# 承　　認　　書
SPECIFICATION FOR APPROVAL

| | |
|---|---|
| 客　　戶<br>CUSTOMER | Hansong(NanJing)Technology Ltd |
| 日　　期<br>DATE | 2018-07-11 |
| 品　　名<br>DESCRIPTION | Antenna |
| 客 戶 料 號<br>CUSTOMER P/N | 45-2-000320 |
| 成 品 編 號<br>Model No | RC12WFI0288A1 |

**Suzhou point positive electronic technology co.,ltd**

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# SPECIFICATION

| | |
|---|---|
| 1. Description | ANTENNA |
| 2. Customer | Hansong(NanJing)Technology Ltd |
| 3. Model No | RC12WFI0228A1 |
| 4. Part No | 45-2-000320 |
| 5.Standard | WIFI |
| 6.Antenna Profile | 31.5mm (see Drawing) |
| 7.Color | BLACK |

8.Electrical Characteristics

| | |
|---|---|
| Operating Frequency | 2.4 ~5.8Ghz |
| Antenna Type | External PCB Antenna |
| Polarization Type | Omni-directional |
| Type of Radiation | vertical or horizontal |
| Peak Gain | 2.4~5.8Ghz/2.8dBi Typica |
| Impedance | 50Ω |
| V.S.W.R | 2:1 Max |

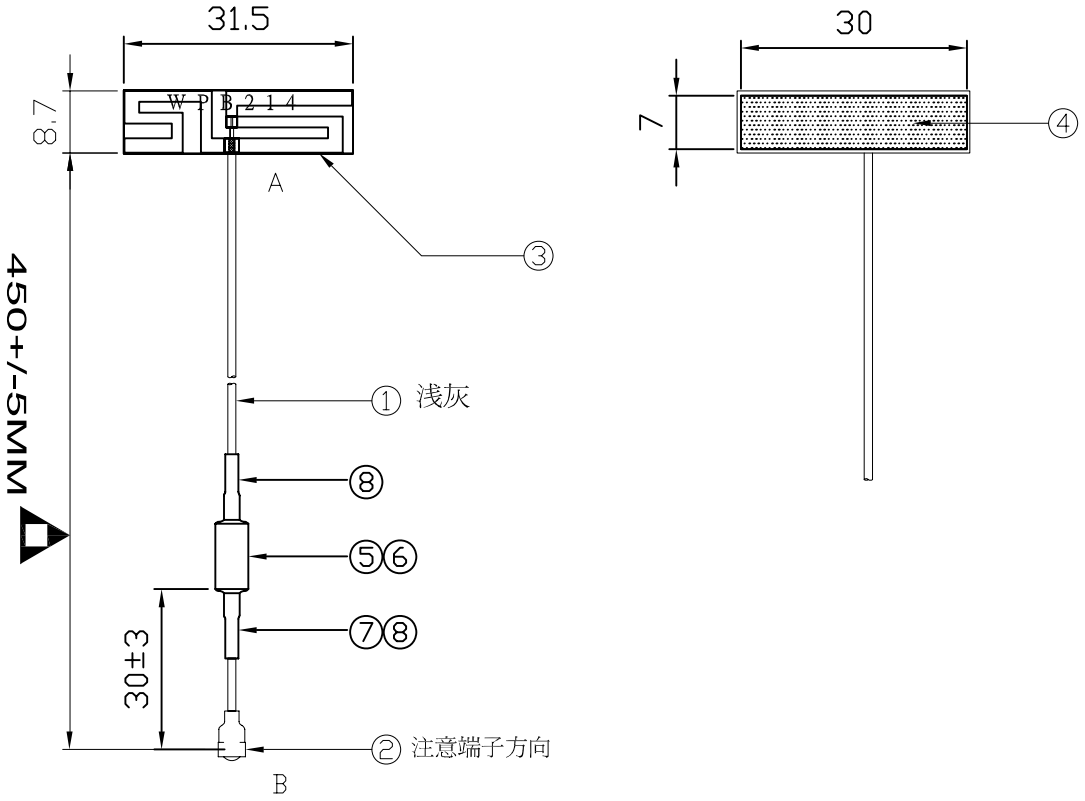
9.Mechanical Characteristics

| | |
|---|---|
| Swivel | |
| Lead Length | L:450MM |
| Connector | MHF CON |

10.Raw Material

| | |
|---|---|
| Coaxial Cable | MINI1.13 |
| Housing/Hinge | N/A |

| 变更内容履历简述 REVISIONS DESCRIPTION | 版次 REV. | 年月日 DATE | 變更切換方式 | 作成 |
|---|---|---|---|---|
| 1 | | | | |
| 2 | | | | |
| 3 | | | | |




加工注意项：
1. 天線組立依據天線組立作業指導書規定製作。
依據QC管理工程圖，執行品質管制。

双面背胶

| NO. | 材料名稱 | 廠商 | 零件規格 | | 顏色 | 切斷尺寸& 備註 | 用量 |
|---|---|---|---|---|---|---|---|
| 8 | 熱縮套管 | | CB 无卤套管 2.5 黑 | HF | 黑 | | 2 |
| 7 | 熱縮套管 | | CB 无卤套管 1.5 黑 | HF | 黑 | | 1 |
| 6 | 熱縮套管 | | CB 无卤套管 4.0 黑 | HF | 黑 | | 1 |
| 5 | 铁粉芯 | | F5B RH 4*10*2 | HF | 黑 | | 1 |
| 4 | 双面背胶 | | SONY G9000 7*30 | HF | | | 1 |
| 3 | PCB | | WPB214 | HF | 黑 | | 1 |
| 2 | MHF Connector | | MHF-13-CON | HF | 金 | | 1 |
| 1 | MINI 1.13 Coaxial Cable | | MINI RG OD:1.13 浅灰 | HF | 浅灰 | | 1 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 第3角法 | 圖面不用實測 | | | | 部品番號 | 45-2-000320 |
| 單位: mm | 作成 | 檢圖 | 確認 | 核准 | 品名 | MINI 1.13 GY 2.4G-5.8G L:450MM |
| 比例: FREE | Alei | Hellen | Roy | David | 产品分类 | ■ A成品 □ B半成品 □ C样品 |
| 2018.07.11 | | | | | 公司番號 | RC12WFI0288A1 |

# OUTLINE SUMMARY

- Test Environment and Equipment
- Test Data of Antenna:

Test Result : Efficiency & Peak Gain

Test Result : 3D Radiation Pattern Test

## TEST ENVIRONMENT AND EQUIPMENTS

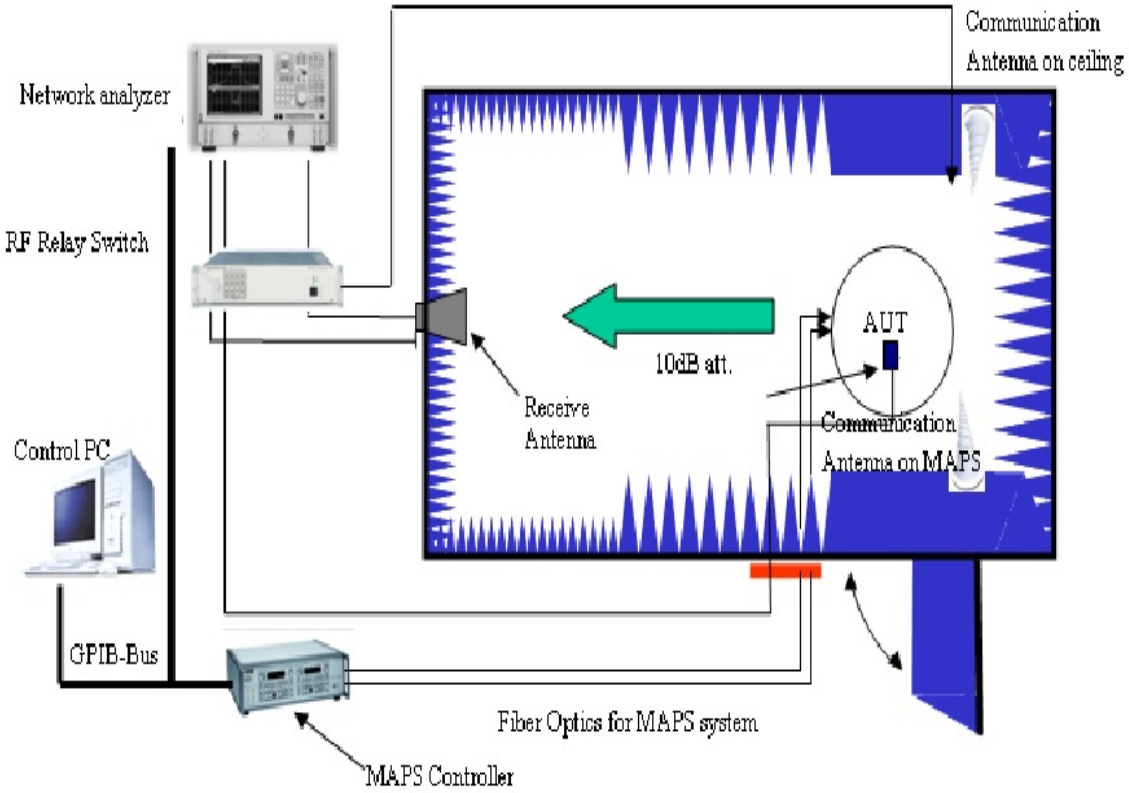
**The Gain, Efficiency, Directivity and 3D Pattern**

Shanghai EM-Testing Co., Ltd.
https://www.em-testing.com/

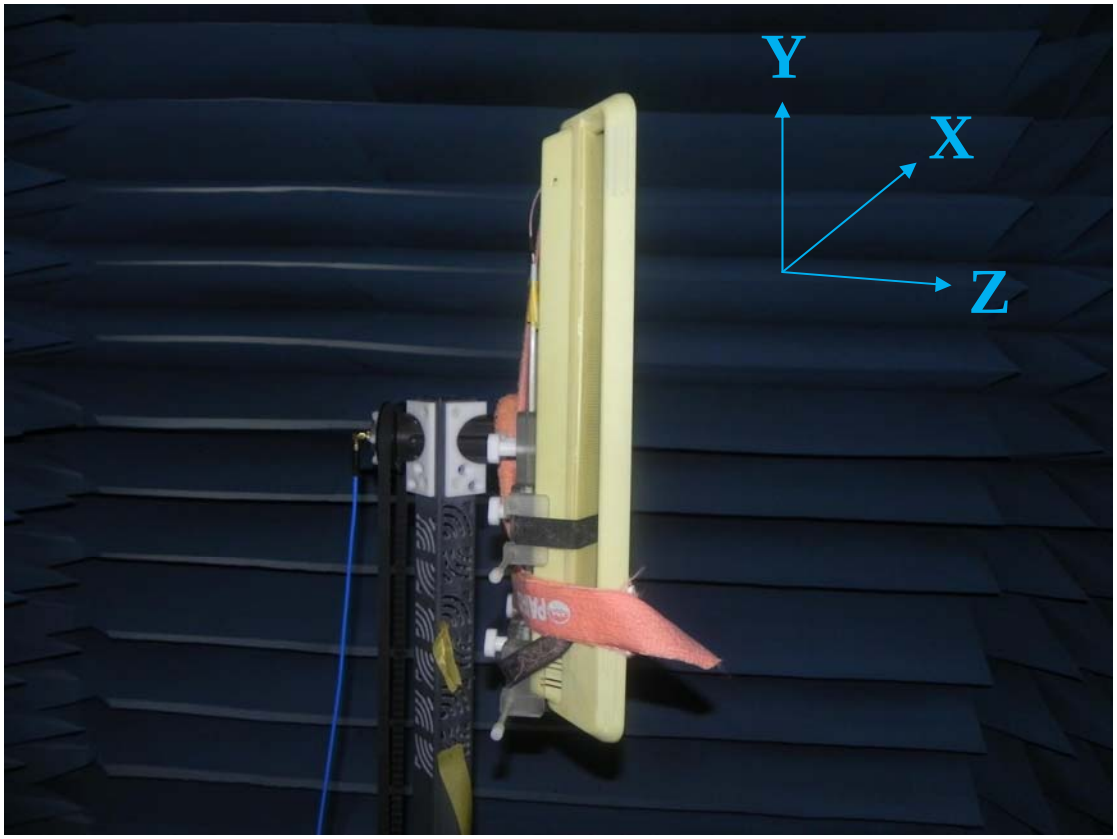
**Frequency Range :**

WLAN 802.11 a/b/g: 2.40~2.50 & 5.125~5.85 GHz
Bluetooth : 2.4~2.5GHz

**Radiation Pattern Test System :**



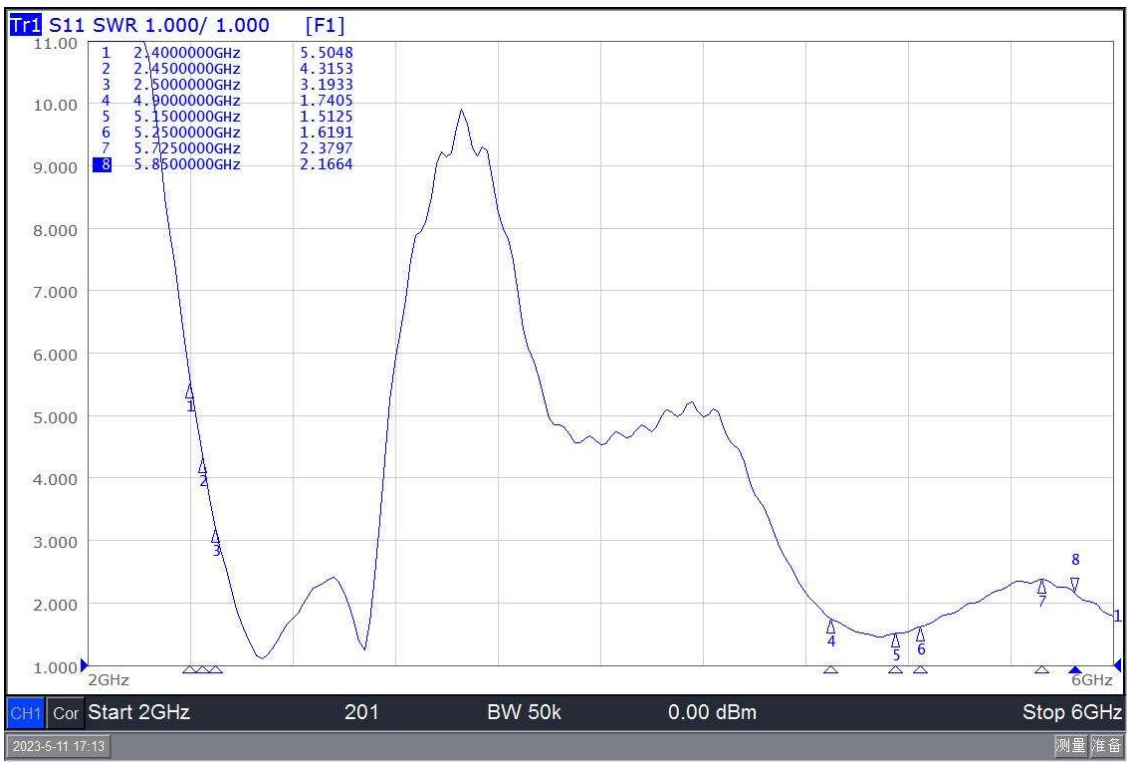

COORDINATE OF STRUCTURE:



## Network analyzer (Naked test)

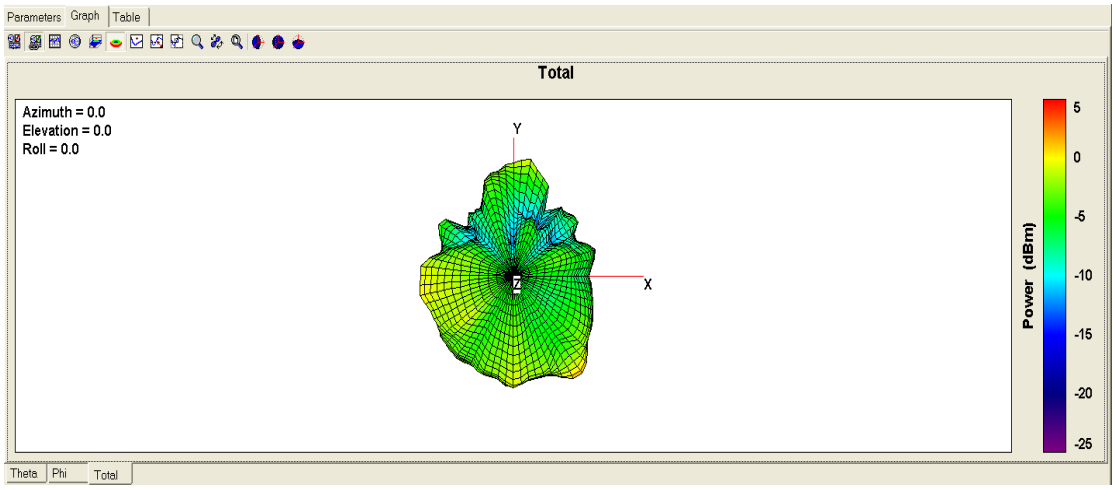
## S11

## Vswr

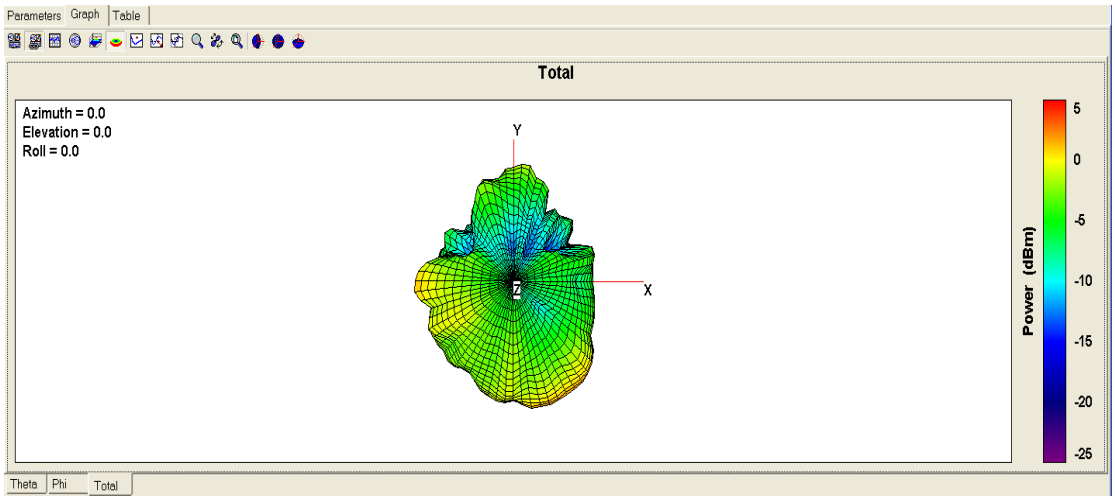


## RADIATION PATTERN

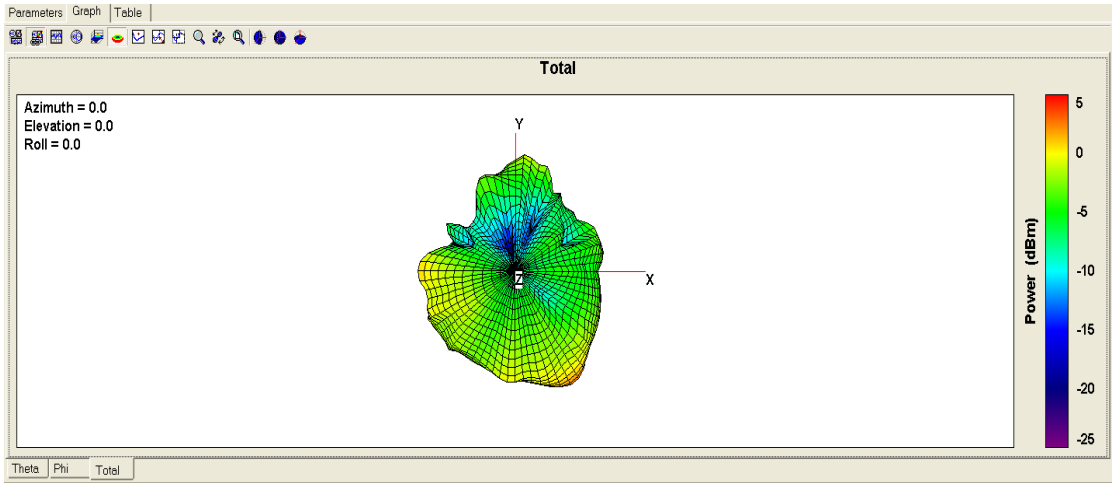
2.4G



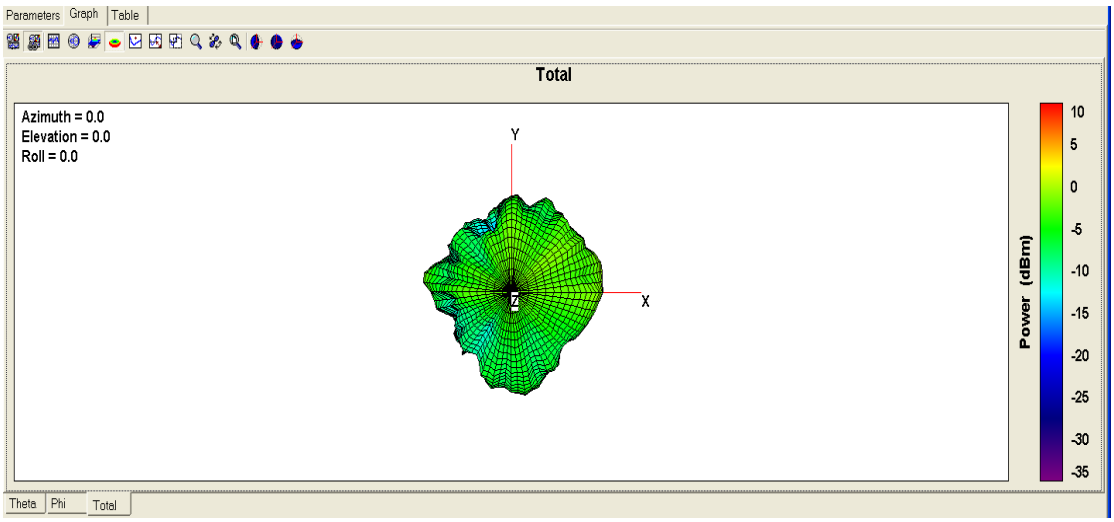

2.45G



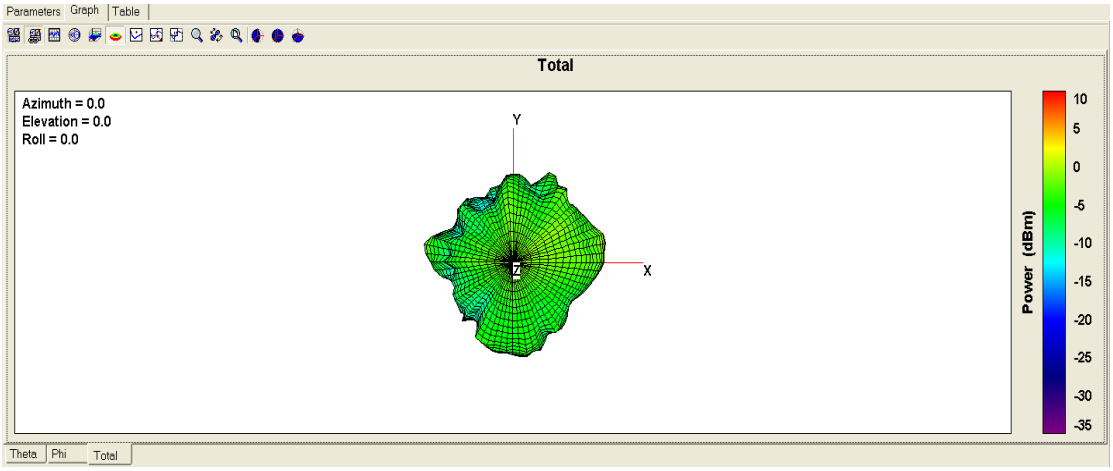

2.5G



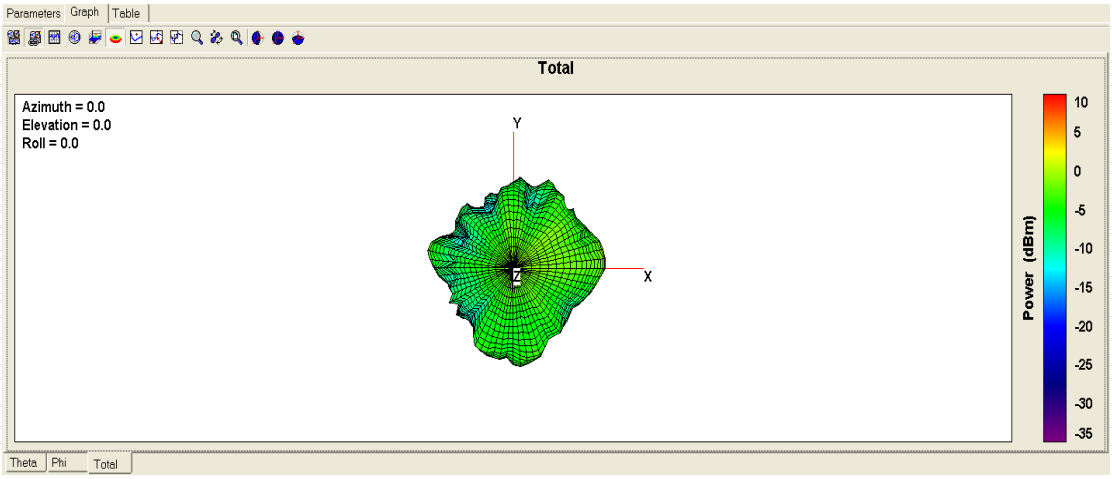
5.15G




5.25G

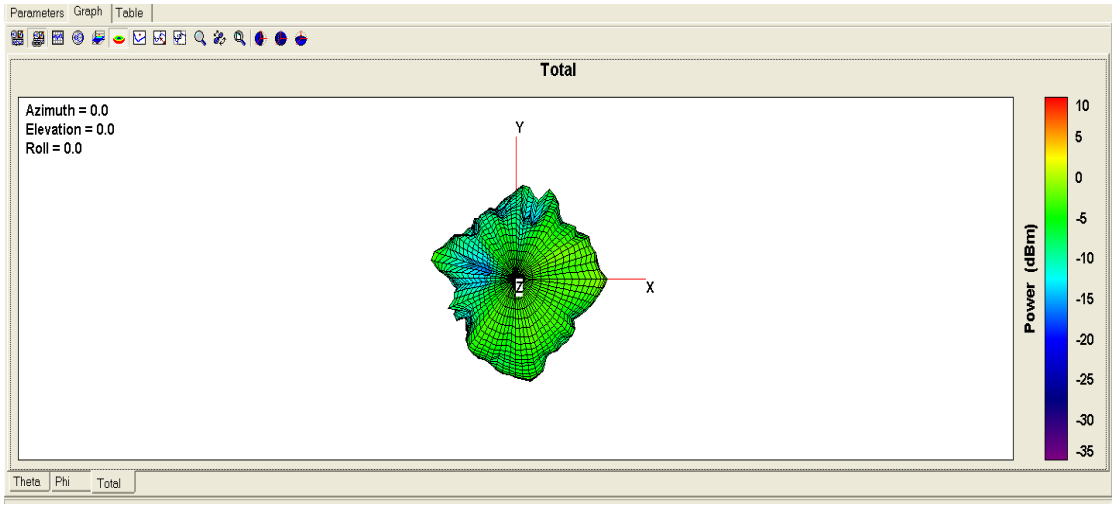



5.35G

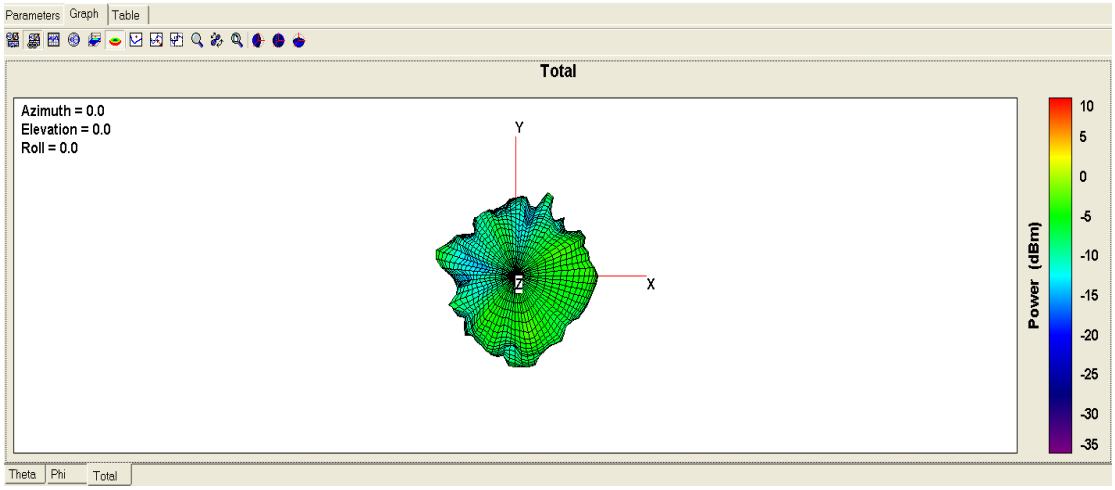



‘

5.725G




5.85G




| TOTAL | Point values(Mhz) | Efficiency (%) | Peak Gain (dBi) |
|---|---|---|---|
| | 2400 | 48.52 | 2.09381 |
| | 2450 | 52.91 | 2.14324 |
| | 2500 | 54.57 | 2.34422 |
| | 5150 | 36.43 | 2.54406 |
| | 5250 | 39.47 | 2.59018 |
| | 5350 | 32.62 | 2.55269 |
| | 5725 | 34.94 | 2.53948 |
| | 5850 | 30.9 | 2.78974 |