Huizhou SPEED Wireless Technology Co, Ltd.

（Suzhou SPEED）

Customer：<u>Zebra Technologies Corporation</u>

Brand Name：<u>Zebra</u>

Model Name： <u>comet-wlan-antenna</u>

Material：<u>FPC</u>

Documented by: <u>_kai jie guo</u>

Engineer: <u>_hai dong miu</u>

Date：<u>2023.3.28</u>

1： Chamber room introduction and testing scope

Our company has a number of OTA test darkrooms, ranging from 400MHz to 8.5ghz, which can provide passive test and active test (including OTA overall 2G,3G,4G,5GFR test, WiFi multi-mode test, GPS active test, Bluetooth active test, which can provide antenna gain and efficiency. 2D orientation and apple chart analysis and upper and lower hemisphere efficiency values, mutual disturbance correlation coefficient test items

WIFI a/b/g/n/ac/ax

2：Test system introduction:

The testing system has the characteristics of accurate, fast and simple testing. The operation interface is simple and humanized.

3：Information

Check items	Information
Provided by lab	Speed ETS
Manufacturer/ad	Huizhou SPEED Wireless Technology Co, Ltd /Speed 99 Wei xin Road, Suzhou Industrial Park, Jiangsu Province, China.
Model name(Part number)	comet-wlan-antenna
Test environment	Speed ETS
Test Software	EM Quest
List of calibrated test equipment	Agilent E5071C_2022.8.23
Antenna detail info.	Show WLAN/BT/ NFC only, no WWAN ANT0: WiFi BT/2.4G / 5G / 6E antenna (2.4~2.5GHz, 5.15~7.125GHz), monopole type antenna. ANT1: WiFi 2.4G / 5G / 6E antenna(2.4~2.5GHz, 5.15~7.125GHz), IFA type antenna. NFC Antenna: loop Differential port to excite FPC coil +Ferrite sheet with dimension 32.14 mm *31.30mm*0.25mm
Antenna gain test data	Included antenna frequency, gain pattern

A0 Wlan Peak Gain (dBi)			
2400-2483.5MHz	-1.1	5470-5725MHz	-1.2
5150-5250MHz	0.1	5725-5850MHz	-0.91
5250-5350MHz	-0.55	5925-7125MHz	5925-6425:2.05
			6425-6525:-0.94
			6525-6875:-0.54
			6875-7125:-2.15

A1 Wlan Peak Gain (dBi)			
2400-2483.5MHz	-1.23	5470-5725MHz	-1.02
5150-5250MHz	-0.66	5725-5850MHz	-1
5250-5350MHz	-0.26	5925-7125MHz	5925-6425:1.51
			6425-6525:0.76
			6525-6875:0.1
			6875-7125:-0.73

3D Pattern

A0 (Frequency=2437MHz)
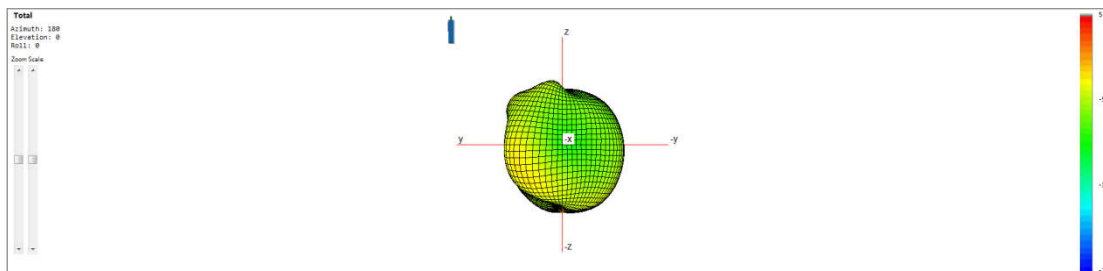
A0 (Frequency=5200MHz)
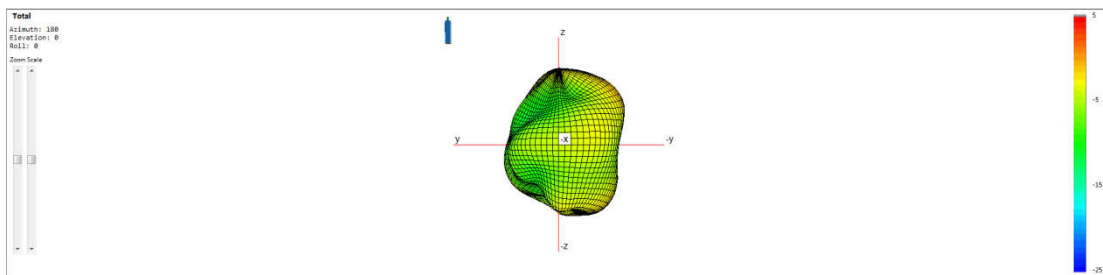
A0 (Frequency=5280MHz)
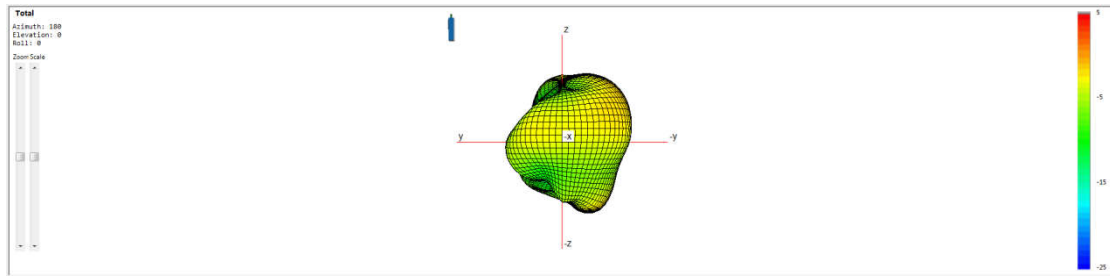
A0 (Frequency=5600MHz)
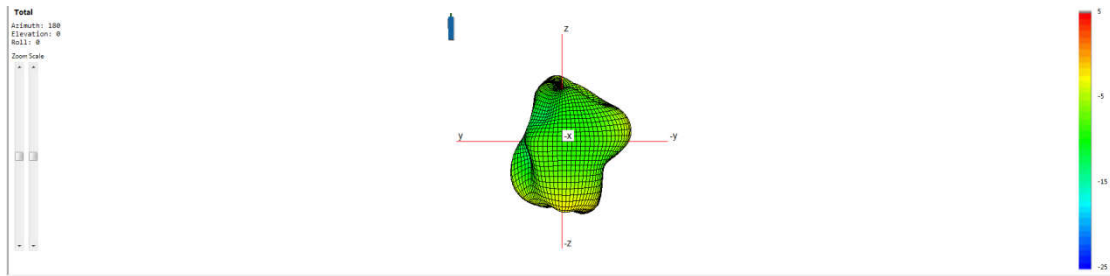
A0 (Frequency=5800MHz)
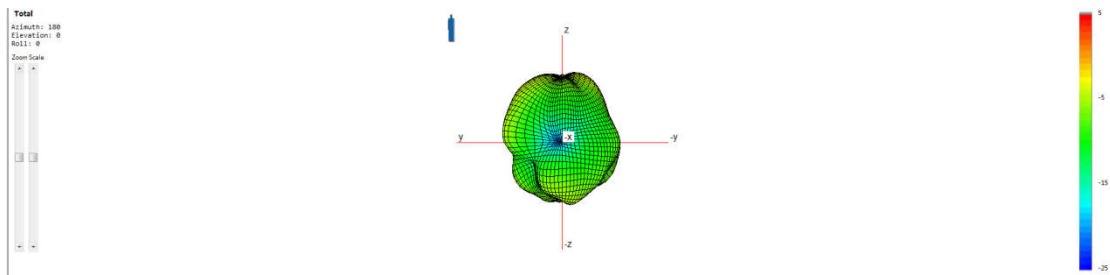
A0 (Frequency=6000MHz)
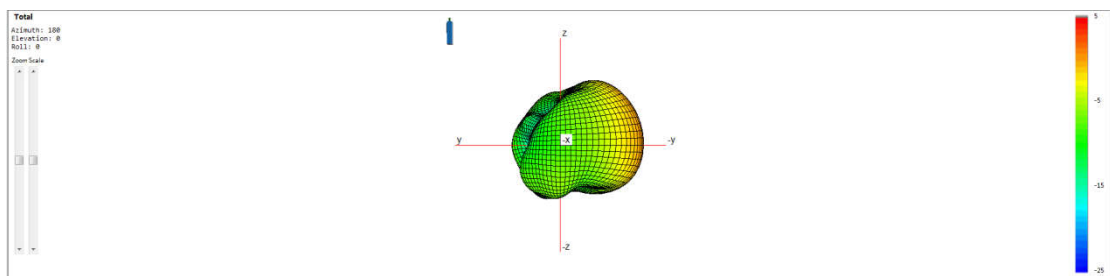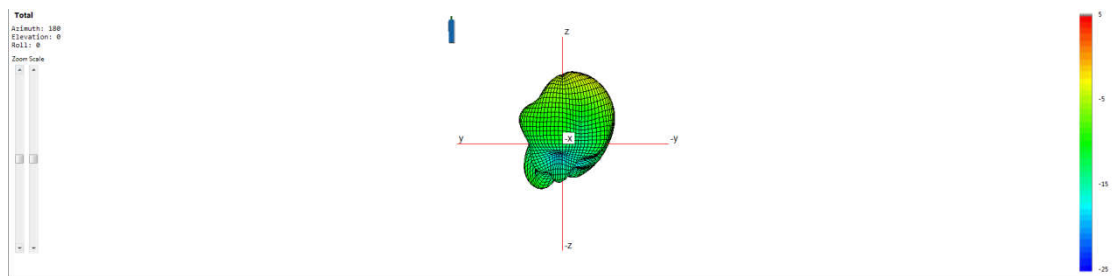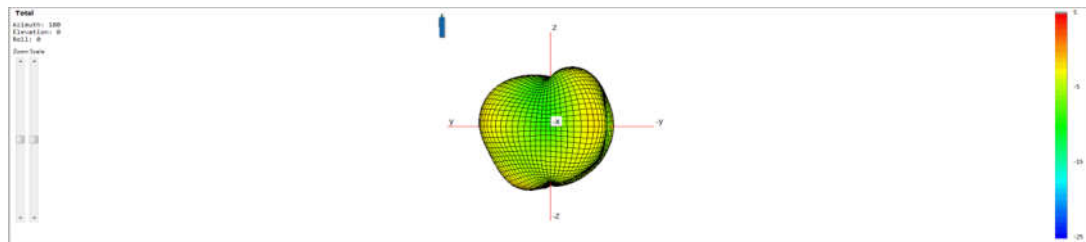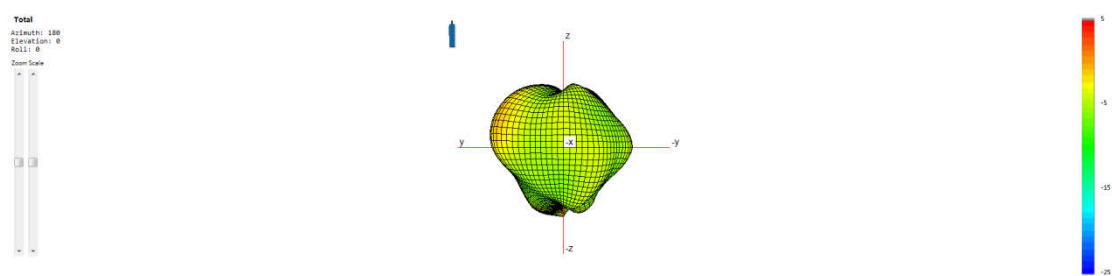

A0 (Frequency=6475MHz)
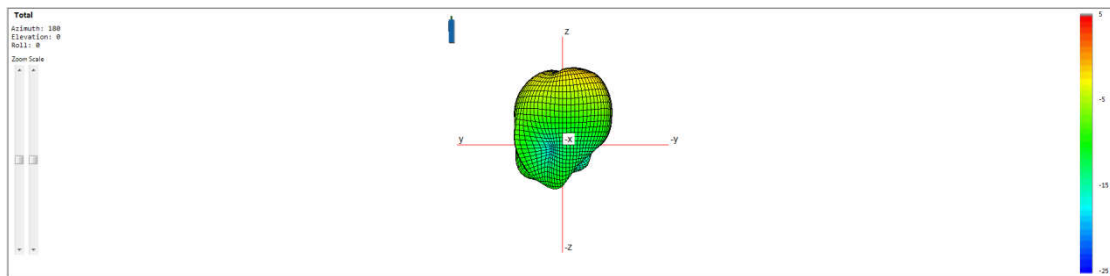
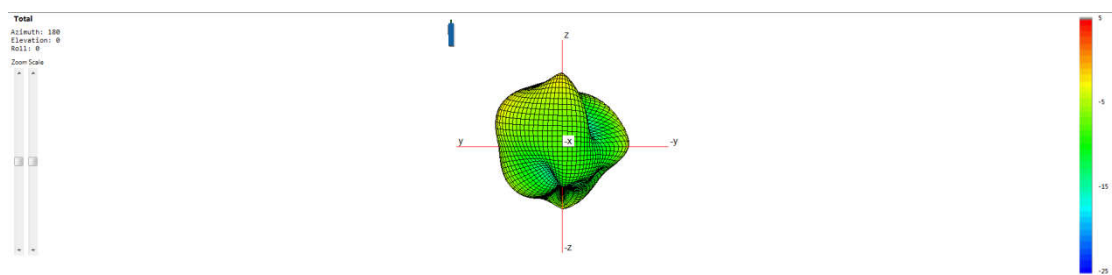## A0 (Frequency=6755MHz)
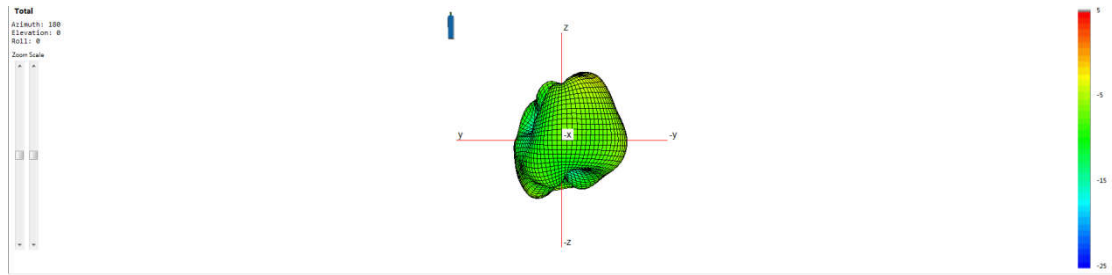
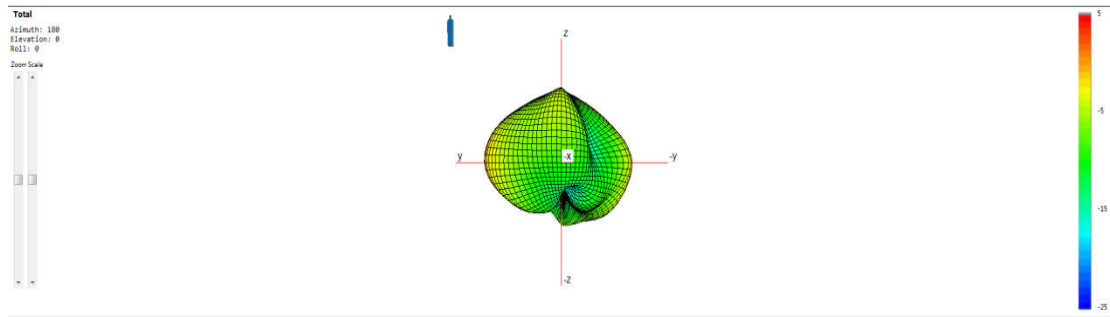## A0 (Frequency=7000MHz,)

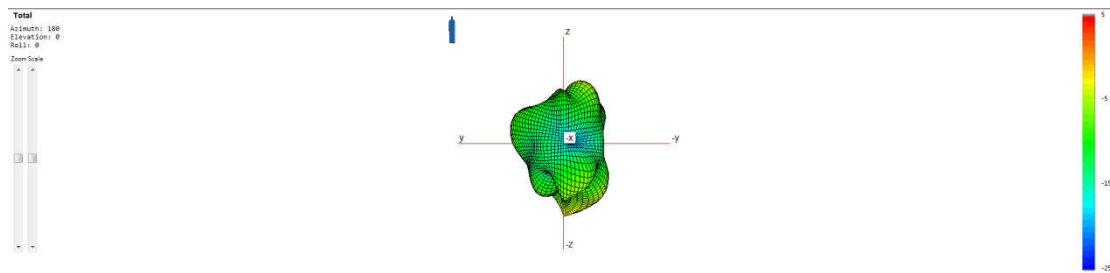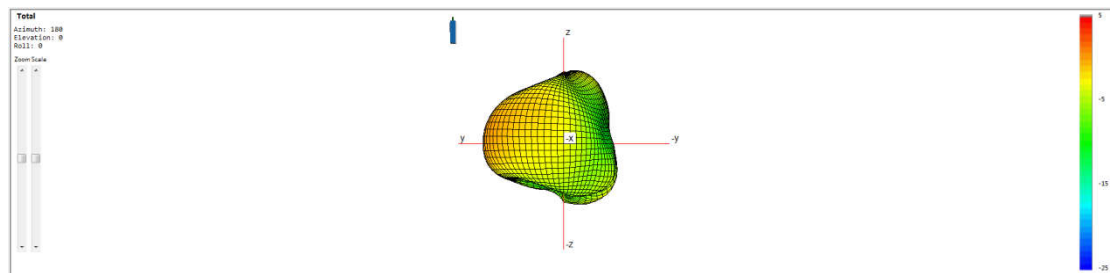## A1 (Frequency=2437MHz)

A1 (Frequency=5200MHz)

A1 (Frequency=5280MHz)
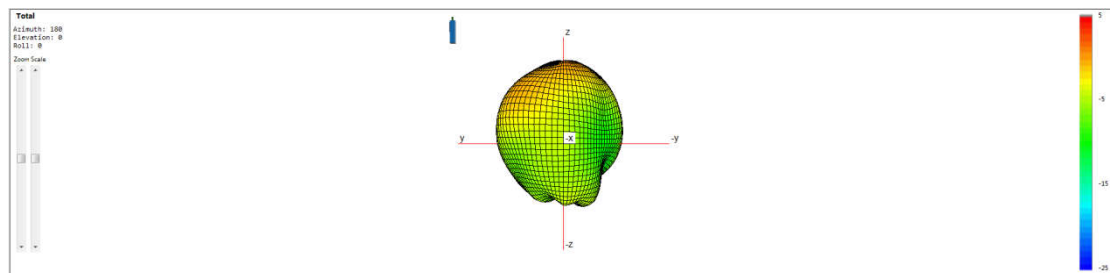
A1 (Frequency=5600MHz)
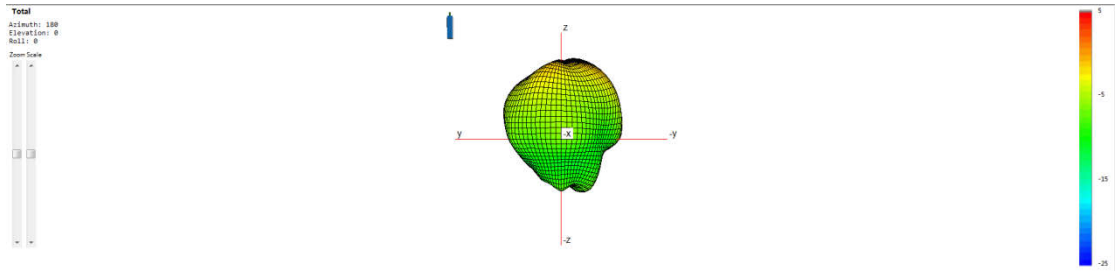

A1 (Frequency=5800MHz)

A1 (Frequency=6000MHz)

A1 (Frequency=6475MHz)

A1 (Frequency=6755MHz)

A1 (Frequency=7000MHz)