



# 深圳市星通无线技术有限公司

Shenzhen Xingtong Wireless Technology Co., Ltd

+86-755- 27850514

+86- 0755-27850514

地 址：深圳市宝安区西乡九围强荣东工业区 A1 栋 3 楼

3rd Floor, Building A1, Qiangrong East Industrial Zone, Jiuwei, Xixiang, Baoan District, Shenzhen

# specification

Project name: CREagle tablet Terminal

Product name: CREagle flat terminal WiFi/BT antenna

## 1.产品结构 (Product Construction)

1. Antenna material: FPC
2. Adhesive type: 3M9471
3. Antenna size: 33.5\*9.6 (tolerance  $\pm 0.2\text{mm}$ )
4. Antenna form: FPC+IPEX (RF coaxial line  $\varnothing 1.13$   $\varnothing 90\text{mm}$ -1 generation)

## 2.参数指标 (Parameter index)

Scope of use: guest machine

Antenna frequency: 2400-2484mhz 5150-5850mhz

Antenna technology: unipolar coupling

The average free space gain at the plate end of the antenna :  $2.4\text{G} \geq 4.3\text{dbi}$  The average free space gain at the receiving end of the antenna:  $2.4\text{G} \geq 1.1\text{dbi}$  the standing wave of the antenna:  $< 1.52\text{DBm}$

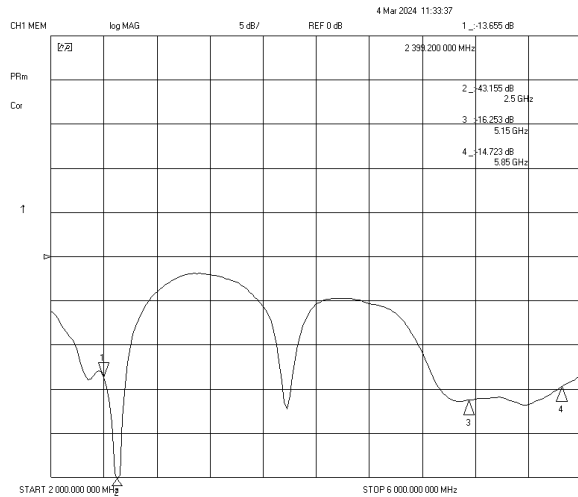
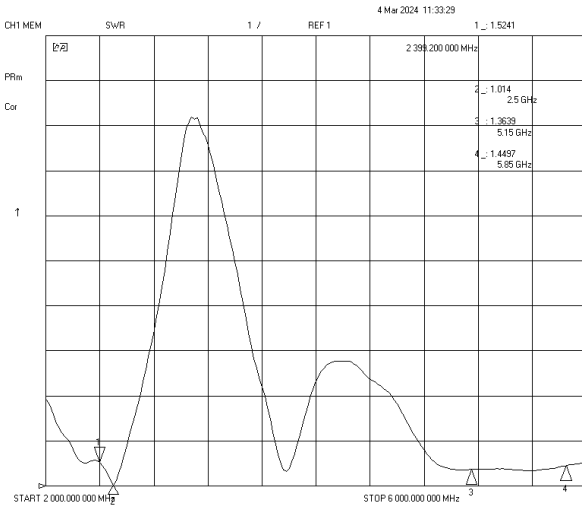
$5.8\text{G} \geq 1.87\text{dbi}$

Return loss:  $< -14\text{DB}$

Antenna polarization mode: vertical/horizontal

Power capacity: 5W

Installation method: Connect the IPEX terminal cable to the mainboard

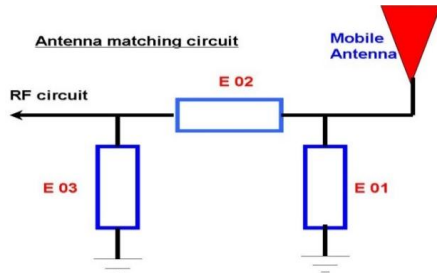


频点	2400mhz	2500mhz	5150Mhz	5850Mhz
SWR(dbm)	1.52	1.01	1.36	1.44
LOG (db)	-13.65	-43.15	-16.25	-14.72

产品名称

CREagele

CREagele-APP-RA



WIFI/BT Antenna	
Element	Value
E1 (0201)	
E2 (0201)	
E3 (0201)	
E4 (0201)	
匹配无修改	

4.2.1-2. 4G-TEST-2D(平板端) tablet device

Frequency ID	1	2	3	4	5	6	7	8	9	10	11
Frequency (MHz)	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0
Efficiency (dBi)	-1.56	-1.59	-1.33	-1.29	-1.58	-1.39	-1.52	-1.73	-1.44	-1.68	-1.91
Gain (dBi)	5.55	5.43	5.62	5.62	5.22	5.30	5.07	4.82	4.96	4.53	4.30
Efficiency (%)	69.89	69.31	73.66	74.25	69.43	72.60	70.40	67.20	71.82	67.85	64.42
Directivity (dB)	5.11	5.02	4.95	4.91	4.80	4.69	4.60	4.55	4.40	4.22	4.21
Peak Gain Position (Theta)	105.00	105.00	105.00	105.00	105.00	105.00	105.00	105.00	105.00	105.00	90.00
Peak Gain Position (Phi)	285.00	285.00	285.00	285.00	285.00	285.00	285.00	285.00	285.00	285.00	300.00
Efficiency ThetaPol (%)	68.67	68.06	72.29	72.78	67.96	70.94	68.69	65.53	69.92	65.95	62.48
Efficiency PhiPol (%)	1.22	1.25	1.36	1.47	1.47	1.67	1.71	1.67	1.90	1.90	1.94
Upper Hem. Efficiency (%)	16.75	17.28	18.99	19.87	19.48	21.64	22.47	22.77	25.65	25.52	25.52
Lower Hem. Efficiency (%)	53.14	52.03	54.67	54.38	49.95	50.96	47.93	44.42	46.16	42.33	38.91

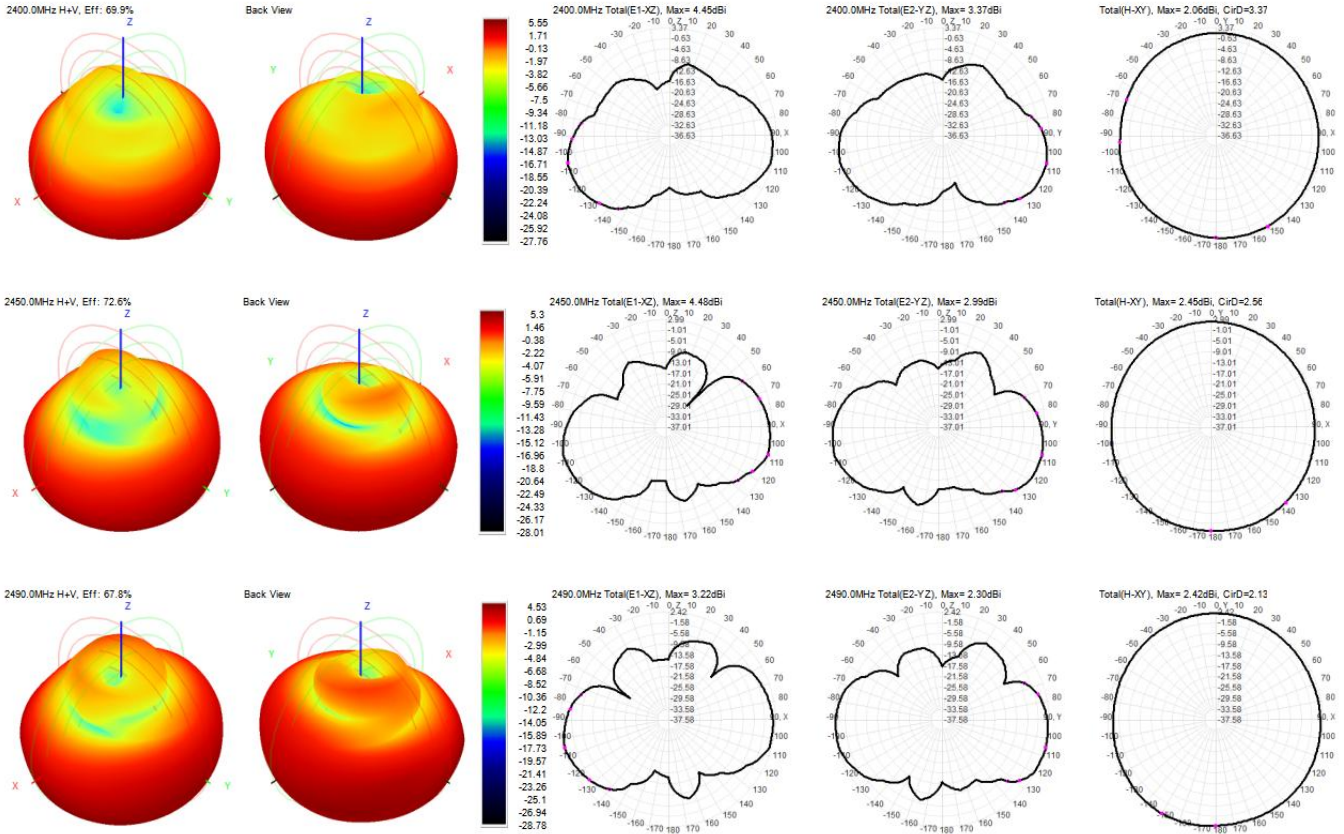
4.2.2-5G-TEST-2D (平板端) tablet device

Frequency ID	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
Frequency (MHz)	5150.0	5200.0	5250.0	5300.0	5350.0	5400.0	5450.0	5500.0	5550.0	5600.0	5650.0	5700.0	5750.0	5800.0	5850.0
Efficiency (dBi)	-2.21	-2.11	-2.38	-2.33	-2.53	-2.62	-2.36	-2.71	-2.04	-2.40	-3.07	-2.03	-2.39	-3.43	-1.65
Gain (dBi)	3.02	4.02	3.26	3.10	2.87	2.56	2.97	2.56	2.96	2.62	2.04	3.20	2.75	1.87	3.08
Efficiency (%)	60.08	61.45	57.85	58.42	55.81	54.65	58.08	53.57	62.49	57.52	49.33	62.67	57.74	45.42	68.35
Directivity (dB)	5.23	6.13	5.64	5.44	5.41	5.18	5.33	5.27	5.00	5.02	5.11	5.23	5.14	5.30	4.73
Peak Gain Position (Theta)	90.00	90.00	90.00	90.00	90.00	90.00	90.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	45.00
Peak Gain Position (Phi)	75.00	90.00	105.00	105.00	105.00	105.00	105.00	0.00	30.00	0.00	345.00	345.00	30.00	0.00	315.00
Efficiency ThetaPol (%)	47.08	48.66	47.24	47.87	45.43	44.73	47.83	43.06	50.51	46.54	40.11	51.63	47.04	37.26	55.13
Efficiency PhiPol (%)	13.00	12.79	10.61	10.55	10.38	9.92	10.25	10.51	11.97	10.98	9.22	11.05	10.70	8.16	13.22
Upper Hem. Efficiency (%)	38.64	40.29	38.33	39.65	38.17	38.27	40.74	37.95	44.79	41.67	35.72	45.59	41.98	32.80	49.34
Lower Hem. Efficiency (%)	21.43	21.16	19.53	18.77	17.64	16.38	17.34	15.62	17.69	15.85	13.61	17.09	15.75	12.63	19.01

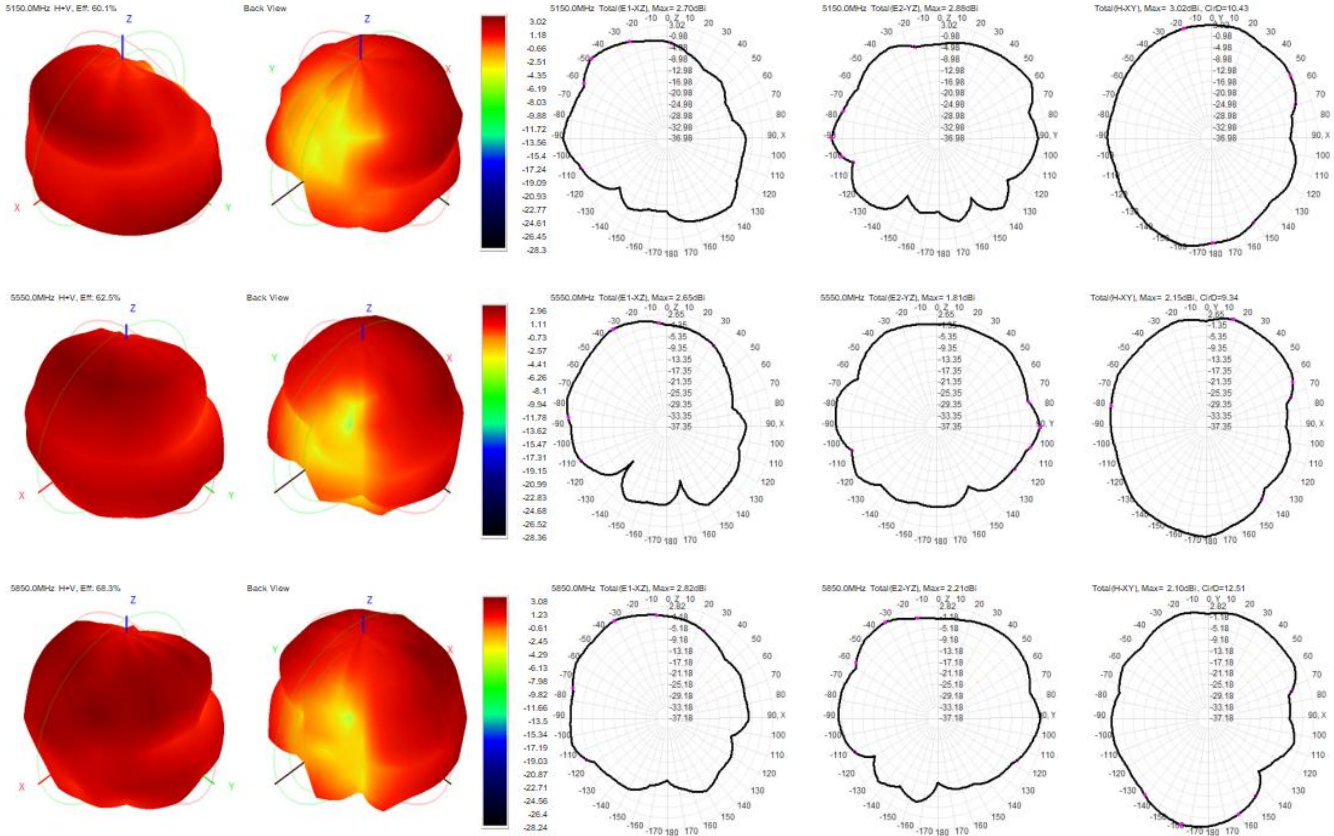
4.2.3-BT/WIFI-2D (接收端) receiving terminal

Frequency ID	1	2	3	4	5	6	7	8	9	10	11
Frequency (MHz)	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0
Efficiency (dBi)	-2.79	-2.95	-2.78	-2.88	-3.00	-2.88	-2.91	-2.98	-2.84	-3.06	-3.21
Gain (dBi)	1.19	1.39	1.77	1.69	1.41	1.55	1.44	1.50	1.55	1.30	1.02
Efficiency (%)	52.65	50.72	52.67	51.52	50.10	51.50	51.12	50.38	51.95	49.42	47.76
Directivity (dB)	3.98	3.93	3.76	3.57	3.41	3.43	3.36	3.48	3.39	3.36	3.18
Peak Gain Position (Theta)	165.00	165.00	165.00	165.00	120.00	120.00	75.00	75.00	75.00	75.00	75.00
Peak Gain Position (Phi)	165.00	165.00	165.00	165.00	270.00	270.00	75.00	75.00	75.00	75.00	75.00
Efficiency ThetaPol (%)	32.87	31.53	33.25	32.48	31.87	32.32	32.12	32.10	33.04	31.80	30.70
Efficiency PhiPol (%)	19.79	19.19	19.41	19.04	18.23	19.18	19.00	18.28	18.91	17.62	17.06
Upper Hem. Efficiency (%)	23.34	22.79	23.97	23.64	23.27	24.26	24.44	24.40	25.51	24.54	24.02
Lower Hem. Efficiency (%)	29.31	27.93	28.70	27.88	26.83	27.24	26.68	25.98	26.45	24.88	23.74

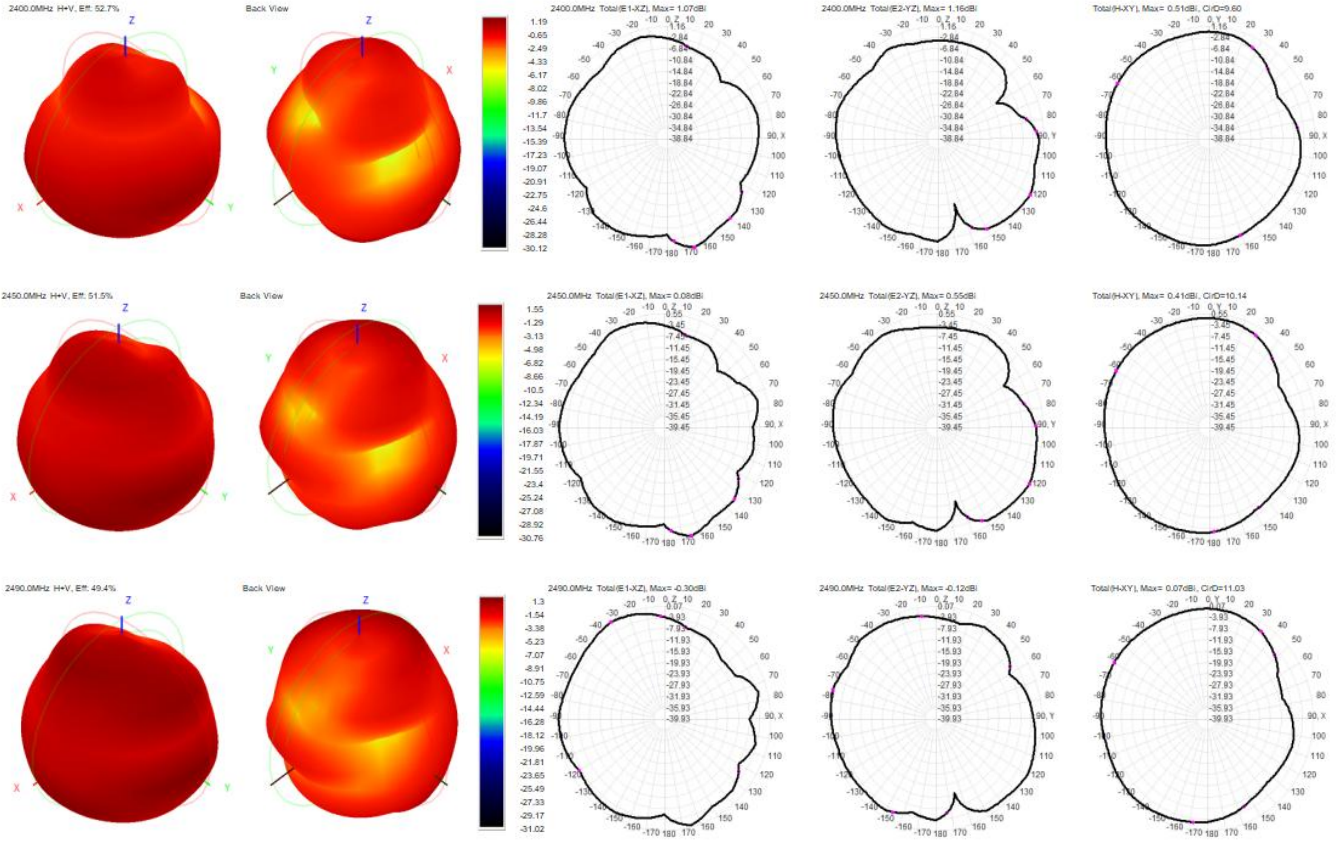
4.2.3-2. 4G-3D



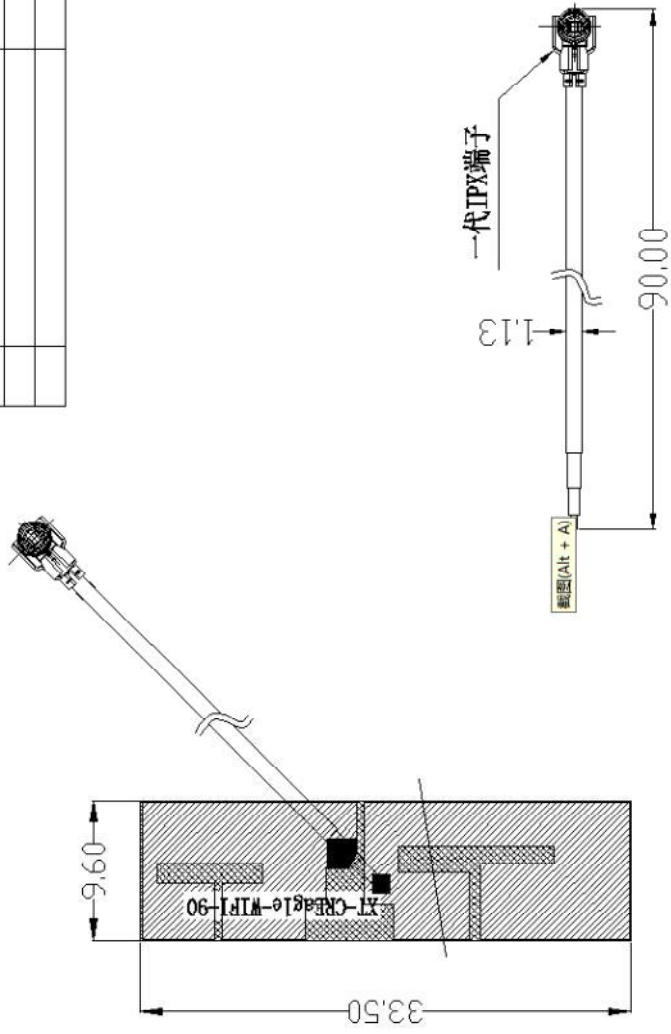
4.2.4-5G-3D



#### 4.2.5-WiFi/BT接收端BT receiving end



1	2	3	4
A	B	C	D
版本		修改内容	修改者



图例:		外形	□
		线路	□
		金手指	■
		手撕位	—
<b>深圳市星通无线技术有限公司</b>			
单位: 图	名称: CREagle	日期: 2024/06/11	
一般公差:	料号:	设计: x x	
.X ±0.5		R F:	
.I ±0.25	材质: PVC	审核: x x	
.XX ±0.10	表面处理: 清治	比例: 1:1	版本: A0
.XXX ±0.05	颜色: 黑		
ANGULAR < 1 0.5°			

## 6. 维持力验证:

	CREagele 内置 FPC 天线 Built-in FPC antenna	5PCS
2024-05-11		2024-05-11





