

EA230 dock SDR & Bluetooth Antenna Datasheet



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Revision history

Version	Change notes	Modifier	Date
V1.0		Weaver.peng	2023.06.05



DOCK SDR Antenna0 ~ Antenna 8

DJI Antenna Datasheet Ant0~ Ant7

1、 Basic Specifications

No	Specification	Descriptions	Notes	
1	Antenna Name	<u>EA230 H-VSDR Ant</u>	Ant0~Ant7	
2	Brand	<u>DJI</u>		
3	Operation Frequency	<u>2.4~2.483GHz;</u> <u>5.125-5.25GHz;</u> <u>5.725~5.85GHz</u>		
4	Connector Type	Fraka		
5	Impedance	50ohm		
6	Gain	ANT2、ANT3: 4.5 dBi@2.4~2.483GHz 3.3 dBi@5.2GHz 2.2 dBi@5.725~5.875GHz ANT0、ANT1: 3.7 dBi@2.4~2.483GHz 2.3 dBi@5.2GHz 2.2 dBi@5.725~5.875GHz		



		ANT6、ANT7: 3.9 dBi @2.4~2.483GHz 2.8 dBi @5.2GHz 1.7 dBi@5.725~5.875GHz ANT4、ANT5: 3.1 dBi @2.4~2.483GHz 1.8 dBi @5.2GHz 1.9 dBi@5.725~5.875GHz		
7	Efficiency	$\geq 25\%$		
8	VSWR	≤ 2.5		
9	Polarization type	Linear		
10	3dB Beamwidth	-		
11	Weight	-		
12	Antenna type	HV-dual-polarised dipole		
13	Manufacturer	禾邦		

2、Antenna Gain

ANT2、ANT3	Frequency	Efficiency()	Gain (dB)
	2400MHz	76%	4.4
	2410MHz	75%	4.3
	2420MHz	73%	4.1
	2430MHz	78%	4.4
	2440MHz	79%	4.5
	2450MHz	73%	4.1
	2460MHz	70%	3.8
	2470MHz	73%	3.9
	2480MHz	73%	4.0
	5150MHz	65%	2.7



	5200MHz	64%	3.0
	5250MHz	71%	3.3
	5725MHz	73%	1.2
	5750MHz	75%	1.7
	5775MHz	75%	2.0
	5800MHz	76%	2.2
	5825MHz	75%	2.2
	5850MHz	72%	2.0

ANT0、ANT1	Frequency	Efficiency()	Gain (dB)
	2400MHz	75%	3.4
	2410MHz	75%	3.5
	2420MHz	73%	3.3
	2430MHz	76%	3.6
	2440MHz	77%	3.7
	2450MHz	71%	3.4
	2460MHz	67%	3.1
	2470MHz	69%	3.1
	2480MHz	73%	3.4
	5150MHz	63%	2.1
	5200MHz	59%	2.1
	5250MHz	63%	2.3
	5725MHz	71%	2.4
	5750MHz	70%	2.2
	5775MHz	68%	2.1
	5800MHz	68%	2.2
	5825MHz	65%	2.2
	5850MHz	63%	2.2

ANT6、ANT7	Frequency	Efficiency()	Gain (dB)
	2400MHz	76%	3.8
	2410MHz	75%	3.7
	2420MHz	73%	3.5
	2430MHz	78%	3.8
	2440MHz	79%	3.9
	2450MHz	73%	3.5
	2460MHz	70%	3.2
	2470MHz	73%	3.3
	2480MHz	73%	3.4
	5150MHz	65%	2.2



	5200MHz	64%	2.5
	5250MHz	71%	2.8
	5725MHz	73%	0.7
	5750MHz	75%	1.2
	5775MHz	75%	1.5
	5800MHz	76%	1.7
	5825MHz	75%	1.7
	5850MHz	72%	1.5

ANT4、ANT5	Frequency	Efficiency()	Gain (dB)
	2400MHz	75%	2.8
	2410MHz	75%	2.9
	2420MHz	73%	2.7
	2430MHz	76%	3.0
	2440MHz	77%	3.1
	2450MHz	71%	2.8
	2460MHz	67%	2.5
	2470MHz	69%	2.5
	2480MHz	73%	2.8
	5150MHz	63%	1.6
	5200MHz	59%	1.6
	5250MHz	63%	1.8
	5725MHz	71%	1.9
	5750MHz	70%	1.7
	5775MHz	68%	1.6
	5800MHz	68%	1.7
	5825MHz	65%	1.7
	5850MHz	63%	1.7

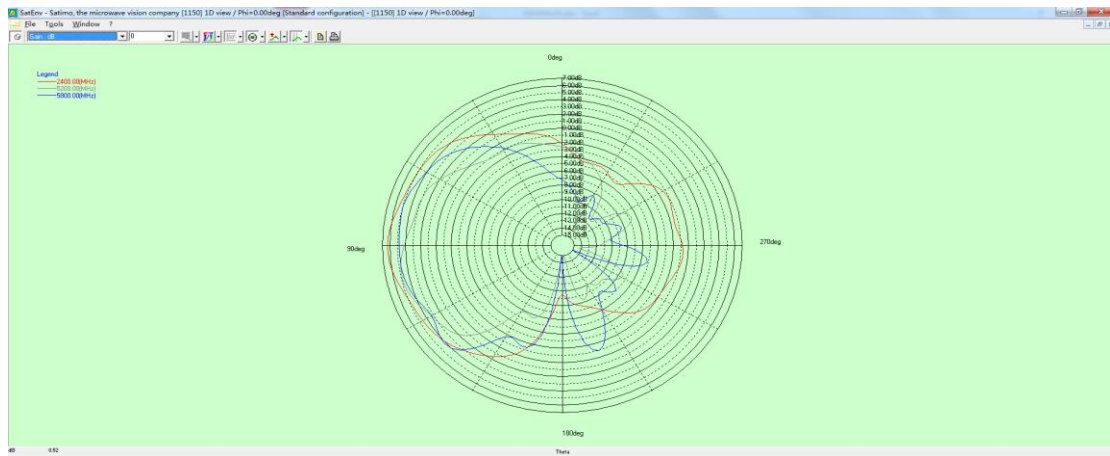
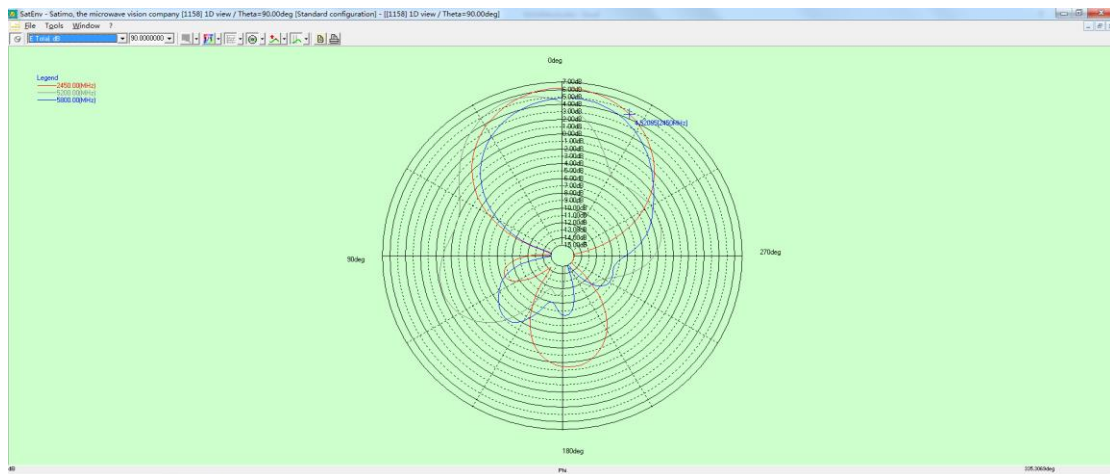
3、 Antenna Pattern

Measurement System: Satimo

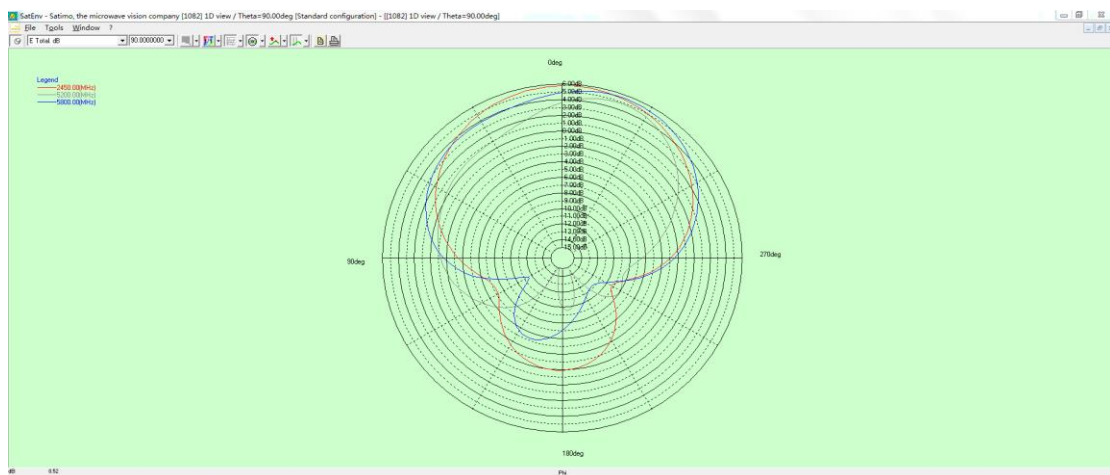
Reference Position

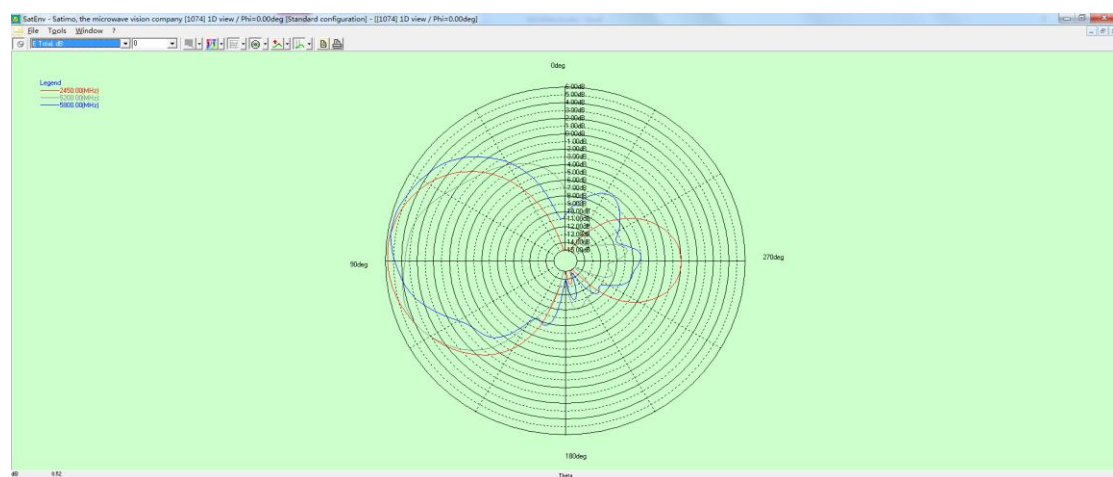
Antenna Pattern:

ANT 2、ANT3、ANT6、ANT7:



ANT 0、ANT1、ANT4、ANT5





4、 antenna drawing



DJI Antenna Datasheet Ant8

1、 Basic Specifications

No.	Specification	Descriptions	Notes	
1	Antenna Name	<u>EA230 SDR Ant8</u>		
2	Brand	<u>DJI</u>		
3	Operation Frequency	<u>2.4~2.483GHz;</u> <u>5.125-5.25GHz;</u> <u>5.725~5.85GHz</u>		
4	Connector Type	Fraka		
5	Impedance	50ohm		
6	Gain	4.0 dbi@2.4~2.483GHz 0.5 dbi@5.2GHz -1.2 dBi@5.725~5.875GHz		
7	Efficiency	≥25%		
8	VSWR	≤2.5		
9	Polarization type	Linear		
10	3dB Beamwidth	-		
11	Weight	-		
12	Antenna type	Patch+loop		
13	Manufacturer	睿翔		

2、 Antenna Gain



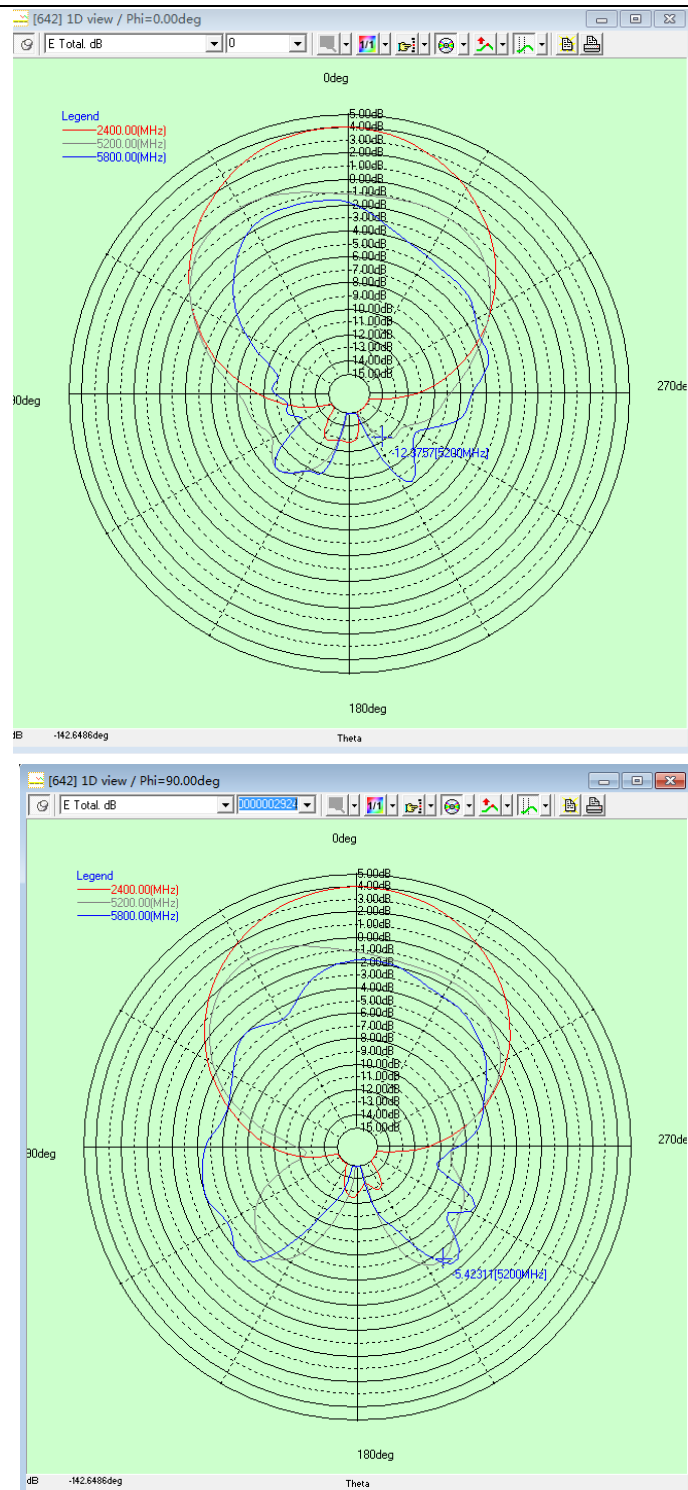
Frequency	Efficiency	gain (dB)
2400MHz	32%	4.0
2410MHz	35%	3.0
2420MHz	40%	3.5
2430MHz	42%	3.8
2440MHz	44%	4.0
2450MHz	44%	3.4
2460MHz	39%	2.7
2470MHz	34%	2.2
2480MHz	29%	2.0
5100MHz	30%	0.5
5150MHz	26%	0.5
5200MHz	21%	0.5
5250MHz	22%	-1.0
5725MHz	22%	-1.2
5750MHz	21%	-1.3
5775MHz	20%	-1.5
5800MHz	20%	-1.5
5825MHz	19%	-2.0
5850MHz	20%	-2.0

3、 Antenna Pattern

Measurement System: Satimo

Reference Position

Antenna Pattern:



4、 antenna drawing



. Bluetooth Antenna

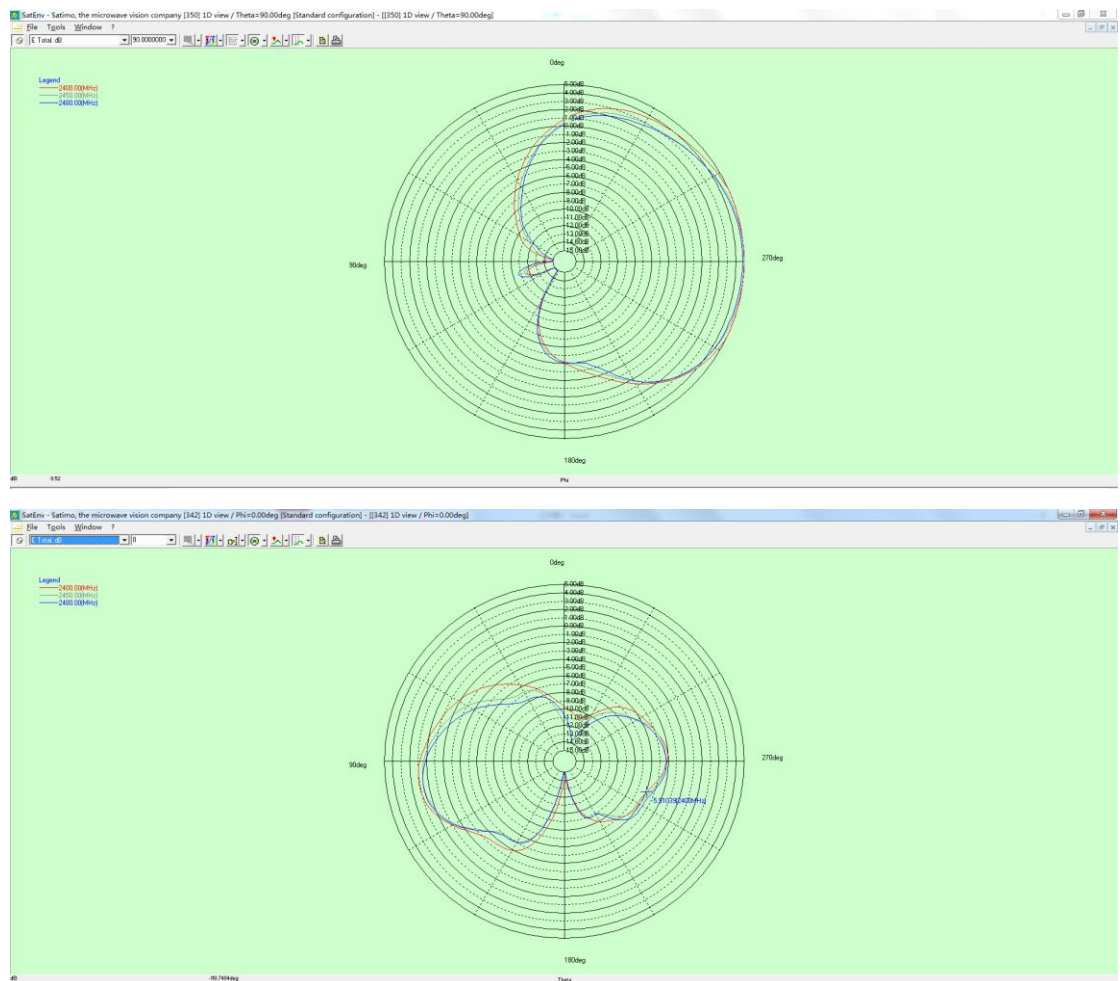
1、 Basic Specifications

No.	Specification	Descriptions	Notes	
1	Antenna Name	<u>EA230 dock BT antenna</u>		
2	Brand	<u>DJI</u>		
3	Operation Frequency	<u>2.4~2.483GHz;</u>		
4	Connector Type	IPEX1 代		
5	Impedance	50ohm		
6	Gain	5.6 dbi@2.4~2.483GHz		
7	Efficiency	≥60%		
8	VSWR	≤2		
9	Polarization type	Linear		
10	3dB Beamwidth	-		
11	Weight	-		
12	Antenna type	Dipole		
13	Manufacturer	睿翔		

2、 Gain

Frequency	eff	gain (dB)
2400MHz	77%	5.6
2410MHz	74%	5.5
2430MHz	72%	5.3
2450MHz	69%	5.0
2470MHz	66%	4.8
24809MHz	67%	4.9

3、 radiation pattern





4、 Structure drawing