

承認書

APPROVAL SHEET

JOYMAX MODEL NO.: IHF-2120MPX9-W018

DESCRIPTION: #2120 Stubby Antenna, Straight type

Antenna type: Monopole

REV.: B

DATE: 2022/10/28

Customer Approval

Joymax Approval



士誼科技事業股份有限公司
JOYMAX ELECTRONICS CO., LTD.

Tel:+886-3-4335698 Fax:+886-3-4336340

E-mail: info@joymax.com.tw

桃園市中壢區中壢工業區東園二路5號
No.5 Dong Yuan Rd.2,Jhongli industrial Park,
Jhongli Dist,Tao Yuan,Taiwan,R.O.C.
<http://www.joymax.com.tw>

Index

1. Specification & Dimension	-----	3
2. Test Condition & Report		
2.1 V.S.W.R	-----	4
2.2 Pattern	-----	6
2.3 Gain and Efficiency	-----	10
3. Package	-----	12
4. UL報告		

Modification History:

Rev.	Date	Content
A	2022/10/12	
B	2022/10/28	Change PART NO.

1. Specification & Dimension

1		2		3		4	
ITEM	PART NO.	PART NAME	RAW MTL COLOR	ARTWORK	MATERIAL	FINISH PROCESS	FINISH COLOR
1	025.9024J.M001	FGR-70F BT ANTENNA BY JOYMAX	NONE	NONE	NONE	NONE	NONE

Electrical Properties	
Frequency Range	2.4~2.4835GHz
Impedance	50Ω
V.S.W.R.	≤3.0
Radiation	Omnit
Gain	Unity
Polarization	Vertical
Test Ground Size	N/A

Mechanical Properties	
Radome Material	Plastic /White
Connector Type	I-PEX MHF1
Dimension	L=13.5mm
Weight	3 g (est)
Operating Temp.	-40℃~+75℃
Storage Temp.	-40℃~+75℃

MODEL	NAME	REV	DESCRIPTION	SINGDATE
FGR-70F	BT ANTENNA BY JOYMAX IHF-2120MPX9-W018	Change PART NO.		
DRN	Kyliu	9/29 2022		KYLIU10/28
DSN	Nick	9/29 2022		SARA10/28
CKD	Sara	9/29 2022		MATT10/28
APPD	Matt	9/29 2022		

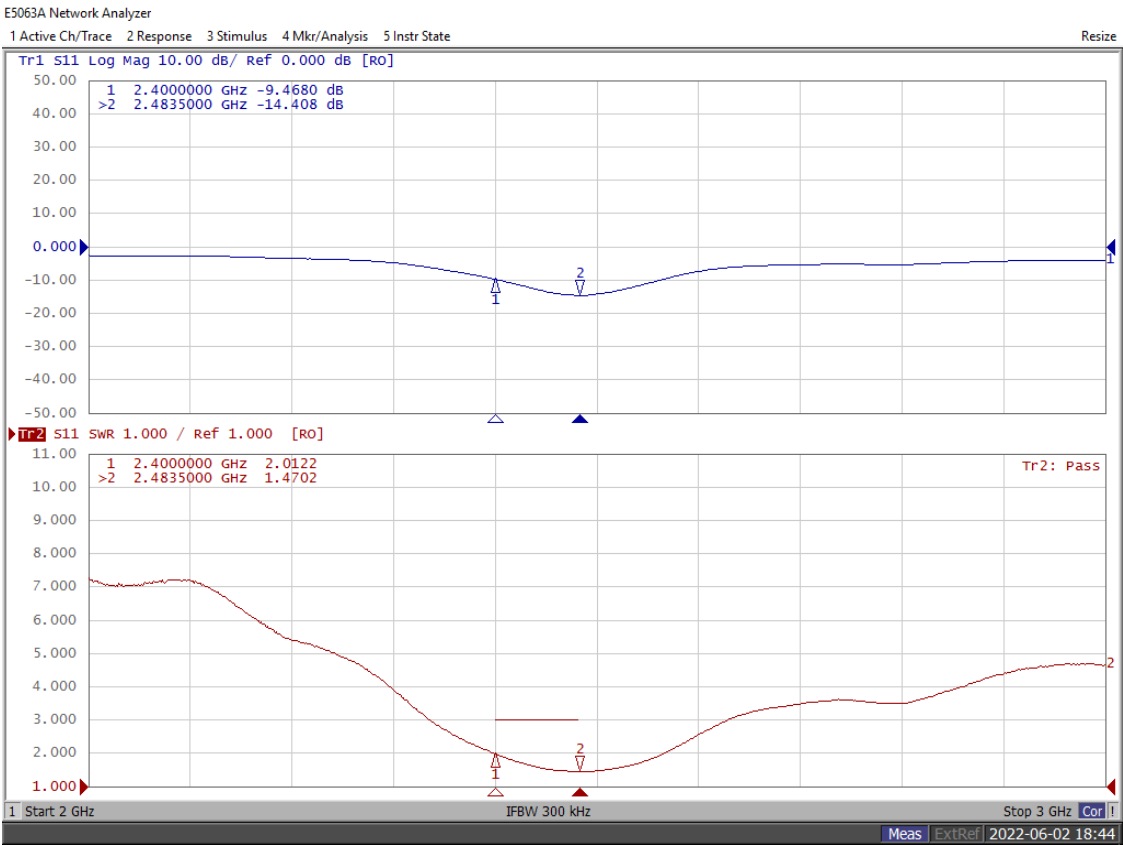
UNLESS OTHERWISE SPECIFIED TOLERANCES ON:	DRN	DSN	CKD	APPD
X	± 0.5			
X.X	± 0.25			
X.XX	± 0.1			
ANG.	± 1.5°			

DRAWING NO.	DESCRIPTION	DO NOT SCALE DWG
IHF-2120MPX9-W018		1

2.Test Condition & Report

2.1 V.S.W.R

V.S.W.R.



2.Test Condition & Report

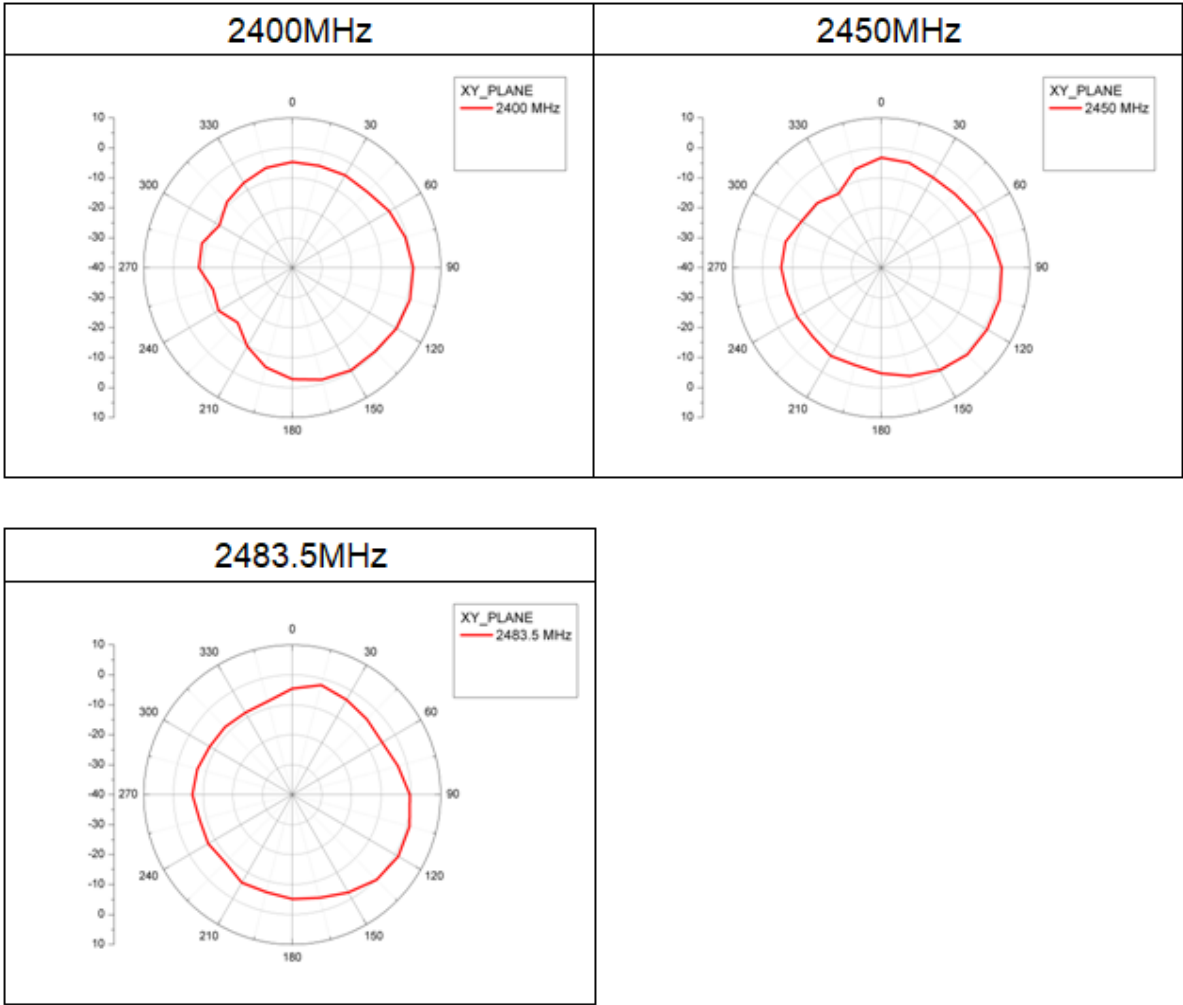
2.1 V.S.W.R

V.S.W.R.



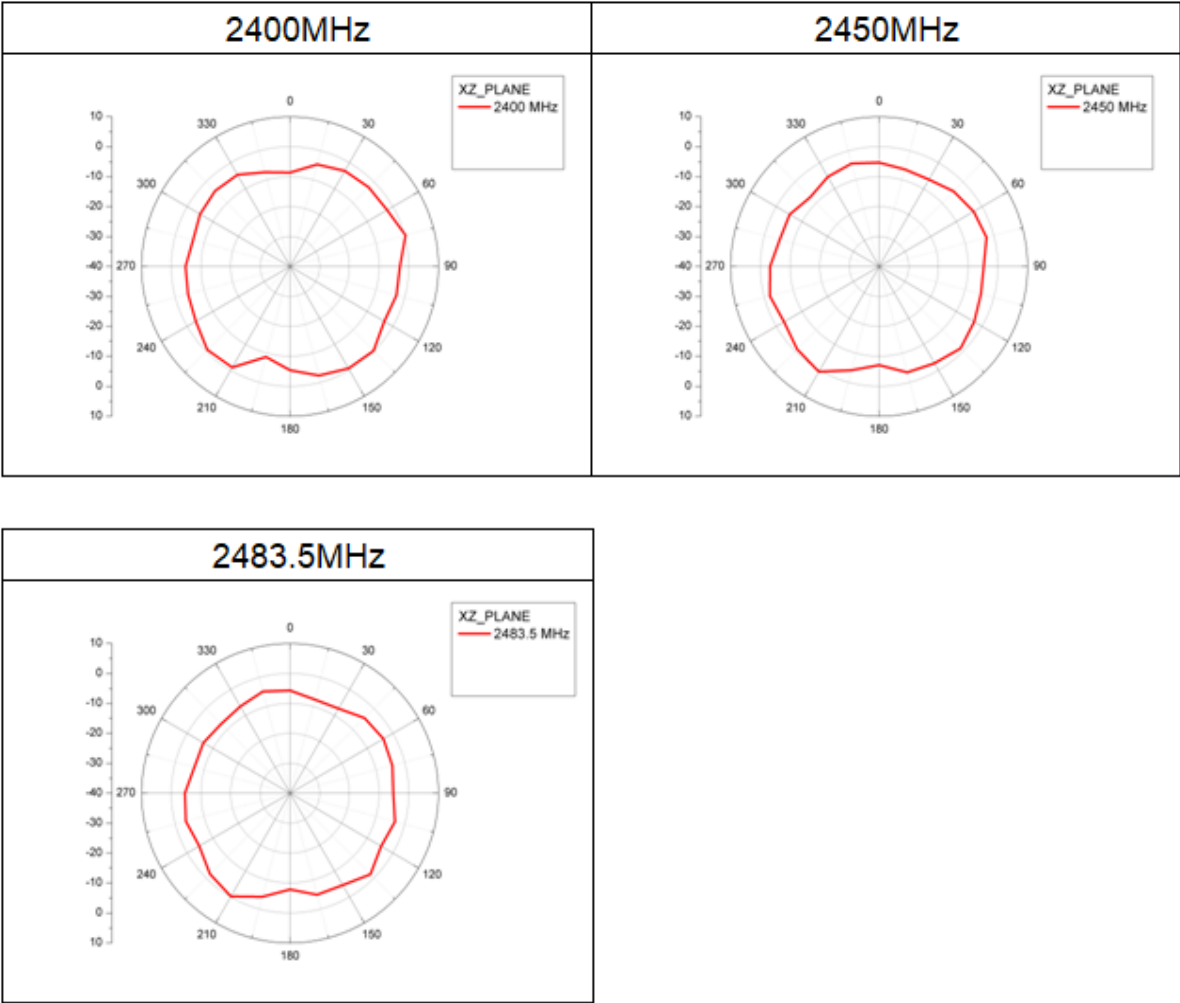
2.2 2D Radiation Pattern(With ground)

X-Y PLANE



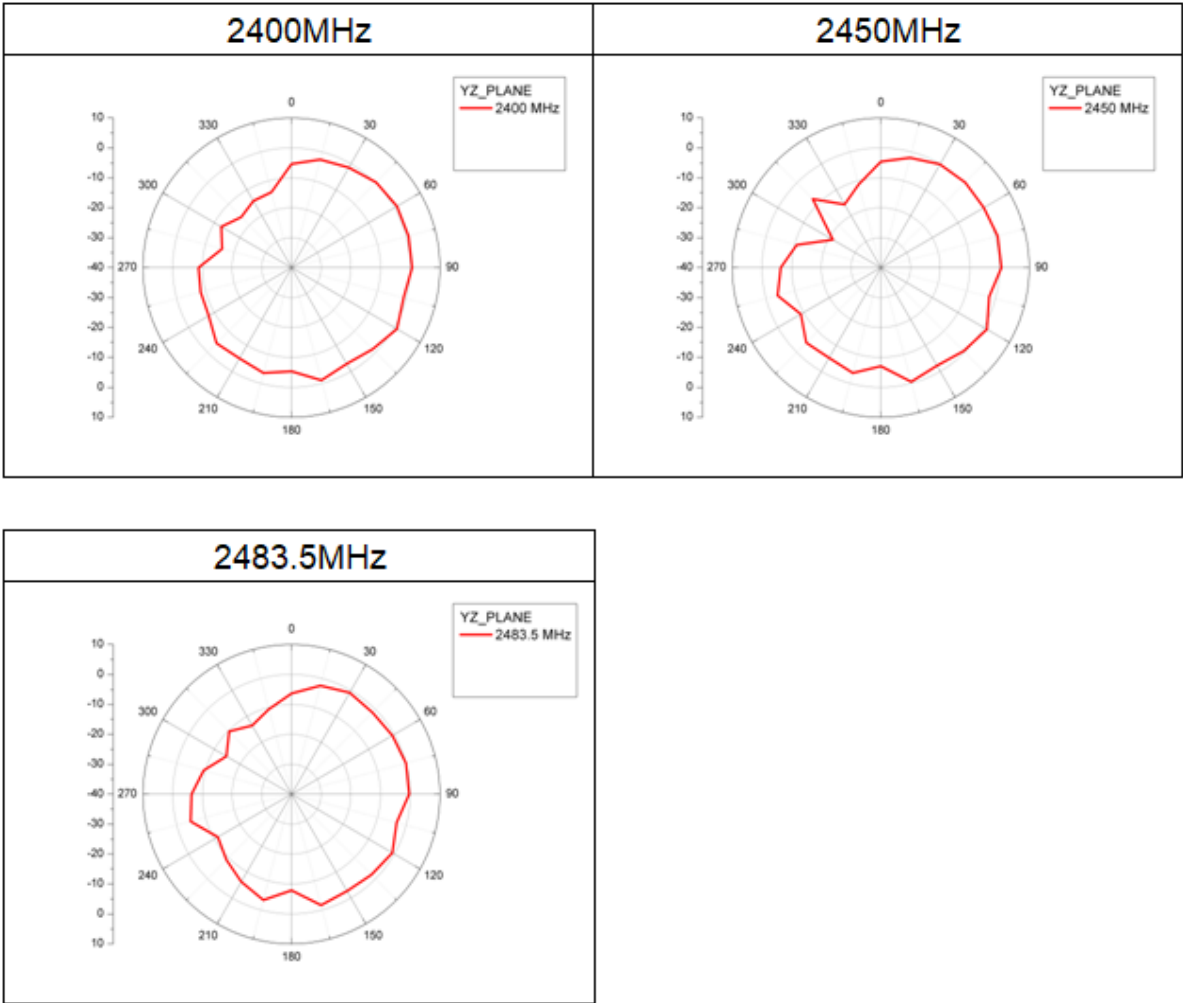
2.2 2D Radiation Pattern(With ground)

X-Z PLANE

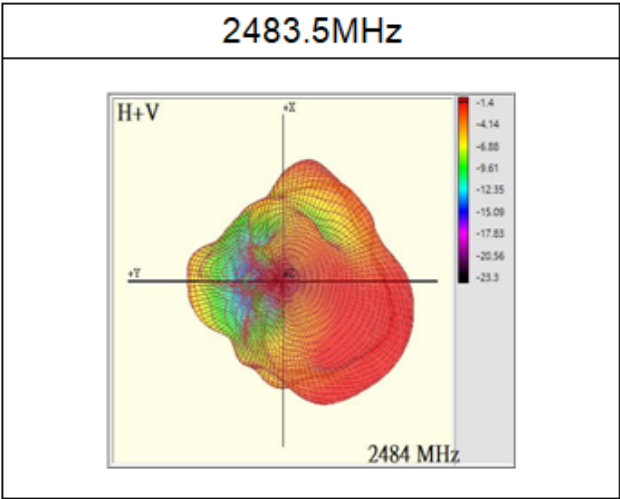
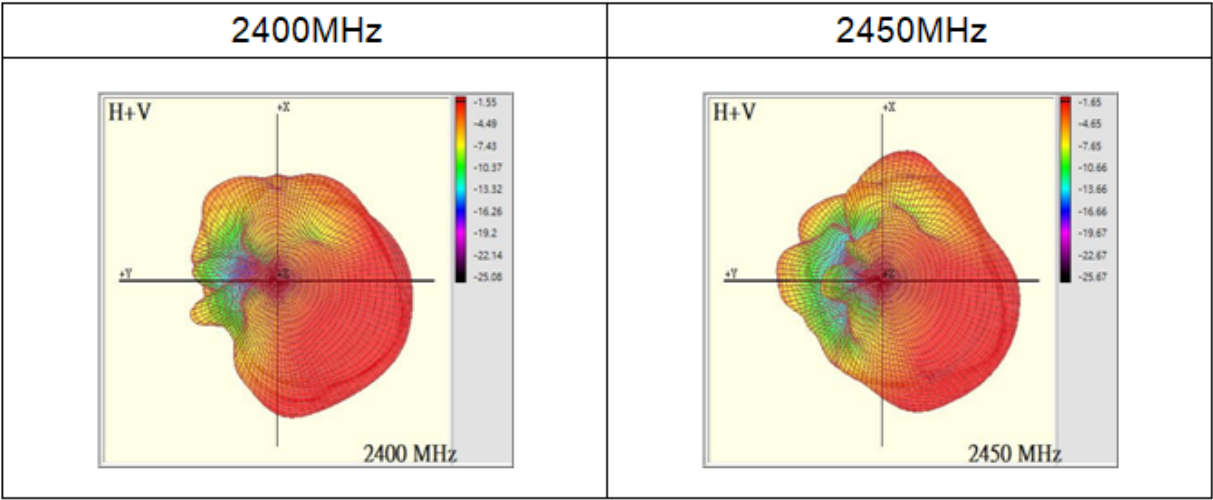


2.2 2D Radiation Pattern(With ground)

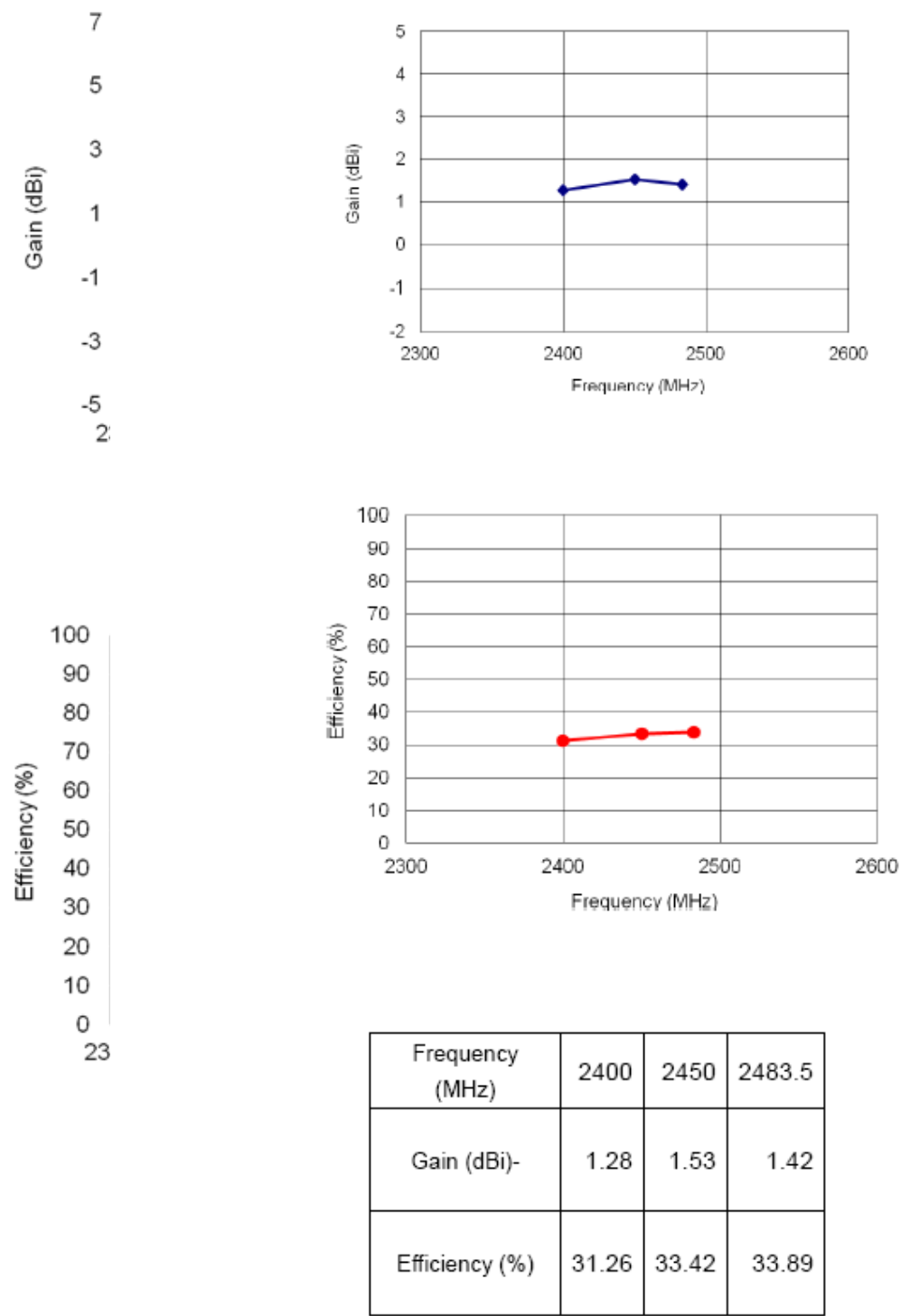
Y-Z PLANE



2.2 3D Radiation Pattern(With ground)



2.3 Gain and Efficiency

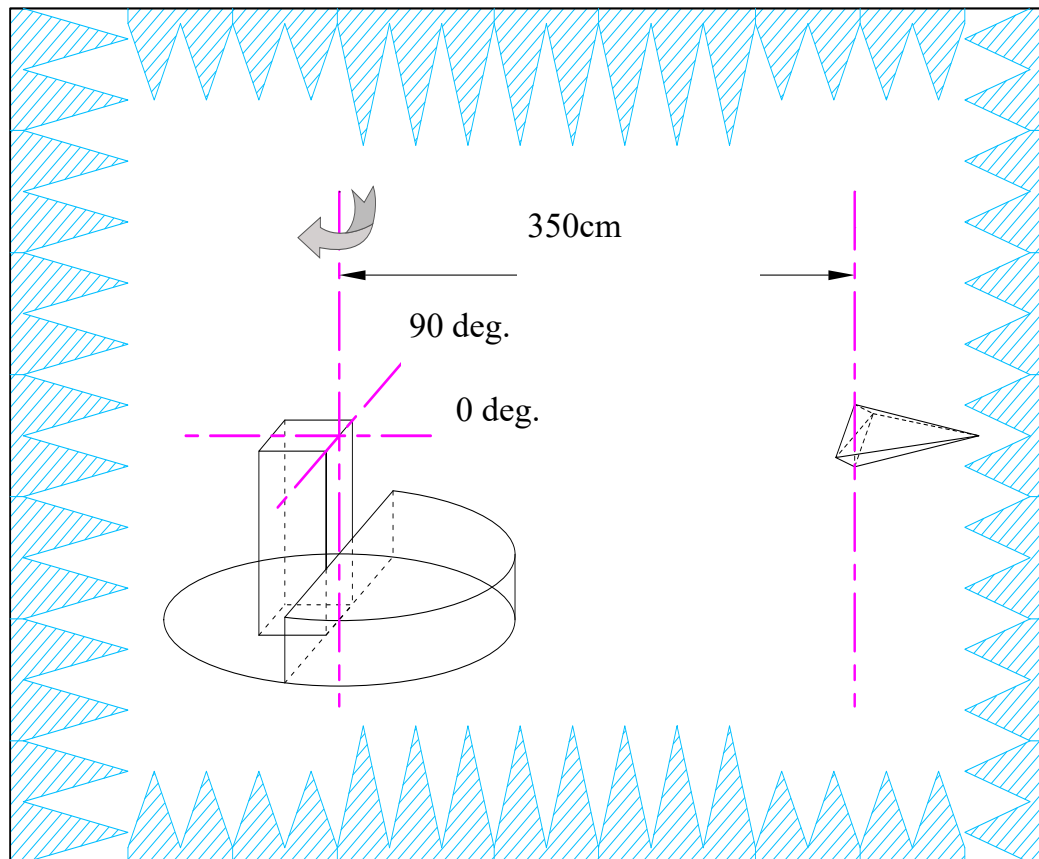


Pattern Test Equipment

Anechoic chamber: 100MHz~6GHz 8*6*6m (※ 1m Quiet zone at 800MHz)

Source Antenna: ETS-3164 Dual Polarized Horn

Network Analyzer: Agilent E5071B 100kHz~8.5GHz



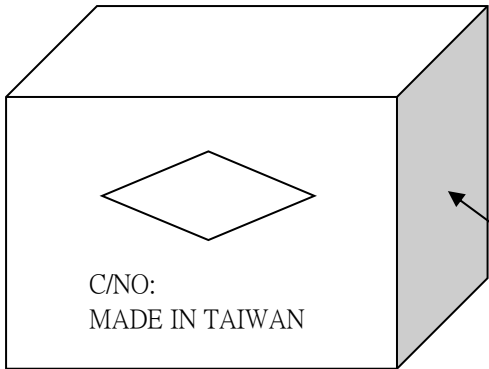
3. Package



1 10pcs antenna / 1 bubble bag



2 50pcs antenna / 1 PE bag



3 1000pcs antenna / 1 Carton

MODEL No.:	
Q'ty:	PCS
N.W:	PCS
G.W:	PCS

Packing q'ty is for reference only, adjust it based on production packing.