

品名：RFPCA281311IMLB301

1. Explanation of part number :

RF	PCA	2813	11	I	M	L	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
RF Device	PCB Antenna	Per 2 digits of length, width e.g.: 3205 Length 32mm, Width 5mm	2 digits for cable length e.g.: 08 Length 8cm	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 R:902~928 MHz N: NFC T: LTE band W: WCDMA band	B: MP T:During Test X: Pile Run	0:None 1:∅ 0.81 2:∅ 1.32 3:∅ 1.13 4:Low Loss ∅ 1.13 5:∅ 0.5 6:RG316 7: ∅ 1.37 8:RG178 9:Low Loss ∅ 1.37	01~99 series number

2. Electrical Specification :

Item	Specification
Working Frequency Range	2.4~2.5 / 5.15~5.85 GHz
Return Loss	-10 dB(Max)
VSWR	2 max.
Gain	1.14 dBi@2.4~2.5 GHz 3.68 dBi@5.15~5.85 GHz
Impedance	50 Ohm Nominal
Radiation	Omni-directional
Polarization	Linear Vertical
Operation Temperature	-20° C~+65° C

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



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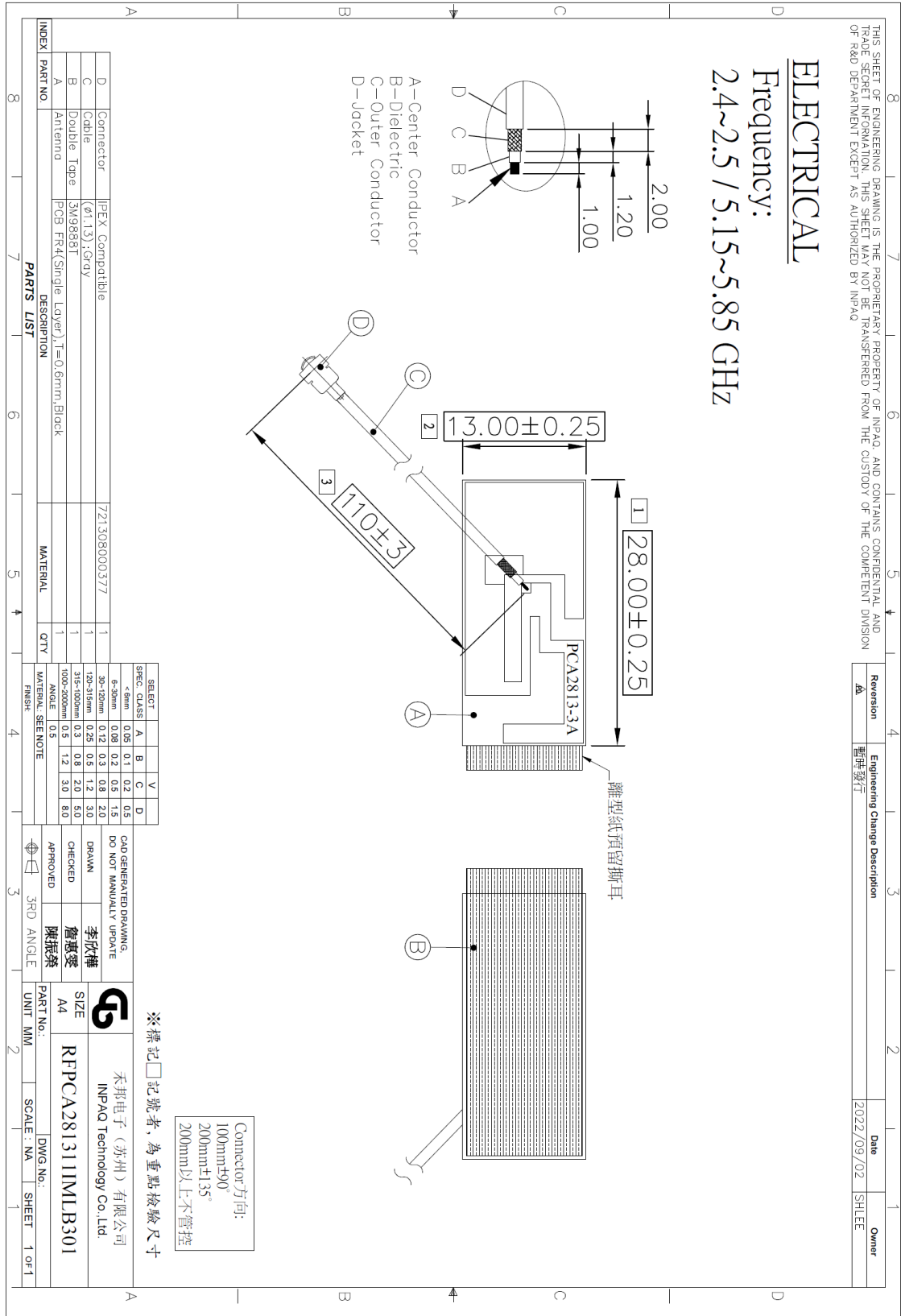
SCALE : N/A UNIT : mm
 DRAWN BY : 李欣樺 CHECKED BY : 詹惠雯
 DESIGNED BY : 黄瑞郎 APPROVED BY : 陳振榮


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3. Antenna Drawing :

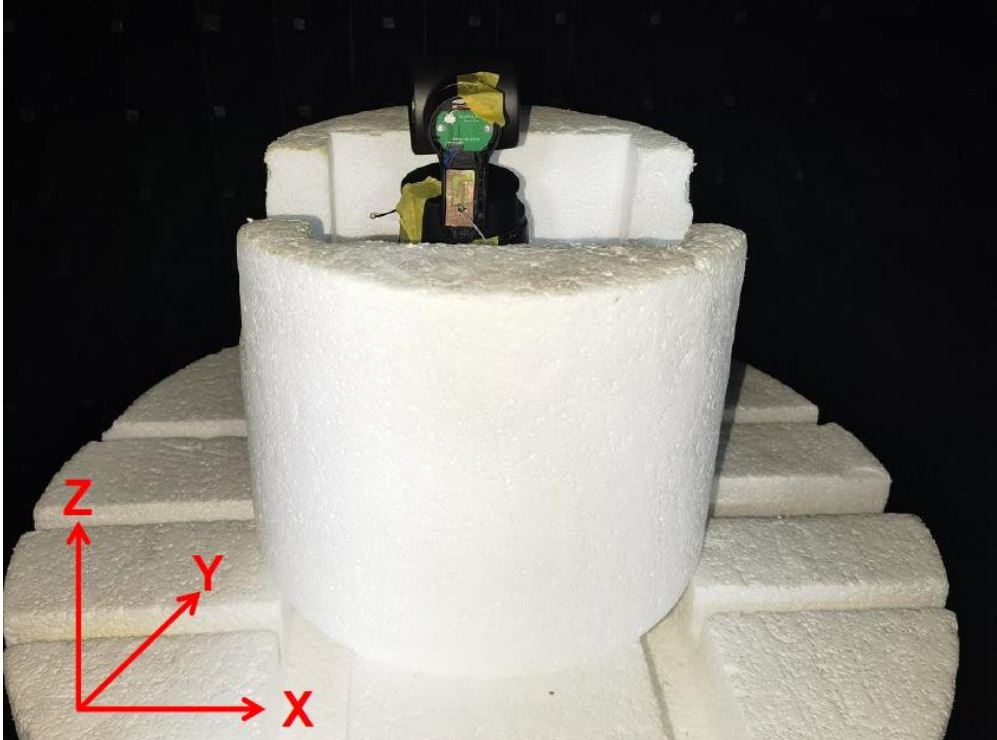



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4. Performance Report :

Test Report

ELECTRICAL CHARACTERISTICS

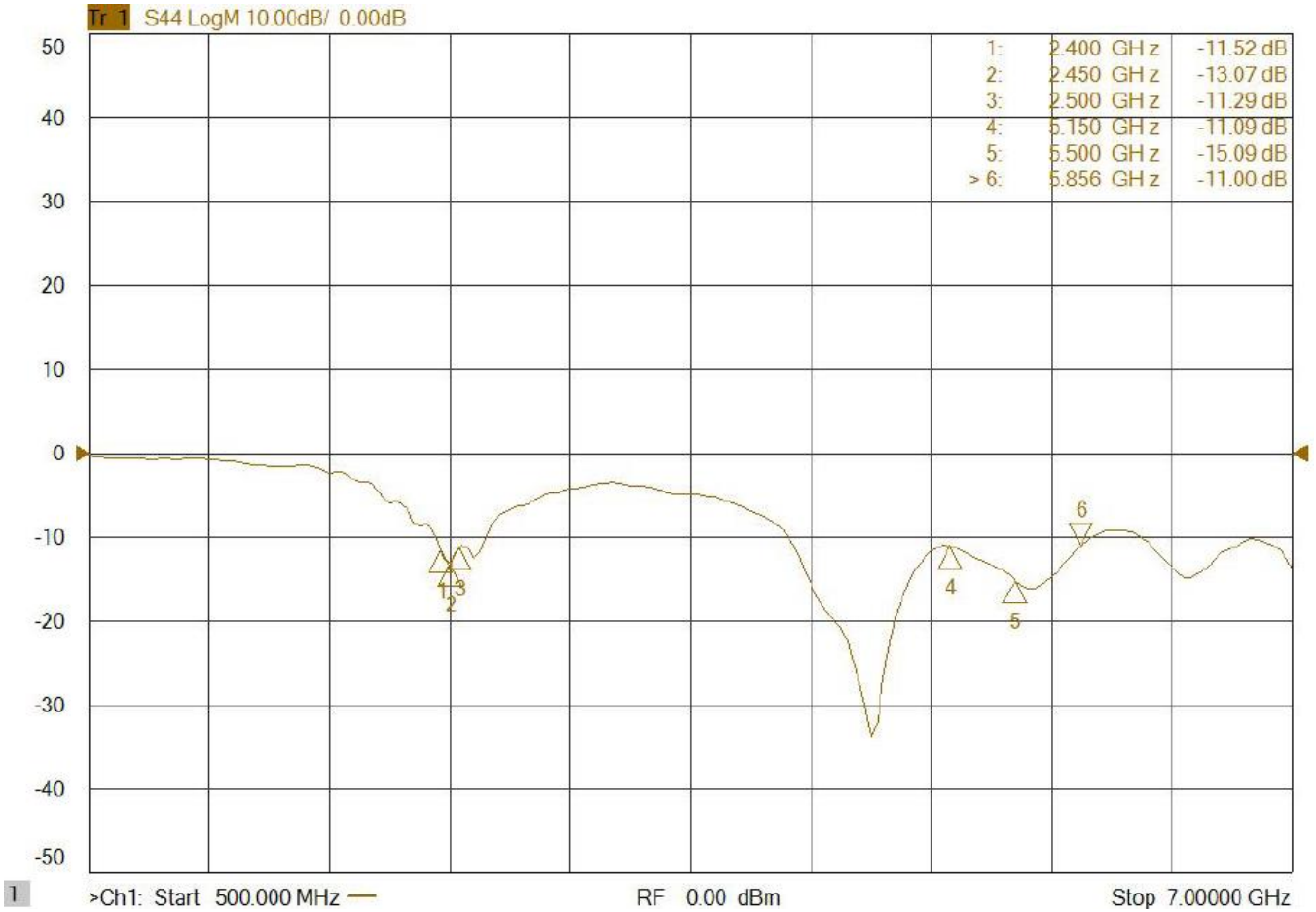



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ELECTRICAL CHARACTERISTICS

Return Loss

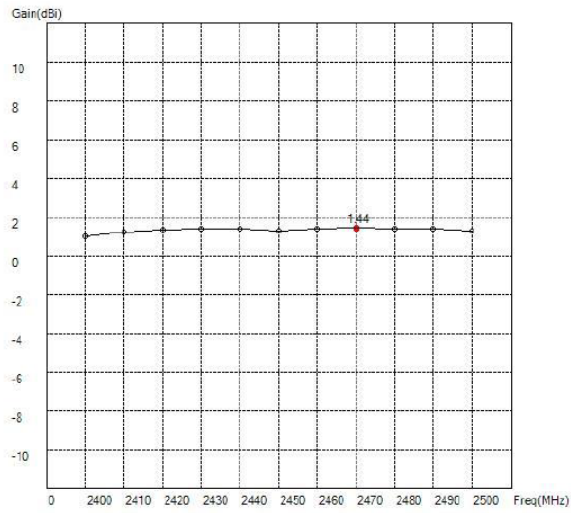
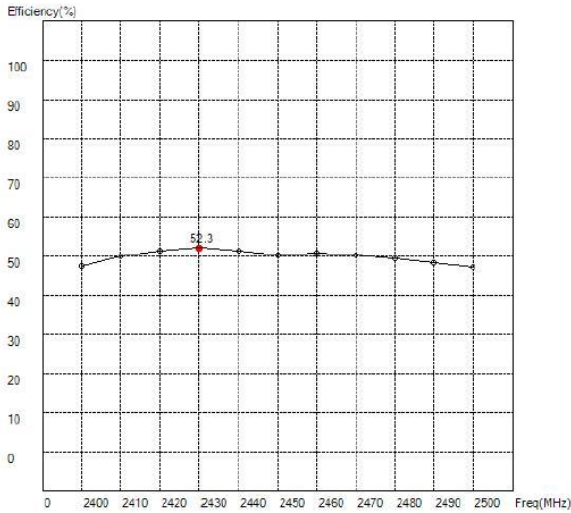
WiFi-2



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Efficiency & Peak Gain

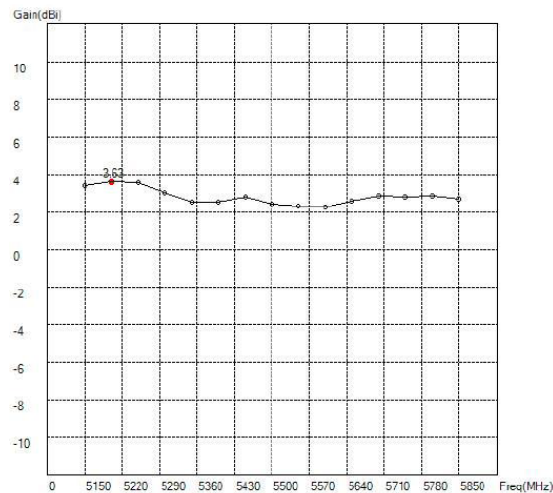
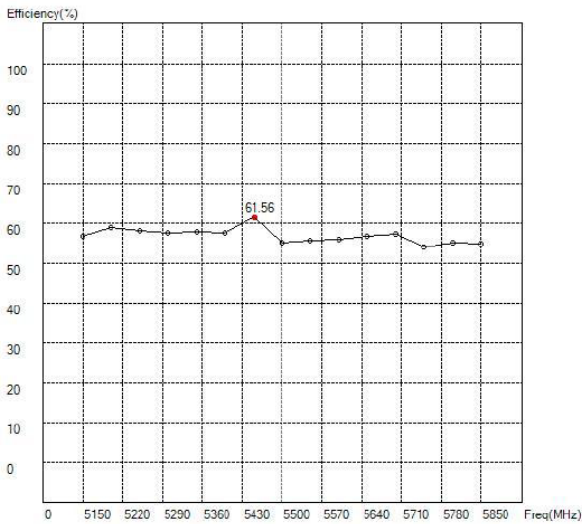
2G



Maximum Efficiency at 2430MHz : 52.3 %

Maximum Peak Gain at 2470MHz : 1.44 dBi

5G



Maximum Efficiency at 5450MHz : 61.56 %

Maximum Peak Gain at 5200MHz : 3.63 dBi

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



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SCALE : N/A

UNIT : mm

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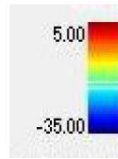
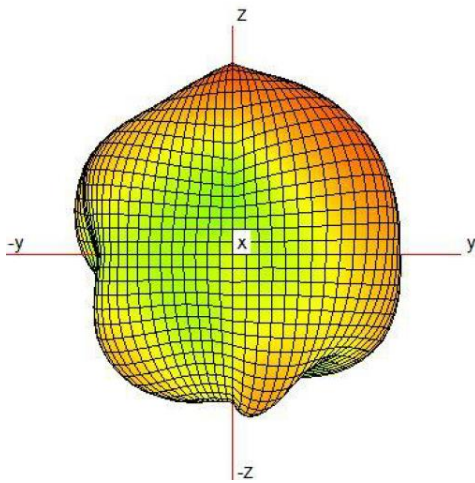
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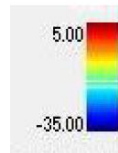
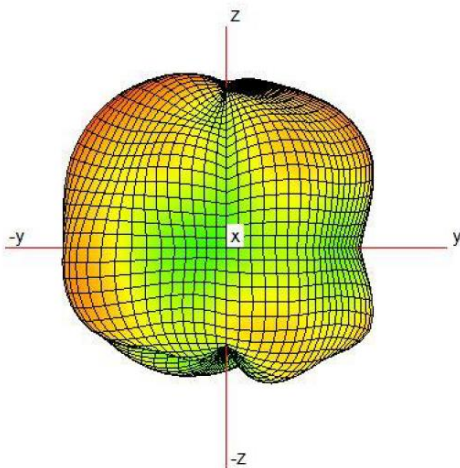
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3D Pattern

2450 MHz



5500 MHz



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 ANGLES=N/A HOLEDIA=N/A



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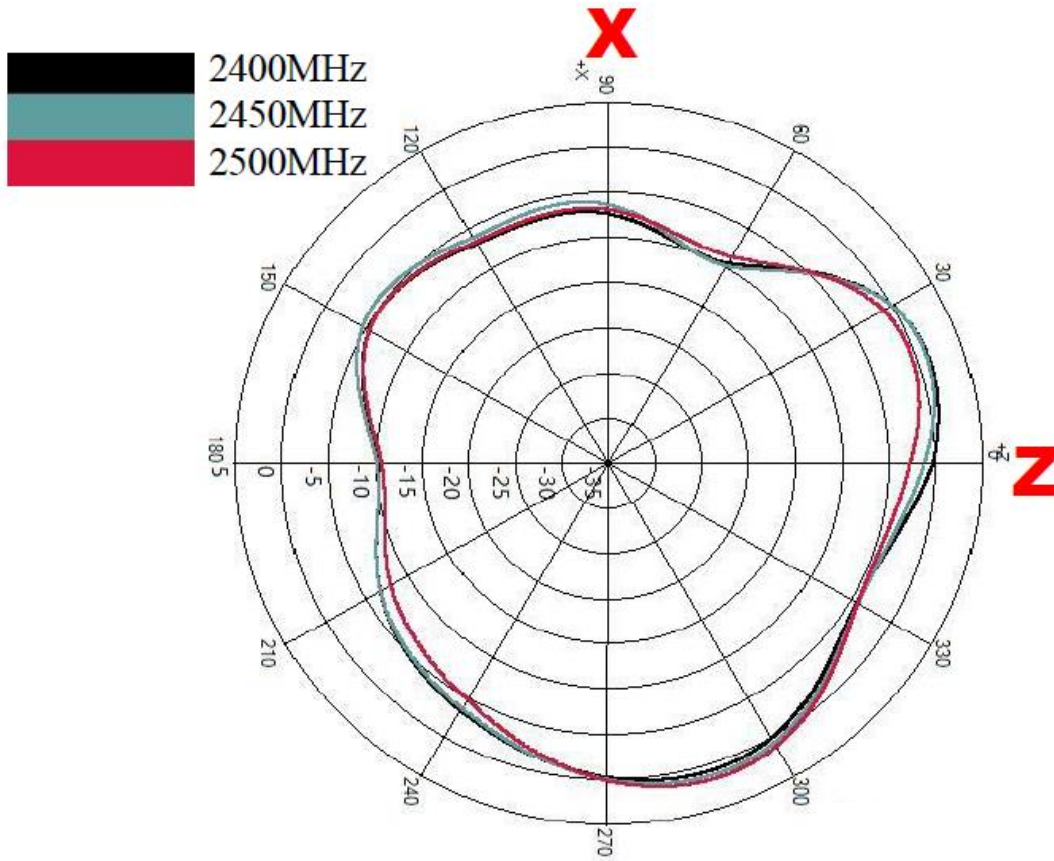
SPEC REV.
P0


Radiation Patterns

X-Z Plane

Phi=0.00deg

Gain . dB

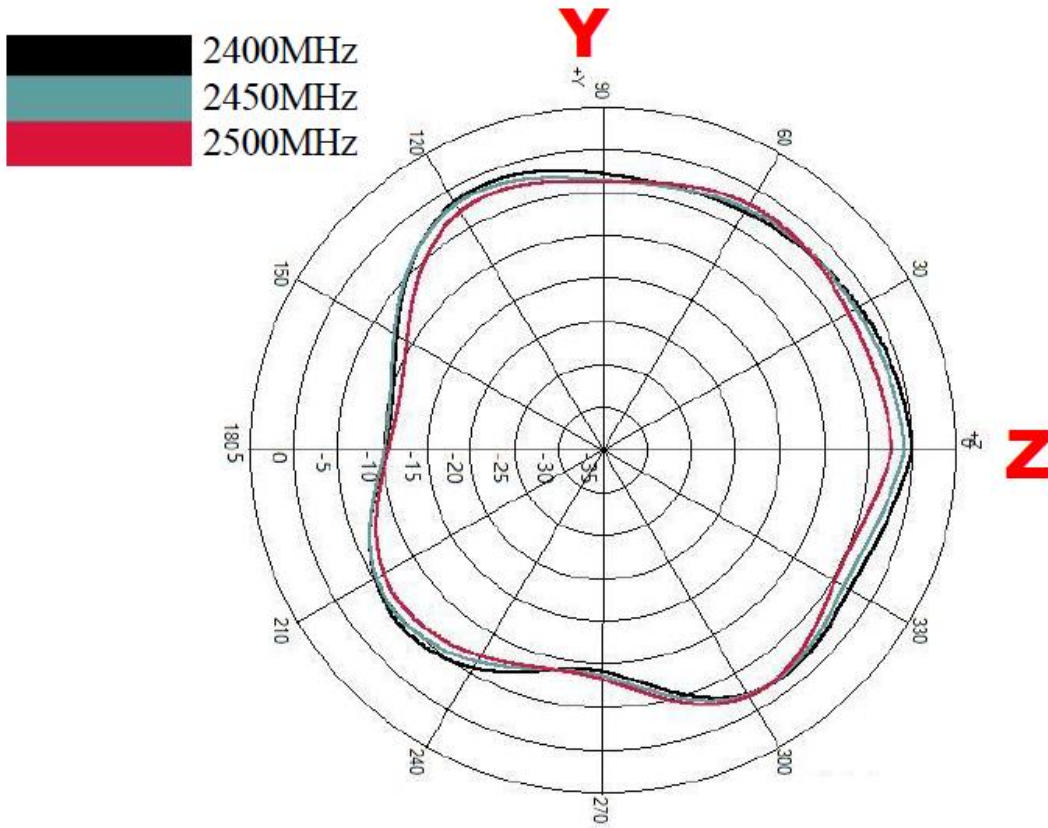



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Y-Z Plane

Phi=90.00deg

Gain . dB

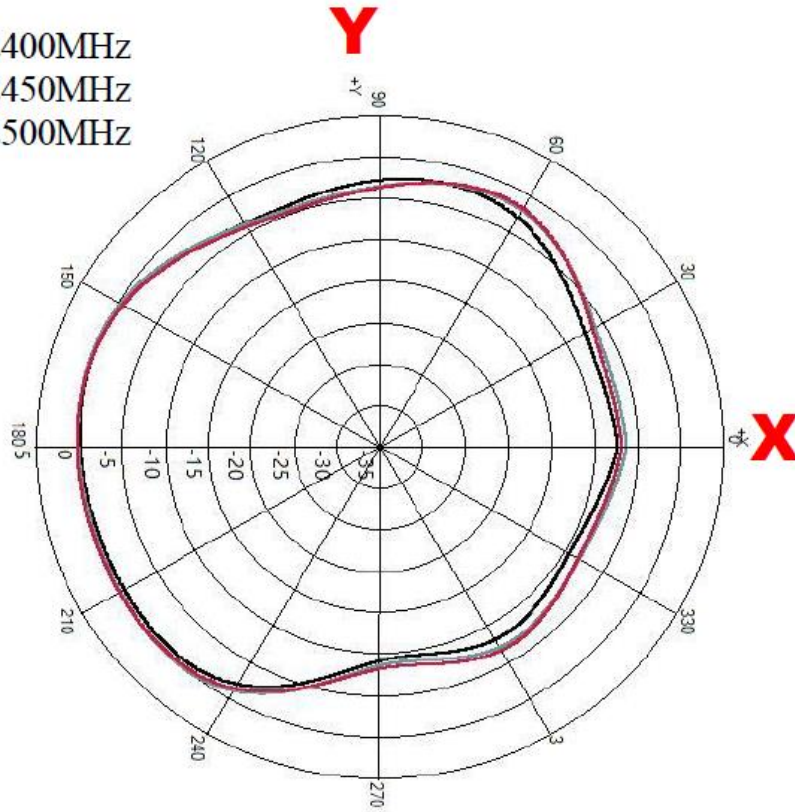


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X-Y Plane

Theta=90.00deg

Gain . dB



Frequency [MHz]	ZX plane		ZY plane		XY plane	
	Max Value [dBi]	Average [dBi]	Max Value [dBi]	Average [dBi]	Max Value [dBi]	Average [dBi]
2400	0.08	-2.51	0.03	-2.68	-0.21	-3.32
2450	0.67	-2.54	-0.81	-3.10	0.03	-2.89
2500	1.14	-3.06	-1.86	-3.81	0.16	-2.96

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



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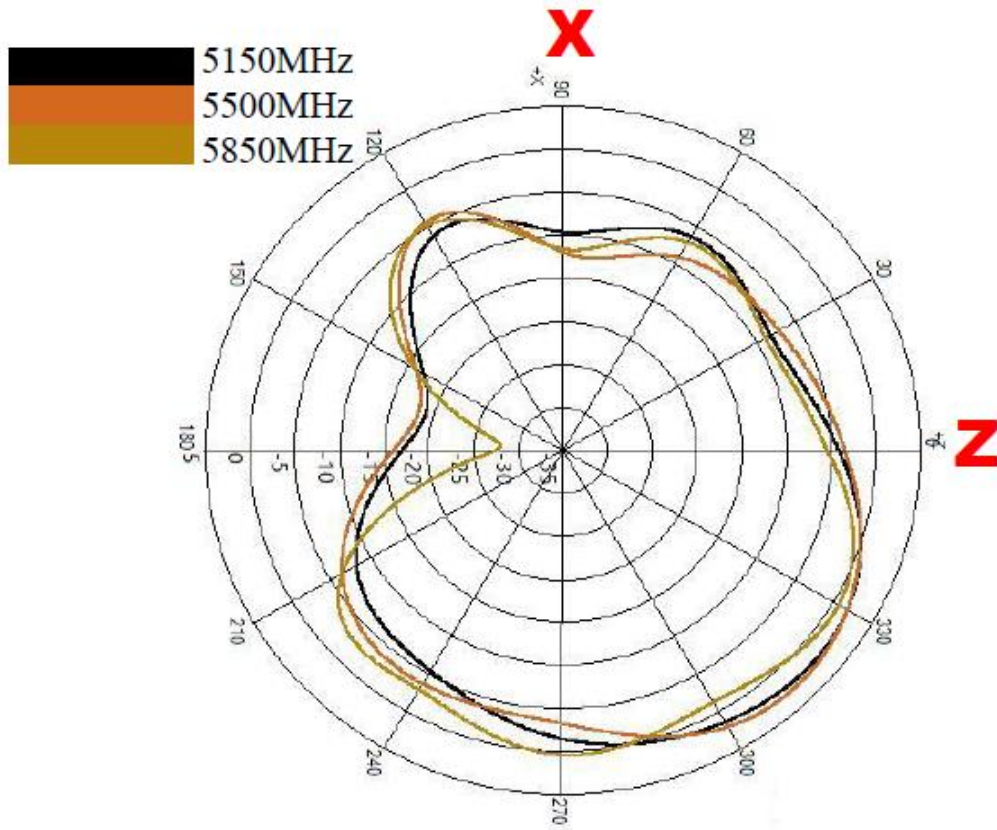
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X-Z Plane

Phi=0.00deg

Gain . dB

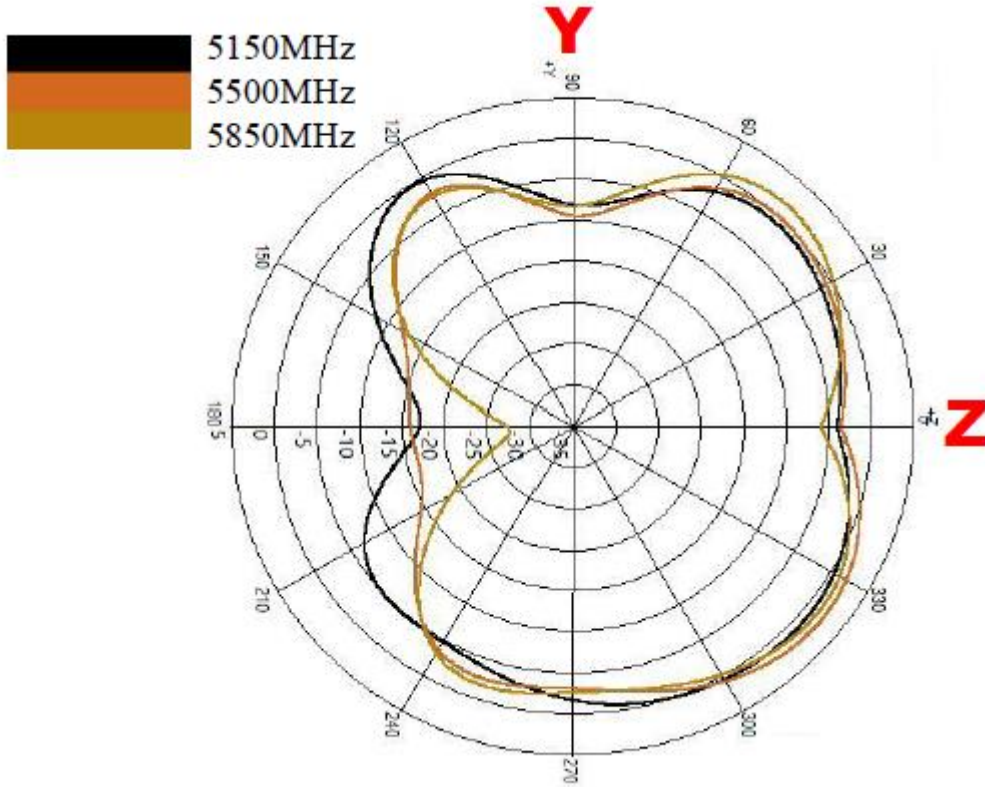



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Y-Z Plane

Phi=90.00deg

Gain . dB

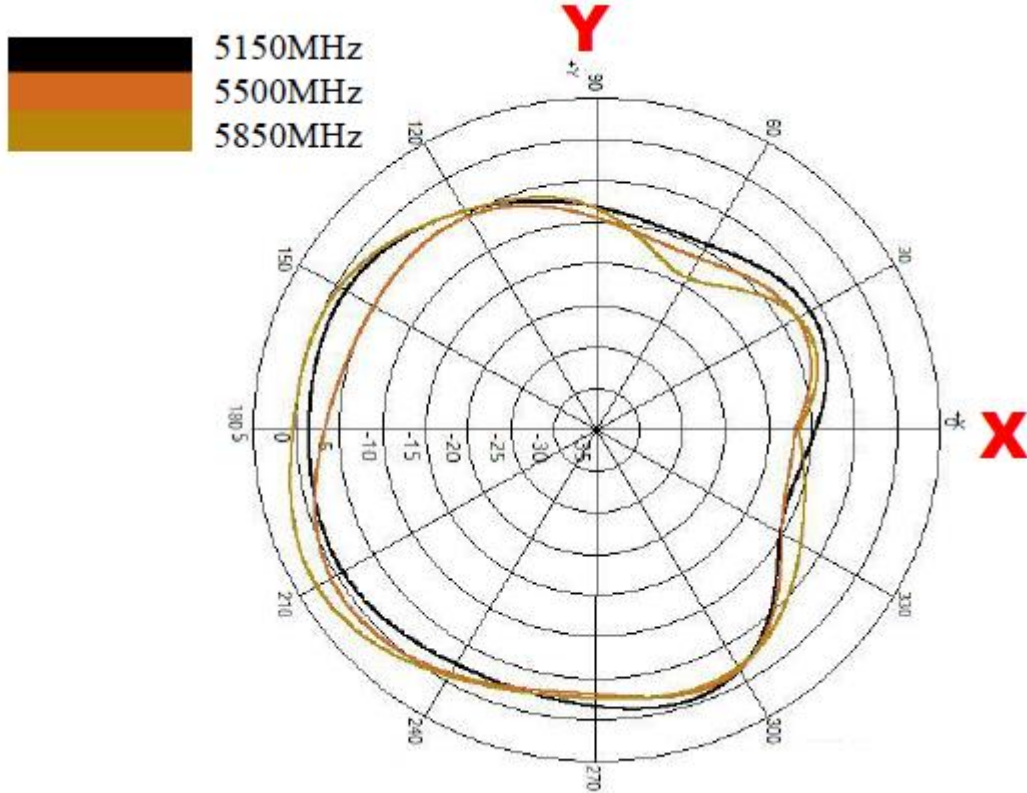


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X-Y Plane

Theta=90.00deg

Gain . dB



Frequency [MHz]	ZX plane		ZY plane		XY plane	
	Max Value [dBi]	Average [dBi]	Max Value [dBi]	Average [dBi]	Max Value [dBi]	Average [dBi]
5150	1.82	-3.31	0.57	-2.44	-0.82	-3.53
5500	2.07	-3.07	2.06	-2.34	0.75	-4.02
5850	0.68	-3.72	1.17	-2.52	2.68	-2.43

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



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