



# 承 认 书

## SPECIFICATION FOR APPROVAL

客 户 名 称

CUSTOMER NAME:

产 品 名 称

PRODUCT NAME: L46 圆形 2.4G5.8G 天线

客 户 料 号

CUSTOMER P/N:

晟达电子料号

SD P/N: SDL46WIFI6SJ300 REV: A

|              | MANUFACTURER<br>SIGNATURE | CUSTOMER<br>SIGNATURE |
|--------------|---------------------------|-----------------------|
| CHECKED BY:  |                           |                       |
| APPROVED BY: |                           |                       |
| DATE:        | 2023/2/14                 |                       |

深圳地址：深圳市龙岗区爱联社区嶂背创业四路汉光科技园 4 栋

东莞地址：东莞凤岗镇金凤凰工业区金鹏路 19 号都市智谷 1 栋 16 层 01

电话：0755-89985492

传真：0755-89916753

网址：www.szsdtx.com

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## 1. 1 规格表:

### 产品主要技术参数

| 主要技术指标           |                                                | Main technical specifications |                                                |
|------------------|------------------------------------------------|-------------------------------|------------------------------------------------|
| 频率范围<br>(MHZ)    | 2400-2500/5150-5850                            | Frequency<br>Range<br>(MHZ)   | 2400-2500/5150-5850                            |
| 特性阻抗( $\Omega$ ) | 50                                             | Impedance( $\Omega$ )         | 50                                             |
| 峰值增益(dBi)        | 2.5                                            | Gain(dBi)                     | 2.5                                            |
| 输出电压<br>驻波比      | $\leq 2.2\text{Max}$                           | VSWR                          | $\leq 2.2\text{Max}$                           |
| 电缆长度<br>(mm)     | $300 \pm 20$                                   | Line L Length                 | $300 \pm 20$                                   |
| 电缆规格             | RG174                                          | Cable<br>specification        | RG174                                          |
| 极化方式             | 垂直/水平                                          | Polarization                  | Vertical and horizontal                        |
| 连接方式             |                                                | Connector Type                |                                                |
| 物理性能             |                                                | Physical Properties           |                                                |
| 天线本体材料           | ABS                                            | Antenna Base                  | ABS                                            |
| 工作温度             | $-20^{\circ}\text{C} \sim +50^{\circ}\text{C}$ | Operating Temp                | $-20^{\circ}\text{C} \sim +50^{\circ}\text{C}$ |
| 湿度               | Humidity95%~100%RH                             | Humidity                      | Humidity95%~100%RH                             |

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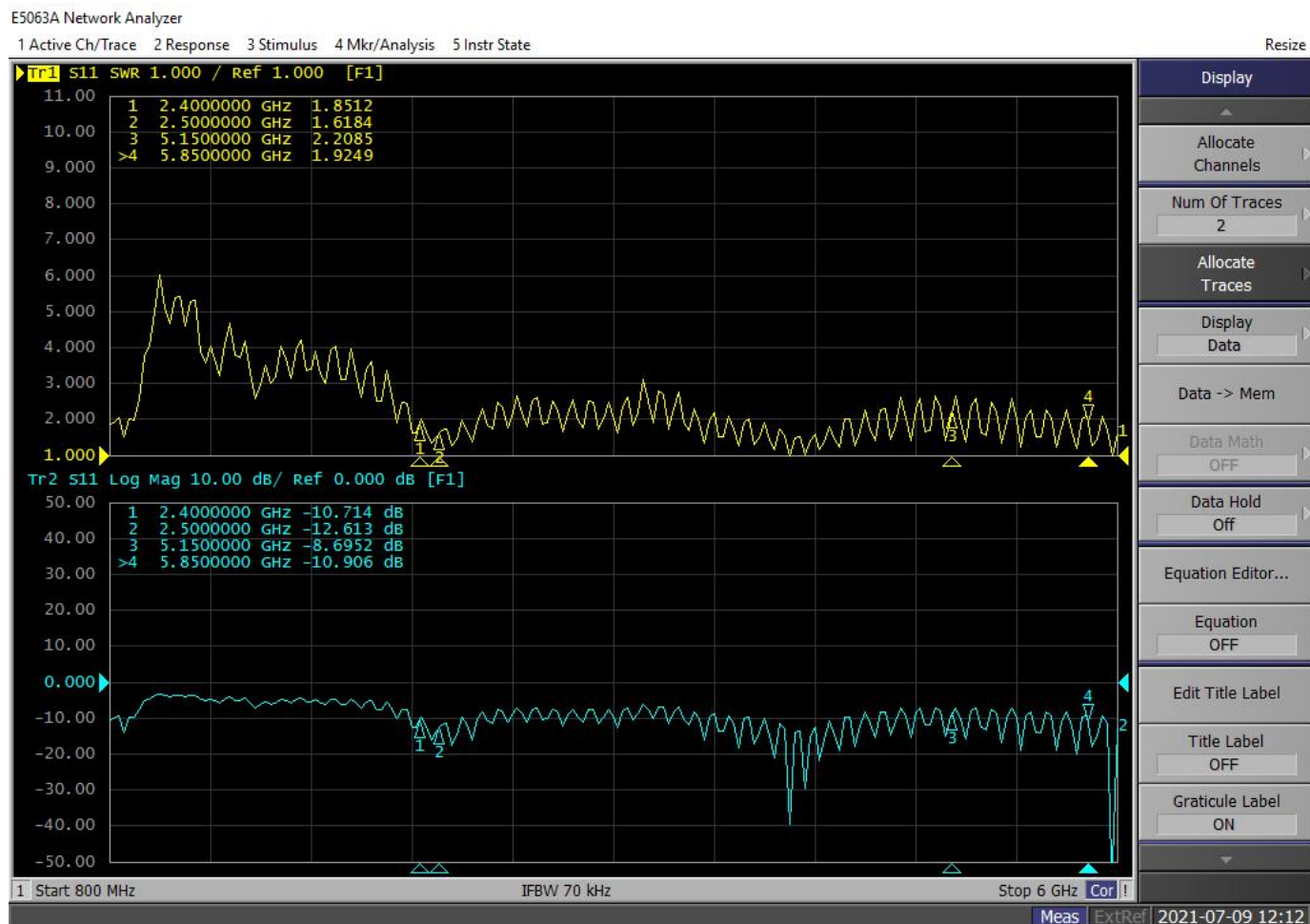
## 2. 成品图



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### 3. 测试报告

#### 3.1: 网络分析仪测试 Typical VSWR



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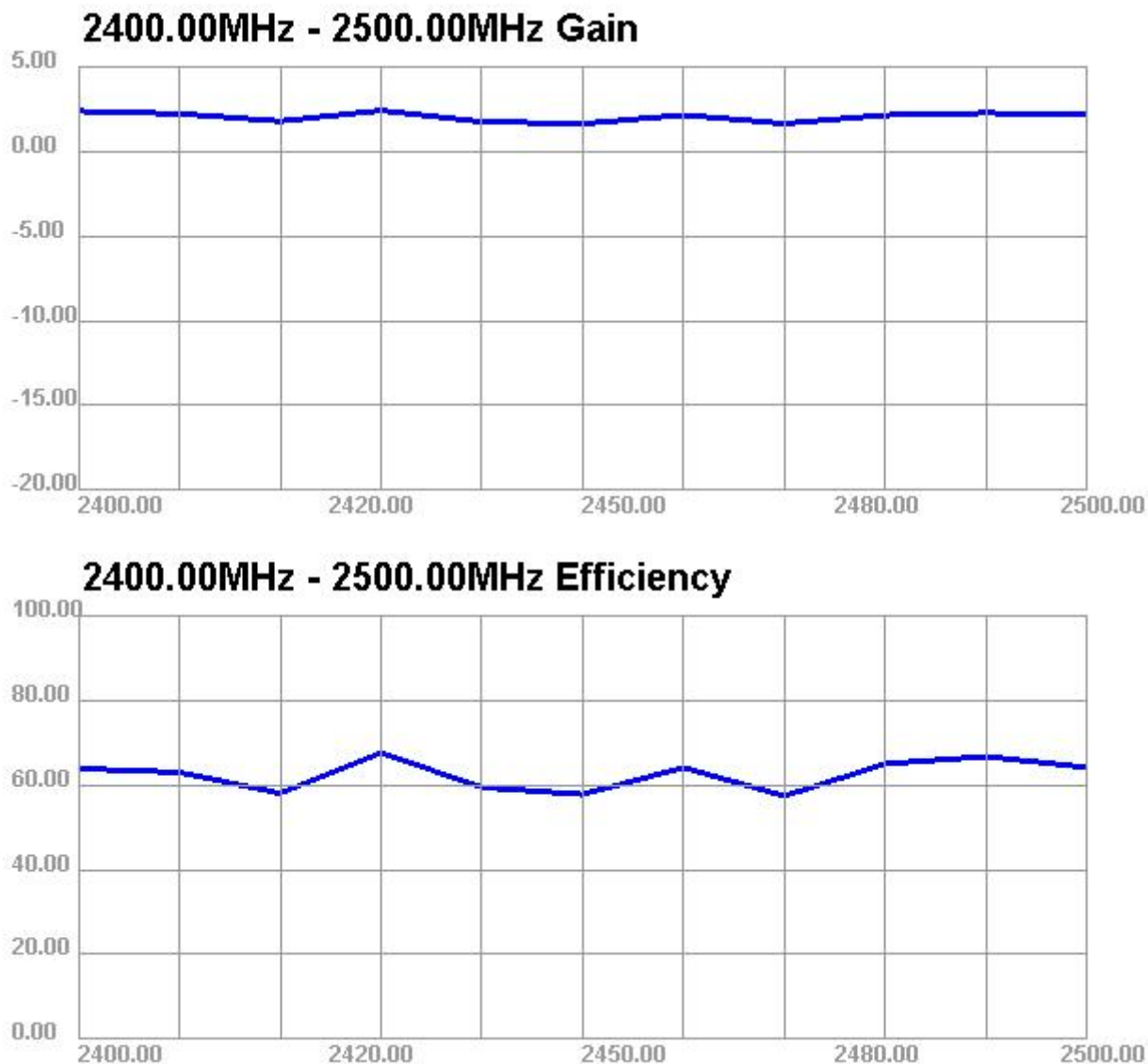
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### 3.2. 暗室2D, 3D Raditation Pattern



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| Passive Test For 2.4G |             |              |               |               |            |             |             |             |                      |                    |              |              |
|-----------------------|-------------|--------------|---------------|---------------|------------|-------------|-------------|-------------|----------------------|--------------------|--------------|--------------|
| Freq<br>(MHz)         | Effi<br>(%) | Effi<br>(dB) | Gain<br>(dBi) | Gain<br>(dBd) | UHS<br>(%) | DHIS<br>(%) | Max<br>(dB) | Min<br>(dB) | Directivity<br>(dBi) | Beamwidth<br>(3dB) | AttH<br>(dB) | AttV<br>(dB) |
| 2300                  | 56.31       | -2.49        | 2.51          | 0.36          | 25.545     | 30.763      | 2.51        | -15.59      | 5.01                 | 0                  | 45.58        | 45.42        |
| 2350                  | 58.07       | -2.36        | 2.44          | 0.29          | 25.477     | 32.589      | 2.44        | -13.84      | 4.8                  | 0                  | 45.5         | 45.31        |
| 2400                  | 57.27       | -2.42        | 2.33          | 0.18          | 24.056     | 33.216      | 2.33        | -13.66      | 4.75                 | 0                  | 45.97        | 45.77        |
| 2450                  | 54.91       | -2.6         | 2.2           | 0.05          | 22.513     | 32.393      | 2.2         | -12.15      | 4.81                 | 0                  | 45.54        | 45.4         |
| 2500                  | 57.49       | -2.4         | 2.38          | 0.23          | 24.27      | 33.218      | 2.38        | -12.19      | 4.79                 | 0                  | 45.88        | 45.75        |
| 2550                  | 56.94       | -2.45        | 2.28          | 0.13          | 26.037     | 30.901      | 2.28        | -18.66      | 4.72                 | 0                  | 45.65        | 45.5         |
| 2600                  | 57.23       | -2.42        | 2.2           | 0.05          | 27.926     | 29.304      | 2.2         | -16.39      | 4.62                 | 0                  | 45.95        | 45.8         |

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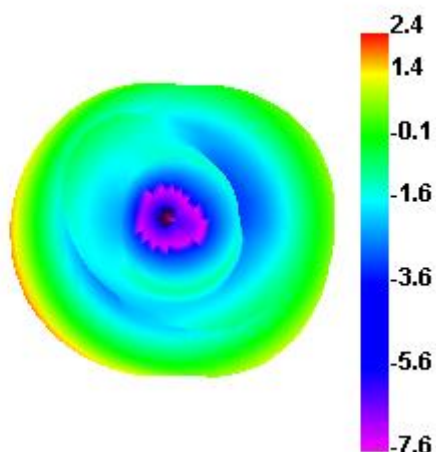
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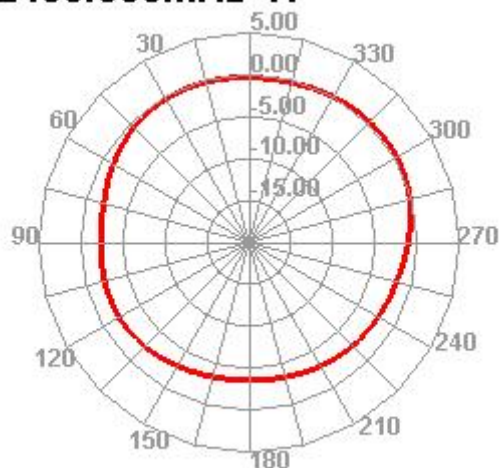
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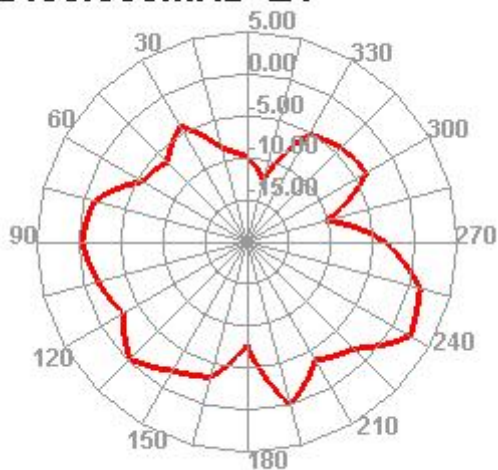
2400.000MHz



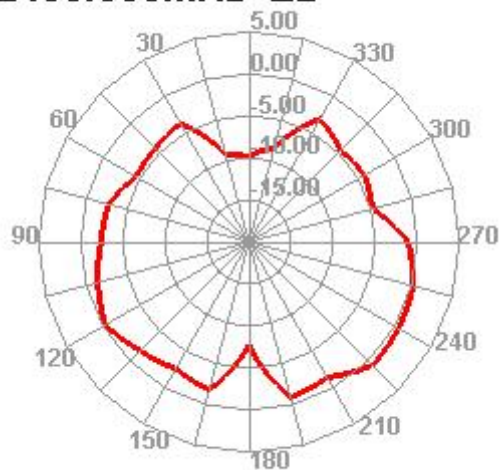
2400.000MHz H



2400.000MHz E1



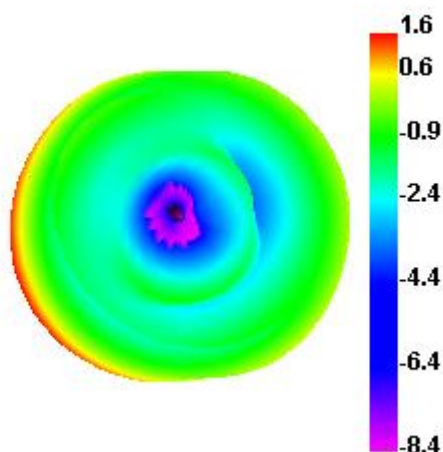
2400.000MHz E2



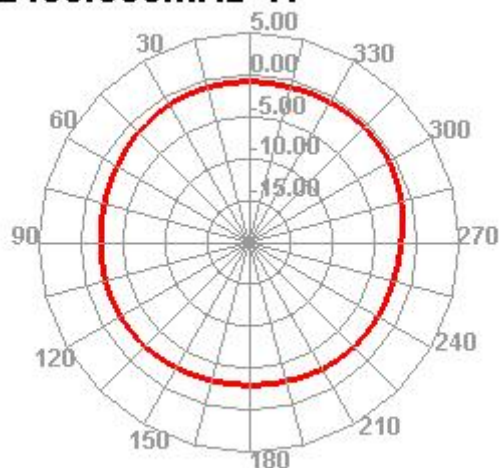
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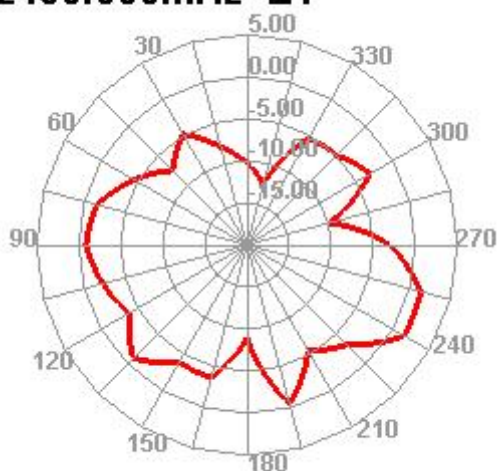
2450.000MHz



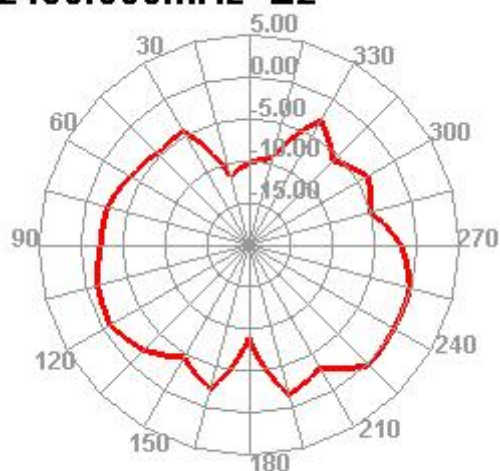
2450.000MHz H



2450.000MHz E1

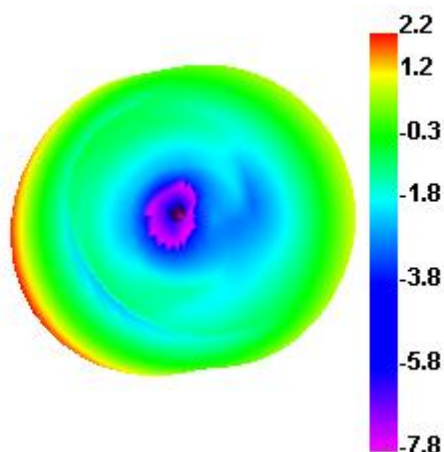


2450.000MHz E2

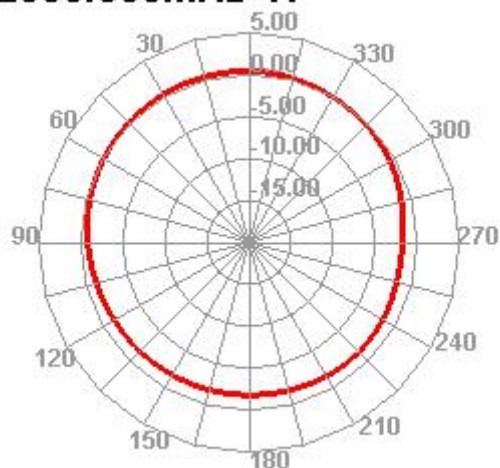


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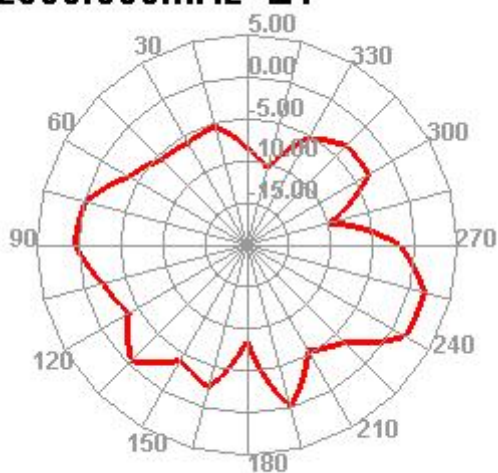
2500.000MHz



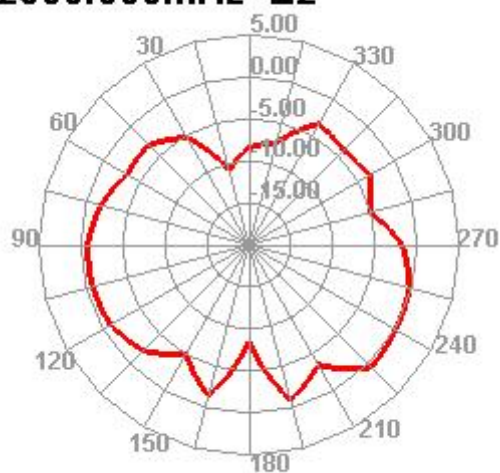
2500.000MHz H



2500.000MHz E1

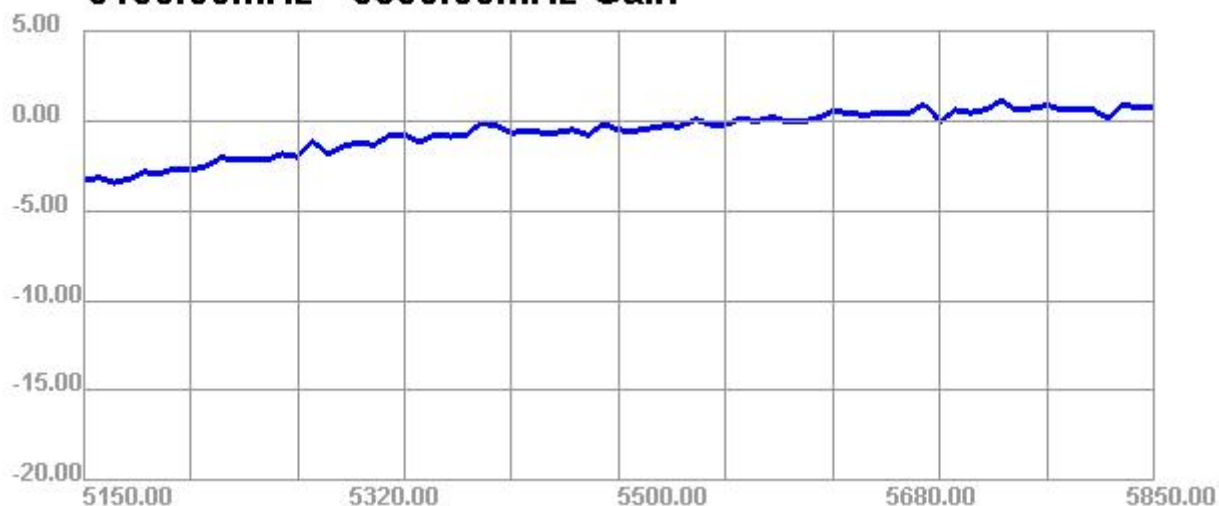


2500.000MHz E2

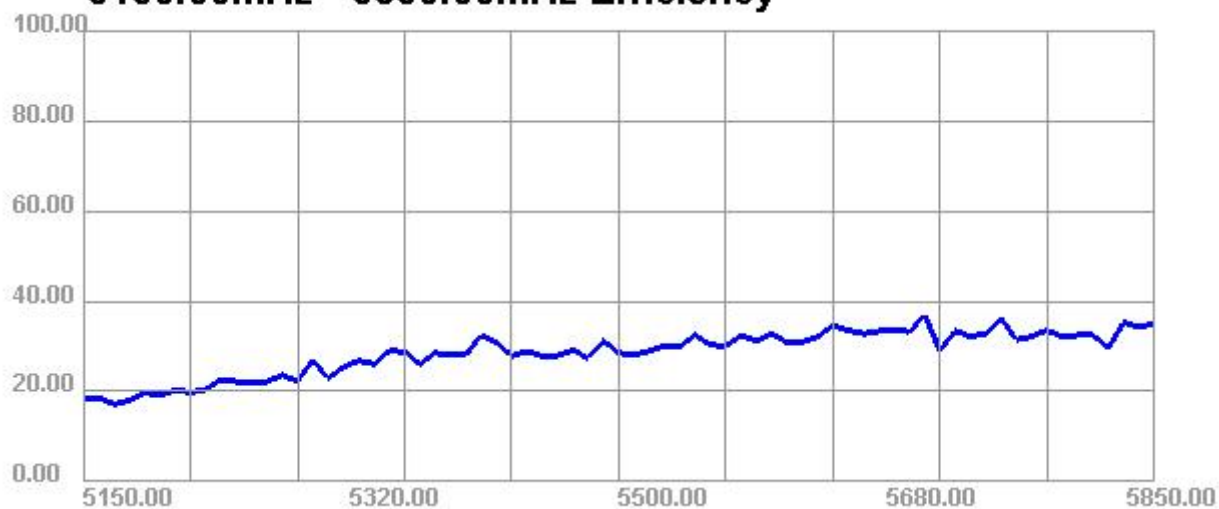


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**5150.00MHz - 5850.00MHz Gain**



**5150.00MHz - 5850.00MHz Efficiency**



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| Passive Test For 5.8G |             |              |               |               |            |            |             |             |                      |                    |              |              |
|-----------------------|-------------|--------------|---------------|---------------|------------|------------|-------------|-------------|----------------------|--------------------|--------------|--------------|
| Freq<br>(MHz)         | Effi<br>(%) | Effi<br>(dB) | Gain<br>(dBi) | Gain<br>(dBd) | UHS<br>(%) | DHS<br>(%) | Max<br>(dB) | Min<br>(dB) | Directivity<br>(dBi) | Beamwidth<br>(3dB) | AttH<br>(dB) | AttV<br>(dB) |
| 5150                  | 18.62       | -7.3         | -3.3          | -5.45         | 0          | 0          | -3.3        | -31.43      | 7.3                  | 30                 | 49.61        | 49.76        |
| 5160                  | 18.57       | -7.31        | -3.17         | -5.32         | 0          | 0          | -3.17       | -30.29      | 7.31                 | 30                 | 49.56        | 49.97        |
| 5170                  | 17.2        | -7.64        | -3.44         | -5.59         | 0          | 0          | -3.44       | -29.63      | 7.64                 | 30                 | 49.44        | 49.75        |
| 5180                  | 18.01       | -7.45        | -3.24         | -5.39         | 0          | 0          | -3.24       | -29.71      | 7.45                 | 30                 | 49.48        | 49.83        |
| 5190                  | 19.74       | -7.05        | -2.85         | -5            | 0          | 0          | -2.85       | -29.79      | 7.05                 | 30                 | 49.53        | 49.84        |
| 5200                  | 19.19       | -7.17        | -2.95         | -5.1          | 0          | 0          | -2.95       | -30.89      | 7.17                 | 30                 | 49.63        | 49.96        |
| 5210                  | 20.37       | -6.91        | -2.64         | -4.79         | 0          | 0          | -2.64       | -30.23      | 6.91                 | 30                 | 49.89        | 50.14        |
| 5220                  | 19.77       | -7.04        | -2.72         | -4.87         | 0          | 0          | -2.72       | -28.94      | 7.04                 | 30                 | 49.65        | 49.96        |
| 5230                  | 20.45       | -6.89        | -2.53         | -4.68         | 0          | 0          | -2.53       | -27.79      | 6.89                 | 30                 | 50.1         | 50.4         |
| 5240                  | 22.65       | -6.45        | -2.07         | -4.22         | 0          | 0          | -2.07       | -26.76      | 6.45                 | 30                 | 49.79        | 49.97        |
| 5250                  | 22.19       | -6.54        | -2.16         | -4.31         | 0          | 0          | -2.16       | -27.18      | 6.54                 | 30                 | 49.73        | 49.93        |
| 5260                  | 22.22       | -6.53        | -2.17         | -4.32         | 0          | 0          | -2.17       | -27.87      | 6.53                 | 30                 | 49.98        | 50.11        |
| 5270                  | 22.2        | -6.54        | -2.16         | -4.31         | 0          | 0          | -2.16       | -27.52      | 6.54                 | 30                 | 49.94        | 49.97        |
| 5280                  | 23.58       | -6.27        | -1.85         | -4            | 0          | 0          | -1.85       | -26.11      | 6.27                 | 30                 | 49.91        | 49.96        |
| 5290                  | 22.42       | -6.49        | -1.99         | -4.14         | 0          | 0          | -1.99       | -25.08      | 6.49                 | 30                 | 50.03        | 50.03        |
| 5300                  | 26.85       | -5.71        | -1.15         | -3.3          | 0          | 0          | -1.15       | -23.48      | 5.71                 | 30                 | 50.25        | 50.17        |
| 5310                  | 22.92       | -6.4         | -1.85         | -4            | 0          | 0          | -1.85       | -24.01      | 6.4                  | 30                 | 49.92        | 49.93        |
| 5320                  | 25.46       | -5.94        | -1.42         | -3.57         | 0          | 0          | -1.42       | -23.81      | 5.94                 | 45                 | 50.75        | 50.61        |
| 5330                  | 26.81       | -5.72        | -1.23         | -3.38         | 0          | 0          | -1.23       | -23.57      | 5.72                 | 45                 | 50.01        | 49.93        |
| 5340                  | 26.08       | -5.84        | -1.34         | -3.49         | 0          | 0          | -1.34       | -23.5       | 5.84                 | 45                 | 50.38        | 50.29        |
| 5350                  | 28.97       | -5.38        | -0.82         | -2.97         | 0          | 0          | -0.82       | -22.29      | 5.38                 | 45                 | 50.47        | 50.32        |
| 5360                  | 28.84       | -5.4         | -0.8          | -2.95         | 0          | 0          | -0.8        | -21.85      | 5.4                  | 30                 | 50.28        | 50.15        |
| 5370                  | 26.07       | -5.84        | -1.19         | -3.34         | 0          | 0          | -1.19       | -23.44      | 5.84                 | 45                 | 50.53        | 50.38        |
| 5380                  | 28.55       | -5.44        | -0.79         | -2.94         | 0          | 0          | -0.79       | -23.74      | 5.44                 | 45                 | 50.39        | 50.29        |
| 5390                  | 28.07       | -5.52        | -0.87         | -3.02         | 0          | 0          | -0.87       | -23.58      | 5.52                 | 45                 | 50.26        | 50.1         |
| 5400                  | 28.11       | -5.51        | -0.81         | -2.96         | 0          | 0          | -0.81       | -22.47      | 5.51                 | 45                 | 50.75        | 50.75        |
| 5410                  | 32.42       | -4.89        | -0.14         | -2.29         | 0          | 0          | -0.14       | -20.94      | 4.89                 | 30                 | 50.48        | 50.28        |
| 5420                  | 30.91       | -5.1         | -0.29         | -2.44         | 0          | 0          | -0.29       | -21.09      | 5.1                  | 30                 | 50.4         | 50.4         |
| 5430                  | 27.93       | -5.54        | -0.7          | -2.85         | 0          | 0          | -0.7        | -22         | 5.54                 | 30                 | 50.07        | 50.04        |
| 5440                  | 28.85       | -5.4         | -0.53         | -2.68         | 0          | 0          | -0.53       | -22.82      | 5.4                  | 30                 | 50.04        | 49.98        |
| 5450                  | 27.86       | -5.55        | -0.67         | -2.82         | 0          | 0          | -0.67       | -23.22      | 5.55                 | 30                 | 49.99        | 49.99        |
| 5460                  | 27.98       | -5.53        | -0.65         | -2.8          | 0          | 0          | -0.65       | -22.55      | 5.53                 | 30                 | 50.18        | 50.19        |
| 5470                  | 29.19       | -5.35        | -0.51         | -2.66         | 0          | 0          | -0.51       | -21.6       | 5.35                 | 30                 | 50.24        | 50.2         |
| 5480                  | 27.4        | -5.62        | -0.79         | -2.94         | 0          | 0          | -0.79       | -22.13      | 5.62                 | 30                 | 50.28        | 50.4         |
| 5490                  | 31.25       | -5.05        | -0.18         | -2.33         | 0          | 0          | -0.18       | -21.95      | 5.05                 | 30                 | 50.27        | 50.26        |

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|      |       |       |       |       |   |   |       |        |      |    |       |       |
|------|-------|-------|-------|-------|---|---|-------|--------|------|----|-------|-------|
| 5500 | 28.54 | -5.45 | -0.52 | -2.67 | 0 | 0 | -0.52 | -22.91 | 5.45 | 30 | 50.18 | 50.21 |
| 5510 | 28.04 | -5.52 | -0.57 | -2.72 | 0 | 0 | -0.57 | -23.75 | 5.52 | 30 | 50.17 | 50.22 |
| 5520 | 29.05 | -5.37 | -0.43 | -2.58 | 0 | 0 | -0.43 | -25.08 | 5.37 | 30 | 50.44 | 50.48 |
| 5530 | 30.14 | -5.21 | -0.29 | -2.44 | 0 | 0 | -0.29 | -27.76 | 5.21 | 30 | 50.29 | 50.31 |
| 5540 | 29.99 | -5.23 | -0.32 | -2.47 | 0 | 0 | -0.32 | -31.36 | 5.23 | 30 | 50.46 | 50.42 |
| 5550 | 32.59 | -4.87 | 0.07  | -2.08 | 0 | 0 | 0.07  | -32.77 | 4.87 | 30 | 50.38 | 50.52 |
| 5560 | 30.28 | -5.19 | -0.22 | -2.37 | 0 | 0 | -0.22 | -30.3  | 5.19 | 30 | 50.81 | 50.62 |
| 5570 | 30.17 | -5.2  | -0.22 | -2.37 | 0 | 0 | -0.22 | -28.08 | 5.2  | 30 | 50.51 | 50.68 |
| 5580 | 32.42 | -4.89 | 0.11  | -2.04 | 0 | 0 | 0.11  | -26.34 | 4.89 | 30 | 51    | 50.75 |
| 5590 | 31.14 | -5.07 | -0.04 | -2.19 | 0 | 0 | -0.04 | -25.33 | 5.07 | 30 | 50.32 | 50.36 |
| 5600 | 32.9  | -4.83 | 0.2   | -1.95 | 0 | 0 | 0.2   | -23.97 | 4.83 | 30 | 50.56 | 50.48 |
| 5610 | 30.9  | -5.1  | -0.07 | -2.22 | 0 | 0 | -0.07 | -23.09 | 5.1  | 30 | 50.38 | 50.34 |
| 5620 | 31.05 | -5.08 | -0.04 | -2.19 | 0 | 0 | -0.04 | -21.99 | 5.08 | 30 | 50.62 | 50.44 |
| 5630 | 32.04 | -4.94 | 0.14  | -2.01 | 0 | 0 | 0.14  | -21.36 | 4.94 | 30 | 50.52 | 50.4  |
| 5640 | 34.74 | -4.59 | 0.55  | -1.6  | 0 | 0 | 0.55  | -20.54 | 4.59 | 30 | 51.01 | 50.94 |
| 5650 | 33.54 | -4.74 | 0.42  | -1.73 | 0 | 0 | 0.42  | -20.47 | 4.74 | 30 | 50.75 | 50.65 |
| 5660 | 32.83 | -4.84 | 0.32  | -1.83 | 0 | 0 | 0.32  | -20.82 | 4.84 | 30 | 51.02 | 50.93 |
| 5670 | 33.36 | -4.77 | 0.4   | -1.75 | 0 | 0 | 0.4   | -20.91 | 4.77 | 30 | 50.79 | 50.58 |
| 5680 | 33.79 | -4.71 | 0.46  | -1.69 | 0 | 0 | 0.46  | -20.66 | 4.71 | 30 | 50.85 | 50.74 |
| 5690 | 33.24 | -4.78 | 0.43  | -1.72 | 0 | 0 | 0.43  | -20.27 | 4.78 | 30 | 50.8  | 50.75 |
| 5700 | 36.87 | -4.33 | 0.94  | -1.21 | 0 | 0 | 0.94  | -19.26 | 4.33 | 30 | 51.01 | 50.89 |
| 5710 | 29.08 | -5.36 | -0.04 | -2.19 | 0 | 0 | -0.04 | -20.01 | 5.36 | 30 | 51.04 | 50.9  |
| 5720 | 33.46 | -4.76 | 0.59  | -1.56 | 0 | 0 | 0.59  | -19.25 | 4.76 | 30 | 50.9  | 50.82 |
| 5730 | 32.2  | -4.92 | 0.45  | -1.7  | 0 | 0 | 0.45  | -19.53 | 4.92 | 30 | 51.15 | 51.09 |
| 5740 | 32.82 | -4.84 | 0.61  | -1.54 | 0 | 0 | 0.61  | -19.56 | 4.84 | 30 | 50.89 | 50.87 |
| 5750 | 36.21 | -4.41 | 1.12  | -1.03 | 0 | 0 | 1.12  | -19.31 | 4.41 | 15 | 50.87 | 50.75 |
| 5760 | 31.45 | -5.02 | 0.59  | -1.56 | 0 | 0 | 0.59  | -20.24 | 5.02 | 15 | 50.93 | 50.81 |
| 5770 | 32.19 | -4.92 | 0.7   | -1.45 | 0 | 0 | 0.7   | -20.16 | 4.92 | 15 | 50.7  | 50.72 |
| 5780 | 33.62 | -4.73 | 0.85  | -1.3  | 0 | 0 | 0.85  | -20.75 | 4.73 | 15 | 50.78 | 50.75 |
| 5790 | 32    | -4.95 | 0.6   | -1.55 | 0 | 0 | 0.6   | -21.01 | 4.95 | 15 | 50.71 | 50.67 |
| 5800 | 32.5  | -4.88 | 0.63  | -1.52 | 0 | 0 | 0.63  | -20.66 | 4.88 | 15 | 50.85 | 50.75 |
| 5810 | 32.5  | -4.88 | 0.61  | -1.54 | 0 | 0 | 0.61  | -20.66 | 4.88 | 15 | 50.82 | 50.83 |
| 5820 | 29.58 | -5.29 | 0.15  | -2    | 0 | 0 | 0.15  | -20.94 | 5.29 | 15 | 51.28 | 51.2  |
| 5830 | 35.32 | -4.52 | 0.89  | -1.26 | 0 | 0 | 0.89  | -20.76 | 4.52 | 15 | 50.98 | 51.06 |
| 5840 | 34.21 | -4.66 | 0.71  | -1.44 | 0 | 0 | 0.71  | -21.82 | 4.66 | 15 | 51.5  | 51.25 |
| 5850 | 35.07 | -4.55 | 0.81  | -1.34 | 0 | 0 | 0.81  | -21.63 | 4.55 | 15 | 51.03 | 51.11 |

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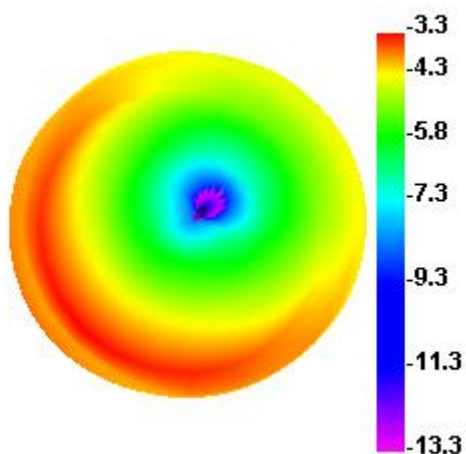
电话：0755-89985492

传真：0755-89916753

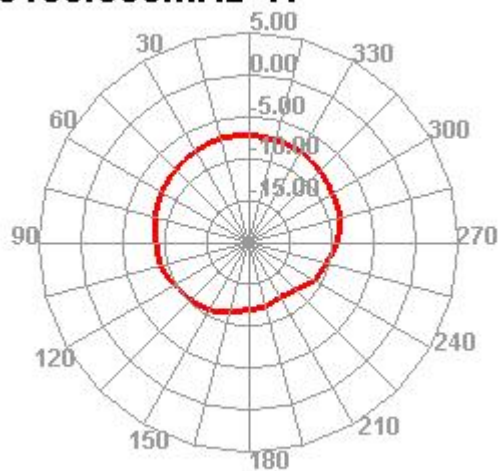
网址：www.szsdtx.com



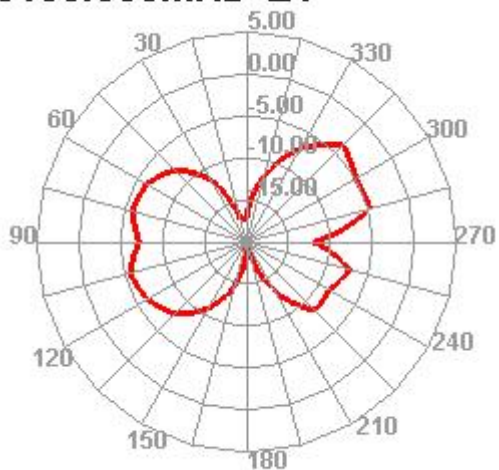
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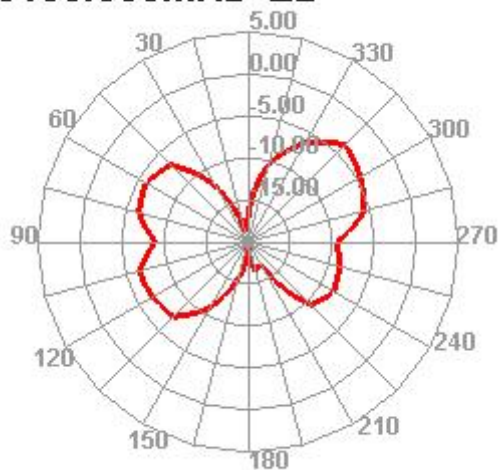
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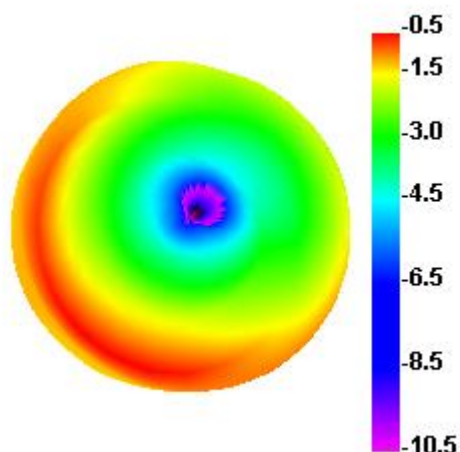


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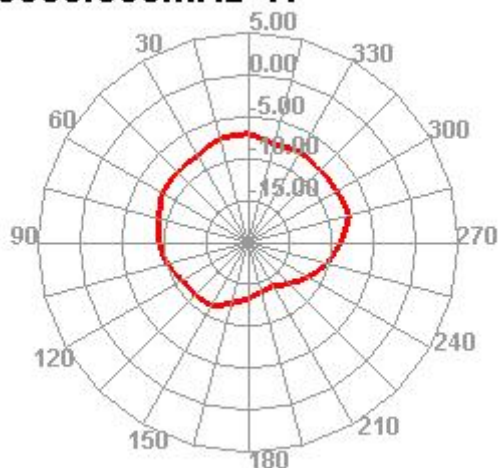


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电话：0755-89985492  
传真：0755-89916753  
网址：[www.szsdtx.com](http://www.szsdtx.com)

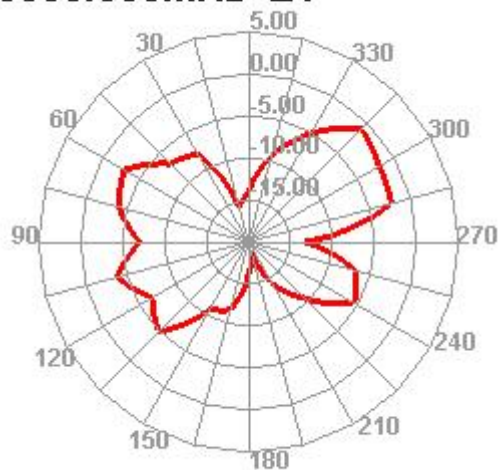
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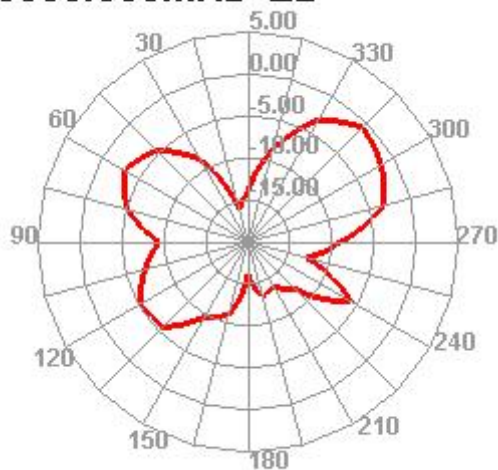
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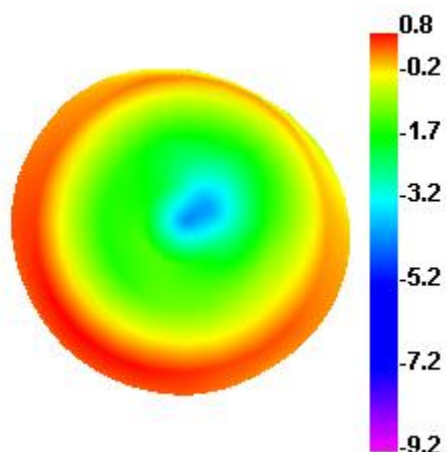


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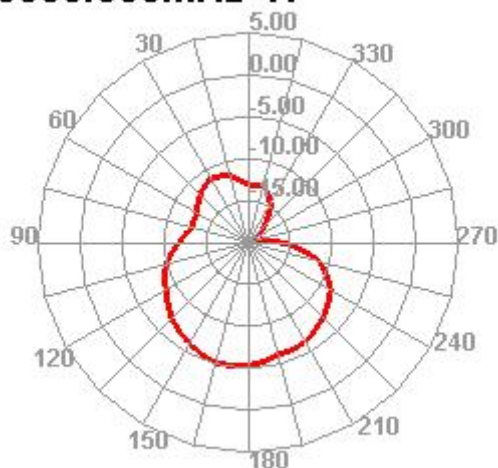


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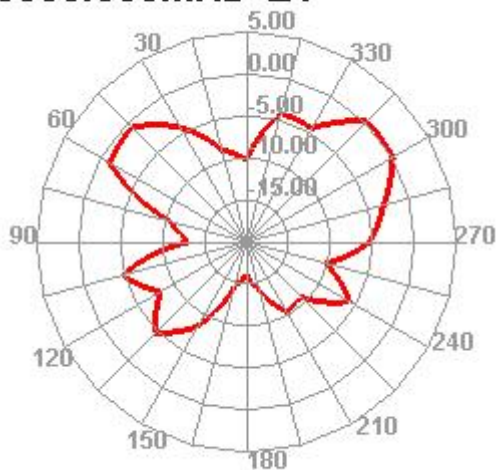
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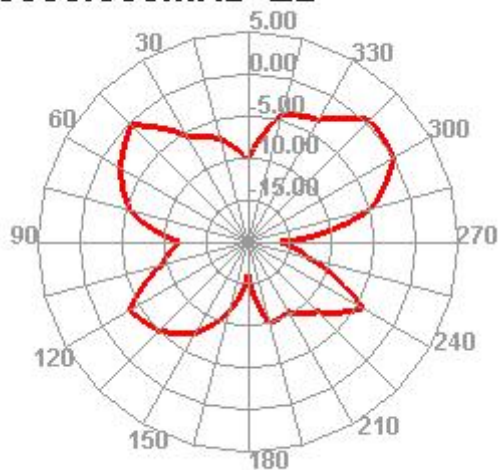
5850.000MHz H



5850.000MHz E1



5850.000MHz E2



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