

## Antenna Test Report

**Report No.: E4/2021/40013**

**Test Plan: Non-compliance with ISO17025**

**Applicant Name: Dyson Limited**

**Manufacturer Name: Dyson Limited**

**Product Name: N277 WiFi\_A and WiFi\_B/BT antennas for HLP2 version**

**Model Number: N277 WiFi\_A and WiFi\_B/BT antennas for HLP2 version**

**Measurements performed at**

**SGS Taiwan Ltd.**

**Hwaya District, Taiwan**

**Issued Date: May 25, 2021**

|              | Name                          | Date & Signature                 |
|--------------|-------------------------------|----------------------------------|
| Prepared by: | Shawn Yen<br>Asst. Supervisor | <i>Shawn Yen</i><br>May 25, 2021 |
| Approved by: | Dragon Wu<br>Asst. Manager    | <i>Dragon Wu</i><br>May 25, 2021 |

| Distribution |
|--------------|
|              |

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## Measurement System Information

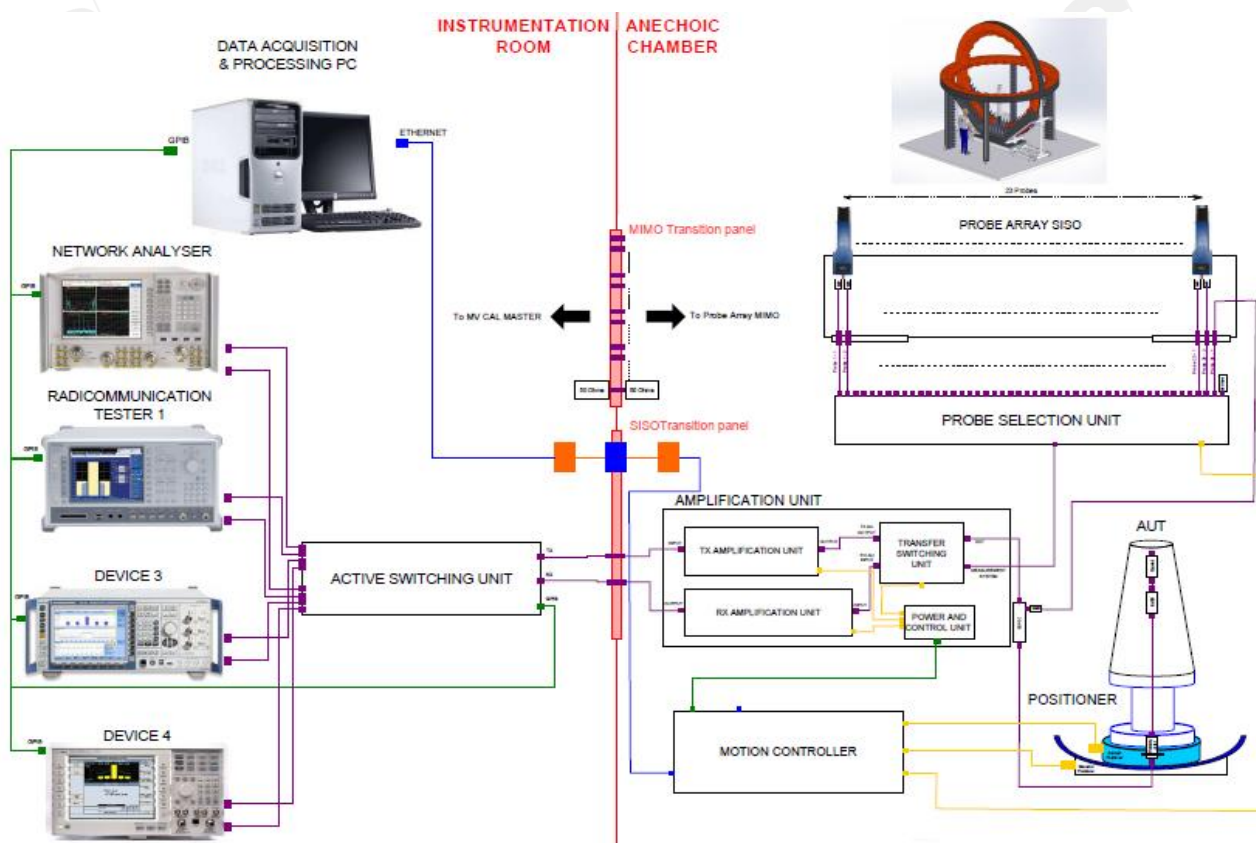
### General Information

#### Testing Condition:

- Temperature:  $22 \pm 3^{\circ}\text{C}$
- Humidity:  $< 80\%$

#### Measurement Facility:

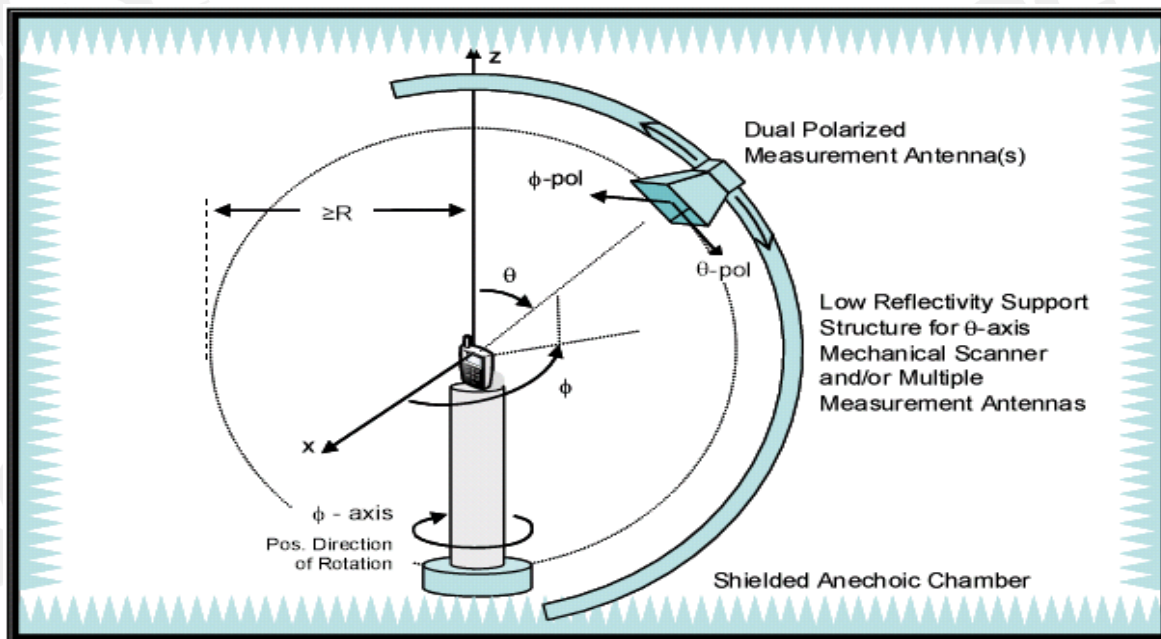
- Measurement Chamber: MVG 3D fully anechoic chamber and its measuring system (Stargate-24-L)
- Base Station Simulator: Anritsu MT8820C (or R&S CMU200)
- Network Analyzer: Agilent E5071C



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Measurements are performed in a MVG **Stargate-24-L** with the StarAct interface for a base station simulator. The **Stargate-24-L** has 23 probe antennas mounted with equal spacing on a circular arch. Electronic switching of the probe antennas provides outstanding measurement speed. The geometry of the setup, with only a Styrofoam column within 1.6 meters of the EUT, ensures minimum interference and low ripple on the measured radiation patterns. The DUT is placed on top of the pedestal, in the center of the system.

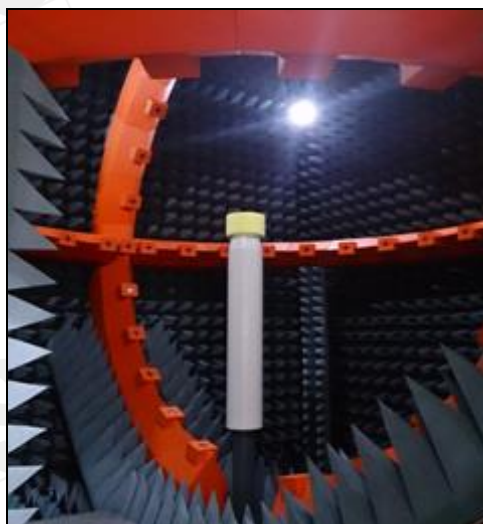
## Typical Setup for MVG Stargate-24-L:



## Instruments View



## Inside View



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**Testing Laboratory: Identification of the Responsible Test Laboratory.**

- **OTA Laboratory:**  
**SGS Taiwan Ltd. Electronics & Communication Laboratory**  
No.134, Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803.  
Telephone: +886 2 2299 3279  
Fax: +886 2 2298 0488  
Internet: <http://www.tw.sgs.com>
- **Testing Location:**  
No. 2, Keji 1<sup>st</sup> Rd., Hwaya Technology Park, Guishan District, Taoyuan City, Taiwan 33383.

**Details of Applicant:**

|                             |                                                                                  |
|-----------------------------|----------------------------------------------------------------------------------|
| <b>Applicant's name:</b>    | <b>Dyson Limited</b>                                                             |
| <b>Applicant's address:</b> | <b>Hullavington Airfield, Hullavington, Chippenham, Wiltshire, SN14 6GU, UK.</b> |
| <b>Contact person:</b>      | <b>Darren Salter.</b>                                                            |
| <b>Telephone:</b>           | <b>+44 1666 339020</b>                                                           |
| <b>Fax:</b>                 | <b>N/A</b>                                                                       |
| <b>E-mail:</b>              | <b>Darren.Salter@Dyson.com</b>                                                   |

**Details of Manufacturer:**

|                                |                                                                                  |
|--------------------------------|----------------------------------------------------------------------------------|
| <b>Manufacturer's name:</b>    | <b>Dyson Limited</b>                                                             |
| <b>Manufacturer's address:</b> | <b>Hullavington Airfield, Hullavington, Chippenham, Wiltshire, SN14 6GU, UK.</b> |
| <b>Contact person:</b>         | <b>Darren Salter.</b>                                                            |
| <b>Telephone:</b>              | <b>+44 1666 339020</b>                                                           |
| <b>Fax:</b>                    | <b>N/A</b>                                                                       |
| <b>E-mail:</b>                 | <b>Darren.Salter@Dyson.com</b>                                                   |

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**Details of EUT:**

|                             |                                                                                           |
|-----------------------------|-------------------------------------------------------------------------------------------|
| <b>Device Description:</b>  | <b>N277 WiFi_A and WiFi_B/BT antennas for HLP2 version</b>                                |
| <b>Device Manufacturer:</b> | <b>Dyson Limited</b>                                                                      |
| <b>Device Model:</b>        | <b>N277 WiFi_A and WiFi_B/BT antennas for HLP2 version</b>                                |
| <b>Hardware Version:</b>    | <b>DVT</b>                                                                                |
| <b>Software Version:</b>    | <b>N/A</b>                                                                                |
| <b>FCC ID:</b>              | <b>N/A</b>                                                                                |
| <b>Frequency Range:</b>     | <b>BT: 2412MHz ~ 2472MHz<br/>WiFi Dual Band: 2402MHz ~ 2480MHz,<br/>5180MHz ~ 5825MHz</b> |
| <b>Antenna Type:</b>        | <b>Internal antenna</b>                                                                   |

**Duration of Tests:**

|                             |                   |
|-----------------------------|-------------------|
| <b>Sample Receive Date:</b> | <b>2021-01-07</b> |
| <b>Test Starting Date:</b>  | <b>2021-01-07</b> |
| <b>Test Ending Date:</b>    | <b>2021-01-07</b> |
| <b>Report Issued Date:</b>  | <b>2021-05-25</b> |

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## Photographs of EUT:

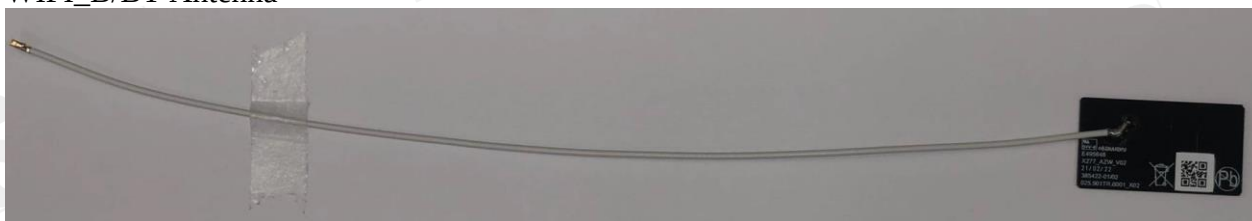


## Photographs of Antenna:

WIFI\_A Antenna



WIFI\_B/BT Antenna



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## List of Equipment

## Equipment Summary Sheet

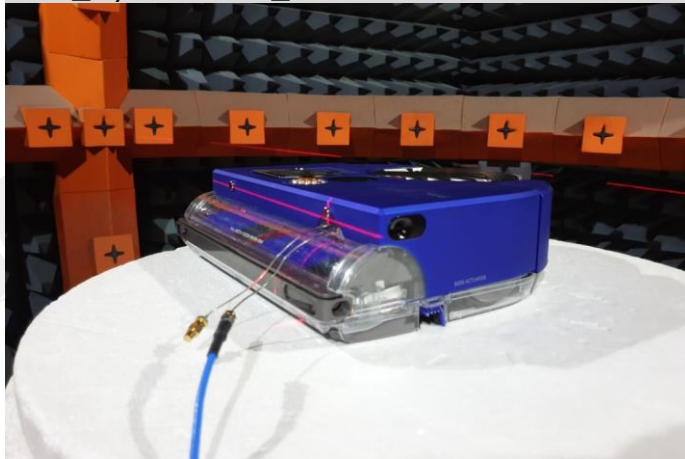
| Equipment Description                | Manufacturer | Identification no. | Current calibration date | Next calibration date |
|--------------------------------------|--------------|--------------------|--------------------------|-----------------------|
| Universal Radio Communication tester | Anritsu      | MT8820C            | 2020/10/11               | 2021/10/10            |
| Network Analyzer                     | Agilent      | E5071C             | 2020/12/17               | 2021/12/16            |
| Sleeve Dipole                        | MVG          | SD740              | 2019/01/17               | 2022/01/16            |
| Dual Ridge Horn                      | MVG          | SH800              | 2020/10/16               | 2021/10/15            |
| Stargate-24-L probe array            | MVG          | Stargate-24-L      | 2020/11/13               | 2021/11/12            |
| Measurement software                 | MVG          | SPM V1.9           | N/A                      | N/A                   |

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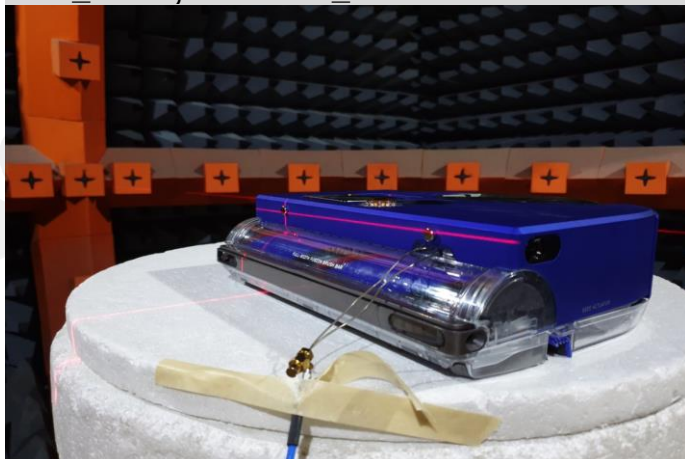
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## Test Setup

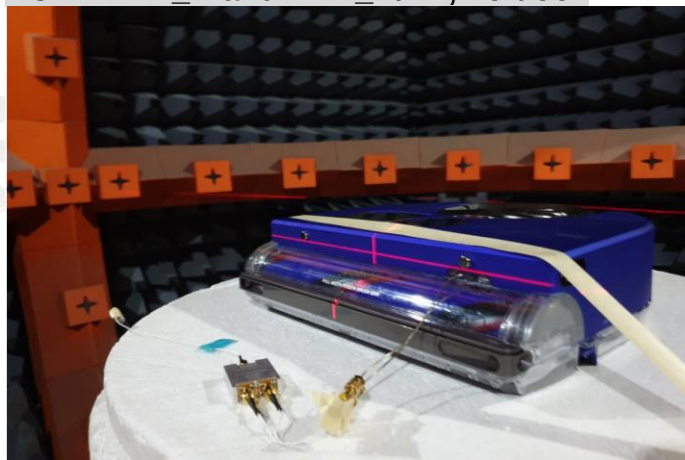
**WIFI\_A, with WIFI\_B/BT ANT terminated with 50ohms, no dock**



**WIFI\_B/BT, with WIFI\_A terminated with 50ohms, no dock**

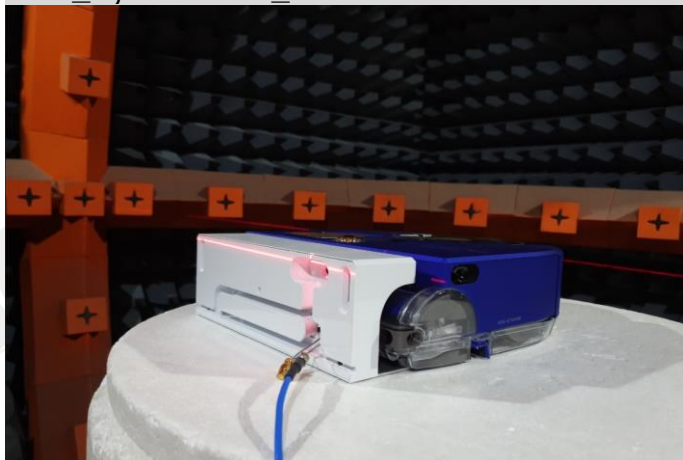


**BOTH WIFI\_A and WIFI\_B/BT, no dock**

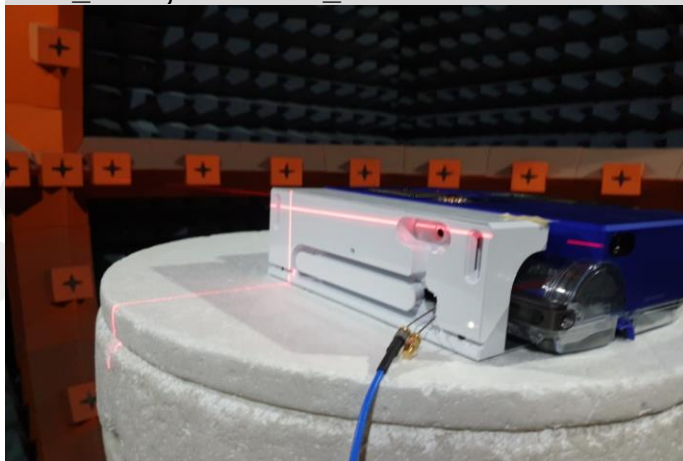


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**WIFI\_A, with WIFI\_B/BT terminated with 50ohms, dock**



**WIFI\_B/BT, with WIFI\_A terminated with 50ohms, dock**



**BOTH WIFI\_A and WIFI\_B/BT ANT, dock**



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**Antenna Gain and Efficiency****WIFI\_A, with WIFI\_B/BT ANT terminated with 50ohms, no dock**

| Frequency (MHz) | Max Antenna Gain (dBi) | Min Antenna Gain (dBi) | Min Antenna Gain (90%) (dBi) | Antenna Efficiency (%) | Directivity Gain (dBi) | Average Gain (dBi) |
|-----------------|------------------------|------------------------|------------------------------|------------------------|------------------------|--------------------|
| 2402.00         | 3.02                   | -22.66                 | -8.46                        | 54.41%                 | 5.66                   | -2.64              |
| 2412.00         | 2.81                   | -27.75                 | -8.54                        | 56.11%                 | 5.32                   | -2.51              |
| 2442.00         | 3.44                   | -26.98                 | -8.82                        | 56.28%                 | 5.93                   | -2.50              |
| 2472.00         | 3.96                   | -23.93                 | -8.70                        | 60.94%                 | 6.11                   | -2.15              |
| 2480.00         | 3.85                   | -27.24                 | -8.45                        | 62.89%                 | 5.86                   | -2.01              |
| 5180.00         | 5.57                   | -25.74                 | -11.66                       | 62.46%                 | 7.62                   | -2.04              |
| 5500.00         | 4.63                   | -28.68                 | -12.44                       | 65.46%                 | 6.47                   | -1.84              |
| 5700.00         | 5.28                   | -30.11                 | -12.22                       | 65.81%                 | 7.10                   | -1.82              |
| 5720.00         | 5.32                   | -30.83                 | -12.35                       | 65.10%                 | 7.18                   | -1.86              |
| 5800.00         | 5.40                   | -28.69                 | -12.05                       | 63.84%                 | 7.35                   | -1.95              |
| 5825.00         | 5.16                   | -29.21                 | -11.92                       | 63.39%                 | 7.14                   | -1.98              |

**WIFI\_B/BT, with WIFI\_A terminated with 50ohms, no dock**

| Frequency (MHz) | Max Antenna Gain (dBi) | Min Antenna Gain (dBi) | Min Antenna Gain (90%) (dBi) | Antenna Efficiency (%) | Directivity Gain (dBi) | Average Gain (dBi) |
|-----------------|------------------------|------------------------|------------------------------|------------------------|------------------------|--------------------|
| 2412.00         | 2.96                   | -34.96                 | -8.23                        | 54.40%                 | 5.61                   | -2.64              |
| 2442.00         | 2.37                   | -21.70                 | -8.15                        | 53.55%                 | 5.08                   | -2.71              |
| 2472.00         | 1.84                   | -22.47                 | -8.01                        | 53.89%                 | 4.53                   | -2.69              |
| 5180.00         | 6.15                   | -28.90                 | -10.18                       | 57.34%                 | 8.56                   | -2.42              |
| 5500.00         | 4.63                   | -30.19                 | -9.36                        | 53.69%                 | 7.33                   | -2.70              |
| 5700.00         | 4.62                   | -24.40                 | -9.70                        | 50.38%                 | 7.59                   | -2.98              |
| 5720.00         | 4.72                   | -22.82                 | -9.63                        | 50.92%                 | 7.65                   | -2.93              |
| 5800.00         | 5.41                   | -32.87                 | -9.70                        | 52.74%                 | 8.19                   | -2.78              |
| 5825.00         | 5.47                   | -32.52                 | -9.67                        | 52.76%                 | 8.25                   | -2.78              |

**BOTH WIFI\_A and WIFI\_B/BT, no dock**

| Frequency (MHz) | Max Antenna Gain (dBi) | Min Antenna Gain (dBi) | Min Antenna Gain (90%) (dBi) | Antenna Efficiency (%) | Directivity Gain (dBi) | Average Gain (dBi) |
|-----------------|------------------------|------------------------|------------------------------|------------------------|------------------------|--------------------|
| 2412.00         | 4.05                   | -25.60                 | -7.21                        | 57.84%                 | 6.42                   | -2.38              |
| 2442.00         | 3.79                   | -21.29                 | -7.51                        | 59.13%                 | 6.07                   | -2.28              |
| 2472.00         | 3.16                   | -25.43                 | -8.07                        | 59.65%                 | 5.41                   | -2.24              |
| 5180.00         | 6.93                   | -29.97                 | -9.66                        | 54.75%                 | 9.55                   | -2.62              |
| 5500.00         | 5.02                   | -27.88                 | -8.52                        | 55.42%                 | 7.59                   | -2.56              |
| 5700.00         | 5.11                   | -25.26                 | -8.61                        | 51.75%                 | 7.97                   | -2.86              |
| 5720.00         | 5.09                   | -26.89                 | -8.77                        | 50.68%                 | 8.04                   | -2.95              |
| 5800.00         | 6.14                   | -26.45                 | -8.88                        | 55.02%                 | 8.73                   | -2.59              |
| 5825.00         | 6.91                   | -22.08                 | -8.72                        | 59.83%                 | 9.14                   | -2.23              |

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**WIFI\_A, with WIFI\_B/BT terminated with 50ohms, dock**

| Frequency (MHz) | Max Antenna Gain (dBi) | Min Antenna Gain (dBi) | Min Antenna Gain (90%) (dBi) | Antenna Efficiency (%) | Directivity Gain (dBi) | Average Gain (dBi) |
|-----------------|------------------------|------------------------|------------------------------|------------------------|------------------------|--------------------|
| 2402.00         | 3.18                   | -25.30                 | -10.68                       | 51.13%                 | 6.10                   | -2.91              |
| 2412.00         | 3.15                   | -27.22                 | -10.81                       | 51.58%                 | 6.03                   | -2.88              |
| 2442.00         | 4.08                   | -28.37                 | -11.05                       | 55.20%                 | 6.66                   | -2.58              |
| 2472.00         | 4.05                   | -26.86                 | -10.40                       | 61.40%                 | 6.17                   | -2.12              |
| 2480.00         | 3.79                   | -26.62                 | -10.58                       | 60.24%                 | 5.99                   | -2.20              |
| 5180.00         | 5.72                   | -32.07                 | -12.97                       | 61.15%                 | 7.86                   | -2.14              |
| 5500.00         | 5.73                   | -31.96                 | -12.88                       | 65.93%                 | 7.54                   | -1.81              |
| 5700.00         | 5.90                   | -33.41                 | -12.03                       | 62.49%                 | 7.94                   | -2.04              |
| 5720.00         | 6.10                   | -29.48                 | -11.87                       | 62.38%                 | 8.14                   | -2.05              |
| 5800.00         | 5.68                   | -25.30                 | -12.29                       | 58.33%                 | 8.02                   | -2.34              |
| 5825.00         | 5.72                   | -28.01                 | -12.39                       | 56.84%                 | 8.17                   | -2.45              |

**WIFI\_B/BT, with WIFI\_A terminated with 50ohms, dock**

| Frequency (MHz) | Max Antenna Gain (dBi) | Min Antenna Gain (dBi) | Min Antenna Gain (90%) (dBi) | Antenna Efficiency (%) | Directivity Gain (dBi) | Average Gain (dBi) |
|-----------------|------------------------|------------------------|------------------------------|------------------------|------------------------|--------------------|
| 2412.00         | 3.77                   | -22.43                 | -8.37                        | 54.34%                 | 6.42                   | -2.65              |
| 2442.00         | 3.41                   | -26.67                 | -7.97                        | 52.73%                 | 6.25                   | -2.84              |
| 2472.00         | 2.91                   | -24.38                 | -7.96                        | 52.39%                 | 5.72                   | -2.81              |
| 5180.00         | 5.92                   | -29.41                 | -11.41                       | 56.53%                 | 8.40                   | -2.48              |
| 5500.00         | 4.92                   | -24.82                 | -10.56                       | 54.01%                 | 7.59                   | -2.68              |
| 5700.00         | 4.27                   | -30.34                 | -10.88                       | 51.59%                 | 7.14                   | -2.87              |
| 5720.00         | 4.31                   | -31.78                 | -10.86                       | 52.04%                 | 7.15                   | -2.84              |
| 5800.00         | 5.03                   | -39.05                 | -10.92                       | 54.01%                 | 7.71                   | -2.68              |
| 5825.00         | 5.01                   | -28.00                 | -10.97                       | 53.99%                 | 7.69                   | -2.68              |

**BOTH WIFI\_A and WIFI\_B/BT ANT, dock**

| Frequency (MHz) | Max Antenna Gain (dBi) | Min Antenna Gain (dBi) | Min Antenna Gain (90%) (dBi) | Antenna Efficiency (%) | Directivity Gain (dBi) | Average Gain (dBi) |
|-----------------|------------------------|------------------------|------------------------------|------------------------|------------------------|--------------------|
| 2412.00         | 3.30                   | -23.96                 | -8.54                        | 50.23%                 | 6.29                   | -2.99              |
| 2442.00         | 3.29                   | -22.18                 | -8.60                        | 52.82%                 | 6.06                   | -2.77              |
| 2472.00         | 3.74                   | -19.91                 | -8.36                        | 59.42%                 | 6.00                   | -2.26              |
| 5180.00         | 7.00                   | -22.86                 | -10.88                       | 57.08%                 | 9.44                   | -2.43              |
| 5500.00         | 5.65                   | -24.16                 | -9.88                        | 51.80%                 | 8.51                   | -2.86              |
| 5700.00         | 4.31                   | -27.15                 | -9.17                        | 51.17%                 | 7.22                   | -2.91              |
| 5720.00         | 4.25                   | -27.05                 | -9.29                        | 50.22%                 | 7.24                   | -2.99              |
| 5800.00         | 5.17                   | -25.66                 | -9.41                        | 52.51%                 | 7.97                   | -2.80              |
| 5825.00         | 5.56                   | -30.40                 | -9.31                        | 54.31%                 | 8.21                   | -2.65              |

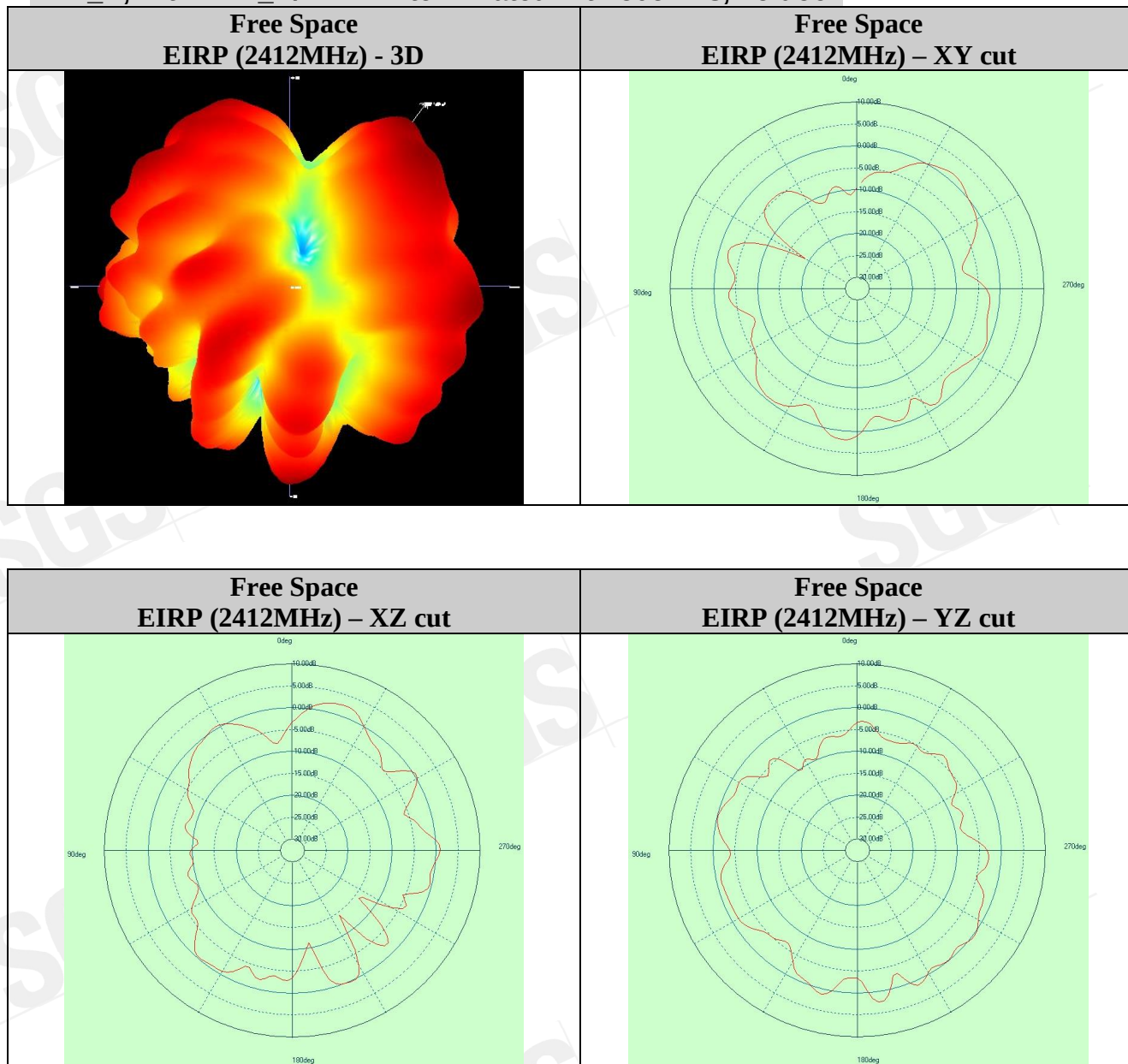
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## Antenna 3D Plot Matrix

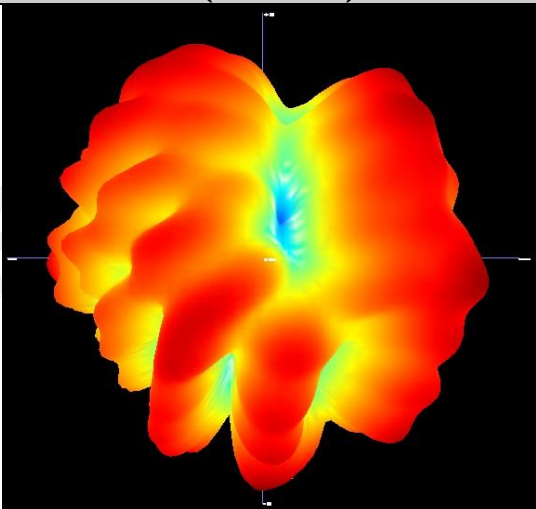
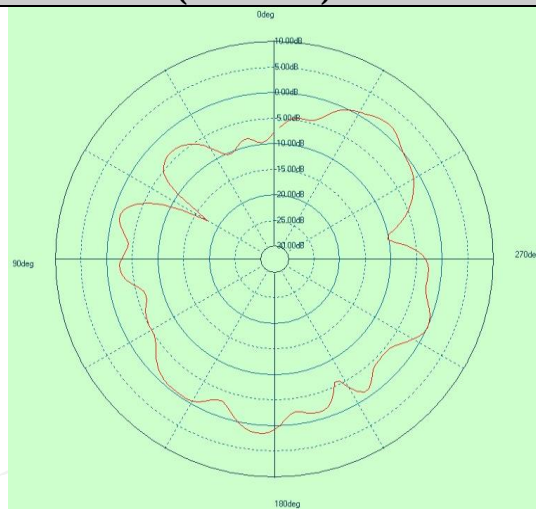
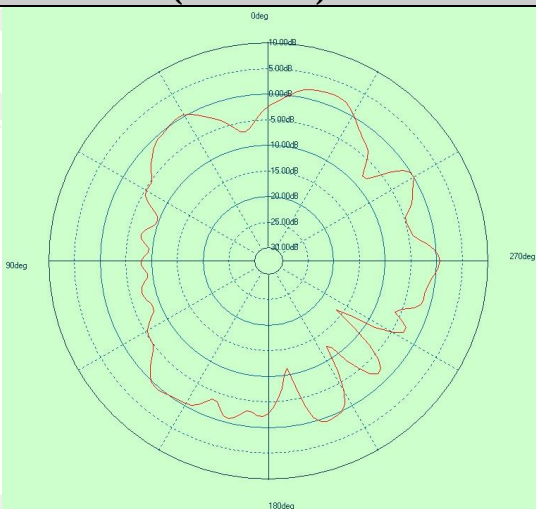
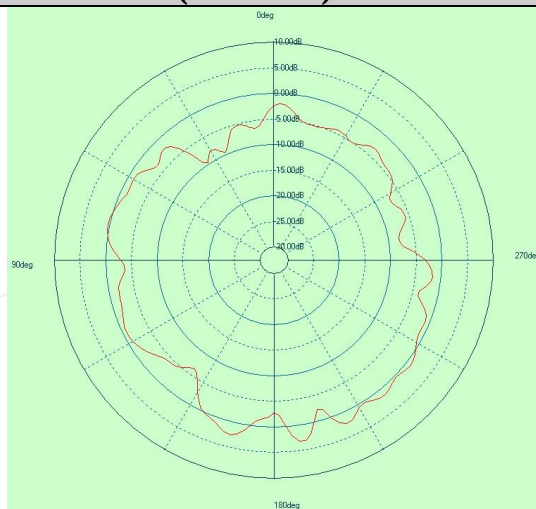
All plots in this section show the total EIRP ( $EIRP_{\theta} + EIRP_{\phi}$ ) with the +x-axis pointing out of the page, +y-axis pointing right, and +z-axis pointing up.

WIFI\_A, with WIFI\_B/BT ANT terminated with 50ohms, no dock



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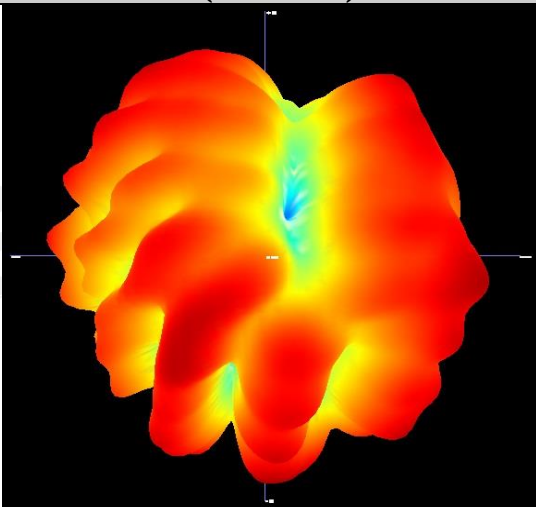
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**Free Space  
EIRP (2442MHz) - 3D****Free Space  
EIRP (2442MHz) – XY cut****Free Space  
EIRP (2442MHz) – XZ cut****Free Space  
EIRP (2442MHz) – YZ cut**

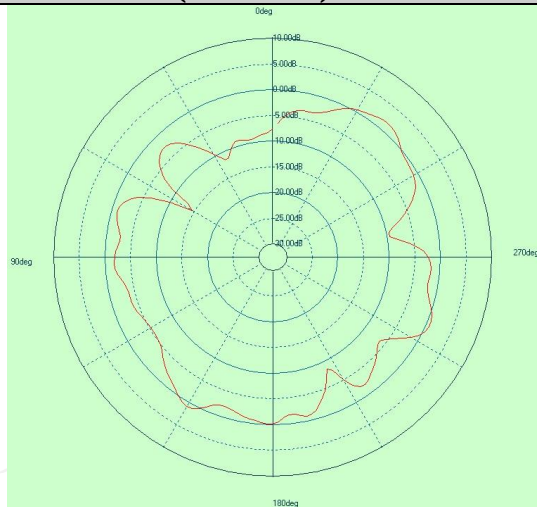
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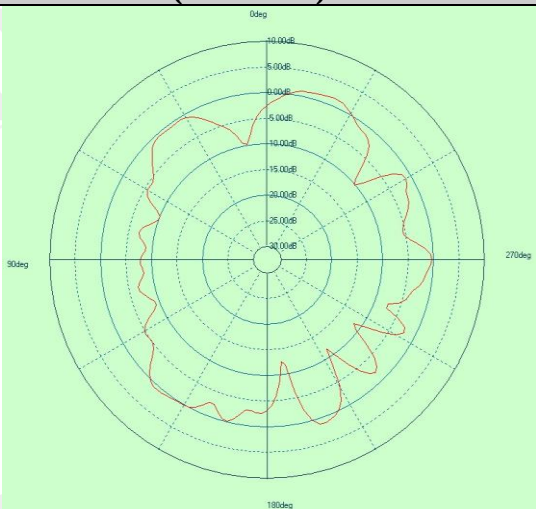
**Free Space  
EIRP (2472MHz) - 3D**



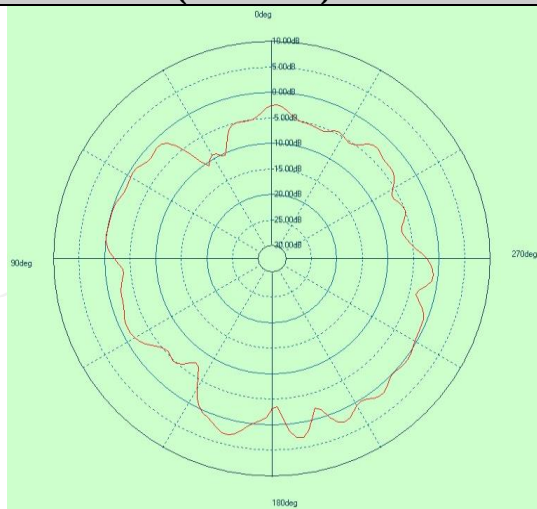
**Free Space  
EIRP (2472MHz) – XY cut**



**Free Space  
EIRP (2472MHz) – XZ cut**



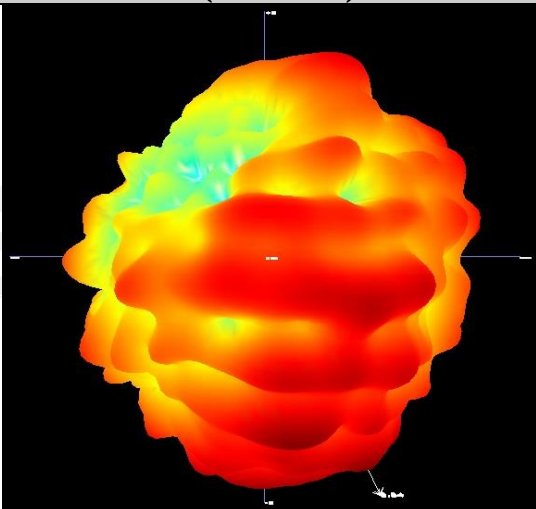
**Free Space  
EIRP (2472MHz) – YZ cut**



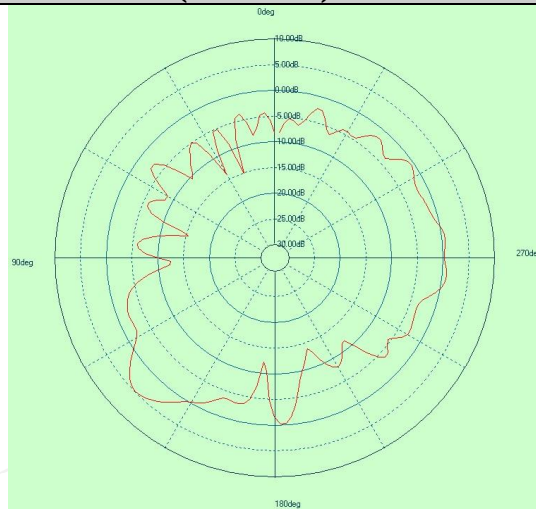
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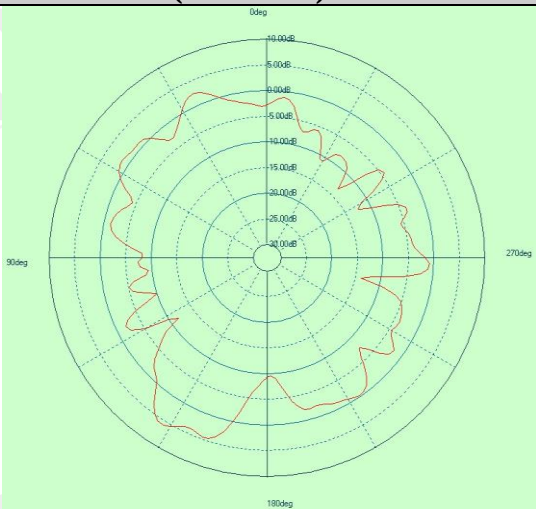
**Free Space  
EIRP (5180MHz) - 3D**



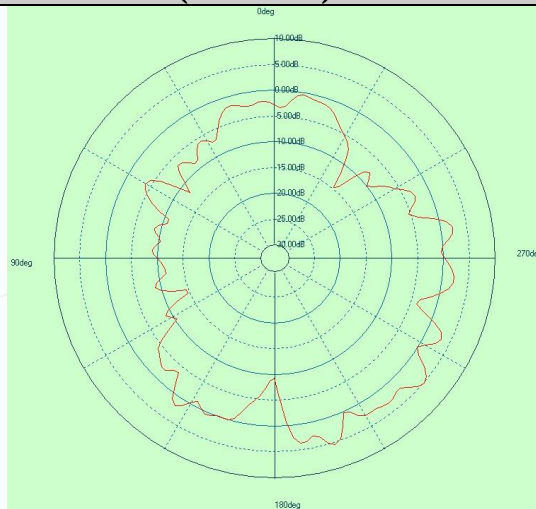
**Free Space  
EIRP (5180MHz) – XY cut**



**Free Space  
EIRP (5180MHz) – XZ cut**



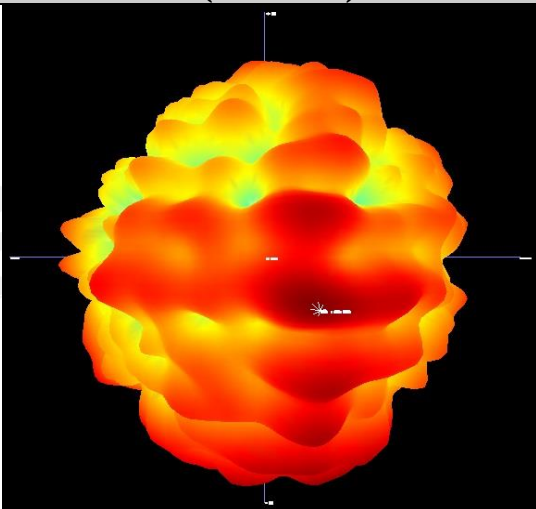
**Free Space  
EIRP (5180MHz) – YZ cut**



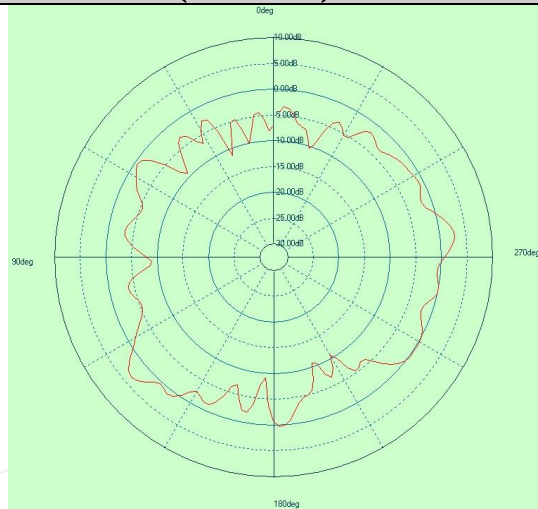
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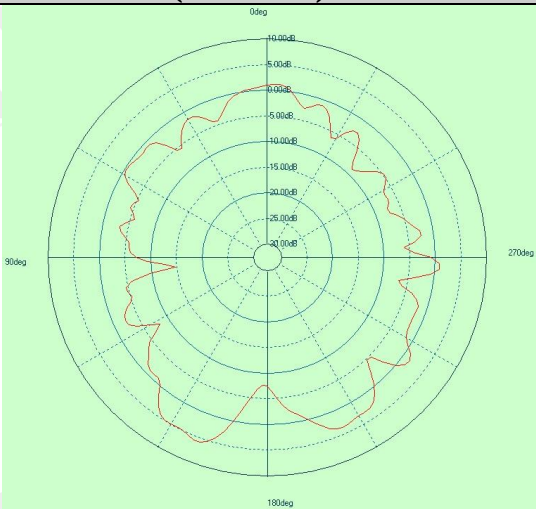
**Free Space  
EIRP (5500MHz) - 3D**



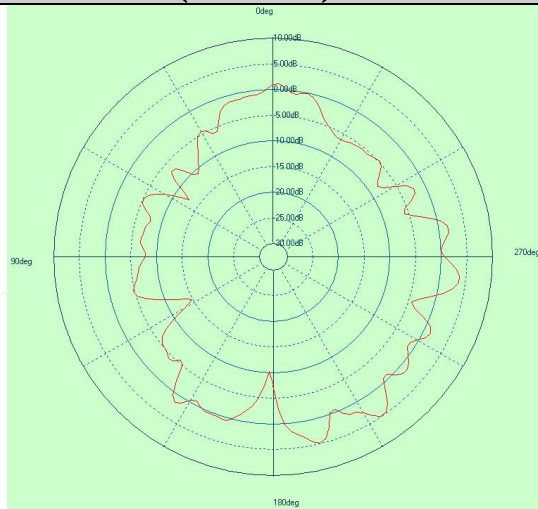
**Free Space  
EIRP (5500MHz) – XY cut**



**Free Space  
EIRP (5500MHz) – XZ cut**



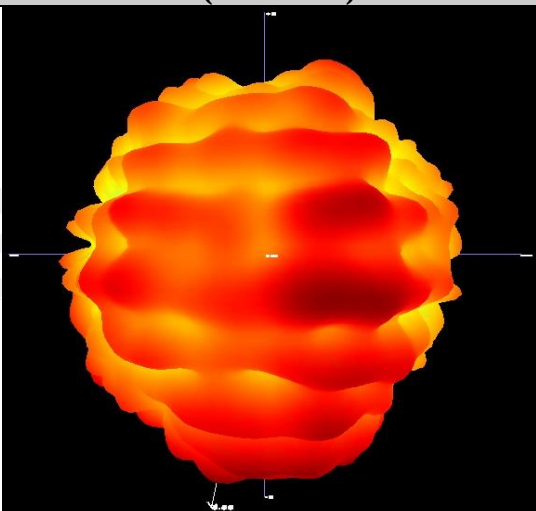
**Free Space  
EIRP (5500MHz) – YZ cut**



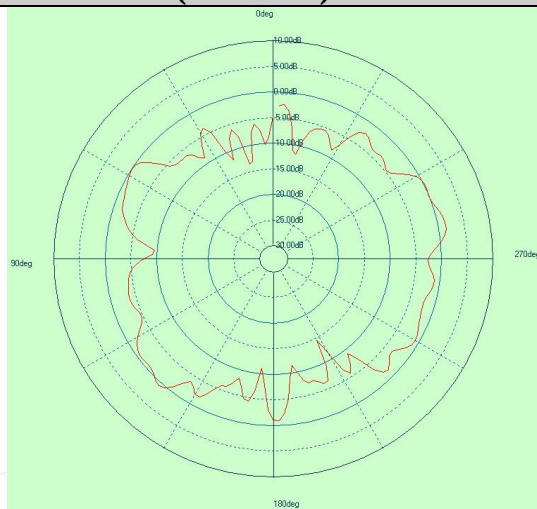
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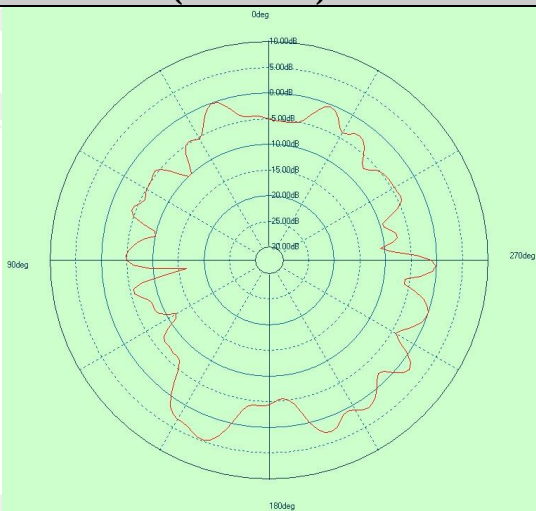
**Free Space  
EIRP (5825MHz) - 3D**



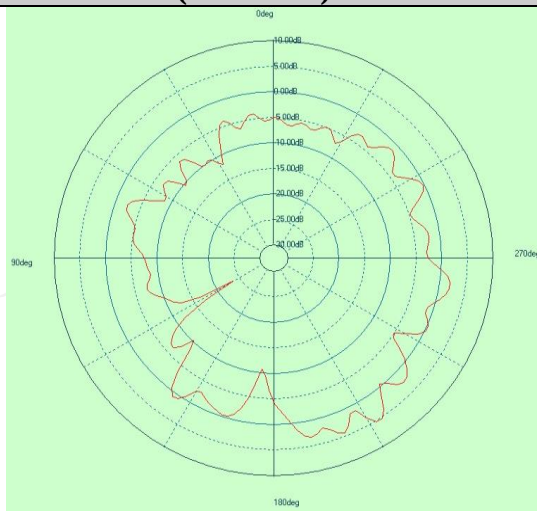
**Free Space  
EIRP (5825MHz) – XY cut**



**Free Space  
EIRP (5825MHz) – XZ cut**



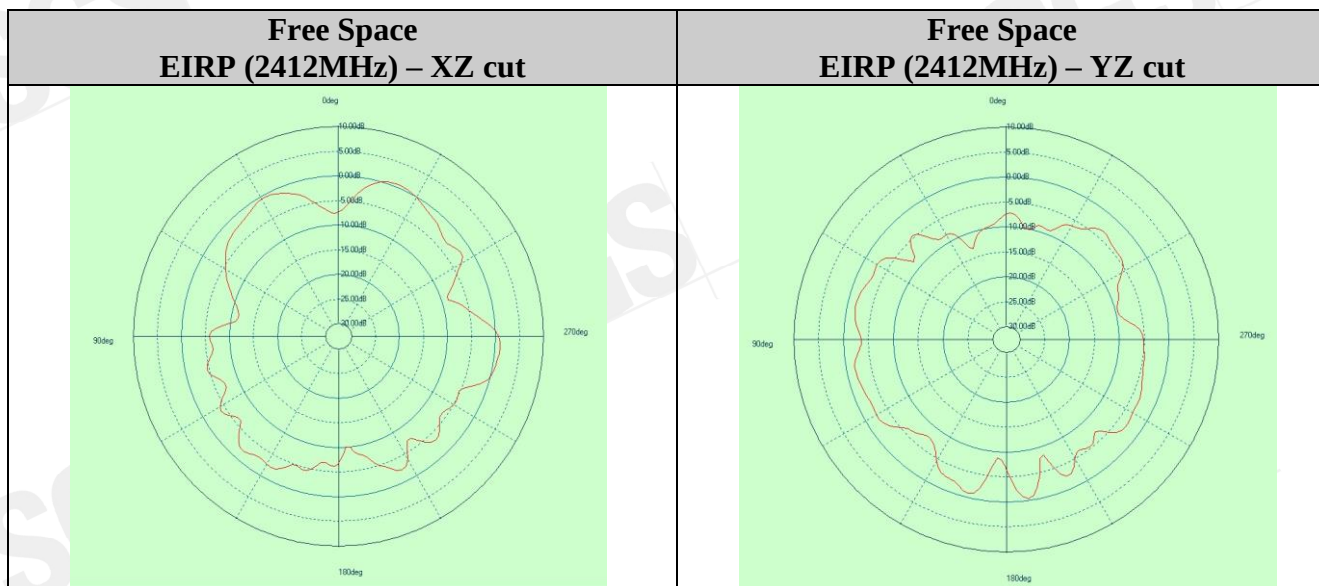
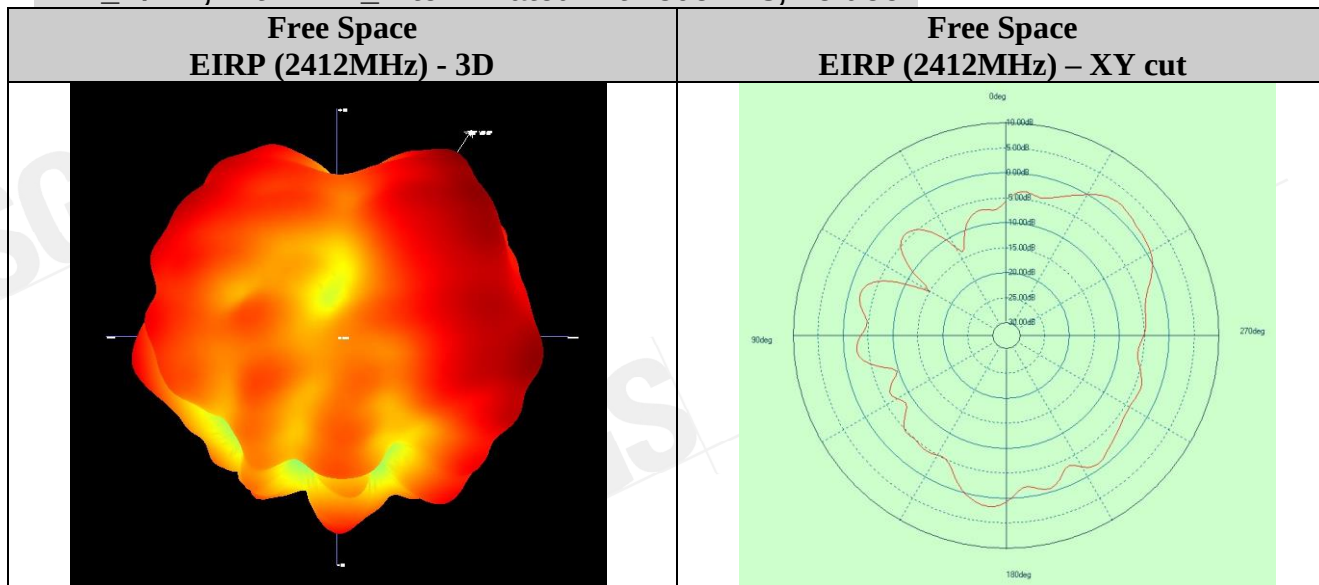
**Free Space  
EIRP (5825MHz) – YZ cut**



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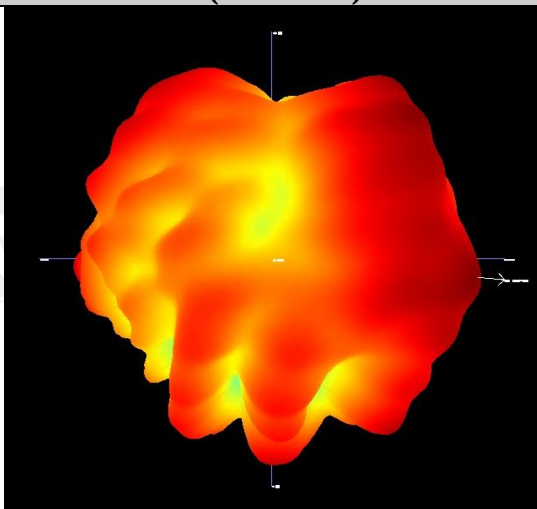
## WIFI\_B/BT , with WIFI\_A terminated with 50ohms, no dock



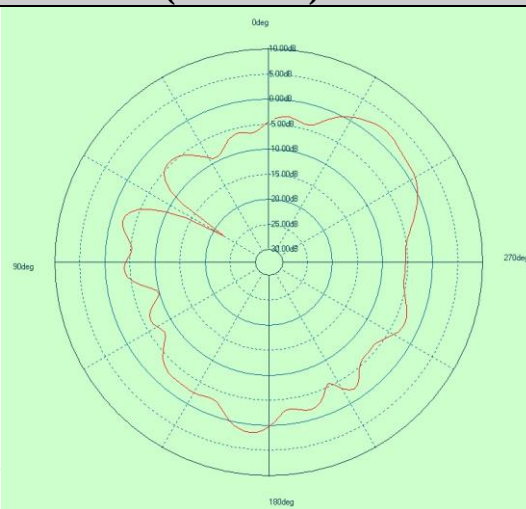
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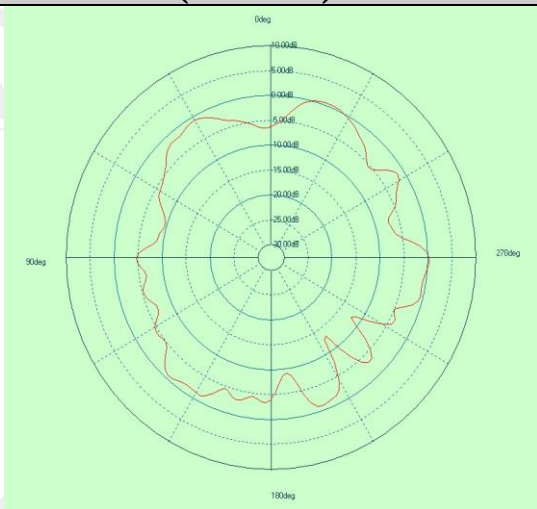
**Free Space  
EIRP (2442MHz) - 3D**



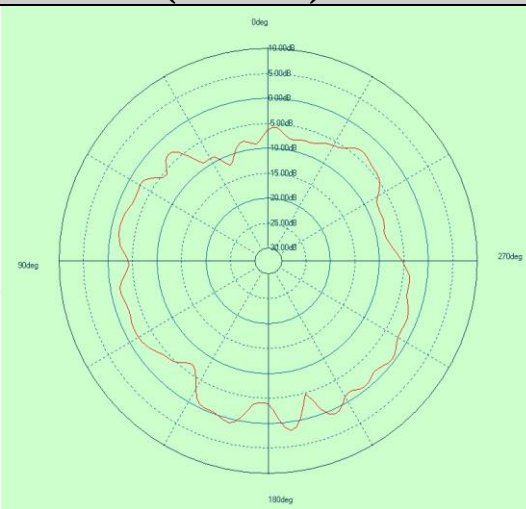
**Free Space  
EIRP (2442MHz) – XY cut**



**Free Space  
EIRP (2442MHz) – XZ cut**



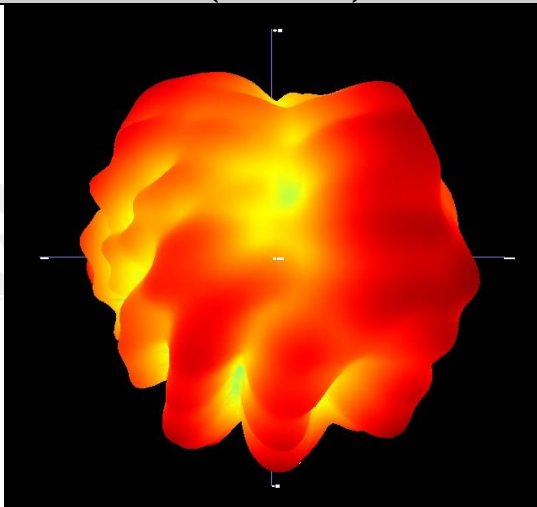
**Free Space  
EIRP (2442MHz) – YZ cut**



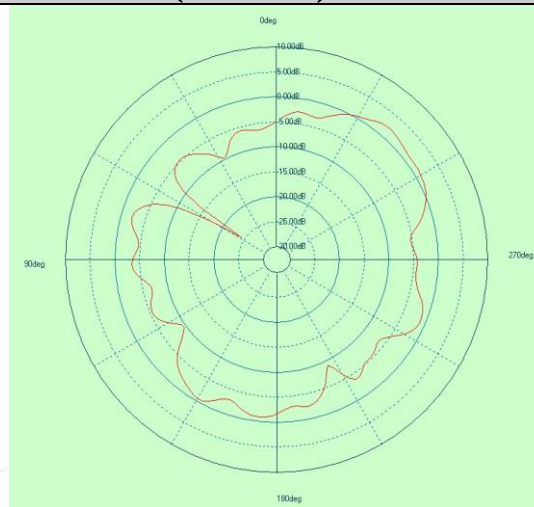
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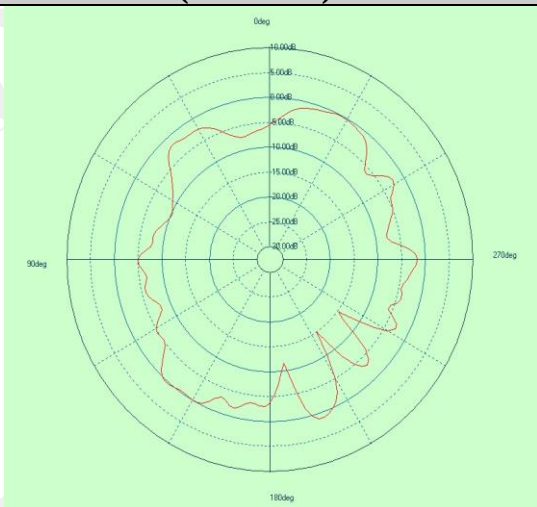
**Free Space  
EIRP (2472MHz) - 3D**



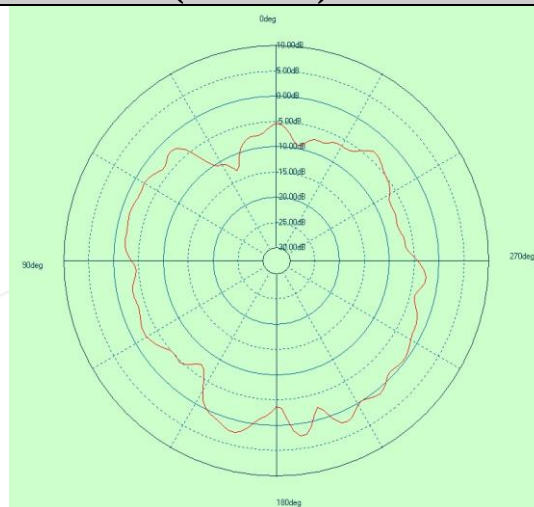
**Free Space  
EIRP (2472MHz) – XY cut**



**Free Space  
EIRP (2472MHz) – XZ cut**



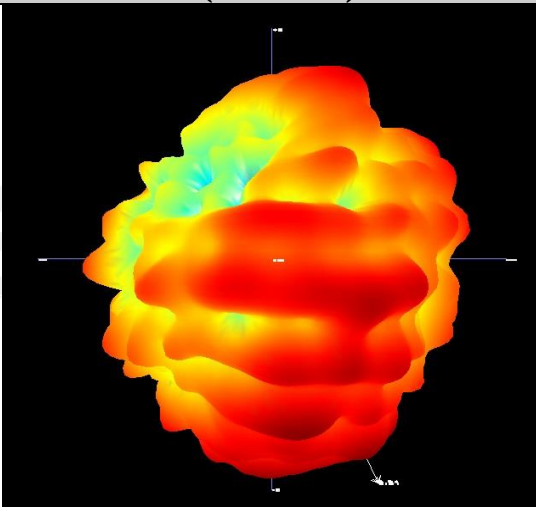
**Free Space  
EIRP (2472MHz) – YZ cut**



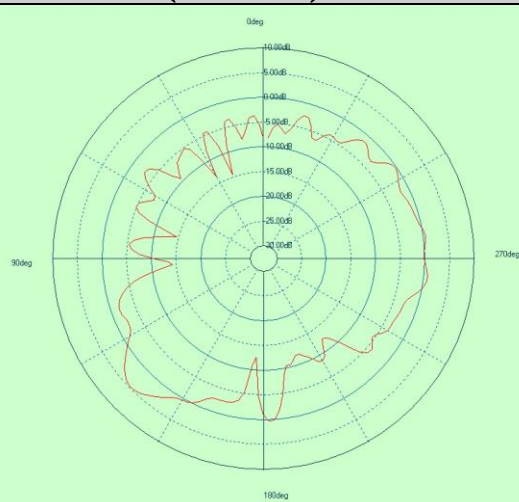
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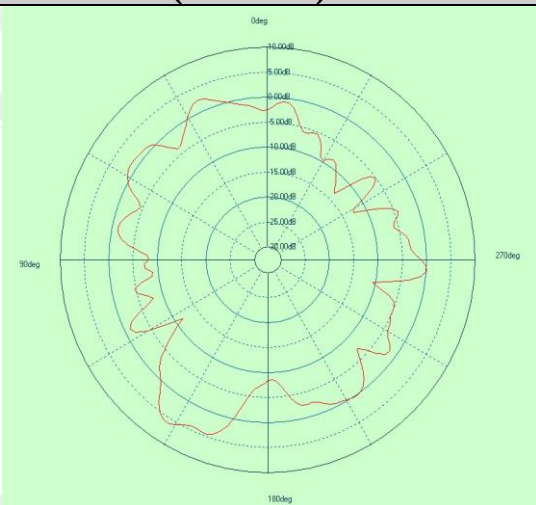
**Free Space  
EIRP (5180MHz) - 3D**



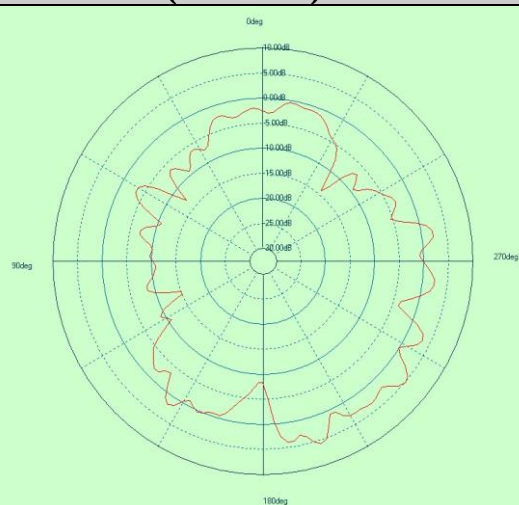
**Free Space  
EIRP (5180MHz) – XY cut**



**Free Space  
EIRP (5180MHz) – XZ cut**



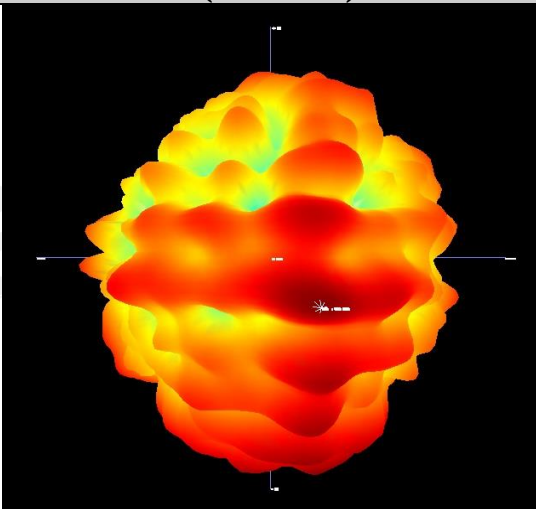
**Free Space  
EIRP (5180MHz) – YZ cut**



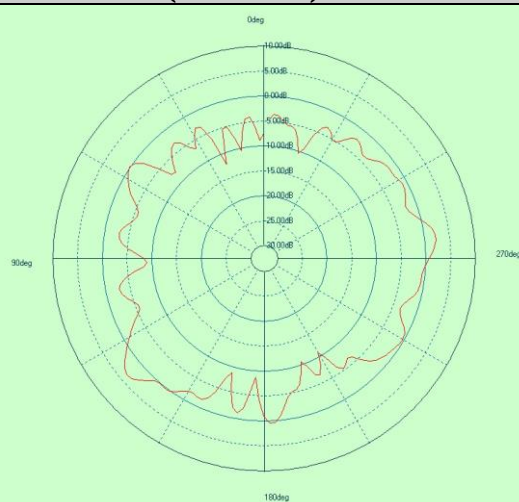
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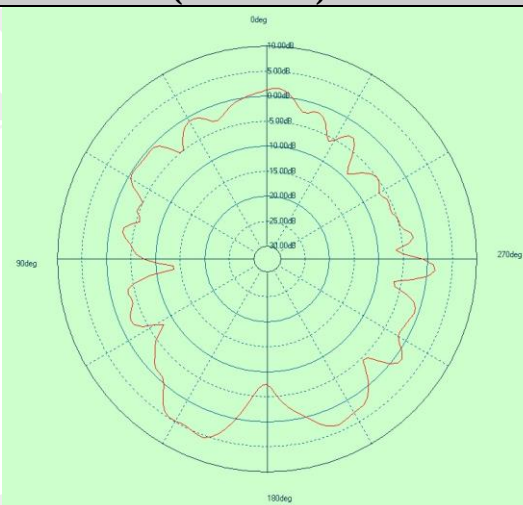
**Free Space  
EIRP (5500MHz) - 3D**



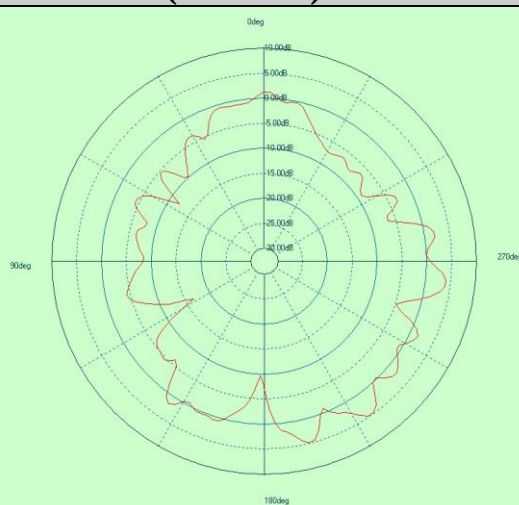
**Free Space  
EIRP (5500MHz) – XY cut**



**Free Space  
EIRP (5500MHz) – XZ cut**



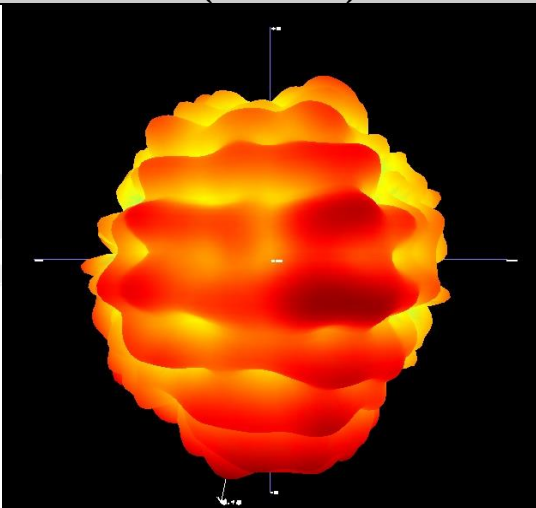
**Free Space  
EIRP (5500MHz) – YZ cut**



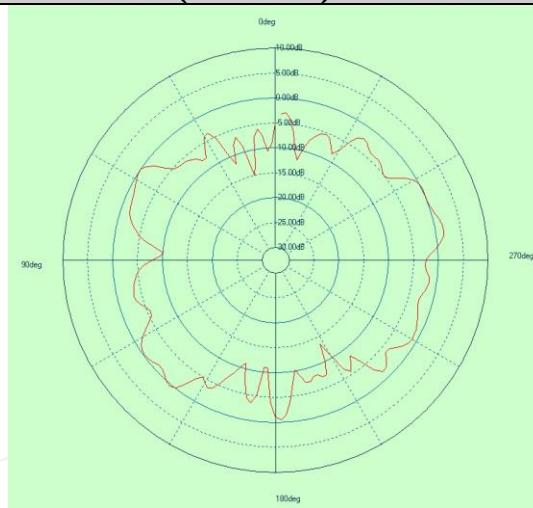
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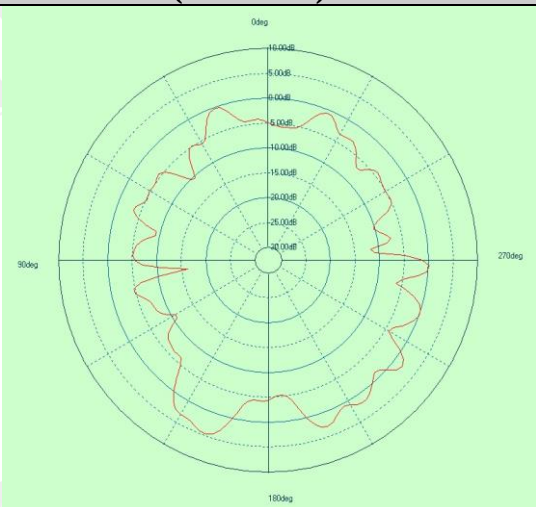
**Free Space  
EIRP (5825MHz) - 3D**



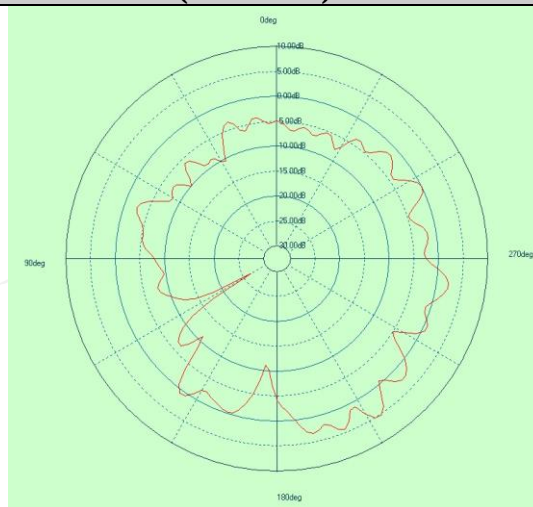
**Free Space  
EIRP (5825MHz) - XY cut**



**Free Space  
EIRP (5825MHz) - XZ cut**



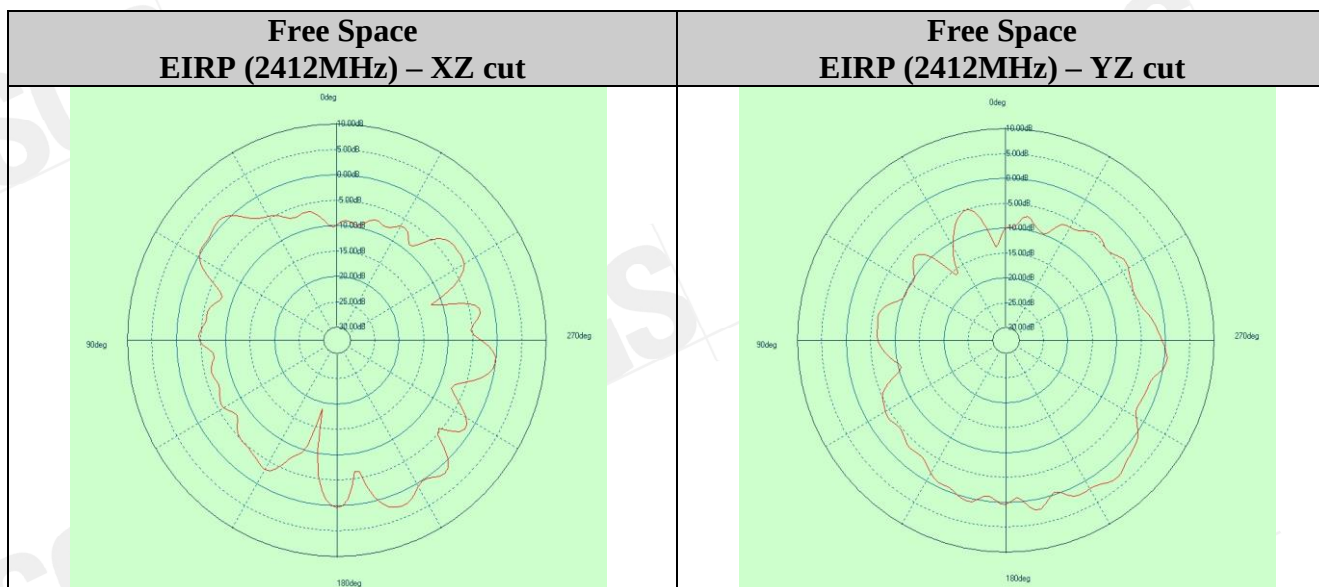
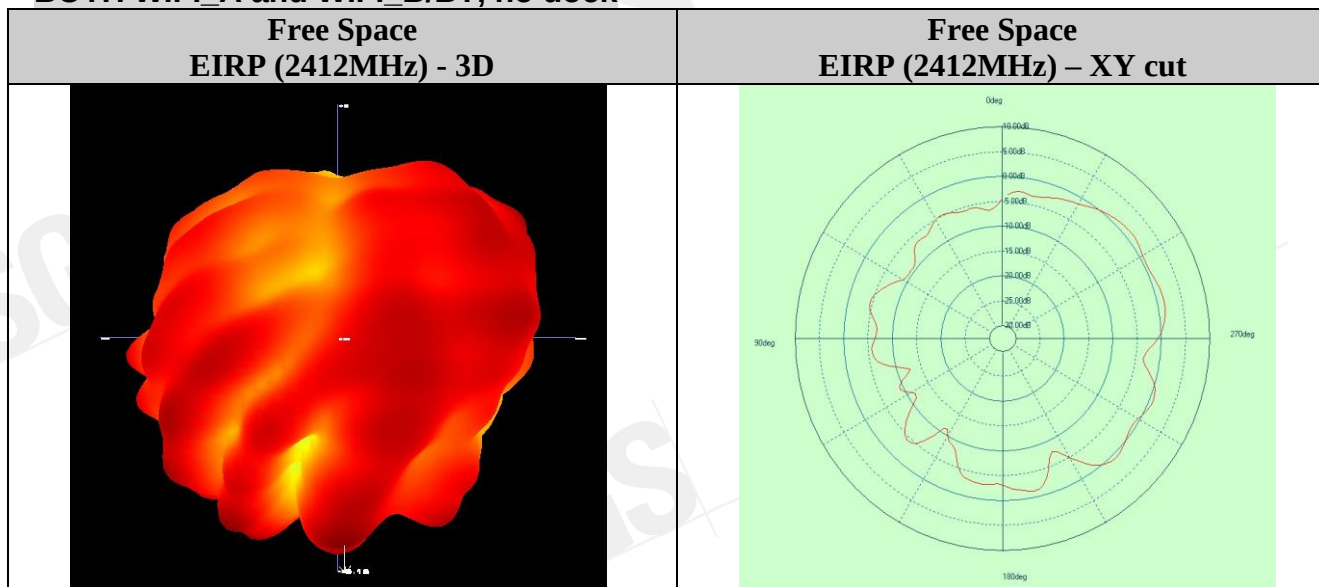
**Free Space  
EIRP (5825MHz) - YZ cut**



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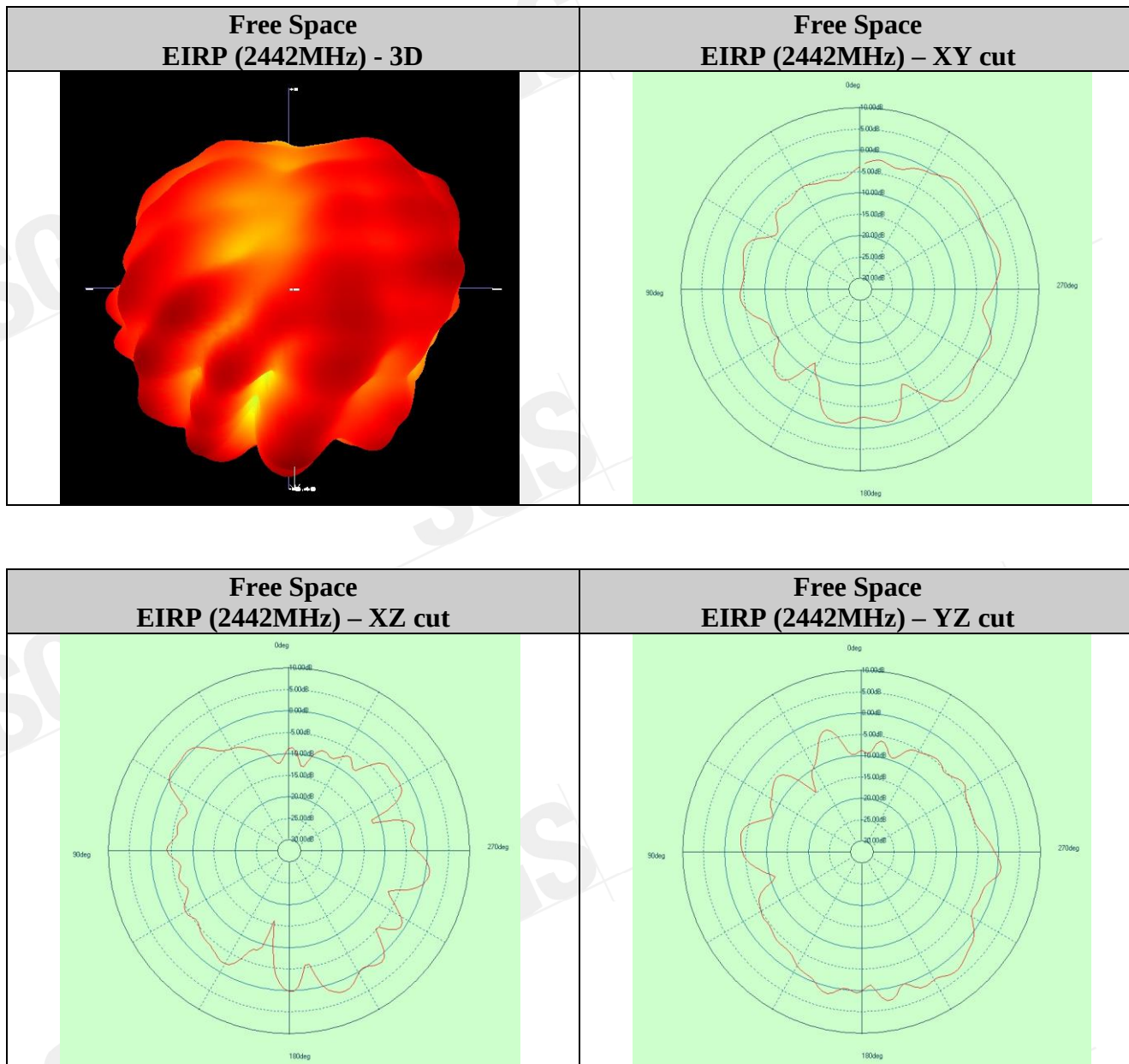
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**BOTH WIFI\_A and WIFI\_B/BT, no dock**



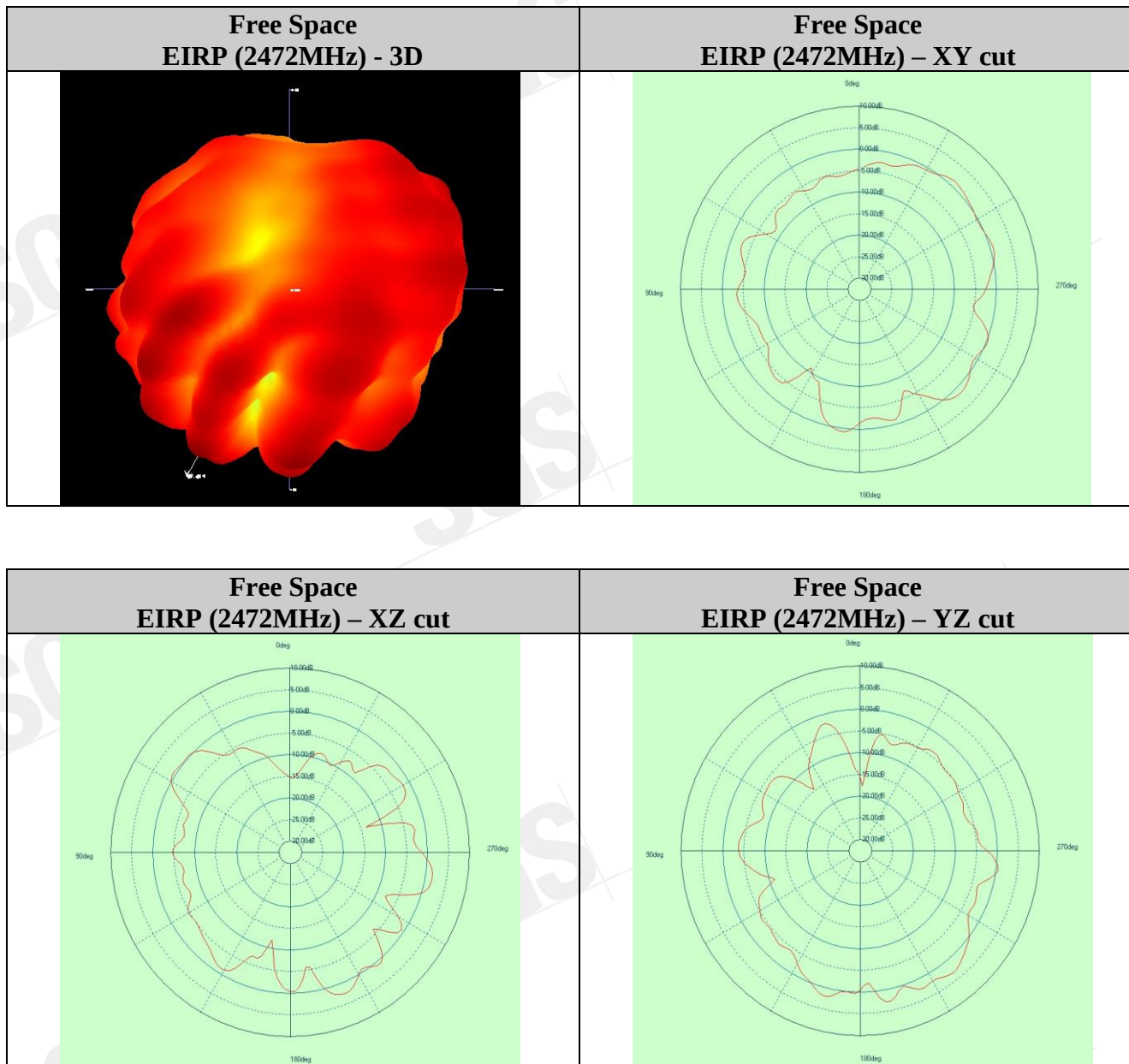
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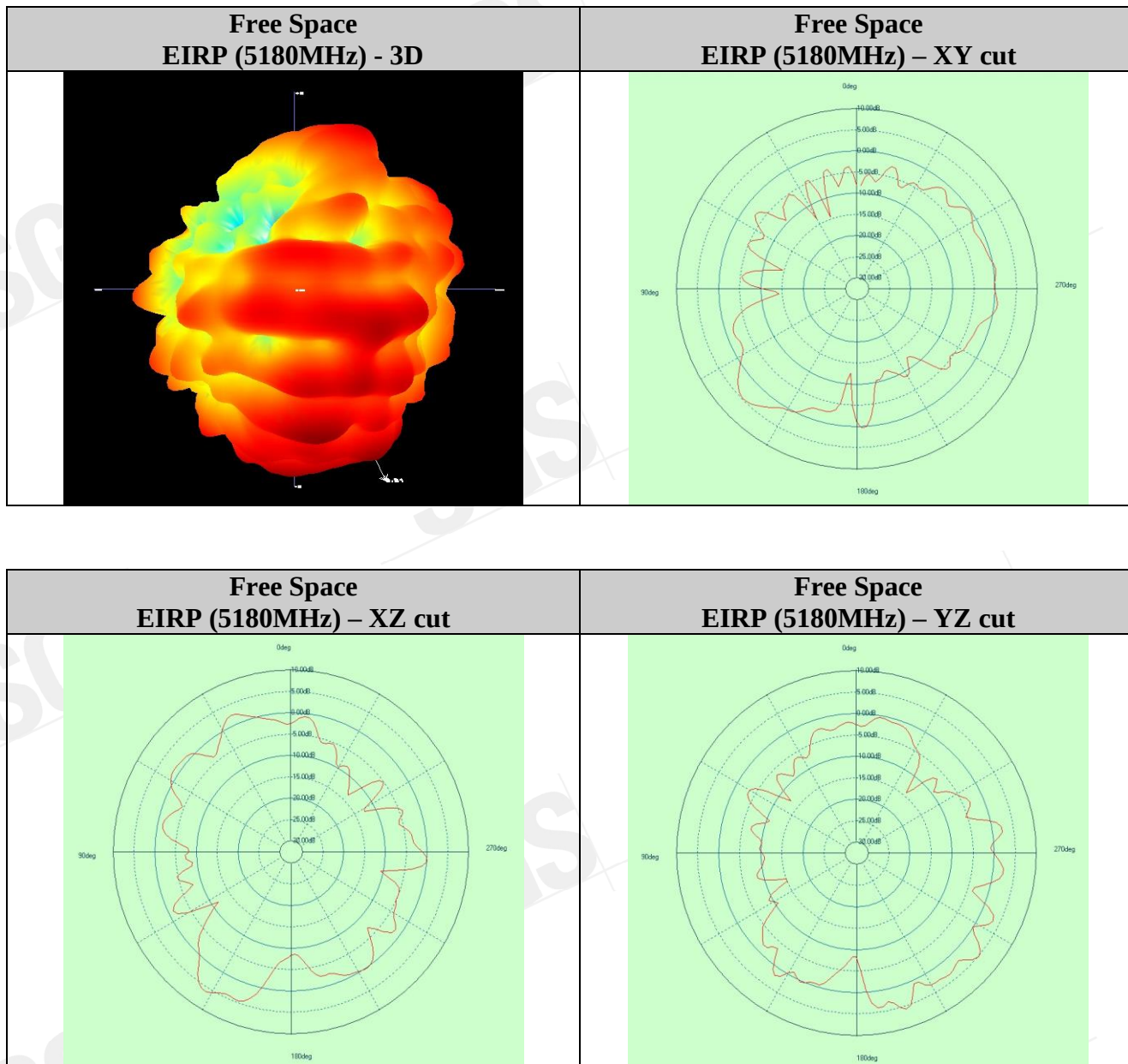
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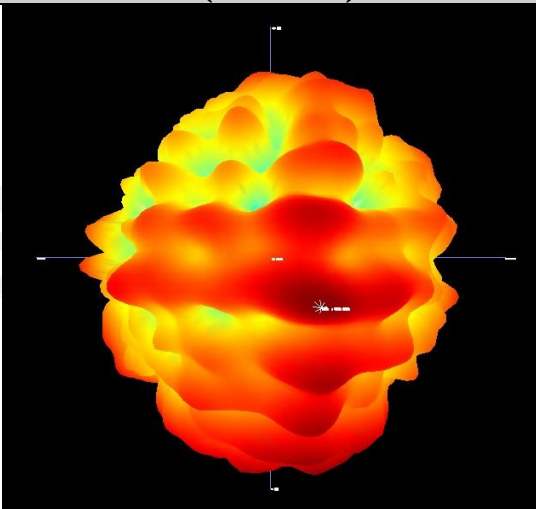
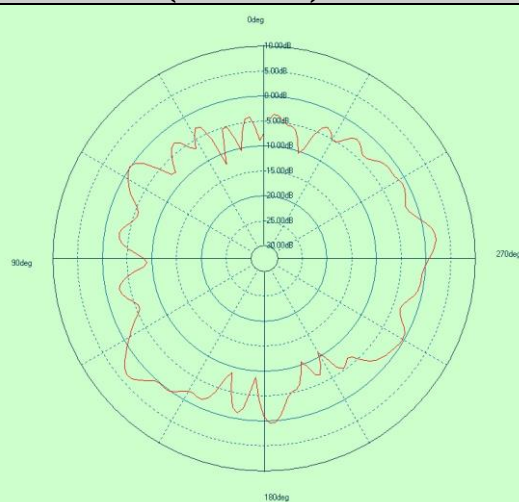
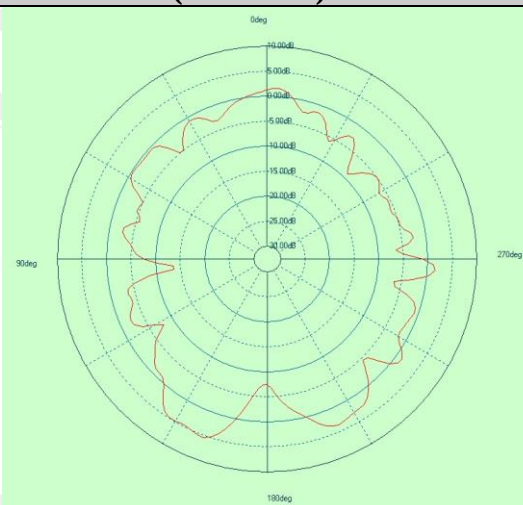
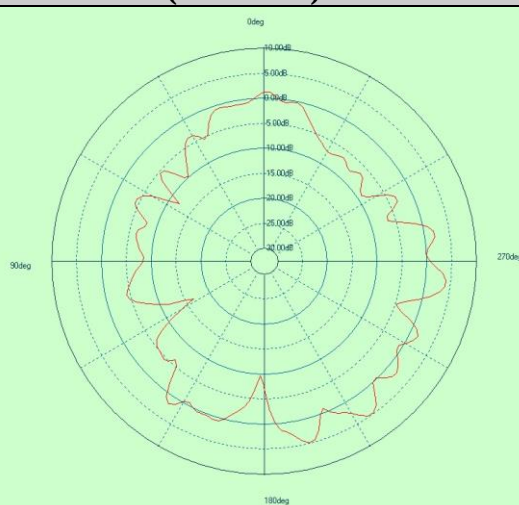
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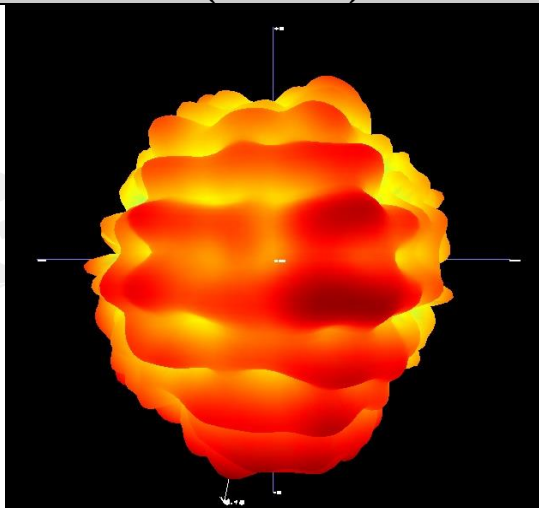
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**Free Space  
EIRP (5500MHz) - 3D****Free Space  
EIRP (5500MHz) – XY cut****Free Space  
EIRP (5500MHz) – XZ cut****Free Space  
EIRP (5500MHz) – YZ cut**

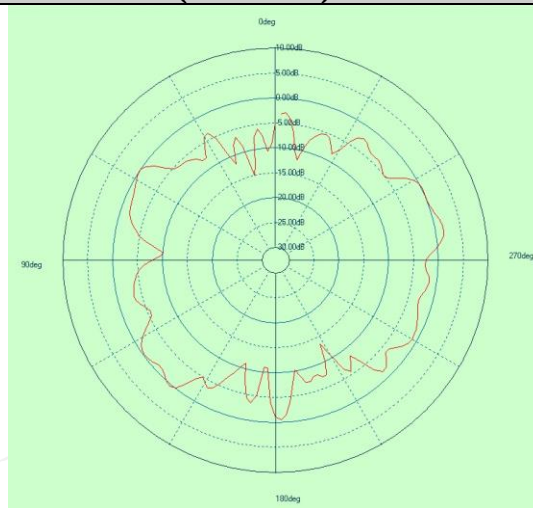
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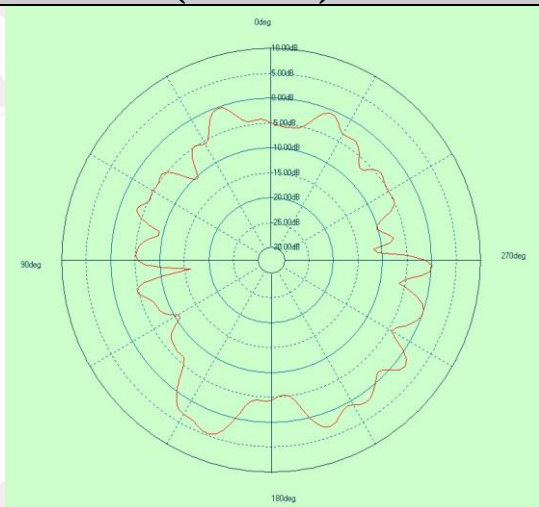
**Free Space  
EIRP (5825MHz) - 3D**



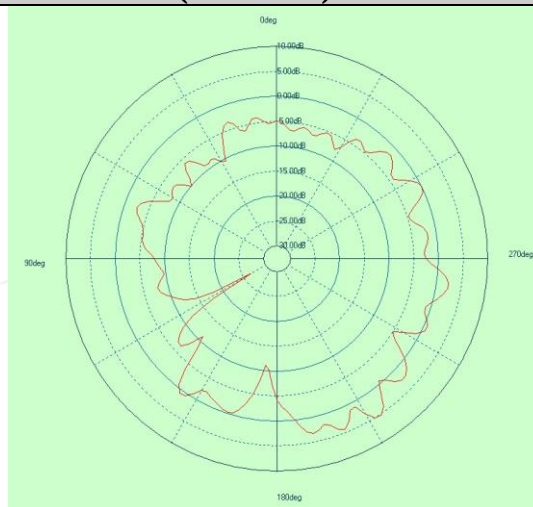
**Free Space  
EIRP (5825MHz) - XY cut**



**Free Space  
EIRP (5825MHz) - XZ cut**

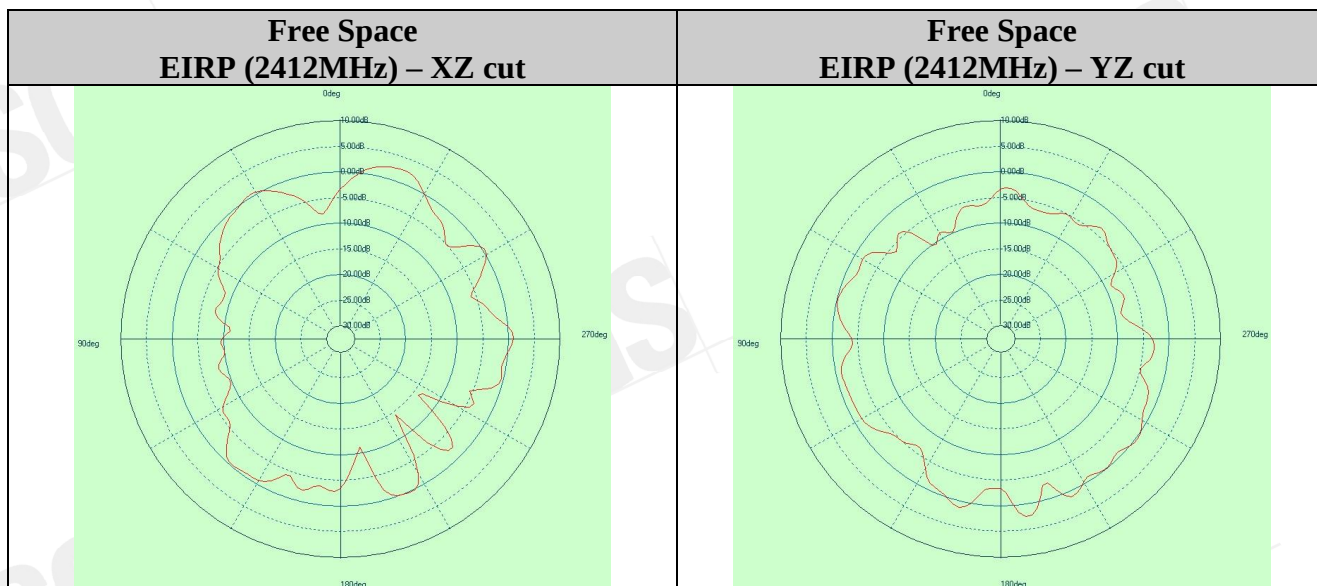
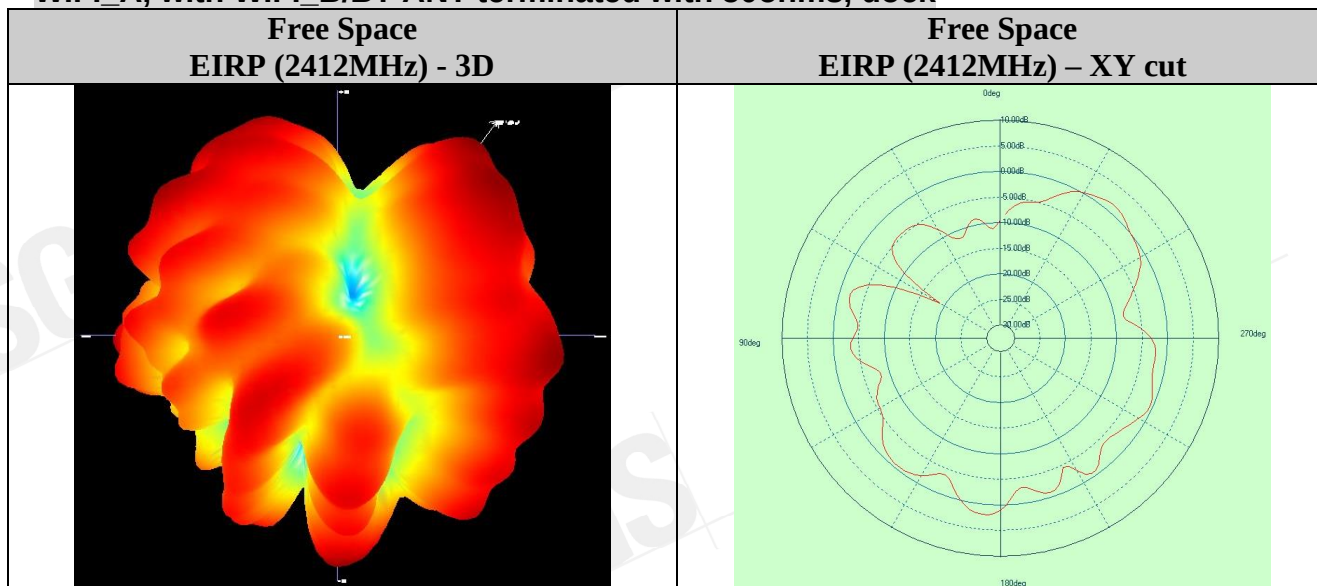


**Free Space  
EIRP (5825MHz) - YZ cut**



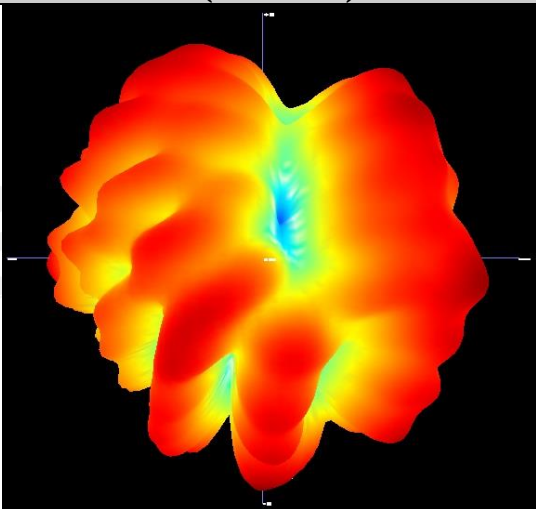
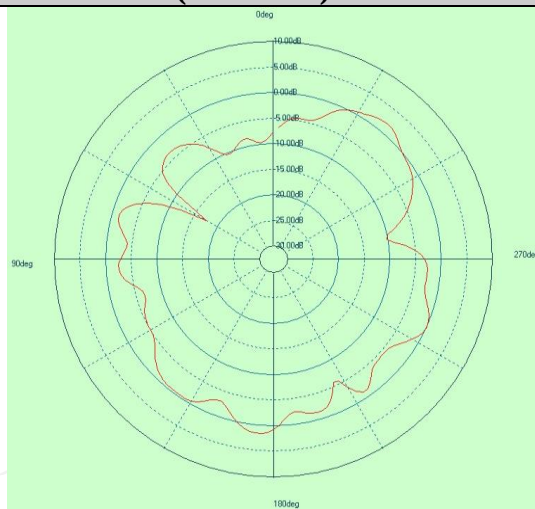
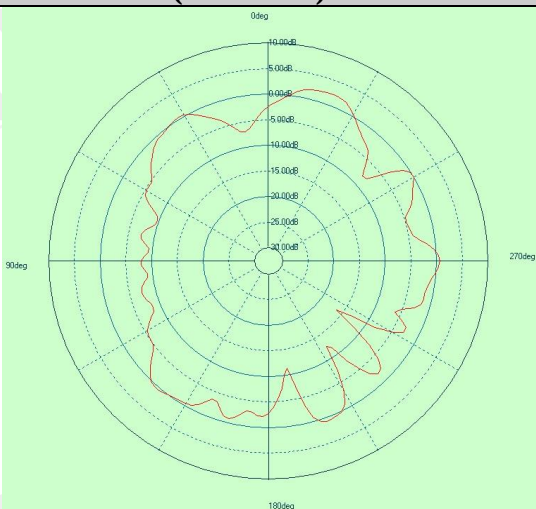
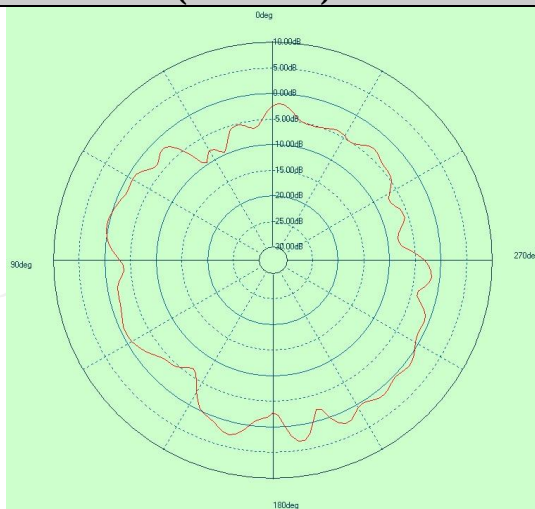
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## WIFI\_A, with WIFI\_B/BT ANT terminated with 50ohms, dock



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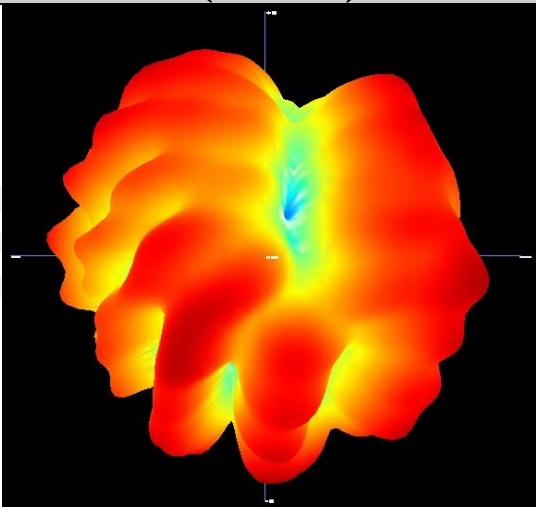
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**Free Space  
EIRP (2442MHz) - 3D****Free Space  
EIRP (2442MHz) – XY cut****Free Space  
EIRP (2442MHz) – XZ cut****Free Space  
EIRP (2442MHz) – YZ cut**

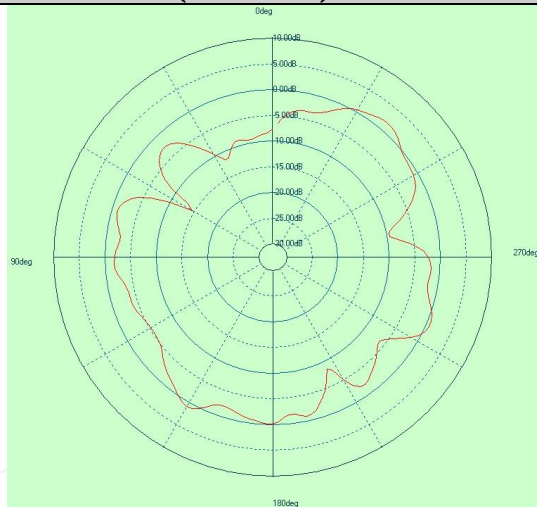
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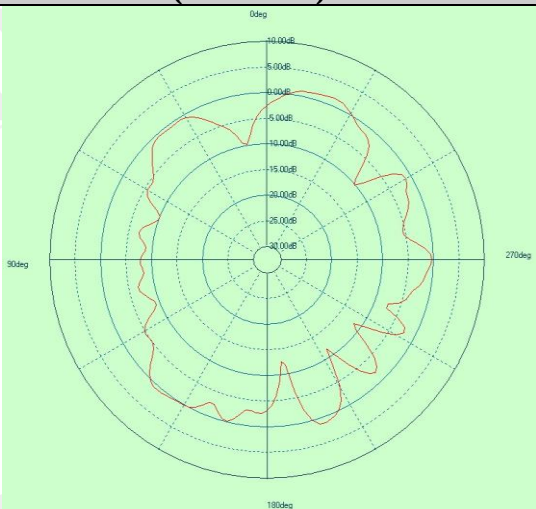
**Free Space  
EIRP (2472MHz) - 3D**



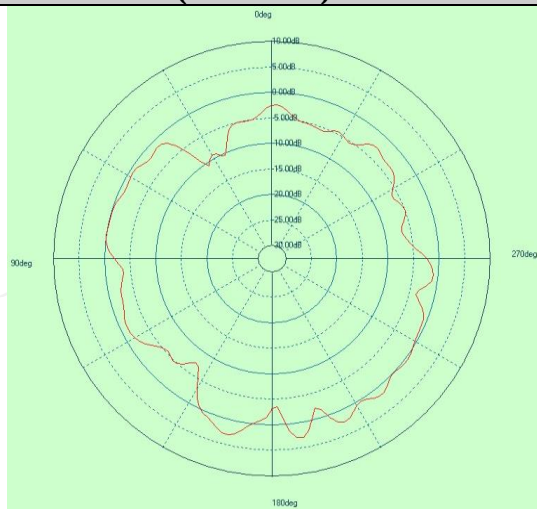
**Free Space  
EIRP (2472MHz) – XY cut**



**Free Space  
EIRP (2472MHz) – XZ cut**



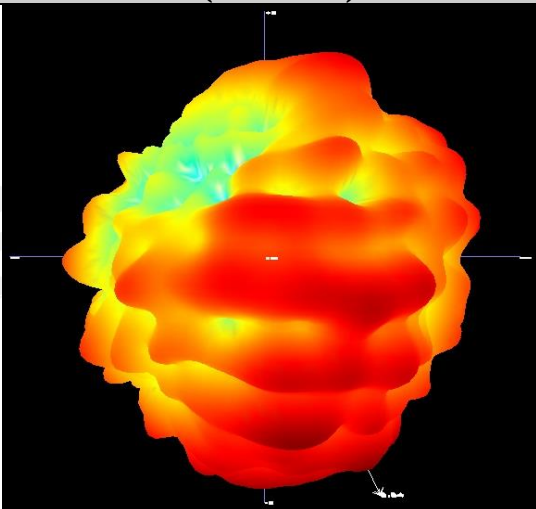
**Free Space  
EIRP (2472MHz) – YZ cut**



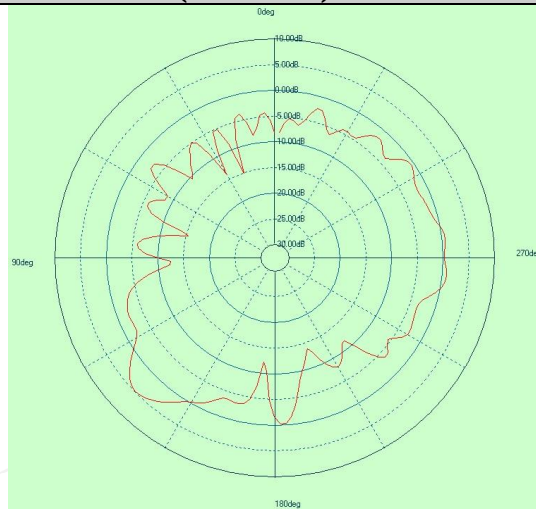
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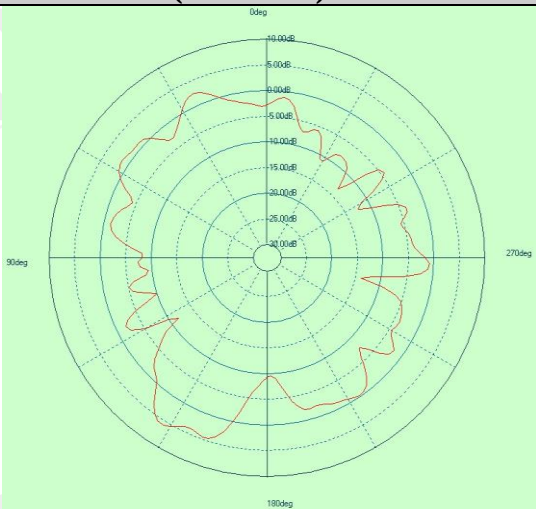
**Free Space  
EIRP (5180MHz) - 3D**



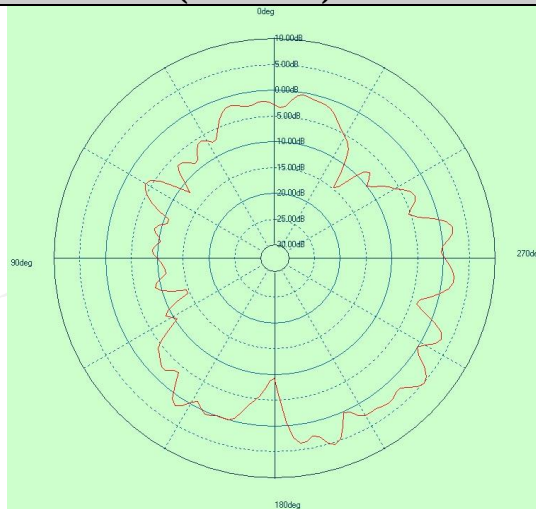
**Free Space  
EIRP (5180MHz) – XY cut**



**Free Space  
EIRP (5180MHz) – XZ cut**



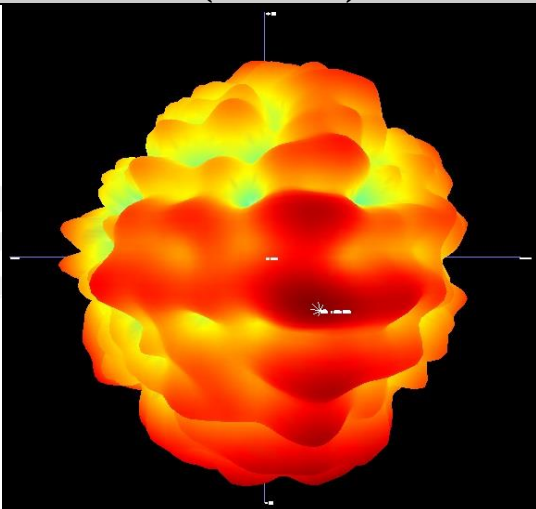
**Free Space  
EIRP (5180MHz) – YZ cut**



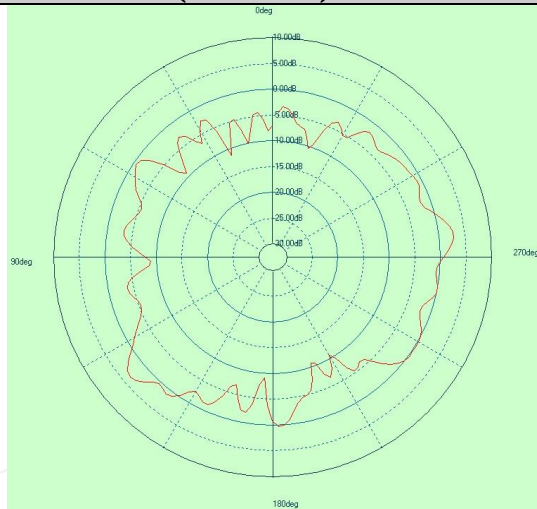
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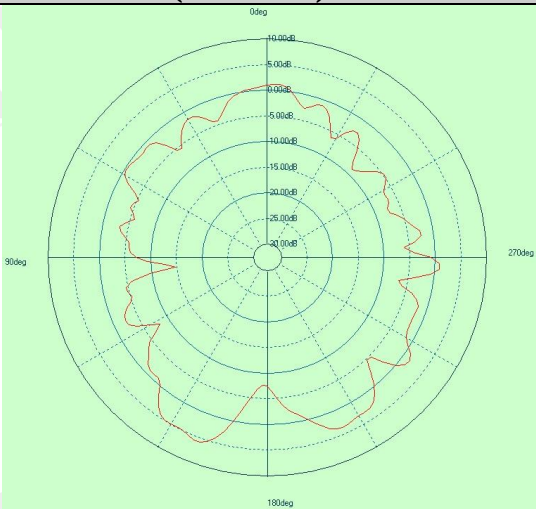
**Free Space  
EIRP (5500MHz) - 3D**



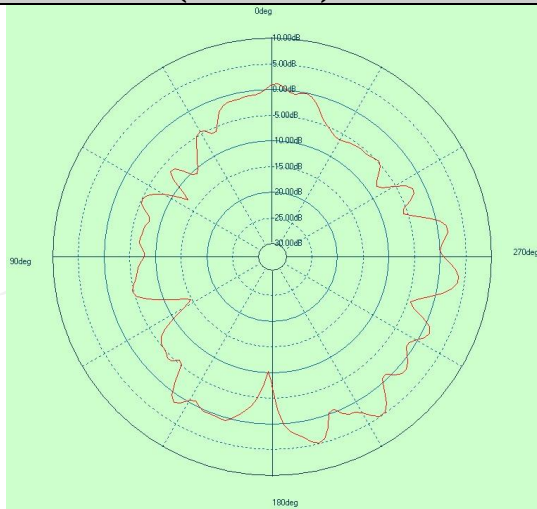
**Free Space  
EIRP (5500MHz) – XY cut**



**Free Space  
EIRP (5500MHz) – XZ cut**



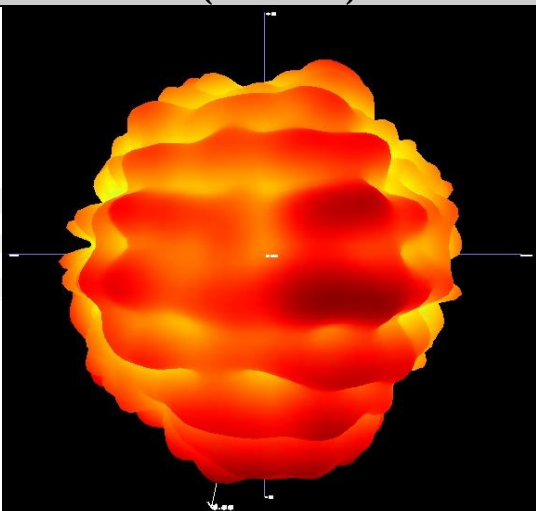
**Free Space  
EIRP (5500MHz) – YZ cut**



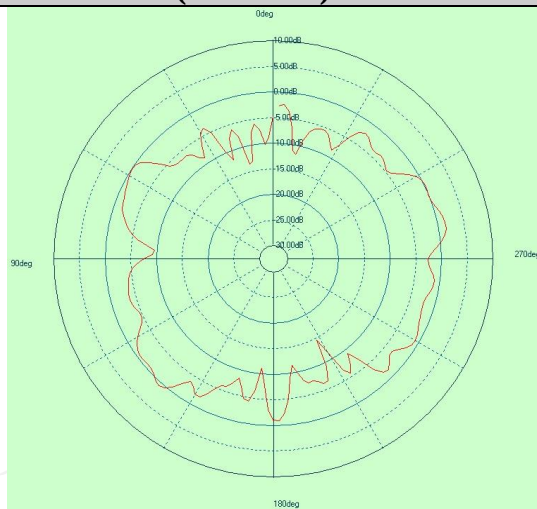
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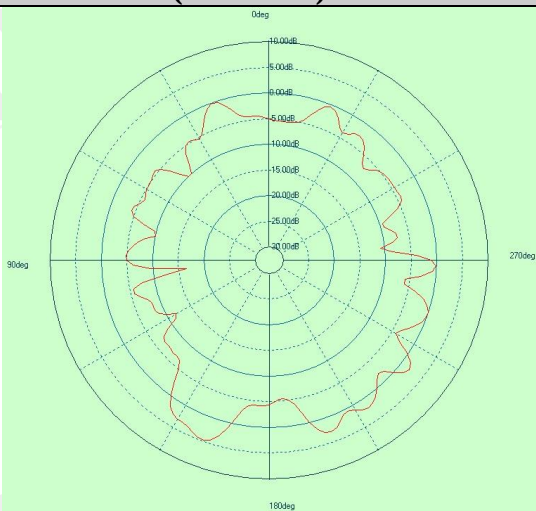
**Free Space  
EIRP (5825MHz) - 3D**



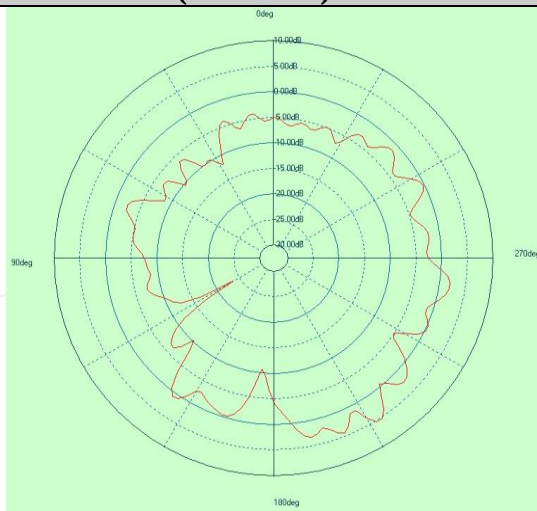
**Free Space  
EIRP (5825MHz) – XY cut**



**Free Space  
EIRP (5825MHz) – XZ cut**



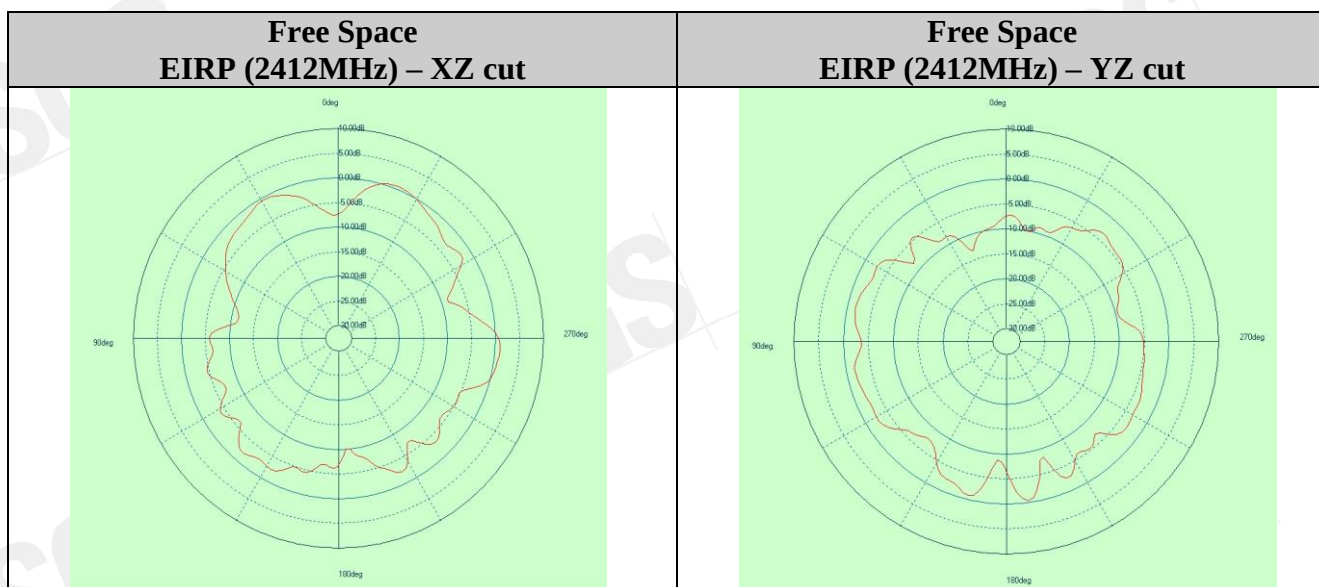
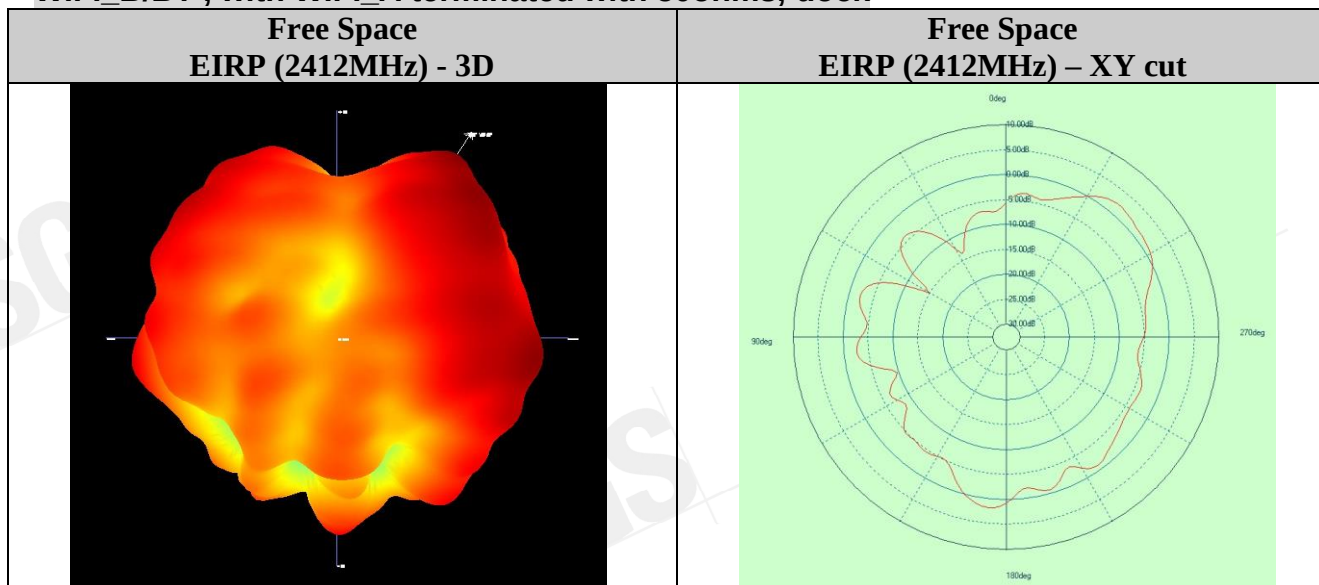
**Free Space  
EIRP (5825MHz) – YZ cut**



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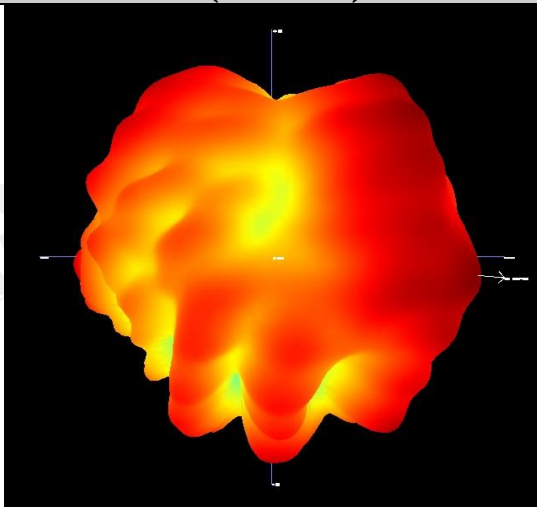
## WIFI\_B/BT , with WIFI\_A terminated with 50ohms, dock



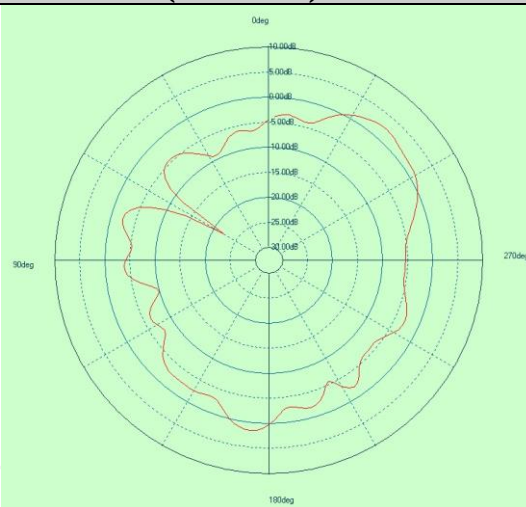
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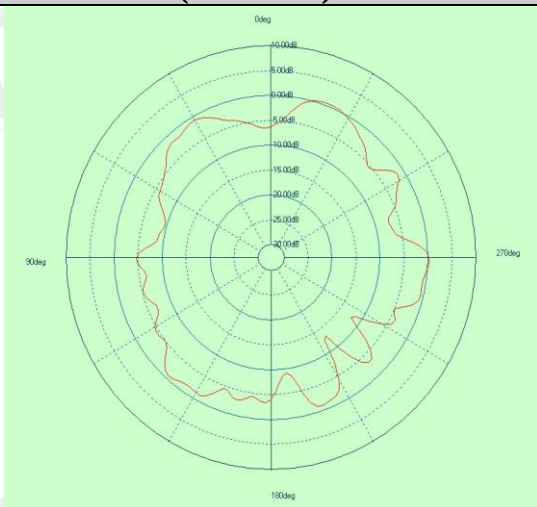
**Free Space  
EIRP (2442MHz) - 3D**



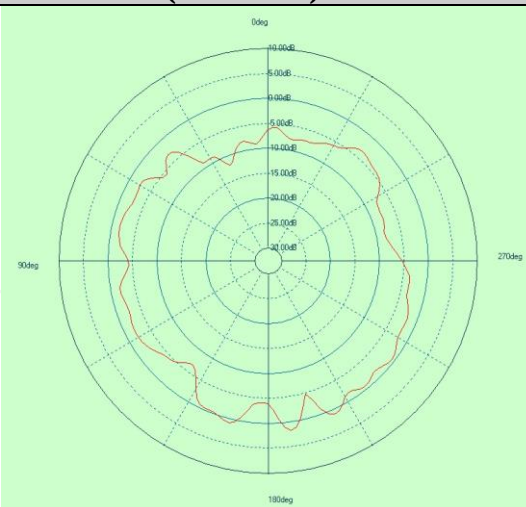
**Free Space  
EIRP (2442MHz) – XY cut**



**Free Space  
EIRP (2442MHz) – XZ cut**

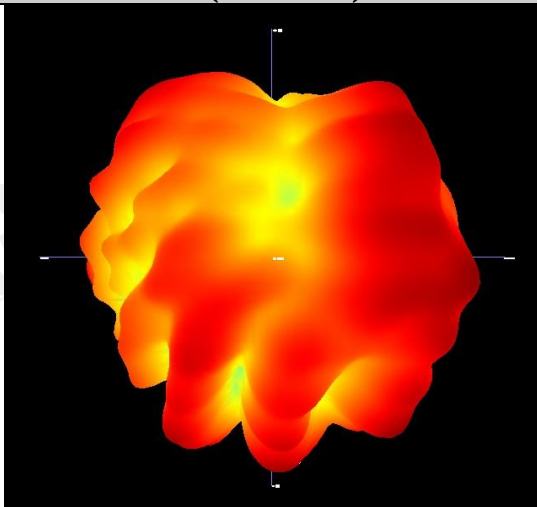


**Free Space  
EIRP (2442MHz) – YZ cut**

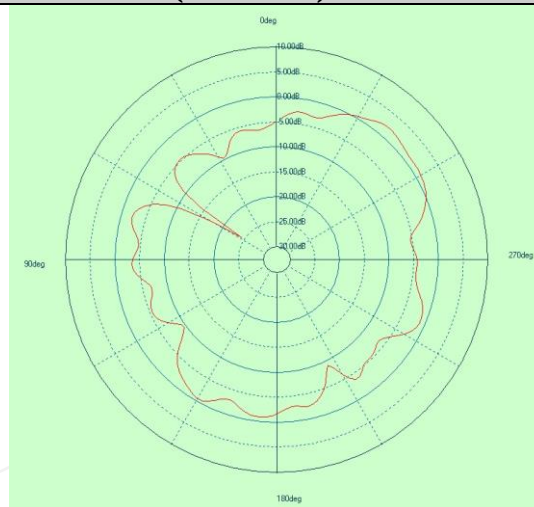


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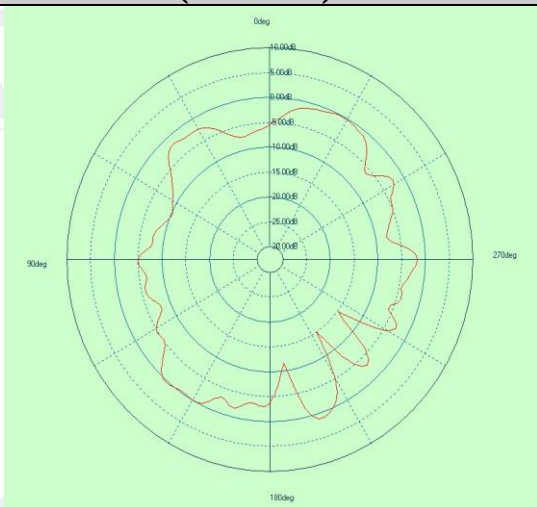
**Free Space  
EIRP (2472MHz) - 3D**



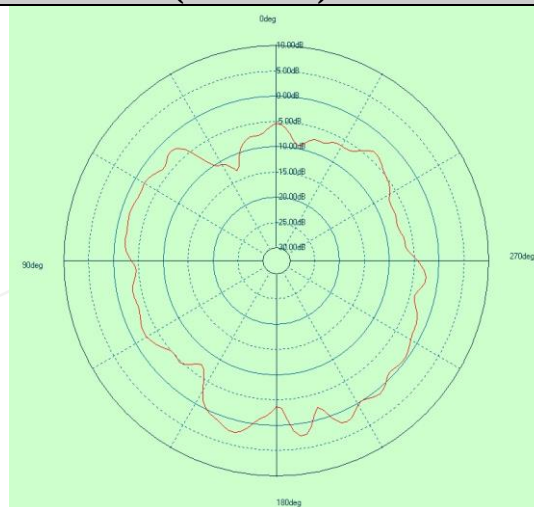
**Free Space  
EIRP (2472MHz) – XY cut**



**Free Space  
EIRP (2472MHz) – XZ cut**

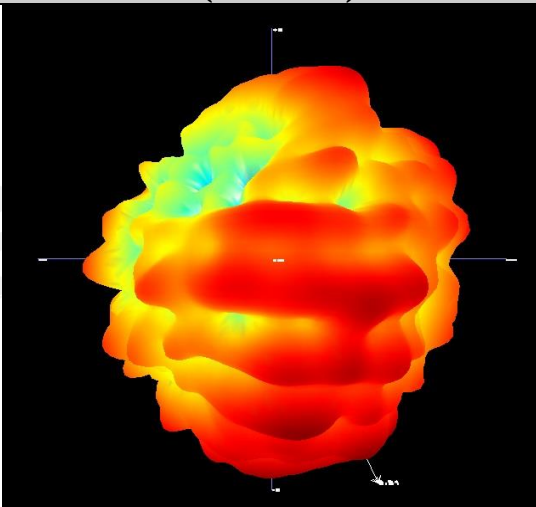
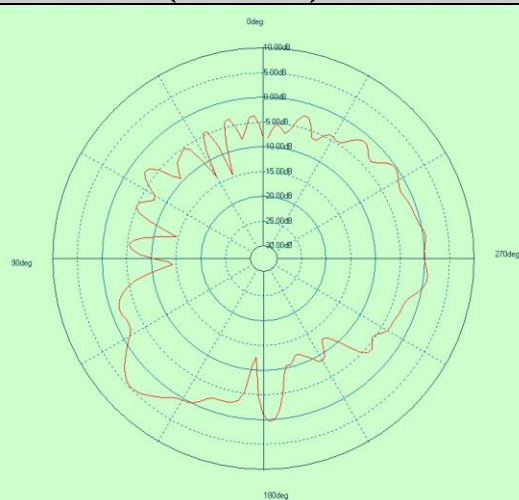
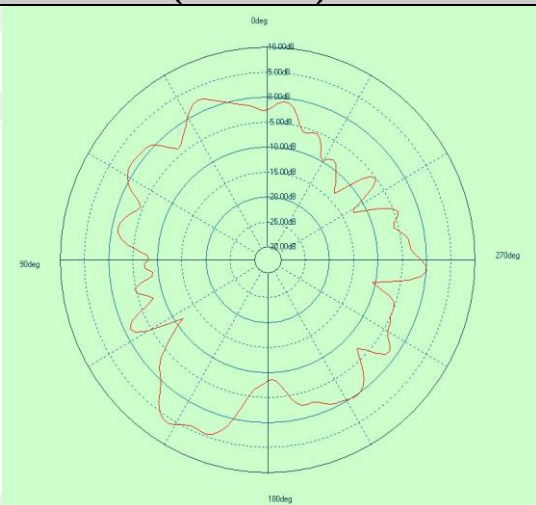
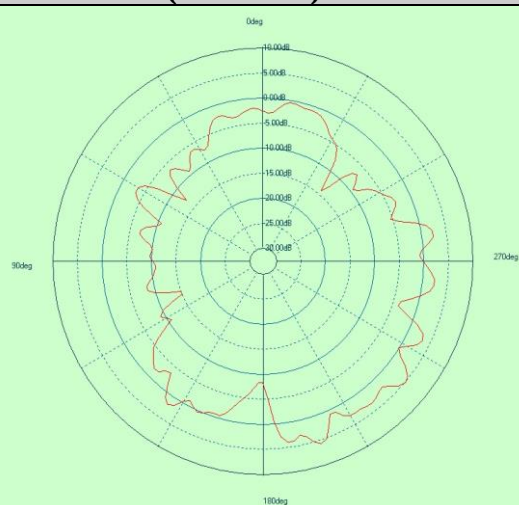


**Free Space  
EIRP (2472MHz) – YZ cut**



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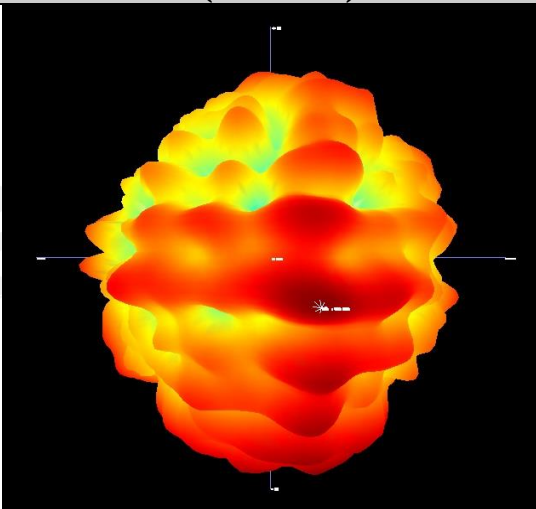
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**Free Space  
EIRP (5180MHz) - 3D****Free Space  
EIRP (5180MHz) – XY cut****Free Space  
EIRP (5180MHz) – XZ cut****Free Space  
EIRP (5180MHz) – YZ cut**

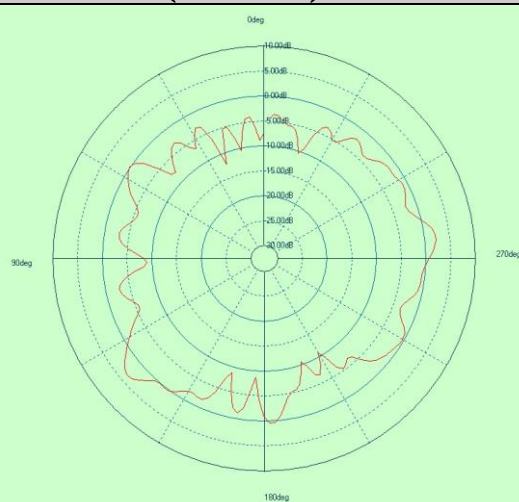
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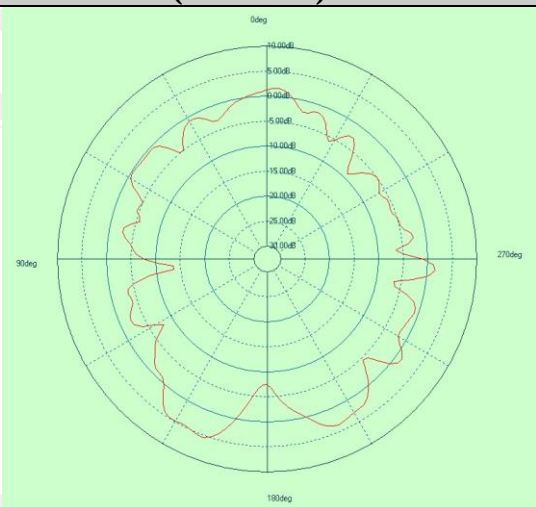
**Free Space  
EIRP (5500MHz) - 3D**



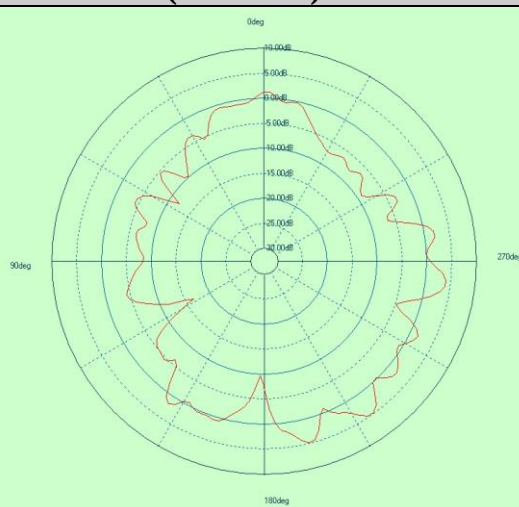
**Free Space  
EIRP (5500MHz) – XY cut**



**Free Space  
EIRP (5500MHz) – XZ cut**



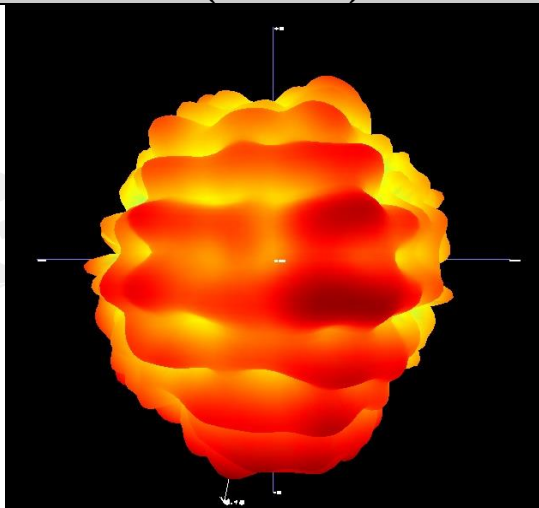
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EIRP (5500MHz) – YZ cut**



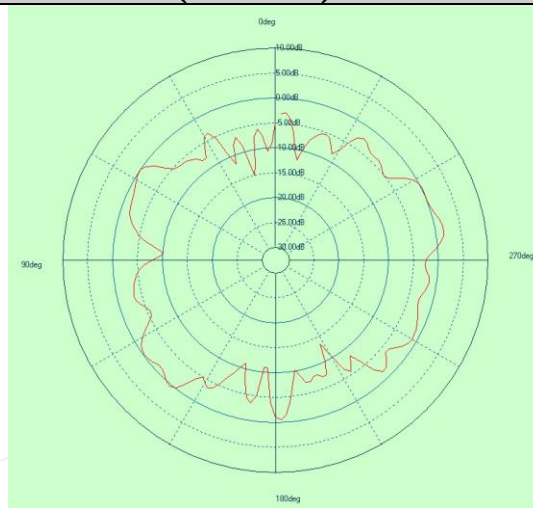
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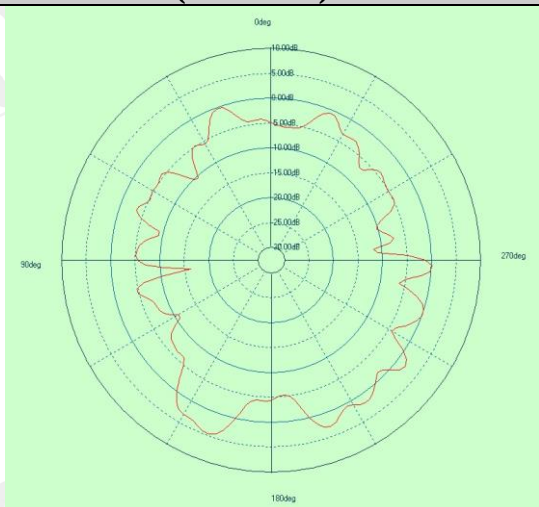
**Free Space  
EIRP (5825MHz) - 3D**



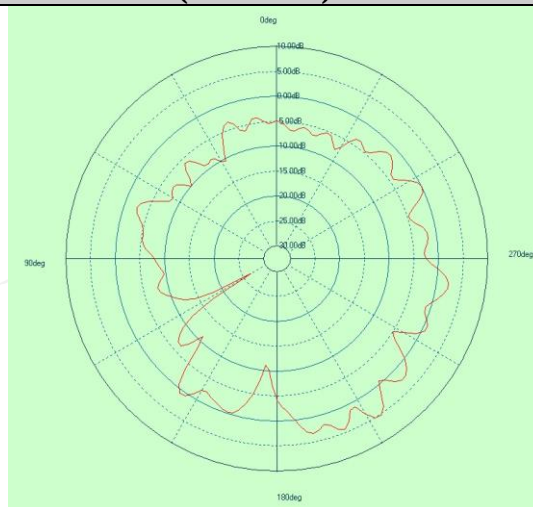
**Free Space  
EIRP (5825MHz) - XY cut**



**Free Space  
EIRP (5825MHz) - XZ cut**



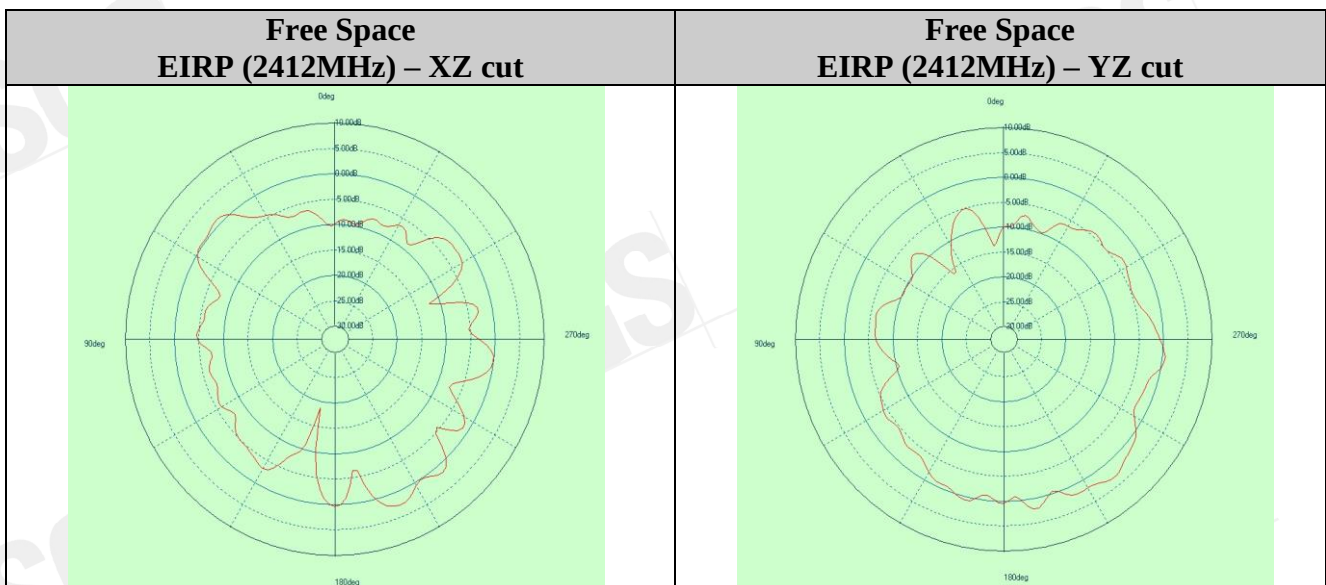
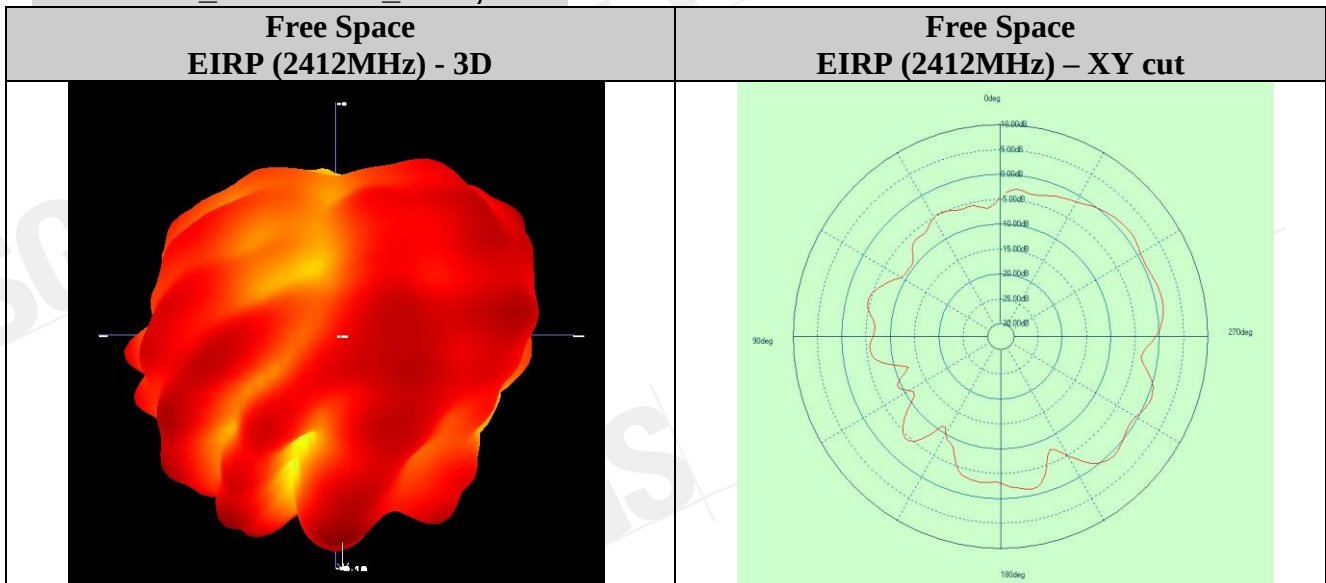
**Free Space  
EIRP (5825MHz) - YZ cut**



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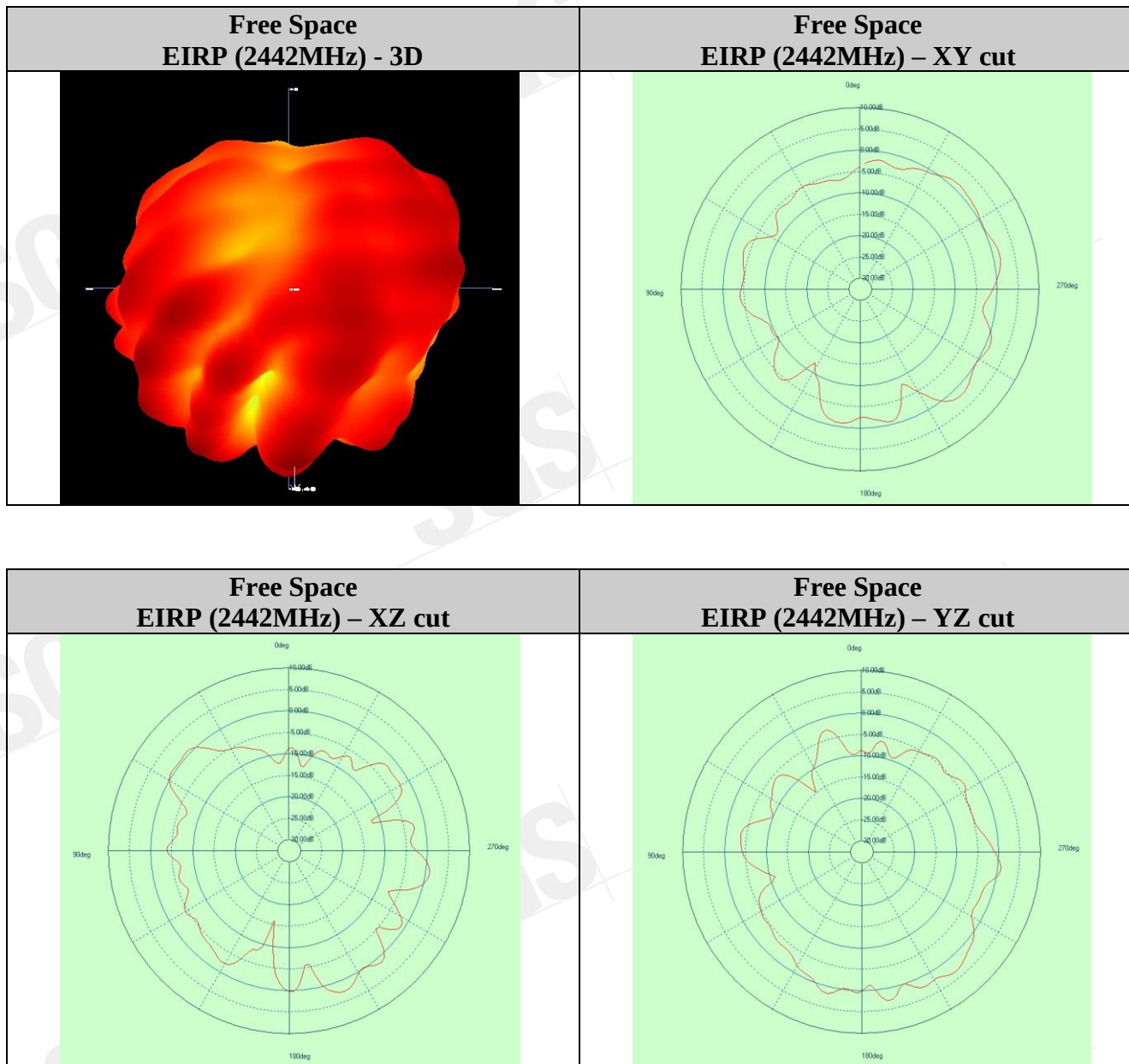
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## BOTH WIFI\_A and WIFI\_B/BT, dock



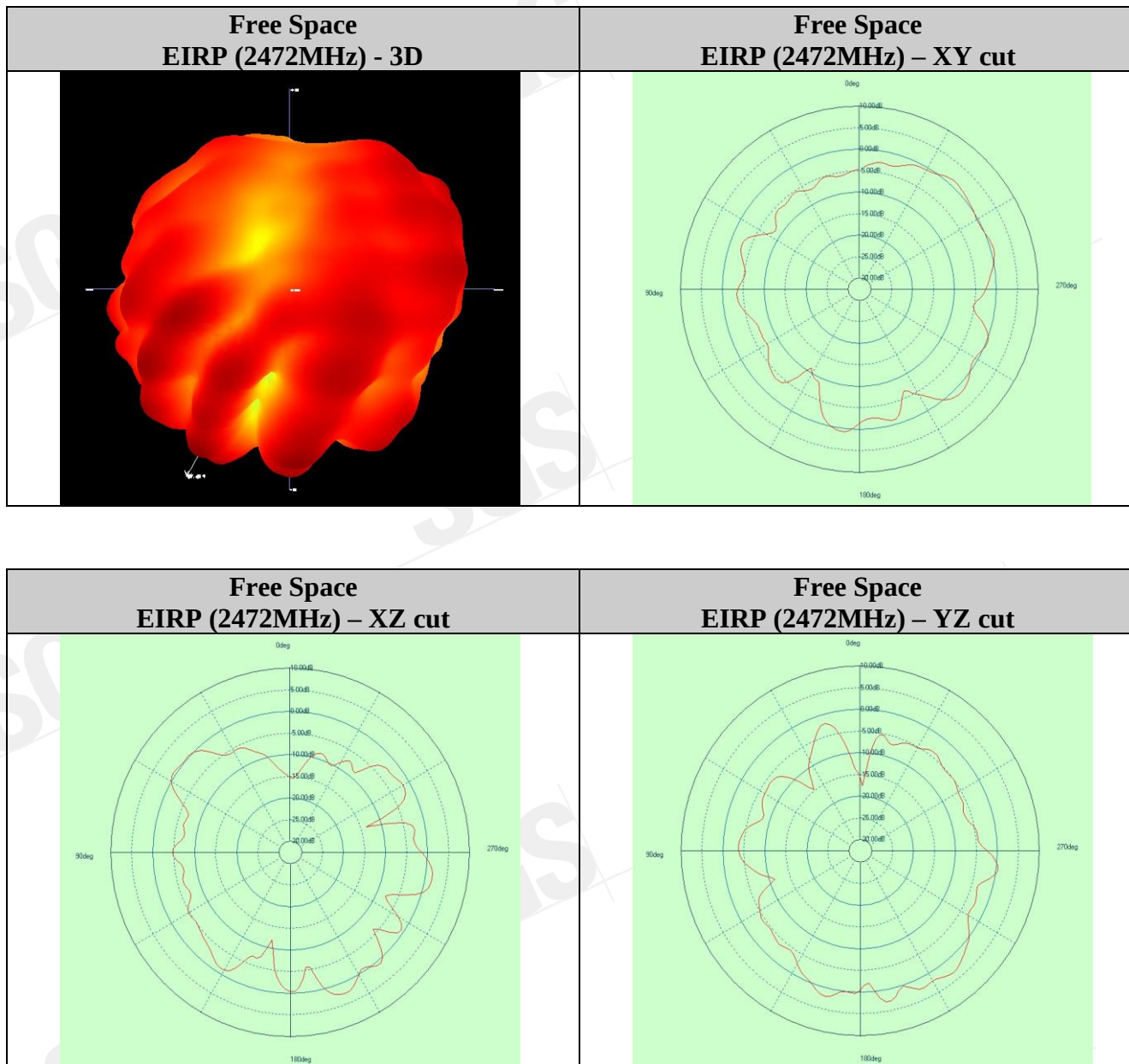
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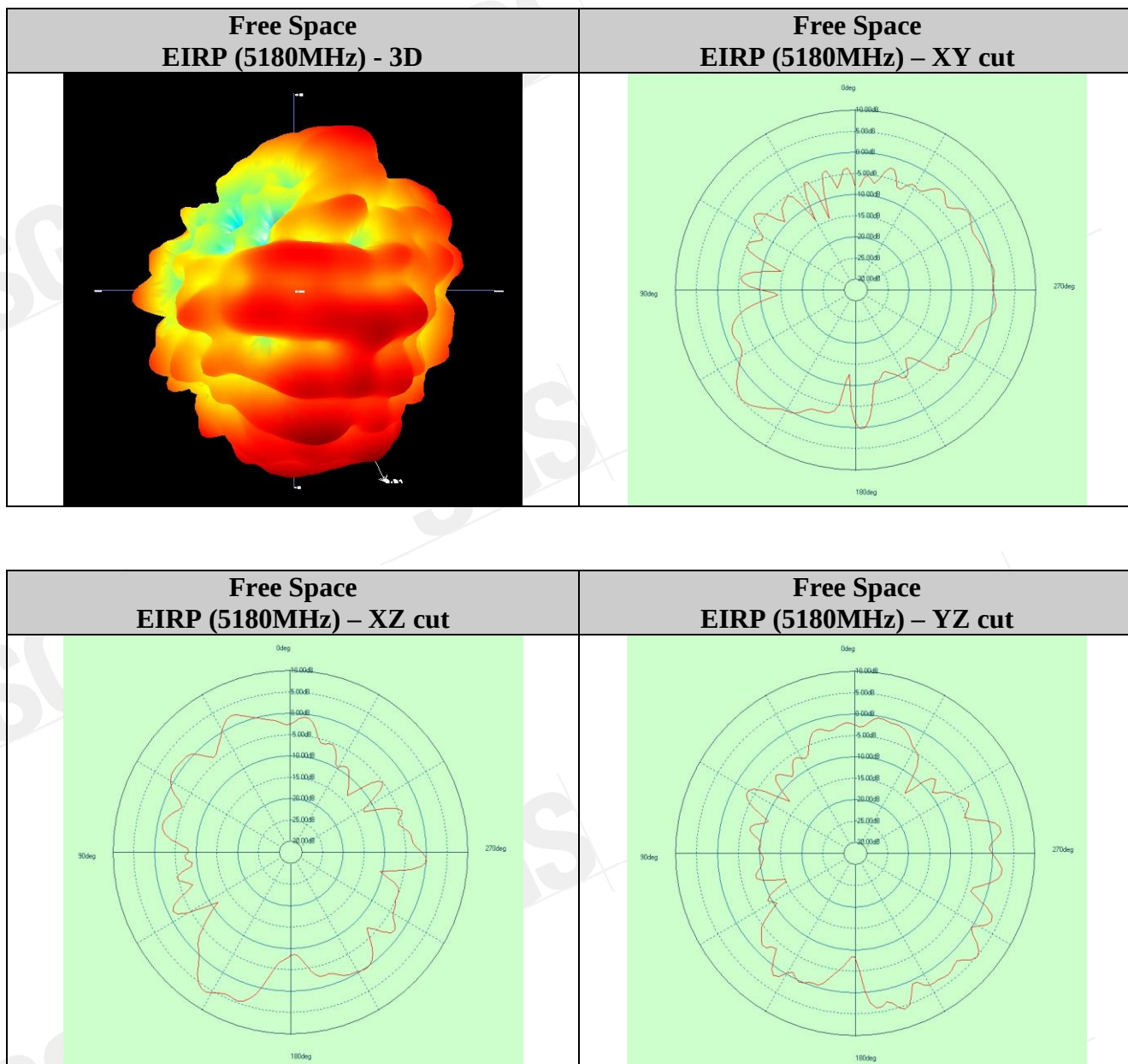
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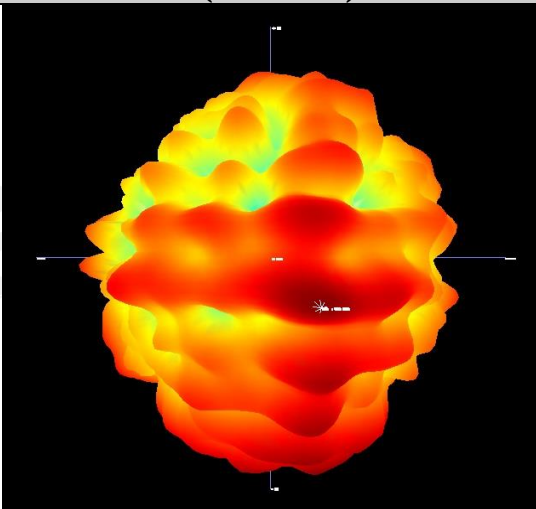
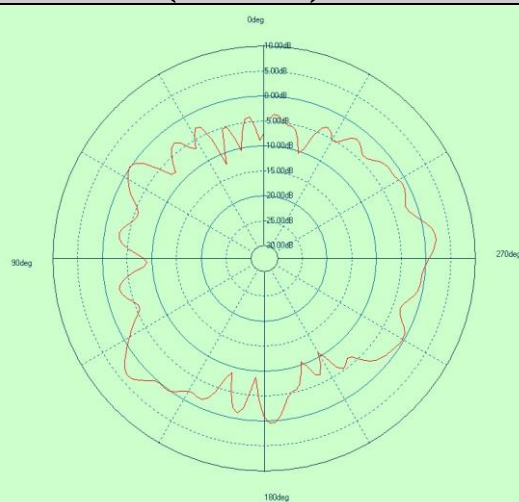
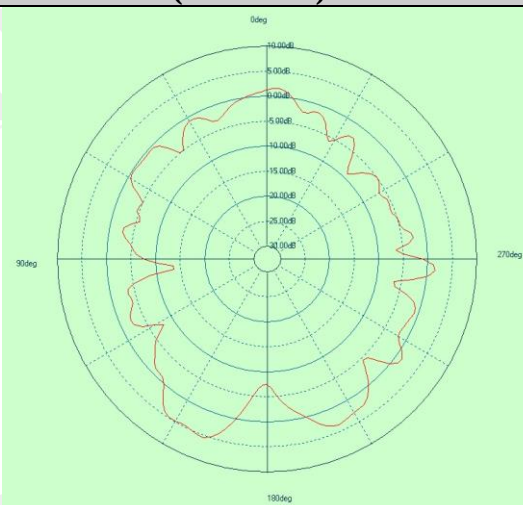
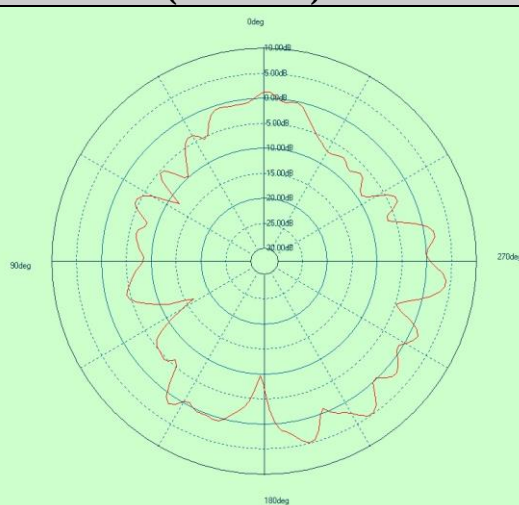
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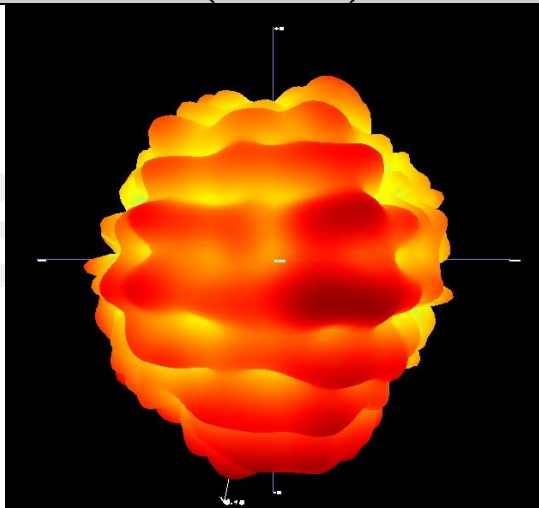
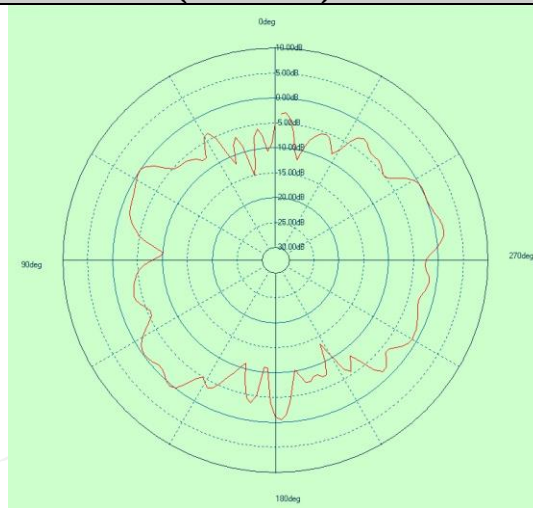
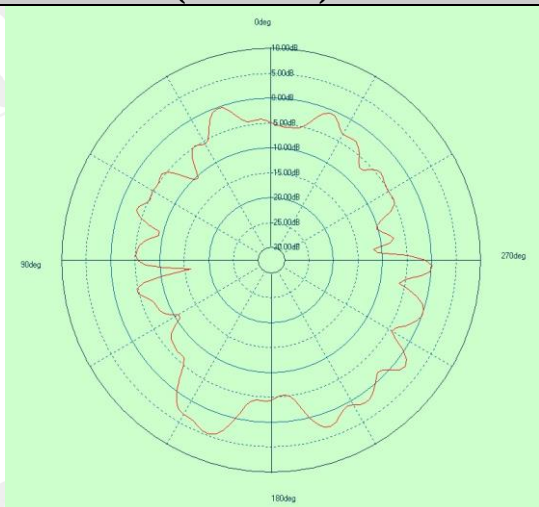
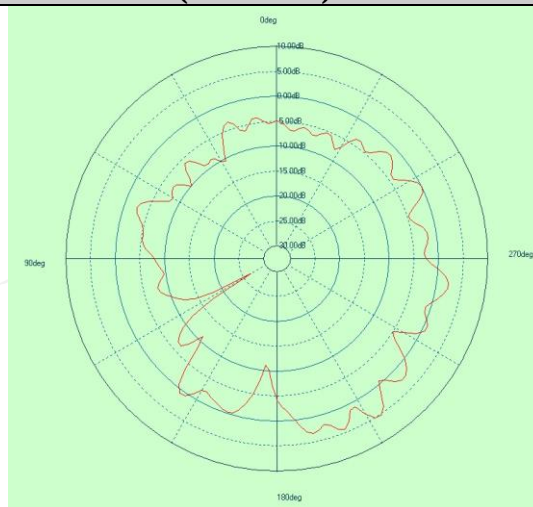
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**Free Space  
EIRP (5500MHz) - 3D****Free Space  
EIRP (5500MHz) – XY cut****Free Space  
EIRP (5500MHz) – XZ cut****Free Space  
EIRP (5500MHz) – YZ cut**

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**Free Space  
EIRP (5825MHz) - 3D****Free Space  
EIRP (5825MHz) - XY cut****Free Space  
EIRP (5825MHz) - XZ cut****Free Space  
EIRP (5825MHz) - YZ cut**

## End of Report

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