AD-303N

Antenna Approval Sheet

Part Number	R3410110222
Product Number	AD-303N
Description	3dBi/3dBi 2.4G/5GHz Dipole RP-SMA
DOC NO.	AS-1809002

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-303N
Part Number：R3410110222

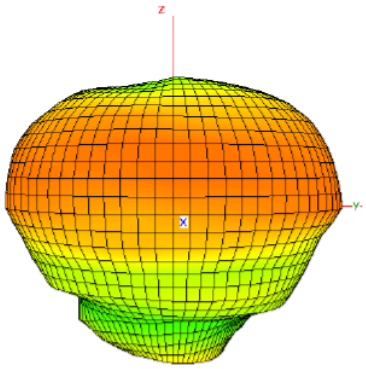
802.11 a/b/g/n/ac AP/Router external dipole antenna

Features

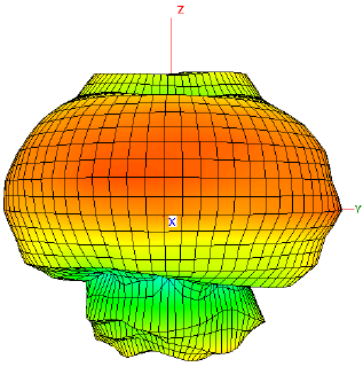
- Dual band IEEE 802.11 a/b/g/n/ac standard
- High efficiency
- Quick integration

Specification

Frequency (MHz)	2400 - 2483	5150 - 5825
Peak Gain (dBi)	3.0 ± 1	3.0 ± 1
VSWR	≦2.0	≦2.0
Power (Watts)	1	1
Impedance (Ohms)	50	50
Dimension (mm)	138 x Ø 6	
Weight (g)	10.5 ±2 g	
Connector	SMA Male RP	
Polarization	Liner ; Vertical	
Operating Temp (°C)	-20°C ~ +60°C	

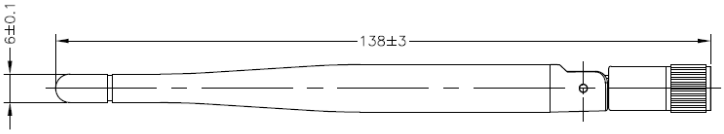


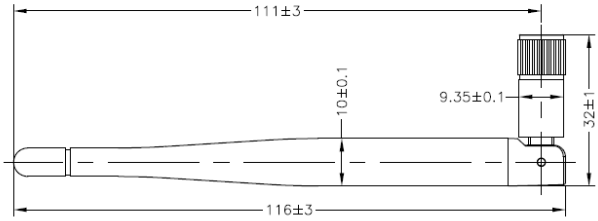
2.45GHz



5GHz

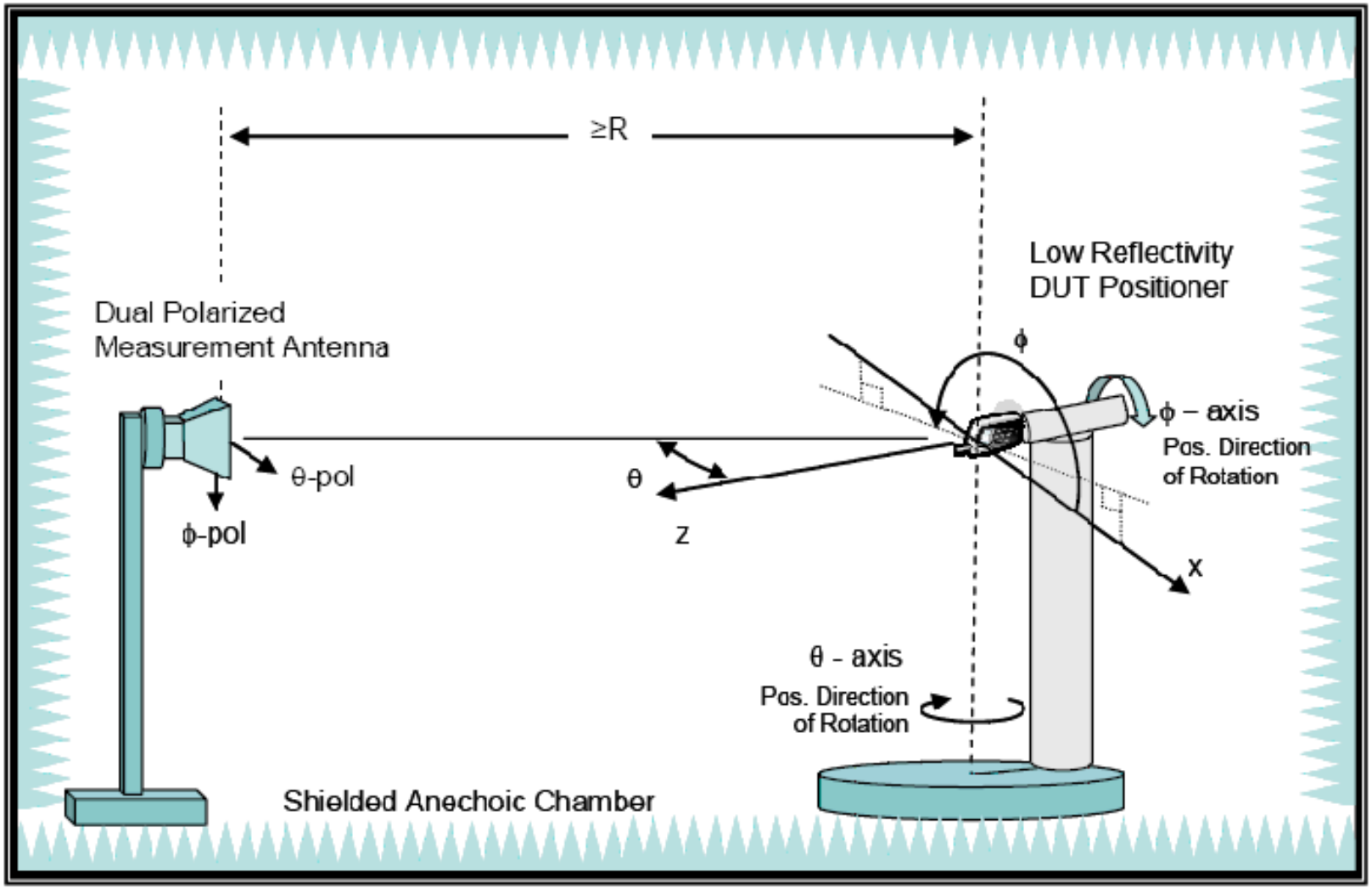
Mechanical Dimensions



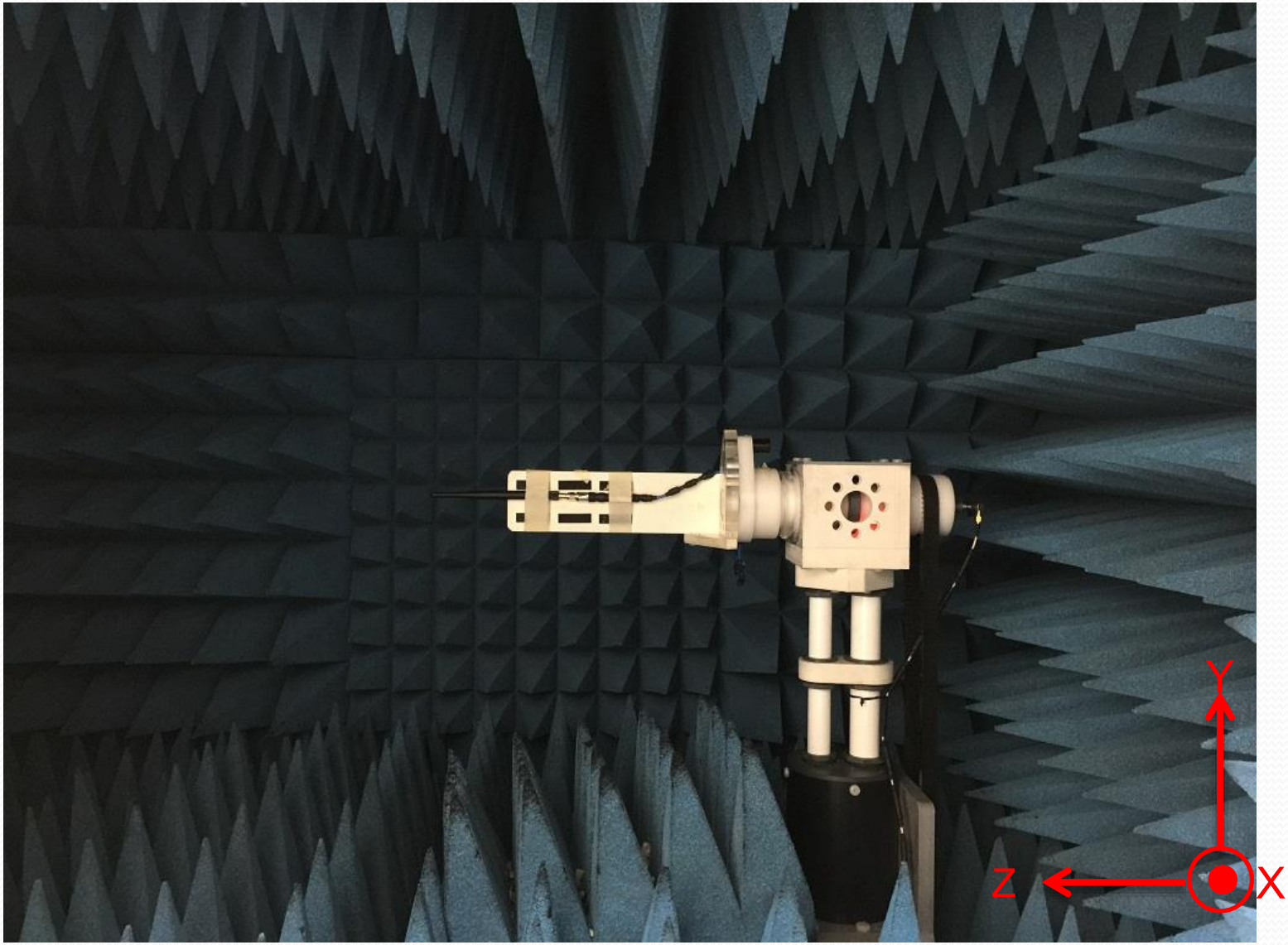


- Manufacturer company name: SparkLAN Communications, Inc.
- Manufacturer company address: 5F, No. 199, Ruihu St., Neihu Dist., Taipei City 114067, Taiwan

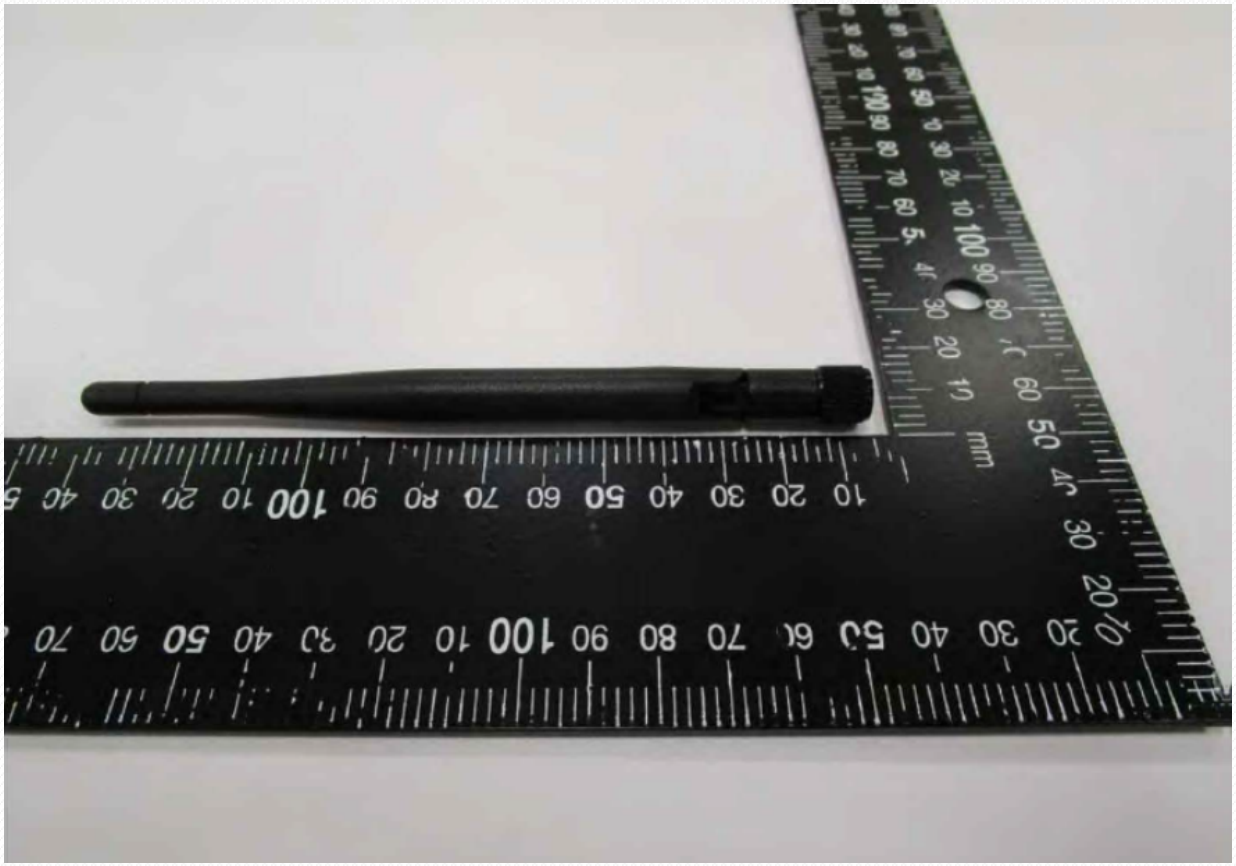
Antenna Testing System

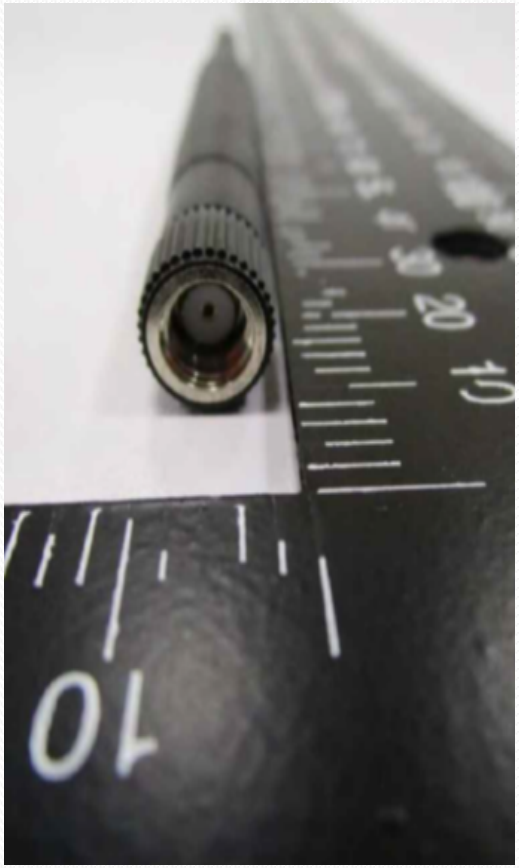


Antenna under testing

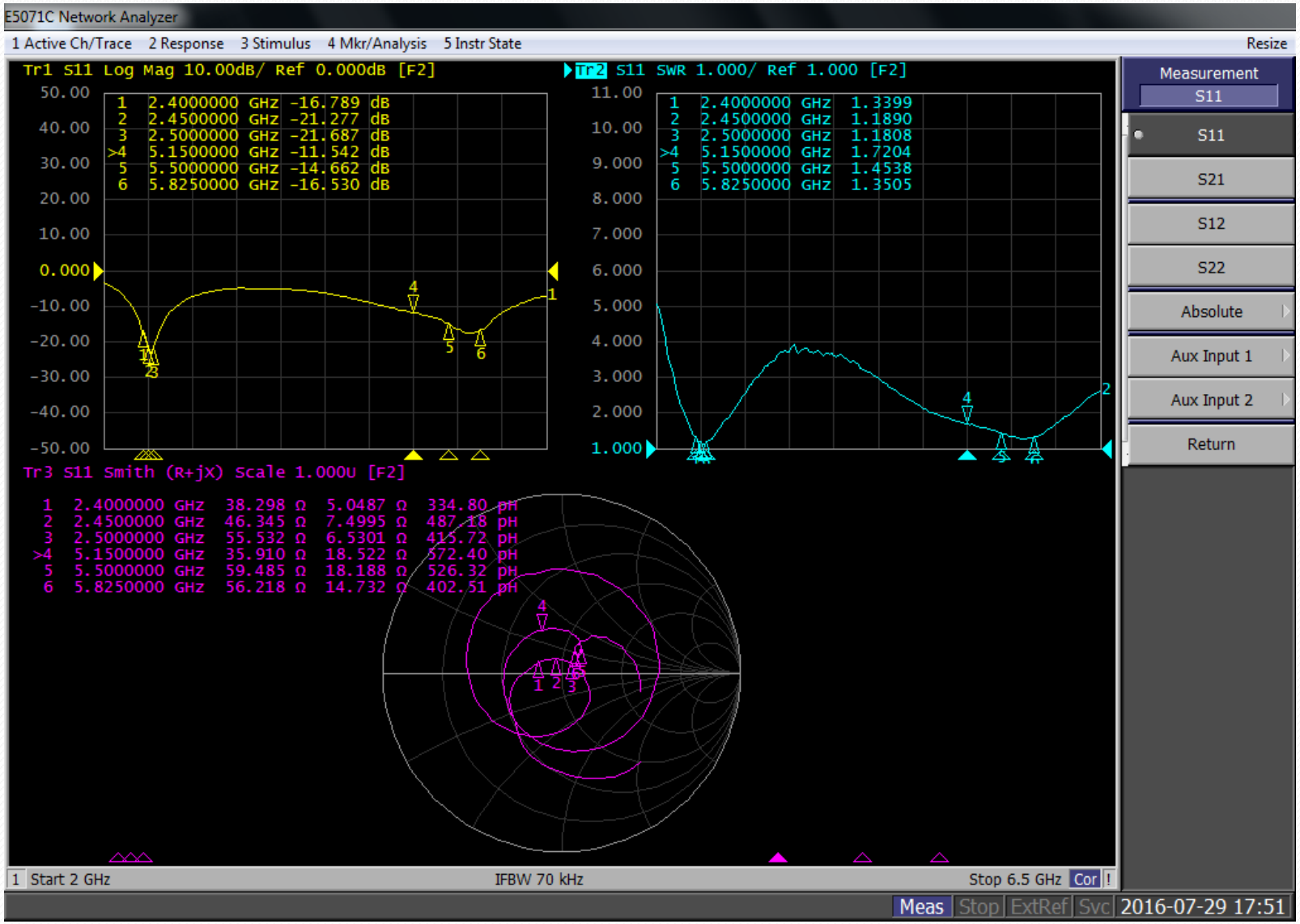


Antenna Placement





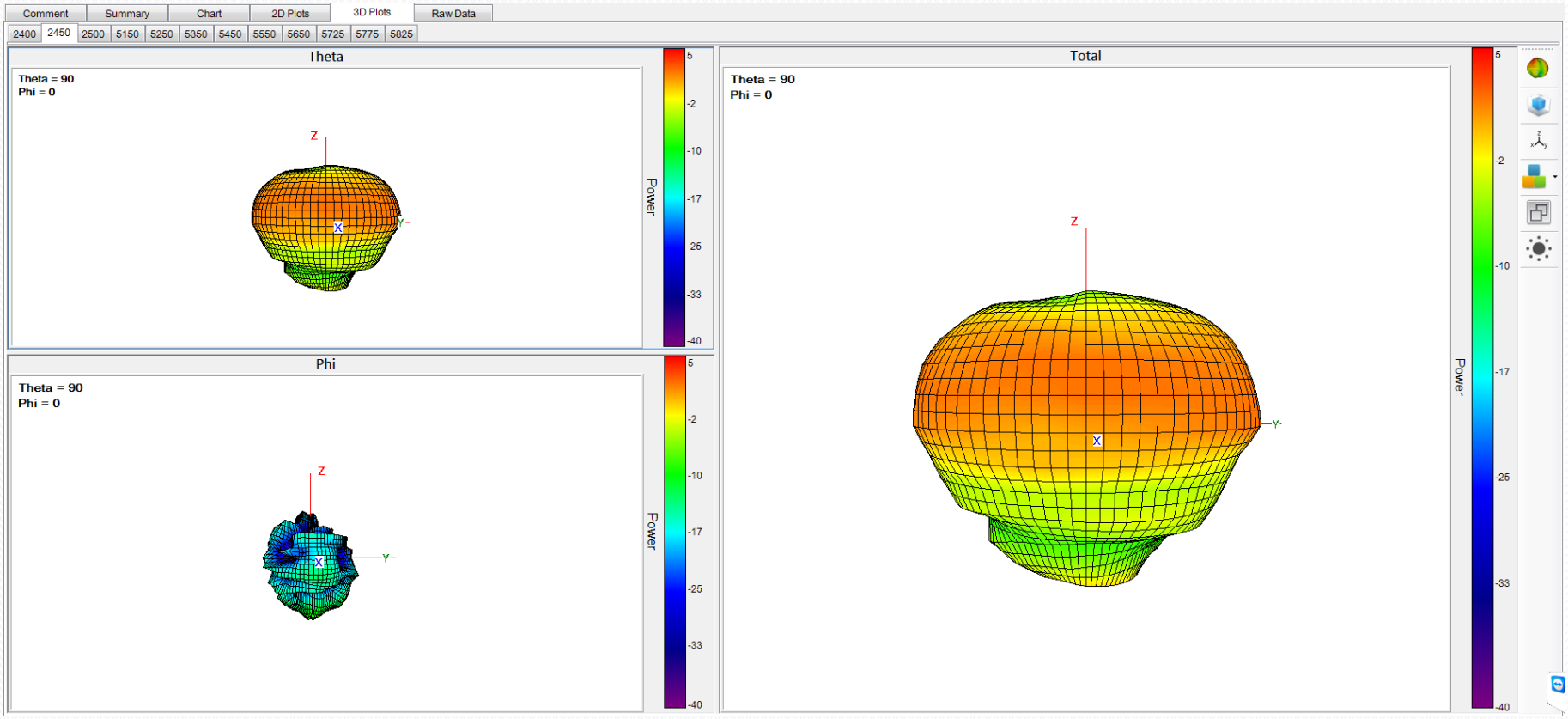
Ant S-Parameter, VSWR & Smith Chart



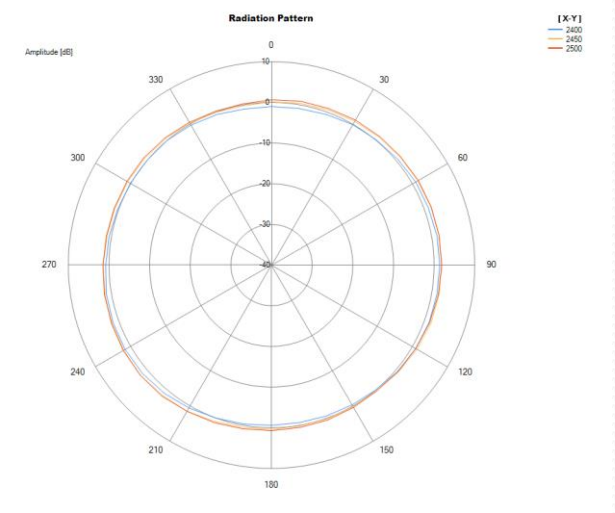
Gain Table

Ant												
Frequency (MHz)	2400	2450	2500	5150	5250	5350	5450	5550	5650	5725	5775	5825
Efficiency (dB)	-1.85	-1.49	-1.41	-1.57	-1.28	-1.18	-1.13	-1.73	-1.76	-1.83	-1.64	-1.96
Peak Gain (dBi)	2.86	3.14	3.10	2.59	2.82	3.24	3.45	2.79	3.01	2.85	2.97	2.57
Efficiency (%)	65.27	71.02	72.24	69.68	74.43	76.29	77.02	67.16	66.71	65.58	68.48	63.63

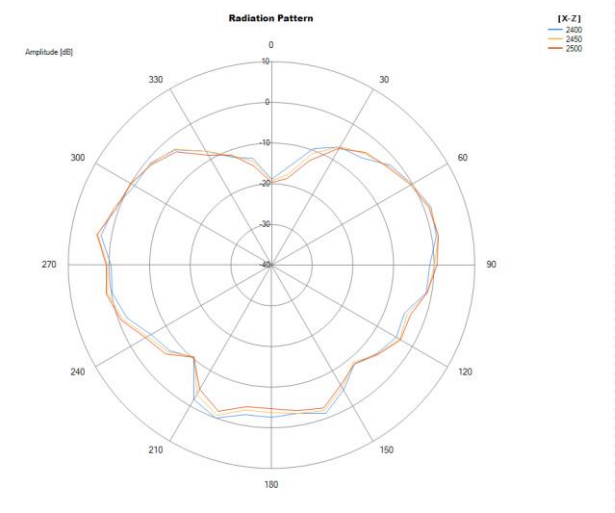
Ant 2.4G 3D Gain pattern



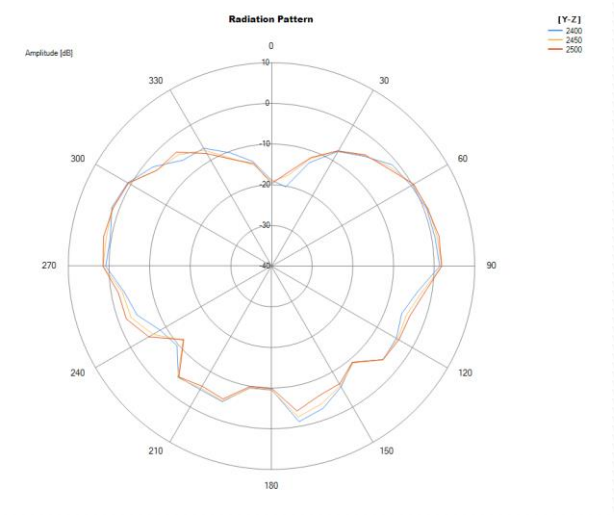
Ant 2.4G 2D Gain pattern



X-Y

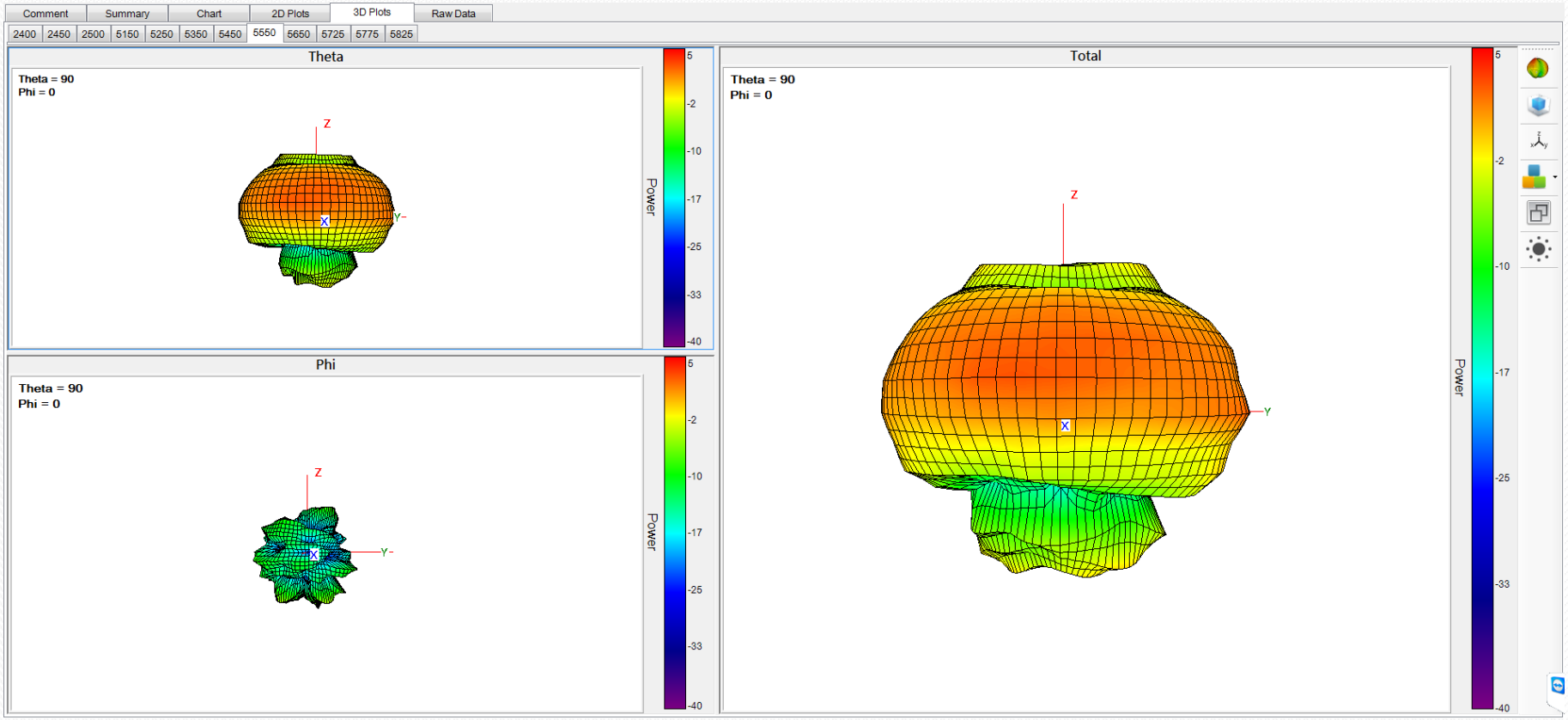


X-Z

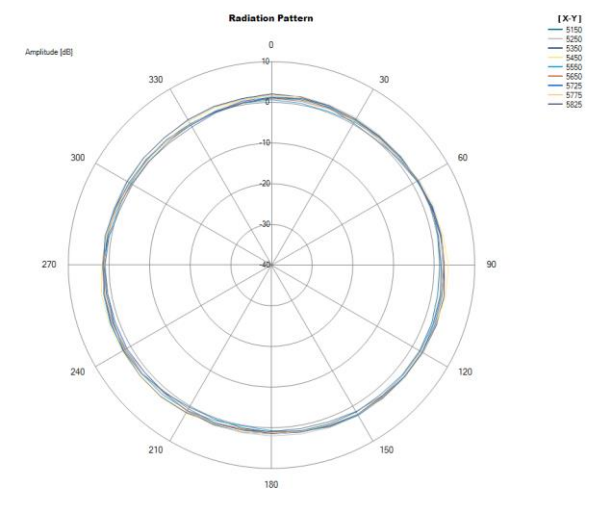


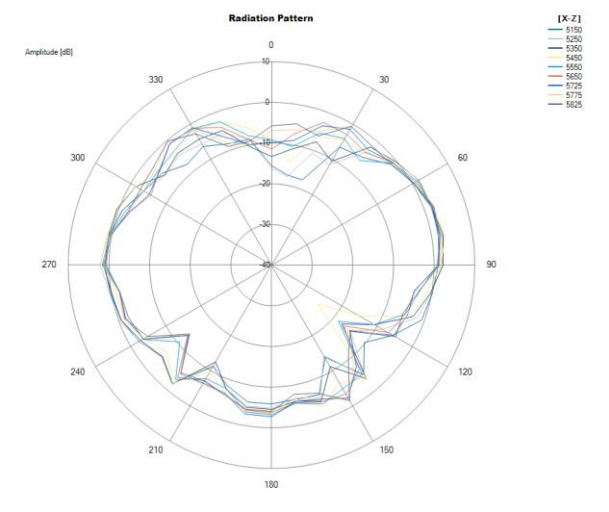
Y-Z

Ant 5G 3D Gain pattern

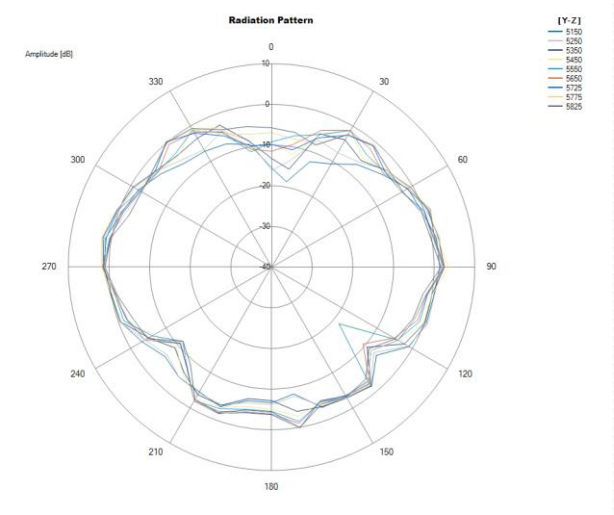


Ant 5G 2D Gain pattern





X-Y



X-Z

Y-Z