承　　認　　書
SPECIFICATION FOR APPROVAL

客戶名稱
CUSTOMER ： LUCKY SOUND TECHNOLOGY CO.,LTD

客戶料號
CUSTOMER'S P/N ：

料號
PART NUMBER ： WAN3216F245W36

規格
DESCRIPTION ： Chip Antenna 3216 M-Ant 2.45G Type 36

版本
VERSION ： V2.2

日期
ISSUE DATE ： 2018/01/30

客 戶 承 認 CUSTOMER APPROVED

工　程　部 R&D CENTER		
承　認 APPROVAL	確　認 CHECKED	製　作 DRAWN
Ray	James	Thor

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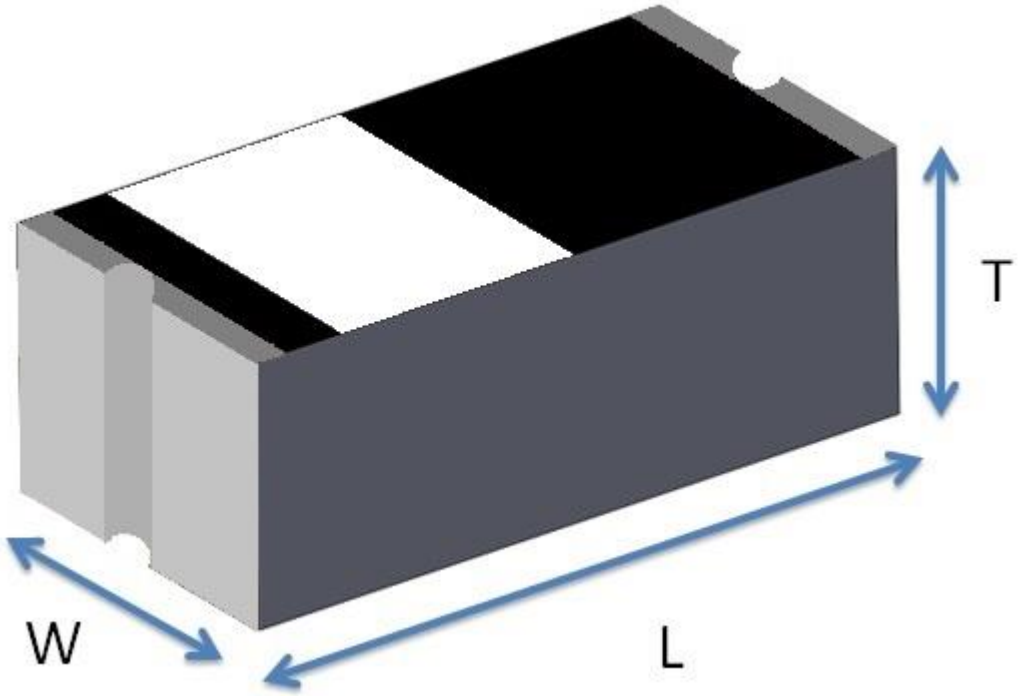
3216 Chip antenna

For Bluetooth / WLAN Applications



P/N: WAN3216F245W36

	Dimension (mm)
L	3.23 ± 0.20
W	1.66 ± 0.20
T	1.23 ± 0.20

Part Number Information

WAN	3216	F	245	W	36
A	B	C	D	E	F

A	Product Series	Antenna
B	Dimension L x W	3.2X1.6mm (+-0.2mm)
C	Material	High K material
D	Working Frequency	2.4 ~ 2.5GHz
E	Feeding mode	Monopole & Single Feeding
F	Antenna type	Type=36

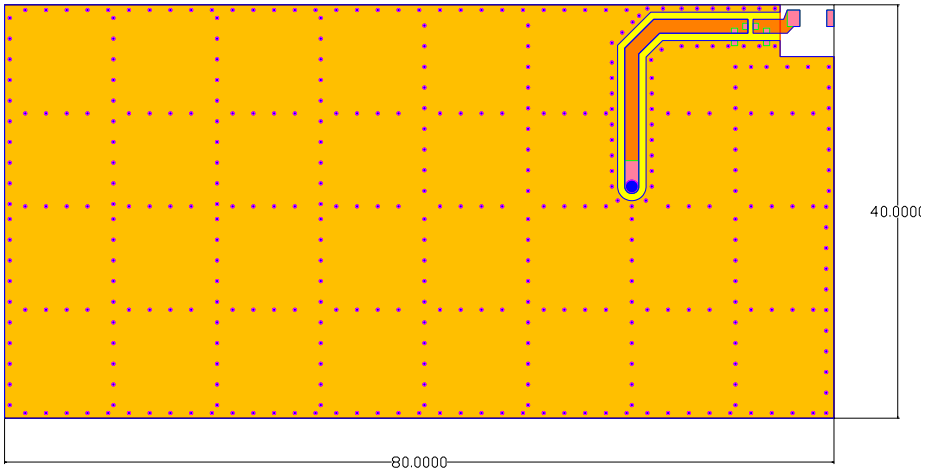
1. Electrical Specification

Specification		
Part Number	WAN3216F245W36	
Central Frequency	2450	MHz
Bandwidth	100 (Min.)	MHz
Return Loss	-6.5 (Max)	dB
Peak Gain	2.71	dBi
Impedance	50	Ohm
Operating Temperature	-40～+85	℃
Maximum Power	4	W
Resistance to Soldering Heats	10 (@ 260℃)	sec.
Polarization	Linear	
Azimuth Beamwidth	Omni-directional	
Termination	Cu / Sn (Leadless)	

Remark : Bandwidth & Peak Gain was measured under evaluation board of next page

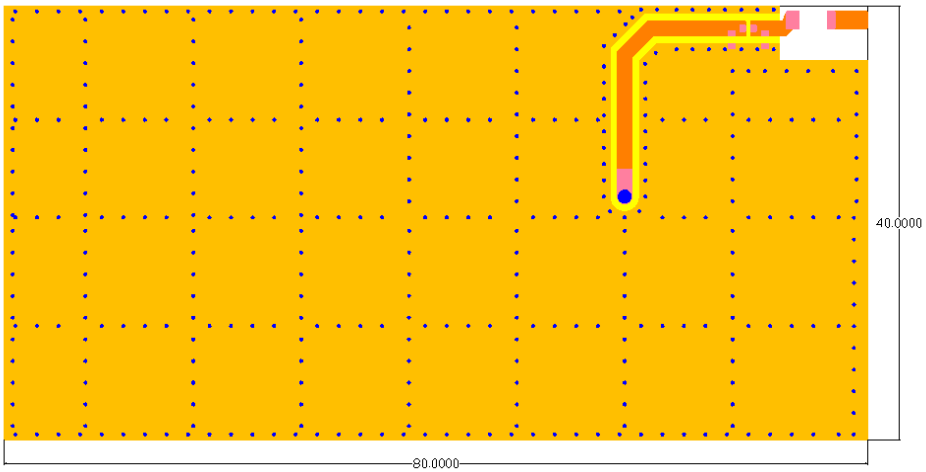
2. Recommended PCB Pattern

1.Evaluation Board Dimension



2.Evaluation Board Dimension

(若淨空區夠大，建議使用此 **Layout**，效能較佳)

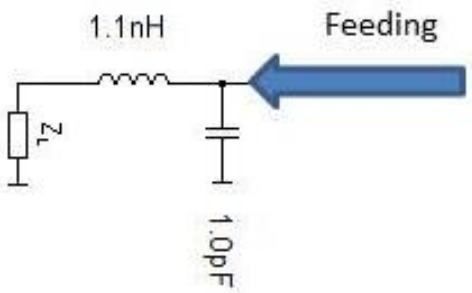


Unit : mm

Suggested Matching

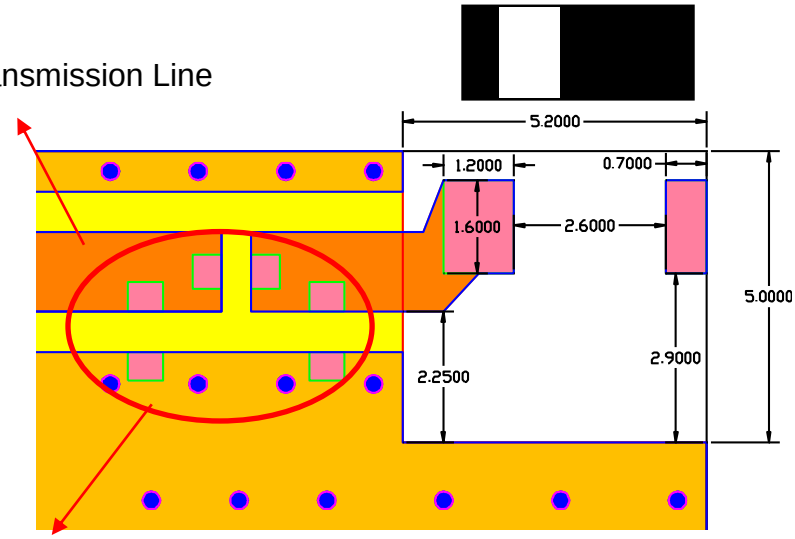
重要資訊：

匹配元件建議使用精準度±1%以下的電感、電容、電阻



1.Layout Dimensions in Clearance area(Size=5.2*5.0mm)

50 ohm transmission Line

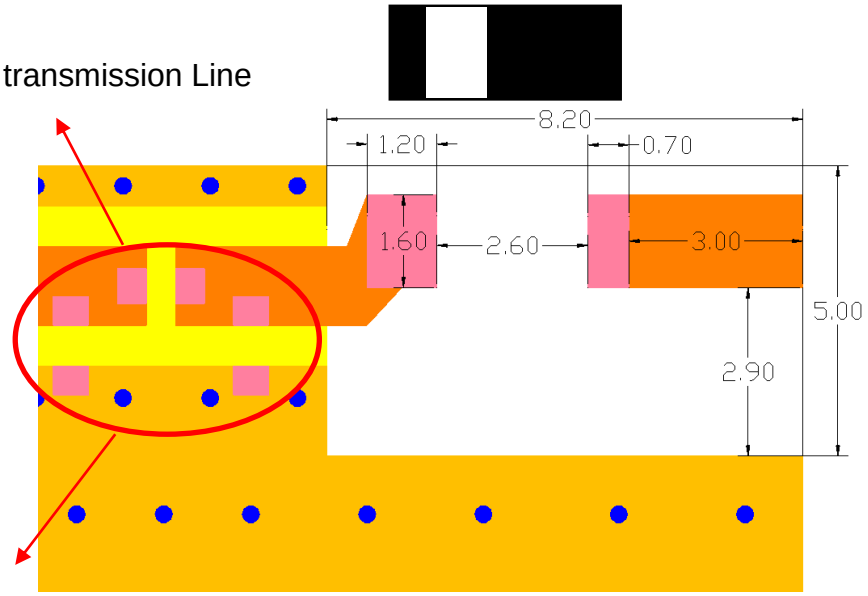


Matching Circuit

2.Layout Dimensions in Clearance area(Size=8.2*5.0mm)

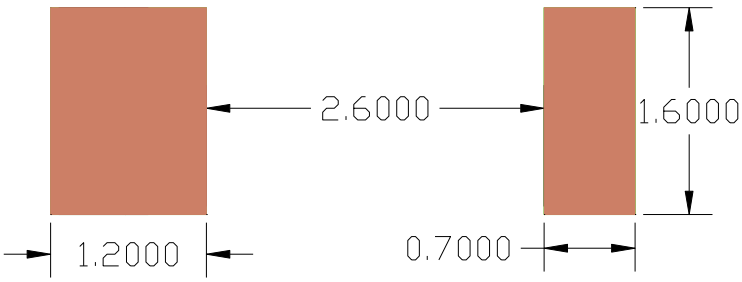
(若淨空區夠大，建議使用此 Layout，效能較佳)

50 ohm transmission Line



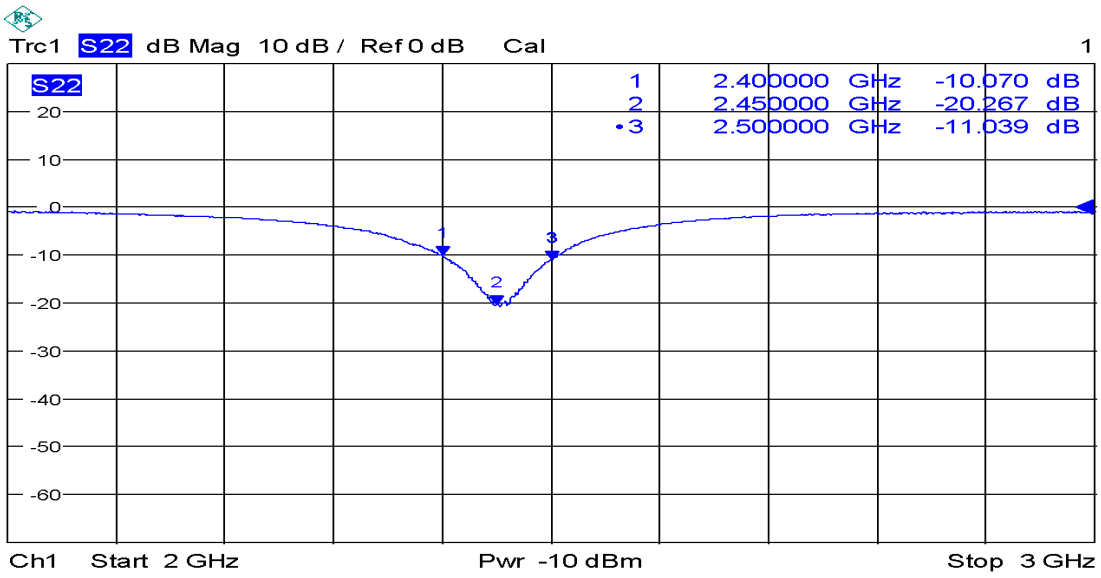
Matching Circuit

FootPrint (Unit : mm)



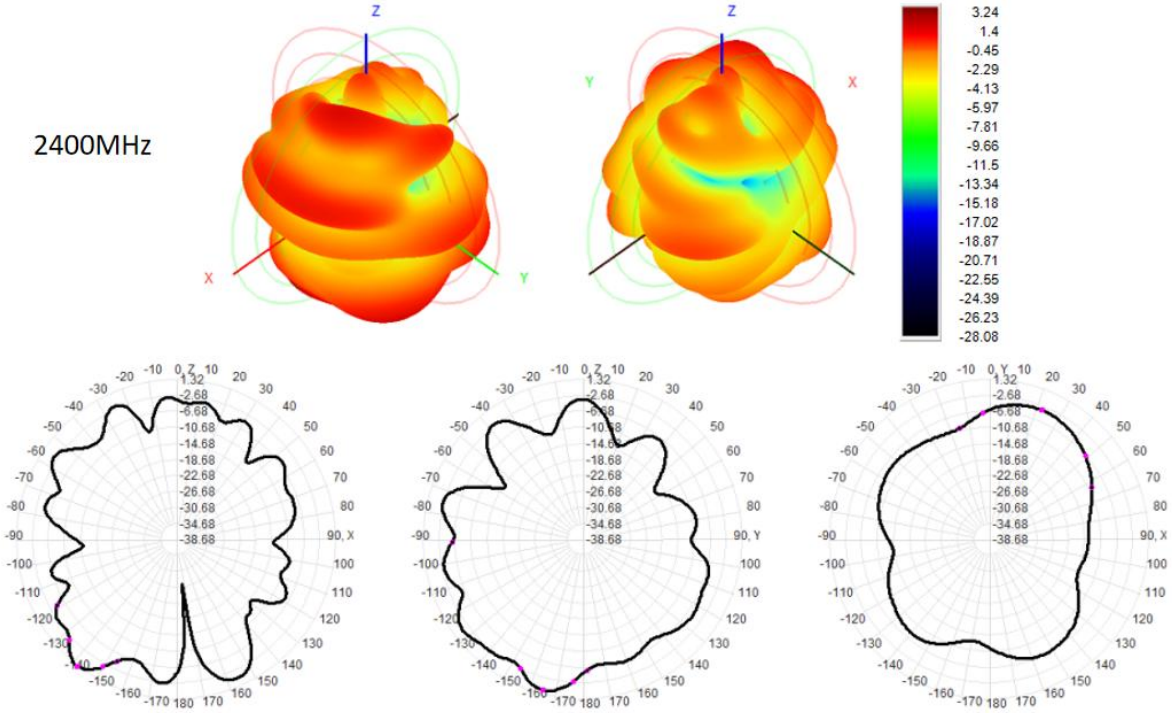
3. Measurement Results

Return Loss

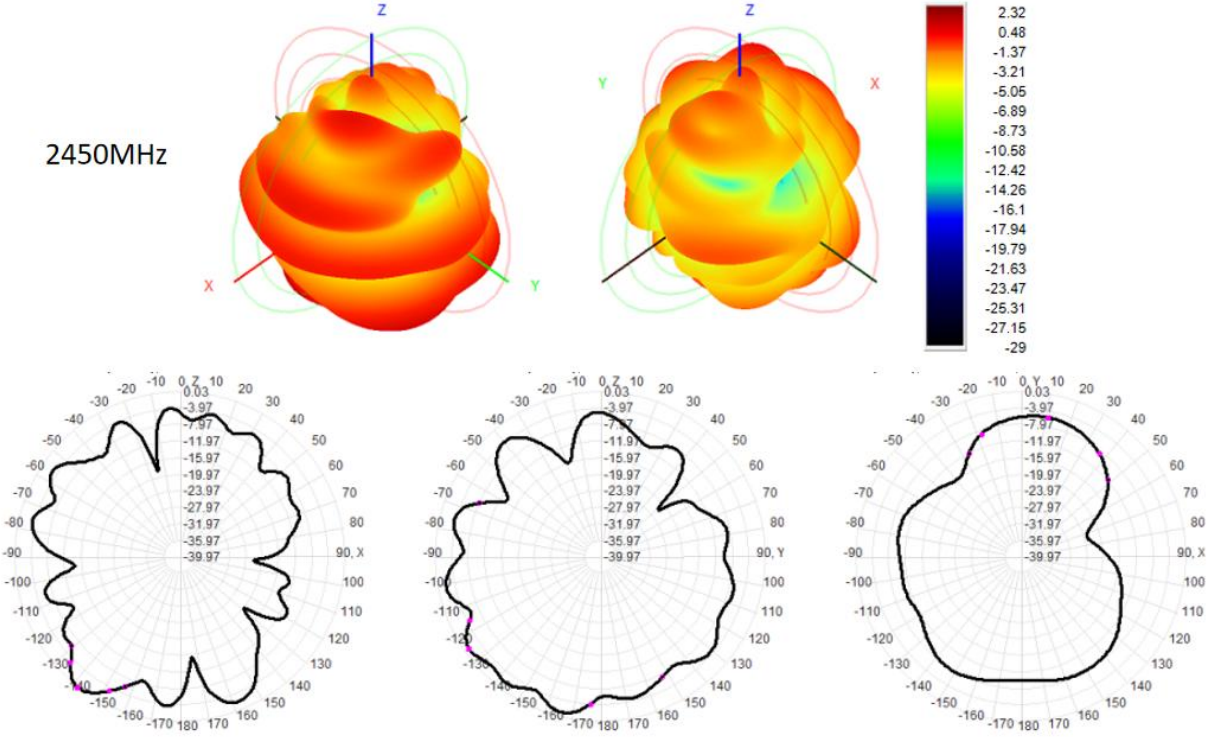


Radiation Pattern

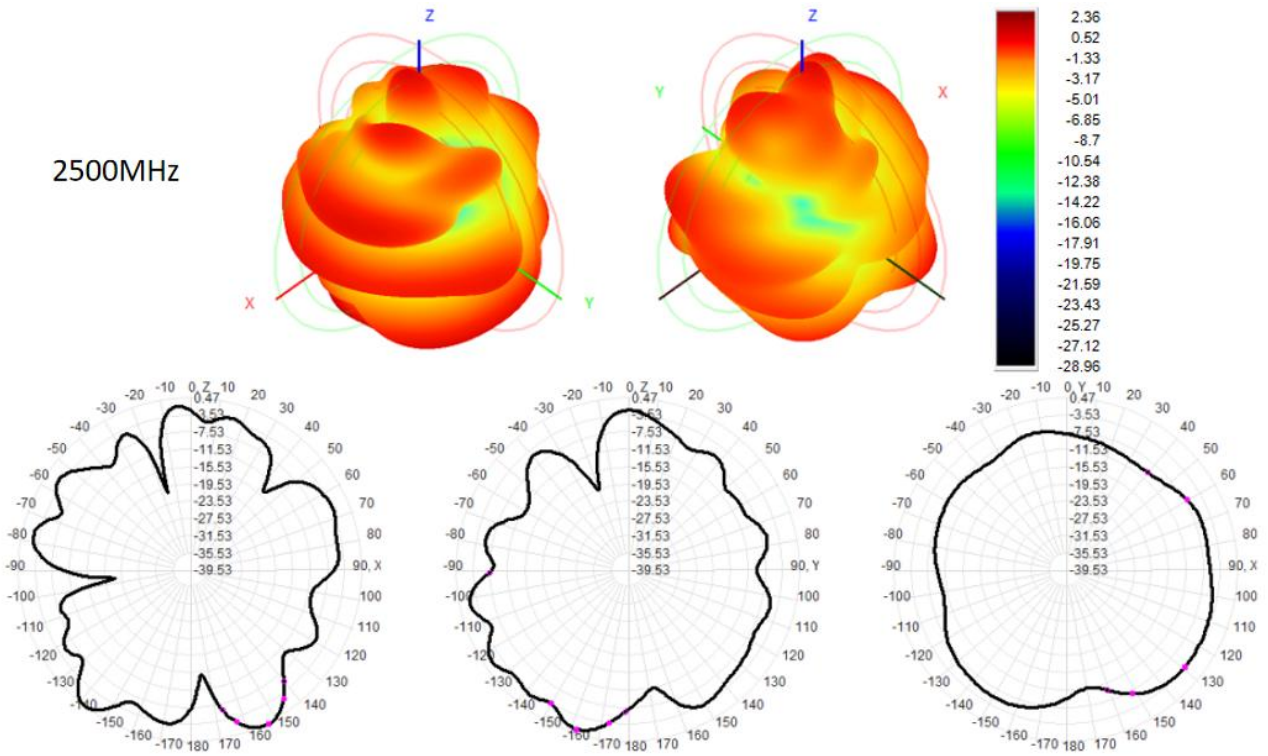
2400MHz



2450MHz

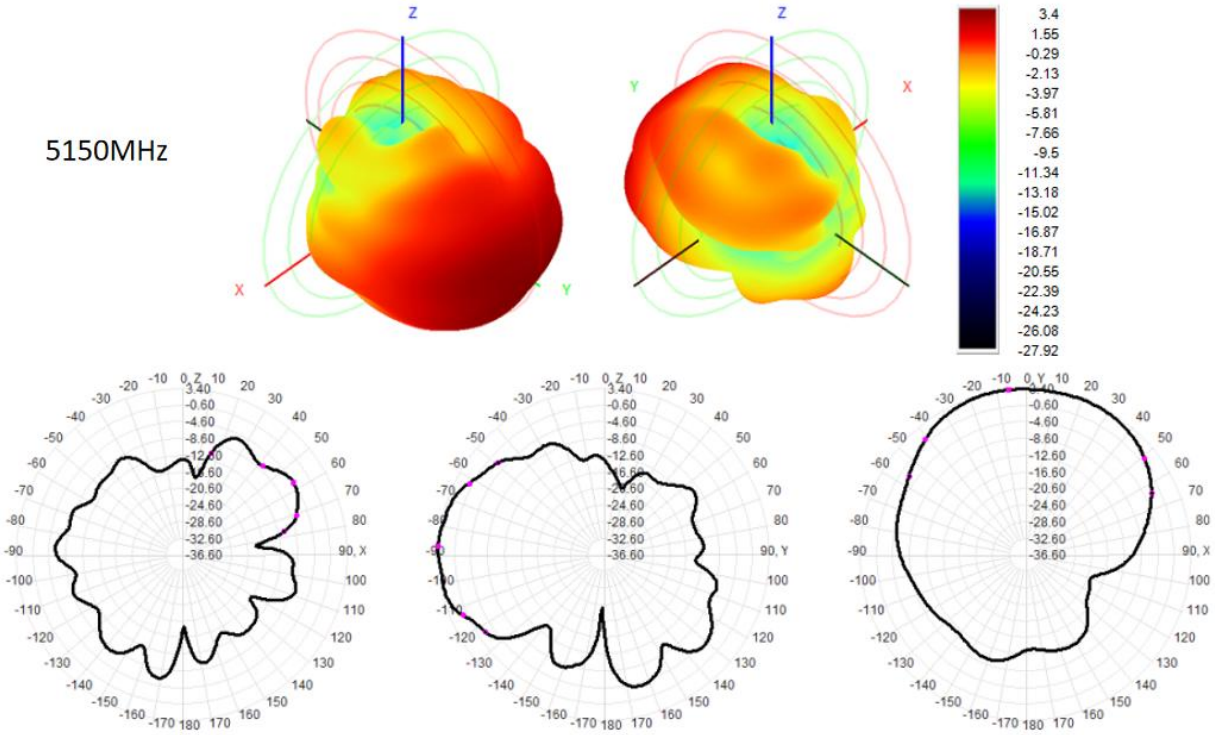


2500MHz

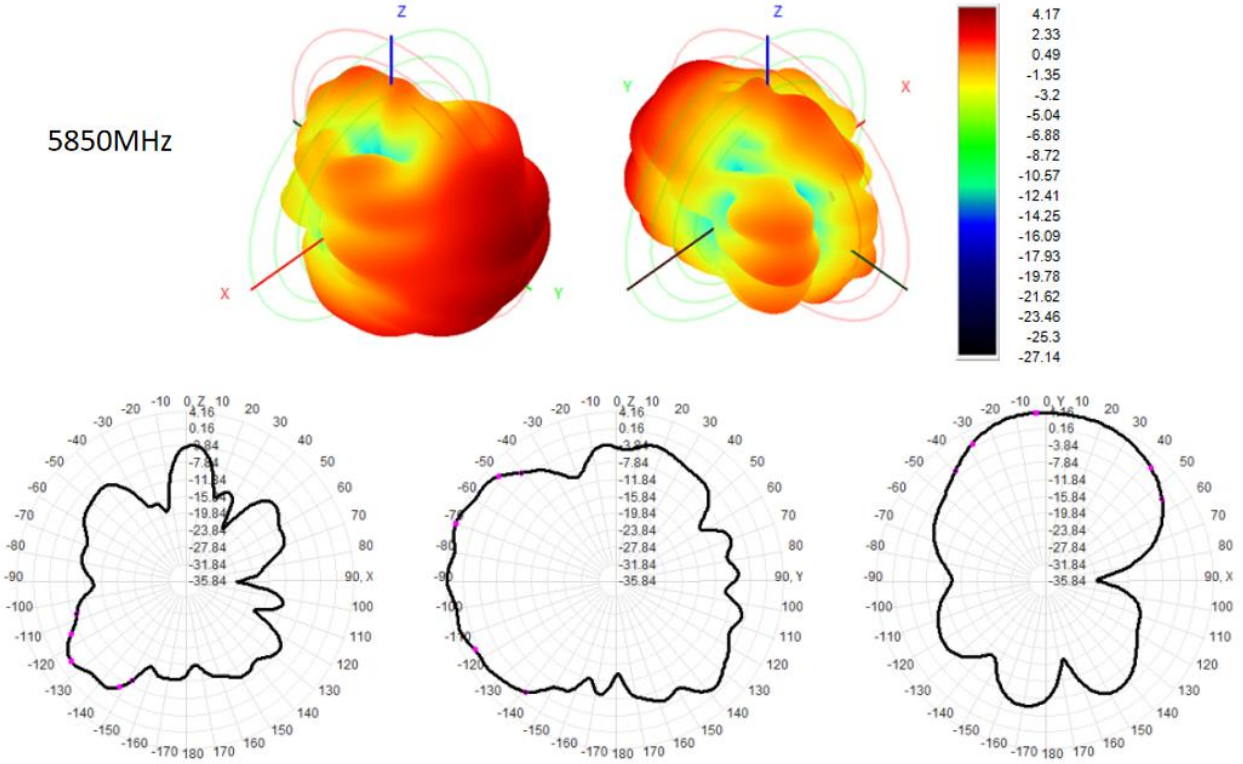


	Efficiency	Peak Gain	Directivity
2400MHz	55.21 %	1.45 dBi	5.32 dBi
2450MHz	66.45 %	2.71 dBi	5.21 dBi
2500MHz	57.53 %	1.98 dBi	5.29 dBi

5150MHz



5850MHz



	Efficiency	Peak Gain	Directivity
5150MHz	32.45 %	1.94dBi	4.48 dBi
5850MHz	40.68 %	2.02 dBi	4.19dBi