

RF Antenna

Manufacturer: Shenzhen Kushida Technology Co., Ltd.
M/N: KSD3ANT

Testing Report

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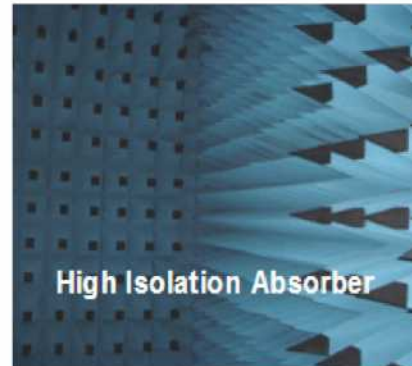
Date: 2022-07-22

Tester: jerry

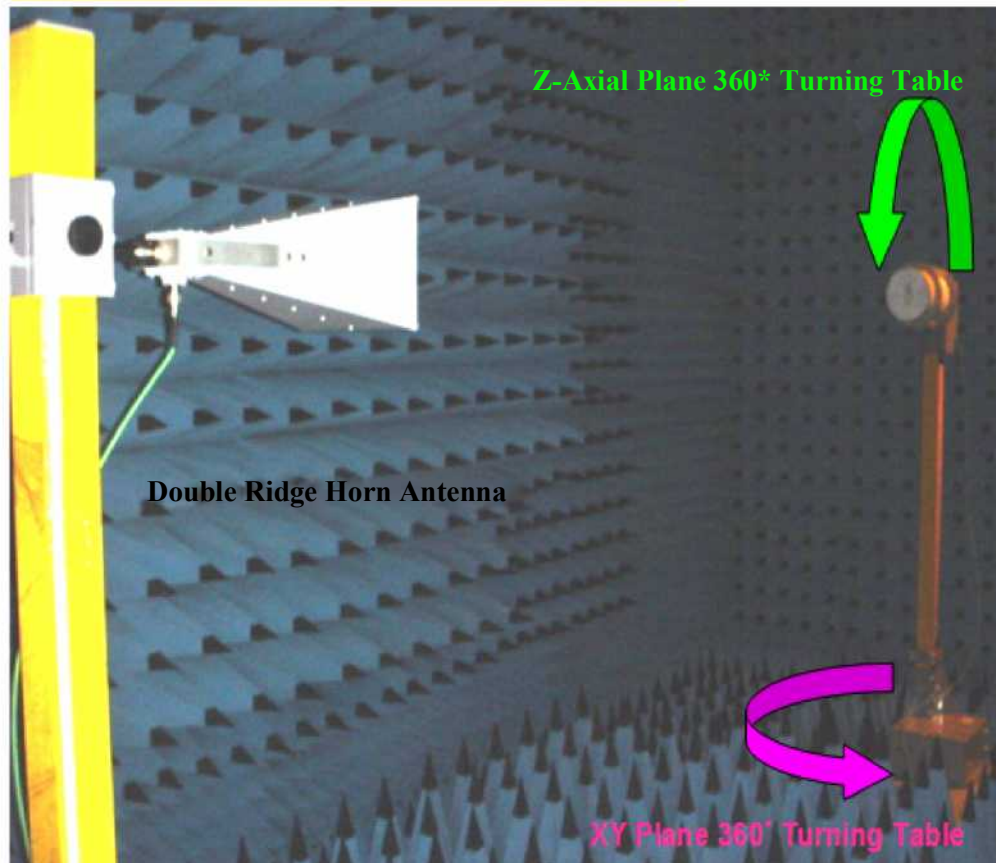
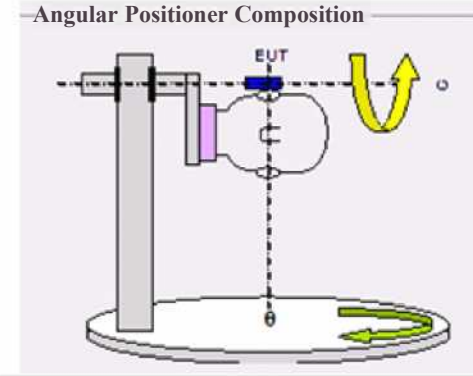
Approval: jerry

1. Testing Item & Equipments

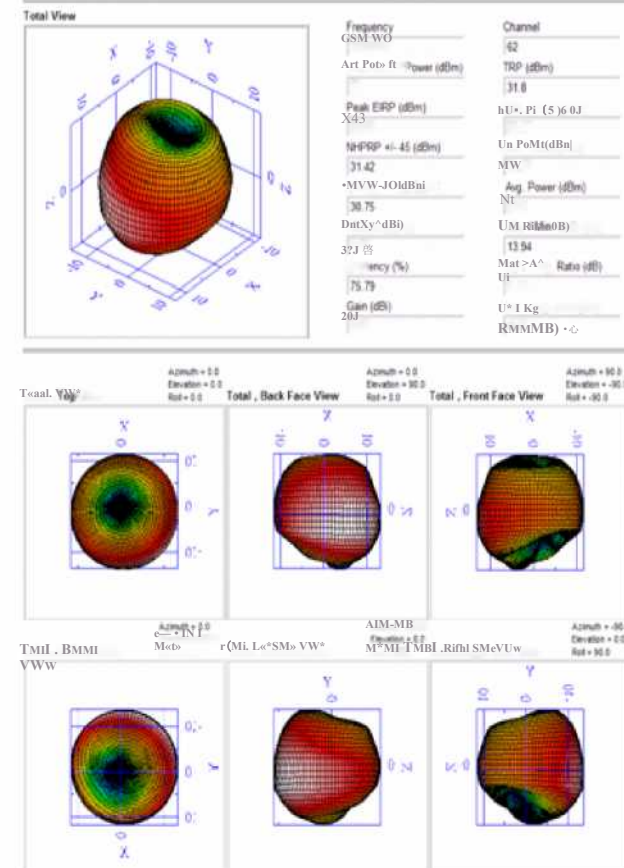
.Chamber Size: 8 x4 x4 m³
 .Freq. Range: 0.7 ~ 6.0 GHz .Double Ridge
 Horn Antenna x 2
 .VNA: Agilent 5071B
 .GSM Tester: R&S CMU200 / Agilent 8960 .3D
 Turning Table and Positioner
 .ADT Solution 3D Testing Software .CTIA 3D
 EIRP /3D TRP / 3D TIS Testing



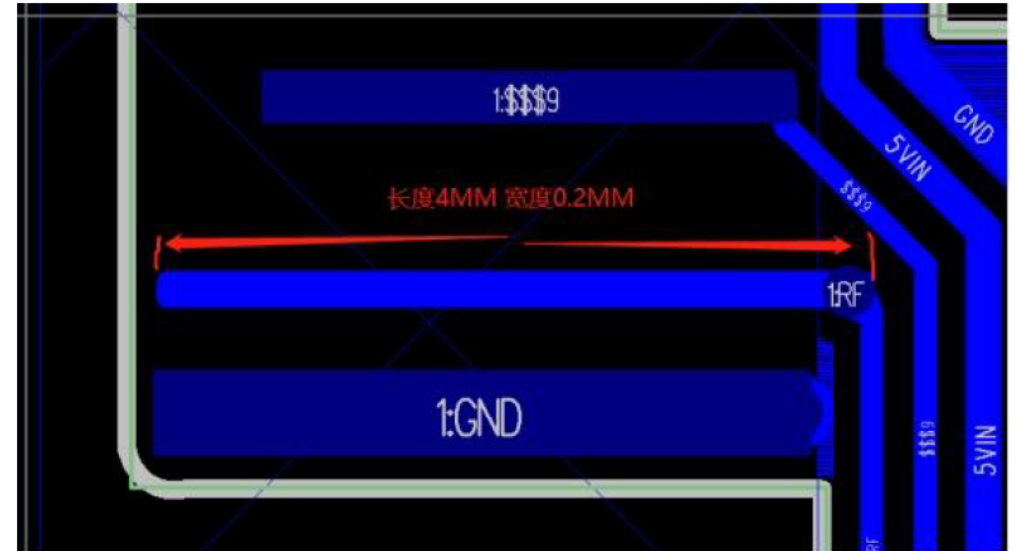
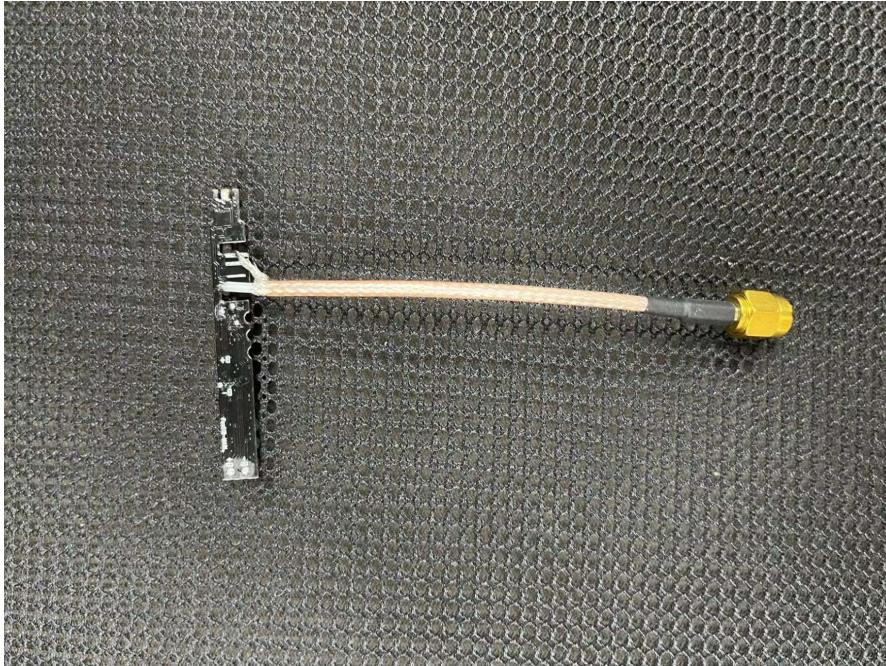
High Isolation Absorber



Double Ridge Horn Antenna



2. Antenna Structure



3. Gain Test

Antenna : 2400MHz Antenna//XZ
Remark : H-Plane//V-Pol
Tested by : Antenna 3D Lab

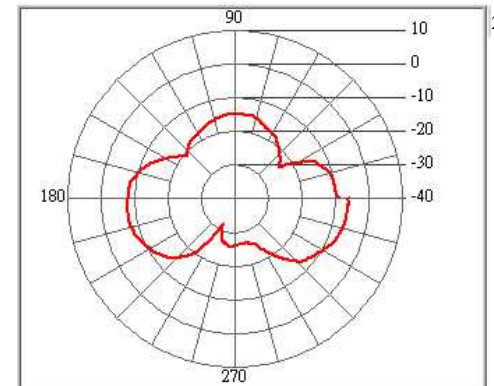
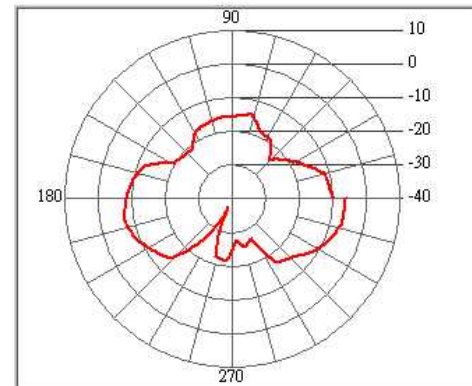
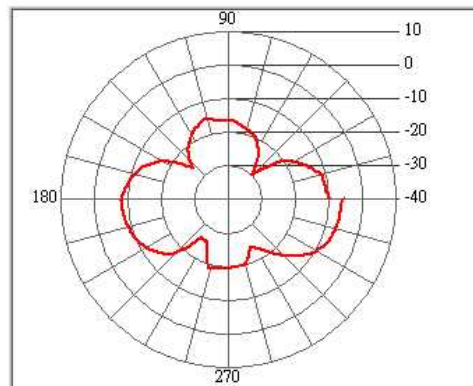
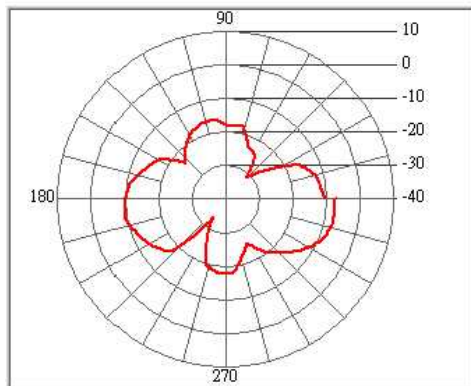
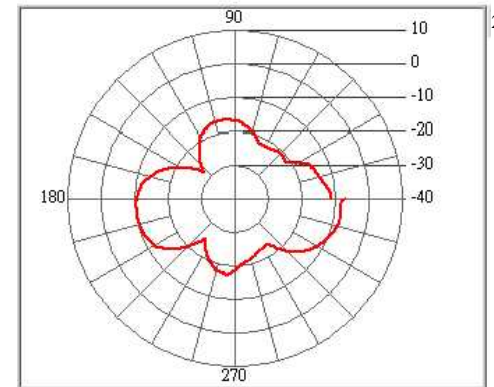
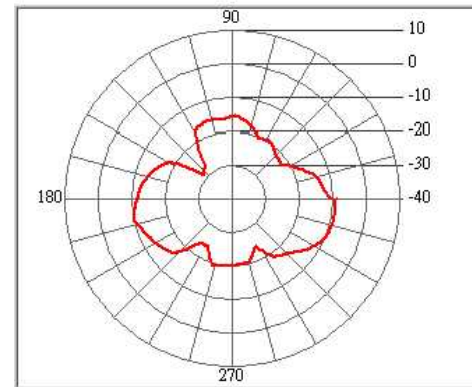
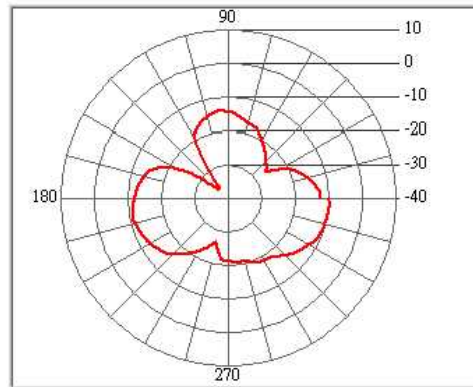
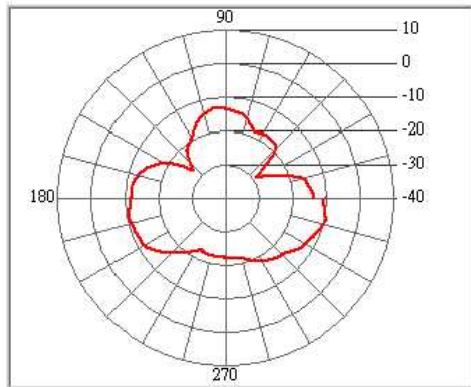
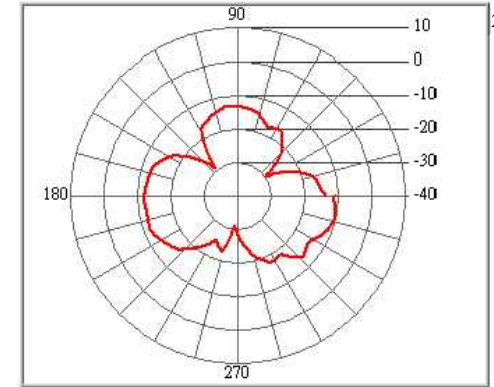
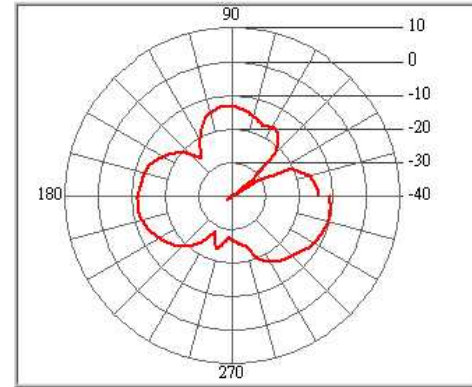
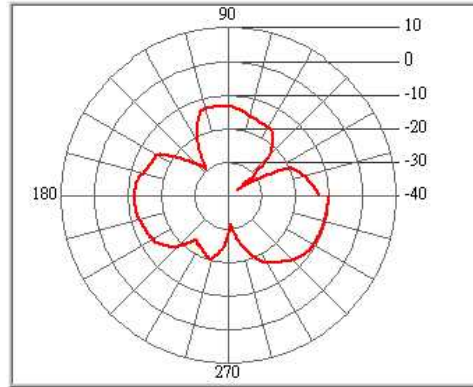
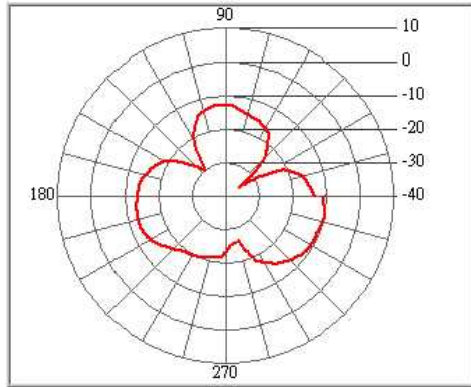
Location: **Chamber**Date: **2022/7/22**

Time: 下午 07:41:10

Temperatuer (七): **25.00**Humidity (%): **65.00**

Approved by:

Freq. (MHz)	2390	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Peak Gain (dBi)	-9.94	-10.04	-10.12	-9.99	-9.49	-9.58	-9.01	-7.53	-7.29	-5.95	-6.21	-5.98
Peak Degree	348	358	348	348	348	358	348	360	358	360	360	358
AV Gain (dBi)	-15.22	-15	-15.32	-15.4	-15.09	-15.32	-14.98	-14.67	-14.27	-13.13	-12.99	-12.5





Cortec Technology Inc.

广东省东莞市长安镇振安路沙头段咸西工业区

Antenna : 2400MHz Antenna//XZ
Remark : H-Plane//H-Pol Tested
by : Antenna 3D Lab

Location: Chamber

Temperatuer (七): 25.00

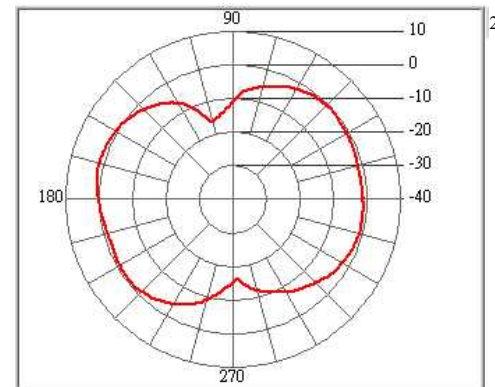
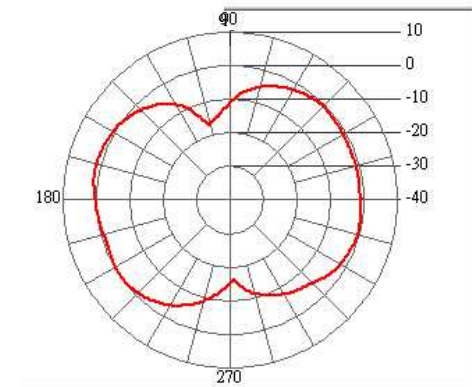
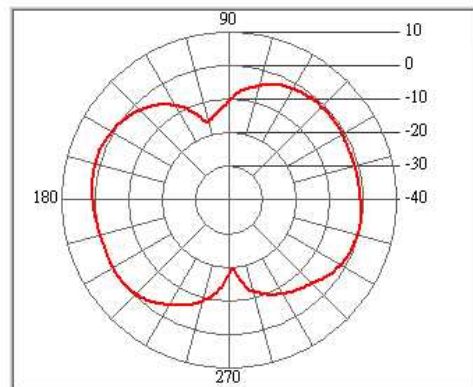
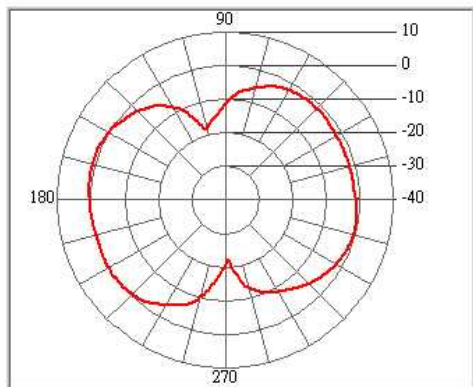
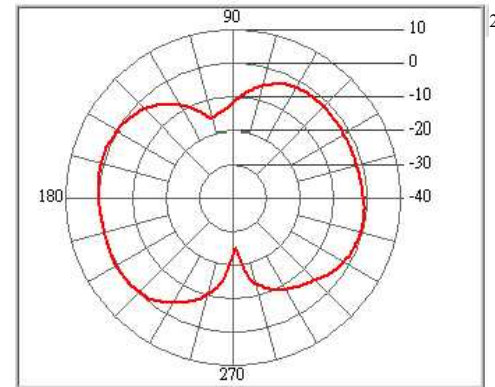
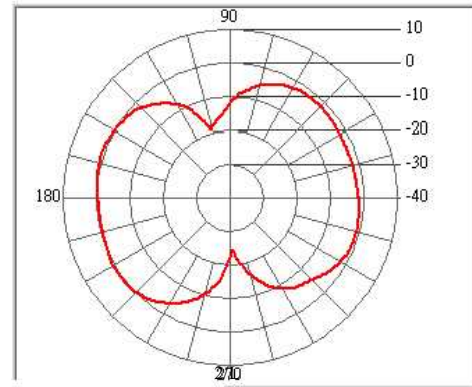
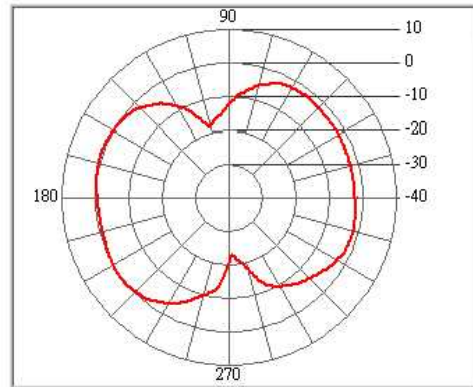
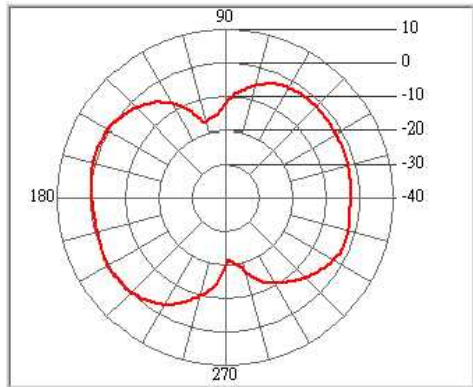
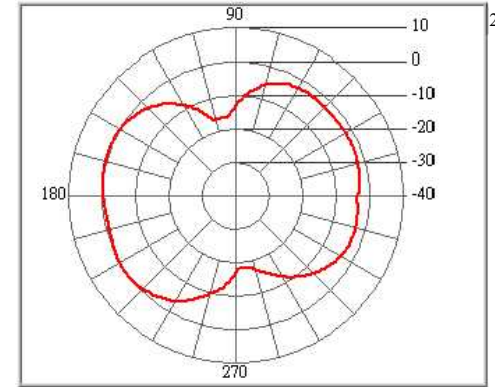
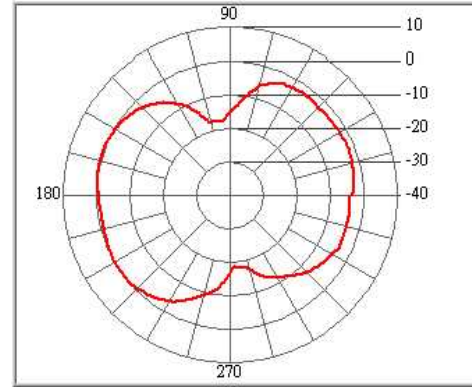
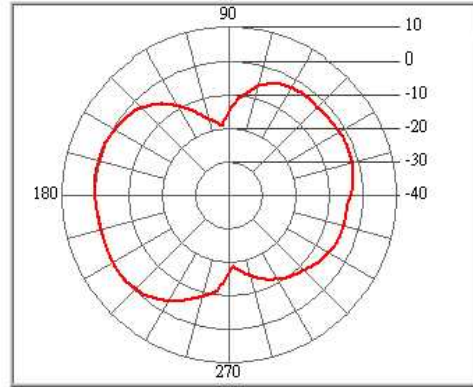
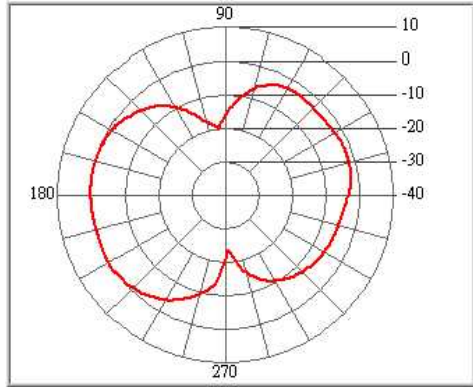
Date: 2022/7/22

Humidity (%): 65.00

Time:下午 07:48:30

Approved by:

Freq. (MHz)	2390	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Peak Gain (dBi)	0.1	0.35	0.31	0.34	0.71	0.53	0.64	0.75	0.74	1.35	1.37	1.32
Peak Degree	210	168	159	158	158	158	158	159	168	159	168	168
AV Gain (dBi)	-3.67	-3.39	-3.48	-3.34	-2.95	-3.07	-2.78	-2.59	-2.61	-2.21	-2.42	-2.58





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广东省东莞市长安镇振安路沙头段咸西工业区

Antenna : 2400MHz Antenna//XZ
Remark : H-Plane//V-Pol
Tested by : Antenna 3D Lab

Location: Chamber

Date: 2022/7/22

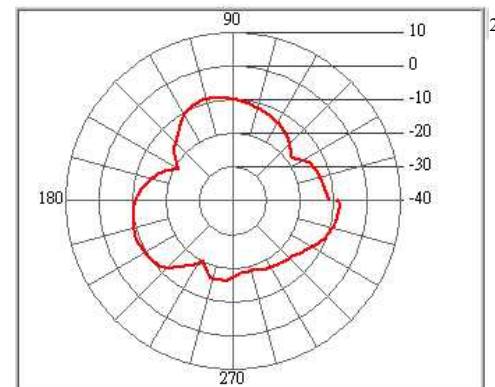
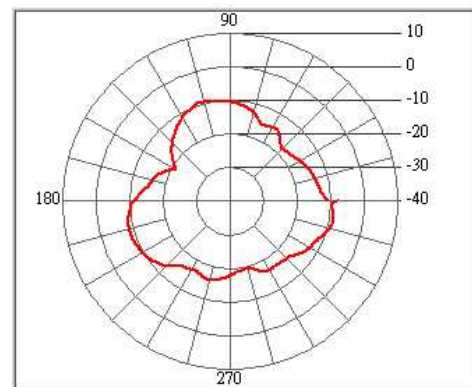
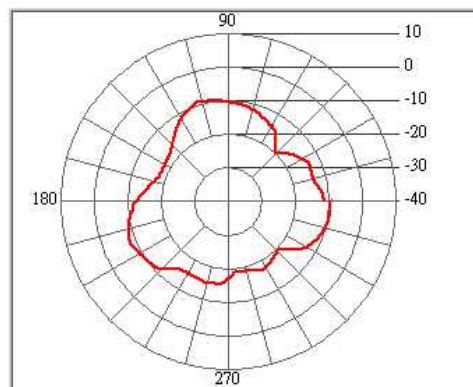
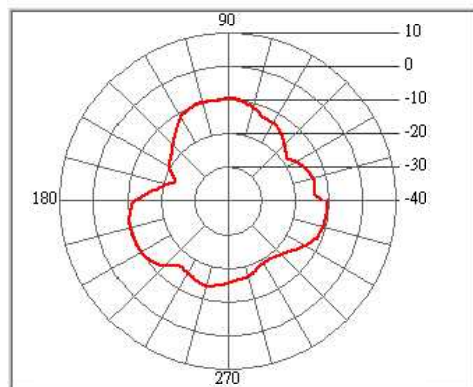
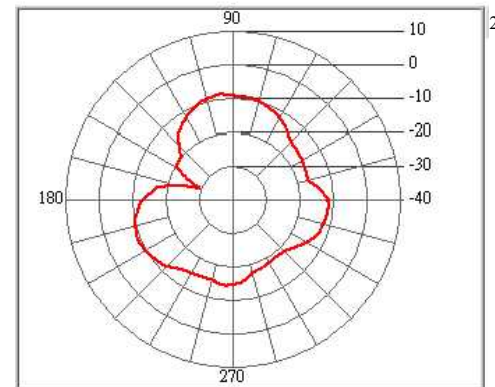
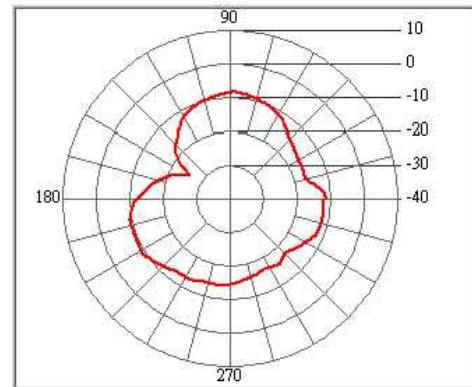
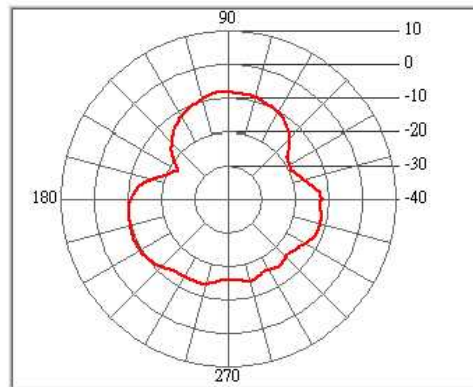
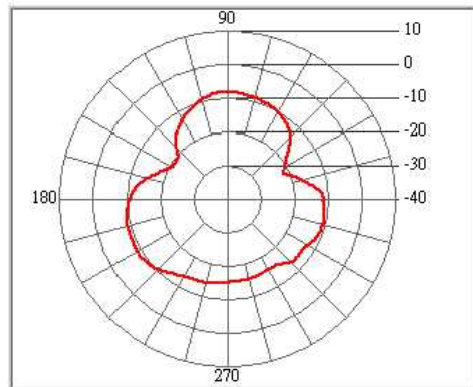
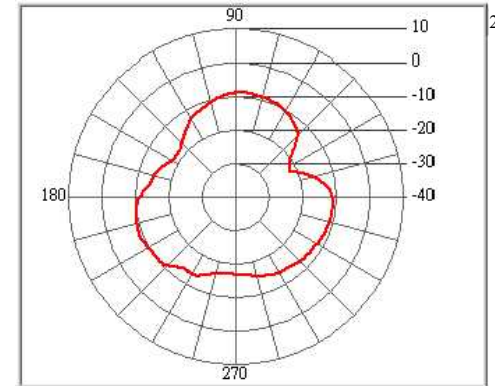
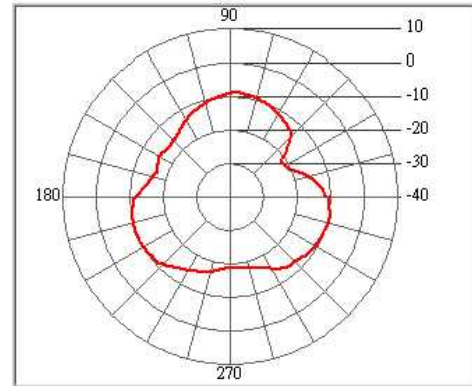
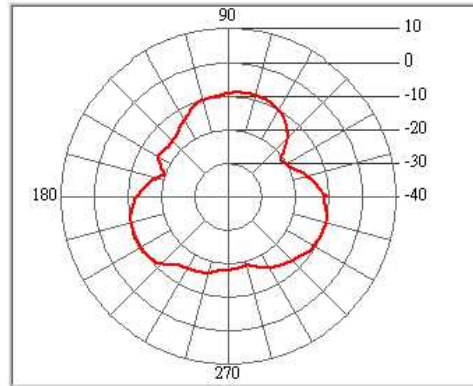
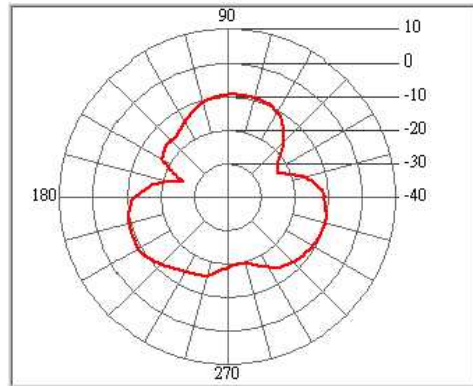
Time: 下午 07:47:16

Temperatuer (七): 25.00

Humidity (%): 65.00

Approved by:

Freq. (MHz)	2390	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Peak Gain (dBi)	-9.04	-8.58	-8.67	-8.62	-8.29	-8.27	-8.38	-8.62	-9.53	-8.33	-8.38	-7.89
Peak Degree	212	77	87	87	88	97	87	98	88	202	360	358
AV Gain (dBi)	-12.57	-12.42	-12.52	-12.31	-11.99	-12.32	-12.56	-12.97	-13.12	-12.85	-12.88	-12.47





Cortec Technology Inc.

广东省东莞市长安镇振安路沙头段咸西工业区

Antenna : 2400MHz Antenna//XY
Remark : H-Plane//H-Pol Tested
by : Antenna 3D Lab

Location: Chamber

Date: 2022/7/22

Time:下午 07:44:14

Temperatuer (七): 25.00

Humidity (%): 65.00

Approved by:

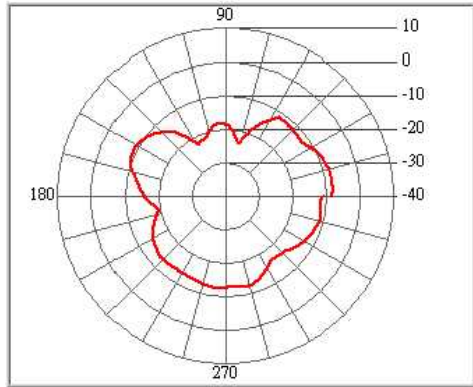
Freq. (MHz)

Peak Gain (dBi)

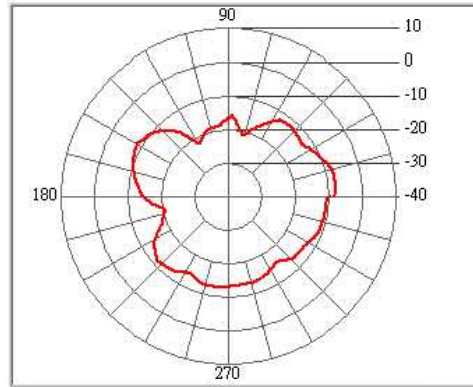
Peak Degree

AV Gain (dBi)

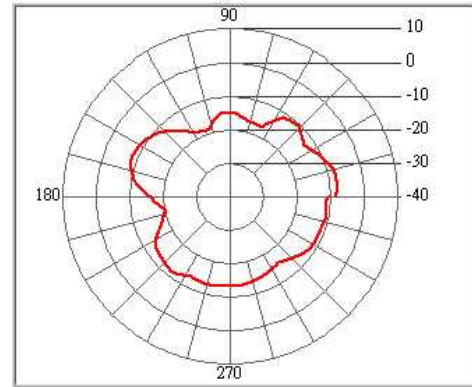
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-7.99	-7.71	-7.76	-7.67	-7.51	-7.9	-7.33	-7.3	-7.1	-6.88	-6.91	-7.58
4	14	4	4	150	150	150	150	150	150	45	160
-12.85	-12.61	-12.36	-12.32	-12.24	-12.28	-12.03	-12.04	-11.98	-11.47	-11.69	-11.96



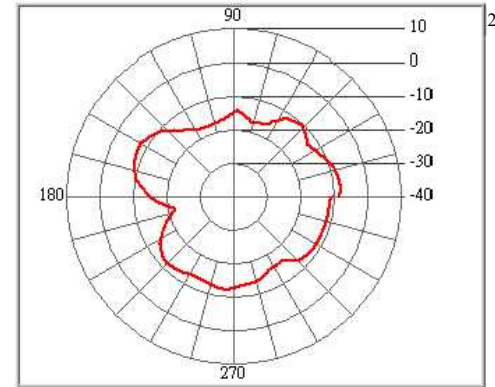
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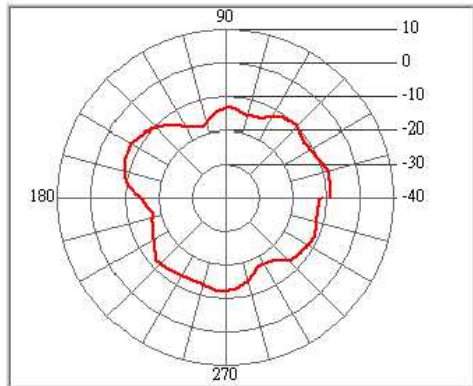
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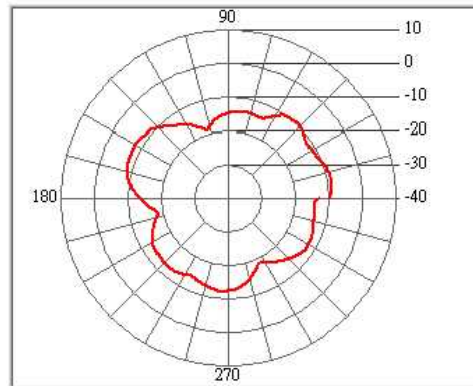
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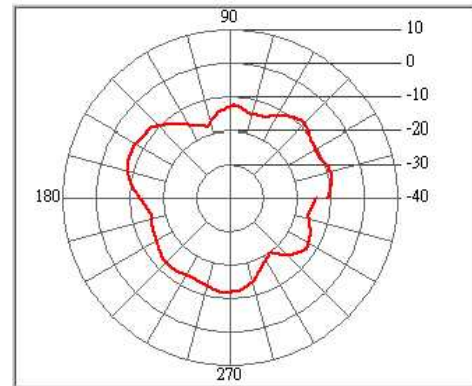
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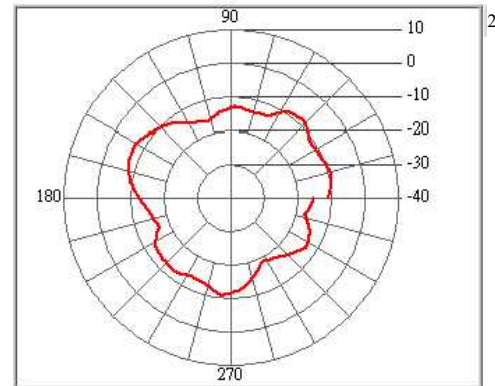
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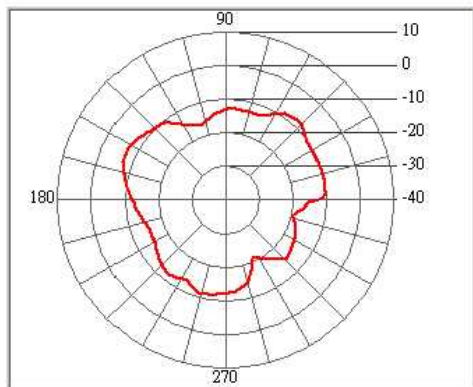
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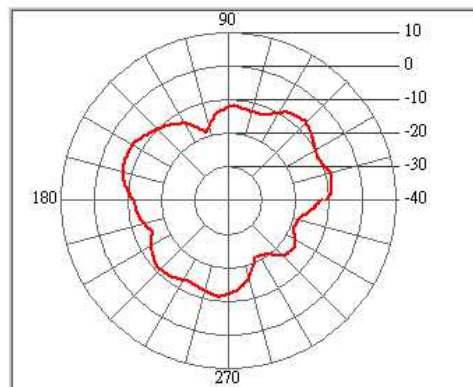
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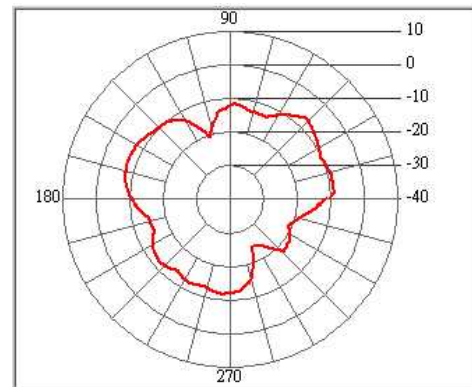
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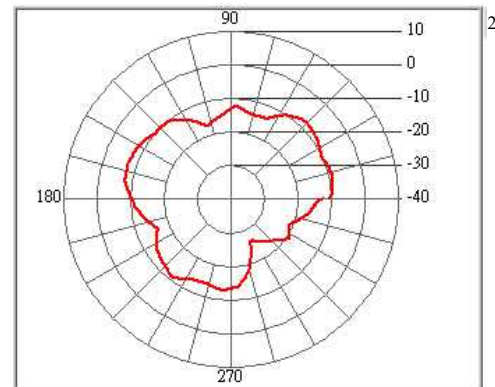
2470



2480



2490



2500



Cortec Technology Inc.

广东省东莞市长安镇振安路沙头段咸西工业区

Antenna : 2400MHz Antenna//XY
Remark : H-Plane//V-Pol
Tested by : Antenna 3D Lab

Location: Chamber

Date: 2022/7/22

Time: 下午 07:45:29

Temperatuer (七): 25.00

Humidity (%): 65.00

Approved by:

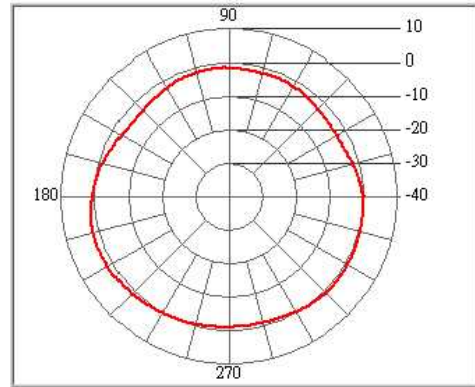
Freq. (MHz)

2390	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
1.75	1.93	1.65	1.7	1.99	1.67	1.76	1.88	1.84	2.13	1.91	1.68
200	200	200	189	199	190	200	210	200	200	200	200
-0.61	-0.47	-0.66	-0.65	-0.38	-0.66	-0.55	-0.56	-0.83	-0.48	-0.88	-1.05

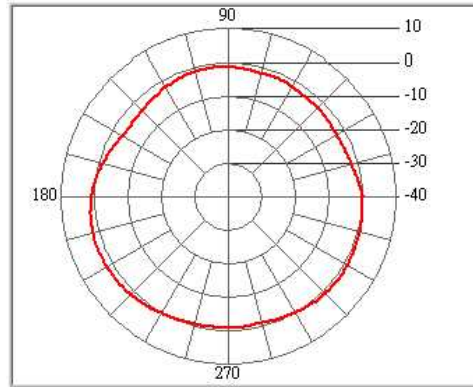
Peak Gain (dBi)

Peak Degree

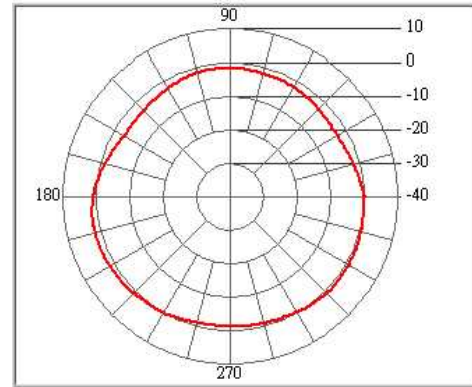
AV Gain (dBi)



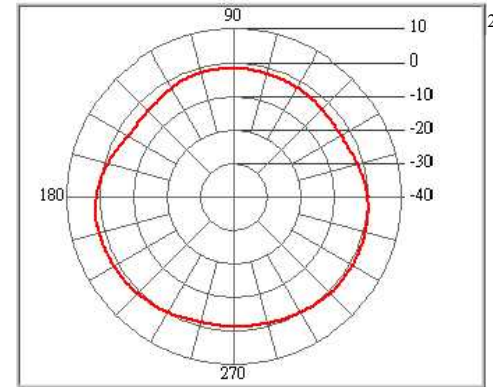
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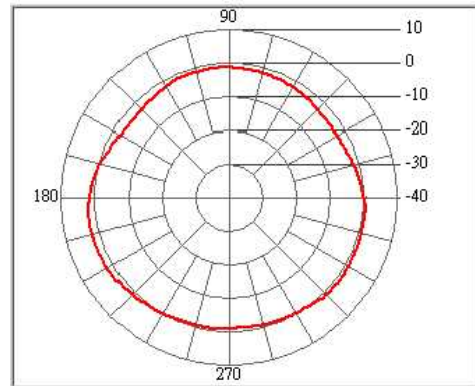
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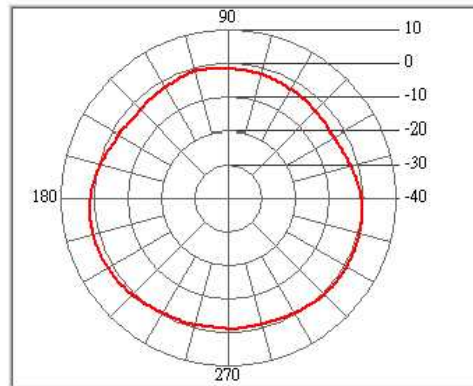
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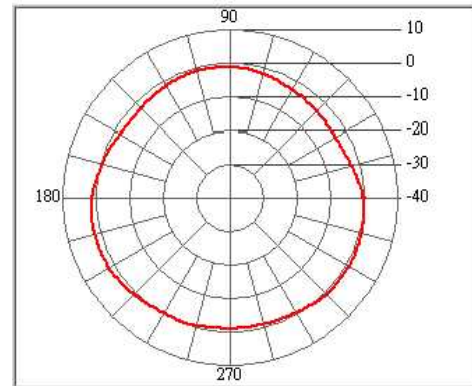
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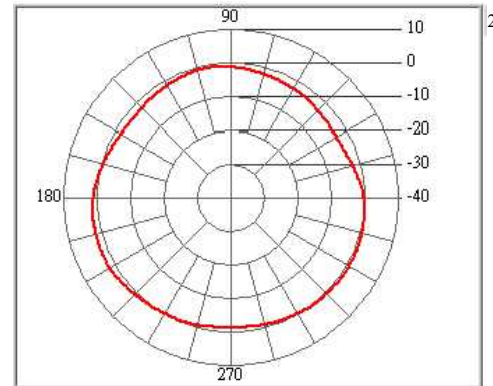
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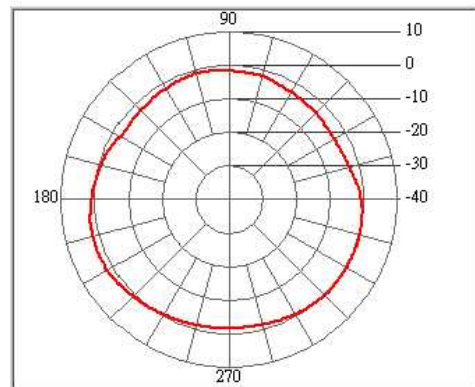
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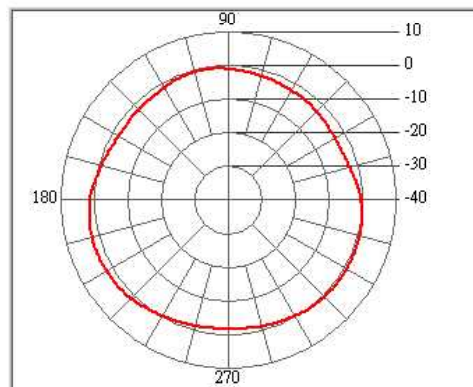
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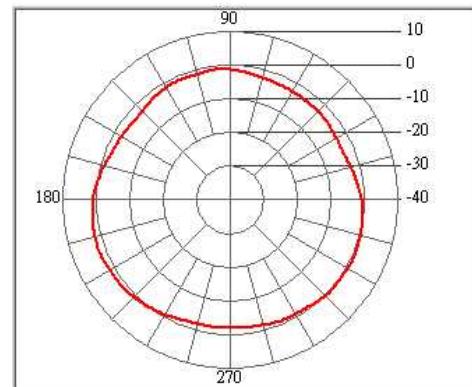
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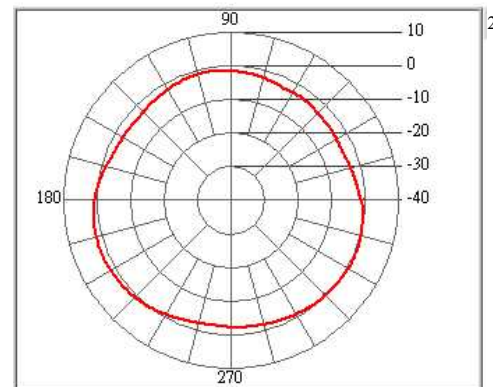
2470



2480



2490



2500

Antenna : 2400MHz Antenna//XZ
Remark : H-Plane//H-Pol Tested
by : Antenna 3D Lab

Location: **Chamber**

Temperatuer (七): **25.00**

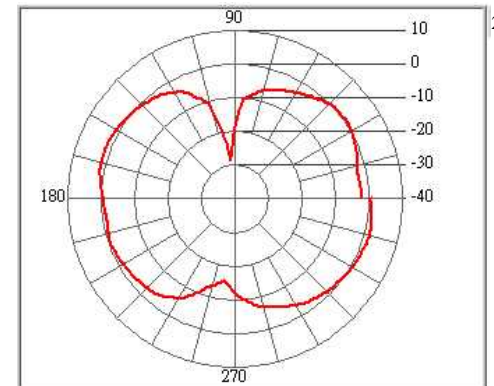
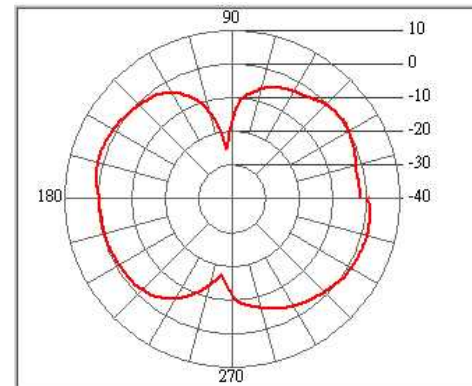
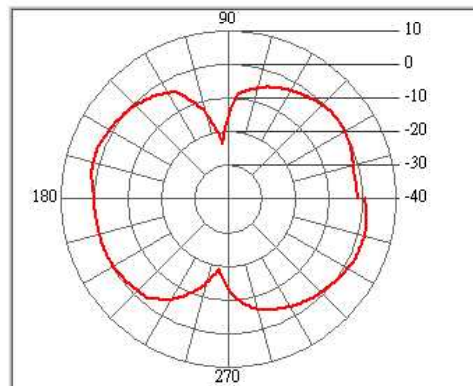
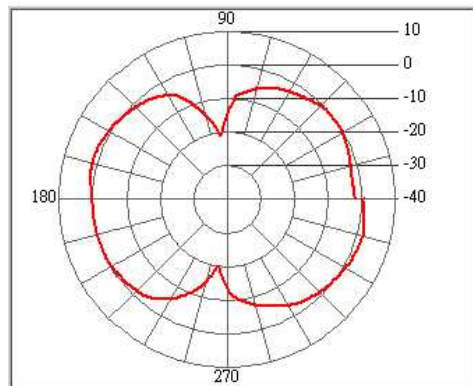
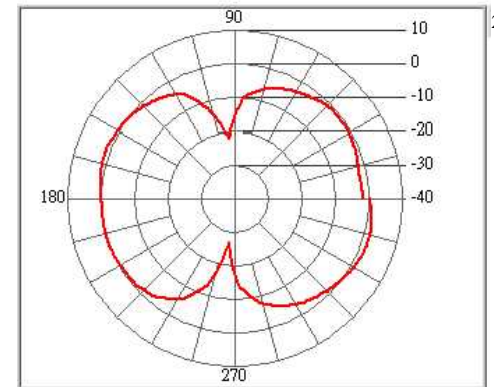
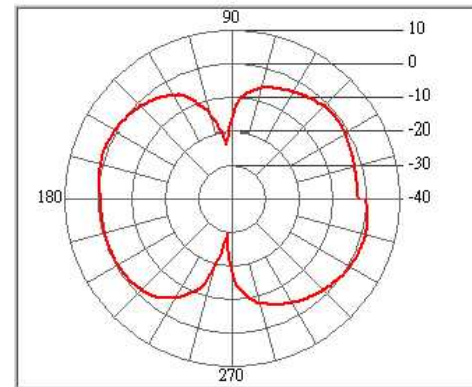
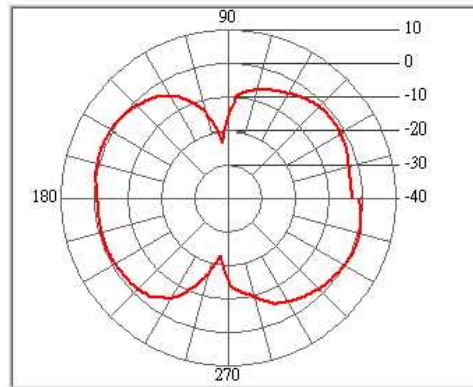
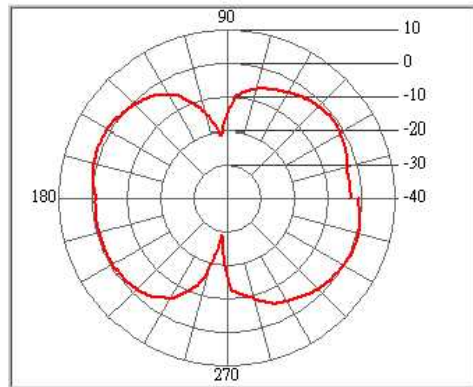
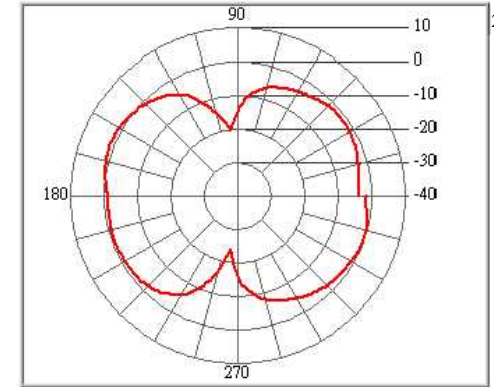
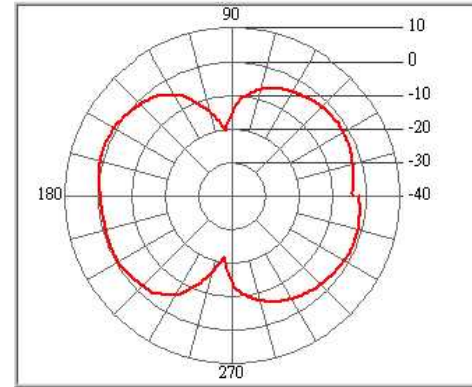
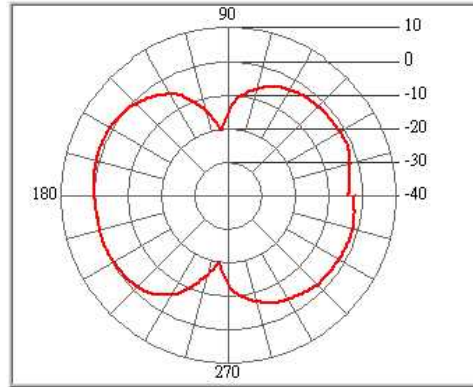
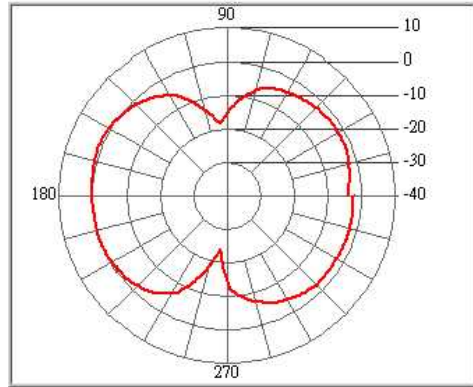
Date: **2022/7/22**

Humidity (%): **65.00**

Time:下午 07:42:38

Approved by:

Freq. (MHz)	2390	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Peak Gain (dBi)	0.91	0.95	1.01	1.14	1.12	0.87	1.33	1.83	1.89	2.08	1.82	1.7
Peak Degree	158	158	158	158	158	158	346	346	346	346	346	346
AV Gain (dBi)	-2.91	-2.69	-2.85	-2.76	-2.42	-2.56	-2.24	-1.92	-1.85	-1.49	-1.72	-1.97



4. Test Results

Bluetooth	Frequency 2400~2500 MHz			
SWR	< 2.0			
2D Test Gain (dBi)	XY	Vertical	Peak Gain	1 ~ 2
			Av Gain	-1 ~ 0
		Horizontal	Peak Gain	-6 —7
			Av Gain	-11~-12
	XZ	Vertical	Peak Gain	-8 ~ -9
			Av Gain	-11 ~-12
		Horizontal	Peak Gain	0 ~ 1
			Av Gain	-2 ~ -3
	YZ	Vertical	Peak Gain	-5 ~10
			Av Gain	-12~-15
		Horizontal	Peak Gain	1 ~ 2.2
			Av Gain	-1 ~-2
3D Test	Efficiency (%)		50 %	
	Peak Gain (dBi)		1 ~ 2.2 dBi	