

APPROVAL SHEET

FPC ANTENNA

2.4 GHz Working Frequency

Halogens Free Product

P/N: RFFPA301033IMAB301

Customer : _____
Customer 's Part No. : _____
Approval No. : _____
Issue Date : _____

*Contents in this sheet are subject to change without prior notice.

Version	Date	Description	Author
V01	2021 Apr.	New Release	SHLEE

ELECTRICAL CHARACTERISTICS

Item	Specification
Working Frequency Range	2.4 ~ 2.5 GHz(Note-1)
Return Loss	-10 dB(Max)
Gain(peak)	3.12 dBi
VSWR	< 2.0
Impedance	50 Ohm Nominal
Radiation	Omni-directional
Polarization	Linear Vertical
Operation Temperature	-20°C ~ +65°C

*Note 1. Central Frequency should be defined after customers' application approval.

MATERIAL TABLE

Items	Description
Antenna	FPC 0.5oz
Double Tape	3M467
Cable	Ø1.13 Cable (White)
Connector	IPEX Compatible(Gold)

ORDERING RULE

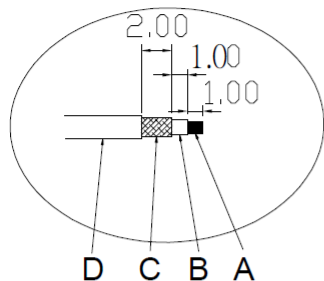
RF	FPA	3010	33	I	M	A	B	3	01
Type Code	Product Code	PCB Dimension (Unit: mm)	Cable Length (unit: cm)	Connector Brand	Type of Connector	Application	Project status	Wire Diameter	Project
Walsin RF Device	FPC Antenna	Per 2 digits of length, width e.g.: 3010 Length 30mm, Width 10mm	2 digits for cable length e.g.: 33 Length 33cm	A: N C: MCX D: IPEX III E: IPEX IV F: IPEX A13 H: Hirose I: IPEX M: MMCX S: SMA T: TNC U: MURATA N: None	A: Reverse Female B: Reverse Male F: Female M: Male N: None	0: 0GHz 3: 3GHz 5: 5GHz 6: 6GHz A: 2.4GHz ISM band B: GSM 900/1800 dual band G: GPS band L: 2.4/5.2/5.8 GHz tri-band N: NFC T: LTE band W: WCDMA band	B: MP T: During Test X: Pile Run	0: None 1: Ø 0.81 2: Ø 1.32 3: Ø 1.13 4: Low Loss Ø 1.13 5: Ø 0.5 6: RG316 7: Ø 1.37 8: RG178 9: Low Loss Ø 1.37	01~99 series number

Dimensions

ELECTRICAL

Frequency:
2.4~2.5 GHz

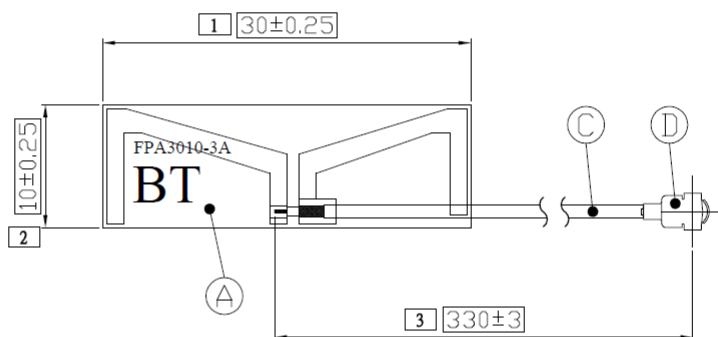
No.	DESCRIPTION	MAT'L	Color	Q'TY
A	Body	FPC (0.5oz) (Single Layer)	Black	1
B	Double Tape	3M 467	—	1
C	(Coaxial Cable $\phi 1.13$)	—	White	1
D	IPEX Compatible(2130800037)	—	Gold	1



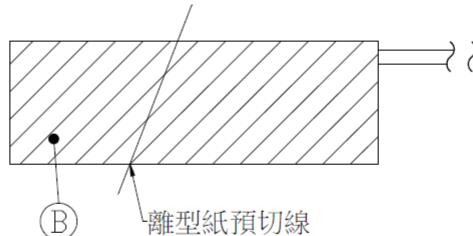
D C B A

A - center conductor
B - Dielectric
C - Outer conductor
D - Jacket

(Front View)



(Back View)



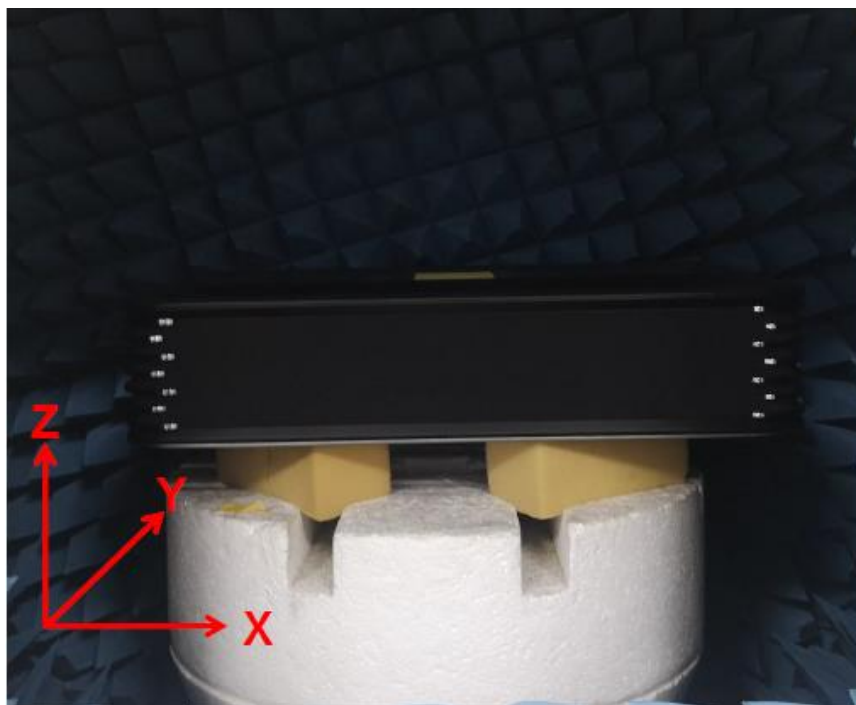
IPEX方向:
100mm : $\pm 90^\circ$
200mm : $\pm 135^\circ$
200mm以上不管控

※標記□記號者, 為重點檢驗尺寸

				設計 DR.	SHLEE	2021.03.29	品名 ARTICLE	版本 REV. A
				核准 APP.	MARCO			
				容許公差 TOLERANCE				
LTR	DESCRIPTION	DATE	REQ. BY	6以下.....			±0.2	RFFPA301033IMAB301
				6以上~30.....			±0.5	
				30以上~120.....			±0.8	
				120以上~315.....			±1.2	
				315以上~1000.....			±2.0	
				1000以上~2000.....			±3.0	
PSA 華新科技股份有限公司 WALSIN TECHNOLOGY CORPORATION				單位 UNIT		比例 SCALE	張數 SHEET	
				mm		****	1	

Test Report

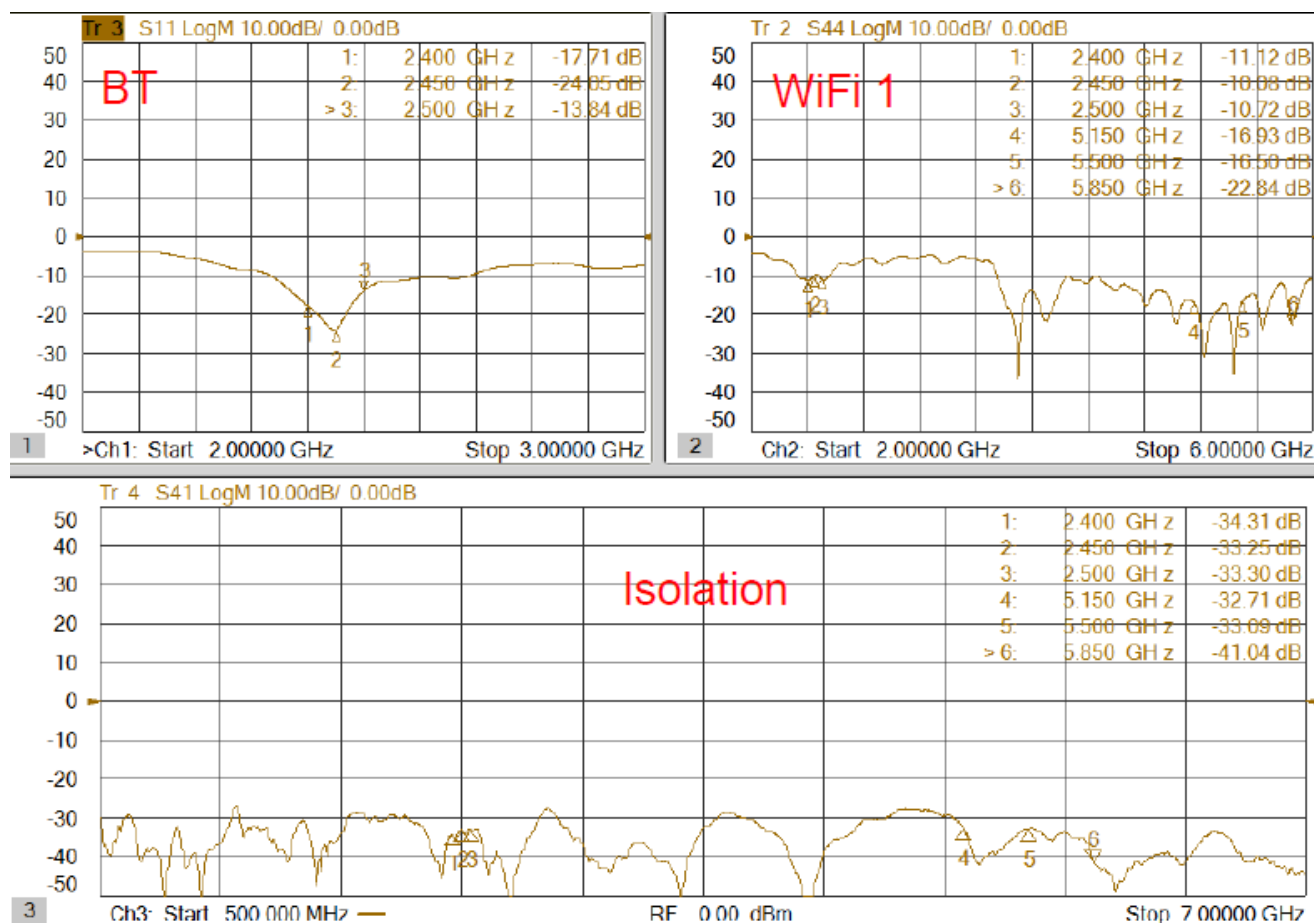
■ Experimental Setup

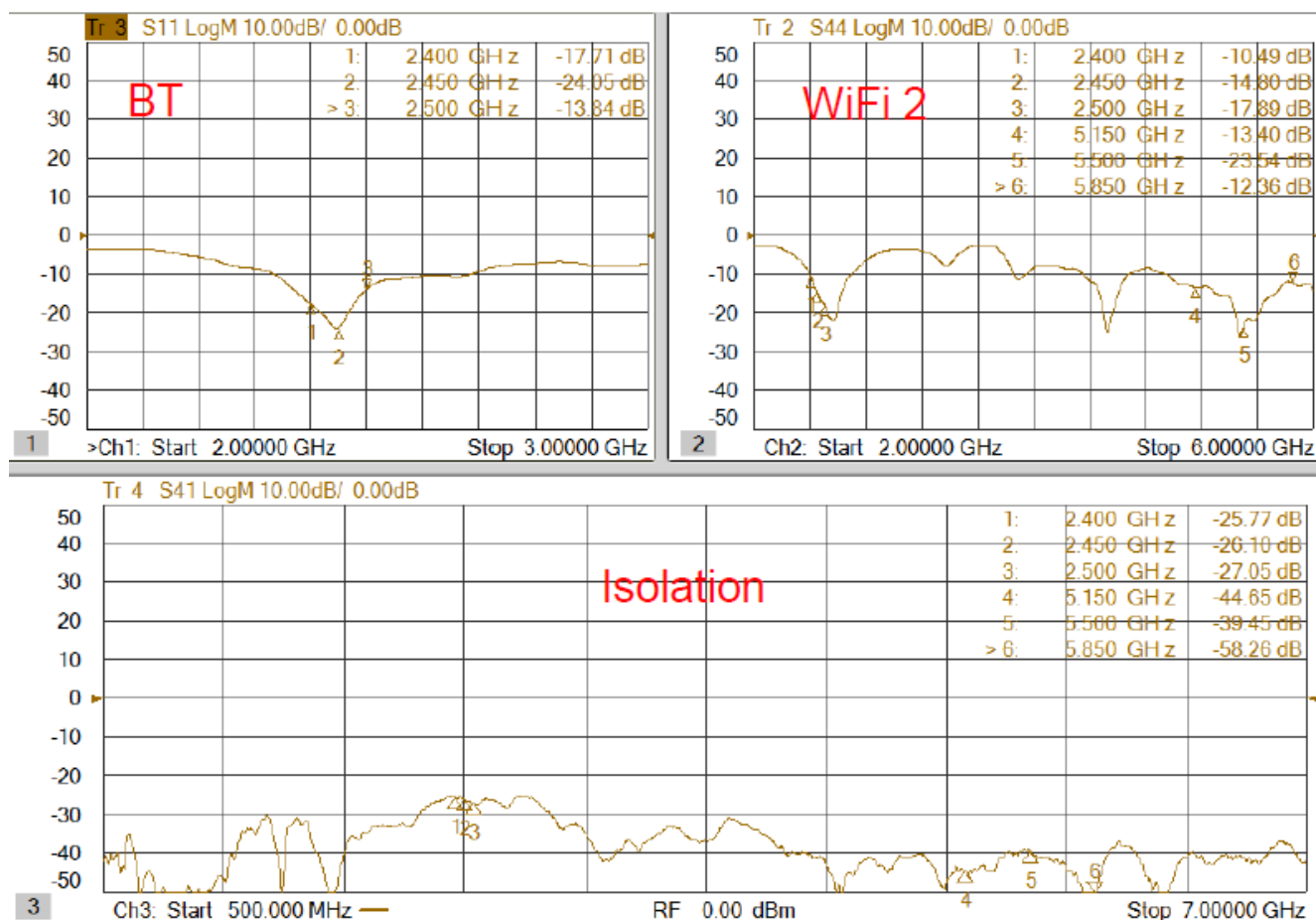


ELECTRICAL CHARACTERISTICS

Return Loss & Isolation

BT

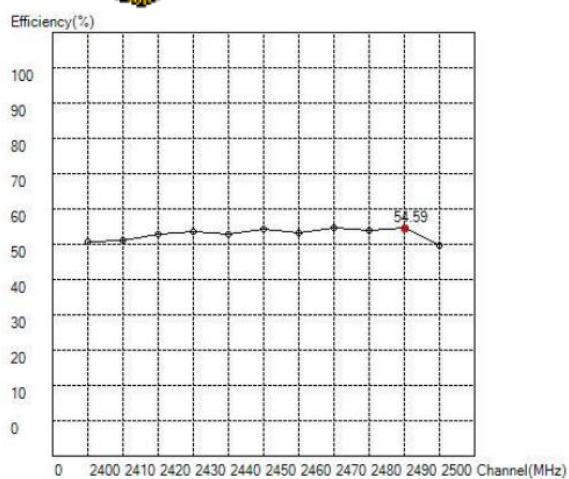
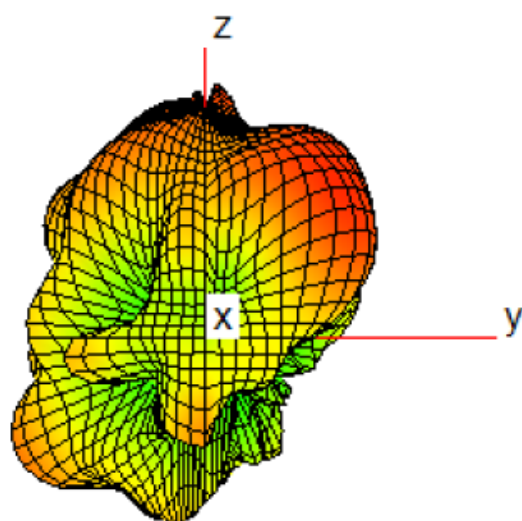




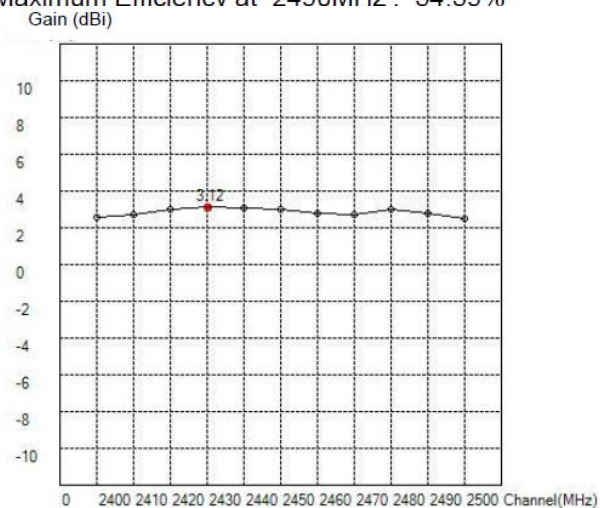
■ Antenna Efficiency & Peak Gain

2400~2500 MHz

2450 MHz



Maximum Efficiency at 2490MHz : 54.59%



Maximum Peak Gain at 2430 MHz : 3.12 dBi