

Kunshan Ruixiang Xuntong
Communication Technology Co.,
Ltd.

Antenna Specification Document

Project Name: CB1

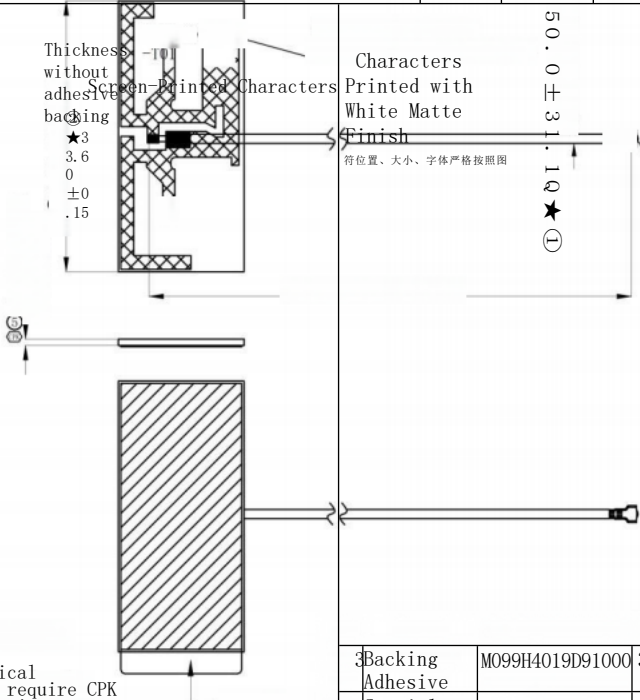
RuiXiang Part Name: E099H4013D12000

Product Name: K H 4 0 - A N T 2 Antenna Assembly

Customer Name: Moga Technology Co., Ltd.

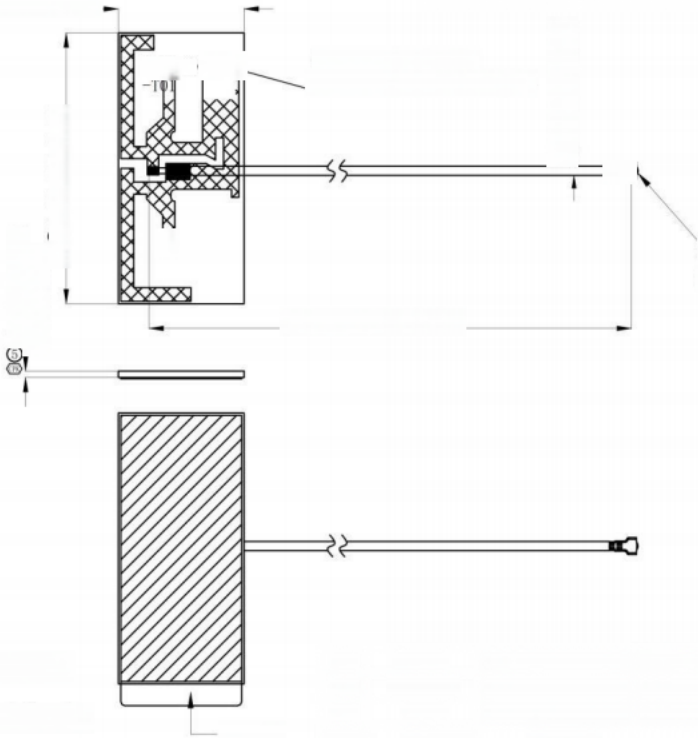
Revision History

Date	Version	Description of changes	Modified by	Approved by
2024/10/10	V1.0	Creation	Shao Dandan	
2025/11/21	V2.0	Added 2D and 3D radiation patterns	Guan Jiahao	

	1	2	3	4	5	6	7	8						
Assembly Drawing					Version	Mark	Change contents	Signature	Date					
					T01		Initial Release	Wu Li	2024. 10. 08					
A	四①★15.60±0.15								A					
B	 Thickness without adhesive backing ★3 3.6 0 ±0 .15 SCS-Printed Characters Characters Printed with White Matte Finish 符位置、大小、字体严格按照图 50.0±31.10★① Terminal retention direction as shown: Retention face up Tear notch									B				
										C				
C	Technical Requirements: 1. Dimensions marked with "★" are critical dimensions; dimensions marked with "P" require CPK process capability analysis; dimensions in parentheses "()" indicate fit-up (actual mating) dimensions; "Zone" indicates design change area. 2. Solder joints shall be smooth, free of burrs, voids, solder bridging, excess solder (icicles), or short circuits. 3. Drawing dimensions are intended for verification of外形 (form), function, and assembly compatibility. 4. Must satisfy reliability tests including salt spray test and adhesion test, etc., to be conducted in accordance with our internal reliability testing standard RX-WI-QAC-014.									C				
										D				
D	All materials shall comply with our internal RX-WI-QAC-008 "Product Environmental Substance Prohibition Management Standard". Complies with environmental requirements of RoHS 2.0, REACH, and HF (Halogen Free); salt spray resistance: 24 hours (NSS test), in accordance with GB/T 10125 or equivalent standard.				Tolerance Table		Name		KH40-ANT2 Antenna Assembly		RF	Peng Xin	Date	2024. 10. 08
					>200 ±0.20 ANGLES		Part Number		F099H4013D12000		Auditor	Wang Liang	Date	2024. 10. 08

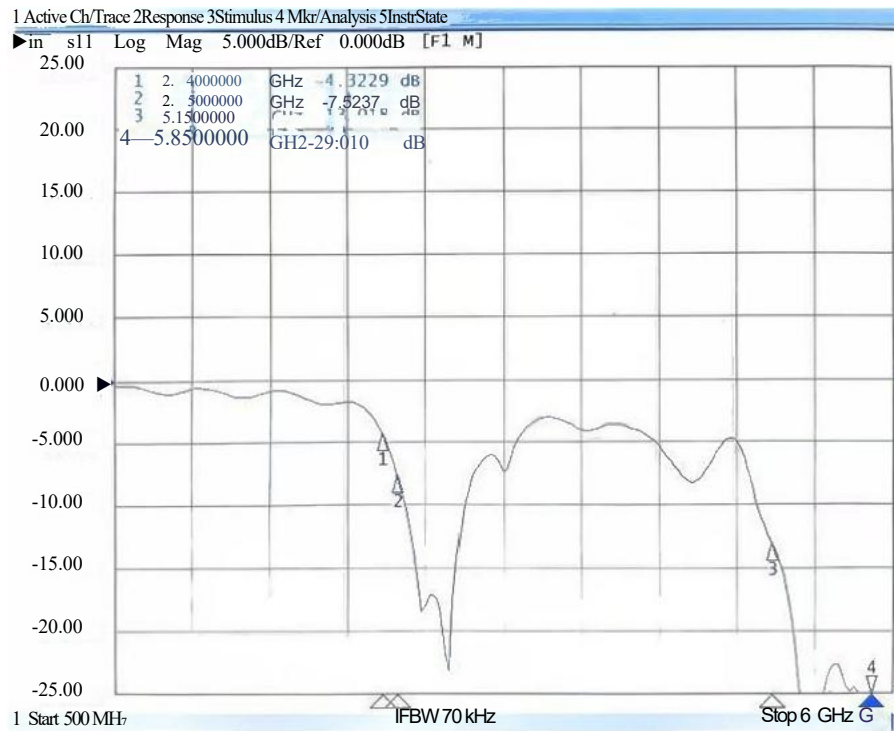
Structural Drawing

5. Packaging shall be carried out according to Ruixiang Engineering' s packaging specifications. 6. This document is classified as commercial confidential. It is intended solely for authorized individuals or organizations. Any disclosure to third parties without prior written permission is strictly prohibited.			100-200	± 0.15	$\pm r$	Version	T01	Drawing Frame	A4	 <u>KunShan Innowave Communication Technology CO.,Ltd.</u>
			50-100	± 0.12						
			10-50	± 0.10		Ratio	FIT	Third Angle Projection 		
			0-10	± 0.05	Unit	mm				
1	2	3	4	5	6	7	8			



Test Report

S11 Test Chart:



Passive Test Data:

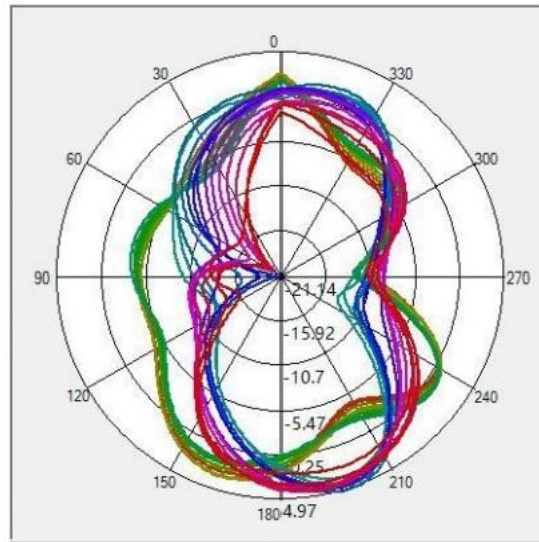
Frequency (Mhz)	Efficiency (dB)	Efficiency_Pcent (%)	Gain (db)
2400	-4.00	39.79	-1.01
2410	-3.49	44.78	-0.48
2420	-3.21	47.79	-0.11
2430	-2.94	50.86	0.18
2440	-2.71	53.62	0.39
2450	-3.01	50.01	0.13
2460	-2.72	53.52	0.47
2470	-2.79	52.57	0.34
2480	-2.65	54.27	0.36
2490	-2.62	54.65	0.34
2500	-2.24	59.74	0.87
5100	-2.04	62.57	2.17

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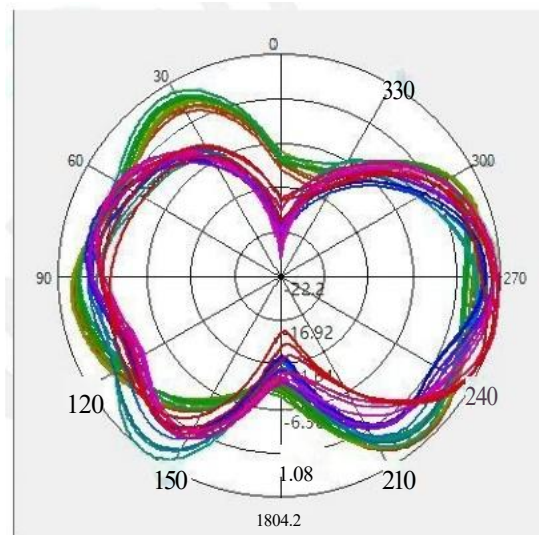
5150	-2.11	61.45	1.25
5200	-1.46	71.46	1.45
5250	-1.68	67.94	1.37
5300	-2.24	59.73	1.25
5350	-2.26	59.49	1.22
5400	-1.91	64.46	1.59
5450	-1.90	64.54	1.51
5500	-1.71	67.39	1.67
5550	-1.89	64.64	1.45
5600	-1.95	63.83	1.70
5650	-1.69	67.69	1.65
5700	-1.71	67.43	1.77
5750	-1.43	71.89	2.29
5800	-1.99	63.23	1.93
5850	-2.16	60.77	1.38

2D Radiation Pattern (Gain units in the figure are all in dBi):

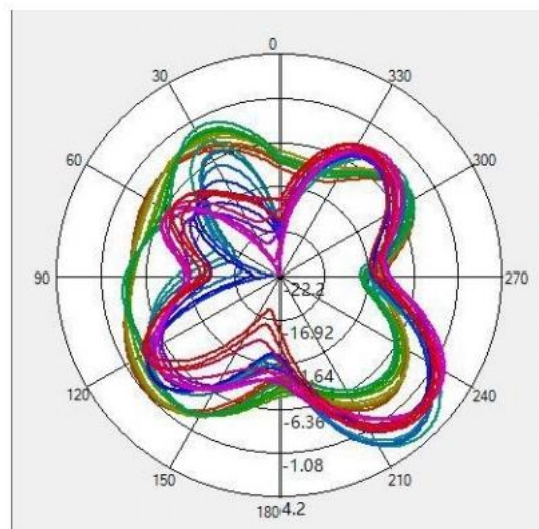
Theta=90°



Phi=0°

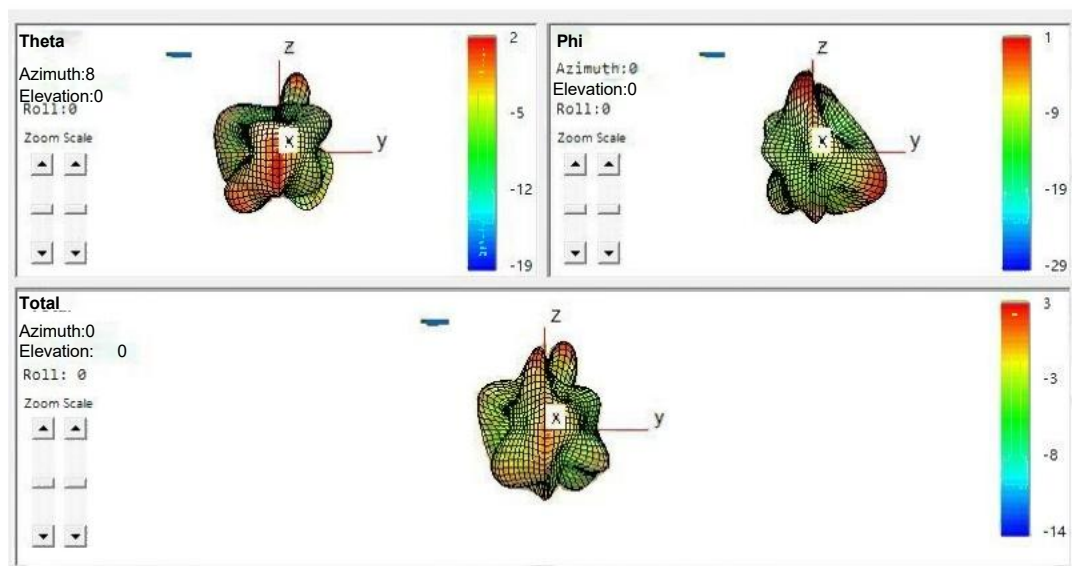


Phi=90°

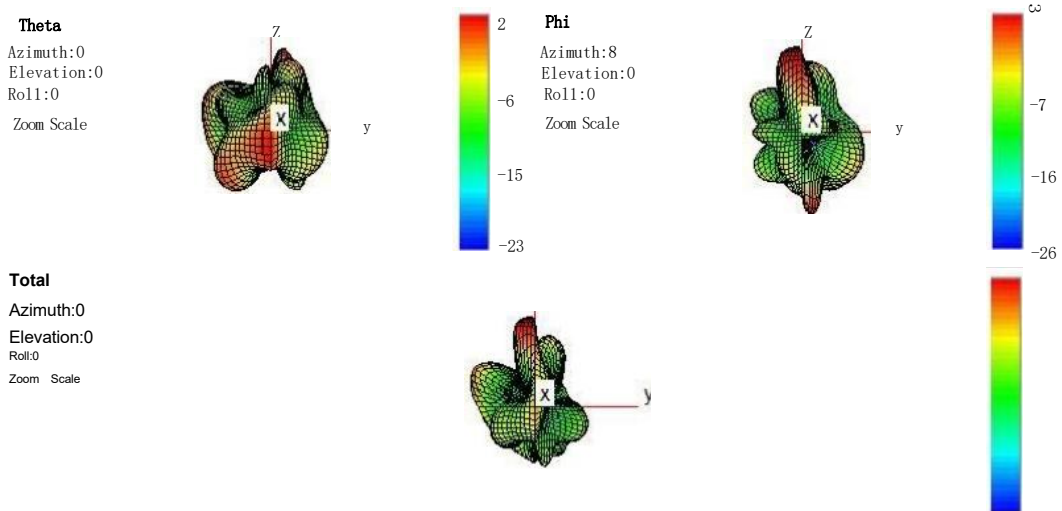


3D Radiation Pattern:

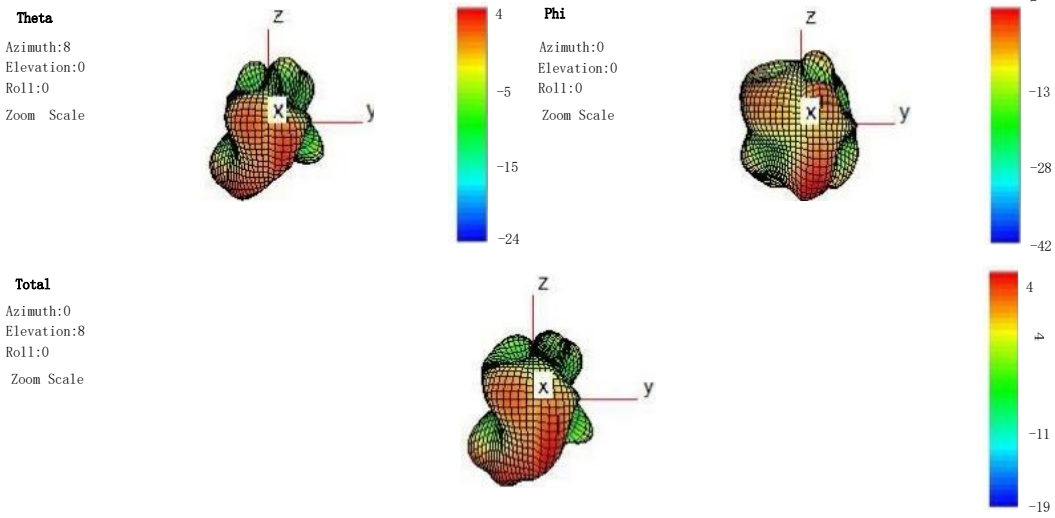
2400MHz:



2500MHz:



5100MHz:



5800MHz:

