

ShenZhen QiXinTongDa Technology Co.,Ltd.

Antenna Test Report

Project Name: CP680

FrequencyBand: GSM:B2/B3/B5/B8

WCDMA:B1/B2/B4/B5/B8

**FDDLTE:B1/B2/B3/B4/B5/B7/B8/B12/B13/B17/B18/B20/B25/B26/B28a+
b/B66**

TDD-LTE:B34/B38/B39/B40/B41

DATE: 2024-12-20

1.Test Project

	Test Project	Equipment
1. S Parameter	1. Return Loss (RL) 2. VSWR	Network Analyzer: Agilent 5071B
2. RF Test (2G+3G+4G)	1. power 2. level 3. TRP/TIS	Comprehensive Test: CMW500/8960 Test Environment: Anechoic Chamber

2.Test Equipment



Agilent 5071B (S Parameter (RL/VSWR) Test Equipment)

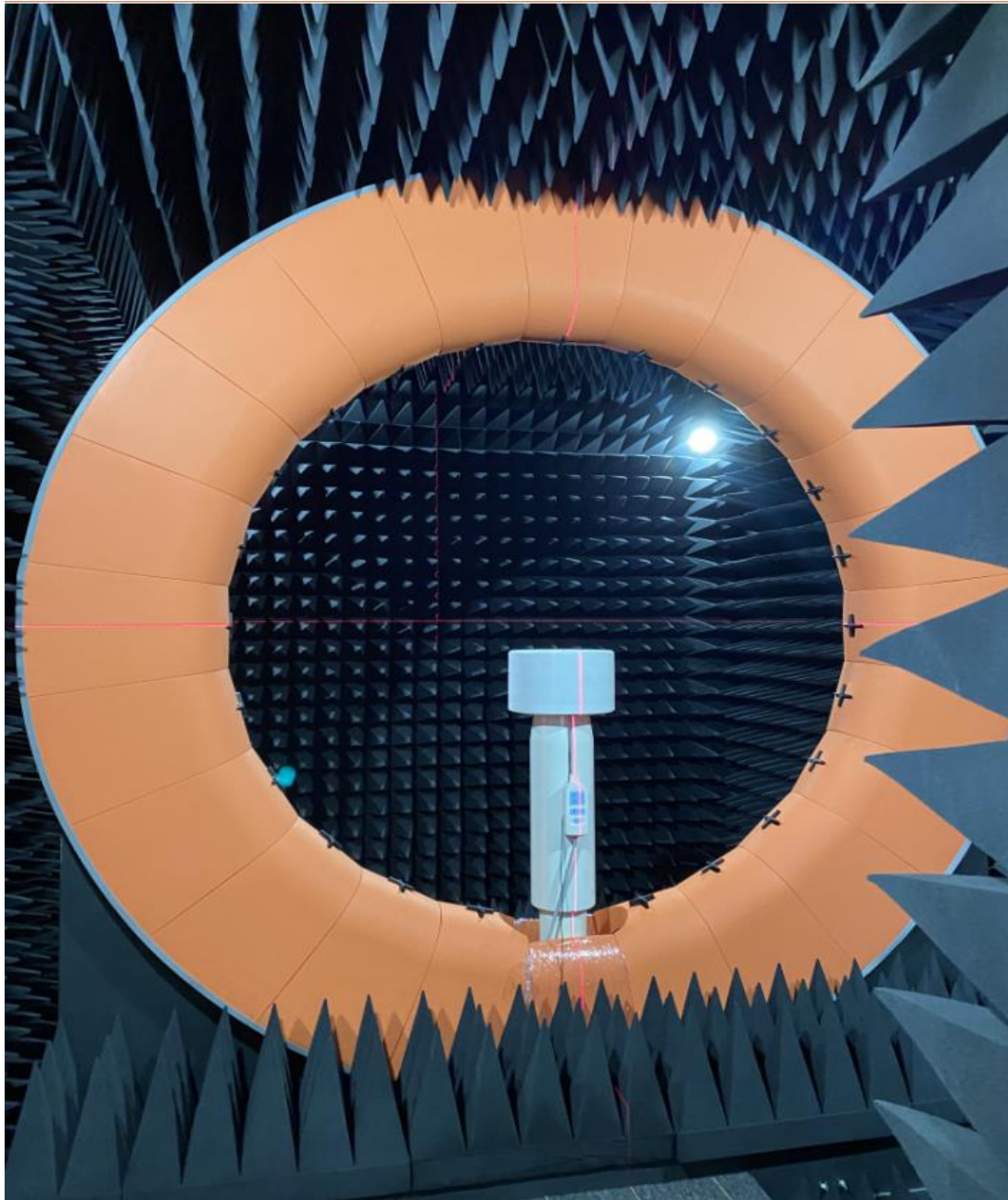


Agilent 8960 (2G/3G Test Equipment)



CMW 500 (2G/3G/4G Test Equipment)

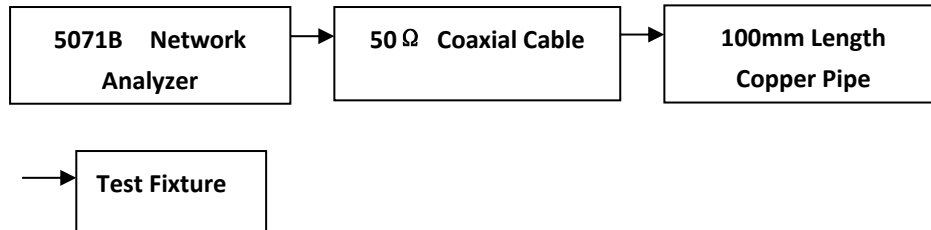
3. TestEnvironment



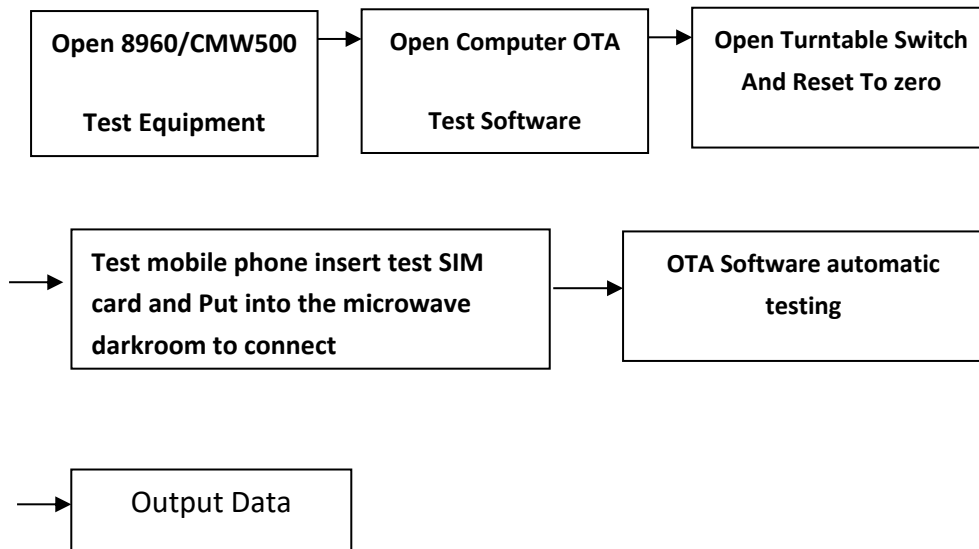
Microwave Anechoic Chamber

4.Test Steps

Passive VSWR/RL Test Steps:



Active TRP/TIS Test Steps:



5. Antenna Gain

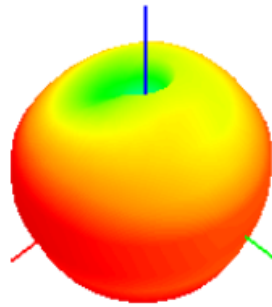
BAND	Peak Gain(dBi)	BAND	Peak Gain(dBi)
GSM		B26	-1.56
850	-1.56	B28	-1.85
900	-1.32	B66	-0.85
1800	-0.85	B34	-0.85
1900	-1.20	B38	0.62
WCDMA		B39	-1.20
B1	-0.85	B40	-1.26
B2	-1.20	B41	0.62
B4	-0.85	Bluetooth	1.45
B5	-1.56	WIFI-2.4G	1.45
B8	-1.32	WIFI-5G	-0.50
LTE			
B1	-0.85		
B2	-1.20		
B3	-0.85		
B4	-0.85		
B5	-1.56		
B7	0.62		
B8	-1.32		
B12	-1.85		
B13	-1.85		
B17	-1.85		
B18	-1.56		
B19	-1.56		
B20	-1.56		
B25	-1.20		

6. 3D Lobe Diagram

GSM850

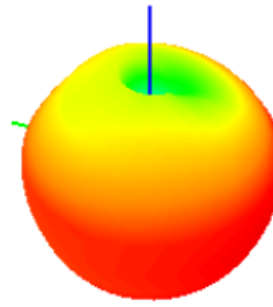


830.00MHz@T45P45



X Axis
Y Axis
Z Axis

830.00MHz@T45P200

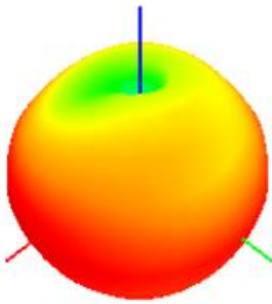


X Axis
Y Axis
Z Axis

GSM900

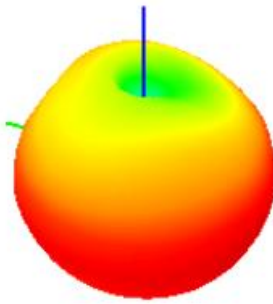


880.00MHz@T45P45



X Axis
Y Axis
Z Axis

880.00MHz@T45P200

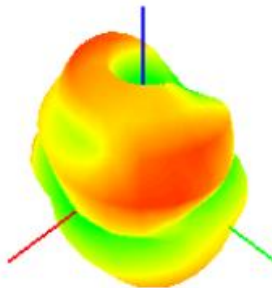


X Axis
Y Axis
Z Axis

DSC1800

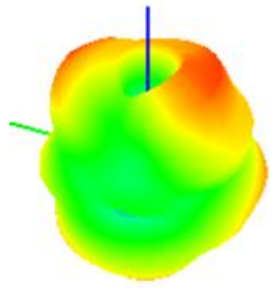


1720.00MHz@T45P45



X Axis
Y Axis
Z Axis

1720.00MHz@T45P200

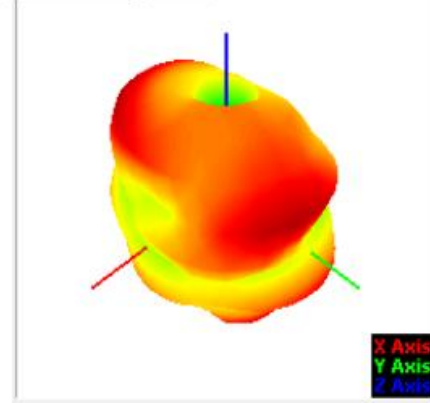


X Axis
Y Axis
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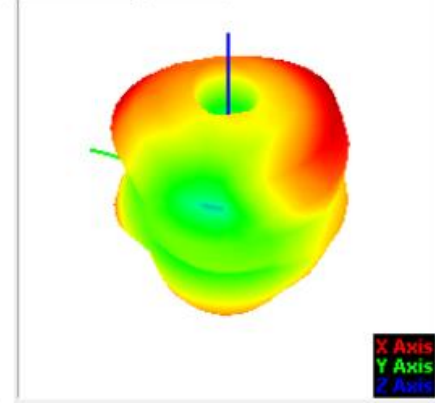
PCS1900



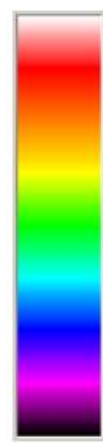
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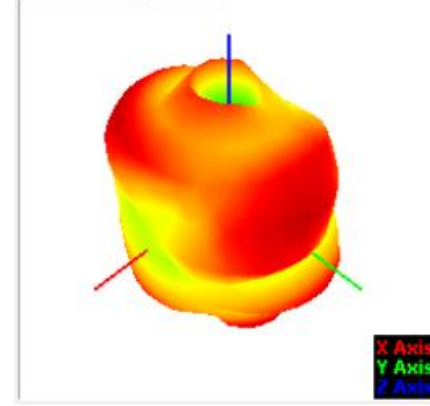
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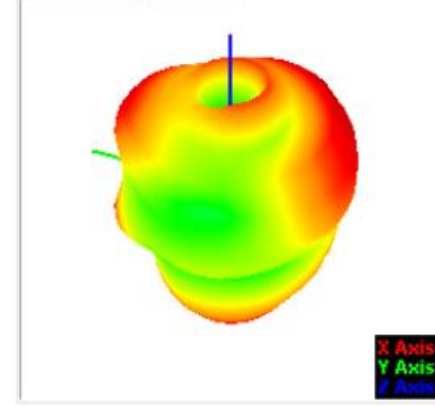
W2100



1920.00MHz@T45P45



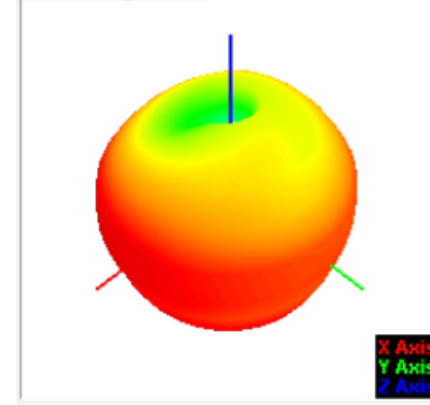
1920.00MHz@T45P200



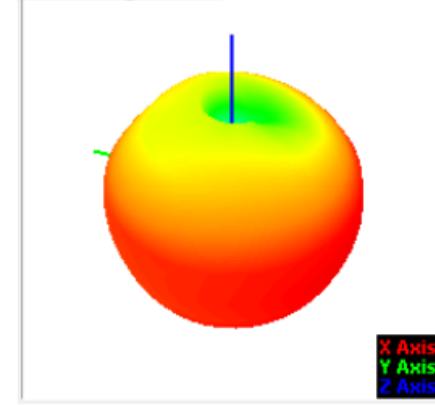
W850



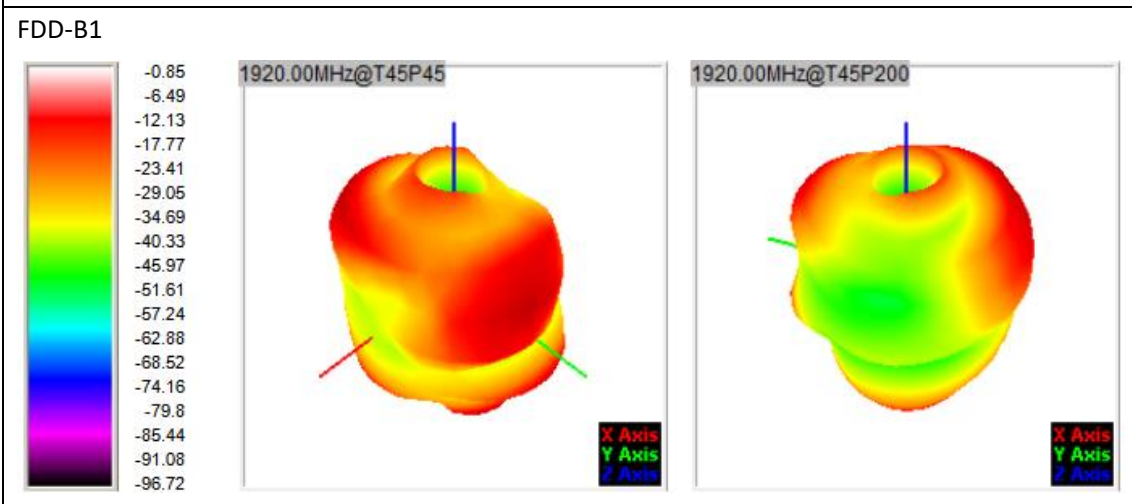
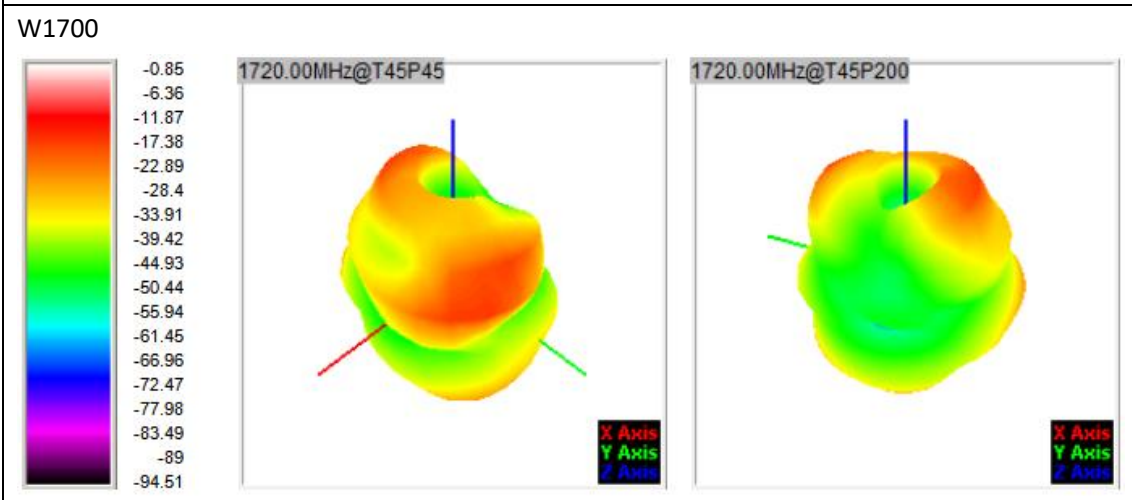
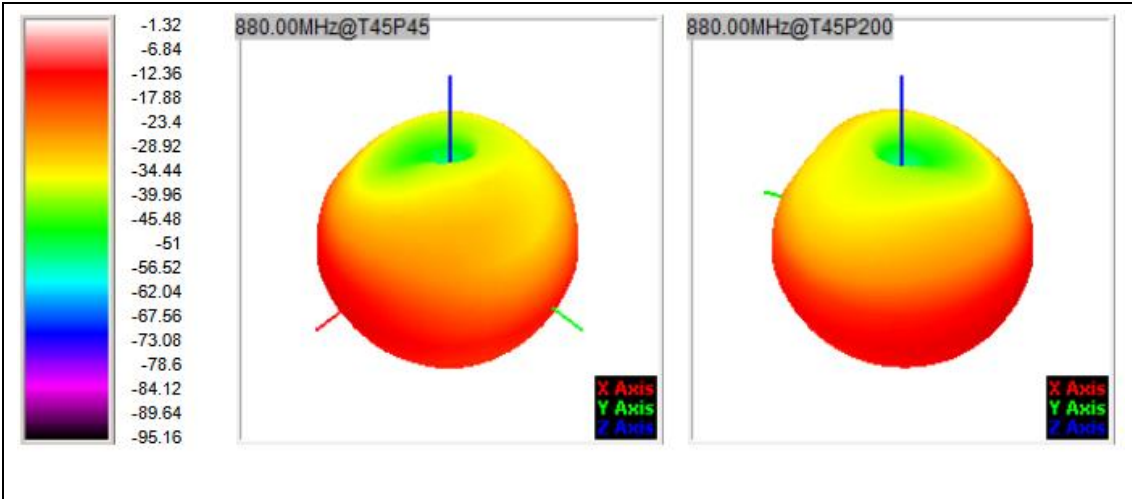
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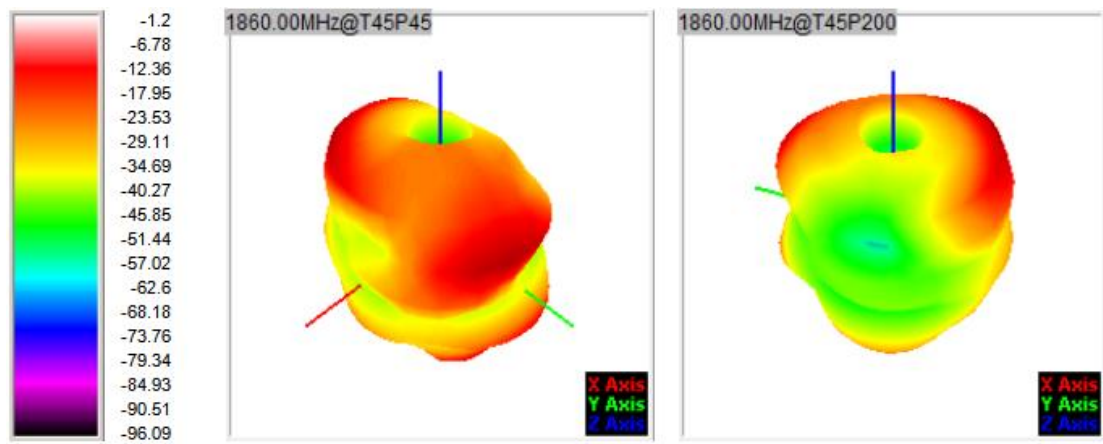
830.00MHz@T45P200



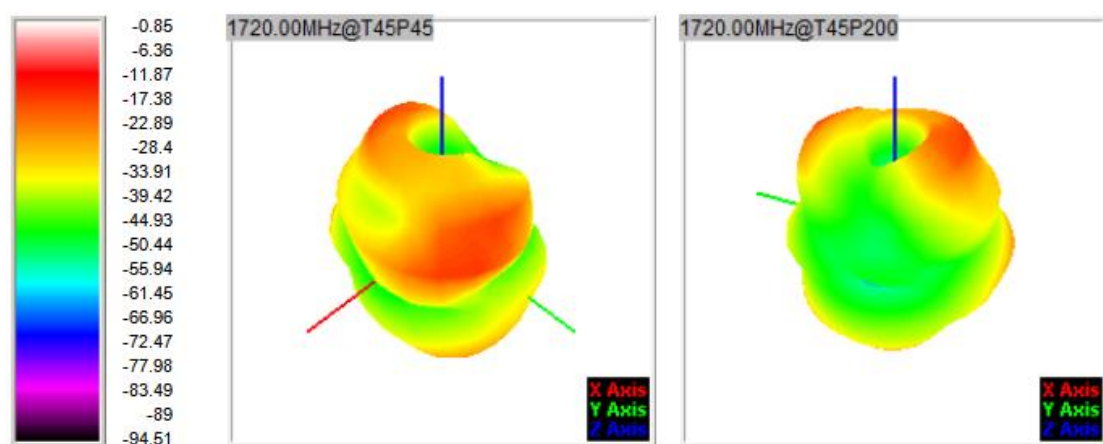
W900



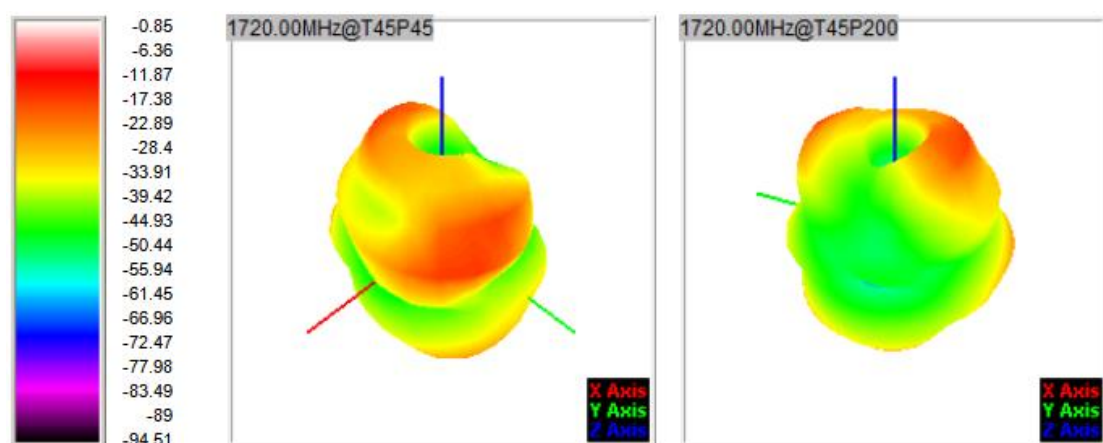
FDD-B2



FDD-B3



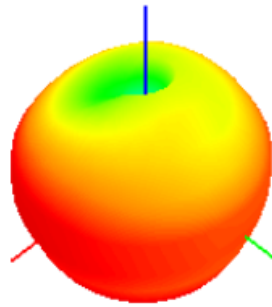
FDD-B4



FDD-B5

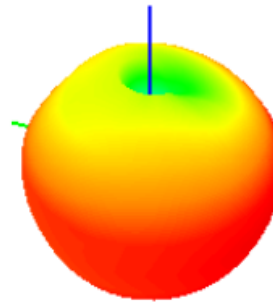


830.00MHz@T45P45



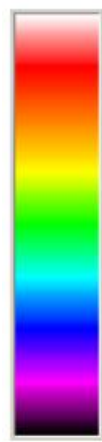
X Axis
Y Axis
Z Axis

830.00MHz@T45P200

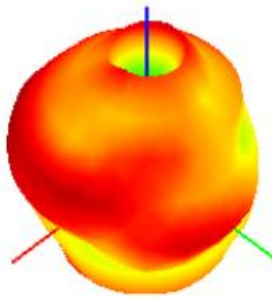


X Axis
Y Axis
Z Axis

FDD-B7

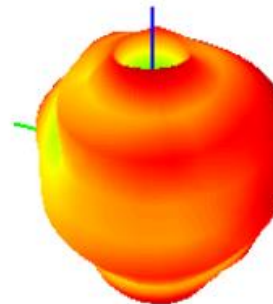


2500.00MHz@T45P45



X Axis
Y Axis
Z Axis

2500.00MHz@T45P200

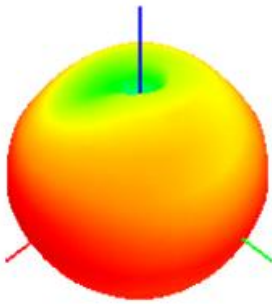


X Axis
Y Axis
Z Axis

FDD-B8

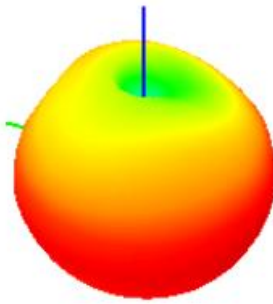


880.00MHz@T45P45



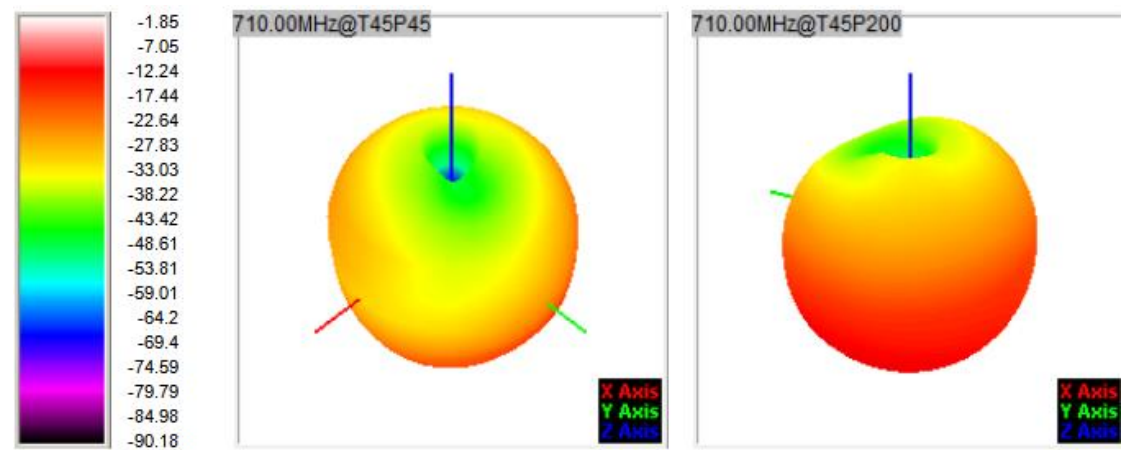
X Axis
Y Axis
Z Axis

880.00MHz@T45P200

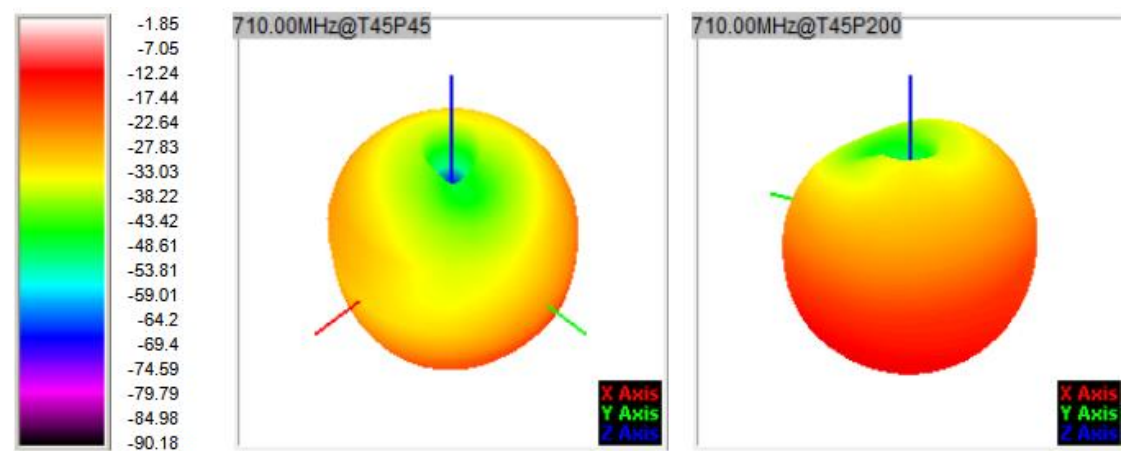


X Axis
Y Axis
Z Axis

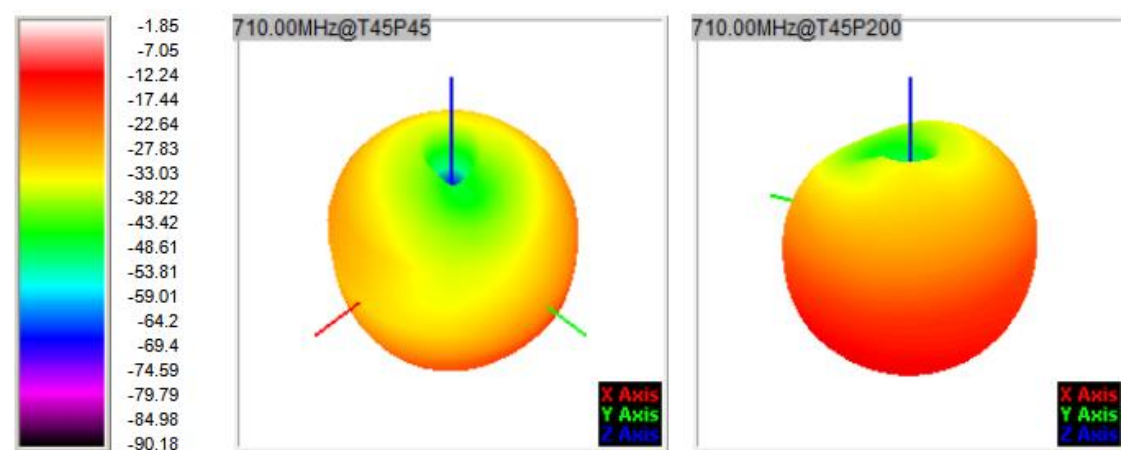
FDD-B12



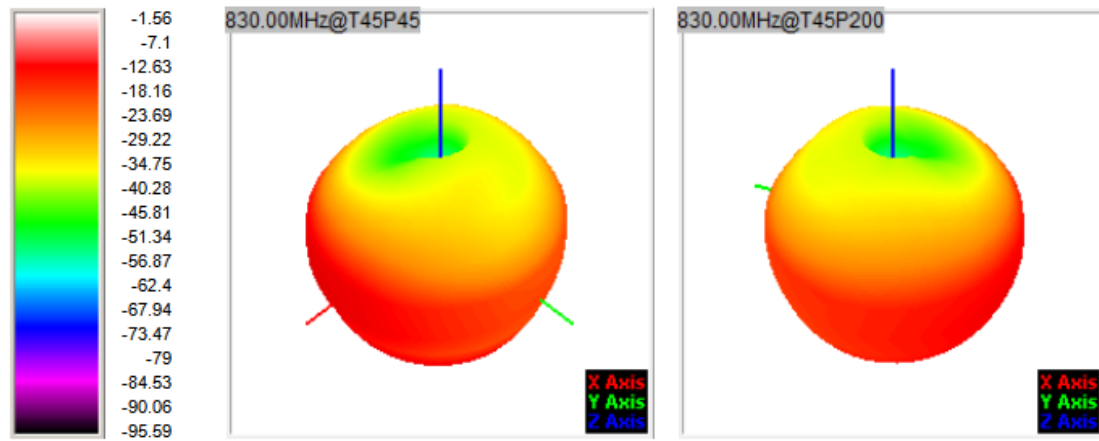
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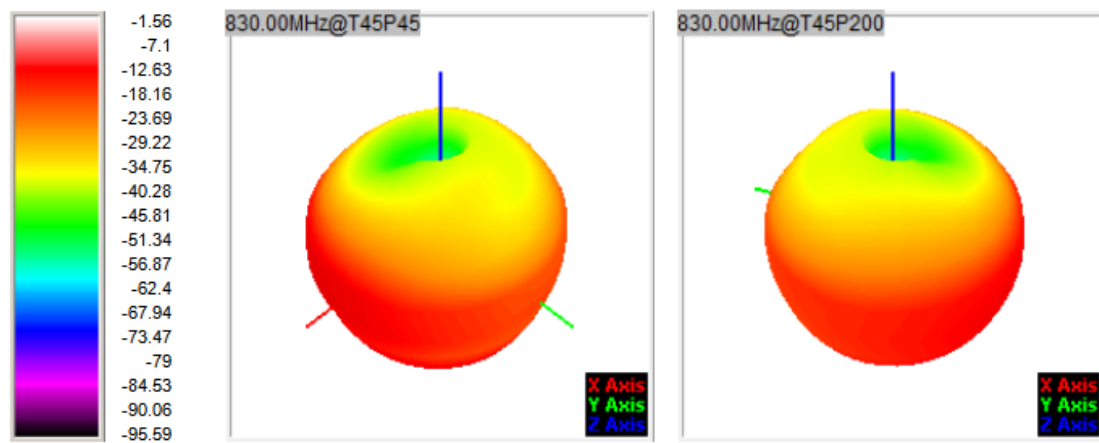
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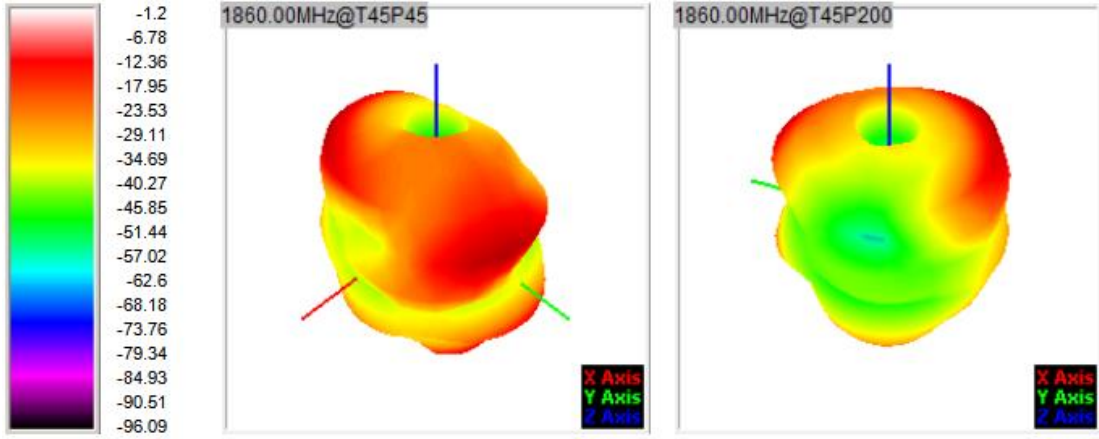
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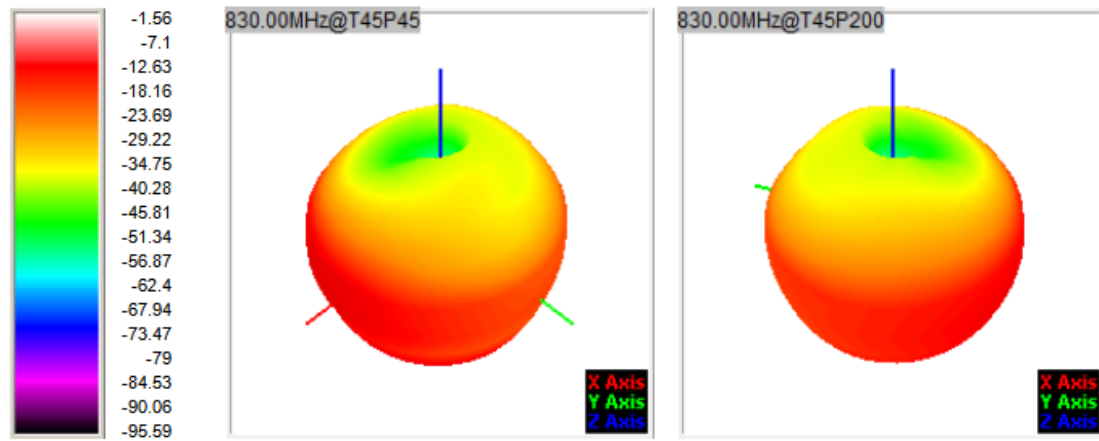
FDD-B20



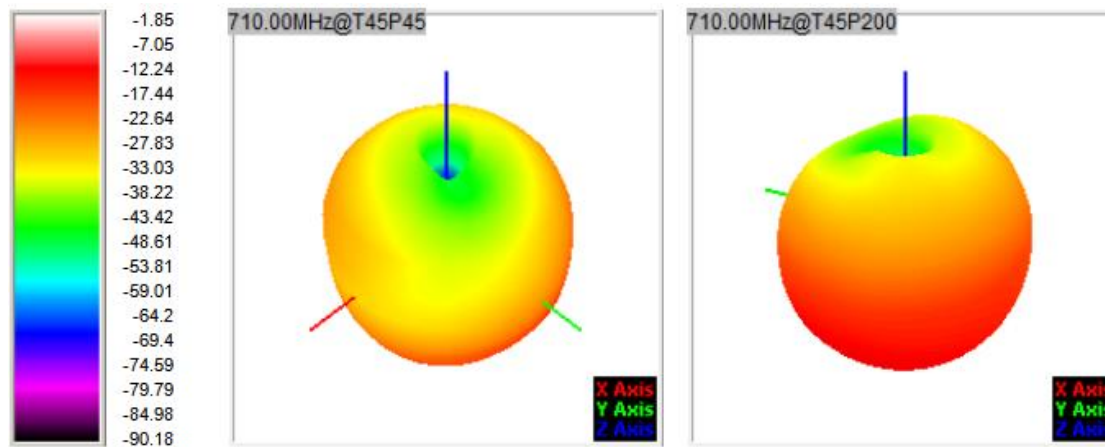
FDD-B25



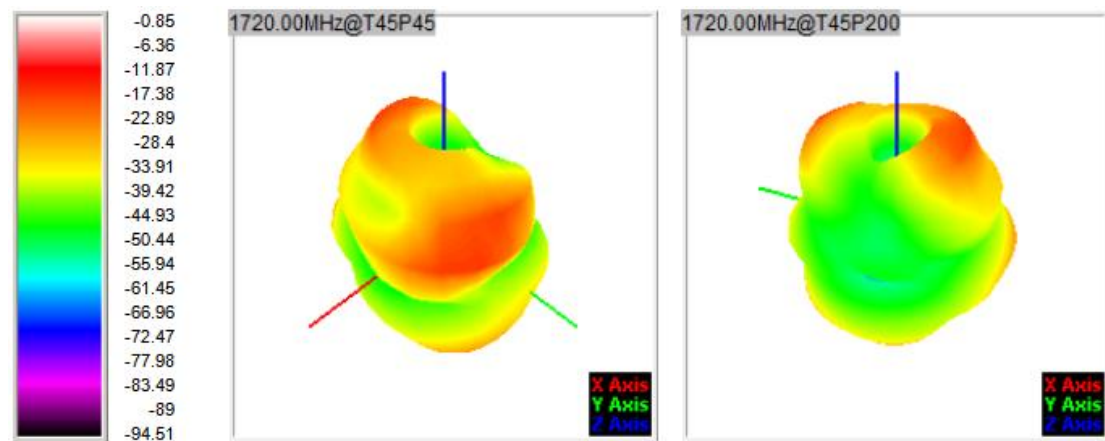
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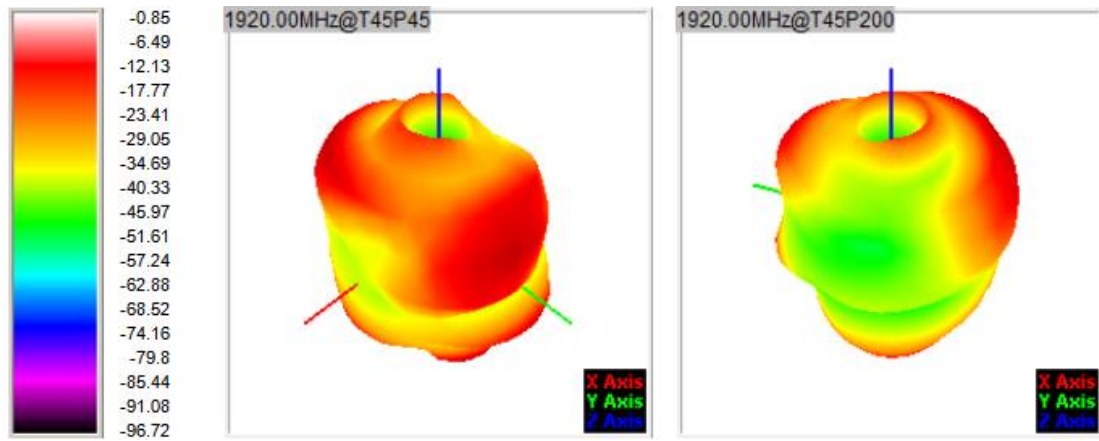
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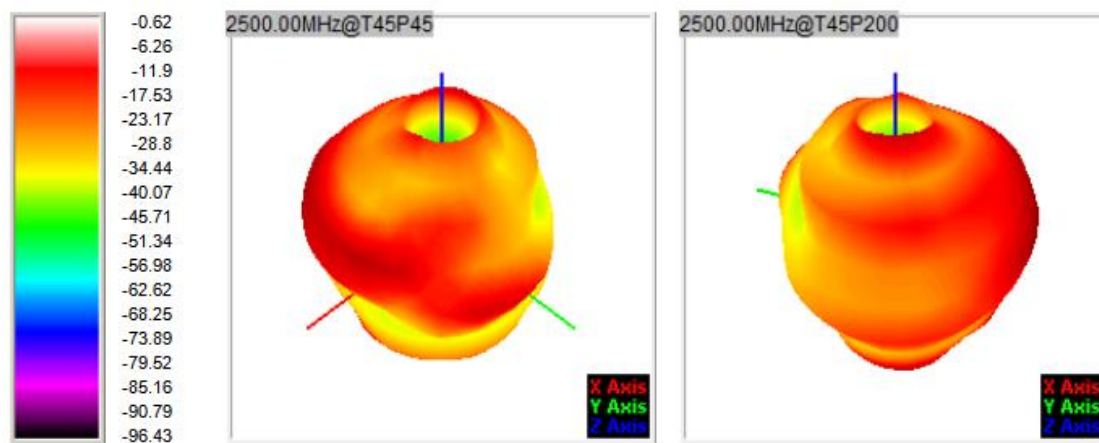
FDD-B66



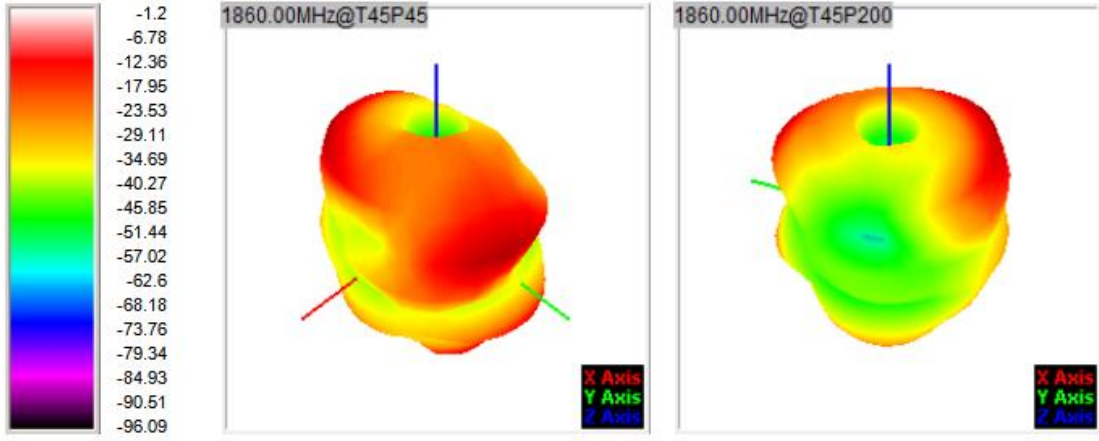
TDD-B34



TDD-B38



TDD-B39

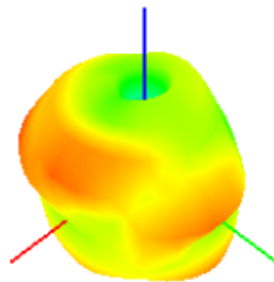


TDD-B40



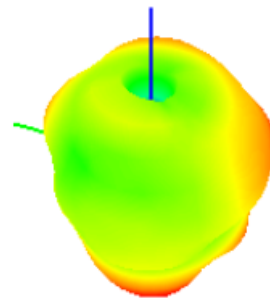
-1.26
-6.74
-12.22
-17.7
-23.17
-28.65
-34.13
-39.61
-45.09
-50.57
-56.05
-61.53
-67.01
-72.48
-77.96
-83.44
-88.92
-94.4

2300.00MHz@T45P45



X Axis
Y Axis
Z Axis

2300.00MHz@T45P200



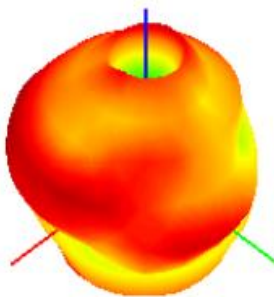
X Axis
Y Axis
Z Axis

TDD-B41



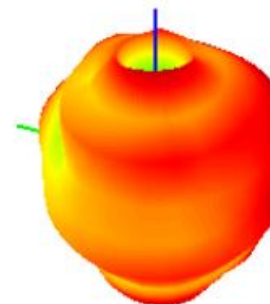
-0.62
-6.26
-11.9
-17.53
-23.17
-28.8
-34.44
-40.07
-45.71
-51.34
-56.98
-62.62
-68.25
-73.89
-79.52
-85.16
-90.79
-96.43

2500.00MHz@T45P45



X Axis
Y Axis
Z Axis

2500.00MHz@T45P200



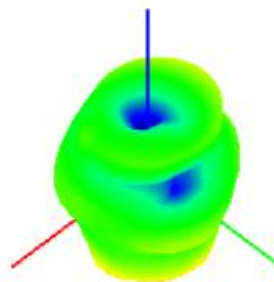
X Axis
Y Axis
Z Axis

2.4GWIFI



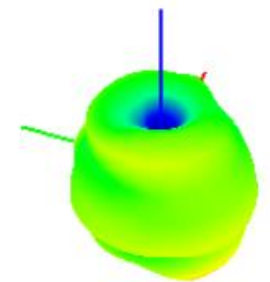
1.45
-4.28
-10.01
-15.74
-21.47
-27.21
-32.94
-38.67
-44.4
-50.13
-55.87
-61.6
-67.33
-73.06
-78.79
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-90.26
-95.99

2450.00MHz@T45P45



X Axis
Y Axis
Z Axis

2450.00MHz@T45P200



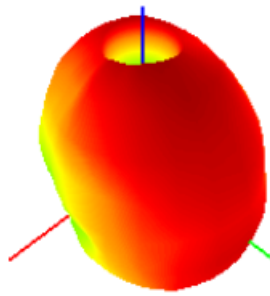
X Axis
Y Axis
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5GWIFI



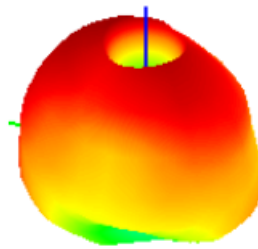
-0.5
-6.11
-11.73
-17.35
-22.97
-28.58
-34.2
-39.82
-45.44
-51.05
-56.67
-62.29
-67.9
-73.52
-79.14
-84.76
-90.37
-95.99

5500.00MHz@T45P45



X Axis
Y Axis
Z Axis

5500.00MHz@T45P200



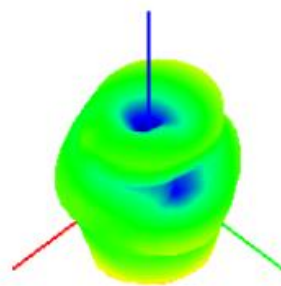
X Axis
Y Axis
Z Axis

BT



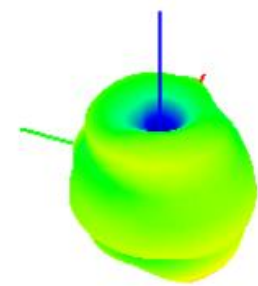
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-4.28
-10.01
-15.74
-21.47
-27.21
-32.94
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-55.87
-61.6
-67.33
-73.06
-78.79
-84.53
-90.26
-95.99

2450.00MHz@T45P45



X Axis
Y Axis
Z Axis

2450.00MHz@T45P200



X Axis
Y Axis
Z Axis

7.Antenna drawing

