

DRA24126ESBE Specification

Wi-Fi 6E Dipole Antenna

1. Feature

- * External type dipole antenna
- * 2.4~2.5&5.15~7.15GHz of frequency
- * Plastic rod of Black
- * RoHS compliance

2. Application

- * Wi-Fi 6E Wireless Communication
- * WLAN device, WLAN Router, e.g., AP, PIC Wireless Card

3. Description

Suzhou Wallys Communication Co., Ltd, this miniature antenna is designed for Wi-Fi 6E applications and can be easily built-in portable devices for SMA Plug. It has excellent stability and sensitivity to consistently provide high signal reception efficiency.

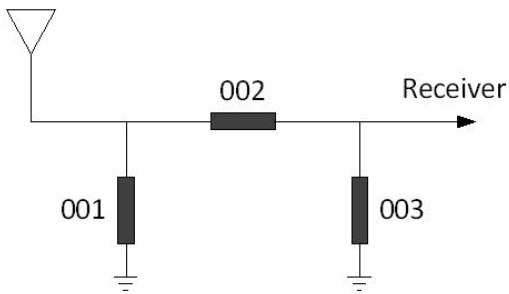
4. General Data

| | |
|--------------------------------|----------------------------------|
| Product Name | Wi-Fi 6E Dipole Antenna |
| Part No. | DRA24126ESBE |
| Frequency | 2.4~2.5&5.15~7.15GHz |
| V.S.W.R | 2.4-1.92max 5.85-2.1max |
| Gain (dBi) | 2.45GHz@3.0dBi 5.85GHz@4.0dBi |
| Polarization | Linear, Vertical |
| Storage Temp | -10°C~+70°C |
| Operating Temperature | -10°C~+60°C |
| Impedance with Matching | 50 Ω |
| Weight | 6.5 g |
| Antenna Type | SMA Plug |
| Dimension | L108.4X φ 11.0 (mm) |

High performance product for you

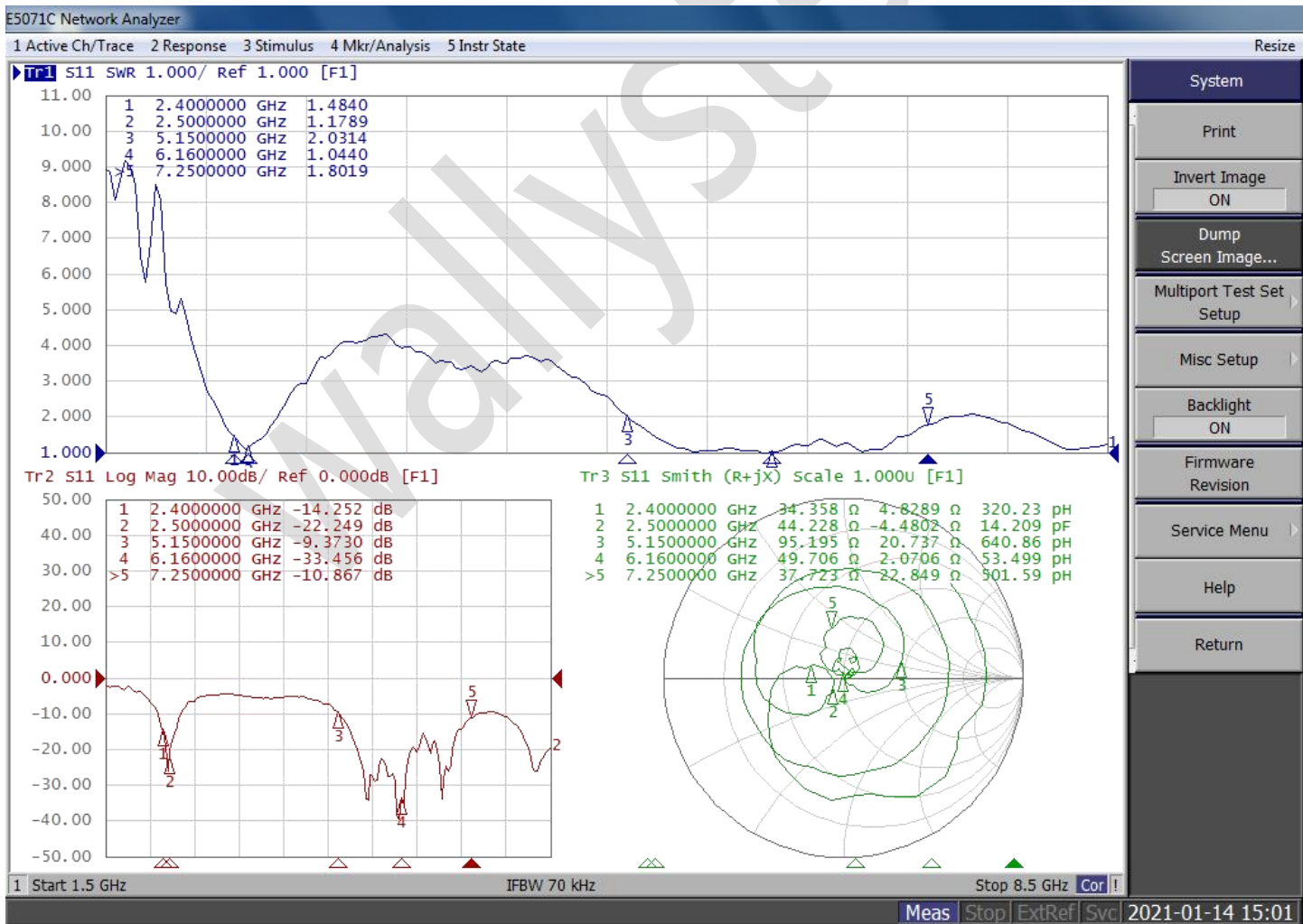
5. Typical Electrical Characteristics

- Recommend Matching Circuit



Reference:
 001=(N/A)
 002=0Ω
 003=(N/A)

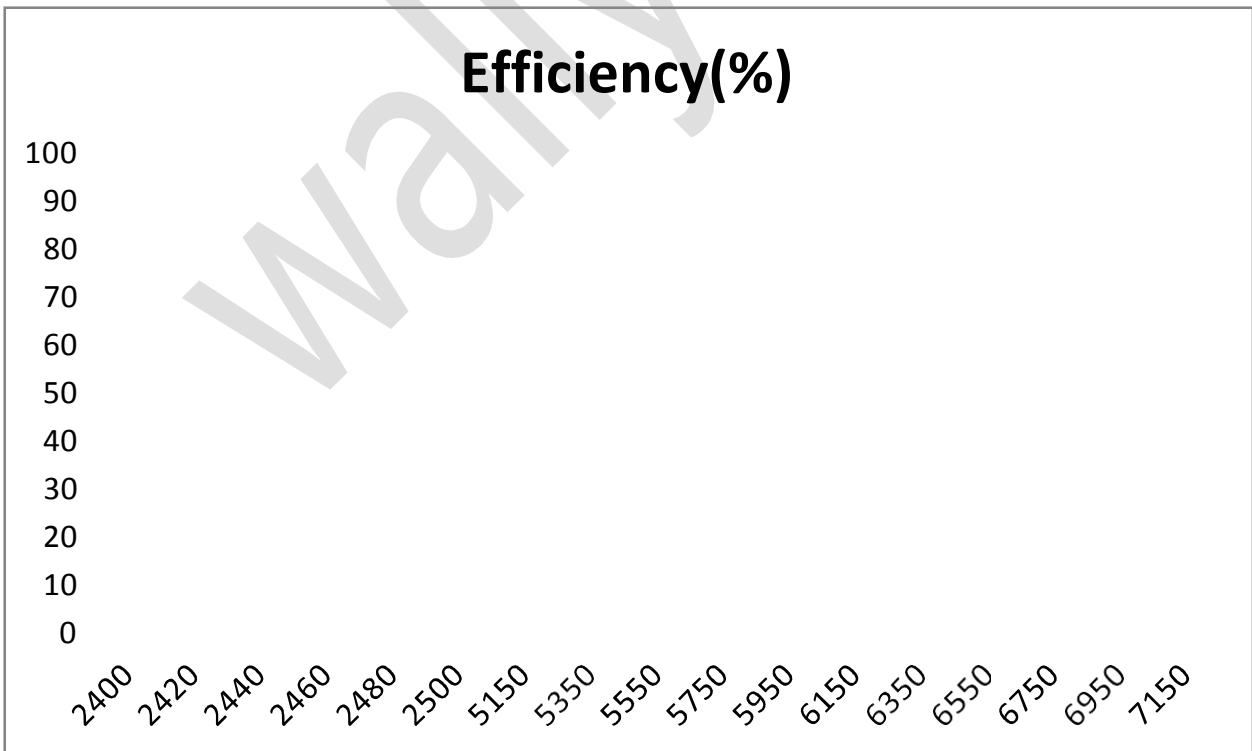
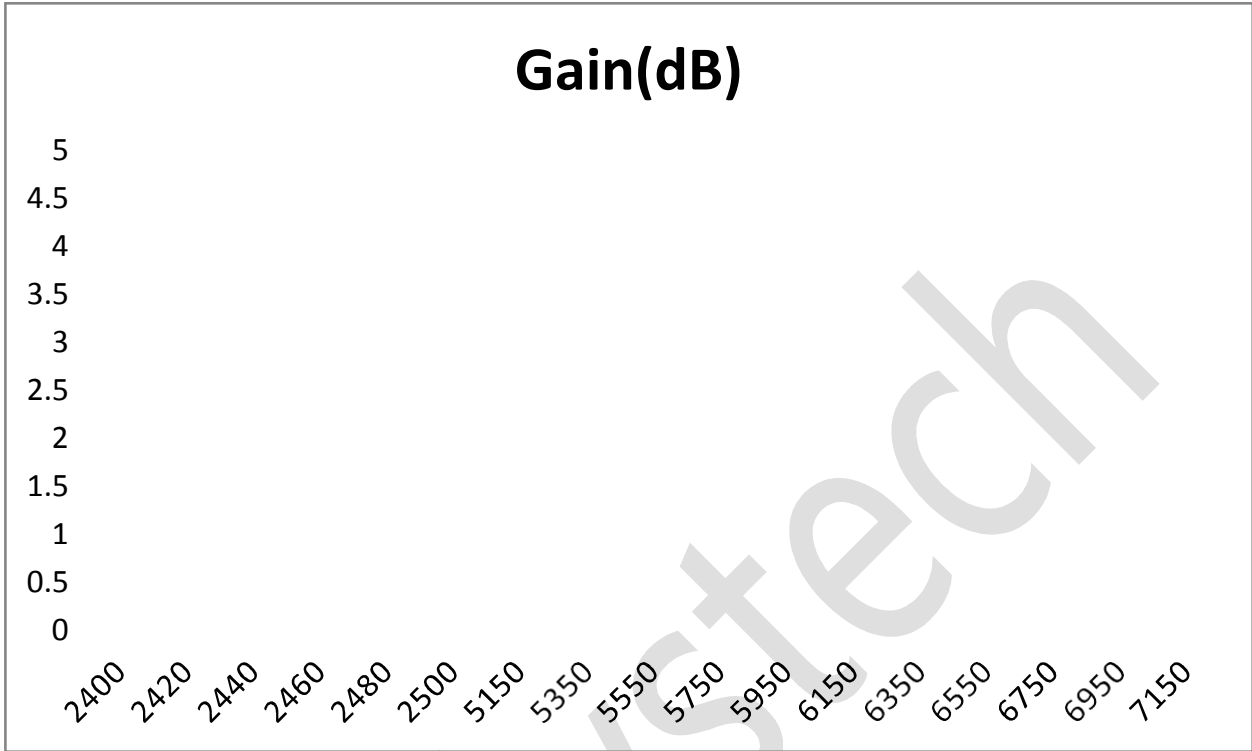
- Return loss, VSWR& Smith chart



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3D Total Date

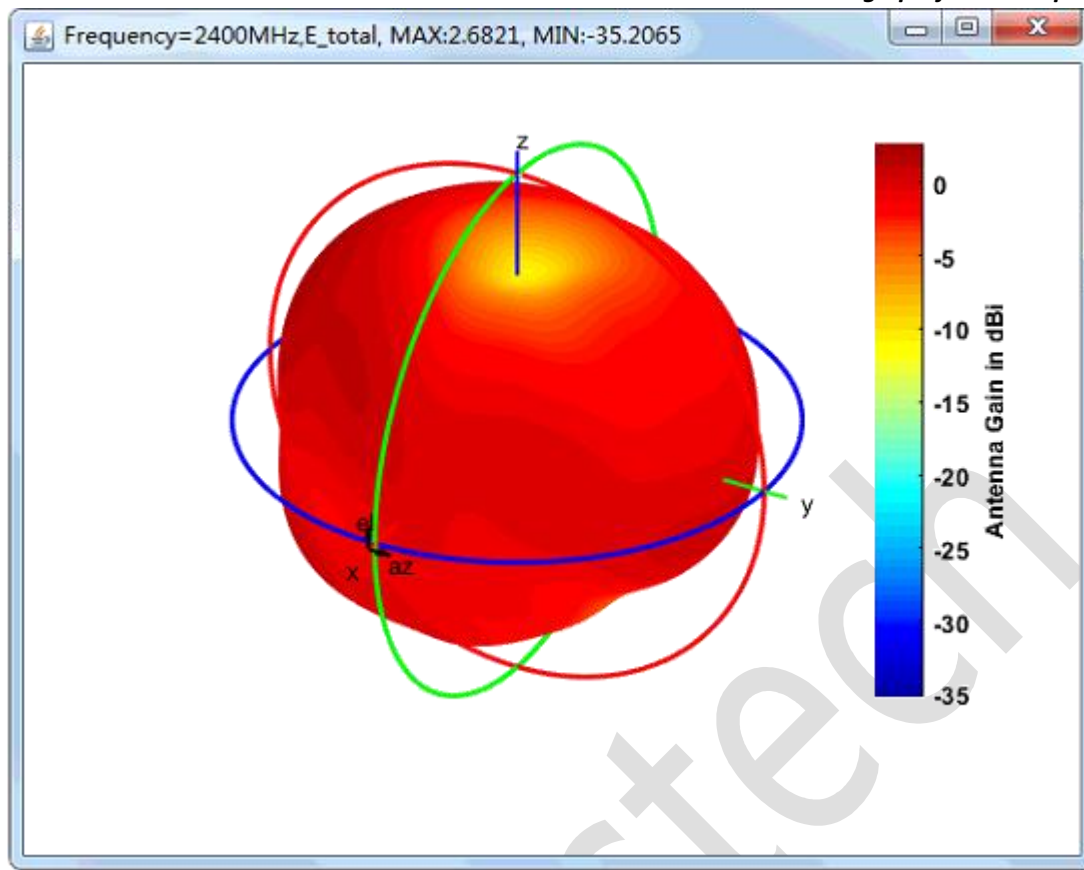
| | | | | | | | | | | | | | | | | | | | | | | |
|-----------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--|
| Frequency (MHz) | 2400 | 2410 | 2420 | 2430 | 2440 | 2450 | 2460 | 2470 | 2480 | 2490 | 2500 | | | | | | | | | | | |
| Directivity(dB) | 3.359 | 3.4772 | 3.5908 | 3.5993 | 3.4672 | 3.3496 | 3.1475 | 3.0237 | 3.0453 | 3.0552 | 3.018 | | | | | | | | | | | |
| Gain(dB) | 2.6821 | 2.7982 | 2.9305 | 2.904 | 2.8822 | 2.8955 | 2.6653 | 2.6879 | 2.6113 | 2.7262 | 2.802 | | | | | | | | | | | |
| Efficiency (dB) | -0.6769 | -0.679 | -0.6604 | -0.6553 | -0.605 | -0.4541 | -0.4822 | -0.3358 | -0.434 | -0.329 | -0.216 | | | | | | | | | | | |
| Efficiency (%) | 85.5671 | 85.5258 | 85.8941 | 85.9936 | 86.997 | 90.0723 | 89.4914 | 92.5589 | 90.4894 | 92.7036 | 95.1481 | | | | | | | | | | | |
| Frequency (MHz) | 5150 | 5250 | 5350 | 5450 | 5550 | 5650 | 5750 | 5850 | 5950 | 6050 | 6150 | 6250 | 6350 | 6450 | 6550 | 6650 | 6750 | 6850 | 6950 | 7050 | 7150 | |
| Directivity(dB) | 4.3888 | 4.2906 | 4.4031 | 4.5023 | 4.3912 | 4.4776 | 4.1564 | 4.2823 | 4.0811 | 3.8119 | 4.2001 | 4.4679 | 4.6719 | 4.6529 | 5.0207 | 5.0356 | 4.9878 | 5.326 | 5.3767 | 5.4479 | 5.6016 | |
| Gain(dB) | 2.8751 | 2.981 | 3.1375 | 3.3117 | 3.2034 | 3.515 | 3.2011 | 3.3517 | 3.3699 | 3.1033 | 3.4082 | 3.7058 | 3.8586 | 3.8967 | 4.2624 | 4.2527 | 4.1824 | 4.4068 | 4.4398 | 4.5038 | 4.4529 | |
| Efficiency (dB) | -1.5116 | -1.3096 | -1.2657 | -1.1606 | -1.1877 | -0.9627 | -0.9553 | -0.9106 | -0.7112 | -0.7087 | -0.7919 | -0.7622 | -0.8132 | -0.7562 | -0.7583 | -0.7829 | -0.8053 | -0.9192 | -0.9369 | -0.944 | -1.1486 | |
| Efficiency (%) | 70.6053 | 73.9679 | 74.7197 | 76.5489 | 76.0722 | 80.1189 | 80.2546 | 81.0853 | 84.8951 | 84.9442 | 83.3314 | 83.9041 | 82.9234 | 84.0194 | 83.9781 | 83.5047 | 83.0742 | 80.9241 | 80.5953 | 80.4634 | 76.7604 | |



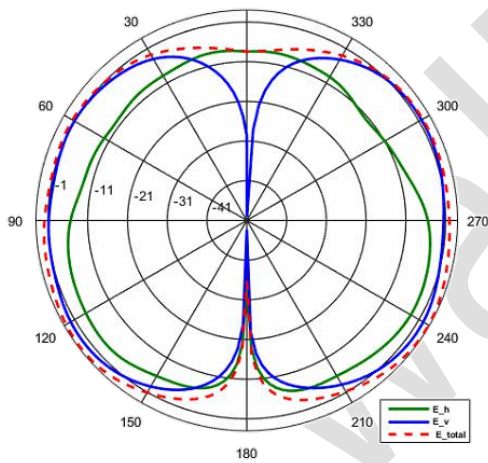
High performance product for you

2400MHz 3D&2D Cut

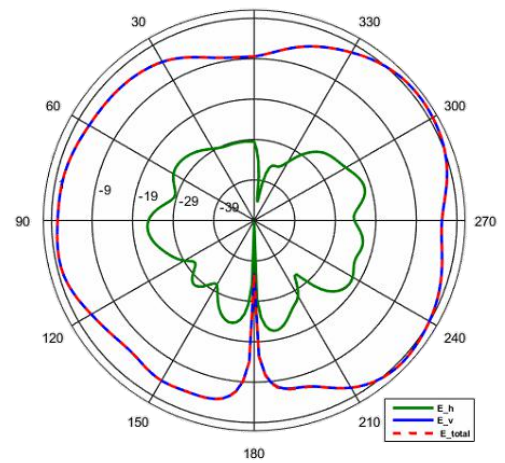
High performance product for you



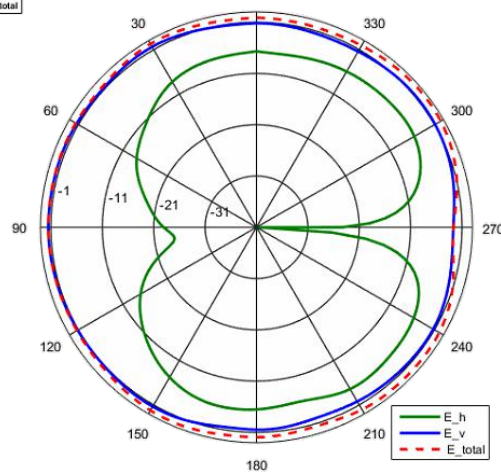
E_h, E_v, and E_total: Theta Cut @ Phi=0 Degree (frequency=2400MHz)



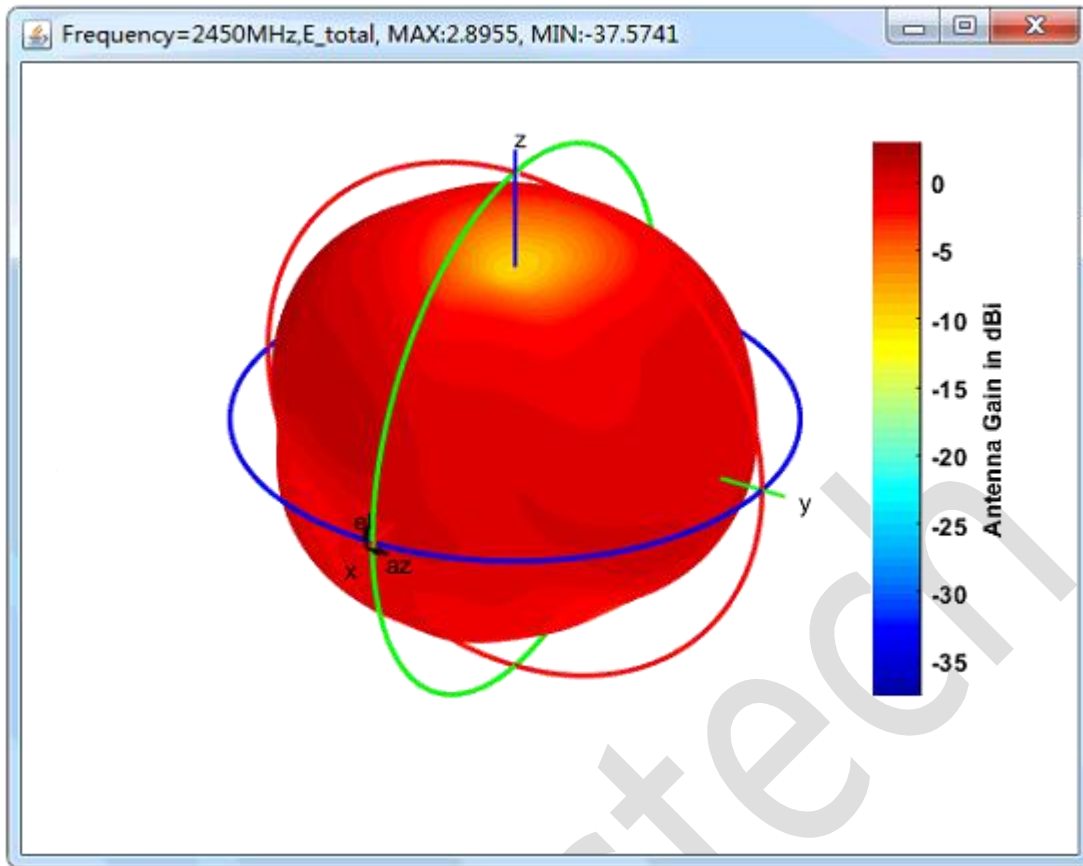
E_h, E_v, and E_total: Theta Cut @ Phi=90 Degree (frequency=2400MHz)



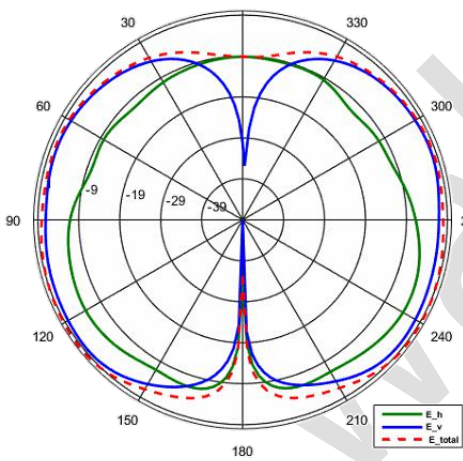
E_h,E_v,and E_total: Phi Cut @ Theta=90 Degree (frequency=2400MHz)



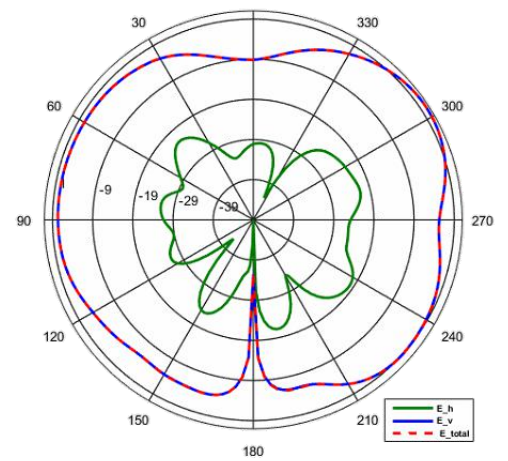
2450MHz 3D&2D Cut



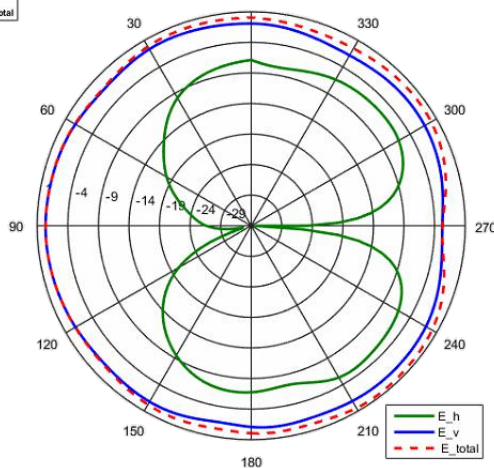
E_h, E_v, and E_{total}: Theta Cut @ Phi=0 Degree (frequency=2450MHz)

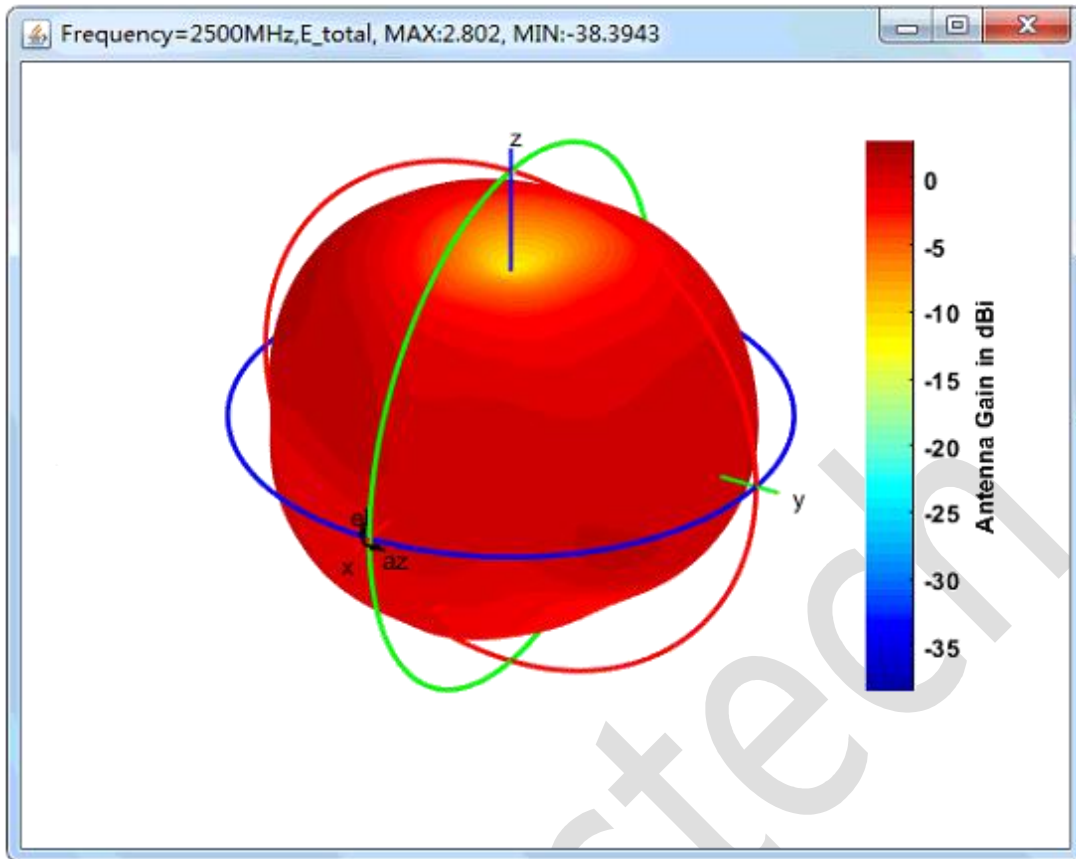


E_h, E_v, and E_{total}: Theta Cut @ Phi=90 Degree (frequency=2450MHz)

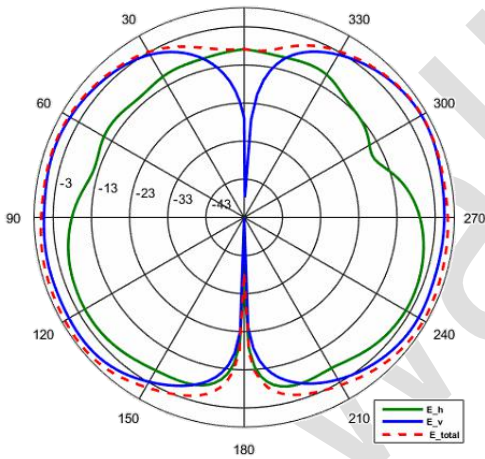


E_h, E_v, and E_{total}: Phi Cut @ Theta=90 Degree (frequency=2450MHz)

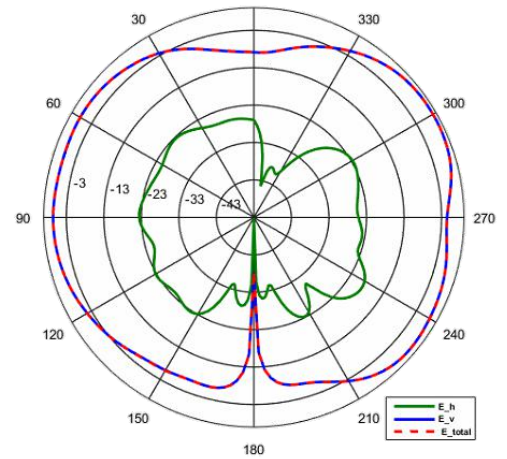




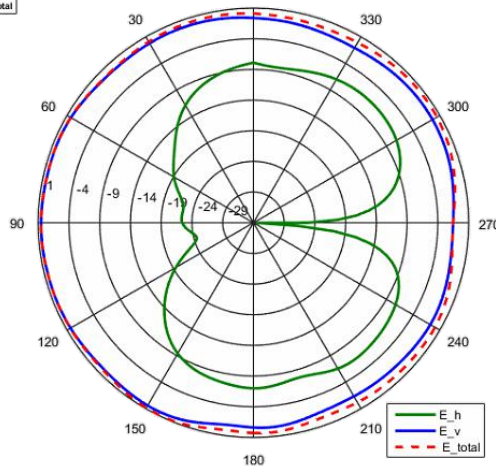
E_h, E_v, and E_total: Theta Cut @ Phi=0 Degree (frequency:2500MHz)



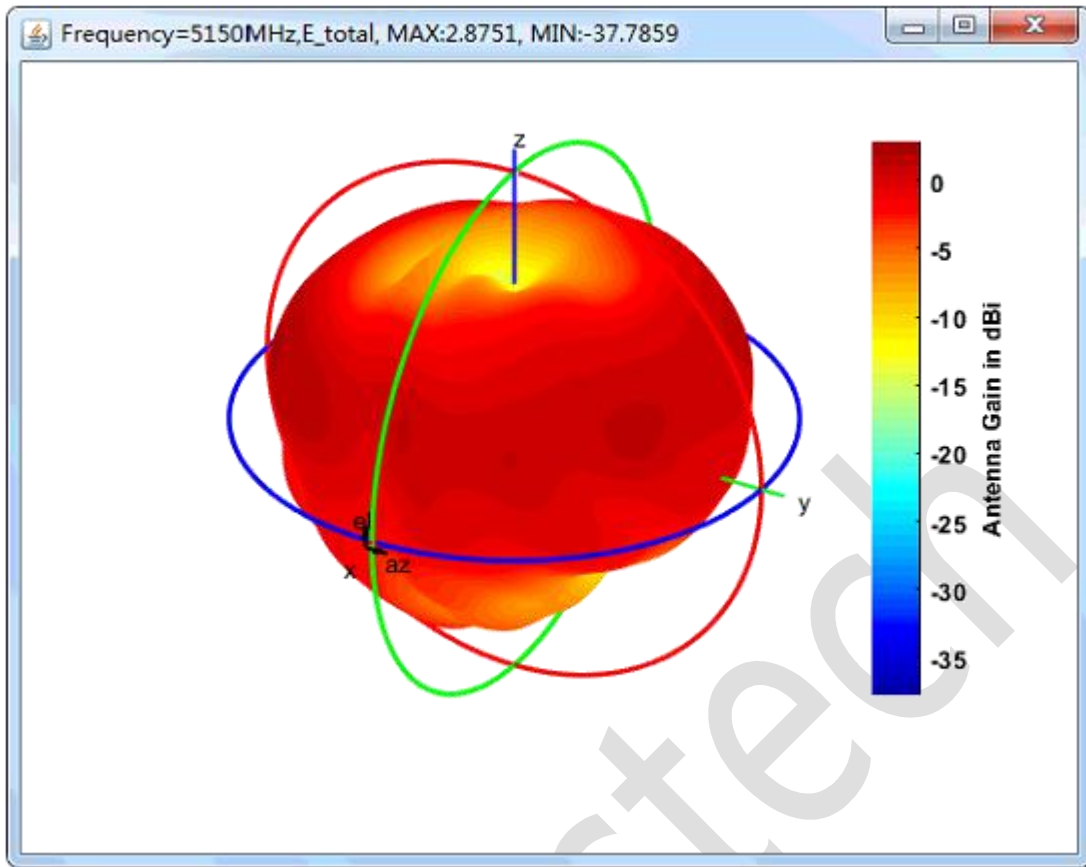
E_h, E_v, and E_total: Theta Cut @ Phi=90 Degree (frequency:2500MHz)



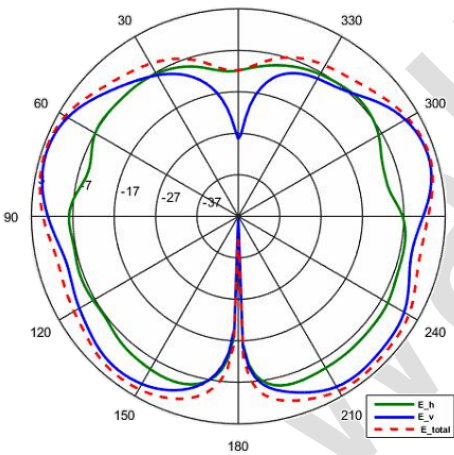
E_h,E_v,and E_total: Phi Cut @ Theta=90 Degree (frequency:2500MHz)



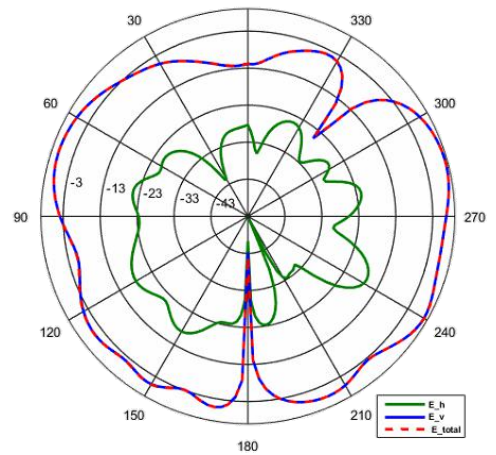
5150MHz 3D&2D Cut



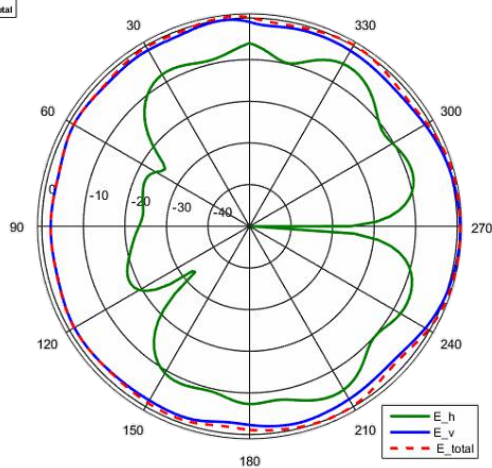
E_h, E_v, and E_total: Theta Cut @ Phi=0 Degree (frequency=5150MHz)

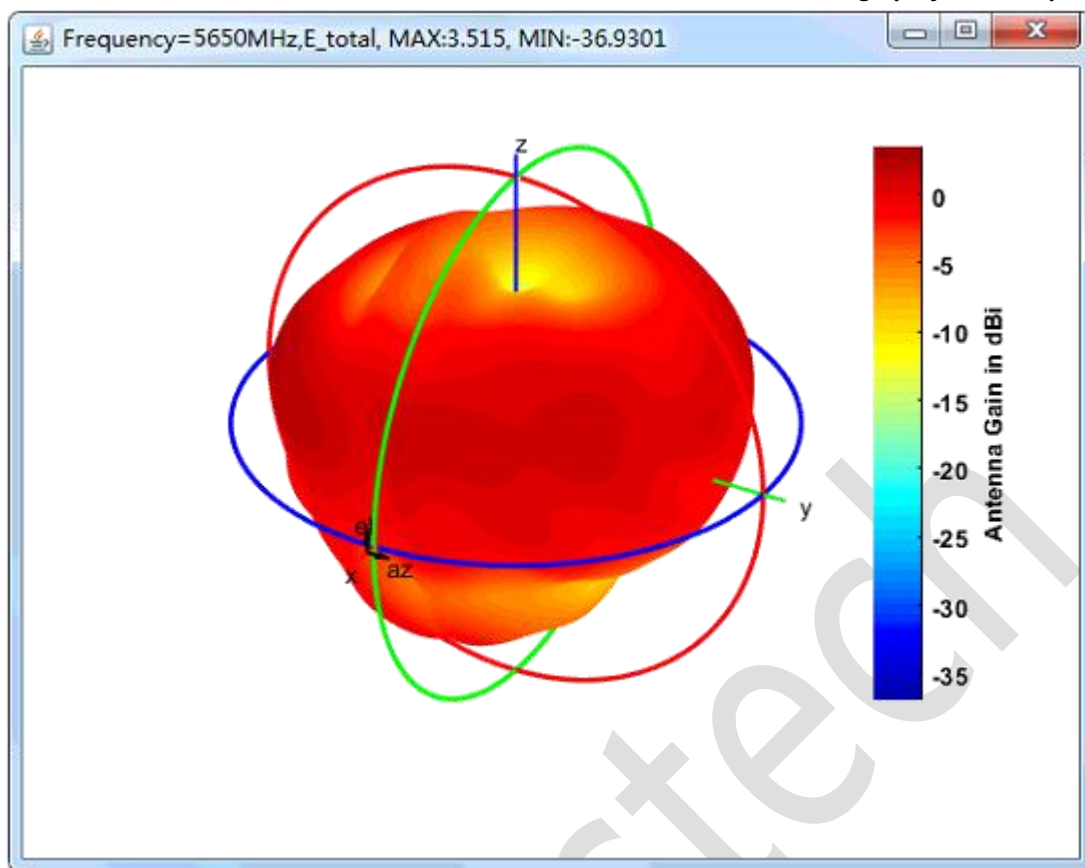


E_h, E_v, and E_total: Theta Cut @ Phi=90 Degree (frequency=5150MHz)

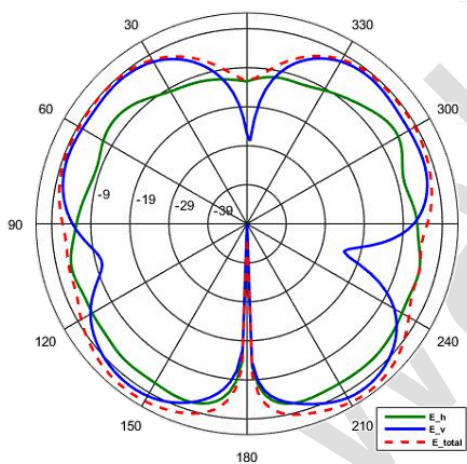


E_h, E_v, and E_total: Phi Cut @ Theta=90 Degree (frequency=5150MHz)

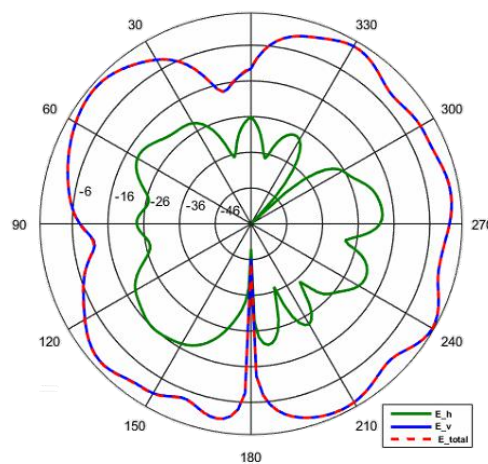




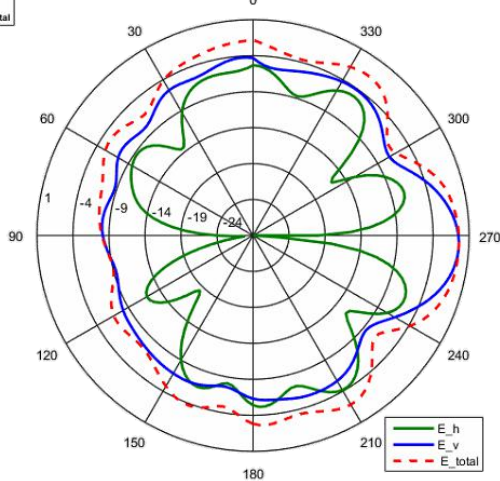
E_h, E_v, and E_{total}: Theta Cut @ Phi=0 Degree (frequency=5650MHz)

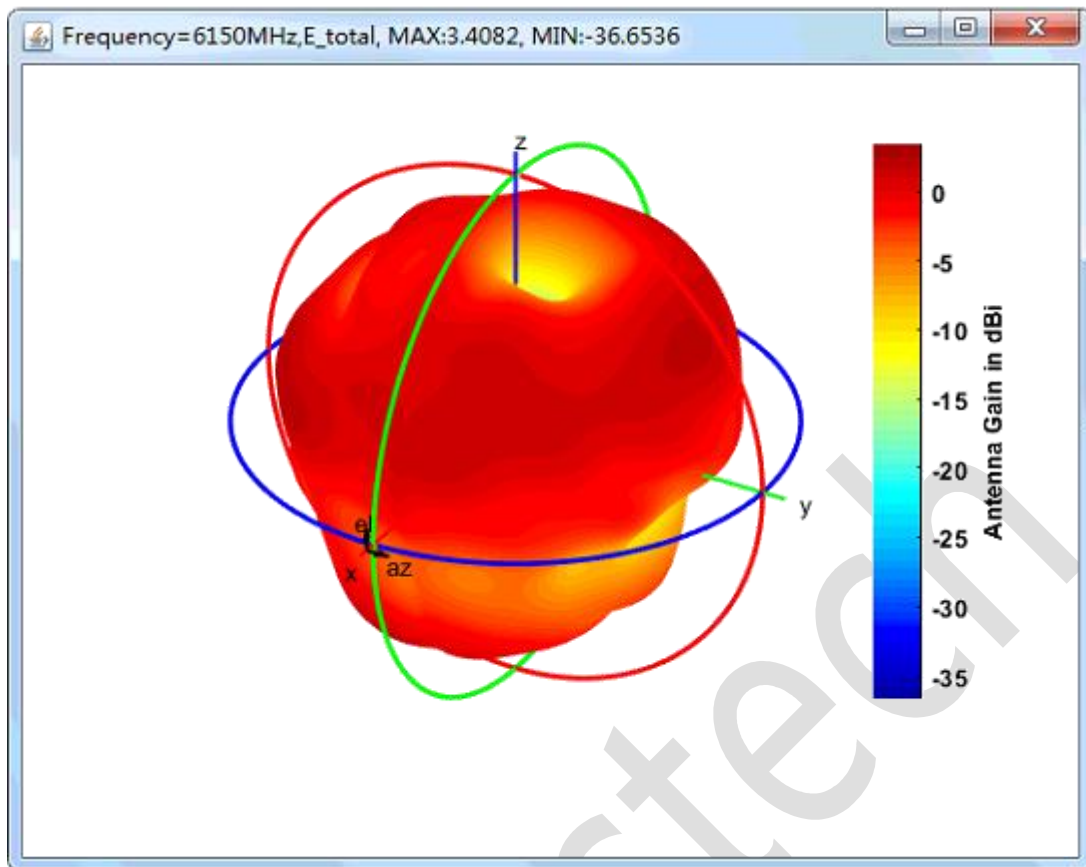


E_h, E_v, and E_{total}: Theta Cut @ Phi=90 Degree (frequency=5650MHz)

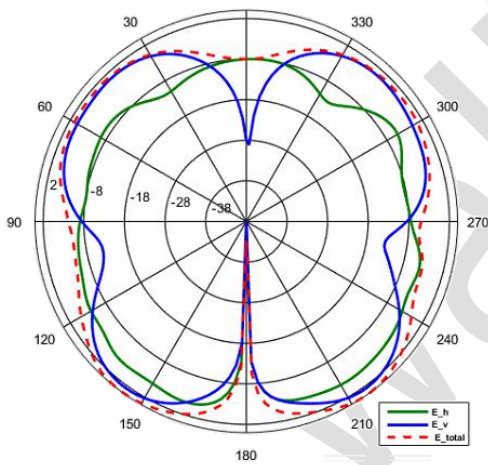


E_h, E_v, and E_{total}: Phi Cut @ Theta=90 Degree (frequency=5650MHz)

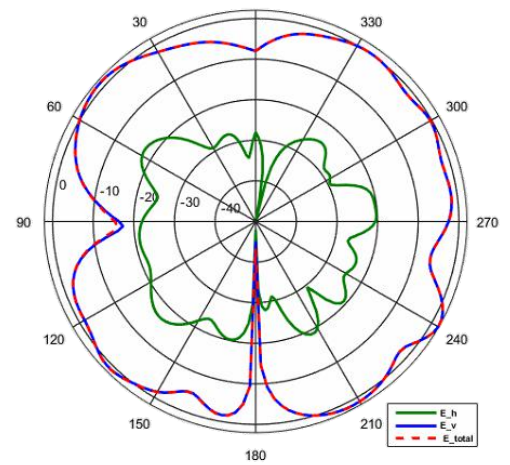




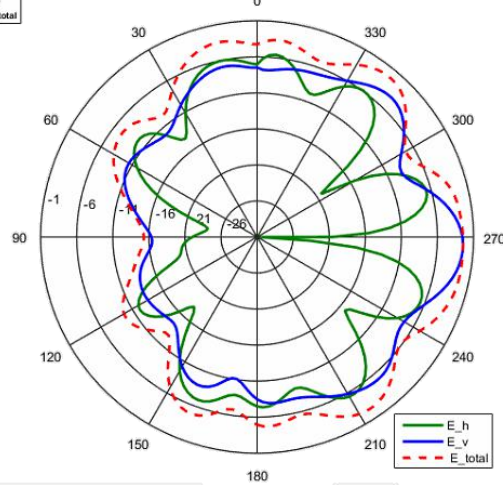
E_h, E_v, and E_{total}: Theta Cut @ Phi=0 Degree (frequency=6150MHz)

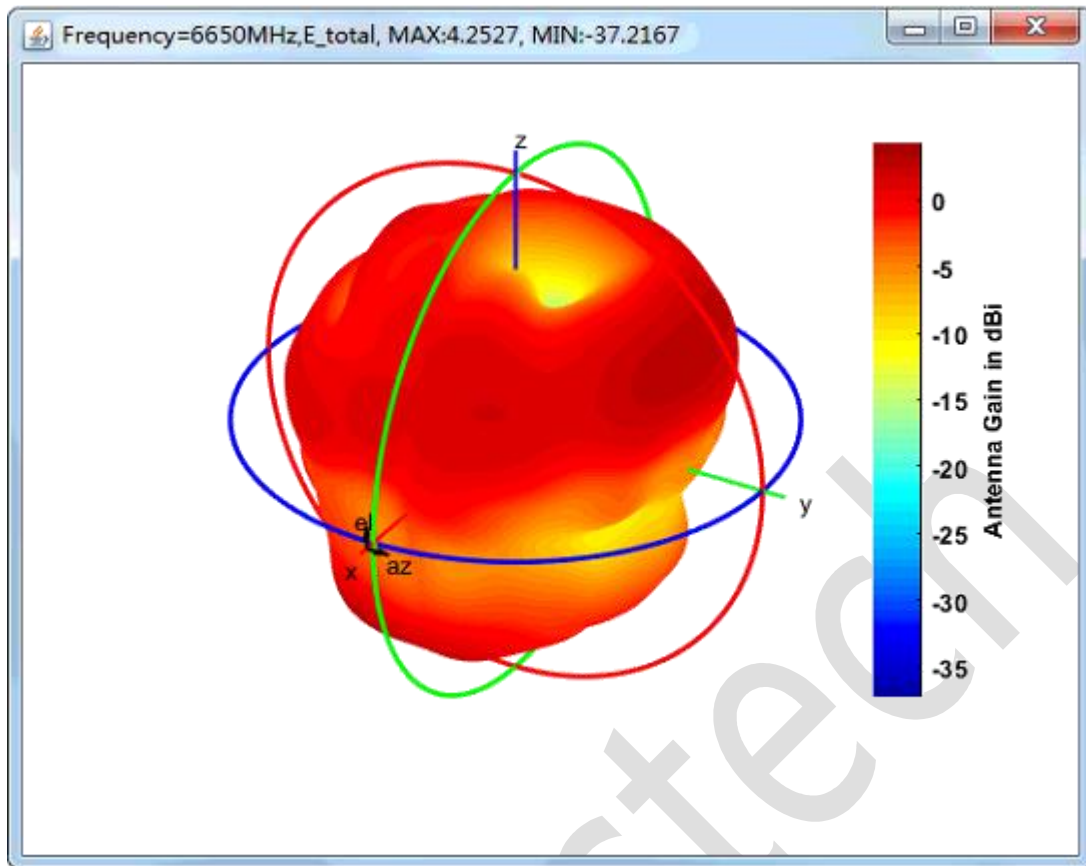


E_h, E_v, and E_{total}: Theta Cut @ Phi=90 Degree (frequency=6150MHz)

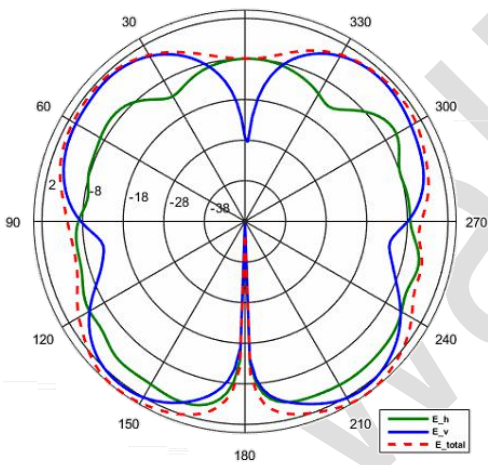


E_h, E_v, and E_{total}: Phi Cut @ Theta=90 Degree (frequency=6150MHz)

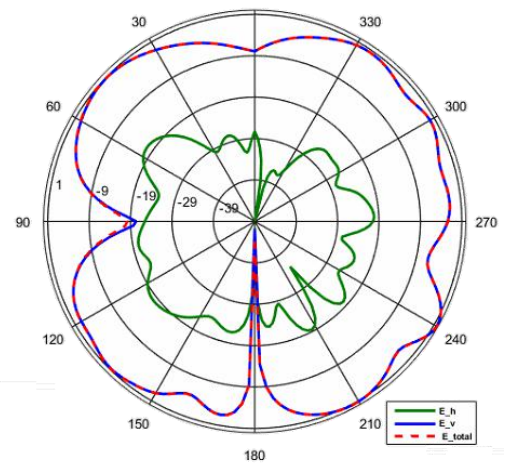




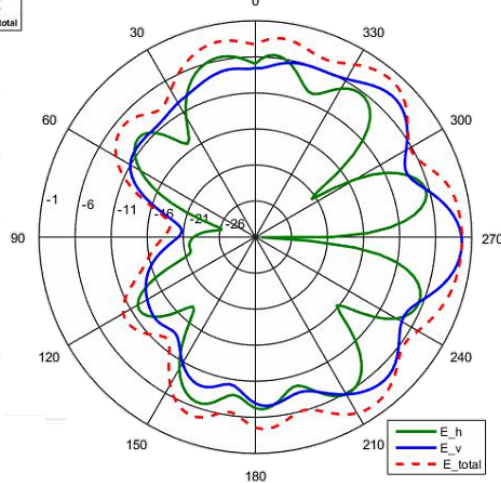
E_h, E_v, and E_{total}: Theta Cut @ Phi=0 Degree (frequency=6650MHz)



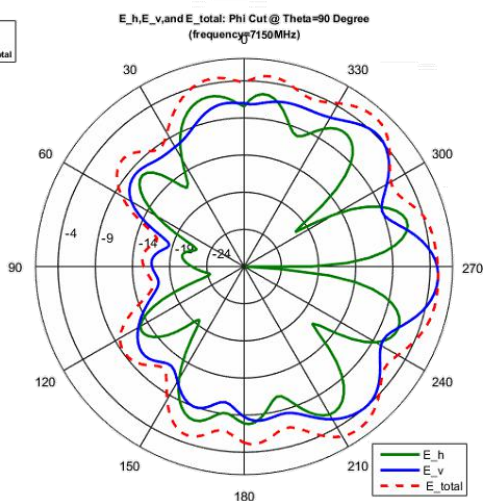
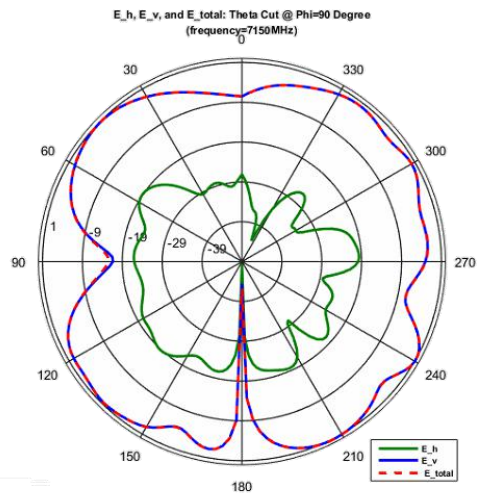
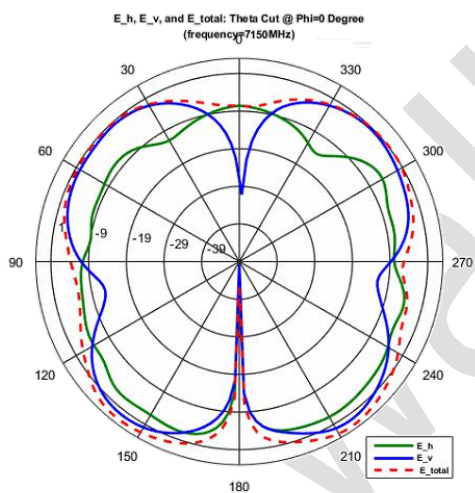
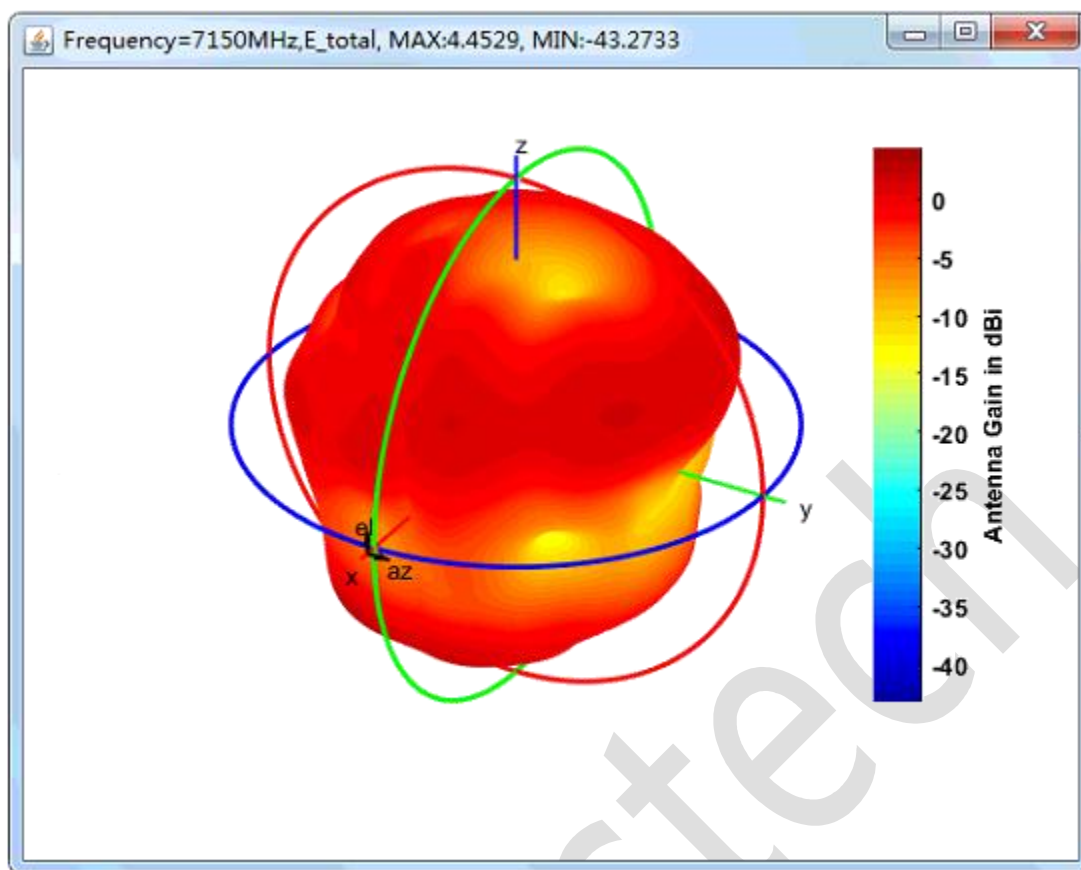
E_h, E_v, and E_{total}: Theta Cut @ Phi=90 Degree (frequency=6650MHz)



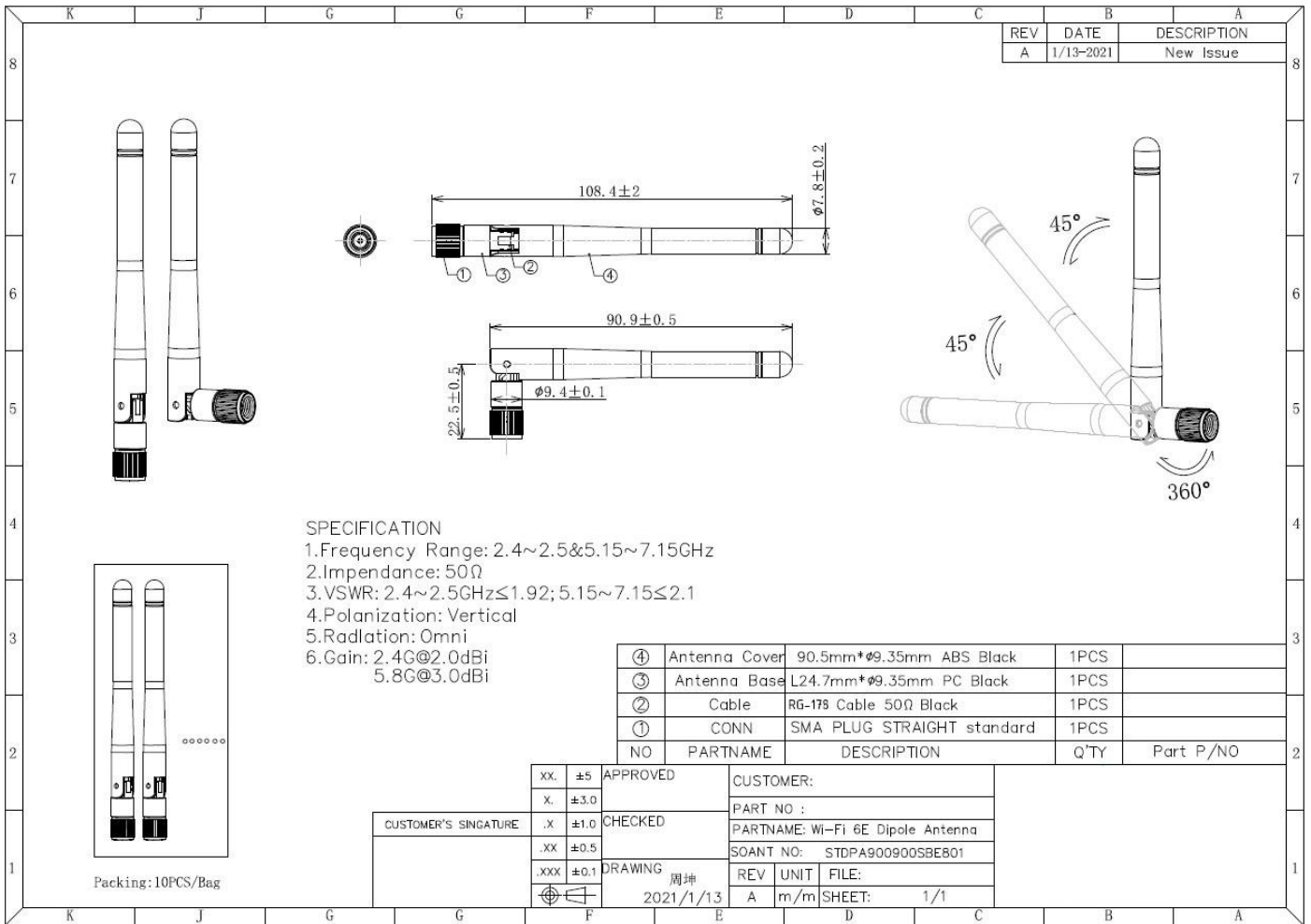
E_h, E_v, and E_{total}: Phi Cut @ Theta=90 Degree (frequency=6650MHz)



7150MHz 3D&2D Cut



6. Dimension



High performance product for you