

# 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	

# Index

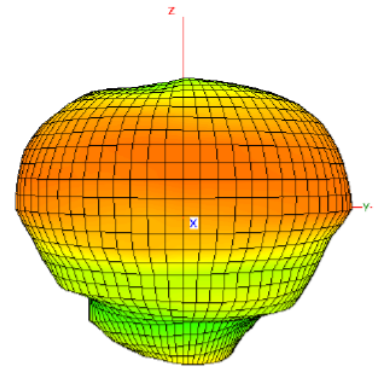
1. Features.....	3
2. Specification .....	3
3. Mechanical Dimensions .....	3
4. Antenna Testing System.....	4
5. Antenna under testing.....	5
6. Antenna Placement .....	6
7. ANT S-Parameter, VSWR & Smith Chart .....	7
8. Gain Table .....	8
9. Ant 2.4G 2D&3D Gain pattern .....	9
10. Ant 5G 2D&3D Gain pattern .....	11
11. Packing information .....	13

**Features**

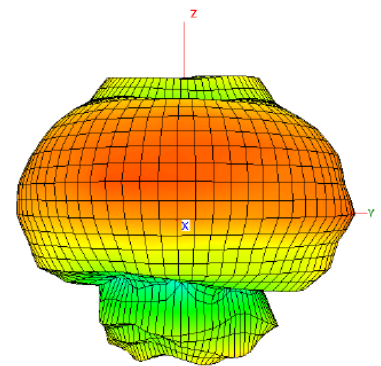
- Dual band IEEE 802.11 a/b/g/n/ac standard
- High efficiency
- Quick integration

**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	

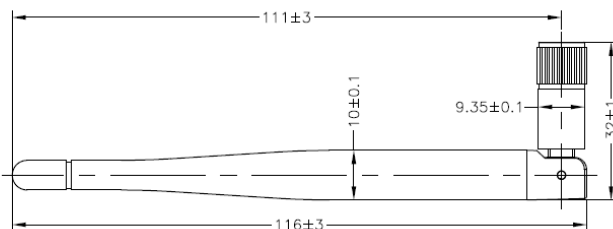
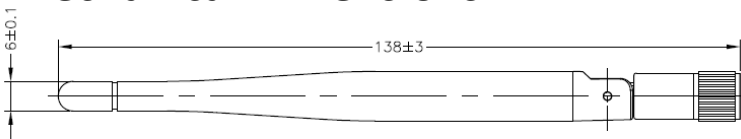


**2.45GHz**

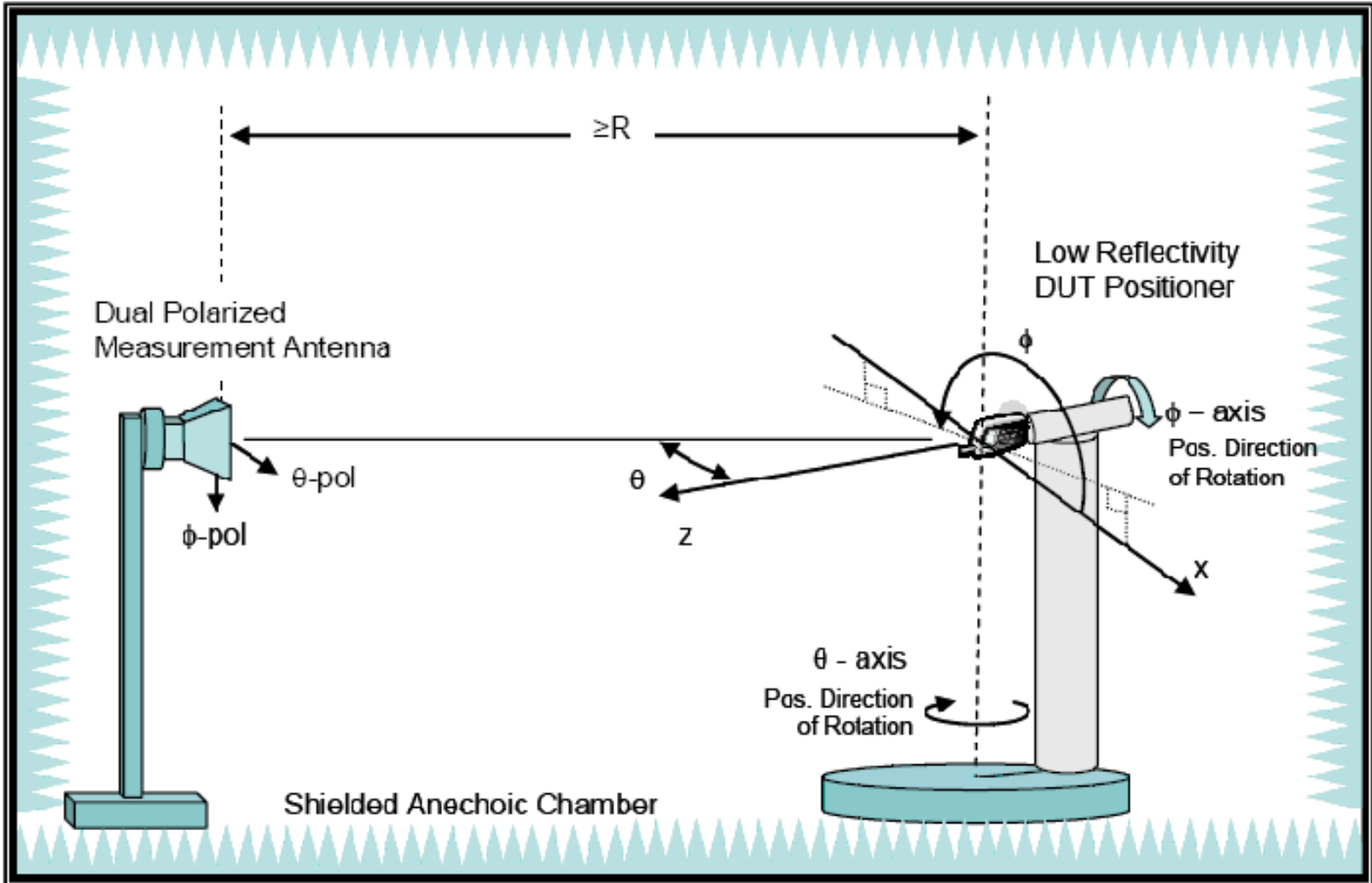


**5GHz**

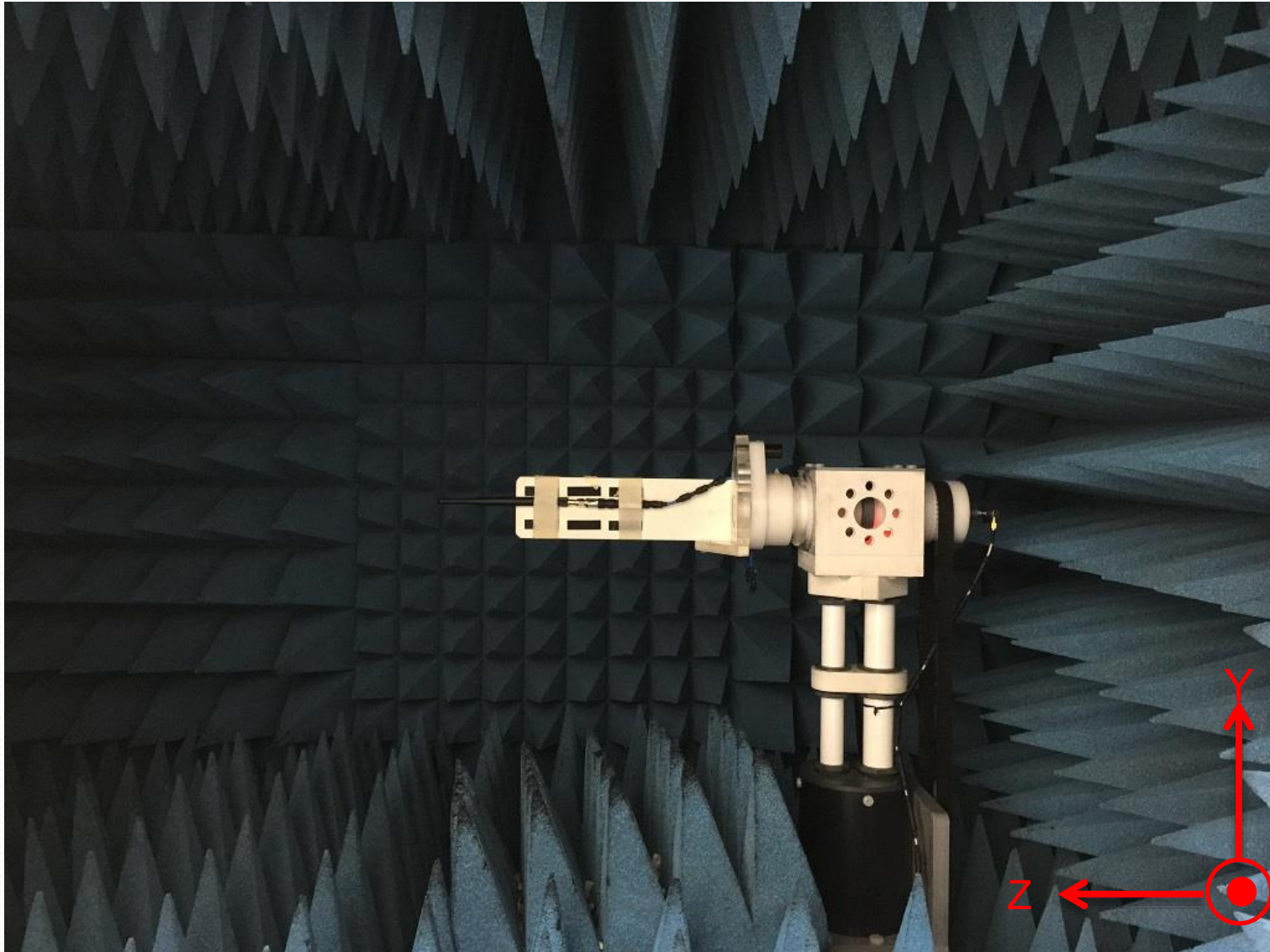
**Mechanical Dimensions**



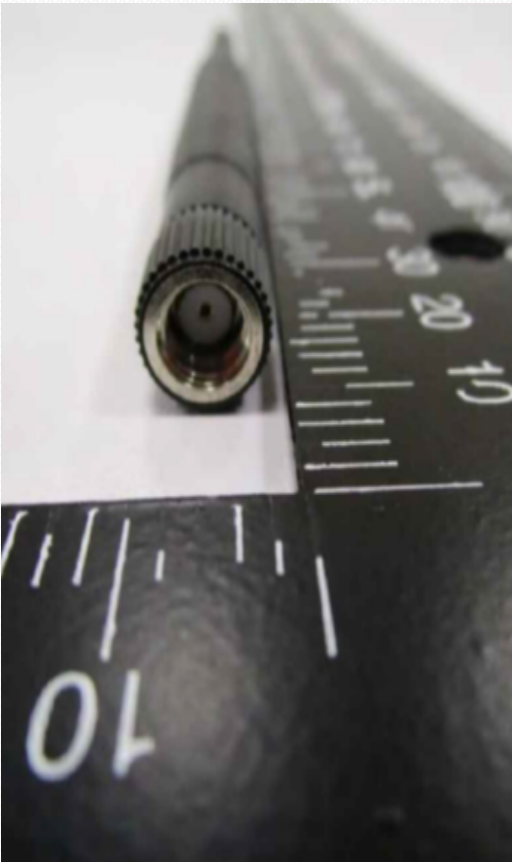
# Antenna Testing System



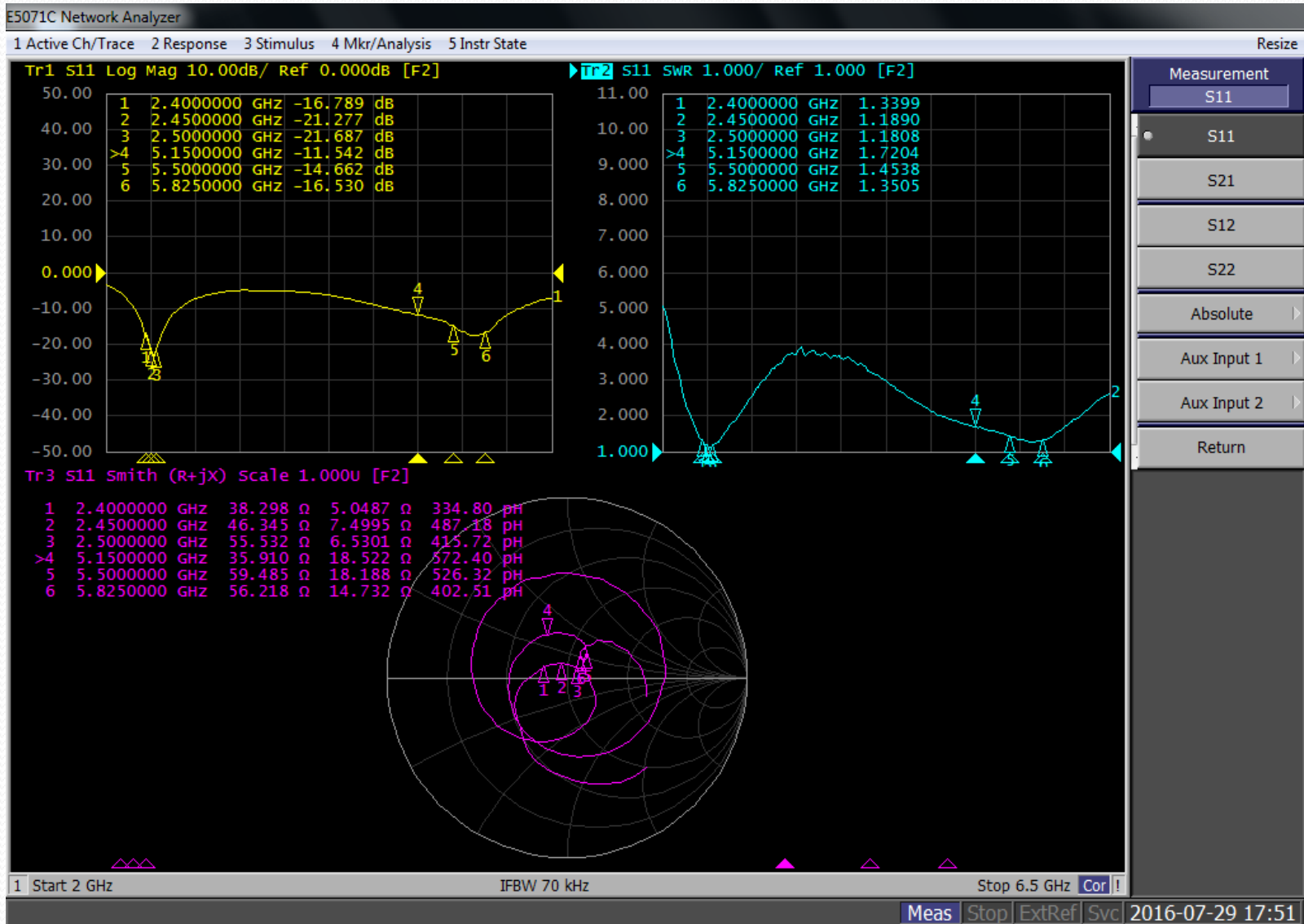
# Antenna under testing



# Antenna Placement



# Ant S-Parameter, VSWR & Smith Chart

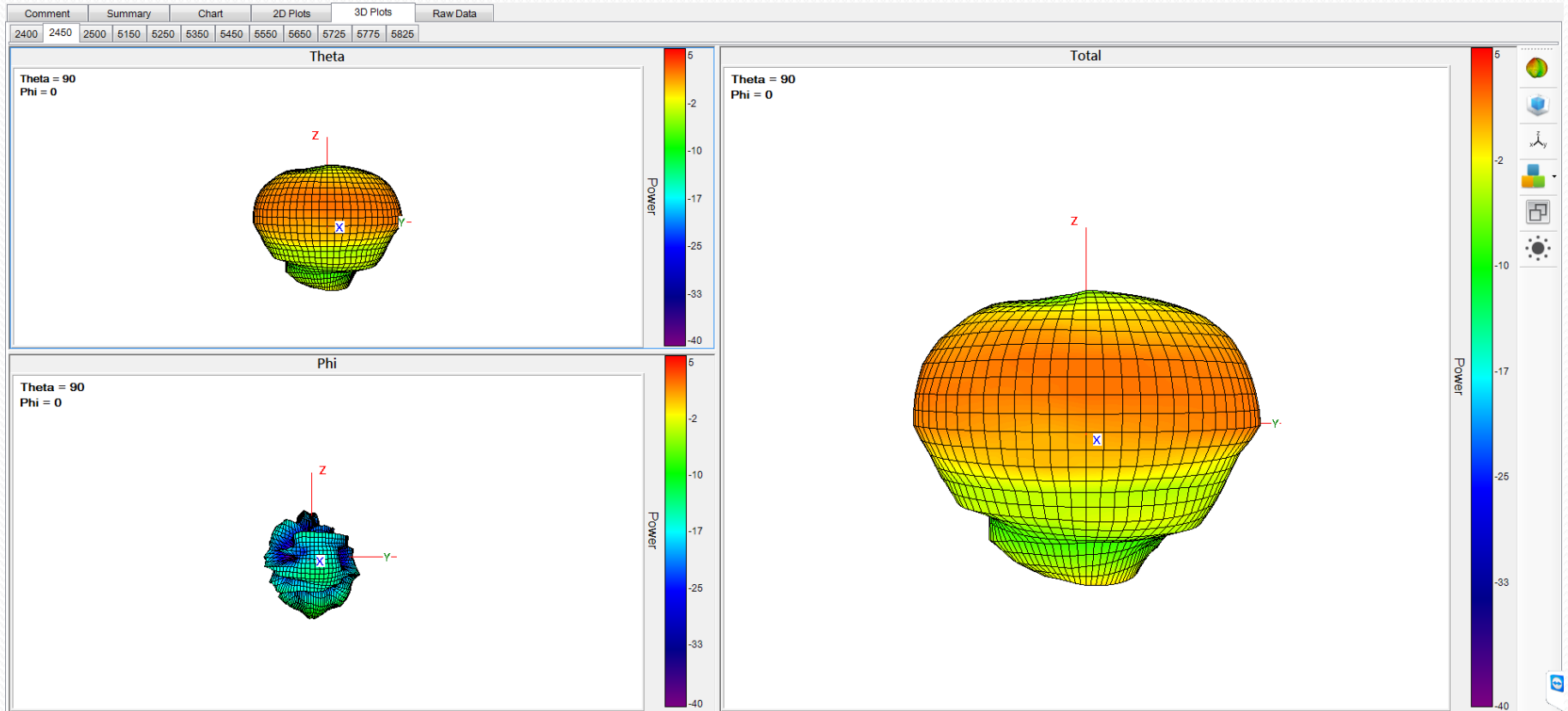


# Gain Table

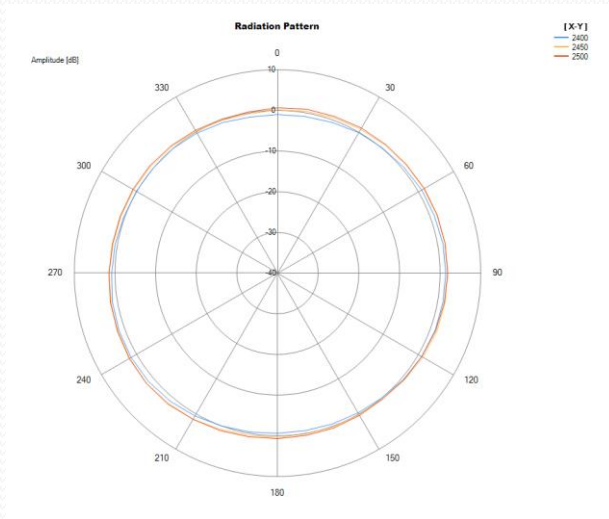
Ant												
Frequency (MHz)	2400	2450	2500	5150	5250	5350	5450	5550	5650	5725	5775	5825
Efficiency (dB)	-1.85	-1.49	-1.41	-1.57	-1.28	-1.18	-1.13	-1.73	-1.76	-1.83	-1.64	-1.96
Peak Gain (dBi)	2.86	3.14	3.10	2.59	2.82	3.24	3.45	2.79	3.01	2.85	2.97	2.57
Efficiency (%)	65.27	71.02	72.24	69.68	74.43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



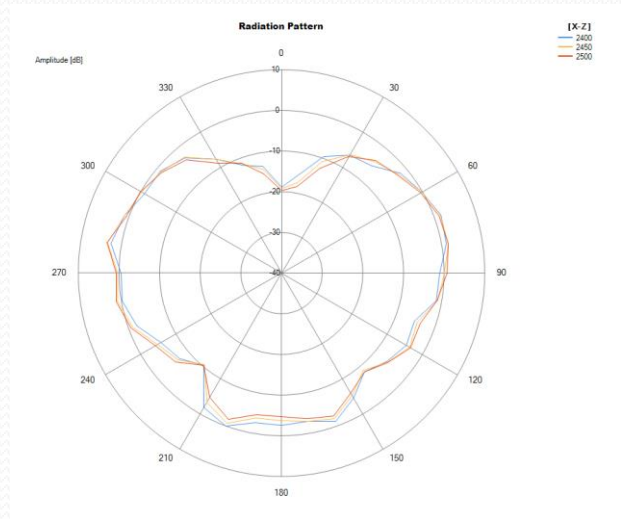
# Ant 2.4G 3D Gain pattern



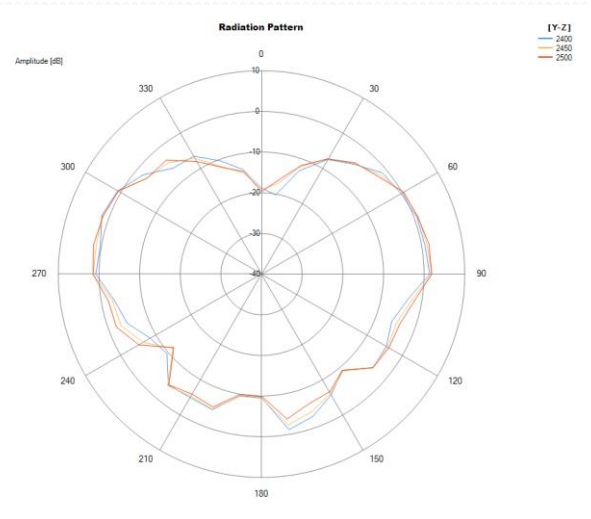
# Ant 2.4G 2D Gain pattern



**X-Y**

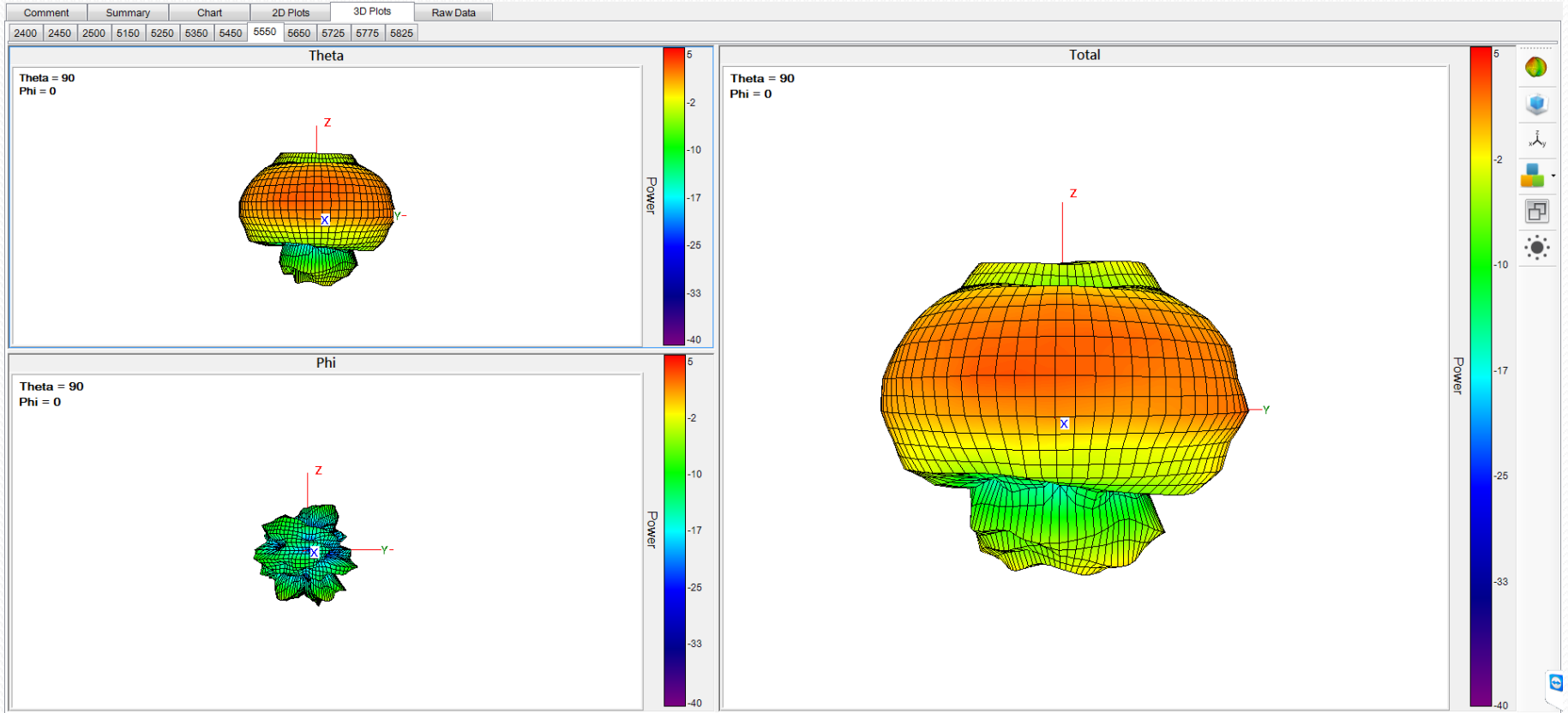


**X-Z**

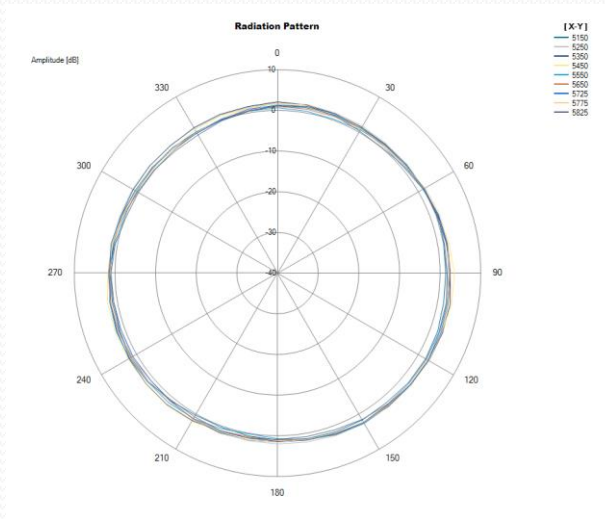


**Y-Z**

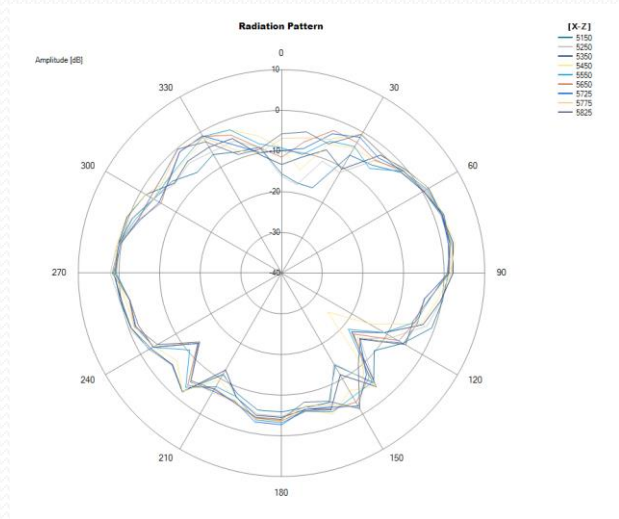
# Ant 5G 3D Gain pattern



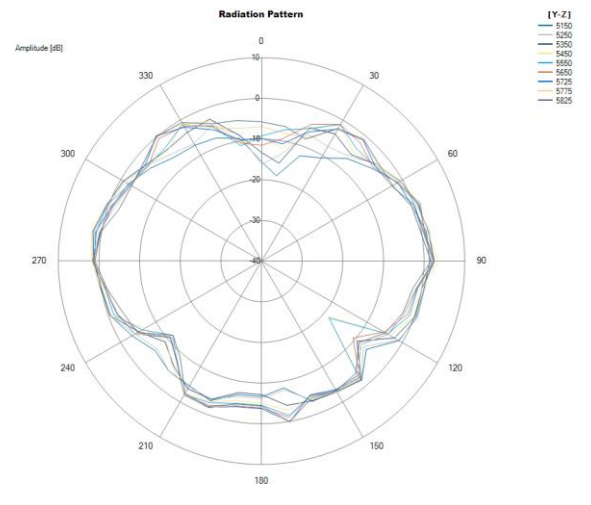
# Ant 5G 2D Gain pattern



X-Y



X-Z



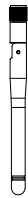
Y-Z

### 包裝規範書

產品名稱	AD-303N	客戶名稱		產品名稱	
產品料號	R3410110222	客戶料號		製作日期	2020/5/27

#### 產品包裝說明:

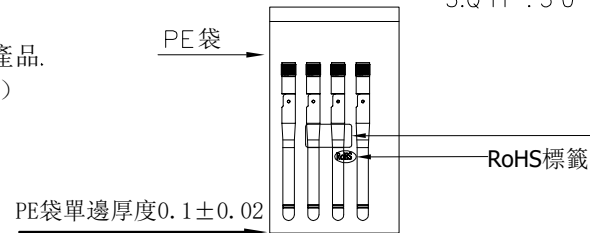
單個產品



#### 內袋包裝說明:

1. PE袋厚 0.1mm, 每PE袋裝入 50 pcs 產品.
2. 每袋需貼 1pc 內袋標籤(PE袋正中間) 以及 1pc RoHS 標籤, RoHS 標籤需粘貼在內袋標籤的正下方位置.

內袋包裝



#### 標籤說明:

1. Company : SparkLAN Communications, Inc.
2. Model Name : AD-303
3. Description : Dipole Antenna, 3dBi/3dBi 2.4G/5GHz, RP-SMA(M) connector
4. Part NO : R3410110222
5. Q'TY : 50 PCS

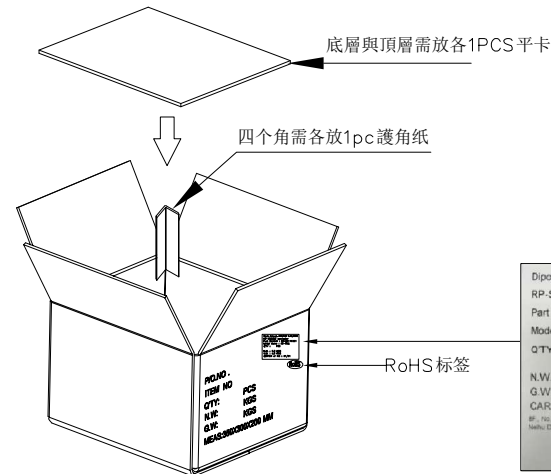
Company	SparkLAN Communications, Inc.
Model Name	AD-303
Description	Dipole Antenna, 3dBi/2dBi 2.4G/5GHz, RP-SMA(M) connector
Part NO	R3410110222
Q'TY	50 PCS

內袋標籤

Pack full: 50pcs/ Bag



外箱包裝



#### 外箱包裝說明:

1. 紙箱底層與頂層需各放 1pc 平卡 · 紙箱四個角需各放 1pc 護角紙.
2. 外箱需貼 1pc 外箱標籤(規格尺寸面) 右上角位置.
3. RoHS 標籤需外箱標籤右下角外置.
4. 紙箱尺寸: 長 350mm \* 寬 300mm \* 高 200mm.
5. 每箱裝 20 袋產品 · 共計裝 1000 pcs 產品.
6. 箱內若有空隙需用填充材填實, 避免晃動.
7. 實際包裝會依出貨數量進行調整.

Dipole Antenna, 3dBi(2dBi) 2.4G/5GHz, RP-SMA(M) connector	
Part Number: R3410110221	
Model No.: AD-302N	
Q'TY: 50 PCS	
N.W: 0.3 KGS	
G.W: 0.5 KGS	
CARTON of NO: 01 / 01	
R.F. No. 287, Sec. 2, Tung Hsing, Hsueh District, Taipei 11493, Taiwan	
Made in Taiwan	

外箱標籤示意