

CCU-80 Antenna Report

Customer: Estone

Project : CCU-80-8InchPlastic-Rk3588MasterControl

Report Date: 2022. 07. 19

Project Introduction

1.Resume

Antennas	Type
1	Tablet
Shell Material: 8-Inch-Plastic	

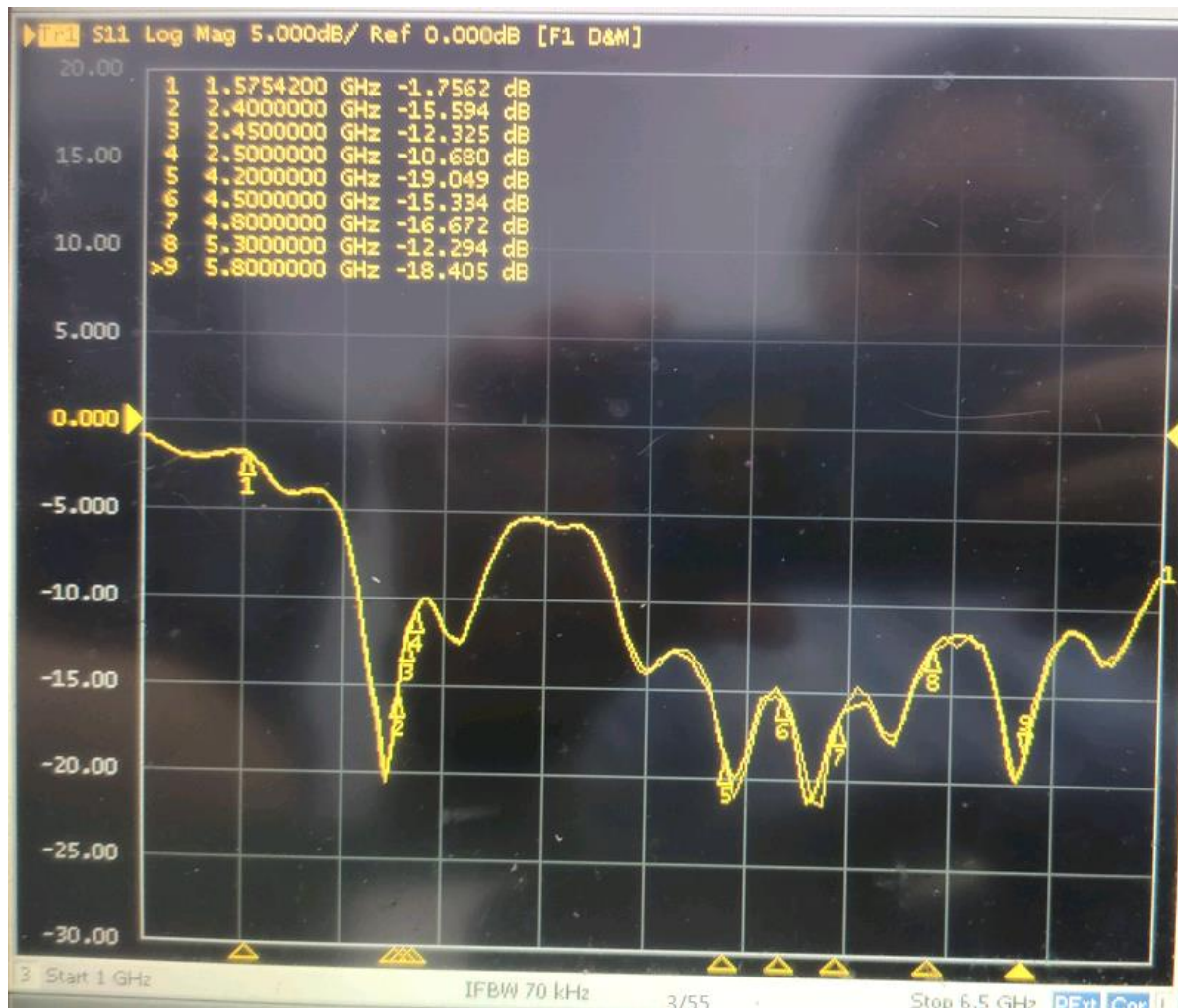
2.Description

Num.	Function	Frequency Band / MHz	Material / Structure
1	WIFI&BT&5Gwifi	2400MHz/2500MHz&5.8GHz	PCB

Antenna Position



WIFI&BT Antenna S11



深圳市宝安区西乡街道润东晟工业区13栋4楼A

A, floor 4, building 13, rundongsheng Industrial Zone, Xixiang street, Bao'an District, Shenzhen City, Guangdong Province

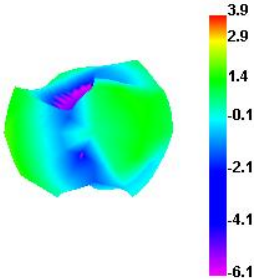
Antenna OTA Data

Num.	Channel	802.11b : 11Mbps		802.11g : 54Mbps		802.11n : MCS7)		802.11a : 54Mbps	
		TRP	TIS	TRP	TIS	TRP	TIS	TRP	TIS
1	1	11. 23		11. 13		11. 73		NA	NA
	7	12. 16		11. 47		11. 79		NA	NA
	13	12. 34	-80. 07	11. 78	-68. 48	11. 77	-66. 54	NA	NA
	36	NA	NA	NA	NA	10. 16		10. 38	
	149	NA	NA	NA	NA	10. 47		11. 59	
	161	NA	NA	NA	NA	10. 18	-66. 42	11. 57	-68. 09

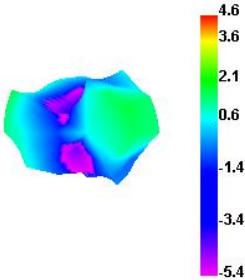
Antenna 2.4G Efficiency

Passive Test For 2.4Gwifi								
Freq	Effi	Effi	Gain	Gain	UHS	DHIS	Max	Min
(MHz)	(%)	(dB)	(dBi)	(dBd)	(%)	(%)	(dB)	(dB)
2400	47.46	-3.24	3.88	1.73	21.959	25.503	3.88	-16.45
2410	45.66	-3.4	3.82	1.67	20.906	24.757	3.82	-15.95
2420	45.87	-3.38	4	1.85	20.799	25.073	4	-15.1
2430	46.28	-3.35	4.17	2.02	20.822	25.455	4.17	-14
2440	47.97	-3.19	4.41	2.26	21.581	26.393	4.41	-12.98
2450	49.46	-3.06	4.6	2.45	22.143	27.312	4.6	-12.69
2460	48.27	-3.16	4.53	2.38	21.697	26.569	4.53	-12.57
2470	47.6	-3.22	4.49	2.34	21.33	26.268	4.49	-12.1
2480	49.39	-3.06	4.67	2.52	22.279	27.11	4.67	-11.07
2490	53.83	-2.69	5.05	2.9	24.368	29.462	5.05	-9.69
2500	53.44	-2.72	5.01	2.86	24.581	28.859	5.01	-10.08

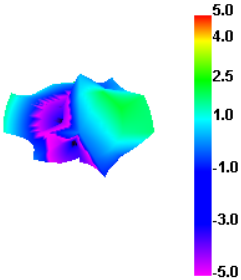
2400.000MHz



2450.000MHz



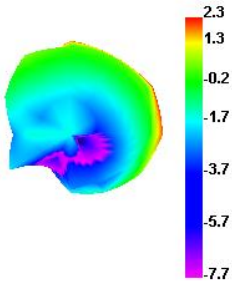
2500.000MHz



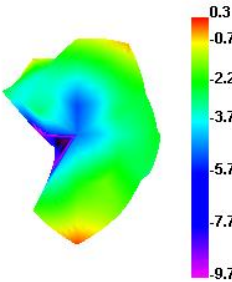
Antenna 5G Efficiency

Passive Test For 5Gwifi								
Freq	Effi	Effi	Gain	Gain	UHS	DHIS	Max	Min
(MHz)	(%)	(dB)	(dBi)	(dBd)	(%)	(%)	(dB)	(dB)
5000	37.87	-4.22	2.34	0.19	13.876	23.997	2.34	-17.52
5100	37.1	-4.31	2.52	0.37	14.141	22.963	2.52	-17.93
5200	35.08	-4.55	2.45	0.3	13.84	21.236	2.45	-17.83
5300	28.31	-5.48	0.37	-1.78	12.193	16.122	0.37	-18.35
5400	39.98	-3.98	-0.18	-2.33	18.787	21.193	-0.18	-14.49
5500	38.37	-4.16	0.31	-1.84	19.228	19.143	0.31	-12.56
5600	40.17	-3.96	2.09	-0.06	20.658	19.509	2.09	-13.15
5700	45.49	-3.42	2.31	0.16	23.489	22.005	2.31	-12.54
5800	45.25	-3.44	1.81	-0.34	23.607	21.642	1.81	-12.12
5900	41.06	-3.87	0.39	-1.76	21.875	19.188	0.39	-13.23
6000	45.36	-3.43	1.67	-0.48	22.911	22.449	1.67	-13.51

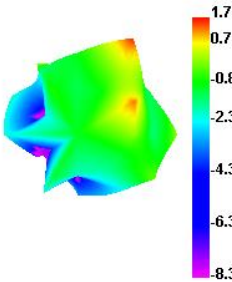
5000.000MHz



5500.000MHz



6000.000MHz



Antenna 2.4G Signal Strength



Test Location: R & D of Sward

Test Time : 14:00-14:30

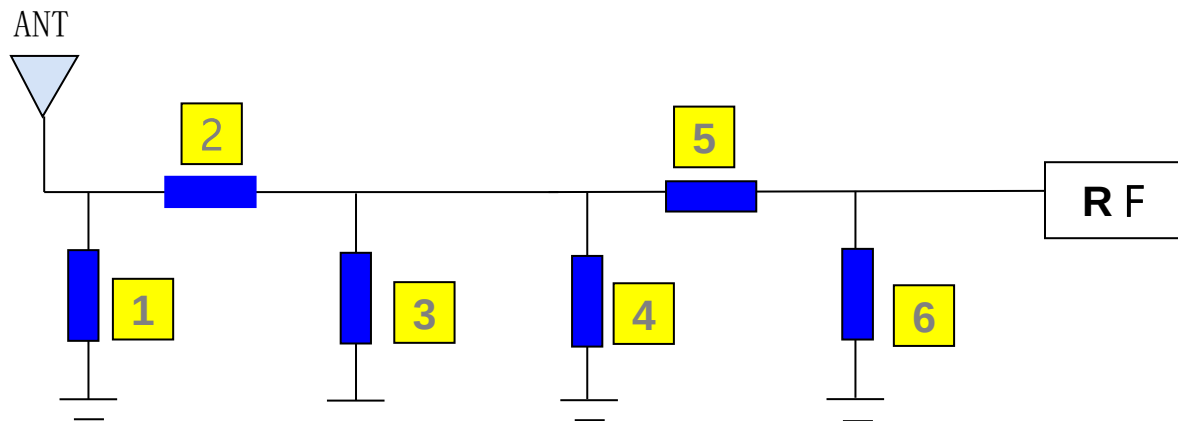
Test Distance: 10-15 meters

Test Result : -52dbm to -42dbm

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Antenna Matching Network



Antenna matching **has not been changed.**

Main Ant	1	2	3	4	5	6	Remarks
Original Match	-	-	-	-	-	-	-
Changed Match	-	-	-	-	-	-	-

Assembly Instructions

The assembly style of the machine **has not been changed.**



Notes:

1. This report is based on the actual commissioning and testing of the commissioning prototype, including the assembly instructions, antenna position and assembly position of each device. **It cannot be changed at will;**
2. If there is **any change** in the materials used in the prototype, it is necessary to timely feed back to our company for **re-verification**;
3. List of sensitive devices:
 - TP (material, coating, wiring, etc.)
 - Screen (amplification circuit, led, cable layout design, etc.)
 - Shell material (antenna assembly method, structural interference, shell material, antenna position height and area, etc.)
 - Mainboard (mainboard conduction, RF circuit matching, PA, duplex, filter, LNA, power circuit, etc.)
 - Camera, battery, motor, MIC, fingerprint identification module, etc.
4. Due to the small number or only one sample adjusting machine, some probabilistic problems cannot be completely found. **It is recommended to Check the problem points in small batch trial production before mass production**(screen flashes , horn noise, TP jump point, black screen OR crash, signal diving, etc.).

