

APPROVAL SHEET

(RoHS)

CUSTOMER	: eZEX
CUSTOMER'S PART NO.	: PCA-2615-2G4C1-A6
DESCRIPTION	: RF CABLE ASSEMBLY
PART NO.	: PCA-2615-2G4C1-A6
DATE	: 2022/08/03
PRODUCTION NAME	: 美磊科技有限公司
PRODUCTION ADDRESS	: No.270, Nanfeng Rd., Pingzhen Dist., Taoyuan City 324, Taiwan (R.O.C.)

美磊科技股份有限公司

MAG. LAYERS SCIENTIFIC-TECHNICS CO., LTD

No.270, Nanfeng Rd., Pingzhen Dist., Taoyuan City 324, Taiwan (R.O.C.)

TEL: +886-3-4159111 FAX: +886-3-4192255

<http://www.maglayers.com.tw>

E-mail : info@maglayers.com.tw



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Mechanical Specification

RoHS COMPLIANT

MECHANICAL

Body : FR4(黑漆OSP板) T=0.6mm

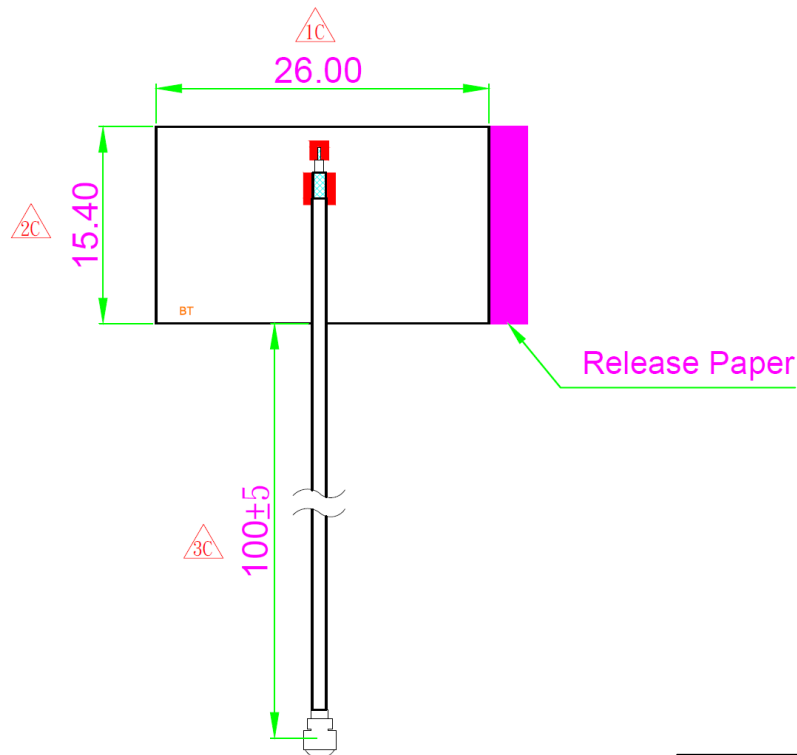
Coaxial Cable : $\phi 1.37$ Low Loss cable (Yellow)

Connector : 20351-112R-37

Double Tape : G9000

ELECTRICAL

Frequency : 2.4GHz



IPEX方向管控

單位: mm

線長	角度
<100	$\pm 90^\circ$
100~199	$\pm 135^\circ$
≥ 200	不管控

△			
△			
△			
△	New Release	05/30/22	Sheng
LTR	DESCRIPTION	DATE	REQ. BY

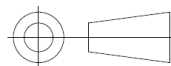
※凡標記 $\triangle C$ 記號者, 為品管檢驗之尺寸

設計 DR.	核准 APPD.
Sheng	Alvin
2022/05/30	2022/05/30
版本說明	REVISION NOTE

容許公差	TOLERANCE
.XXX	± 0.20
.XX	± 0.35
.X	± 0.50
X	± 1.00
ANG	± 5

品名
ARTICLE
PCA-2615-2G4C1-A6

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單位 UNIT	比例 SCALE	張數 SHEET	版本 REV.
mm	****	1	A



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Antenna Specification

ELECTRICAL PROPERTIES

- 1.1 Frequency Range.....2.4GHz
- 1.2 Impedance..... 50 Ohm Nominal
- 1.3 VSWR..... <2 dB
- 1.4 Radiation..... Omni-directional
- 1.5 Gain(peak)..... <5 dBi
- 1.6 Polarization..... Linear Vertical
- 1.7 Admitted Power..... 1W

PHYSICAL PROPERTIES

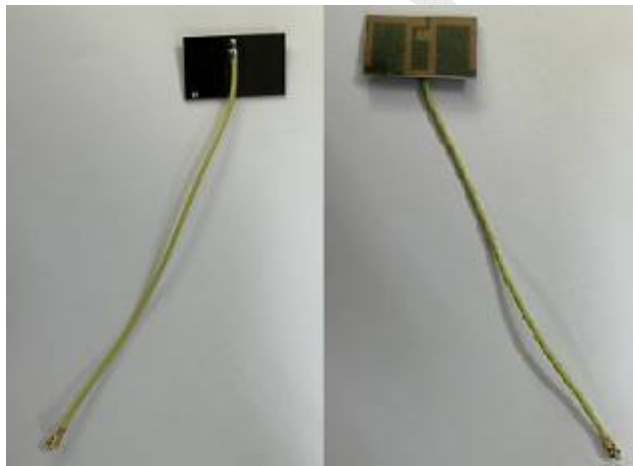
- 2.1 Antenna Material.....FR4 (黑漆 OSP 板)
- 2.2 Cable..... ϕ 1.37 Low Loss (Yellow)
- 2.3 Double Tape..... G9000
- 2.4 Connector.....20351-112R-37
- 2.5 Operating Temp.....-20°C ~ +65°C
- 2.6 Storage Temp.....-30°C ~ +75°C



Specification

Item	Parameter	Specification
1	Operating Frequency	BT(2.4GHz)
2	VSWR	< 2
3	Efficiency	>60%
4	Isolation	<-20dB
5	Peak Gain	<5dBi

Antenna Picture



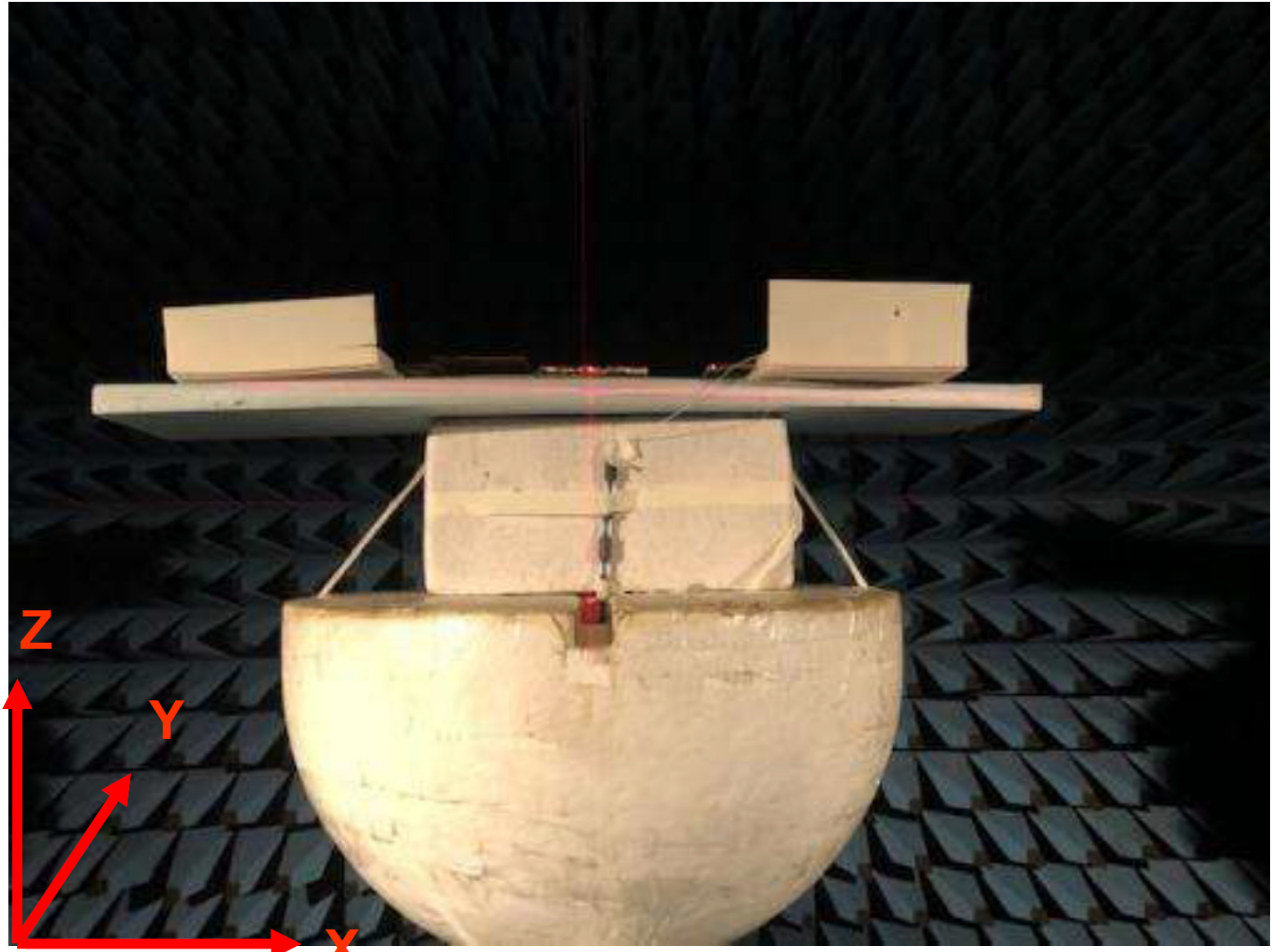
Coordinate System

Note

BT PCB Dimension : 26* 15* 0.6mm, Cable Length : 100mm

Antenna Cable : 0. D 1.37 Low loss +IPEX Conn.





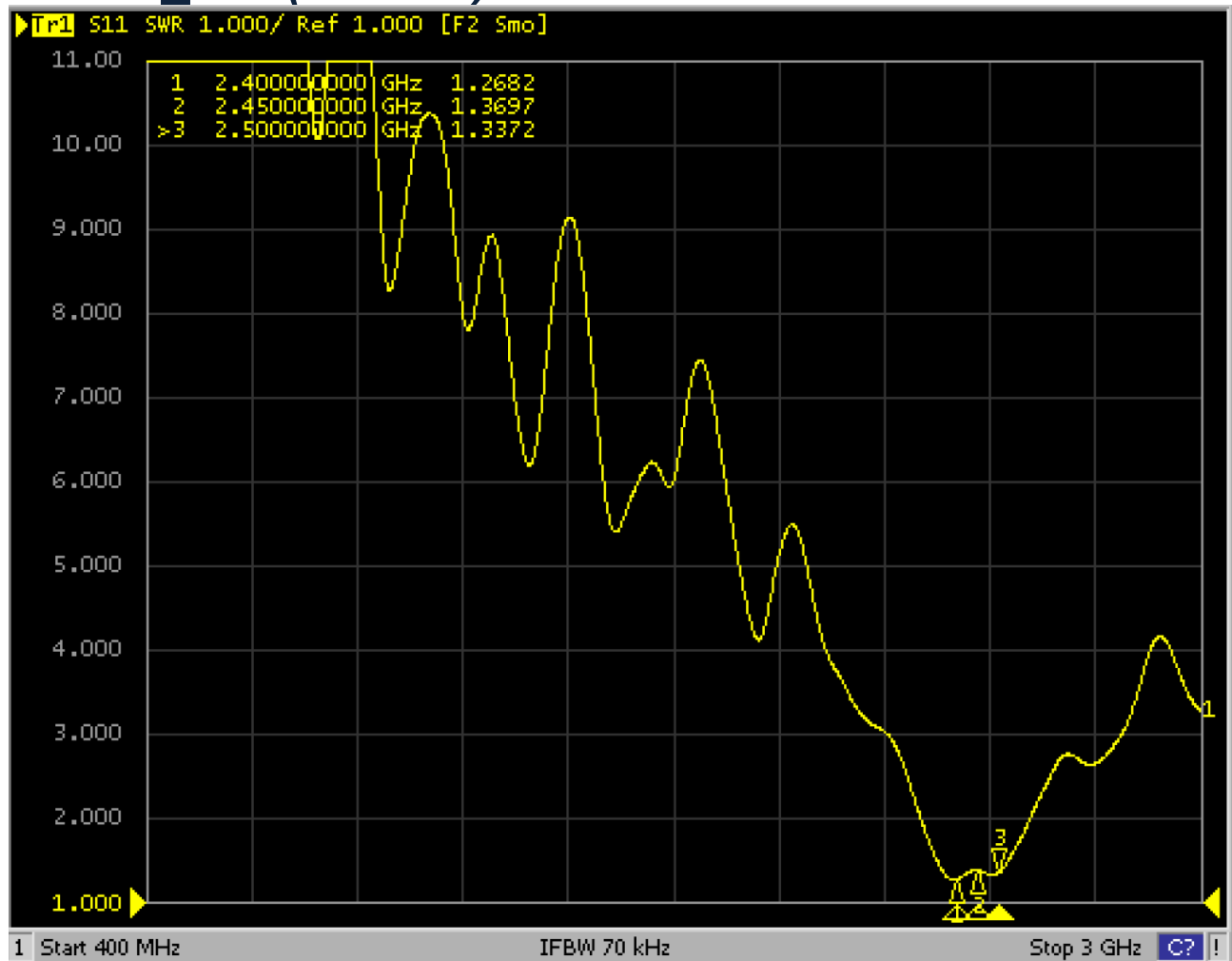
Test Report

ELECTRICAL CHARACTERISTICS

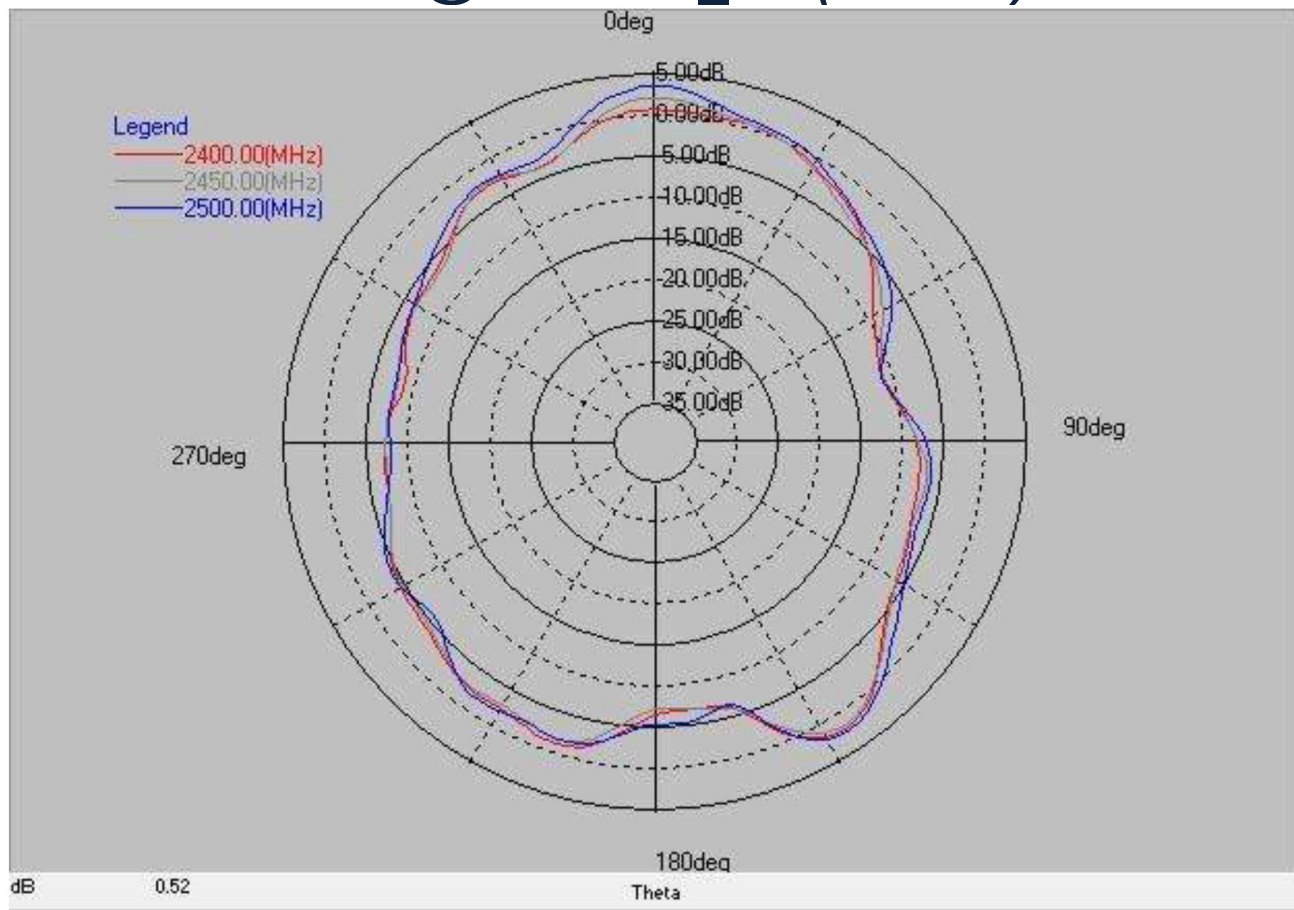
P/NO: PCA-2615-2G4C1-A6

Spec: 2.4GHz

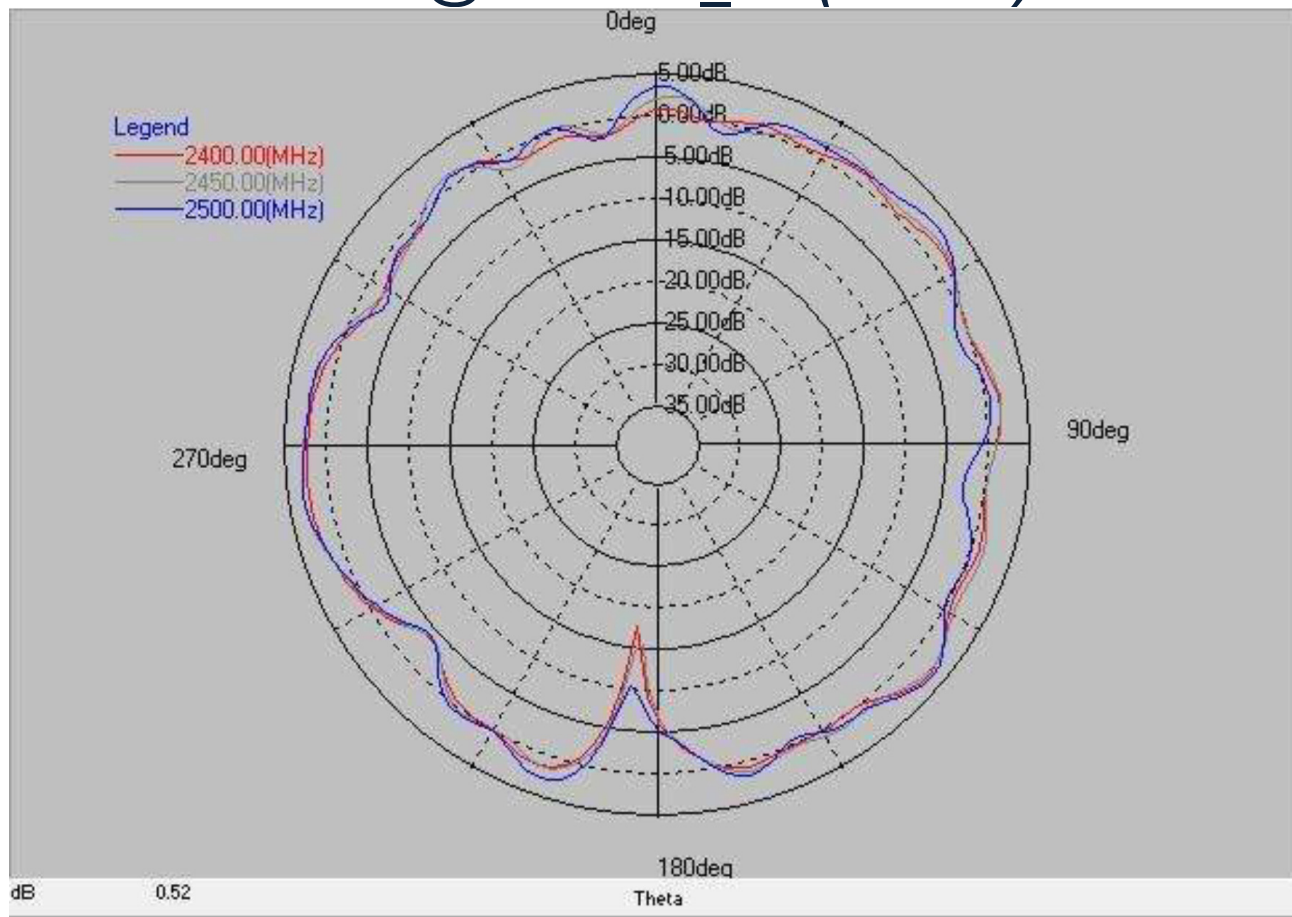
VSWR_BT (2.4GHz)



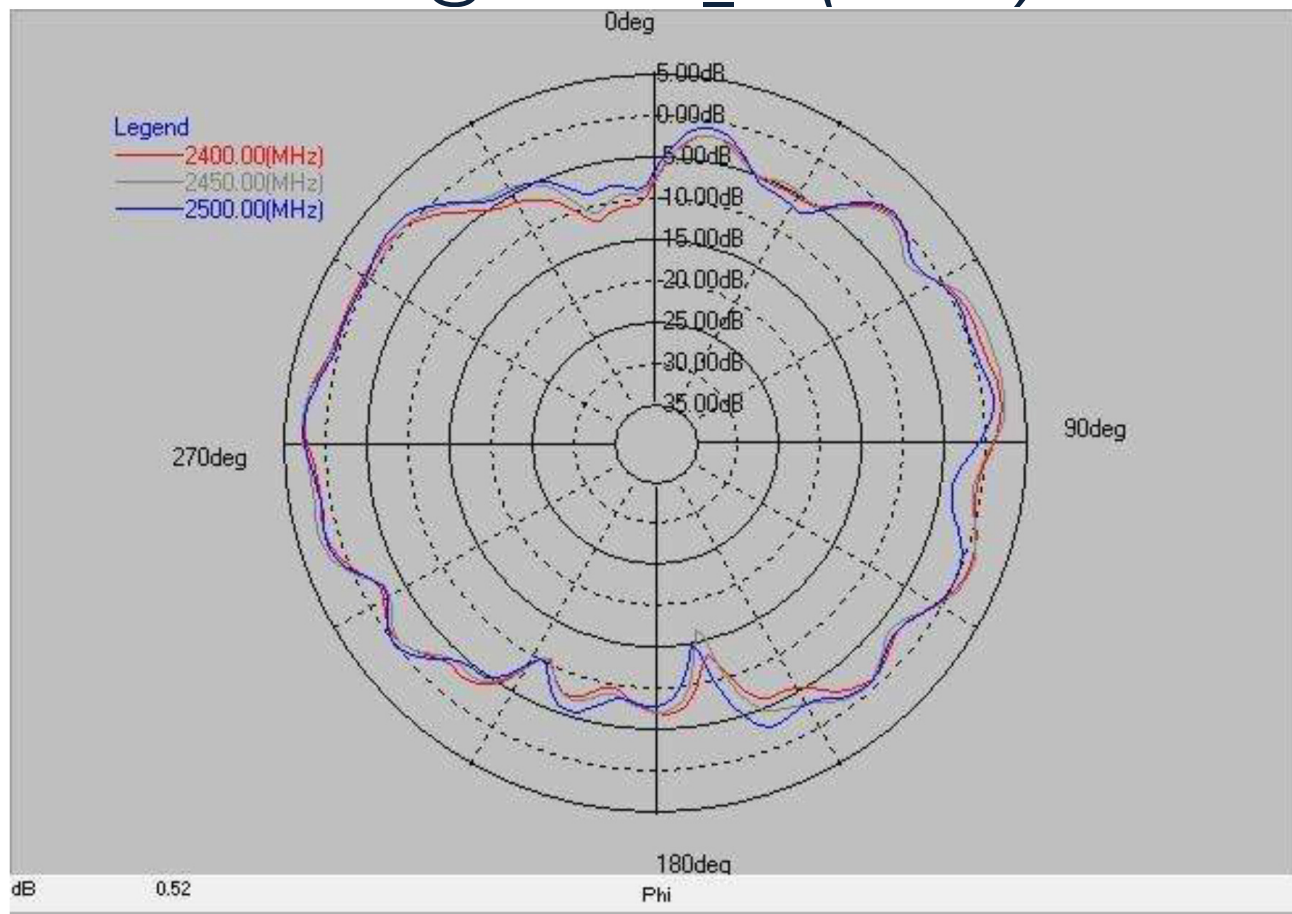
2D Gain Pattern @ZX Plane_BT (2.4GHz)



2D Gain Pattern @ZY Plane_BT (2.4GHz)



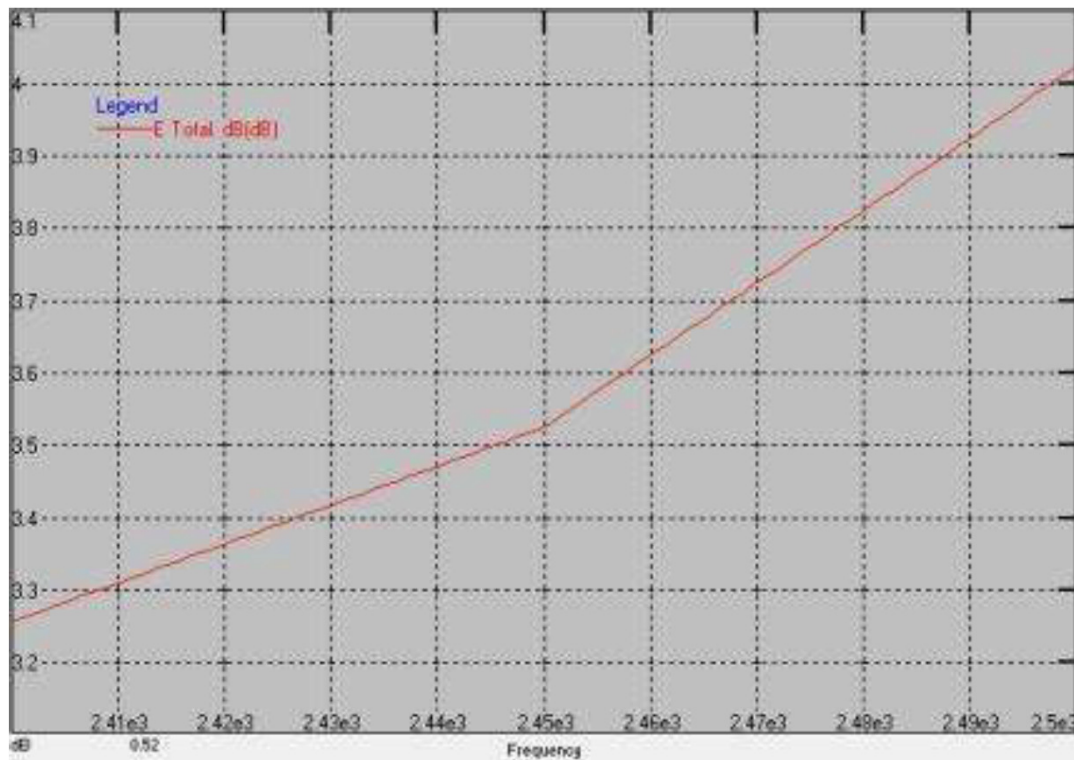
2D Gain Pattern @XY Plane_BT (2.4GHz)



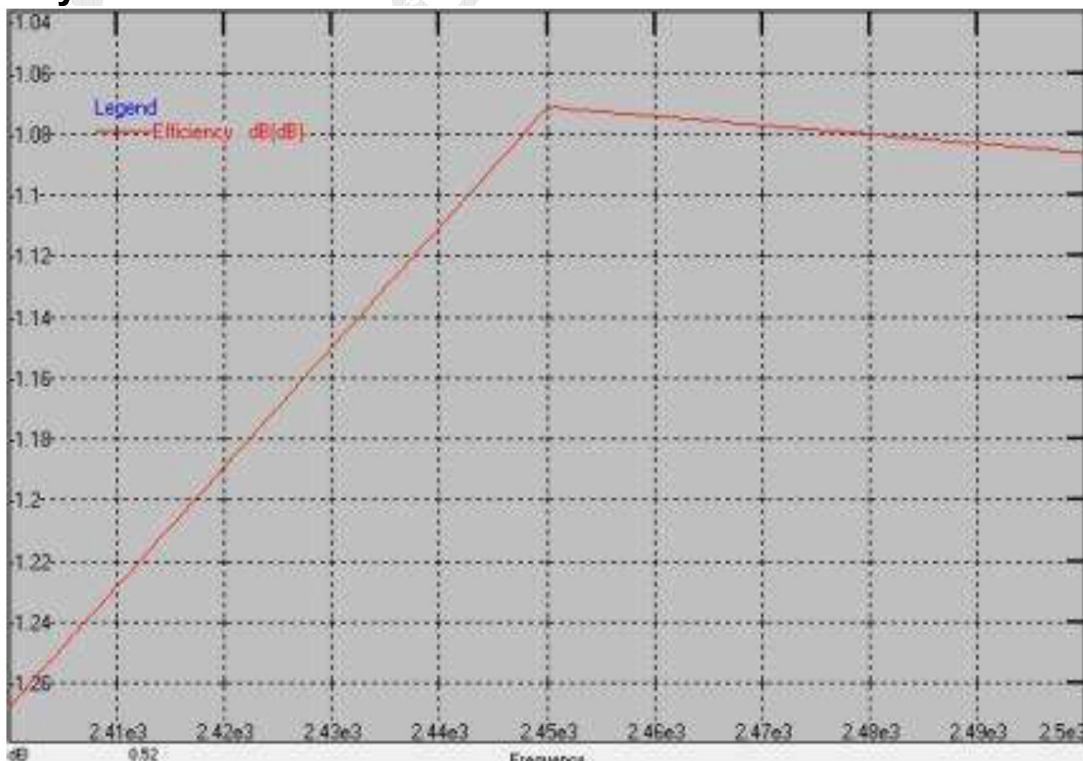
3D Peak Gain&Efficiency_BT (2.4GHz)

Frequency (MHz)	Efficiency	Efficiency . dB	E Total. dB
2400	75%	-1.27	3.26
2450	78%	-1.07	3.53
2500	78%	-1.09	4.02

Peak Gain



Efficiency



Summary

- Exchange WiFi and BT Location and calbe length. all antenna efficiency can >60% for handmade prototype test result.
- eFinally test result need real device to do test.

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