



ANTENNA TEST RESULT

Project Name	Memor11	Platform	MT8768
ANT Version	V1.0	HW Version	V01
Software Version	1.00.01.20220803	ME Version	T0
Test Date	2022.08.31	Engineer	wuqingjie
Temperature	25°C	Humidity	50%
Conclusion:			

Test Equipment&Environment

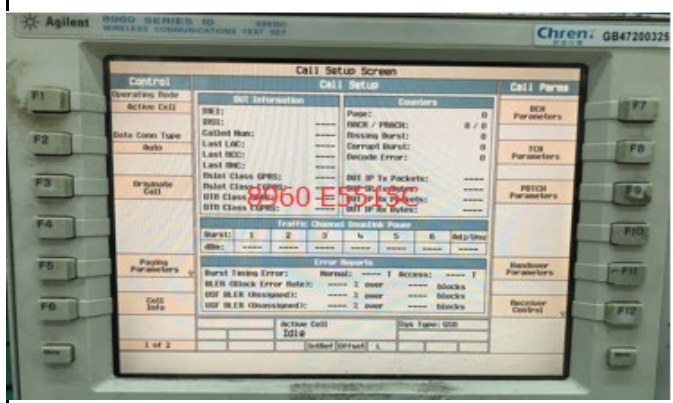
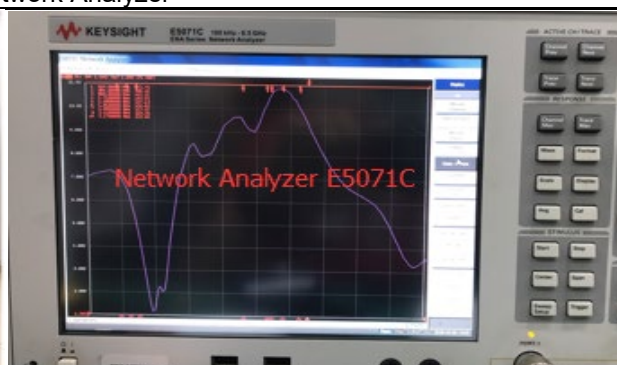
Equipment&Environment:

3D Microwave chamber (7M*4M*4M)

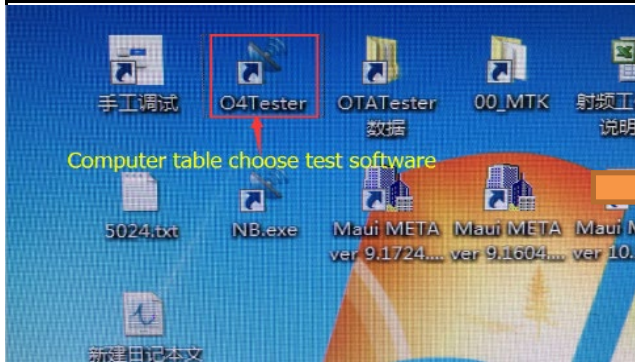
ROHDE&SCHWARZ CMW500

Agilent 8960 SERIES 10 E5515C

KEYSIGHT E5071C Network Analyzer

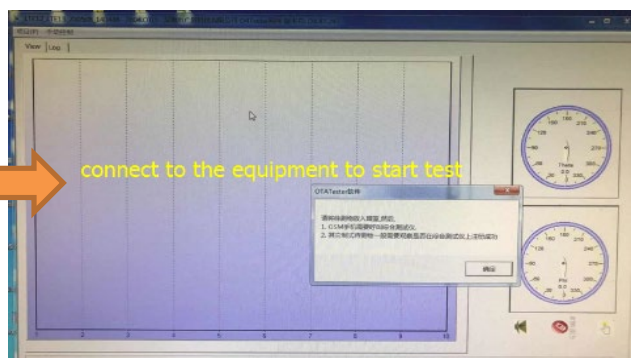
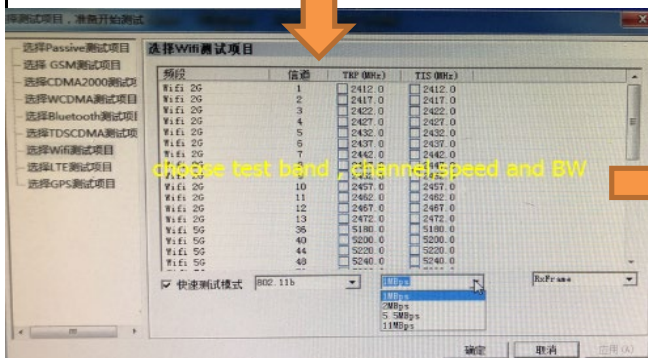
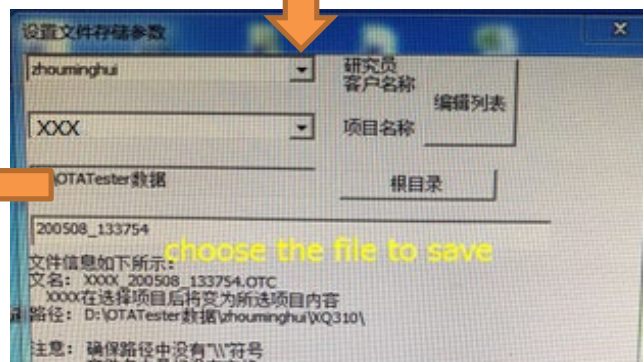
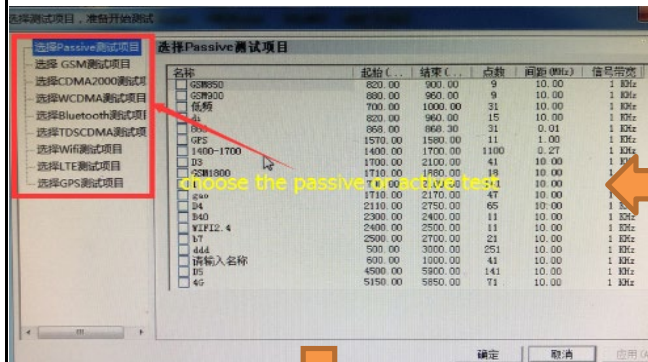


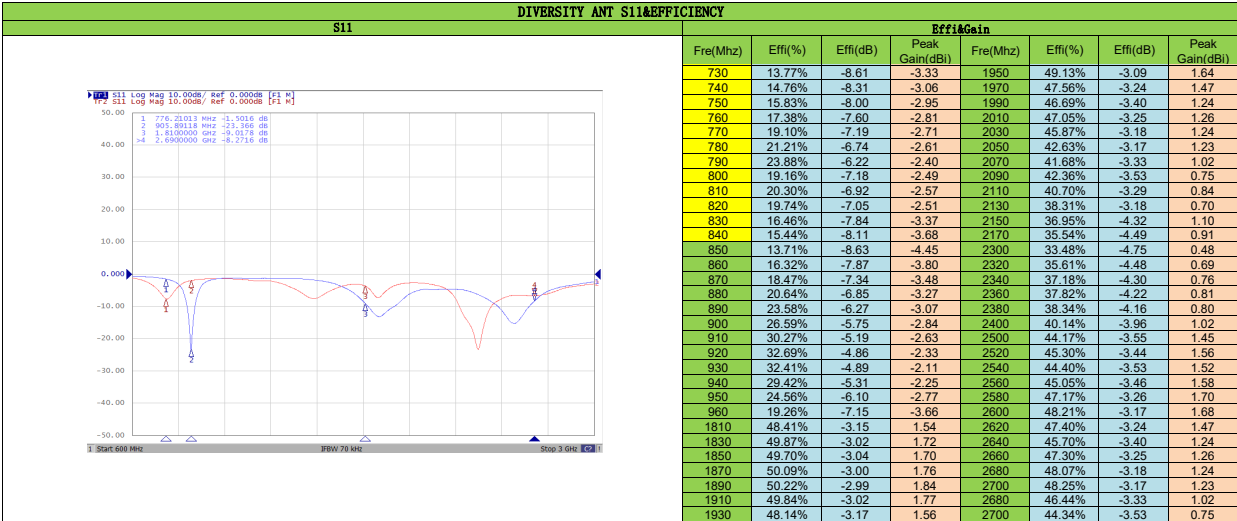
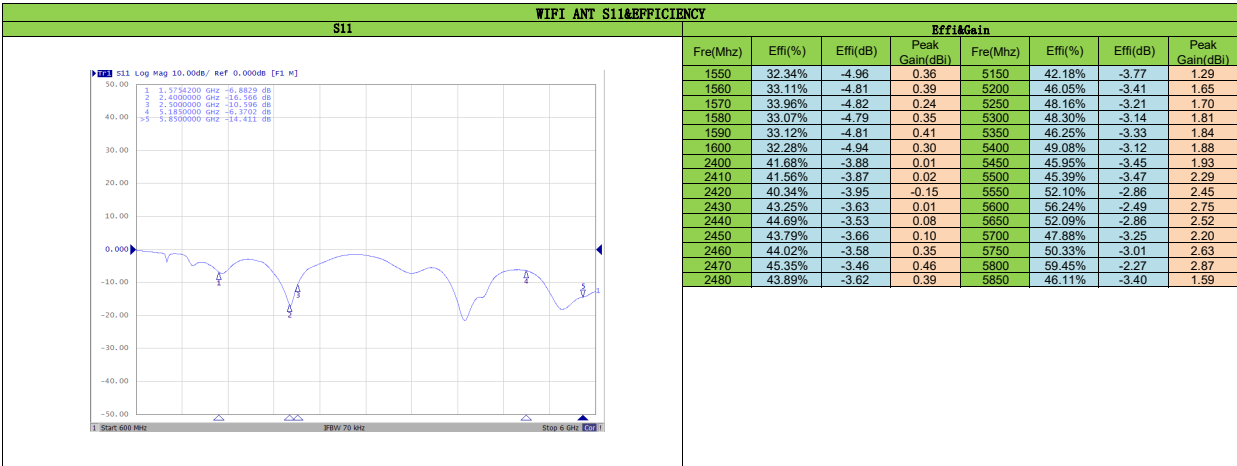
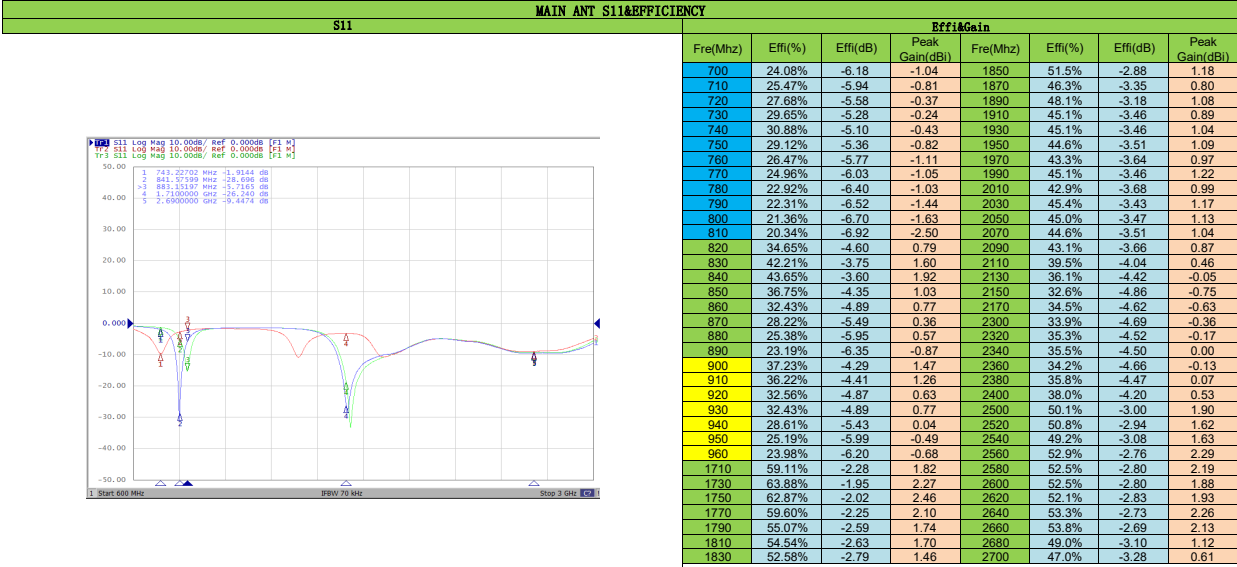
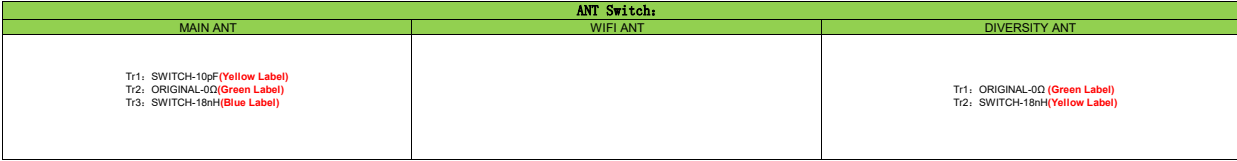
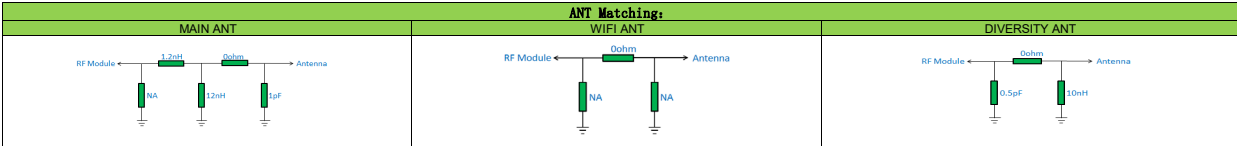
Test Step



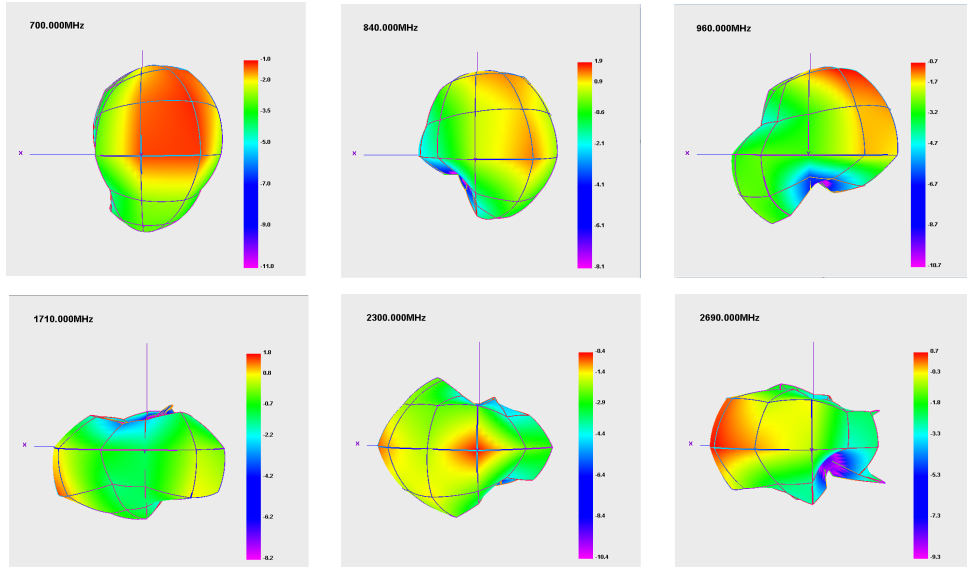
查看测试结果
开始一个3D测试
开始一个2D测试
开始特定点测试
平坦度测试
金机/偶极子校准
喇叭天线校准无源
偶极子校准有源
查看/更改 配置
查看历史测试记录

choose test mode
(3D OR 2D)

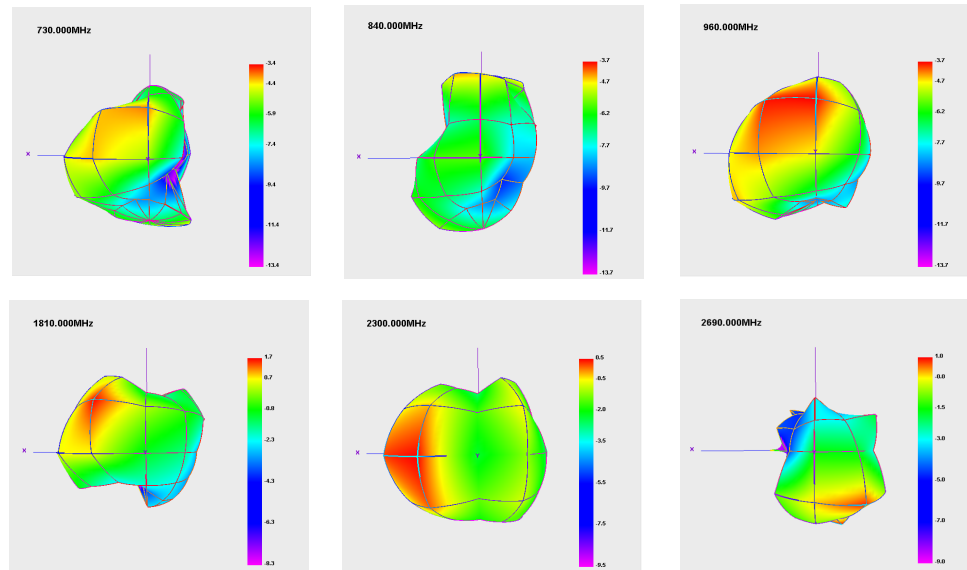




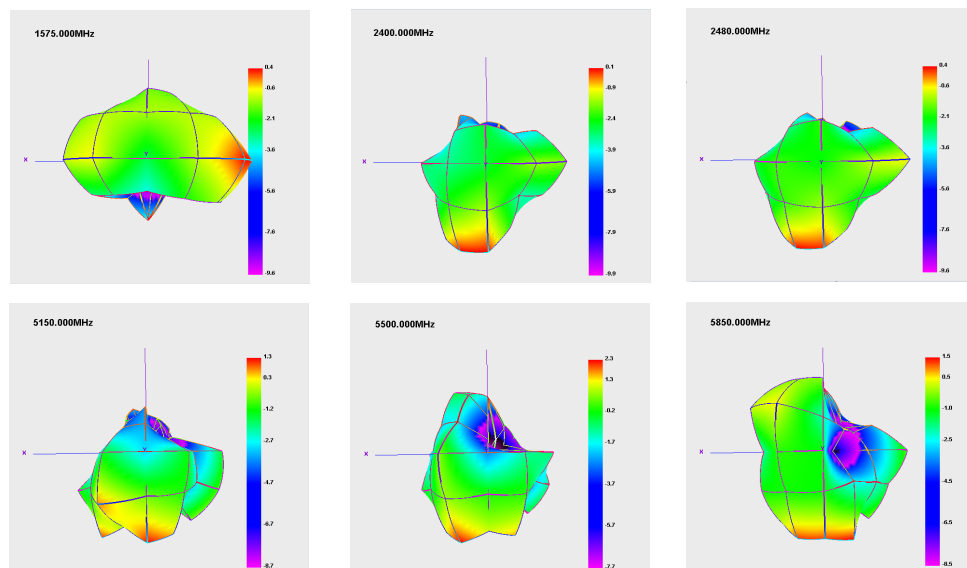
MAIN ANT 3D Pattern



DIVERSITY ANT 3D Pattern



WIFI ANT 3D Pattern



MAIN ANT TWP (dbm)									
Band	Channel	Freq (MHz)	RF (MHz)		FS	ATP	SPFC	(min) SPEC	
GSM850	128	924.2	924.2		28.42				
	190	935.6	935.6		28.32	28.27	27	26	
	251	946.8	946.8		28.08				
GSM900	975	960.9	960.9		28.13	27.82	23		
	124	967.1	967.1		28.39				
	124	967.1	967.1		28.95				
DCS1800	212	1733.2	1733.2		28.73	28.79	21		
	298	1747.4	1747.4		28.97				
	885	1754.4	1754.4		28.68				
PCS1900	212	1920.2	1920.2		28.76	27.21	25.6	24.5	
	881	1938.8	1938.8		27.53				
	910	1949.8	1949.8		27.34				
WCDMA-B1	9912	1920.4	1920.4		28.18	20.70	15		
	9728	1926.4	1926.4		28.70				
	9988	1927.6	1927.6		28.73				
WCDMA-B2	9988	1926.4	1926.4		28.97	20.61	19.9	18	
	9920	1926.4	1926.4		28.36				
	9920	1926.4	1926.4		28.81				
WCDMA-B4	1312	1712.4	1712.4		28.14	20.59	20.05	18	
	1312	1712.4	1712.4		28.73				
	1312	1712.4	1712.4		28.91				
WCDMA-B5	4132	846.6	846.6		19.16	18.39	18	17	
	4185	857	857		17.60				
	4253	858.6	858.6		18.40				
WCDMA-B8	2112	864.4	864.4		18.13	18.16	13		
	2128	864.4	864.4		18.16				
	2883	865.6	865.6		18.18				
FDD LTE-B2	18900	1880	1880	10MHz	20.91	20.78	18.9	17	
	18900	1880	1880	10MHz	20.76				
	18900	1880	1880	10MHz	20.87				
FDD LTE-B4	20115	1712.5	1712.5	10MHz	20.09	20.08	19.05	17	
	20115	1712.5	1712.5	10MHz	20.09				
	20115	1712.5	1712.5	10MHz	20.07				
FDD LTE-B5	20400	806	806	10MHz	19.18	19.40	17.95	17	
	20400	806	806	10MHz	19.65				
	20400	806	806	10MHz	19.37				
FDD LTE-B7	20400	2025	2025	10MHz	20.66	20.16	13.5		
	21100	2025	2025	10MHz	20.38				
	21100	2025	2025	10MHz	19.44				
FDD LTE-B12	21100	740	740	10MHz	17.95	17.35	16.5	15	
	21100	740	740	10MHz	17.22				
	21100	740	740	10MHz	17.63				
FDD LTE-B13	21200	742	742	10MHz	17.40	17.40	17	16	
	21200	742	742	10MHz	17.40				
	21200	742	742	10MHz	17.91				
FDD LTE-B25	20900	1824	1824	10MHz	19.97	18.99	14		
	20900	1824	1824	10MHz	19.41				
	20900	1824	1824	10MHz	19.58				
FDD LTE-B28	21210	814	814	10MHz	16.62	17.55	14		
	20900	814	814	10MHz	17.50				
	20900	814	814	10MHz	18.54				
FDD LTE-B28	21210	814	814	10MHz	18.54	17.97	16.5	15	
	21210	814	814	10MHz	17.66				
	21210	814	814	10MHz	17.70				

MAIN+DIVERSITY ANT TIS (dbm)									
Band	Channel	Freq (MHz)	RF (MHz)	FS	ATP	SPFC	(min) SPEC		
GSM850	128	924.2	924.2	-104.70					
	190	935.6	935.6	-105.72	-104.68	-102.5	-101.5		
	251	946.8	946.8	-103.62					
GSM900	975	960.9	960.9	-102.77	-101.81	-98.5			
	124	967.1	967.1	-101.48					
	124	967.1	967.1	-101.48					
DCS1800	212	1733.2	1733.2	-109.25	-108.36	-98			
	298	1747.4	1747.4	-107.23					
	885	1754.4	1754.4	-105.80					
PCS1900	212	1920.2	1920.2	-109.68	-107.24	-103	-101.5		
	881	1938.8	1938.8	-107.64					
	910	1949.8	1949.8	-107.40					
WCDMA-B1	9912	1920.4	1920.4	-110.84	-110.75	-99			
	9728	1926.4	1926.4	-110.19					
	9988	1927.6	1927.6	-111.22					
WCDMA-B2	9988	1926.4	1926.4	-108.50	-109.08	-104.4	-102		
	9920	1926.4	1926.4	-109.49					
	9920	1926.4	1926.4	-109.25					
WCDMA-B4	1312	1712.4	1712.4	-110.95	-110.38	-105.5	-103		
	1312	1712.4	1712.4	-110.95					
	1312	1712.4	1712.4	-110.95					
WCDMA-B5	4132	846.6	846.6	-108.17	-107.81	-104.8	-102		
	4185	857	857	-108.28					
	4253	858.6	858.6	-106.97					
WCDMA-B8	2112	864.4	864.4	-107.85	-107.83	-99			
	2128	864.4	864.4	-107.85					
	2888	865.6	865.6	-107.48					
FDD LTE-B2	18900	1880	1880	-98.34	-98.32	-92.2	-90		
	18900	1880	1880	-98.79					
	18900	1880	1880	-97.84					
FDD LTE-B4	20115	1712.5	1712.5	-98.90	-98.41	-93.3	-91.5		
	20115	1712.5	1712.5	-98.40					
	20115	1712.5	1712.5	-98.14					
FDD LTE-B5	20400	806	806	-95.96	-95.83	-92.6	-90		
	20400	806	806	-95.85					
	20400	806	806	-95.16					
FDD LTE-B7	20400	2025	2025	-97.69	-97.37	-87.5			
	21100	2025	2025	-96.19					
	21100	2025	2025	-97.64					
FDD LTE-B12	21100	740	740	-93.85	-93.73	-91	-90.5		
	21100	740	740	-93.86					
	21100	740	740	-94.38					
FDD LTE-B13	21200	742	742	-95.64	-95.64	-91	-90		
	21200	742	742	-95.64					
	21200	742	742	-93.59					
FDD LTE-B17	21200	742	742	-93.59	-93.47	-91	-90.5		
	20900	742	742	-93.44					
	20900	742	742	-93.44					
FDD LTE-B25	20900	1824	1824	-96.37	-96.03	-87			
	20900	1824	1824	-96.37					
	20900	1824	1824	-96.37					
FDD LTE-B28	21210	814	814	-94.12	-93.54	-86			
	20900	814	814	-94.12					
	20900	814	814	-92.54					
FDD LTE-B28	21210	814	814	-94.11	-94.90	-91	-90.5		
	21210	814	814	-95.32					
	21210	814	814	-95.26					

Performance Color Table		
	Channel Level	
	Not optimized Level	

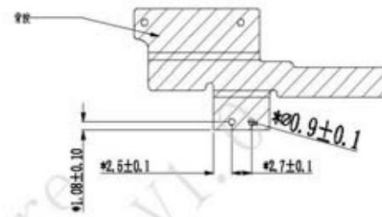
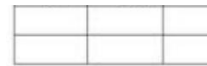
Main Antenna			
ANT Switch State	Matching	For US Bands	
State 1	Active	GSM850DCS1800PCS1900 WCDMA-B1/B2/B4/B5/LTE-B2/B4/B5/B7/B25/B28	
State 2	Idle	LTE-B2/B4/B5/B7/B28	
State 3	Idle	GSM900 WCDMA-B8	
Diversity Antenna			
ANT Switch State	Matching	For US Bands	
State 1	Active	WCDMA-B1/B2/B4/B5/B8/LTE-B2/B4/B5/B7/B25/B28	
State 2	Idle	LTE-B2/B4/B5/B7/B28	

WIFI OTA TEST(LCD ON)					
Mode: 802.11b Rate: 11Mbps BW: 20M					
Band	Channel	Freq/MHz	TRP (dBm) FS	AVE	SPEC
WIFI 2.4G	1	2412	15.21	15.55	≥16
	7	2442	16.09		
	11	2462	15.34		
Mode: 802.11b Rate: 11Mbps BW: 20M					
Band	Channel	Freq/MHz	TIS (dBm) FS	AVE	SPEC
WIFI 2.4G	1	2412	-88.10	-88.27	≤-86
	7	2442	-88.34		
	11	2462	-88.36		

GPS OTA TEST	
Freq (MHz)	TIS
1575.42	-143.09

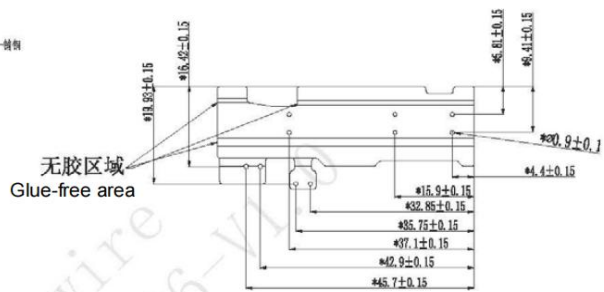
WIFI OTA TEST(LCD ON)					
Mode: 802.11a Rate: 6Mbps BW: 20M					
Band	Channel	Freq/MHz	TRP (dBm) FS	AVE	SPEC
WIFI 5G	36	5180	15.99	15.42	≥14
	100	5500	15.73		
	165	5850	14.53		
Mode: 802.11a Rate: 54Mbps BW: 20M					
Band	Channel	Freq/MHz	TIS (dBm) FS	AVE	SPEC
WIFI 5G	36	5180	-76.03	-76.23	≤-74
	100	5500	-77.09		
	165	5850	-75.58		

Antenna design drawing
WIFI/BT ANT

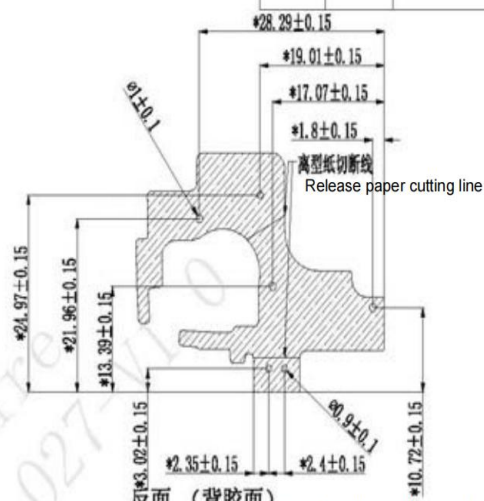
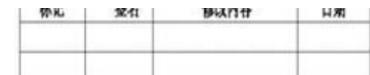


Back side (adhesive back side)
反面（背胶面）

LTE ANT			
55-117	55-2	TECH 10/10	



Back side (adhesive back side)
反面 (背胶面)



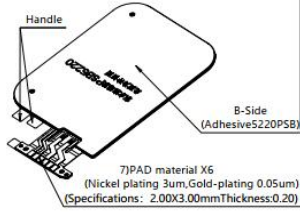
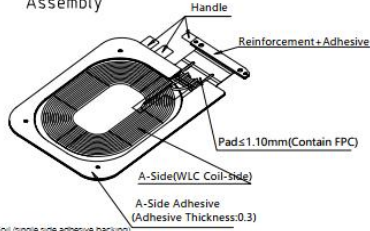
反面 (背胶面) Back side (adhesive back side)

NFC ANT

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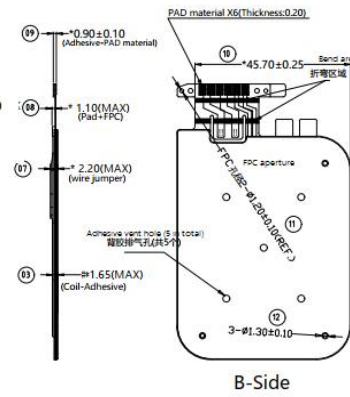
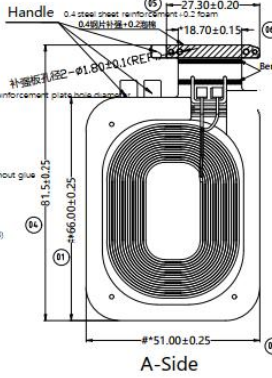
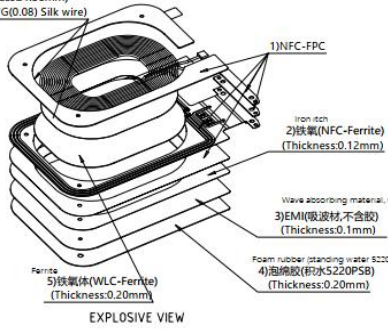
Revision	Engineering Change Description	Date	Owner
A0	初版 First edition	2022/11/01	Jaizhang

Assembly



PAD material: C5191R-H/C520, contact resistance: 20 milliohms MAX over all: Ni 3um, contact area: AU 0.05um

Coil (single side adhesive backing)
6)线圈(单面背胶)
(Thickness: 1.50mm)
(50x40AWG(0.08) Silk wire)



SELECT	A	B	C	D
SPEC. CLASS				
< 8mm	0.05	0.1	0.1	0.2
8~20mm	0.05	0.15	0.15	0.3
20~80mm	0.1	0.2	0.25	0.4
80~200mm	0.25	0.3	0.3	0.5
ANGLE	0.5			
MATERIAL	SEE NOTE			
Finish	SEE NOTE			

CAO GENERATED DRAWING, DO NOT MANUALLY UPDATE	SIZE	WPC-L-P-RX-CF-003
DRAWN	Jaizhang	
DESIGNED	Steven	
APPROVED	Steven	
PART No.	UNIT	MM
SCALE	1:1	
SHEET	1 OF 1	

禾邦电子(苏州)有限公司 INPAQ Technology Co., Ltd.	SIZE	WPC-L-P-RX-CF-003
	SCALE	1:1
	SHEET	1 OF 1