

深圳市合拓科技有限公司

Shenzhen Hetuo Technology Co., LTD

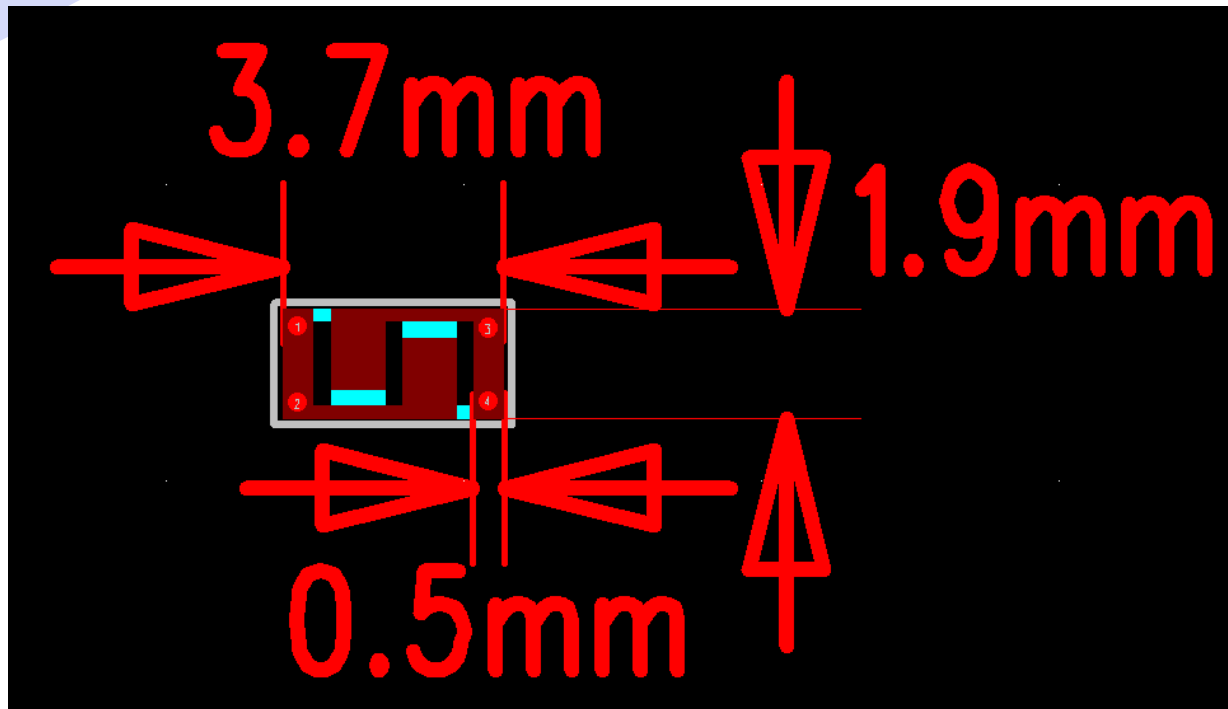
1202B, Building C6, Hengfeng Industrial City,

Xixiang, Baoan District, Shenzhen

BT Antenna Test Report

Customer	Shenzhen Distar Technology Co., Ltd.
Project	L1
Antenna Revision	A1
Product Description	2.4GHz Antenna
Product No	
DATE	2023. 12. 04

Antenna shape



Purpose

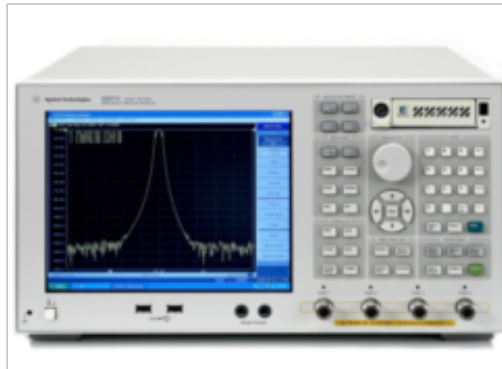
This report is to measure the performance of BT antenna for CBS01. The antenna operating frequency at 2.4~2.5GHz, All test data are showed as below.

Content

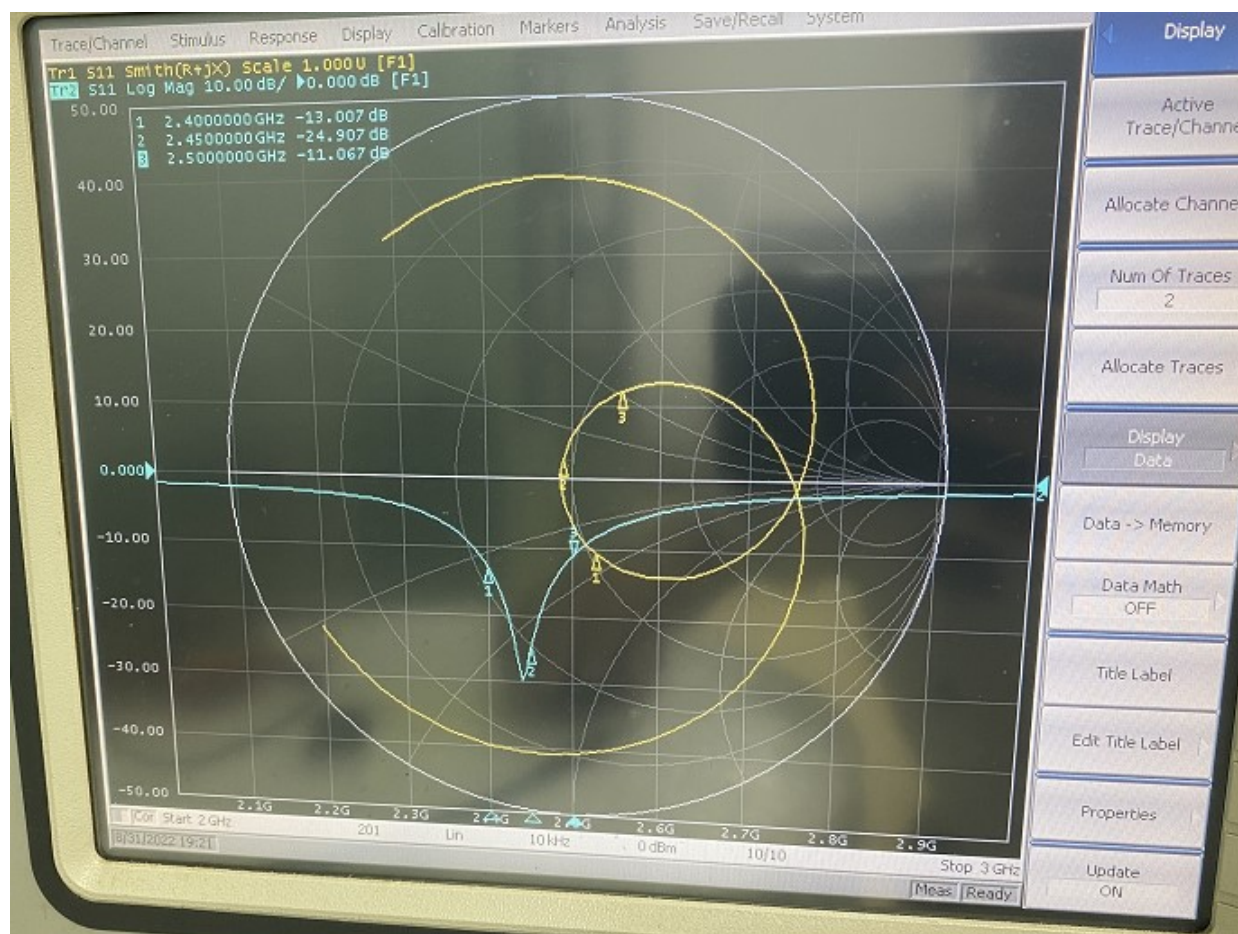
1. Product Overview & Dimension
2. Test system
3. Antenna Matching Network
4. Test Result
 - 4.1 S11 Parameter
 - 4.2 Test coordinate
 - 4.3 2D Pattern
 - 4.4 OTA Data
 - 4.5 BT Boot measured
5. Antenna Assembly & environmental processing

2. Test System

Sequence Number	Test Item	equipment
S parameter	VSWR	Agilent 5071C & Agilent 5062A
OTA Test	TRP&TIS	CMW500 & CMW270 ETS&SATIMO
Gain & Efficiency	Gain & Efficiency	ETS&SATIMO Agilent 5071C

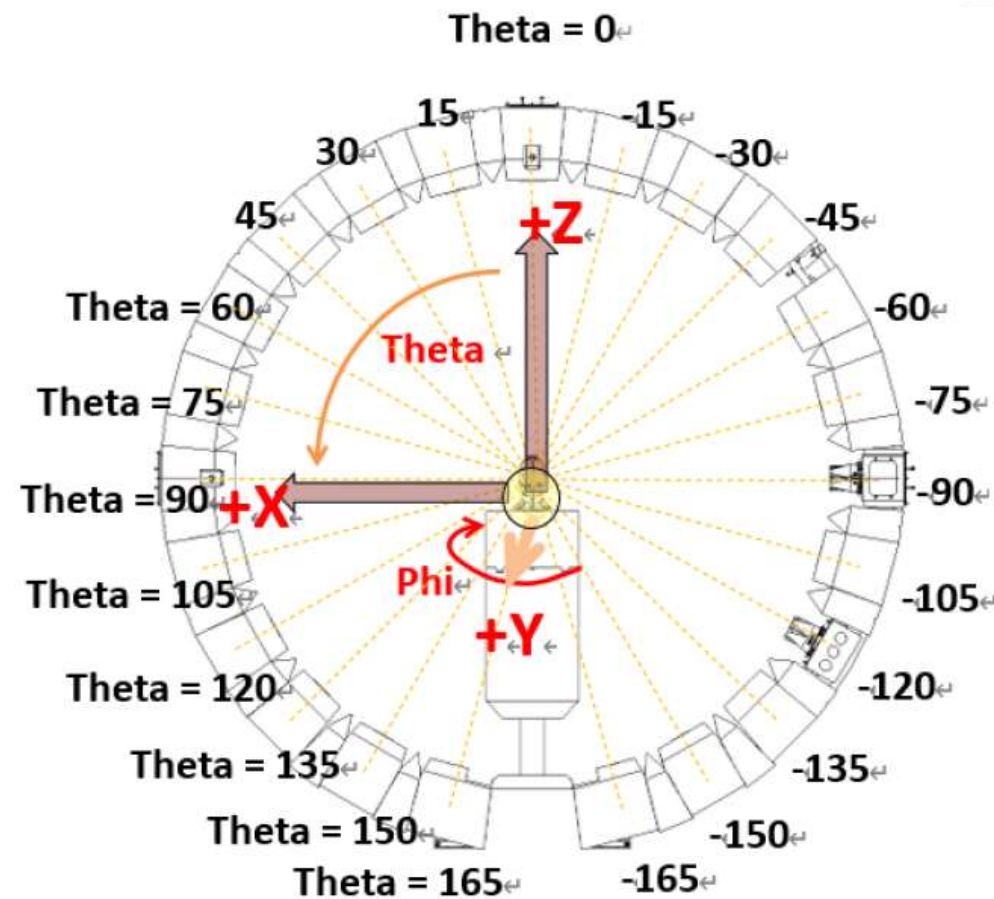


无源S11—(BT ANT)



Test Result

Sample status & coordinates



Test Result

Gain & Efficiency—**BT- ANT**

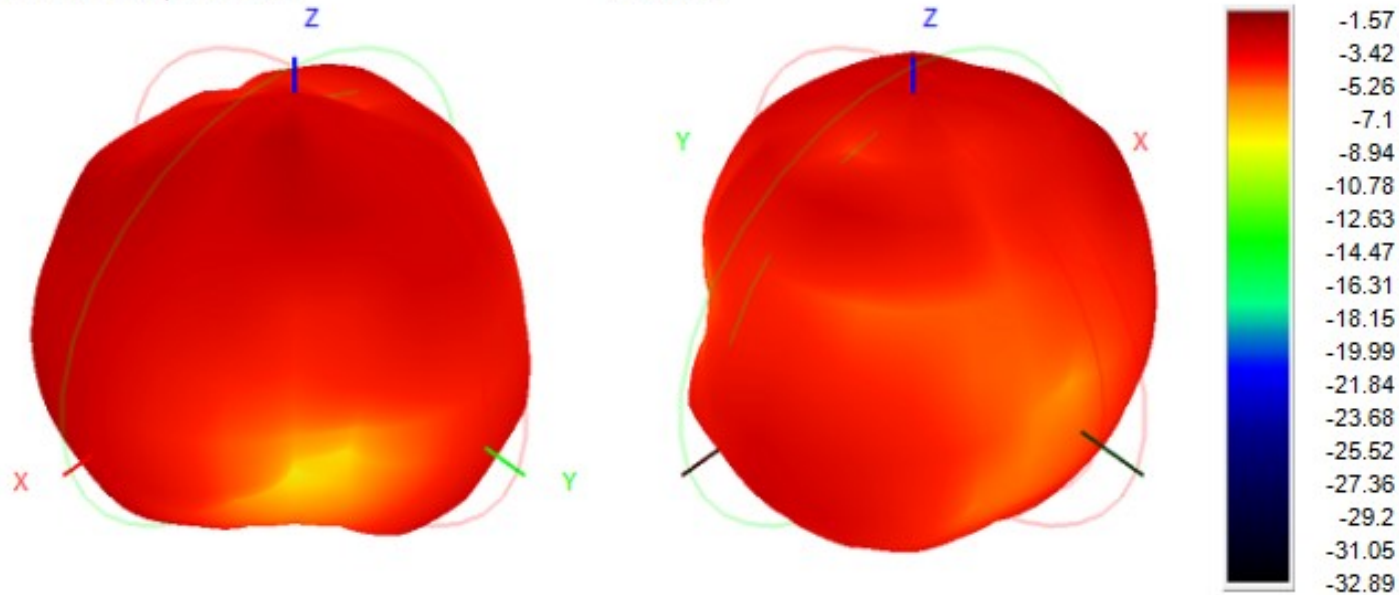
Frequency (MHz)	Efficiency (%)	Peak GAIN (dBi)
2400	25.25	-1.57
2410	26.57	-1.06
2420	26.52	-1.09
2430	29.04	-0.67
2440	29.29	-0.66
2450	29.57	-0.57
2460	29.96	-0.42
2470	30.62	-0.63
2480	29.30	-0.83
2490	28.31	-0.83
2500	28.01	-0.64

Test Result

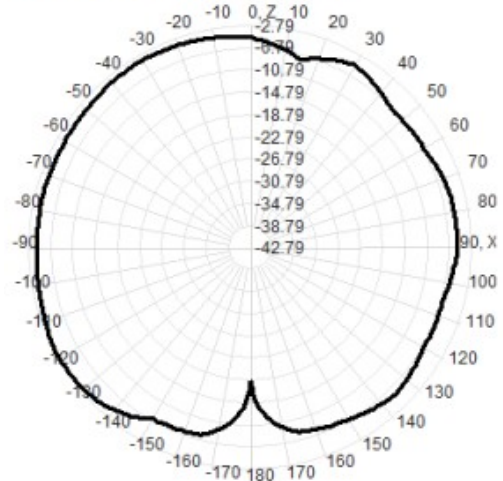
2D&3D — BT- ANT

2400.0MHz H+V, Eff: 25.2%

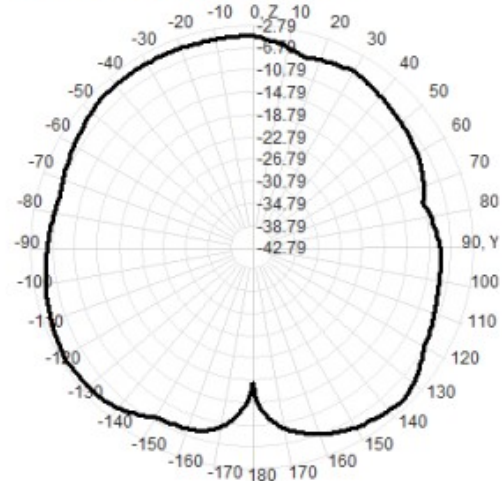
Back View



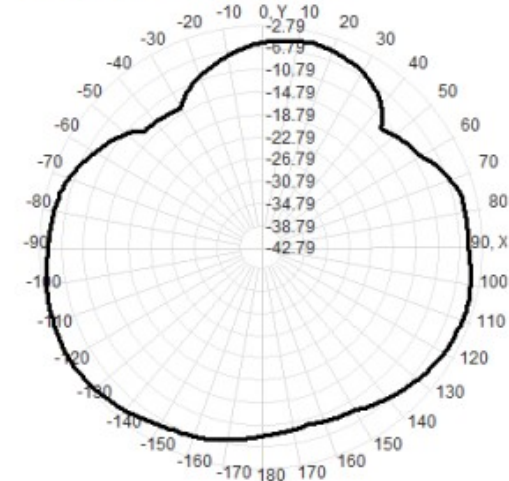
2400.0MHz Total(E1-XZ), Max= -3.02dBi



2400.0MHz Total(E2-YZ), Max= -3.68dBi



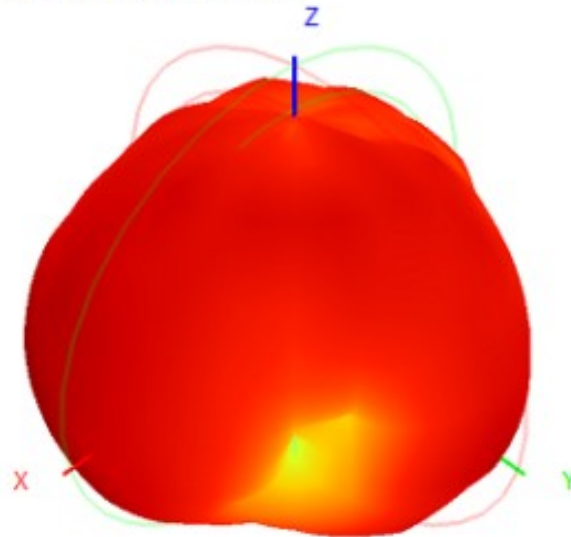
Total(H-XY), Max= -2.79dBi, CirD=11.01



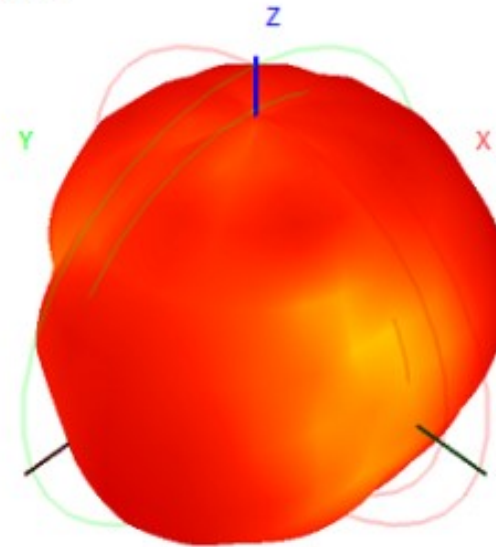
Test Result

2D&3D — BT- ANT

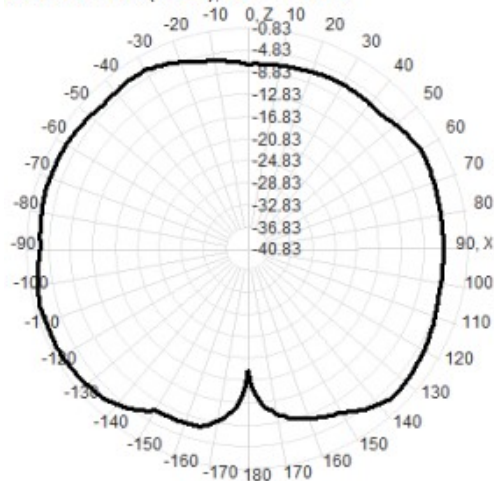
2450.0MHz H+V, Eff: 29.6%



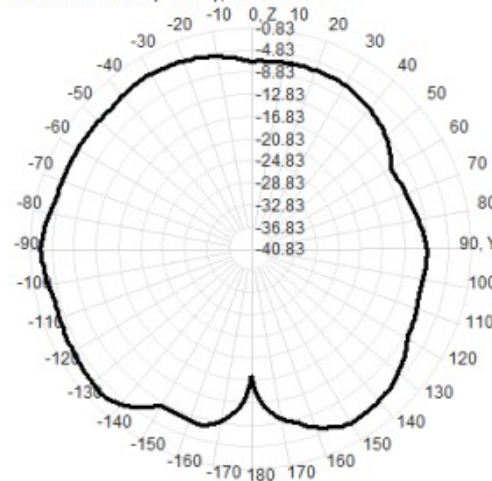
Back View



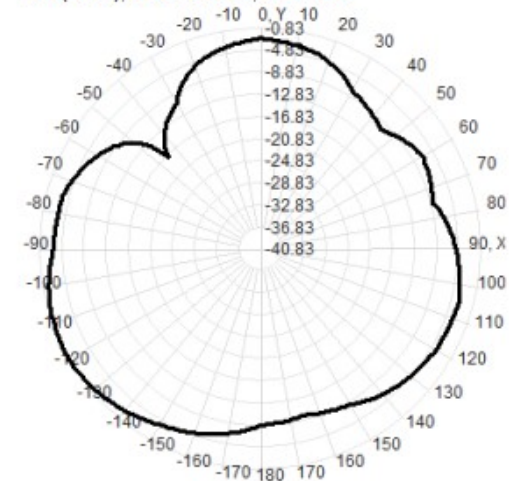
2450.0MHz Total(E1-XZ), Max= -1.95dBi



2450.0MHz Total(E2-YZ), Max= -2.74dBi



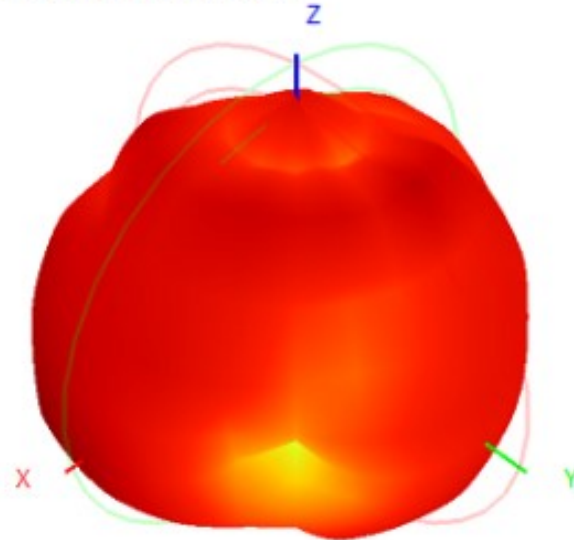
Total(H-XY), Max= -0.83dBi, CirD=16.37



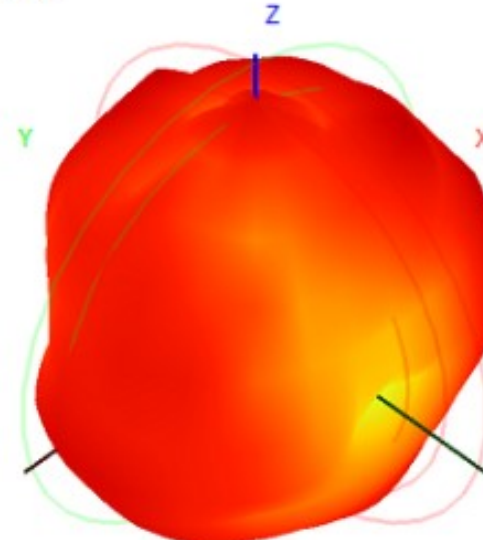
Test Result

2D&3D — BT- ANT

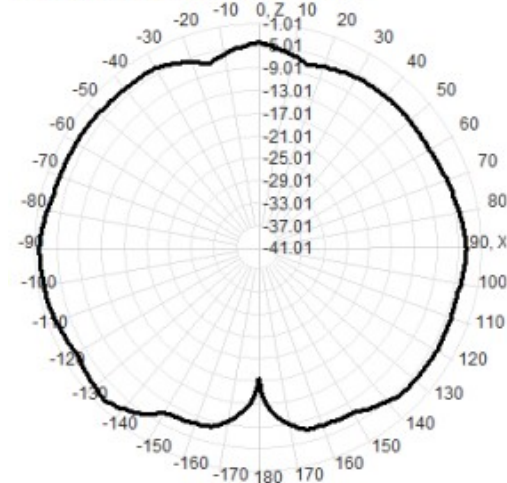
2500.0MHz H+V, Eff: 28.0%



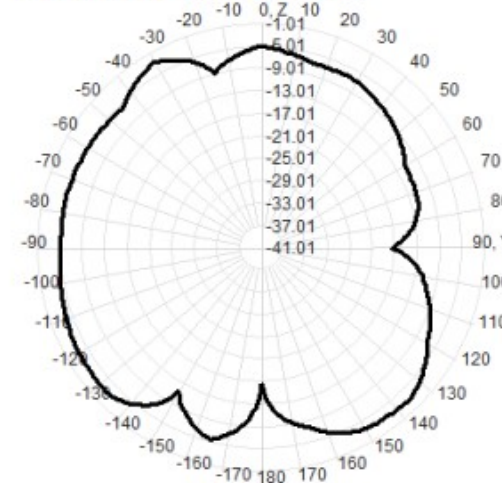
Back View



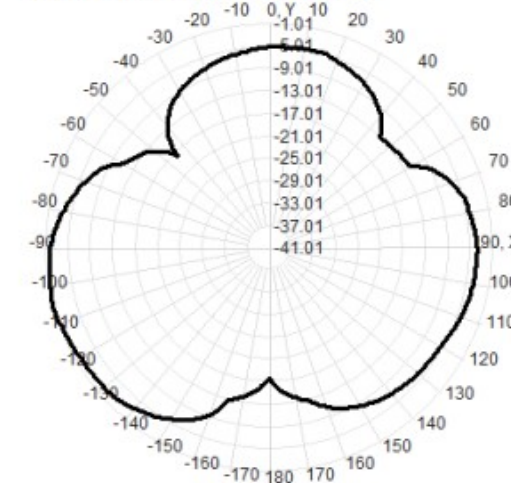
2500.0MHz Total(E1-XZ), Max=-1.90dBi



2500.0MHz Total(E2-YZ), Max=-2.85dBi

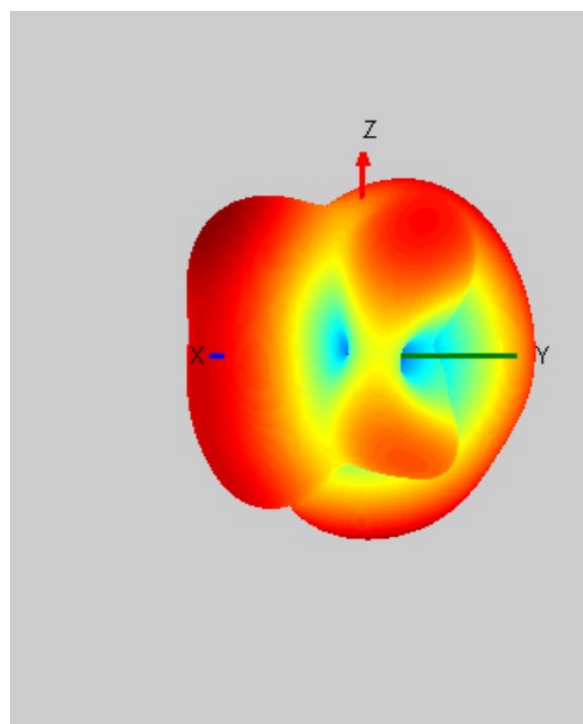


Total(H-XY), Max=-1.01dBi, CirD=16.85



OTA DATA(--自由空间

Test Equipment:	R&S CMW500			
Test Condition:	3D chamber			
Band	Wireless Protocol	Channel	TRP(dBm)	TIS(dBm)
BT		0	-1.20	-81.76
		39	-0.83	-81.35
		78	-0.36	-81.09



Thanks for your comment!

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