



WHA YU INDUSTRIAL CO., LTD.(HEAD OFFICE)

DONGGUAN AEON TECH CO.,LTD.(CHINA)

SPECIFICATION FOR APPROVAL

CUSTOMER: 星縱智能

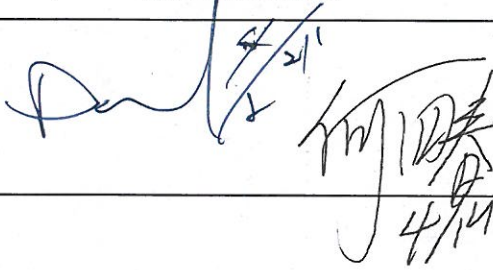
PART NAME: RF Antenna Assembly

PART NO.: 23.001.000002

REVISION:

W. Y. P/NO.: C4254-510033-A(SSR210057)

REV.: X1

	MANUFACTURER SIGNATURE	CUSTOMER SIGNATURE
APPROVED BY :		
DATE :	4/14	

WHA YU GROUP

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RF Antenna Assembly

Specification

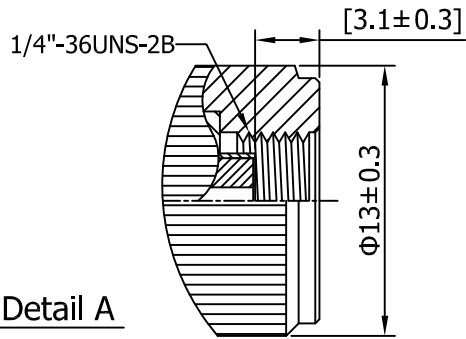
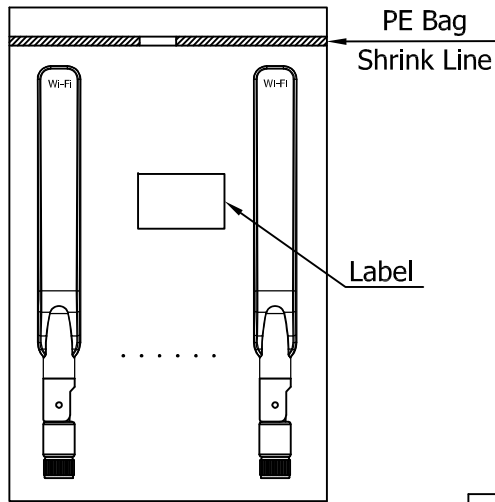
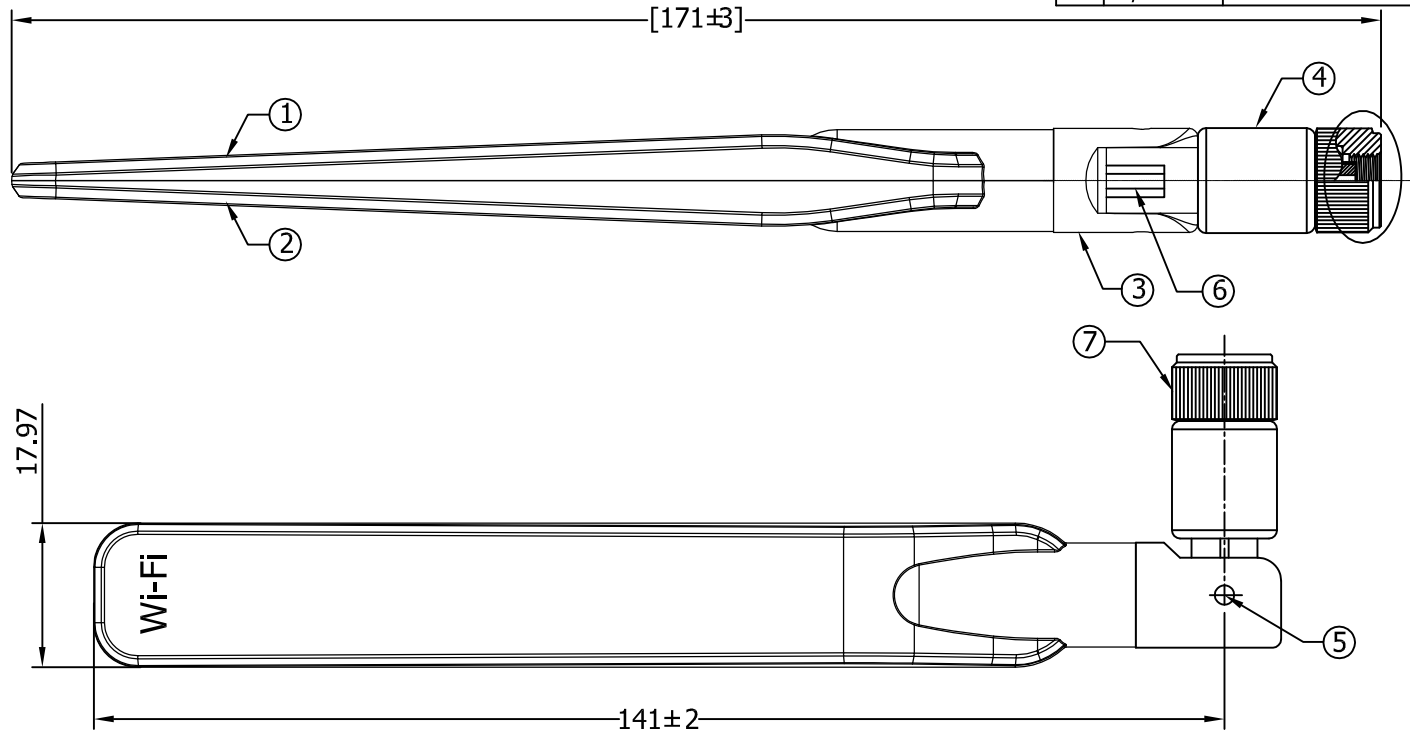
1. Electrical Properties : With housing/With Cable Loss

1.1 Frequency Range.....	2.4 ~ 2.5 , 4.9~5.825 GHz
1.2 Impedance	50Ω Nominal
1.3 VSWR	2.0 : 1 Max.
1.4 Return Loss.....	9.54 dB Min.
1.5 Radiation	Omni-directional
1.6 Peak Gain.....	3.89dBi Max.@2.4 ~ 2.5GHz 6.12dBi Max.@4.9~5.825GHz
1.7 Cable Loss.....	0.41 dB Max.@2.4 ~ 2.5GHz 0.71dB Max.@4.9~5.825GHz
1.8 Polarization.....	Linear
1.9 Cable.....	RG178 Coaxial Cable
1.10 Connector.....	SMA Plug Straight Reverse

2. Physical Properties :

2.1 Operating Temp.	-10°C ~ +60°C
2.2 Storage Temp.	-10°C ~ +70°C

REV	DATE	DESCRIPTION
X1	06/05-2019	New Issue
X2	08/13-2019	客戶要求增加中包裝標籤
X3	04/01-2021	增加印字



7	Connector	SMA Plug Straight Reverse	1	
6	Cable	RG-178Cable,Transparency Brown,50 Ω	1	
5	Rivet	POM,Color:Black	2	
4	Antenna Base	(CD-13)PC+PBT,Color:Black	1	
3	Antenna Base	(CD-419)PC,Color:Black	1	
2	Antenna Housing(R)	(CD-414)PC+ABS,Color:Black	1	
1	Antenna Housing(L)	(CD-415)PC+ABS,Color:Black	1	
NO	DESCRIPTION			Q'TY
	REMARK			

CUSTOMER'S SINGATURE	XX.	± 5.0	APPROVED 何四春	CUSTOMER: 星縱智能		
	X.	± 3.0		PART NO : 23.001.000002		
	.X	± 1.0	CHECKED	PART NAME: RF Antenna Assembly		
	.XX	± 0.2		W.Y P/NO : C4254-510033-A		
	.XXX	± 0.1	DRAWING 舒華	REV	UNIT	FILE : SSR-210057
				X3	mm	SHEET : 1/1

Wha Yu Group

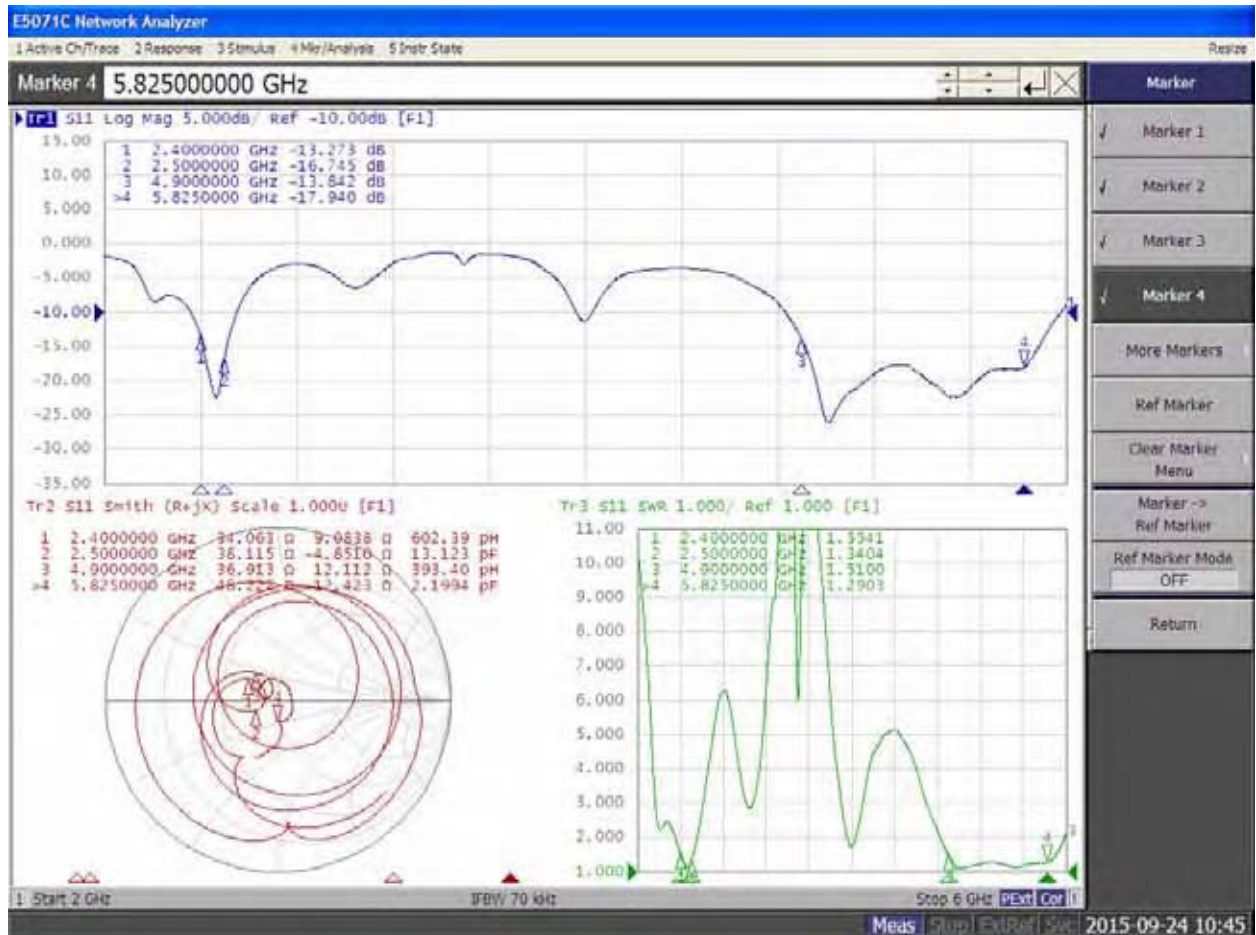
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1 Antenna Introduction



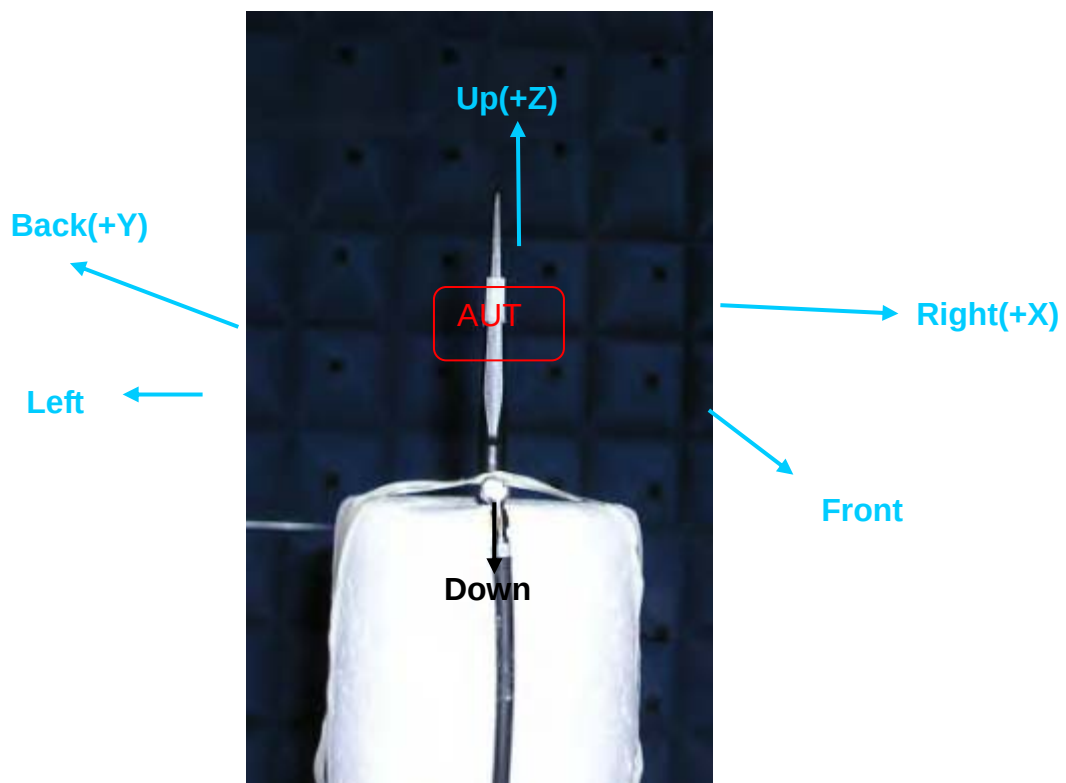
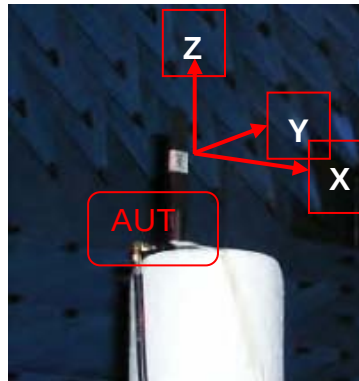
RF Antenna Assembly

P/No.C4254-510033-A Spec:2.4~2.5GHz , 4.9~5.825 GHz

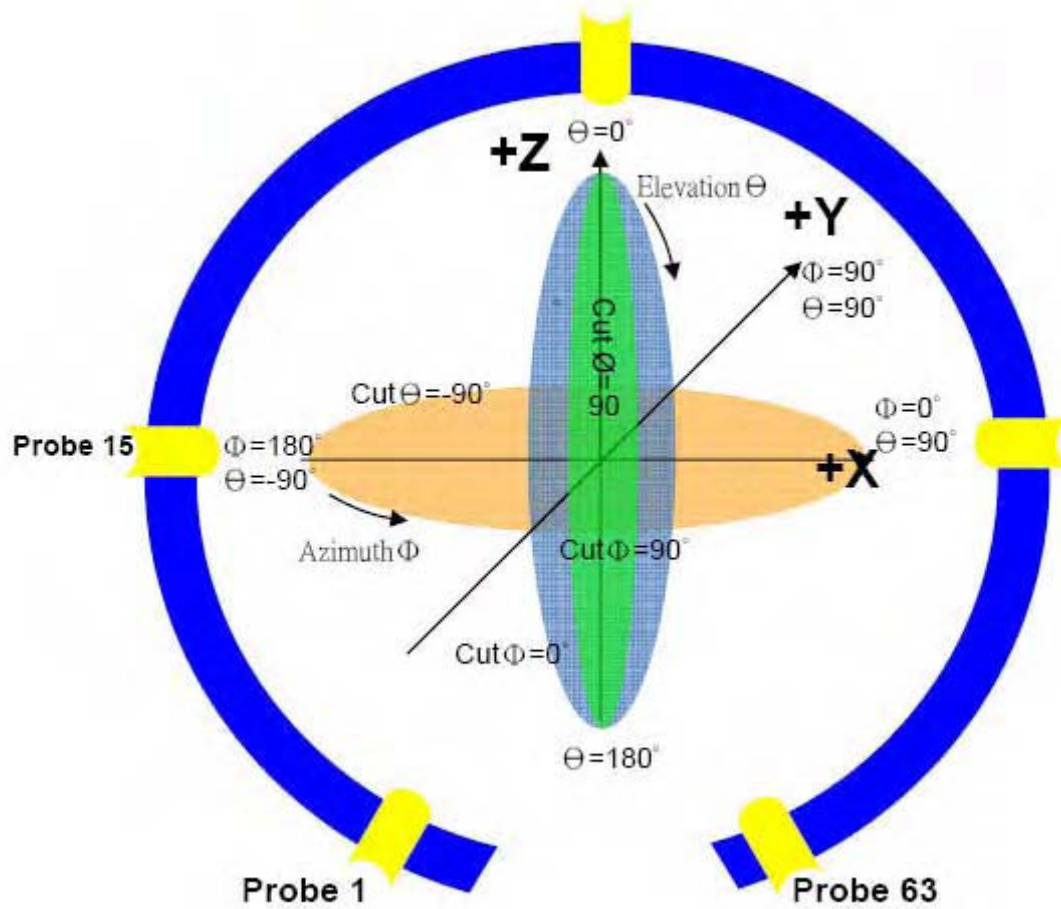


3 Gain & Patterns test results

3.1 Measurement setting



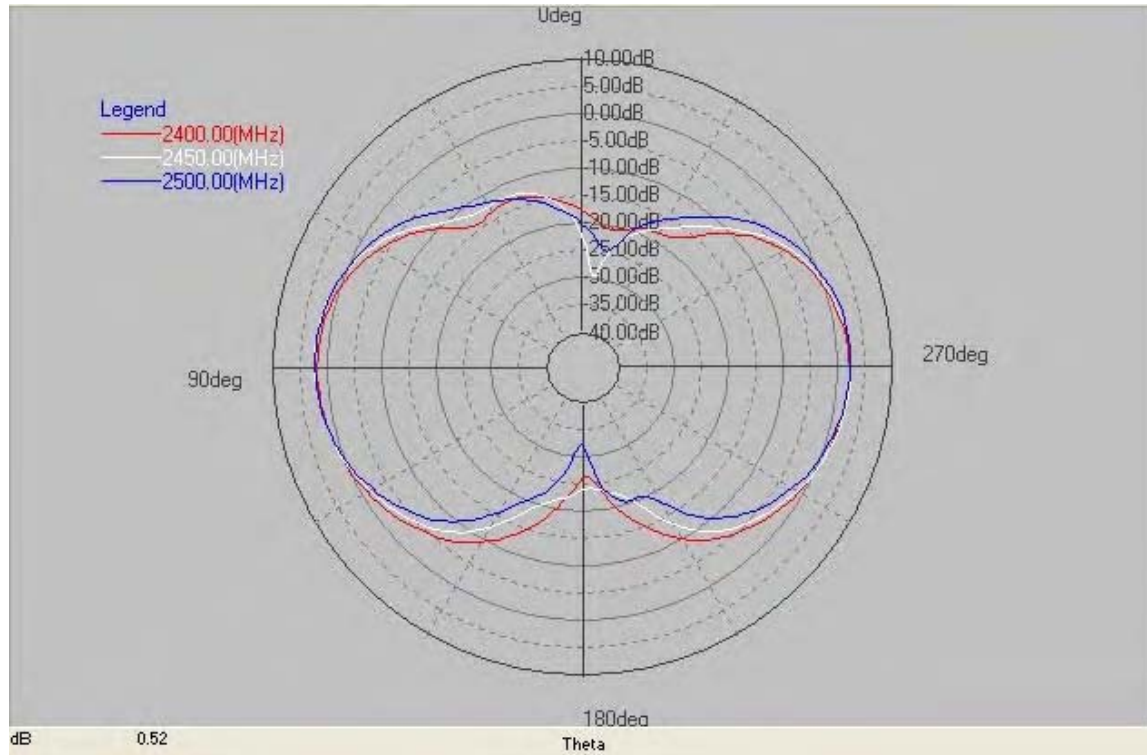
	XY	YZ	XZ
0°	Right	Up	Up
90°	Back	Back	Right
180°	Left	Down	Down
270°	Front	Front	Left



	θ	ϕ
Total angle	175	360
How many angle scan one point	5	5
Total scan point	36	73

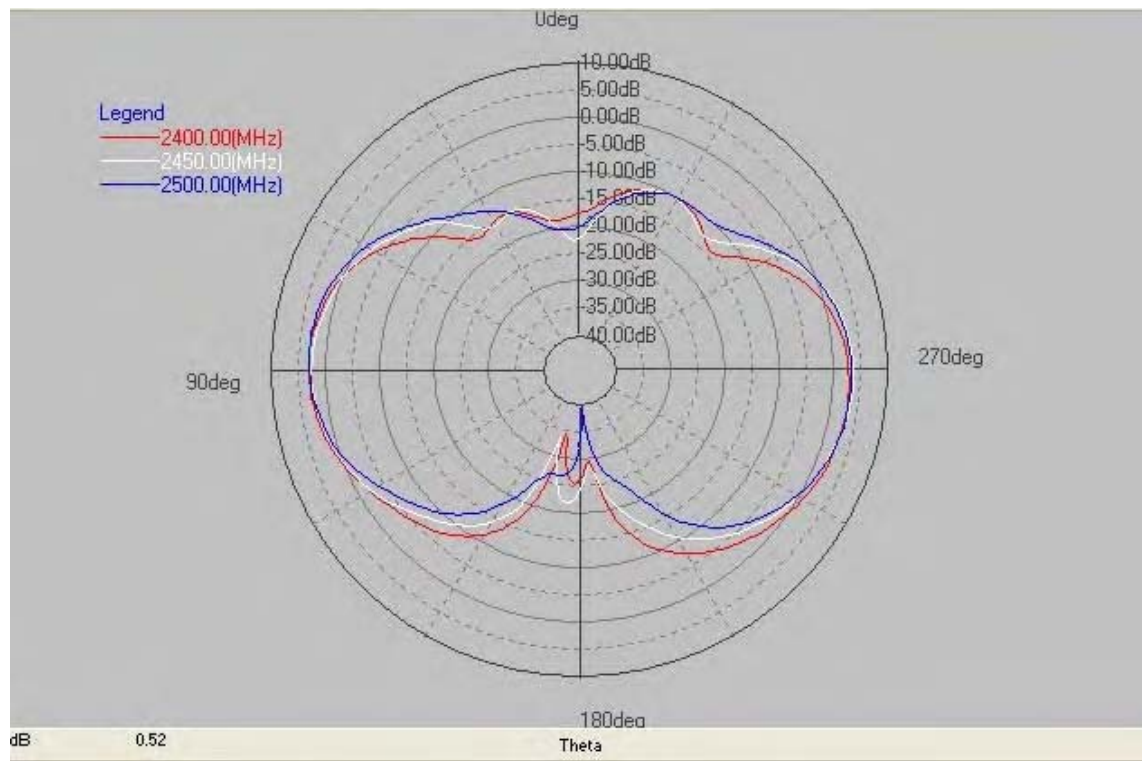
3.2 ANT 1.

2400 MHz~2500 MHz



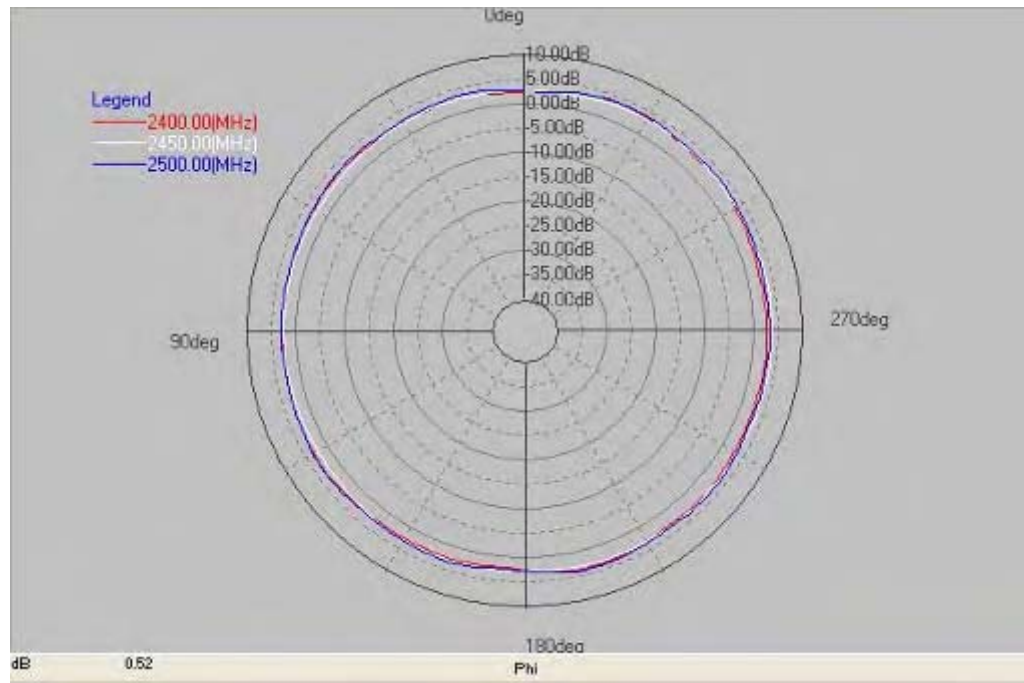
X-Z Plane (E-total)

2400 MHz~2500 MHz



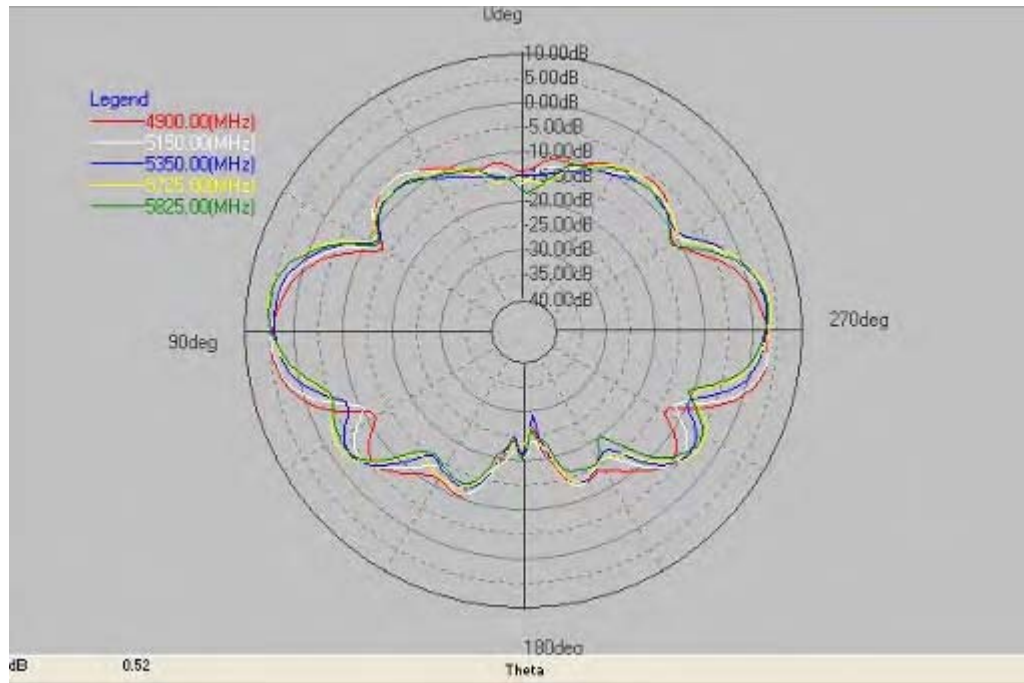
Y-Z Plane (E-total)

2400 MHz~2500 MHz



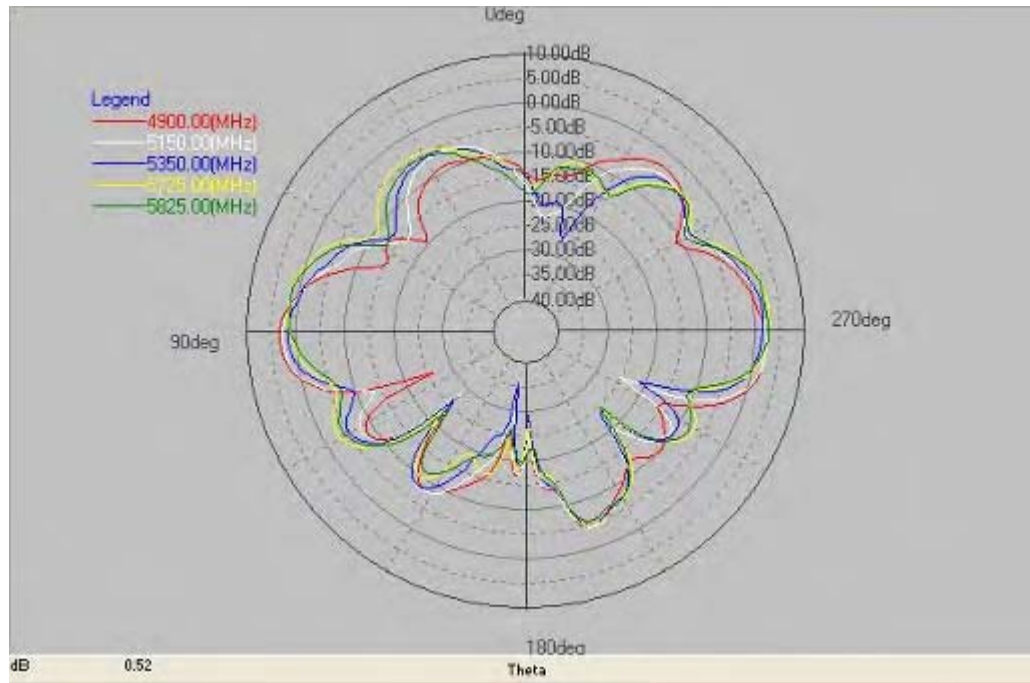
X-Y Plane (E-total)

4900 MHz~5825 MHz



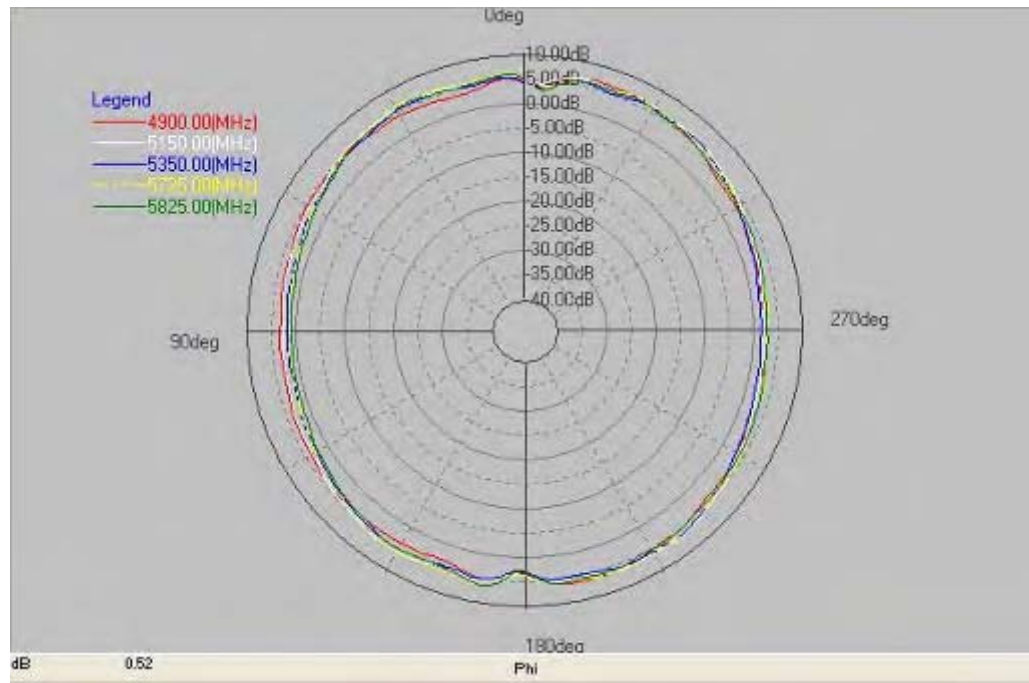
X-Z Plane (E-total)

4900 MHz~5825 MHz



Y-Z Plane (E-total)

4900 MHz~5825 MHz



X-Y Plane (E-total)

4.0 Return Loss

Frequency	Ant 1.(dB)
2400MHz	12.53
2450MHz	17.52
2500MHz	14.79
4900MHz	14.83
5150MHz	17.55
5350MHz	15.16
5725MHz	15.14
5825MHz	14.70

4.1 3D total Peak Gain & Efficiency

Frequency	Ant 1.	
	Peak Gain (dBi)	Efficiency (%)
2400MHz	3.71	83.45
2450MHz	3.83	84.51
2500MHz	3.89	83.22
4900MHz	6.04	70.41
5150MHz	6.08	70.26
5350MHz	6.05	70.31
5725MHz	6.12	72.35
5825MHz	6.07	72.61