

STDPA900900SBE801 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

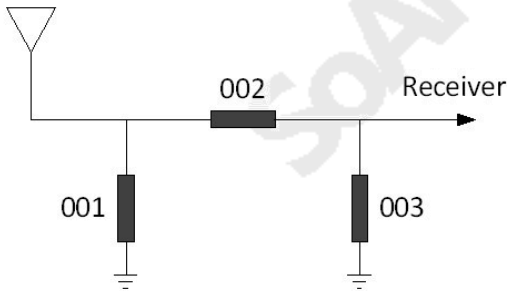
Using Suzhou Soant communication Equipent Co.,Ltd, this miniature antenna is designed for Wi-Fi 6E applications and can be easily built-in portable devices for SMA Plug. It has excellent stability and sensitivity to consistently provide high signal reception efficiency.

4. General Data

Product Name	Wi-Fi 6E Dipole Antenna
Part No.	STDPA900900SBE801
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℃~+70℃
Operating Temperature	-10℃~+60℃
Impedance with Matching	50 Ω
Weight	6.5 g
Antenna Type	SMA Plug
Dimension	L108.4X φ 11.0 (mm)

5. Typical Electrical Characteristics

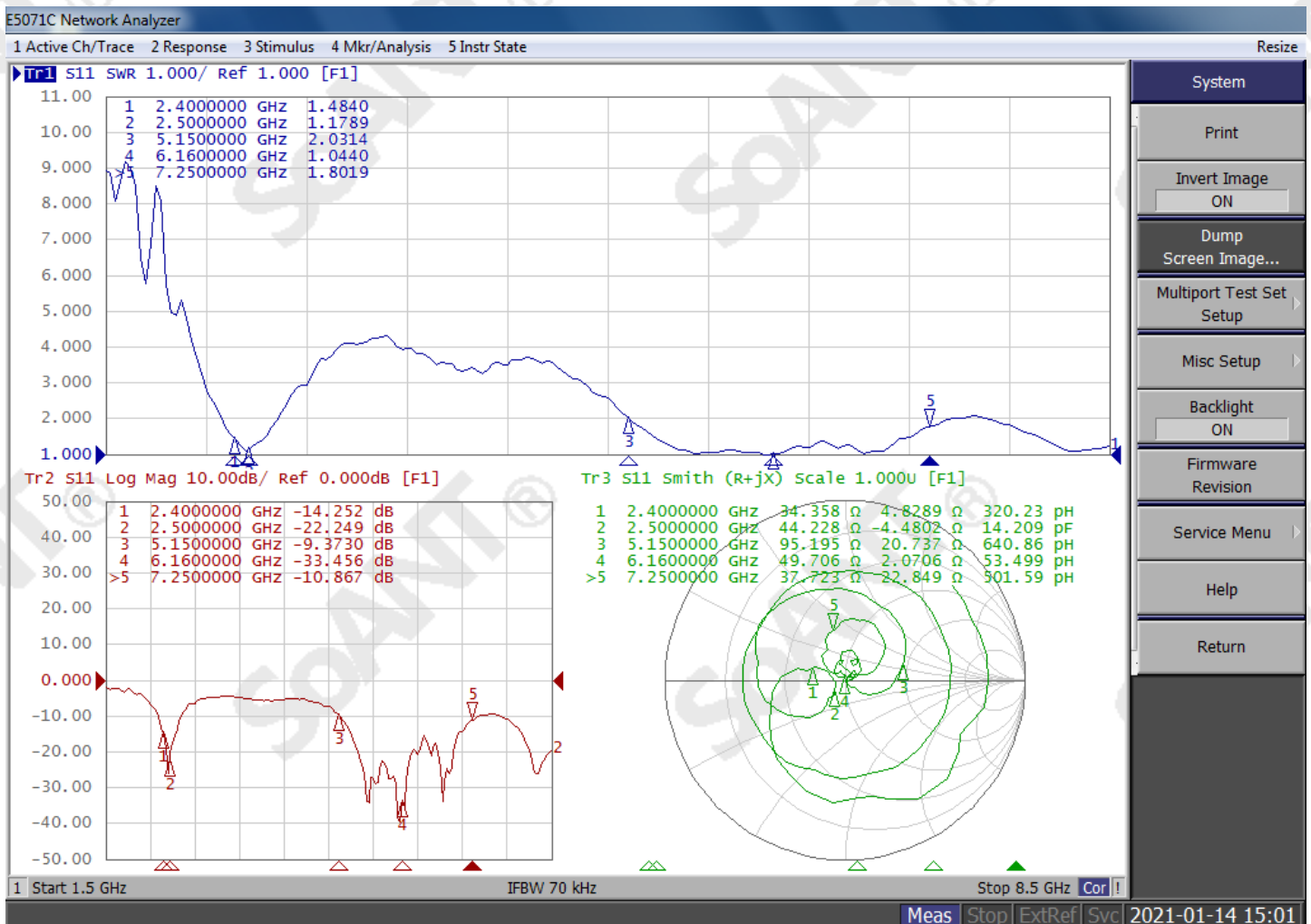
- Recommend Matching Circuit



Reference:

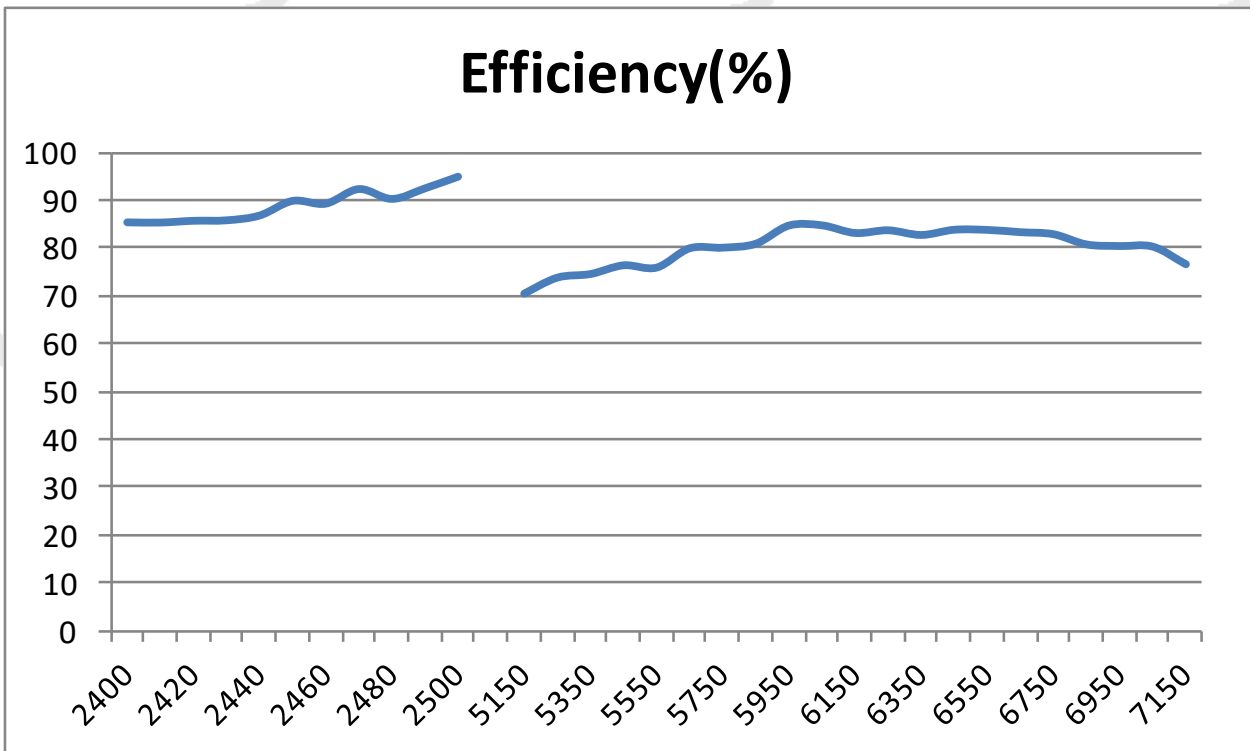
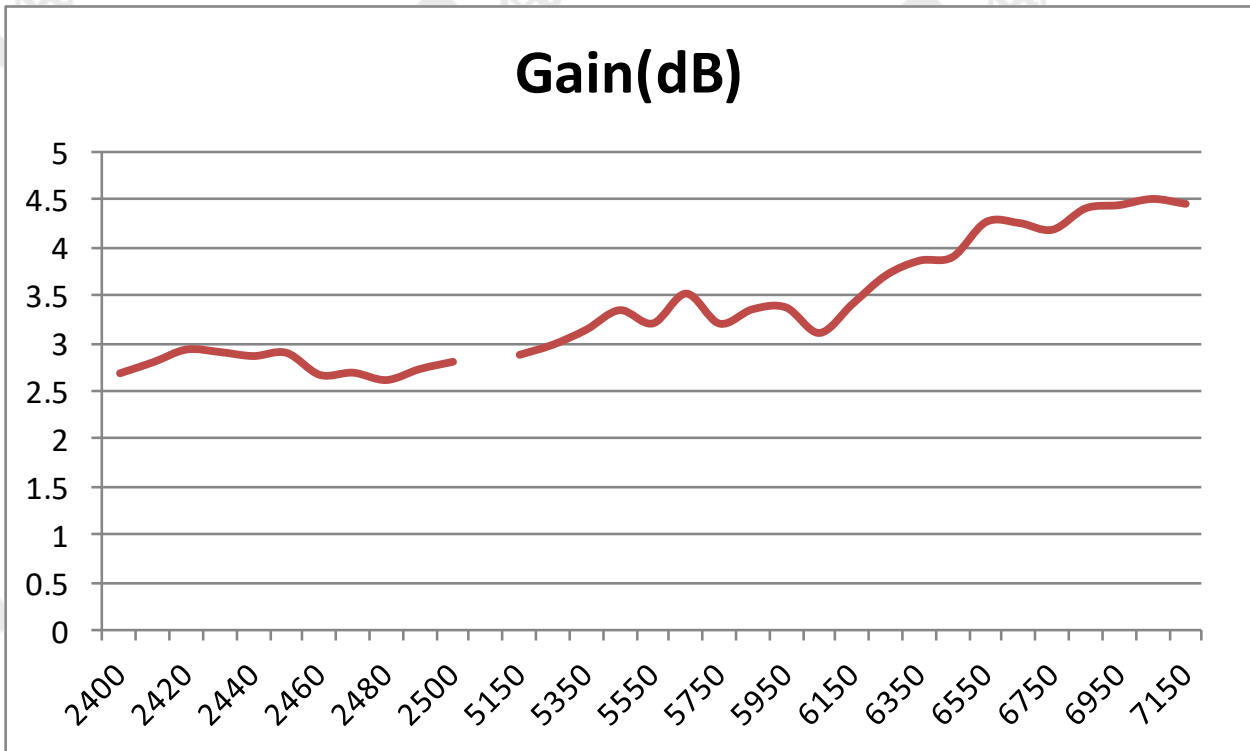
001=(N/A)
002=0Ω
003=(N/A)

- Return loss、VSWR& Smith chart

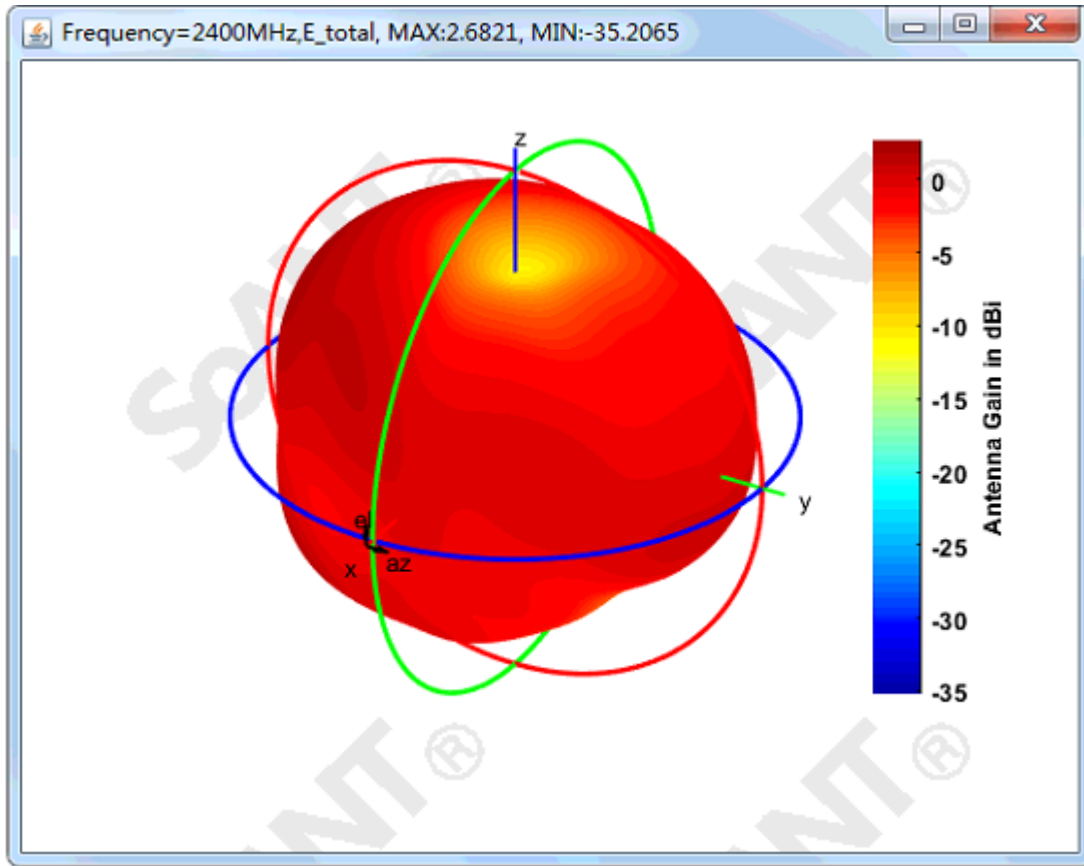


3D Total Date

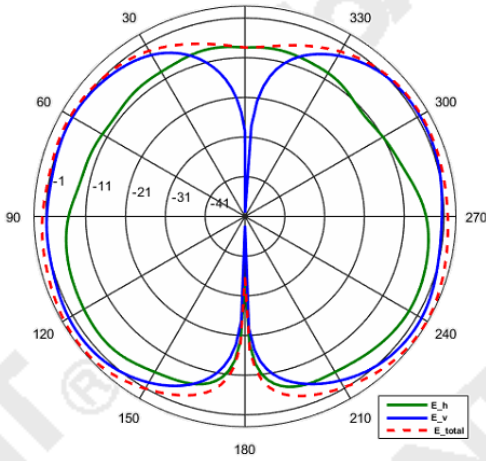
Frequency (MHz)	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500										
Directivity(dB)	3.359	3.4772	3.5909	3.5593	3.4672	3.3496	3.1475	3.0237	3.0453	3.0552	3.018										
Gain(dB)	2.6821	2.7982	2.9305	2.904	2.8622	2.8955	2.6653	2.6879	2.6113	2.7262	2.802										
Efficiency (dB)	-0.6769	-0.679	-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)	4.3868	4.2906	4.4031	4.5023	4.3912	4.4776	4.1564	4.2623	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	3.3417	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



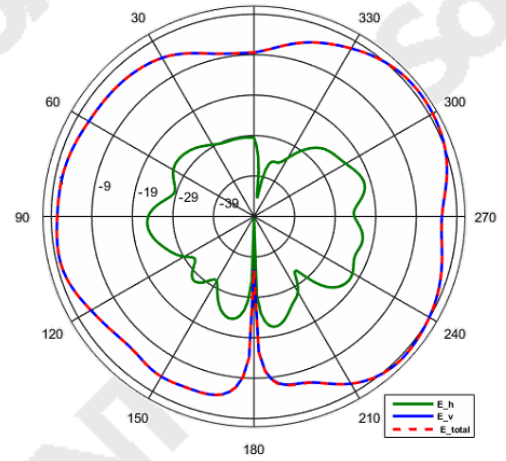
2400MHz 3D&2D Cut



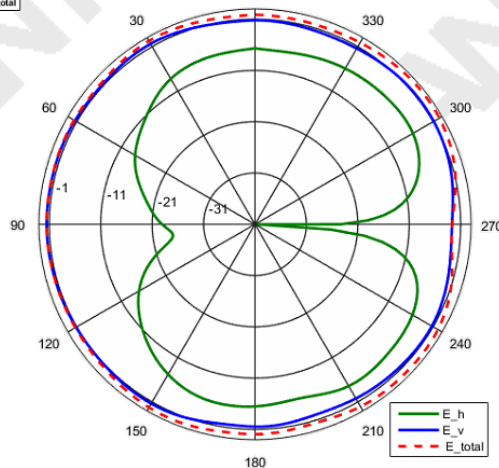
E_h, E_v, and E_{total}: Theta Cut @ Phi=0 Degree (frequency=2400MHz)



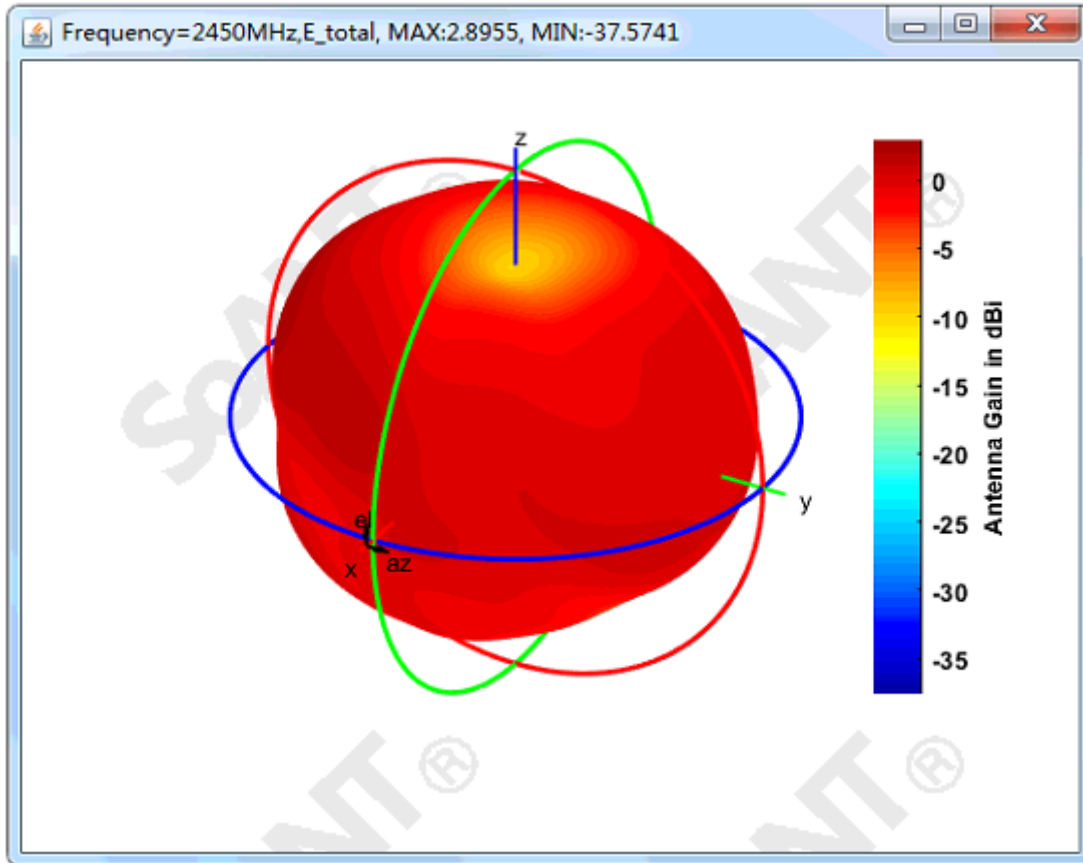
E_h, E_v, and E_{total}: Theta Cut @ Phi=90 Degree (frequency=2400MHz)



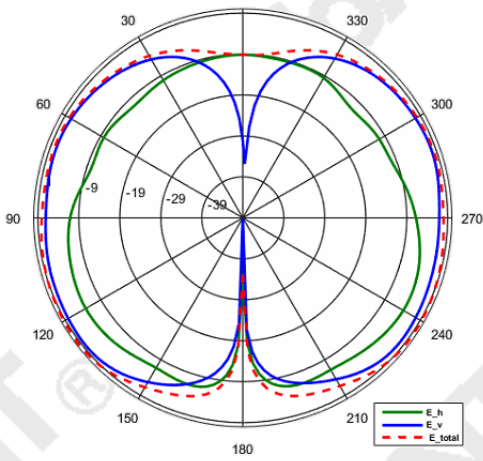
E_h, E_v, and E_{total}: Phi Cut @ Theta=90 Degree (frequency=2400MHz)



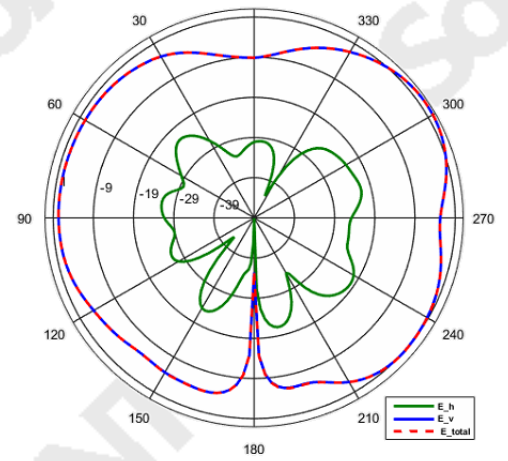
2450MHz 3D&2D Cut



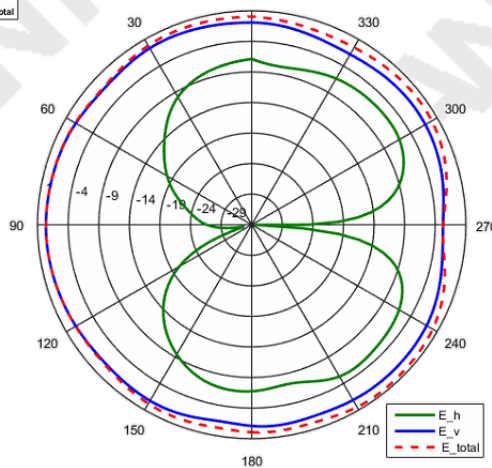
E_h, E_v, and E_total: Theta Cut @ Phi=0 Degree
(frequency=2450MHz)



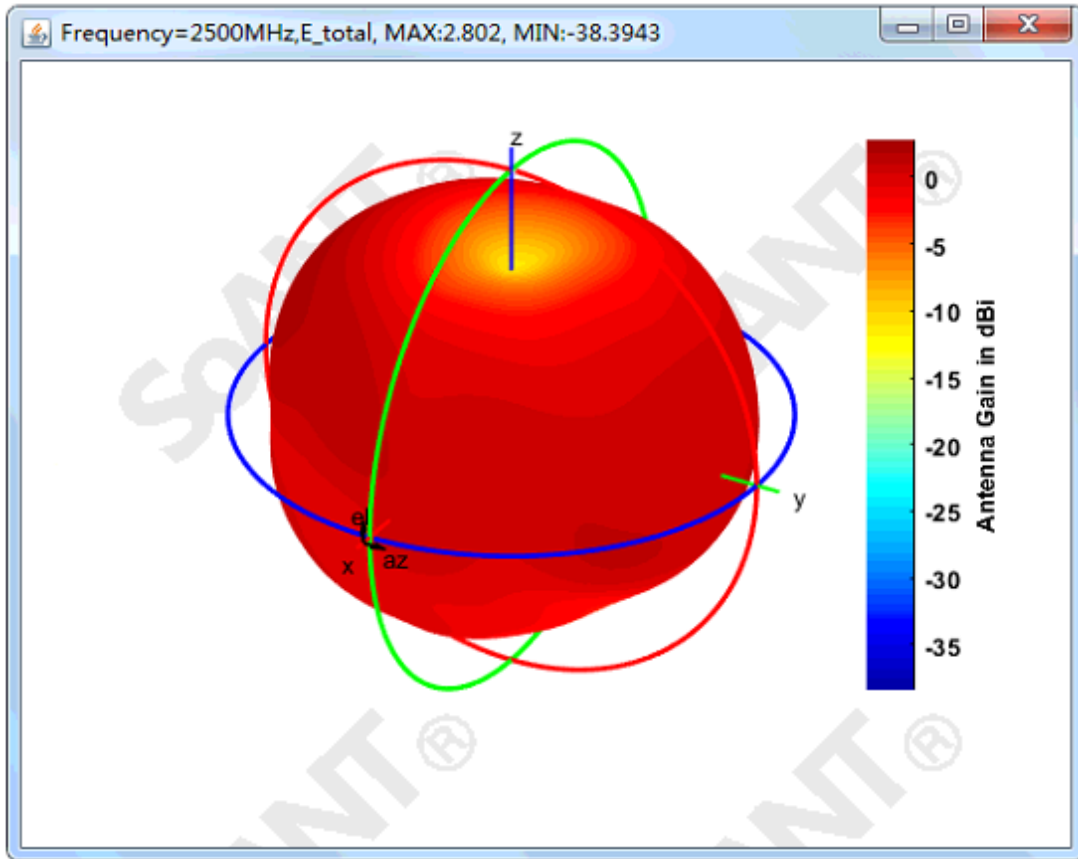
E_h, E_v, and E_total: Theta Cut @ Phi=90 Degree
(frequency=2450MHz)



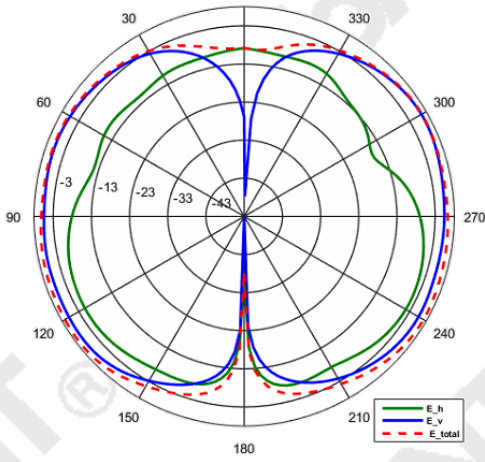
E_h, E_v, and E_total: Phi Cut @ Theta=90 Degree
(frequency=2450MHz)



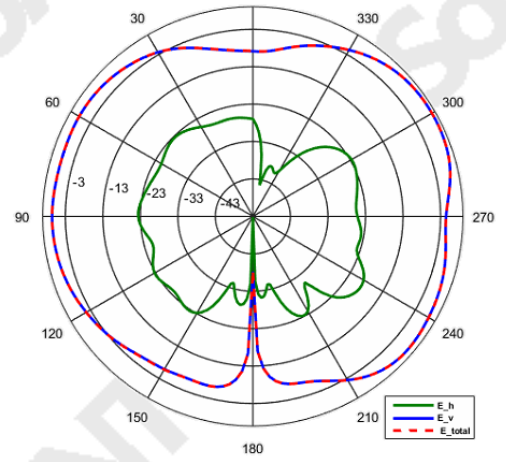
2500MHz 3D&2D Cut



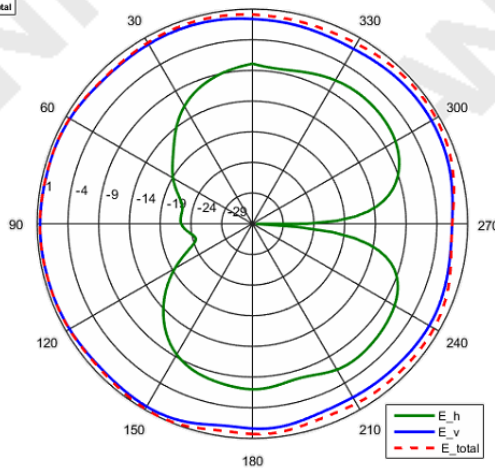
E_h, E_v, and E_total: Theta Cut @ Phi=0 Degree
(frequency:2500MHz)



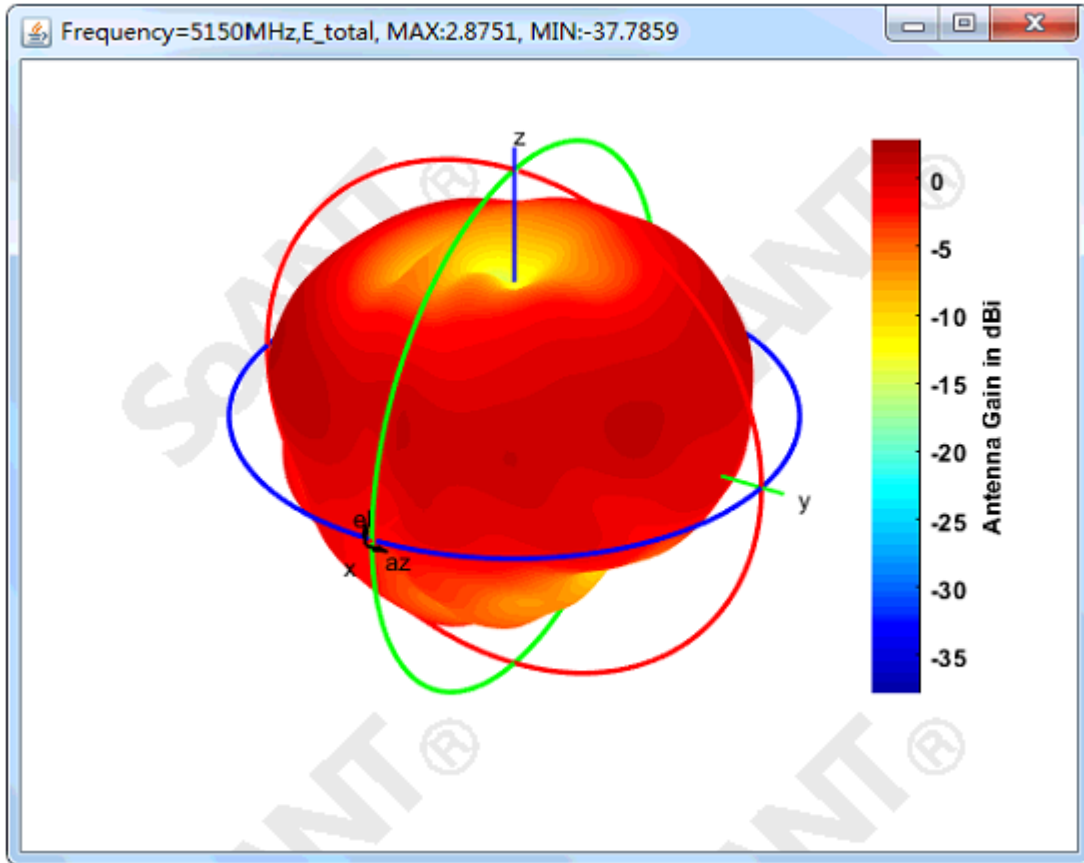
E_h, E_v, and E_total: Theta Cut @ Phi=90 Degree
(frequency:2500MHz)



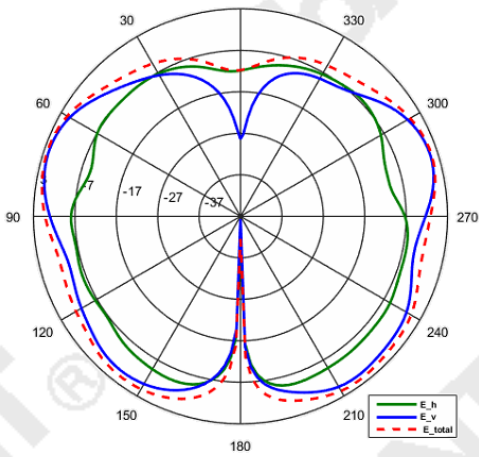
E_h, E_v, and E_total: Phi Cut @ Theta=90 Degree
(frequency:2500MHz)



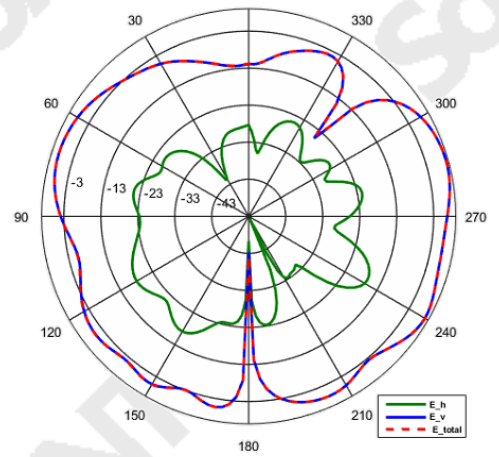
5150MHz 3D&2D Cut



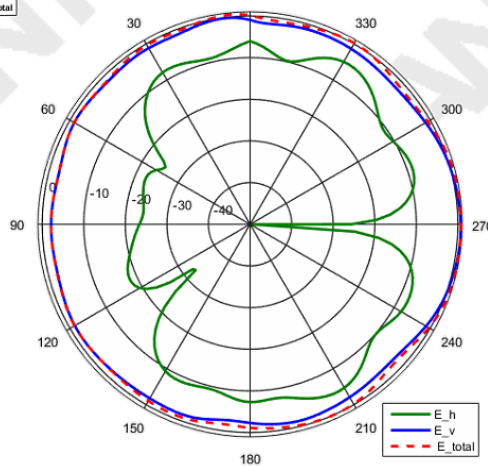
E_h, E_v, and E_total: Theta Cut @ Phi=0 Degree (frequency=5150MHz)



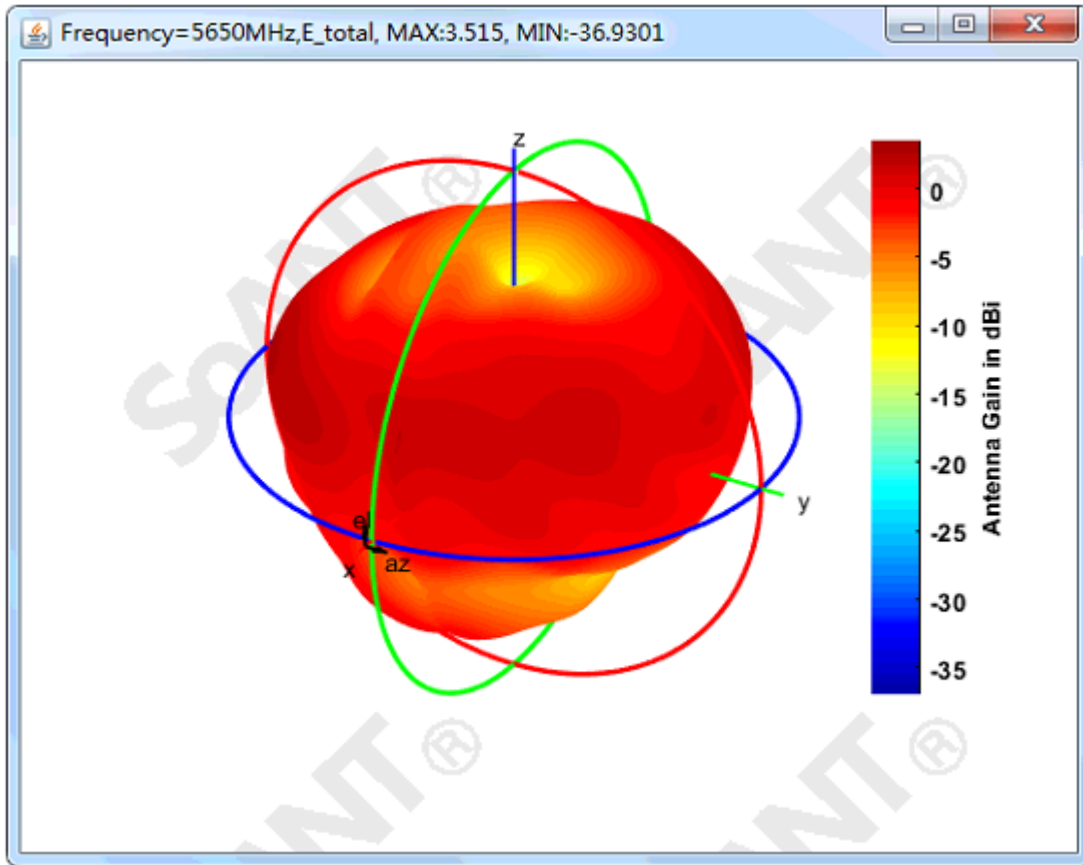
E_h, E_v, and E_total: Theta Cut @ Phi=90 Degree (frequency=5150MHz)



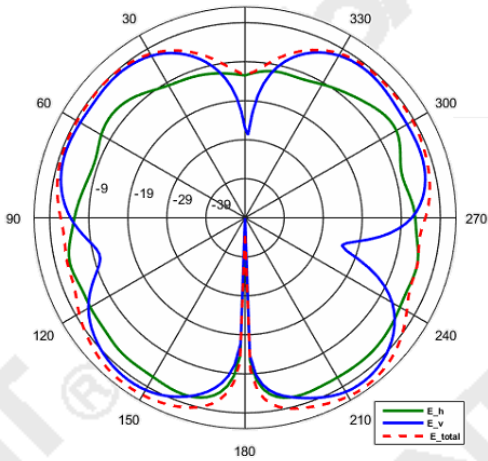
E_h, E_v, and E_total: Phi Cut @ Theta=90 Degree (frequency=5150MHz)



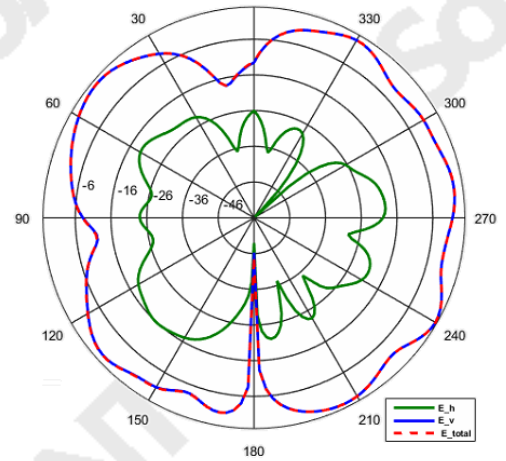
5650MHz 3D&2D Cut



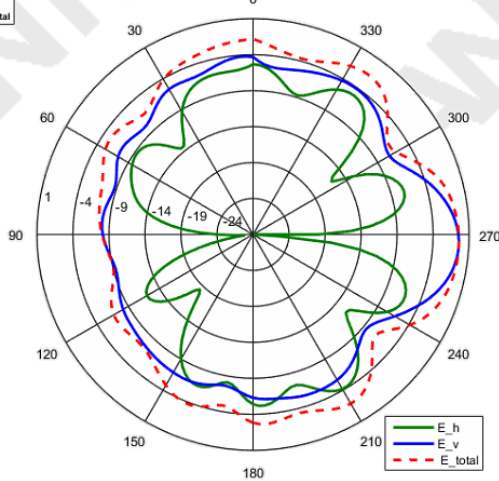
E_h, E_v, and E_total: Theta Cut @ Phi=0 Degree
(frequency=5650MHz)



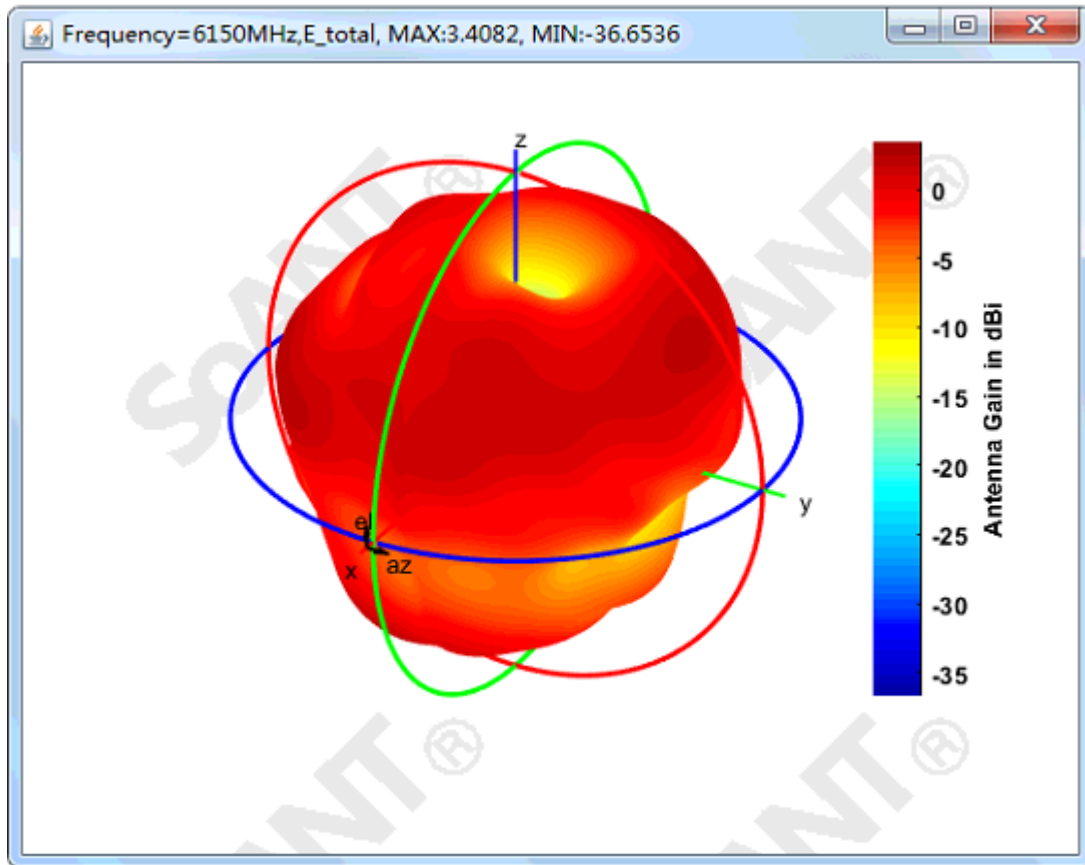
E_h, E_v, and E_total: Theta Cut @ Phi=90 Degree
(frequency=5650MHz)



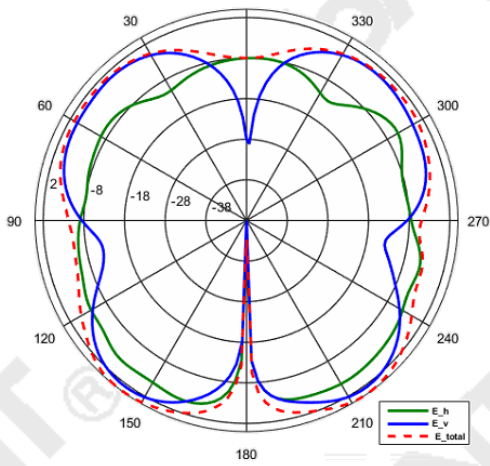
E_h, E_v, and E_total: Phi Cut @ Theta=90 Degree
(frequency=5650MHz)



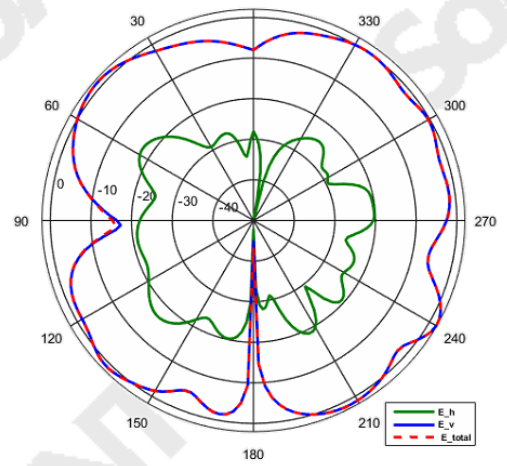
6150MHz 3D&2D Cut



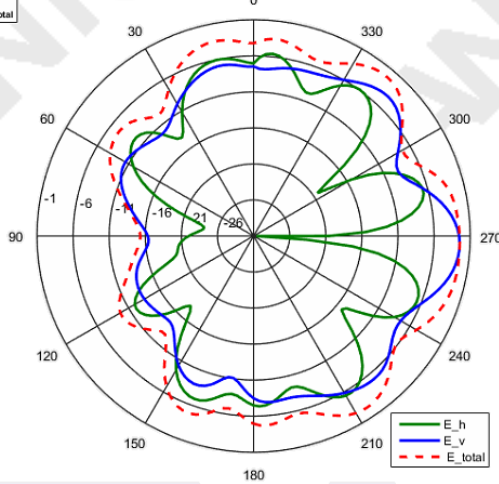
E_h, E_v, and E_total: Theta Cut @ Phi=0 Degree
(frequency=6150MHz)



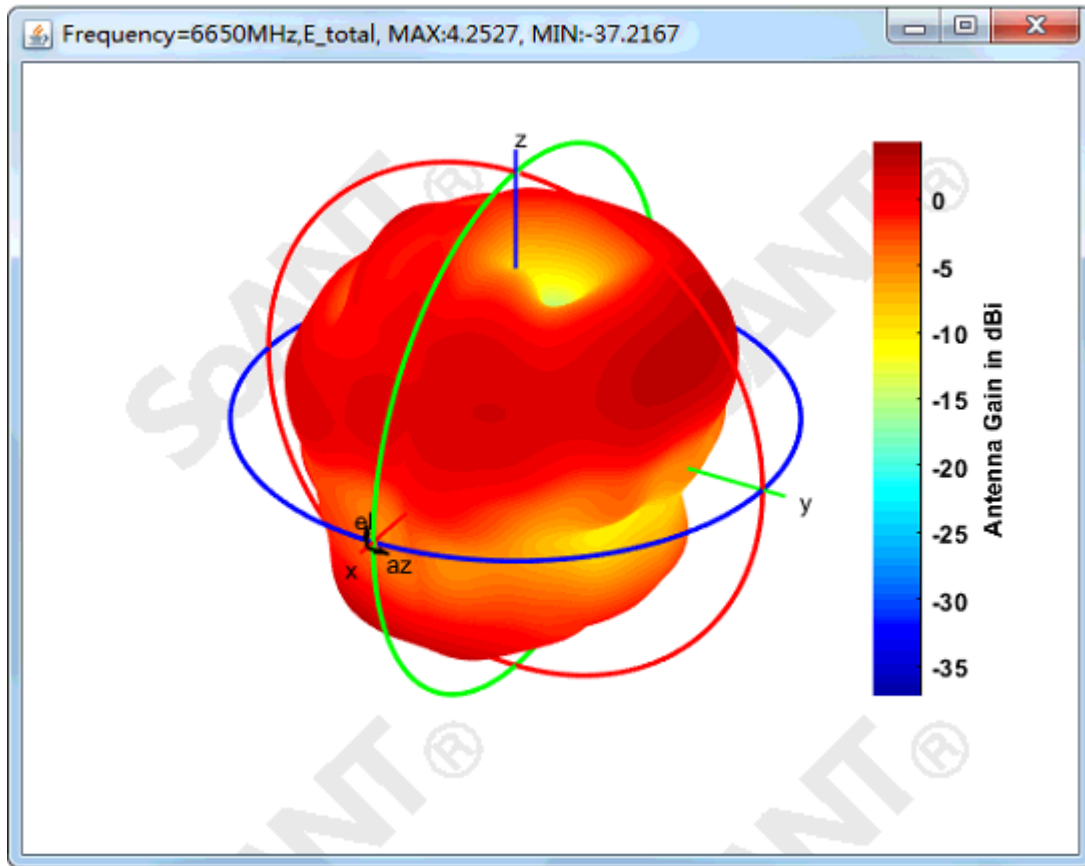
E_h, E_v, and E_total: Theta Cut @ Phi=90 Degree
(frequency=6150MHz)



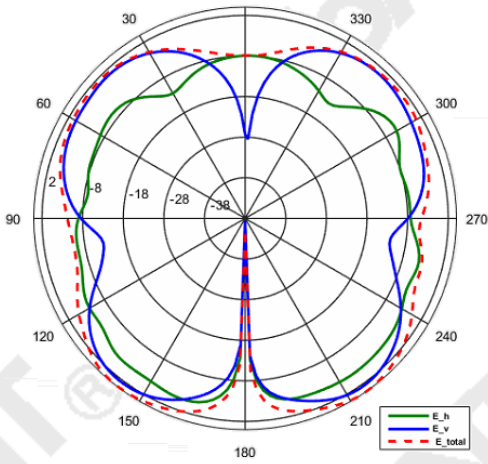
E_h, E_v, and E_total: Phi Cut @ Theta=90 Degree
(frequency=6150MHz)



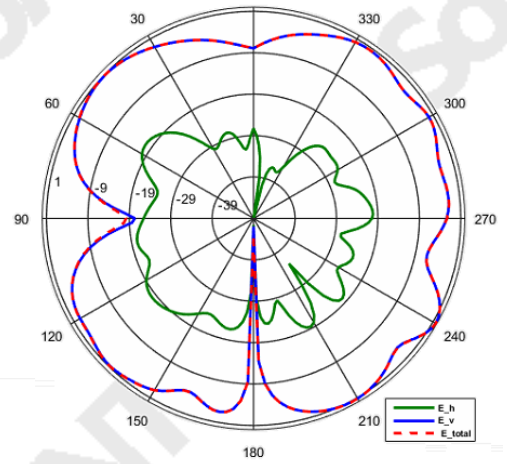
6650MHz 3D&2D Cut



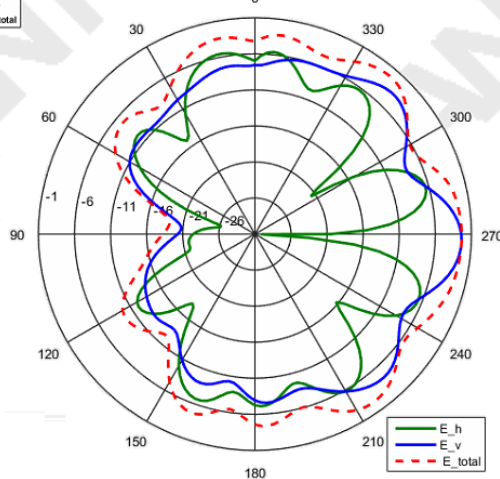
E_h, E_v, and E_total: Theta Cut @ Phi=0 Degree
(frequency=6650MHz)



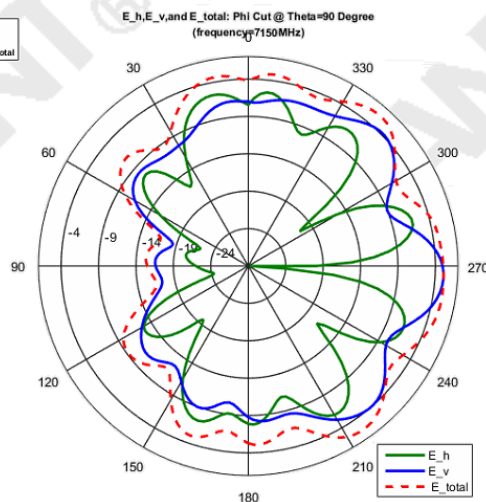
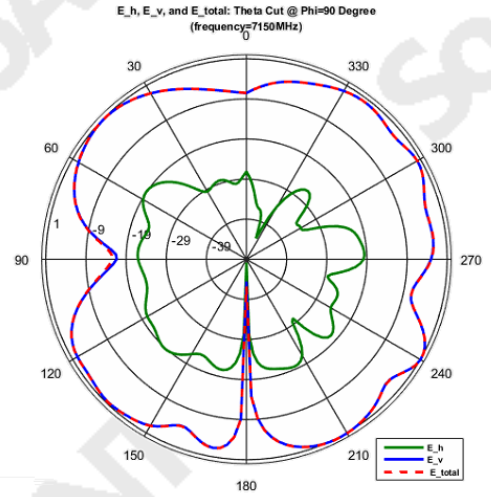
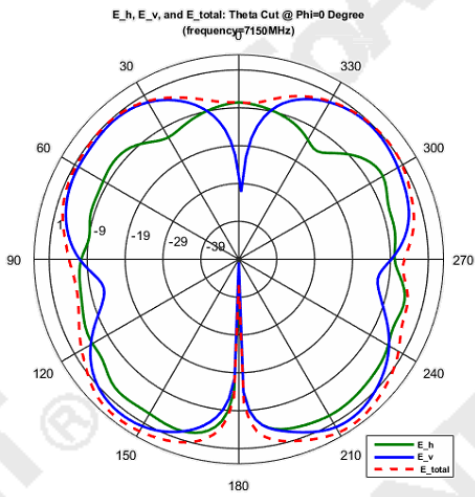
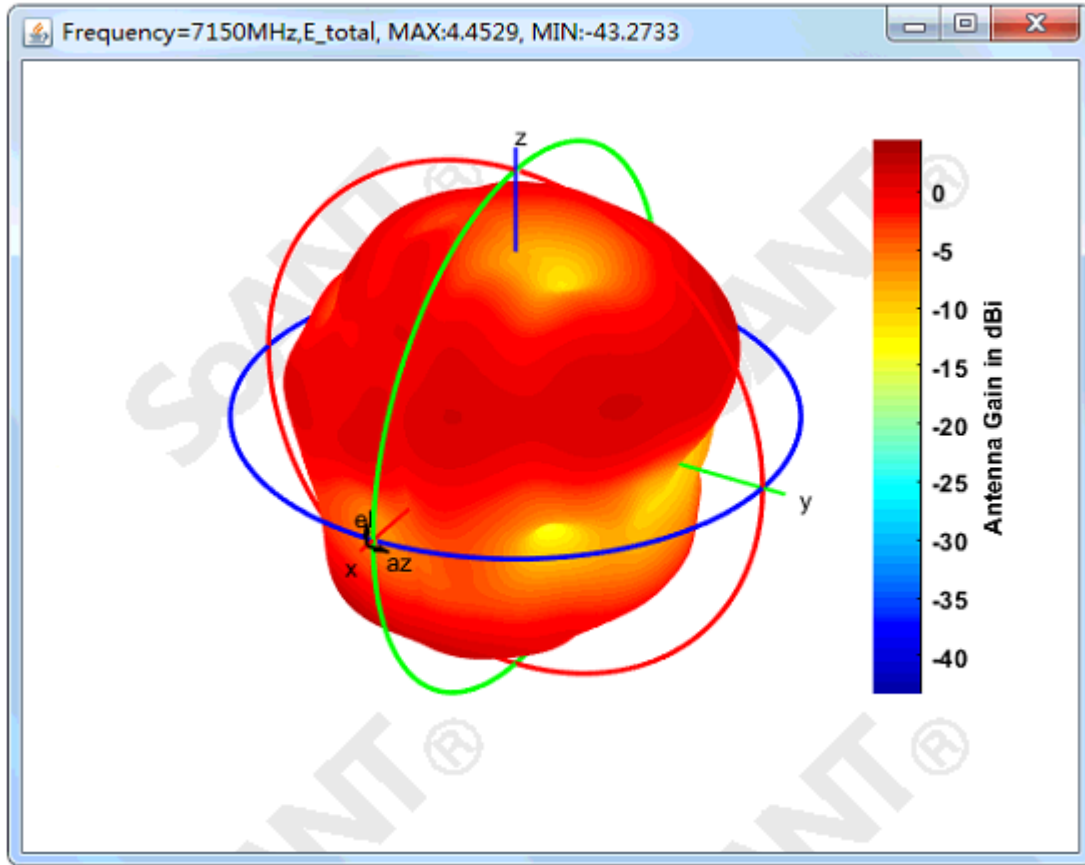
E_h, E_v, and E_total: Theta Cut @ Phi=90 Degree
(frequency=6650MHz)



E_h, E_v, and E_total: Phi Cut @ Theta=90 Degree
(frequency=6650MHz)



7150MHz 3D&2D Cut



6. Dimension

