

WM630 SDR Ant Datasheet

ANT Engineer:

Freeman.deng(SDR)

Antenna Datasheet

1 Basic Specifications

No.	Specification	Descriptions	Notes
1	Antenna Name	WM630 SDR Ant	Only sale for DJI
2	Brand	DJI	
3	Operation Frequency	2.4~2.483GHz; 5.15~5.25GHz; 5.725~5.85GHz;	
4	Connector Type	SMA	
5	Impedance	50ohm	
6	Gain	2dBi@2.4~2.483GHz 2dBi @5.15~5.25GHz; 2.5dBi @5.725~5.85GHz	
7	Efficiency	$\geq 50\%$	
8	VSWR	≤ 2.5	
9	Polarization type	Linear	
10	3dB Beamwidth	Omnidirectional	
11	Manufacturer	Shenzhen ZTX Communication Technology Co., LTD. No.34 Shilong Road, Bao'an District, Shenzhen, China	

2 Antenna Return Loss/VSWR



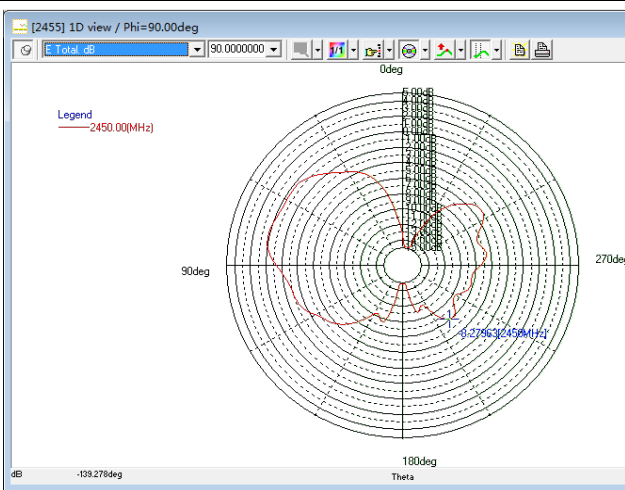
3 Antenna Gain

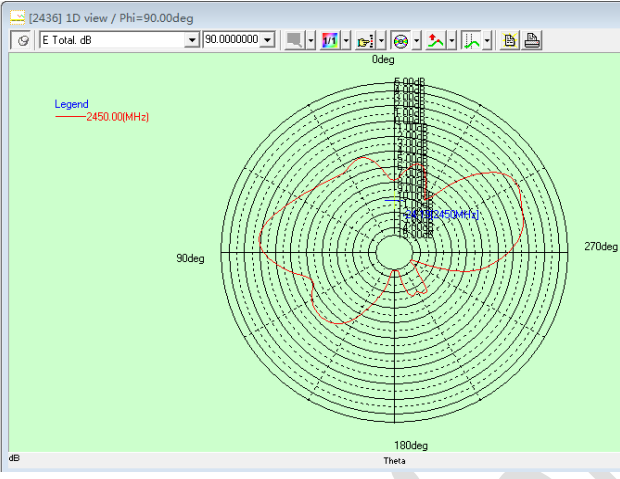
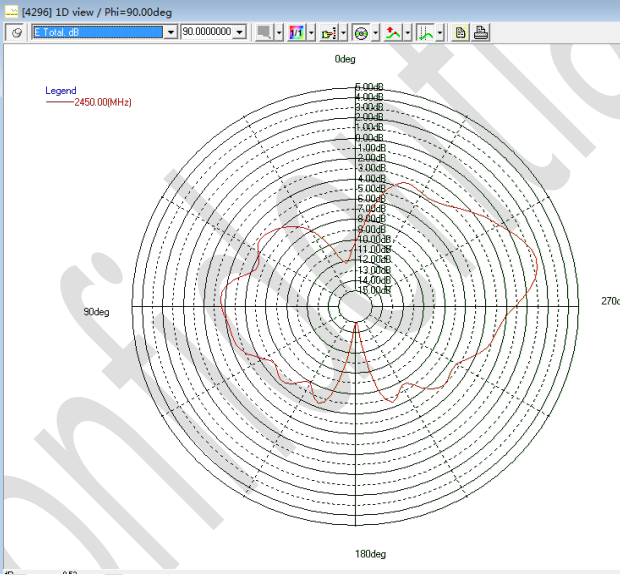
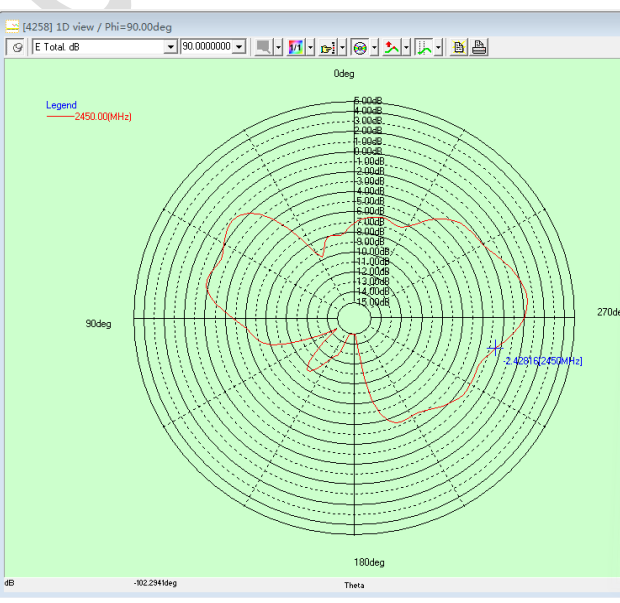
Frequency	Efficiency	Gain(dBi)
2400MHz	58%	1.92143
2410MHz	59%	2.01237
2420MHz	54%	1.86028
2450MHz	59%	1.90777
2470MHz	52%	1.96167
2480MHz	53%	1.87167

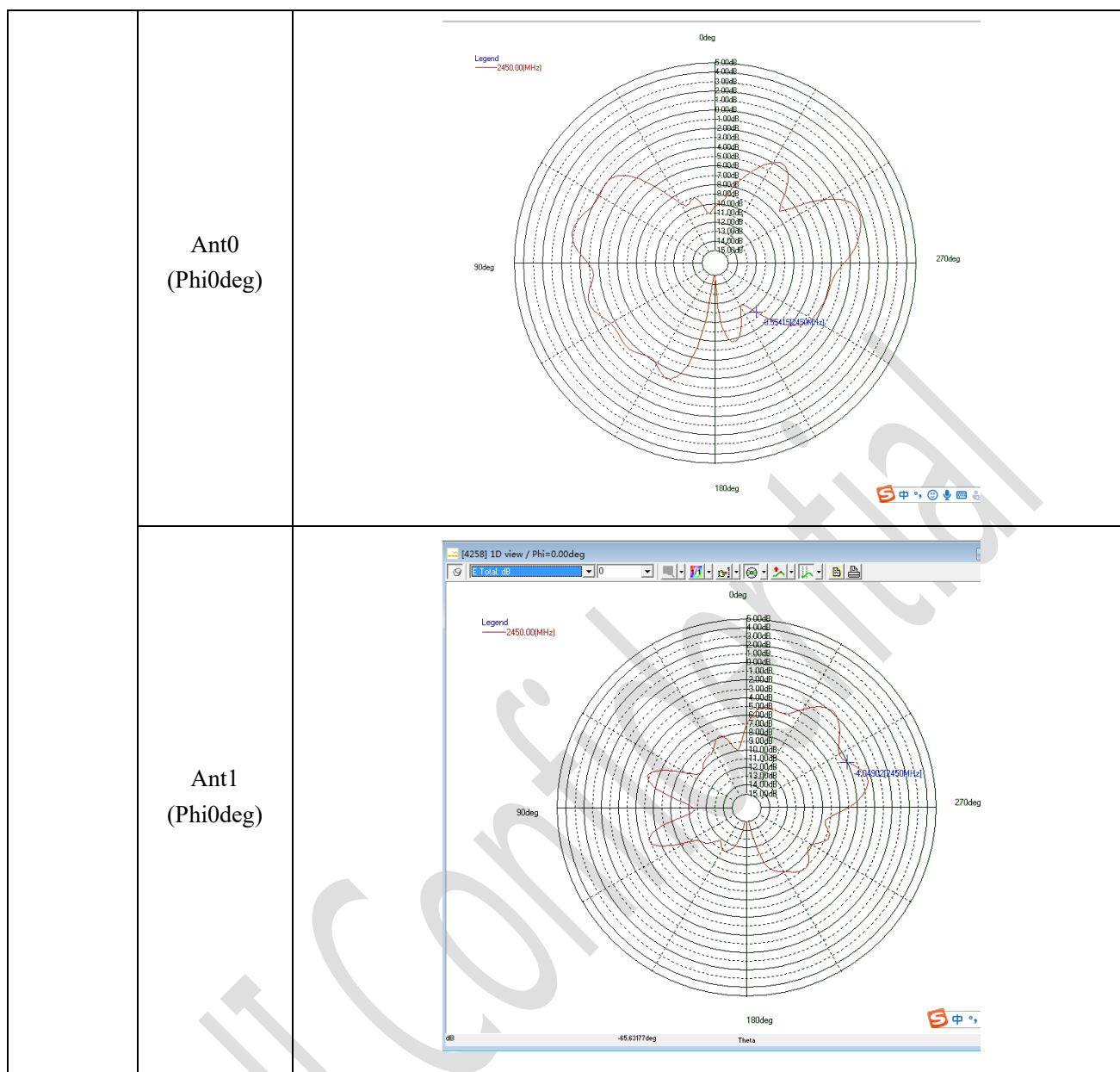
Frequency	Efficiency	Gain(dBi)
5145MHz	33%	1.72534
5175MHz	35%	1.84122
5205MHz	32%	2.04267
5235MHz	28%	1.54286
5265MHz	31%	1.60078

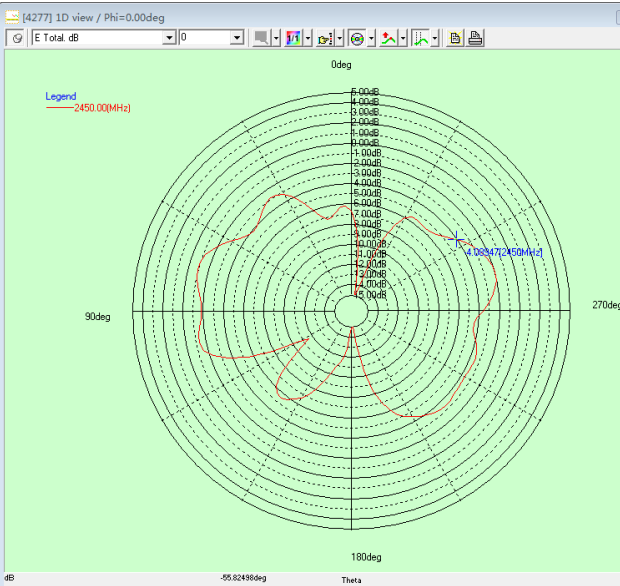
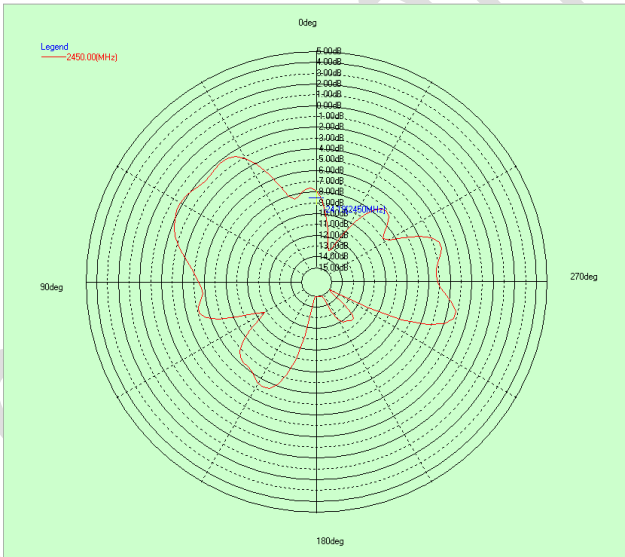
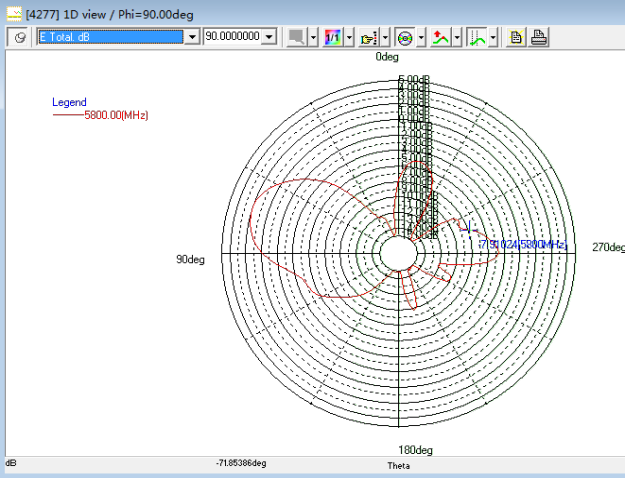
Frequency	Efficiency	Gain(dBi)
5725MHz	57%	2.55116
5775MHz	59%	2.49269
5800MHz	56%	2.43893
5825MHz	59%	2.42121
5850MHz	54%	2.43672

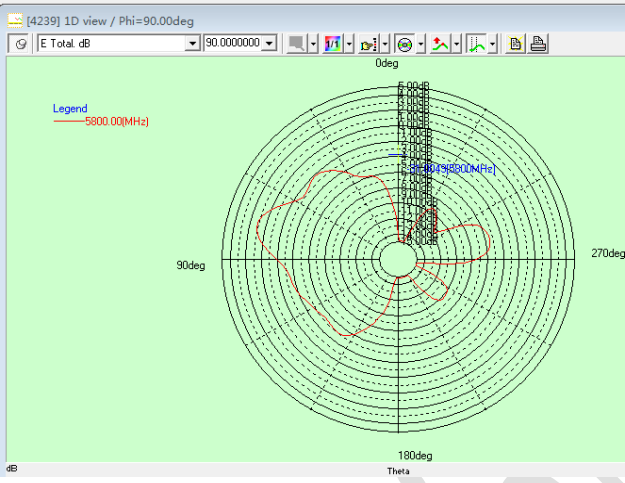
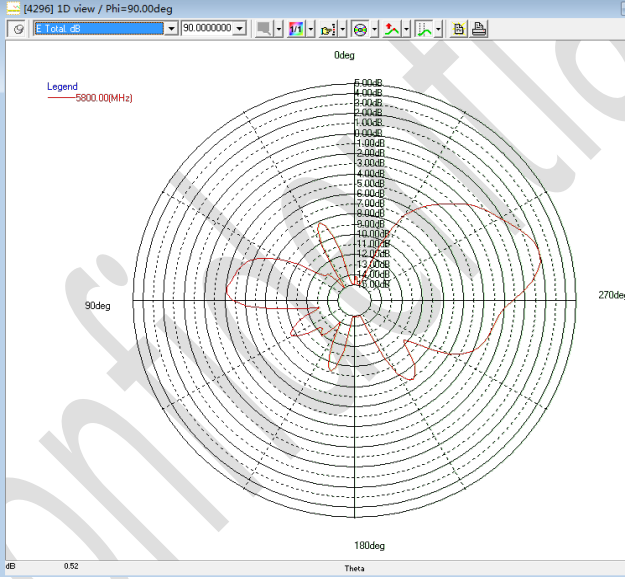
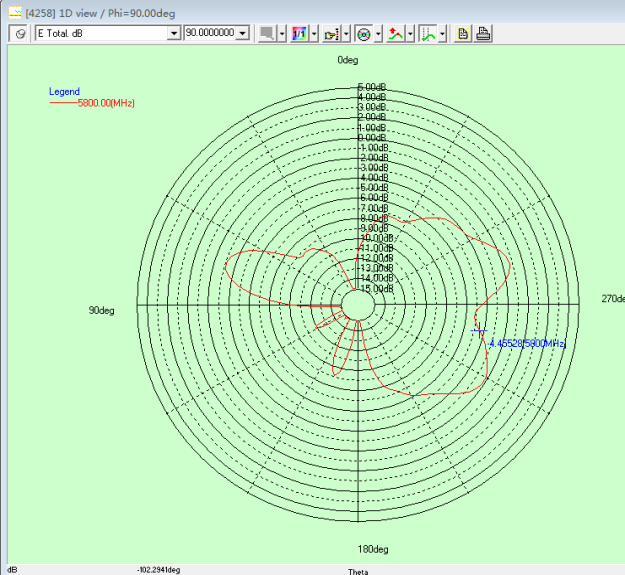
4 Radiation Pattern

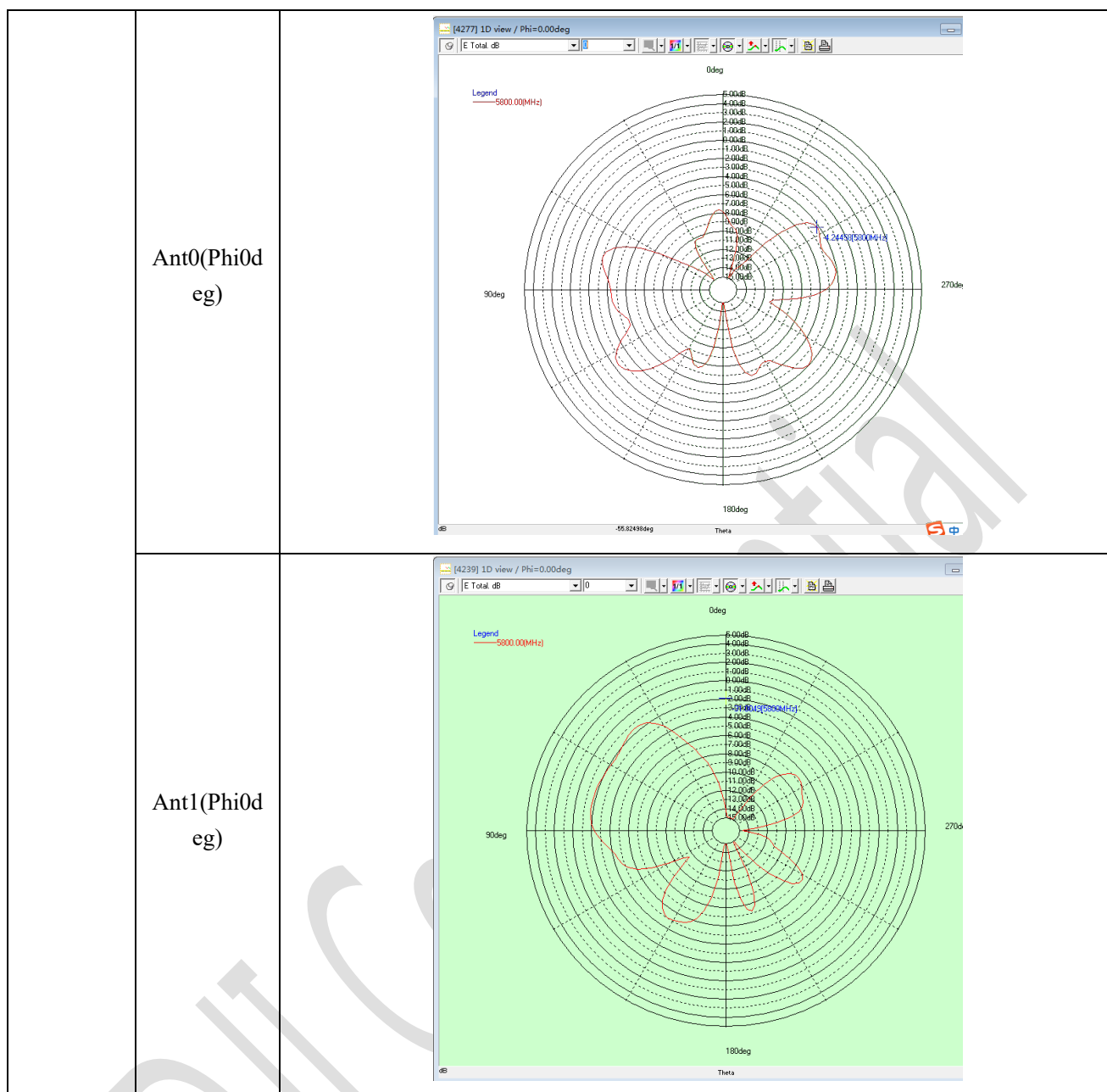
Frequency	Tangent	Direction
2450MHz	Ant0 (Phi90deg)	

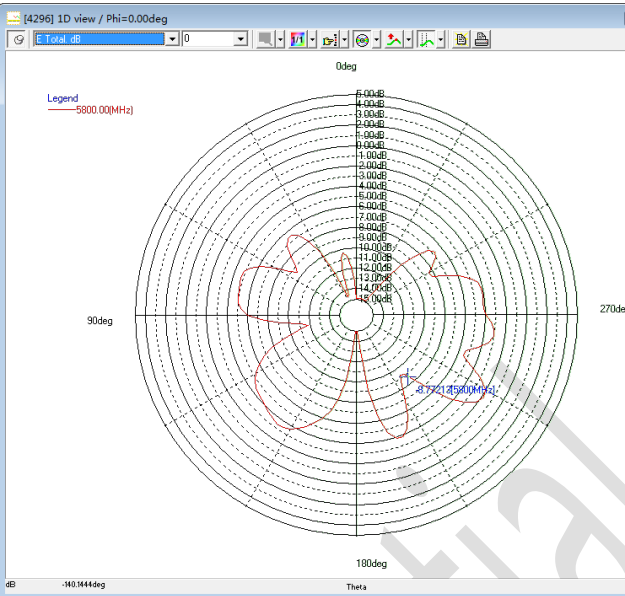
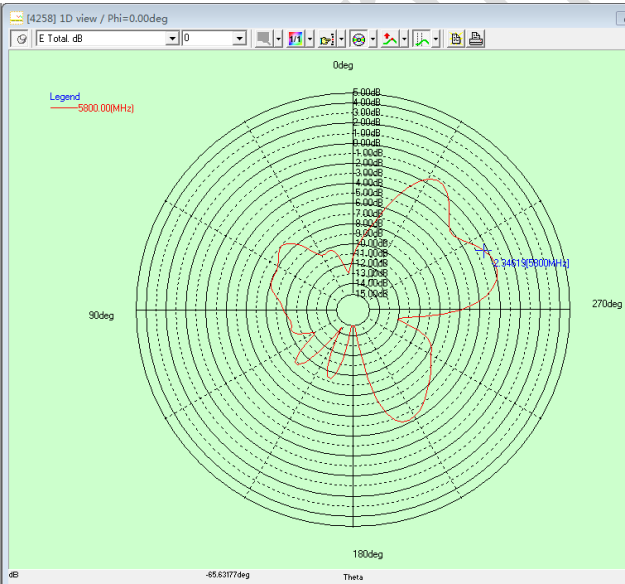
	Ant1(Phi90deg)	 [2436] 1D view / Phi=90.00deg E Total dB 90.0000000 Legend 2450.00(MHz) 0deg 90deg 180deg 270deg dB Theta
	Ant2(Phi90deg)	 [4296] 1D view / Phi=90.00deg E Total dB 90.0000000 Legend 2450.00(MHz) 0deg 90deg 180deg 270deg dB Theta
	Ant3(Phi90deg)	 [4258] 1D view / Phi=90.00deg E Total dB 90.0000000 Legend 2450.00(MHz) 0deg 90deg 180deg 270deg dB Theta

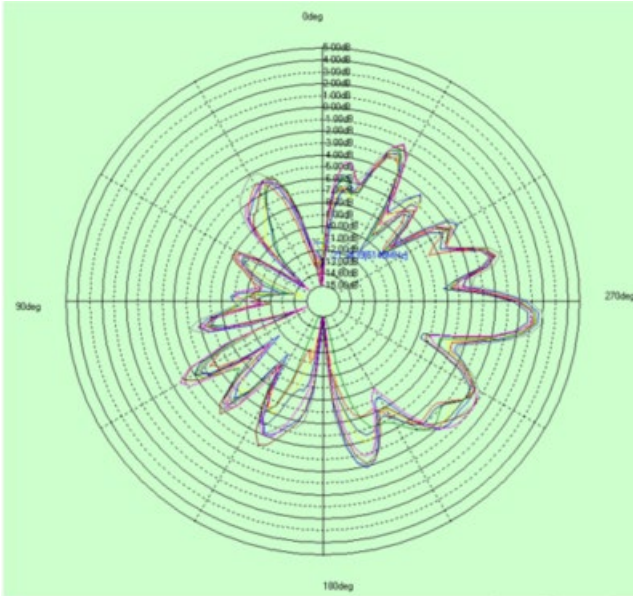
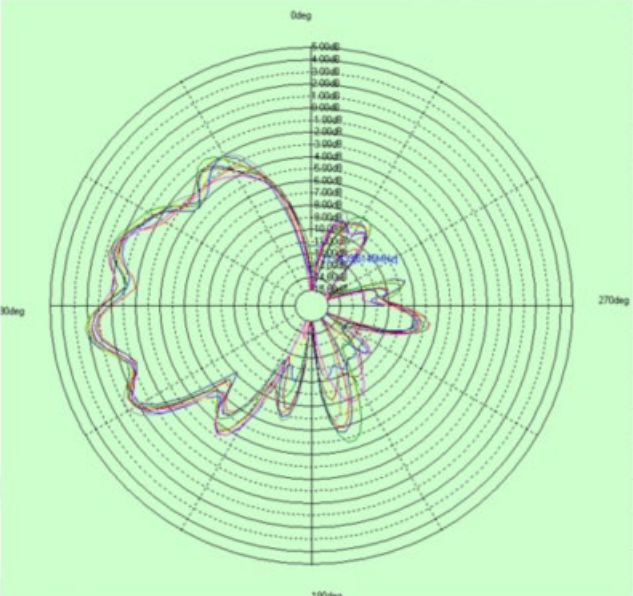


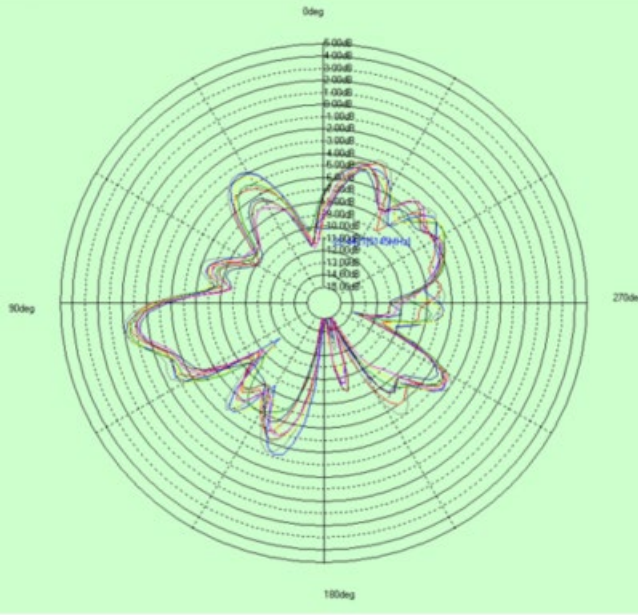
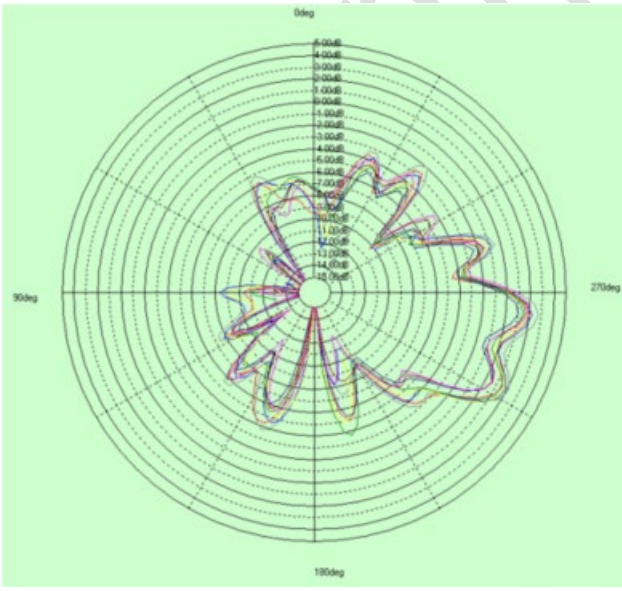
	Ant2 (Phi0deg)	
2450MHz	Ant3 (Phi0deg)	
5800MHz	Ant0 (Phi90deg)	

	Ant1(Phi90 deg)	 [4239] 1D view / Phi=90.00deg E Total: dB 90.0000000 Legend: 5800.00(MHz) dB: -10.00, -9.00, -8.00, -7.00, -6.00, -5.00, -4.00, -3.00, -2.00, -1.00, 0.00, 1.00, 2.00, 3.00, 4.00, 5.00, 6.00, 7.00, 8.00, 9.00, 10.00 Theta: 0deg, 90deg, 180deg, 270deg
	Ant2(Phi90 deg)	 [4296] 1D view / Phi=90.00deg E Total: dB 90.0000000 Legend: 5800.00(MHz) dB: -10.00, -9.00, -8.00, -7.00, -6.00, -5.00, -4.00, -3.00, -2.00, -1.00, 0.00, 1.00, 2.00, 3.00, 4.00, 5.00, 6.00, 7.00, 8.00, 9.00, 10.00 Theta: 0deg, 90deg, 180deg, 270deg
	Ant3(Phi90 deg)	 [4258] 1D view / Phi=90.00deg E Total: dB 90.0000000 Legend: 5800.00(MHz) dB: -10.00, -9.00, -8.00, -7.00, -6.00, -5.00, -4.00, -3.00, -2.00, -1.00, 0.00, 1.00, 2.00, 3.00, 4.00, 5.00, 6.00, 7.00, 8.00, 9.00, 10.00 Theta: 0deg, 90deg, 180deg, 270deg



	Ant2(Phi0deg)	
5800MHz	Ant3(Phi0deg)	

5200MHz	Ant0	
	Ant1	

	Ant2	 The radiation pattern for Ant2 is a polar plot on a green background. It features concentric circles representing signal strength in dBm, ranging from -12 dBm at the center to -5 dBm at the outer edge. The plot is divided into four quadrants by a vertical line (0deg/180deg) and a horizontal line (90deg/270deg). The radiation pattern shows a complex, multi-lobed structure with several peaks and nulls. The highest gain is observed in the upper-right quadrant, reaching approximately -5 dBm. The pattern is relatively symmetrical about the vertical axis.
	Ant3	 The radiation pattern for Ant3 is a polar plot on a green background, similar to the one for Ant2. It uses the same concentric circle scale for signal strength in dBm, from -12 dBm to -5 dBm. The plot is also divided into four quadrants. The radiation pattern for Ant3 is more complex and irregular than that of Ant2, with more pronounced side lobes and a more varied distribution of signal strength across the angles. The highest gain is still in the upper-right quadrant, but the overall pattern is less symmetrical.