

CUSTOMER'S PART NO. _____

Dipole Antenna

– RFDPA870920IMLB301 for Dual Band 2.4/5.x GHz Application

ELECTRICAL CHARACTERISTICS

Item	Specification
Working Frequency Range	2.4 ~ 2.5 / 5.15 ~ 5.85 GHz (Note-1)
Gain	2.4 ~ 2.5 GHz : 1.84dBi 5.15 ~ 5.85GHz : 3.26dBi
Return Loss	-10dB(Max)
VSWR	2 max.
Polarization	Linear
Radiation Pattern	Omni-directional
Impedance	50Ω

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

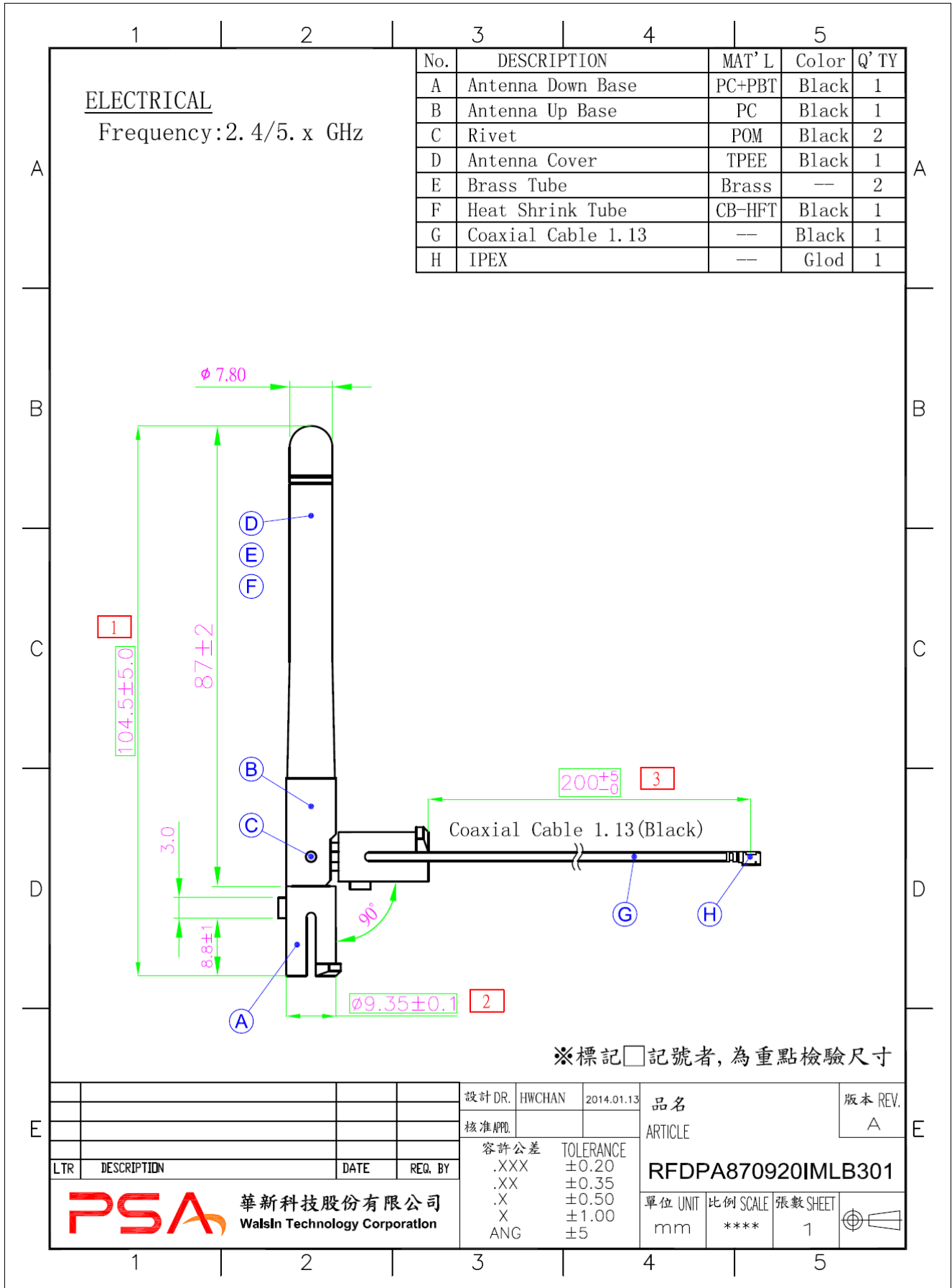
MATERIAL TABLE

Items	Description
Cable	Coaxial Cable Ø1.13 (Black)
Antenna Cover	TPEE
Antenna Base	PC/PBT
Connector	IPEX
Color	Black
Brass Tube	Brass
Heat Shrink Tube	Black

ORDERING RULE

RF	DPA	8709	20	I	M	L	B	3	01
Type Code	Product Code	Dipole Dimension (Unit: mm)	Cable Length (unit: cm)	Connector Brand	Type of Connector	Application	Project status	Wire Diameter	Project
Walsin RF Device	DPA: Dipole Antenna	Per 2 digits of length, width e.g.: 8709 Length: 87mm, Width: 9.4mm	2 digits for cable length e.g.: 20 Cable Length: 20cm	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 W: WCDMA band	B: MP T: During Test X: Pile Run	0: None 1: Ø0.81 3: Ø1.13 6: RG316 7: Ø1.37 8: RG178	01~99 series number

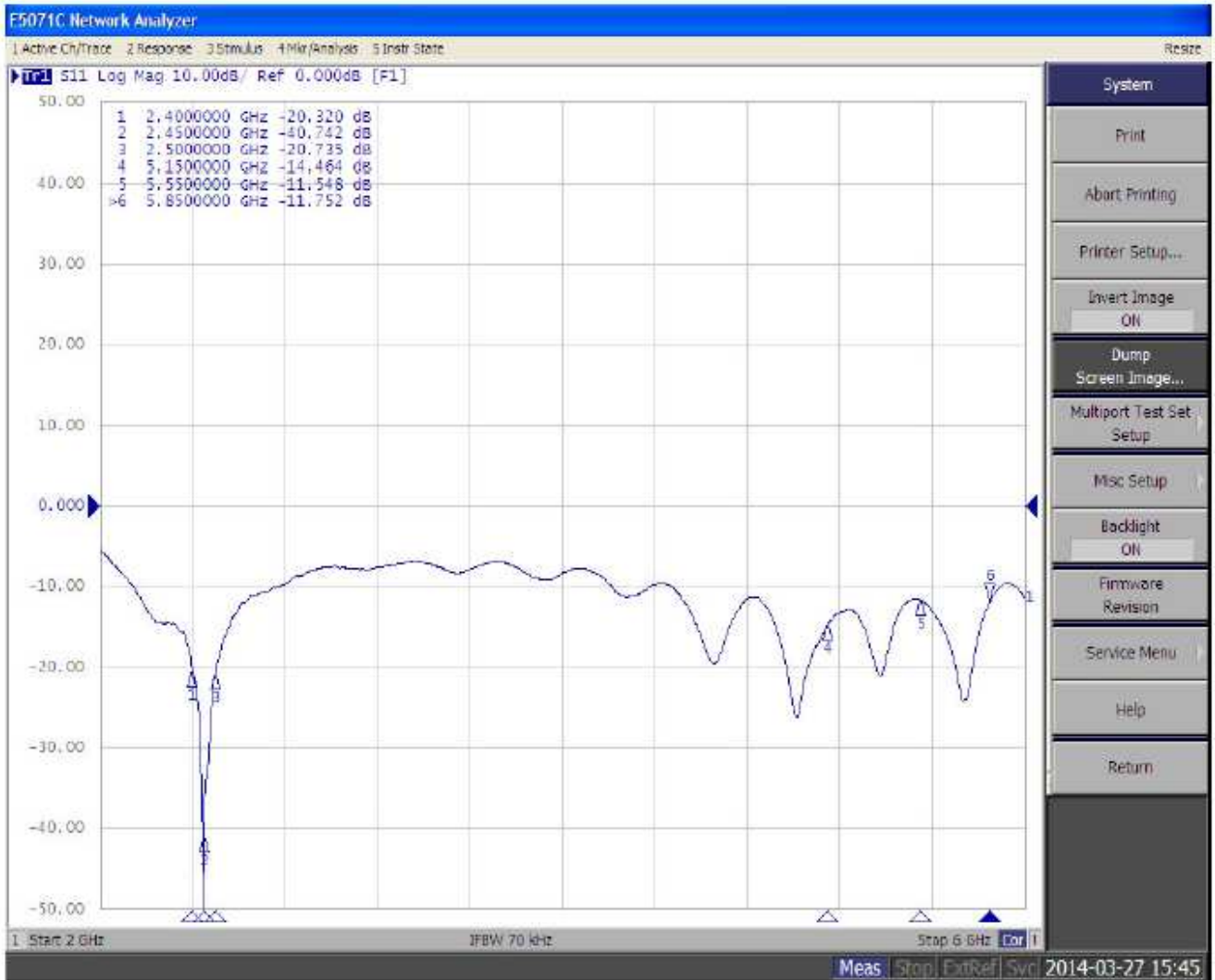
DIMENSIONS



Test Report

ELECTRICAL CHARACTERISTICS

Return Loss



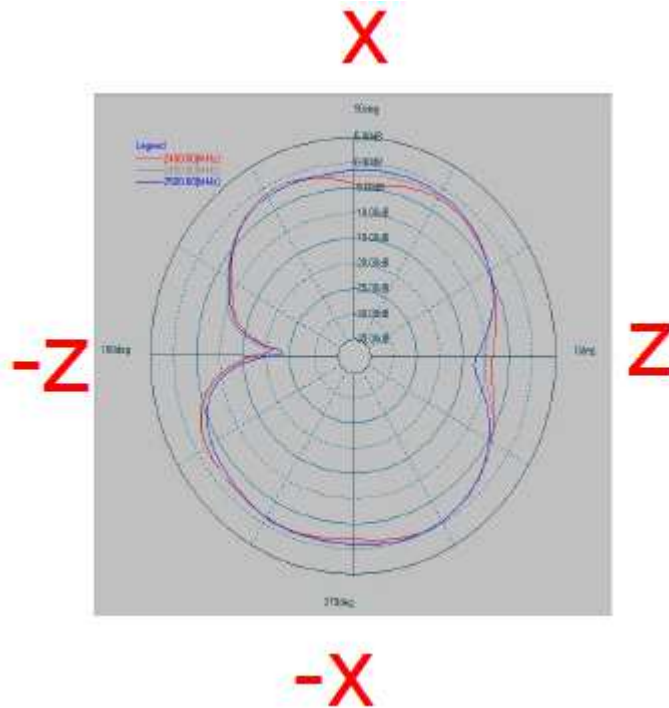
RADIATION PATTERN

2400~2500 MHz

X-Z Plane

Phi=0.00deg

Gain . dB



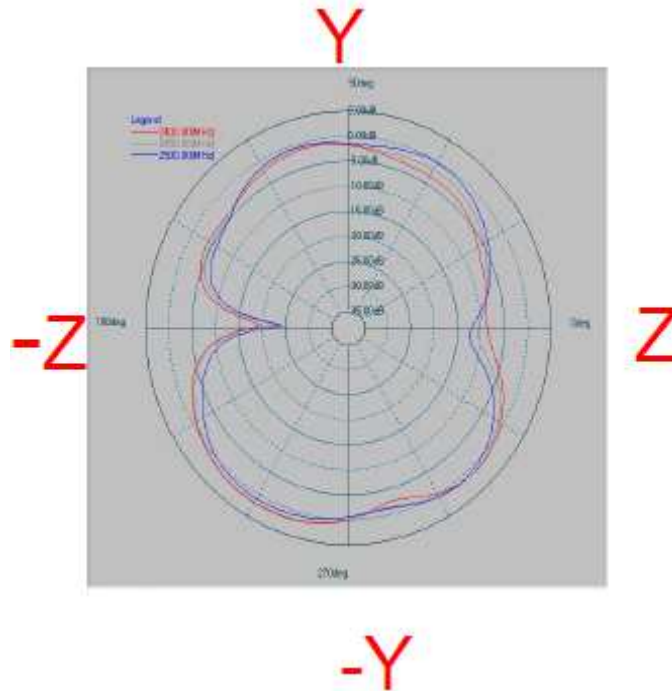
Plane	Frequency [MHz]	Max Value	Average
ZX	2400	-0.39	-3.39
	2450	-0.19	-3.14
	2500	-0.34	3.21

2400~2500 MHz

Y-Z Plane

Phi=90.00deg

Gain . dB



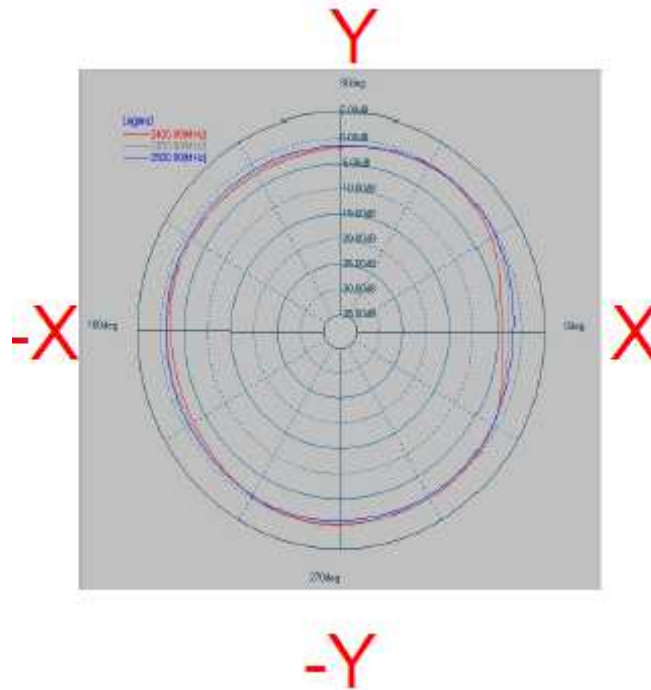
Plane	Frequency [MHz]	Max Value	Average
ZY	2400	1.84	-1.97
	2450	1.66	-1.87
	2500	0.86	-2.13

2400~2500 MHz

X-Y Plane

Theta=90.00deg

Gain . dB



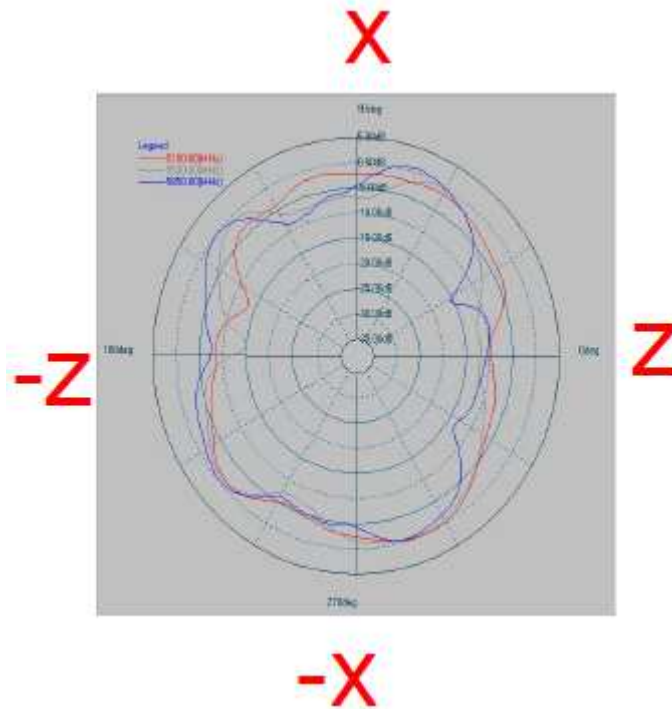
Plane	Frequency [MHz]	Max Value	Average
XY	2400	0.05	-1.37
	2450	0.16	-1.08
	2500	-0.15	-0.99

5150~5850 MHz

X-Z Plane

Phi=0.00deg

Gain . dB



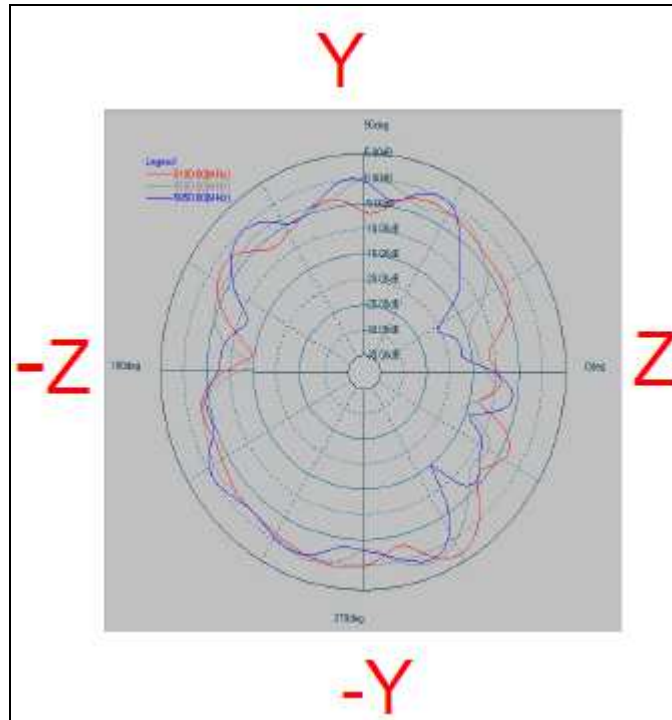
Plane	Frequency [MHz]	Max Value	Average
ZX	5150	-0.13	-3.66
	5550	-0.41	-4.23
	5850	0.78	-3.75

5150~5850 MHz

Y-Z Plane

Phi=90.00deg

Gain . dB



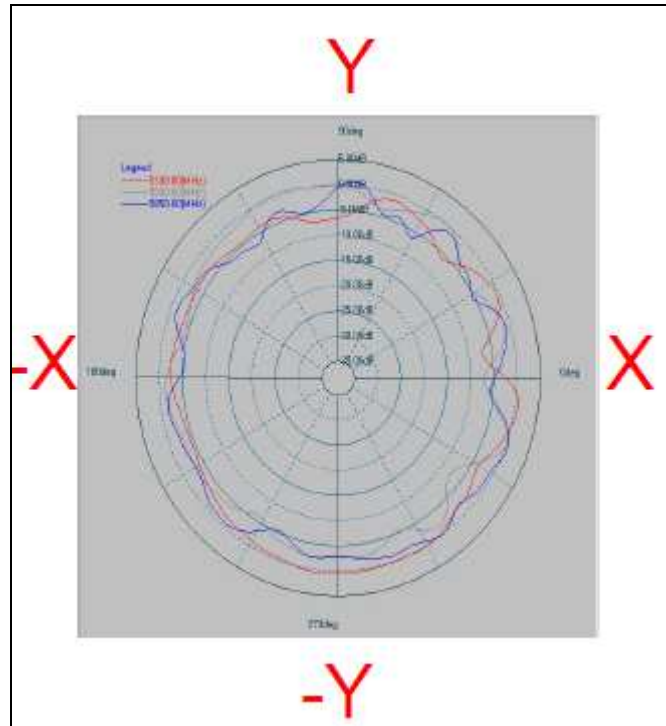
Plane	Frequency [MHz]	Max Value	Average
ZY	5150	3.26	-2.94
	5550	2.13	-2.99
	5850	1.55	-3.38

5150~5850 MHz

X-Y Plane

Theta=90.00deg

Gain . dB



Plane	Frequency [MHz]	Max Value	Average
XY	5150	0.71	-2.24
	5550	0.42	-2.46
	5850	0.62	-2.49