

# AD-103AG

## Antenna Approval Sheet

<b>Part Number</b>	R3410110203
<b>Product Number</b>	AD-103AG
<b>Description</b>	Dipole Antenna, 2dBi 2.4GHz/5GHz, RP-SMA(M) connector
<b>DOC NO</b>	AS-1905003

Ver. 1.2

### Revised History

Version	Purpose	Date	Responsible
1.0	Initial Doc	2019/06/13	Aaron
1.1	Added Antenna picture (Page 12)	2019/08/06	kamoro
1.2	Revised Operating Temperature (Page 3)	2019/08/21	Aaron

<b>SparkLAN</b>		<b>Customer</b>
<b>Sales</b>	<b>PM</b>	<b>Approval by</b>
	Aaron	

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# SPECIFICATION

1. Description : Dual Band Dipole Antenna  
with RP-SMA(M)(Black)
2. Customer :
3. Model No. : AD-103AG
4. Part No. : R3410110203
5. Standard : IEEE 802.11a/b/g Wireless LAN
6. Antenna Profile : 157 mm (see Drawing)
7. Color : Black
8. Electrical Characteristics
  - Operating Frequency : 2.4~2.5 & 5.15~5.85GHz
  - Antenna Type : Dipole
  - Polarization Type : Linear
  - Type of Radiation : Toroidal
  - Peak Gain : 2.0±1 dBi Typical
  - Impedance : 50 Ohm nominal
  - V.S.W.R. : 2.0:1 Max.
9. Mechanical Characteristics
  - Connector : RP-SMA(M)
  - Core : N/A
10. Raw Material
  - Coaxial Cable : RG-178
  - Housing : TPU
  - Hinge : PC+ALLOY
11. Operating Temperature : -40°C ~+85°C

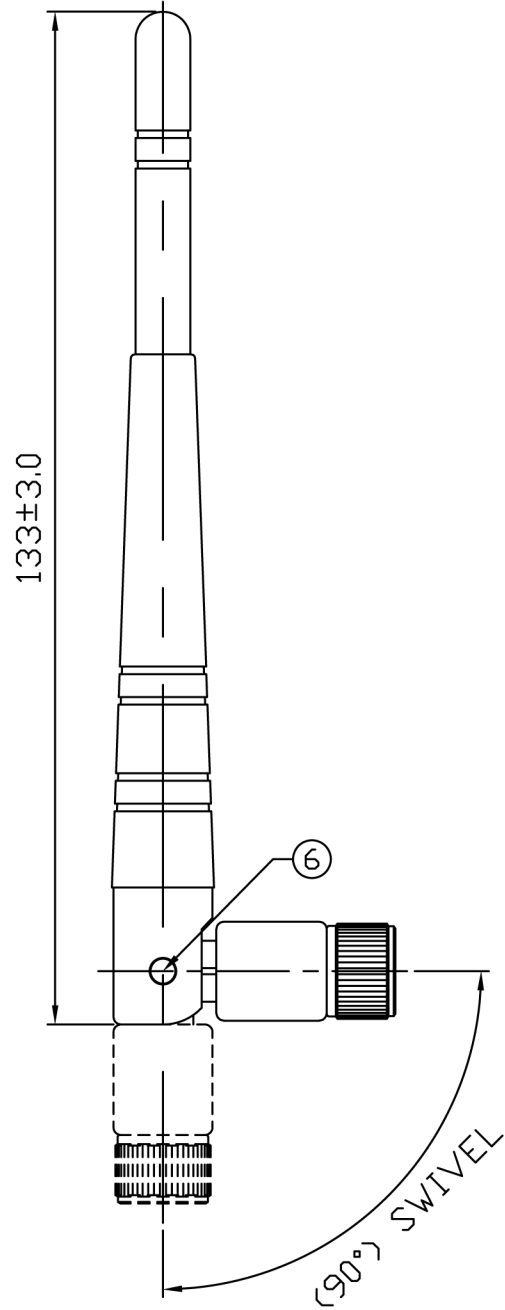
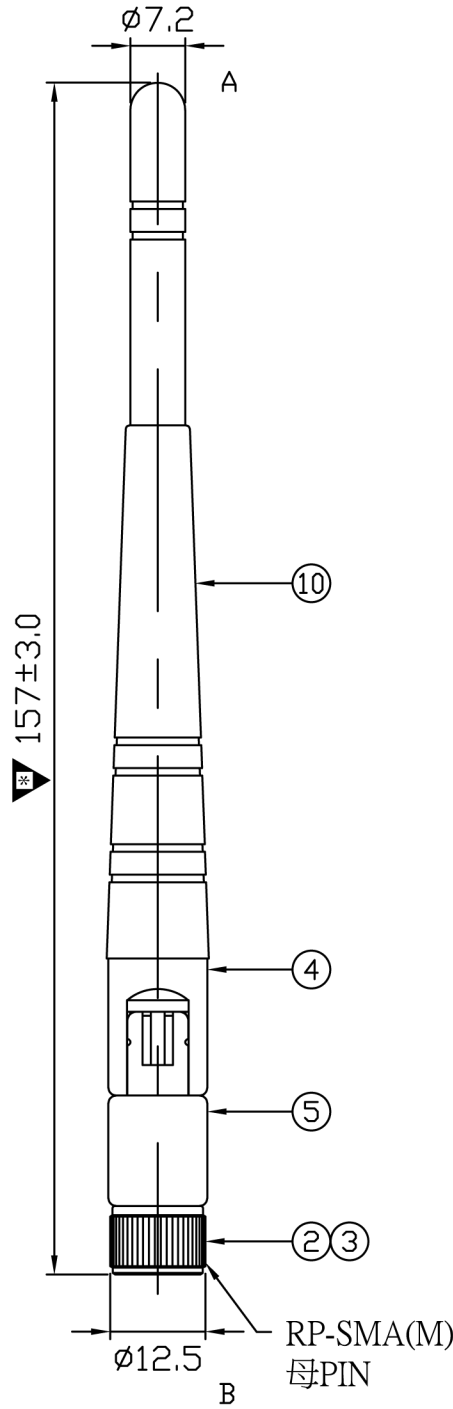
一般未注公差 (mm)	
X	±1.0
X.X	±0.5
X.XX	±0.3
ANGULAR	±5.0°
成品單重	X.X g



客戶  
簽名

客戶  
承認圖面

※ 重點尺寸指示符



第3角法	圖面不用實測				機種料號	R3410110203		
單位: mm	作成	檢圖	確認	核准	品名	AD-103AG		
比例: FREE	徐晨瑄	林佳緯	吳志修	楊怡隆	產品分類	<input checked="" type="checkbox"/> A成品	<input type="checkbox"/> B半成品	<input type="checkbox"/> C樣品
2019年06月11日					圖面編號			版次:
					客戶版次:	表單編號:RD-4-037C		頁次: 1/2

A  
B  
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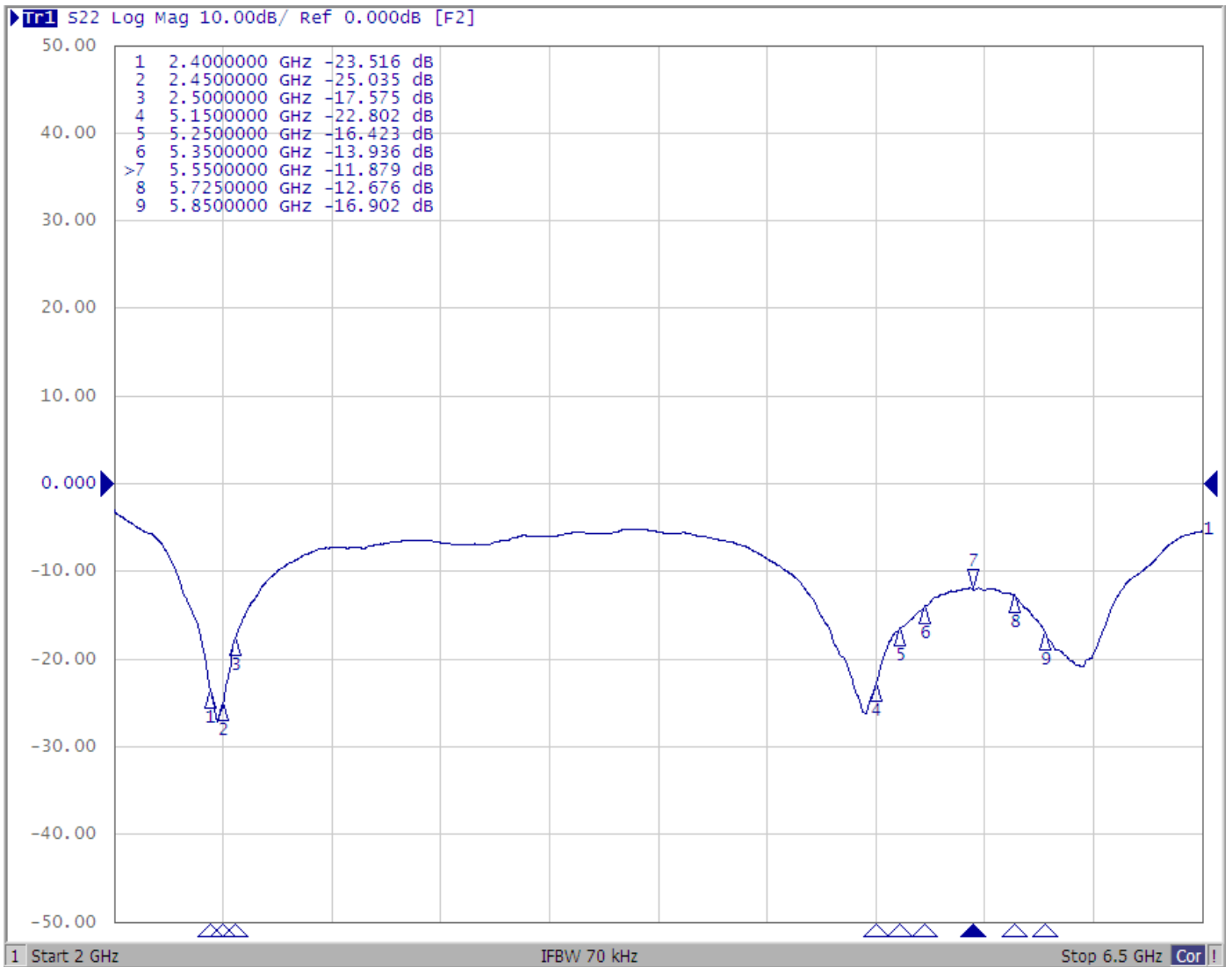
A  
B  
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D  
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F  
G  
H  
I  
J  
K

H	10	外套	WSL003 13.4*115L外套(黑色)	黑		1
	9	熱縮套管	UL/CSA 5.0 黑 超薄	黑	20	1
	8	銅管	4.8 φ *24L 銅管<平頭>	銀		1
	7	銅管	5.2 φ *22L FOR 178 銅管<平頭>	銀		1
I	6	固定鉚釘	028922001-6 4.80*1.95 φ 固定鉚釘<大>(黑鋅)	黑		2
	5	下座	13 φ *25.5L下座(黑色)	黑		1
	4	上座	13 φ *28L上座孔15.2*7.25(黑色)	黑		1
	3	連接軸	0249A-B Connector RP-SMA(M) φ 12.5	銀		1
	2	SMA 本體	0249A-A Body RP-SMA(M) φ 12.5 Connector	黑		1
J	1	RG-178 Coaxial Cable	RG-178<鍍錫> CABLE 105SV 橙	橙	54	1
	NO	材料名稱	零件規格	顏色	切斷尺寸	用量

K	第3角法		圖面不用實測			機種料號	R3410110203		
	單位: mm	作成	檢圖	確認	核准	品名	AD-103AG		
	比例: FREE	徐晨瑄	林佳緯	吳志修	楊怡隆	產品分類	<input checked="" type="checkbox"/> A成品	<input type="checkbox"/> B半成品	<input type="checkbox"/> C樣品
	2019年06月11日					圖面編號			版次: A5
						客戶版次:	表單編號:RD-4-037C	頁次: 2/2	

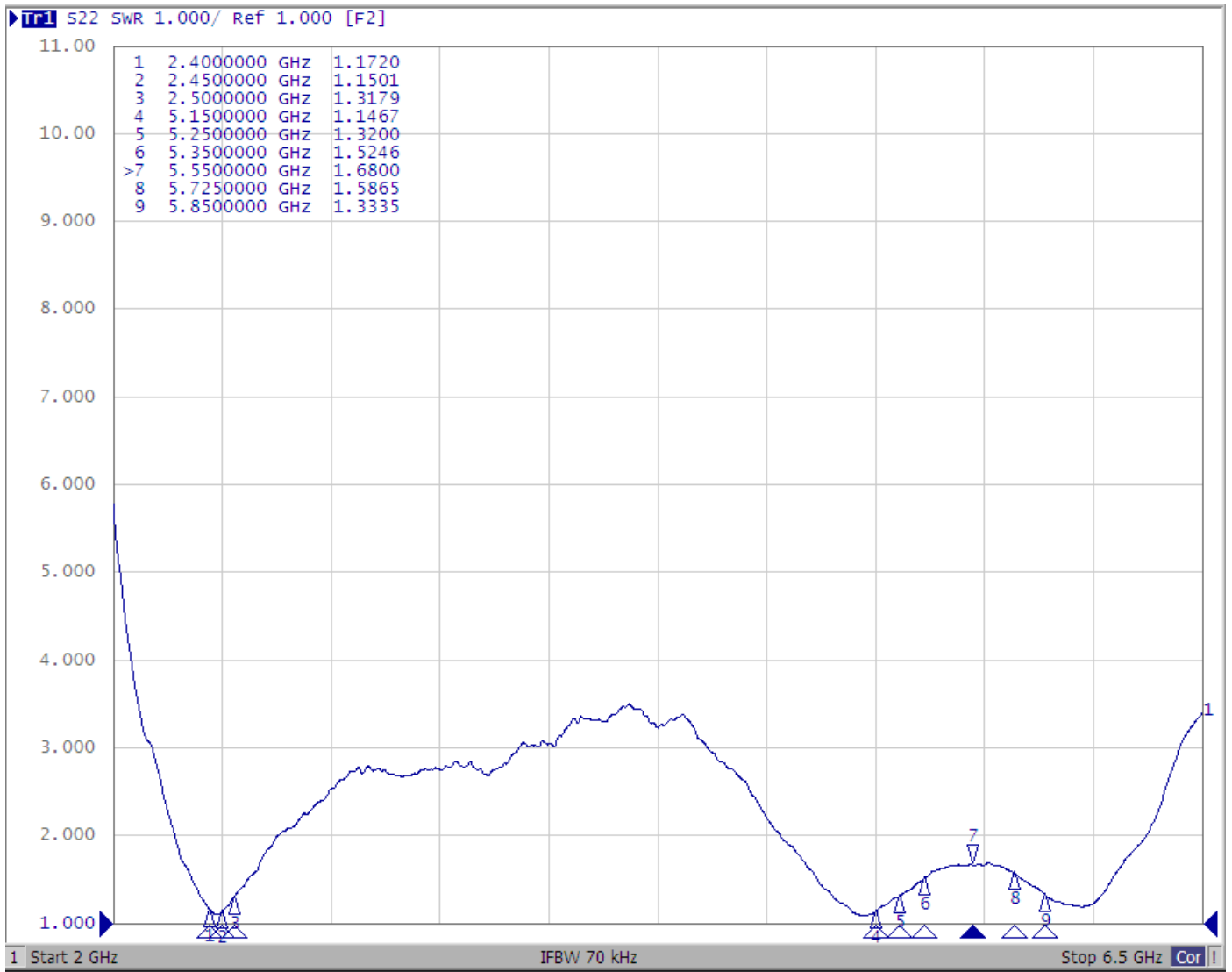
# Electrical Properties

## Return Loss



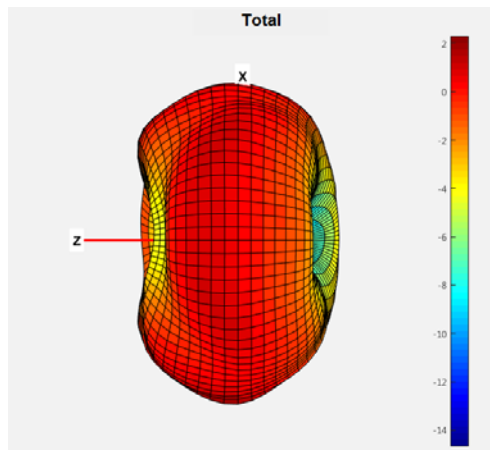
# Electrical Properties

## V.S.W.R

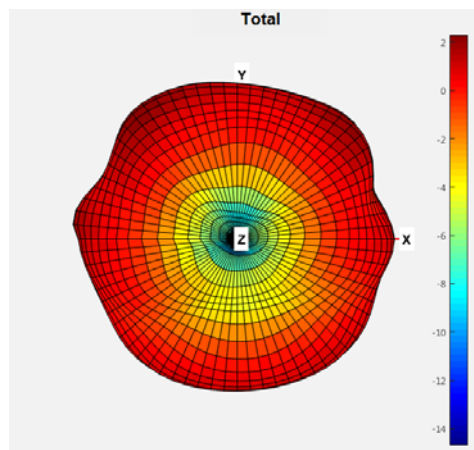


# 3D Pattern

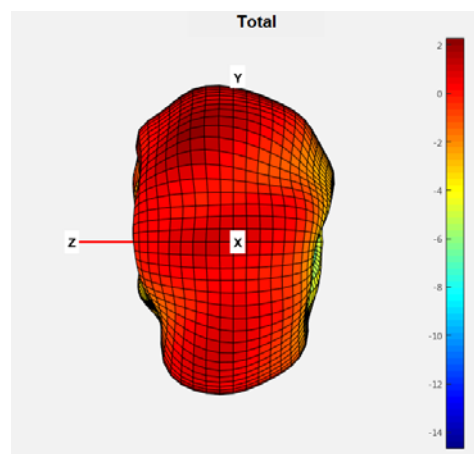
2.45GHz\_X-Z Plane



2.45GHz\_X-Y Plane

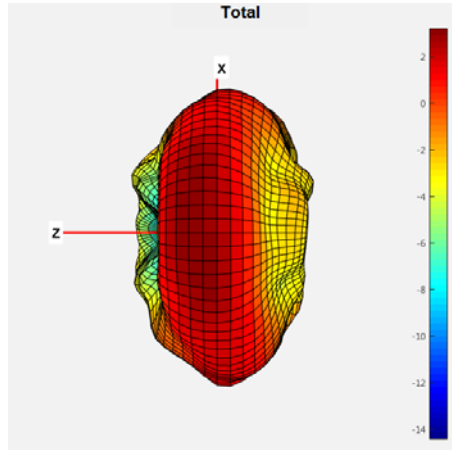


2.45GHz\_Y-Z Plane

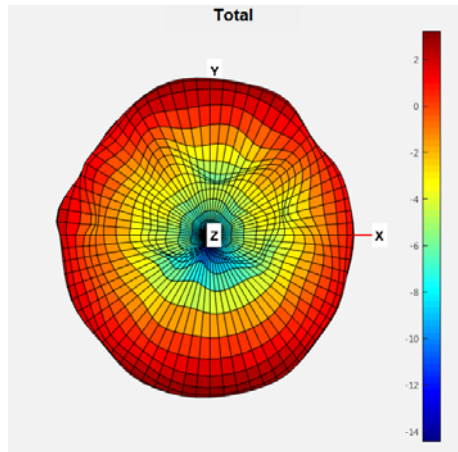




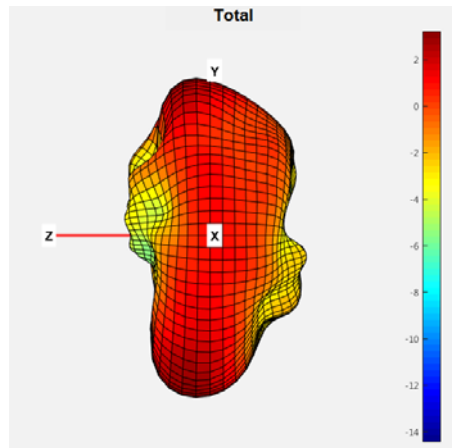
5.15GHz\_X-Z Plane



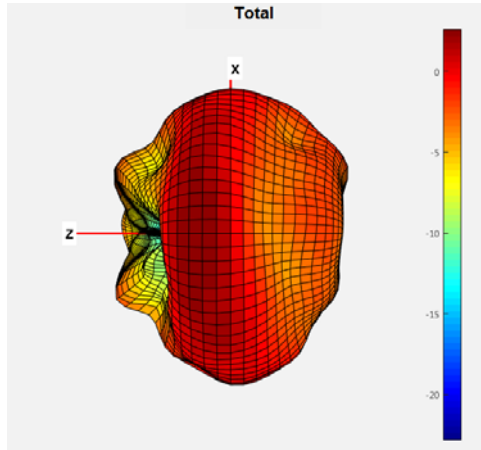
5.15GHz\_X-Y Plane



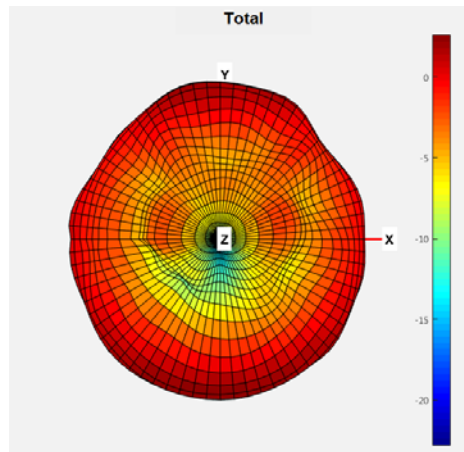
5.15GHz\_Y-Z Plane



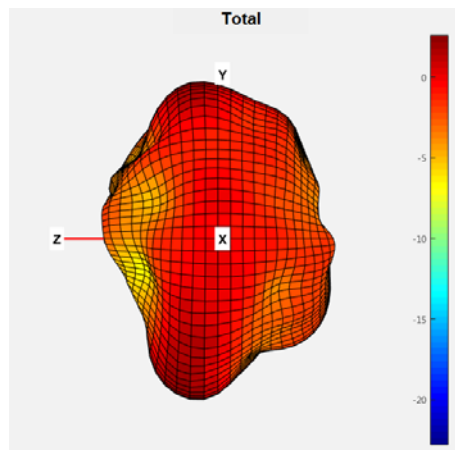
5.55GHz\_X-Z Plane



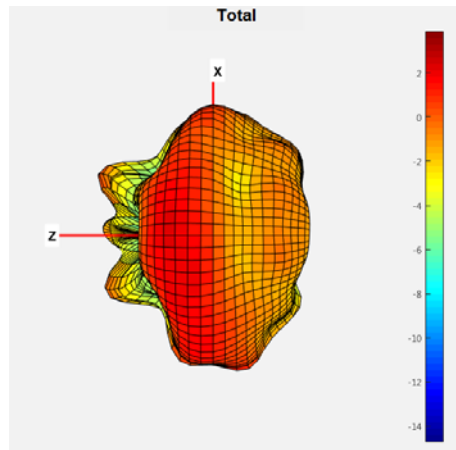
5.55GHz\_X-Y Plane



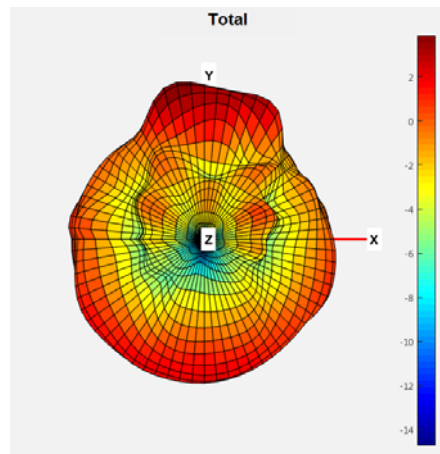
5.55GHz\_Y-Z Plane



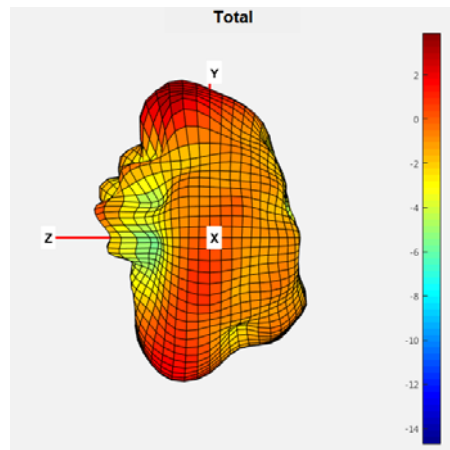
5.85GHz\_X-Z Plane



5.85GHz\_X-Y Plane



5.85GHz\_Y-Z Plane



Frequency	2.4GHz	2.45GHz	2.5GHz
Avg. Gain (dBi)	-1.92	-2.39	-2.32
Peak Gain (dBi)	2.02	1.83	1.96
Efficiency (%)	64.27	57.68	58.61

Frequency	5.15GHz	5.25GHz	5.35GHz	5.47GHz	5.5GHz	5.55GHz	5.6GHz	5.725GHz	5.85GHz	5.875GHz
Avg. Gain (dBi)	-1.18	-1.87	-2.35	-1.8	-1.8	-1.8	-1.75	-1.7	-1.84	-2.08
Peak Gain (dBi)	1.63	1.93	1.37	1.71	1.6	1.49	1.76	2.03	1.9	1.5
Efficiency (%)	76.21	65.01	58.21	66.07	66.07	66.07	66.84	67.61	65.46	61.94

Antenna picture

