



Dongguan Hengxin Electronic Technology Co., Ltd.
No. 201, Hudong Road, Yanggongzhou, Shatian Town, Dongguan

Specification For Approval

Customer

Description

SOLAR3A-N

ChaoWei P/N

211-SL3AN0002

Customer P/N

211-SL3AN0002

Date

2025. 02. 24

Customers Confirmation			Supplier	
Engineer	QC	Purchasing	Approval	Check
			赵 2025.02.24 守 刚	Shamoer

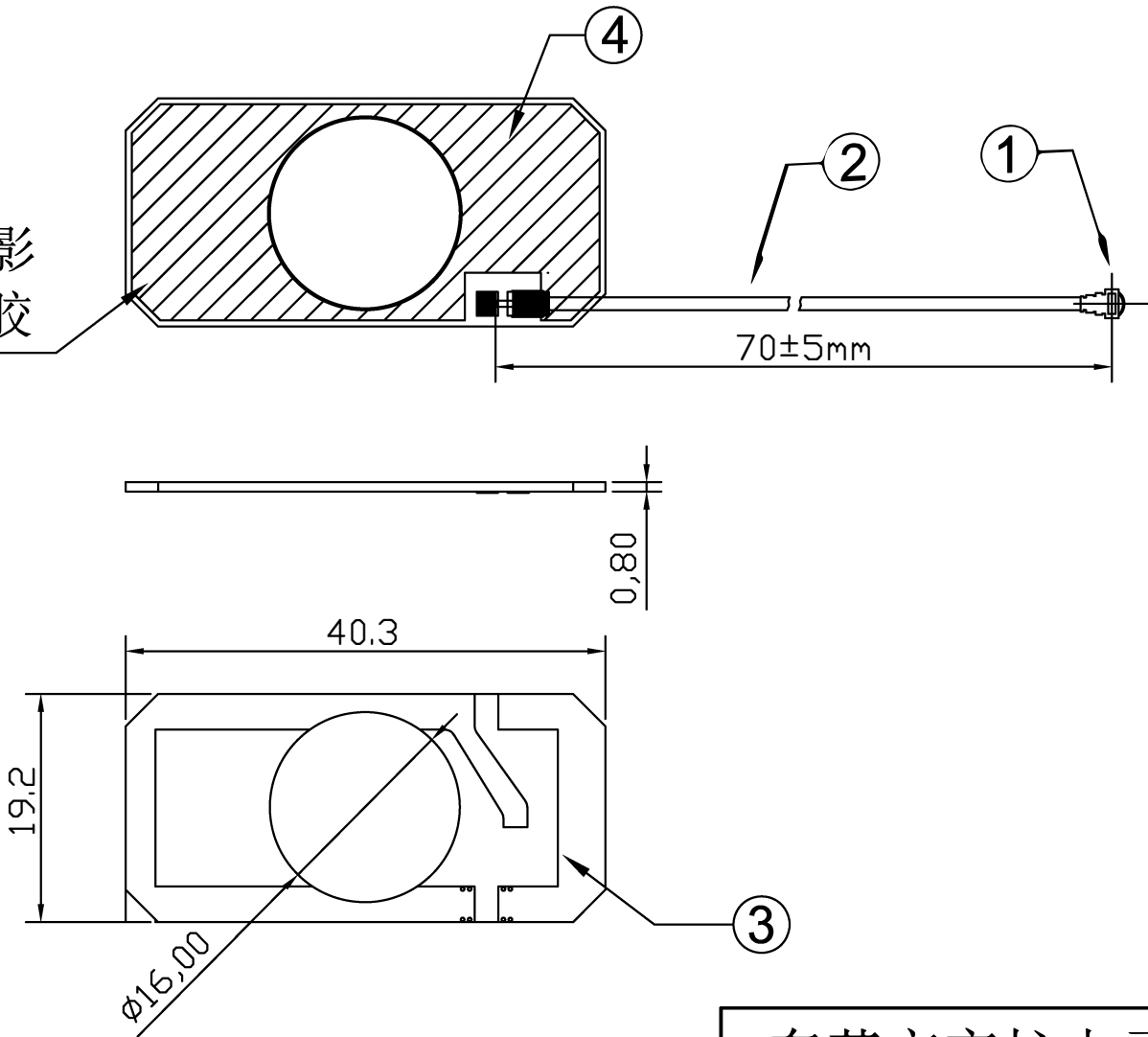
TEL : 0769-81663533

FAX: 0769-89361945

RoHS
Compatible

序号	日期	原因	确认人
B	2024-09-26	内圆14.7修改为16mm	
C			
D			

红色阴影
区域背胶



4	HX-G900-4020	G9000	40*19mm	1
3	HX-P161-A06	PCB	40.3*19.2mm	1
2	HX-CB-113B	Coaxial Cable	RG1.13 Black	1
1	HX-CI-113	Connector	UFL 1 compatible	1
No.	Part Number	Name	Material	Q'ty

东莞市亨松电子科技有限公司

PART NAME: SOLAR3天线板				
PART NO.: 211-SL3AN0002			DATE: 2024-09-26	
APPROVED BY	CHECKED BY	DESIGNED BY		Tolerance
		张雅军	UNITS: mm	X.X ±0.50
			SCALE: 1/1	X.XX±0.15
			REVISION:A	X° ±3°

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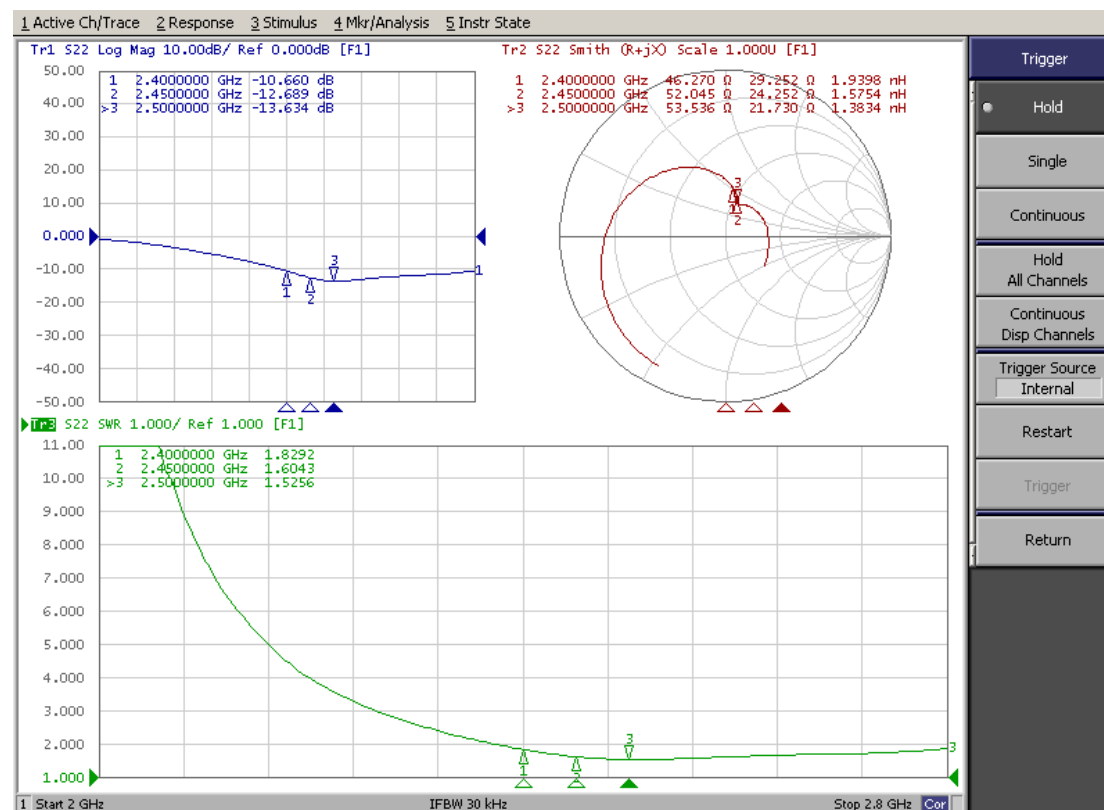
1. Reliability Testing

Test Item	Procedure	Requirement
1. Visual inspection and Dimension Check	Applicable methods using x5 magnification	follow specification
2. Rapid Changing of Temperature	-40°C (30minutes) to 80°C (30minutes); 24 cycles	After 2 hours recovery: 1. no visible damage 2. bandwidth tolerance < $\pm 5\%$
3. Damp Heat	24 hours at 60°C; 90 ~ 95% RH	After 2 hours recovery: 1. no visible damage 2. bandwidth tolerance < $\pm 5\%$
4. Endurance	24 hours at 80°C	After 2 hours recovery: 1. no visible damage 2. bandwidth tolerance < $\pm 5\%$
5. Connector Pull Strength Test	≥ 1.0 Kg	Hold 2~3S: 1. no visible damage 2. bandwidth tolerance < $\pm 5\%$

2. Specification

A. Electrical Characteristics	
S.W.R.(Tested in PC)	<= 2.0 @ 2400~2500 MHz
Typical Antenna Gain	1.82dbi
Impedance	50 Ohm
B. Material	
Material of Radiator	PCB
Connector Type	Pex
C. Environmental	
Operation Temperature	- 40 °C ~ + 85 °C
Storage Temperature	- 40 °C ~ + 85 °C

3. S.W.R. Testing Result



4. Antenna Radiation Pattern

Testing Equipment Specification:

Antenna Anechoic Chamber Dimension: 8 x 4 x 4 m

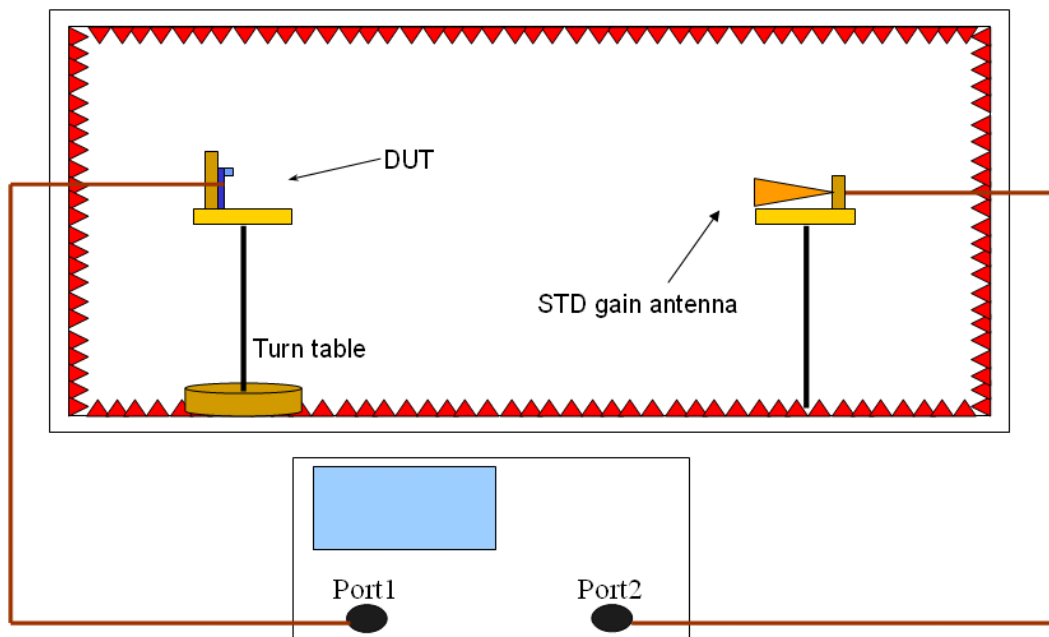
Quiet Zone: 600mm @1 GHz

Isolation: >100dB @ 1 MHz ~ 10 GHz

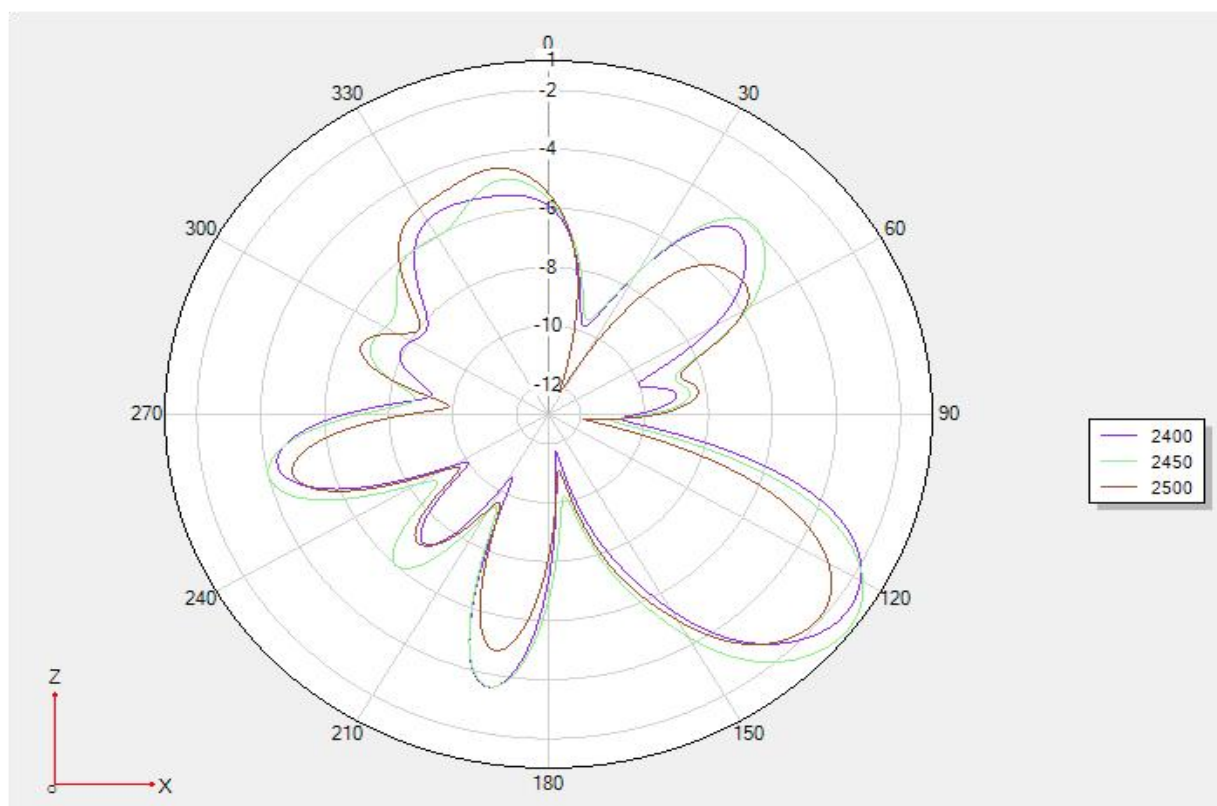
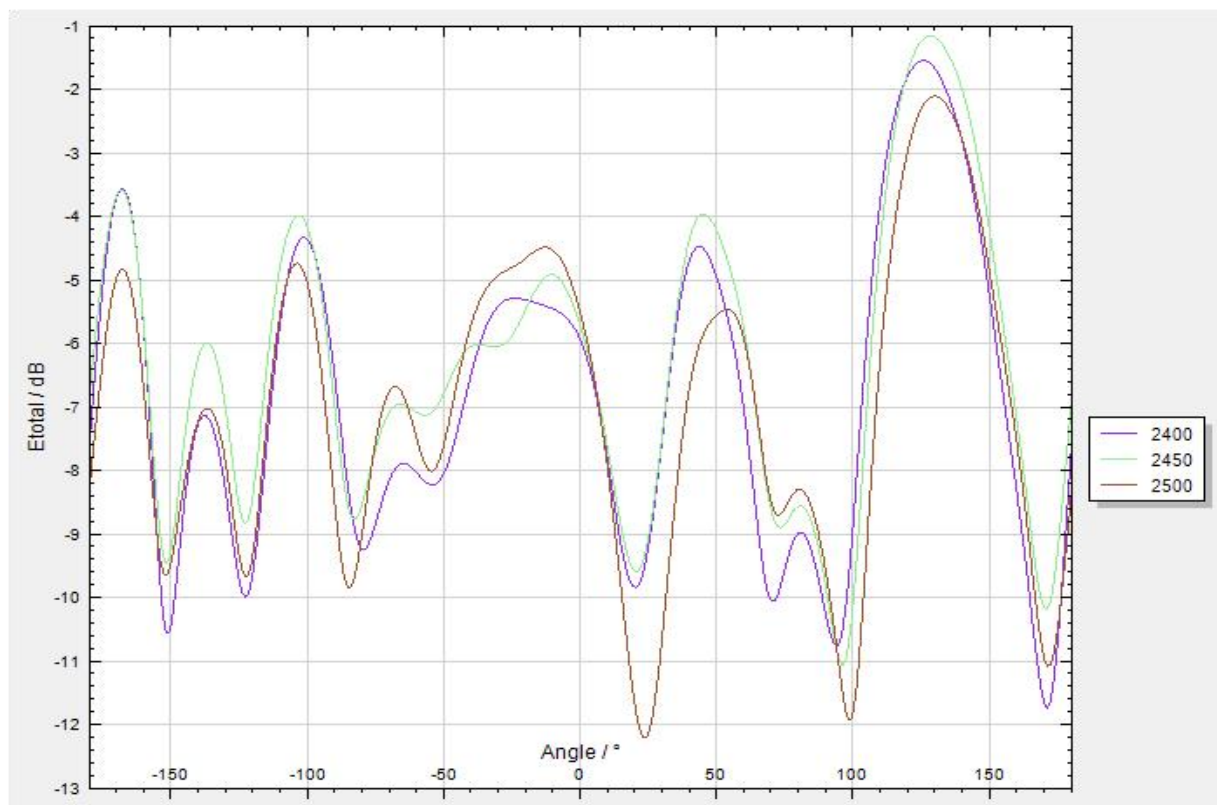
Testing Equipment: Agilent 5071B

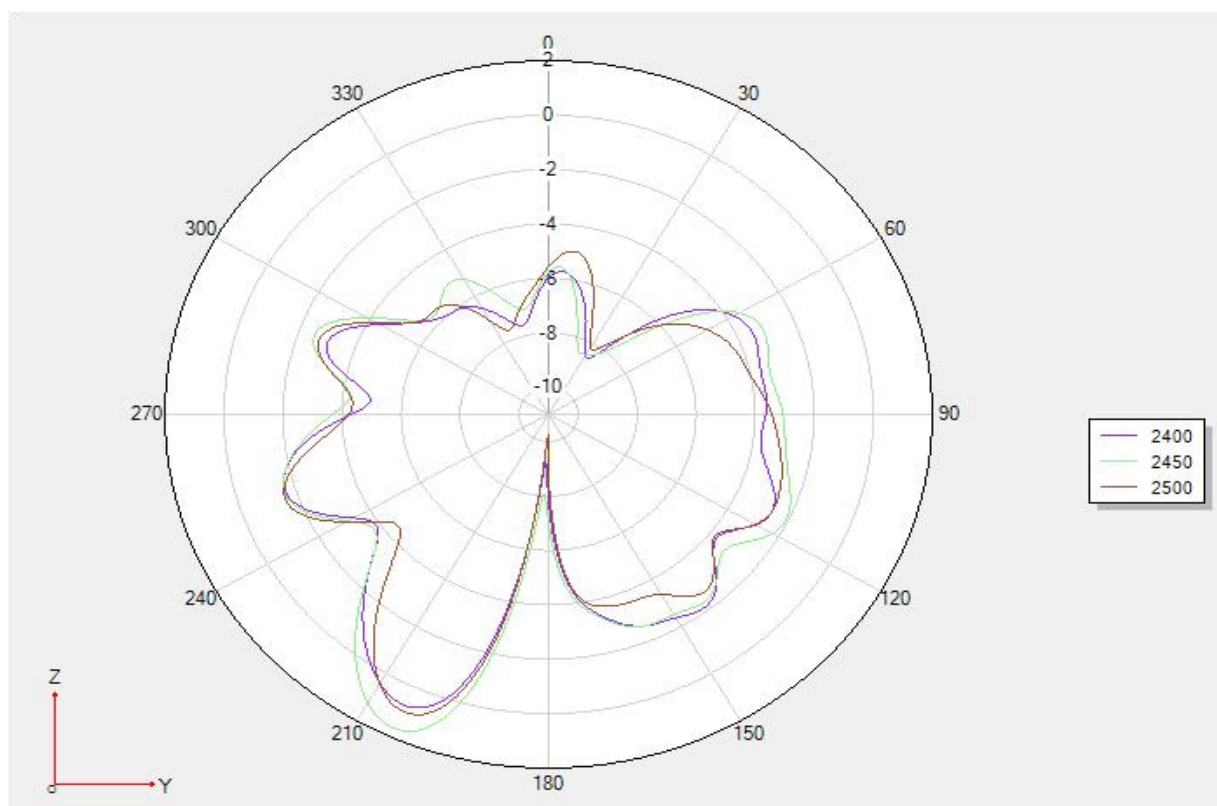
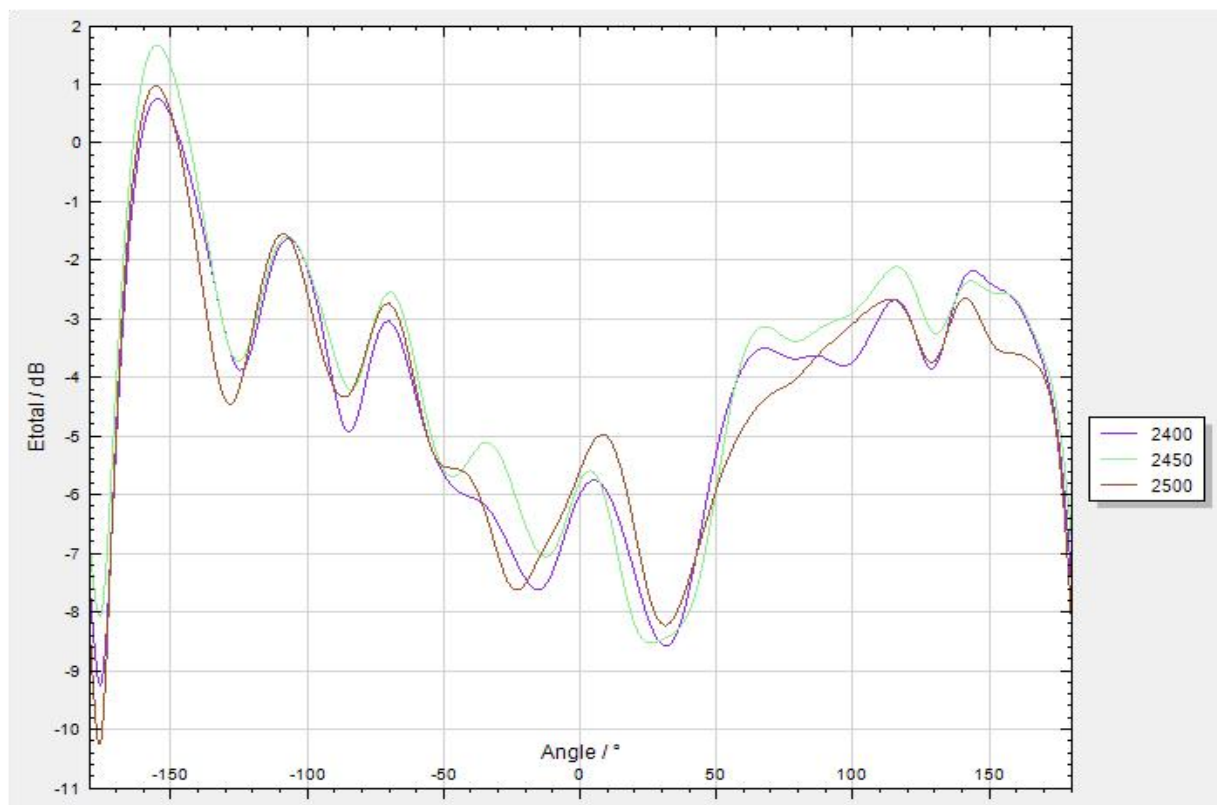
Received Antenna: 0.7 ~ 6.0 GHz for Gain Calibration

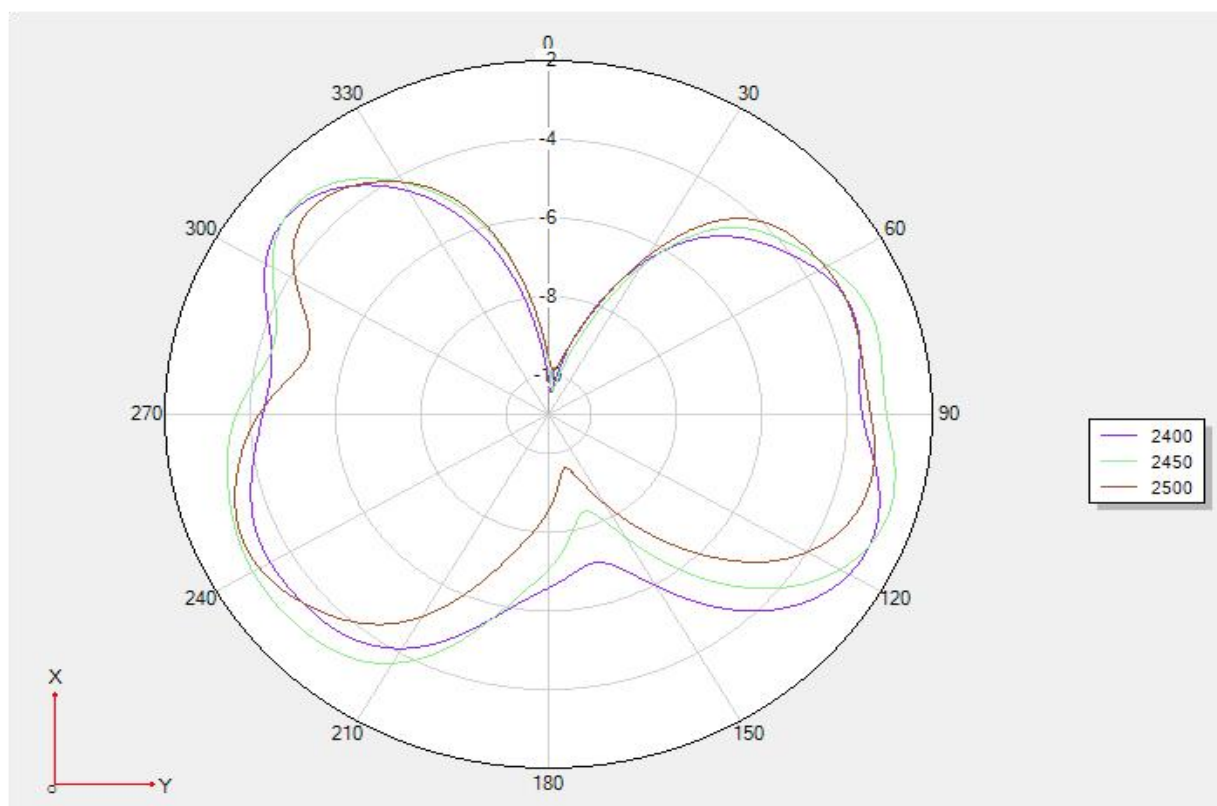
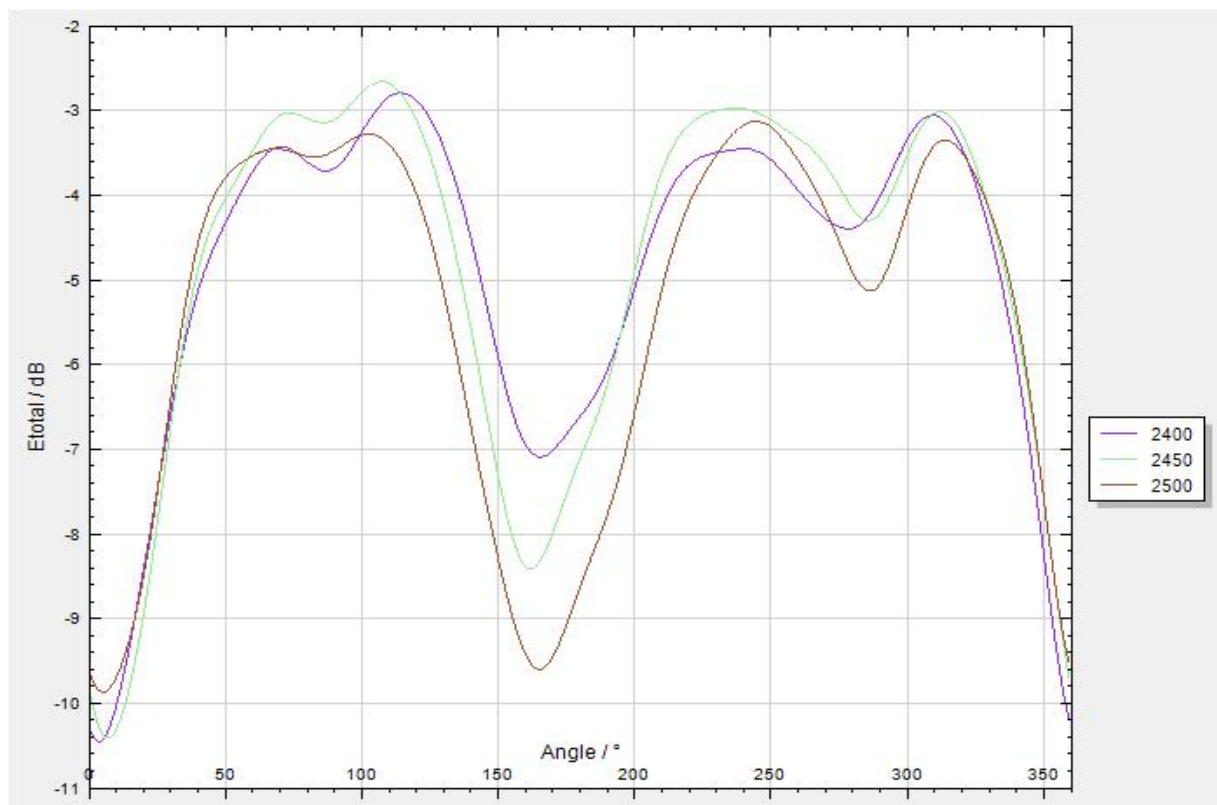
Double Ridged Horn Antenna



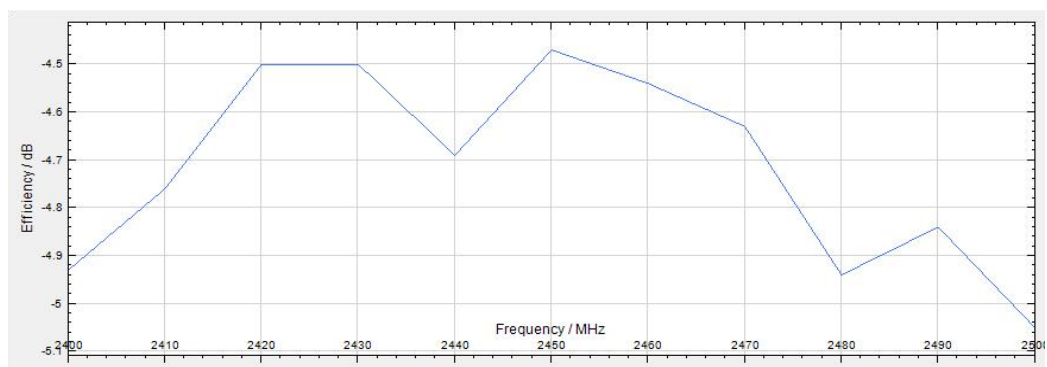
5. Test data diagram and antenna gain frequency







Frequency	Efficiency /	Efficiency / %
2400	-4.93	32.14
2410	-4.76	33.42
2420	-4.5	35.48
2430	-4.5	35.48
2440	-4.69	33.96
2450	-4.47	35.73
2460	-4.54	35.16
2470	-4.63	34.43
2480	-4.94	32.06
2490	-4.84	32.81
2500	-5.05	31.26



Frequency	Gain/ dB
2400	0.95
2410	1.19
2420	1.51
2430	1.69
2440	1.43
2450	1.82
2460	1.48
2470	1.68
2480	1.18
2490	1.44
2500	1.06

