



WHA YU INDUSTRIAL CO., LTD.(HEAD OFFICE)
 DONGGUAN AEON TECH CO.,LTD.(CHINA)
 SUZHOU AEON TECH CO.,LTD.(CHINA)
 AEON TECH (SHANGHAI) CO.,LTD(CHINA)
 DONGGUAN PARNER TECH CO.,LTD.(CHINA)

SPECIFICATION FOR APPROVAL

CUSTOMER: 歐普羅

PART NAME: RF Antenna Assembly

PART NO.:

REVISION:

W. Y. P/NO.: C664-510172-A(SSR-22629)

REV.: X1

	MANUFACTURER SIGNATURE	CUSTOMER
APPROVED BY :	鄭香廷	
DATE :	2012.11.05	

WHA YU GROUP

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

譚裕實業股份有限公司

Address: No. 326, Sec. 2, Kung Tao 5 Road, Hsin Chu City, Taiwan, R.O.C.

Tel: +886-3-5714225(REP.)

Fax: +886-3-5713853 · +886-3-5723600

DONGGUAN AEON TECH CO., LTD.(CHINA)

東莞台霖電子通訊有限公司

Address: Hupan Industrial District, Tai Ling Shan Town, Dong Guan City, Guangdong, China

Tel: +86-769-85655858

Fax: +86-769-85655258

SUZHOU AEON TECH CO., LTD.(CHINA)

蘇州華廣電通有限公司

Address: Limin North Road, LiLi Town, LiLi Industrial Park, LinHu Economic Zone

Wujiang City, Jiangsu Province, China

Tel: +86-512-63627980

Fax: +86-512-63627981

AEON TECH (SHANGHAI) CO., LTD.(CHINA)

普翔電子貿易(上海)有限公司

Address: Flat 501, 5F, Build 27, NO.68, Guiqing Road, Huhui District, Shanghai, China

Tel: +86-21-64959151

Fax: +86-21-64959059

DONGGUAN PARNER TECH CO., LTD.(CHINA)

東莞倍能電子有限公司

Address: Hupan Industrial District, Shida Road, Tai Ling Shan Town,

Dong Guan City, Guangdong, China

Tel: +86-769-81662366

Fax: +86-769-81602681

Contents

<i>Item</i>	<i>Description</i>	<i>Page</i>
1.	規格表	 1
2.	成品圖	 2
3.	測試報告	 3~11
4.	Cable 規格	 12
5.	Connector 規格	 13
6.	SGS 測試	14~126
7.	RoHS 排外條款	 127

RF Antenna Assembly

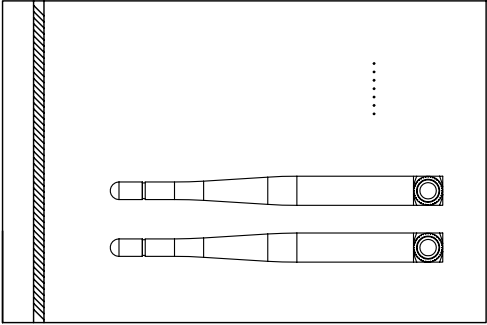
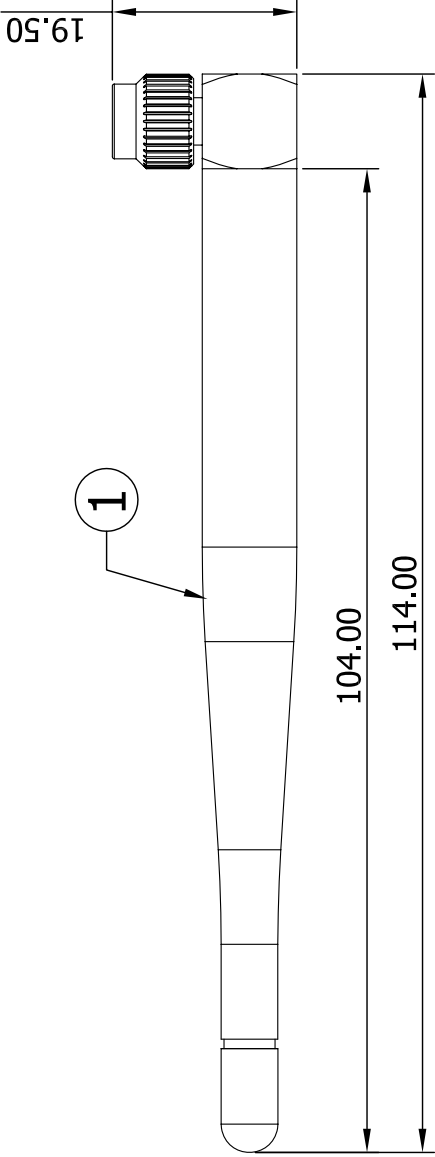
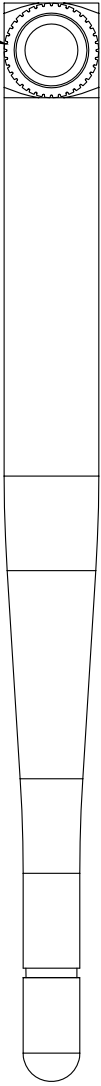
Specification (With housing)

1. Electrical Properties :

- 1.1 Frequency Range.....2.4GHz ~ 2.5GHz
- 1.2 Impedance50 Ω Nominal
- 1.3 VSWR1.92:1 Max.
- 1.4 Return Loss..... $\pm$ 10 dB Max.
- 1.5 RadiationOmni-directional
- 1.6 Gain(peak).....3.39dBi
- 1.7 Cable Loss..... NONE
- 1.8 Polarization.....Linear ; Vertical
- 1.9 Admitted Power.....1W
- 1.10 Cable..... RG178 Coaxial Cable
- 1.11 Connector.....PLUG
- 1.12 Core.....NONE

2. Physical Properties :

- 2.1 Operating Temp.-10 $^{\circ}$ C ~ +60 $^{\circ}$ C
- 2.2 Storage Temp.-10 $^{\circ}$ C ~ +70 $^{\circ}$ C

A		B		C		D		E		F		G																																																																																											
CG-												REV	DATE	DESCRIPTION																																																																																									
												X1	10/25-2012	New Issue																																																																																									
1													2													3													4													5													6																																						
PE Bag Shrink Line 													1 													2 													<table><tr><td>2</td><td>Connector</td><td>SMA Reverse;Right Angle</td><td>1</td><td>1</td><td>Plain White</td></tr><tr><td>1</td><td>Antenna Cap</td><td>TPE+1%UV</td><td>1</td><td>1</td><td>Plain White</td></tr><tr><td>NO</td><td colspan="2">DESCRIPTION</td><td colspan="2">QTY</td><td>REMARK</td></tr></table>													2	Connector	SMA Reverse;Right Angle	1	1	Plain White	1	Antenna Cap	TPE+1%UV	1	1	Plain White	NO	DESCRIPTION		QTY		REMARK	Wha Yu Group THIS DRAWING, AND IT'S INHERANT DESIGN CONCEPTS, ARE THE PROPERTY OF WHA YU AND AS SUCH MAY NOT BE COPIED, REPRODUCED, OR GIVEN TO THIRD PARTIES WITHOUT THE WRITTEN CONSENT OF WHA YU.																																	
2	Connector	SMA Reverse;Right Angle	1	1	Plain White																																																																																																		
1	Antenna Cap	TPE+1%UV	1	1	Plain White																																																																																																		
NO	DESCRIPTION		QTY		REMARK																																																																																																		
													CUSTOMER: 歐普羅													PART NO :													PART NAME: RF Antenna Assembly													W.Y P/NO : C664-510172-A													REV UNIT FILE : SSR-22629													X1 mm SHEET : 1/1																									
													APPROVED 張毅華 2012.11.02													CHECKED 林凱元													2012.10.26													DRAWING 徐筱惠 2012.10.26																																																			
													XX. ±5.0													X. ±3.0													.X ±1.0													.XX ±0.5													.XXX ±0.1																																						
													CUSTOMER'S SINGATURE																																																																																										

Packing:10pcs/bag

Antenna For NE3-12093

V1.00

Document Number	NE3-12093
1st Released Date	11/02/12
Last Released Date	11/02/12
Author	Kevin Lin
Review by	Byron Chang

Revised History

[illegible]

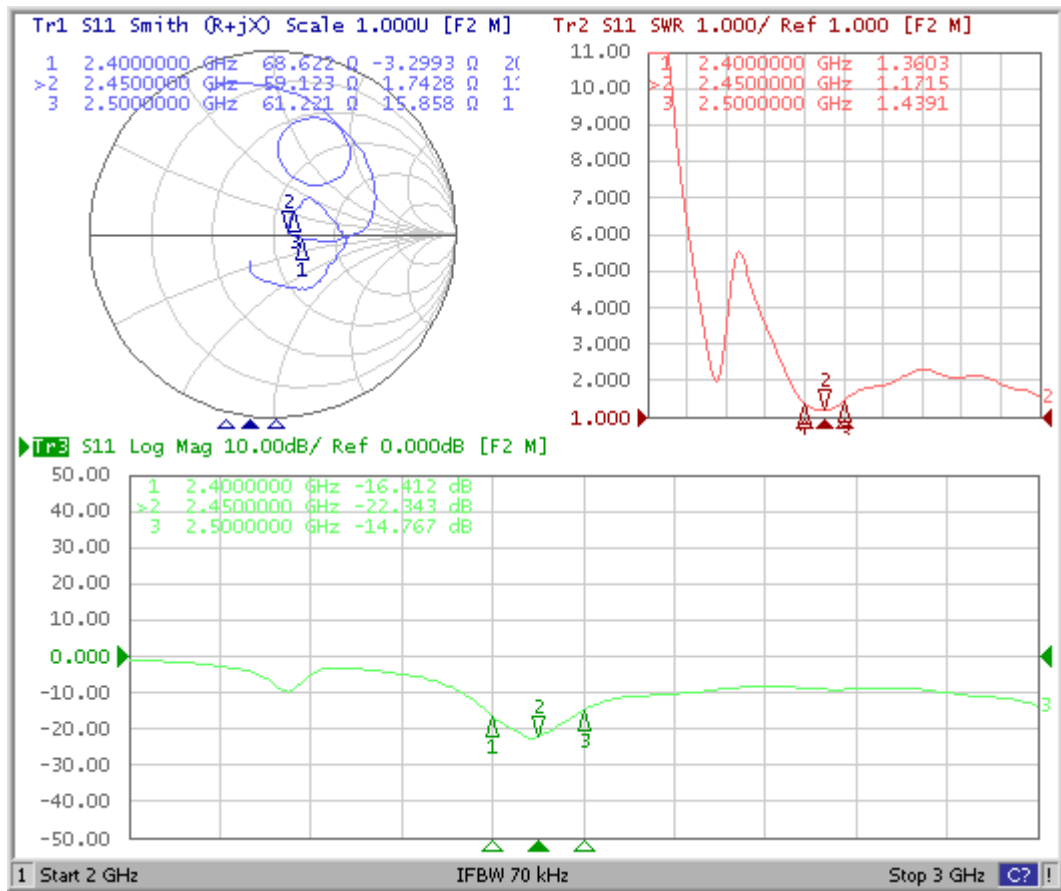
Specification

Rough description		
Item	Initial Specification	Final Specification
Dimensions	None	
Impedance	50Ω	
Test environment	With Housing	
Application	None	
Freq. Range	2400GHz~2500GHz	
Antenna type	Dipole	
Gain	3.39	
VSWR	1.92	
Radiation	None	
Polarization	Linear	
HPBW / H	None	
HPBW / E	None	
Rad. efficiency	None	
Connector type	PLUG	
Cable type	None	
Cable length	None	
Isolation	None	

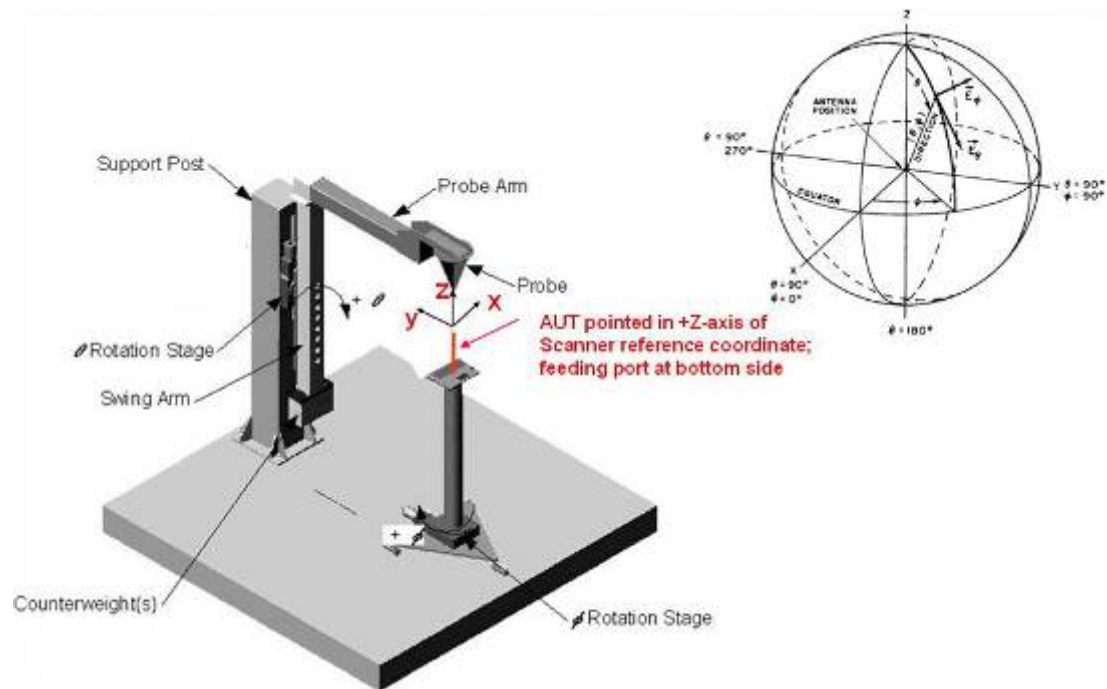
1 Antenna Introduction



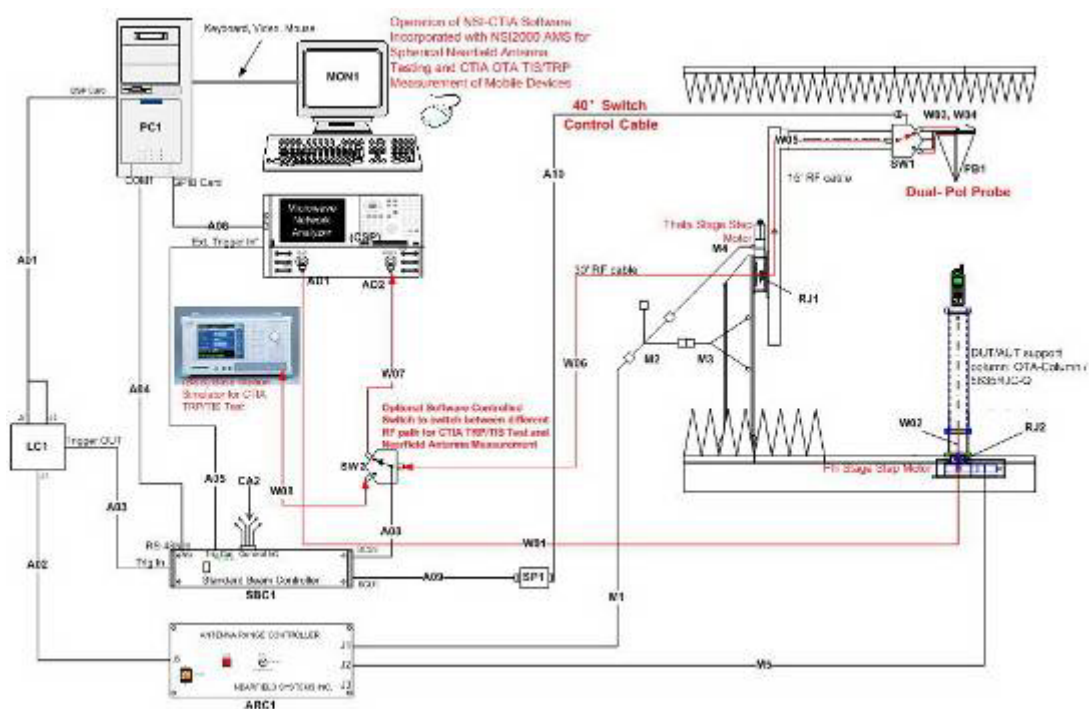
2 S11 test results



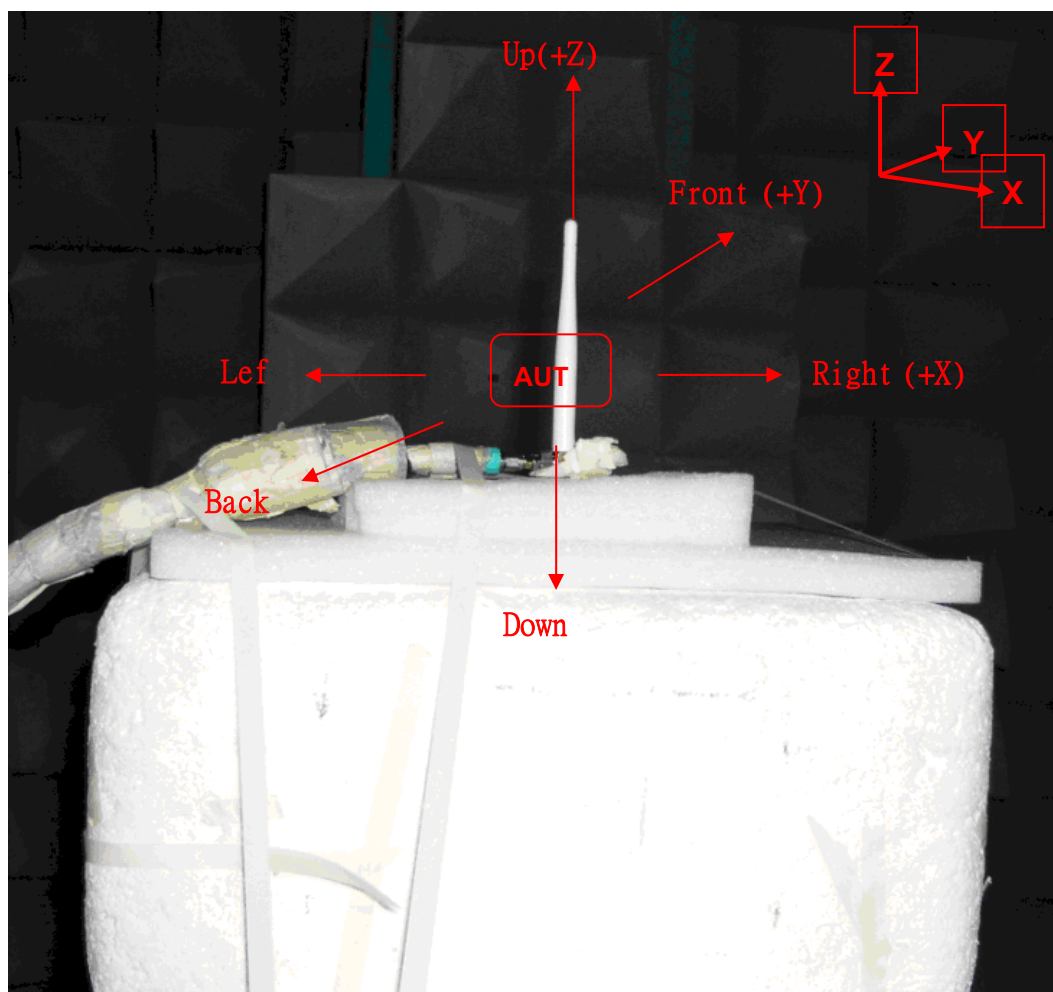
2.1 Measurement setting



NFC-500S 3D Chamber Coordinate System Definition

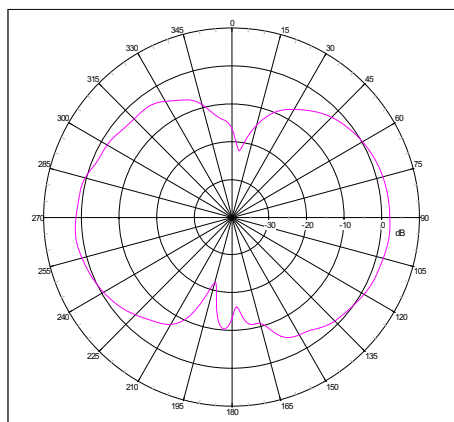


Configuration of NFC-500S 3D Chamber

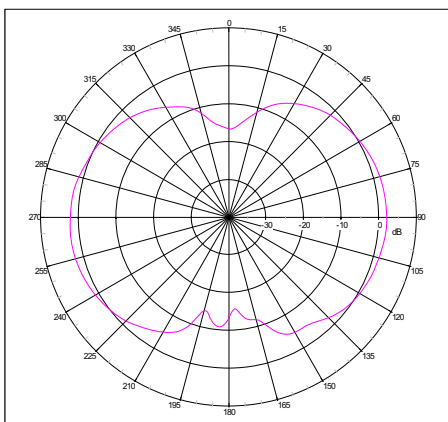


2.2 2D pattern

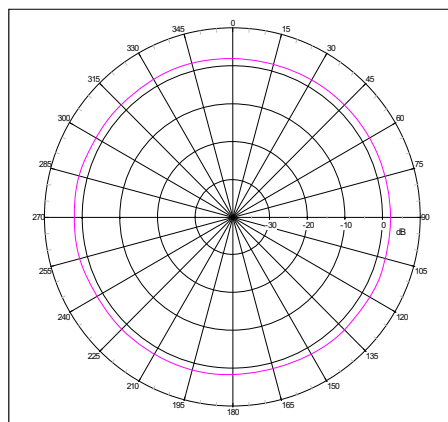
2400 GHz



X-Z Plane (E-total)

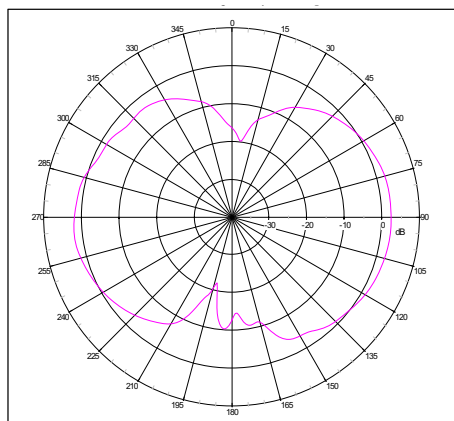


Y-Z Plane (E-total)

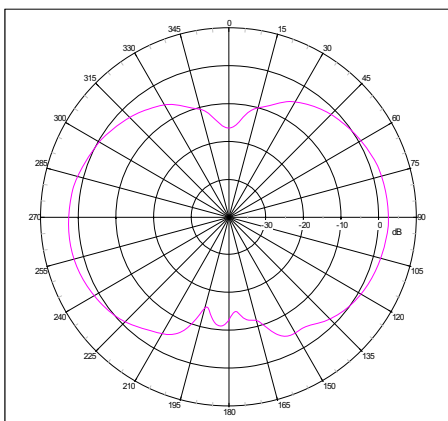


X-Y Plane (E-total)

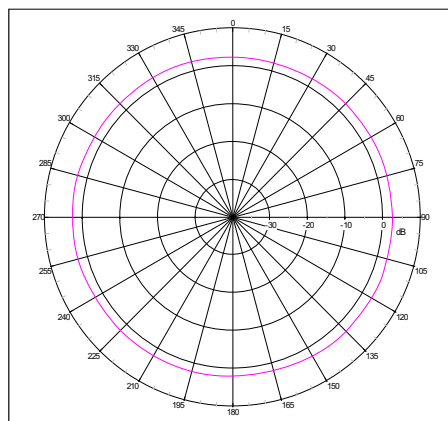
2450 GHz



X-Z Plane (E-total)

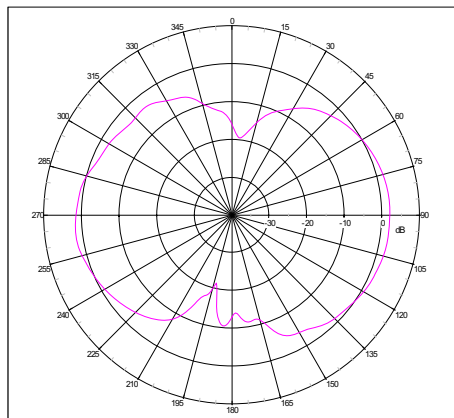


Y-Z Plane (E-total)

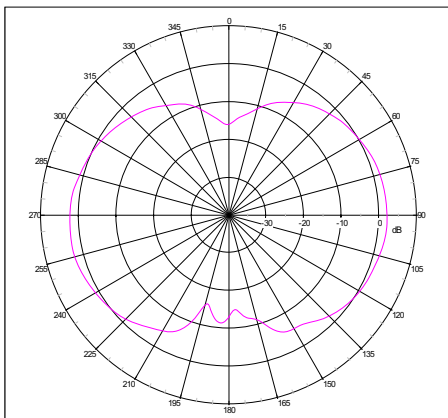


X-Y Plane (E-total)

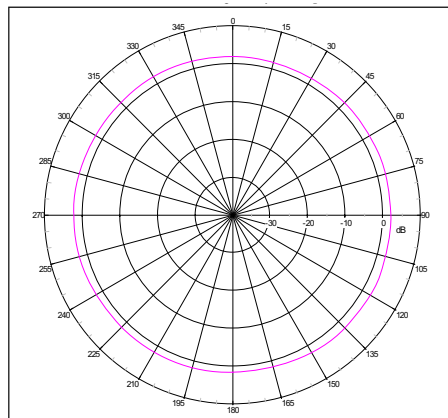
2500 GHz



X-Z Plane (E-total)



Y-Z Plane (E-total)



X-Y Plane (E-total)

3 Summary

3.1 Return Loss

Frequency	Ant
2400GHz	-16.41
2450GHz	-22.34
2500GHz	-14.76

3.2 3D total Peak Gain & Efficiency

Frequency	Ant	
	Peak Gain (dBi)	Efficiency (%)
2400GHz	3.16	71.49
2450GHz	3.39	72.33
2500GHz	3.14	71.61