SCANWAY

CBU Antenna test report

Shenzhen Shengchuangwei Technology Co., Ltd

SCANWAY

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CBU
Antenna test report

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Customer Approval

Company SCANWAY Technology Co., Ltd

Signature 谷星

Date 2022-3-15

CONTENT

1. Product Description

Product Name	CBU
Antenna Type	PCB antenna
Maximum	Gain:1.96dBi
	Efficiency:44.48%

2. General Description

EUT Name	CBU Antenna
Wireless type	WIFI
Antenna Type	PCB antenna
Dimensions	Appendix A

3. Technical Information

Frequency Range	2402MHz~2480MHz
Test Frequency	2400,2410.....2500MHz

4. Test Standards

Identity	Document Title
IEEE 149-1979	IEEE Standard Test Procedures for Antennas

5. Test Item

Report Section	Description
Appendix B	S11A/SWR
Appendix C	Gain and Efficiency
Appendix D	Radiation Pattern (1D and 3D)

6. Test Photo

Report Section	Description
Appendix E	Test Setup Photo

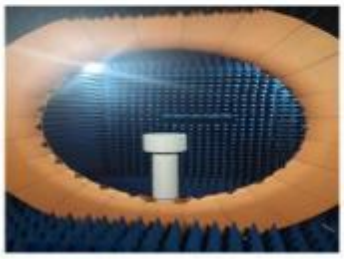
7. Darkroom test equipment and data

5.0 Test Equipment

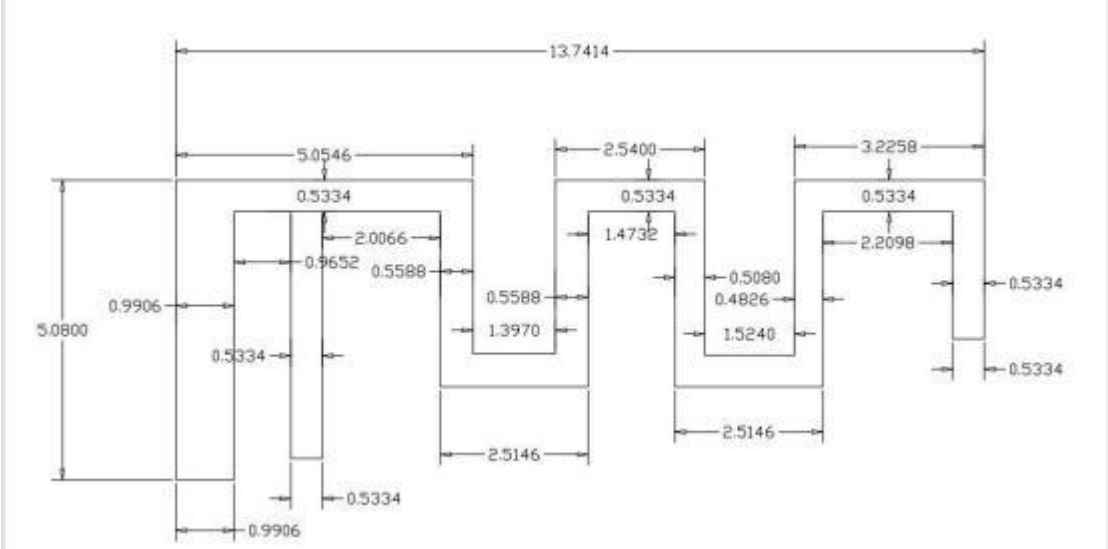
Test system: shielded darkroom

Test environment: temperature 22 ℃± 3 ℃ , humidity 50% ± 15%

Test equipment: when testing passive data, use AgilentE5071C network analyzer； When testing the active data, use the comprehensive tester CMW500

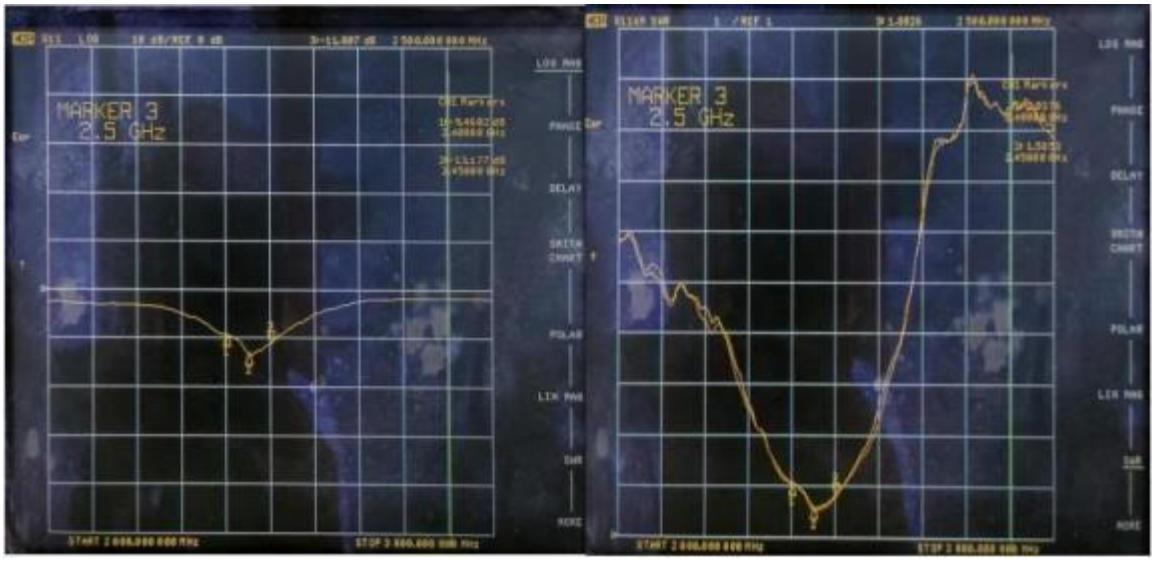


8. Appendix A Antenna Dimension



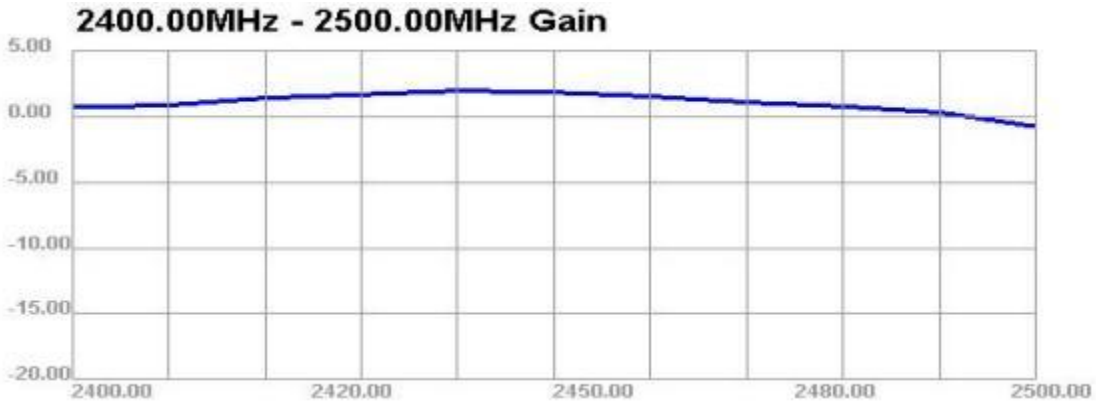
9. Appendix B SII/VSWR

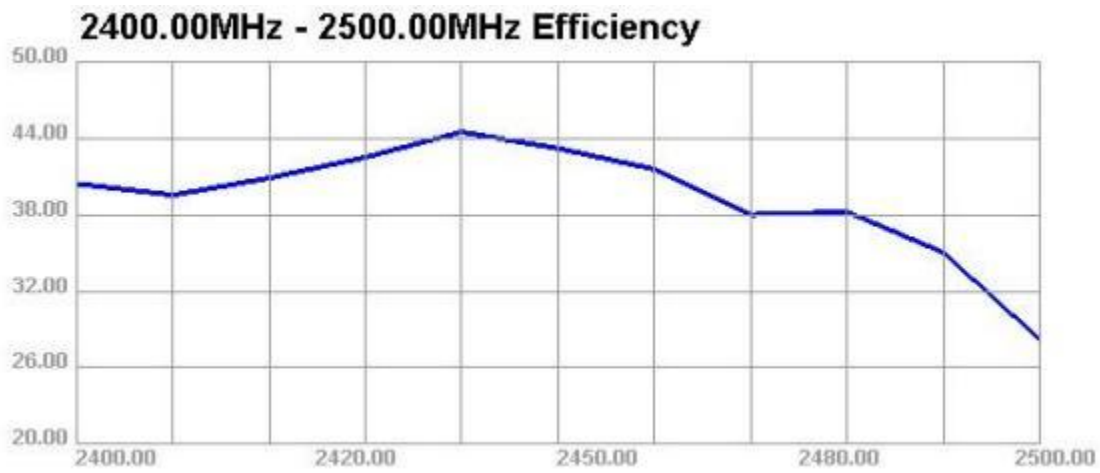
requency （MHz)	2400	2450	2500
eturn Loss	-9.46	-13	-11
SWR	1.8	1.5	1.8



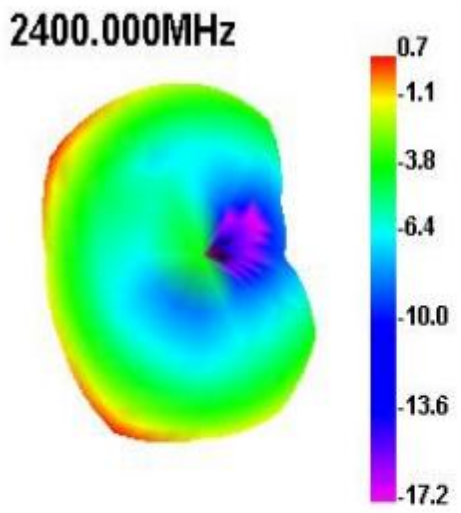
10. Appendix C Gain and Efficiency

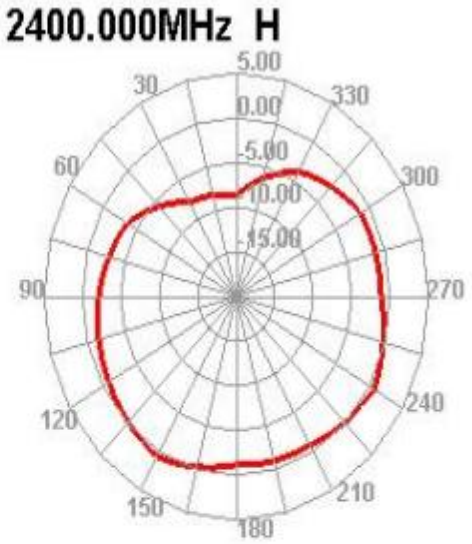
Passive Test For D44										
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	UHIS (%)	DHIS (%)	Max (dB)	Min (dB)	Attenut Hor	Attenut Ver
2400	40.43	-3.93	0.7	-1.45	16.061	24.371	0.7	-17.16	49.18	49.3
2410	39.54	-4.03	0.86	-1.29	15.756	23.785	0.86	-16.67	49.23	49.45
2420	40.88	-3.89	1.4	-0.75	16.635	24.243	1.4	-18.58	49.06	49.29
2430	42.5	-3.72	1.67	-0.48	17.57	24.935	1.67	-17.79	49.12	49.32
2440	44.48	-3.52	1.96	-0.19	18.796	25.689	1.96	-16.72	49.75	50.01
2450	43.2	-3.65	1.84	-0.31	18.687	24.512	1.84	-17.35	49.82	50.08
2460	41.57	-3.81	1.53	-0.62	18.485	23.085	1.53	-19.76	49.85	50.08
2470	38.01	-4.2	1.07	-1.08	17.234	20.774	1.07	-21.44	49.76	49.97
2480	38.23	-4.18	0.77	-1.38	17.723	20.511	0.77	-21.64	49.66	49.8
2490	35.02	-4.56	0.3	-1.85	16.519	18.504	0.3	-20.83	49.54	49.68
2500	28.21	-5.5	-0.77	-2.92	13.358	14.85	-0.77	-21.32	49.32	49.42

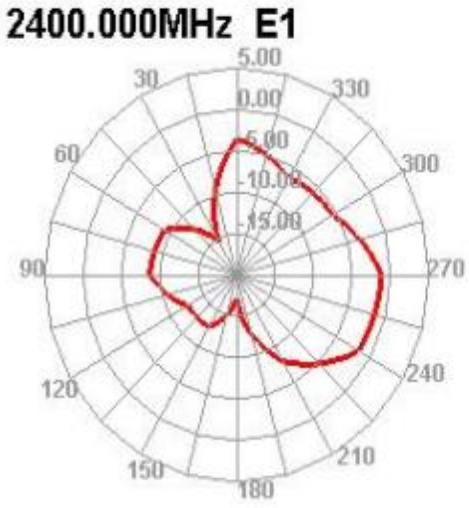


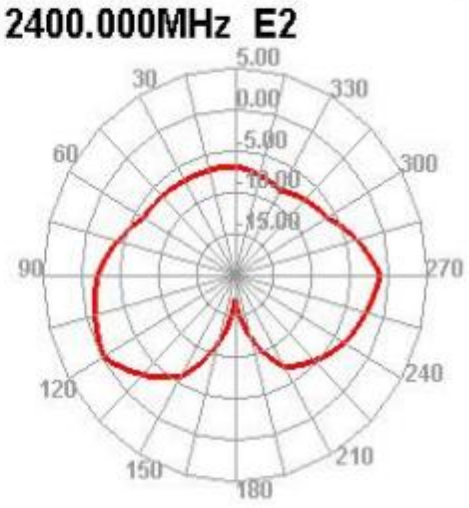


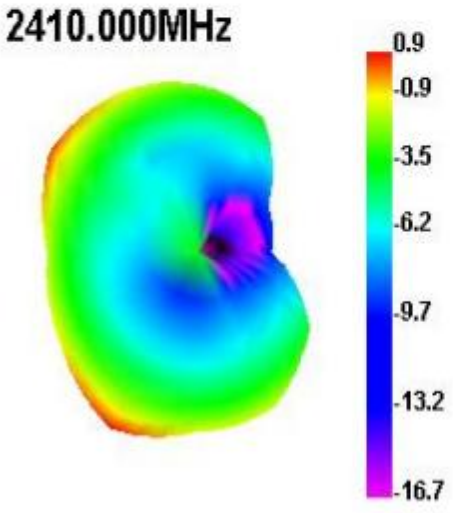
11. Appendix D Radiation Pattern(ID and 3D)

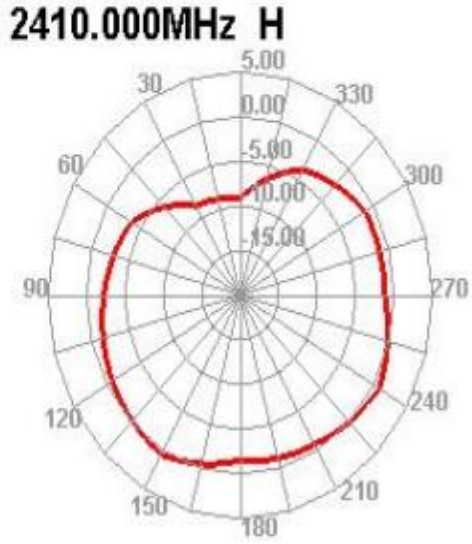


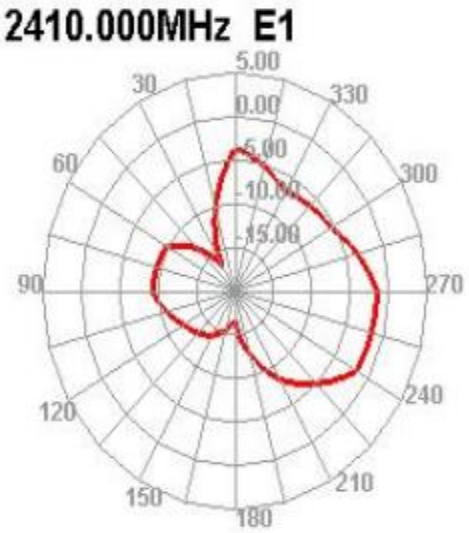











2410.000MHz E1
5.00
0.00
-5.00
-10.00
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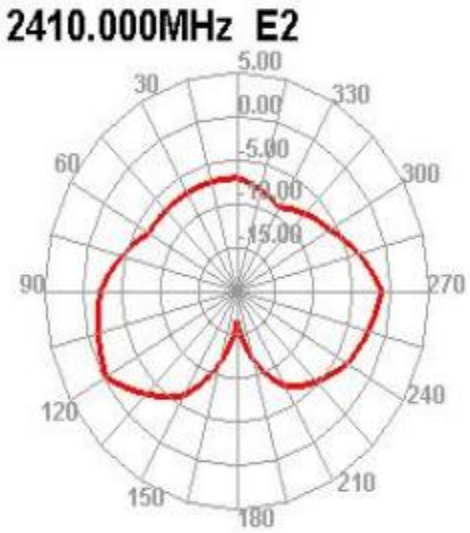
30
330
60
300
90
270
120
240
150
210
180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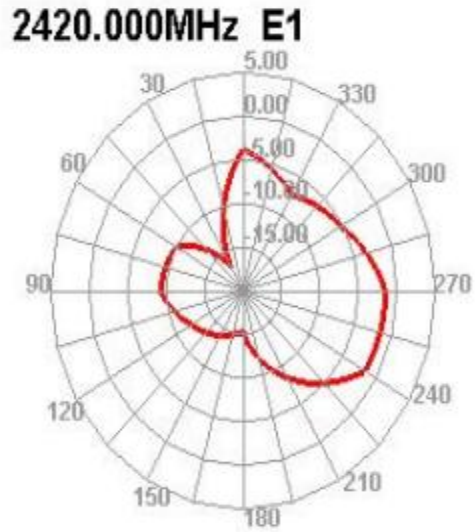
30
330
60
300
90
270
120
240
150
210
180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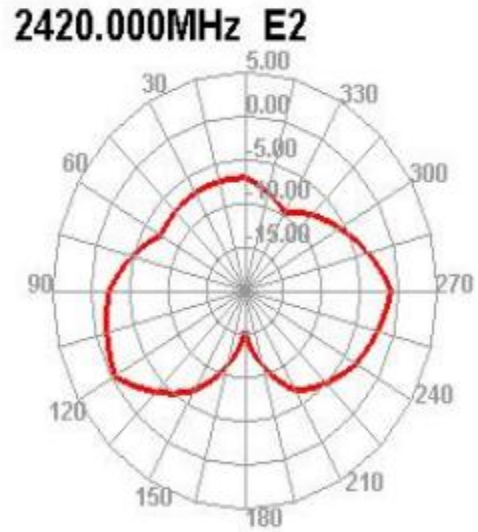
5.00
0.00
-5.00
-10.00
-15.00
30
330
60
300
90
270
120
240
150
210
180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-10.00
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30
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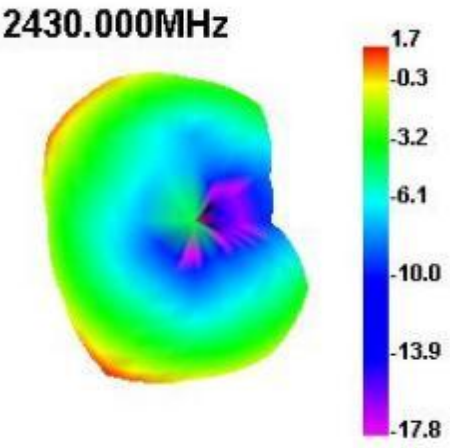
120
240
150
210
180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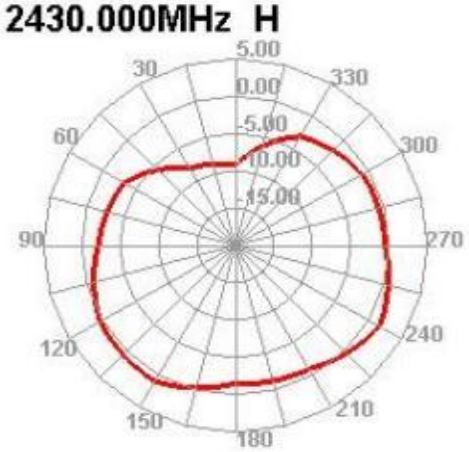
-3.2
-6.1
-10.0
-13.9
-17.8


2430.000MHz H
5.00
0.00
-5.00
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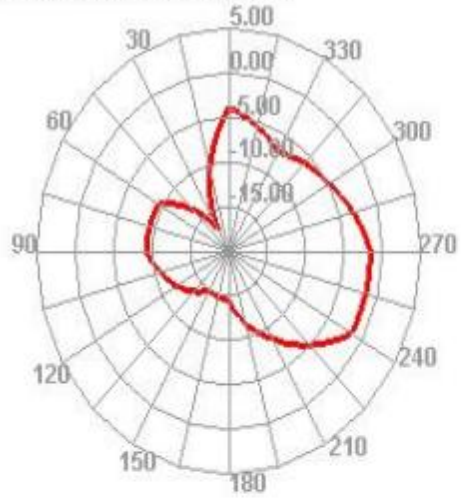
-15.00
30
330
60
300
90
270
120
240
150
210
180

2430.000MHz E1



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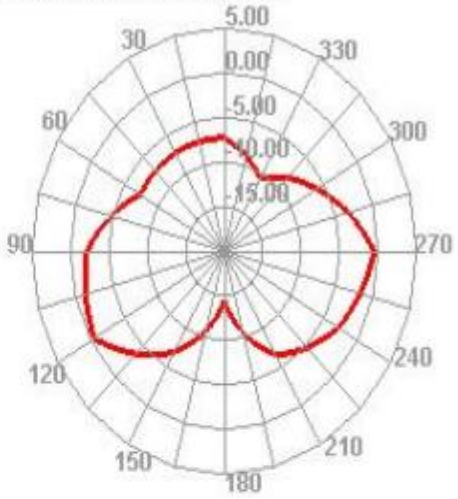

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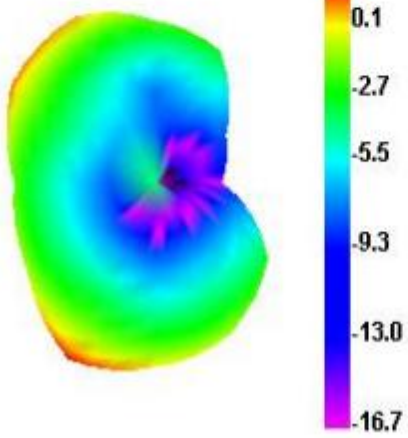

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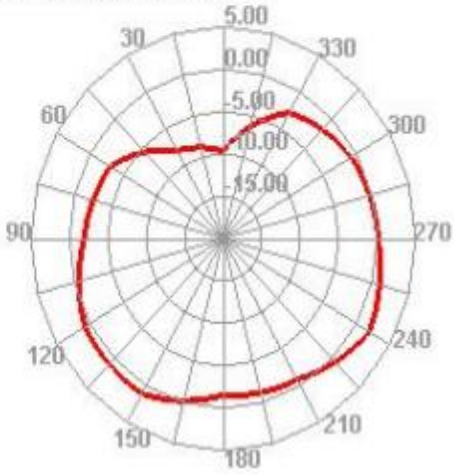

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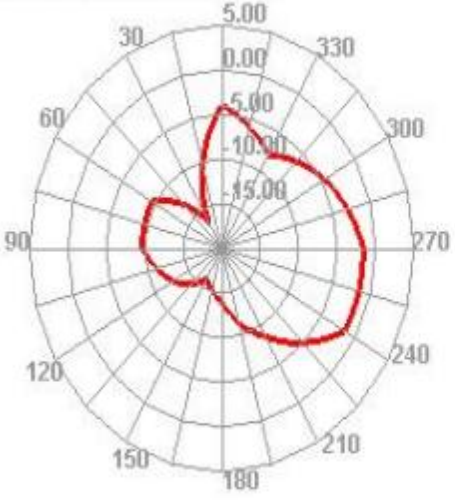

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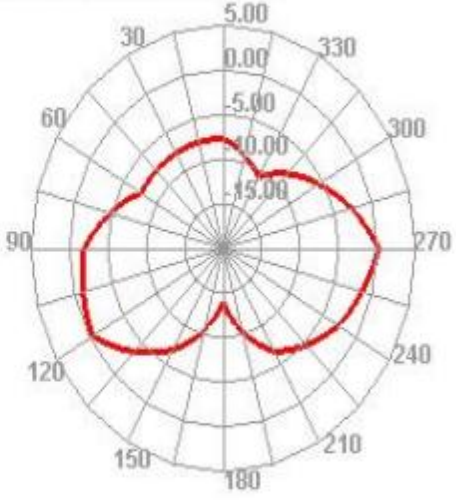

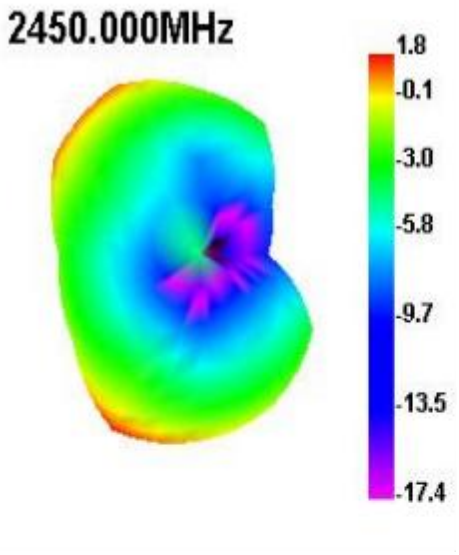
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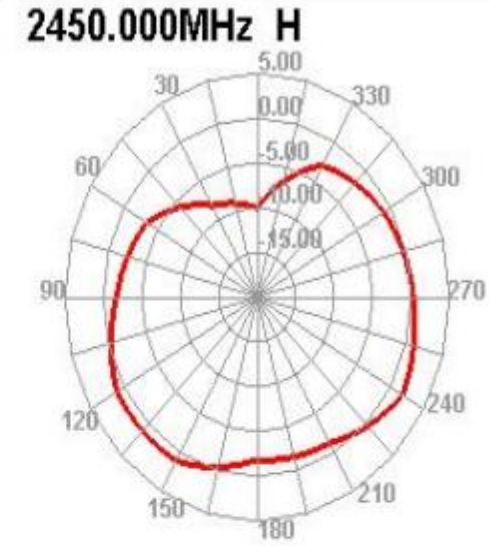
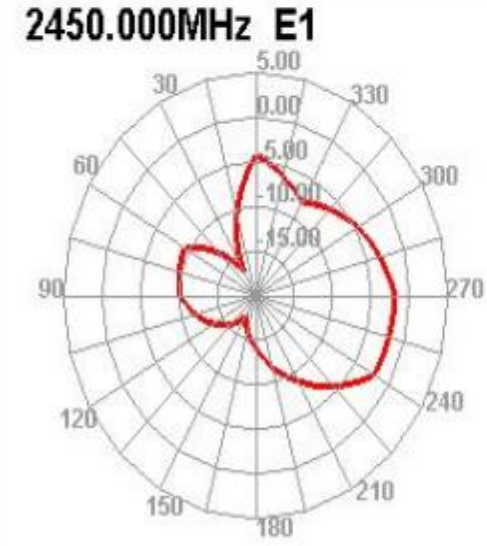
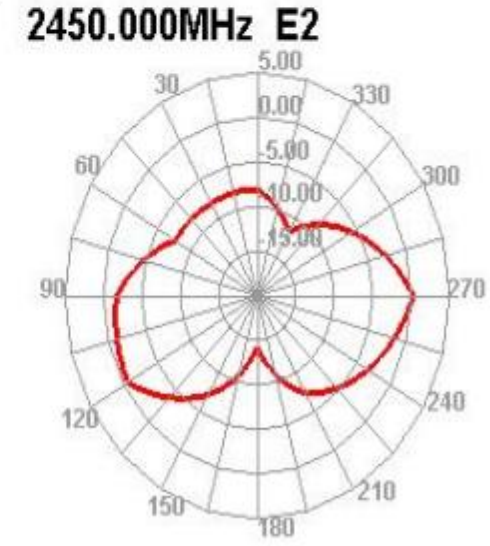
-0.1
-3.0
-5.8
-9.7
-13.5
-17.4


2450.000MHz H
5.00
0.00
-5.00
-10.00
-15.00
30
330
60
300
90
270
120
240
150
210
180


2450.000MHz E1
5.00
0.00
-5.00
-10.00
-15.00
30
330
60
300
90
270
120
240
150
210
180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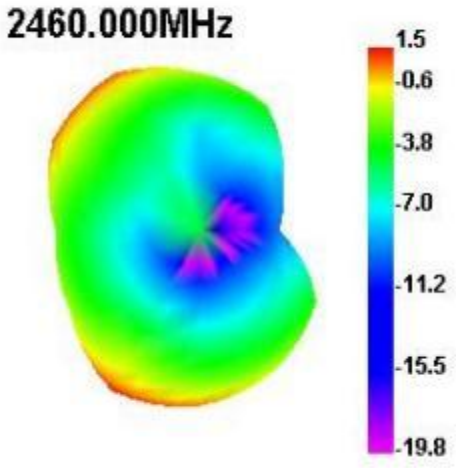
-5.00
-10.00
-15.00
30
330
60
300
90
270
120
240
150
210
180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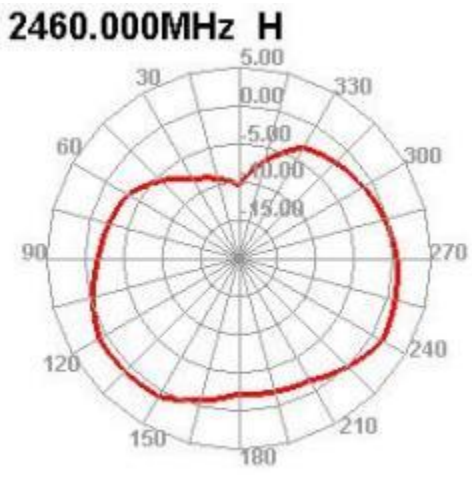
-15.5
-19.8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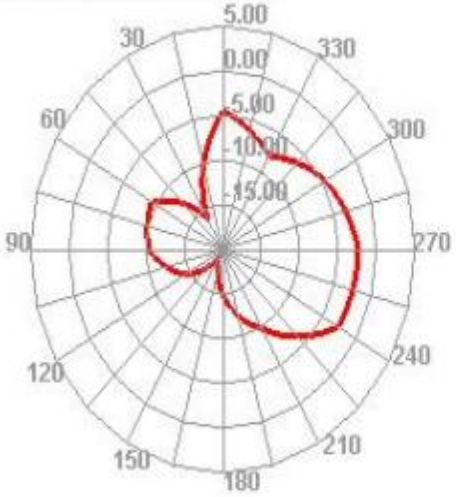
5.00
0.00
-5.00
-10.00
-15.00
30
330
60
300
90
270
120
240
150
210
180

2460.000MHz E1



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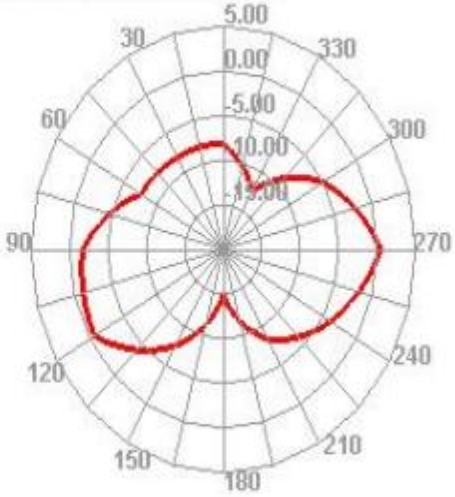

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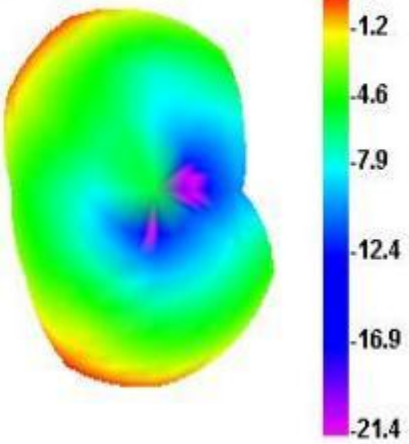

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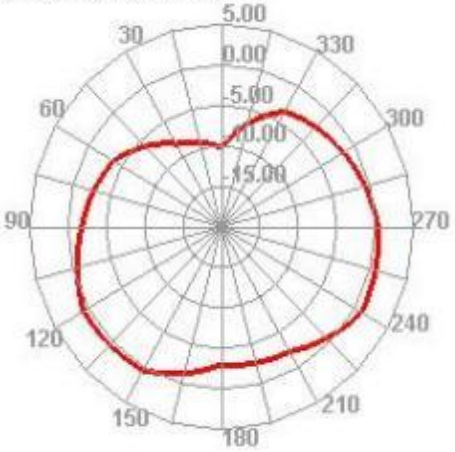

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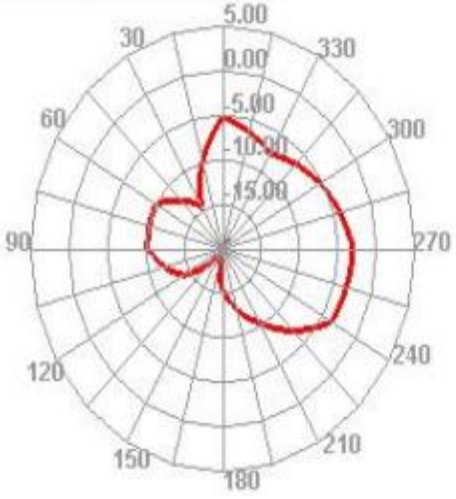

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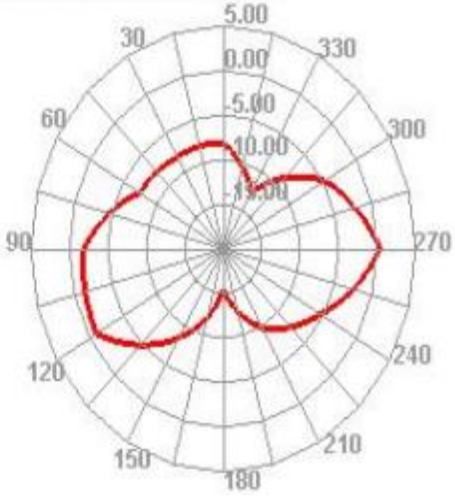

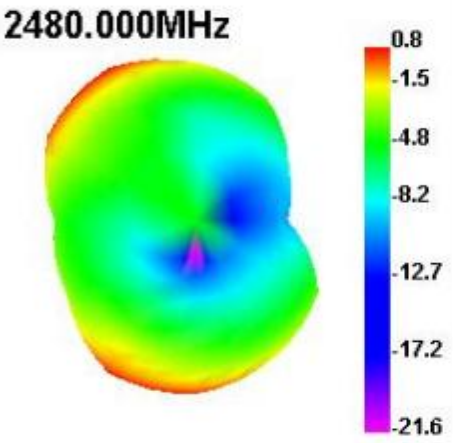
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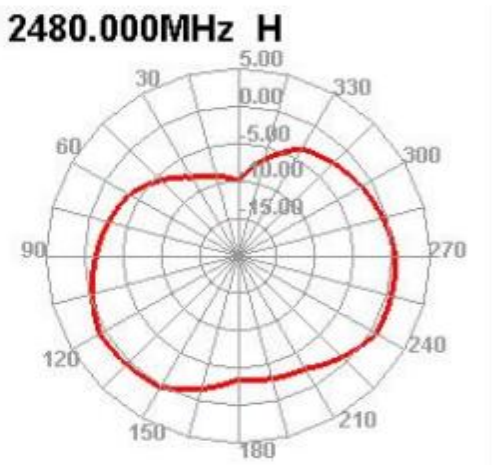
-1.5
-4.8
-8.2
-12.7
-17.2
-21.6


2480.000MHz H
5.00
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-15.00
30
330
60
300
90
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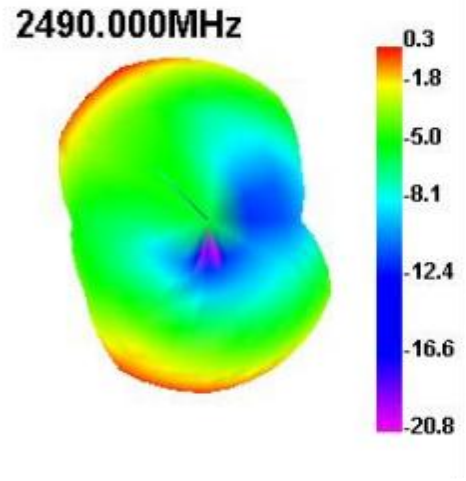
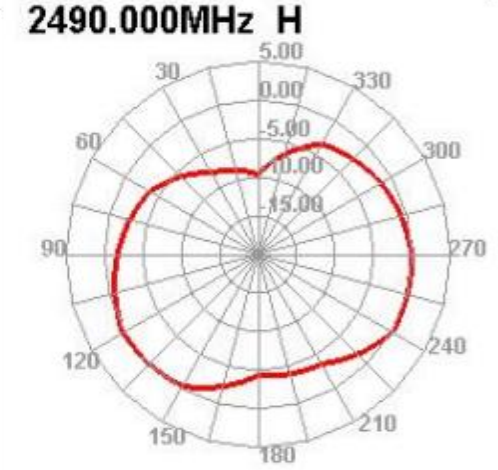
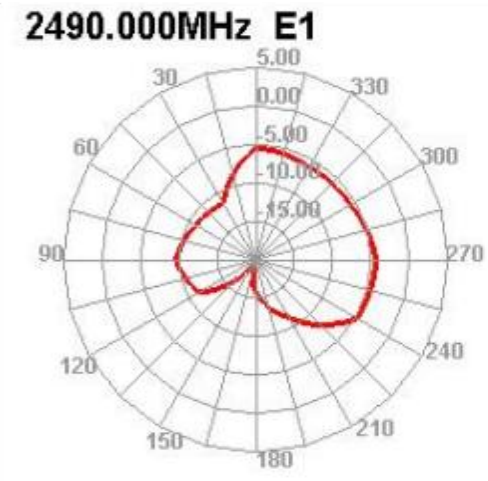
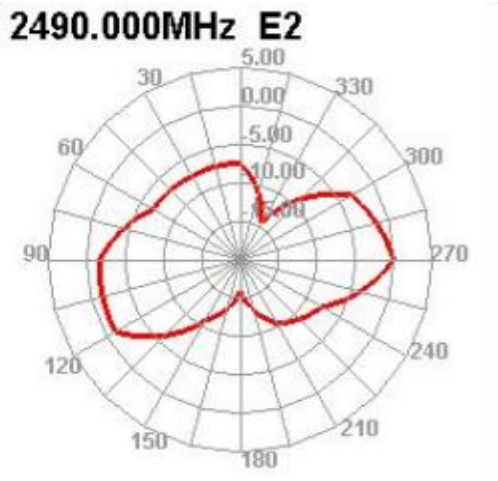
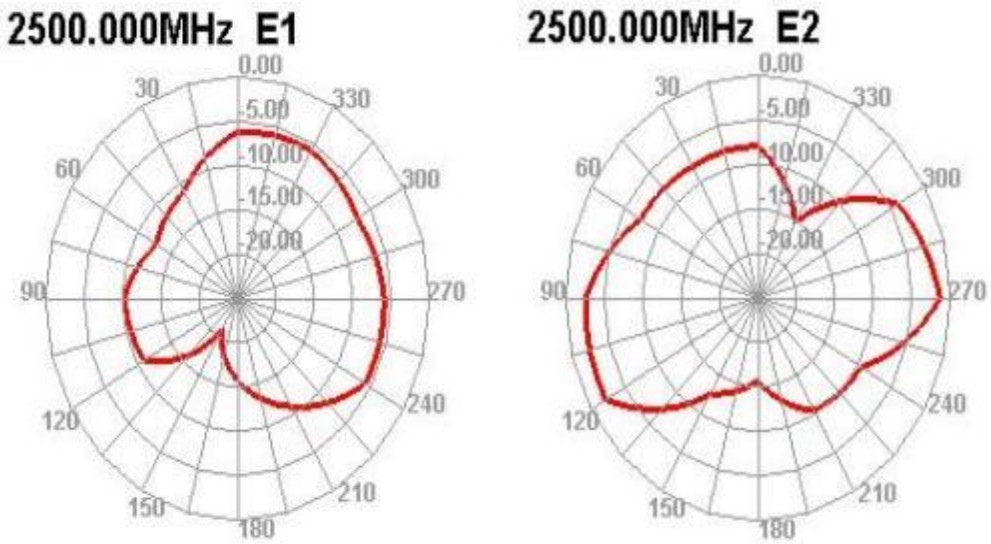
120
240
150
210
180


2490.000MHz
0.3
-1.8
-5.0
-8.1
-12.4
-16.6
-20.8


2490.000MHz H
5.00
0.00
-5.00
-10.00
-15.00
30
330
60
300
90
270
120
240
150
210
180


2490.000MHz E1
5.00
0.00
-5.00
-10.00
-15.00
30
330
60
300
90
270
120
240
150
210
180


2490.000MHz E2
5.00
0.00
-5.00
10.00
30
330
60
300
90
270
120
240
150
210
180



12. Appendix E Test Setup Photo