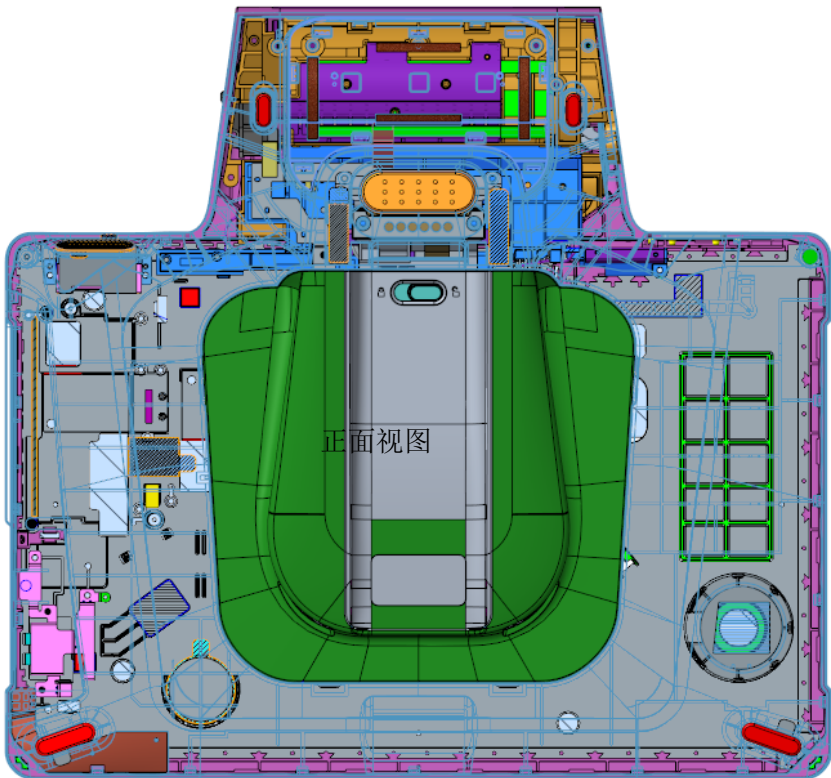


Antenna Product Specification

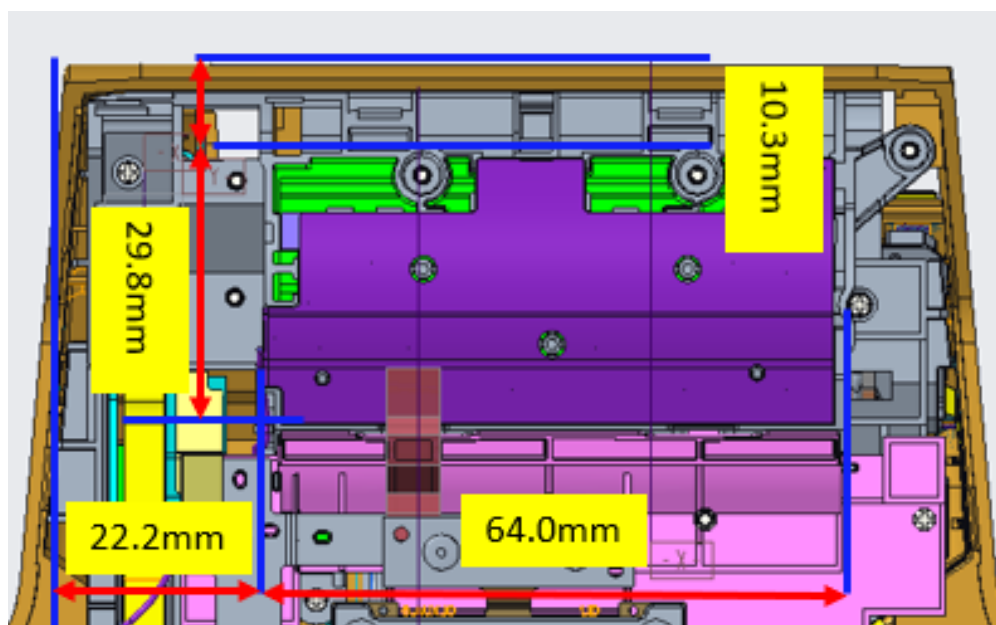
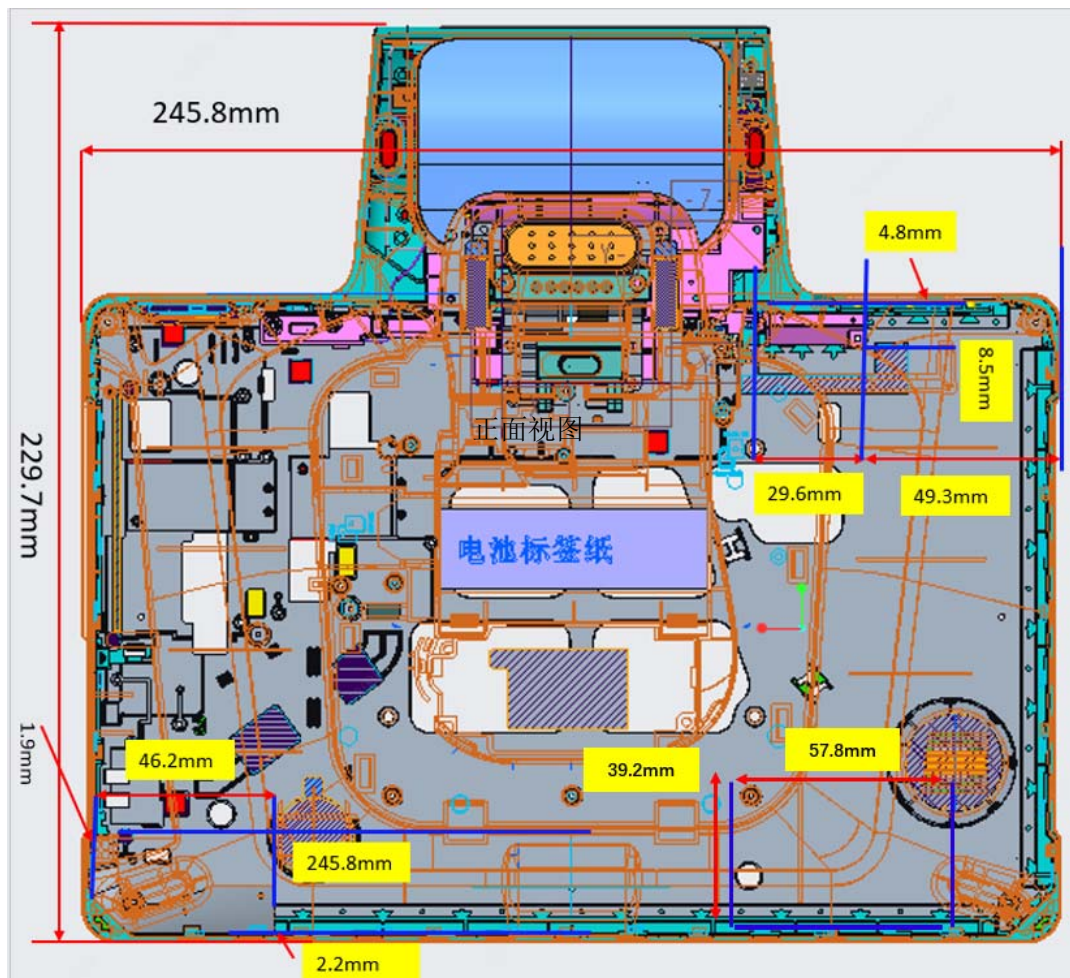
Entry Name	MIX
Frequency Channel	GSM850/900/1800 UMTS: B1/2/4/5/8 FDD-LTE: B1/2/3/4/5/7/12/13/14/17/18/19/25/26/28/30/66/ 71 TDD-LTE: 38/41
Supplier Name	KunShan Innwave Communication Technology Co., Ltd.

1. Type of Antenna: Internal Antennas

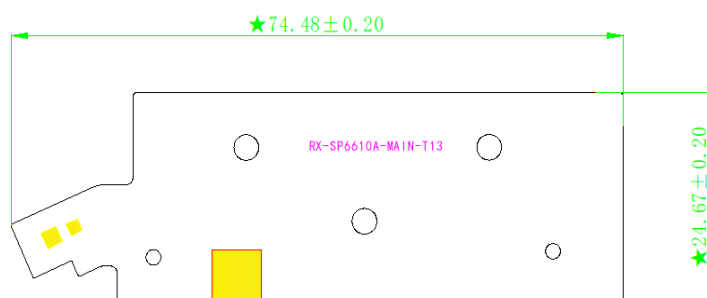
Antenna attachment type: Fixed/Internal mounted



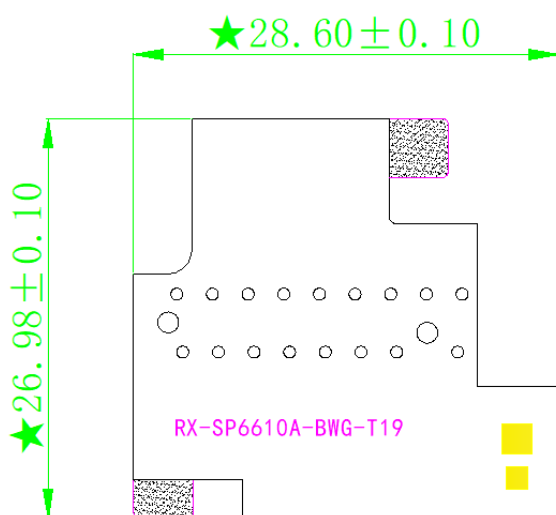
2. Antenna Area



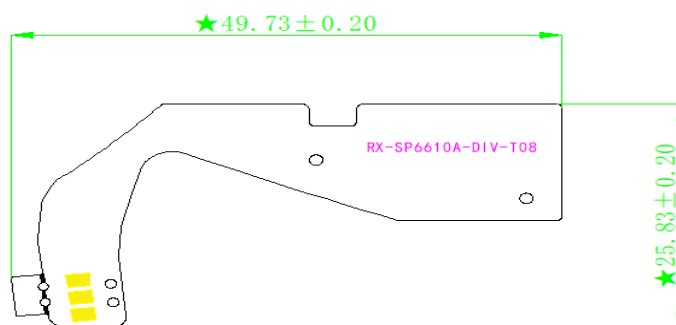
WWAN MAIN ANTENNA



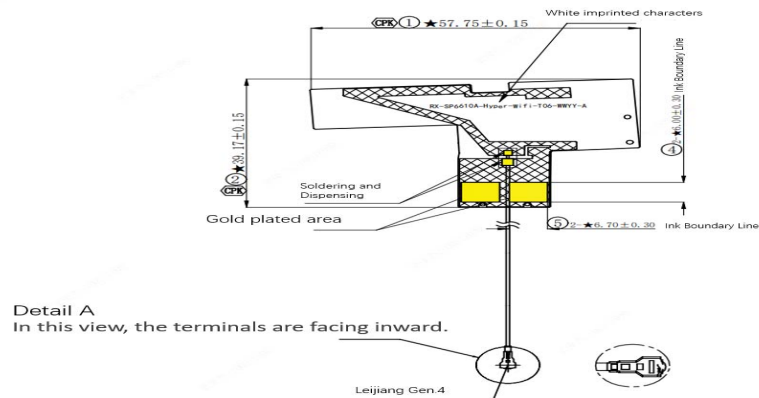
BT/BLE/WIFI (WCN) ANTENNA



WWAN SUB (DIV) antenna



Halow(Hype Wi-Fi)Antenna



3. Efficiency and Gain

Main ANT1- Efficiency and Gain

BAND	Peak Gain(dBi)	Average Gain(dB)
GSM850/WB5 LTE		
B5/18/19/26	-0.7	-4.9
GSM900/WB8	-1.3	-5.3
LTE B12/13/14/28/17	-1.2	-6.0
LTE B71	-2.3	-7.1
LTE B39 WCDMA b2/LTE B2	2.6	-2.5
LTE 30	2.3	-2.9
LTE B7/38/41	2.5	-2.6
GSM1800 WCDMA B4 lte 3/4/66	2.8	-2.9
Lte b1 WCDMA B1	2.5	-2.6

WCN - Efficiency and Gain

Freq (MHz)	Peak Gain(dBi)	Average Gain(dB)
2400~2483.5MHz	1.2	-3.7
5150~5250MHz	1	-3.8
5250~5350MHz	1.1	-3.6
5470~5725MHz	1.2	-3.6
5725~5850MHz	1.15	-3.9
1575.5MHz	0.3	-4.2

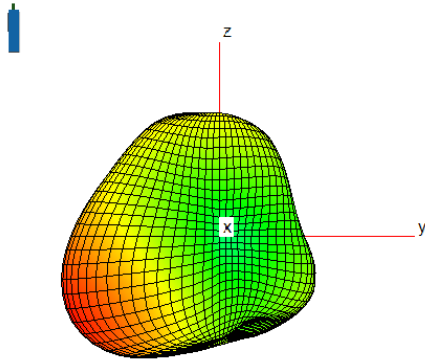
Halow - Efficiency and Gain

Freq (MHz)	Peak Gain(dBi)	Average Gain(dB)
860	-0.9	-4.3
870	0.0	-3.1
880	0.3	-2.6
890	0.5	-2.8
900	-0.1	-3.3
910	-0.2	-3.7
920	-0.5	-4.2
930	-0.7	-4.4

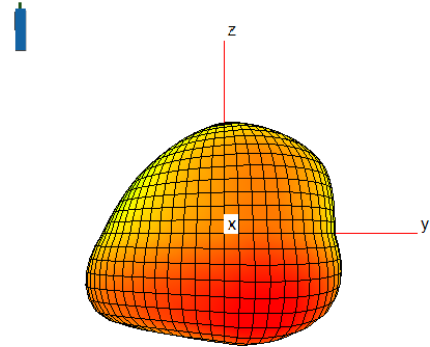
4. 3D Directional Pattern

MAIN ANTENNA

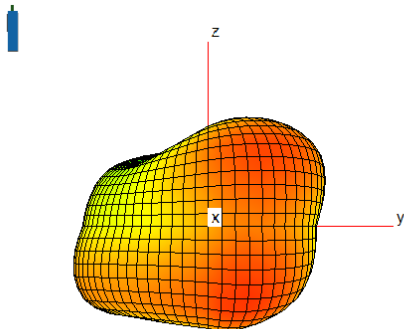
620MHz



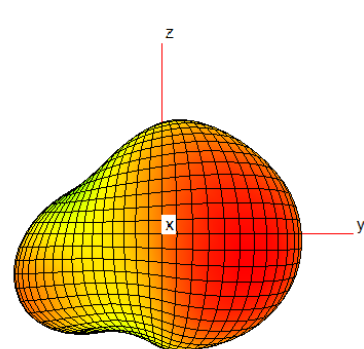
690MHz



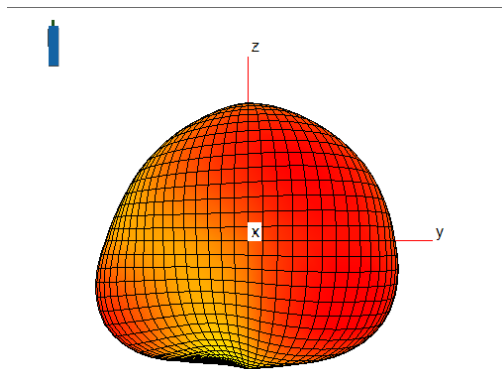
710MHz



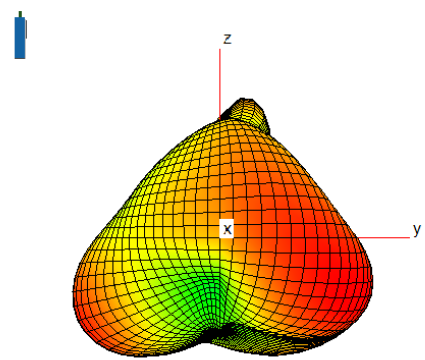
740MHz



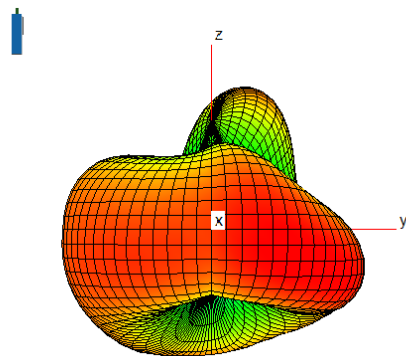
760MHz



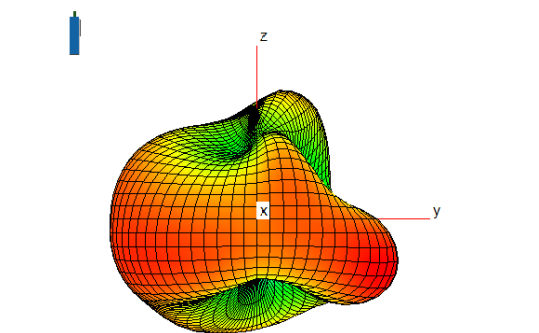
790MHz



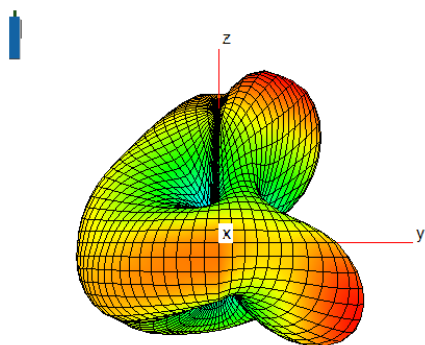
830MHz



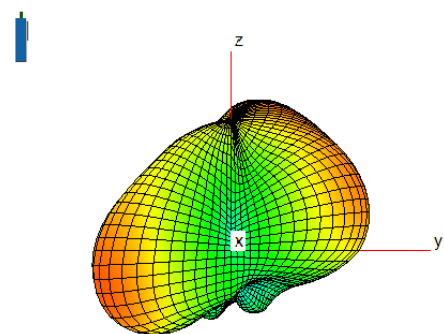
880MHz



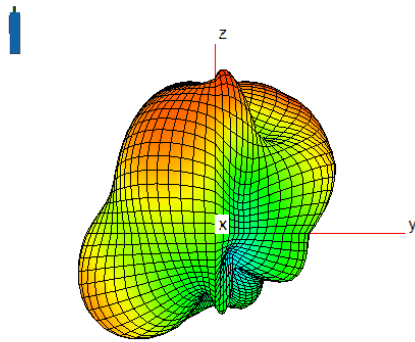
960MHz



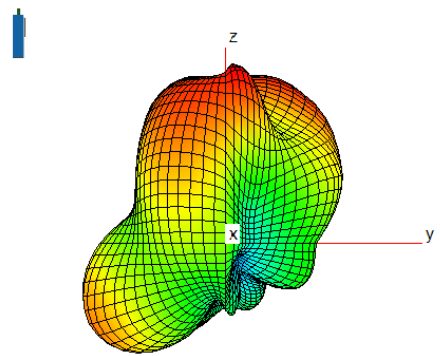
1710MHz



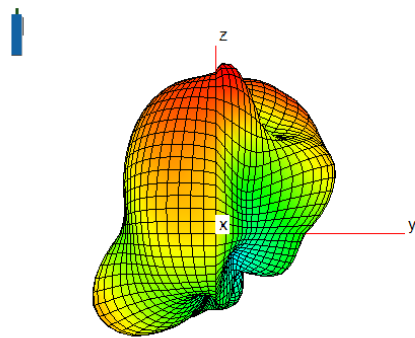
1850MHz



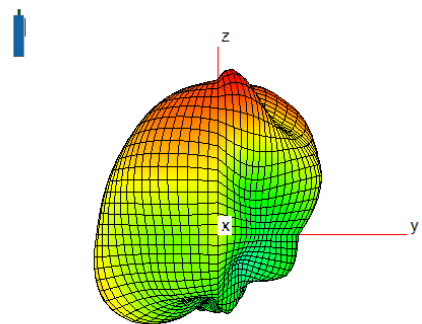
1880MHz



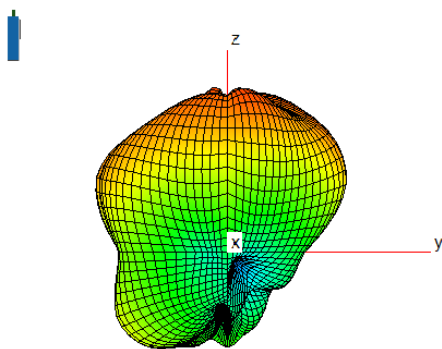
1920MHz



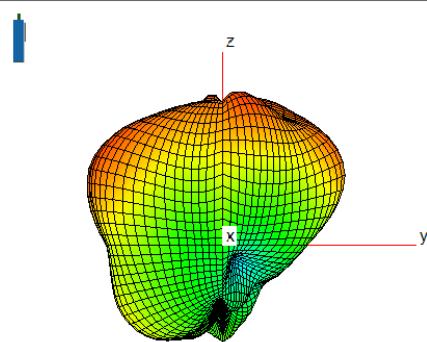
1990MHz



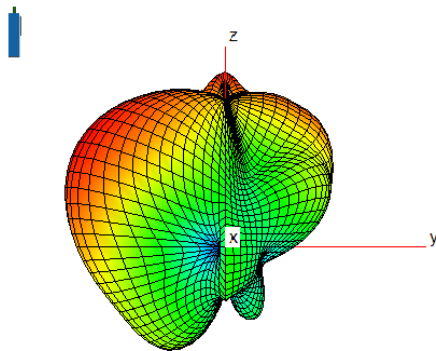
2150MHz



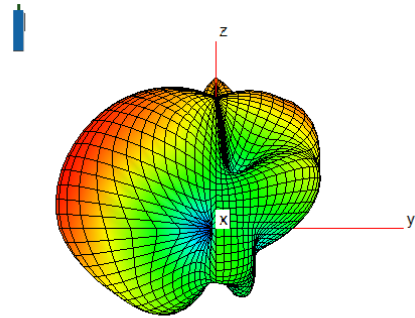
2170MHz



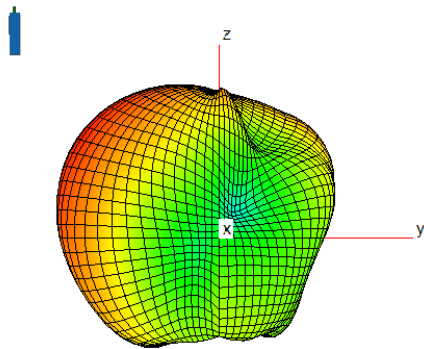
2300MHz



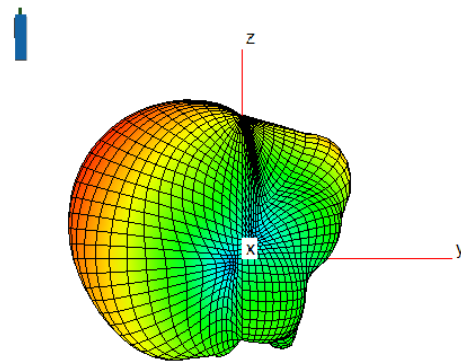
2360MHz



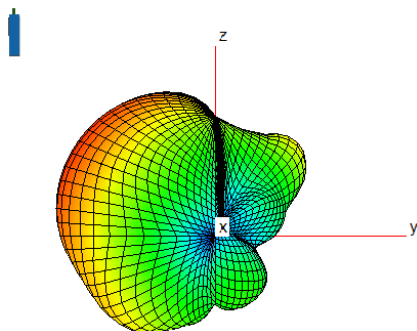
2500MHz



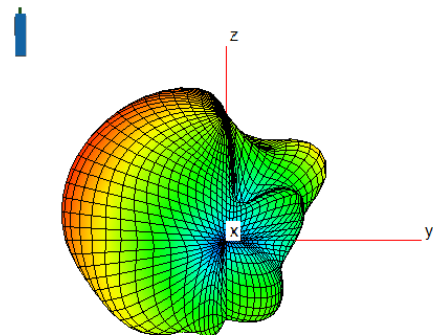
2570MHz



2620MHz

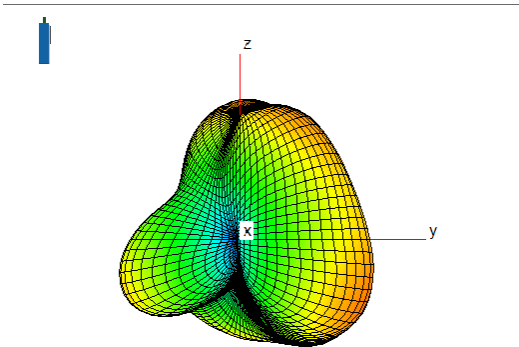


2690MHz

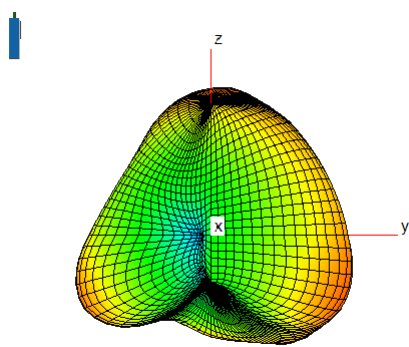


DIV ANTENNA

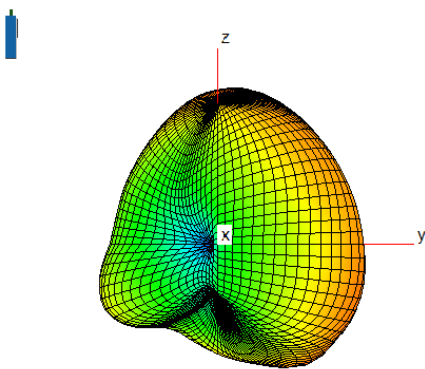
620MHz



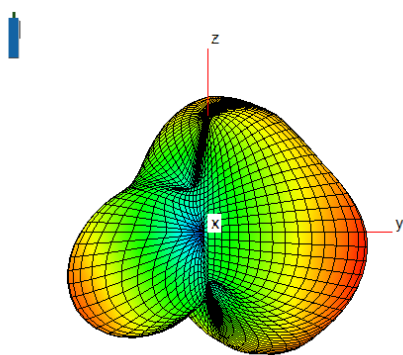
690MHz



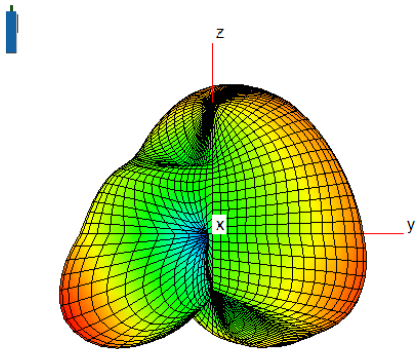
710MHz



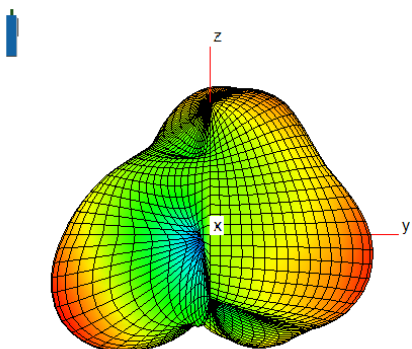
740MHz



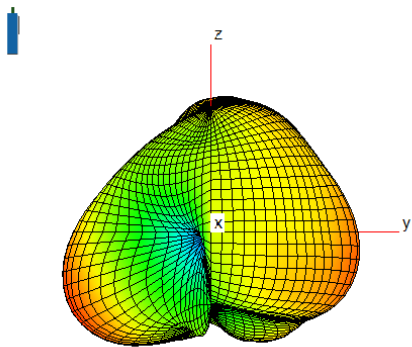
760MHz



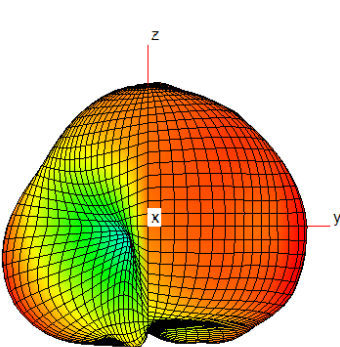
790MHz



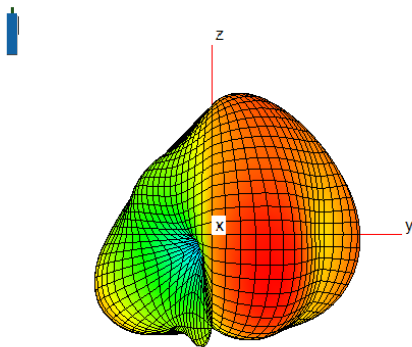
830MHz



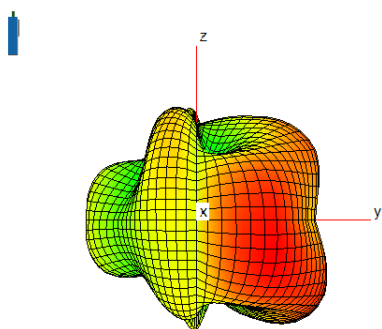
880MHz



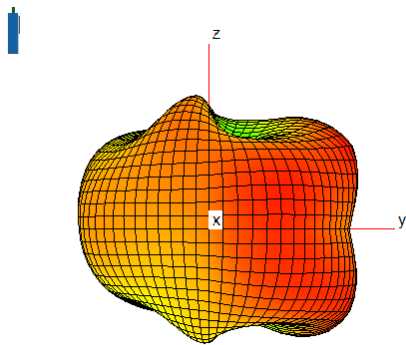
960MHz



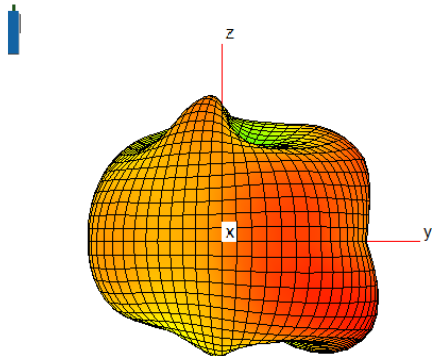
1710MHz



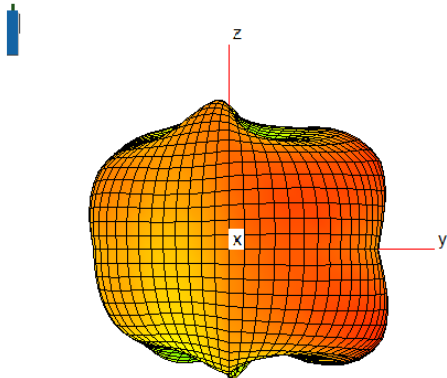
1850MHz



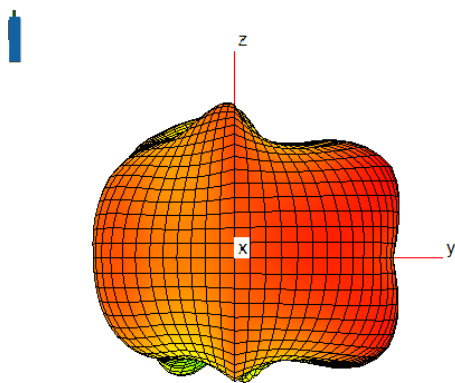
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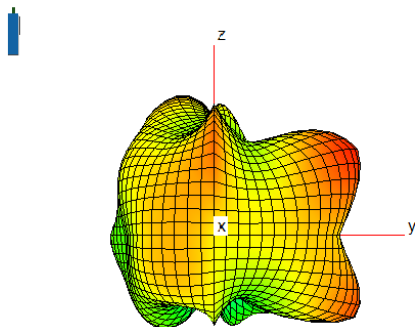
1920MHz



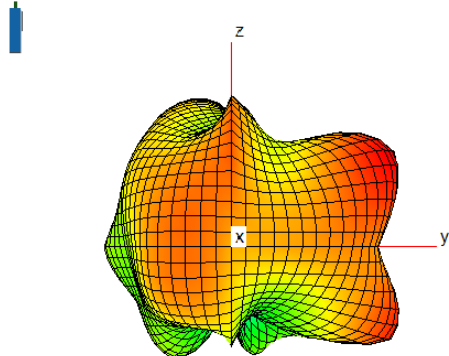
1990MHz



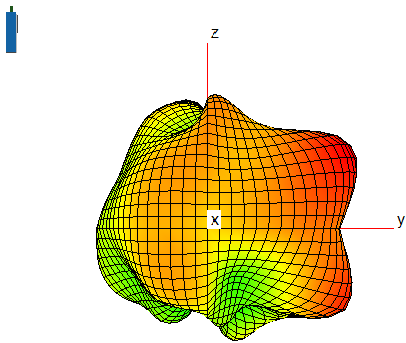
2150MHz



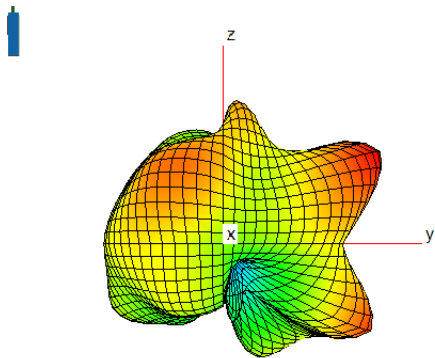
2170MHz



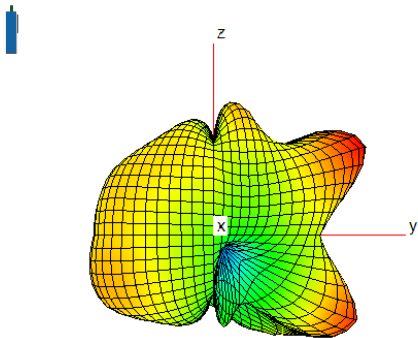
2300MHz



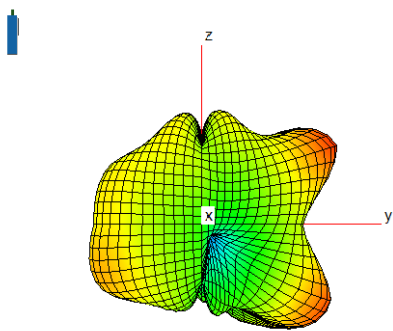
2360MHz



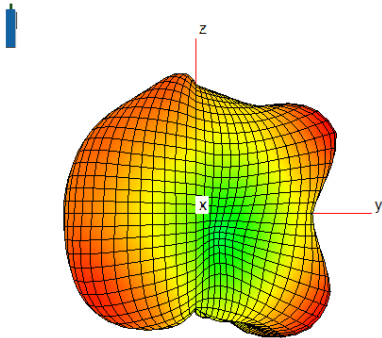
2500MHz



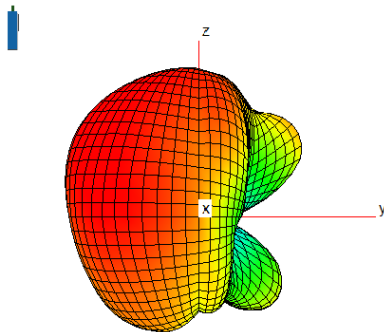
2570MHz



2620MHz

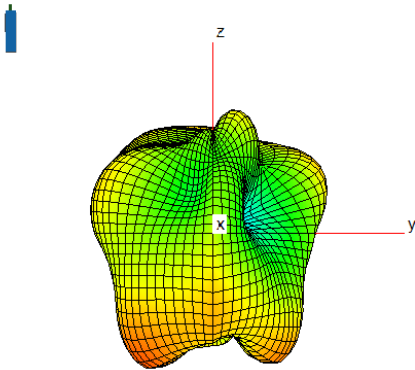


2690MHz

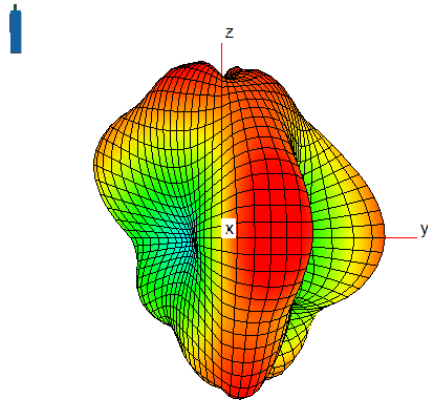


WCN

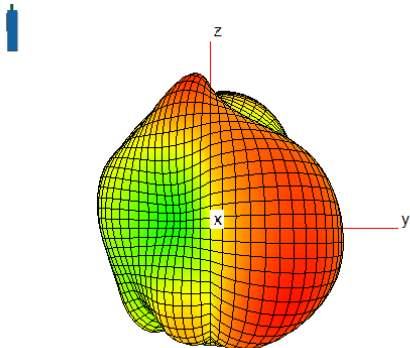
1575MHz



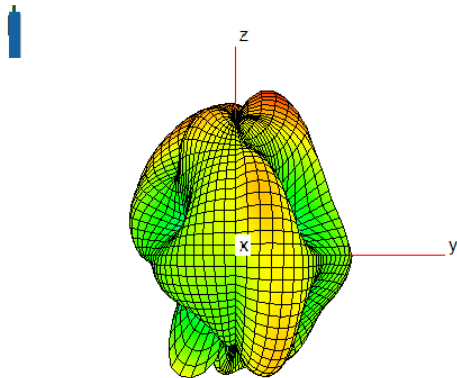
2400MHz



2480MHz

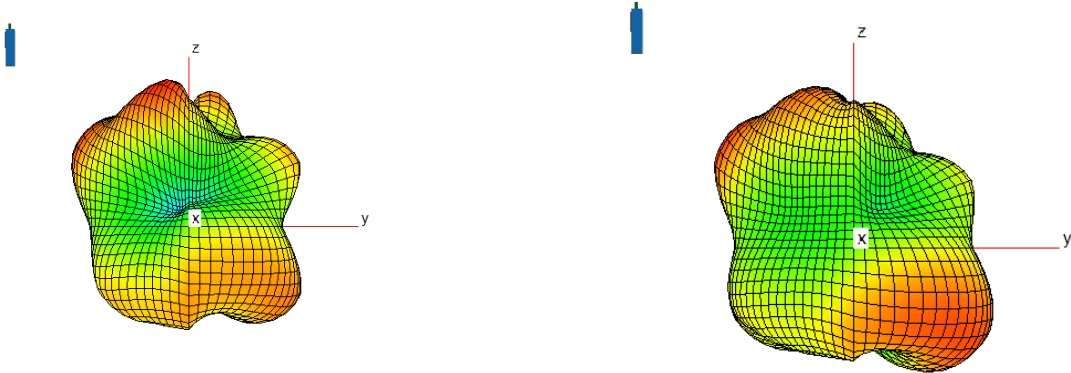


2500MHz

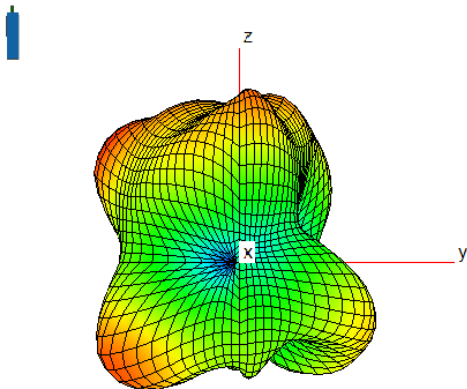


5150MHz

5350MHz

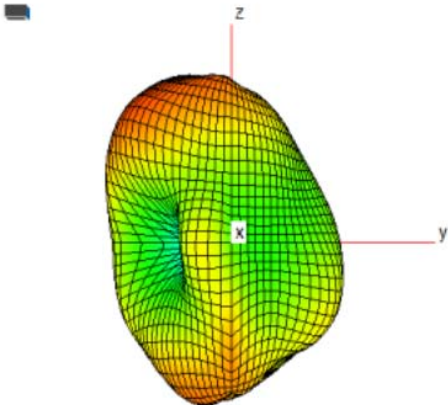


5850MHz

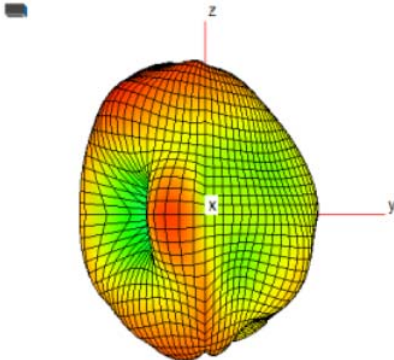


Hyper WIFI

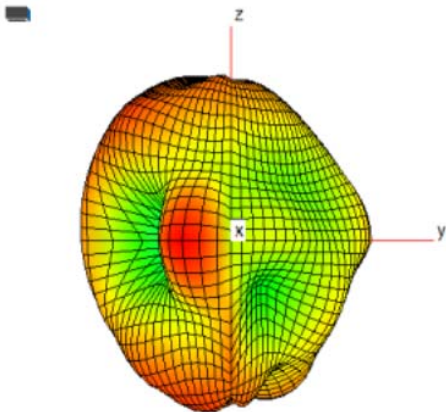
860MHz



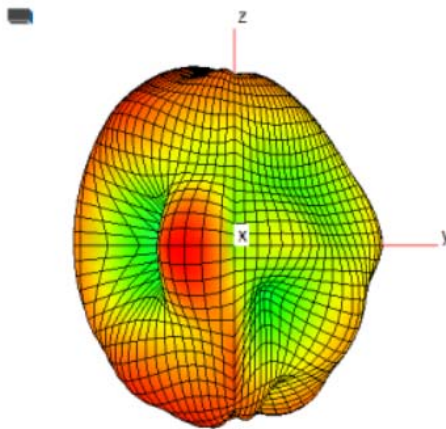
880MHz



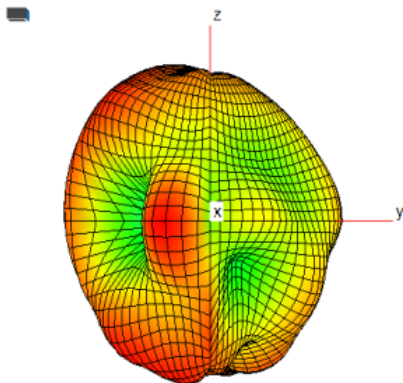
900MHz



910MHz



920MHz



930MHz

