

PRODUCT SPECIFICATION

Customer: Shenzhen Xianzhi IOT Technology Co., Ltd.

Customer's part number: XXXXXXXXX

RedbirdTek number:RBT-ANT-245-LS-V1.0

Product description: 2.4G/5G Dual Frequency Antenna

Manufacturer: Shenzhen RedbirdTek Technology Co., Ltd.

1、PRODUCT TECHNICAL SPECIFICATION

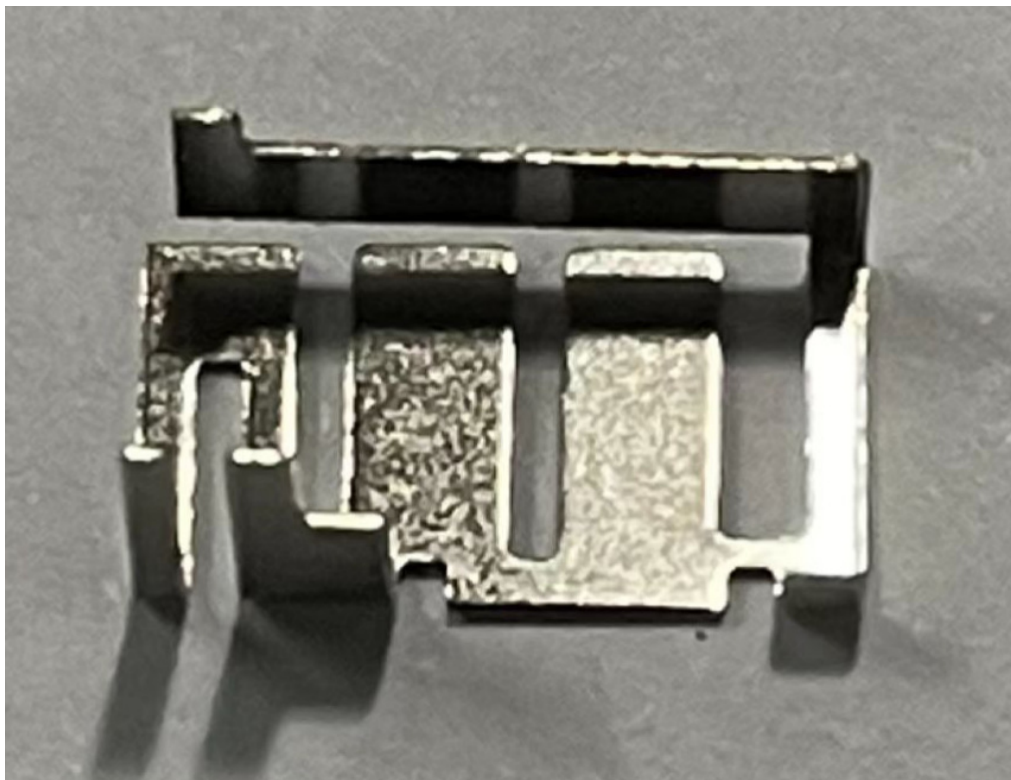
Electrical Specifications	
Frequency Range (MHz)	2400-2500/5150-5850
Bandwidth (MHz)	2.4G: 100 5G: 700
Input Impedence (Ω)	50
V.S.W.R	≤ 2.0
Gain (dBi)	2.4G: ≤ 0.56 5G: 5150-5250 MHz: 1.27; 5270-5330 MHz: 1.23; 5350-5430 MHz:0.87; 5450-5530 MHz:1.13; 5550-5630 MHz:1.52; 5650-5730 MHz:1.2; 5750-5850 MHz:0.51
Polarization Type	Vertical
Mechanical Specifications	
Antenna Length (mm)	11.1*6.2*3mm
Radiator	Steel
Connect Type	DIP

Radome Color	Silver
Weight (g)	0.3

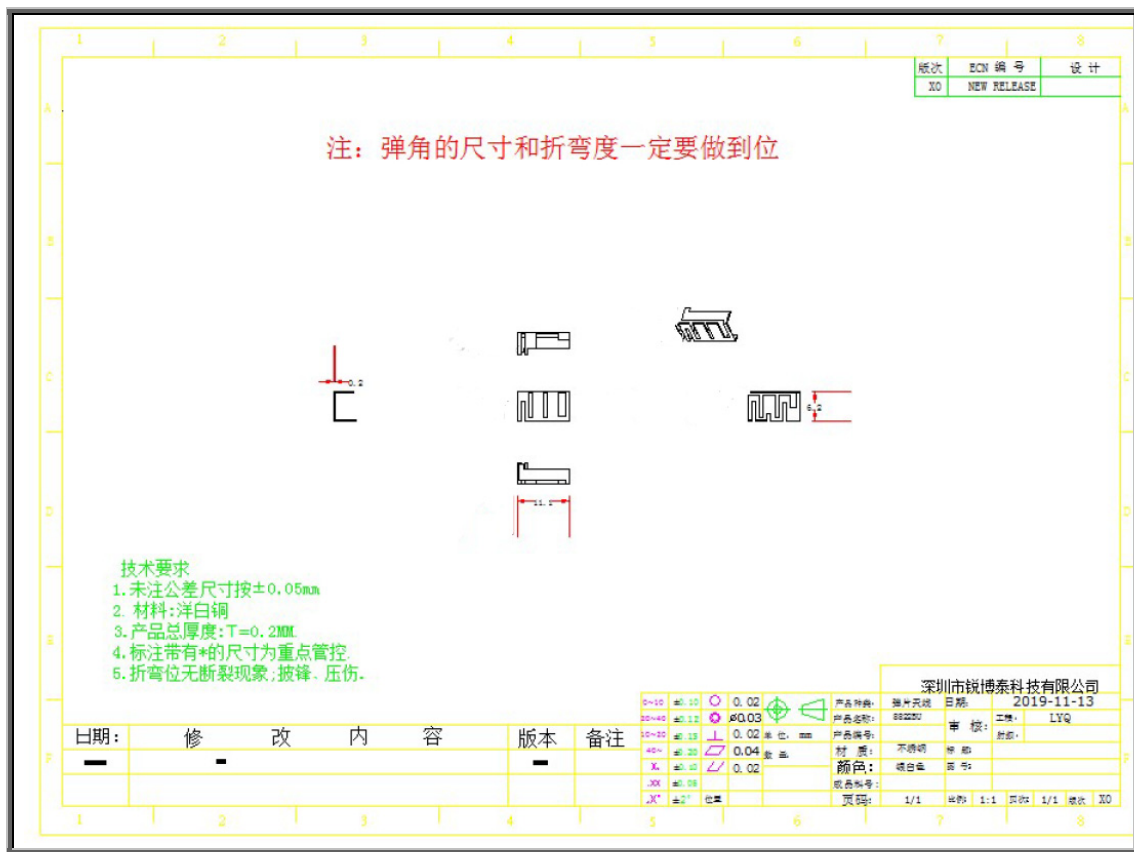
Product introduction:

The antenna is specially designed and produced for wireless built-in antenna equipment. The antenna has the advantages of beautiful appearance, compact structure and convenient installation. The material is nickel-plated stainless steel with sufficient hardness.

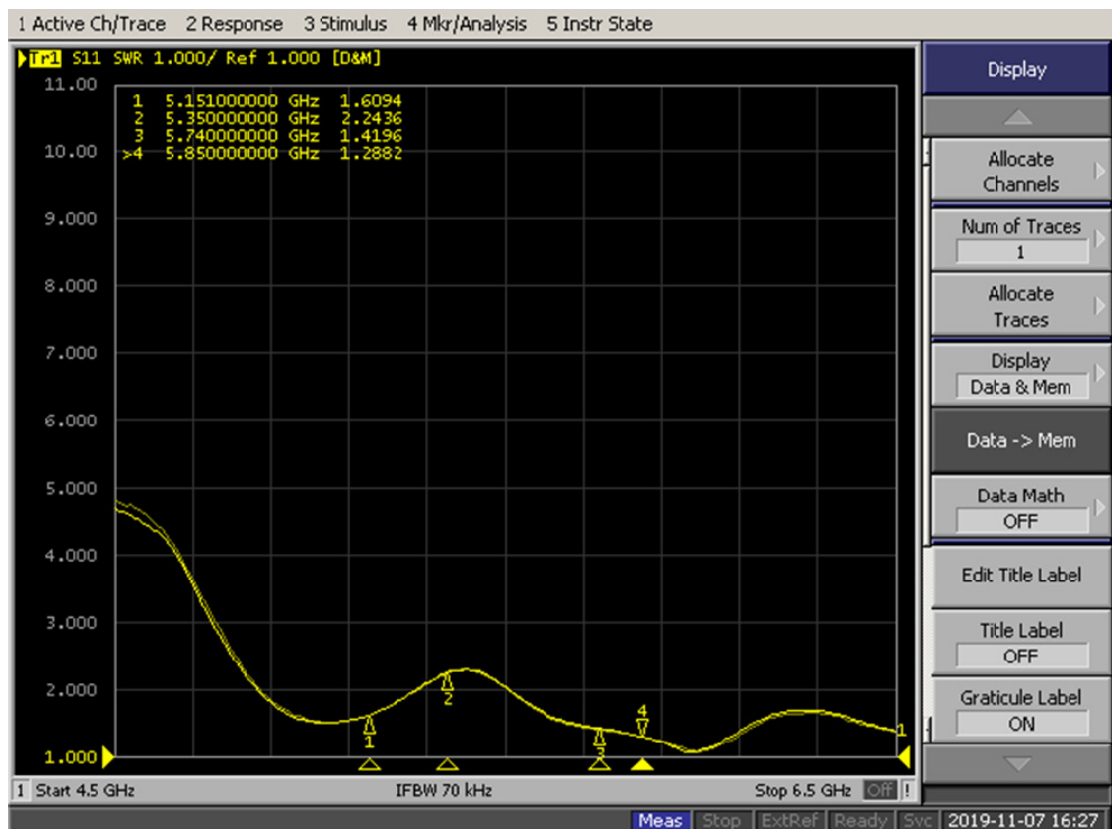
2、PRODUCT PICTURE



3、PRODUCT SPECIFICATION CHART



4、STATIONARY WAVE PATTERN



5. Gain and Efficiency:

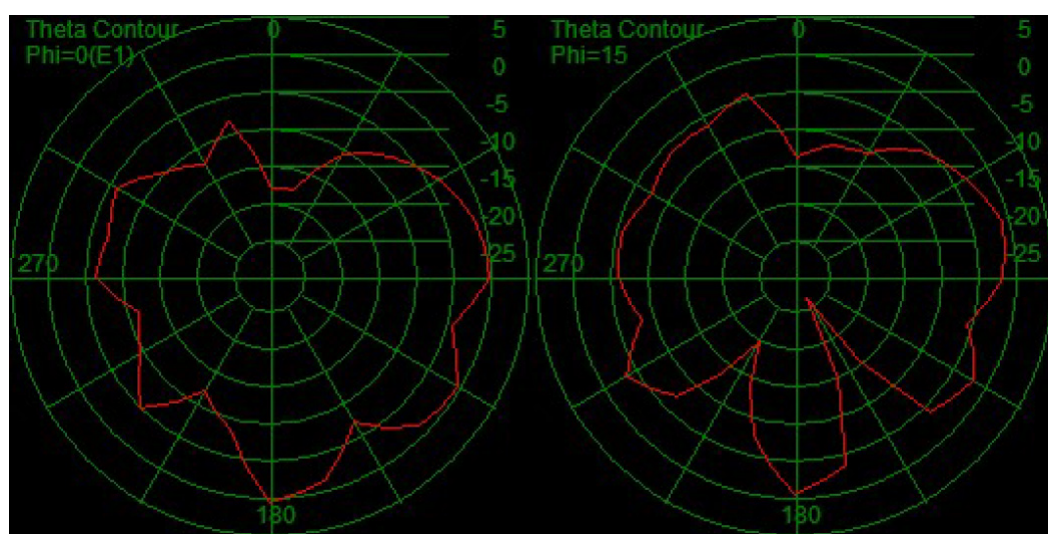
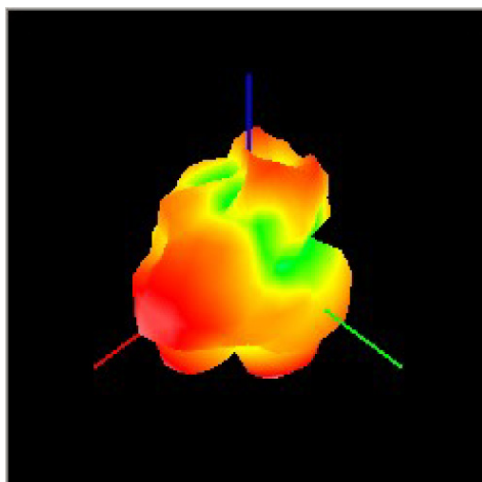
Test Point ID	Freq. (MHz)	TRP (dBm)	Gain (dBi)	Directivity (dBi)	Efficiency (dB)	Efficiency (dB)	Max (dBm)	Theta of Max	Phi of Max	Min (dBm)	Theta of Min	Phi of Min	AVG (dBm)	Max/Min (dB)	Max/AVG (dB)	Min/AVG (dB)
1	2400.0	2400.00	0.34	3.83	43.6%	-6.16	0.34	120	255	-95.99	0	0	-6.87	93.65	4.53	-89.12
2	2410.0	2410.00	0.26	4.04	50.1%	-7.16	0.26	120	255	-95.99	0	0	-7.76	92.87	4.64	-88.23
3	2420.0	2420.00	0.34	3.77	51.3%	-6.47	0.34	120	255	-95.99	0	0	-6.86	93.29	4.16	-89.13
4	2430.0	2430.00	0.46	4.12	52.2%	-5.46	0.46	120	240	-95.99	0	0	-5.73	94.66	4.40	-90.26
5	2440.0	2440.00	0.56	4.07	49.4%	-5.76	0.56	120	240	-95.99	0	0	-6.04	94.30	4.36	-89.95
6	2450.0	2450.00	0.29	3.86	48.3%	-3.41	0.29	150	285	-95.99	0	0	-3.69	96.43	4.13	-92.30
7	2460.0	2460.00	0.37	4.12	47.3%	-4.41	0.37	75	225	-95.99	0	0	-4.68	95.70	4.39	-91.31
8	2470.0	2470.00	0.19	3.51	46.8%	-3.29	0.19	150	285	-95.99	0	0	-3.81	96.20	4.03	-92.17
9	2480.0	2480.00	0.21	3.26	45.2%	-4.57	0.21	75	225	-95.99	0	0	-5.56	94.68	4.25	-90.43
10	2490.0	2490.00	0.34	2.96	44.2%	-5.17	0.34	75	225	-95.99	0	0	-6.28	93.79	4.08	-89.71
11	2500.0	2500.00	0.37	4.91	43.4%	-6.74	0.37	120	225	-95.99	0	0	-7.87	94.16	6.04	-88.12
12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

2.4G

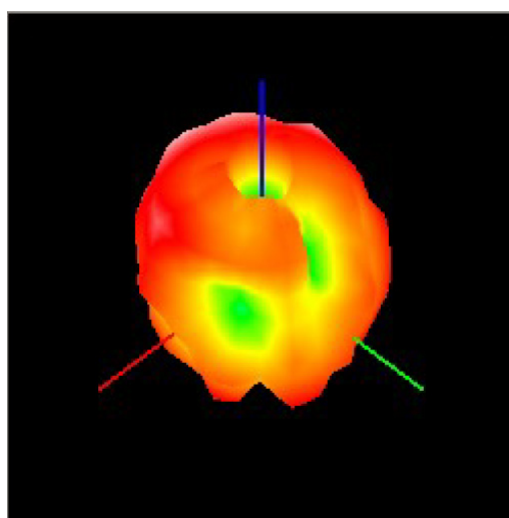
Test Point ID	Freq. (MHz)	TRP (dBm)	Gain (dBi)	Directivity (dBi)	Efficiency (dB)	Efficiency (dB)	Max (dBm)	Theta of Max	Phi of Max	Min (dBm)	Theta of Min	Phi of Min	AVG (dBm)	Max/Min (dB)	Max/AVG (dB)	Min/AVG (dB)
1	5150.0	5150.00	0.82	4.07	47.3%	-3.25	0.82	45	180	-26.42	0	90	-4.28	27.24	5.09	-22.14
2	5170.0	5170.00	1.02	4.64	57.9%	-2.37	1.02	45	180	-20.80	0	105	-3.54	23.06	5.80	-17.26
3	5190.0	5190.00	1.27	3.95	53.9%	-2.69	1.27	45	180	-24.93	0	135	-4.18	26.20	5.45	-20.74
4	5210.0	5210.00	1.00	3.15	61.1%	-2.14	1.00	135	0	-23.97	180	90	-3.82	24.97	4.82	-20.15
5	5230.0	5230.00	0.71	3.02	58.8%	-2.30	0.71	30	180	-23.68	150	135	-4.02	24.39	4.73	-19.66
6	5250.0	5250.00	0.95	3.38	57.2%	-2.43	0.95	45	165	-22.00	165	285	-4.20	22.95	5.15	-17.80
7	5270.0	5270.00	1.23	3.54	50.1%	-0.80	1.23	135	0	-21.71	15	285	-2.46	24.45	5.19	-19.26
8	5290.0	5290.00	1.05	4.67	52.4%	-1.36	1.05	135	0	-27.62	150	300	-2.73	30.93	6.04	-24.89
9	5310.0	5310.00	1.10	4.74	53.1%	0.35	1.10	135	0	-18.46	165	330	-0.96	23.55	6.05	-17.50
10	5330.0	5330.00	0.98	3.44	54.2%	-1.23	0.98	60	75	-23.38	165	300	-2.78	25.59	4.99	-20.60
11	5350.0	5350.00	0.87	4.20	55.1%	-0.96	0.87	135	0	-22.75	150	135	-2.62	25.99	5.87	-20.13
12	5370.0	5370.00	0.75	4.81	55.2%	-1.97	0.75	135	0	-24.27	180	15	-3.61	27.11	6.45	-20.67
13	5390.0	5390.00	0.72	4.51	52.1%	-0.74	0.72	135	0	-24.91	150	315	-2.29	28.69	6.06	-22.63
14	5410.0	5410.00	0.67	4.59	50.2%	-0.89	0.67	135	0	-25.04	135	60	-2.56	28.74	6.26	-22.48
15	5430.0	5430.00	0.73	4.72	49.6%	-1.04	0.73	135	0	-23.19	150	135	-2.62	26.87	6.30	-20.57
16	5450.0	5450.00	0.62	5.90	48.3%	-0.06	0.62	135	0	-19.05	165	315	-1.30	24.89	7.14	-17.75
17	5470.0	5470.00	0.82	5.97	43.3%	0.10	0.82	135	0	-20.03	150	315	-1.47	26.11	7.54	-18.57
18	5490.0	5490.00	0.91	4.60	43.6%	-0.30	0.91	135	0	-22.14	0	90	-2.08	26.44	6.38	-20.07
19	5510.0	5510.00	1.05	4.46	42.4%	1.17	1.05	60	165	-25.02	165	315	-0.45	30.65	6.08	-24.57
20	5530.0	5530.00	1.13	5.17	41.2%	-0.30	1.13	135	0	-26.03	165	300	-2.11	30.91	6.98	-23.93
21	5550.0	5550.00	1.18	5.01	43.7%	0.50	1.18	135	0	-23.43	0	0	-1.39	28.95	6.91	-22.04
22	5570.0	5570.00	1.35	5.21	45.2%	0.45	1.35	120	0	-22.88	165	300	-1.48	28.54	7.14	-21.40
23	5590.0	5590.00	1.42	5.23	46.8%	0.26	1.42	120	0	-21.52	150	315	-1.69	27.01	7.18	-19.83
24	5610.0	5610.00	1.52	5.44	47.2%	1.36	1.52	135	0	-21.13	0	15	-0.55	27.94	7.36	-20.58
25	5630.0	5630.00	1.30	6.04	43.1%	1.01	1.30	120	0	-17.10	180	105	-0.80	24.15	7.86	-16.29
26	5650.0	5650.00	1.20	6.12	43.2%	1.36	1.20	135	0	-17.97	0	0	-0.28	25.45	7.77	-17.69
27	5670.0	5670.00	0.94	6.15	44.2%	1.72	0.94	135	0	-24.35	0	0	-0.12	32.22	7.99	-24.23
28	5690.0	5690.00	0.82	5.32	45.7%	0.96	0.82	135	0	-21.69	165	300	-0.78	27.97	7.06	-20.91
29	5710.0	5710.00	0.67	6.31	45.6%	1.29	0.67	135	0	-17.16	15	315	-0.27	24.76	7.67	-16.89
30	5730.0	5730.00	0.54	5.81	46.8%	2.23	0.54	135	0	-15.90	165	105	0.42	23.95	7.62	-16.33
31	5750.0	5750.00	0.51	5.86	43.3%	2.75	0.51	135	0	-21.51	165	15	0.91	30.12	7.70	-22.42
32	5770.0	5770.00	0.48	6.48	42.1%	1.38	0.48	135	0	-21.29	180	15	-0.20	29.16	8.06	-21.09
33	5790.0	5790.00	0.50	5.82	41.1%	2.58	0.50	135	0	-23.38	165	15	0.59	31.79	7.81	-23.98
34	5810.0	5810.00	0.49	5.61	40.2%	2.39	0.49	135	0	-20.93	165	15	0.37	28.93	7.63	-21.30
35	5830.0	5830.00	0.42	5.91	40.3%	1.29	0.42	135	0	-17.91	180	15	-0.18	25.10	7.37	-17.73
36	5850.0	5850.00	0.40	6.53	40.0%	-1.16	0.40	135	0	-31.97	15	315	-3.29	37.34	8.66	-28.68

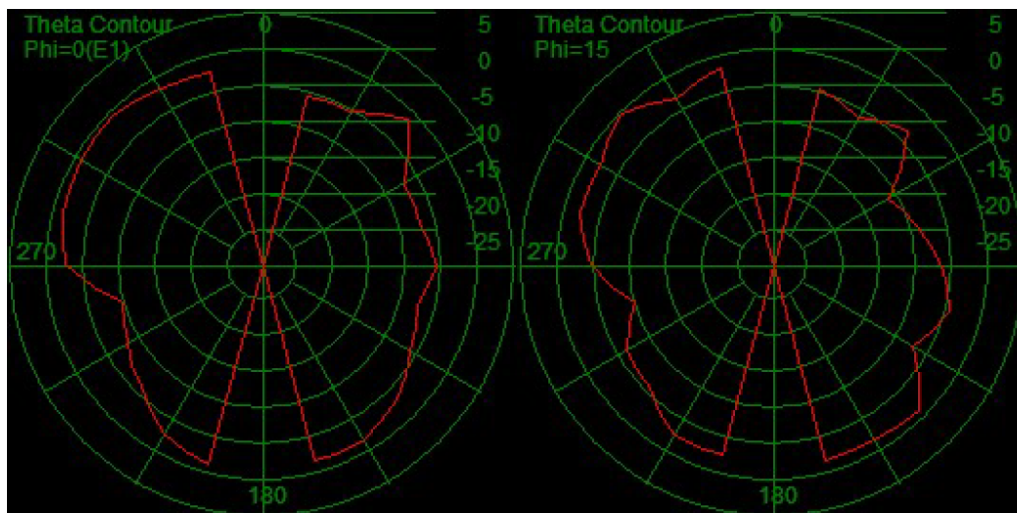
5G

6. Field Pattern:



2.4G





5G