



APPROVAL SHEET

客户名称 Customer Name APPOTRONICS Co., Ltd

产品型号 Product Model E8

客户料号 Customer P/N

南斗星料号 SouthstarP/N N12-6561-R0A

制作日期 Production date 2020-03-24

封样版本 Sample Version Version A

Southstar		
FICTION	DQE	R&D
Customer		
PUR)	QC	R&D

Manufacturer: SHENZHEN SOUTH STAR TECHNOLOGY CO.,LTD

Address-SZ: 8.10.16F, Building C6, Hezhou Hengfeng Industrial City, Xixiang,
Bao'an District, Shenzhen.

Address-SH: 103B, Building 10, Lane 198, Zhangheng Road, Zhangjiang Gaoke,
Shanghai.

TEL: 0755-27474071 FAX: 0755-29976316

Version	Date	Change Description	note
Rev. 01	2020. 03. 24	First Edition	

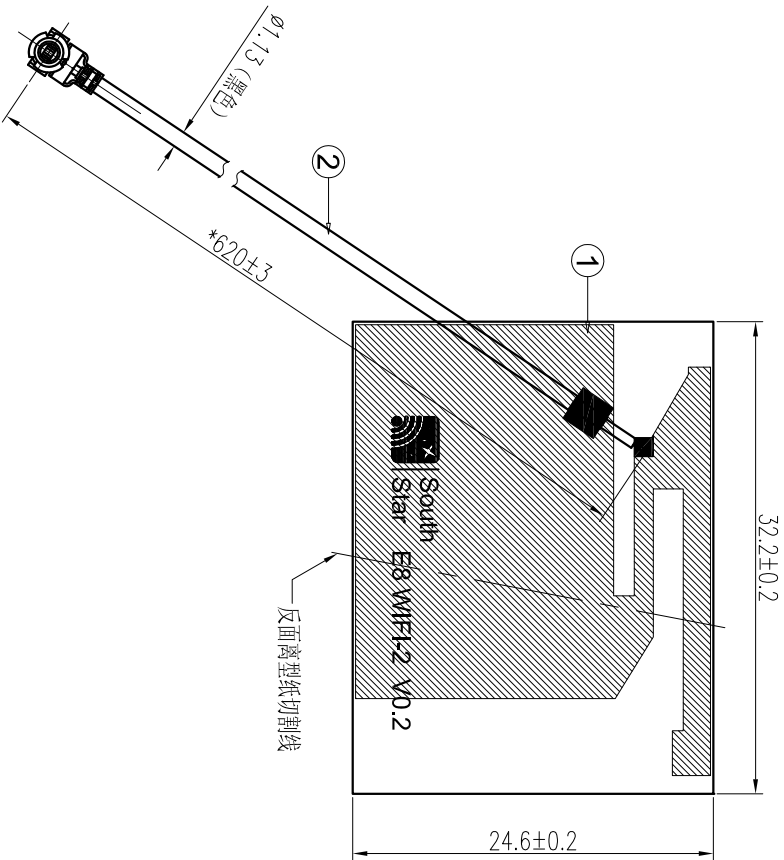
Index

1、	Cover • • • • •	1
2、	version • • • • •	2
3、	Index • • • • •	3
4、	The basic parameters • • • • •	4
5、	Product Drawing • • • • •	5
6、	Test Equipment & Conditions • • • • •	6
7、	Test Report • • • • •	7-8
8、	Installation method • • • • •	10

The basic parameters

A. Electrical Characteristics	
Frequency	2400MHZ~2500MHZ 5150MHZ~5800MHZ
VSWR	< 2
Efficiency	2.4G>45% 5.8G>50%
Impedance	50 Ohm
Polarization	Linear
Gain	2.4G<3dBi 5.8G<3dBi
B. Material & Mechanical Characteristics	
Material of Radiator	FPC black
Cable Type	Ø 1.13mm black
Connector Type	
Dimension	
C. Environmental	
Operation Temperature	- 20 °C ~ + 80 °C
Storage Temperature	- 20 °C ~ + 80 °C

Rev	Description	Date	Remark
A	New drawing		



技术要求:

1. 标“*”尺寸为重点管控尺寸;
2. 未标注尺寸依照图纸;
3. 无虚焊、假焊、连锡、短路、断路等焊接不良现象;
4. 所有部件需符合RoHS要求;
5. 成品需全检性能。

No.	Part No.	Name	Specification	Amount	Remark
2	X02-****-ROA	WiFi-2/同轴线	一代端子* ϕ 1.13mm黑色同轴线	1	
1	F03-****-ROA	WiFi-2/FPC	PI电解铜 单面板 黑色	1	
1					

		深圳市南斗星科技有限公司		SHEN ZHEN SOUTHSTAR CO., LTD	
	Third Angle	Project	E8	Date	2019-03-24
0~10	± 0.06	Part Name	WiFi天线-2	Designed by	李基胜
10~18	± 0.10	Part No.	N12-6561-ROA	Checked by	邓居平
18~30	± 0.12	Material	/	RF	
30~40	± 0.15			PE	
40~	± 0.20	Angle	$\pm 0.5^\circ$	Approved by	
Location		DWG No.	N12-6561-ROA	Unit	
5	6	7	8	Scale	1:1
				Rev	A

Test Equipment & Conditions

1 Test Equipment

VSWR is tested by connecting Agilent E5071B to the mobile phone system.

2 Test Conditions

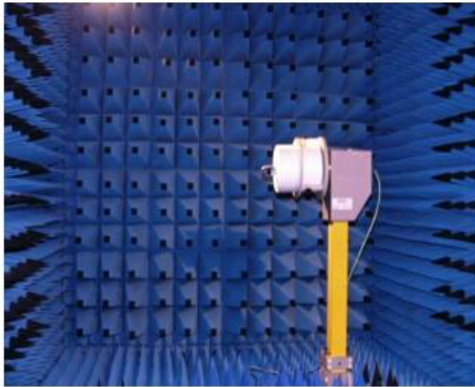
Chamber: ETS-743

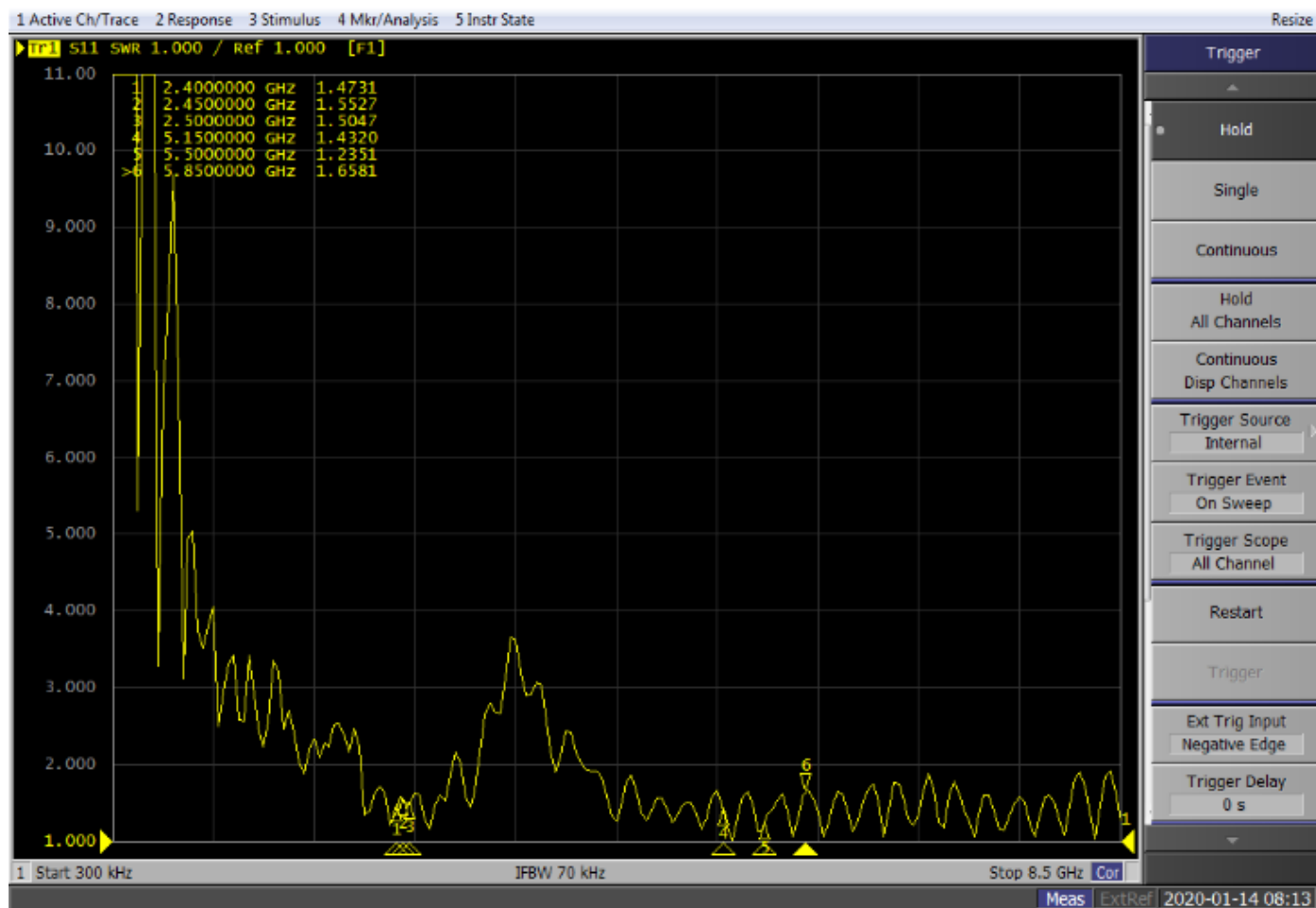
TD-SCDMA test equipment :StarPoint S6010/Agilent 8960

LTE-TDD/FDD-SCDMA test equipment: StarPoint SP8011/CMW500

WCDMA/GSM/CDMA test equipment:Agilent 8960

Passive efficiency est equipment:Agilent Technologies E5071B

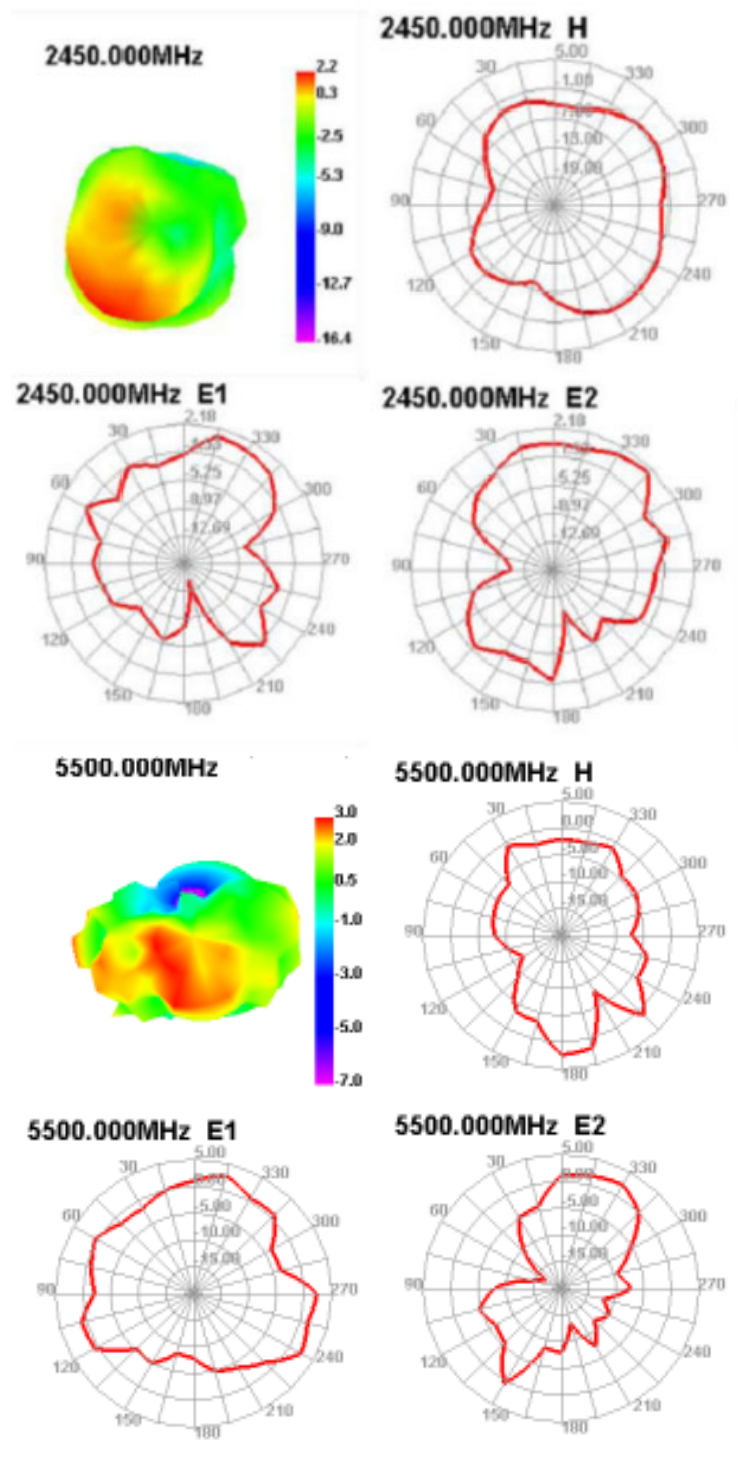


Antenna Impedance: S11 (parameter)


Efficiency & gain:

Passive Test For WIFI-2.4G			Passive Test For 5		
Freq (MHz)	Effi (%)	Gain (dBi)	Freq (MHz)	Effi (%)	Gain (dBi)
2400	45.18	2.14	5150	50.12	2.82
2410	45.35	2.31	5200	50.26	2.93
2420	45.44	2.64	5250	51.29	2.23
2430	48.31	2.55	5300	51.45	2.47
2440	48.28	2.81	5350	51.32	2.71
2450	46.36	2.17	5400	50.36	2.36
2460	46.49	2.35	5450	53.39	2.52
2470	45.39	2.21	5500	51.35	2.96
2480	45.61	2.42	5550	51.47	2.19
2490	46.22	2.56	5600	51.31	2.27
2500	45.36	2.49	5650	53.42	2.31
			5700	53.49	2.59
			5750	52.52	2.48
			5800	50.55	2.37
			5850	50.76	2.66

Antenna 3D radiation pattern



Antenna assembly drawing:

