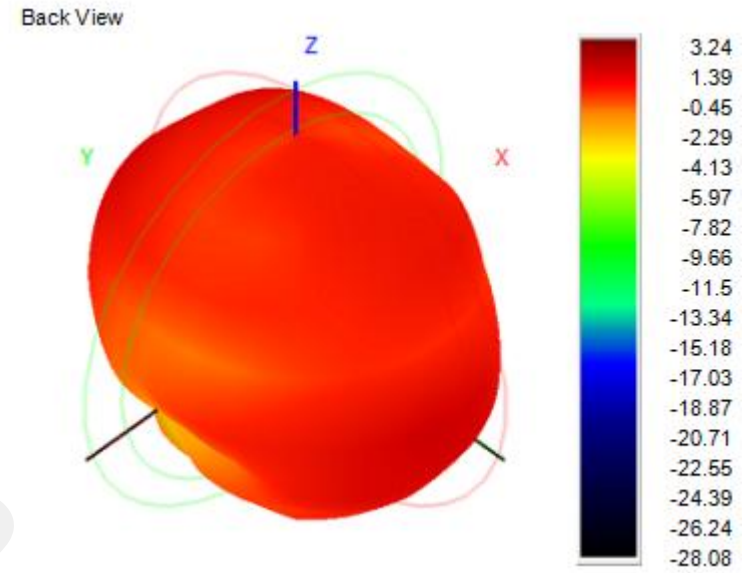

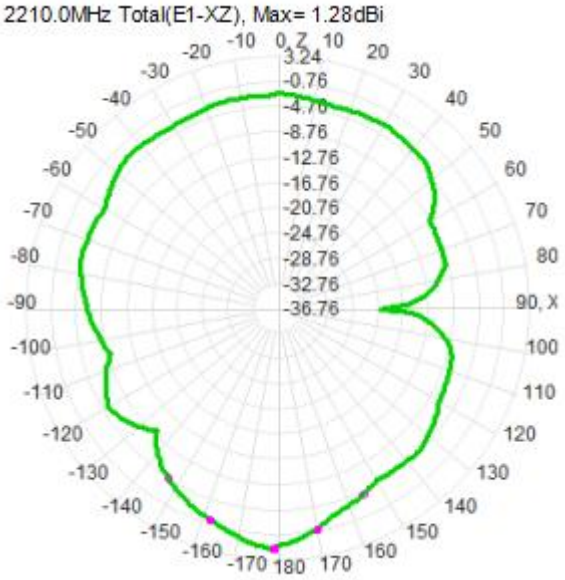

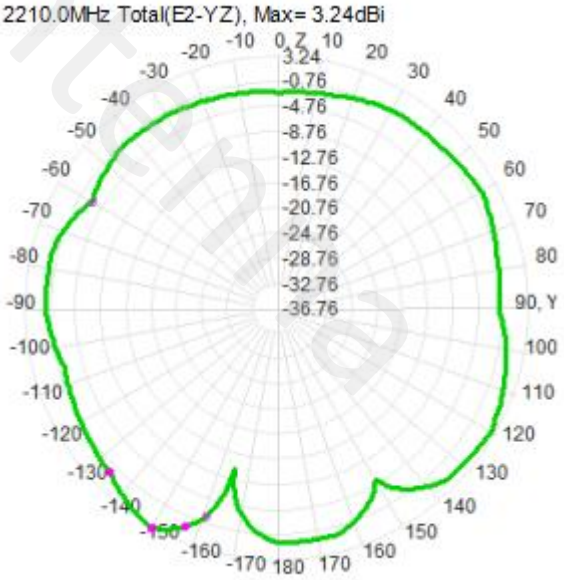

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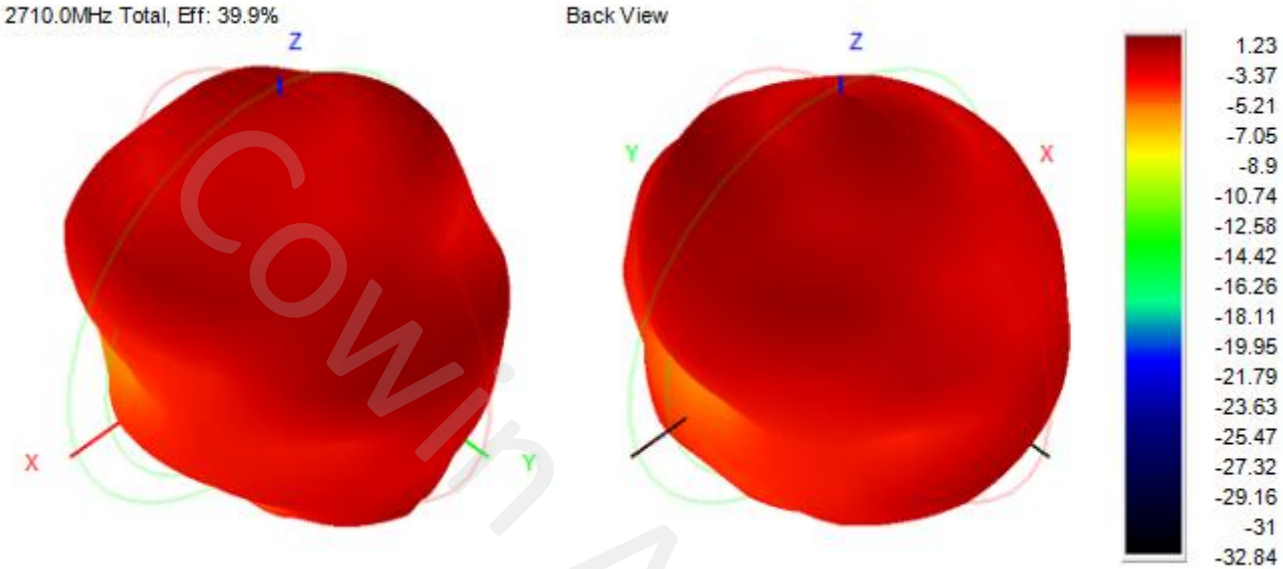

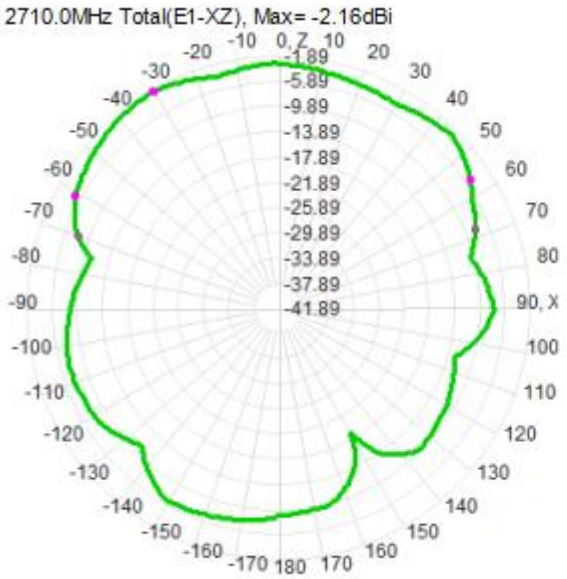

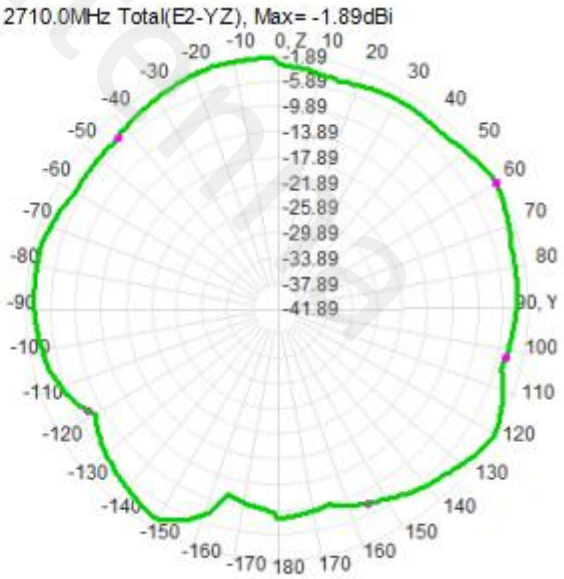

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