

DJI Antenna Datasheet

AD01A 4G antenna

2024-03-28



Revision history

Version	Change notes	Modifier	Date
V1.0	First draft.	Josh.hu	2024.03.28

DJI Antenna Datasheet

Manufacture:

Taiwan Inpaq electronic Co., Ltd.

No. 90, Keyi Street, 11 Gongyi Lane, Zhunan Town, Miaoli County, Taiwan

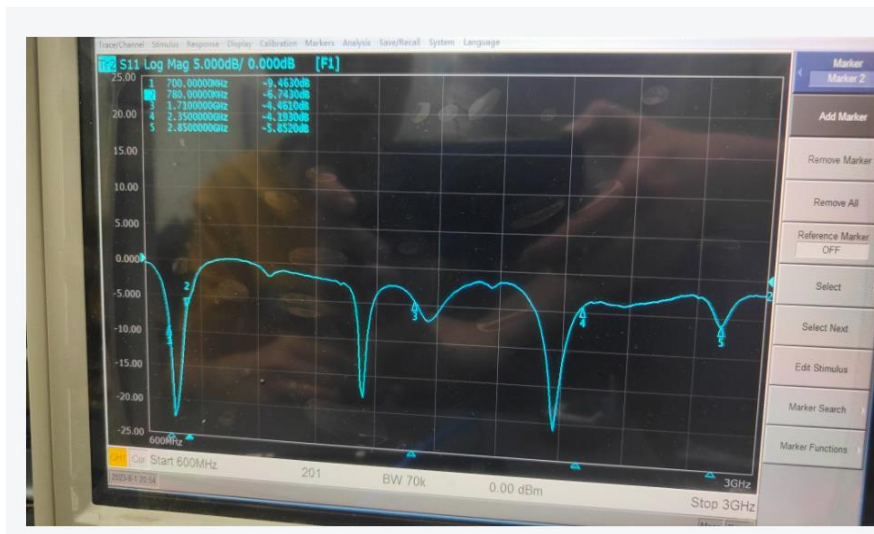
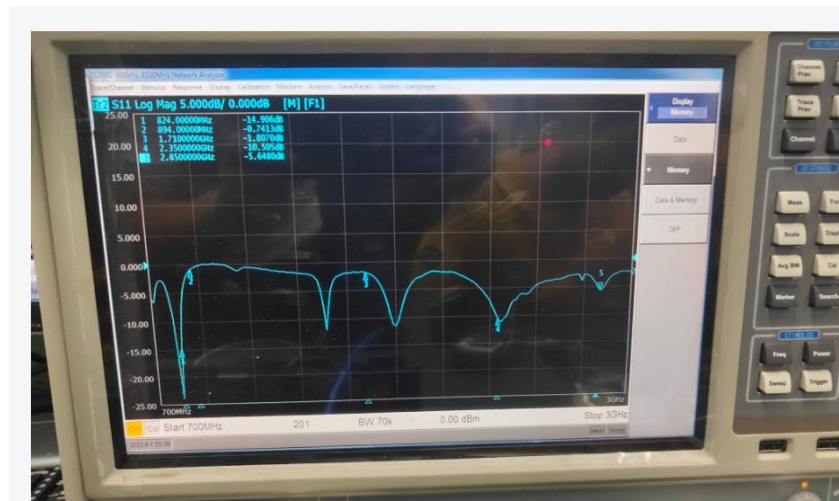
1、 Basic Specifications

No.	Specification	Descriptions	Notes
1	Antenna Name	AD01A 4G Antenna	Only sale for DJI
2	Brand	DJI	
3	Operation Frequency	0.69~0.96GHz(LB) 1.71~2.17GHz(MB) 2.3~2.4GHz(HB) 2.5~2.69GHz(HB)	
4	Connector Type	Spring pin	
5	Impedance	50ohm	
6	Gain	Ant-L MAX Gain: band 2 -7.11dBi band 25 -7.11dBi band 4 -7.78dBi band 26(824-849MHz) -6.51dBi band 5 -7.66dBi band 26(814-824MHz) -6.51dBi band 7 -1.51dBi band 38 -2.03dBi band 12 -4.72dBi band 41 -0.43dBi band 13 -5.00dBi band 66 -7.78dBi	
7	Efficiency	$\geq 5\%$ MHB	
8	VSWR	≤ 3	
9	Polarization type	Linear	
10	3dB Beam width	Omnidirectional horizon	
11	Weight	/	
12	Antenna type	Internal FPC PIFA antenna	
13	Manufacturer	DJI	

2、 Antenna Return Loss/VSWR

2.1 Antenna return loss

Antenna:



3、 Antenna Gain sheet

Antenna:



去週轉	0歐	效率dB	增益	效率%		8.2nh	效率dB	增益	效率%		22nh	效率dB	增益	效率%	
BS	1	700	-16.97	-11.07	2.01	1	700	-14.19	-8.66	3.81	1	700	-12.15	-6.55	6.1
	2	710	-15.91	-10.17	2.56	2	710	-12.66	-7.66	5.42	2	710	-11	-5.35	7.93
	3	720	-14.04	-9.27	3.95	3	720	-11.49	-7.04	7.1	3	720	-10.17	-4.72	9.61
	4	730	-12.91	-7.28	5.12	4	730	-10.79	-5.5	8.33	4	730	-10	-4.6	10
	5	740	-11.82	-5.76	6.58	5	740	-10.8	-6.17	8.31	5	740	-9.89	-4.72	10.25
	6	750	-11.15	-6.35	7.67	6	750	-11.05	-6.99	7.85	6	750	-9.82	-4.63	10.43
	7	760	-11.42	-5.96	7.21	7	760	-11.47	-8.51	7.13	7	760	-10.2	-5.27	9.55
	8	770	-11.71	-5.46	6.74	8	770	-11.69	-5.49	6.77	8	770	-10.18	-5	9.6
	9	780	-12.15	-7.77	6.09	9	780	-11.75	-5.36	6.69	9	780	-10.33	-5.46	9.28
	10	790	-12.7	-8.35	5.37	10	790	-12.44	-6.92	5.7	10	790	-10.35	-5.66	9.23
	11	800	-13.75	-8.79	4.22	11	800	-12.89	-6.9	5.14	11	800	-10.49	-5.73	8.92
	12	810	-13.64	-8.74	4.33	12	810	-12.83	-6.64	5.21	12	810	-10.81	-6.51	8.3
	13	820	-14.44	-8.82	3.6	13	820	-13.33	-7.97	4.65	13	820	-11.63	-6.8	6.87
	14	830	-15.05	-9.73	3.13	14	830	-13.48	-7.81	4.49	14	830	-12.23	-6.51	5.99
	15	840	-15.28	-10.25	2.96	15	840	-13.25	-7.66	4.73	15	840	-12.67	-7.52	5.4
	16	850	-15.35	-10.07	2.92	16	850	-13.12	-7.65	4.87	16	850	-13.18	-8.06	4.81
	17	860	-14.81	-9.37	3.3	17	860	-13.22	-7.33	4.76	17	860	-13.58	-8.63	4.1
	18	870	-14.24	-7.47	3.77	18	870	-13.68	-7.24	4.92	18	870	-14.05	-8.79	3.94
	19	880	-13.83	-6.93	4.14	19	880	-13.19	-7.64	4.8	19	880	-14.67	-9.14	3.41
20	890	-13.83	-6.51	4.33	20	890	-13.22	-8.35	4.77	20	890	-14.87	-9.35	3.26	
21	900	-12.68	-6.05	5.39	21	900	-14.11	-8.63	3.88	21	900	-15.1	-9.5	3.09	
22	910	-12.51	-5.25	5.61	22	910	-14.42	-8.83	3.62	22	910	-14.44	-8.41	3.6	
23	920	-11.99	-5	6.32	23	920	-15.25	-9.57	2.99	23	920	-14.08	-8.13	3.91	
24	930	-12.64	-6.28	5.45	24	930	-15.92	-9.82	2.56	24	930	-14.52	-8.82	3.53	
25	940	-13.74	-6.71	4.22	25	940	-16.03	-9.15	2.5	25	940	-14.88	-9.96	3.25	
26	950	-14.25	-6.65	3.76	26	950	-15.79	-8.6	2.64	26	950	-15.66	-10.38	2.71	
27	960	-15.1	-6.61	3.09	27	960	-15.15	-8.3	3.05	27	960	-15.94	-9.96	2.6	
28	1000	-15.9	-11.72	0.18	28	1000	-15.89	-7.78	3.28	28	1000	-16.32	-10.22	0.22	
29	1710	-27.34	-21.28	0.18	29	1710	-18.83	-7.89	2.61	29	1710	-27.26	-23.18	0.19	
30	1720	-27.06	-20.98	0.2	30	1720	-18.85	-7.78	2.6	30	1720	-27.89	-23.44	0.16	
31	1730	-26.19	-20.23	0.24	31	1730	-16.49	-7.86	2.24	31	1730	-28.31	-23.39	0.15	
32	1740	-25.36	-19.8	0.29	32	1740	-17.08	-8.15	1.96	32	1740	-28.8	-23.62	0.13	
33	1750	-24.28	-19.24	0.37	33	1750	-17.73	-8.49	1.69	33	1750	-29.23	-23.73	0.12	
34	1760	-22.72	-17.67	0.53	34	1760	-18.43	-9.32	1.44	34	1760	-29.5	-24.04	0.11	
35	1770	-21.91	-16.51	0.64	35	1770	-19.25	-9.8	1.19	35	1770	-29.96	-24.4	0.1	
36	1780	-20.35	-15.13	0.92	36	1780	-18.61	-10.24	1.09	36	1780	-30.07	-24.25	0.1	
37	1790	-19.24	-13.3	1.19	37	1790	-20.43	-10.54	0.91	37	1790	-30.2	-24.53	0.1	
38	1800	-18.32	-11.88	1.47	38	1800	-20.33	-10.69	0.93	38	1800	-30.11	-25.02	0.1	
39	1810	-17.65	-11.5	1.71	39	1810	-21.24	-11.54	0.75	39	1810	-29.81	-24.92	0.1	
40	1820	-18.53	-11.94	1.4	40	1820	-21.36	-11.85	0.73	40	1820	-29.61	-24.49	0.11	
41	1830	-18.76	-12.26	1.33	41	1830	-21.91	-12.39	0.64	41	1830	-29.32	-24.27	0.12	
42	1840	-19.08	-12.32	1.24	42	1840	-22.13	-12.96	0.61	42	1840	-29.23	-23.58	0.12	
43	1850	-18.74	-12.26	1.34	43	1850	-22.37	-13.19	0.58	43	1850	-29.2	-23.81	0.12	
44	1860	-18.12	-11.8	1.54	44	1860	-22.65	-14.26	0.54	44	1860	-29.27	-23.2	0.12	
45	1870	-17.69	-10.86	1.7	45	1870	-23.38	-15.17	0.46	45	1870	-29.52	-23.62	0.11	
46	1880	-17.2	-10.14	1.91	46	1880	-23.93	-16.14	0.4	46	1880	-29.76	-23.23	0.11	
47	1890	-16.3	-8.37	2.34	47	1890	-24.49	-17.13	0.36	47	1890	-29.89	-23.2	0.1	
48	1900	-15.74	-8.28	2.67	48	1900	-24.42	-17.24	0.36	48	1900	-29.42	-22.23	0.11	
49	1910	-14.59	-7.11	3.24	49	1910	-24.48	-18.53	0.36	49	1910	-28.8	-21.54	0.13	
50	1920	-13.58	-6.02	3.84	50	1920	-24.86	-18.99	0.33	50	1920	-28.17	-21.69	0.15	
51	1930	-12.69	-5.18	5.38	51	1930	-24.61	-19.16	0.35	51	1930	-27.13	-20.07	0.19	
52	1940	-11.95	-4.64	6.38	52	1940	-24.2	-17.6	0.38	52	1940	-26.3	-19.46	0.23	
53	1950	-11.11	-4.06	7.78	53	1950	-23.58	-19.16	0.44	53	1950	-25.21	-17.19	0.3	
54	1960	-11.57	-4.52	6.97	54	1960	-23.09	-17.9	0.49	54	1960	-24.22	-16.19	0.38	

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
54	1920	-13.58	-6.02	4.41	50	1920	-24.86	-18.99	0.33	50	1920	-28.17	-21.69	0.15			
55	1930	-12.69	-5.18	5.38	51	1930	-24.61	-19.16	0.35	51	1930	-27.13	-20.07	0.19			
56	1940	-11.95	-4.64	6.38	52	1940	-24.2	-17.6	0.38	52	1940	-26.3	-19.46	0.23			
57	1950	-11.11	-4.06	7.78	53	1950	-23.58	-19.16	0.44	53	1950	-25.21	-17.19	0.3			
58	1960	-11.57	-4.52	6.97	54	1960	-23.09	-17.9	0.49	54	1960	-24.22	-16.19	0.38			
59	1970	-11.48	-4.64	7.12	55	1970	-22.54	-16.65	0.56	55	1970	-23.37	-15.67	0.46			
60	1980	-11.91	-4.69	6.44	56	1980	-22.25	-15.05	0.6	56	1980	-22.11	-14.16	0.62			
61	1990	-12.09	-4.83	6.19	57	1990	-21.92	-13.73	0.64	57	1990	-21.1	-13.61	0.78			
62	2000	-12.24	-5.1	5.98	58	2000	-21.24	-12.19	0.75	58	2000	-19.72	-11.19	1.07			
63	2010	-11.38	-4.02	7.28	59	2010	-20.41	-10.97	0.91	59	2010	-18.66	-10.14	1.36			
64	2020	-11.99	-3.77	6.33	60	2020	-19.46	-9.83	1.13	60	2020	-17.78	-9.3	1.67			
65	2030	-12.1	-3.76	6.17	61	2030	-18.98	-8.86	1.26	61	2030	-16.81	-8.64	2.08			
66	2040	-12.1	-4.22	6.17	62	2040	-18.35	-8.21	1.46	62	2040	-16.15	-9.13	2.45			
67	2050	-12.64	-3.58	5.44	63	2050	-18	-10.79	1.59	63	2050	-15.25	-7.5	2.99			
68	2060	-12.2	-3.3	6.03	64	2060	-17.4	-10.65	1.82	64	2060	-14.35	-6.65	3.67			
69	2070	-11.71	-3.82	6.74	65	2070	-16.8	-9.97	2.09	65	2070	-13.32	-5.79	4.66			
70	2080	-11.72	-3.67	6.73	66	2080	-15.87	-8.9	2.59	66	2080	-12.44	-5.26	5.7			
71	2090	-11.7	-2.77	6.76	67	2090	-15.78	-7.89	2.64	67	2090	-11.39	-5.16	7.26			
72	2100	-11.69	-3.13	6.78	68	2100	-15.77	-8.47	2.65	68	2100	-10.19	-3.12	9.37			
73	2110	-11.25	-1.48	7.5	69	2110	-14.5	-6.21	3.55	69	2110	-9.11	-2.09	12.26			
74	2120	-11.03	-1.26	7.88	70	2120	-14.22	-5.85	3.79	70	2120	-8.13	-0.77	15.39			
75	2130	-10.92	-3.9	8.09	71	2130	-13.03	-5.17	4.97	71	2130	-7.47	0.74	20.89			
76	2140	-9.99	-0.93	10.03	72	2140	-12.63	-3.59	5.46	72	2140	-6.61	0.06	19.42			
77	2150	-9.71	-1.32	10.7	73	2150	-11.8	-3.74	6.61	73	2150	-6.79	0.77	17.96			
78	2160	-9.04	0.31	12.46	74	2160	-10.83	-3.17	8.27	74	2160	-6.63	1.34	21.72			
79	2170	-8.66	0.4	13.63	75	2170	-10.02	-1.79	9.96	75	2170	-6.57	1.63	22.05			
80	2180	-9.01	-1.87	12.36	76	2180	-10.15	-2.11	9.66	76	2180	-6.62	1.56	21.77			
81	2190	-8.55	-0.75	13.95	77	2190	-8.77	-0.21	13.27	77	2190	-6.63	0.95	21.73			
82	2200	-8.36	-1.29	13.92	78	2200	-8.23	0.75	15.02	78	2200	-6.66	0.61	21.56			
83	2210	-8.06	0.61	15.65	79	2210	-7.89	0.08	16.24	79	2210	-6.67	0.3	21.55			
84	2220	-8.29	0.58	14.83	80	2220	-7.51	0.42	17.75	80	2220	-6.79	0.08	20.93			
85	2230	-8.65	0.13	13.66	81	2230	-7.09	0.88	19.56	81	2230	-7	-0.15	19.95			
86	2240	-9.01	-2.02	12.57	82	2240	-7.32	0.96	18.52	82	2240	-7.38	-0.53	18.27			
87	2250	-9.43	-2.17	11.41	83	2250	-7.37	0.79	18.24	83	2250	-7.74	-0.98	16.84			
88	2260	-9.7	-2.85	10.72	84	2260	-7.54	0.63	17.64	84	2260	-8.15	-1.43	15.31			
89	2270	-9.92	-2.54	10.18	85	2270	-7.78	0.18									

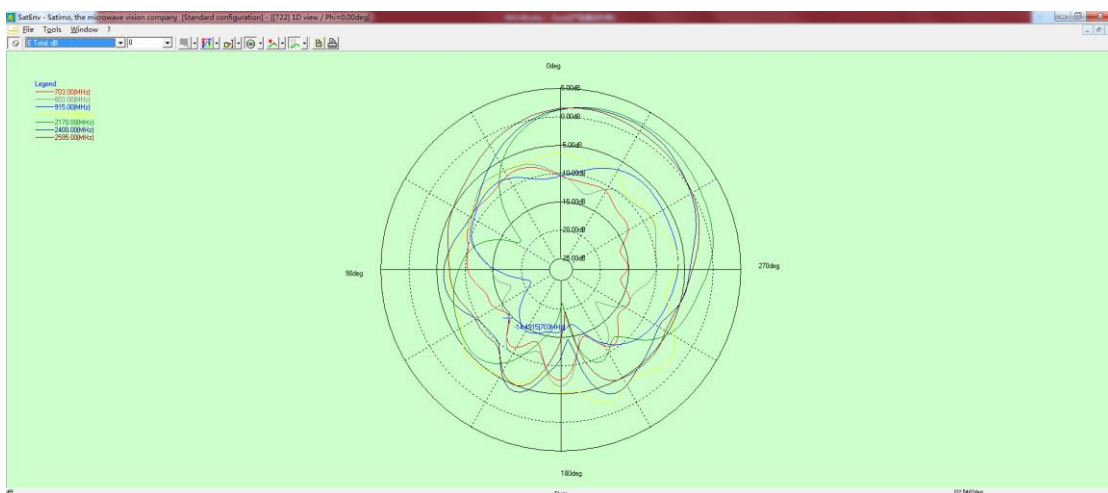


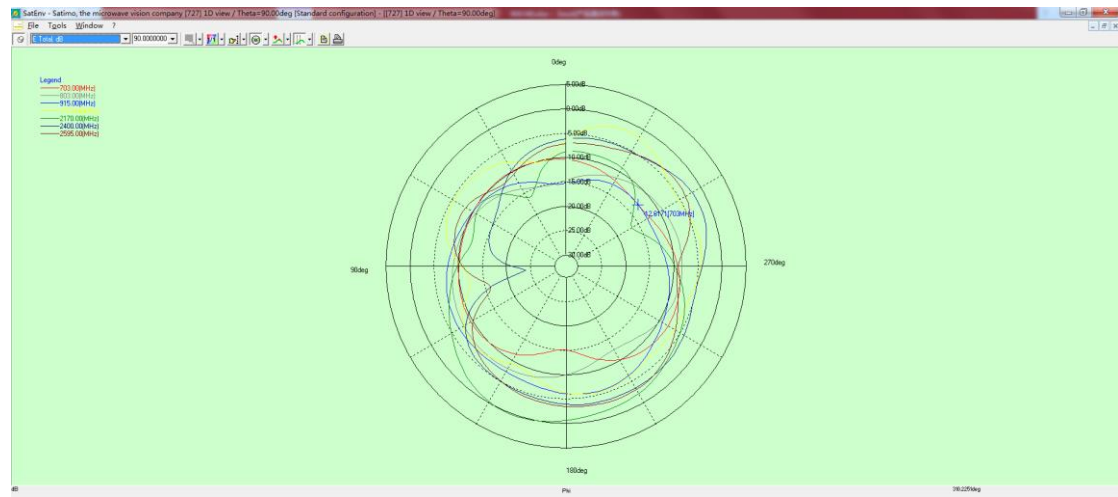
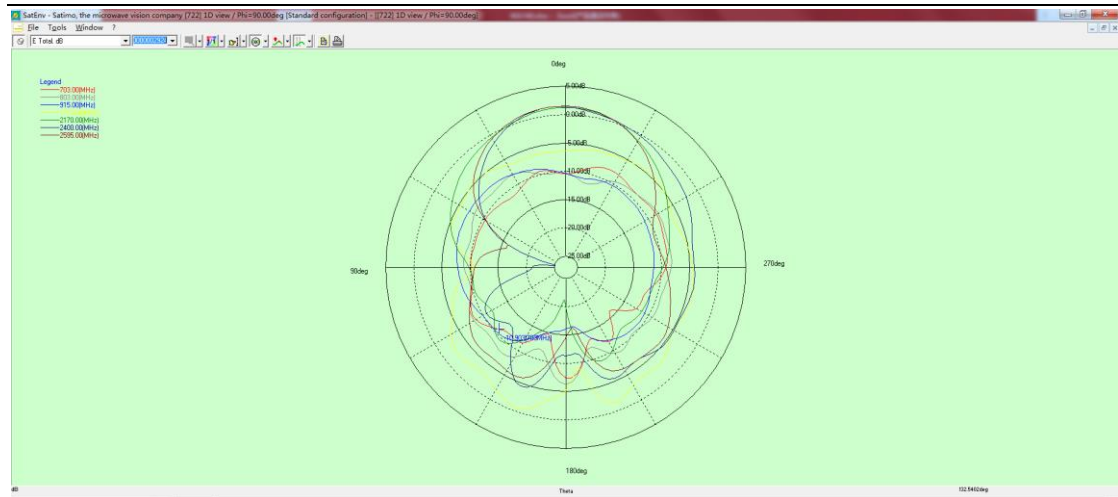
74	2160	-9.04	0.31	12.46	74	2160	-10.83	-3.17	8.27	74	2160	-6.63	1.34	21.72
75	2170	-8.66	0.4	13.63	75	2170	-10.02	-1.79	9.96	75	2170	-6.57	1.63	22.05
76	2180	-9.01	-1.87	12.96	76	2180	-10.15	-2.11	9.66	76	2180	-6.62	1.96	21.77
77	2190	-8.55	-0.75	13.95	77	2190	-8.77	-0.21	13.27	77	2190	-6.63	0.95	21.73
78	2200	-8.56	-1.29	13.92	78	2200	-8.23	0.75	13.02	78	2200	-6.66	0.61	21.56
79	2210	-8.06	0.61	15.65	79	2210	-7.89	0.08	16.24	79	2210	-6.67	0.3	21.55
80	2220	-8.29	0.58	14.83	80	2220	-7.51	0.42	17.75	80	2220	-6.79	0.08	20.93
81	2230	-8.65	0.13	13.66	81	2230	-7.09	0.88	19.56	81	2230	-7	-0.15	19.95
82	2240	-9.01	-2.02	12.57	82	2240	-7.32	0.96	18.52	82	2240	-7.38	-0.53	18.27
83	2250	-9.43	-2.17	11.41	83	2250	-7.37	0.79	18.34	83	2250	-7.74	-0.98	16.84
84	2260	-9.7	-2.85	10.72	84	2260	-7.54	0.63	17.64	84	2260	-8.15	-1.43	15.31
85	2270	-9.92	-2.54	10.18	85	2270	-7.78	0.18	16.69	85	2270	-8.46	-1.86	14.27
86	2280	-10.33	-3.59	9.27	86	2280	-8.15	-0.33	15.32	86	2280	-8.75	-2.28	13.32
87	2290	-10.71	-4.77	8.49	87	2290	-8.75	-1.09	13.94	87	2290	-8.99	-2.59	12.91
88	2300	-10.73	-4.77	8.45	88	2300	-9.37	-1.9	11.55	88	2300	-8.95	-2.77	12.78
89	2310	-10.92	-5.1	8.28	89	2310	-10.04	-2.61	9.91	89	2310	-9	-2.95	12.58
90	2320	-10.74	-5.16	8.43	90	2320	-10.45	-3.11	9.01	90	2320	-8.83	-2.94	13.1
91	2330	-10.64	-5.18	8.62	91	2330	-10.47	-3.64	8.98	91	2330	-8.61	-2.74	13.77
92	2340	-10.56	-4.95	8.79	92	2340	-10.38	-3.64	9.15	92	2340	-8.39	-1.93	14.48
93	2350	-10.33	-4.57	9.27	93	2350	-10.12	-3.2	9.73	93	2350	-8.32	-1.59	14.74
94	2360	-10.17	-5.13	9.61	94	2360	-9.93	-2.73	10.16	94	2360	-8.51	-2.17	14.08
95	2370	-10.19	-4.31	9.57	95	2370	-9.81	-2.12	10.44	95	2370	-8.69	-1.88	13.52
96	2380	-10.31	-3.92	9.31	96	2380	-9.86	-1.69	10.32	96	2380	-8.85	-1.36	13.03
97	2390	-10.49	-3.96	8.93	97	2390	-10.45	-2.41	9.01	97	2390	-9.55	-2	11.1
98	2400	-10.6	-3.79	8.7	98	2400	-10.58	-2.56	8.75	98	2400	-9.81	-2.09	10.45
99	2410	-10.61	-4.08	8.69	99	2410	-10.93	-3	8.07	99	2410	-10.23	-2.81	9.48
100	2420	-10.64	-4.64	8.62	100	2420	-10.92	-2.96	8.09	100	2420	-10.08	-2.45	9.82
101	2430	-10.31	-3.82	9.31	101	2430	-11.13	-3.4	7.7	101	2430	-10	-2.71	10
102	2440	-10.11	-3.78	9.76	102	2440	-11.54	-4.28	7.02	102	2440	-10.11	-3.37	9.75
103	2450	-9.8	-3.73	10.47	103	2450	-10.9	-3.39	8.12	103	2450	-9.94	-2.58	10.13
104	2460	-9.36	-2.93	11.86	104	2460	-10.31	-2.25	9.31	104	2460	-9.32	-1.61	11.7
105	2470	-9.24	-3.01	11.91	105	2470	-10.89	-3.44	8.15	105	2470	-9.59	-2.36	10.99
106	2480	-8.71	-3.49	13.46	106	2480	-10.04	-2.43	9.92	106	2480	-9.05	-1.29	12.46
107	2490	-8.55	-3.09	13.97	107	2490	-9.86	-1.87	10.33	107	2490	-9.1	-1.43	12.31
108	2500	-8.18	-1.9	15.22	108	2500	-9.94	-0.73	12.75	108	2500	-7.84	0.02	16.45
109	2510	-7.9	-1.51	16.23	109	2510	-10.35	-2.13	9.23	109	2510	-8.38	-1.1	14.51
110	2520	-8.2	-1.66	15.14	110	2520	-10.97	-4.1	7.99	110	2520	-9.92	-3.47	10.18
111	2530	-8.14	-1.92	15.34	111	2530	-10.72	-4.35	8.47	111	2530	-10.56	-4.45	8.78
112	2540	-8.56	-2.18	13.94	112	2540	-10.48	-3.39	8.96	112	2540	-10.67	-4.35	8.57
113	2550	-8.66	-2.37	13.62	113	2550	-10.29	-3.19	9.35	113	2550	-10.57	-4.11	8.76
114	2560	-8.9	-2.54	12.88	114	2560	-10.18	-2.41	9.6	114	2560	-10.52	-3.97	8.88
115	2570	-9.23	-2.44	11.95	115	2570	-10.15	-3.2	9.66	115	2570	-10.41	-3.82	9.1
116	2580	-9.09	-2.46	12.32	116	2580	-10	-2.95	9.99	116	2580	-10.24	-3.58	9.47
117	2590	-9.42	-2.16	11.44	117	2590	-10.04	-2.55	9.92	117	2590	-10.2	-3.51	9.56
118	2600	-9.41	-2.15	11.46	118	2600	-10.08	-2.69	9.81	118	2600	-10.13	-3.45	9.71
119	2610	-9.25	-2.03	11.89	119	2610	-10.08	-2.79	9.81	119	2610	-9.99	-3.24	10.02
120	2620	-9.35	-2.06	11.62	120	2620	-10.2	-3.1	9.56	120	2620	-10.02	-3.29	9.96
121	2630	-8.93	-1.83	12.8	121	2630	-10.26	-2.15	9.41	121	2630	-9.85	-2.98	10.33
122	2640	-8.7	-1.91	13.45	122	2640	-10.36	-2.44	9.2	122	2640	-9.68	-2.66	10.76
123	2650	-8.39	-1.52	14.45	123	2650	-10.43	-1.96	9.06	123	2650	-9.52	-2.36	11.17
124	2660	-8.02	-0.97	15.79	124	2660	-10.52	-1.98	8.88	124	2660	-9.38	-2.14	11.52
125	2670	-7.82	-0.77	16.51	125	2670	-10.65	-2.3	8.62	125	2670	-9.38	-2.09	11.53
126	2680	-7.68	-0.53	17.05	126	2680	-10.92	-2.77	8.08	126	2680	-9.3	-2.19	11.21
127	2690	-7.8	-0.43	16.59	127	2690	-11.35	-3.11	7.33	127	2690	-9.79	-2.48	10.49
128	2700	-7.83	-0.4	16.47	128	2700	-11.66	-3.53	6.83	128	2700	-10.12	-2.79	9.74

4、 Radiation Pattern

4.1 Antenna radiation pattern

Antenna:





5、 Structure drawing

Antenna:

