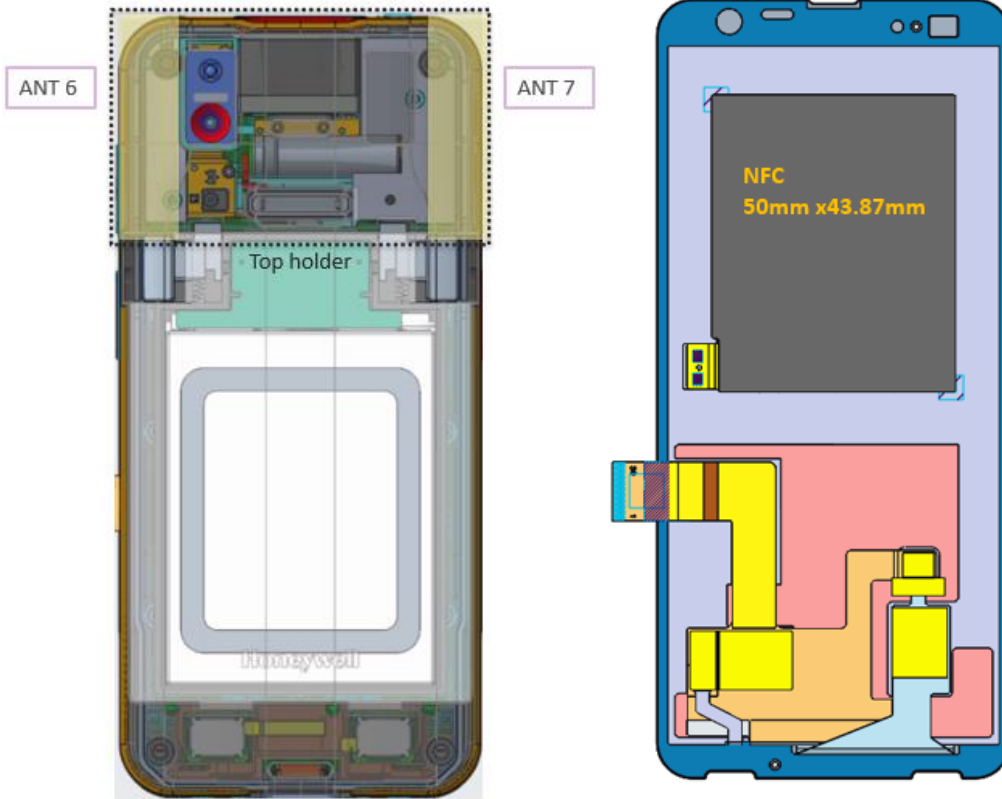


# CT70-L0 Antenna SPECIFICATION

Antenna Manufacturer	Amphenol: ANT6, ANT7 Address: No.71,Lane 956,Jungshan Rd.,Taoyuan City 330 ZJHaitong: NFC Address: 1/F, Building C5, Kangqiao Business Park, No.2555 Xiu Pu Road, Pudong New Area, Shanghai
Frequency Range	ANT 6: 2400~2500, 5150~7125MHz ANT 7: 2400~2500, 5150~7125MHz NFC: 13.56MHz
Impedance	ANT6: 50 Ohm ANT7: 50 Ohm NFC: 6.5 Ohm
Antenna type	ANT6: PIFA (LDS) ANT7: PIFA (LDS) NFC: Loop P/N: US542A-16-002-C WLAN_S803 US542A-16-012-C WLAN_S703 B.1.10.L.0067 Front NFC
TEST DATA	2025/07/18
DATASHEET REVISION	Rev 00

# Antenna Location



# Antenna Gain

WLAN ANT6 Wi-Fi 7		
Frequency (MHz)	Efficiency (dBi)	Peak gain (dBi)
2400	-3.6	0.2
2450	-3.4	0.4
2500	-3.4	0.3
5150	-3.9	1.1
5350	-3.5	0.8
5550	-2.8	2.5
5750	-2.9	2.3
5850	-3.1	2.1
5950	-3.2	1.9
6250	-3.7	0.4
6550	-3.6	0.7
6850	-3.5	1.6
7150	-2.6	1.3

WLAN ANT7 Wi-Fi 7		
Frequency (MHz)	Efficiency (dBi)	Peak gain (dBi)
2400	-3.6	1.3
2450	-3.6	1.3
2500	-3.9	0.9
5150	-3.9	0.3
5350	-3.7	0.5
5550	-3.4	1.1
5750	-3.7	1.1
5850	-3.6	0.9
5950	-3.7	0.7
6250	-3.5	0.4
6550	-3.5	0.7
6850	-3.6	2.1
7150	-3.3	2.6

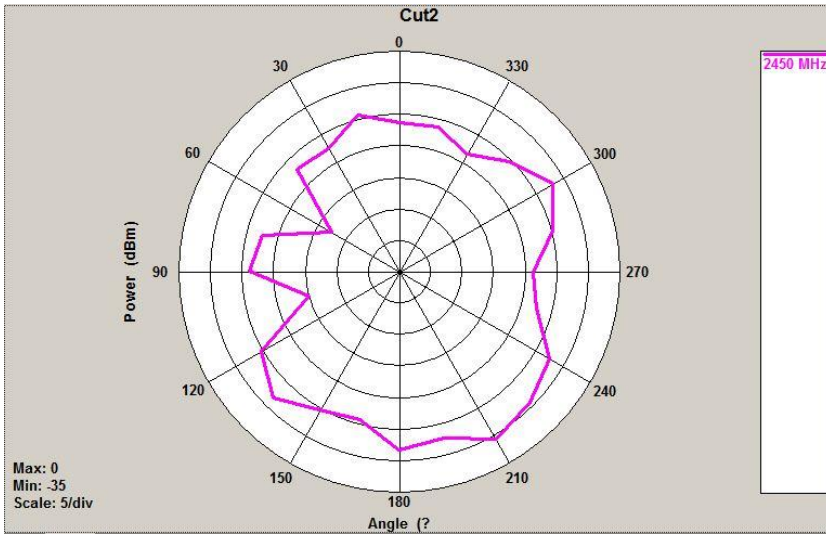
# 2D Radiation Pattern

ANT6 (WIFI)\_2450MHz

XY



XZ

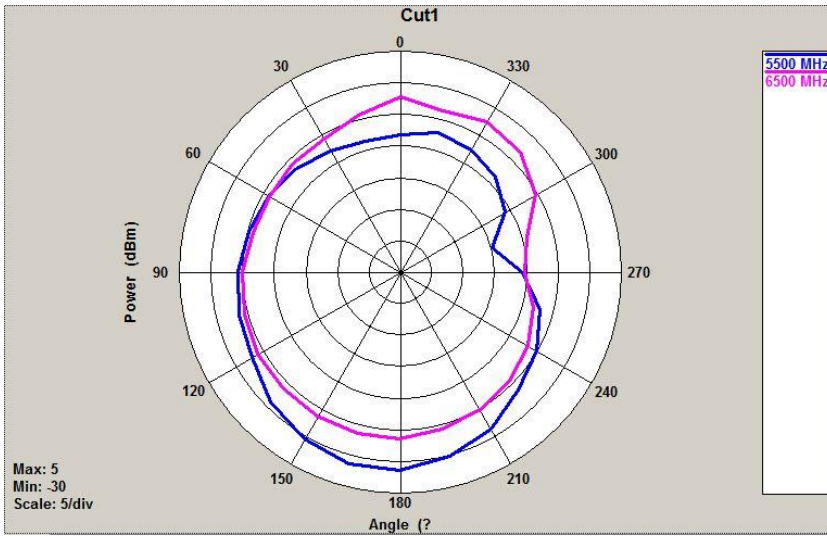


YZ

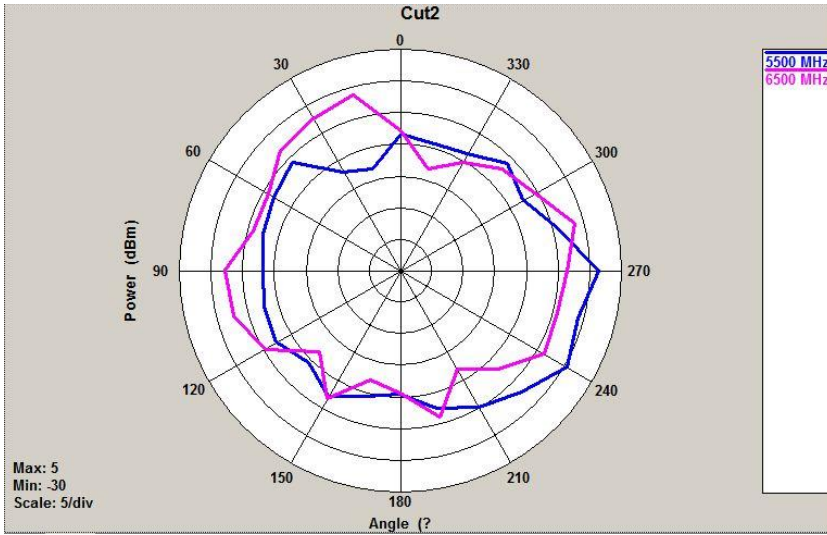


# ANT6 (WIFI)\_5500MHz\_6500MHz

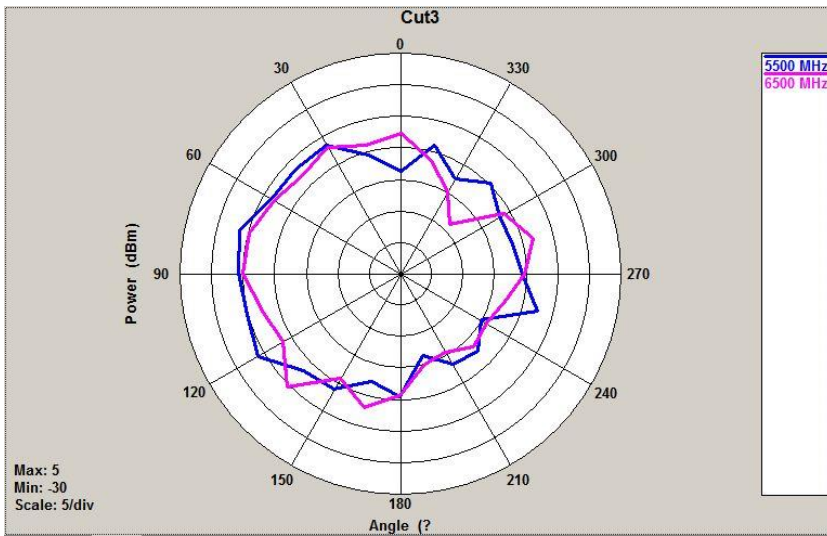
XY



XZ

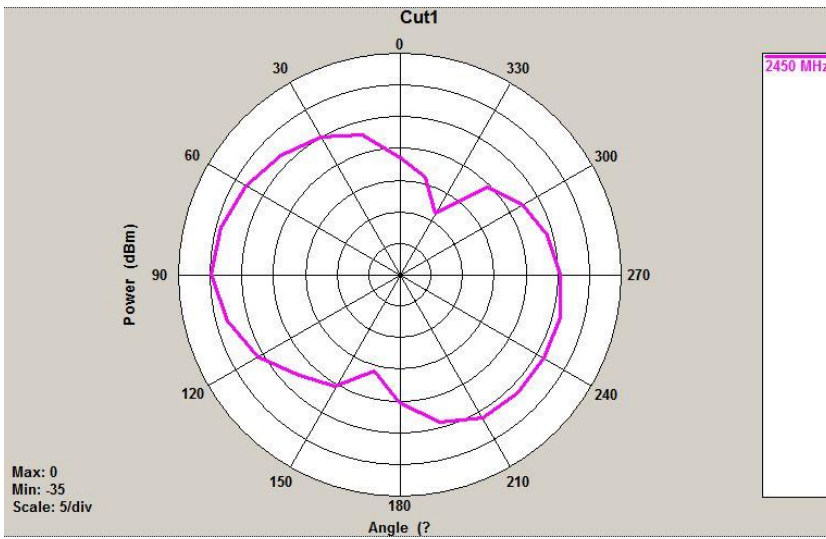


YZ

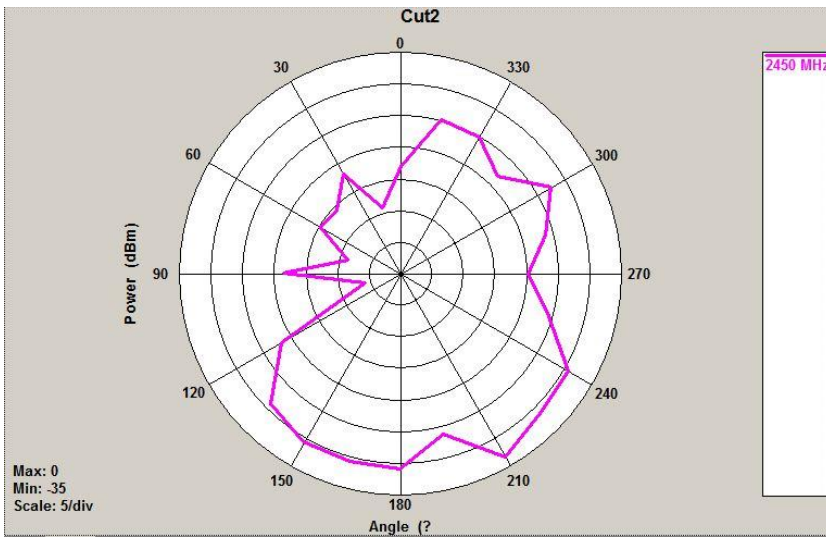


# ANT7 (WIFI)\_2450MHz

## XY



## XZ

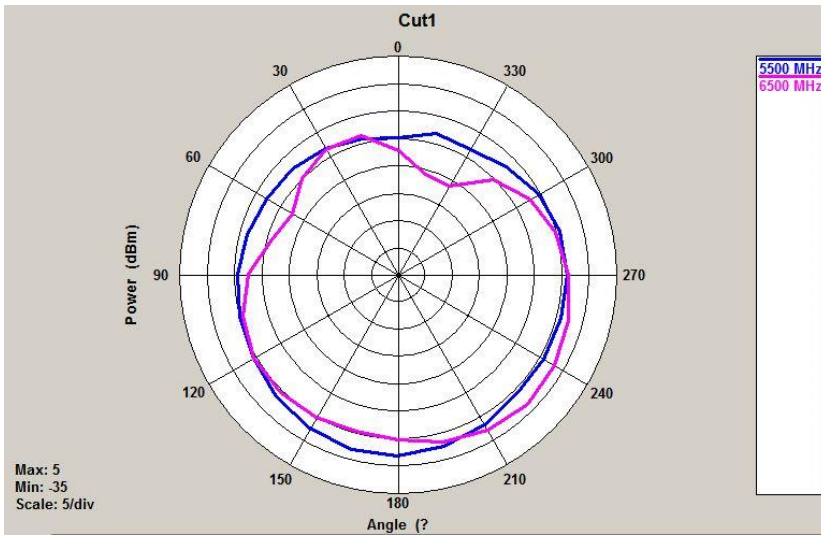


## YZ

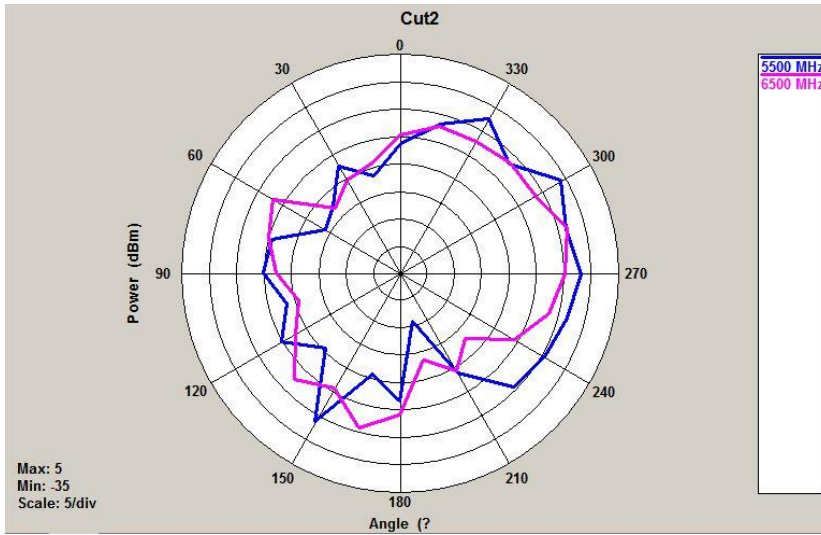


# ANT7 (WIFI)\_5500MHz\_6500MHz

## XY



## XZ



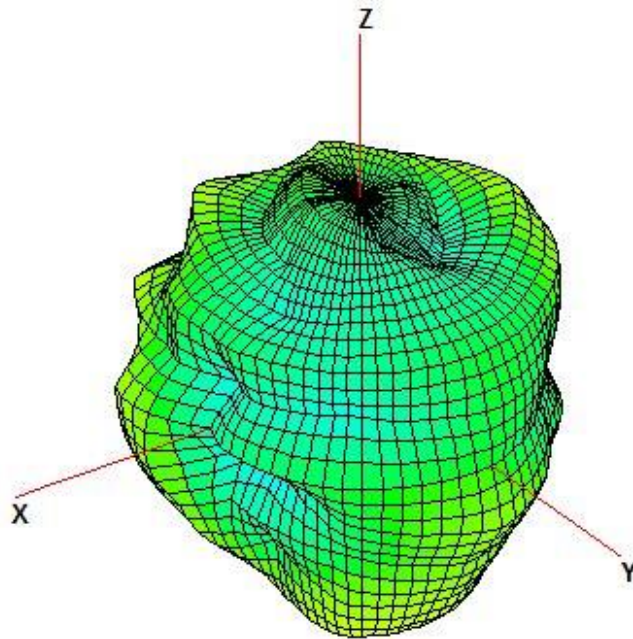
## YZ



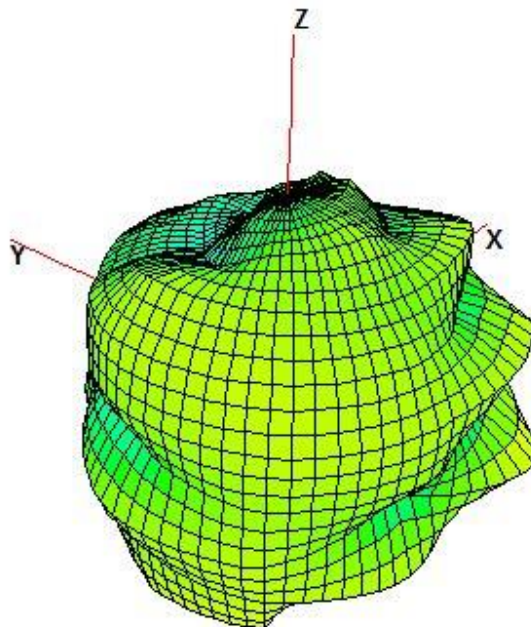
# 3D Radiation Pattern

ANT6 (WIFI)\_2450MHz

Azimuth = 125.0  
Elevation = -45.0  
Roll = -45.0



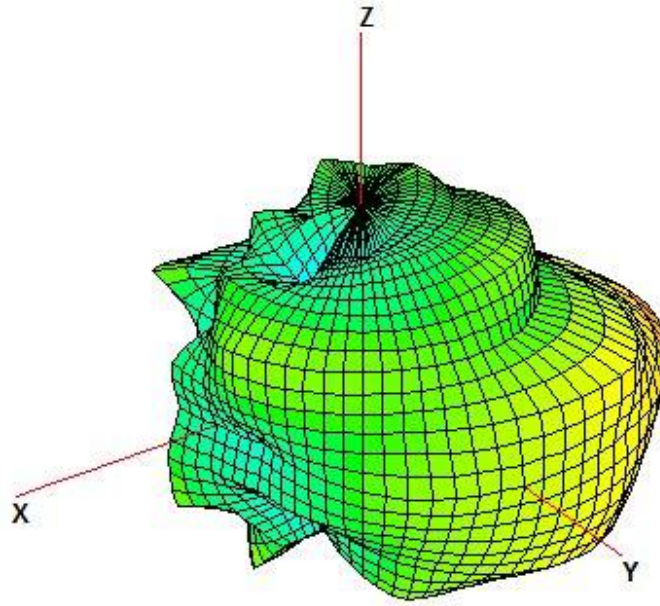
Azimuth = -65.0  
Elevation = 30.0  
Roll = 50.0



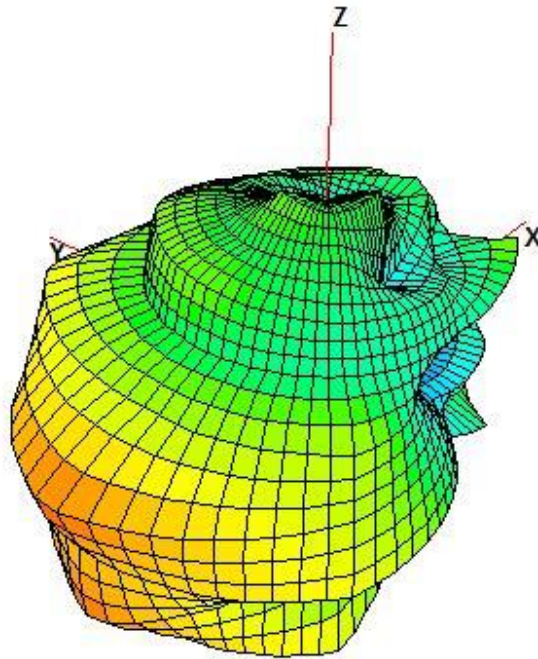


### ANT6 (WIFI)\_5500MHz

Azimuth = 125.0  
Elevation = -45.0  
Roll = -45.0

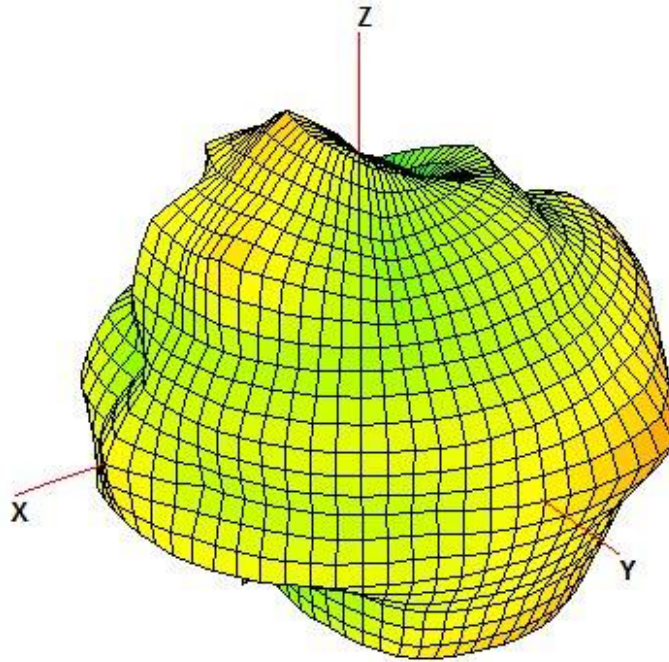


Azimuth = -65.0  
Elevation = 30.0  
Roll = 50.0

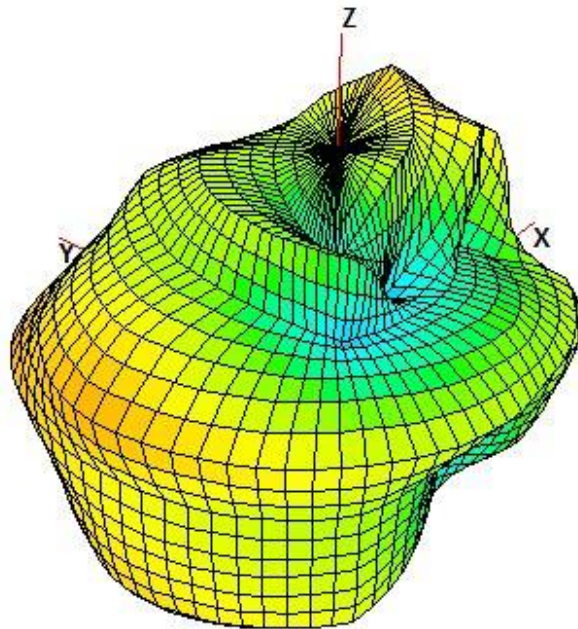


### ANT6 (WIFI)\_6500MHz

Azimuth = 125.0  
Elevation = -45.0  
Roll = -45.0

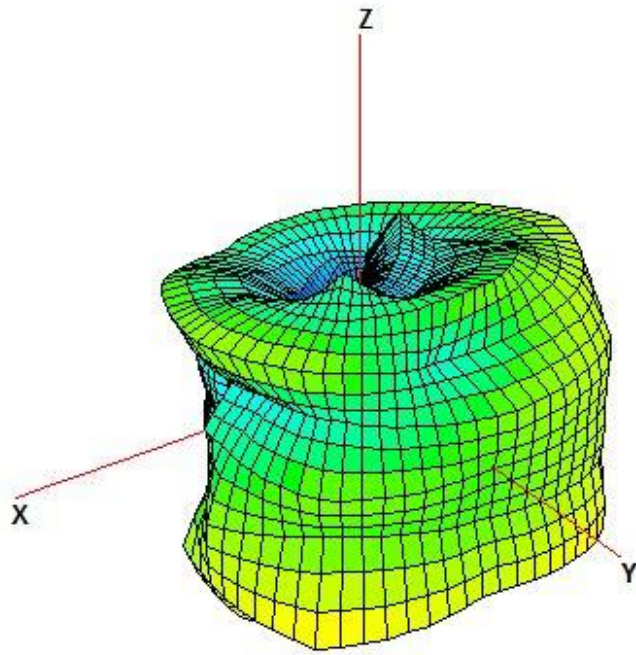


Azimuth = -65.0  
Elevation = 30.0  
Roll = 50.0

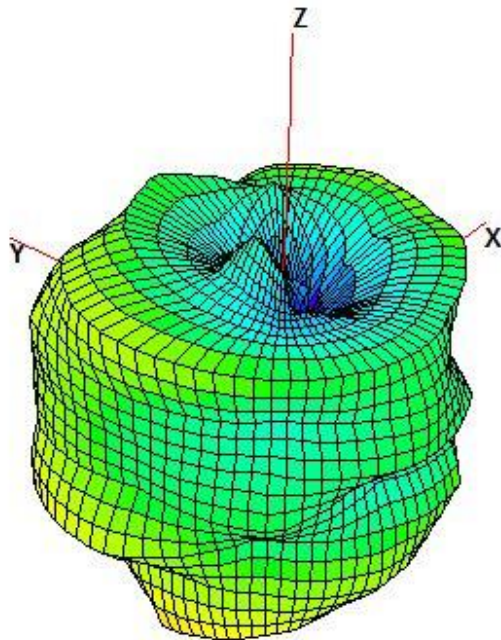


### ANT7 (WIFI)\_2450MHz

Azimuth = 125.0  
Elevation = -45.0  
Roll = -45.0

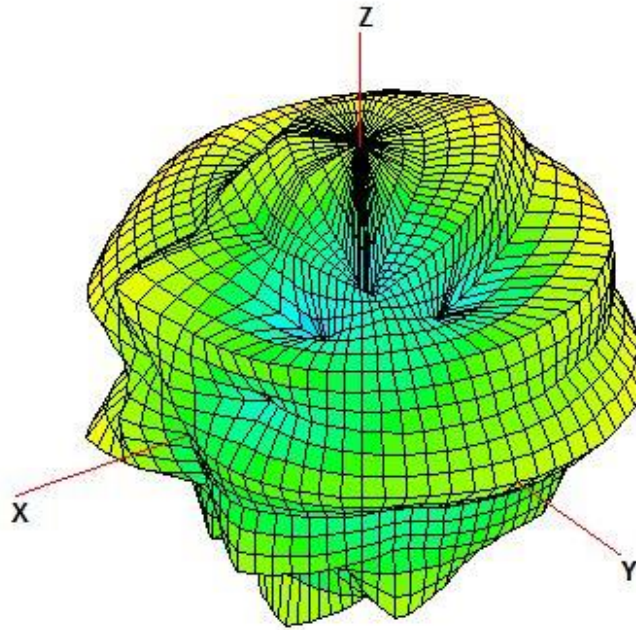


Azimuth = -65.0  
Elevation = 30.0  
Roll = 50.0

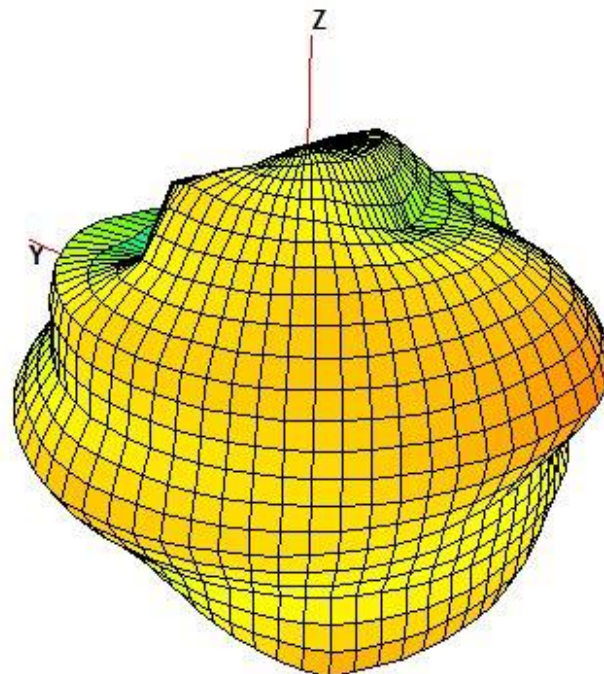


### ANT7 (WIFI)\_5500MHz

Azimuth = 125.0  
Elevation = -45.0  
Roll = -45.0

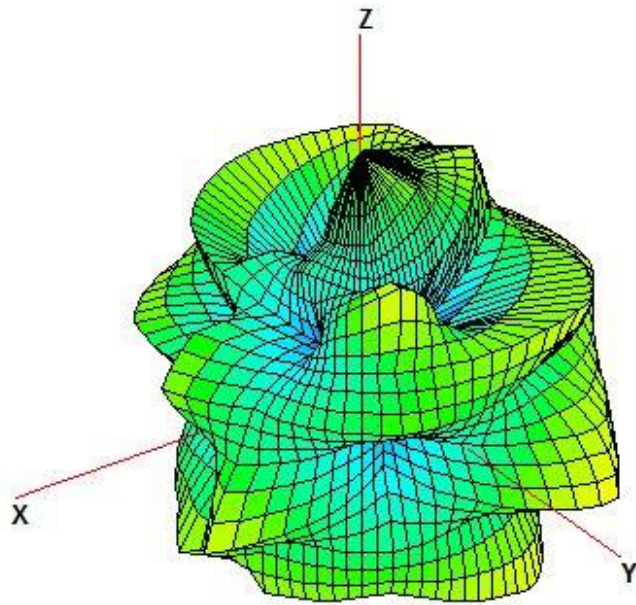


Azimuth = -65.0  
Elevation = 30.0  
Roll = 50.0

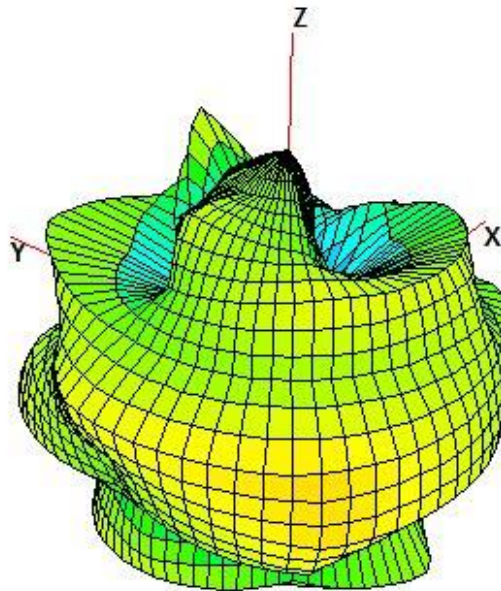


### ANT7 (WIFI)\_6500MHz

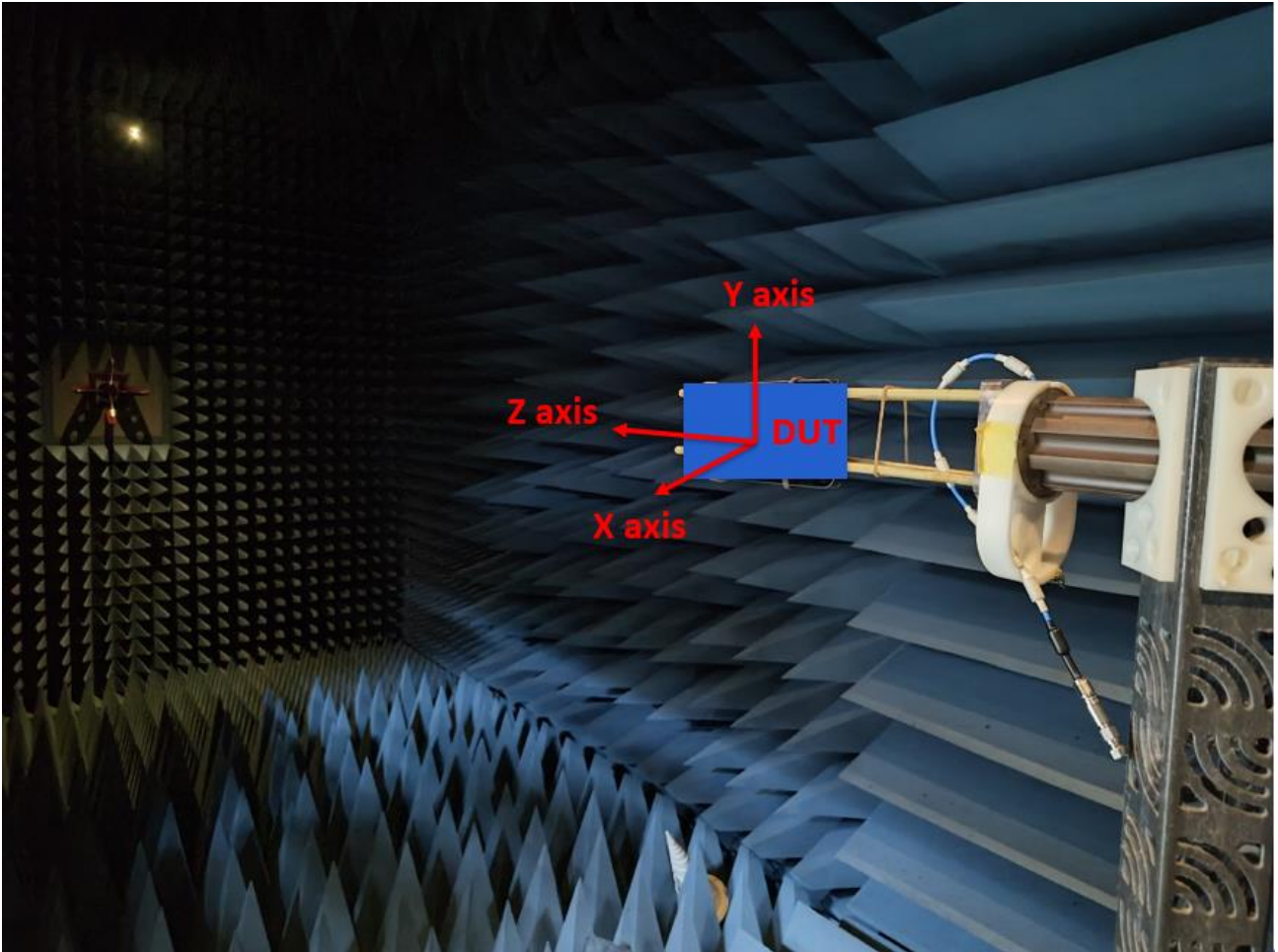
Azimuth = 125.0  
Elevation = -45.0  
Roll = -45.0



Azimuth = -65.0  
Elevation = 30.0  
Roll = 50.0



## Test Environment & Equipment



## Test & System Description

Equipment Description	Manufacturer	Identification no.	Current calibration date	Next calibration date
Network analyzer	Agilent	E5071C	2024/8/20	2025/8/20
Measurement software	ETS-Lindgren	EMQuest	2024/10/21	2025/10/21
EMCenter	ETS-Lindgren	7000-001	2024/10/21	2025/10/21
Multi-device controller	ETS-Lindgren	Model 2090	2024/10/21	2025/10/21
Horn antenna	ETS-Lindgren	3164-08	2024/10/21	2025/10/21

# Measurement Description

ETS-Lindgren J1111 system is 3D fully anechoic chamber, it is applied to the “Conical Cut test method”, the detail description is described as below. The Conical Cut method requires the ability of the Measurement Antenna to be physically rotated in the theta plane (overhead) of the EUT for implementations using a single Measurement Antenna, Eleven conical cuts are required to capture data at every 15 degrees from the EUT, with the top (0 degrees) and bottom (180 degrees) cuts not being measured. Typically, the EUT will remain affixed to a turntable during the entire measurement process. The Measurement Antenna will be positioned at a starting theta angle. The EUT will then be rotated around the full 360 degrees of phi rotation. The Measurement Antenna will then be positioned at the next theta angle, and the process repeated.

Test Date: 2025/07/18

Test Personnel: Tom Chen

Test Software: ETS-Lindgren EMQuest

