



深圳市睿德通讯科技有限公司

Shenzhen Etheta Communication Technology Co., LTD.

供应商名称: 深圳市睿德通讯科技有限公司

产 品 承 认 书

Specification for Approval

客户名称

Client Name: 酷赛科技有限公司

品 牌

Brand Name: ETHETA

原厂料号

Part No: RD1472202NB87-4

物料规格

Part Description: SL112A-2.4G/5.8G/1.575GHz-V01-FPC-睿德

产品制造商:

Manufacturer: 深圳市睿德通讯科技有限公司

酷比物料类别

Koobee Part Name: FPC 天线

酷比物料编号

Koobee Materiel No.: 01.02.05.00008

酷比物料描述

Koobee Description: GPS/2.4G wifi 天线, FPC, 整版出货, 丝印: SL112A

酷比采用原因

Koobee Import Reason:

供 应 商 签 章		客 户 签 章
结构	刘飞明	承 认: 确 认:
射频	王玉玉	
确 认	马 超	



1、	Table Contents
2、	Contents
3、	Antenna Specification
4、	Test &Item Equipment

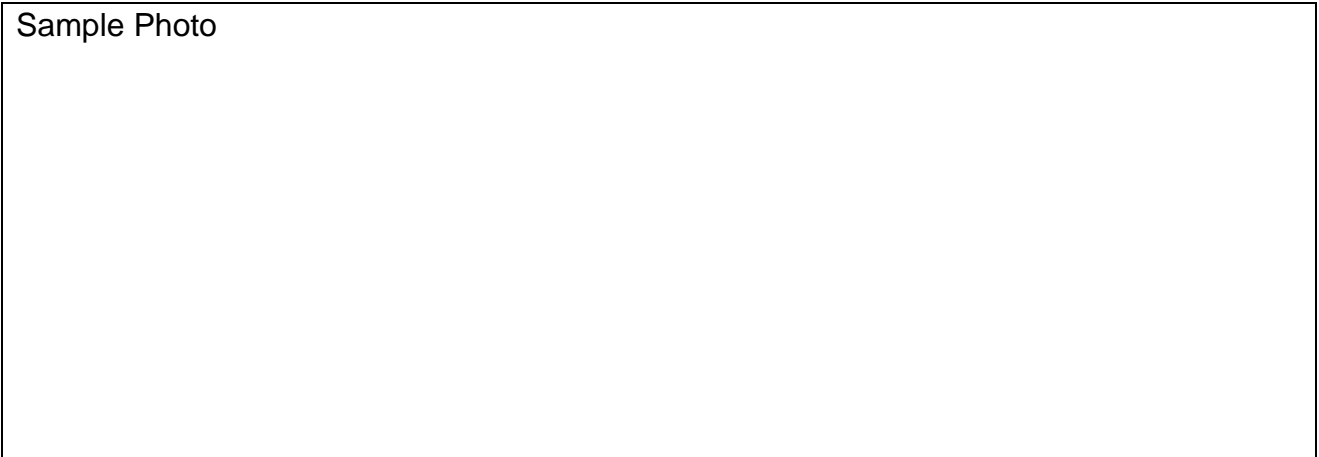
Contents

Shenzhen Etheta Communication Technology Co., LTD.

5、	Matching Circuit
6、	S11 Parameter Test
7、	Passive Test
8、	Drawings

Antenna Specification

Sample Photo





1. Electrical Characteristics

Frequency	1575MHZ、2.4G、5.8G
Polarization	Linear
Impedance	50 Ohm

2. Material & Mechanical Characteristics

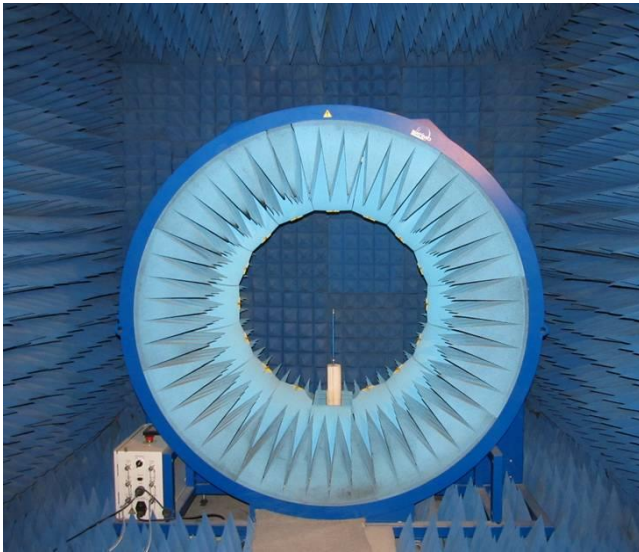
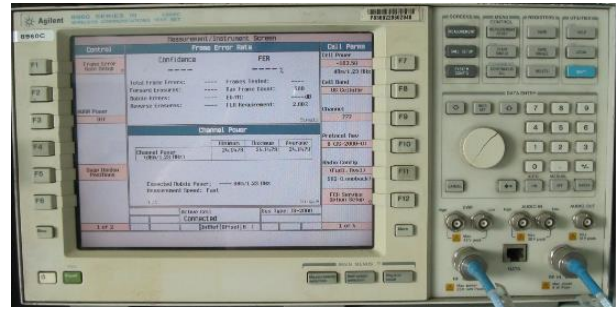
Material of antenna	FPC
Connector Type	

3. Environmental

Operation Temperature	- 40 °C ~ + 65 °C
Storage Temperature	- 40 °C ~ + 80 °C
Antenna Color Storage life	< 2 year

4. Test &Item Equipment

List	Test Item	Equipment	
1.S11 Parameter	VSWR, Return Loss	Agilent VNA	
2.Active Test	TRP, TIS	Agilent 8960	Satimo Starlab
3.Passive Test	Gain, Efficiency, Pattern	Agilent VNA	



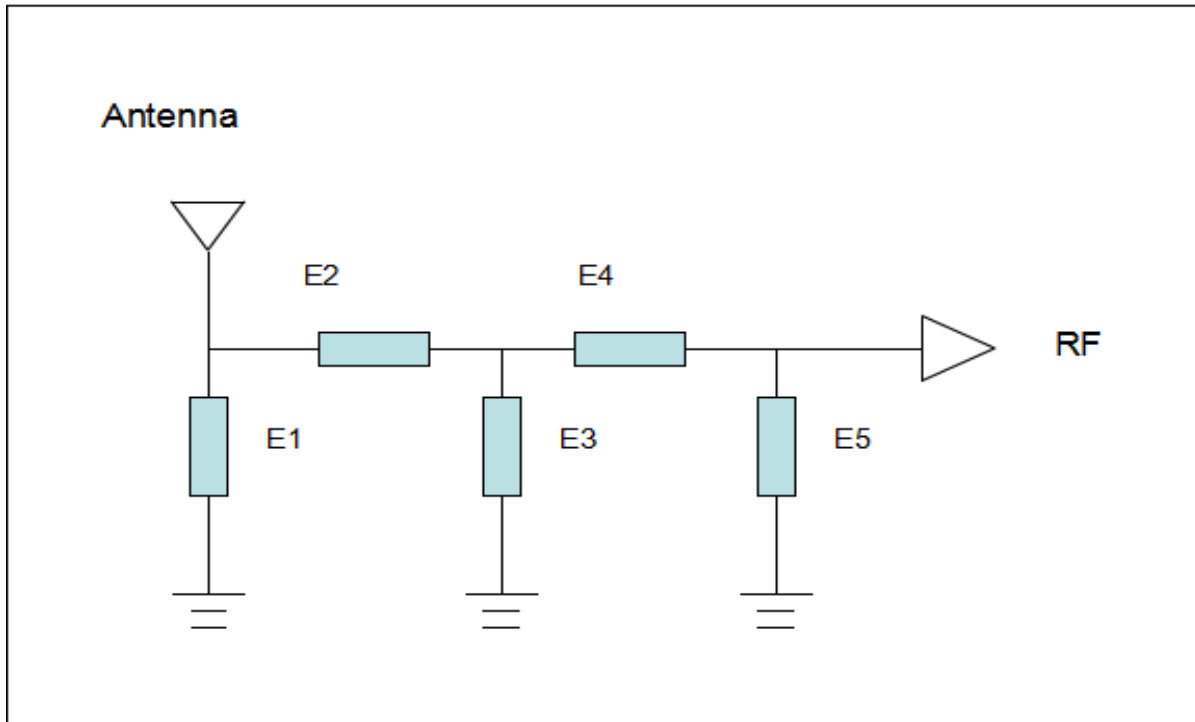
A darkroom test parameters

The test system: SATIMO-SG24

Test environment: temperature $20\text{ }^{\circ}\text{C} + 2\text{ }^{\circ}\text{C}$, humidity of 50% plus or minus 15%

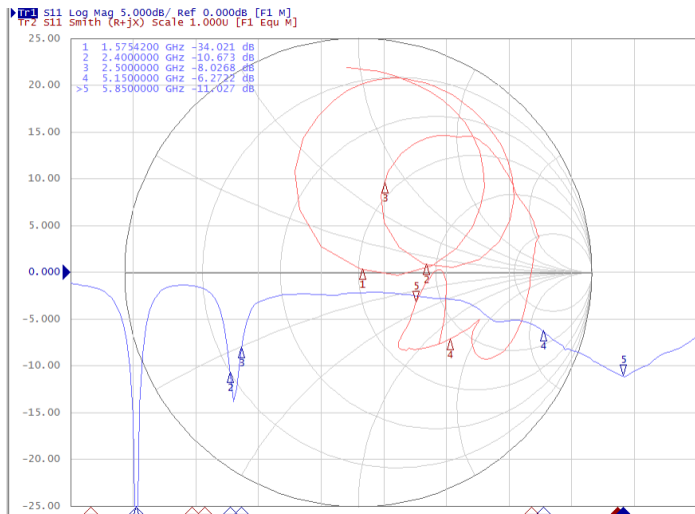
Agilent 8960 Active test equipment, test data, from using measuring Agilent 8960

5、Matching Circuit



Element	Value
E1(0201)	N/A
E2(0201)	0Ω
E3(0201)	N/A
E4(0201)	0Ω
E5(0201)	N/A

We have changed the original matching circuit.



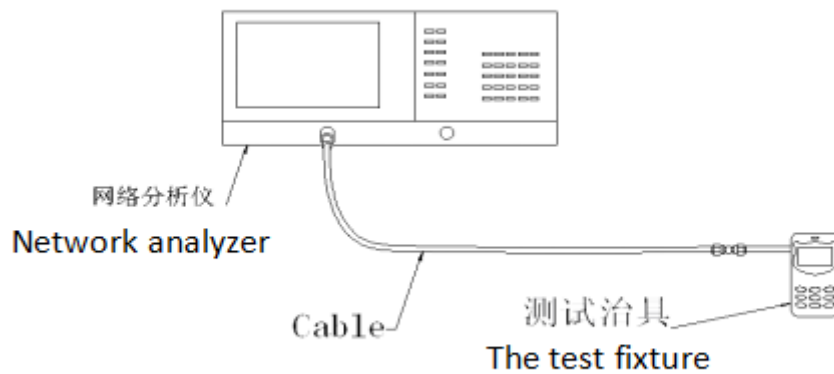
6.1、 Test methods and specifications:

Testing equipment: network analyzer (HP 8753 E)

Test method: with a 50 ohm CABLE CABLE from the instrument test port export, calibration using a calibration after connection

Rf fixture of the SMA connector, records related to the frequency points corresponding return loss and standing wave ratio.

Test schematic diagram is as follows:



7、Passive Test

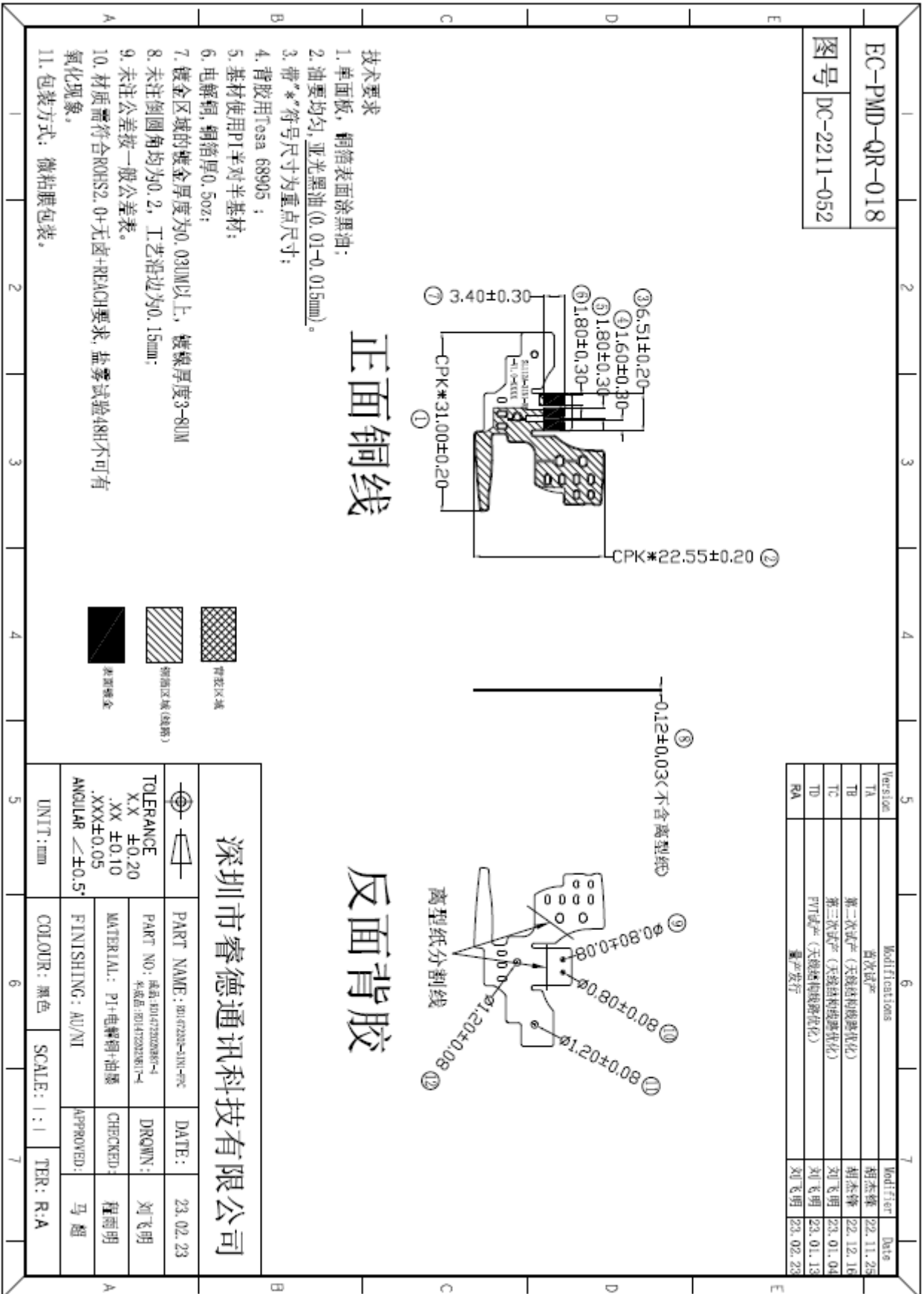
Freq	Efficiency_dB	Gain	Efficiency_Pcent
1550	-3.25	0.7	47.37
1560	-3.23	0.78	47.53
1570	-3.16	0.79	48.25
1580	-3.12	0.79	48.8
1590	-3.08	0.79	49.19
1600	-2.94	0.76	50.77
Freq	Efficiency_dB	Gain	Efficiency_Pcent
2400	-5.22	-0.22	30.03
2420	-4.93	0.1	32.11
2440	-4.87	0.31	32.6
2460	-4.83	0.56	32.92
2480	-4.98	0.4	31.75
2500	-5.36	0.04	29.11
Freq	Efficiency_dB	Gain	Efficiency_Pcent
5150	-6.52	-0.43	22.3
5170	-6.35	-0.04	23.17
5190	-6.24	0.1	23.74
5210	-5.92	0.27	25.56
5230	-5.86	0.33	25.96
5250	-5.86	0.46	25.95
5270	-5.72	0.62	26.8
5290	-5.53	0.8	27.98
5310	-5.14	1.07	30.62
5330	-4.96	1.12	31.91
5350	-4.82	1.11	33
5370	-4.6	1.39	34.69
5390	-4.72	1.52	33.72
5410	-4.44	1.86	35.94
5430	-4.51	1.59	35.39
5450	-4.65	1.09	34.29
5470	-4.49	1.2	35.55
5490	-4.41	1.42	36.18
5510	-4.35	1.64	36.7
5530	-4.22	1.77	37.89
5550	-4.03	1.69	39.51
5570	-3.96	1.56	40.14
5590	-4.03	1.32	39.49
5610	-4.22	1.19	37.84
5630	-4.3	1.24	37.15

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5650	-4.23	1.35	37.73
5670	-4.24	1.27	37.65
5690	-4.16	1.7	38.37
5710	-4.14	1.85	38.58
5730	-3.92	2.07	40.52
5750	-4.12	1.61	38.72
5770	-4.17	1.24	38.25
5790	-4.16	1.06	38.38
5810	-4.17	1.01	38.32
5830	-4.07	1.3	39.2
5850	-4.12	1.54	38.68

GPS		TIS	
		-153.19	
	chNO	TRP	TIS
11B	1	14.6	-84.14
	6	15.38	-83.71
	11	14.52	-83.3
	chNO	TRP	TIS
11A	36	13.19	-73.21
	64	13.3	-73.57
	165	13.47	-72.47

8、Drawings





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