

# Data Sheet

CUSTOMER: Lenovo

Model Name : SA37A47025

VENDER : Luxshare – ICT

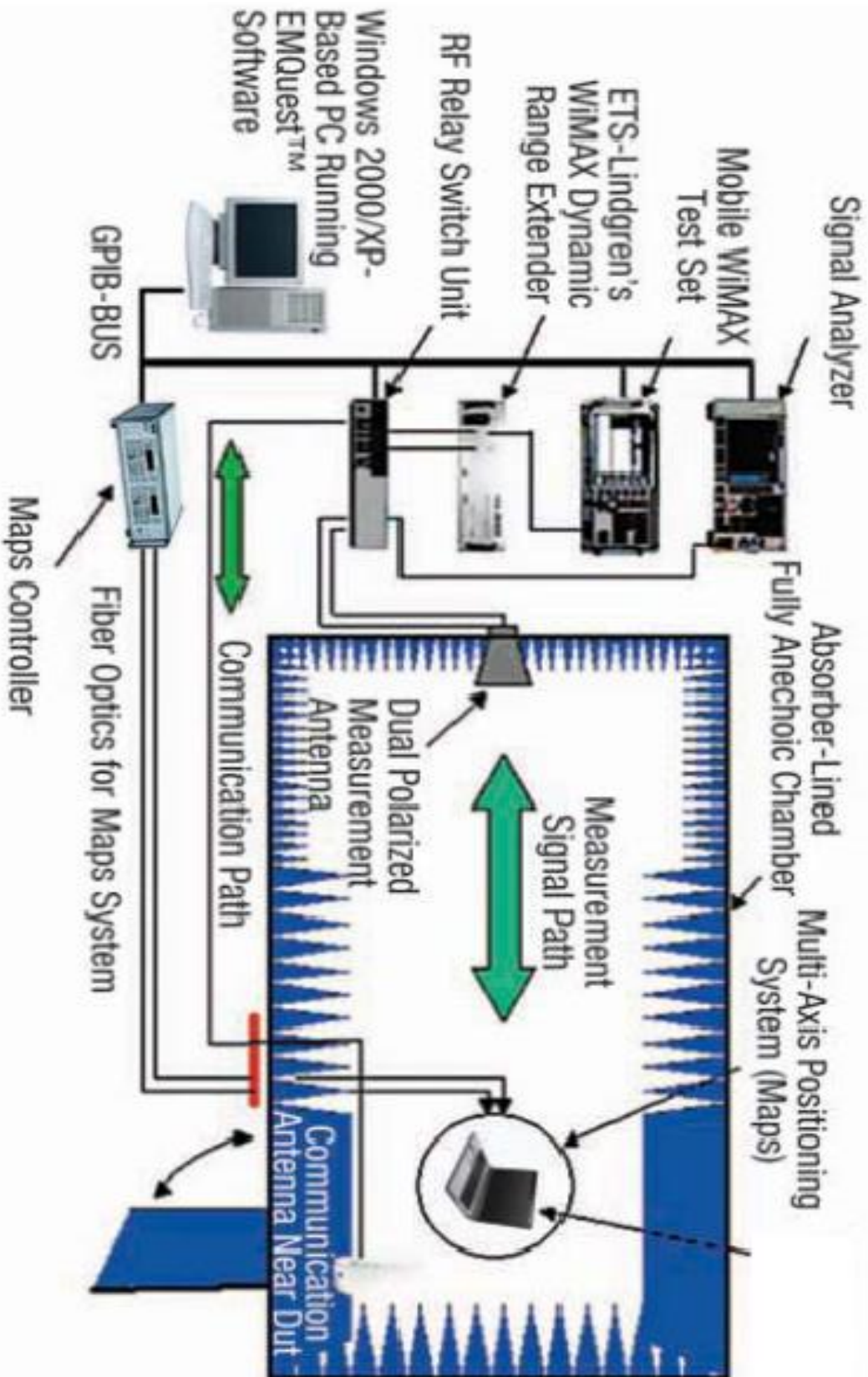
ADDRESS : 7F No. 568, Sec. 1, Minsheng N. Rd.,

Guishan Dist., Taoyuan City 333 , Taiwan (R.O.C.)

<b>APPROVED</b>	
MANUFACTURER	CUSTOMER
<i>PREPARED BY:</i>	<i>APPROVED BY:</i>
<i>CHECK BY:</i>	
<i>APPROVED BY:</i>	

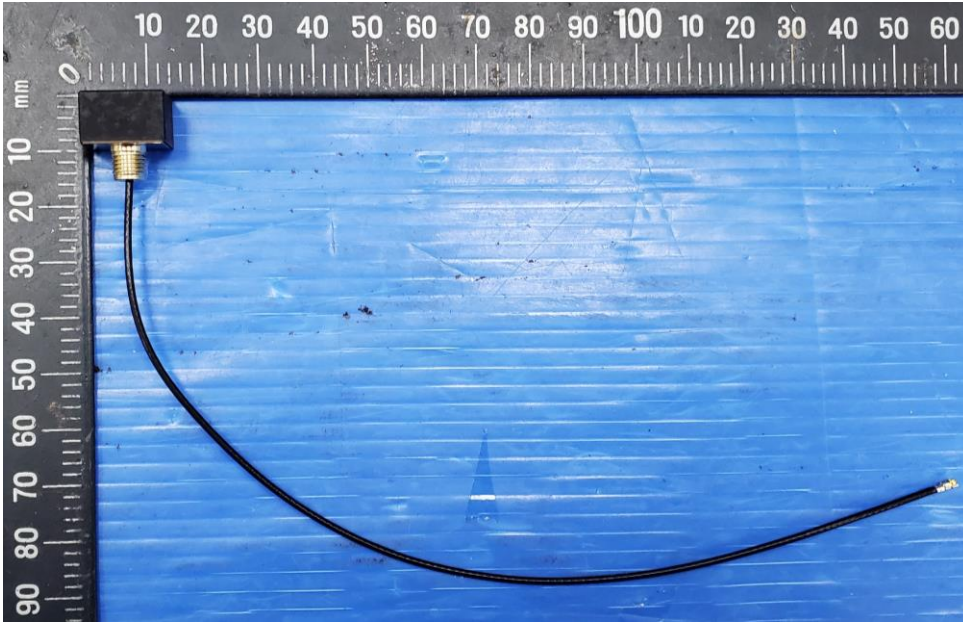
## Description

Antennas Type	PIFA Antenna	
Connector Type	Coaxial Cable	
Cable Type	OD 1.37	
Impedance	50Ω	
Polarization	Linear	
Radiation pattern	Omni-directional	
Frequency Range	Bluetooth 2.4GHz	2.40~2.50 GHz
VSWR	Bluetooth 2.4GHz	3.00 Max
Peak gain with Cable	Bluetooth 2.4GHz	-1.1 dBi
Cable length/Color	180 mm	Black



## Description

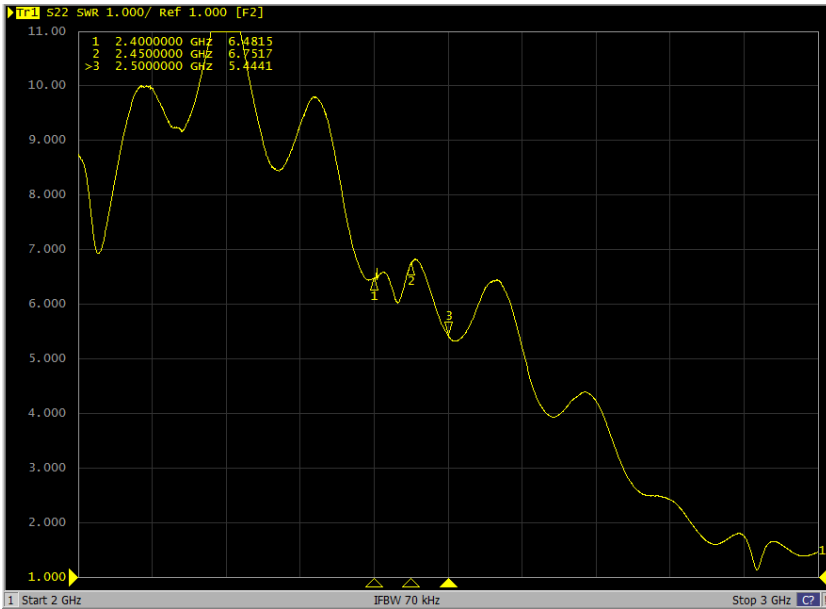
### Bluetooth Antenna Picture



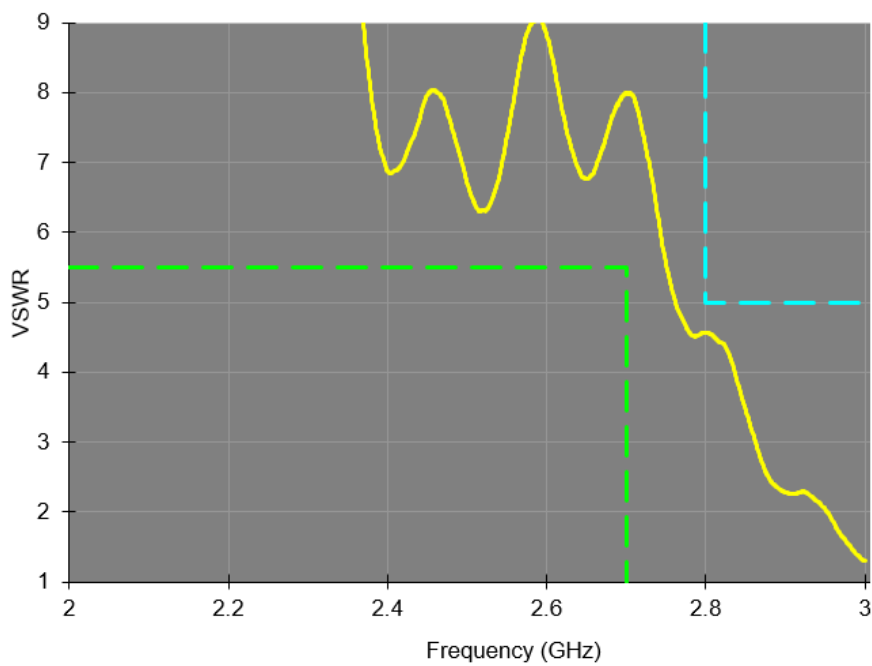
# Performance Data

## 1. VSWR

### Bluetooth



## 2.SPEC

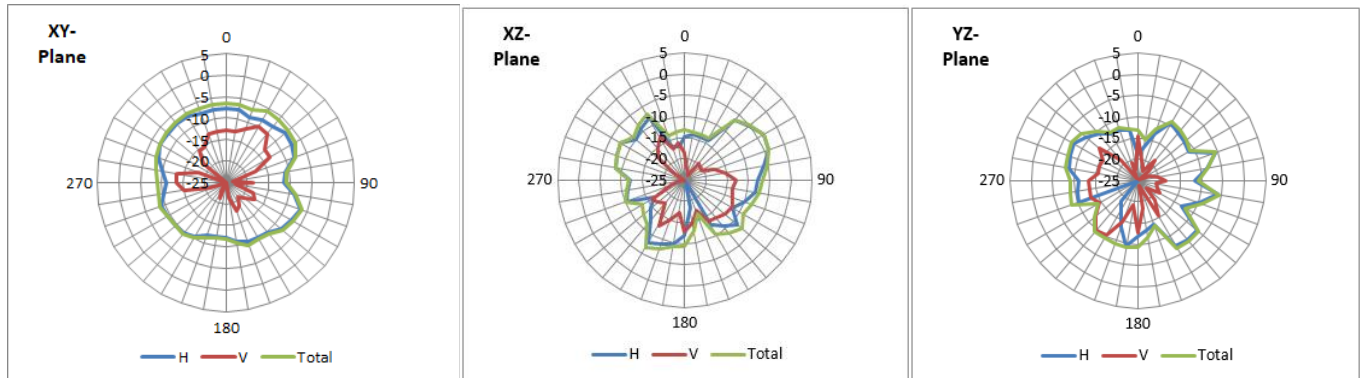


Spec:  
2 ~ 2.7 GHz > 5.5  
2.8 ~ 3 GHz < 5.0

# Bluetooth Antenna

## Radiation pattern open mode

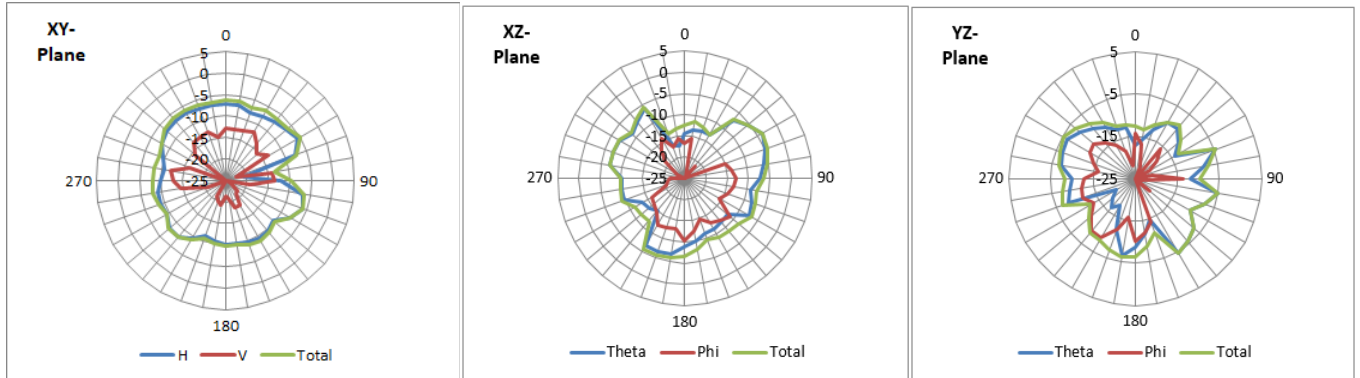
Antenna: 2400MHz



Center Frequency	<b>2400 MHz</b>
Horizontal (dBi) Peak	<b>-3.6</b>
Vertical (dBi) Peak	<b>-12.2</b>

# Radiation pattern open mode

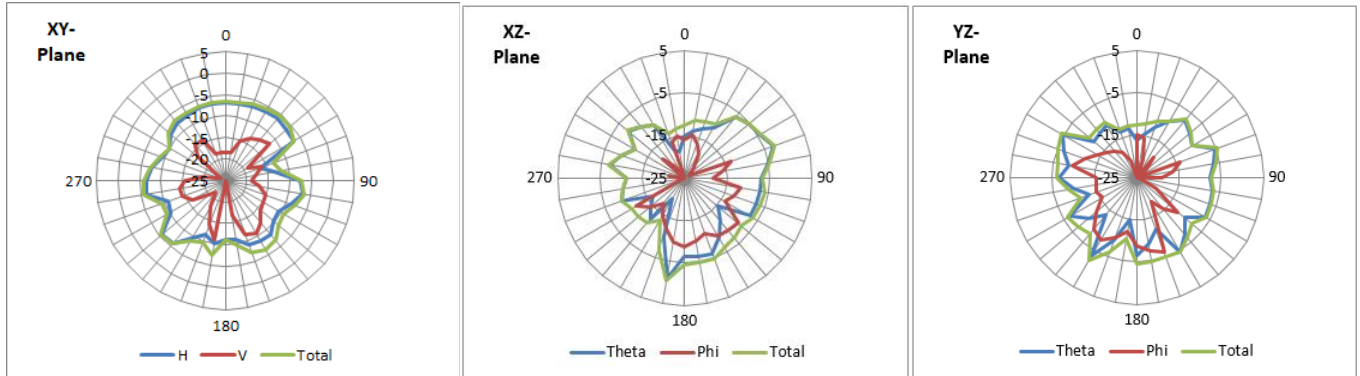
Antenna: 2450MHz



Center Frequency	<b>2450 MHz</b>
Horizontal (dBi) Peak	<b>-3.8</b>
Vertical (dBi) Peak	<b>-10.2</b>

# Radiation pattern open mode

Antenna: 2500MHz



Center Frequency	<b>2500 MHz</b>
Horizontal (dBi) Peak	<b>-1.1</b>
Vertical (dBi) Peak	<b>-8.4</b>



## Bluetooth Antenna

Antenna Gain Data								
Frequency (MHz)	X-Y		X-Z		Y-Z		Average (dB)	Efficiency (%)
	H-pol (dBi)	V-pol (dBi)	H-pol (dBi)	V-pol (dBi)	H-pol (dBi)	V-pol (dBi)		
2400	-6.6	-10.0	-3.6	-12.2	-5.8	-9.8	-7.7	17
2450	-5.7	-11.9	-3.8	-10.2	-4.6	-8.8	-7.4	18
2500	-5.6	-10.7	-1.1	-8.4	-3.7	-6.2	-6.4	23

# Assembly Drawing

## Bluetooth Antenna

180±5 (COLOR:BLACK)

40.00±2

15.00±1

10±0.4

18±2

12.00±1

14.50±1

10±0.4

18±2

12.00±1

14.50±1

VERSION	DESCRIPTION	APPROVER	DATE
1	NEW DRAWING	ANDERSON	2022.09.07
2	MODIFY LABEL DIM.	ANDERSON	2022.09.13
3	MODIFY BOM, NOTES, LABEL	ANDERSON	2022.10.17
4	MODIFY FPC, COVER (DRAFT)	ANDERSON	2022.10.21
5	MODIFY TITLE, NOTES, LABEL AND ADD GLUE	ANDERSON	2022.11.21

ITEM	NAME	DESCRIPTION	PLATING SPEC	QTY
14	GLUE	SILICONE GLUE COLOR: BLACK		1
13	SMA NUT	H9.24*1.75L, BRASS, GOLD PLATING FLASH, NI PLATED 60U", 1/4-36UNS-2B	Au Plating Wash Ni 60U"	1
12	SMA WASHER	#10.2*0.5L, BRASS, GOLD PLATING FLASH, NI PLATED 60U"	Au Plating Wash Ni 60U"	1
11	SMA BODY	BRASS, GOLD PLATING FLASH, NI PLATED 60U", 1/4-36UNS-2A	Au Plating Wash Ni 60U"	1
10	FPC	FPC WITH CONDUCTIVE ADHESIVE, T=0.2MM		1
9	SPONGE	EVA SHORE A 70", COLOR: BLACK		1
8	COVER	PC+ABS, SABC CYCLOYD C2950, COLOR: RAVEN BLACK		1
7	ACETATE TAPE	L=4mm, COLOR: BLACK		4
6	ACETATE TAPE	L=10.5mm, COLOR: BLACK		2
5	FERRITE CORE (R018081326630)	#4.0mm, L=10mm, COLOR: BLACK		2
4	LABEL	W15mm, L=60mm, COLOR: WHITE		1
3	TRANSPARENT TUBE	L=16MM		1
2	CABLE (S1137L/50-005)	DIA 1.37MM SINGLE ENDED COAXIAL LOW LOSS CABLE, COLOR: BLACK, VW-1		A/R
1-1	HOUSING	PBT, COLOR:BLACK, UL94V-0		
1-2	SIGNAL CONTACT	PHOSPHOR BRONZE, Au OVER NI	Au over Ni	1
1-3	GROUND CONTACT	PHOSPHOR BRONZE, Au PLATING AREA: Au OVER NI, NI PLATING AREA: NI ONLY	Au over Ni Ni over Ni only	

NOTES:

- DIMENSIONS MARKED "\*" SHALL BE CHECKED (標註 \* 的尺寸須做重點檢驗(SPC))
- ELECTRICAL (電氣要求)
  - IMPEDANCE: 50 OHMS.
  - FREQUENCY: 2.4GHZ
  - VSWR: ≤2.0
  - PEAK GAIN: <1.0 dBi
  - AVERAGE GAIN: -7dB at 2.4GHZ
  - POLARIZATION: LINEAR
  - RADIATION PATTERN: OMNI-DIRECTIONAL
- ENVIRONMENTAL (使用環境要求)
  - STORAGE TEMPERATURE RANGE: -40 TO +85°C
  - OPERATING TEMPERATURE RANGE: -40 TO +85°C
  - HUMIDITY RANGE: 96%@25°C
  - INGRESS PROTECTION RATING: IP30
- HARMFUL MATERIAL AND PROCESS CONTROL, PLEASE FOLLOW DOC. NO."QW-Q-043". (符合環境管理物質要求規定)

LUXSHARE-ICT		DRAWN: ALEX	
PART NO.: L01RF336-DT-H		CHECKED: ALEX	
DWG NO.:		APPROVED: Anderson Chen	

DOCUMENT TITLE: (784) HAKUBA WLAN BT ANT ASM (-786)	DOCUMENT NUMBER: SA37A47025	DOCUMENT REVISION: X5	SHEET: 1/2
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