



Dongguan Songhui Co., LTD

Focus on antenna solutions
, design, and production

customer: BeiKe

project: V3 PLUS Vidaa

date: 2026.04.18

frequency: LU0 YI

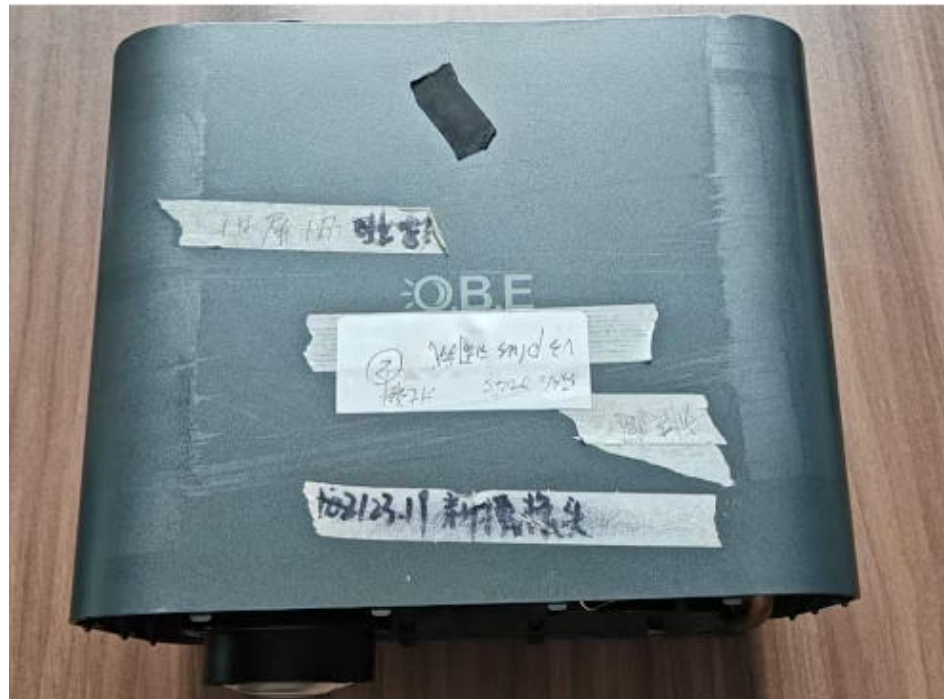
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Description of Previous Debugging Records

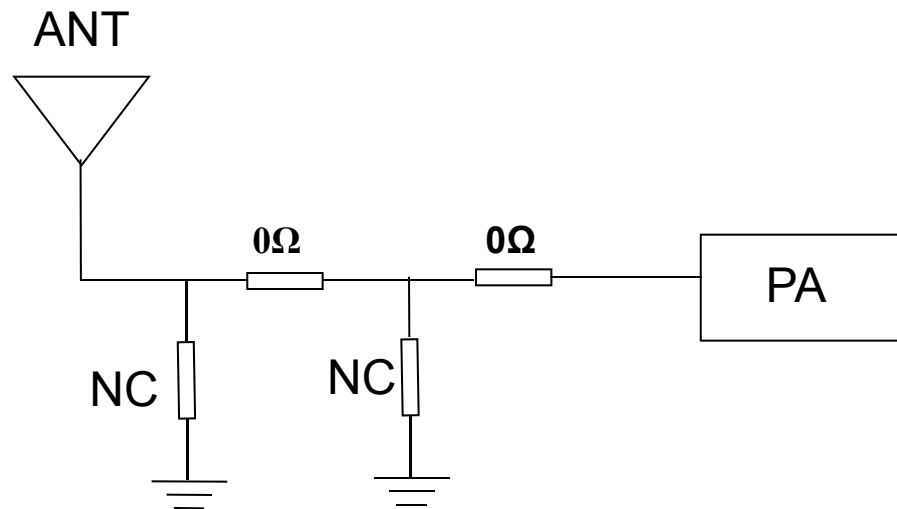
Date	Version	Model	Debugging Record Description
2024.09.25	A		FPC Samples & Tuning Prototypes



Complete Machine Debugging Instructions

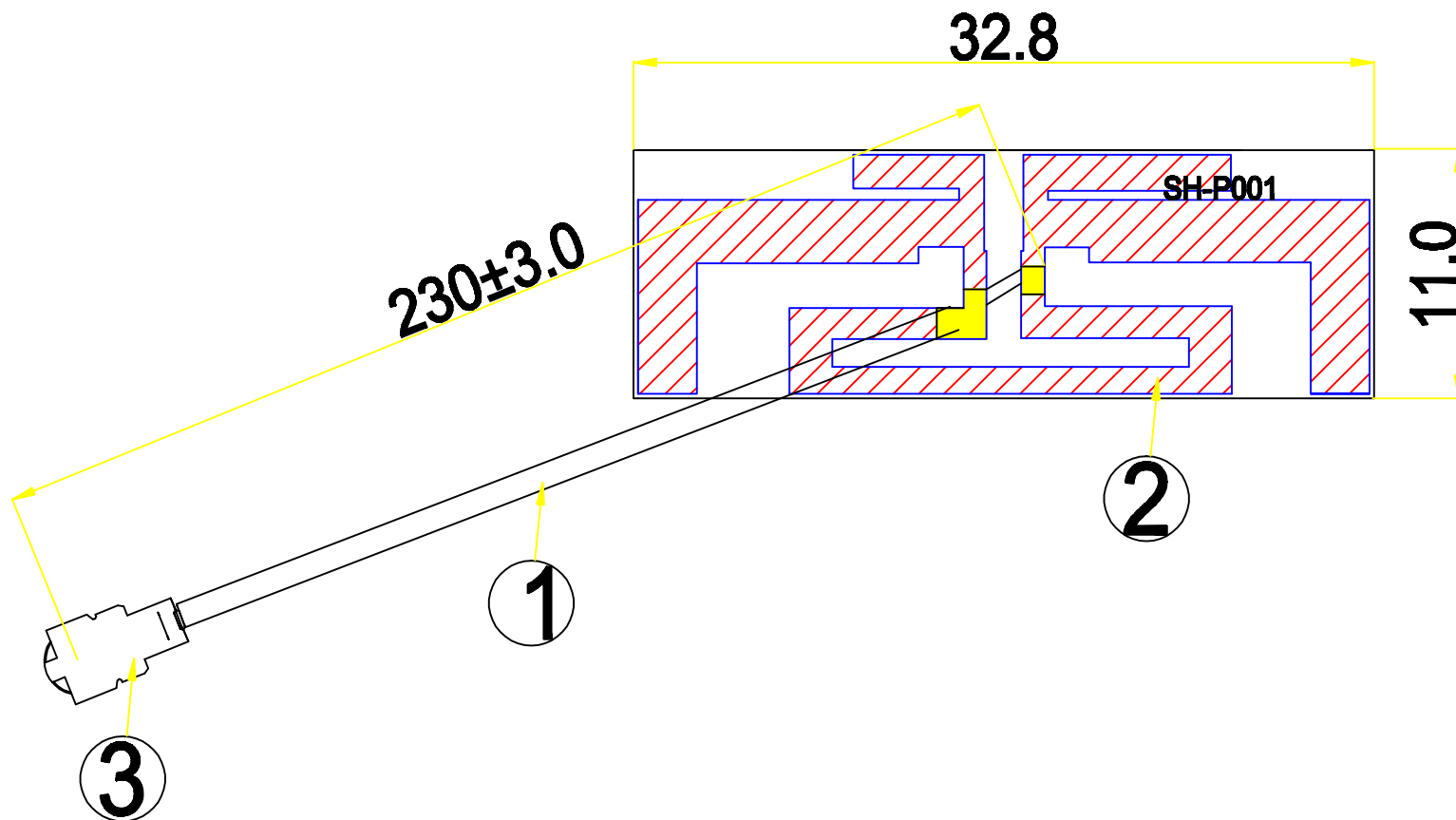
Model Number	Projector						
Model	Motherboard						
Antenna Overview	Main Antenna	Frequency Band		Antenna Status	Antenna Type	Design Area	Matching Adjustment
		2G	N/A	N/A	N/A	N/A	N/A
		3G	N/A				
		4G	N/A				
	Other Antennas	WIFI/BT	2. 4/5G	FPC Sample	PIFA	Shell Parts	None
		GPS	N/A				
		分集	N/A	N/A	N/A	N/A	N/A
Prototype Status	Tuning Prototype			Environment Treatment	无None		

Matching Circuit - Antenna



No changes to antenna matching circuit

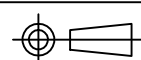
BT



3	MHF1	o.d.1.13专用	1
2	FPC	32.8*11.0mm	1
1	Coaxial Cable	O.D.1.13 Gray	1
NO	PART NAME	DESCRIPTION	Q.TY

SA Dongguan SongHui Co.,Ltd.

CUSTOMER			
PART NO			
TITLE		2.4-5.8GHzAntenna L=230mm	
S.H P/NO		SL186P.300076.P01	

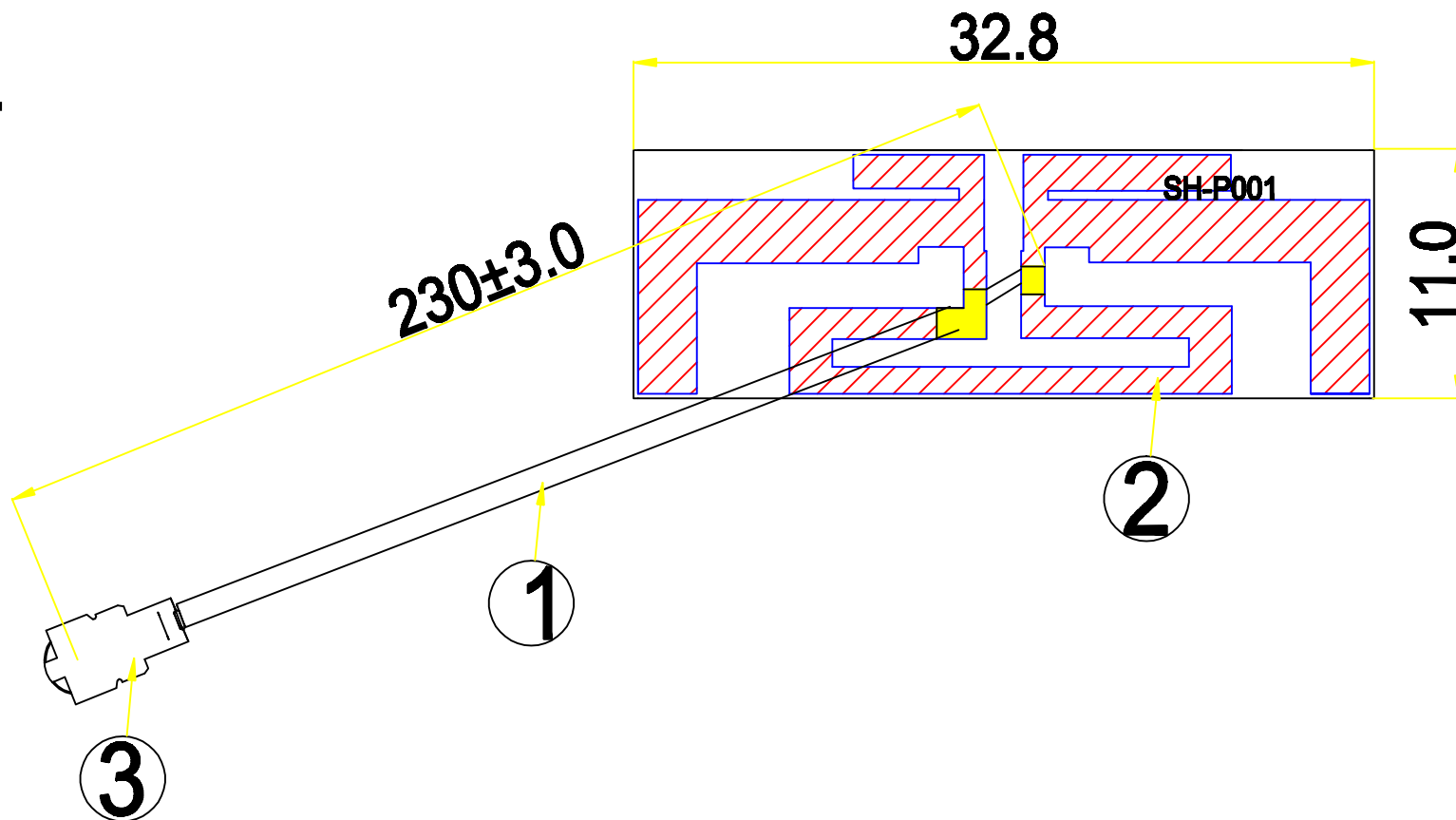


TOLERANCE UNLESS
OTHERWISE SPECIFIED

UNIT:mm	ANGLES ±0.5°	X. ±2.0
SHEET: 1/1	X.XX ±0.2	XX. ±5.0
SCALE: 1/1	X.X ±0.5	DATE:2025-08-29

SIZE	DRAWN	CHECKED	APPROVED
A4	LUOYI	ZOUJIE	

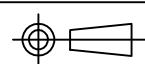
WIFI1



3	MHF1	o.d.1.13专用	1
2	FPC	32.8*11.0mm	1
1	Coaxial Cable	O.D.1.13 Gray	1
NO	PART NAME	DESCRIPTION	Q.TY

SA Dongguan SongHui Co.,Ltd.

CUSTOMER			
PART NO			
TITLE		2.4-5.8GHzAntenna L=230mm	
S.H P/NO		SL186P.300076.P01	

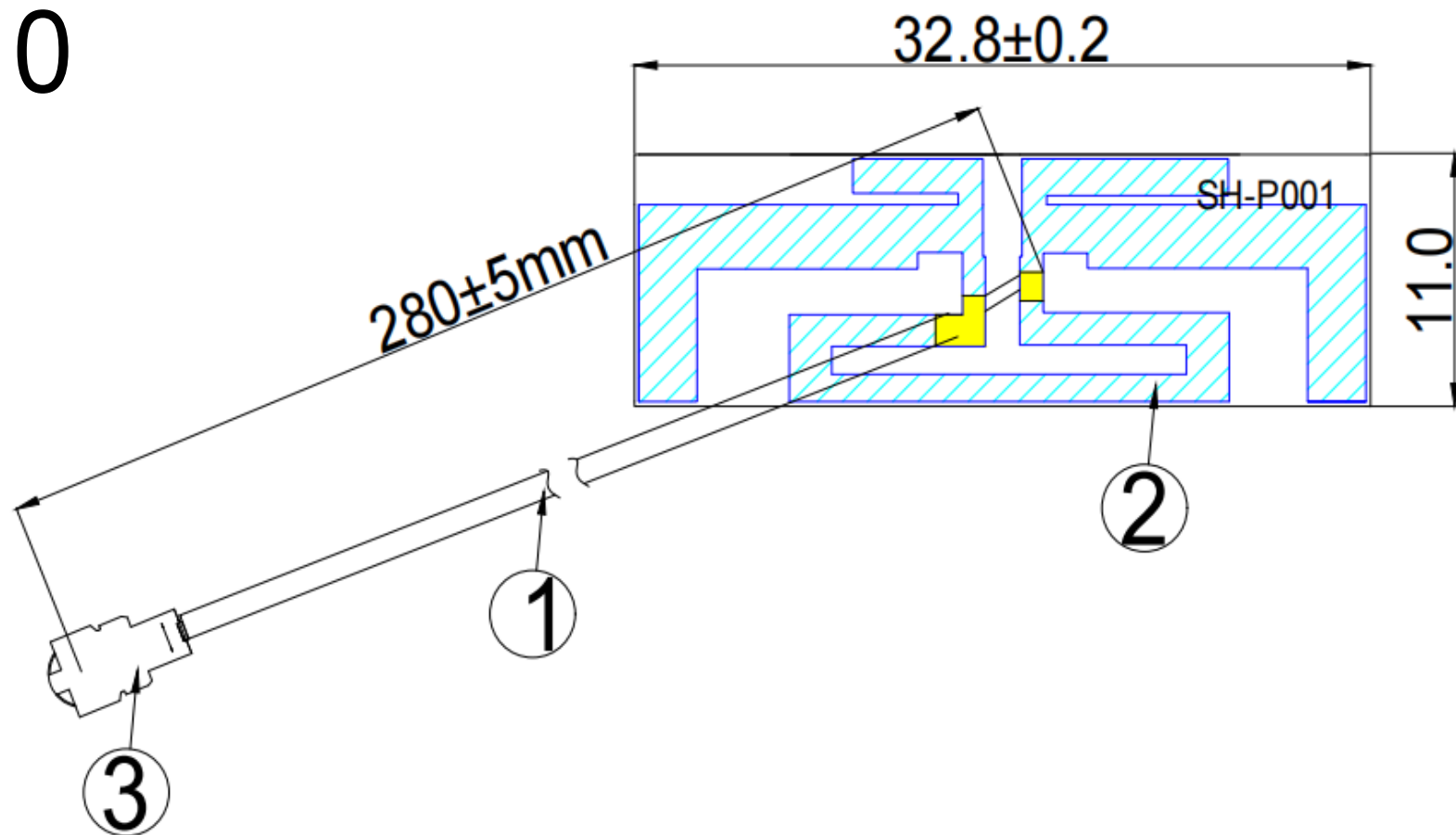


TOLERANCE UNLESS
OTHERWISE SPECIFIED

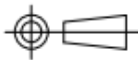
UNIT:mm	ANGLES ±0.5°	X. ±2.0
SHEET: 1/1	X.XX ±0.2	XX. ±5.0
SCALE: 1/1	X.X ±0.5	DATE:2025-08-29

SIZE	DRAWN	CHECKED	APPROVED
A4	LUOYI	ZOUJIE	

WIFI0



3	MHF1	o.d.1.13专用	1
2	FPC	32.8*11.0mm	1
1	Coaxial Cable	O.D.1.13 白色	1
NO	PART NAME	DESCRIPTION	Q.TY

 Dongguan SongHui Co.,Ltd.			CUSTOMER		北科	
			CUSTOMER NO			
			TITLE		2.4-5.8GHzAntenna L=280mm	
			S.H P/NO		SL186P.300091.P01	
	TOLERANCE UNLESS OTHERWISE SPECIFIED		SIZE	DRAWED	CHECKED	APPROVED
UNIT:mm	ANGLES ±0.5°	X. ±2.0	A4	LU	luoyi	
SHEET: 1/1	X.XX ±0.2	XX. ±5.0				
SCALE: 1/1	X.X ±0.5	DATE:2026-04-20				

Passive-SWR2#

2#

WiFi0

WiFi 1

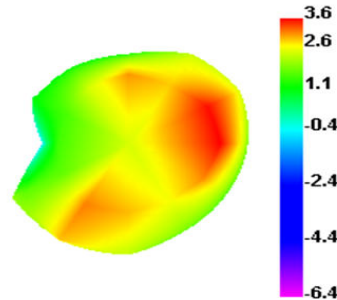
BT



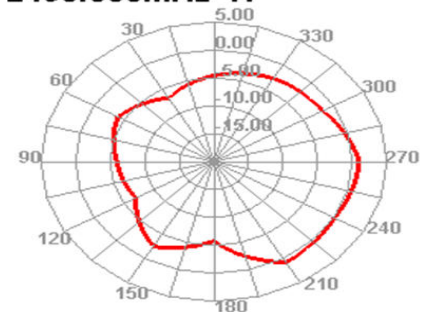
Passive--Efficiency/Gain-WIFI 1

Freq (MHz)	Effi (%)	Gain (dBi)
2400	52.97	2.12
2410	50.39	2.19
2420	52.4	2.23
2430	57.65	2.48
2440	57.62	2.32
2450	60.61	2.48
2460	65.68	3.04
2470	69.28	3.47
2480	67.98	3.51
2490	67.95	3.61
2500	62.76	3.32
5100	51.83	4.42
5120	54.89	4.1
5140	51.16	4.09
5160	54.73	4.32
5180	50.36	4.81
5200	52.42	4.79
5220	49.44	4.67
5240	55.61	4.08
5260	50.31	4.34
5280	50.41	4.11
5300	53.44	4.25
5320	49.51	3.85
5340	51.94	3.49
5360	50.89	3.27
5380	50.43	3.56
5400	54.46	4.04
5420	51.66	3.77
5440	52.03	3.55
5460	48.15	3.31
5480	51.33	2.99
5500	53.17	3.65
5520	47.5	3.14
5540	48.72	2.62
5560	51.97	2.73
5580	51.86	2.24
5600	52.3	3.56
5620	55.75	2.15
5640	51.5	2.66
5660	49.09	2.72
5680	49.91	3.27
5700	52.88	4.51
5720	53.95	4.17
5740	52.94	4.57
5760	54.46	4.25
5780	57.83	4.38
5800	49.91	3.76
5820	57.12	4.39
5840	53.33	4.13
5860	49.27	3.8
5880	53.03	3.39
5900	51.41	3.37

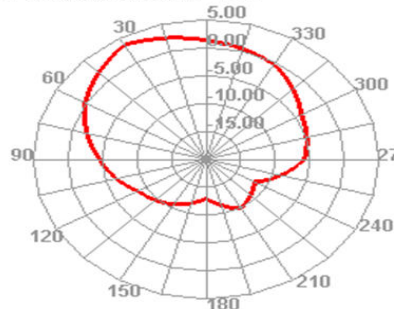
2490.000MHz



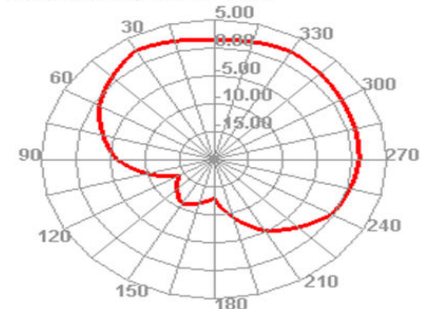
2490.000MHz H



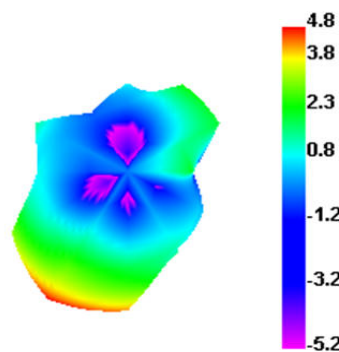
2490.000MHz E1



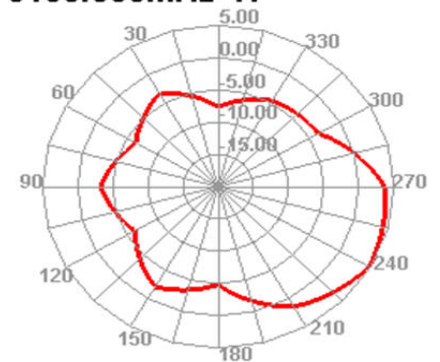
2490.000MHz E2



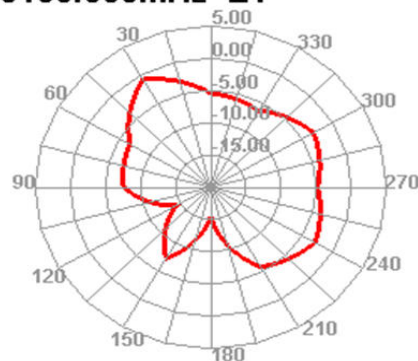
5180.000MHz



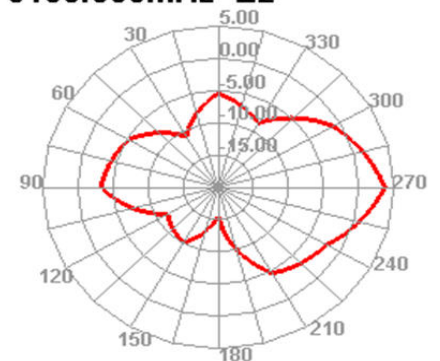
5180.000MHz H



5180.000MHz E1



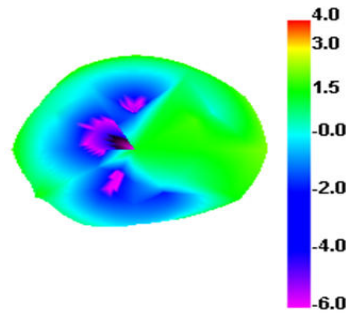
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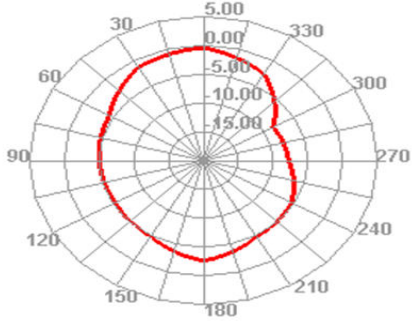
Passive--Efficiency/Gain-WIFI 0

Freq (MHz)	Effi (%)	Gain (dBi)
2400	55.05	3.55
2410	55.72	3.62
2420	57.17	3.54
2430	51.99	3.79
2440	51.14	3.55
2450	53.79	3.83
2460	56.12	3.99
2470	58.01	3.99
2480	55.32	3.53
2490	55.22	3.32
2500	51.52	2.73
5100	55.2	3.69
5120	57.43	4.04
5140	52.76	3.57
5160	54	3.3
5180	59.4	2.79
5200	50.4	3.23
5220	57.85	3.15
5240	52.93	3.63
5260	50.55	3.44
5280	50.75	3.3
5300	51.58	3.43
5320	56.88	2.83
5340	55.37	2.49
5360	55.43	2.25
5380	58.9	2.4
5400	62.96	3.02
5420	60.16	3
5440	60.1	2.97
5460	57.24	2.59
5480	56.48	2.62
5500	50.48	3.13
5520	56.72	2.96
5540	53.5	2.48
5560	53.67	2.78
5580	52.15	2.7
5600	52.63	4.02
5620	58.89	2.09
5640	53.92	2.69
5660	54.65	2.96
5680	56.14	3.02
5700	54.83	4.03
5720	57.71	3.34
5740	51.84	3.83
5760	53.64	3.82
5780	57.04	3.71
5800	52.46	2.8
5820	51.99	3.43
5840	50.91	3.38
5860	56.05	2.69
5880	54	1.88
5900	51.25	1.72

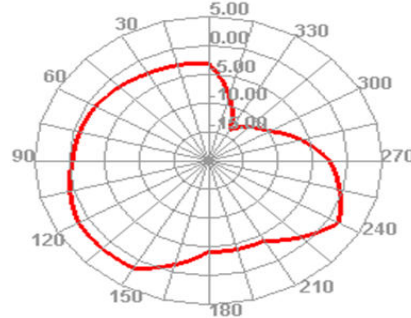
2460.000MHz



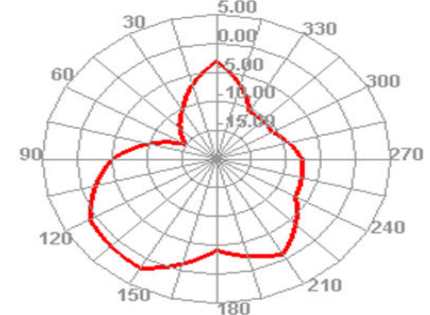
2460.000MHz H



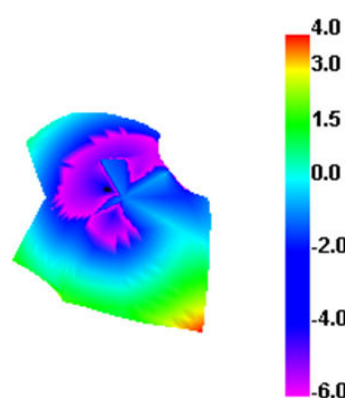
2460.000MHz E1



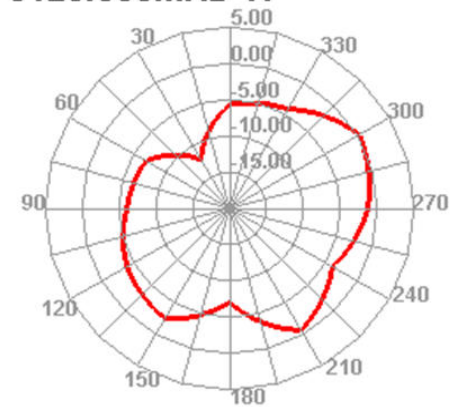
2460.000MHz E2



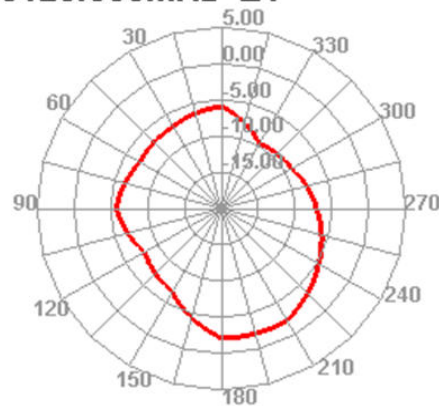
5120.000MHz



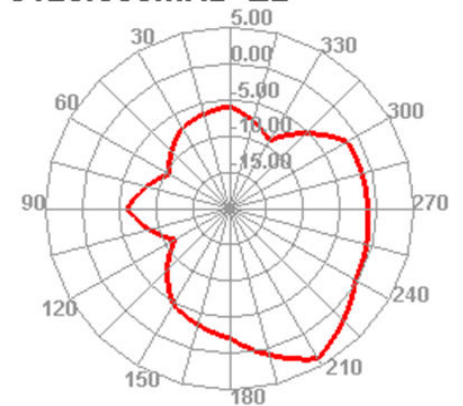
5120.000MHz H



5120.000MHz E1



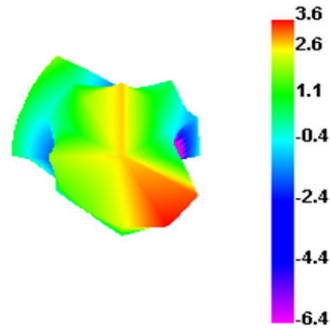
5120.000MHz E2



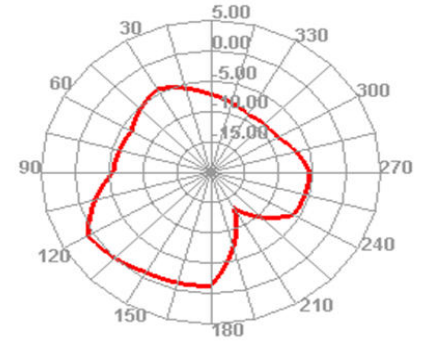
Passive--Efficiency/Gain-BT

Freq (MHz)	Effi (%)	Gain (dBi)
2400	49.28	1.4
2410	49.73	1.74
2420	50.81	2.18
2430	54.56	2.81
2440	54.42	2.83
2450	56.59	2.89
2460	51.38	3.11
2470	53.9	3.43
2480	53.3	3.51
2490	52.9	3.62
2500	50.42	3.22

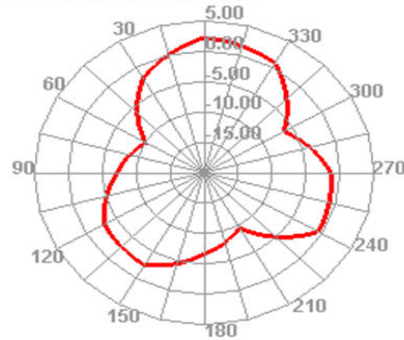
2490.000MHz



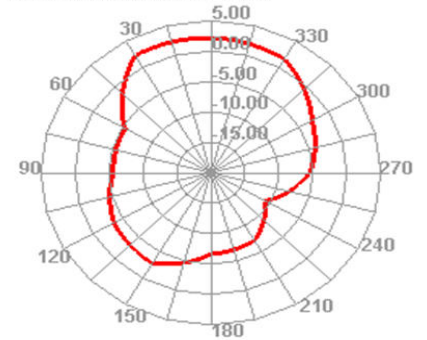
2490.000MHz H



2490.000MHz E1



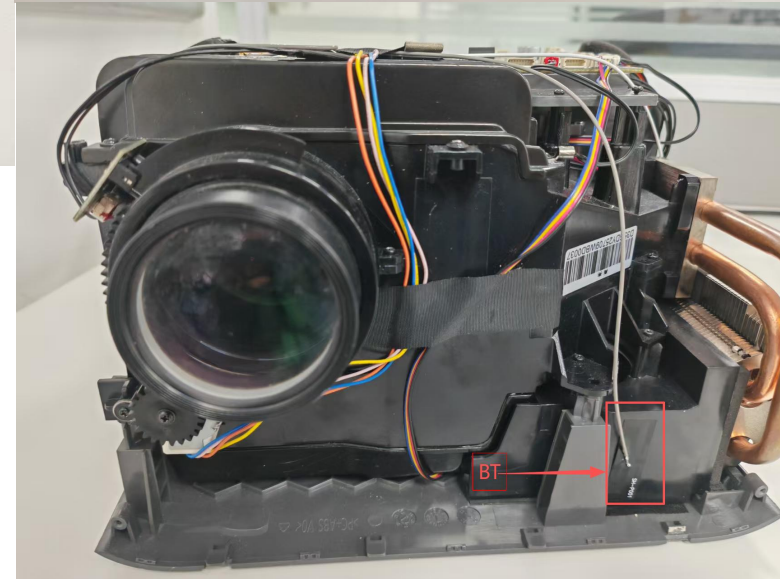
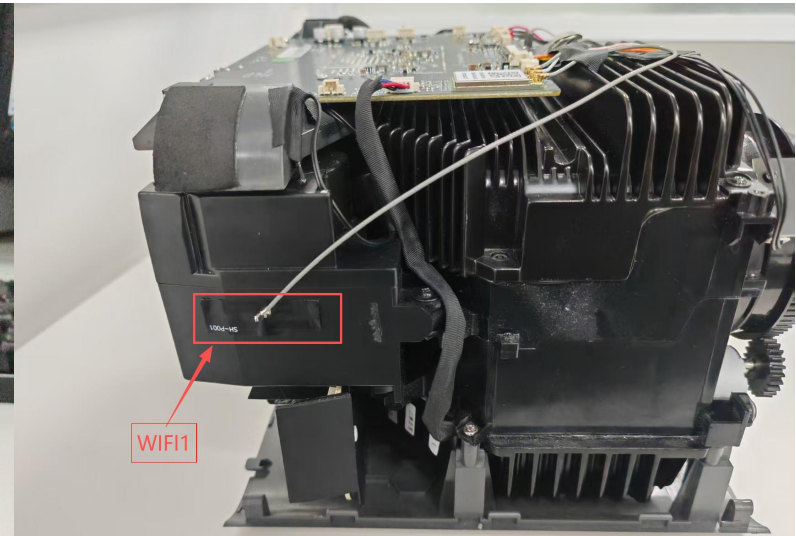
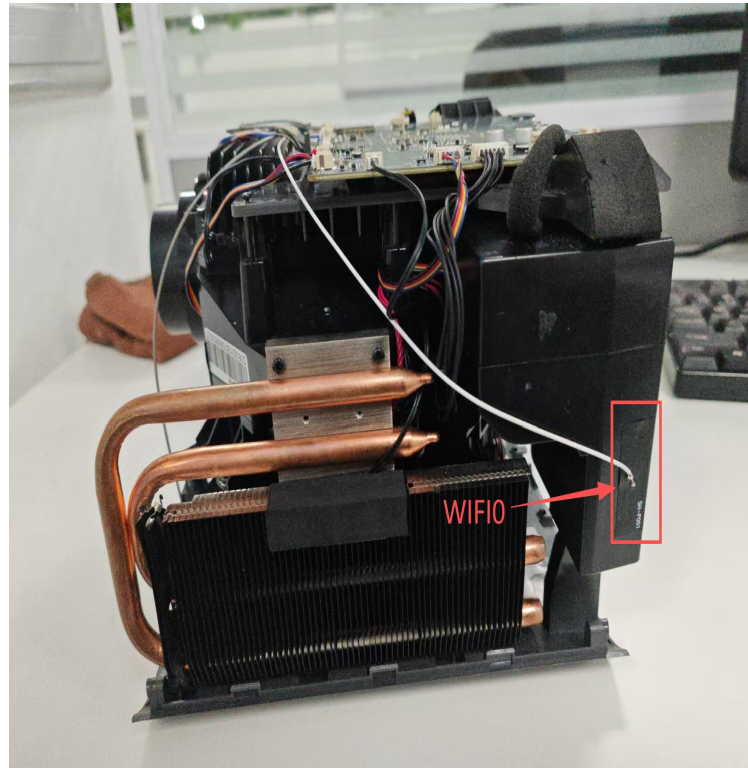
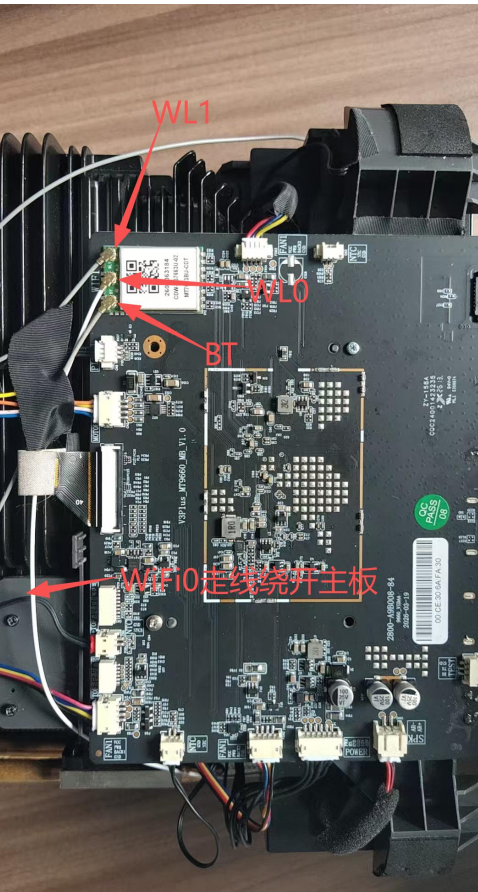
2490.000MHz E2



有源-TRP/TIS

带宽 (MHz)	测试项	模式	速率(Mbps)	信道	频率(MHz)	测试值 (dbm)	测试项目
20	TRP	B	11	1	2412	18.21	v3 plus
				6	2437	18.9	
				11	2462	17.96	
		G	6	1	2412	16.35	
				6	2437	16.41	
				11	2462	15.76	
		N	MCS7	1	2412	14.12	
				6	2437	14.39	
				11	2462	13.78	
		A	6	36	5180	15.35	
				149	5745	14.54	
				165	5825	15.29	
	TIS	B	11	1	2412	-79	
				6	2437		
				11	2462		
		G	54	1	2412	-70	
				6	2437		
				11	2462		
		N	MCS7	1	2412	-66	
				6	2437		
				11	2462		
		A	54	1	2412	-73	
				6	2437		
				11	2462		

Antenna Position



Instructions

1. All test data are obtained solely from the prototype supplied by the customer and shall not represent the final mass production performance of customer's products.
2. Customers are requested to carefully review the descriptions regarding matching circuit modification and environmental treatment stated in this report.
3. Prior to mass production, customers shall provide trial-run prototypes to our factory for secondary verification. Any material replacement, software upgrade or environmental adjustment shall be notified to us in advance.
4. If the customer requires third-party retesting or plans to send prototypes to their own test lab, all samples must pass verification at our facility beforehand to avoid performance discrepancies between mass produced units and tuned prototypes.
5. Our company does not recognize test data measured on non-tuned prototypes or data obtained from other anechoic chambers for formal judgment such data may only be used for reference, excluding certification anechoic chambers. In case of data deviation, all root cause analysis shall be based on the tuned prototypes from our lab.