

SPECIFICATION FOR APPROVAL

CUSTOMER	东莞市南车电路科技有限公司		
CSP/N)	HT-RK3566-MVPL26.1*W9.1		
PARTNAME	On-board antennaL26.1*W9.1mm 2.4~2.5GHz&5.15~5.85GHz		
FREQUENCY	2.4~2.5GHz&5.15~5.85GHz		
ModelNo.	ANT-1		
RTANTNO.	900.119.00001		
DATE	2024.2.29		
	APPROVED BY	CHECKED BY	DRAWED BY
	Huang Baolong	Song Yifeng	Liu Yunhai
Remark:			
Sign:	APPROVED BY	CHECKED BY	TESTED BT

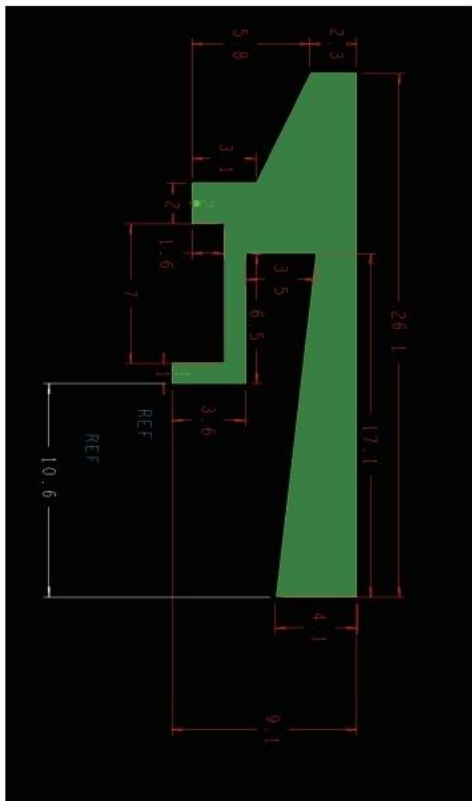
1. Contents

No.	content	Pages
0	Cover	1
1	Project list	2
2	Change record	2
3	Physical drawing of product	3
4	Specification table	3
5	Electrical test report	4-6
6	Sample inspection report	7
附件	2D product drawings and packaging specifications	Attachment

2. Revisionhistory

Revision	Date	Change thecontent
X0	23. 08. 08	New edition

3. Productpicture



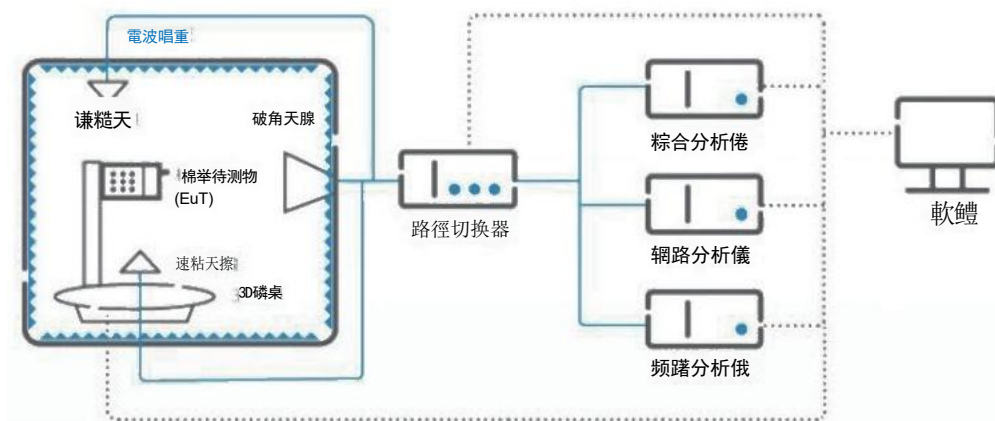
4. Specification

A. ElectricalProperties	
FrequencyRang	2. 4-2. 5GHz&5. 15-5. 85GHz
Impedance	50 Ω Nominal
VSWR	2. 0Max. With shell
Gain(peak)	2. 0dBi
Efficiency	>40%
Outofroundness	3. 0dBi (Max.)
Radiation	Omni- Directional/Omnidirectional
Polarization	Linear Vertical/Vertical
B. PhysicalProperties	
Connector Type	IPEX
Cable	①1. 13mm
Antenna Radiator	FPC
C. Environmental	
StorageTemp	-10℃~+60℃
Operating Temp	-40℃+65℃
Storagehumidity	95%
Working humidity	5%~95%

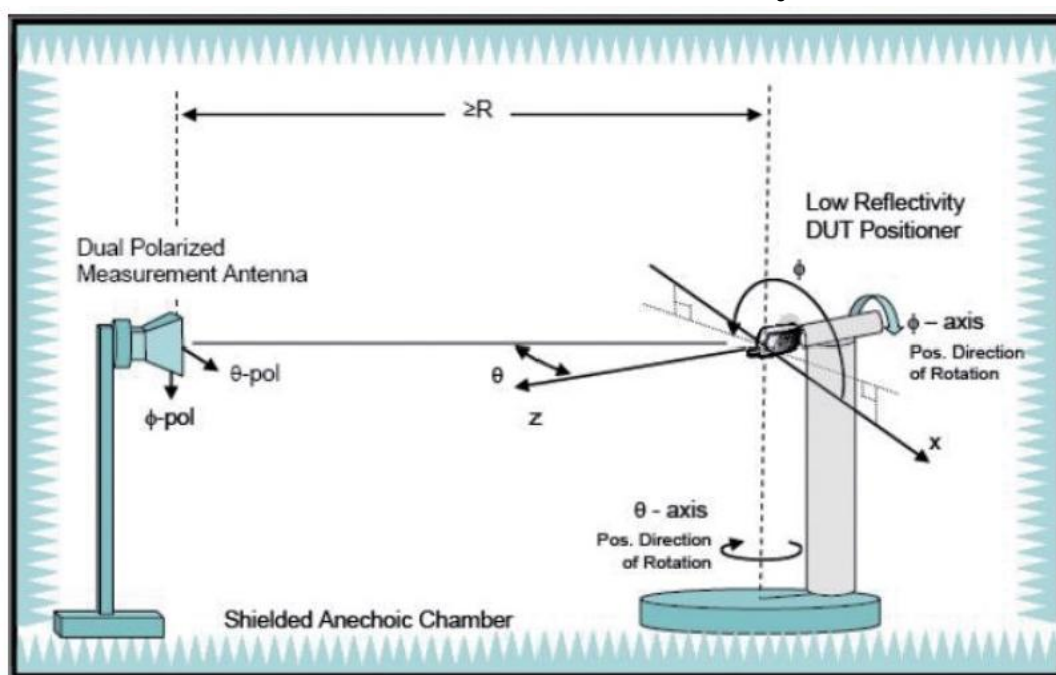
5. Electrical TestReport

5.1 Testequipment

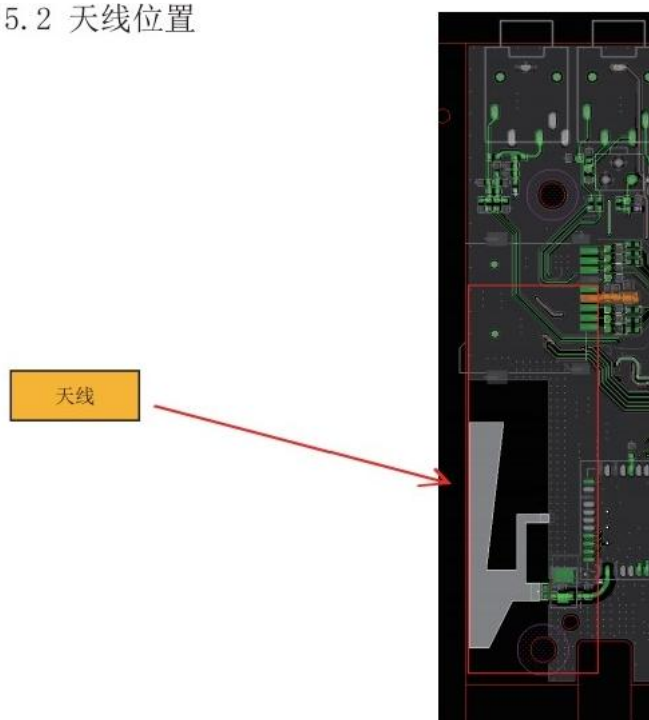
OTA系統架構圖



.....Control Signal
—— RF Signal

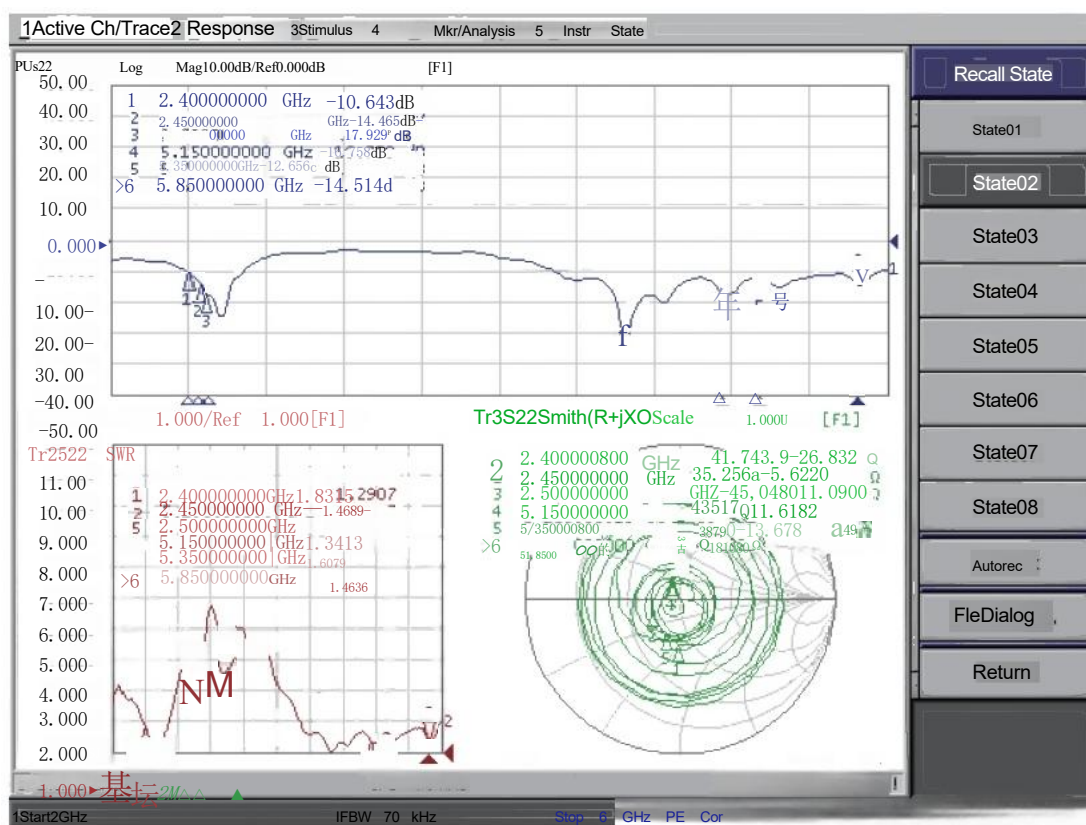


5.2 天线位置

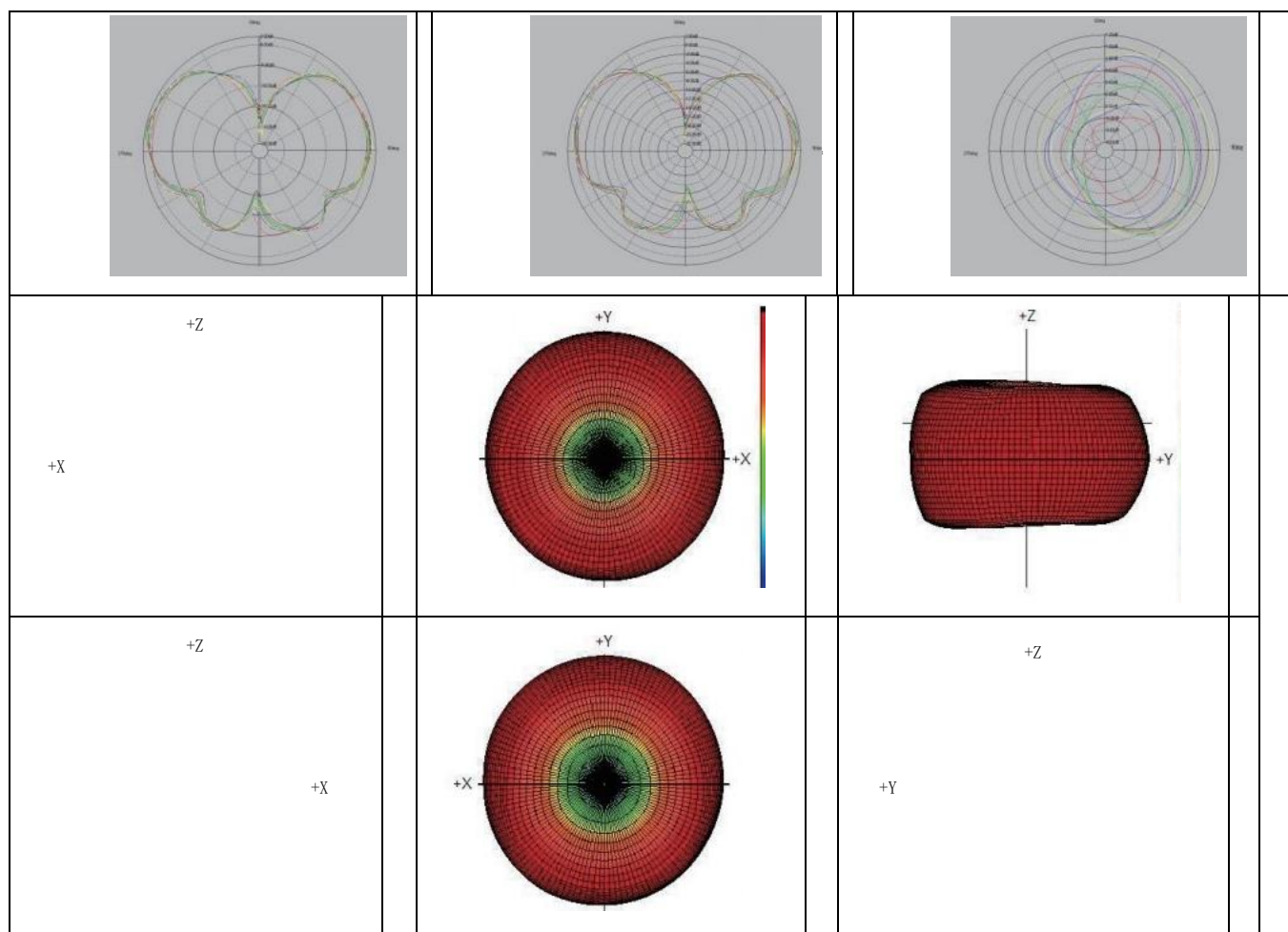


Position of the antenna

5.3 Test report of Network Analyzer



5.4 Darkroom2D、3DRaditation Pattern



5.5Darkroom passive test data

Frequency (Mhz)	2400	2410	2420	2430	2440	2450	2460	2470	2480
Efficiency rate (%)	70.54	75.31	74.92	72.6	68.52	67.09	67.62	64.99	59.18
Gain (dBi)	1.78	1.93	2.06	1.93	1.64	1.28	1.12	0.83	0.32

Frequency (Mhz)	5100	5200	5300	5400	5500	5600	5700	5800	5900	
Efficiency rate (%)	43.57	40.18	46.56	48.55	49.81	46.99	43.95	41.88	36.64	
Gain (dBi)	0.94	2.49	3.19	1.34	2.55	4.27	2.57	1.6	2.63	

6. Sample inspection report

Date: 2023.08.08

送检数量Quantity submitted for inspection		5PCS	Qualified quantity		5PCS				
Inspection item		Inspection standard and description	Test results					判定	
			No. 1	No. 2	No. 3	No. 4	No. 5		
External view	Wire rod	Φ 1.13mm; no chromatic aberration, no dirt, no damage and no scratches	pass	pass	pass	pass	pass	pass	OK
	Joint	No chromatic aberration, no dirt, no damage, no scratches.	pass	pass	pass	pass	pass	pass	OK
	PCB/FPC	No chromatic aberration, no dirt, no damage, no scratches.	pass	pass	pass	pass	pass	pass	OK
	Welding	No cold welding, false welding, tin tip, tin bead or missed welding after welding	pass	pass	pass	pass	pass	pass	OK
	Dipping tin	After soaking tin, there can be no tin tip, convex tin ball, no tin immersion and deformation.							OK
	Other								OK
The main thing is to measure an inch.	1	150±5mm	150	150	150	150	150	150	OK
Electric gas and power test	Frequency Rang	2.4-2.5GHz 5.15-5.85GHz							
	VSWR	Contrast	pass	pass	pass	pass	pass	pass	OK
Mechanical properties	Cable vs. PEX assembly pull.	>1.0kg	1.73	1.63	1.80	1.77	1.58	1.58	OK

	Force							
Remarks								
Final decision		☒ Qualified ☐ Unqualified ☐ Conditional approval						

Audit: Zhang Chaochao

Inspection: Lei
Juanlan

2023/12/08