



Shenzhen cape deep communication technology co., LTD

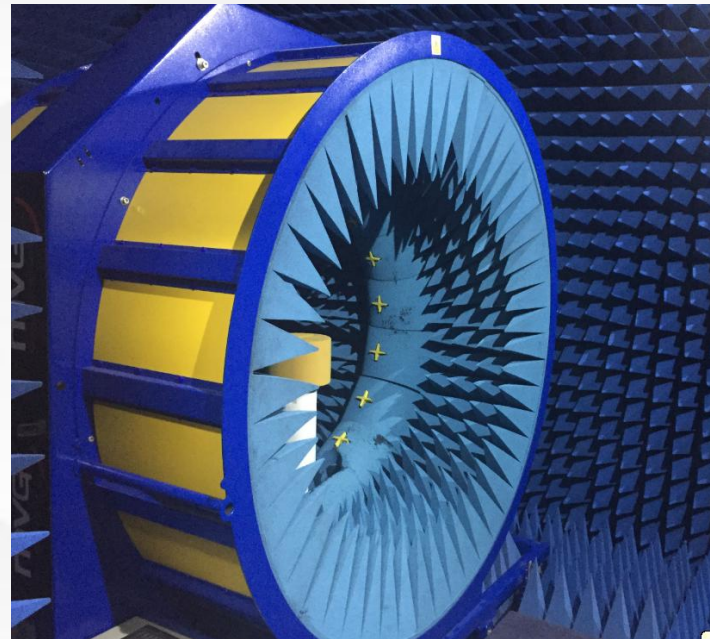
Antenna Test Report

Customer: Haoen
Project Name: CB021
RF: Hu Gong
Date: April 15th, 2025
Version: V3.1



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Laboratory testing environment and equipment

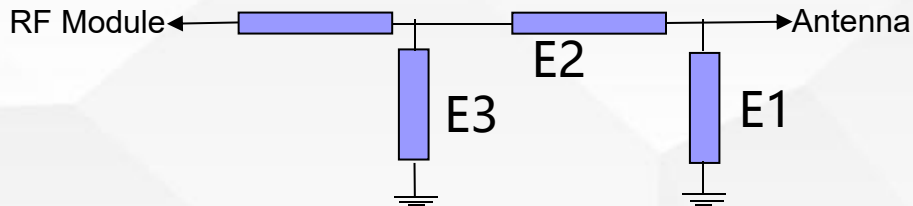


Test project	Testing equipment
S11、S12、VSWR、LOSS	network analyzer E5071B、E5062A
Efficiency、Gain 3D Radiation Pattern	Satimo SG16darkroom、GP7*4*3darkroom、E5071B
TRP、TIS	Satimo SG16darkroom、GP7*4*3darkroom、8960、CMW500、MT8820C、E4438C、



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BT antenna matching circuit

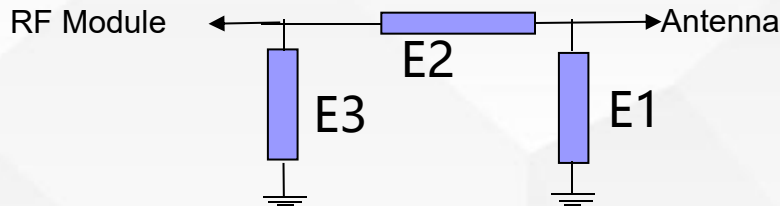


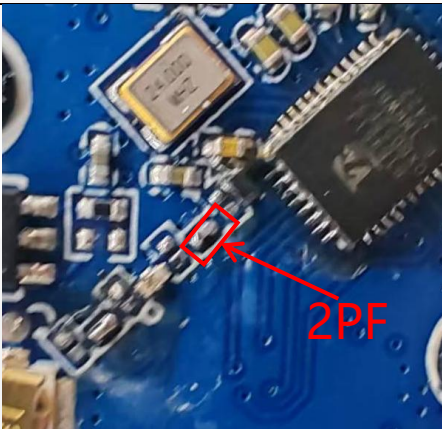
BT antenna	Element	Value	Original motherboard matching
	E1		
	E2		
	E3		



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Keyboard mainboard end matching circuit



BT antenna	Element	Value	
	E1	NC	
	E2	2PF	
	E3	NC	



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Antenna OTA test data

Frequency band	Channel	TRP(dBm)	TIS(dBm)	Frequency band	Channel	TRP(dBm)	TIS(dBm)
KeypadV3.1 (1#)	0	7.9	-89.7	KeypadV3.1 (1#) (mainboard 0Ω change 2PF)	0	6.9	-90.6
	39	7.4	-89.6		39	7.7	-90.1
	78	6.5	-89.1		78	6.2	-89.5
KeypadV3.1 (2#)	0	7.7	-89.3	KeypadV3.1 (2#) (mainboard 0Ω change 2PF)	0	7.6	-90
	39	7.2	-88.9		39	8.3	-90.3
	78	6.1	-88.7		78	7	-90.1
KeypadV3.1 (3#)	0	7.5	-89.1	KeypadV3.1 (3#) (mainboard 0Ω change 2PF)	0	7.3	-90
	39	7.9	-89.7		39	7.7	-90.3
	78	6.3	-89.6		78	7	-89.7
V3.1 Onboard (mainboard Conduct data)	0	10.9	-91.7				
	39	10.9	-91.5				
	78	10.4	-91.6				



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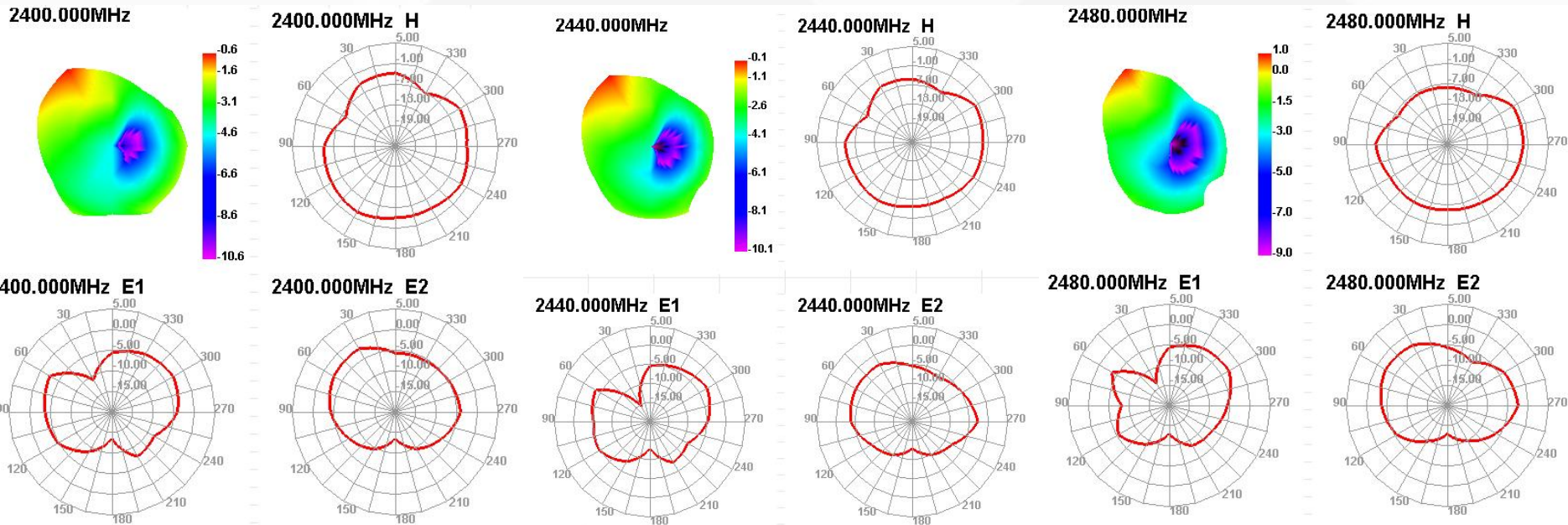
Antenna passive test data

Passive Test For WIFI2.4			
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2400	33.41	-4.76	-0.63
2410	33.71	-4.72	-0.58
2420	34.07	-4.68	-0.47
2430	32.65	-4.86	-0.52
2440	33.13	-4.8	-0.12
2450	33.33	-4.77	0.25
2460	33.84	-4.71	0.63
2470	33.75	-4.72	0.91
2480	33.06	-4.81	1.03
2490	37.06	-4.31	1.63
2500	37.56	-4.25	1.73



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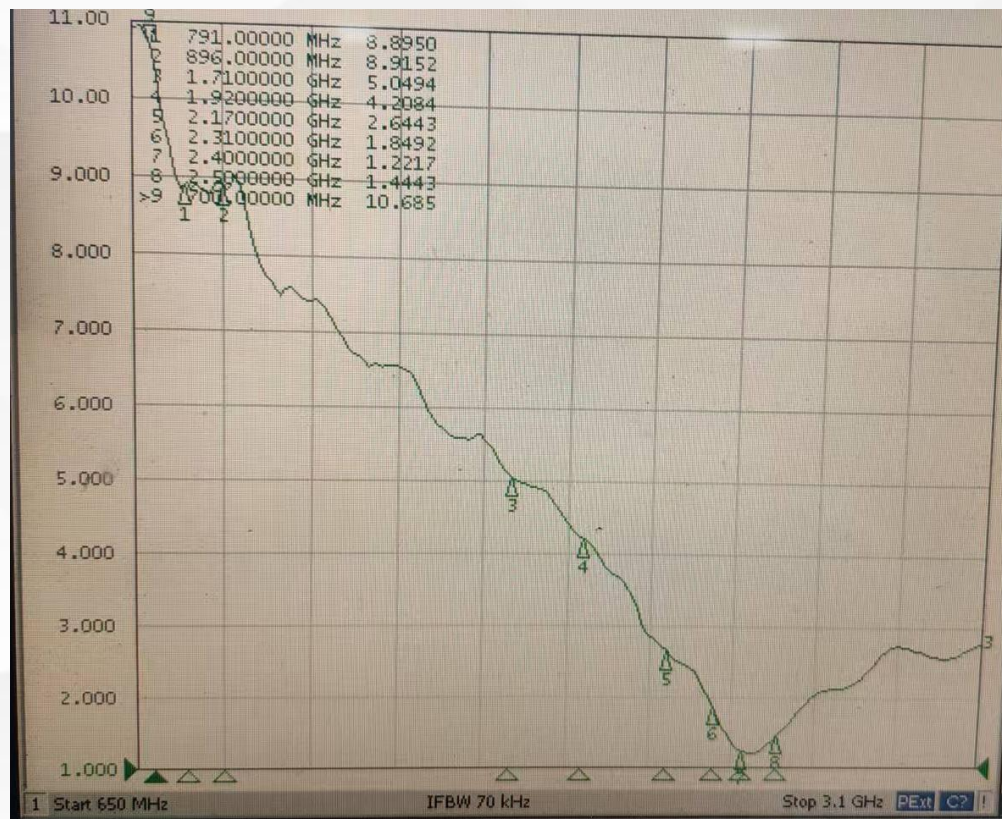
3-D patterns





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S-11 patterns



深圳市凯普深通讯科技有限公司

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include antenna dimensions



Setup photo





contact information

contact information:

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THE END

**Thank you for your
valuable feedback!**