

Product Number: AN2400-5901RS

Product Name: 2.4 GHz Antenna

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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 90°C (30minutes); 24 cycles	After 2 hours recovery: 1. no visible damage 2. Freq. Tol.: < ±5%
3. Damp Heat	24 hours at 60°C; 90 ~ 95% RH	After 2 hours recovery: 1. no visible damage 2. Freq. Tol. : < ±5%
4. Endurance	24 hours at 90°C	After 2 hours recovery: 1. no visible damage 2. Freq Tol.: < ±5%
5. Connector Rotation Force	1200 - 1600 g.cm	1. no visible damage 2. Freq Tol.: < ±5%
6. Connector Pull Force	>= 5.0 Kg	1. no visible damage 2. Freq Tol.: < ±5%

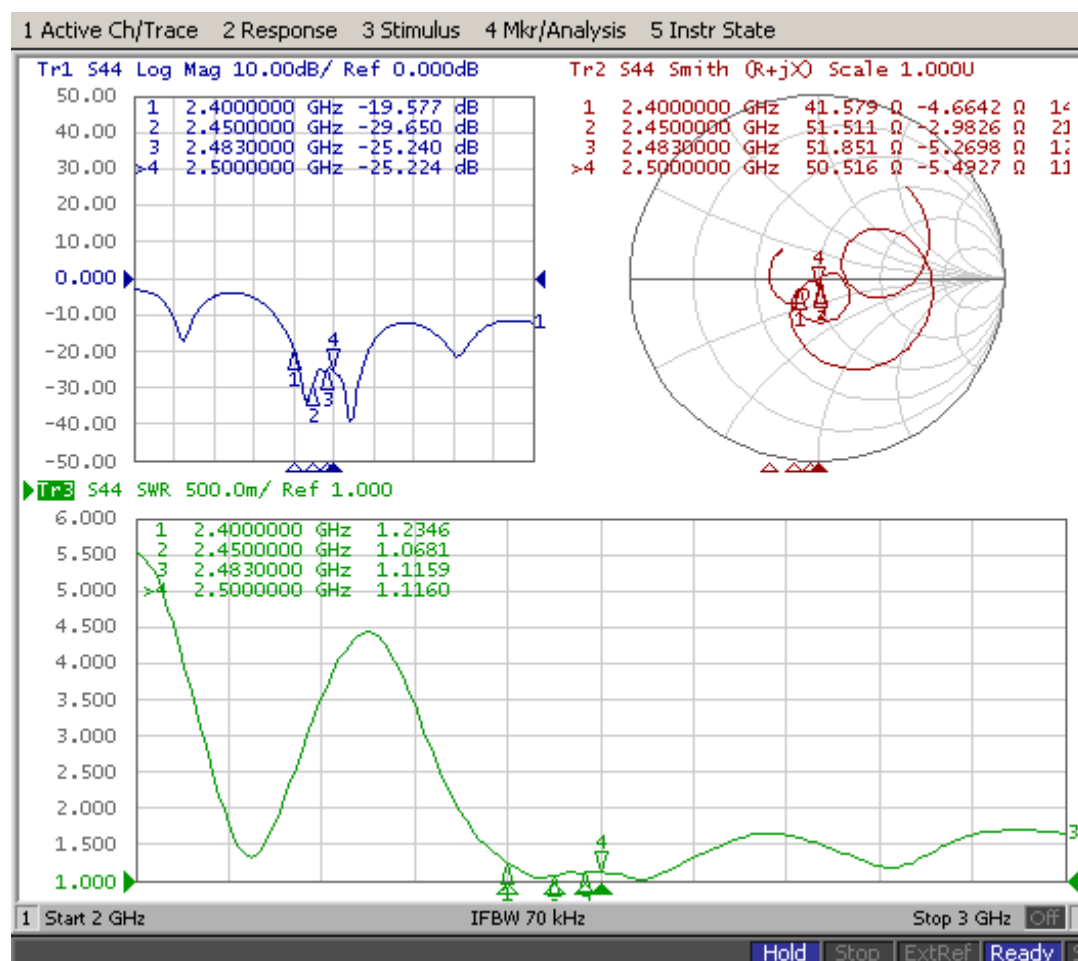
Product Number: AN2400-5901RS

Product Name: 2.4 GHz Antenna

2. Specification

A. Electrical Characteristics	
Return Loss (dB)	≤ 2.0 @ 2400 - 2500 MHz
Antenna Gain	9 ± 0.7 dBi @ 2450 MHz
Radiation Pattern	360 Degree / Omni-Directional
Impedance	50 Ohm
B. Material	
Material of Plastic	ABS / PA-6
Material of Metal	Cu(Plated)
Connector	SMA Male Reverse
C. Environmental	
Operation Temperature	- 30 °C ~ + 85 °C
Storage Temperature	- 30 °C ~ + 85 °C

3. S Parameter Test Data



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4. Antenna Radiation Pattern

Testing Equipment Specification:

Antenna Anechoic Chamber Dimension: 8 x 4 x 4 m

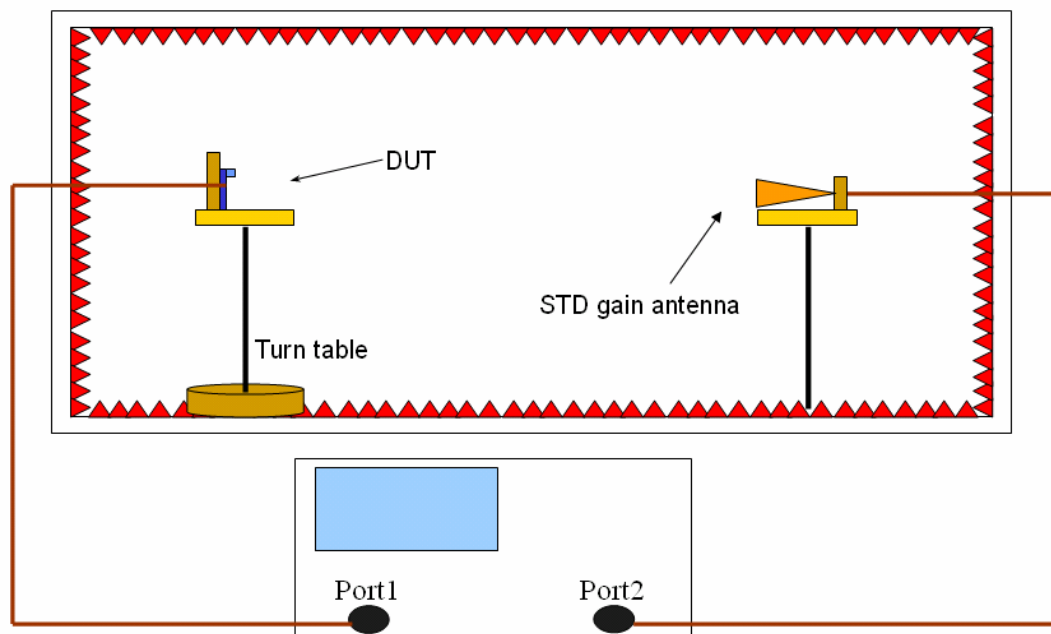
Quiet Zone: 600mm @1 GHz

Isolation: >100dB @ 1 MHz ~ 10 GHz

Testing Equipment: Agilent 5071B

Received Antenna: 0.7 ~ 6.0 GHz for Gain Calibration

Double Ridged Horn Antenna



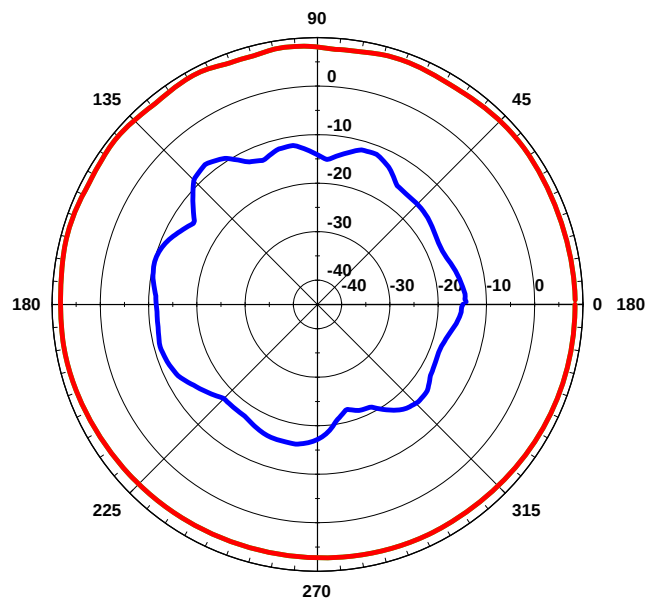
5. Mechanical Drawing

6. MSDS & SGS Report

Electrical Performance-Radiation Pattern and Gain

H-Plane

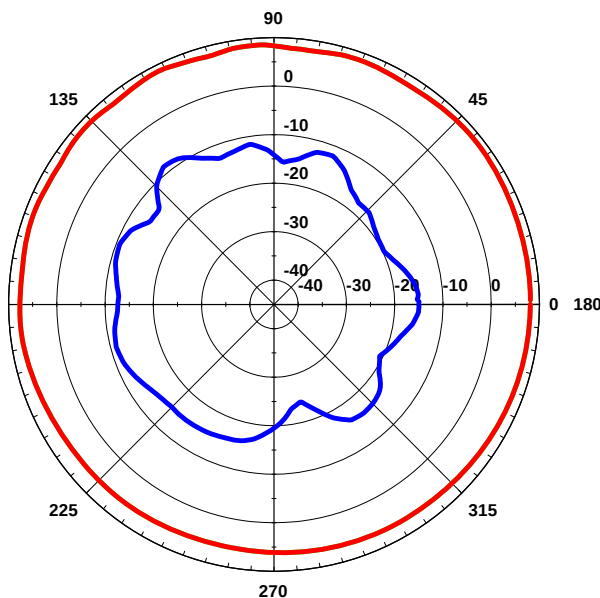
2400MHz



Ver. Pol. (max.)=	9.0
Ver. Pol. (avg.)=	8.1
Hor. Pol. (max.)=	-7.9
Hor. Pol. (avg.)=	-13.8
Tol. Gain (max.)=	9.0
Tol. Gain (avg.)=	8.1

Unit: dBi

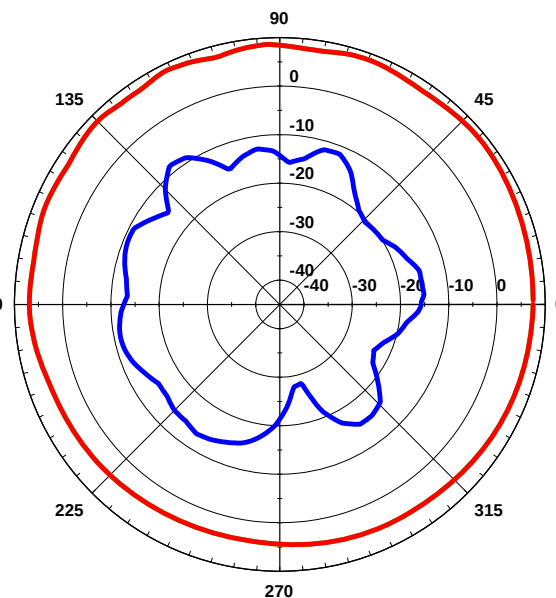
2450MHz



Ver. Pol. (max.)=	8.7
Ver. Pol. (avg.)=	7.6
Hor. Pol. (max.)=	-8.6
Hor. Pol. (avg.)=	-14.1
Tol. Gain (max.)=	8.7
Tol. Gain (avg.)=	7.6

Unit: dBi

2500MHz



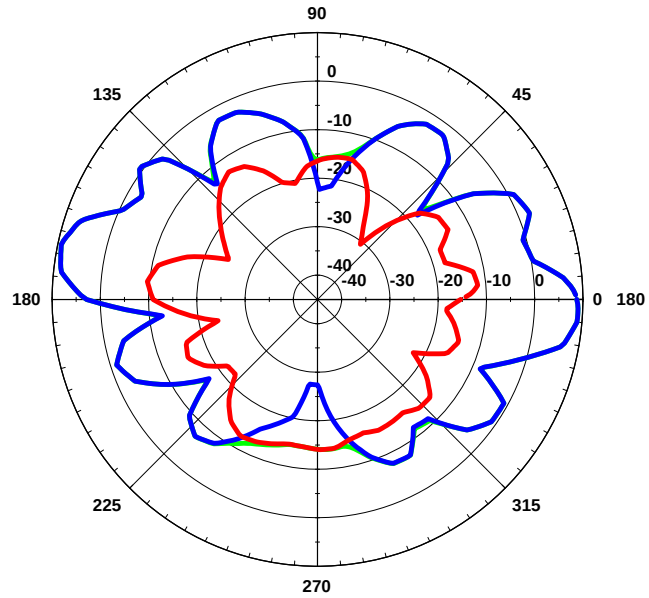
Ver. Pol. (max.)=	8.7
Ver. Pol. (avg.)=	7.0
Hor. Pol. (max.)=	-8.5
Hor. Pol. (avg.)=	-14.3
Tol. Gain (max.)=	8.7
Tol. Gain (avg.)=	7.0

Unit: dBi

Electrical Performance-Radiation Pattern and Gain

E-Plane

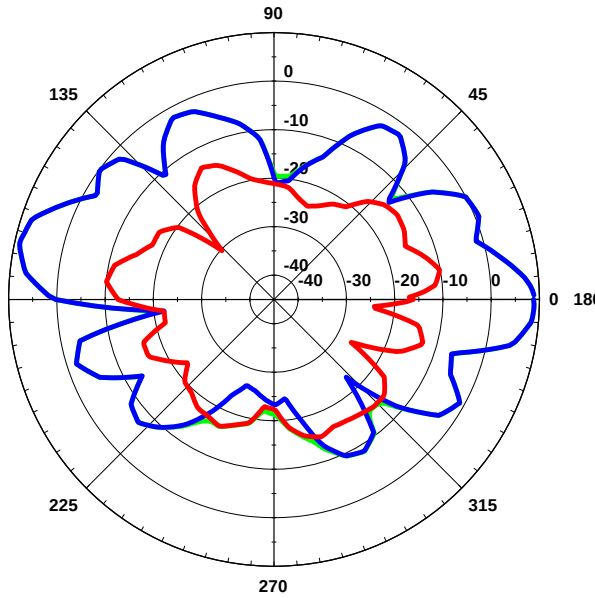
2400MHz



Ver. Pol. (max.)=	-9.6
Ver. Pol. (avg.)=	-15.6
Hor. Pol. (max.)=	9.3
Hor. Pol. (avg.)=	-0.1
Tol. Gain (max.)=	9.3
Tol. Gain (avg.)=	0.0

Unit: dBi

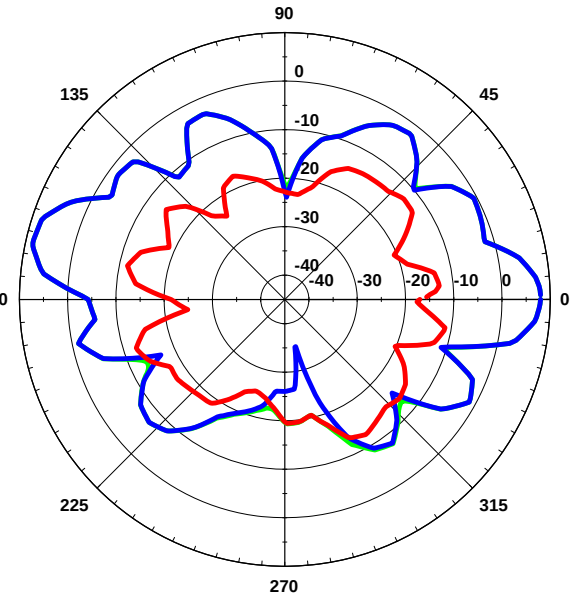
2450MHz



Ver. Pol. (max.)=	-10.1
Ver. Pol. (avg.)=	-16.4
Hor. Pol. (max.)=	8.9
Hor. Pol. (avg.)=	-0.3
Tol. Gain (max.)=	8.9
Tol. Gain (avg.)=	-0.3

Unit: dBi

2500MHz



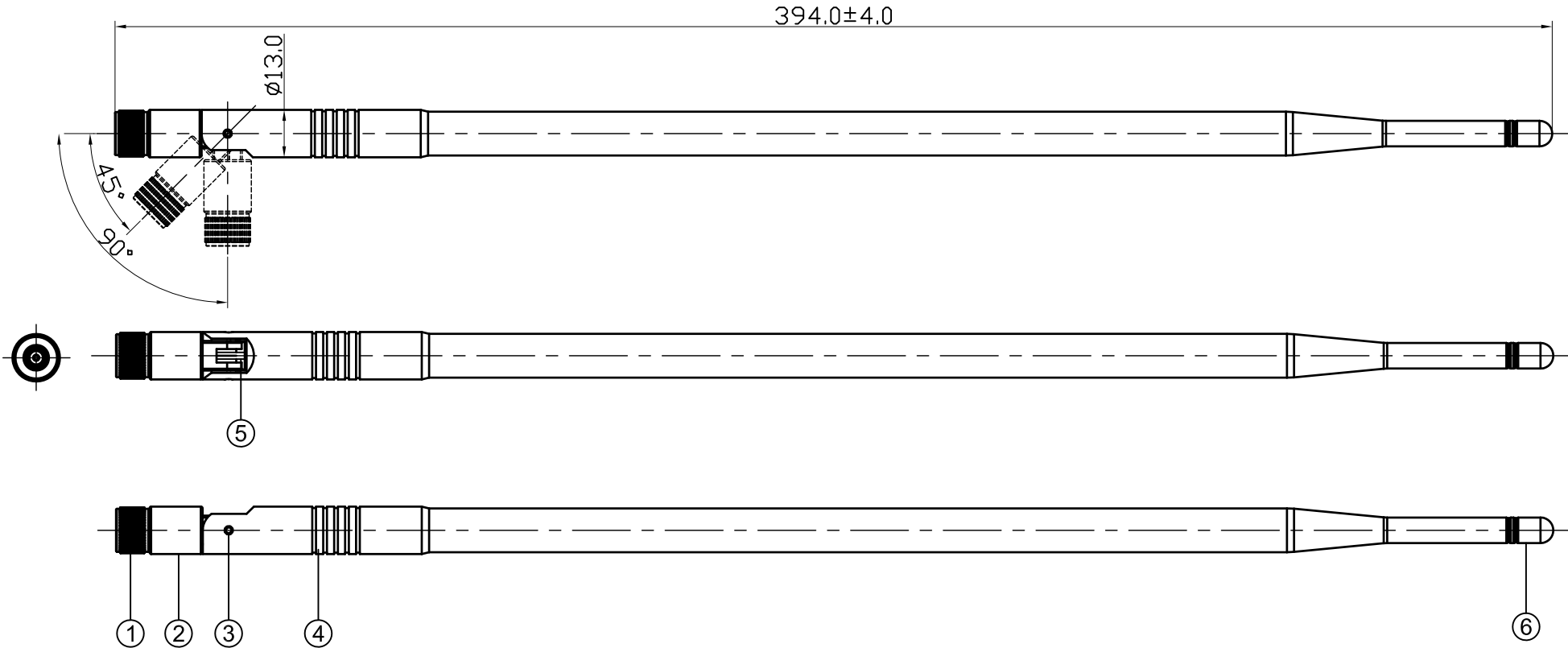
Ver. Pol. (max.)=	-11.3
Ver. Pol. (avg.)=	-16.2
Hor. Pol. (max.)=	8.5
Hor. Pol. (avg.)=	-0.9
Tol. Gain (max.)=	8.5
Tol. Gain (avg.)=	-0.9

Unit: dBi

RoHS

Compatible

SIGN	DATE	DESCRIPTION	APPROVER
			
			
			



6	R-AN60-01B	Aerial cap	PVC	Black	1
5	R-RG-178U	Cable	RG178	L=62.7mm	1
4	R-AN6011-01A	Body	ABS	Black L=370	1
3	R-AN03-514CZ	Pin	Cu	Black Zn Plated	2
2	R-AN03-T01	Body1	PA+ABS	Black	1
1	R-SMA336-CC8MRANT	SMA Male Reverse	Cu	Eletrodeposition	1
No.	Part Number	Description	Material	Finish	Q'ty

TITLE: 2.4 GHz 9dBi Antenna				
PART NO.: AN2400-5901RS			DWG NAME: AN2400-5901RS.dwg	
APPROVED BY	CHECKED BY	DESIDNED BY		Tolerance
			UNITS: mm	X.X ±0.2
			SCALE: 1/1	X.XX ; Ø0.05
			REVISION: A	Xø X ; Ø1ø X