

APPROVAL SHEET

FPCB Antenna

865~928 MHz Working Frequency Application

Halogens Free Product

P/N: RFFPA321309IMRB402

Customer : 光寶科技股份有限公司

Customer 's Part No. : 20301-004820A000

Approval No. :

Issue Date :

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

品名：RFFPA321309IMRB402

History List

[illegible]

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UNLESS OTHER SPECIFIED TOLERANCES ON :
X = N/A X.X = N/A X.XX = N/A
ANGLES = N/A HOLEDIA = N/A



INPAQ TECHNOLOGY CO., LTD.

SCALE : N/A

UNIT : mm

DRAWN BY : 詹惠雯

CHECKED BY : 詹惠雯

DESIGNED BY : 王志祥

APPROVED BY : 陳振榮

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1.Explanation of part number :

RF	FPA	3213	09	I	M	R	B	4	02
Type Code	Product Code	FPCB Dimension (Unit: mm)	Cable Length (unit: cm)	Connector Brand	Type of Connector	Application	Project status	Wire Diameter	Project
RF Device	FPA: FPCB Antenna	Per 2 digits of length, width e.g.:1017 Length 105.0mm, Width 17.3mm	2 digits for cable length e.g.:07 Length 7.0cm	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: 5 GHz 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 R: 865~928 MHz	B: MP T:During Test X: Pile Run	0:None 1:Ø0.81 3:Ø1.13 4: Ø1.13 Low Loss 6:RG316 7:Ø1.37 8:RG178 9:Low LossØ1.37 A:RG174 B:RG178 單芯線 C:WPC用Ø0.3 D:DECT 用 Ø2.0 E:RG405 F:RG179	01~99 series number

2.Electrical Specification :

Item	Specification
Working Frequency Range	865~928 MHz
Return Loss	-10 dB
Peak Gain	0.31 dBi
Polarization	Linear Vertical
Radiation Pattern	Directional
Impedance	50Ω
Operation Temperature	-20℃ ~ +65℃

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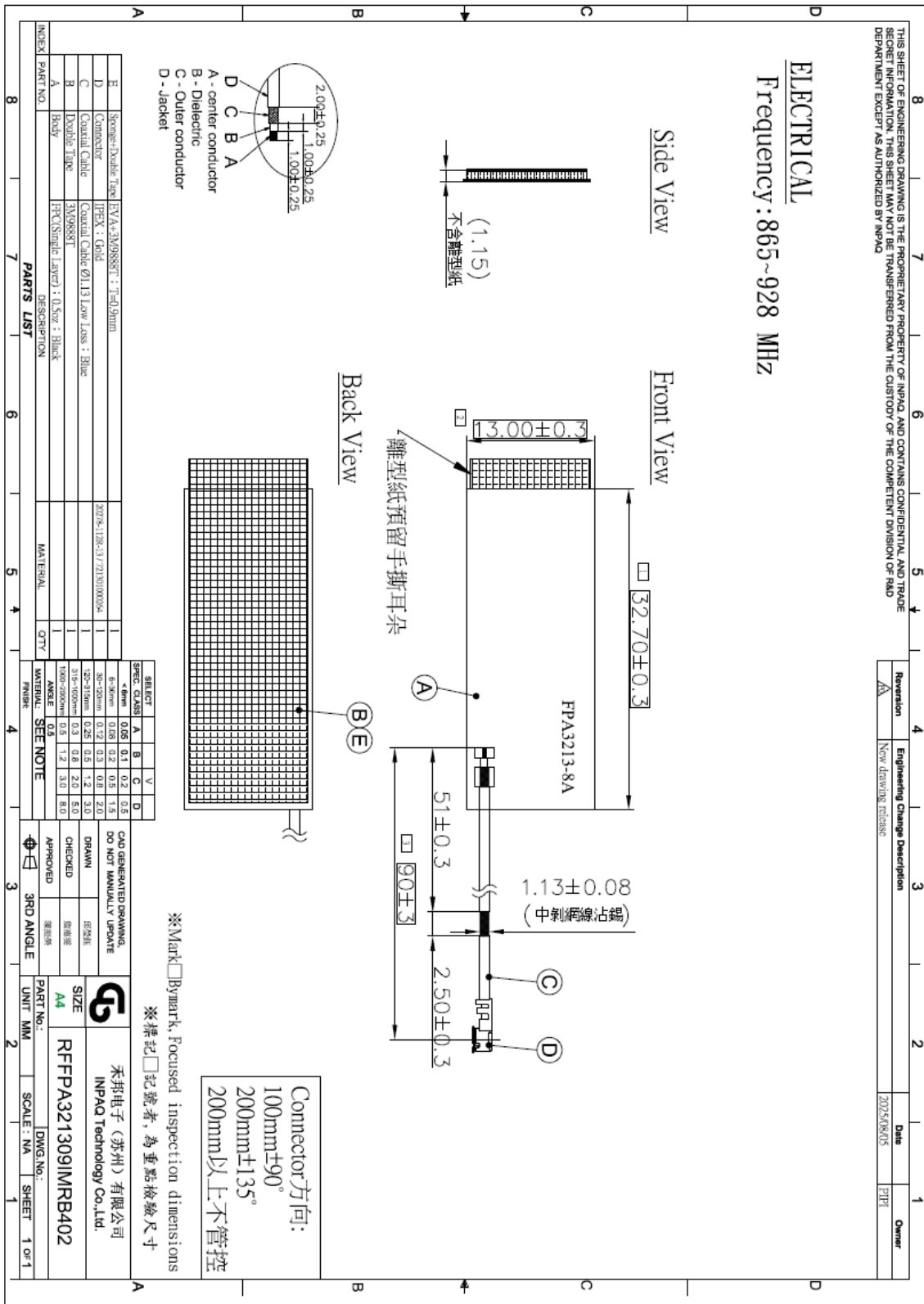
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3. Drawing :



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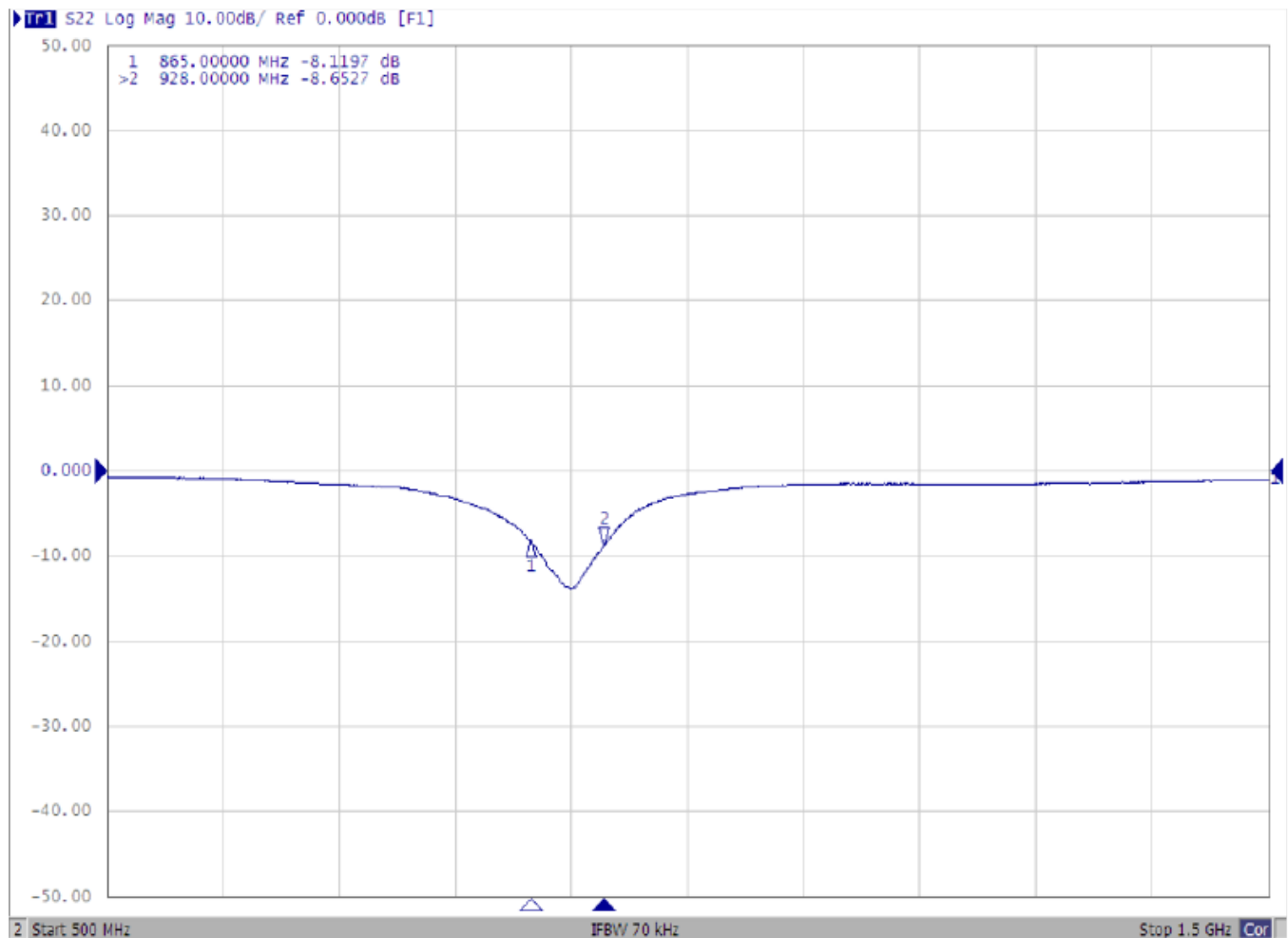
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4. Test Report

■ Electrical Characteristics

S-Parameter



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■ Antenna Efficiency and Peak Gain

INPAQ PN : RFFPA321309IMRB402_FPC +sponge(0.9mm)		
Frequency(MHz)	Efficiency (%)	Gain (dBi)
865	45.74	0.02
870	45.53	-0.04
875	48.26	0.14
880	49.13	0.28
885	49.38	0.12
890	49.45	0.31
895	50.52	0.30
900	48.74	0.12
902	48.15	-0.01
905	49.63	0.12
910	49.23	0.14
915	49.05	-0.23
920	48.12	-0.29
925	46.28	-0.45
928	45.22	-0.59

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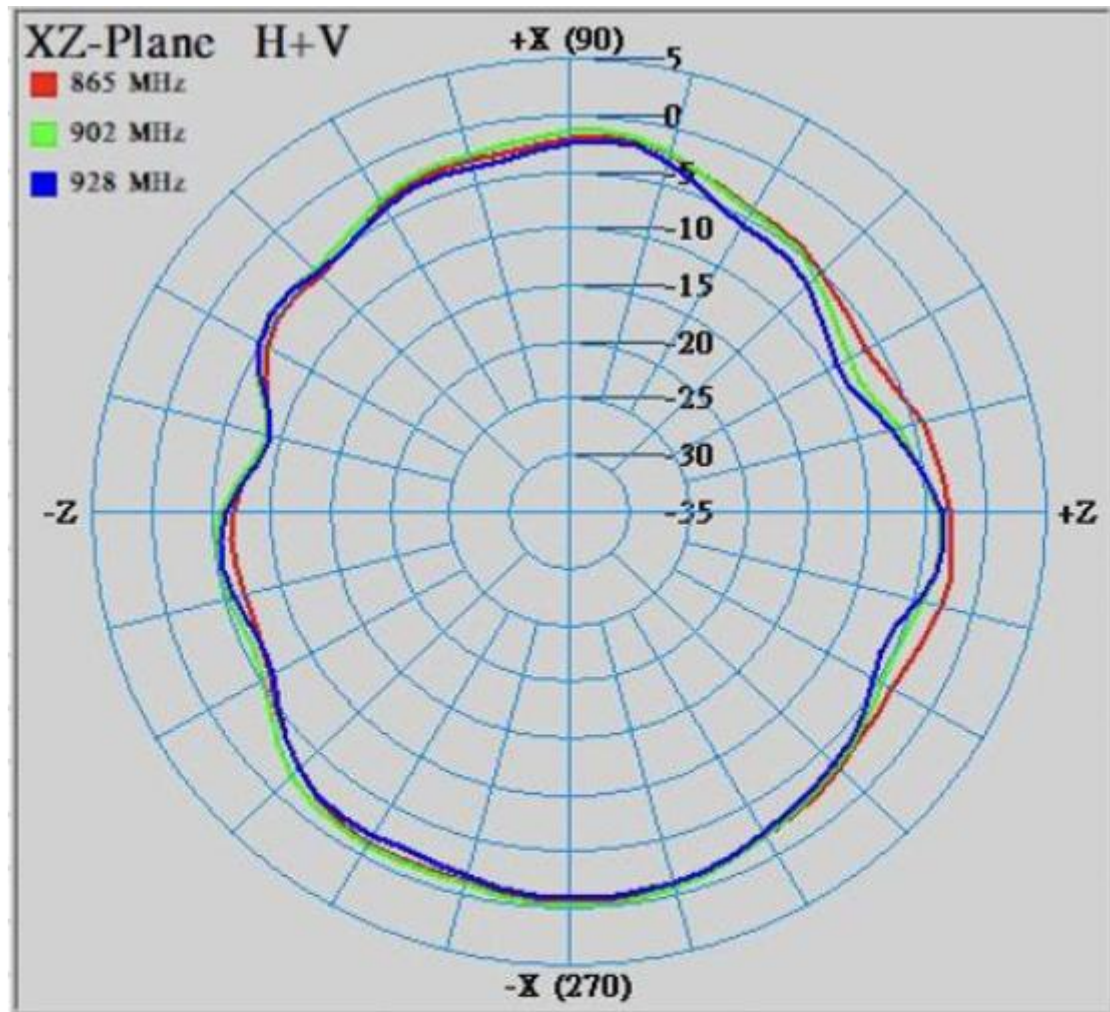
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Radiation Pattern

X-Z Plane

Phi=0.00deg

Gain . dB



XZ-Plane	Peak EIRP (dBi)	Efficiency (dB)
865 MHz	-0.49	-3.38
902 MHz	-0.18	-3.31
928 MHz	-0.84	-3.96

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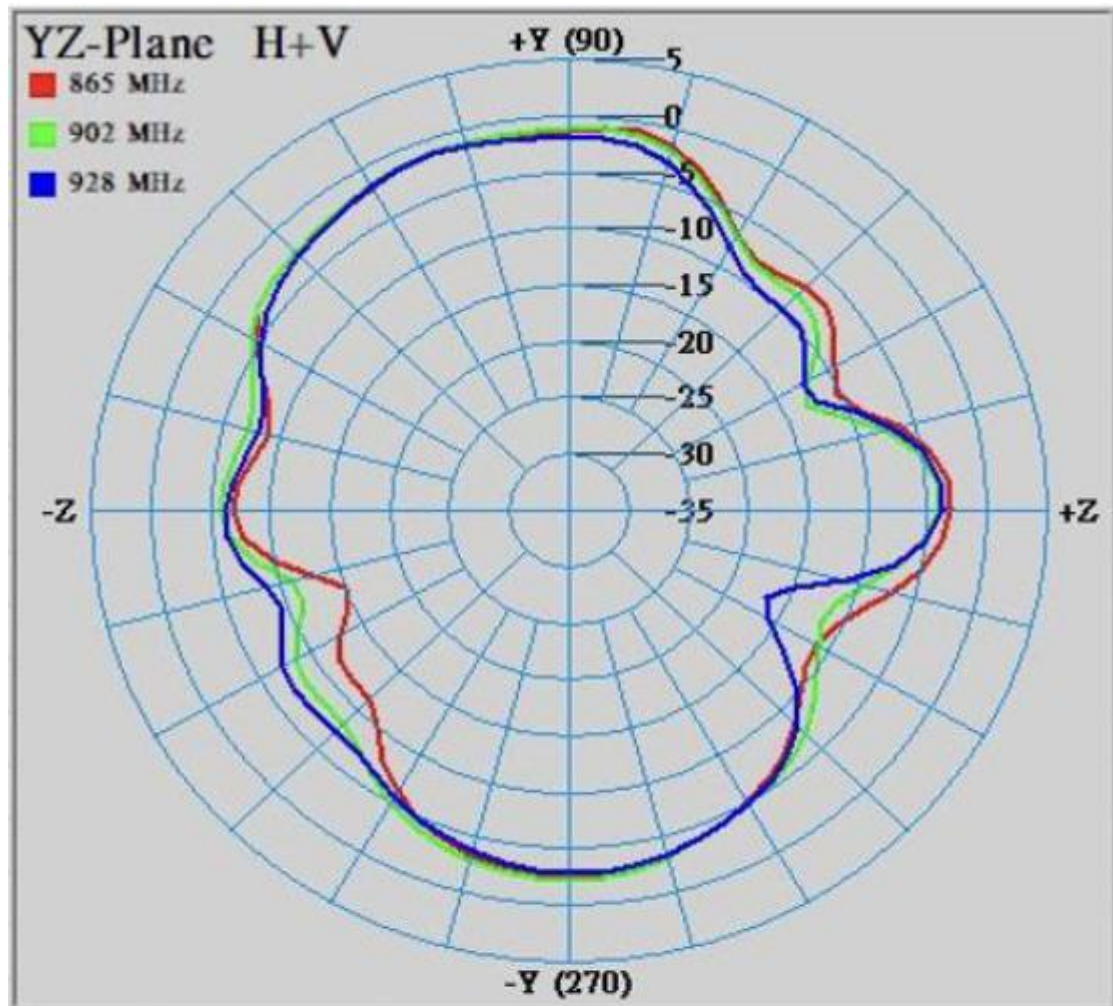
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Y-Z Plane

Phi=90.00deg

Gain . dB



YZ-Plane	Peak EIRP (dBi)	Efficiency (dB)
865 MHz	-0.88	-4.85
902 MHz	-1.06	-4.71
928 MHz	-1.37	-5.13

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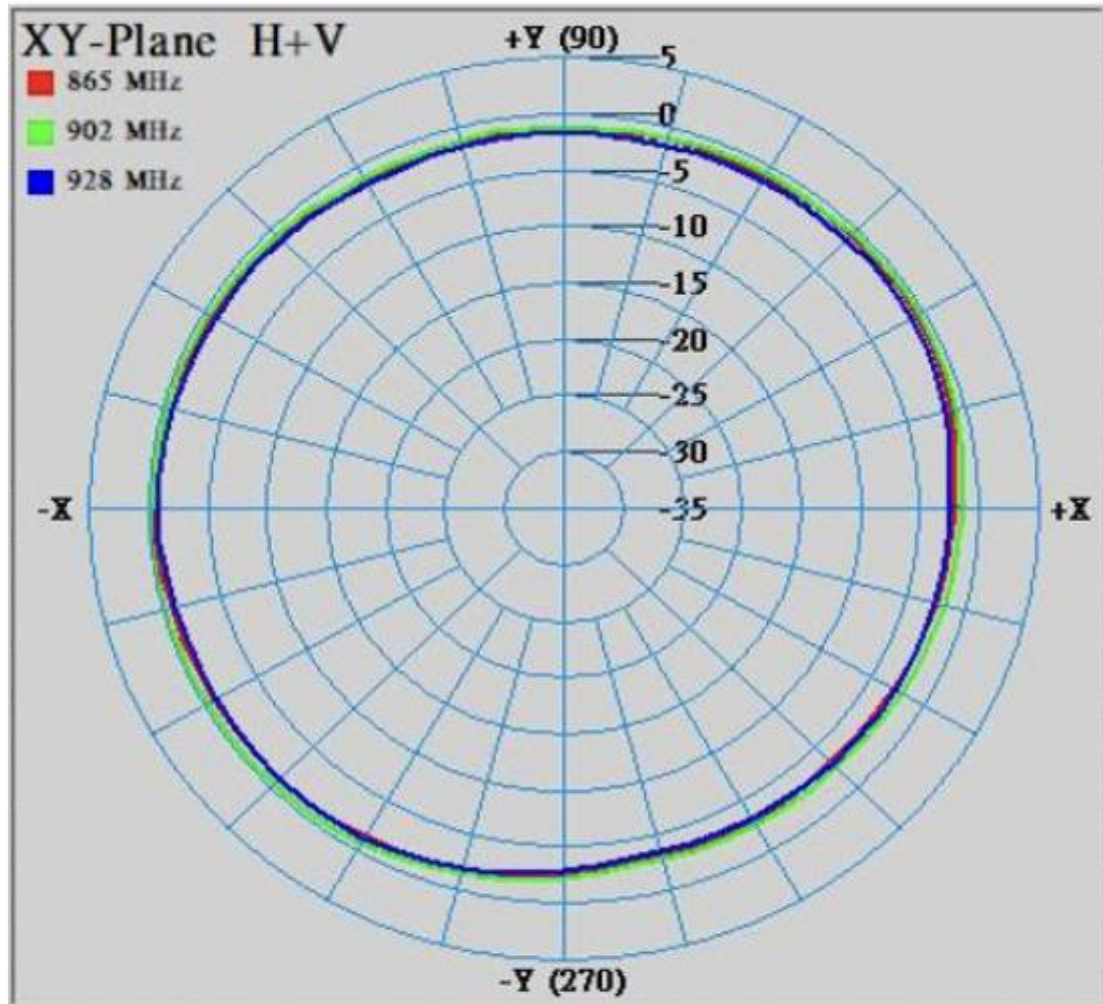
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X-Y Plane

Theta=90.00deg

Gain . dB



XY-Plane	Peak EIRP (dBi)	Efficiency (dB)
865 MHz	-0.59	-1.54
902 MHz	-0.21	-1.13
928 MHz	-0.84	-1.81

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5. Package

RFFPA321309IMRB402生規		頁次：5 之 1	
		版次：A0版	
		制修訂日期：2025/07/29	
包裝圖			
圖一			
圖二			
圖三			
產品包裝規範：			
1. 將每25pcs產品使用珍珠棉將端子端用橡皮筋包扎, 裝入PE袋中, 每PE袋400pcs, 封口並粘貼製造標, 如圖示 (一)			
2. 將泡棉放入外箱中 (如圖示二)			
3. 將裝好的成品 (如圖示三) 放入外箱中, 每箱放4000pcs產品, 上下各放1片珍珠棉, 封箱並粘貼製造標, 封箱為“工”字型即六面封箱。			
4. 尾數箱填充參照此規範《Y-WI-09-281》			
Metal Antenna 370625 RFMTA370625IMAB301 75B1031604 10 -WW0121-031922193619-200 75B1031604 0001			
第一排：機種+空格+Antenna+空格+規格的6-11位 第二排：規格+空格+批號+數量 第三排：條碼內容：規格+批號+序號 (同第四排最後的4碼流水碼) +數量 (單位是K/PCS) 第四排：“-”+打印者工號+“-”月份+日期+年+時+分+秒+“-”+“當次打印的“標籤數量” +批號+4碼流水碼			
製造標規格：銅版紙 (L85±5mm*W25±3mm) 字體規格：標楷體 製造標條碼規格：code 128 (高度80mm)			
標識注釋權屬 (PSA) 華新科技股份有限公司			
核准：	何耀輝	審核：	趙文豹
制定：	張海艷		

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