

SPECIFICATION FOR APPROVAL

CUSTOMER:

P/N NO.:

CND0020149

PART NAME:

2.4GHz 2dBi Antenna Light Gray
With I-PEX MHF PLUG (RoHS)
FOR OD:1.13 Coaxial Cable L:115mm

PART NO.:

C053-RF-018

ISSUE DATE:

2011.11.21

CONFIRMATION

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(CUSTOMER CONFIRMATION)

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APPROVAL	CHECK	PREPARE
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Antenna Specification

1. Electrical Properties

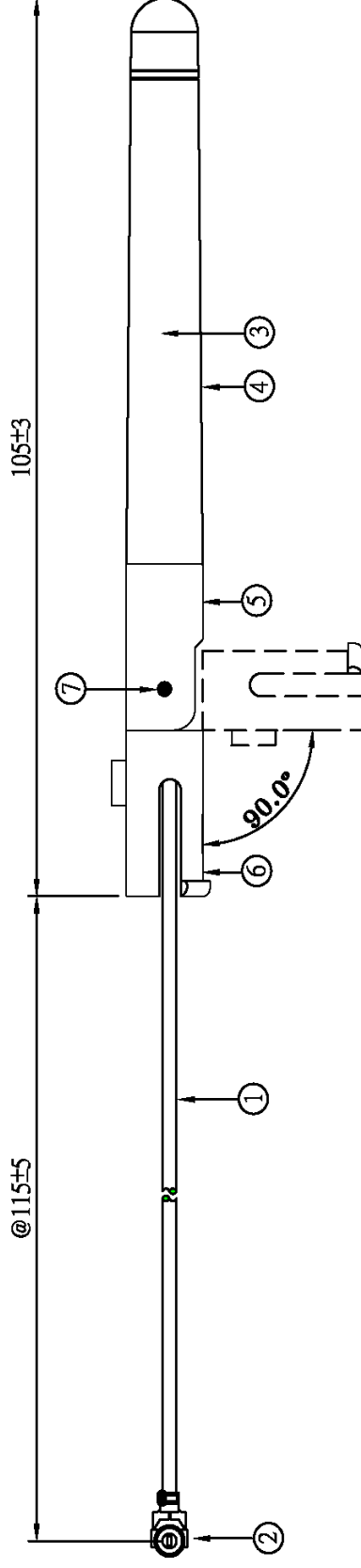
- 1.1 Operating Frequency..... 2.4 - 2.4835 GHz
- 1.2 characteristic impedance..... 50 Ω (Nominal)
- 1.3 VSWR..... Max 2.0: 1
- 1.4 Return Loss..... -10dBi Max
- 1.5 Polarization..... Vertical
- 1.6 Gain(Peak)..... 2dBi $\pm$ 0.7 @2.45GHz
- 1.7 Radiation..... Omni-directional

2. Physical Properties:

- 2.1 Cable..... RG113 Coaxial Cable
- 2.2 Antenna Cover..... Light Gray
- 2.3 Antenna Base-1..... Light Gray
- 2.5 temperature..... - 20°C - +70°C
- 2.6 Storage temperature..... - 30°C - +80°C
- 2.7 Color..... Light Gray
- 2.8 Connector..... I-PEX MHF PLUG

Finished map

(RoHS)



Note:

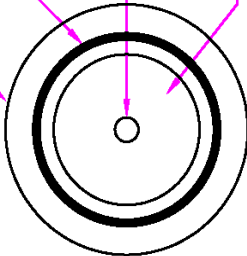
1. Standard "@" that focus on test size;
2. 20PCS/PE BAG 220*25(Openings)*0.03mm*20PCS ;
3. Again100PCS/PE BAG 380*280(Openings)*0.03mm , 1500PCS/BOX;
4. 1-Desiccant / bag;
5. Products to be 100% electrical test conditions:
 - 5.1 Operating Frequency :2.4GHz - 2.4835GHz;
 - 5.2 VSWR : MAX 2.0 ;1;
6. Gain(Peak) : 2dBi±0.7 @2.45GHz
7. Polarization:linear(Vertical)
8. Beam-Width : Omni-directional
9. Impedance : 50 Ω (Nominal)
10. Mechanical properties:
 - 10.1: Operating Temperature : -20°C - +70°C
 - 10.2: Storage temperature: -30°C - +80°C
11. This product is environmentally friendly products; using environmentally friendly processes, in line with (RoHS);
12. Terminal drawing force: 10N MIN;

No.	Materials Part No.	Name	Specification	Note	Units	Dosage	Remarks
10		PAPER BOX 450*280*280mm			PCS	1/1500	RoHS
9		PE BAG 380*280(Openings)*0.03mm			PCS	1/100	RoHS
8		PE BAG 220*25(Openings)*0.03mm*20PCS*220*75(Openings)*0.03			PCS	1/20	RoHS
7	ANTE-05-2-01	Fixed Pin	Black		PCS	2	RoHS
6	ANTE-25-2-07	Base-2	MATERIAL: PBT+PC LIGHT GRAY		PCS	1	RoHS
5	ANTE-30-2-08	Base-1	MATERIAL: PBT+PC LIGHT GRAY		PCS	1	RoHS
4	ANTE-67-1-06	COVER	MATERIAL: TPEE LIGHT GRAY		PCS	1	RoHS
3	ANTE-25-1-01	CopperTube	COPPER		PCS	1	RoHS
2	IPEX-13-M-11	CONN	I-PEX P/N:20278-112R-13 PLUG ,GOLD PLAED		PCS	1	RoHS
1	R113-32-T-01	CABLE	COAXIAL CABLE 32AWG CONDUCTOR: SILVER PLATING BRAID COPPER:TINNED PLATING OD:1.13 JACKET:LIGHT GRAY(FEP)		mm	193	RoHS

No.	Materials Part No.	Name	Specification	Note	Units	Dosage	Remarks
Products Model: C053-RF-018					page: 1	OF 1	
Customer's code: C053					Approved:		
Customer's Part No.: CND00020149					Checked:		
Customer's Confirmation:					Units: mm	Version: A	Drawing: zhong gui qi 2011.11.21

Material map(RoHS)

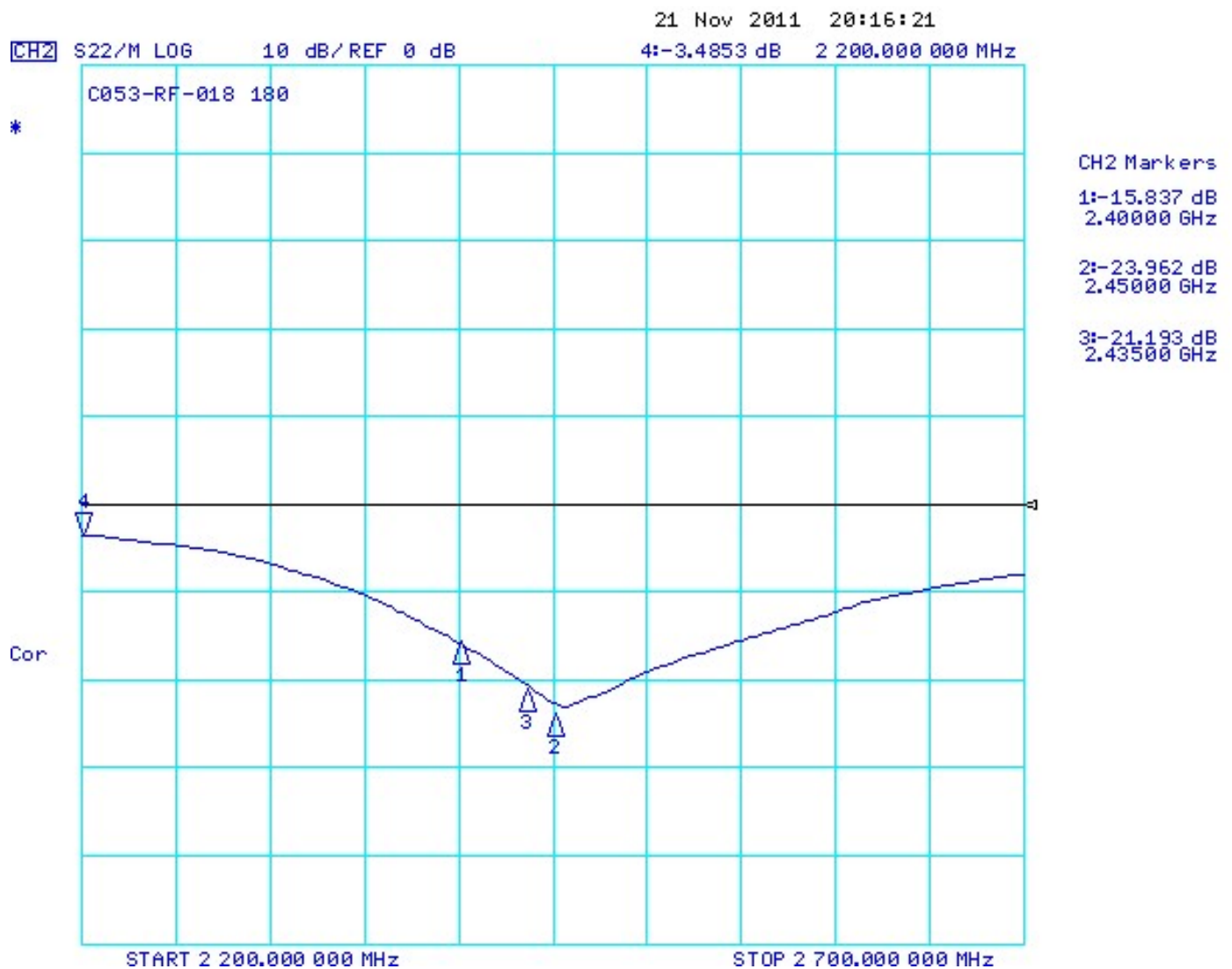
REV	Date	Description of revisions	BY

SPECIFICATION:		1C+B		CONSTRUCTION	D.W.G	
ITEM		SPECIFICATION				
CONDUCTOR	AWG	32AWG				
	MATERIAL	Silver-Coated Copper				
	COND.SIZE	7/0.08±0.008mm				
INSULATION	MIN.AVG.THICK	0.15mm				
	MATERIAL	FEP				
	O.D	0.68±0.05mm				
BRAID COPPER	MATERIAL	Tin-Coated Copper			COLOUR CODE:	
	SIZE	16*4/0.05±0.008mm				NATURAL:
	COVERAGE	93%MIN				
JACKET	MIN.AVG.THICK	0.10mm			MARKING	
	MATERIAL	FEP				
	COLOUR	LIGHT GRAY				
O.D	1.13±0.1mm					
SPECIFICATION:		Environmental protection product				
1.Rating:TEMP200°C; VOLTAGE 30V 2.Conductor Resistance:at 20°C MAX 32AWG:567 OHM/km; 3.InSulation Resistance:100MOHM-km min 20°C 4.Dielectric strength:AC 500V/1minute 5.Impedance test(normal):50± 3OHM@TDR 6.Attenuation(normal): at 1GHz 2.0dB/M at 2GHz 2.9dB/M at 4GHz 4. 2dB/M at 6GHz 5. 2dB/M		Material No.: R113-32-T-01 Material name : RF1.13 Supplier code: S018 Supplier's Part No.: RF1.13		 深圳市卓越發展科技有限公司 SHENZHEN EXCELLENCE DEVELOPMENT TECHNOLOGY CO.,LTD		
		Ratio: 1:4		Version: A		
		Approved: ZHONG GUI YANG 2006.03.28		Checked: GEORGE 2006.03.28		
		Units: mm		Drawing: LI FEI YING 2006.03.28		
		TOLERANCE: X±0.3 .XX±0.2 .XXX±0.1				



SHENZHENSHI EXCELLENCE DEVELOP TECHNOLOGY CO.,LTD

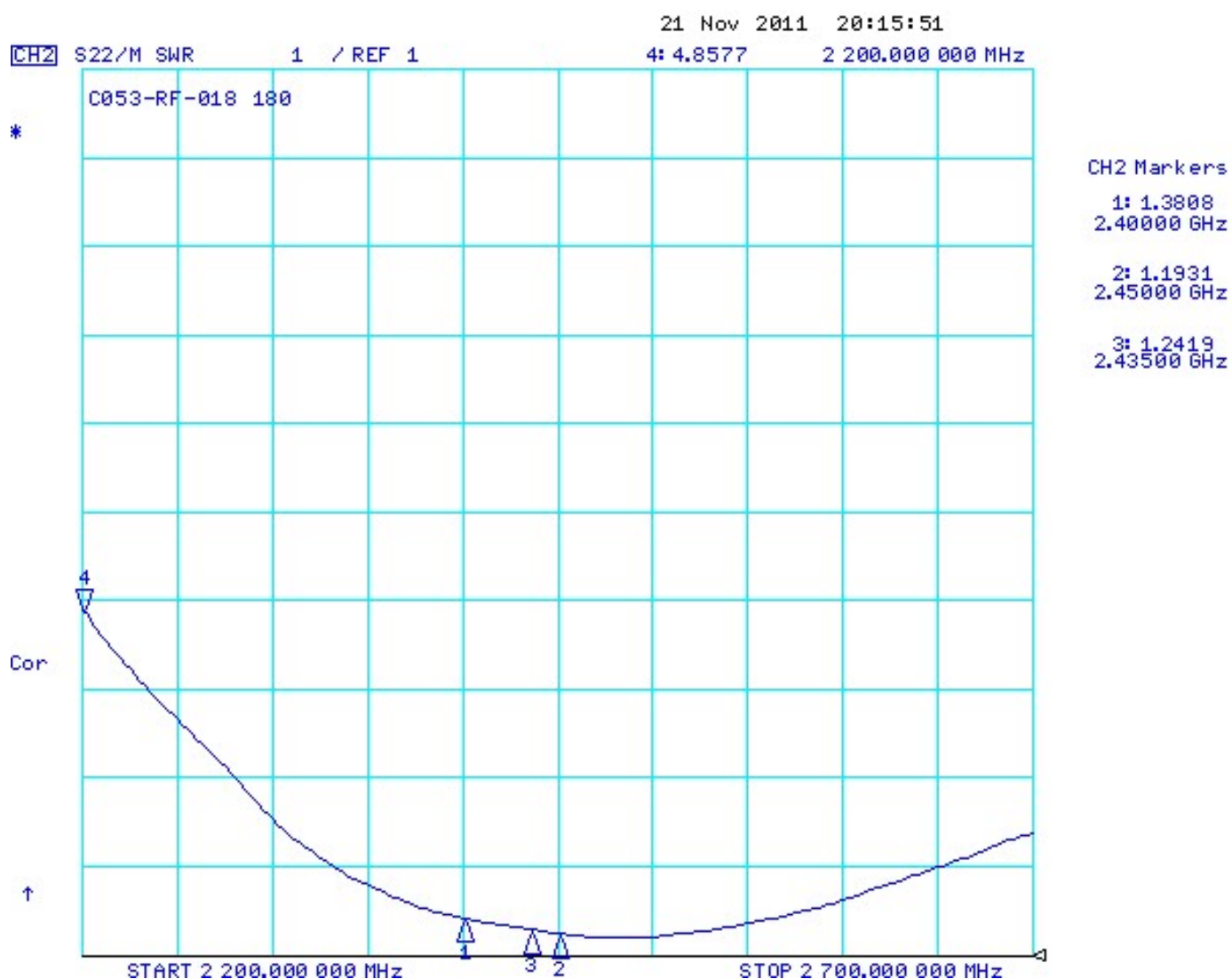
Return loss





SHENZHENSHI EXCELLENCE DEVELOP TECHNOLOGY CO.,LTD

VSWR





SHENZHENSHI EXCELLENCE DEVELOP TECHNOLOGY CO.,LTD

Smith

21 Nov 2011 20:16:07

CH2 S22/M 1 U FS

4: 15.934 Ω 37.055 Ω 2.6807 nH

2 200.000 000 MHz

C053-RF-018 180

*

CH2 Markers

1: 59.283 Ω
-14.074 Ω
2.40000 GHz

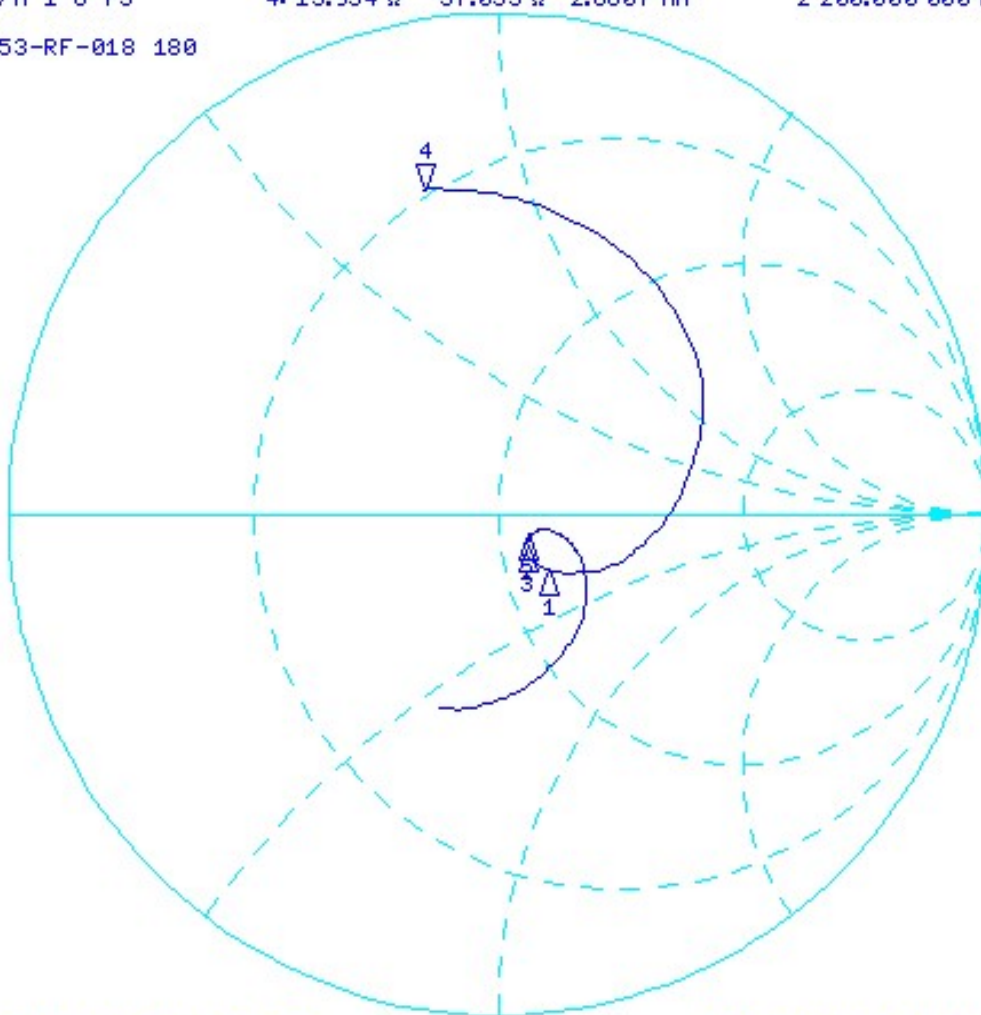
2: 55.814 Ω
-4.9590 Ω
2.45000 GHz

3: 55.512 Ω
-7.4043 Ω
2.43500 GHz

Cor

START 2 200.000 000 MHz

STOP 2 700.000 000 MHz



深圳市卓越发展科技有限公司

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WWW.ZY-RF.COM

Model : 2.4GHz Antenna 2dBi-6

Remark : E-Plane // Horizontal Polarization

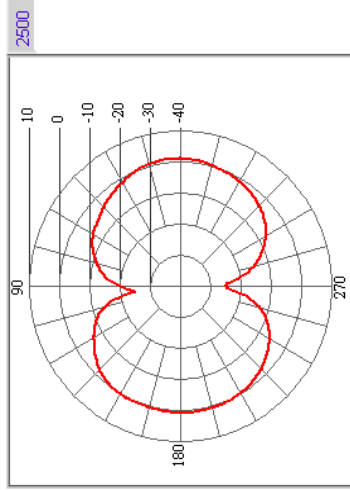
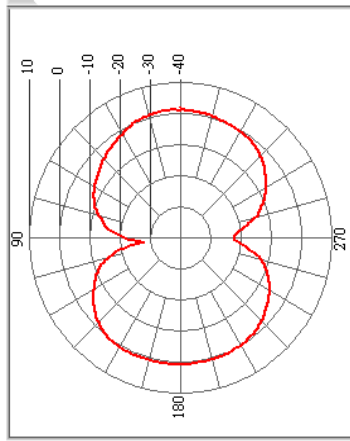
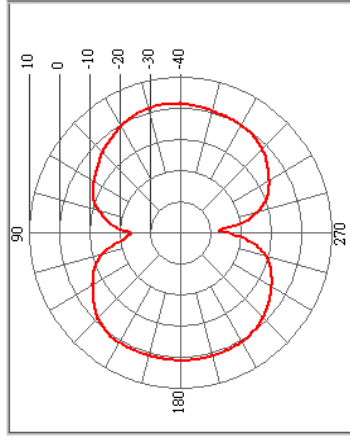
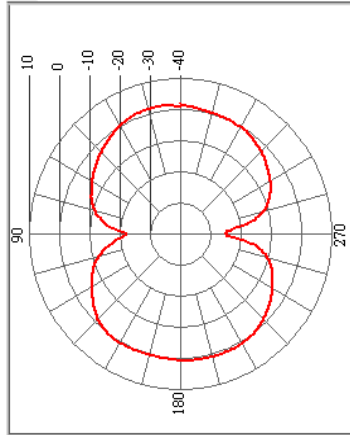
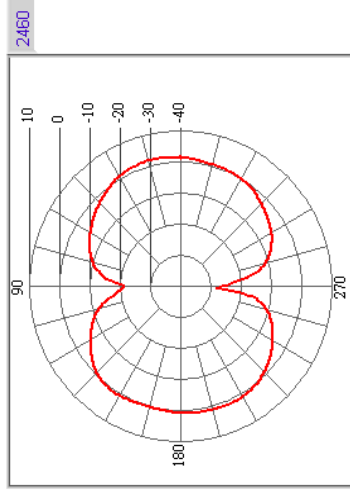
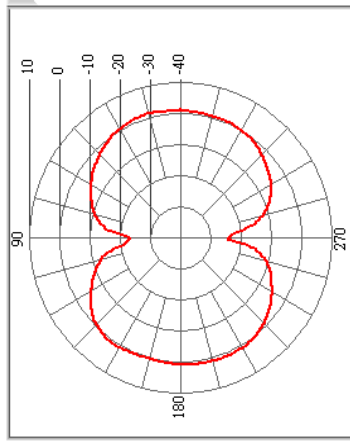
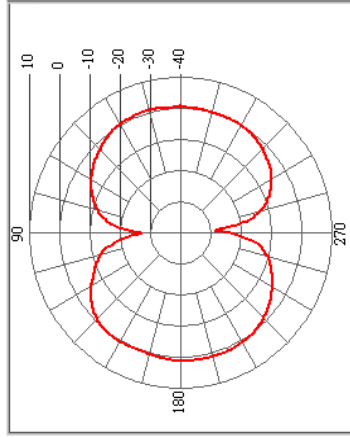
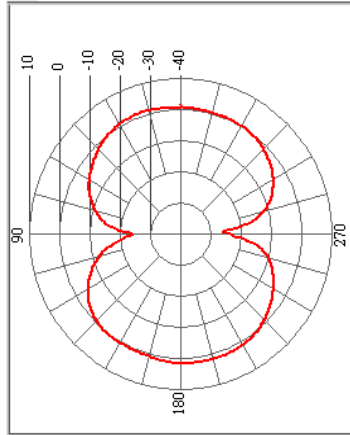
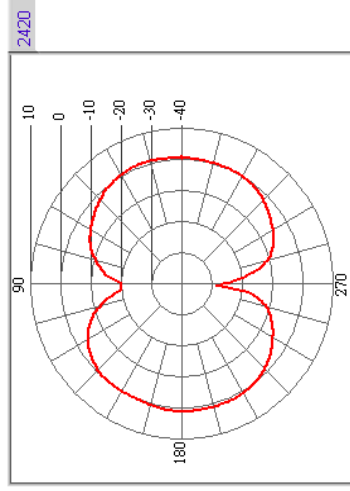
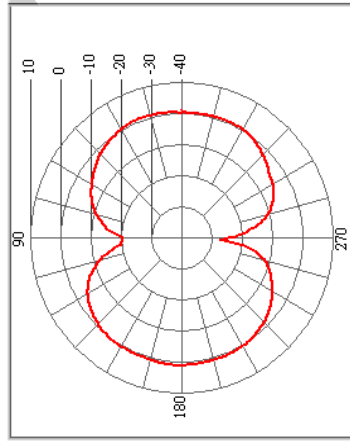
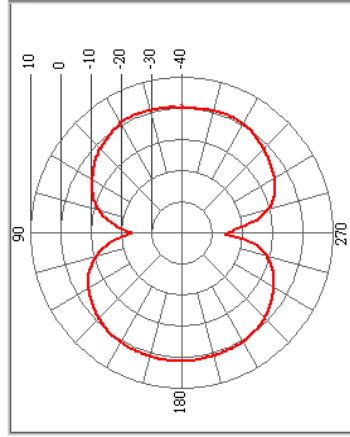
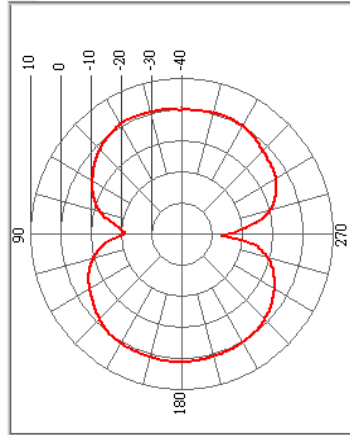
Tested by : CORTEC Antenna 3D Lab // R. Z. Q

Freq. (MHz)	2390	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Peak Gain (dBi)	1.06	1.21	1.11	1.17	1.49	1.17	1.63	2.1	1.96	1.91	1.6	1.48
Peak Degree	28	22	22	16	16	15	15	15	10	9	4	4
AV Gain (dBi)	-1.82	-1.7	-1.87	-1.83	-1.51	-1.89	-1.75	-1.6	-1.92	-1.87	-2.28	-2.5

Temperatuer (°C): 22.00

Humidity (%): 55.00

Approved by:



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WWW.ZY-RF.COM

Model : 2.4GHz Antenna 2dBi-6
Remark : H-Plane // Vertical Polarization
Tested by : CORTEC Antenna 3D Lab // R. Z. Q

Freq. (MHz)	2390	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Peak Gain (dBi)	2.72	2.78	2.47	2.59	2.85	2.46	2.64	2.75	2.27	2.31	2.1	2.03
Peak Degree	6	3	0	338	332	326	332	326	320	12	308	307
AV Gain (dBi)	2.14	2.28	1.96	1.85	1.97	1.49	1.63	1.75	1.56	1.82	1.57	1.33

Temperatuer (°C): 22.00

Humidity (%): 55.00

Approved by:

