

承 认 书

APPROVAL SHEET

客 户 名 称

CUSTOMER NAME: Zhuhai Raysharp Technology Co.,Ltd.

产 品 名 称

PRODUCT NAME: 2.4G+5.8GHz FPC 内置天线 L=90mm+端子

客 户 料 号

CUSTOMER P/N:

优比电子料号

Youbi P/N: UB01C90F2D4330A REV: A

	MANUFACTURER SIGNATURE	CUSTOMER SIGNATURE
CHECKED BY:		
APPROVED BY:	Changxing.Liu	
DATE:	2023/12/1	

Modification History

Version	Content Revision	Issued by	Date
A	Original version	Eddy	2023-12-1

Content

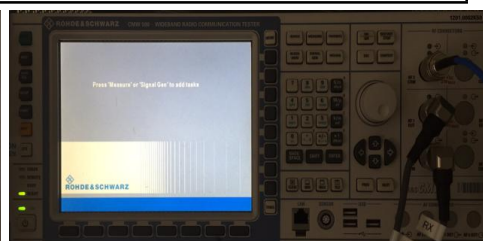
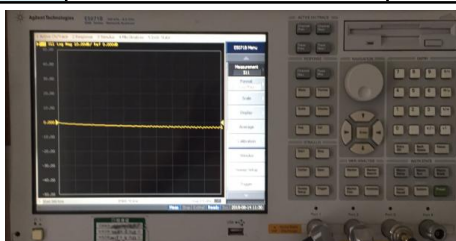
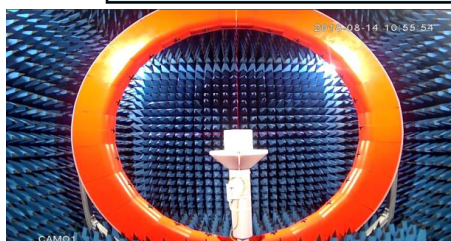
<i>Item</i>	<i>Description</i>
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1. Electrical Specification

Characteristics	Specifications	Unit
Outline Dimensions	28.3x26.1,L90	mm
Frequency	2400-2500 / 5150-5850	MHz
Impedance	50	Ω
VSWR	< 2	
Polarization	Linear Polarization	
Gain	2.0±0.5 @2.4G 3.0 REF @5.8G	dBi
Efficiency	>40	%
Connector Type	RF 1	
Operating temperature	-20℃~+85℃	
Storage Temp	-20℃~+85℃	

2. Test Items and Equipment

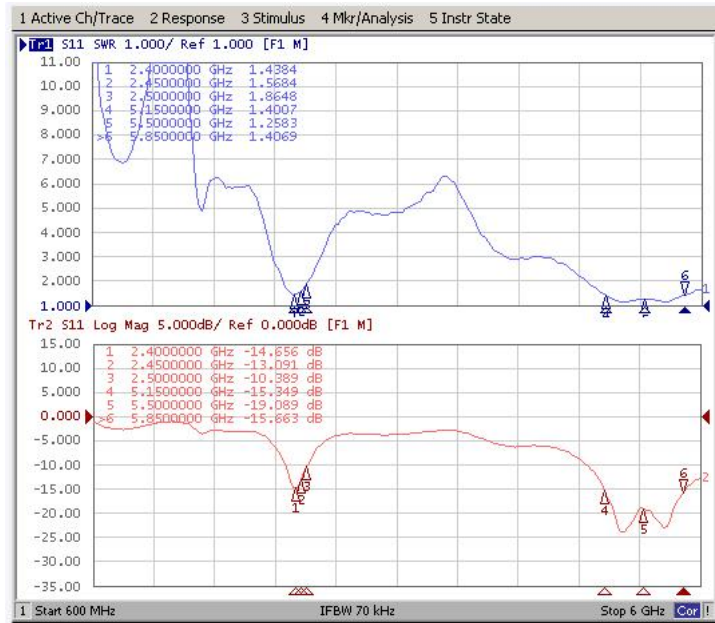
	Test items	Test equipment
S Parameter	1.Return Loss 2.VSWR	Network analyzer (Agilent E5071B)
The whole machine of Passive parameters	1.Frequency 2.Gain 3.Radiation Pattern	1.3D microwave darkroom (5m*5m*5m) 2.Network analyzer (Agilent E5071B)
The whole machine of Active parameters	1.TRP 2.TIS	1.3D microwave darkroom (5m*5m*5m) 2.Comprehensive test instrument (CMW500)



3. S Parameter

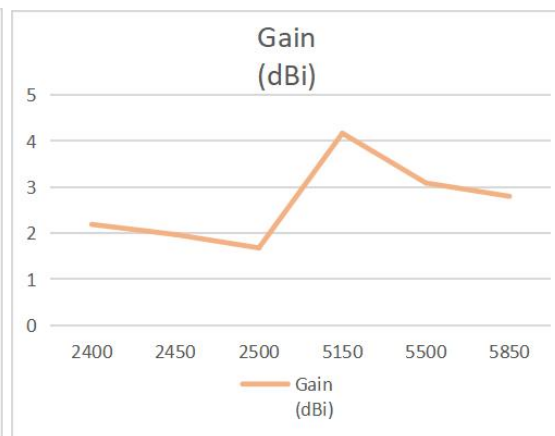
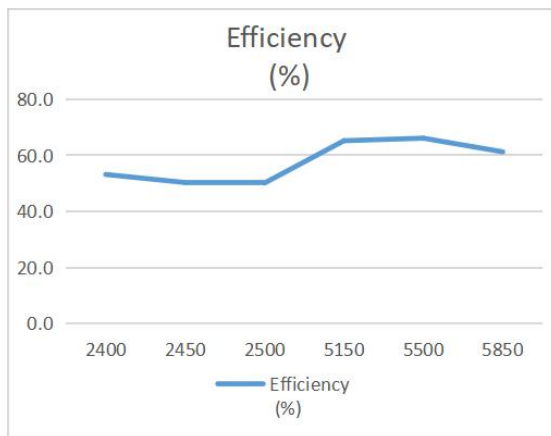
Frequency (MHz)	Return Loss (dB)	VSWR
2400	-14.65	1.43
2450	-13.09	1.56
2500	-10.38	1.86
5150	-15.34	1.40
5500	-19.08	1.25
5850	-15.66	1.40

* Voltage Standing Wave Ratio(VSWR)
Return Loss(RL)
 $RL = 20 * \log_{10}[(VSWR + 1) / (VSWR - 1)]$



4. Efficiency and Gain

Frequency (MHz)	2400	2450	2500	5150	5500	5850
Efficiency (%)	53.12	50.24	50.07	65.14	66.04	61.18
Gain (dBi)	2.19	1.97	1.68	4.17	3.09	2.80

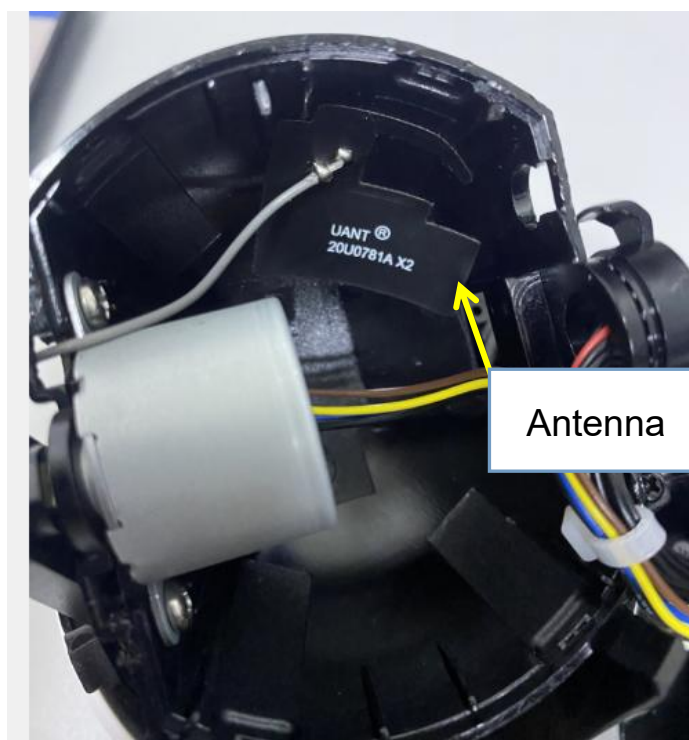


5.Active test data

Channel	Measurement	Total
1	TRP	16.34
6	TRP	16.32
11	TRP	16.58
1	TIS(EIRP)	-86.30
6	TIS(EIRP)	-86.66
11	TIS(EIRP)	-87.52

Channel	Measurement	Total
36	TRP	14.45
149	TRP	15.50
165	TRP	15.42
36	TIS(EIRP)	-74.21
149	TIS(EIRP)	-74.55
165	TIS(EIRP)	-75.03

6. Antenna installation diagram



7. Mechanical Specification

