

Kunshan Ruixiang Xuntong
Communication Technology Co.,
Ltd.

Antenna Specification Document

Project Name: CB1

RuiXiang Part Number: F099H4013D13000

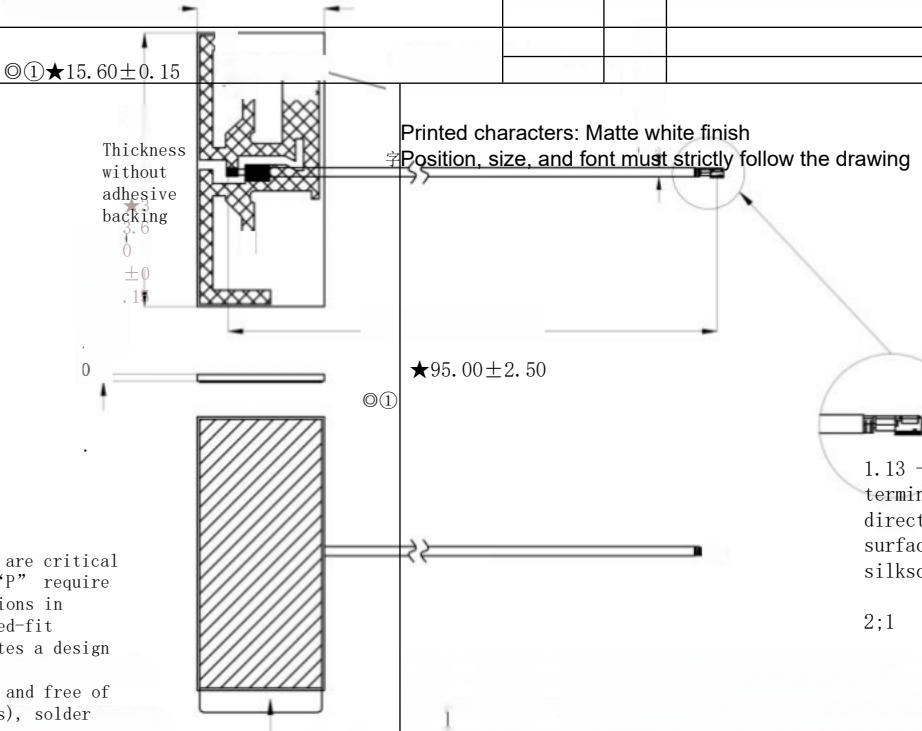
Customer Part Number: Not Available

Product Name: KH40 - ANT3 Antenna Assembly

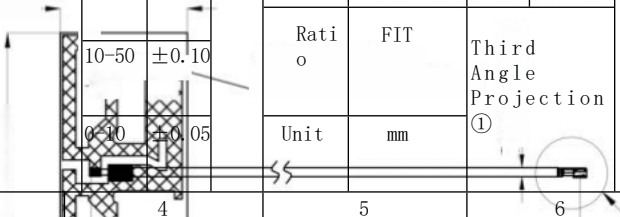
Customer Name : Moga Technology Co., Ltd.

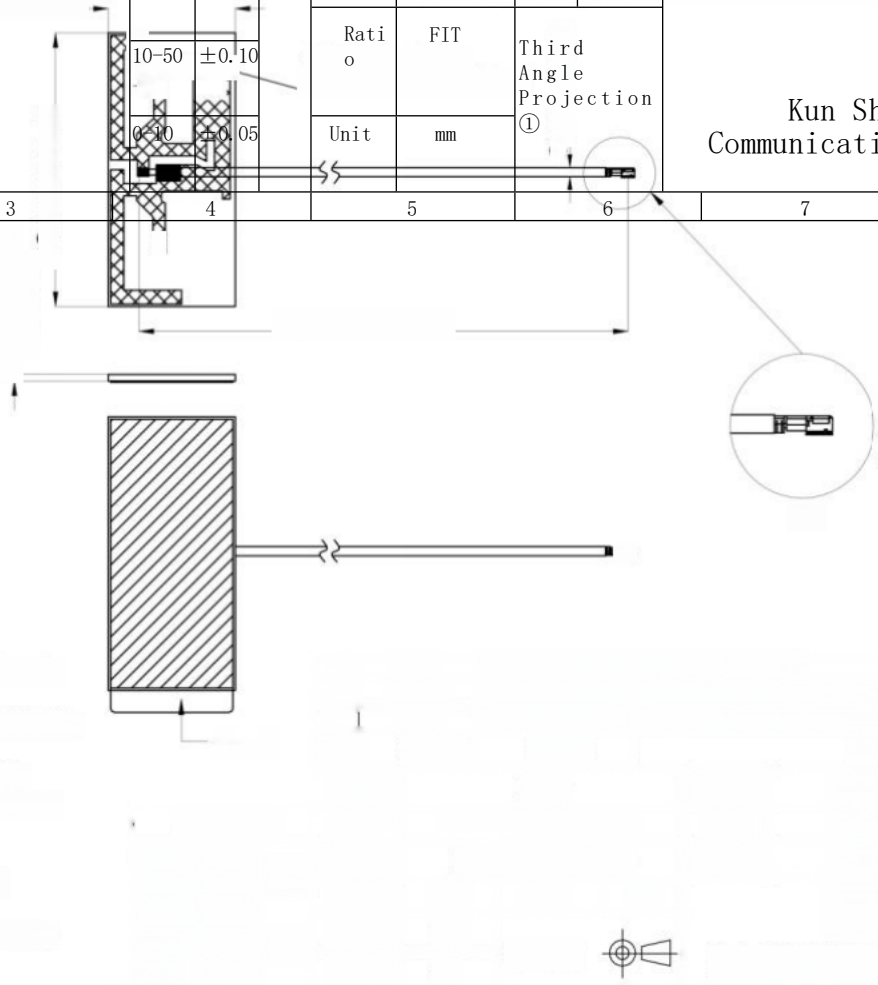
Revision History

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						
A	Assembly Drawing				Version	Mark	Change Content	Signature	Date					
					T01		Initial Release	Wu Li	2024.10.08					
B														
C	Technical Requirements: 1. Dimensions marked with “★” are critical dimensions; those marked with “P” require CPK capability analysis; dimensions in parentheses “()” are assembled-fit dimensions; and “Zone” indicates a design change area. 2. Solder joints shall be smooth and free of burrs, cold solder joints (voids), solder bridging, or short circuits. 3. Dimensions shown on the drawing are used for verification of外形 (external geometry), functional performance, and assembly compatibility. 4. The part must pass relevant reliability tests, including salt spray test and adhesion test, in accordance with the													
D	All materials comply with our company's internal standard: RX-WI-QAC-008 — Product Environmental Substance Prohibition Management Standard. Compliant with RoHS Directive 2011/65/EU (RoHS 2.0), REACH Regulation (EC) No. 1907/2006, and Halogen-Free (HF) requirements.				Tolerance Table		Number Name		Consumption					
							Mode 1		KH40		designer	Wu Li	Date	2024.10.08
							Name		KH40-ANT3 Antenna Assembly		R F	Peng Xin	Date	2024.10.08

Structura
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Passed salt spray test for 24 hours (per RX-WI-QAC-014). 5.Packaging shall conform to the packaging specifications provided by Ruixiang Engineering. 6.This drawing is confidential and proprietary. It is intended solely for use by authorized individuals or organizations. Unauthorized disclosure, reproduction, or distribution to any third party is strictly prohibited.			>200	±0.20	ANGLES	Part Number	F099H4013D13000			Auditor	Wang Liang	Date	2024.10.08										
			100-200	±0.15																			
			50-100	±0.12	±r	Version	T01	Drawing Frame	A4	INNOWAVE Kun Shan In no wave Communication Technology CO ., Ltd.													
			10-50	±0.10		Ratio	FIT	Third Angle Projection ①															
			0-10	±0.05		Unit	mm																
																							
			2			3			4			5			6			7			8		



Test Report

S11 Test Chart:



Passive Test Data:

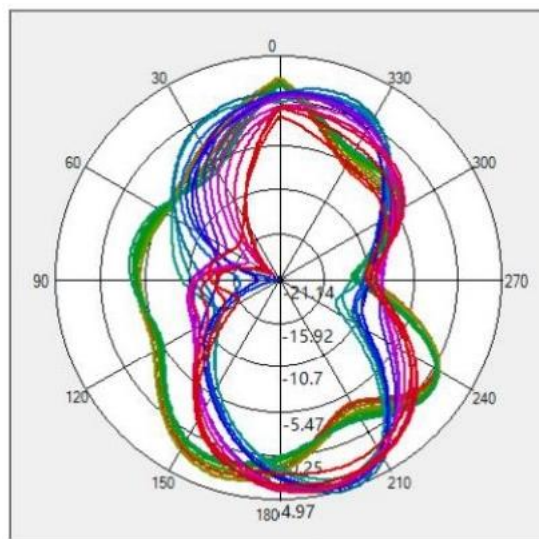
Frequency (Mhz)	Efficiency_ (dB)	Efficiency_Pcent (%)	Gain (db)
2400	-4.64	34.35	-2.02
2410	-4.14	38.51	-1.55
2420	-3.71	42.57	-1.13
2430	-3.31	46.61	-0.68
2440	-3.02	49.85	-0.25
2450	-3.43	45.35	-0.56
2460	-3.31	46.62	-0.31
2470	-3.47	44.99	-0.39
2480	-3.37	46.02	-0.18
2490	-3.41	45.62	-0.09
2500	-3.18	48.12	0.16
5100	-3.24	47.38	1.67
5150	-2.74	53.25	1.05

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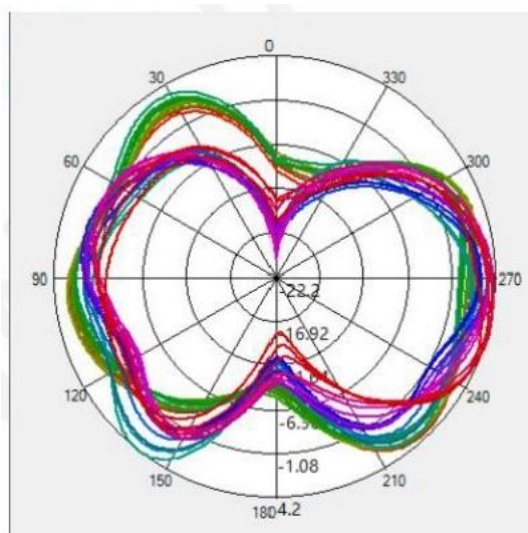
5200	-1.95	63.85	1.02
5250	-2.31	58.78	0.74
5300	-2.72	53.41	0.17
5350	-2.35	58.20	0.94
5400	-1.70	67.60	1.87
5450	-1.81	65.90	1.77
5500	-1.71	67.50	1.51
5550	-1.55	69.98	1.77
5600	-1.59	69.42	1.78
5650	-1.65	68.34	1.31
5700	-1.76	66.69	1.49
5750	-1.86	65.20	1.26
5800	-2.08	61.90	1.65
5850	-1.94	63.91	1.75

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

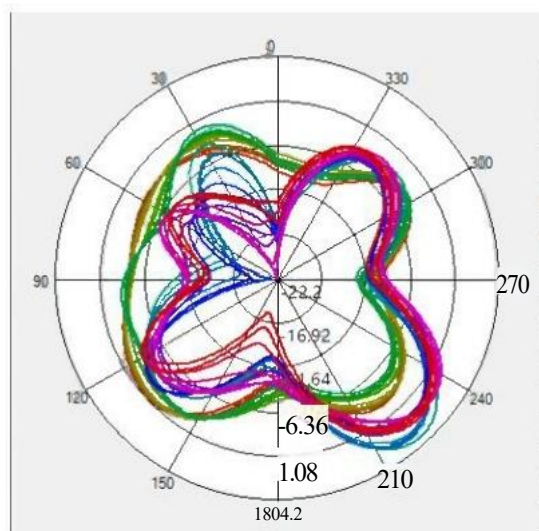
Theta=90°



Phi=0°

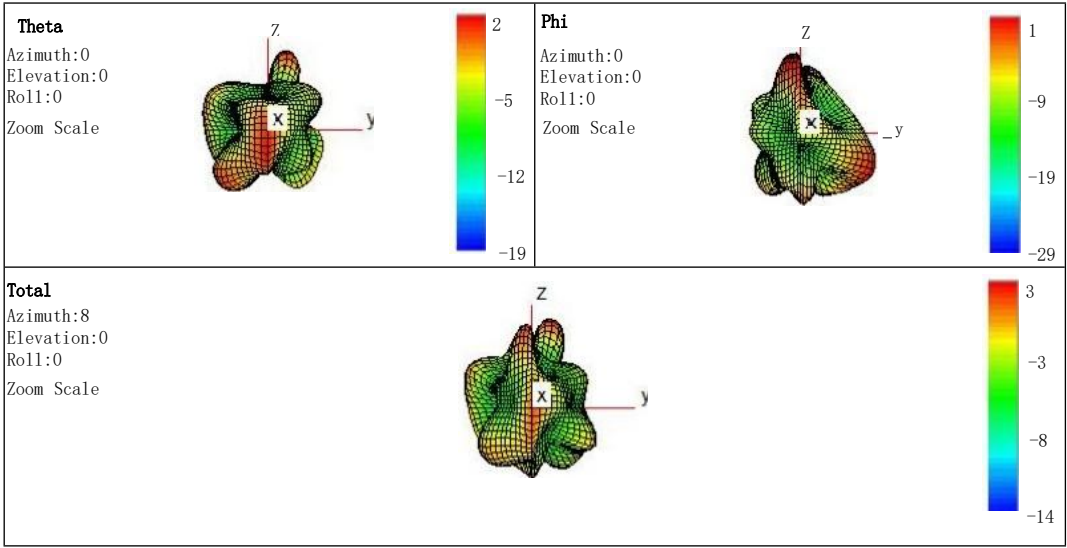


Phi=90°

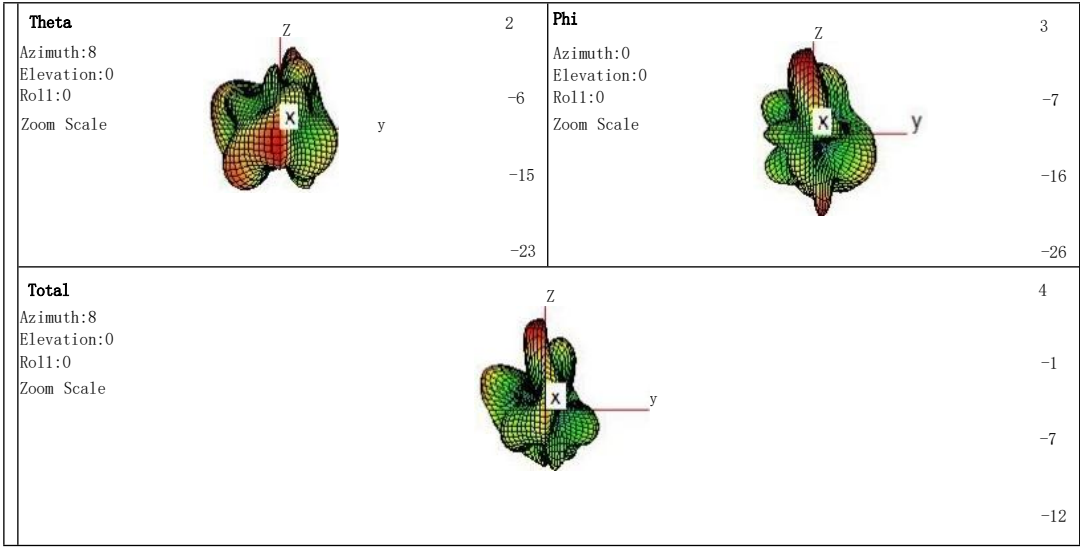


3D Radiation Pattern:

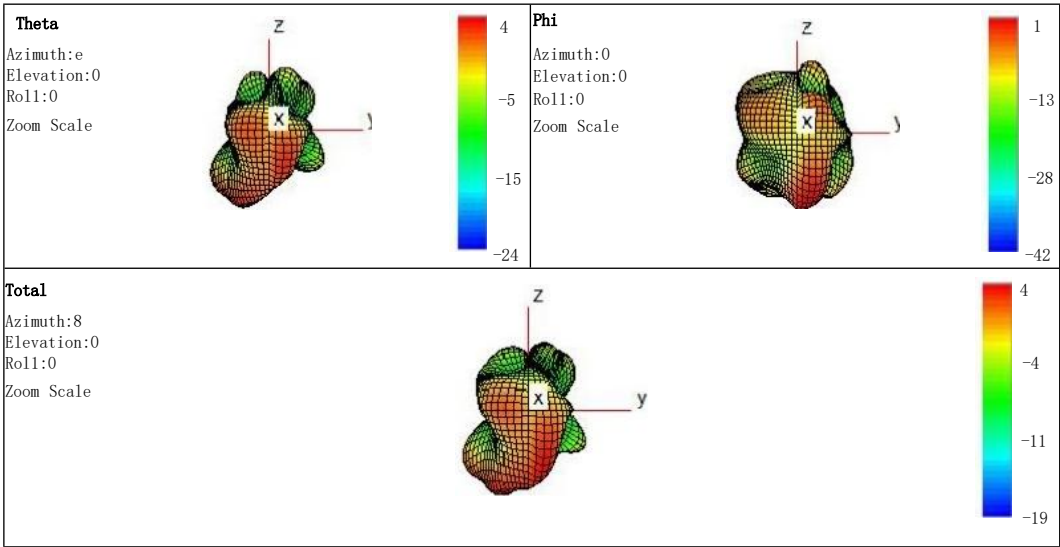
2400MHz:



2500MHz:



5100MHz:



5800MHz:

