

Specification sheet

Applicant: _____

Product Name: **2.4G Antenna**

Material no.: **TT-2.4G25B-RPSMAM**

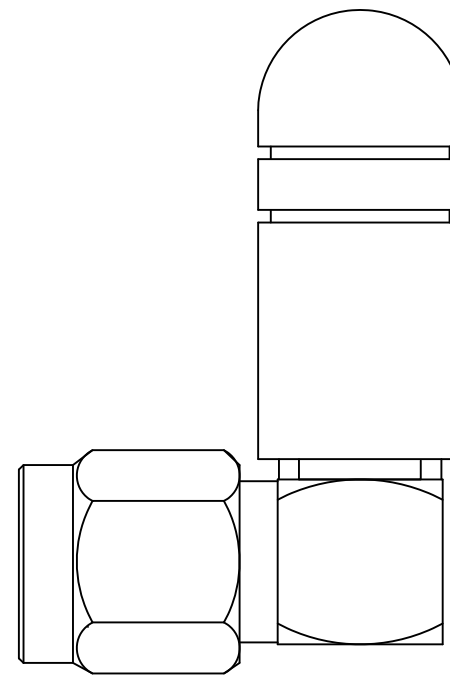
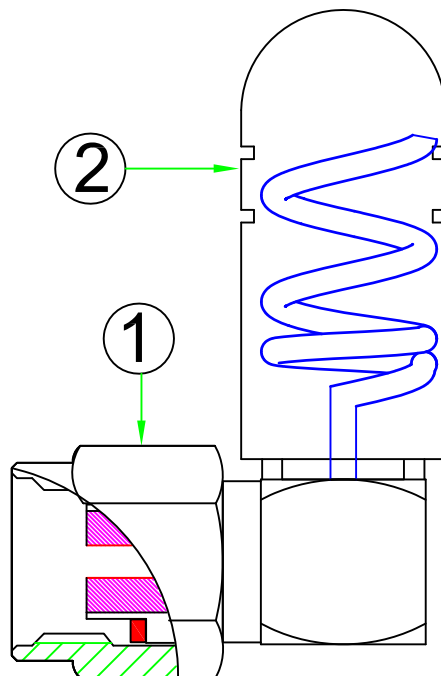
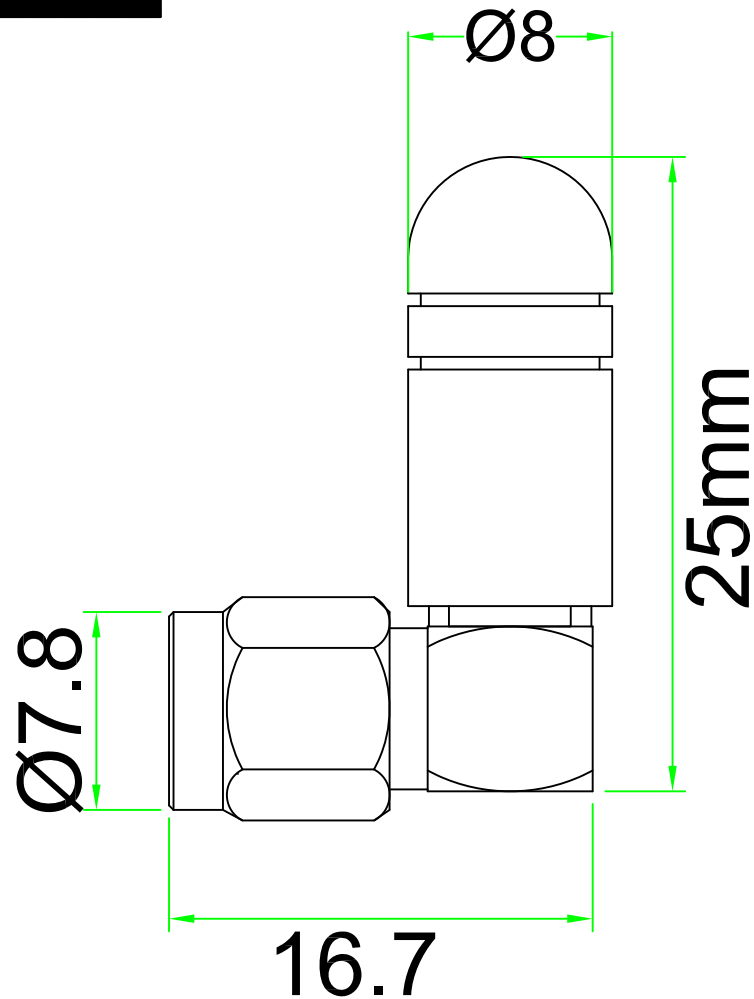
Sample delivery date: **2022.11.30**

Custom erconfirm ation			Manufacturer of supply	
Department of Engineering	QualityAssurance Department	Purchasing Department	Approved by the	Sample giver
			何 2022. 11. 30 田	Hu Qianwang

RoHS

Compliance

SIGN	DATE	DESCRIPTION	APPROVER
△			
△			
△			



3	ANT2400	ANT2400	Brass	L=2.45mm	1
2	AN25-B	Plastic shell	TPEE	Black	1
1	RPSMAM	RP-SMA male	Brass	Gold-plated	1
NO	Part Number	Name	Material	Finished	Q'ty

2.4G Antenna

TT-2.4G25B-RPSMAM

NONE

unit:

mm



Person of approval

Person of review

Cartographer

Tolerance of dimensions
x. ±1.0
x.x ±0.5
x.xx ±0.1
x° ±1°

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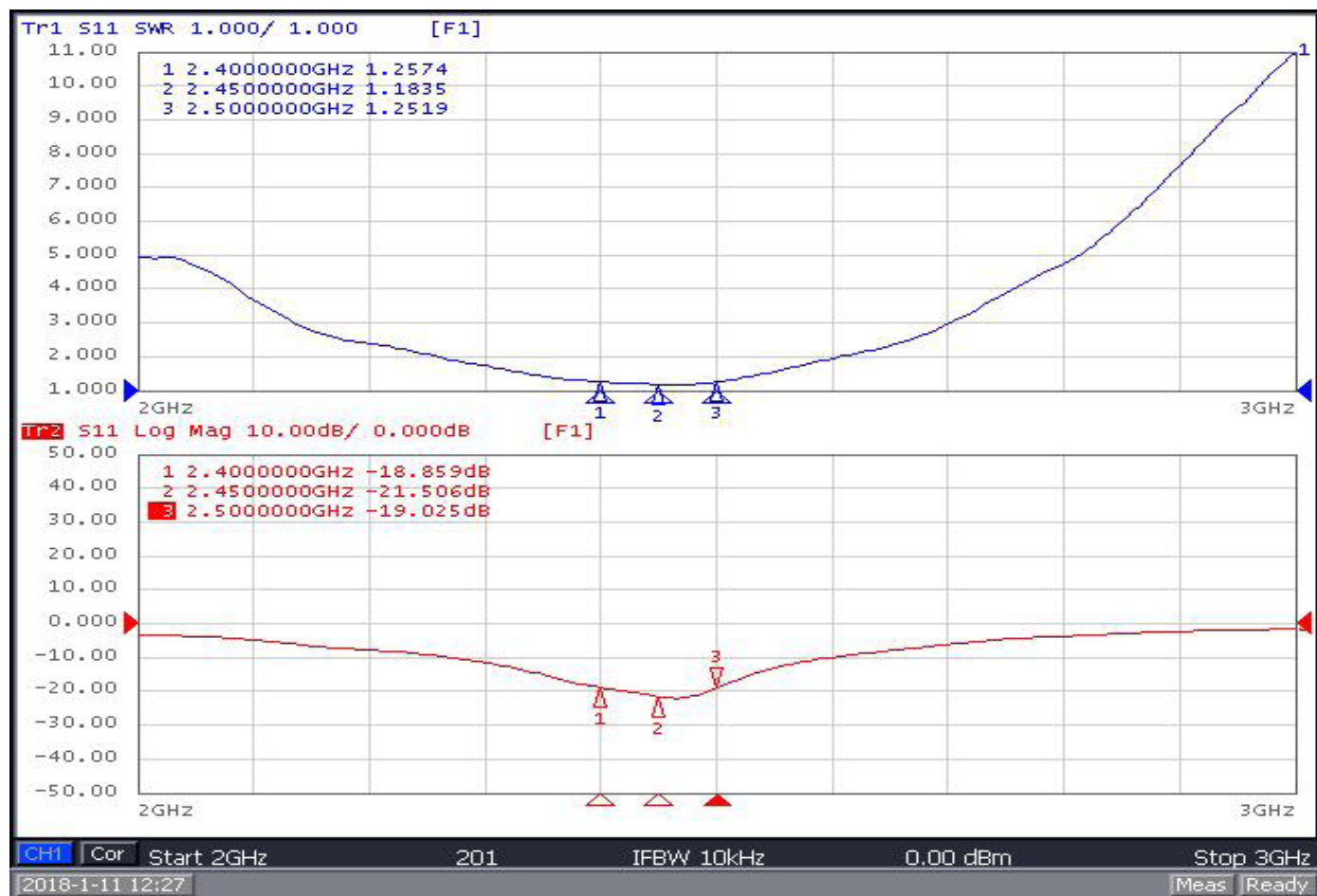
1. Reliability Testing

Test Item	Procedure	Requirement
1. Visual inspection and Dimension Check	Applicable methods using x5 magnification	follow specification
2. Rapid Changing of Temperature	-40°C (30minutes) to 80°C (30minutes); 24 cycles	After 2 hours recovery: 1. no visible damage 2. bandwidth tolerance < ±5%
3. Damp Heat	24 hours at 60°C; 90 ~ 95% RH	After 2 hours recovery: 1. no visible damage 2. bandwidth tolerance < ±5%
4. Endurance	24 hours at 80°C	After 2 hours recovery: 1. no visible damage 2. bandwidth tolerance < ±5%
5. Connector Pull Strength Test	>= 1.0 Kg	Hold 2~3S: 1. no visible damage 2. bandwidth tolerance < ±5%

2. Specification

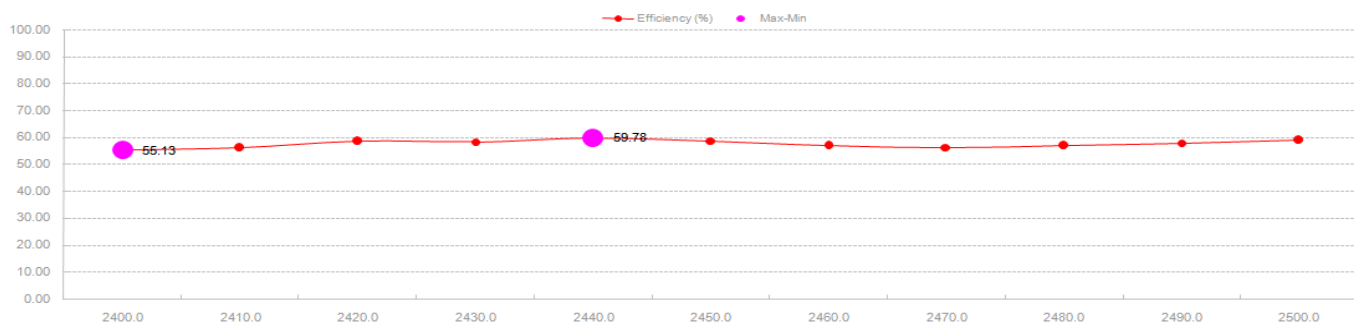
2.4G Antenna	
Working Frequency	2.4G(2400-2500MHz)
VS.W.R	<1.5
Max Gain	0 dBi
Polarization	Vertical
Impedance	50 Ohm
Marerial of Plastic	Cu
Connector Type	SMA male

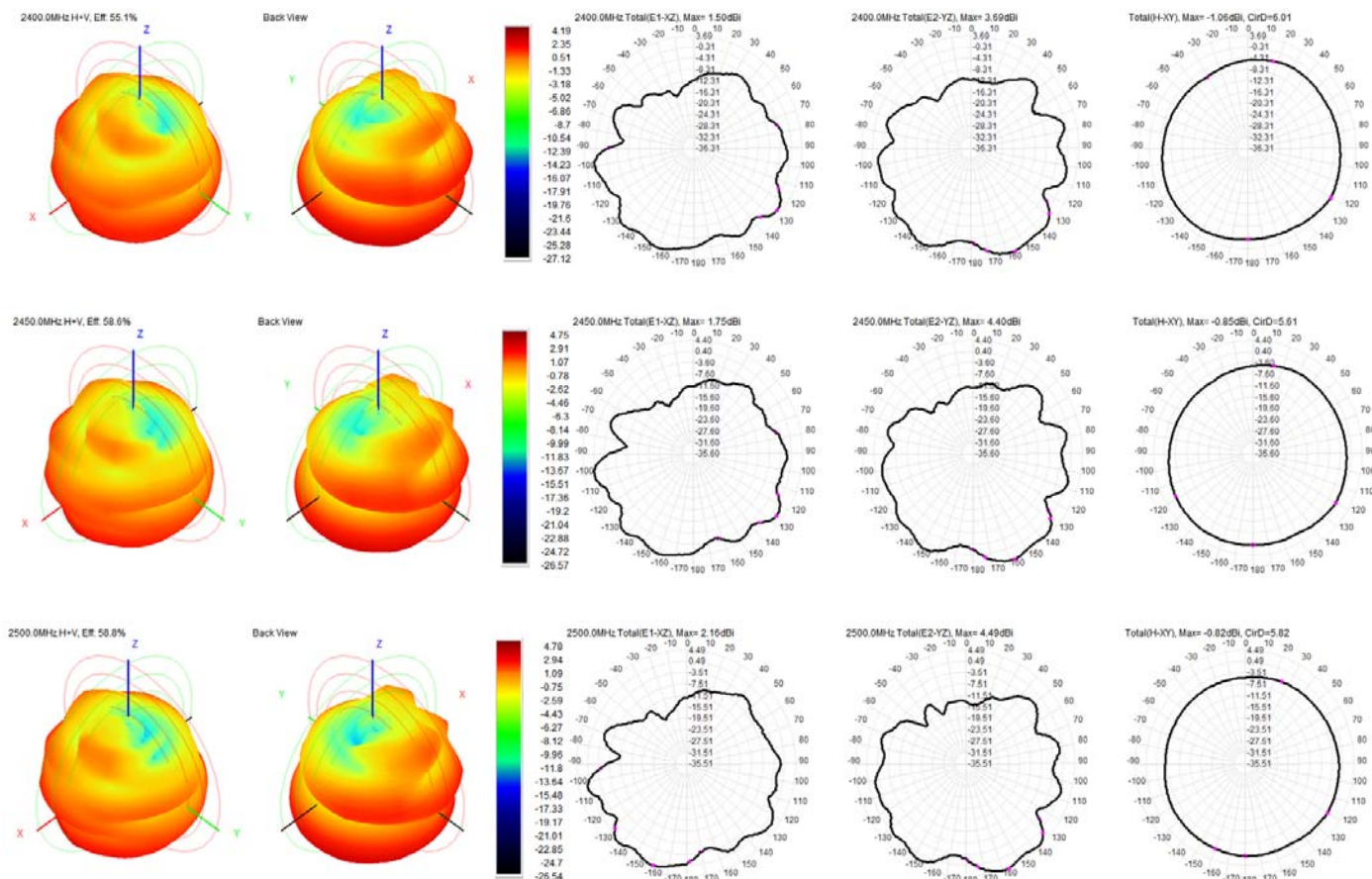
3. S.W.R. Testing Result



4. Antenna Radiation Pattern

Frequency (MHz)	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0
Efficiency (dBi)	-2.59	-2.51	-2.33	-2.34	-2.23	-2.32	-2.45	-2.50	-2.46	-2.38	-2.31
Gain (dBi)	1.78	1.81	1.84	1.86	1.88	2.00	1.97	1.93	1.95	1.94	1.88
Efficiency (%)	55.13	56.07	58.54	58.28	59.78	58.61	56.89	56.24	56.76	57.86	58.75
Directivity (dB)	6.78	6.85	6.87	6.98	7.04	7.07	7.07	7.02	6.97	7.04	7.09
Peak Gain Position (Theta)	25.00	24.00	24.00	25.00	24.00	24.00	23.00	23.00	23.00	23.00	22.00
Peak Gain Position (Phi)	60.00	60.00	60.00	60.00	60.00	60.00	60.00	60.00	60.00	60.00	60.00
Efficiency ThetaPol (%)	42.48	43.08	44.60	44.48	45.03	44.02	42.86	42.29	42.60	43.82	44.50
Efficiency PhiPol (%)	12.65	12.99	13.94	13.81	14.74	14.59	14.03	13.95	14.16	14.04	14.25
Upper Hem. Efficiency (%)	12.33	12.62	13.28	13.14	13.40	13.04	12.60	12.52	12.73	12.93	13.09
Lower Hem. Efficiency (%)	42.80	43.45	45.26	45.14	46.37	45.56	44.29	43.73	44.02	44.93	45.67
T90(H)圆度	6.01	5.96	5.81	5.69	5.60	5.61	5.66	5.62	5.75	5.95	5.82
Gain 15deg (dBi)											
E1(XZ)波谱宽度	20.00	20.00	20.00	20.00	20.00	20.00	51.00	52.00	51.00	51.00	51.00
E1(XZ)前后比	0.23	0.28	0.37	0.33	0.19	0.04	0.00	0.00	0.00	0.00	0.00
E2(YZ)波谱宽度	42.00	42.00	42.00	43.00	44.00	44.00	43.00	43.00	42.00	43.00	42.00
E2(YZ)前后比	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
最大增益处轴比(P)											
仰角10度最差(大)轴比(P)											
Hc(XY)波谱宽度	163.00	160.00	161.00	166.00	234.00	228.00	218.00	201.00	195.00	174.00	175.00
Hc(XY)前后比	1.78	1.94	2.00	2.14	2.29	2.33	2.29	2.28	2.24	2.03	1.95
Empty											





5. Testing Equipment Specification:

Antenna Anechoic Chamber Dimension: 7x3 x3 m

Quiet Zone: 600mm @1 GHz

Isolation: >100dB @ 1 MHz ~ 10 GHz

Testing Equipment: Agilent E5071C

Received Antenna: 0.4 ~ 6.0 GHz for Gain Calibration

Double Ridged Horn Antenna

