AD-305N

Antenna Approval Sheet

Part Number	R3410110223
Product Number	AD-305N
Description	5dBi/5dBi 2.4G/5GHz Dipole RP-SMA
DOC NO.	AS-1809003

Ver.1.4

Revised History

Version	Purpose	Date	Editor
V1.0	Initial	09/18/2018	Aaron
V1.1	Revised Page6 Pic and Page 8 Gain table	02/15/2019	Kamoro
V1.2	Replaced page 6 picture	08/16/2019	Kamoro
V1.3	Added Packing Info.	01/03/2020	Kamoro
V1.4	Revised Specification / Frequency (Page 3)	08/28/2020	Kamoro

SparkLAN		Customer
Sales	**PM**	**Approved by**
	Aaron	

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Model No：AD-305N

Part Number：R3410110223

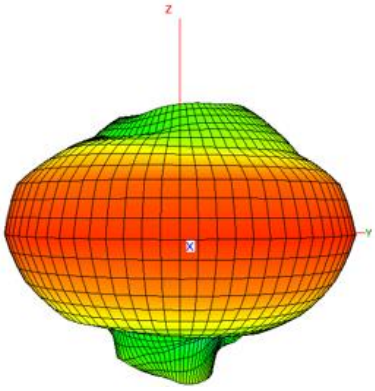
802.11 a/b/g/n/ac AP/Router external dipole antenna

Features

- Dual band IEEE 802.11 a/b/g/n/ac standard
- High efficiency
- Quick integration

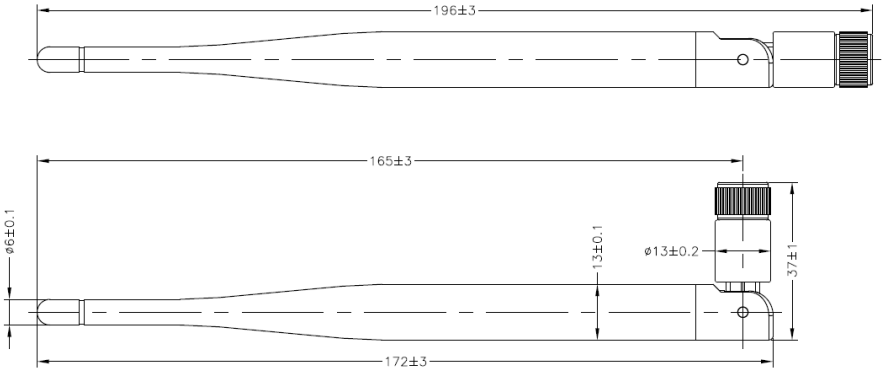
Specification

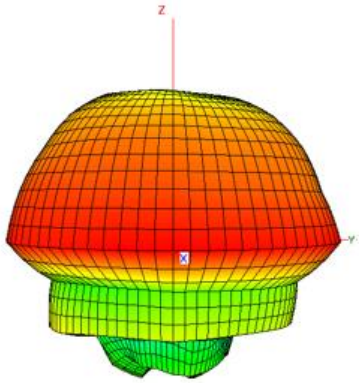
Frequency (MHz)	2400 - 2483	5150 - 5825
Peak Gain (dBi)	5.0 ± 0.5	5.0 ± 0.5
VSWR	≦2.0	≦2.0
Power (Watts)	1	1
Impedance (Ohms)	50	50
Dimension (mm)	196 x Ø13	
Weight (g)	20 ±2 g	
Connector	SMA Male RP	
Polarization	Liner ; Vertical	
Operating Temp (°C)	-20°C ~ +60°C	



2.45GHz

Mechanical Dimensions

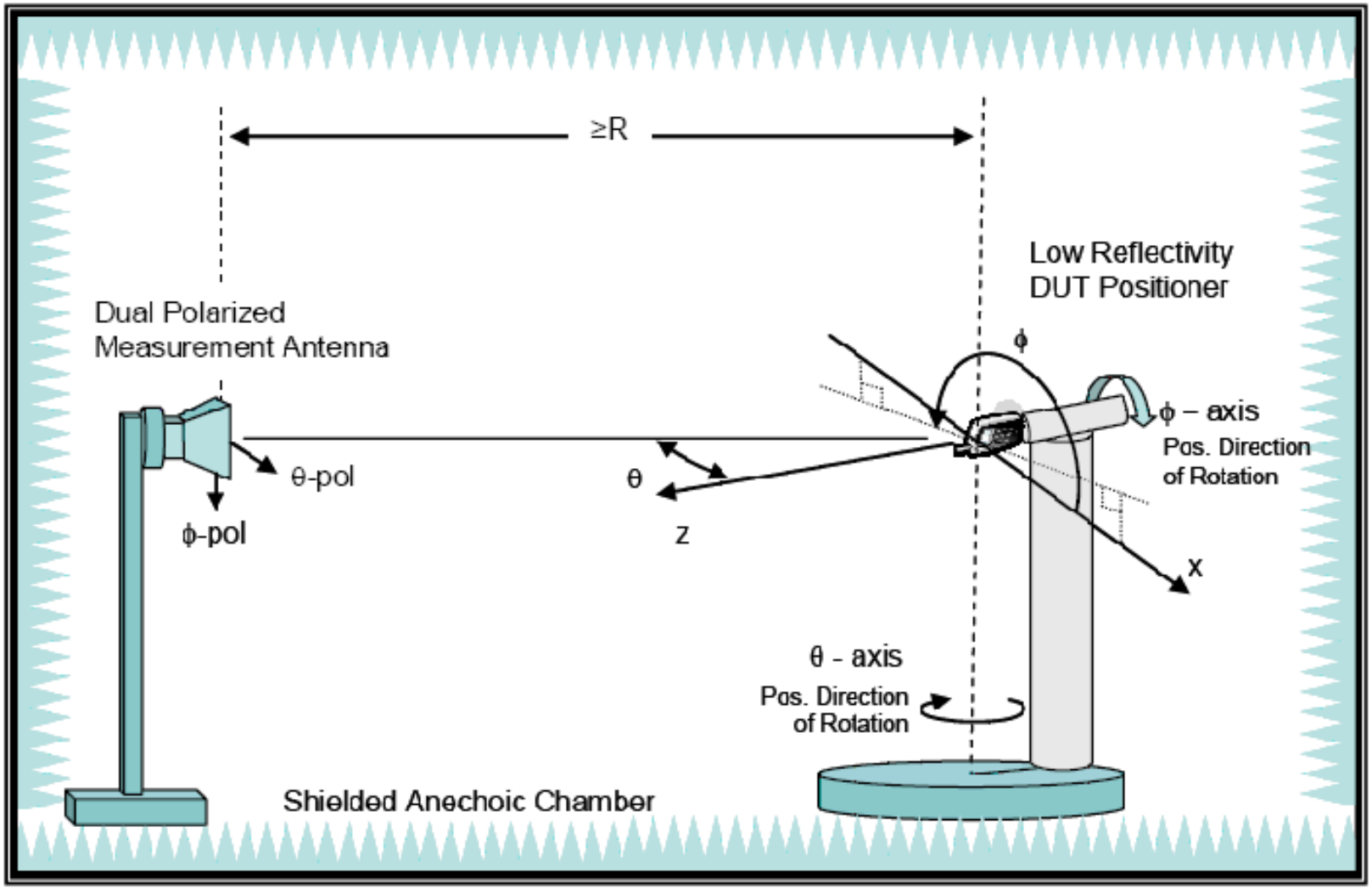




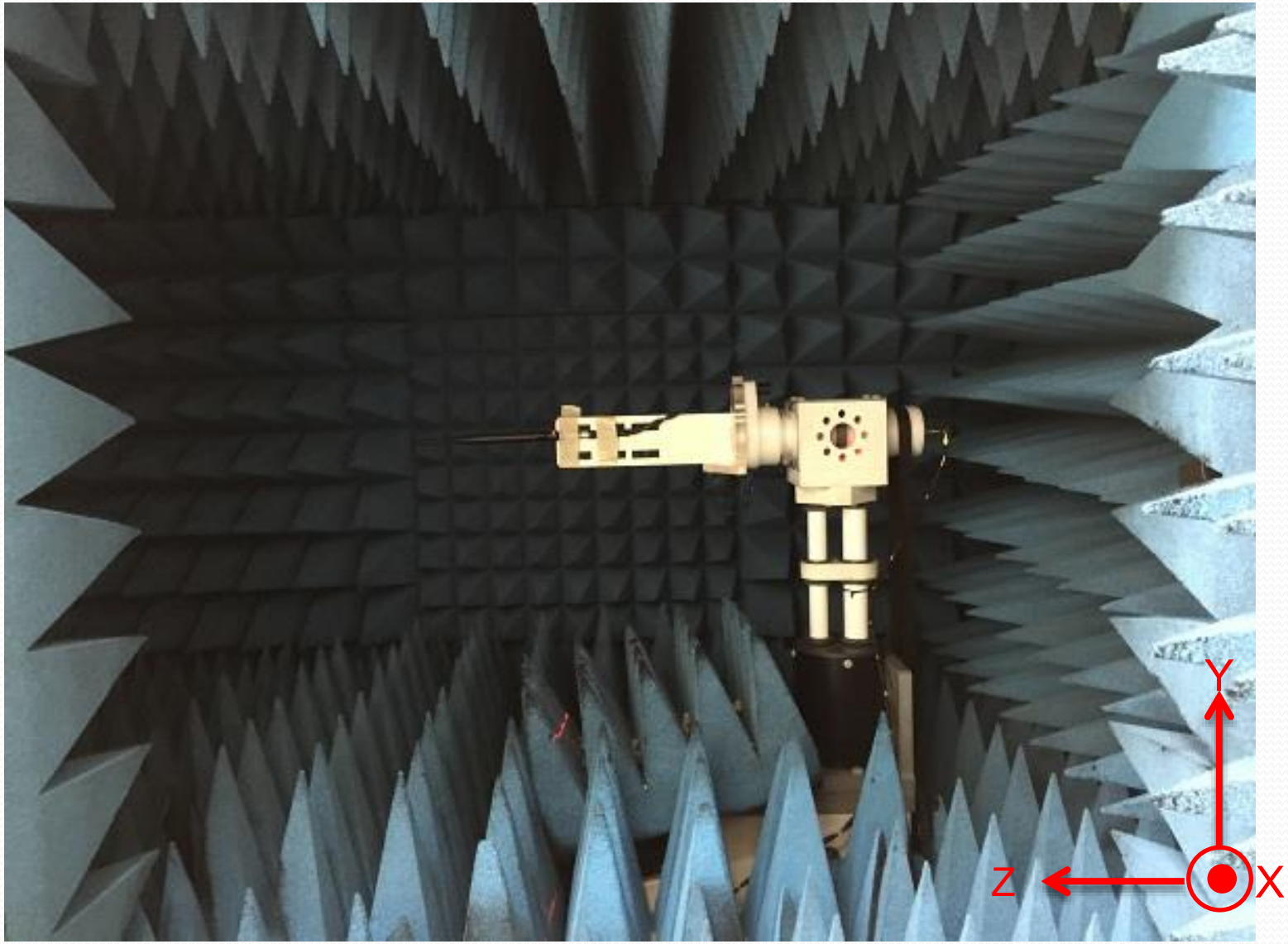
5GHz

- Manufacturer company name: SparkLAN Communications, Inc.
- Manufacturer company address: 5F, No. 199, Ruihu St., Neihu Dist., Taipei City 114067, Taiwan

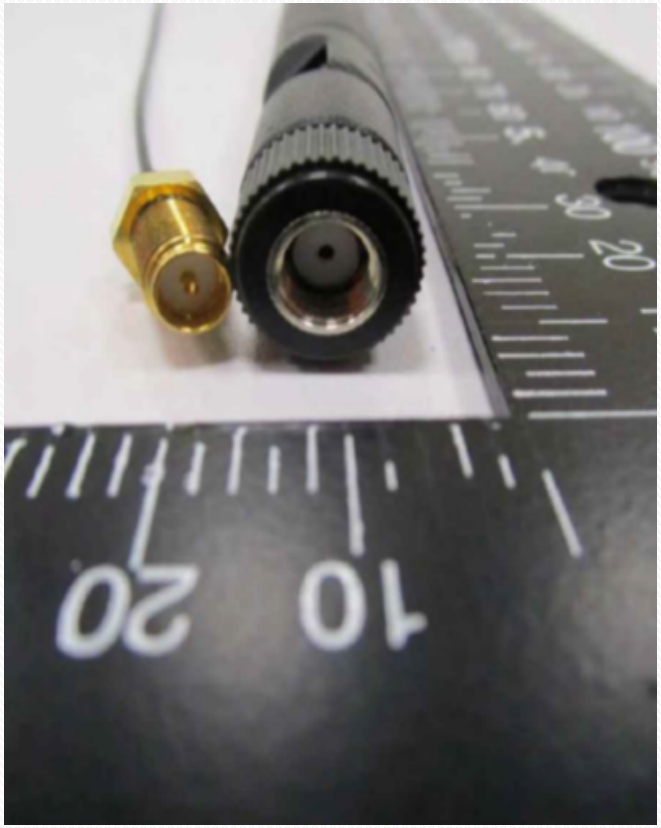
Antenna Testing System



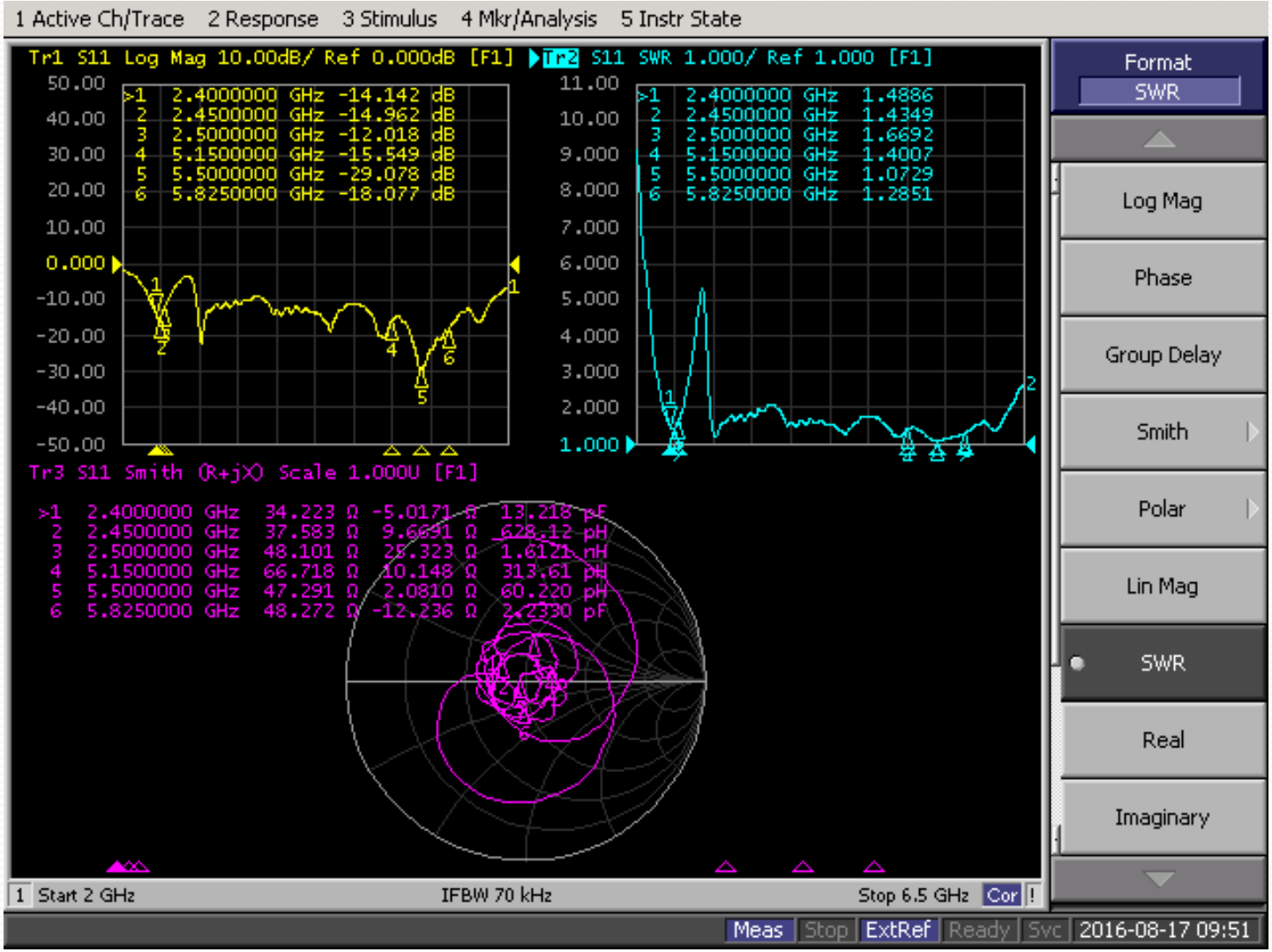
Antenna under testing



Antenna Placement



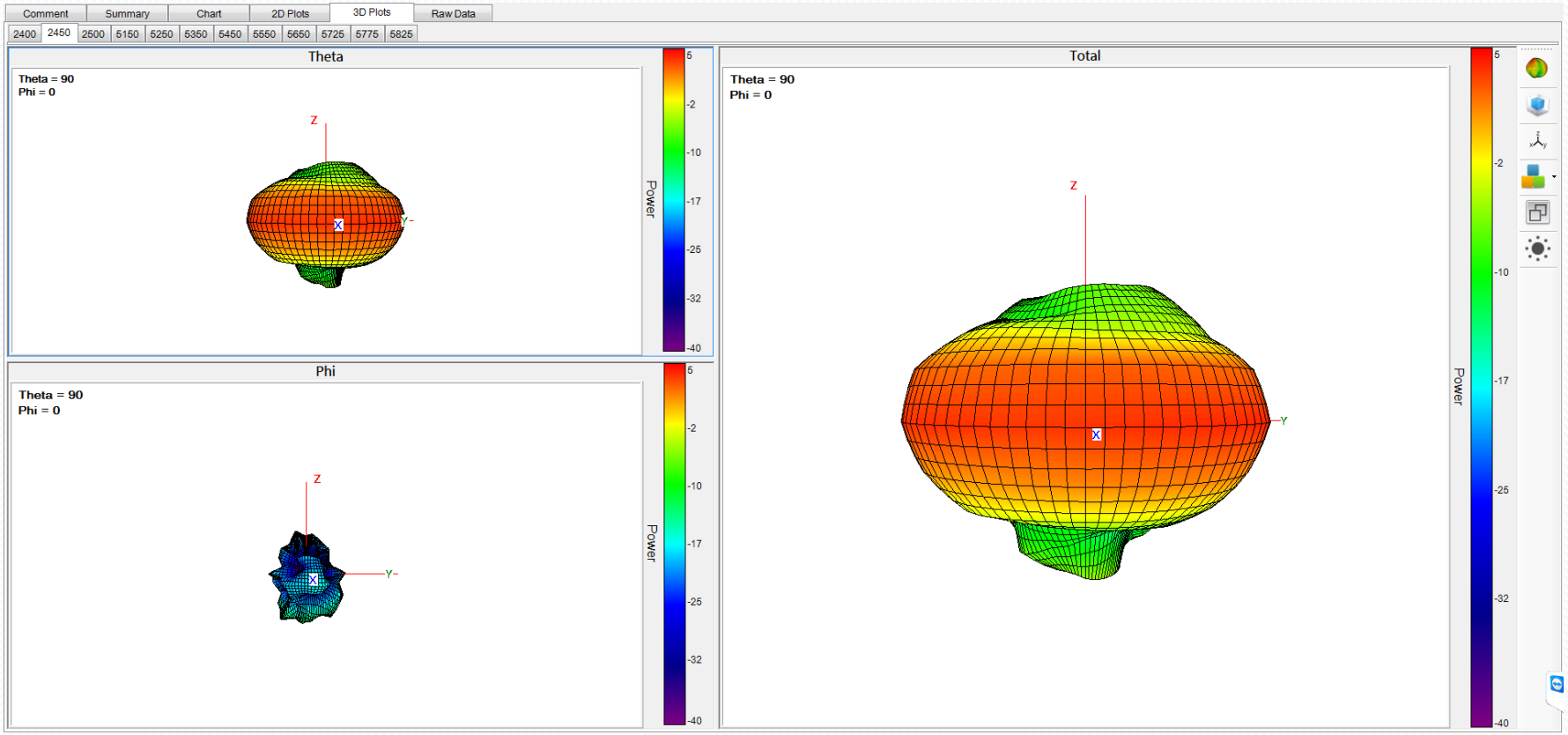
ANT S-Parameter, VSWR & Smith Chart



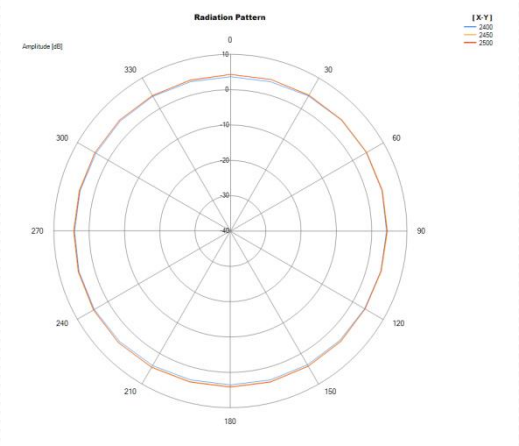
Gain Table

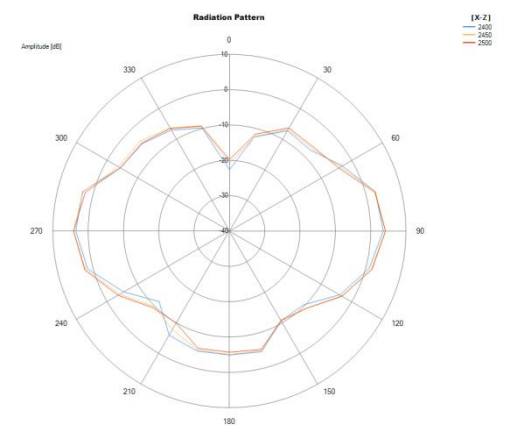
Ant												
Frequency (MHz)	2400	2450	2500	5150	5250	5350	5450	5550	5650	5725	5775	5825
Efficiency (dB)	-1.77	-1.32	-1.42	-1.27	-1.49	-1.62	-1.58	-1.39	-1.43	-1.69	-1.66	-1.71
Peak Gain (dBi)	4.62	5.00	4.85	5.53	5.44	5.26	5.43	5.53	5.01	4.69	4.69	4.57
Efficiency (%)	66.47	73.82	72.07	74.69	70.91	68.8	69.51	72.62	71.93	67.84	68.24	67.39

Ant 2.4G 3D Gain pattern

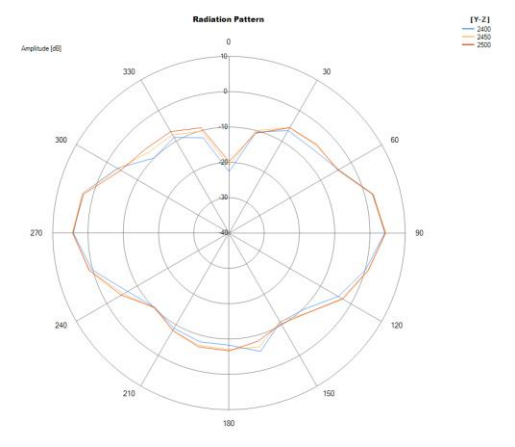


Ant 2.4G 2D Gain pattern





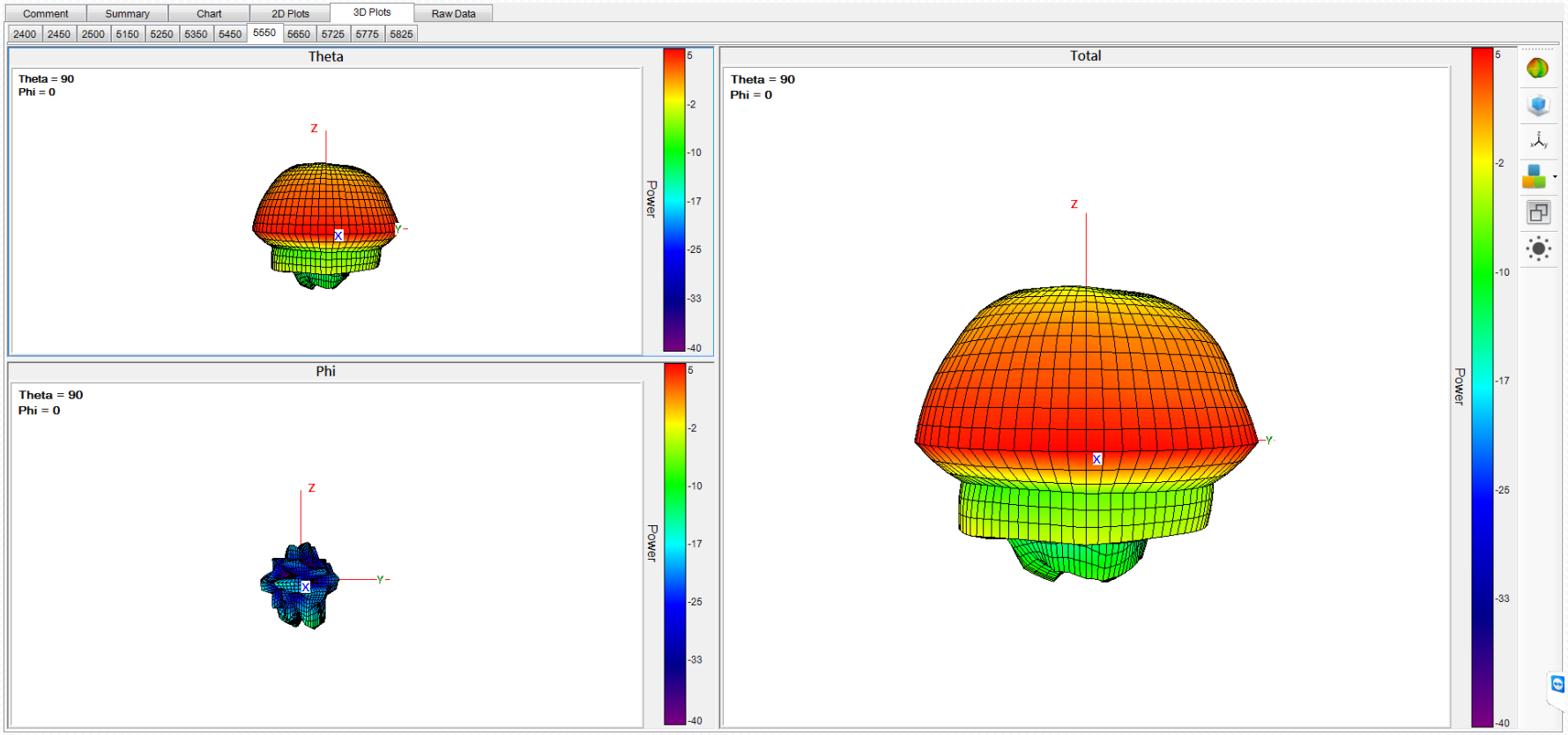
X-Y



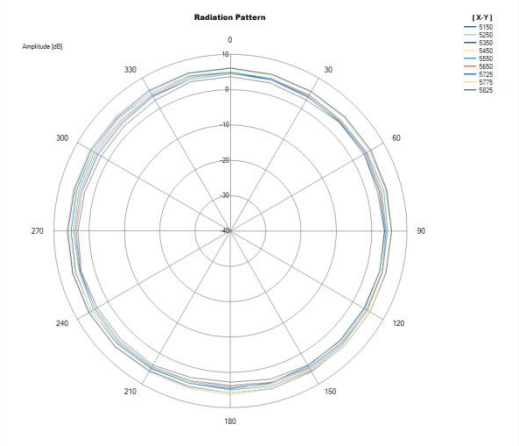
X-Z

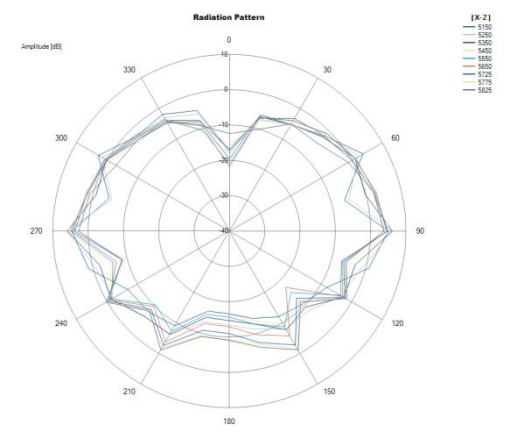
Y-Z

Ant 5G 3D Gain pattern

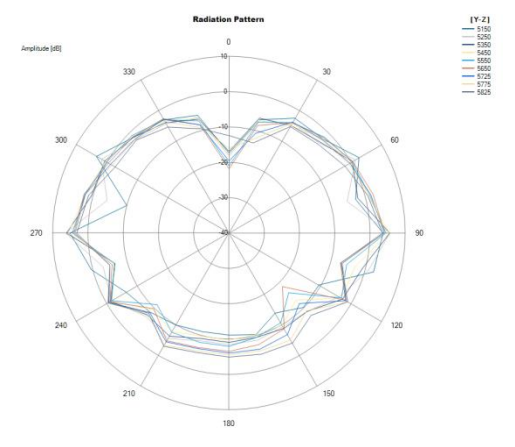


Ant 5G 2D Gain pattern





X-Y



X-Z

Y-Z