

承 认 书

SPECIFICATION FOR APPROVAL

客 户 名 称

CUSTOMER NAME:

产 品 名 称

PRODUCT NAME: 2.4G 陶瓷贴片天线

客 户 料 号

CUSTOMER P/N:

优比电子料号

UB P/N: UB01NP3D75A REV: A

	MANUFACTURER SIGNATURE	CUSTOMER SIGNATURE
CHECKED BY:	Mark Liang 	
APPROVED BY:	Changxing Liu	
DATE:	2020/12/11	

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变更履历 Change calendar

版本 Version	修改内容 Content Revised	创建者 Modifier	时间 Date
A	Original version	Mark.Liang	2020-12-11

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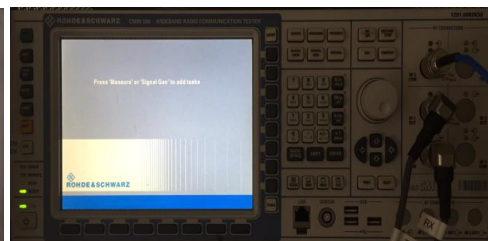
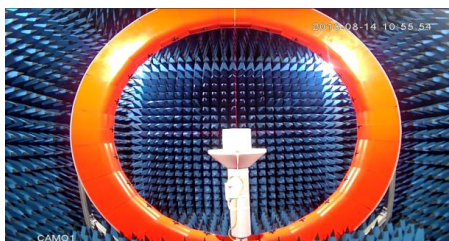
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1. Electrical Specification:

Characteristics	Specifications	Unit
Outline Dimensions	10.4 x 5.4 x3.0	mm
Working Frequency	2400~ 2500	MHz
Input Impedance	50	Ω
VSWR	2.0Max	
Polarization	Linear Polarization	
Gain	3.47	dBi
Efficiency	≥ 40	%
Connector Type	Open	
Operating temperature	-20℃~+70℃	
Storage Temp	-20℃~+50℃	

2. Test items and equipment

	Test items	Test equipment
Parameter	1.Return Loss 2. VSWR	Network analyzer (Agilent E5071B)
Passive parameters of the whole machine	1.Frequency 2.Gain 3. Radiation Pattern	1.3D microwave darkroom (5m*5m*4m) 2. Network analyzer (Agilent E5071B)
Active parameters of the whole machine	1.TRP 2.TIS	1.3D microwave darkroom (5m*5m*4m) 2. Comprehensive test instrument (CMW500)



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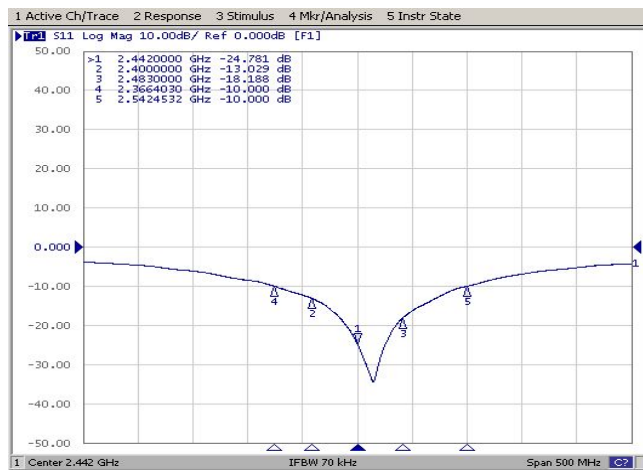
5-2. Electrical Specifications (Evaluation Board Dimensions: 100 x 50 mm²)

5-2-1. Electrical Table

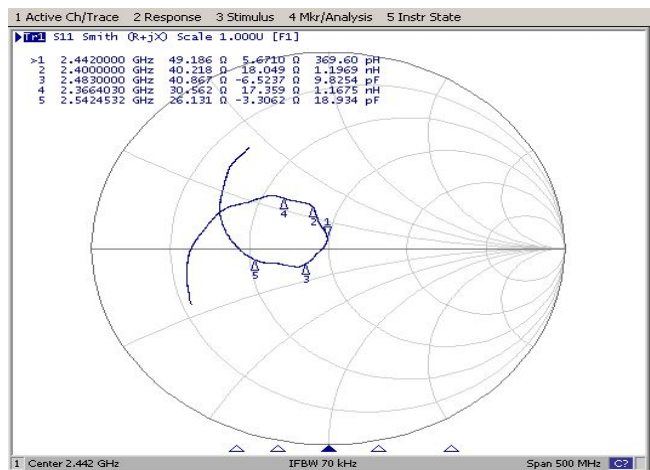
Characteristics		Specifications	Unit
Outline Dimensions		5.0 x 2.2 x 1.6	mm
Working Frequency		2400 ~ 2484	MHz
Bandwidth		140 (typical)	MHz
VSWR		2 Max. (typical)	
Characteristic Impedance		50	Ω
Polarization		Linear Polarization	
Peak Gain	(@2442 MHz)	3.5 (typical)	dBi
Efficiency		65 (typical)	%

5-2. Return Loss & Smith Chart

Return Loss (S_{11})

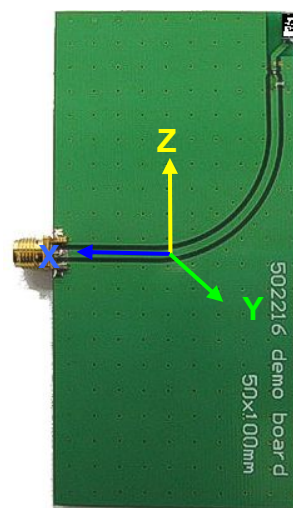
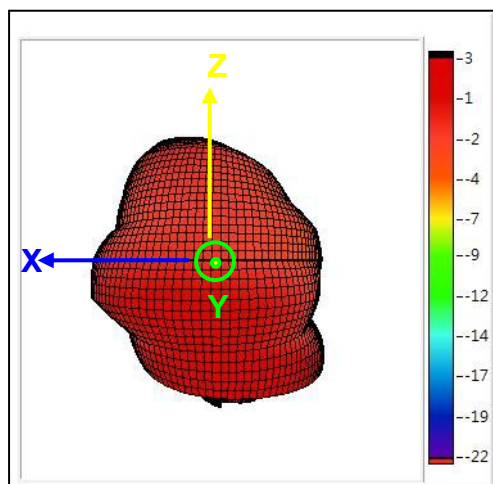
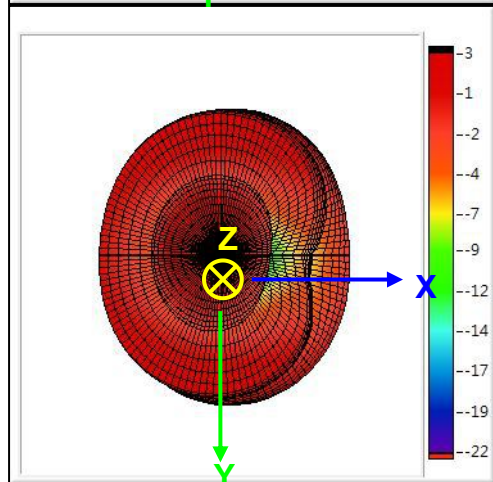
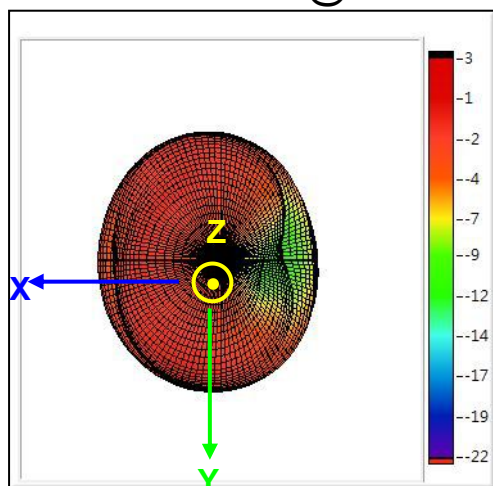


Smith Chart (S_{11})



7. Radiation Pattern (with 100 x 50 mm² Evaluation Board)

7-1. 3D Gain Pattern @ 2442 MHz (unit: dBi)



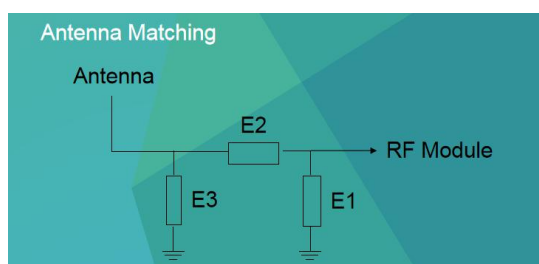
6. Active test data:

Antenna complete machine test

Item	Measurement	Azimuths	Elevations	Standard	Band	Channel	Frequency	Max	Min	Total
1	TRP	Every30	Every30	WIFI (Station)	WIFI_B (11M)	10	2457	21.92	-9.57	17.03
2	TIS(EIRP)	Every30	Every30	WIFI (Station)	WIFI_B (11M)	10	2457	88.46	56.96	83.59

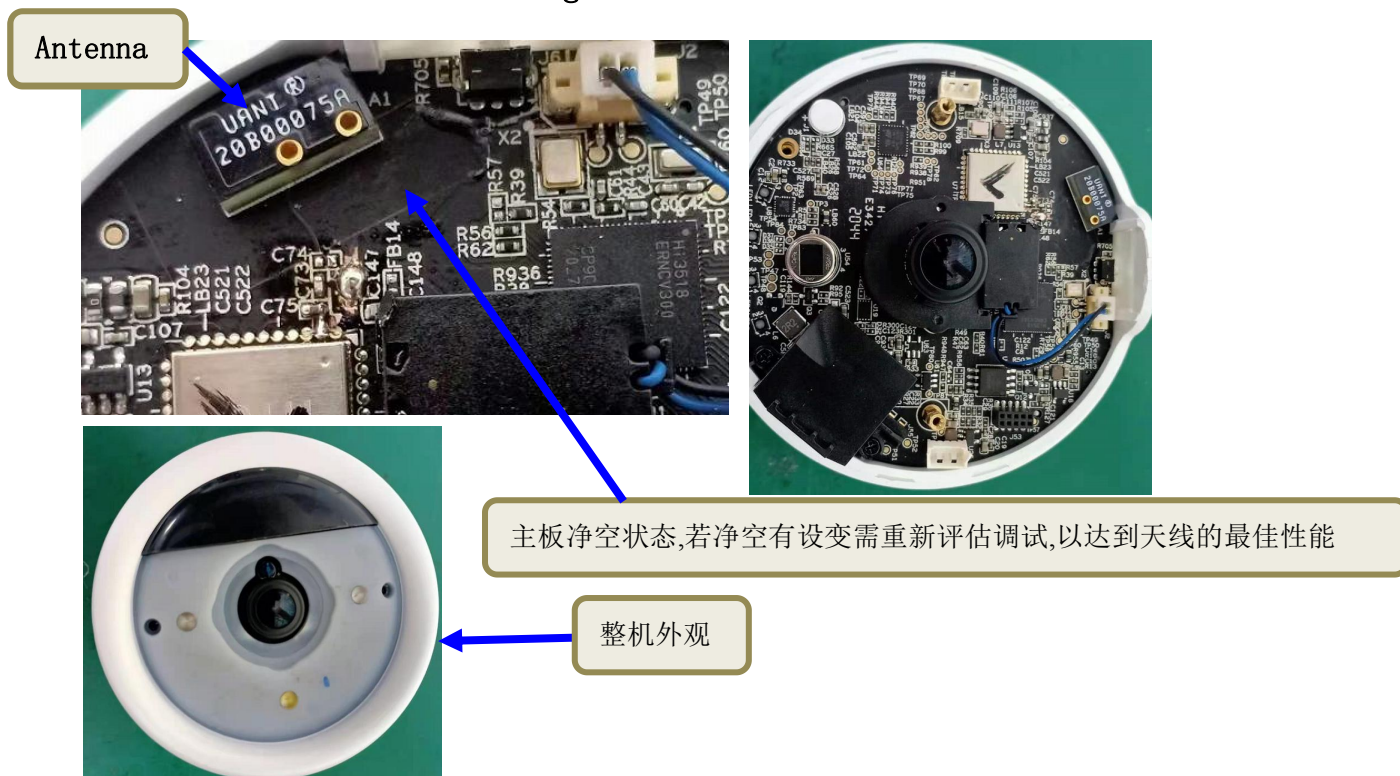
7. Antenna Matching Network

Element	Value
E1	0.5 PF
E2	3.9 NH
E3	N/A



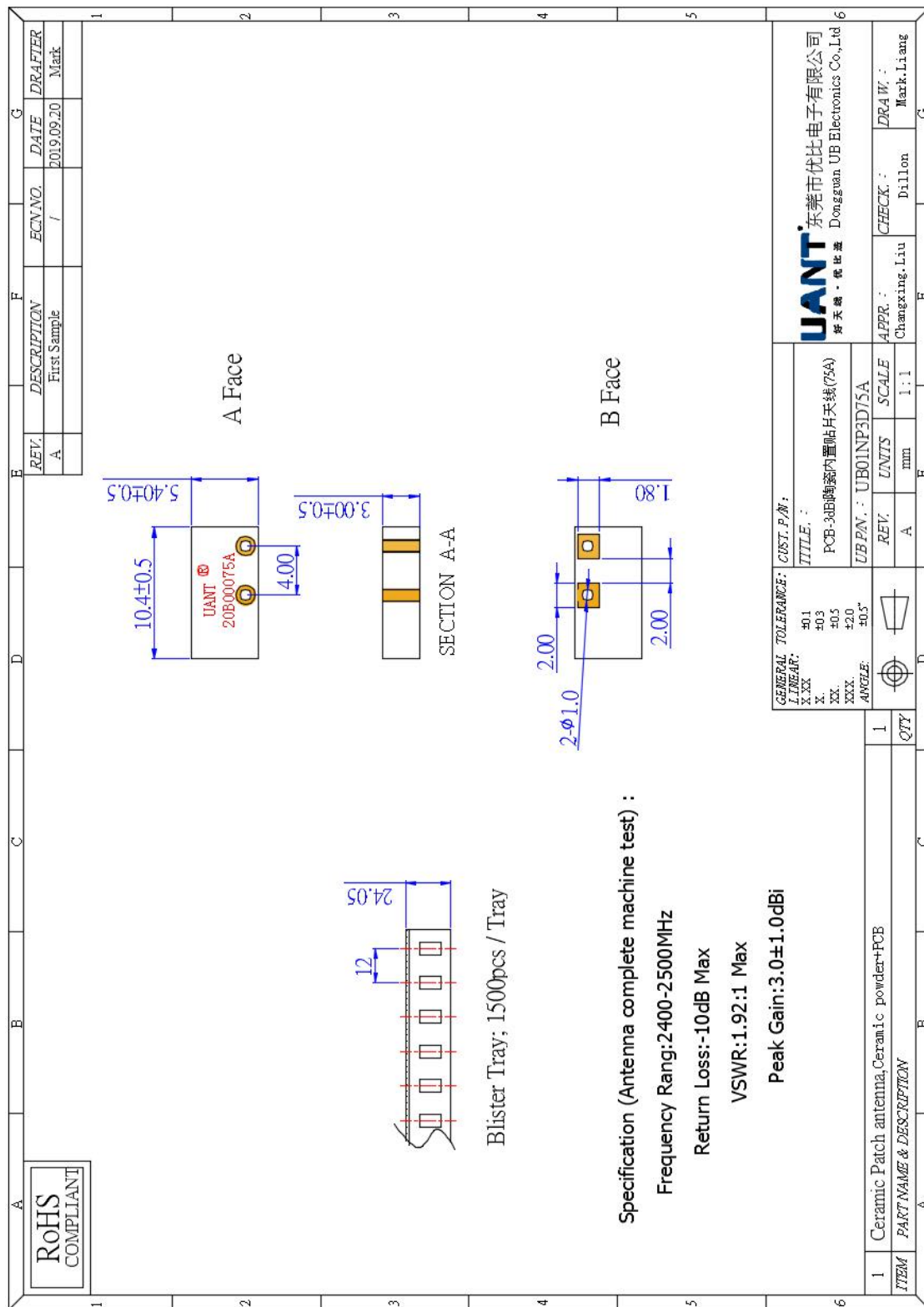
*Match the electronic components according to the above to achieve the reported antenna performance

8. Antenna installation diagram



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9. Mechanical Specification



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