

DJI Antenna Datasheet

WA140 antenna

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Revision history

Version	Change notes	Modifier	Date
V0.1	First draft.	Freeman.D eng	2023.05.26

DJI Antenna Datasheet

1、 Basic Specifications

No.	Specification	Descriptions	Notes	
1	Antenna Name	WA140 Ant		
2	Brand	DJI		
3	Operation Frequency	2.4~2.483GHz; 5.15-5.25GHz; 5.725~5.85GHz;		
4	Connector Type	Ipex-4		
5	Impedance	50ohm		
6	Gain	1dBi@2.4GHz 1dBi@5.2GHz (Only for CE/FCC/NCC) 1.5dBi@5.8GHz		
7	Efficiency	$\geq 50\%$		
8	VSWR	≤ 2		
9	Polarization type	Linear		
10	3dB Beamwidth	Omnidirectional horizon		
11	Weight			
12	Antenna type	Dipole		

2、 Antenna Gain

3.1 LF antenna

Frequency	Efficiency	Gain(dBi)
2400MHz	66%	0.76119



2420MHz	63%	0.81233
2450MHz	65%	0.99091
2470MHz	59%	0.80206

Frequency	Efficiency	Gain(dBi)
5150MHz	43%	0.45847
5200MHz	40%	0.79302
5250MHz	44%	0.95313
Frequency	Efficiency	Gain(dBi)
5725MHz	55%	1.25112
5775MHz	52%	1.32950
5800MHz	53%	1.45854
5850MHz	52%	1.46515

3.2 RF antenna

Frequency	Efficiency	Gain(dBi)
2400MHz	65%	0.72509
2420MHz	62%	0.86527
2450MHz	64%	0.92478
2470MHz	59%	0.65424
Frequency	Efficiency	Gain(dBi)
5150MHz	40%	0.88512
5200MHz	43%	0.73425
5250MHz	44%	0.23541

Frequency	Efficiency	Gain(dBi)
5725MHz	47%	1.41496
5775MHz	49%	1.47157
5800MHz	51%	1.44765
5850MHz	52%	1.41186

3.3 LB antenna

Frequency	Efficiency	Gain(dBi)
2400MHz	51%	0.82512



2420MHz	53%	0.54125
2450MHz	53%	0.82478
2470MHz	57%	0.65424
Frequency	Efficiency	Gain(dBi)
5150MHz	46%	0.89154
5200MHz	44%	0.98452
5250MHz	43%	0.74511

Frequency	Efficiency	Gain(dBi)
5725MHz	50%	1.31871
5775MHz	51%	1.46891
5800MHz	51%	1.26812
5850MHz	52%	1.36540

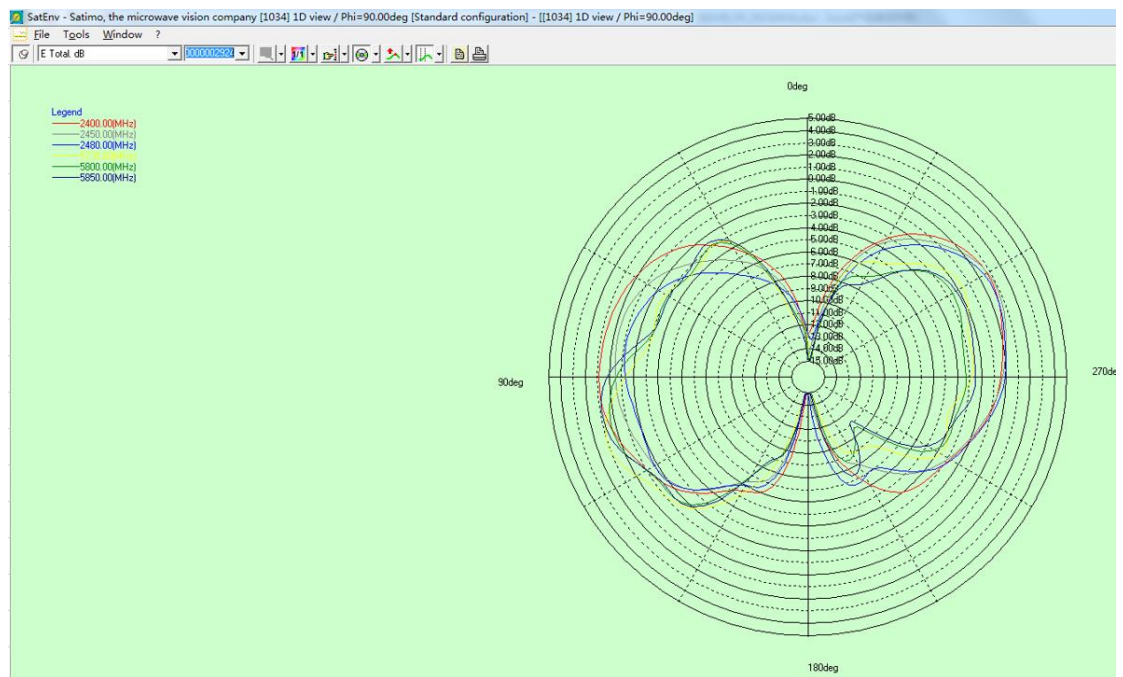
3.4 RB antenna

Frequency	Efficiency	Gain(dBi)
2400MHz	59%	0.81125
2420MHz	57%	0.91545
2450MHz	55%	0.91181
2470MHz	52%	0.75831
Frequency	Efficiency	Gain(dBi)
5150MHz	43%	0.86483
5200MHz	46%	0.98185
5250MHz	44%	0.69710

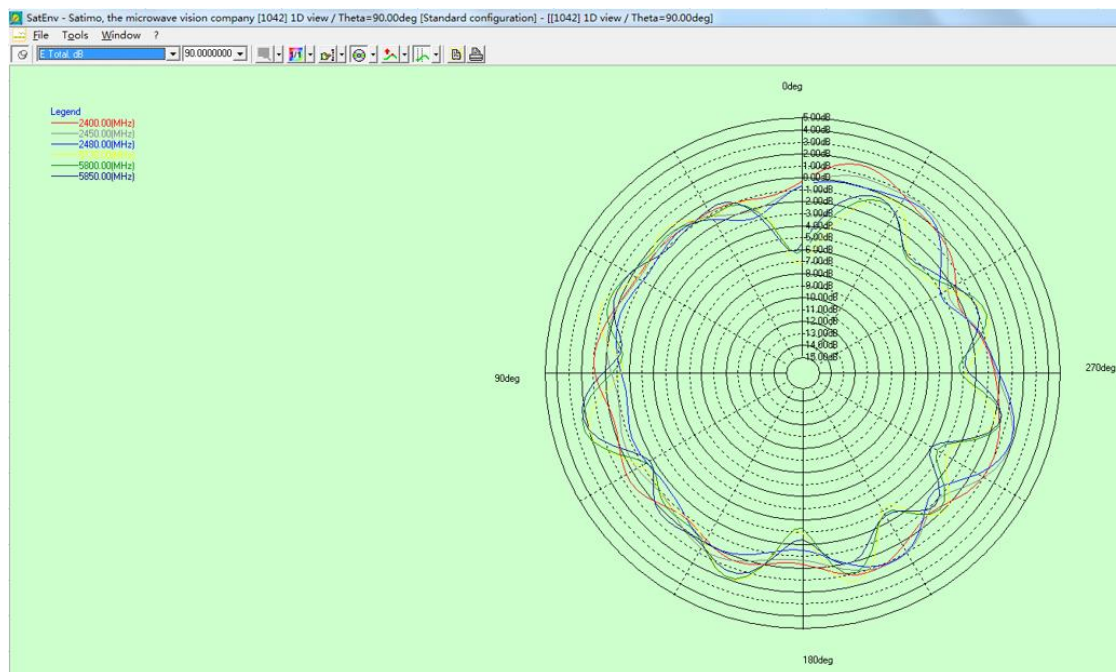
Frequency	Efficiency	Gain(dBi)
5725MHz	55%	1.48807
5775MHz	59%	1.25999
5800MHz	52%	1.44145
5850MHz	53%	1.33584

3、 Radiation Pattern

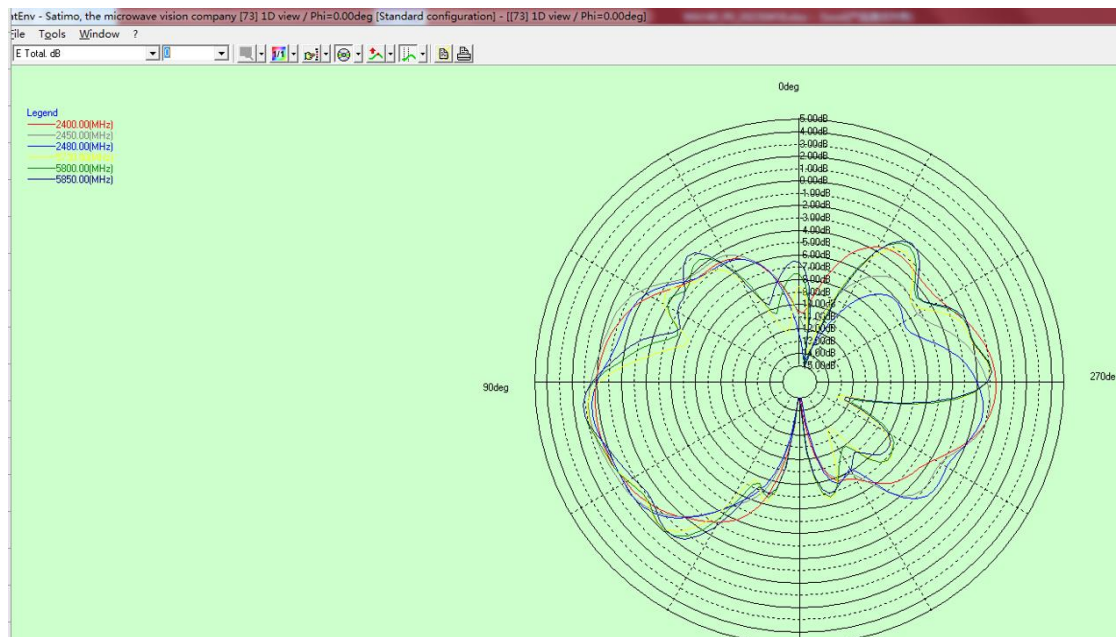
4.1 LF Phi 90



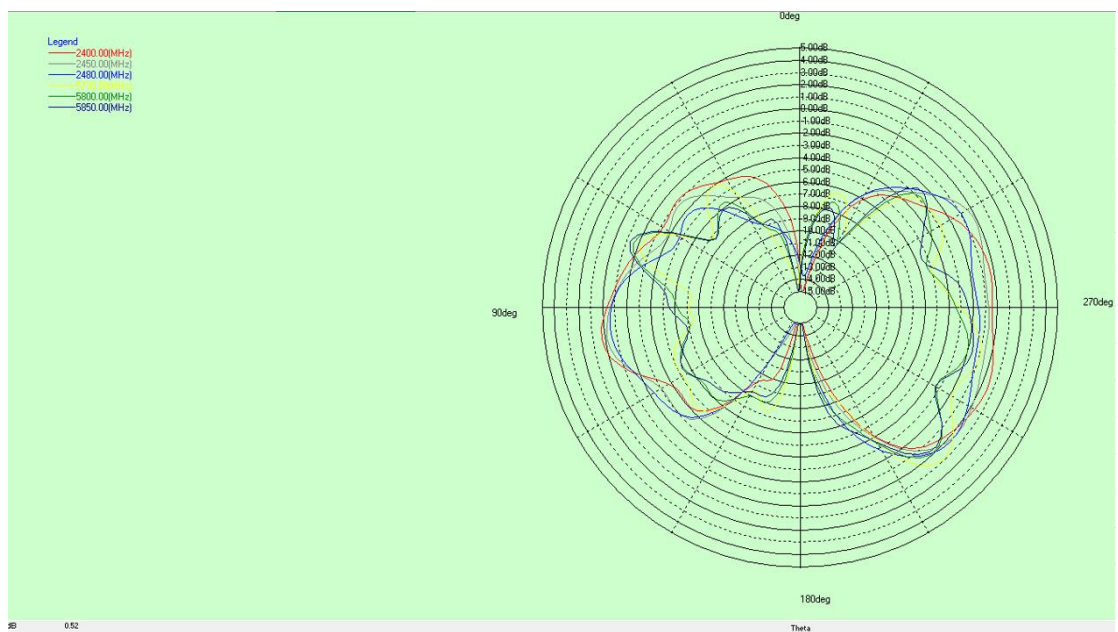
4.2 LF Theta90



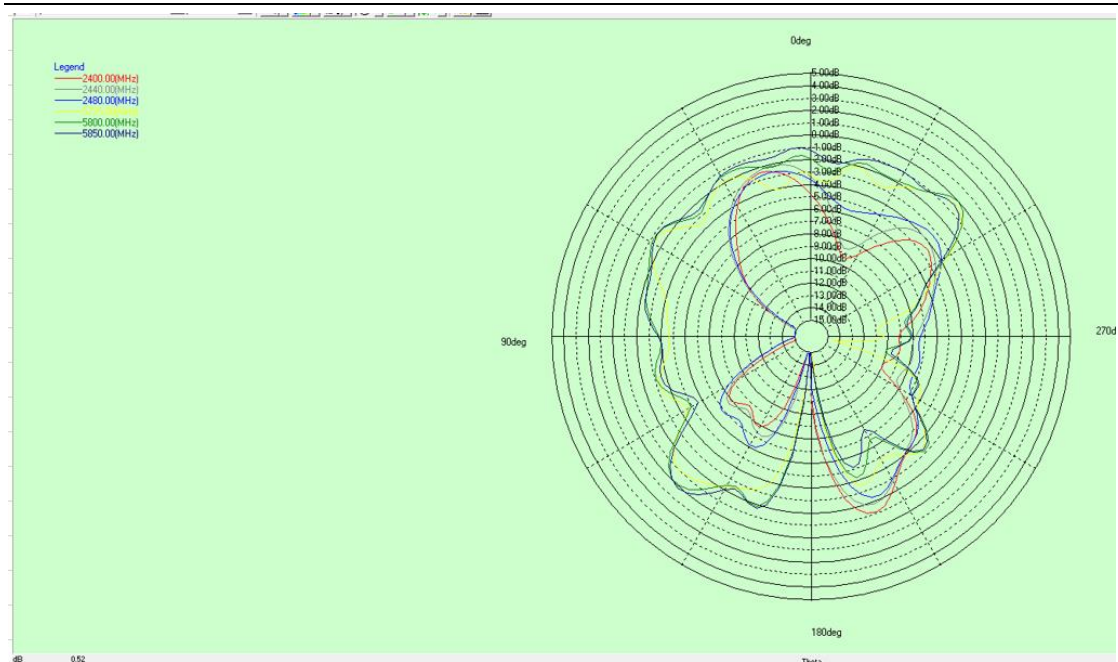
4.3 RF Phi 90



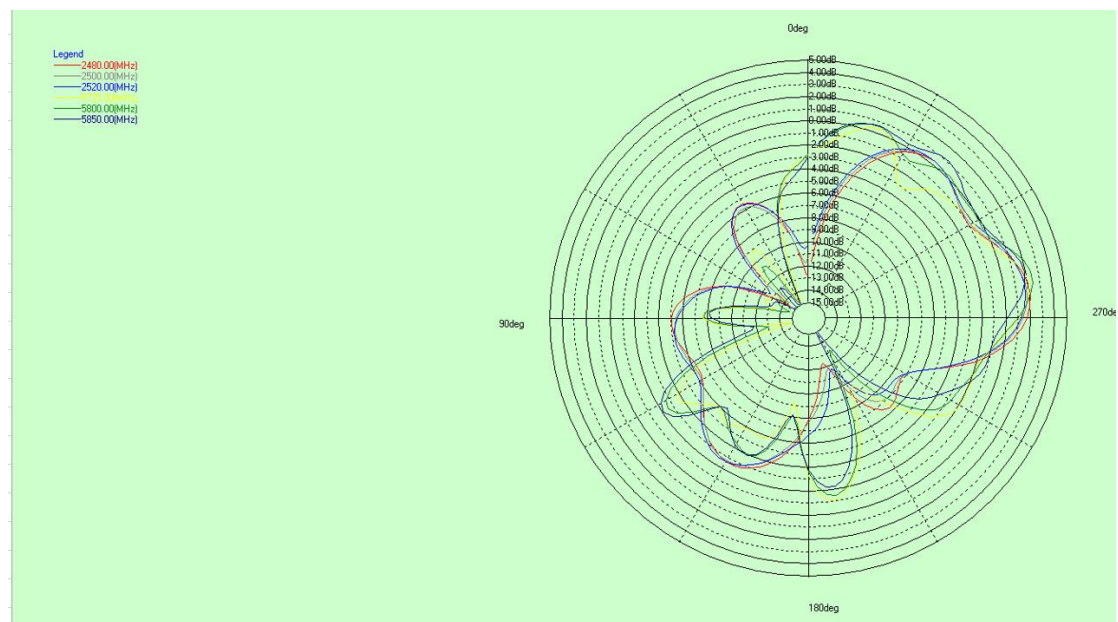
4.4 RF Theta 90



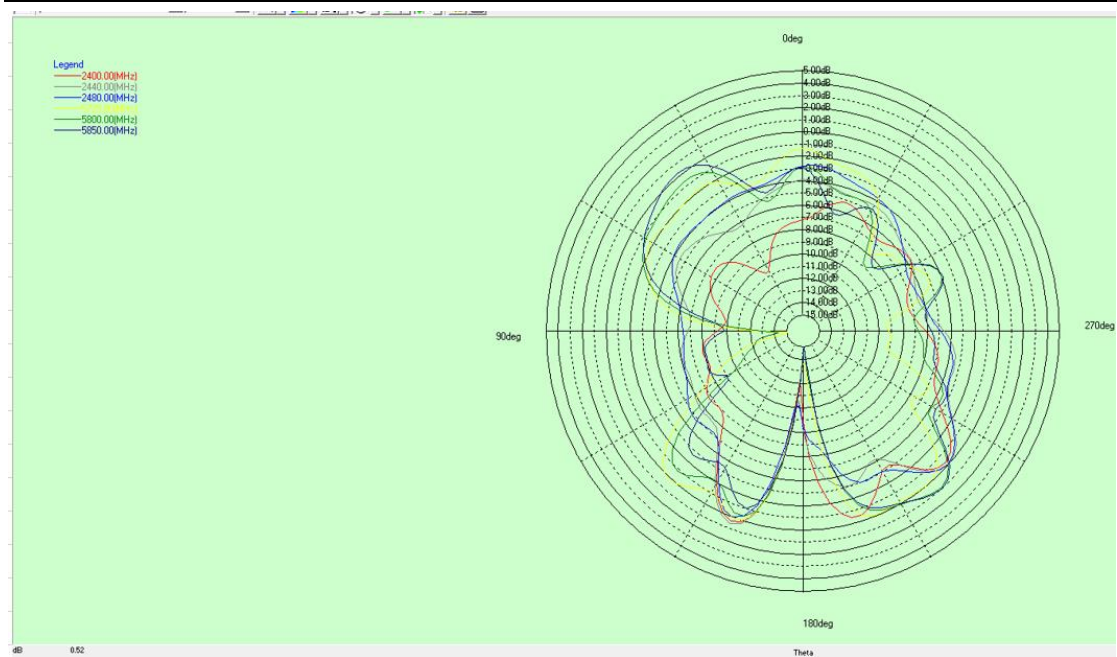
4.5 LB Phi90



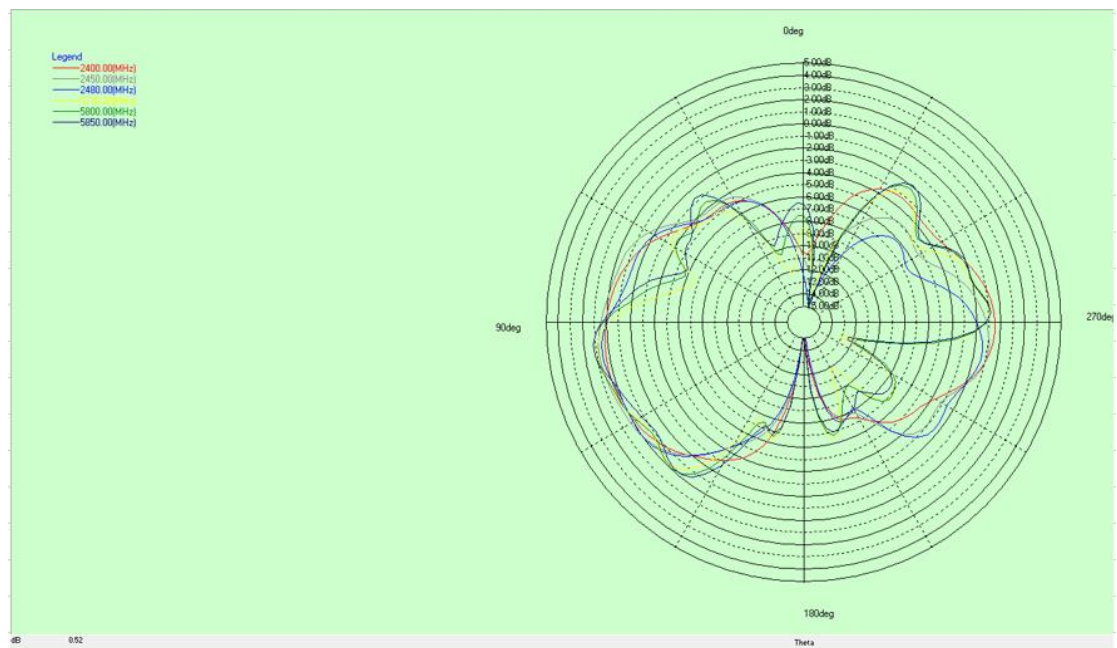
4.6 LB Theta 90



4.7 RB Phi90



4.8 RB Theta90



4、 Structure drawing