

# APPROVAL SHEET

|                                                                                                                                                                   |                         |                               |                              |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|-------------------------------|------------------------------|
| 客 户<br>(Customer)                                                                                                                                                 |                         |                               |                              |
| 日 期<br>(Date)                                                                                                                                                     | 2024-7-9                |                               |                              |
| 品名规格<br>(Description)                                                                                                                                             | IPEX-FPC-L60mm 2.4-5.8G |                               |                              |
| 料 号<br>(Part No.)                                                                                                                                                 |                         |                               |                              |
| 供应商承认签章：                                                                                                                                                          |                         |                               |                              |
| 工 程<br>ENGINEERING DEPARTMENT                                                                                                                                     | 品 保<br>QC DEPARTMENT    | 业 务<br>SALES DEPARTMENT       |                              |
| 陈湘柳                                                                                                                                                               | 徐晓宣                     |                               |                              |
| 客户承认签章：                                                                                                                                                           |                         |                               |                              |
| 工 程<br>ENGINEERING DEPARTMENT                                                                                                                                     | 品 保<br>QC DEPARTMENT    | 生 产<br>MANUFACTORY DEPARTMENT | 采 购<br>PURCHASING DEPARTMENT |
|                                                                                                                                                                   |                         |                               |                              |
| 批示： <input type="checkbox"/> 接受 <input type="checkbox"/> 有条件接受<br>Instructions: <input type="checkbox"/> accepted <input type="checkbox"/> conditional acceptance |                         |                               |                              |
|                                                                                                                                                                   |                         |                               |                              |

※ 感谢给予敝公司送样承认之机会. 如惠蒙承认通过, 烦请将此表签回敝公司.

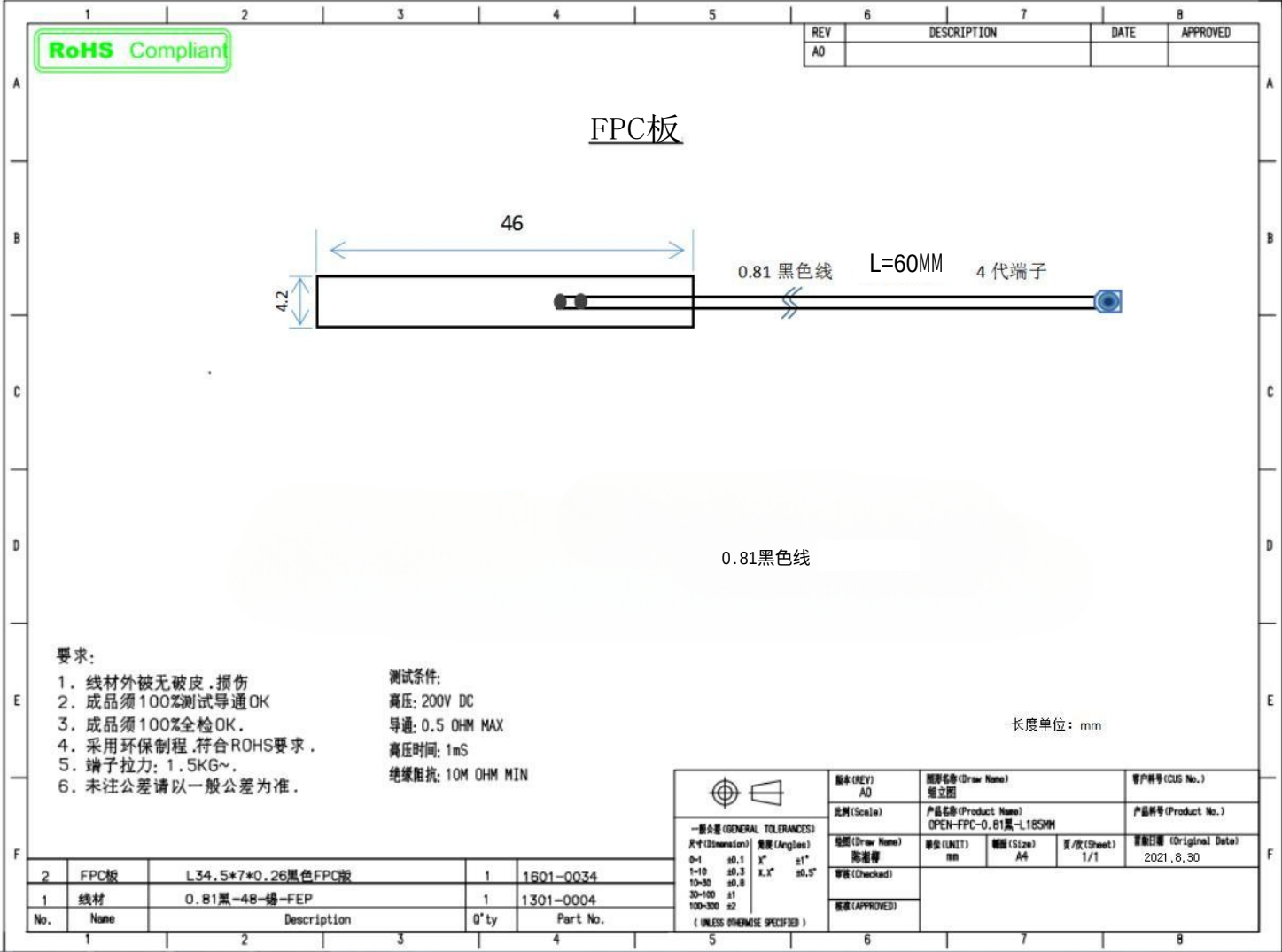
OWE GRATITUDE TO GIVE US THE OPPORTUNITY OF SAMPLE APPROVAL. PLEASE RETURN THIS FROM TO US AFTER YOURS ACCEPT.

# Electrical Specifications

| 电 性 能 指 标 |              | Electrical Specifications |             |
|-----------|--------------|---------------------------|-------------|
| 频率范围      | 2400-5800MHZ | Frequency Range           | 24005800MHZ |
| 电压驻波比     | ≤1.5         | VSWR                      | ≤1.5        |
| 输入阻抗      | 50 Ω         | Input Impedance           | 50 Ω        |
| 最大输入功率    | 50W          | Maximum Input Power       | 50W         |
| 机 械 指 标   |              | Mechanical Specifications |             |
| 连接器接口     | IPEX MHF4    | Antenna Color             | IPEX MHF4   |
| 线材        | RG0.81       | Cable                     | RG0.81      |
| 线材颜色      | 黑色           | Cable Color               | 黑色          |
| 接口形式      | I-PEX        | Input connector           | I-PEX       |
| 长度        | 6 0 mm       | Length                    | 6 0 mm      |
| 工作温度      | -40℃~+85℃    | Working Temperature       | -40℃~+85℃   |
| 工作湿度      | 20~80%       | Working Humidity          | 20~80%      |

实物图片：





## 1. Scope:

This specification covers FEP insulated High-Frequency coaxial cable for internal wiring of electronic equipment.

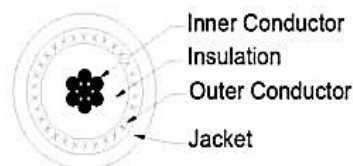
USE: Internal wiring of Class 2 Circuits of Electronic Equipment.

## 2. Construction :

| Item            | Unit           | Spec. Value          |
|-----------------|----------------|----------------------|
| Inner Conductor | Material       | Silver plated copper |
|                 | Construction   | No./mm               |
|                 | Dia.(approx)   | mm                   |
| Insulation      | Material       | FEP                  |
|                 | Nom. Thickness | mm                   |
|                 | Dia.(approx)   | mm                   |
|                 | Color          | Natural              |
| Outer Conductor | Type           | Braid                |
|                 | Material       | Tinned copper        |
|                 | construction   | CarrierxEndsxmm      |
|                 | Coverage       | Min.90%              |
|                 | Dia.(approx)   | mm                   |
| Jacket          | Material       | FEP                  |
|                 | Nom. Thickness | mm                   |
|                 | Color          | Upon your request    |
|                 | Dia.(approx)   | mm                   |

## 3. Characteristics :

| Test Item                            | Unit           | Specified Value                                        | Note                               |
|--------------------------------------|----------------|--------------------------------------------------------|------------------------------------|
| Appearance                           | -              | Faultless in visible                                   | -                                  |
| Temperature rating                   | °C             | 150                                                    | -                                  |
| Voltage rating                       | V              | 250                                                    | -                                  |
| Inner conductor resistance(at 20°C ) | $\Omega$ /km   | Max.1400                                               | At 20°C                            |
| Insulation resistance 1> (at 20°C )  | M $\Omega$ -km | Min.1000                                               | At 20°C                            |
| Dielectric strength                  | -              | Dielectric core : No breakdown at AC1.5KV for 0.15sec. | Spark test                         |
|                                      | -              | Jacket : No breakdown at AC 1.5KV for 0.15sec.         | Spark test                         |
|                                      | -              | No breakdown at AC 500V for 1min                       | Outer conductor to inner conductor |
| Capacitance                          | Pf/m           | 97±14.5                                                | At 1KHz                            |
| Characteristic impedance (at D-TDR)  | $\Omega$       | 50±4                                                   | TDR method                         |
| Attenuation (Max.)                   | dB/m           | 4.03                                                   | 0.9GHz                             |
|                                      |                | 4.60                                                   | 1.5GHz                             |
|                                      |                | 5.18                                                   | 1.9GHz                             |
|                                      |                | 5.87                                                   | 2.4GHz                             |
|                                      |                | 6.67                                                   | 3.0GHz                             |
|                                      |                | 7.94                                                   | 4.0GHz                             |
|                                      |                | 9.09                                                   | 5.0GHz                             |
|                                      |                | 9.89                                                   | 5.8GHz                             |
|                                      |                | 10.24                                                  | 6.0GHz                             |

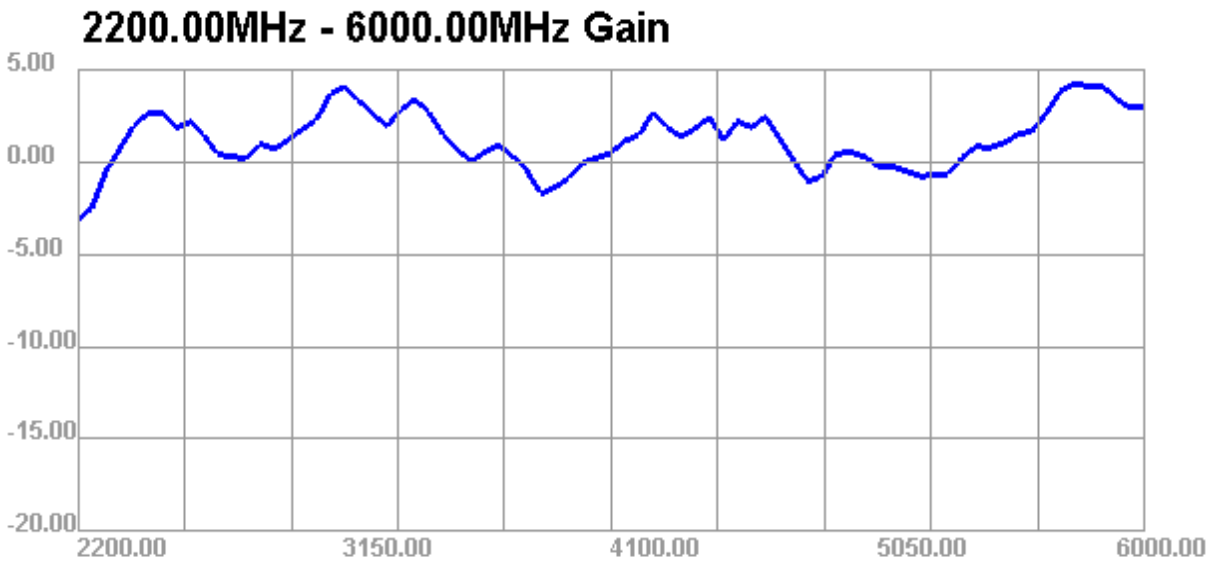


Cross-section of cable

IPEX端子:

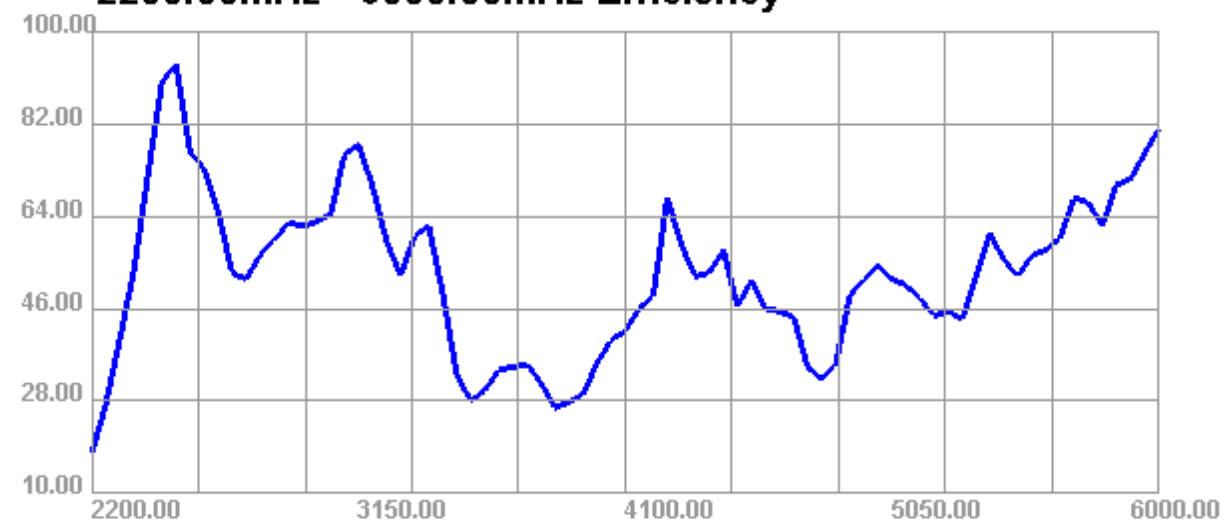
| Passive Test For 2.4-5.8 |             |              |               |               |            |            |             |             |                |                |
|--------------------------|-------------|--------------|---------------|---------------|------------|------------|-------------|-------------|----------------|----------------|
| Freq<br>(MHz)            | Effi<br>(%) | Effi<br>(dB) | Gain<br>(dBi) | Gain<br>(dBd) | UHS<br>(%) | DHS<br>(%) | Max<br>(dB) | Min<br>(dB) | Attenut<br>Hor | Attenut<br>Ver |
| 2200                     | 17.86       | -7.48        | -3.18         | -5.33         | 9.156      | 8.701      | -3.18       | -22.79      | 44.82          | 43.93          |
| 2250                     | 27.5        | -5.61        | -2.48         | -4.63         | 20.199     | 7.298      | -2.48       | -21.08      | 45.23          | 44.53          |
| 2300                     | 40.14       | -3.96        | -0.5          | -2.65         | 26.907     | 13.23      | -0.5        | -20.34      | 45.78          | 45.31          |
| 2350                     | 53.52       | -2.71        | 0.73          | -1.42         | 32.785     | 20.734     | 0.73        | -17.72      | 46.38          | 45.92          |
| 2400                     | 72.25       | -1.41        | 1.99          | -0.16         | 42.586     | 29.667     | 1.99        | -16.08      | 46.87          | 46.67          |
| 2450                     | 90.26       | -0.45        | 2.63          | 0.48          | 52.108     | 38.152     | 2.63        | -20.38      | 47.72          | 47.63          |
| 2500                     | 93.56       | -0.29        | 2.62          | 0.47          | 54.394     | 39.17      | 2.62        | -19.04      | 47.75          | 47.52          |
| 5100                     | 50.55       | -2.96        | -0.24         | -2.39         | 28.052     | 22.501     | -0.24       | -17.57      | 55             | 54.91          |
| 5150                     | 47.98       | -3.19        | -0.5          | -2.65         | 25.793     | 22.183     | -0.5        | -18.07      | 54.78          | 54.67          |
| 5200                     | 44.62       | -3.51        | -0.77         | -2.92         | 23.39      | 21.225     | -0.77       | -17.83      | 54.75          | 54.81          |
| 5250                     | 45.56       | -3.41        | -0.72         | -2.87         | 23.692     | 21.872     | -0.72       | -19.28      | 54.73          | 54.93          |
| 5300                     | 44          | -3.57        | -0.65         | -2.8          | 22.971     | 21.028     | -0.65       | -17.21      | 54.5           | 54.73          |
| 5350                     | 52.3        | -2.81        | 0.23          | -1.92         | 27.109     | 25.193     | 0.23        | -14.72      | 55.24          | 55.51          |
| 5400                     | 60.59       | -2.18        | 0.83          | -1.32         | 30.342     | 30.247     | 0.83        | -14.75      | 55.55          | 56.05          |
| 5450                     | 55.38       | -2.57        | 0.76          | -1.39         | 26.997     | 28.383     | 0.76        | -14.01      | 55.31          | 56.11          |
| 5500                     | 52.43       | -2.8         | 1.02          | -1.13         | 25.316     | 27.112     | 1.02        | -15.7       | 55.63          | 56.65          |
| 5550                     | 56.41       | -2.49        | 1.49          | -0.66         | 25.951     | 30.458     | 1.49        | -16.59      | 56.59          | 57.66          |
| 5600                     | 57.48       | -2.4         | 1.68          | -0.47         | 24.193     | 33.285     | 1.68        | -18.08      | 57.26          | 57.88          |
| 5650                     | 59.86       | -2.23        | 2.62          | 0.47          | 21.921     | 37.939     | 2.62        | -18.26      | 57.84          | 58.26          |
| 5700                     | 67.58       | -1.7         | 3.82          | 1.67          | 21.261     | 46.323     | 3.82        | -15.22      | 57.82          | 58.3           |
| 5750                     | 66.61       | -1.76        | 4.21          | 2.06          | 18.817     | 47.79      | 4.21        | -15.62      | 57.87          | 58.19          |
| 5800                     | 62.16       | -2.06        | 4.11          | 1.96          | 18.41      | 43.75      | 4.11        | -21.53      | 57.78          | 58.22          |
| 5850                     | 70.15       | -1.54        | 4.11          | 1.96          | 25.506     | 44.641     | 4.11        | -12.12      | 58.5           | 59.08          |
| 5900                     | 71.24       | -1.47        | 3.42          | 1.27          | 30.455     | 40.788     | 3.42        | -8.22       | 58.59          | 59.29          |
| 5950                     | 76.18       | -1.18        | 2.92          | 0.77          | 36.672     | 39.505     | 2.92        | -7.56       | 59.52          | 60.37          |
| 6000                     | 80.96       | -0.92        | 2.94          | 0.79          | 40.972     | 39.989     | 2.94        | -7.7        | 61.25          | 62.09          |

| Application Information |              |
|-------------------------|--------------|
| 04Version               | 4.95.303     |
| TotalTime               | 6m 10s 800ms |
| AdditionalInfor         | NULL         |

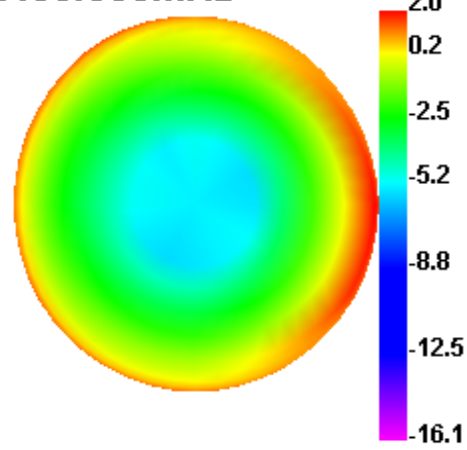




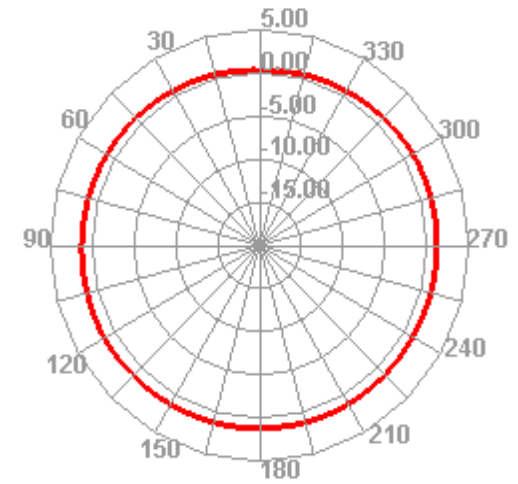
2200.00MHz - 6000.00MHz Efficiency



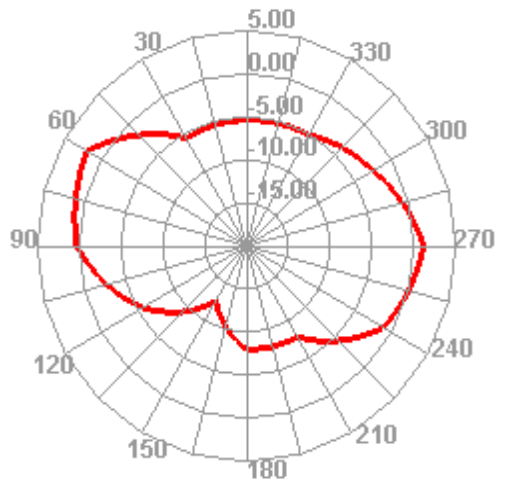
2400.000MHz



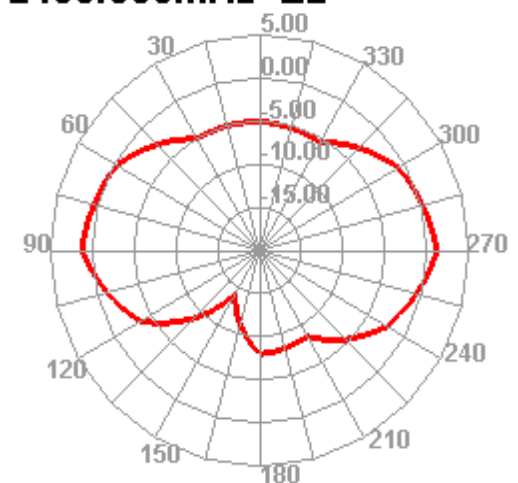
2400.000MHz H



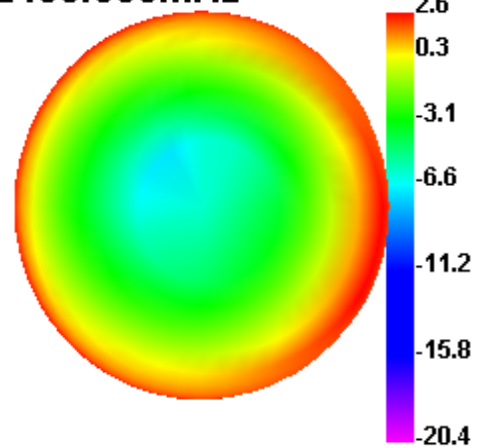
2400.000MHz E1



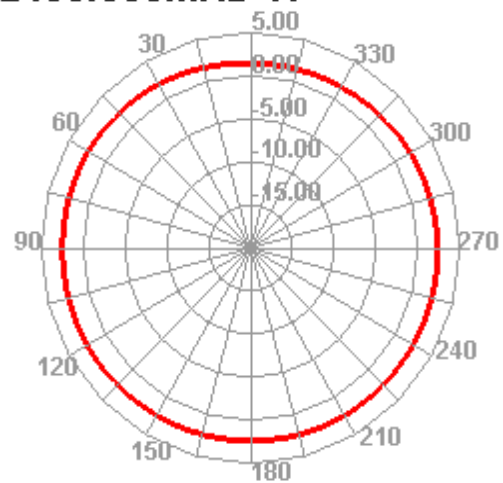
2400.000MHz E2



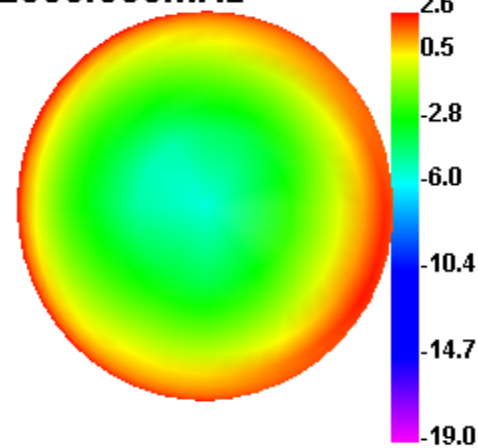
2450.000MHz



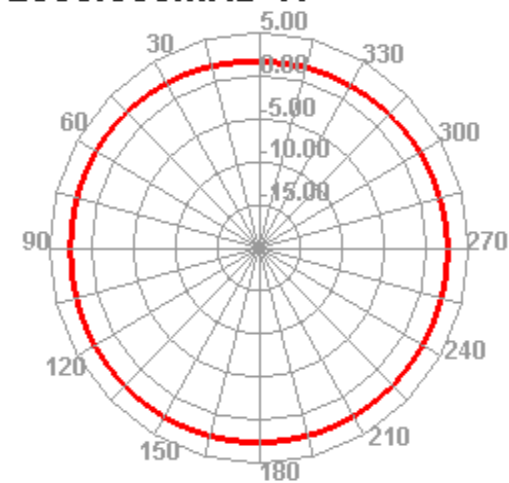
2450.000MHz H



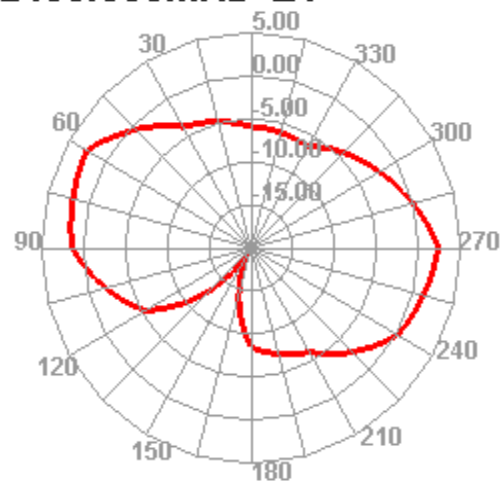
2500.000MHz



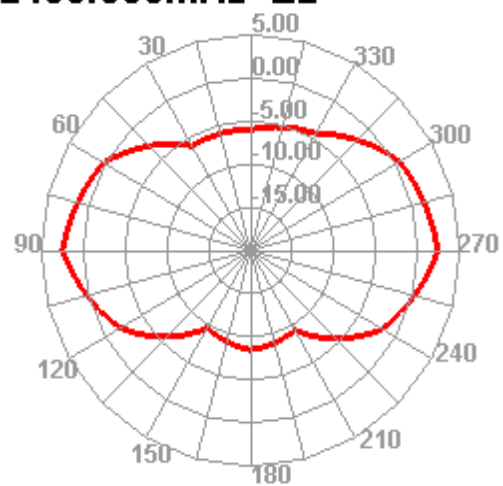
2500.000MHz H



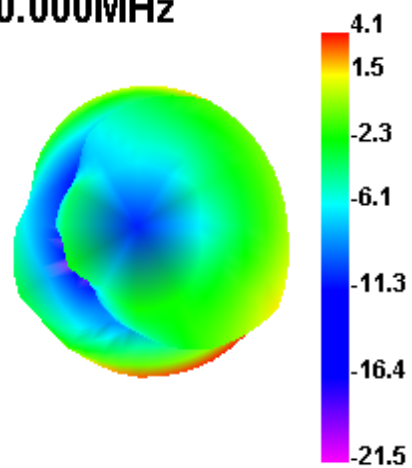
2450.000MHz E1



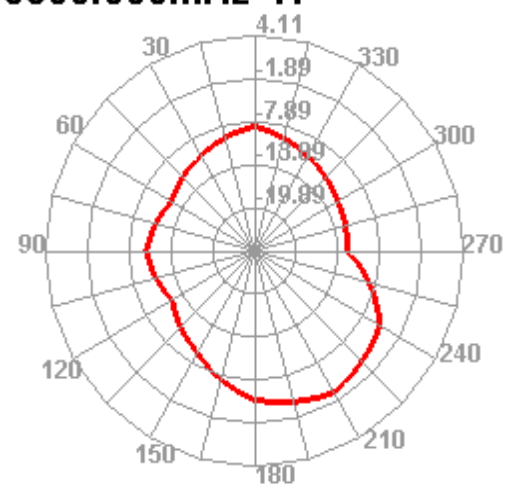
2450.000MHz E2



5800.000MHz



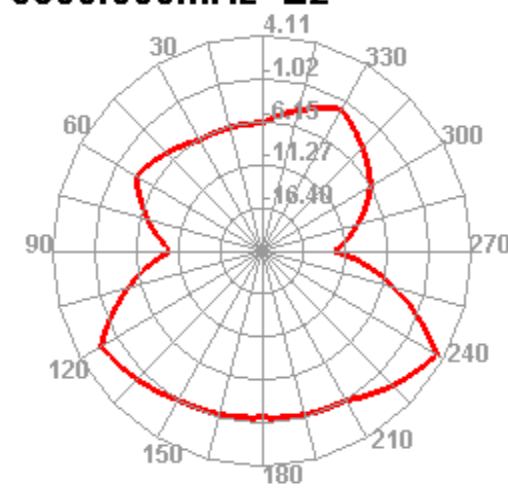
5800.000MHz H



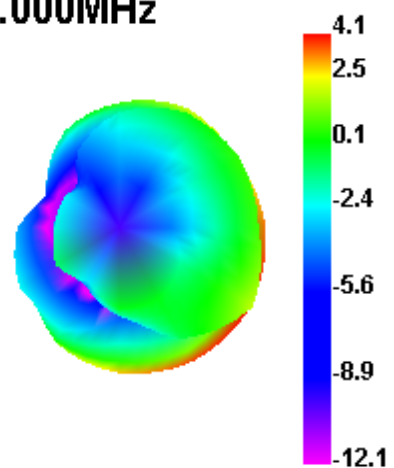
5800.000MHz E1



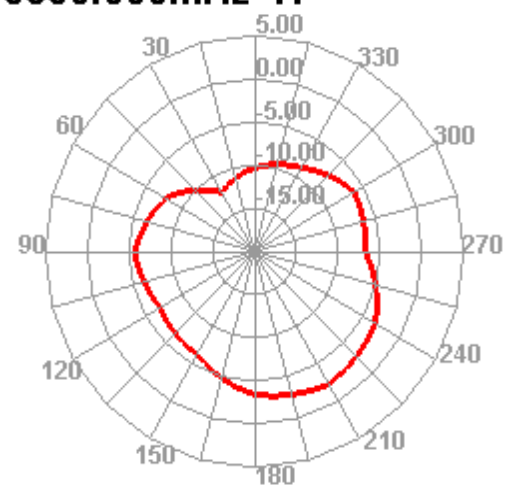
5800.000MHz E2



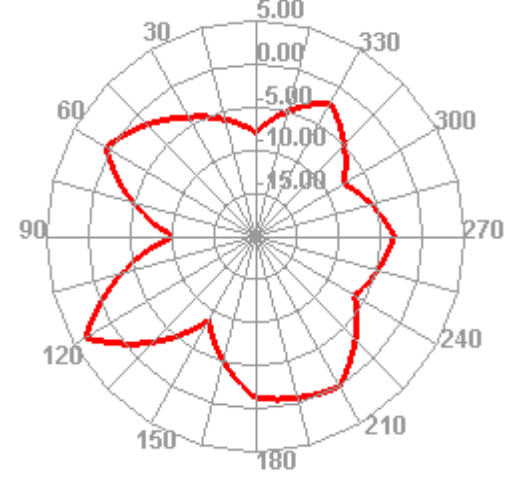
5850.000MHz



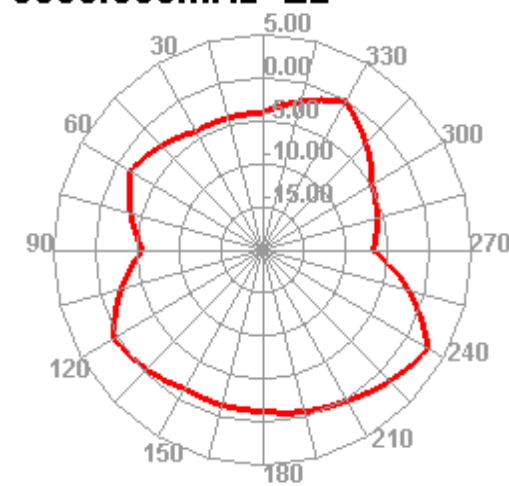
5850.000MHz H



5850.000MHz E1

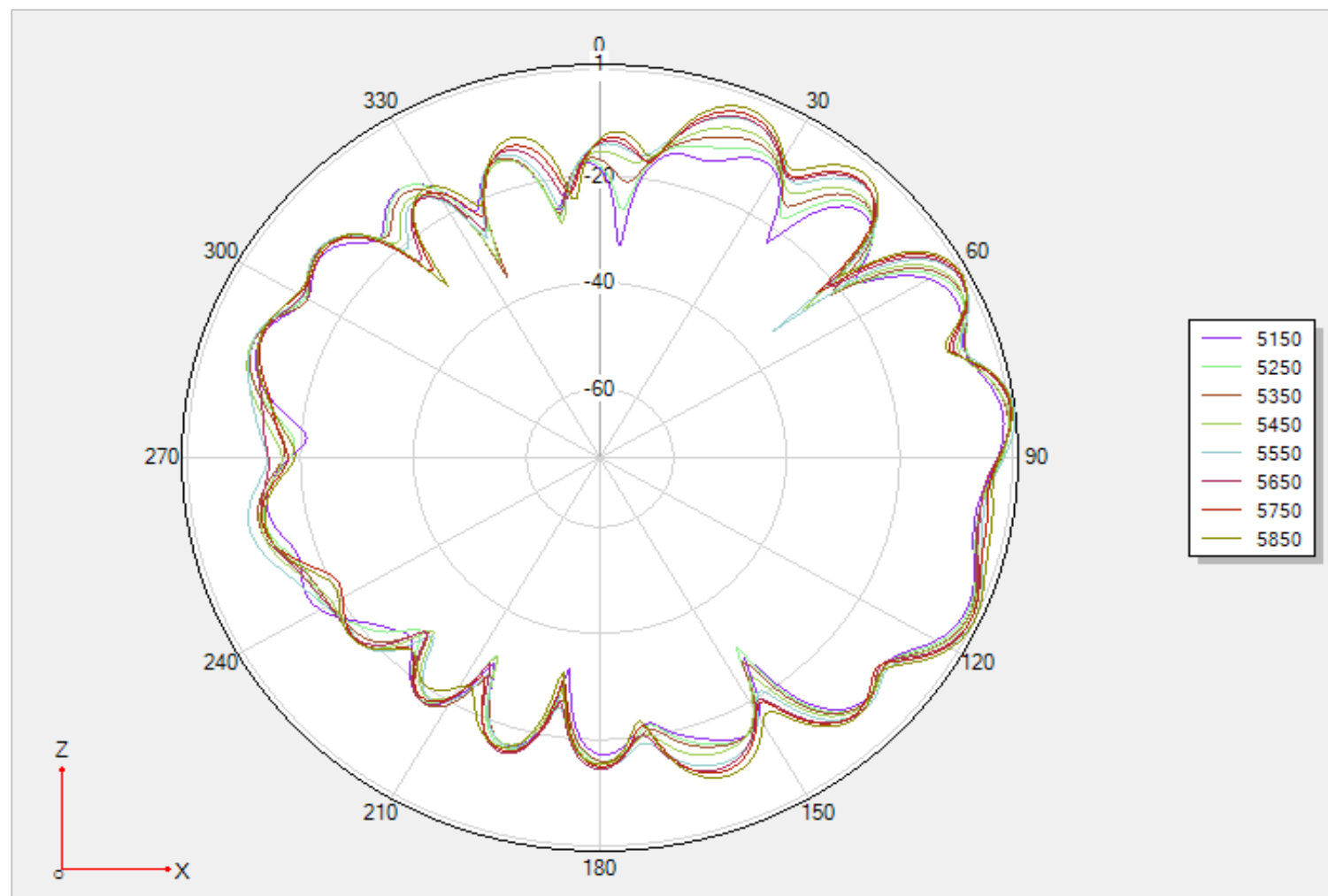


5850.000MHz E2

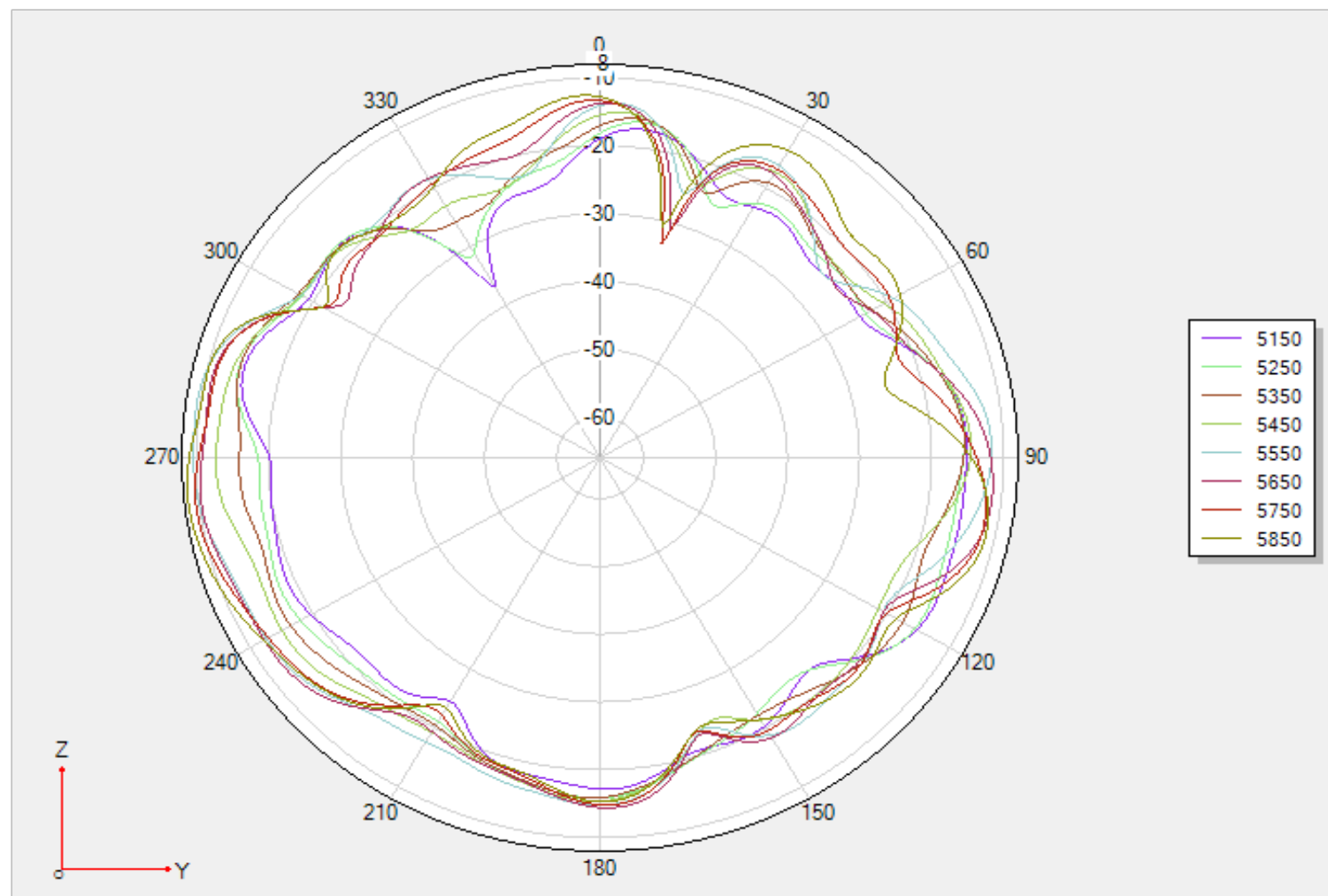




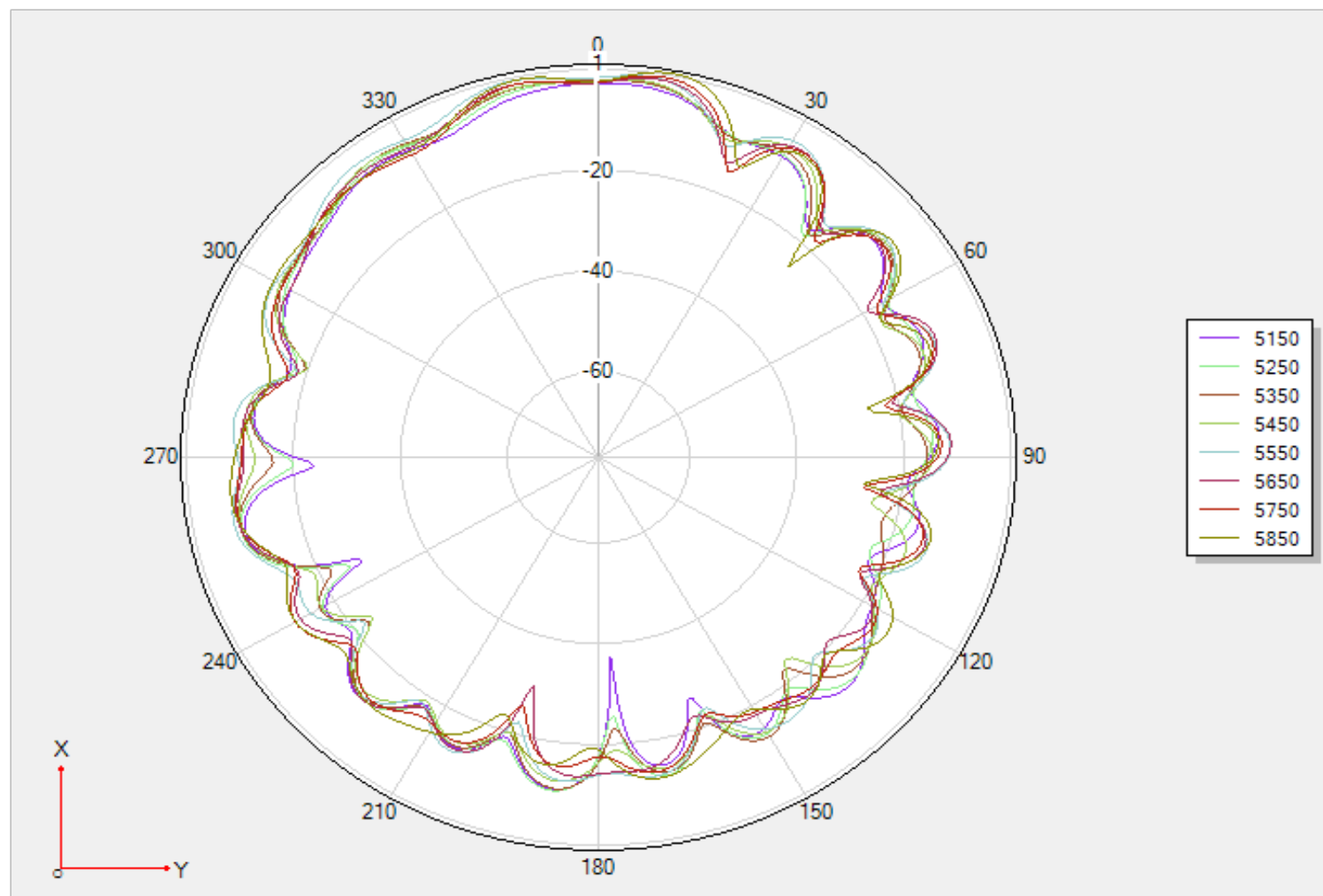
## 5G Phi 0 2D图



## 5G Phi 90 2D图



## 5G Theta 90 2D图



# 5G 3D场型图:

