

客户承认书

SPECIFICATION FOR APPROVAL

CUSTOMER/PROJECT 客户/机型: _____

CUSTOMER P.N./ 客户物料号: _____

PRODUCT NAME./ 物料名称: 4G Antena(4G 天线)

MODEL NO./ 物料型号: 32F001A

SPECIFICATION/ 物料规格: _____

VERSION 版本	DATE 日期	REVISION DESCRIPTION 修订说明
T:A	2024.05.27	New addition 新增

SUPPLIER AUTHORIZED SIGNATURE/供应商承认签核		
制作/PREPARED	审核/CHECKED	批准/APPROVED
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CUSTOMER AUTHORIZED SIGNATURE/客户承认签核			
Project/项目		Quality/质量	

Please return to us one copy of "SPECIFICATION FOR APPROVAL" with your approved signature./ 客户确认签字，盖章后请回传一份承认书给我司。

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1 Definitions of Terms 名词解释

dBi	Decibel relative isotropic antenna
Tx	Transmit frequency
Rx	Receive frequency
TRP	Total Radiated Power
TIS	Total Isotropic Sensitivity
VSWR	Voltage Standing Wave Ratio
GSM	Global Service for Mobile communication
DCS	Digital Communication System
CDMA	Code Division Multiple Access
WCDMA	Wideband Code Division Multiple Access

2 Test equipment 测试设备

Vector Network Analyzer 矢量网络分析仪

Comprehensive tester 综合测试仪

SATIMO 64-bit darkroom SATIMO64 位暗室

3 Applicable frequency bands 适用频段

Mark the applicable frequency bands in other colors.

Format 制式	Upstream 上行	Downward 下行
GSM850	824MHz~849MHz	869MHz~894MHz
GSM900	890MHz~915MHz	935MHz~960MHz
DCS1800	1710MHz~1785MHz	1805MHz~1880MHz
PCS1900	1850MHz~1910MHz	1930MHz~1990MHz
CDMA800	825MHz~835MHz	870MHz~880 MHz
CDMA2000	824MHz ~849MHz	869MHz ~894MHz
WCDMA900	880MHz -915MHz	925MHz -960MHz
WCDMA2100	1920MHz~1980MHz	2110MHz~2170MHz
TD-SCDMA2100	2010MHz~2025MHz	2010MHz~2025MHz
LTE	824MHz ~2690MHz	

4 Basic test items 基本测试项目

4.1 Standing Wave Ratio Chart 驻波比图

4.2 Smith Impedance Diagram 史密斯阻抗图

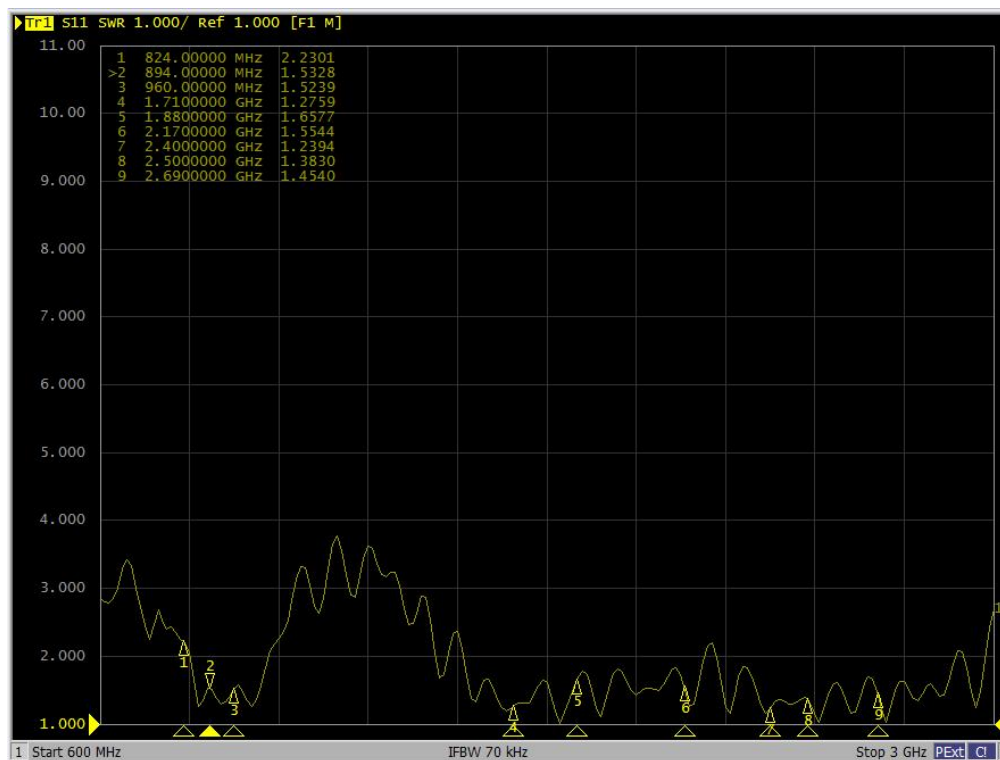
4.3 Radiation Pattern 辐射方向图

4.4 Gain and Efficiency 增益和效率

5 Test metrics and data charts 测试指标和数据图表

5.1 Standing Wave Ratio 驻波比

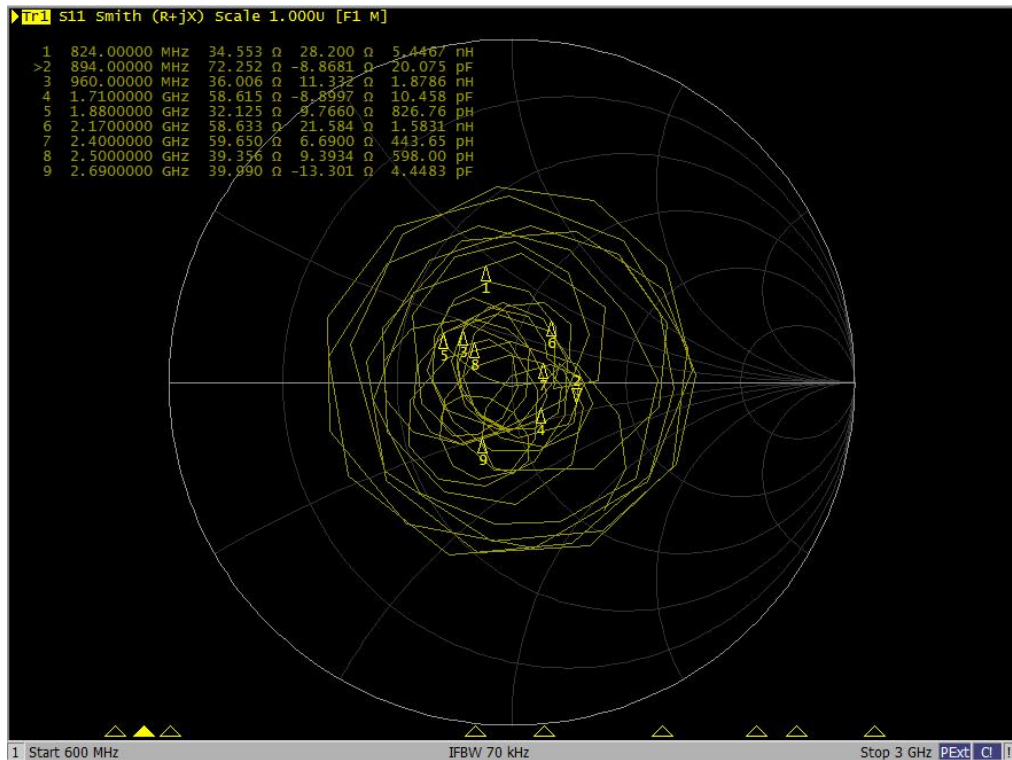
5.1.1 Standing Wave Ratio Chart 驻波比图



5.1.2 Standing Wave Ratio Data 驻波比数据

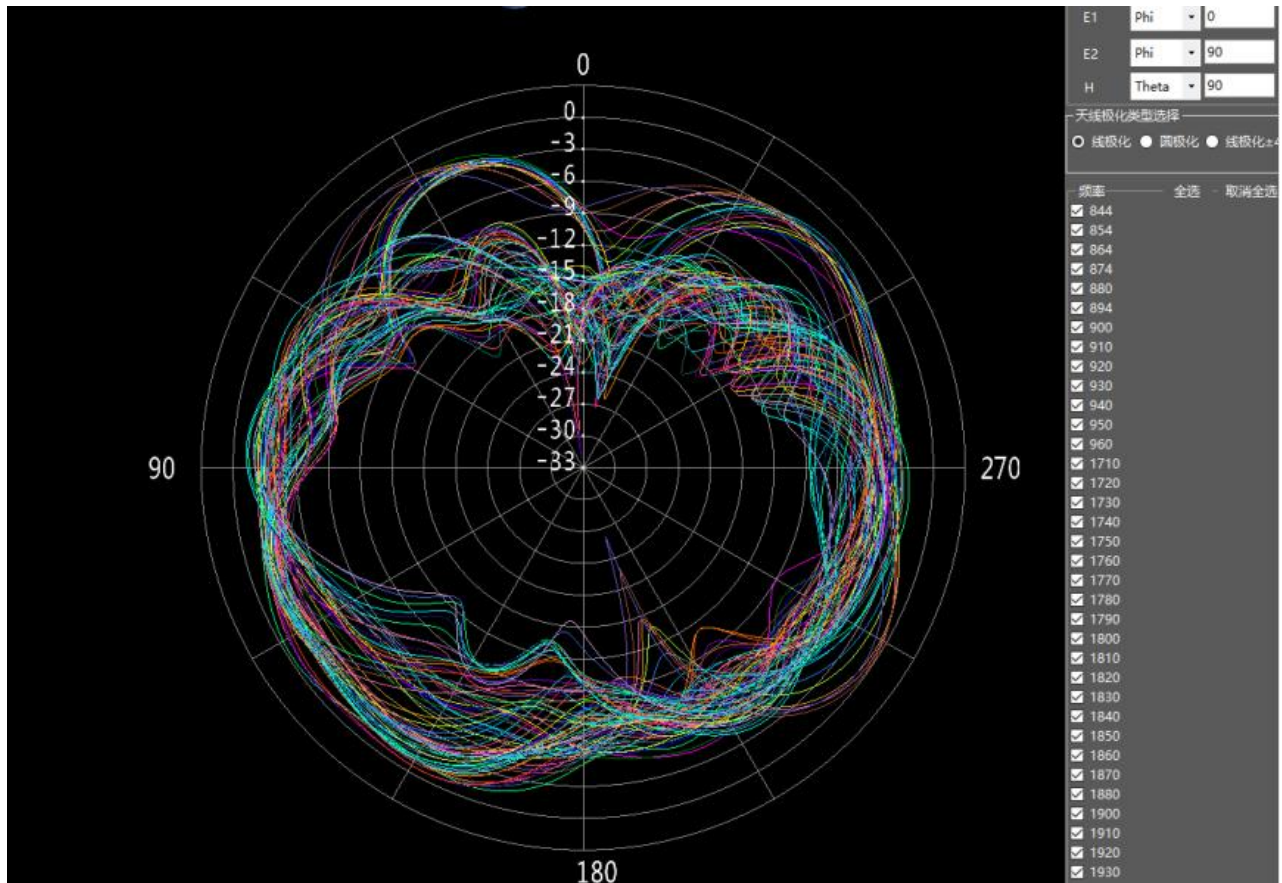
Freq/MHz	824	894	960	1710	1880	2170	2500	2690
VSWR	2.2	1.5	1.5	1.2	1.6	1.5	1.3	1.4

5.2 Smith Impedance Circle Diagram 史密斯阻抗圆图



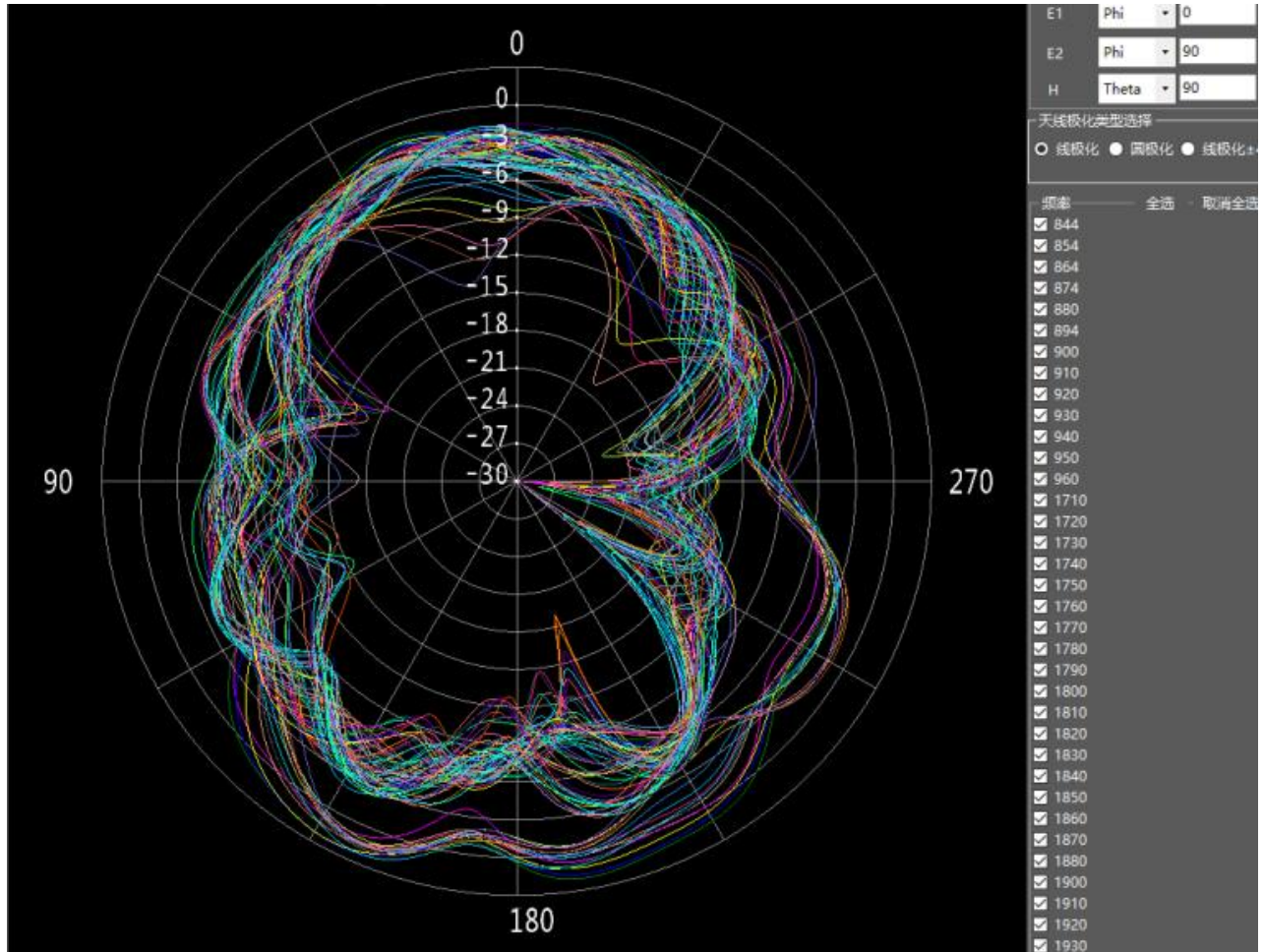
5.3 Radiation pattern 辐射方向图

5.3.1 H-plane

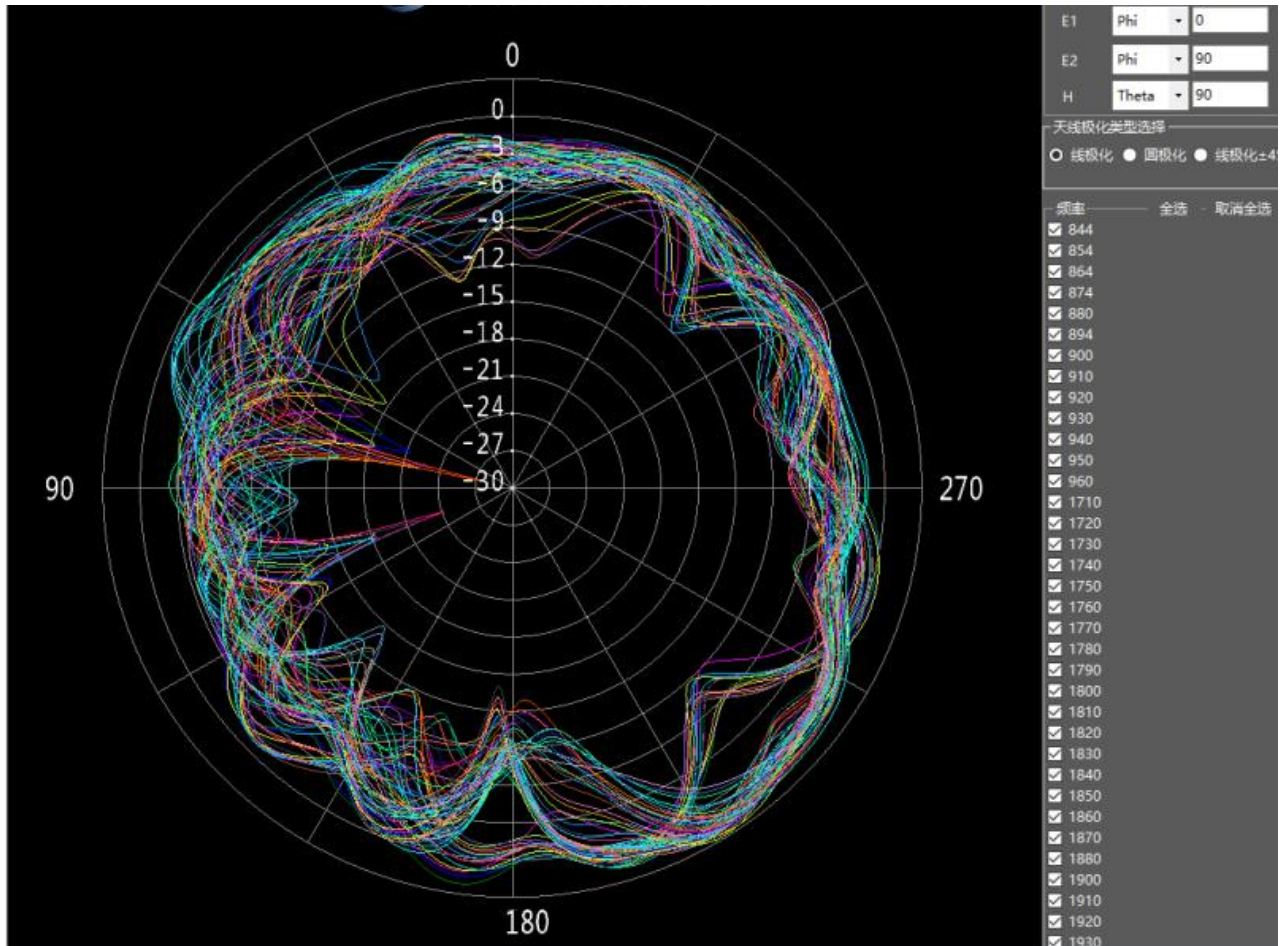


5.3.2 E-plane

E1



E2



5.4 Gain and Efficiency 增益和效率

Band	Gain(dBi)	Efficient(%)
720	1.0	28.34
764	1.1	28.65
804	1.2	30.74
824	1.9	37.85
844	2.78	46.81
864	2.2	42.64
880	2.5	46.04
894	3.19	48.34
900	2.48	42.94
920	1.95	40.59
940	2.31	44.74
960	2.11	42.61
1710	2.62	40.9
1730	2.2	37.79
1740	2.37	38.14
1760	2.41	36.98
1780	2.82	37.65
1800	2.76	38.49
1820	2.87	38.85
1840	2.95	40.95
1860	2.65	37.82
1880	3.1	41.33
1900	2.68	39.67
1920	2.28	36.94
1940	2.91	38.27
1960	2.77	36.92
1980	3.11	40.78
2000	2.52	35.62
2020	2.74	36.49

2060	2.44	37.87
2140	2.01	36.42
2170	2.6	36.87
2220	2.36	33.75
2280	1.59	32.18
2340	2.06	34.68
2400	2.3	35.34
2460	1.96	34.18
2510	2.37	37.35
2570	2.07	36.21
2600	1.7	36.35
2640	1.13	37.43
2690	0.46	34.99

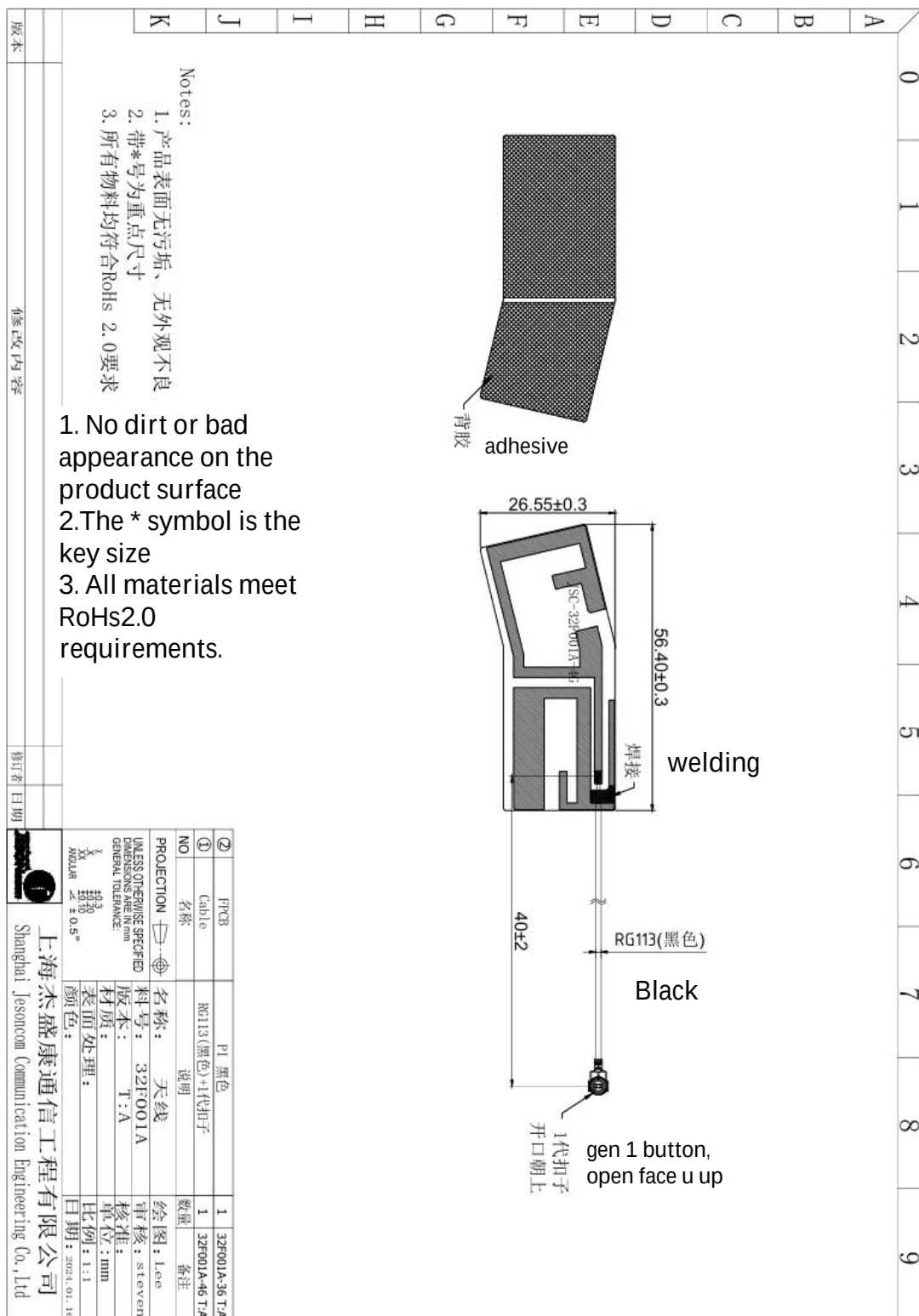
6 Environmental handling suggestions 环境处理建议

The environment does not require any treatment.

7 Impedance matching requirements 阻抗匹配要求

No processing is required for matching.

8 Antenna shape diagram 天线外形图





9 Antenna Installation Guide 天线安装指导

9.1 Antenna Installation and Feeder Routing Instructions

10 Others