

Shenzhen Lingqi Technology Co., Ltd.

-----Professional antenna & cable manufacturer

2.4G/5.8G Antenna Test Report

RF : Xiong Yong

TEL:

Date:2025-09-28

Catalog

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10

Cover

Catalog

Test Information

Test Environment

Standing wave diagram

Radiation pattern

Passive Test Data

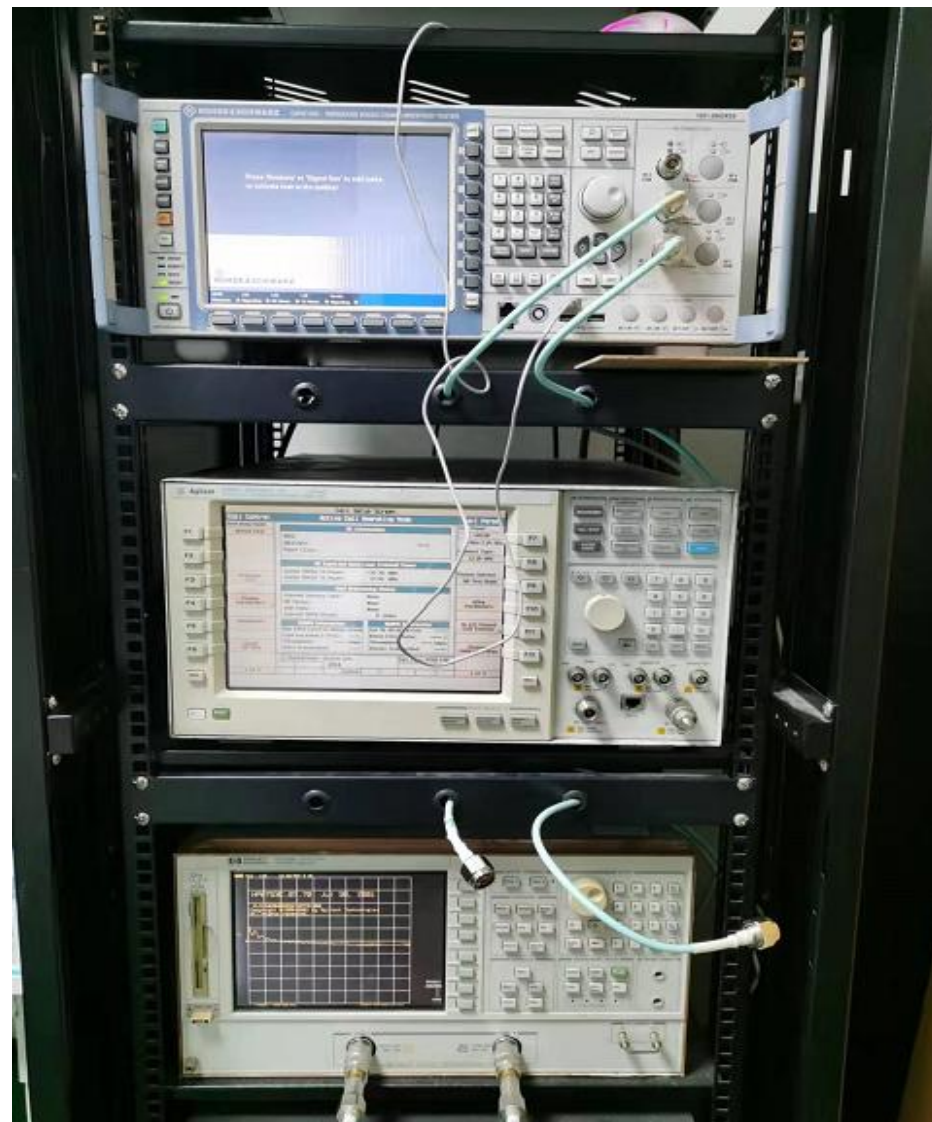
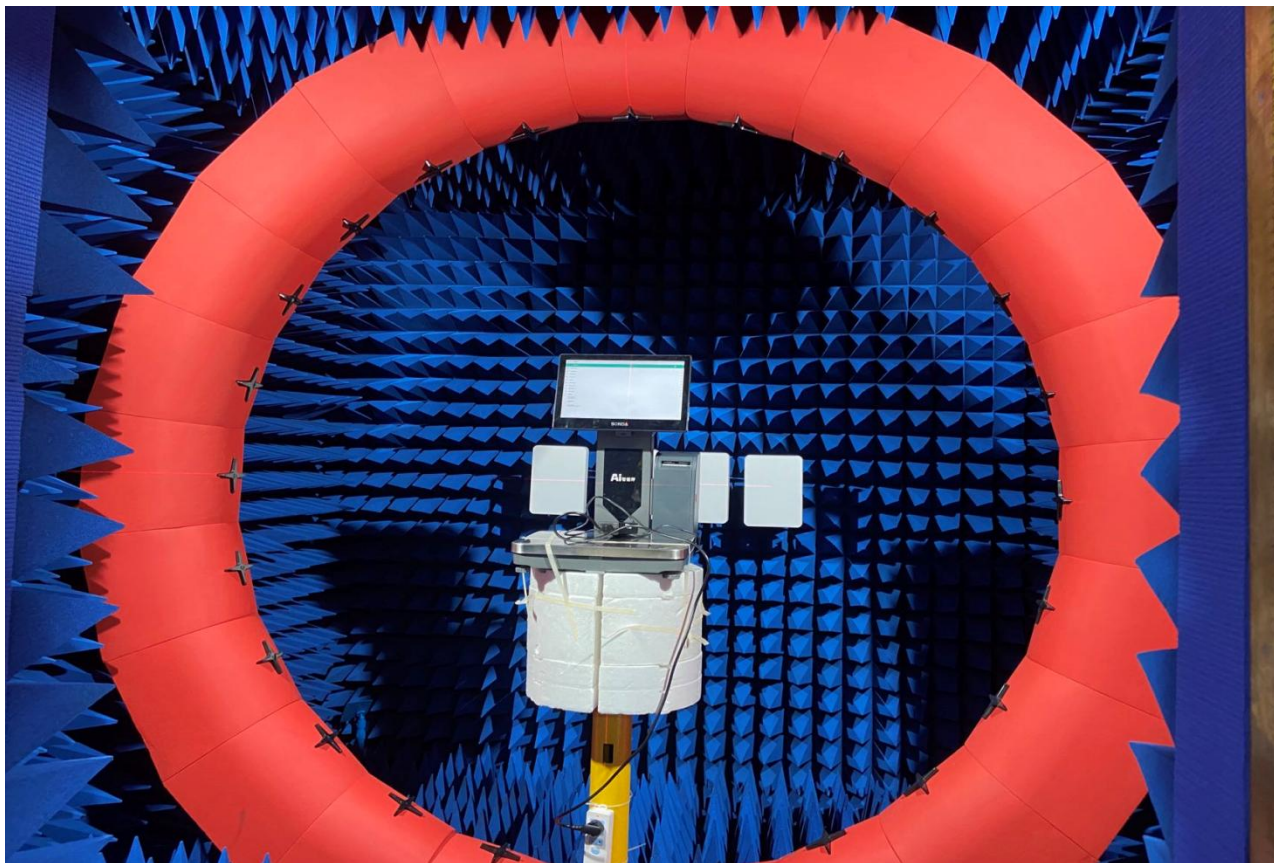
Active Test Data

Drawings

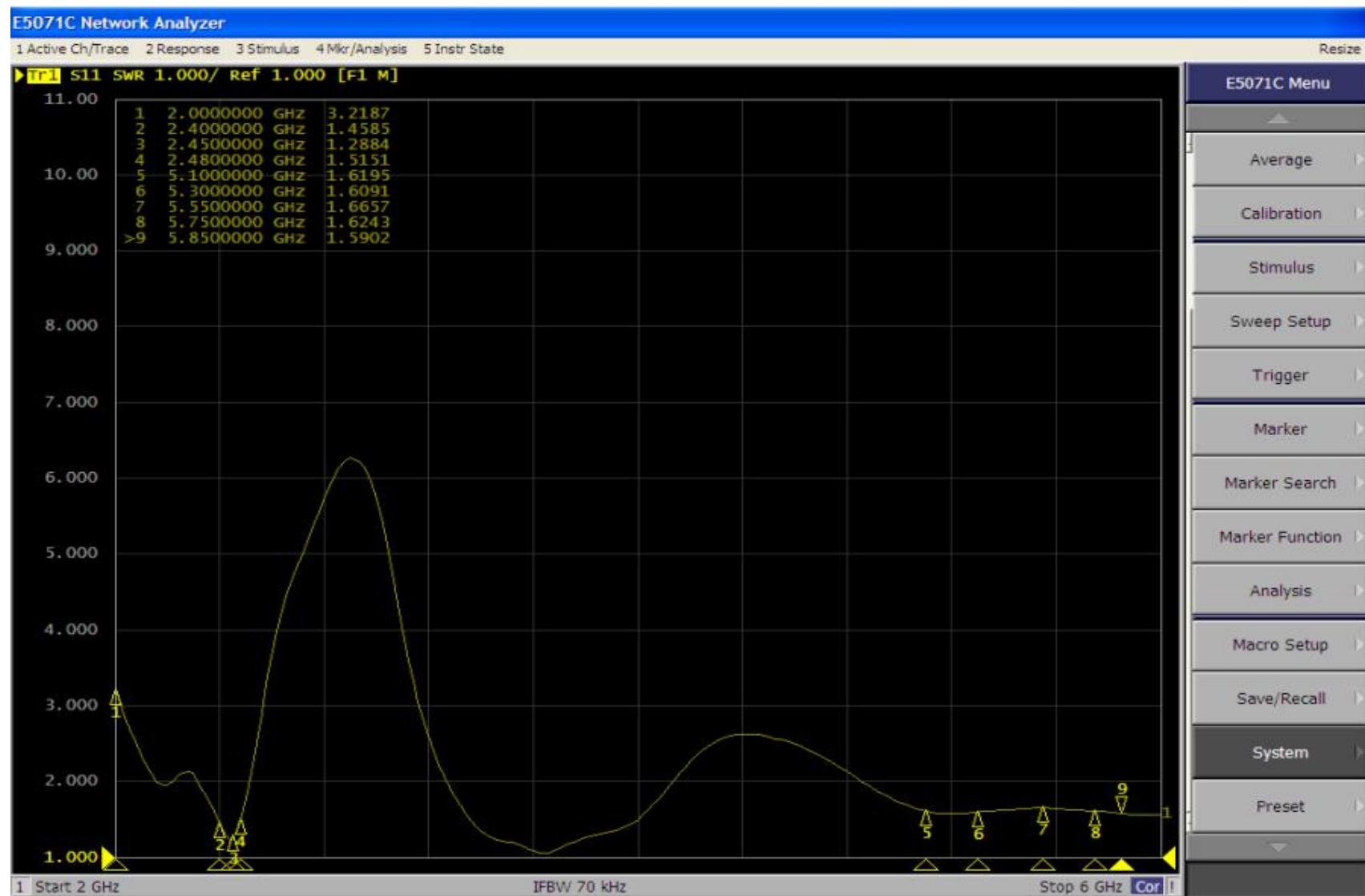
1.Test Information

Mainboard						
Main Antenna	Antenna Band		Antenna State	Antenna Form	Design Area	Match changes
	WIFI	2400MHz-2500MHz 5150MHz-5850MHz	FPC+Coaxial cable 1, terminal 1.13, 200mm wire	PIFA	/	/

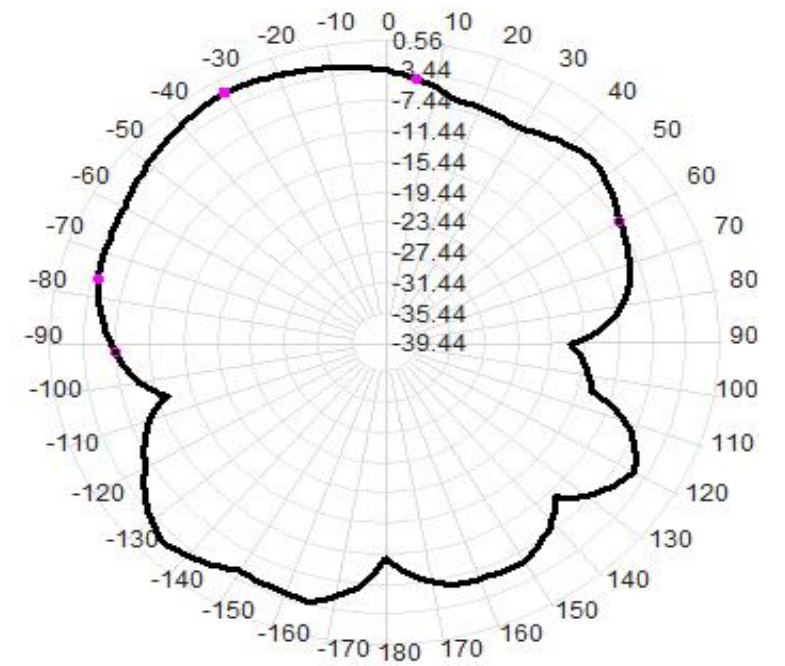
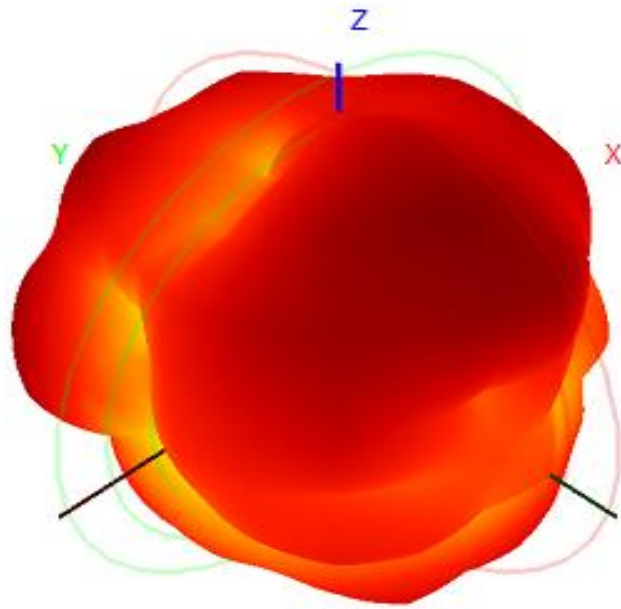
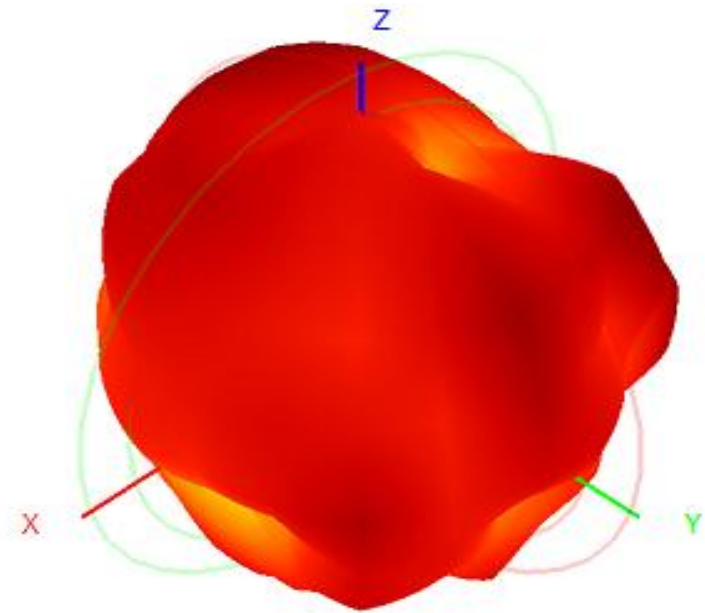
Test Environment



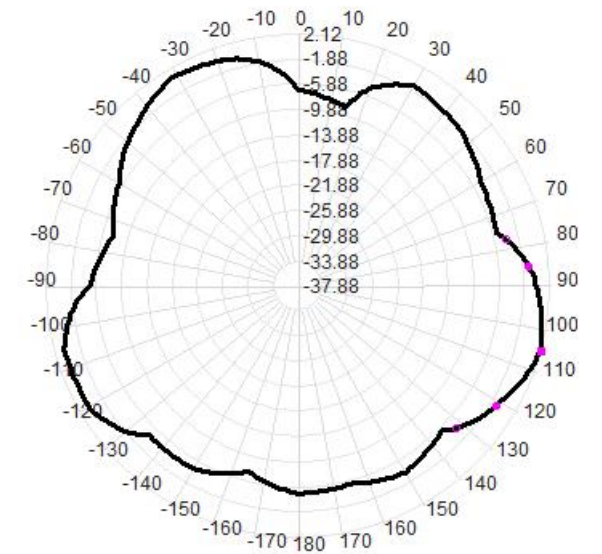
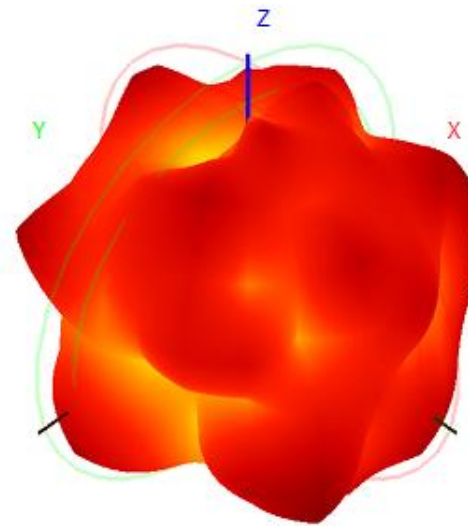
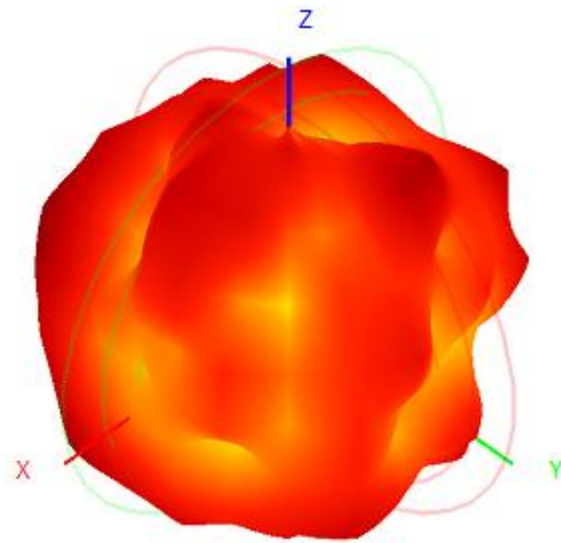
WiFi Antenna Standing Wave Diagram



2.4G Radiation pattern



5.8G Radiation pattern



2.4G Passive Test Data

Frequency	Efficiency (%)	Gain. (dBi)
2400MHz	64.57	3.02
2410MHz	64.71	3.05
2420MHz	65.01	2.84
2430MHz	63.97	2.8
2440MHz	64.86	2.8
2450MHz	65.31	3.06
2460MHz	66.22	3.27
2470MHz	65.77	3.35
2480MHz	65.77	3.47
2490MHz	65.77	3.34
2500MHz	64.86	3.2

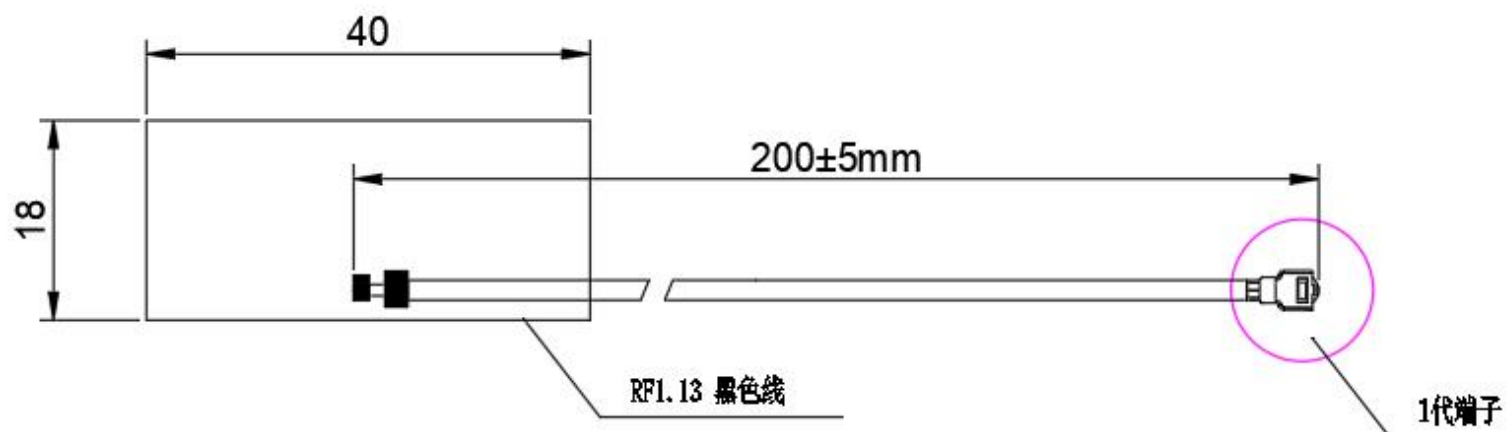
5.8G Passive Test Data

Frequency	Efficiency (%)	Gain. (dBi)
5150MHz	52.6	1.56
5200MHz	51.3	1.7
5250MHz	57.3	1.85
5300MHz	54.8	1.6
5350MHz	56.7	1.69
5500MHz	63.2	2.14
5600MHz	61.7	2.11
5650MHz	62.8	2.3
5700MHz	63.7	2.7
5800MHz	60.2	2.1
5850MHz	58.2	1.98

Wireless OTA Test Data

Measurement	Azimuths	Elevations	Standard	Band	Channel	Frequency	Max	Min	Total
TRP	Every30	Every30	WIFI (Station)	WIFI_B (11M)	1	2412	24.98	6.54	19.85
TRP	Every30	Every30	WIFI (Station)	WIFI_B (11M)	6	2437	24.78	6.54	19.86
TRP	Every30	Every30	WIFI (Station)	WIFI_B (11M)	11	2462	24.79	5.24	20.15
TIS(EIRP)	Every30	Every30	WIFI (Station)	WIFI_B (11M)	1	2412	-70.71	-89.1	-84.01
TIS(EIRP)	Every30	Every30	WIFI (Station)	WIFI_B (11M)	6	2437	-70.85	-89.16	-84.19
TIS(EIRP)	Every30	Every30	WIFI (Station)	WIFI_B (11M)	11	2462	-70.21	-89.73	-85.1
TRP	Every30	Every30	WIFI (Station)	WIFI_G (54M)	1	2412	22.16	8.9	19.77
TRP	Every30	Every30	WIFI (Station)	WIFI_G (54M)	6	2437	22.21	8.3	19.95
TRP	Every30	Every30	WIFI (Station)	WIFI_G (54M)	11	2462	22.3	6.5	20.28
TIS(EIRP)	Every30	Every30	WIFI (Station)	WIFI_G (54M)	1	2412	-63.81	-76.22	-72.75
TIS(EIRP)	Every30	Every30	WIFI (Station)	WIFI_G (54M)	6	2437	-62.96	-76.85	-72.54
TIS(EIRP)	Every30	Every30	WIFI (Station)	WIFI_G (54M)	11	2462	-63.36	-77.18	-73.15
TRP	Every30	Every30	WIFI (Station)	WIFI_N_ISM (65M)	1	2412	22.09	8.78	19.68
TRP	Every30	Every30	WIFI (Station)	WIFI_N_ISM (65M)	6	2437	22.31	8.41	19.98
TRP	Every30	Every30	WIFI (Station)	WIFI_N_ISM (65M)	11	2462	22.51	6.51	20.38
TIS(EIRP)	Every30	Every30	WIFI (Station)	WIFI_N_ISM (65M)	1	2412	-59.42	-72.75	-70.32
TIS(EIRP)	Every30	Every30	WIFI (Station)	WIFI_N_ISM (65M)	6	2437	-58.33	-72.12	-69.88
TIS(EIRP)	Every30	Every30	WIFI (Station)	WIFI_N_ISM (65M)	11	2462	-58.73	-73.84	-71.65

BOM					
ITEM	COMPONENT	DESCRIPTION	Q'TY	P/N	VENDOR
1	CABLE	RF1.13 黑色L=200mm	1PCS		
2	端子	CM-113-BU	1PCS		
3	FPC	40-18mm黑色油墨	1PCS		



					Angle	±1°	DRAW	绘图员			E	名称	2.4G 天线
					101~	±3.0	DESIGN	设计				料号	PART NO.
					31~100	±2.0	CHECK	校阅				客户料号	CUS. P/N
					~30	±1.5	APPRO.	承认				图号	DRAWING NO.
ECN(DCN) NO.	REV	NEW	CHANGE	APPRO.	GENERAL TOLERANCE UNLESS OTHERWISE NOTED		SCALE		UNIT	mm	A4		