

ALink3 2.4G WiFi Antenna Specification

客户

CUSTOMER: _____

客户料号

CUSTOMER NO: _____

品 名

PART NAME: ALink3 2.4G 内置板载天线

料 号

SUPPLIER NO: _____

目录 (Index) :

- 1. 产品规格 (Product Specification)**
- 2. 网络参数测试数据 (S Parameter Test Data)**
- 3. 天线辐射场型测试 (Antenna Radiation Pattern Test)**
- 4. 效率及增益测试数据 (Efficiency and Gain Test Data)**

1. 产品规格 (Product Specification)

产品照片 (Product Photo)



A. 电性参数 (Electrical Characteristics)

频率 (Frequency)	2400-2500MHz
电压驻波比 (V.S.W.R)	<=2.0@2400-2500MHz
返回损失 (Return Loss)	<=-10dB@2400-2500MHz
天线增益 (Antenna Gain)	1.92dBi
辐射效率 (Radiation Efficiency)	30%-40%
极化方式 (Polarization)	线性 (Linear)
阻抗 (Impedance)	50 Ohm
天线类型 (Antenna Type)	PIFA

B. 材料及机械特性 (Material & Mechanical Characteristics)

辐射材质 (Material of Radiator)	Cu
线材类型 (Cable Type)	/
接头类型 (Connector Type)	/
拉力测试 (Pull Test)	/

C. 环境因素 (Environmental)

工作温度 (Operation Temperature)	
储存温度 (Storage Temperature)	

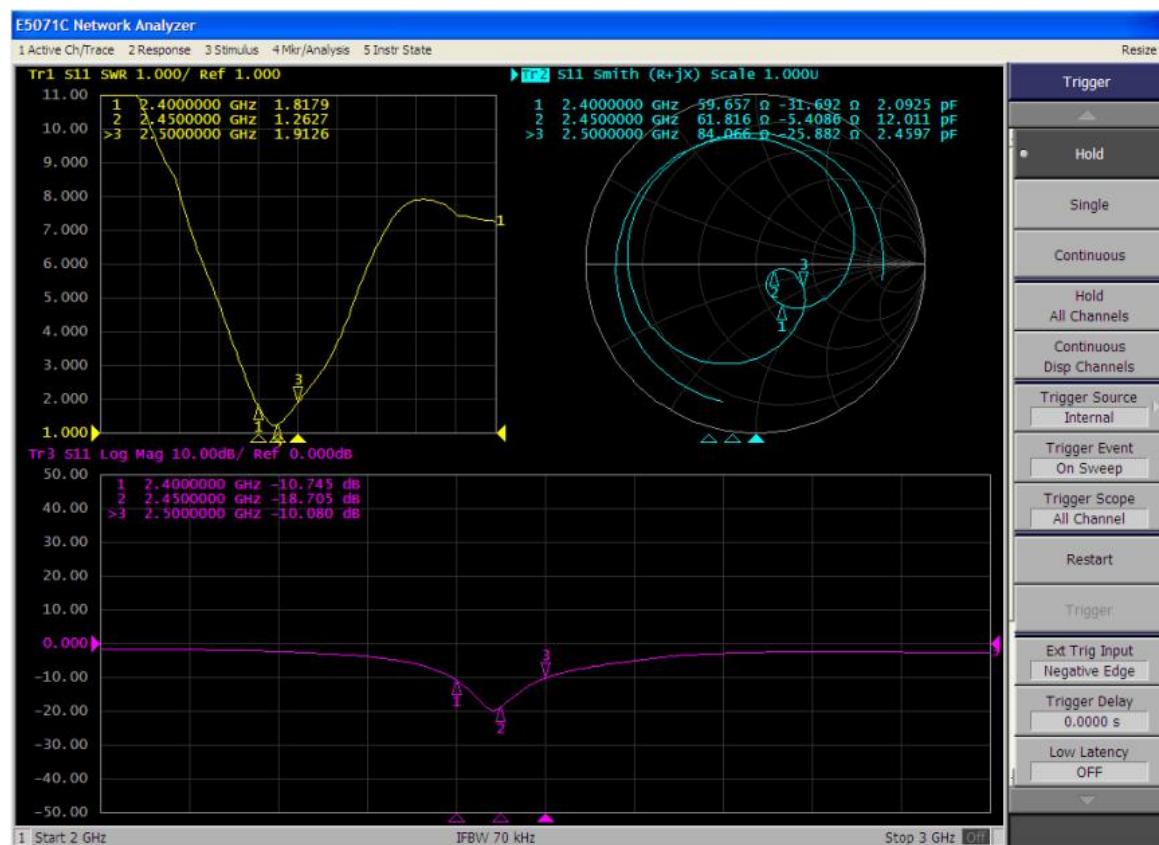
2. 网络参数测试数据 (S Parameter Test Data)



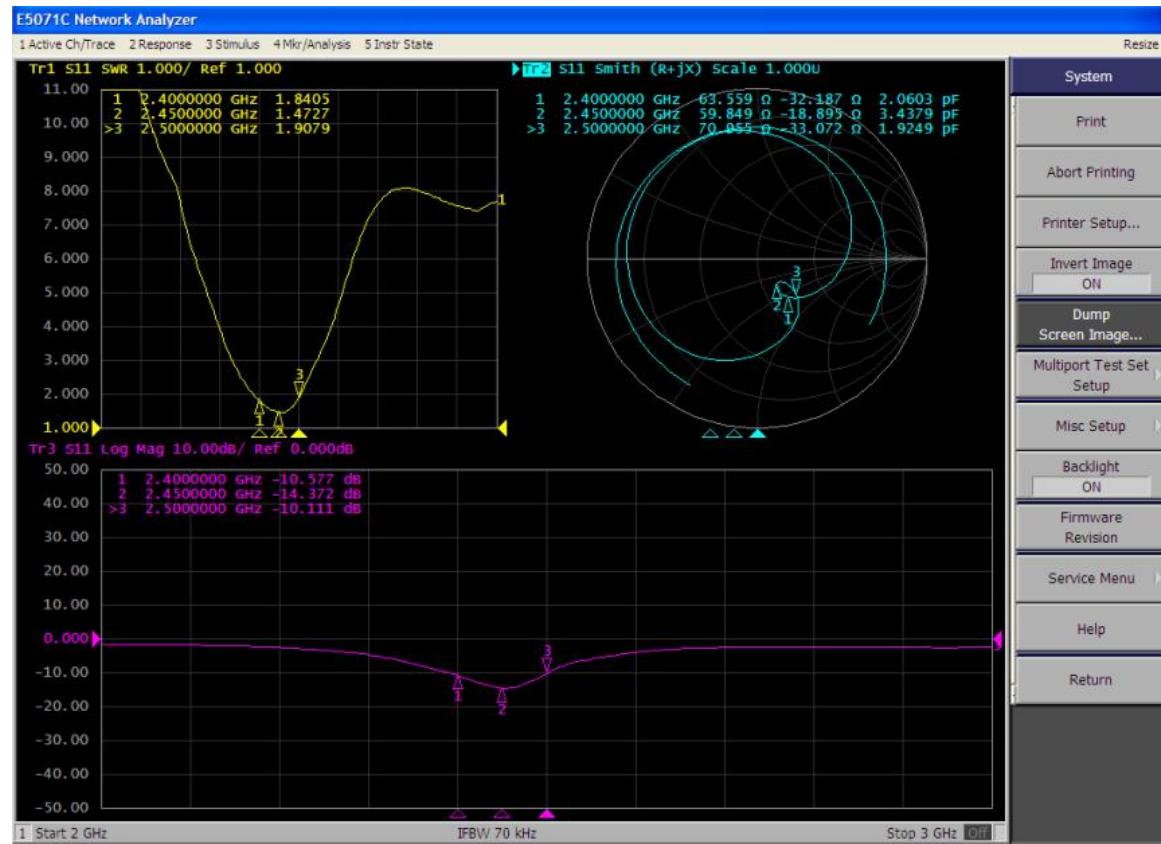
E5071C 矢量网络分析仪

测试频率范围: 30KHz-8.5GHz 测试能力: VSWR、ReturnLoss、Smith 圆图等

ANT1



ANT2



3. 天线辐射场型测试 (Antenna Radiation Pattern Test)

测试设备规格 (Testing Equipment Specification) :

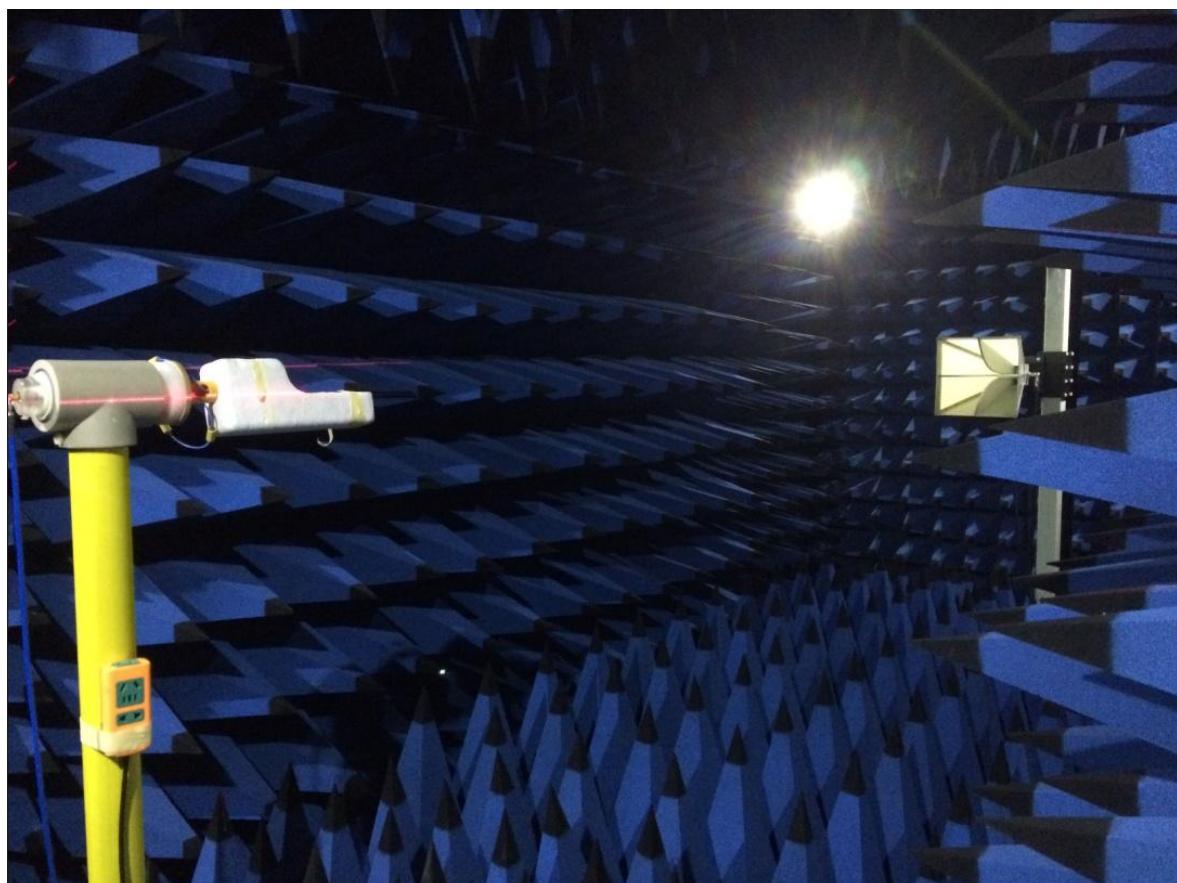
天线微波暗室尺寸 (Antenna Anechoic Chamber Dimension) : 7x3x3 米

屏蔽性能 (Isolation) : >100dB@1M-10GHz

测试设备 (Test Equipment) : E5071C 矢量网络分析仪

接收天线 (Receiver Antenna) : 0.7-6.0GHz 双极喇叭标准天线

(0.7-6.0GHz for Gain Calibration Double Ridged Horn Antenna)



4. 效率及增益测试数据 (Efficiency and Gain Test Data)

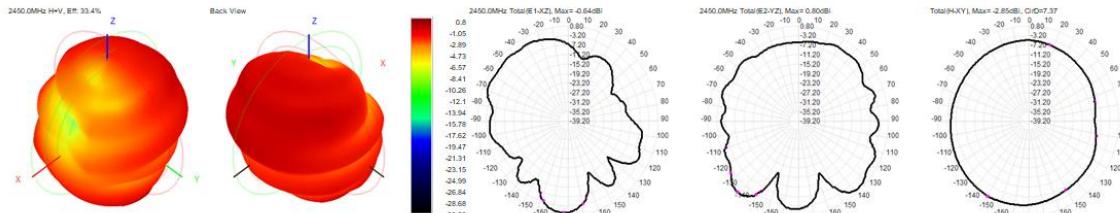
ANT1

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
Gain (dBi)	0.92	0.93	0.78	0.54	0.63	0.80	0.95	1.07	1.24	1.47	1.59
Efficiency (%)	27.44	29.15	29.70	30.35	32.03	33.42	32.98	31.48	30.24	29.79	28.81
Directivity (dB)	6.53	6.28	6.05	5.72	5.58	5.56	5.77	6.09	6.44	6.73	6.99
Peak Gain Position (Theta)	44.00	44.00	44.00	44.00	44.00	42.00	43.00	43.00	41.00	41.00	41.00
Peak Gain Position (Phi)	270.00	270.00	270.00	270.00	270.00	270.00	270.00	270.00	270.00	270.00	270.00
Efficiency ThetaPol (%)	15.23	16.33	16.52	17.02	17.60	18.28	18.16	17.34	16.69	16.85	16.47
Efficiency PhiPol (%)	12.21	12.82	13.18	13.32	14.43	15.14	14.83	14.14	13.55	12.94	12.34
Upper Hem. Efficiency (%)	10.48	11.72	12.64	13.76	15.14	16.20	15.99	14.90	13.75	13.07	12.16
Lower Hem. Efficiency (%)	16.96	17.44	17.07	16.59	16.89	17.22	17.00	16.59	16.48	16.71	16.66

ANT2

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
Gain (dBi)	1.47	1.85	1.92	1.83	1.78	1.63	1.23	0.71	0.20	0.16	0.15
Efficiency (%)	38.60	41.12	41.31	40.89	41.24	40.07	36.29	31.59	31.12	30.60	30.68
Directivity (dB)	5.60	5.71	5.76	5.72	5.62	5.60	5.63	5.72	5.87	6.15	6.51
Peak Gain Position (Theta)	37.00	39.00	38.00	38.00	39.00	40.00	39.00	38.00	38.00	39.00	39.00
Peak Gain Position (Phi)	0.00	0.00	0.00	0.00	30.00	0.00	0.00	0.00	0.00	0.00	0.00
Efficiency ThetaPol (%)	27.84	29.93	30.18	30.35	30.58	29.91	27.32	23.85	20.53	18.88	16.64
Efficiency PhiPol (%)	10.76	11.18	11.13	10.54	10.67	10.16	8.97	7.75	6.59	5.72	4.94
Upper Hem. Efficiency (%)	13.57	14.63	14.97	15.09	15.47	15.24	13.89	12.10	10.27	9.09	7.66
Lower Hem. Efficiency (%)	25.03	26.48	26.34	25.80	25.77	24.83	22.40	19.49	16.86	15.51	13.91

ANT1



ANT2

