CW-NZ-0192

WIFI 6E Internal Antenna

Cowin Antenna

Key Features

Frequency: 2.4-2.5/5.15-5.85/5.925-7.125G

Connector: I-PEX

Cable Type: RF1.13 Double tin cable

Dimensions: 34.8*6.8*0.1mm

1. Antenna Electrical Characteristics

Band (MHz)	
Frequency (MHz)	2.4-2.5/5.15-5.85/5.925-7.125G
VSWR	≤2.5
Efficiency (%)	63.26/52.74/48.09
Peak Gain (dBi)	2.65/2.14/1.95
Impedance (Ohm)	50
Polarisation	Vertical
Max. Input Power (W)	10

2. Material and environmental characteristics

External Structure	N/A
Inner Structure	FPC
Cable Type	RF1.13 Double tin cable
Connector Type	I-PEX
Dimensions (mm)	34.8*6.8*0.1mm
Antenna Colour	Black
Operation Temperature	-40℃ to +80℃
Storage Temperature	-40℃ to +80℃
Antenna Storage Life(year)	10
Substance Compliance	ROHS

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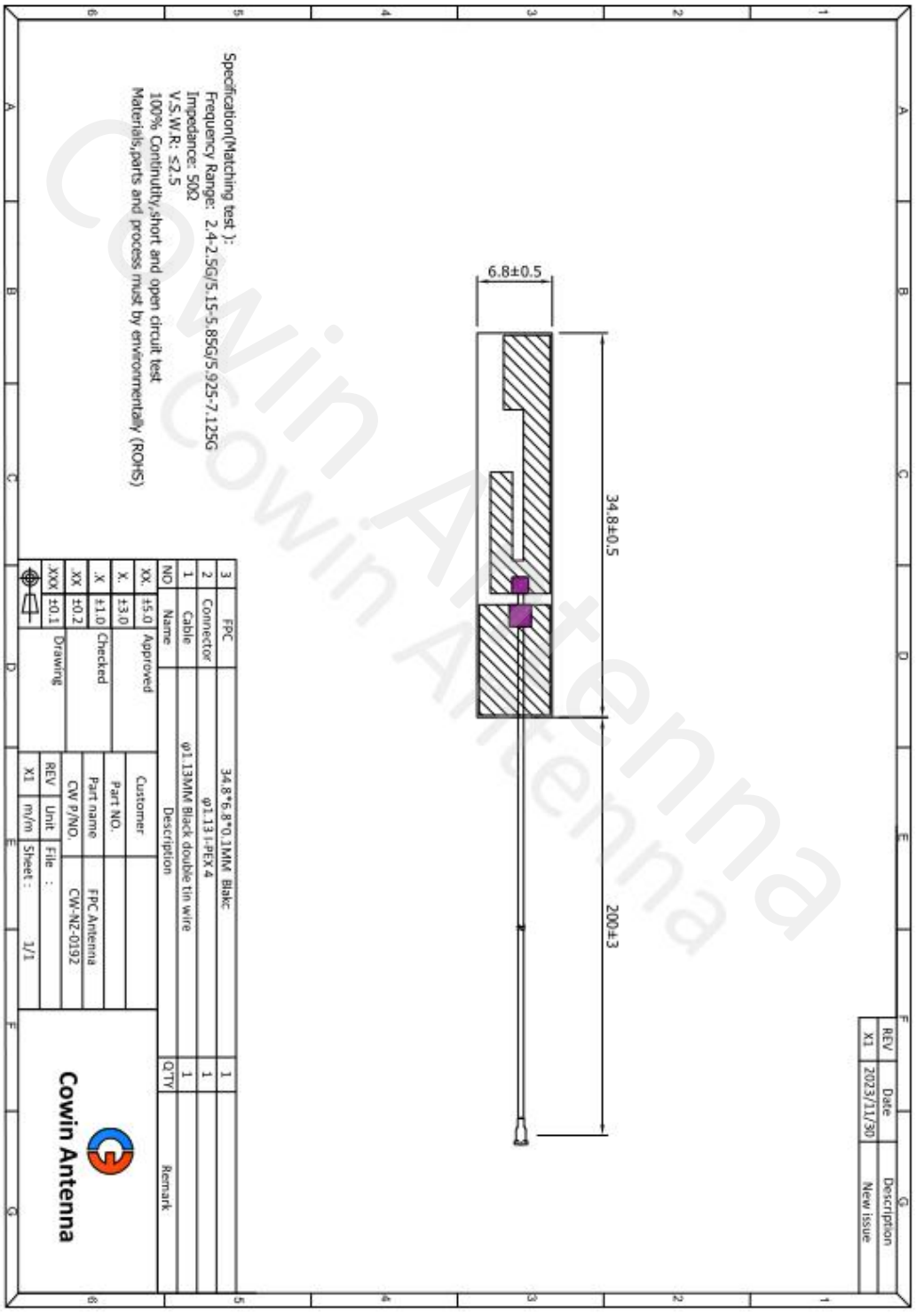
3. Antenna drawing



4. Antenna test parameters

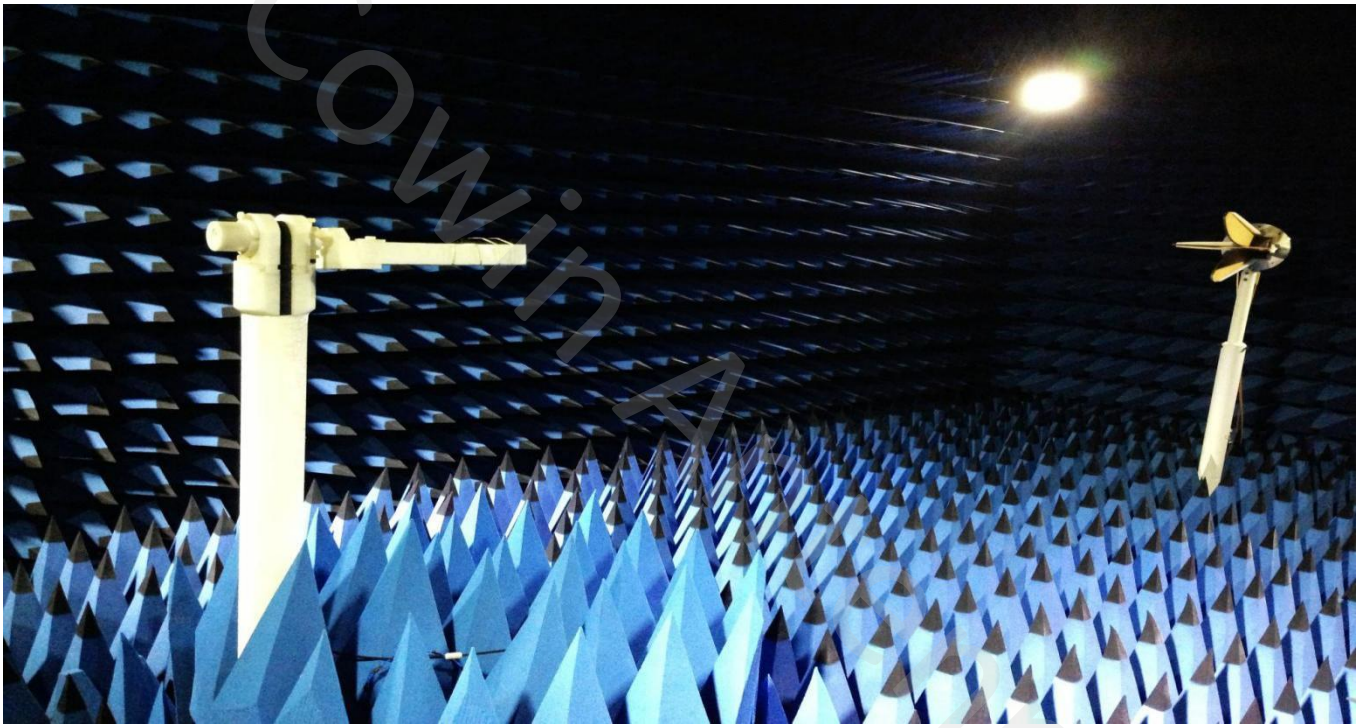
Antenna Measurement Conditions:

Mounted on Ground Plane of 280 x 80 mm

Measured in Certified 3D Anechoic Chamber

The network analyzer is Agilent 5071c

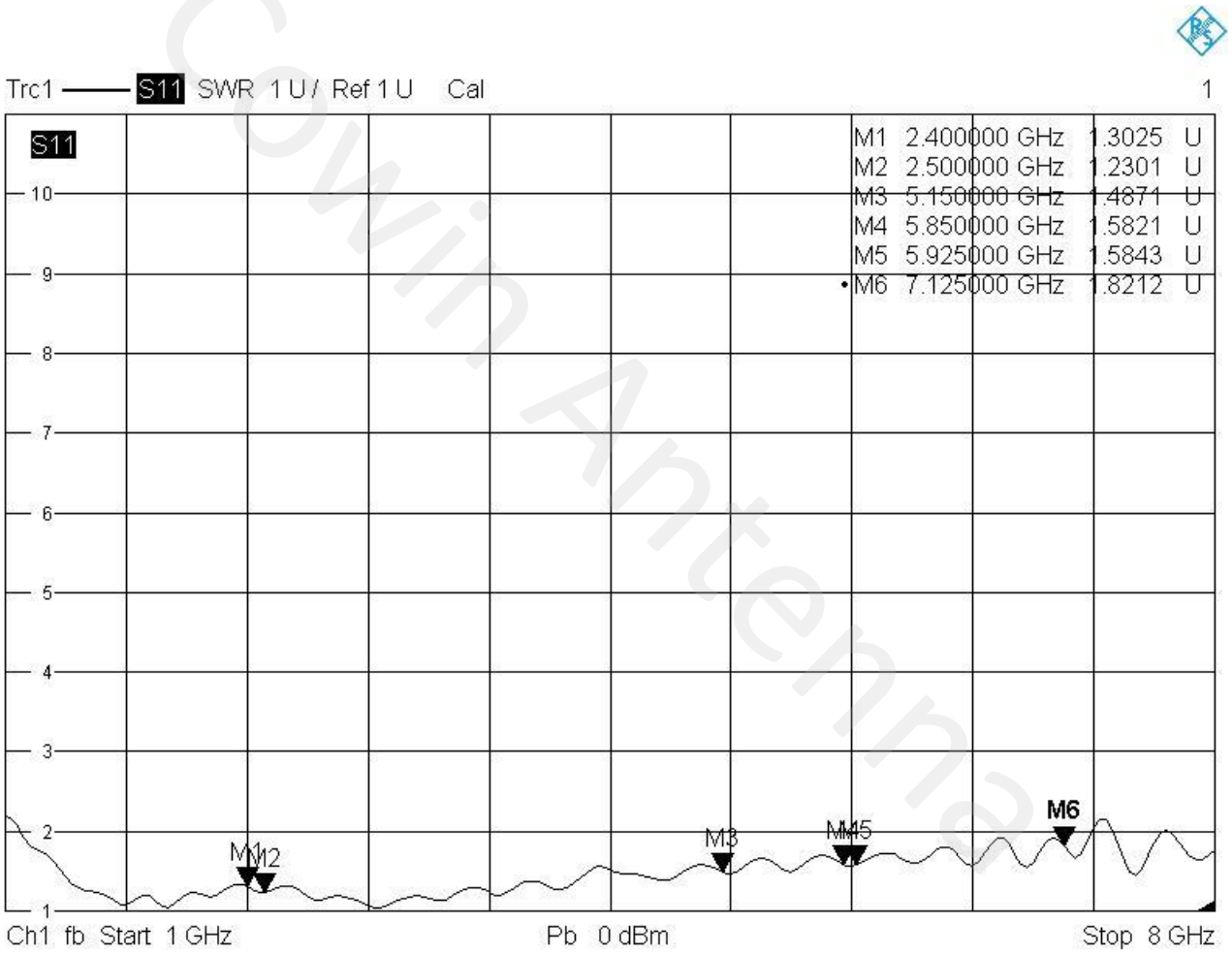
The comprehensive tester is Agilent cmv500







4.1 VSWR



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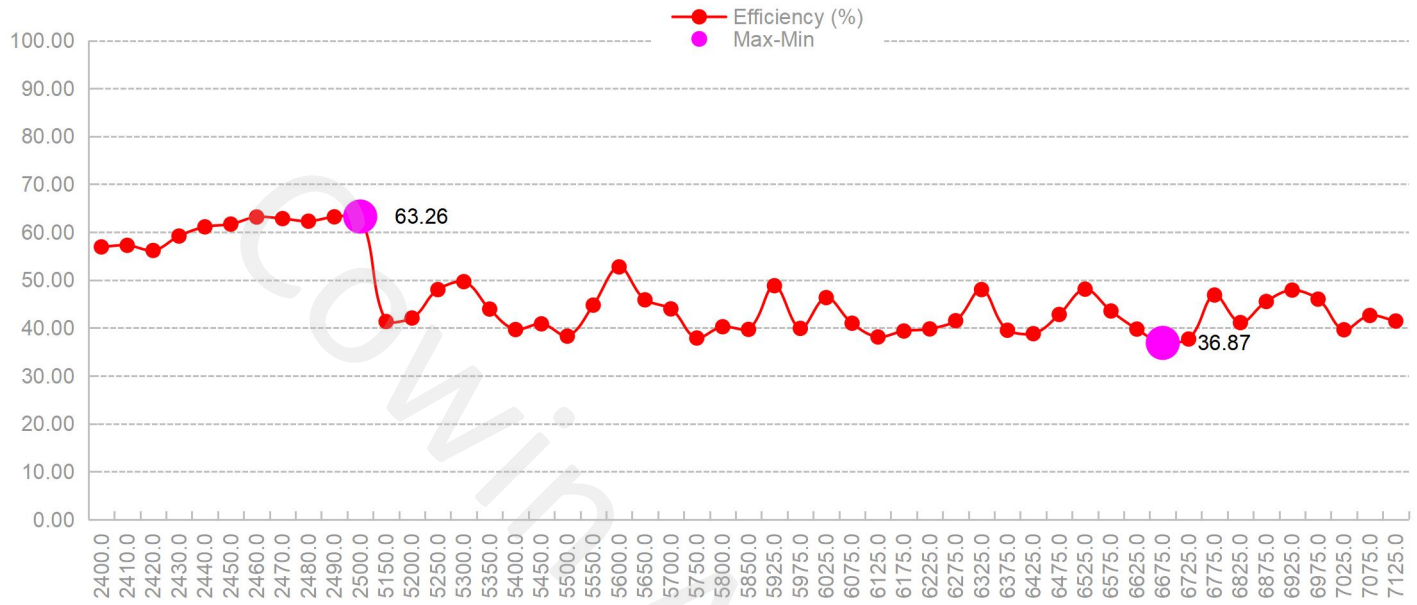
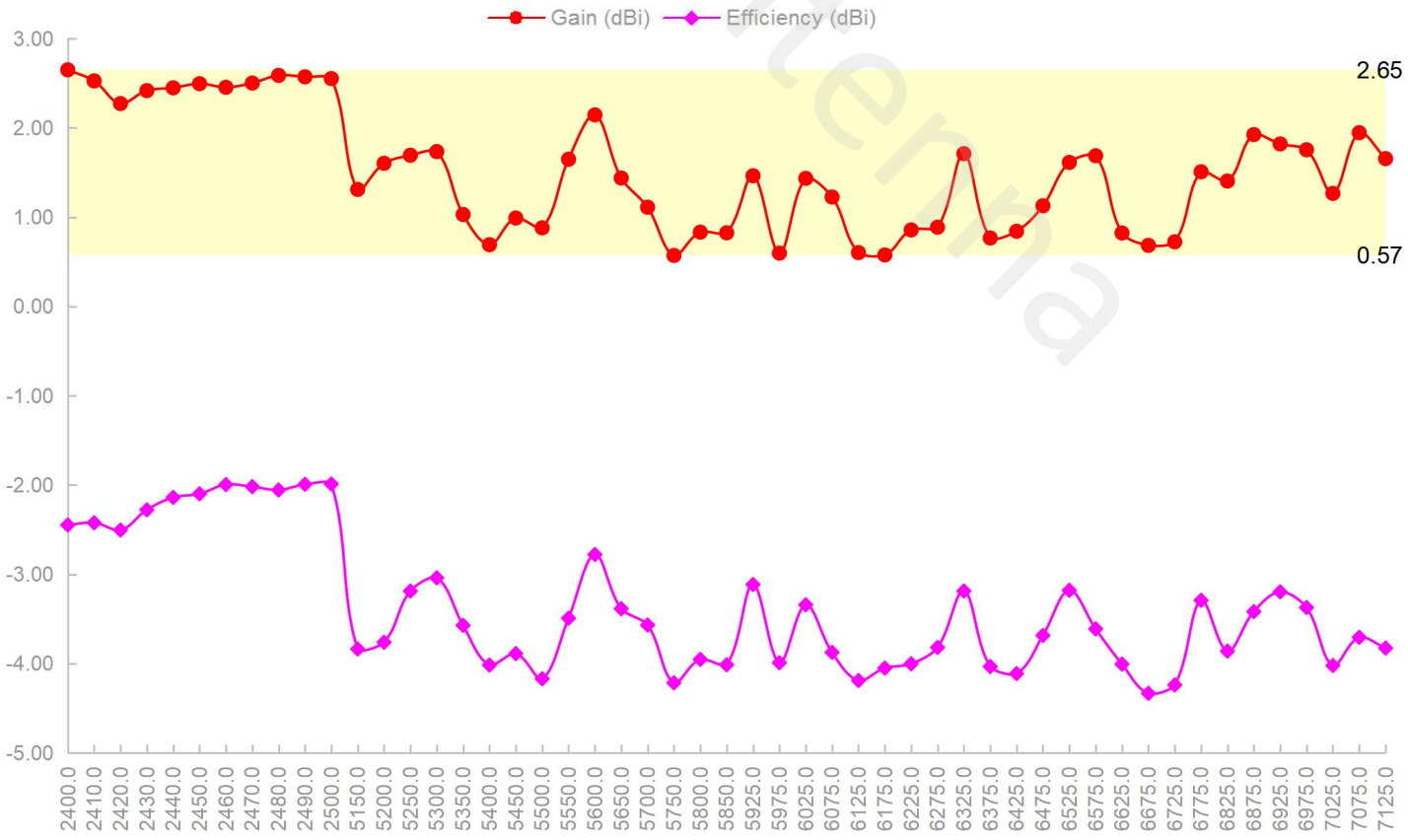
4.2 Efficiency



4.3 Peak gain



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4.4 Data summary

Frequency (MHz)	Gain (dBi)	Efficiency (%)
2400.0	2.65	56.91
2410.0	2.53	57.24
2420.0	2.27	56.17
2430.0	2.42	59.18
2440.0	2.45	61.10
2450.0	2.49	61.68
2460.0	2.45	63.16
2470.0	2.50	62.83
2480.0	2.59	62.29
2490.0	2.57	63.20
2500.0	2.55	63.26
5150.0	1.31	41.33
5200.0	1.60	42.06
5250.0	1.69	48.00
5300.0	1.73	49.66
5350.0	1.03	43.93
5400.0	0.69	39.66
5450.0	0.99	40.85
5500.0	0.88	38.28
5550.0	1.65	44.75
5600.0	2.14	52.74
5650.0	1.44	45.86
5700.0	1.11	43.97
5750.0	0.57	37.89

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Frequency (MHz)	Gain (dBi)	Efficiency (%)
5800.0	0.83	40.24
5850.0	0.82	39.68
5925.0	1.46	48.81
5975.0	0.60	39.90
6025.0	1.43	46.33
6075.0	1.23	40.98
6125.0	0.60	38.11
6175.0	0.58	39.35
6225.0	0.86	39.79
6275.0	0.89	41.50
6325.0	1.71	48.00
6375.0	0.77	39.51
6425.0	0.84	38.80
6475.0	1.13	42.81
6525.0	1.61	48.09
6575.0	1.69	43.53
6625.0	0.82	39.75
6675.0	0.68	36.87
6725.0	0.72	37.67
6775.0	1.51	46.86
6825.0	1.40	41.11
6875.0	1.92	45.51
6925.0	1.82	47.90
6975.0	1.75	46.00
7025.0	1.27	39.61
7075.0	1.95	42.60
7125.0	1.65	41.43

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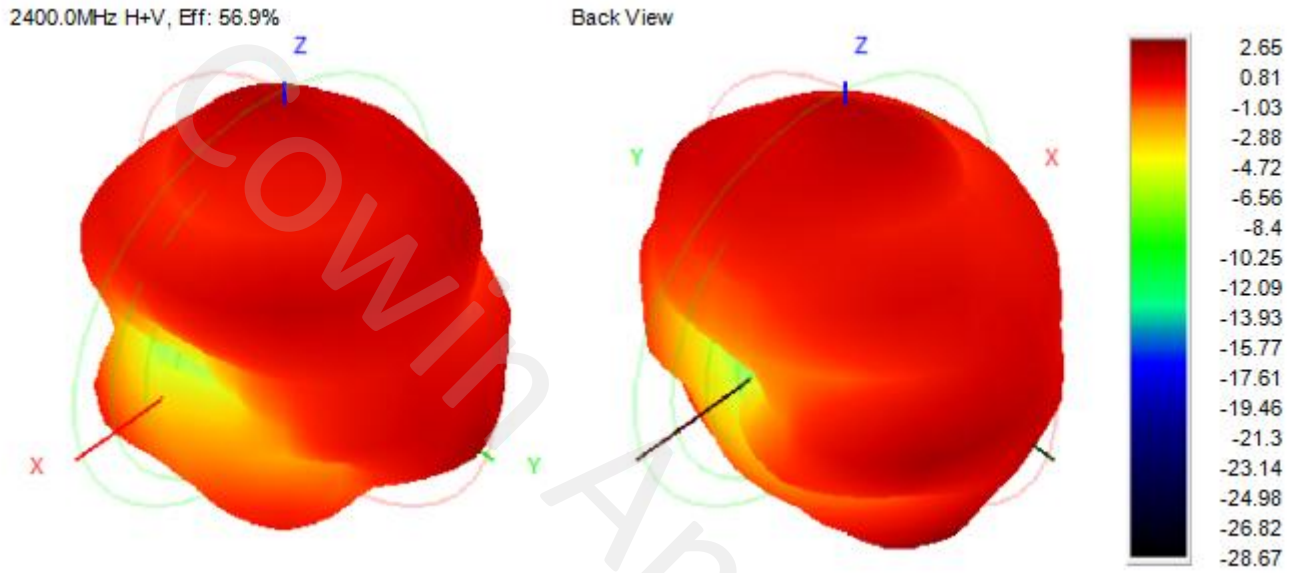
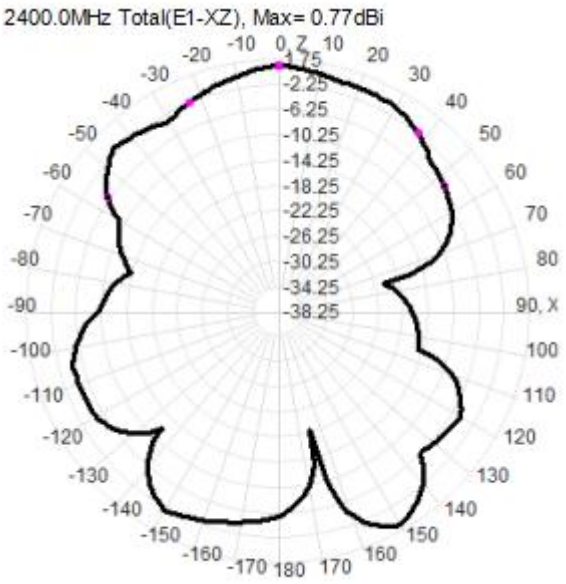
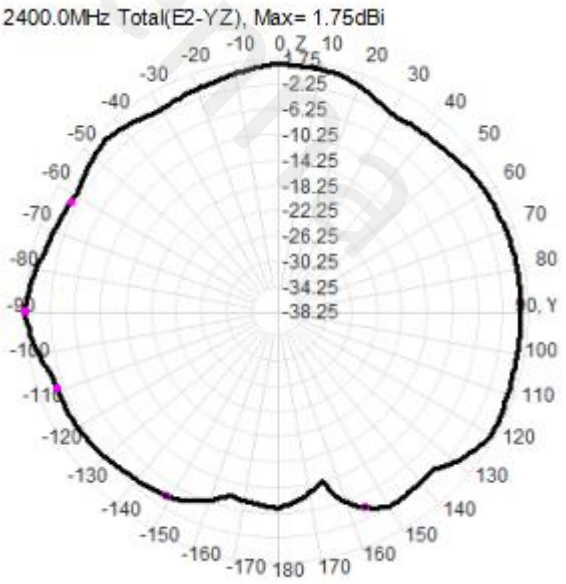
4.5 3D&2D Radiation Patterns







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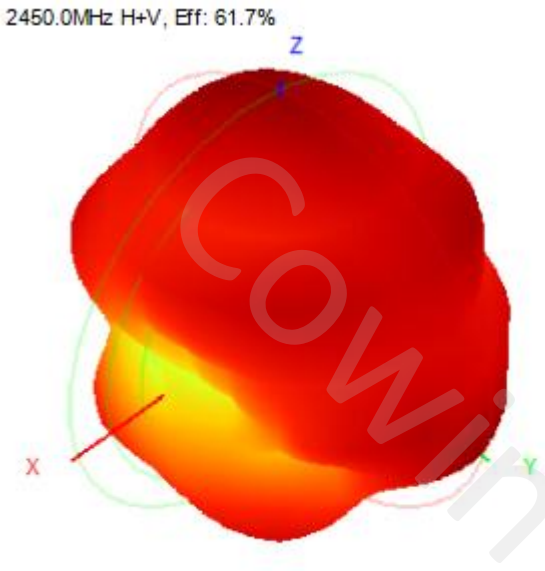

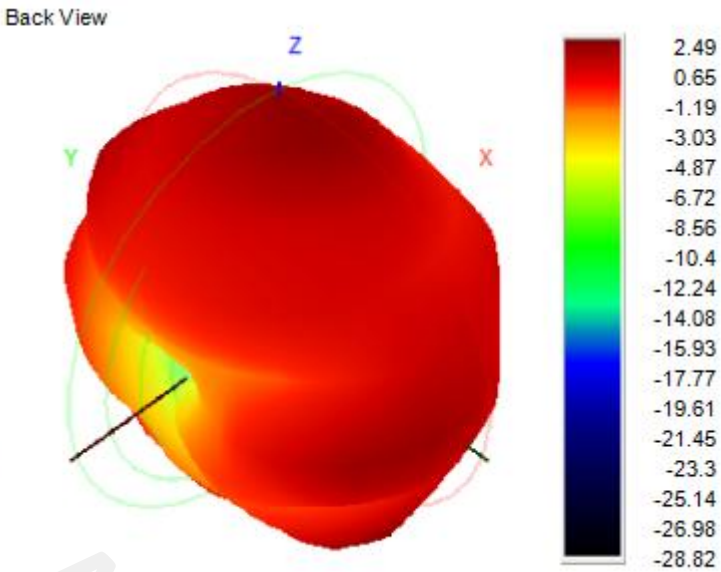

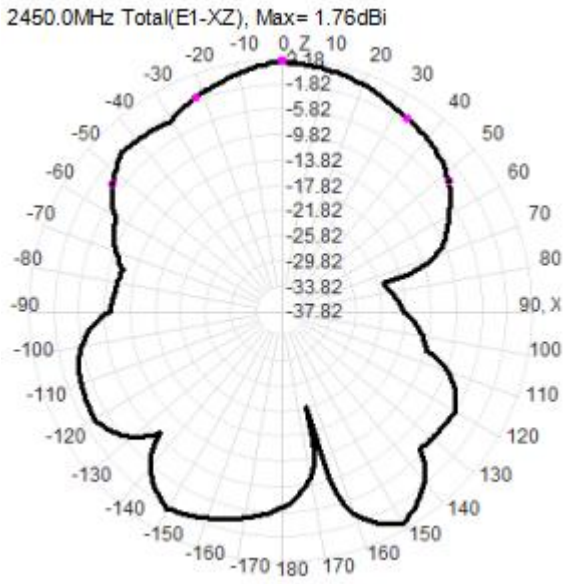

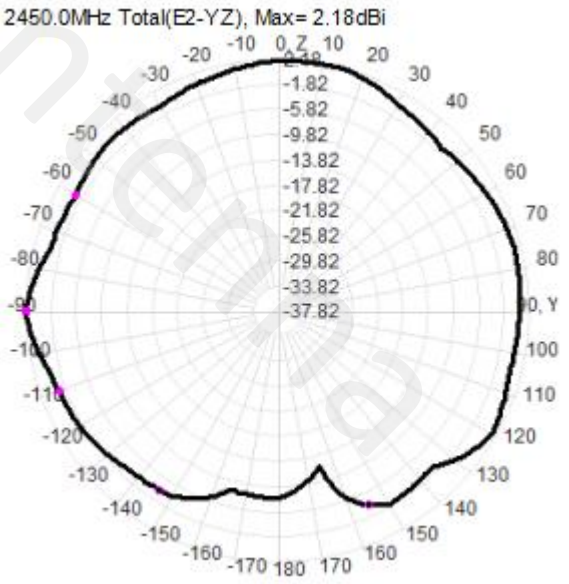

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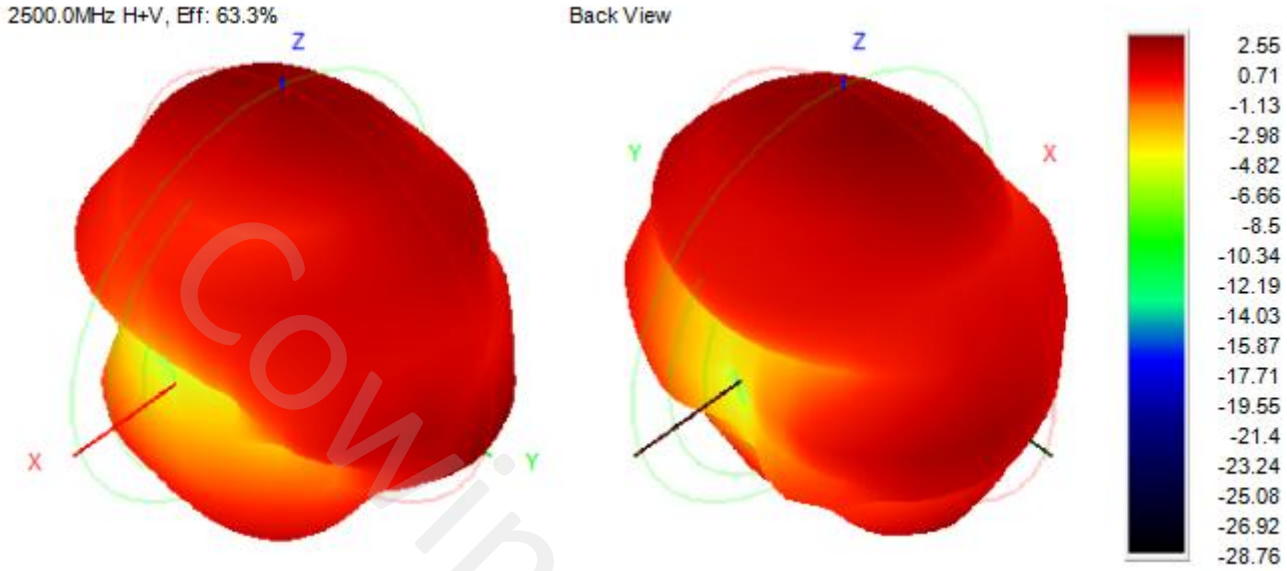

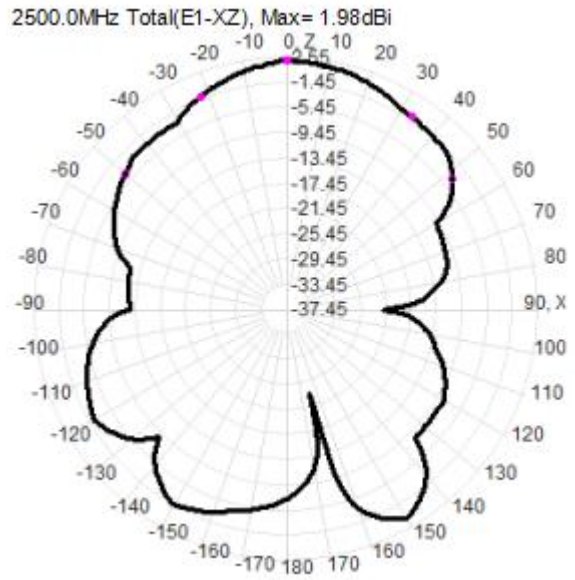

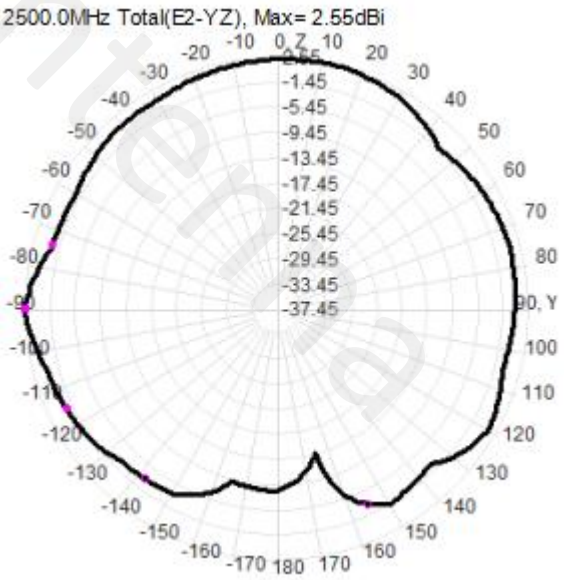

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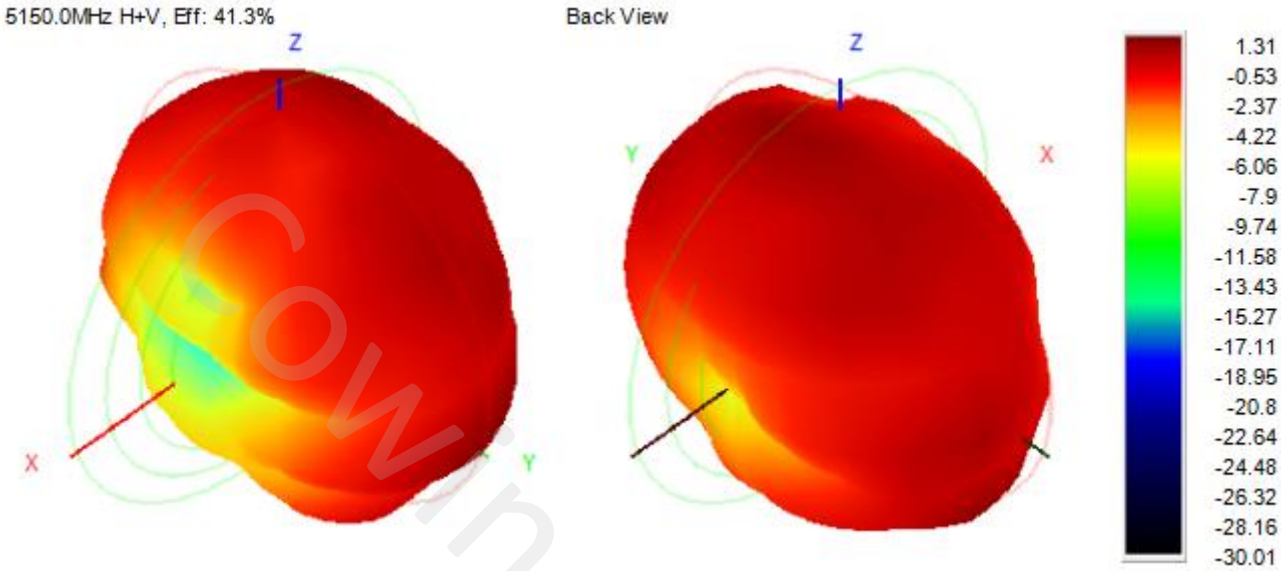

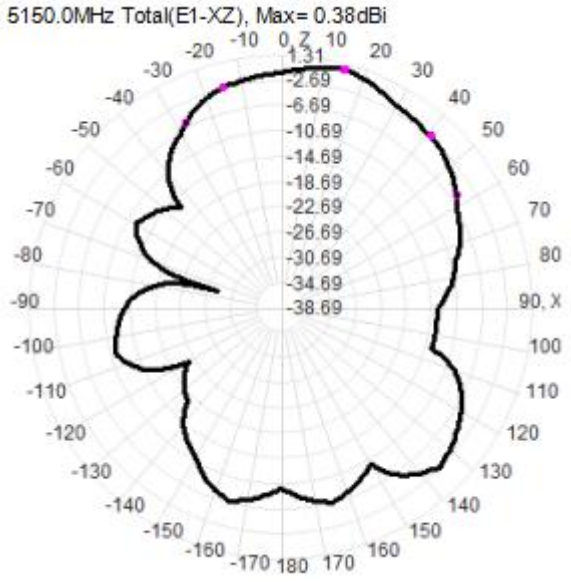

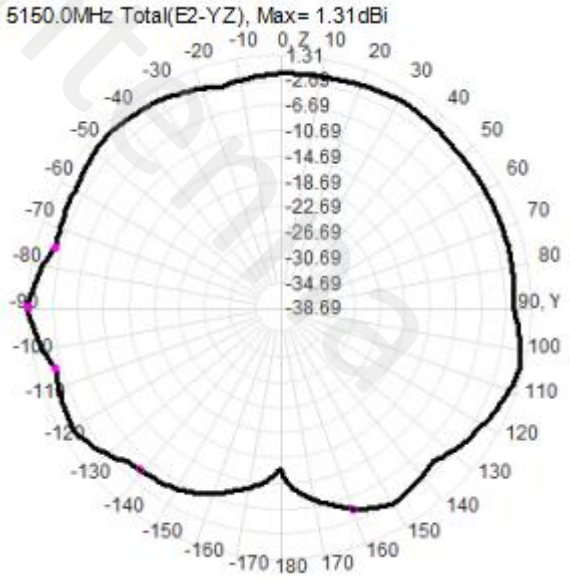

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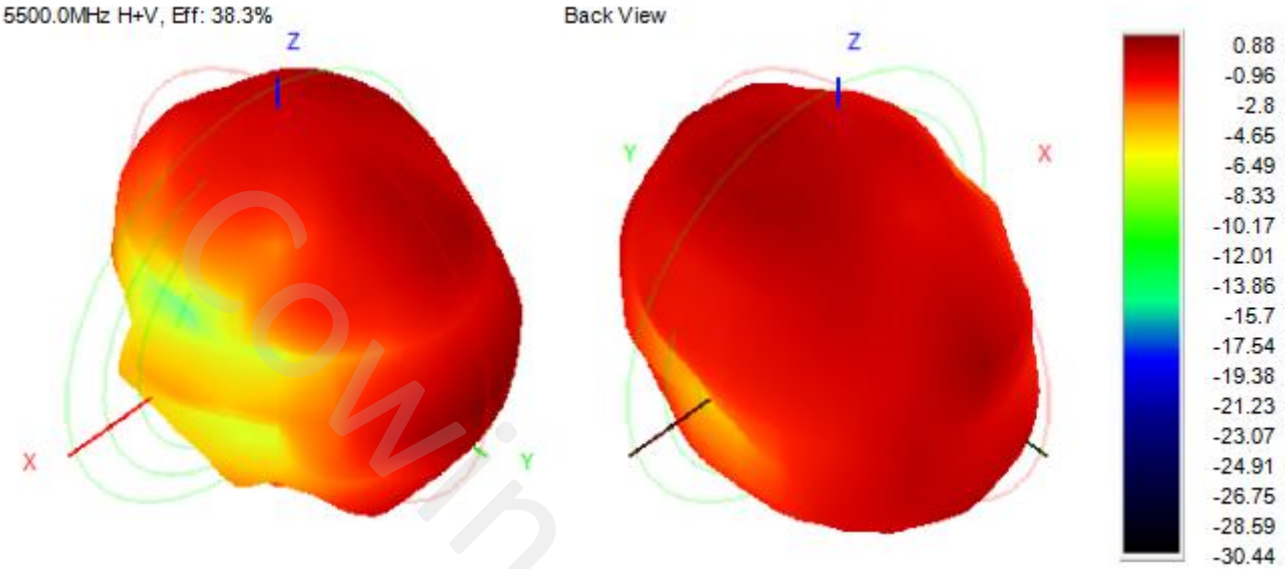

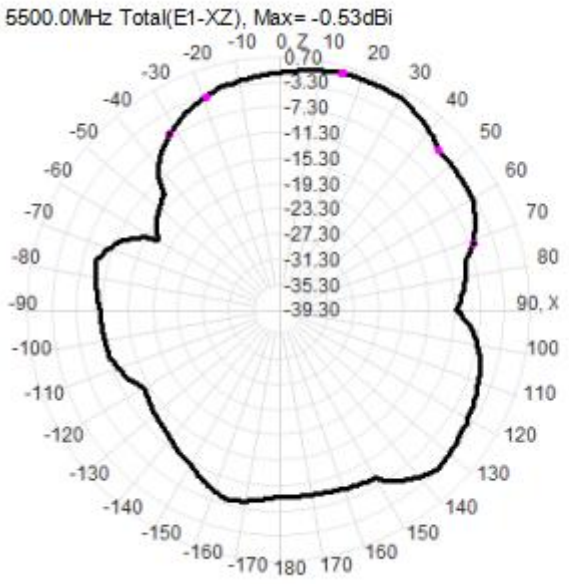

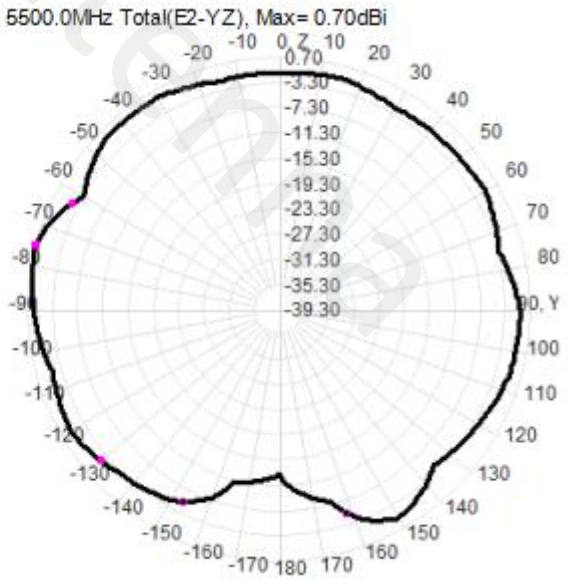

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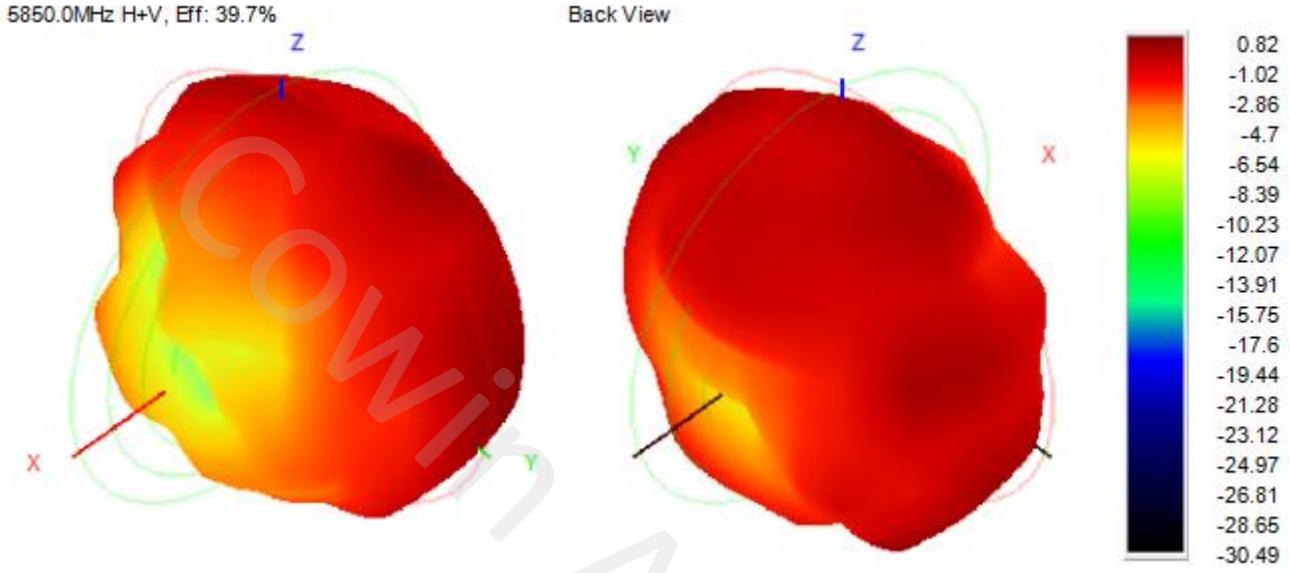

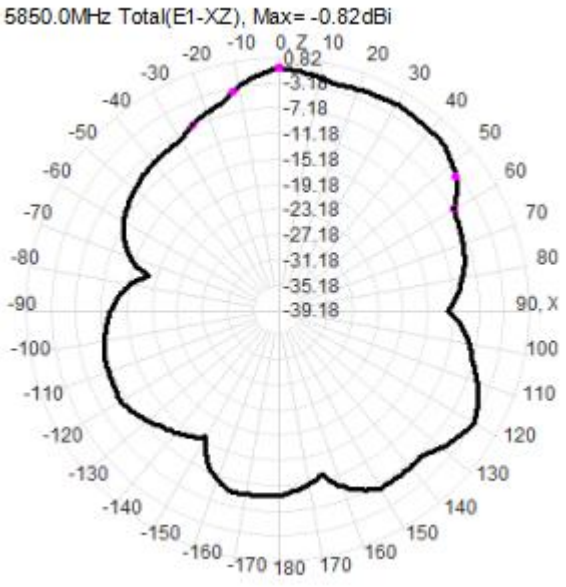

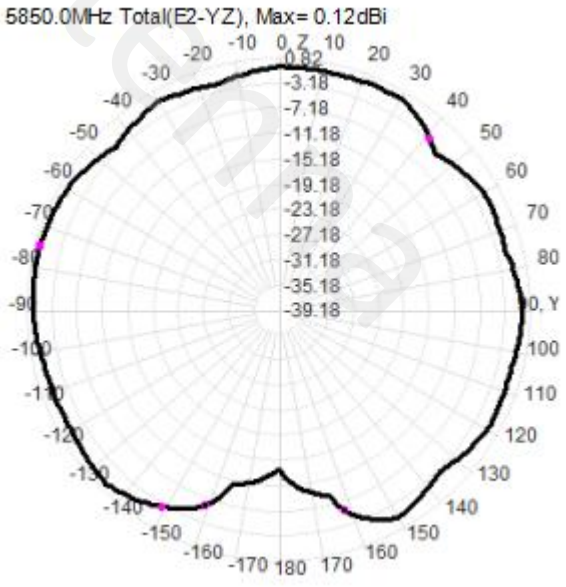

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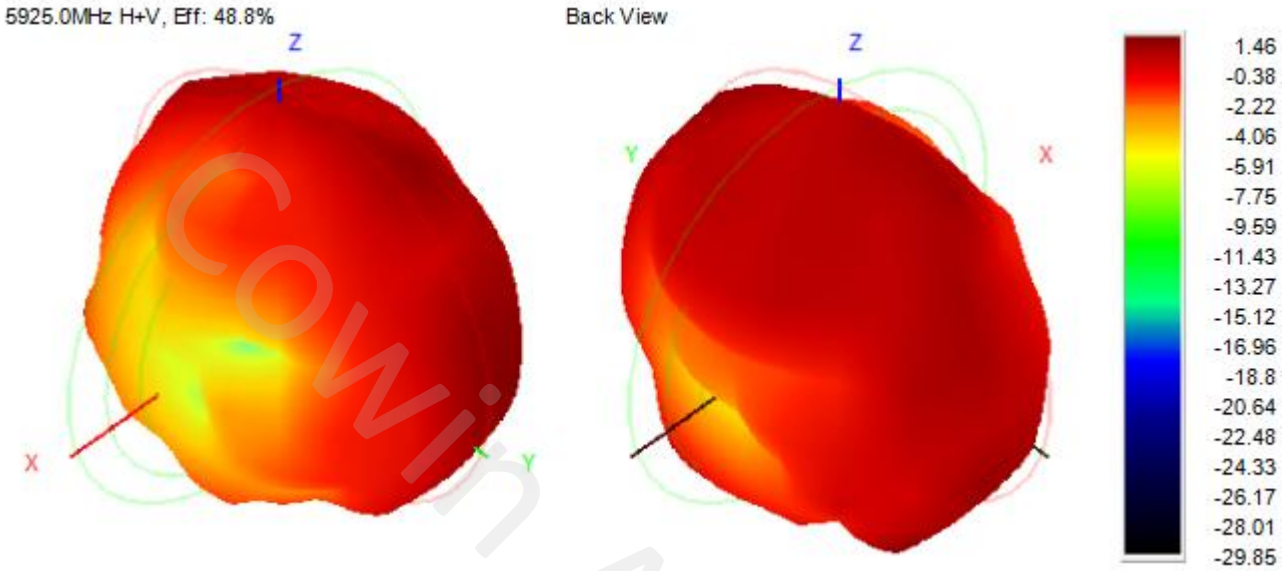

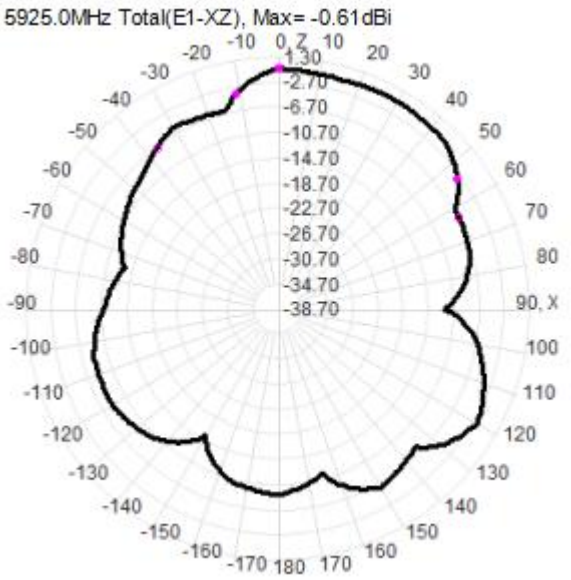

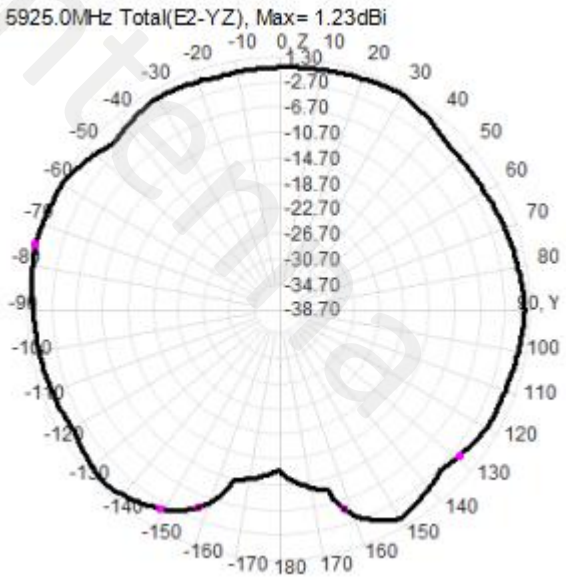

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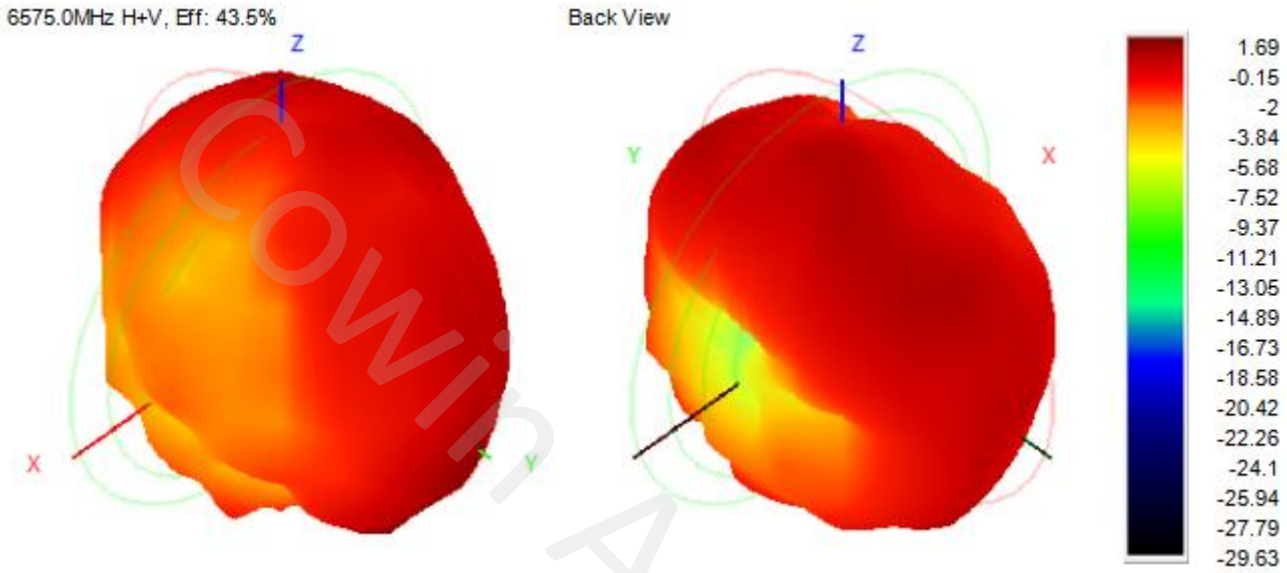

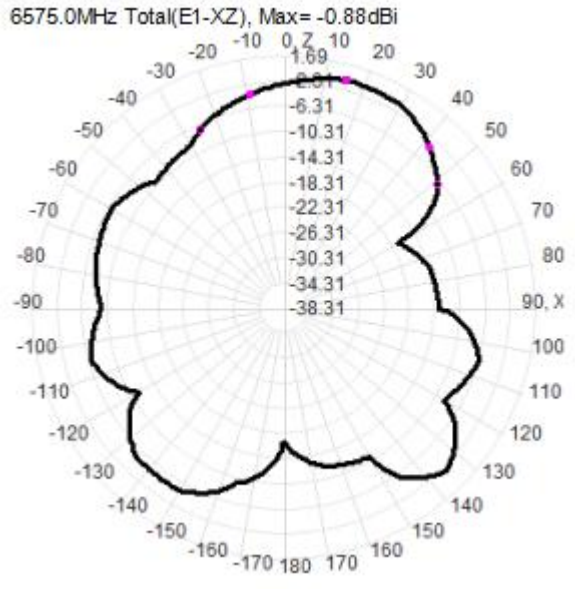

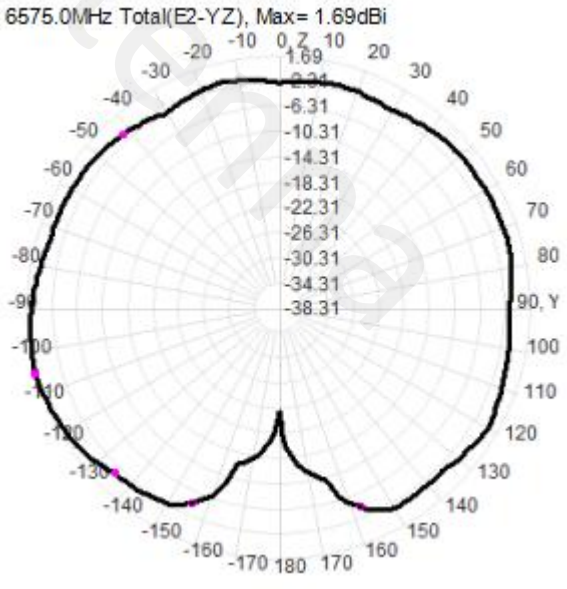

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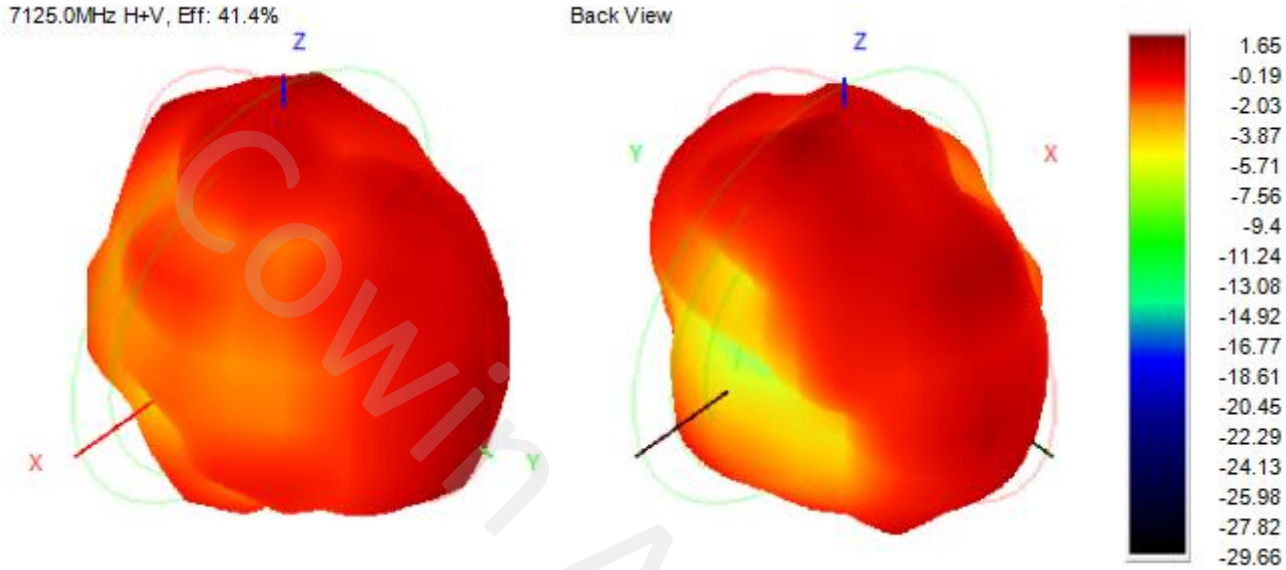

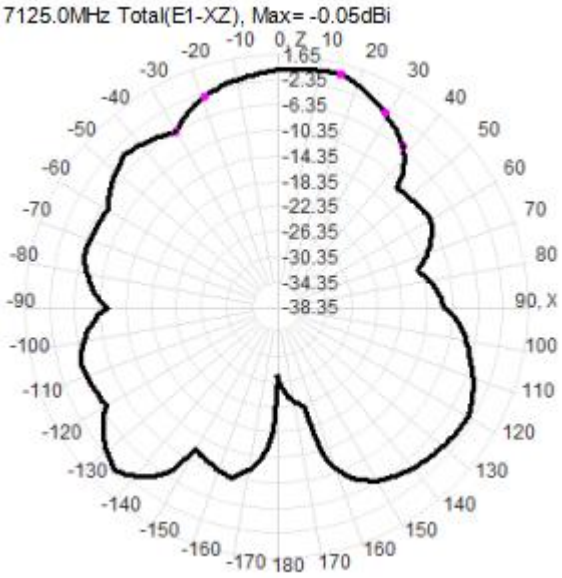

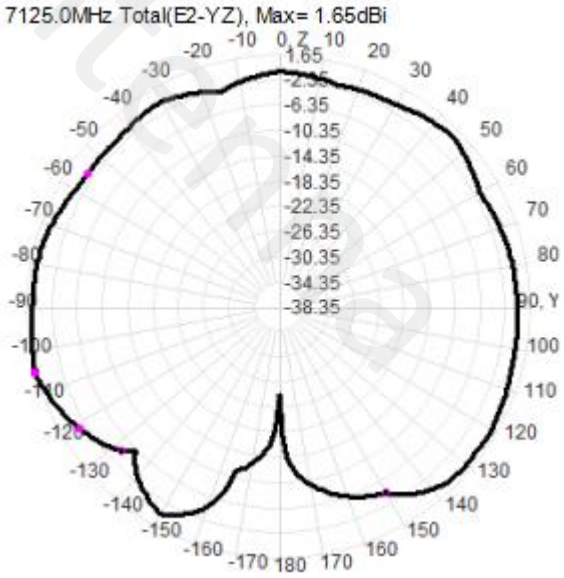

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