

## Regulatory WWAN Antenna Information (Template)

Platform information					
Brand	ODM	****End product model name	Intel platform (ex: Yes, No or NA)	Platform type (ex: regular NB, convertible PC, AIO...etc)	*SAR minimum separation (mm)
GETAC		(F110, F110G6, F110-Ex, F110-631)			
****Please fill in exact product model name and make sure the model name is visible on product cover or any parts for end users recognize for authority inspection.					
Antenna information					
Vendor	Type	Antenna Part number (Main)		Antenna Part number (Aux)	
PULSE	PIFA	422918000006		422918000007	

**WWAN Main Antenna Gain Table**

Frequency	<b>617</b>	<b>634.5</b>	<b>652</b>	<b>663</b>	<b>680.5</b>	<b>698</b>	<b>699</b>	<b>707.5</b>	<b>716</b>
Gain (dBi) w/z loss	-12.95	-16.64	-12.12	-9.43	-6.45	-4.58	-4.47	-3.96	-3.72

Frequency	<b>729</b>	<b>737.5</b>	<b>746</b>	<b>751</b>	<b>756</b>	<b>758</b>	<b>763</b>	<b>768</b>	<b>777</b>
Gain (dBi) w/z loss	-3.18	-2.70	-1.92	-1.41	-1.22	-1.10	-0.85	-0.75	-0.51

Frequency	<b>782</b>	<b>787</b>	<b>788</b>	<b>793</b>	<b>798</b>	<b>814</b>	<b>824</b>	<b>831.5</b>	<b>836.5</b>
Gain (dBi) w/z loss	-0.38	-0.35	-0.34	-0.34	-0.40	-0.64	-0.59	-0.33	-0.32

Frequency	<b>849</b>	<b>859</b>	<b>869</b>	<b>876.5</b>	<b>881.5</b>	<b>894</b>	<b>897.5</b>	<b>915</b>	<b>925</b>
Gain (dBi) w/z loss	-0.21	-0.06	0.20	0.34	0.30	0.16	0.05	-0.46	-0.91

Frequency	<b>942.5</b>	<b>960</b>	<b>1710</b>	<b>1732.5</b>	<b>1745</b>	<b>1755</b>	<b>1780</b>	<b>1850</b>	<b>1880</b>
Gain (dBi) w/z loss	-1.53	-2.30	-0.19	-0.61	-0.70	-0.52	0.35	0.41	0.06

Frequency	<b>1882.5</b>	<b>1910</b>	<b>1915</b>	<b>1930</b>	<b>1960</b>	<b>1962.5</b>	<b>1990</b>	<b>1995</b>	<b>2110</b>
Gain (dBi) w/z loss	0.02	-0.04	-0.04	0.02	0.56	0.50	0.37	0.38	0.42

Frequency	<b>2132.5</b>	<b>2155</b>	<b>2200</b>	<b>2305</b>	<b>2310</b>	<b>2315</b>	<b>2350</b>	<b>2355</b>	<b>2360</b>
Gain (dBi) w/z loss	0.08	-0.59	-0.78	-2.00	-2.13	-2.13	-2.21	-2.34	-2.18

Frequency	<b>2400</b>	<b>2496</b>	<b>2500</b>	<b>2535</b>	<b>2570</b>	<b>2593</b>	<b>2595</b>	<b>2620</b>	<b>2655</b>
Gain (dBi) w/z loss	-3.31	-3.33	-3.29	-2.98	-2.92	-2.88	-2.83	-2.57	-3.19

Frequency	<b>2690</b>	<b>3550</b>	<b>3600</b>	<b>3700</b>	<b>3800</b>	<b>5537.5</b>	<b>5925</b>
Gain (dBi) w/z loss	-1.41	-4.06	-4.07	-4.48	-3.54	-5.01	-2.84

**WWAN Aux Antenna Gain Table**

Frequency	<b>617</b>	<b>634.5</b>	<b>652</b>	<b>663</b>	<b>680.5</b>	<b>698</b>	<b>699</b>	<b>707.5</b>	<b>716</b>
Gain (dBi)	-10.23	-8.31	-6.42	-5.35	-3.71	-2.34	-2.26	-1.95	-1.69

Frequency	<b>729</b>	<b>737.5</b>	<b>746</b>	<b>751</b>	<b>756</b>	<b>758</b>	<b>763</b>	<b>768</b>	<b>777</b>
Gain (dBi)	-1.35	-1.20	-1.08	-0.91	-0.85	-0.77	-0.74	-0.90	-1.48

Frequency	<b>782</b>	<b>787</b>	<b>788</b>	<b>793</b>	<b>798</b>	<b>814</b>	<b>824</b>	<b>831.5</b>	<b>836.5</b>
Gain (dBi)	-1.30	-1.34	-1.36	-1.45	-1.57	-2.00	-2.31	-2.28	-2.26

Frequency	<b>849</b>	<b>859</b>	<b>869</b>	<b>876.5</b>	<b>881.5</b>	<b>894</b>	<b>897.5</b>	<b>915</b>	<b>925</b>
Gain (dBi)	-2.23	-1.70	-1.53	-1.81	-2.12	-1.85	-1.84	-1.48	-1.48

Frequency	<b>942.5</b>	<b>960</b>	<b>1575</b>	<b>1598</b>	<b>1610</b>	<b>1805</b>	<b>1842.5</b>	<b>1850</b>	<b>1880</b>
Gain (dBi)	-1.18	-0.77	-3.14	-3.31	-3.49	-3.26	-2.95	-1.91	-0.86

Frequency	<b>1882.5</b>	<b>1910</b>	<b>1915</b>	<b>1930</b>	<b>1960</b>	<b>1962.5</b>	<b>1990</b>	<b>1995</b>	<b>2110</b>
Gain (dBi)	-0.79	0.04	0.23	0.62	1.18	1.18	0.97	0.88	0.78

Frequency	<b>2132.5</b>	<b>2155</b>	<b>2200</b>	<b>2305</b>	<b>2310</b>	<b>2315</b>	<b>2350</b>	<b>2355</b>	<b>2360</b>
Gain (dBi)	0.33	0.07	0.16	-0.12	-0.15	-0.17	-0.21	0.05	-0.03

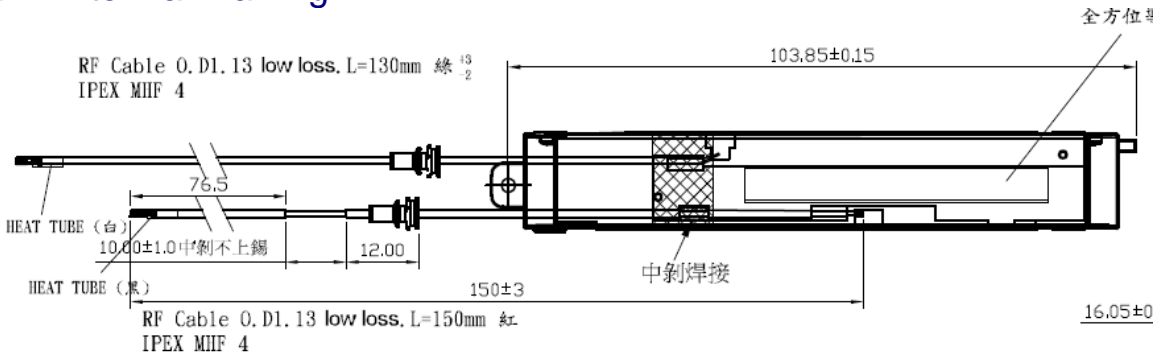
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Gain (dBi)	0.59	1.14	1.08	1.79	2.23	2.50	2.61	2.73	1.48

Frequency	<b>2690</b>	<b>3550</b>	<b>3625</b>	<b>3700</b>	<b>5150</b>	<b>5537.5</b>	<b>5925</b>
Gain (dBi)	0.30	-2.25	-0.25	-0.47	-0.51	1.11	1.57

## Section 2. Dimensioned Photos and Drawings of Antennas

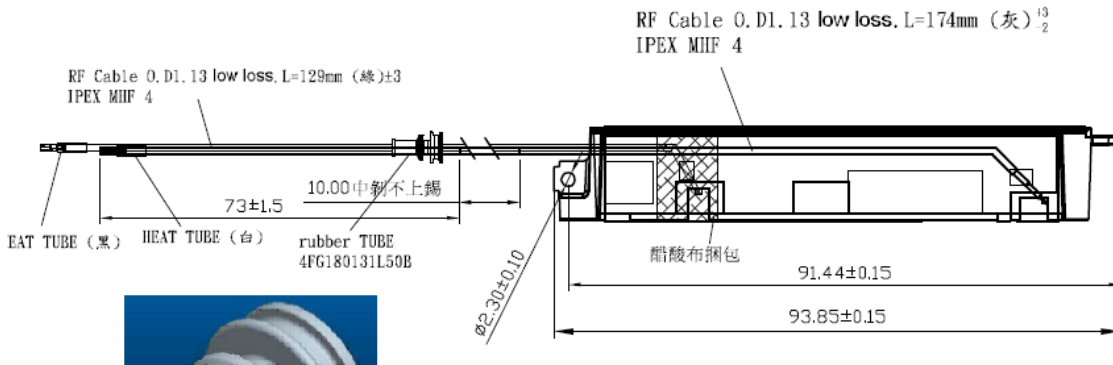
Include the dimensioned photo and drawing of Main antenna here.

Main Antenna Drawing:



Include the dimensioned photo and drawing of Aux antenna here.

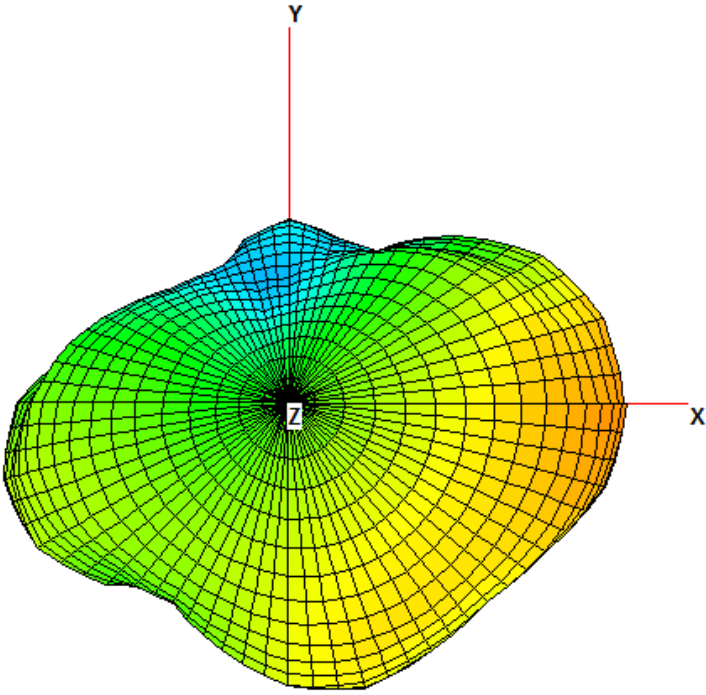
Aux Antenna Drawing:



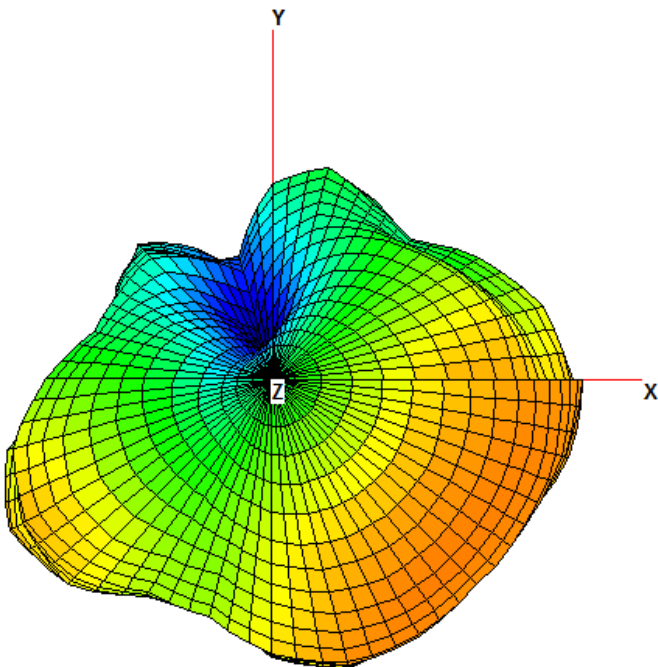
## Section 3. Radiation characteristics of antenna loaded in Host Platform

### Main Antenna

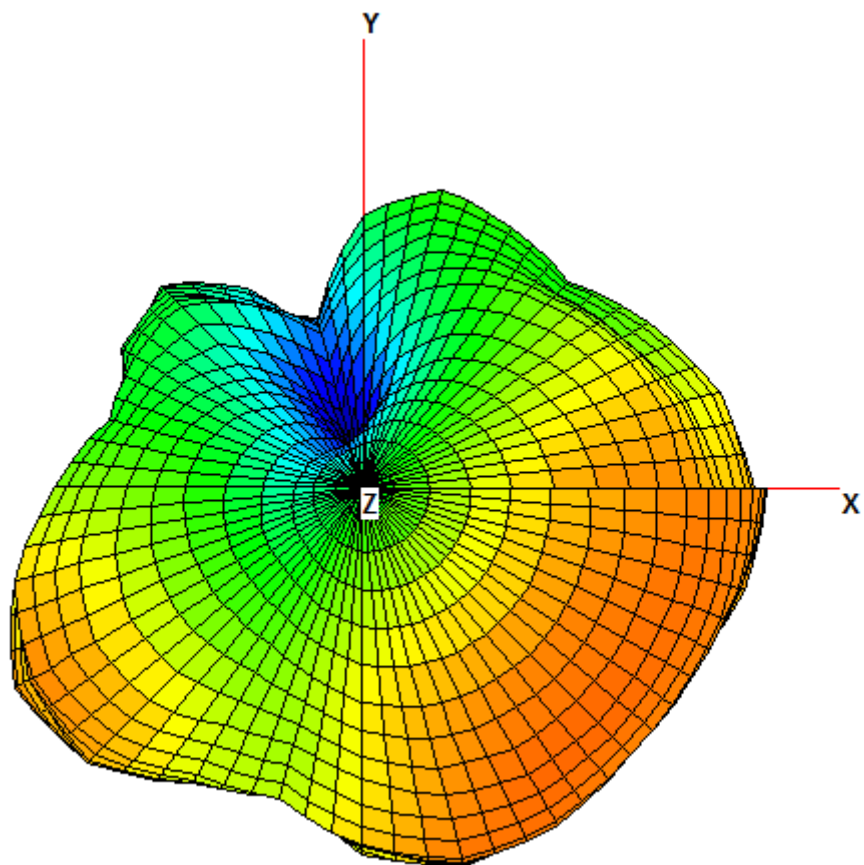
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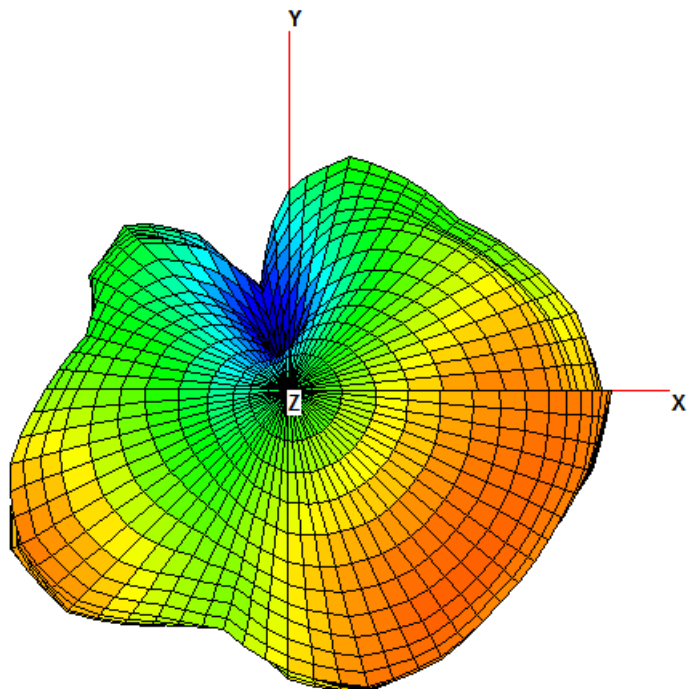
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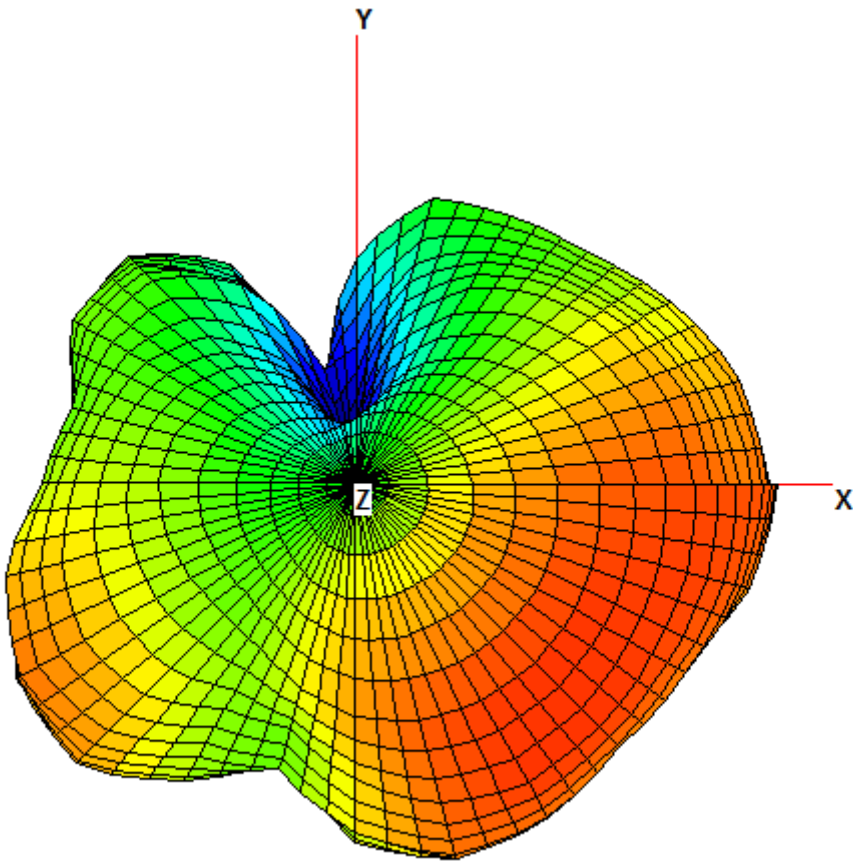
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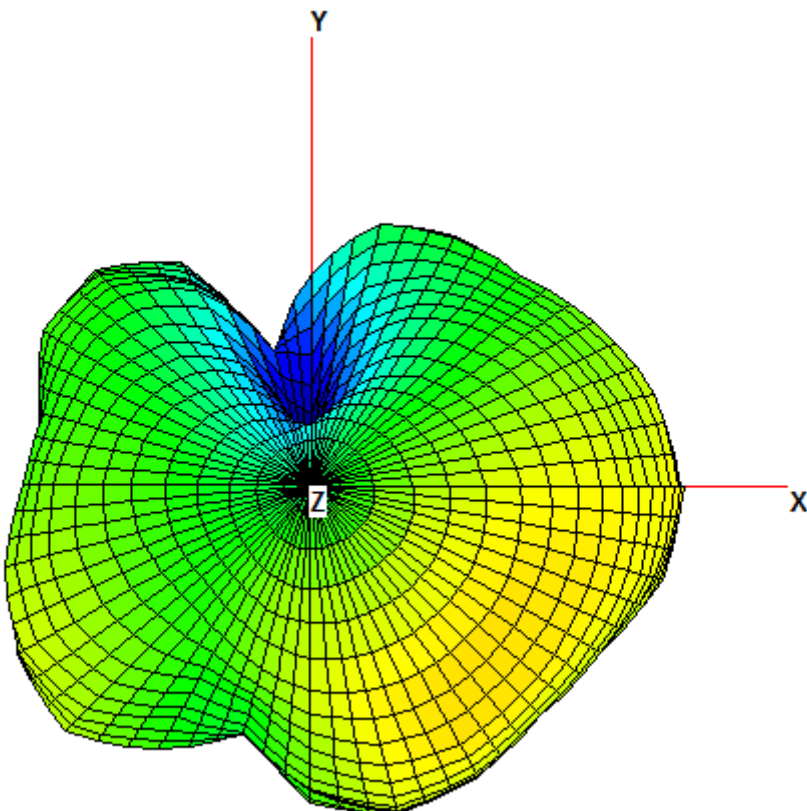
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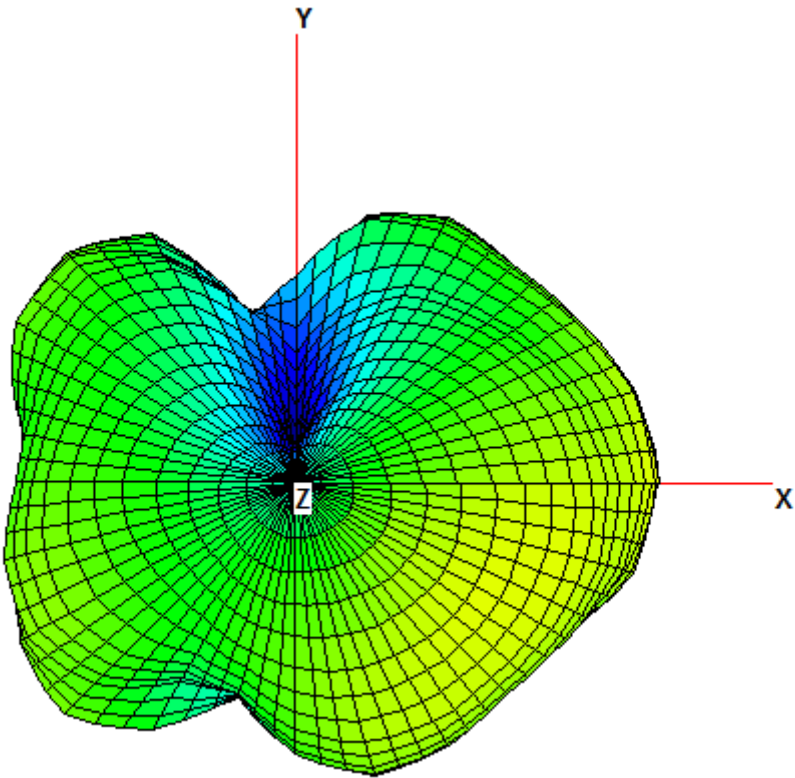
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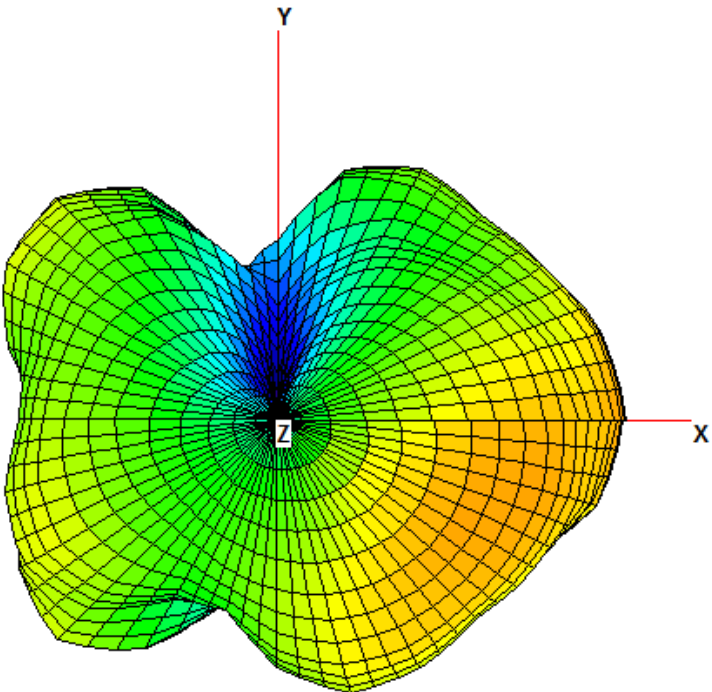
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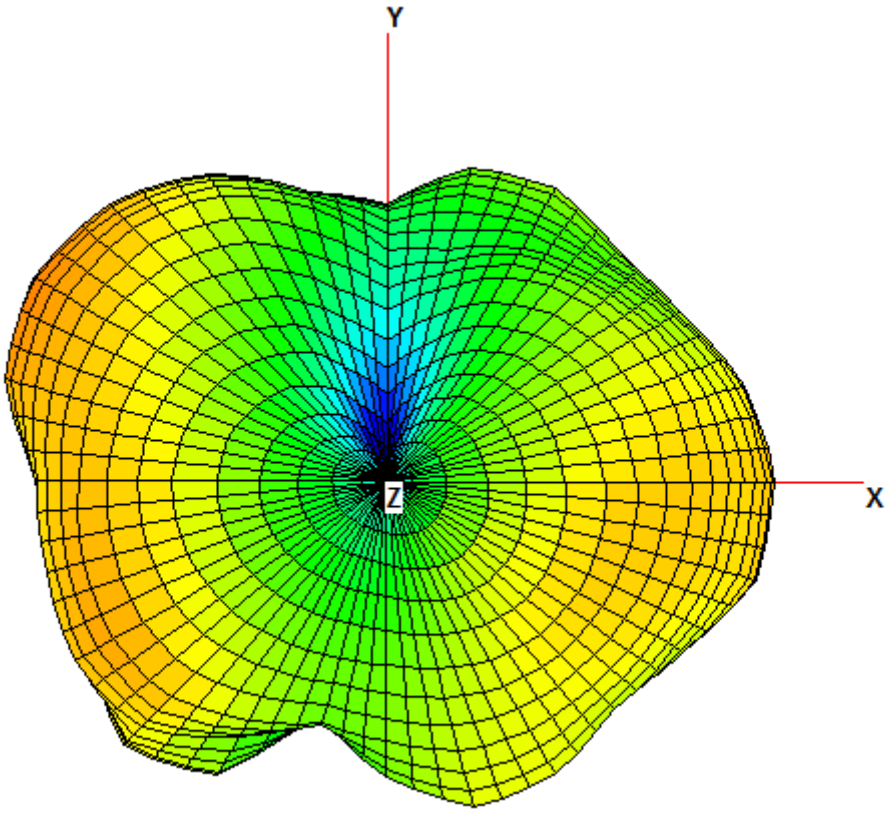


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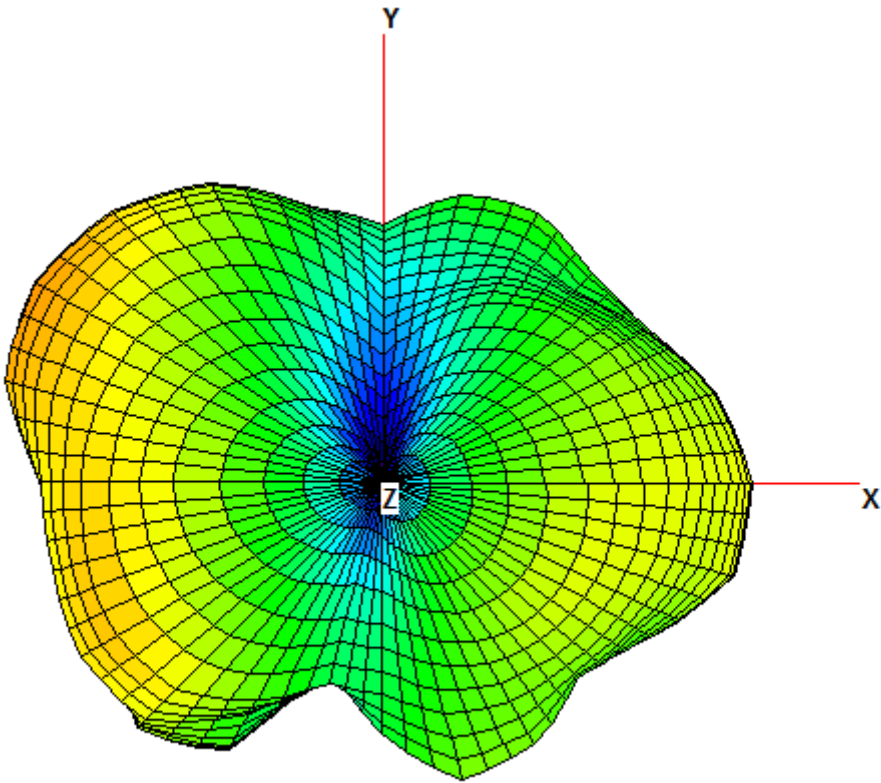




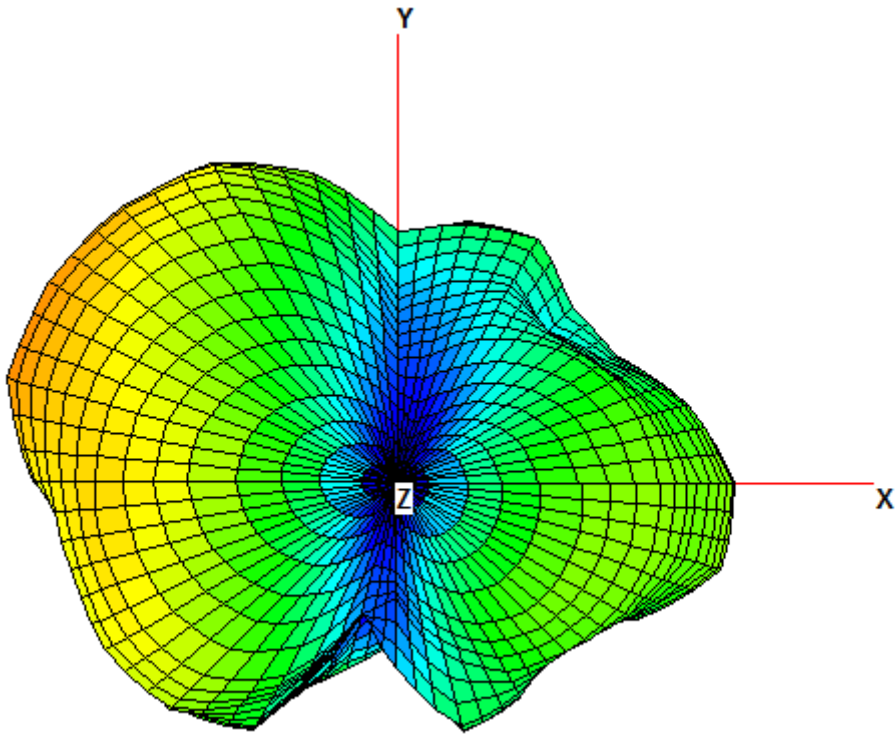
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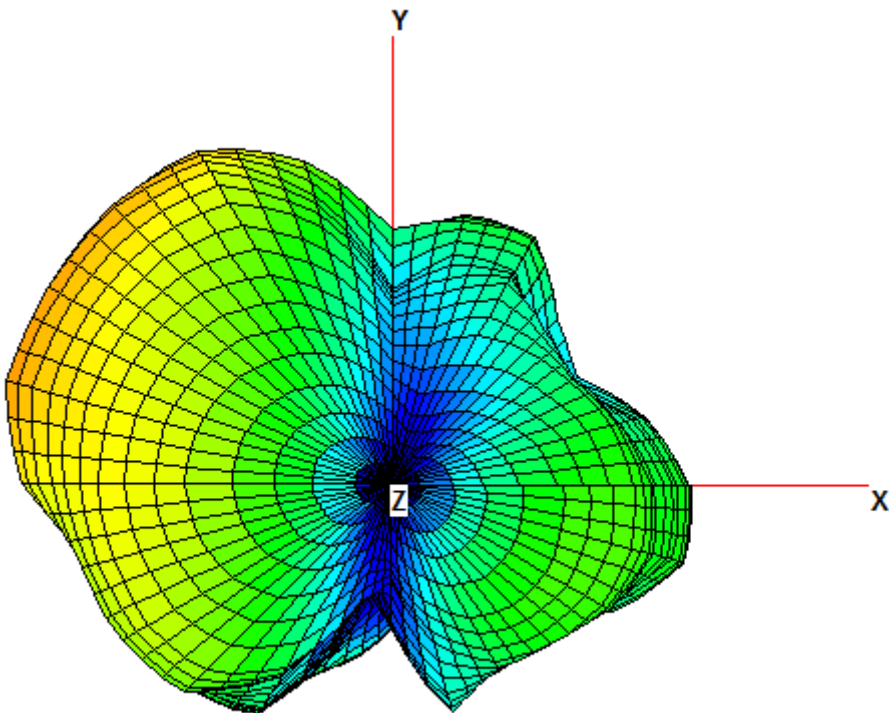
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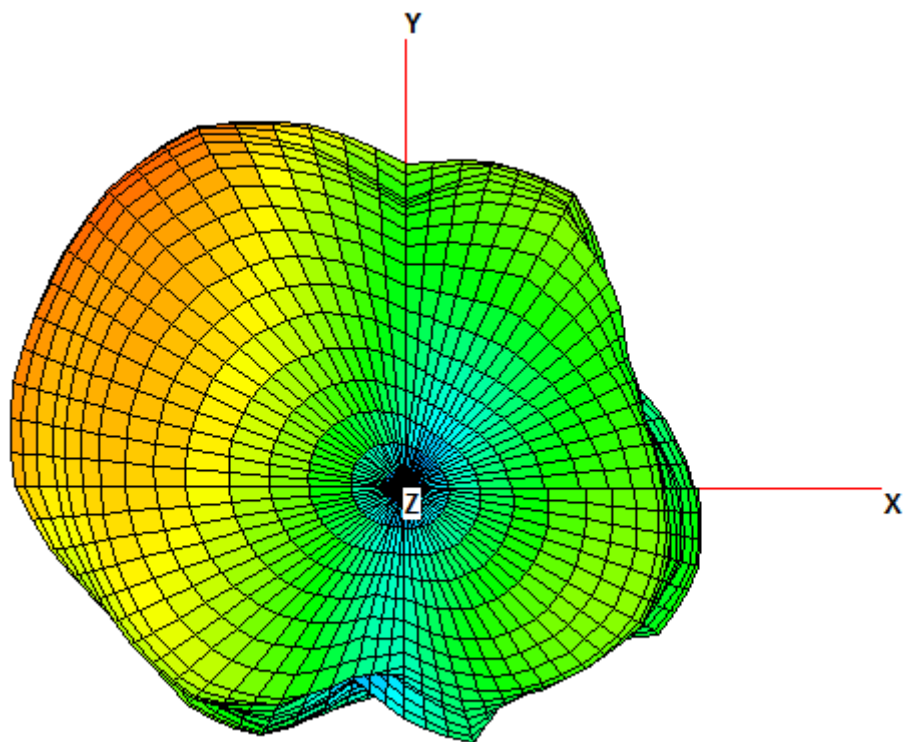
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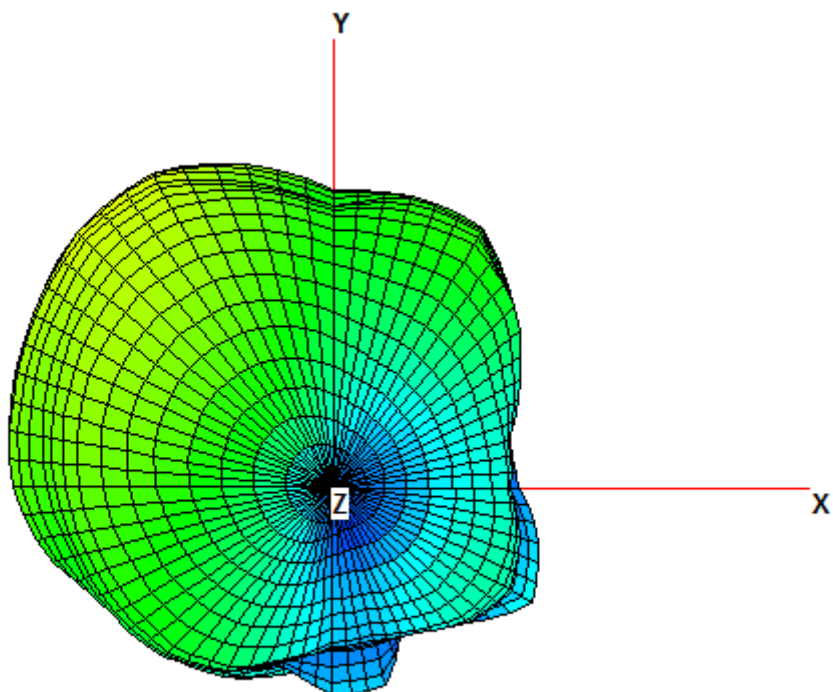
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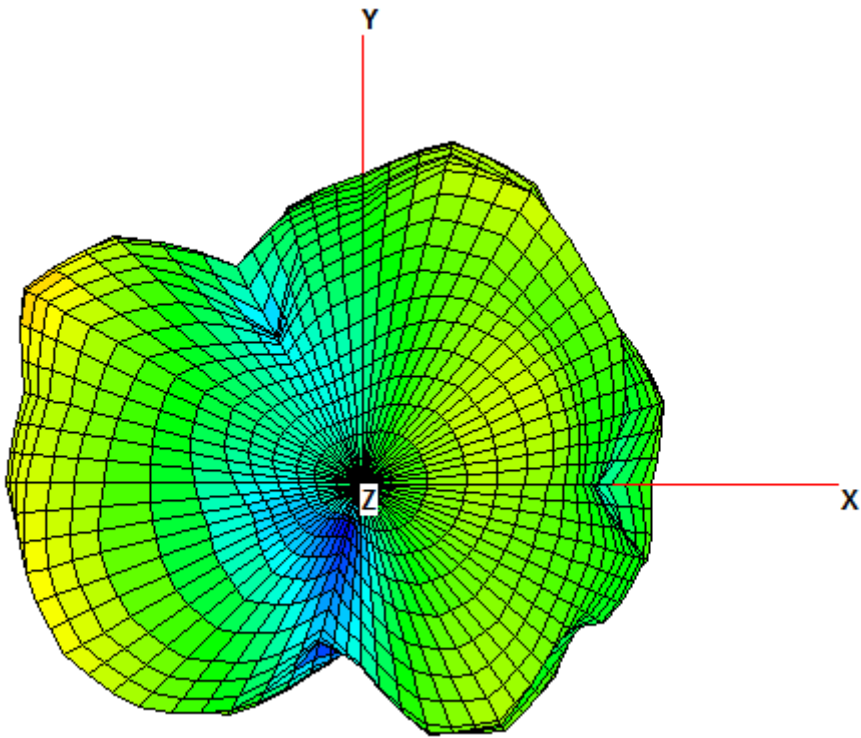
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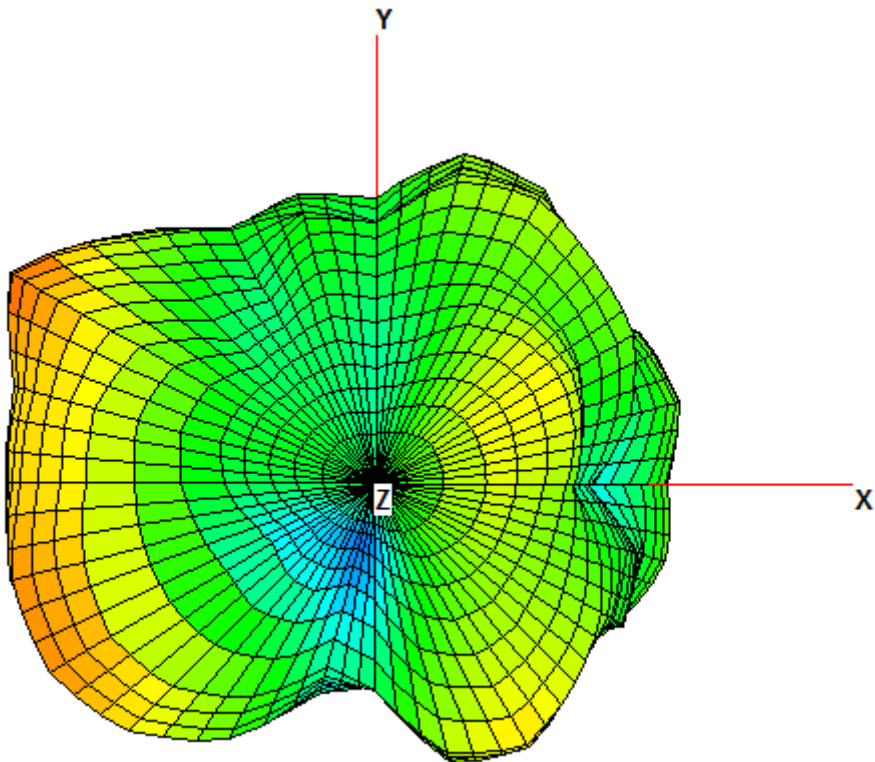
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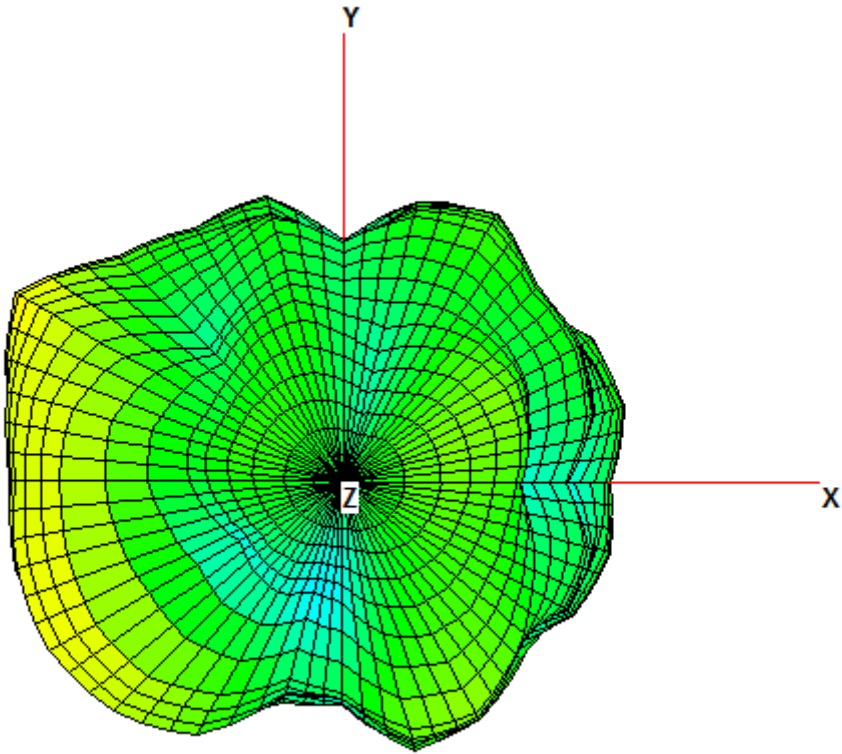
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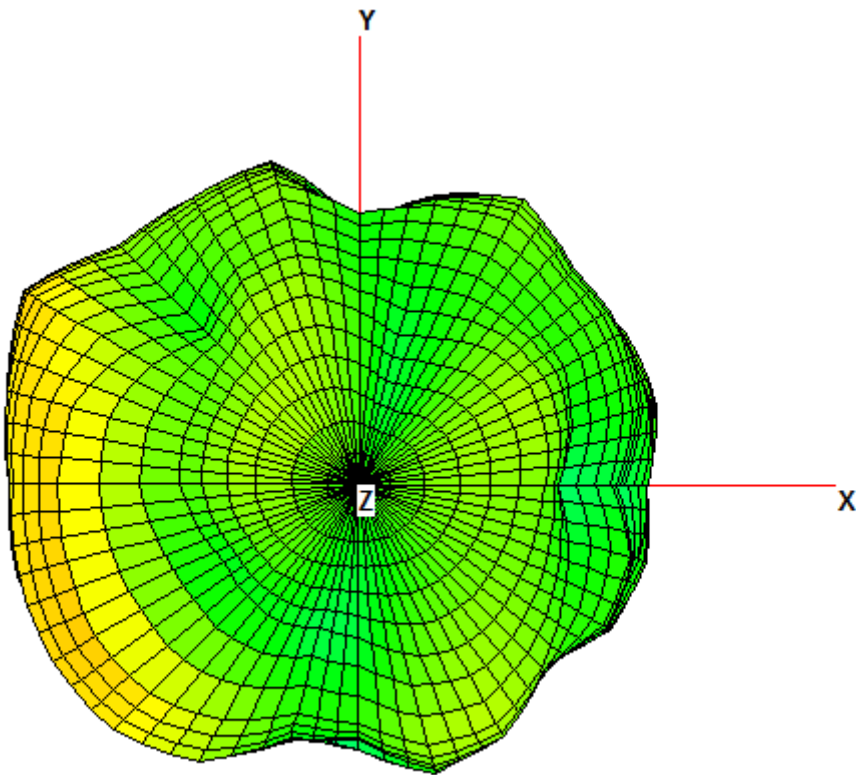
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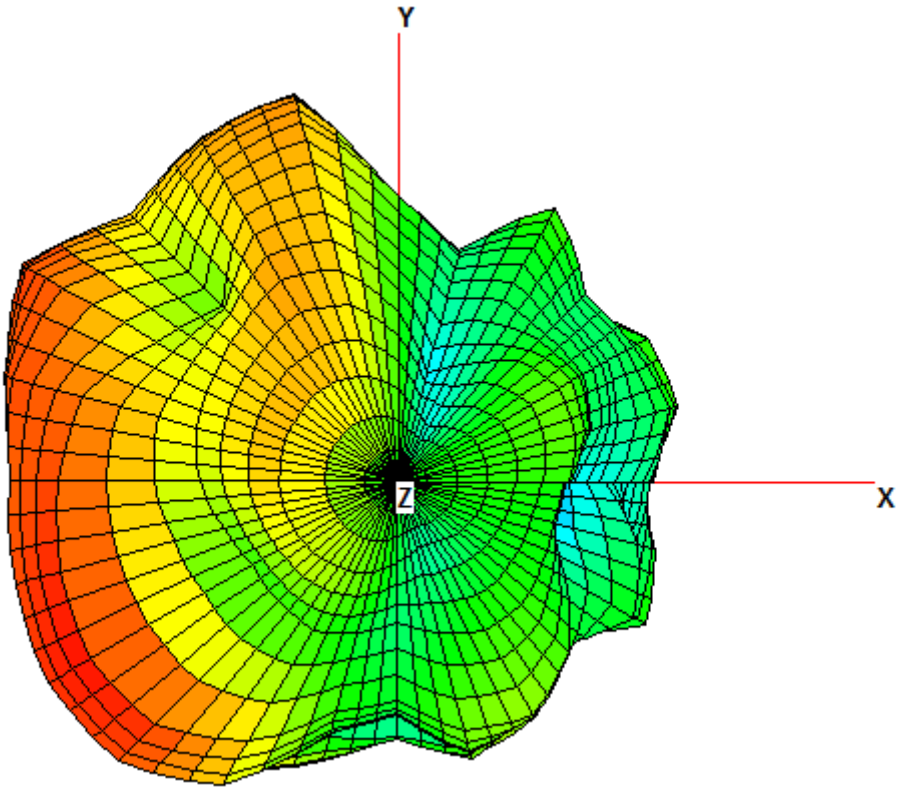
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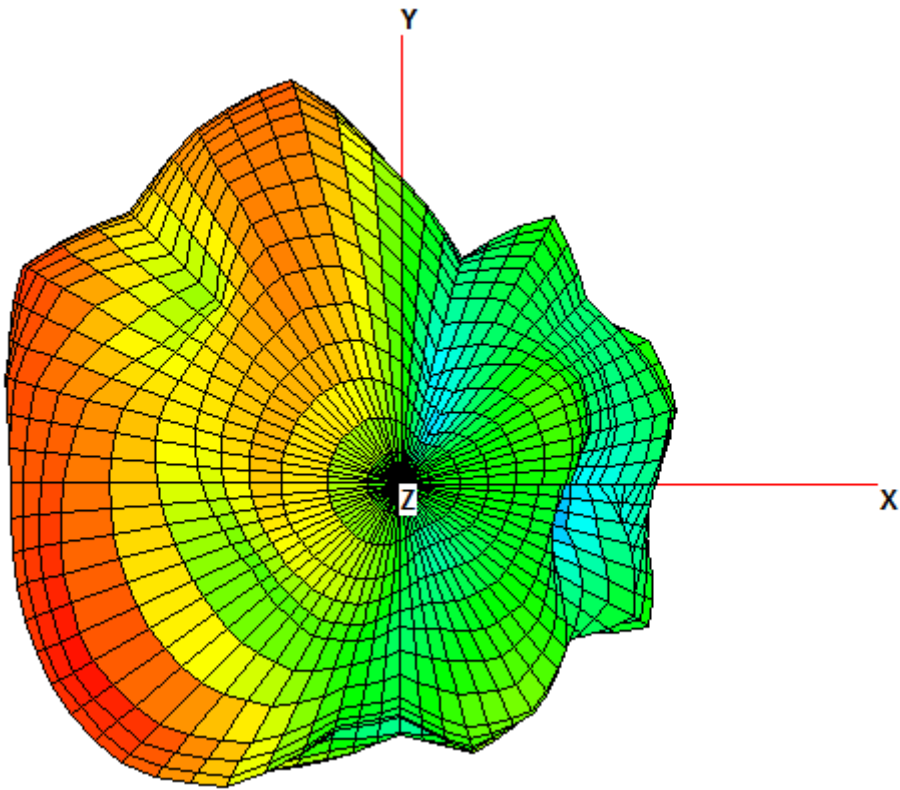
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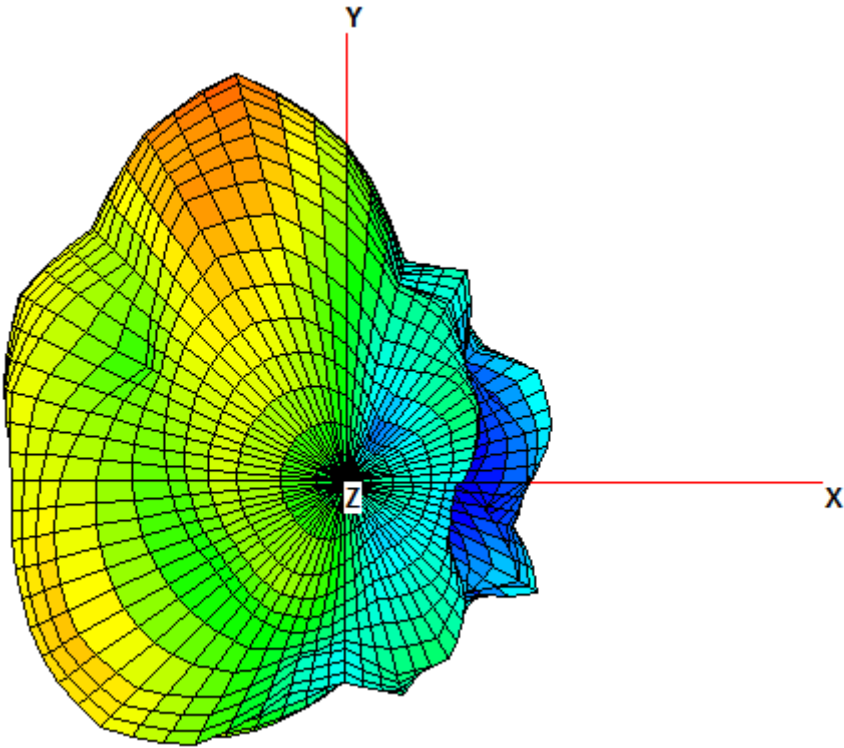
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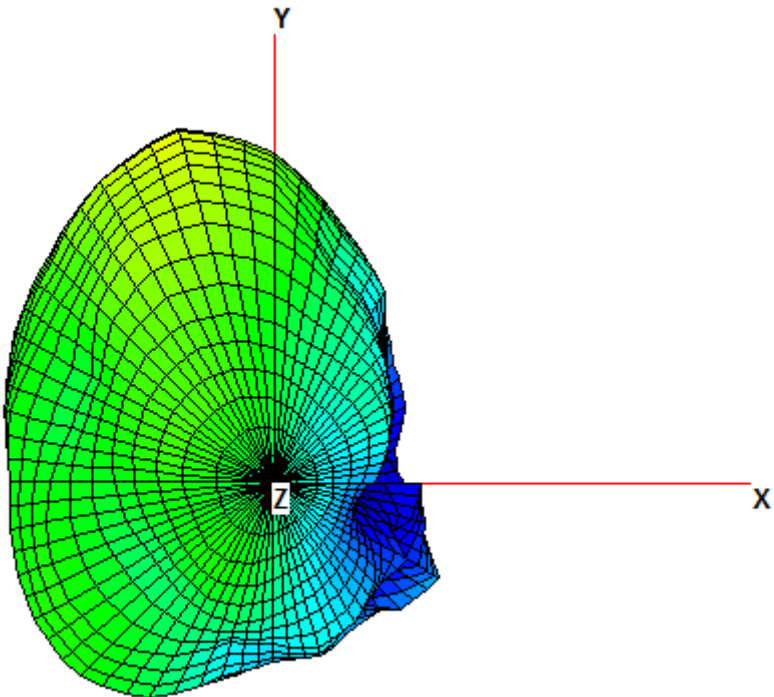
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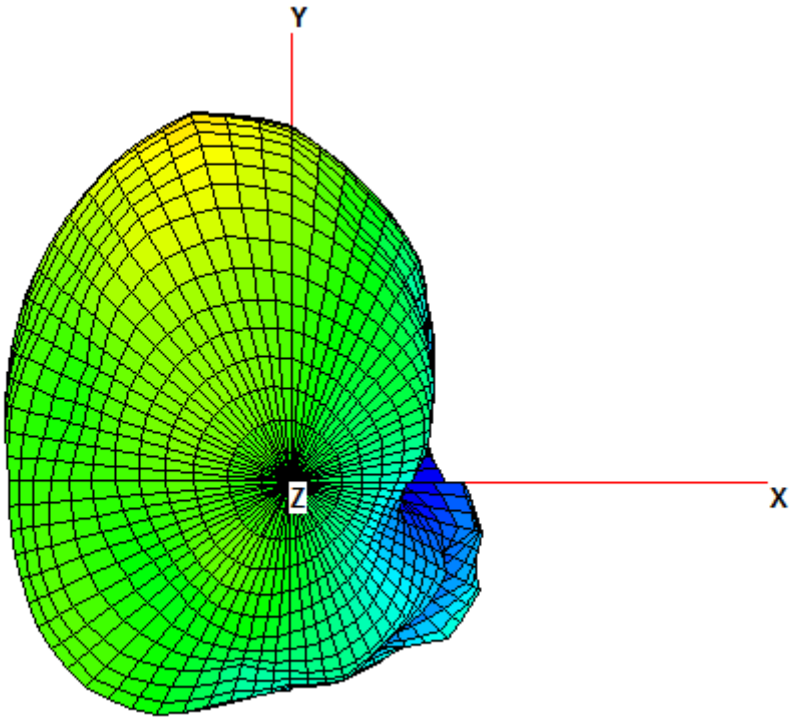
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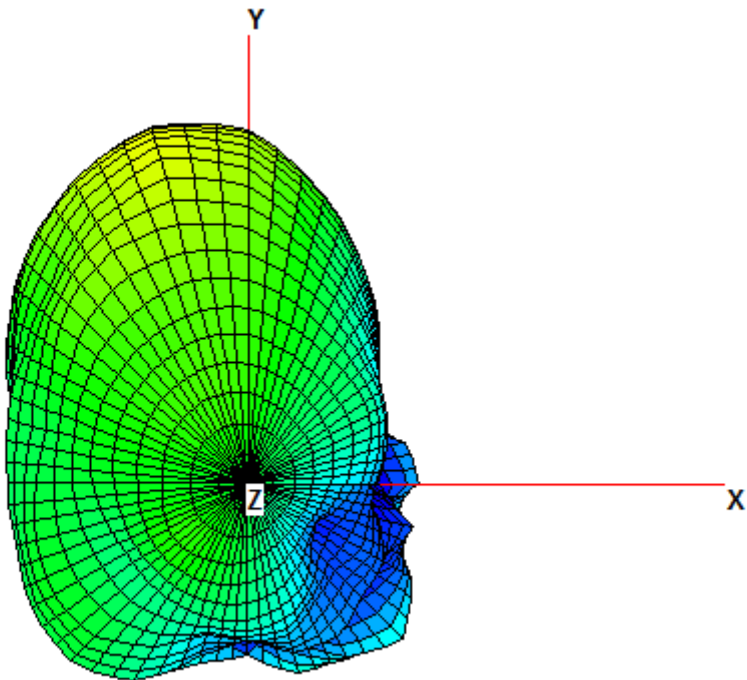
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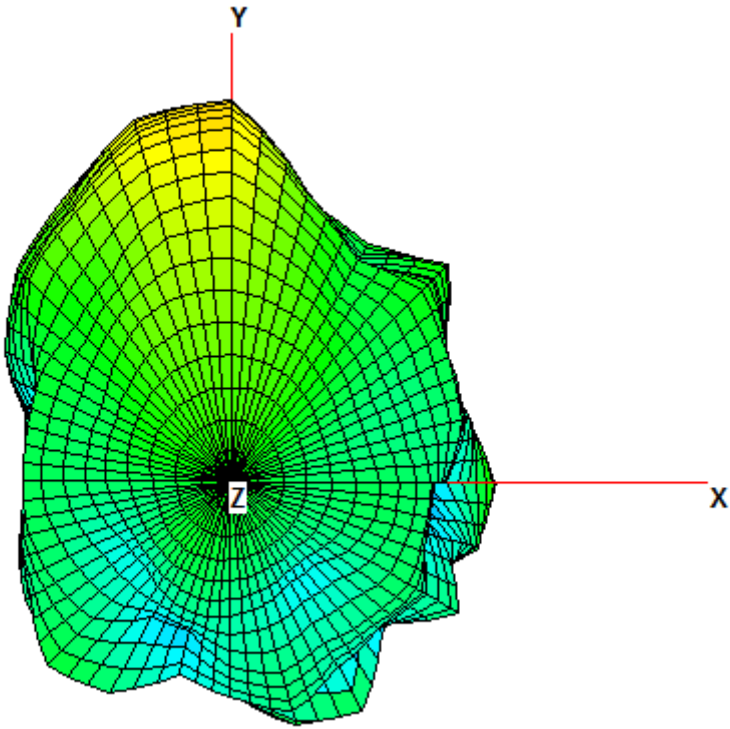


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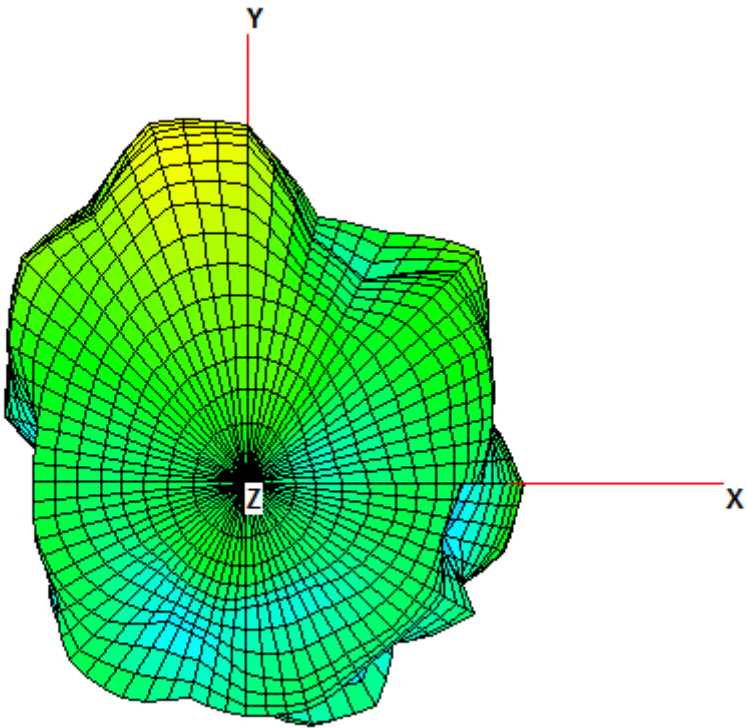




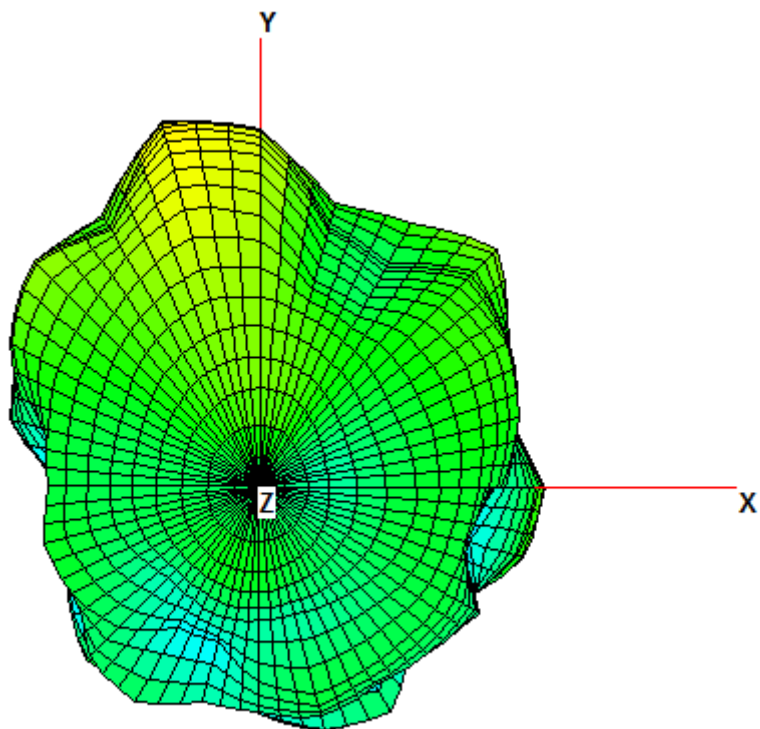
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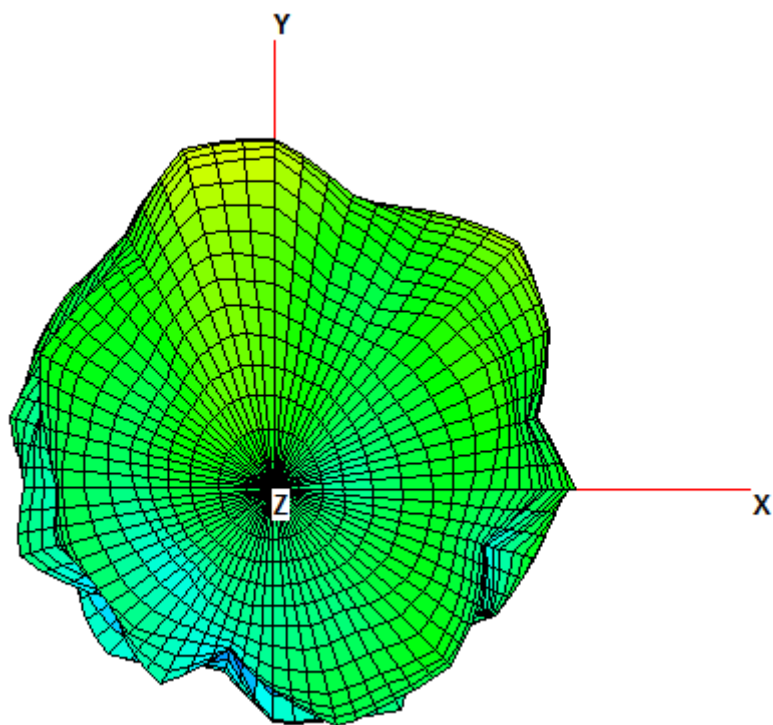
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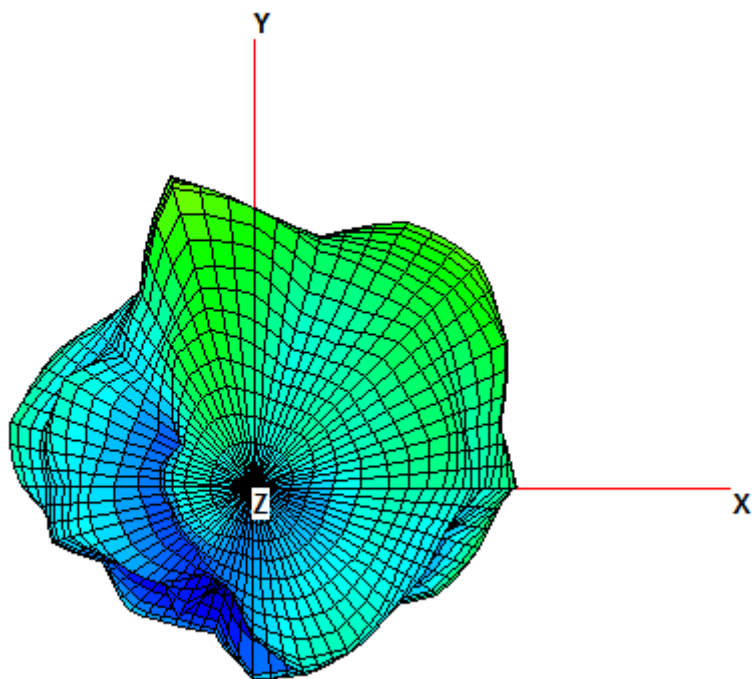
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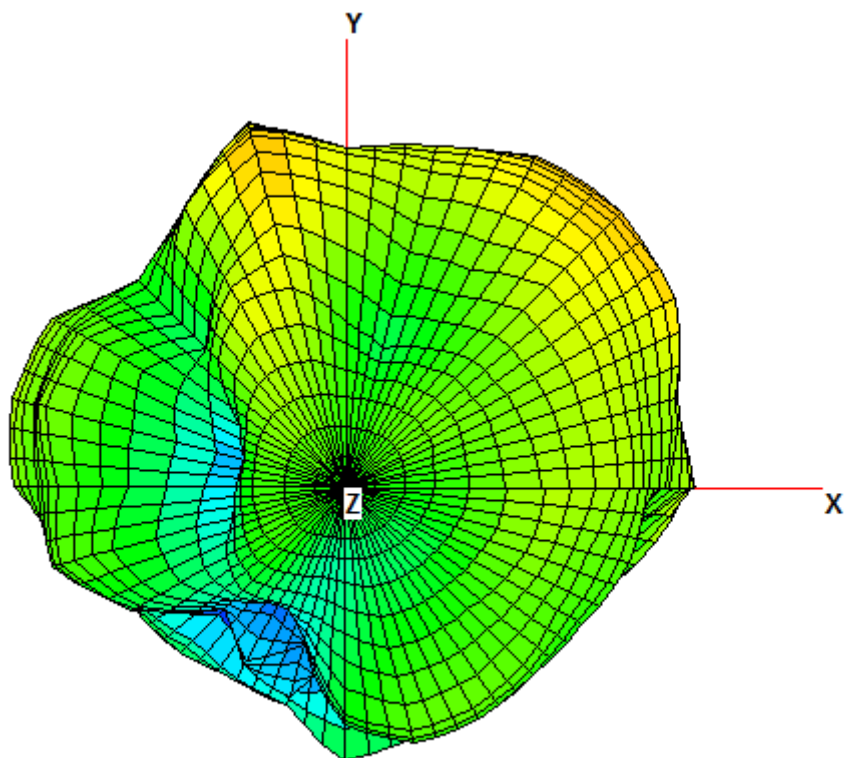
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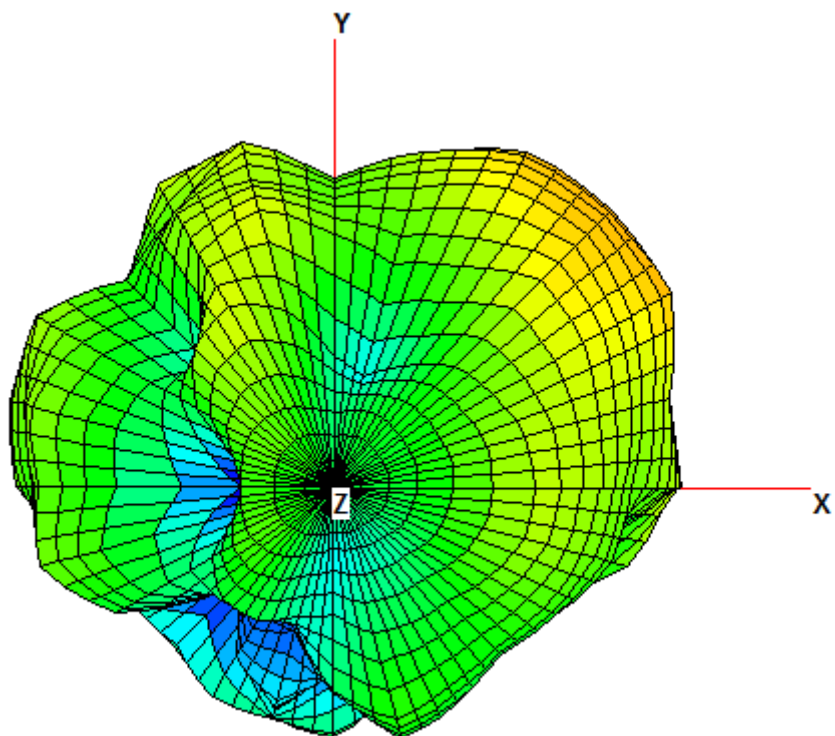
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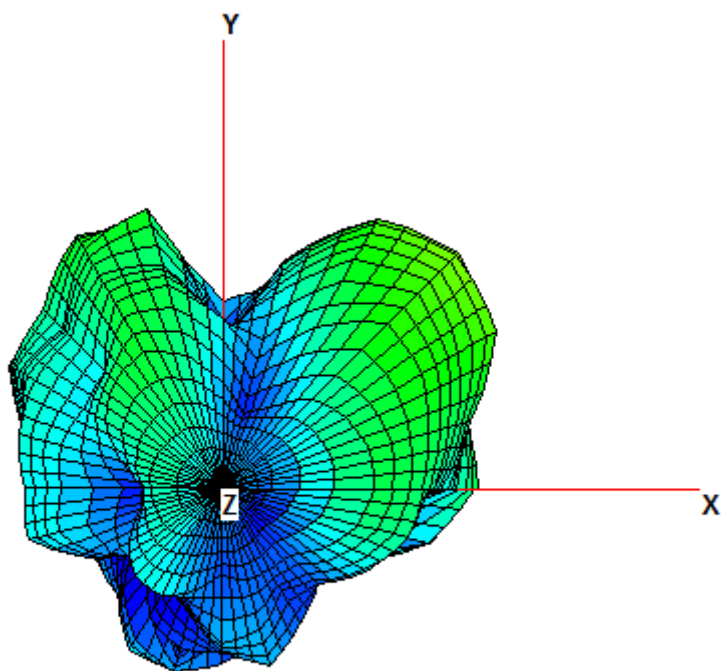
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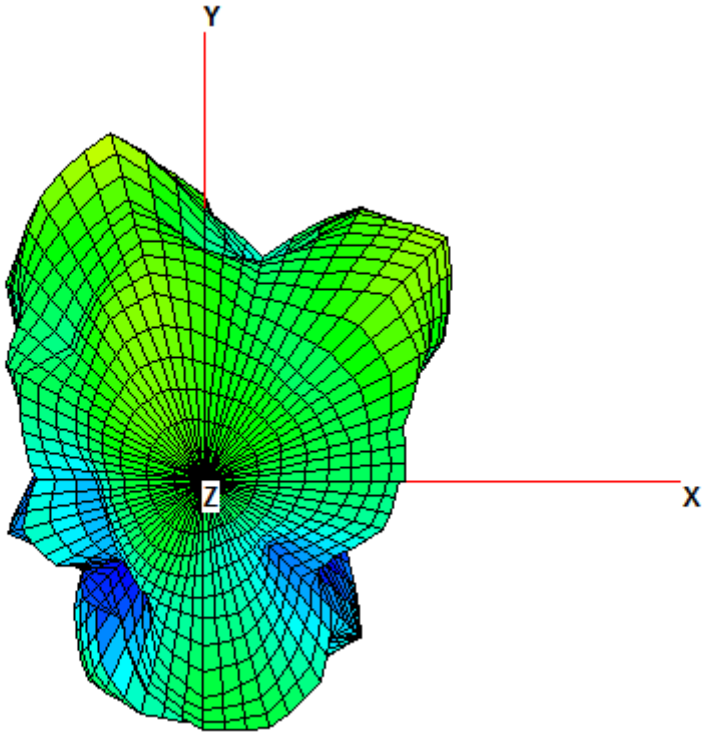
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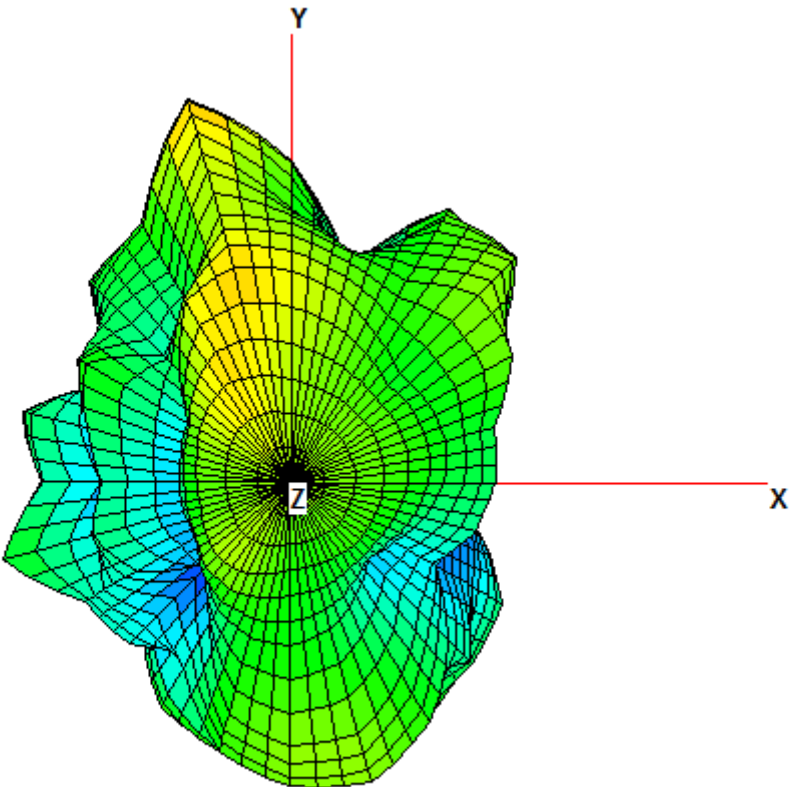
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2570 MHz

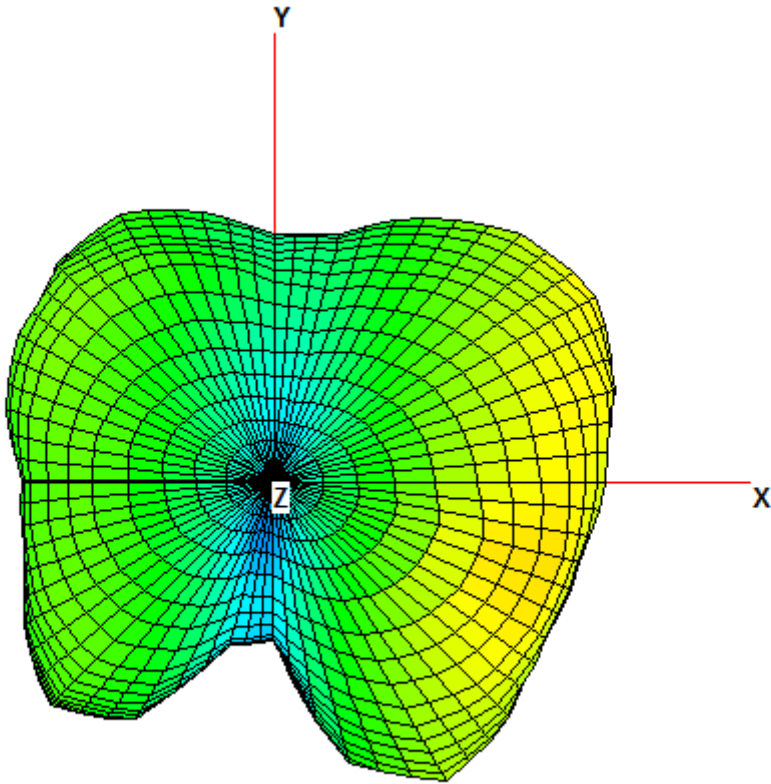


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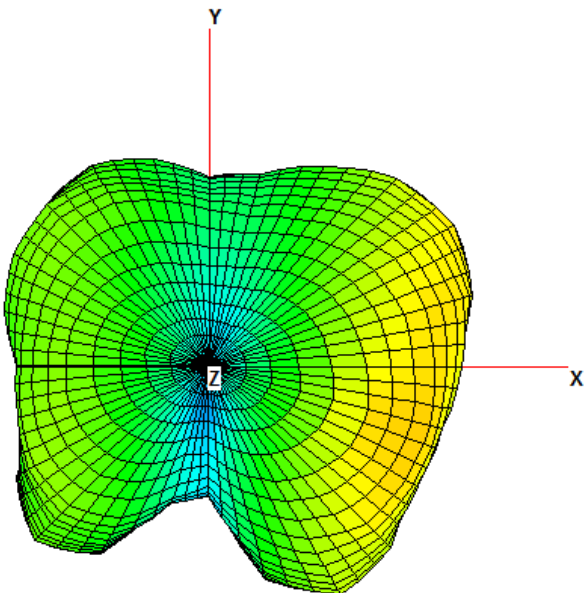


# Aux Antenna

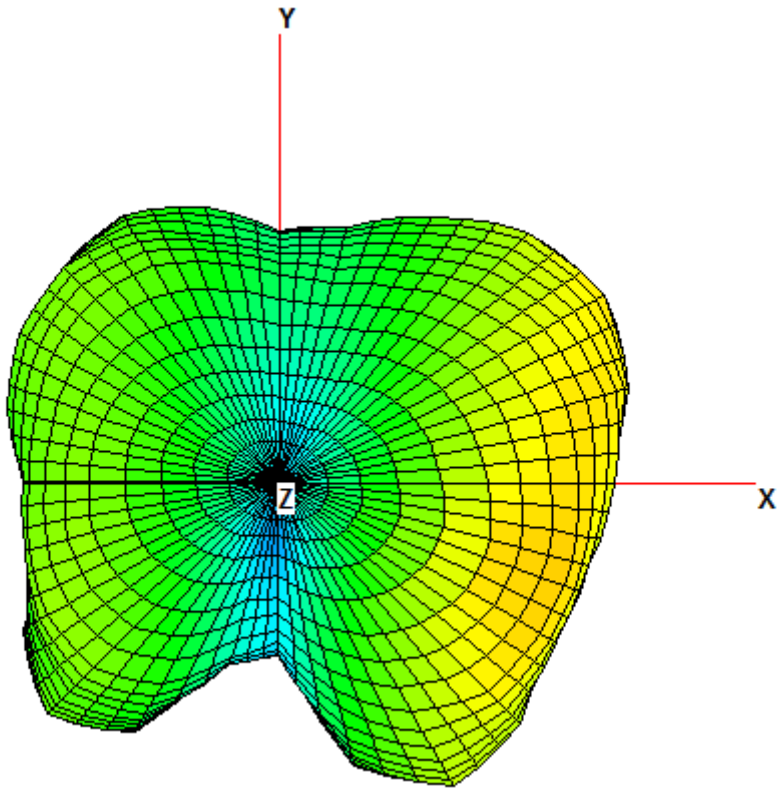
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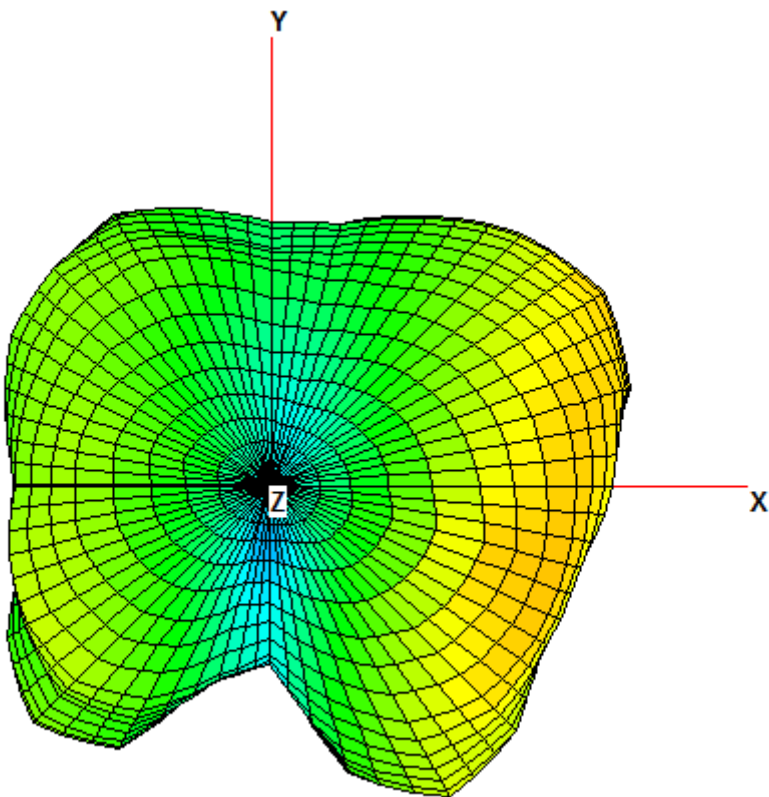
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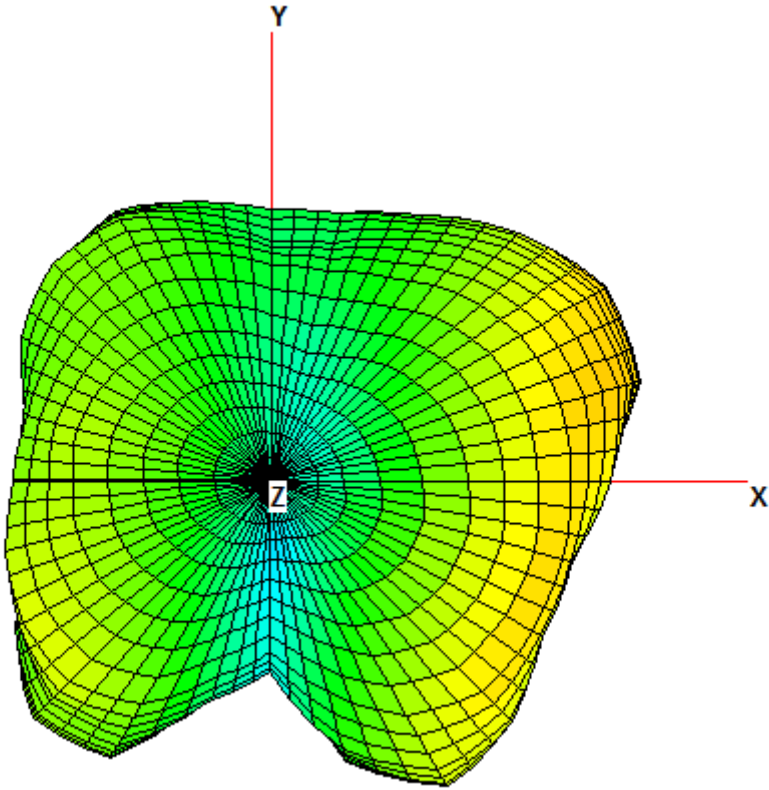
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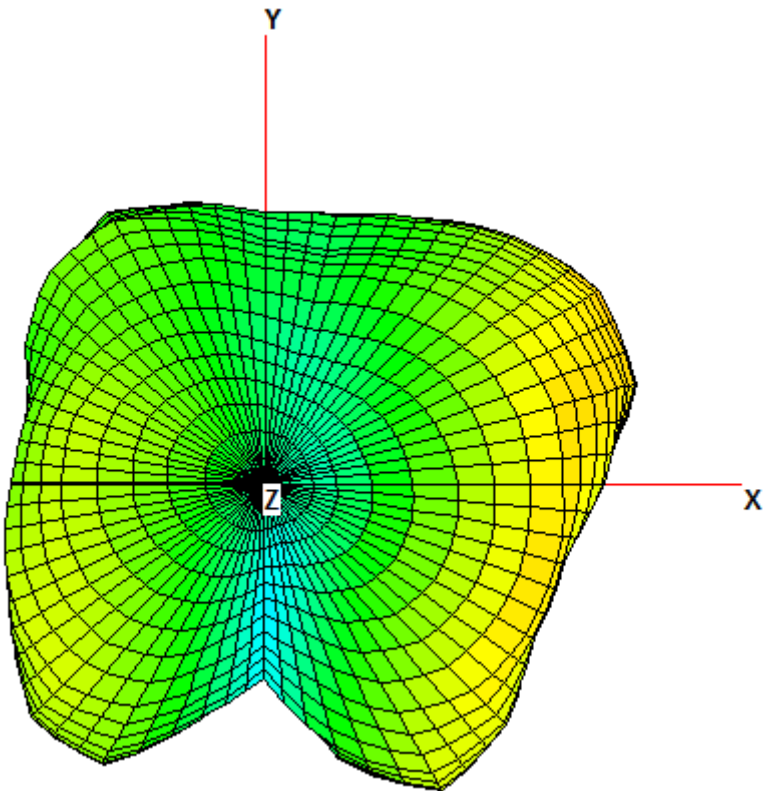
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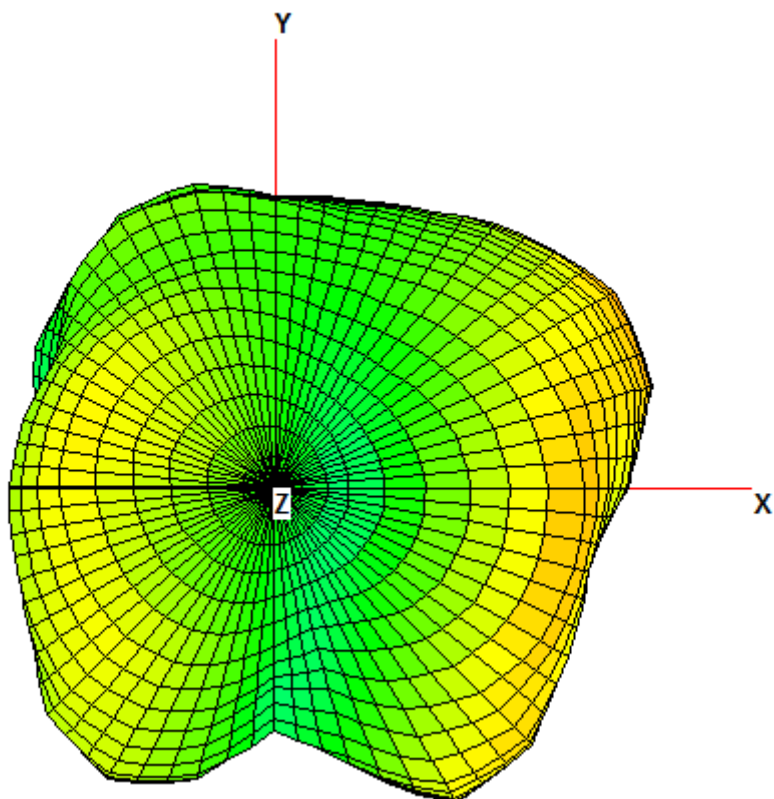


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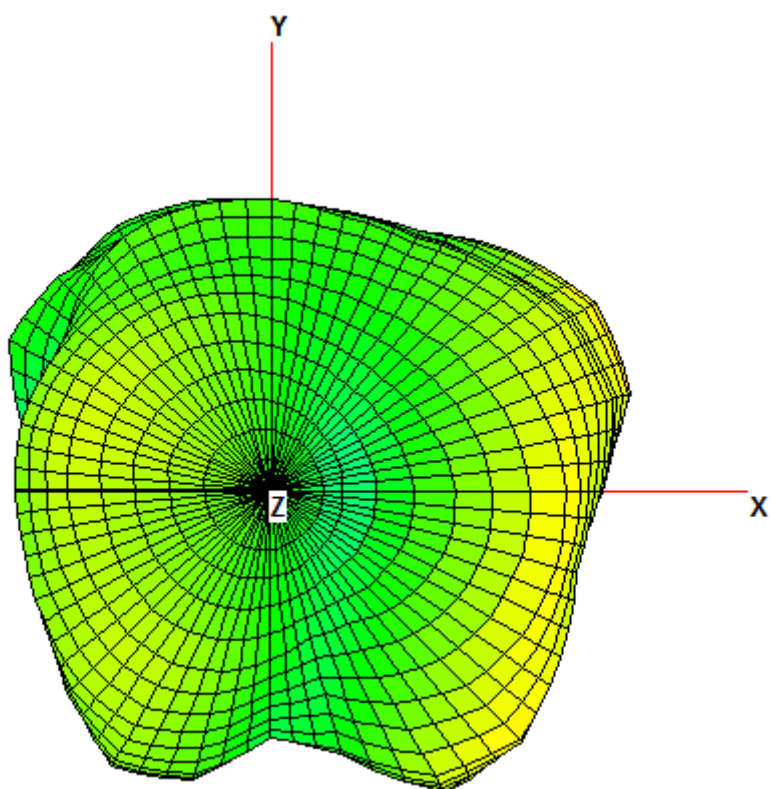




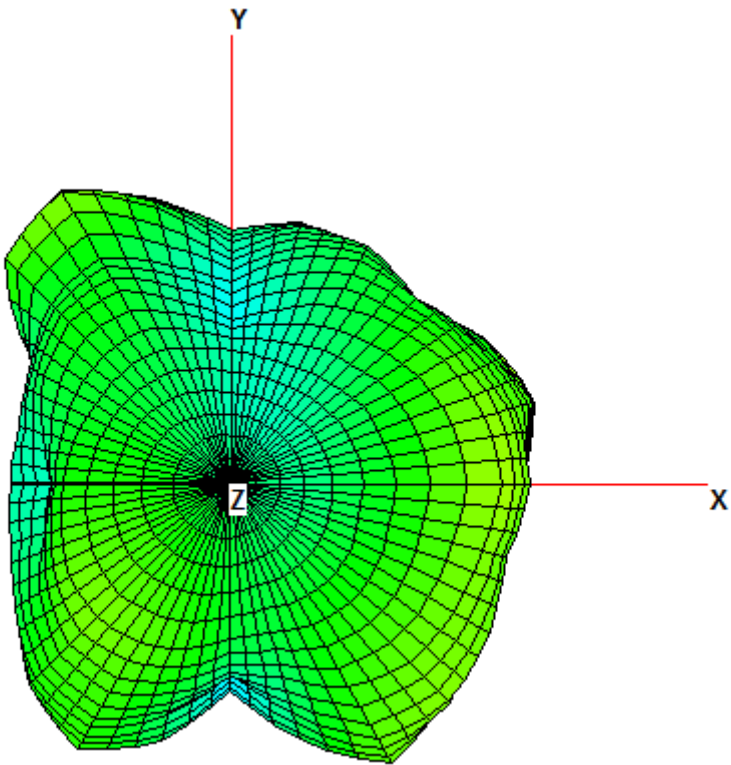
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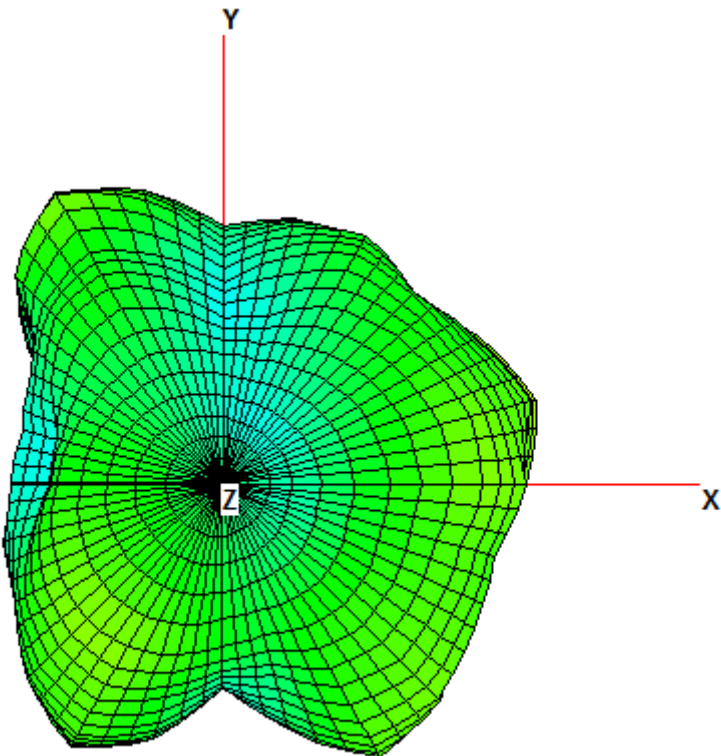
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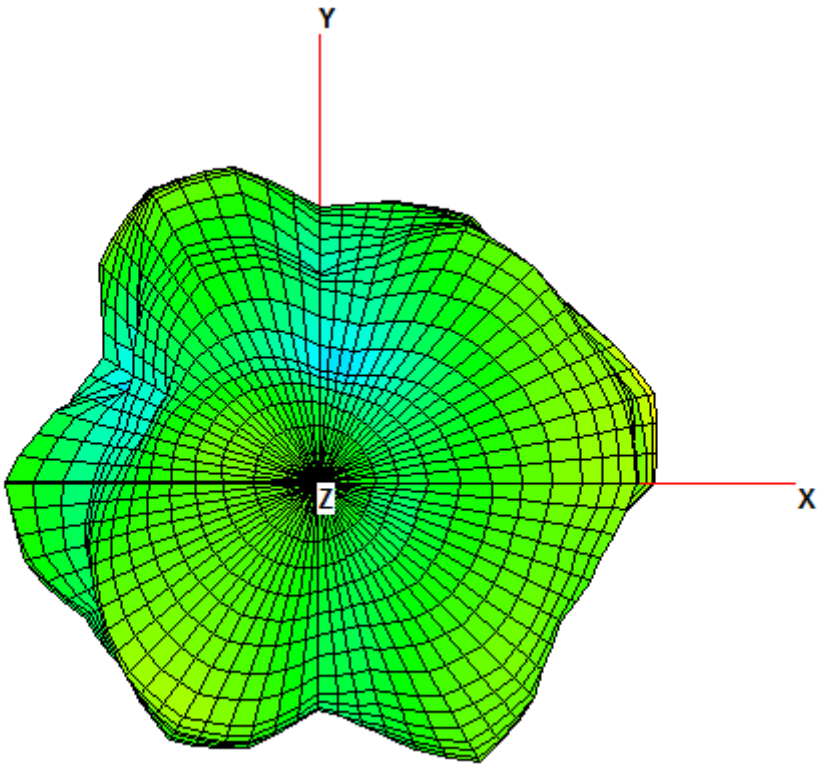
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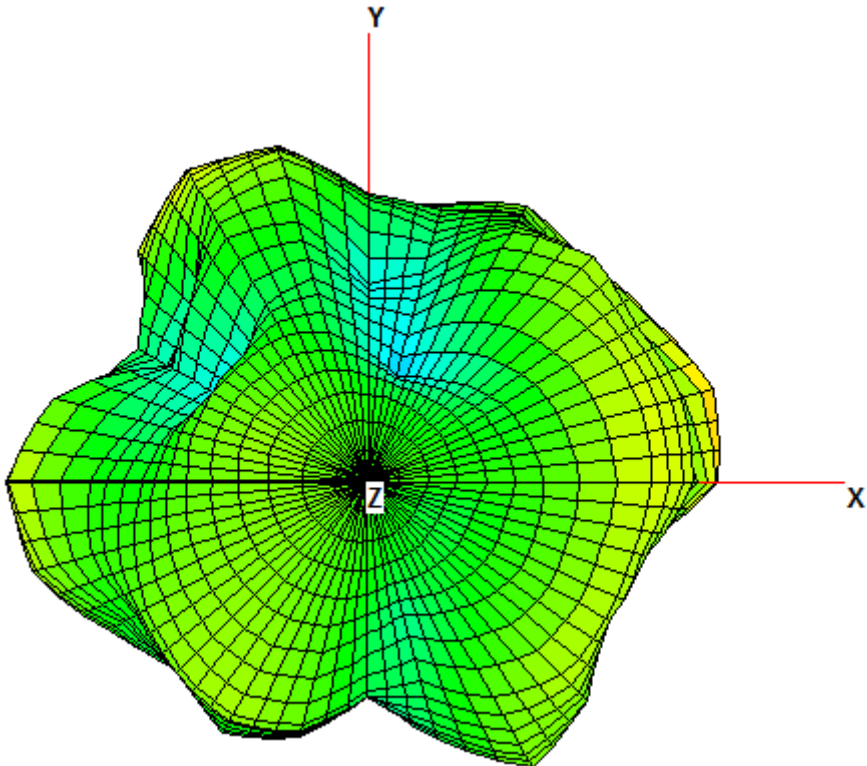
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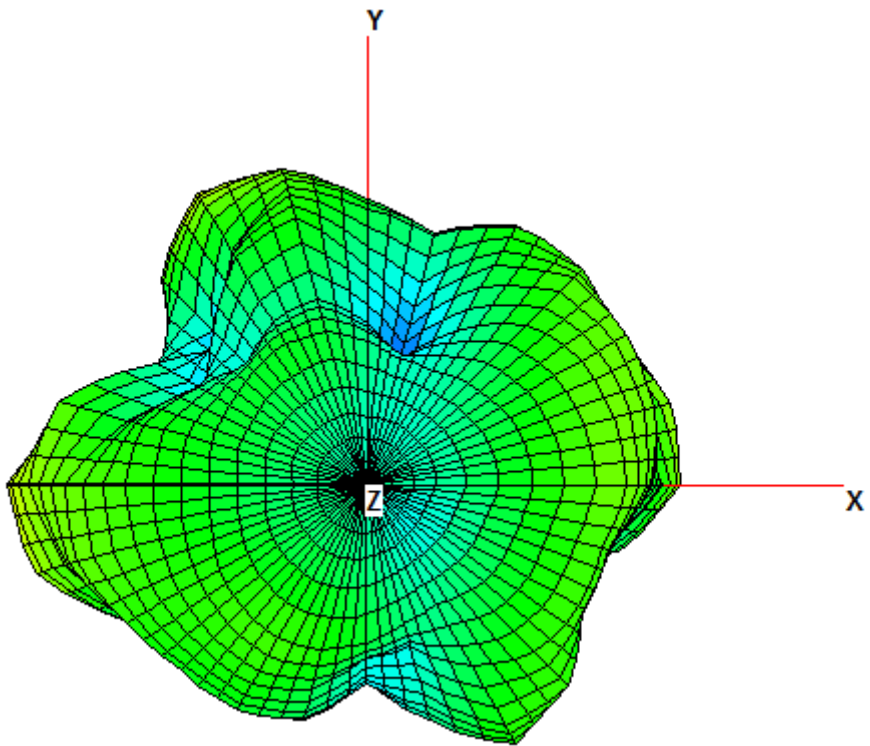
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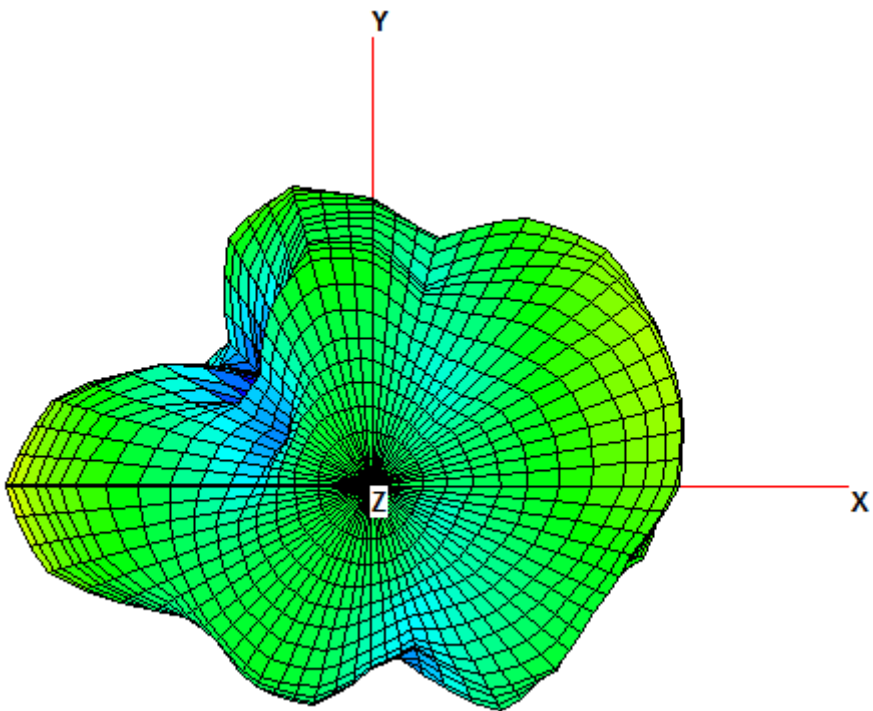
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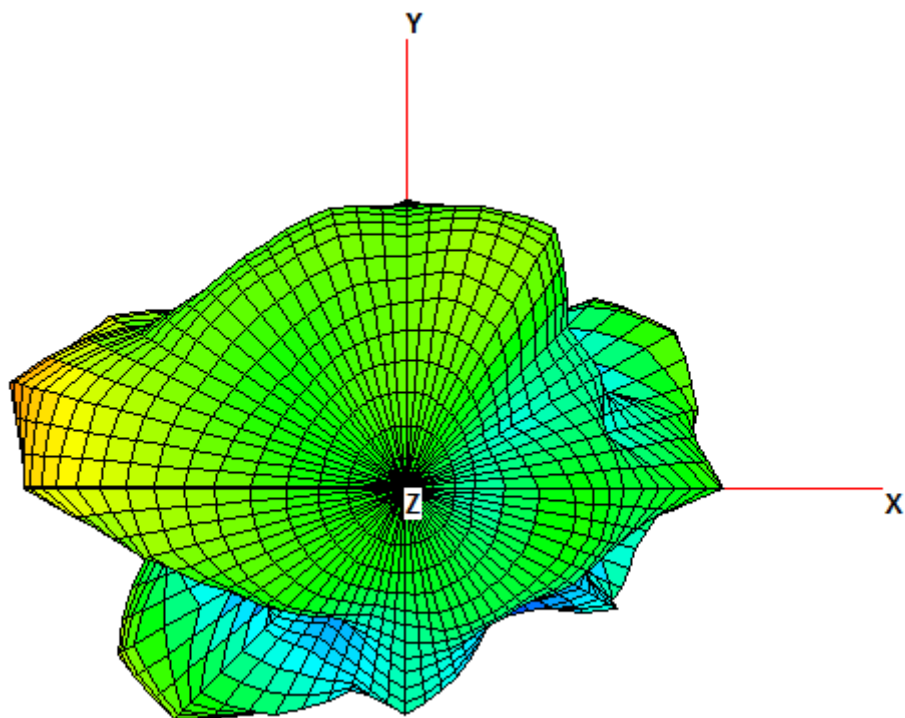
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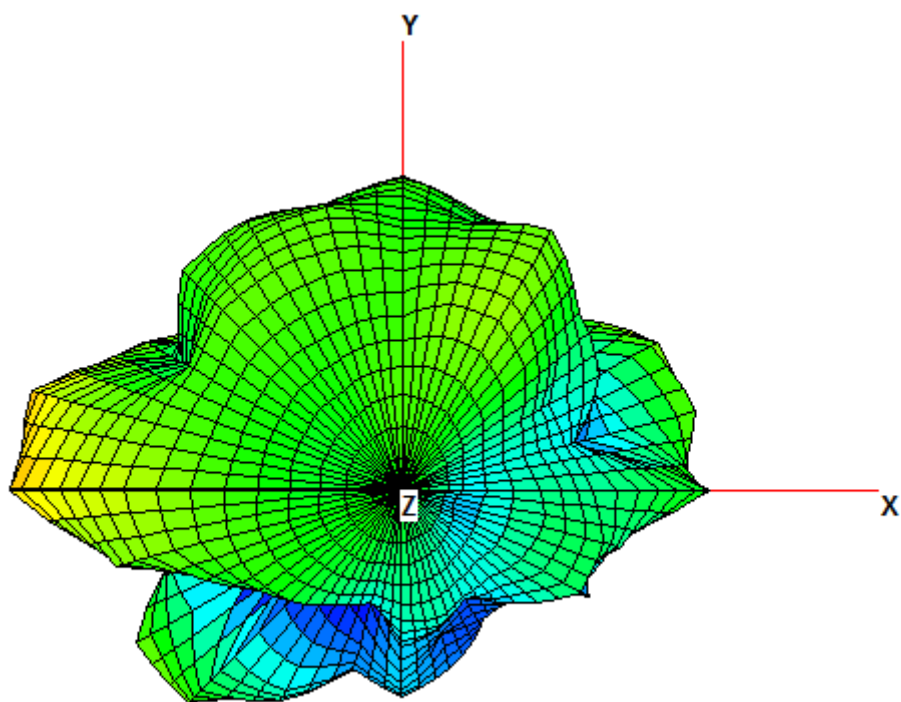
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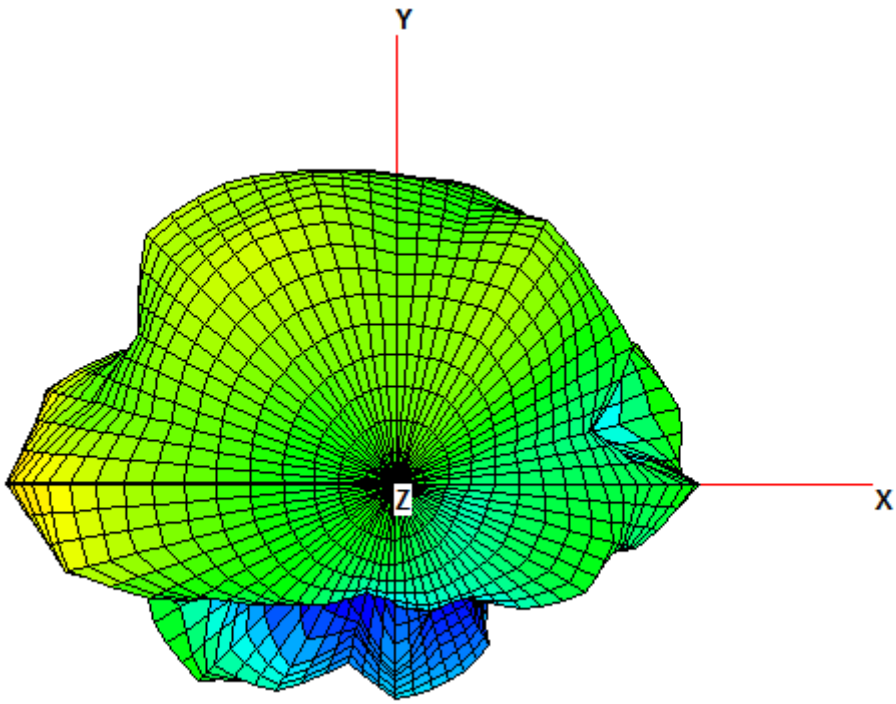
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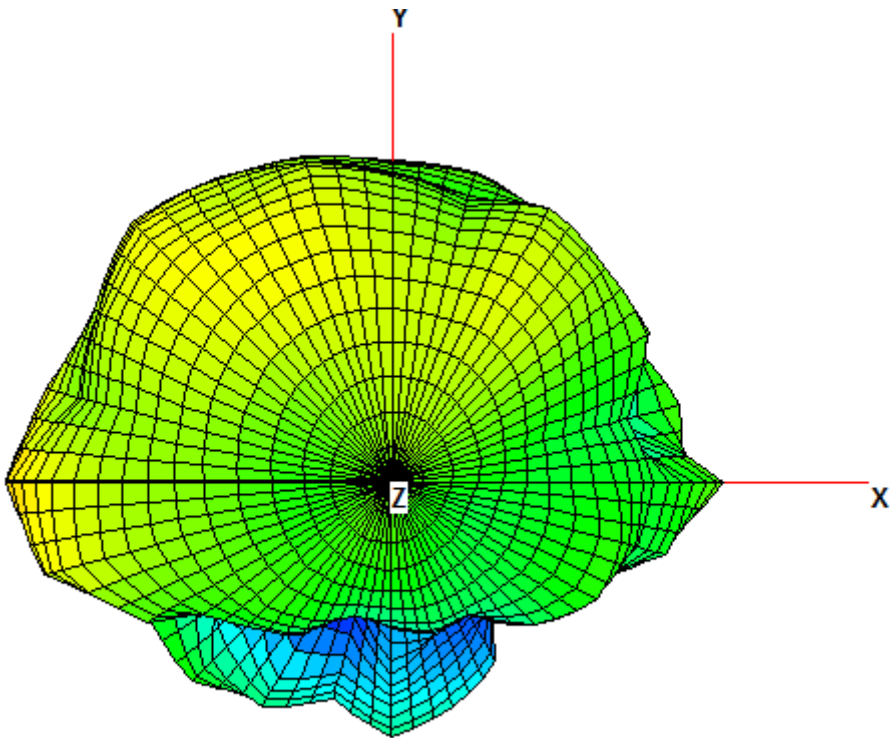
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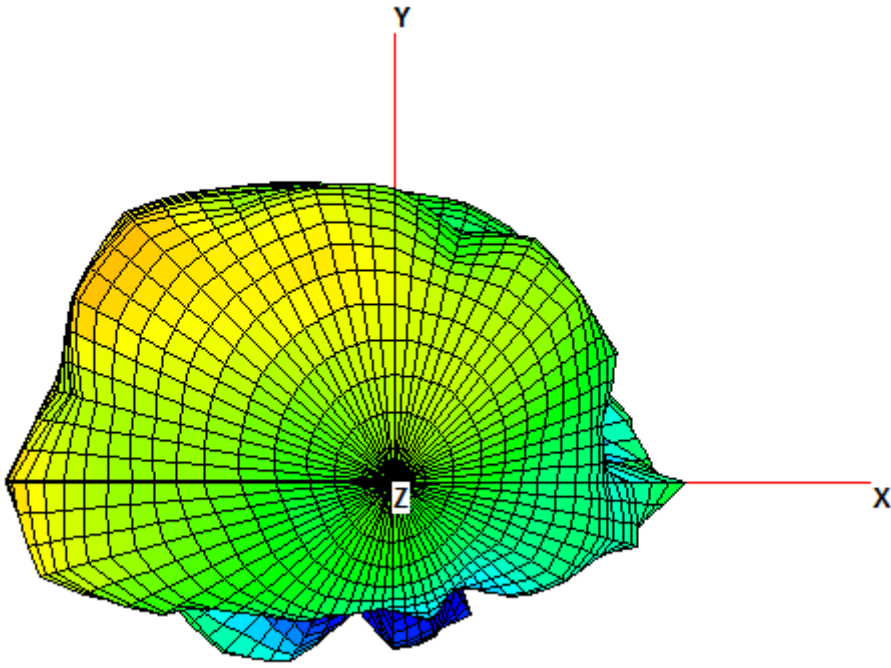
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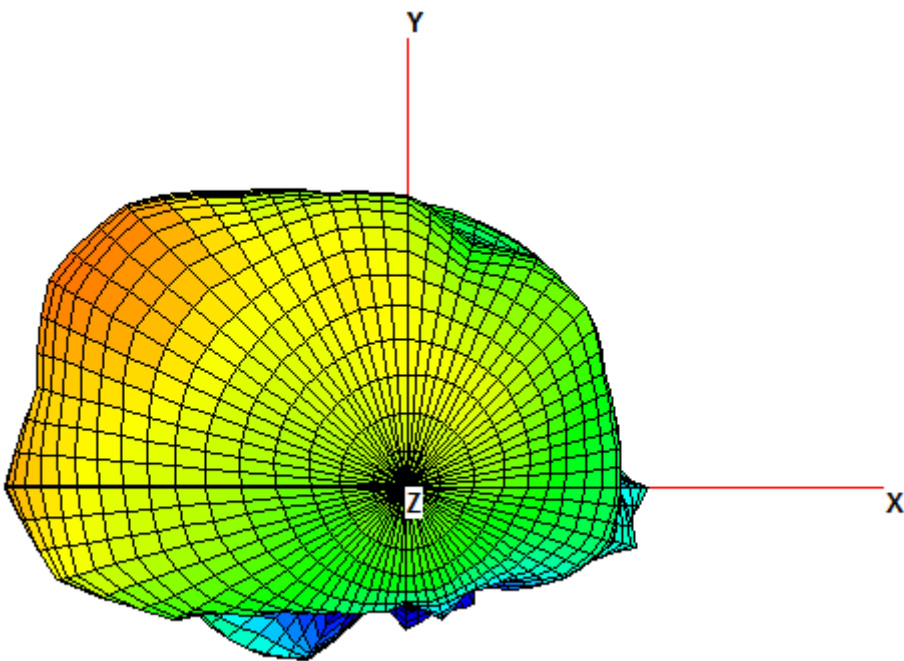
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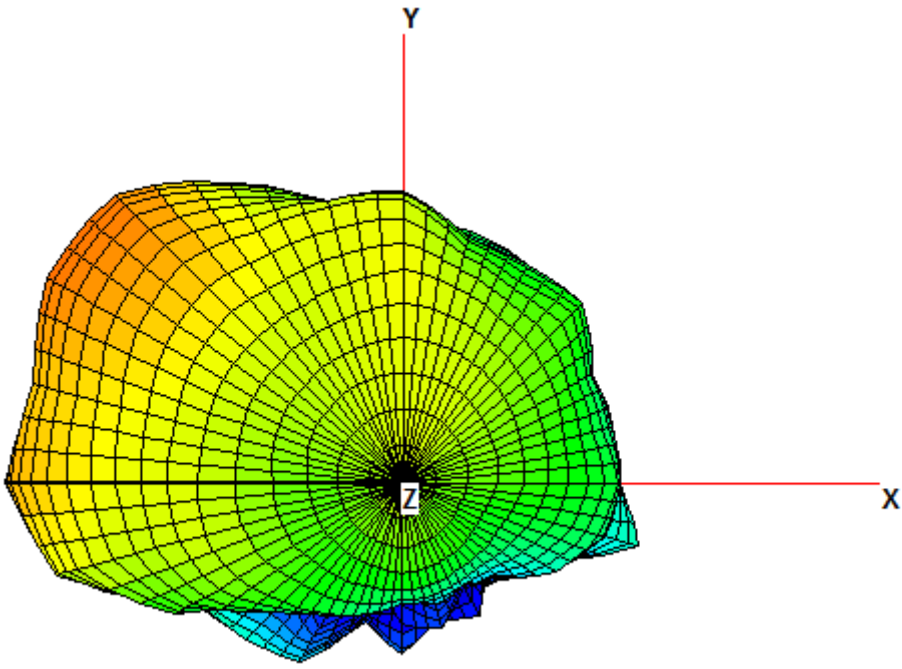
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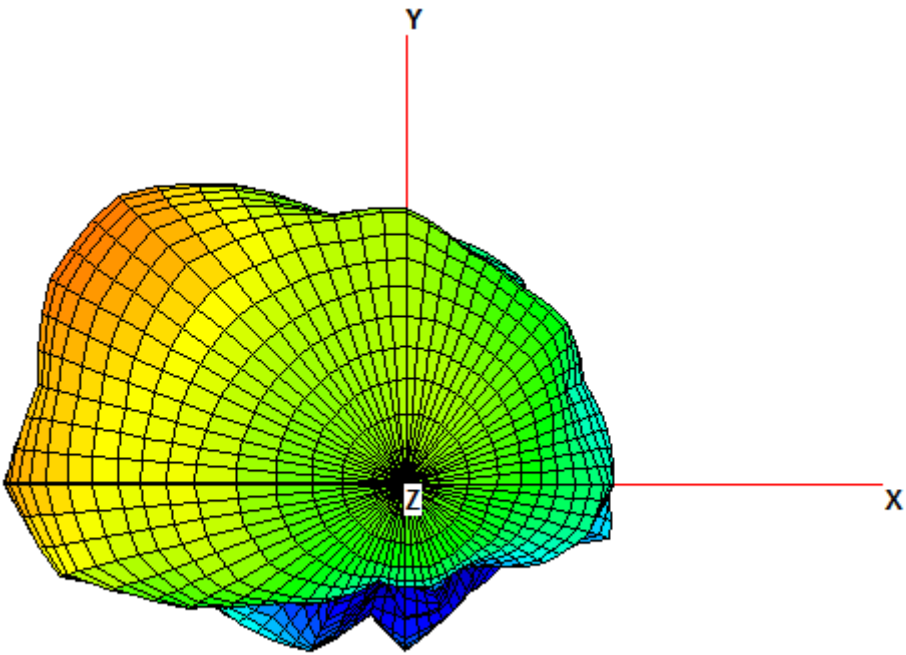
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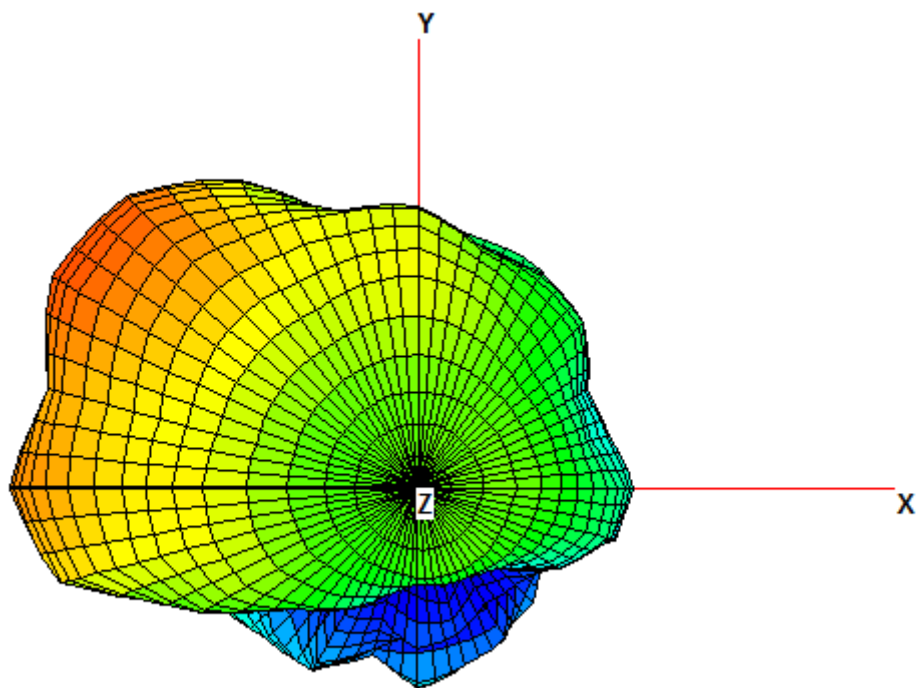


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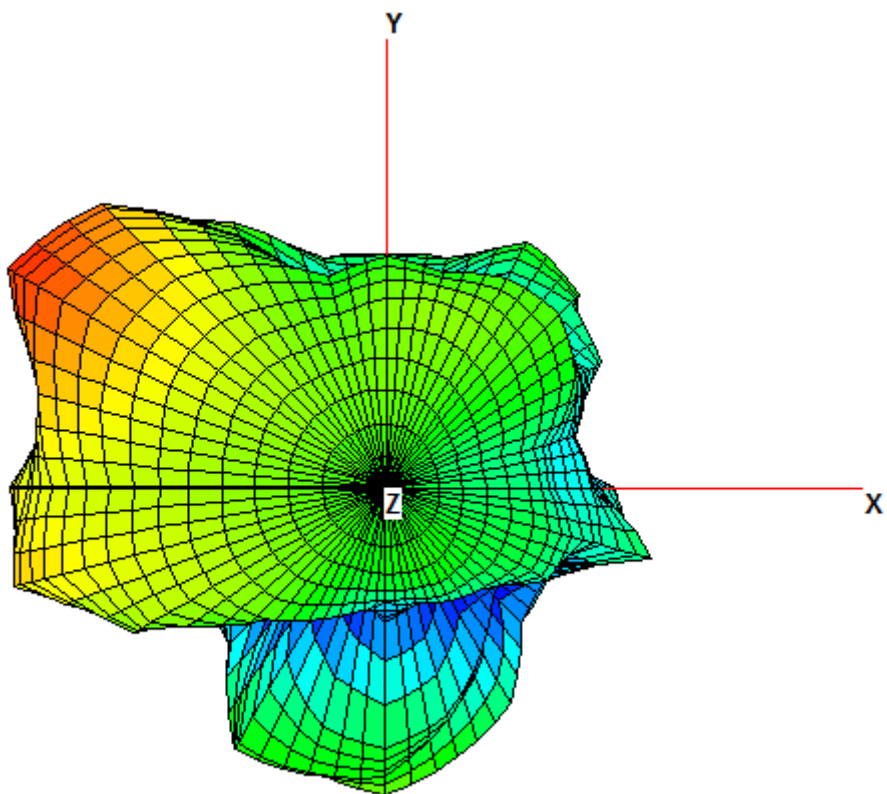




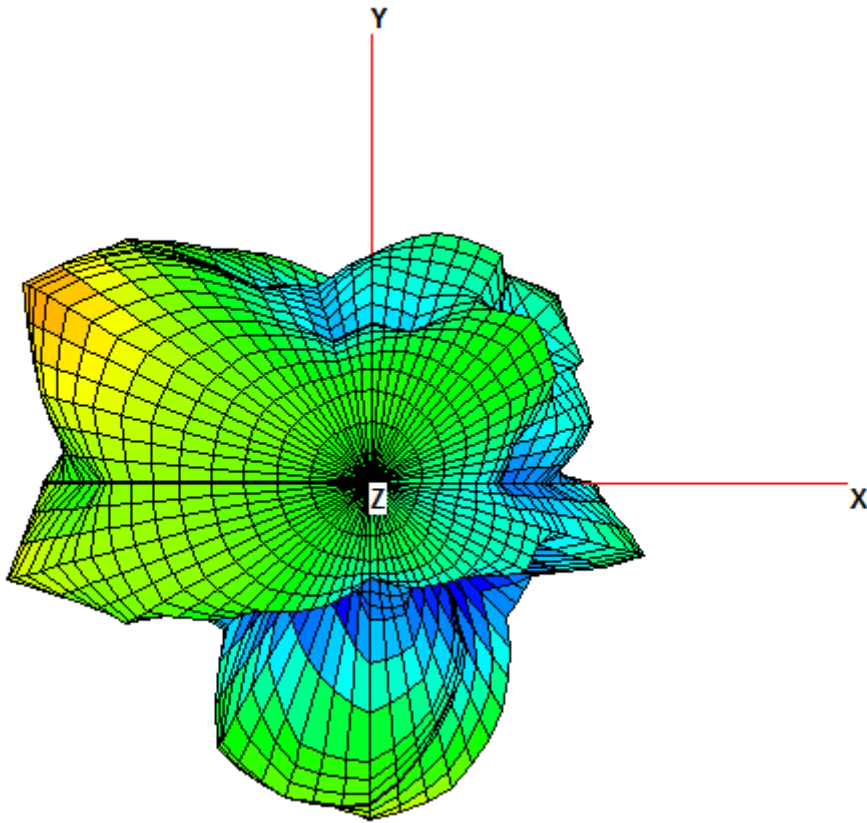
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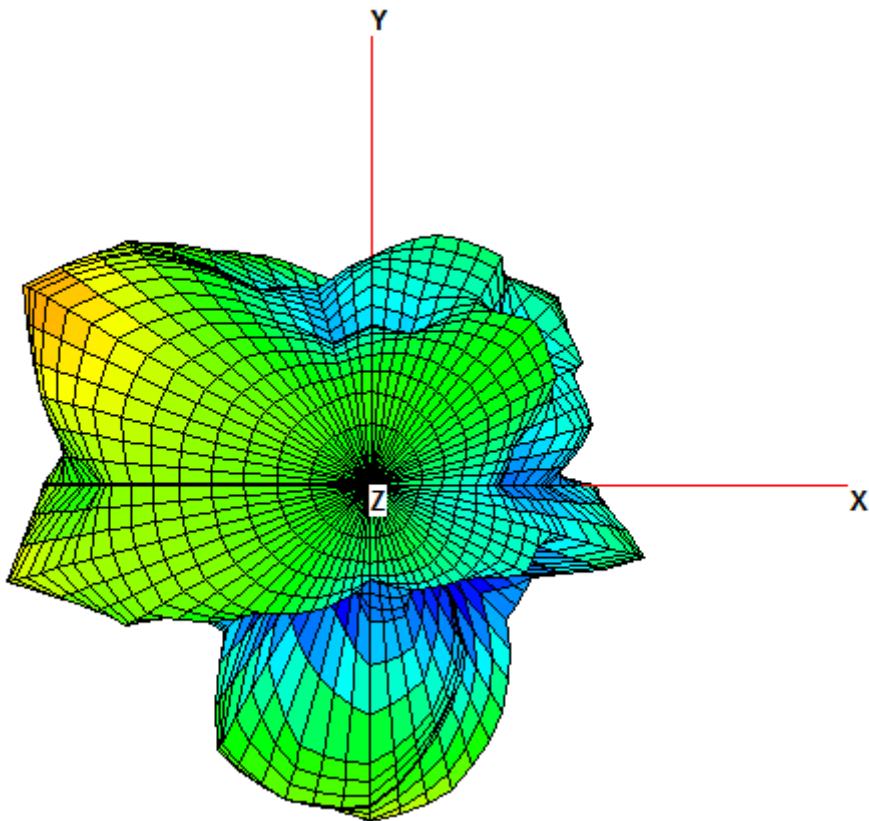
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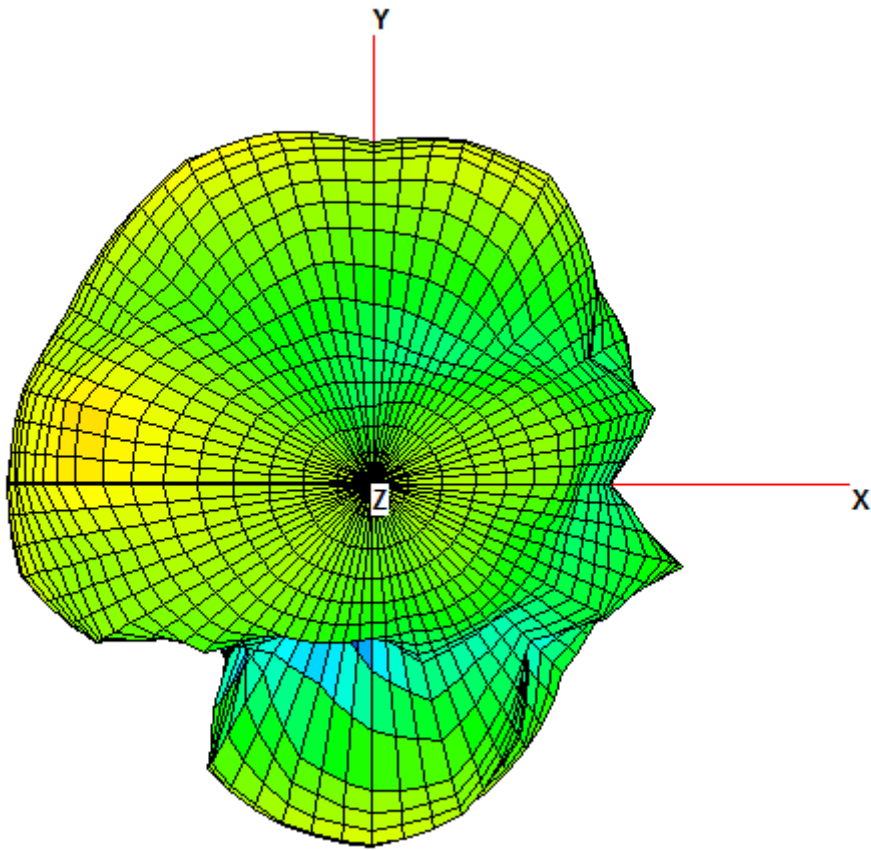
2170MHz



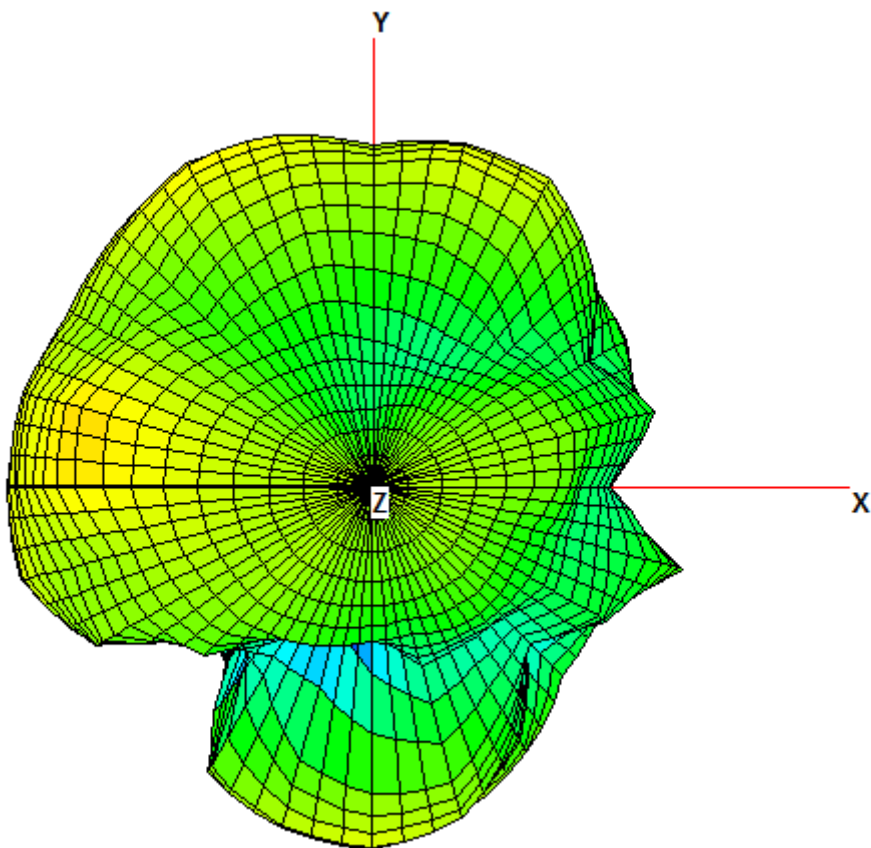
2200MHz



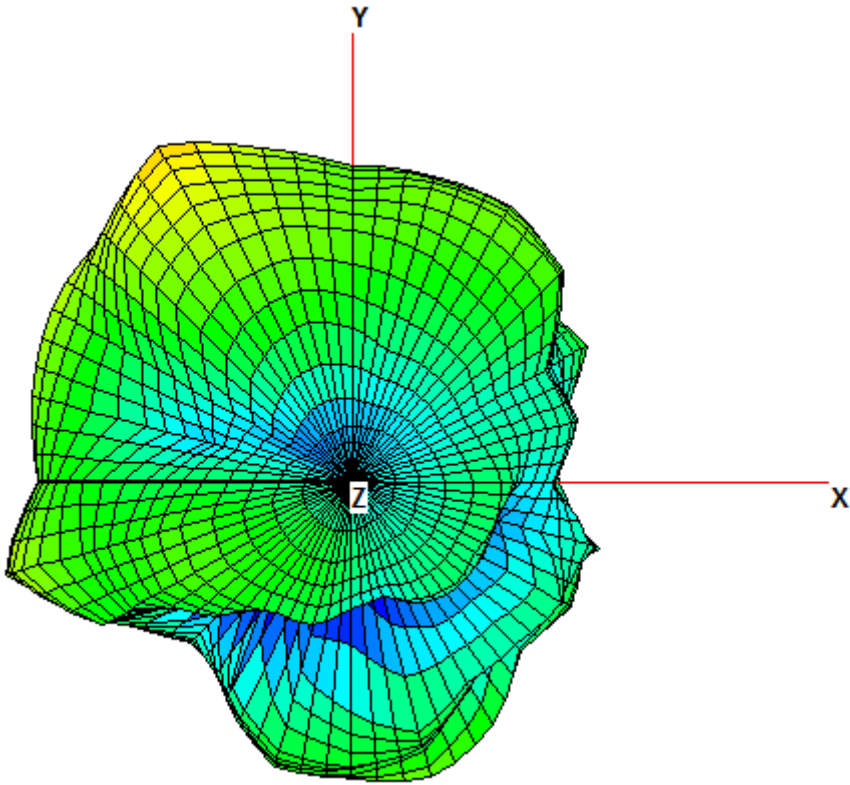
2300MHz



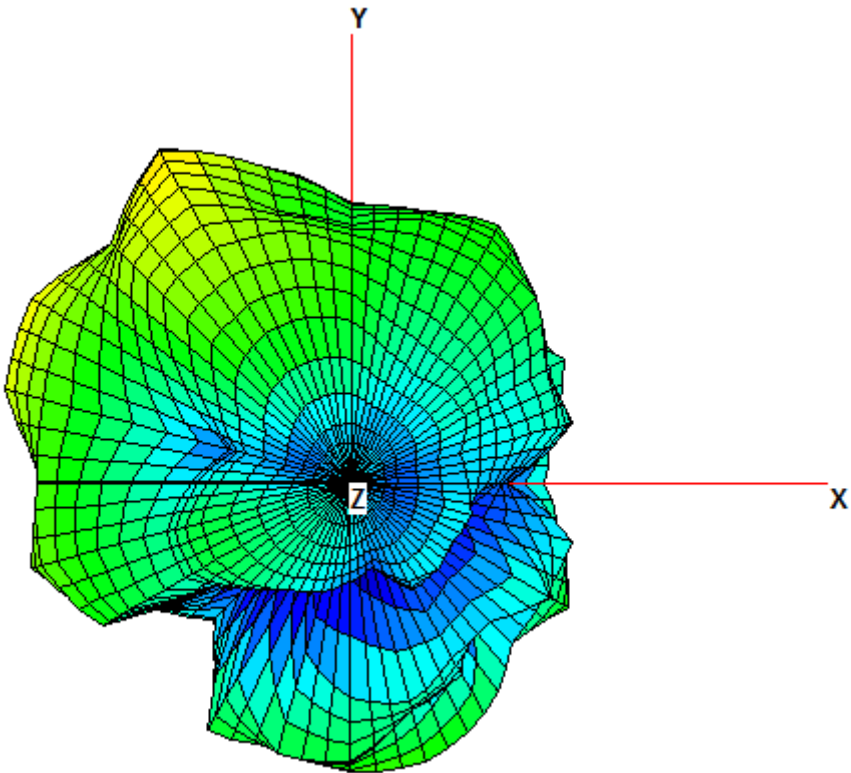
2350MHz



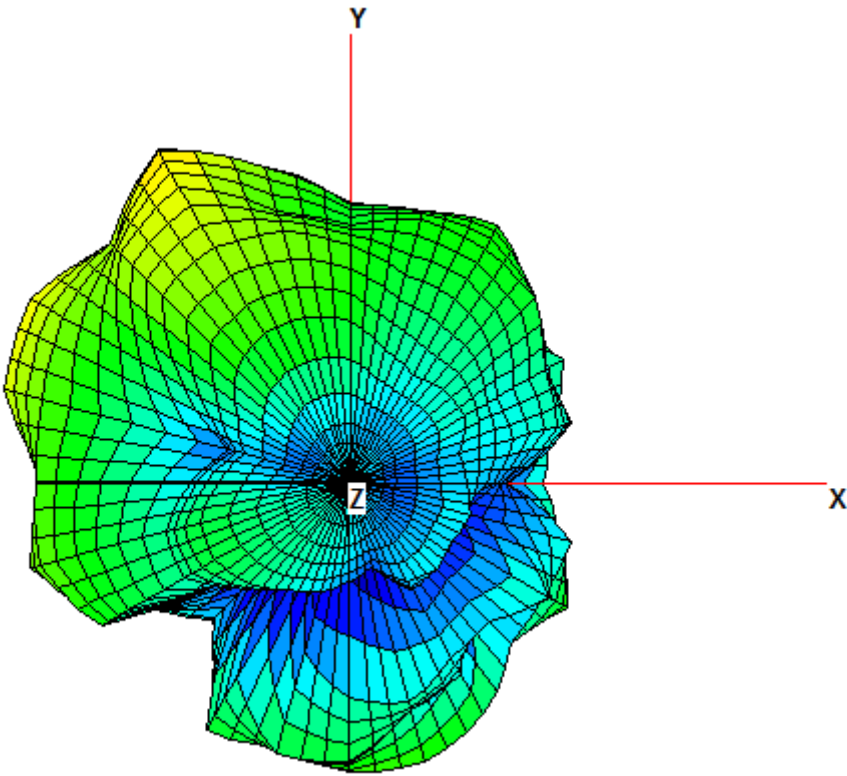
2400MHz



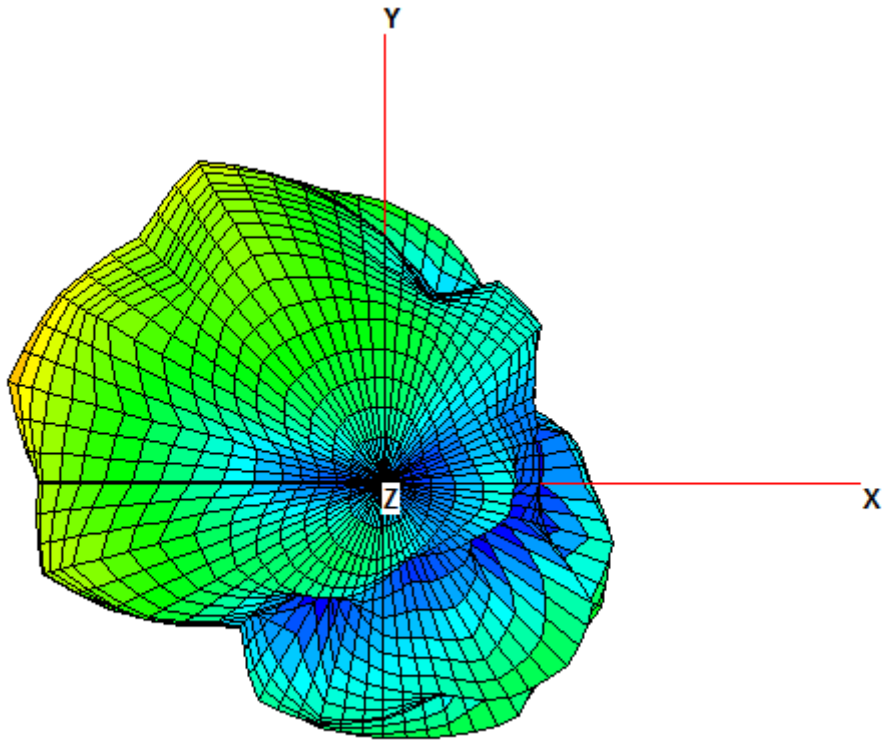
2450MHz



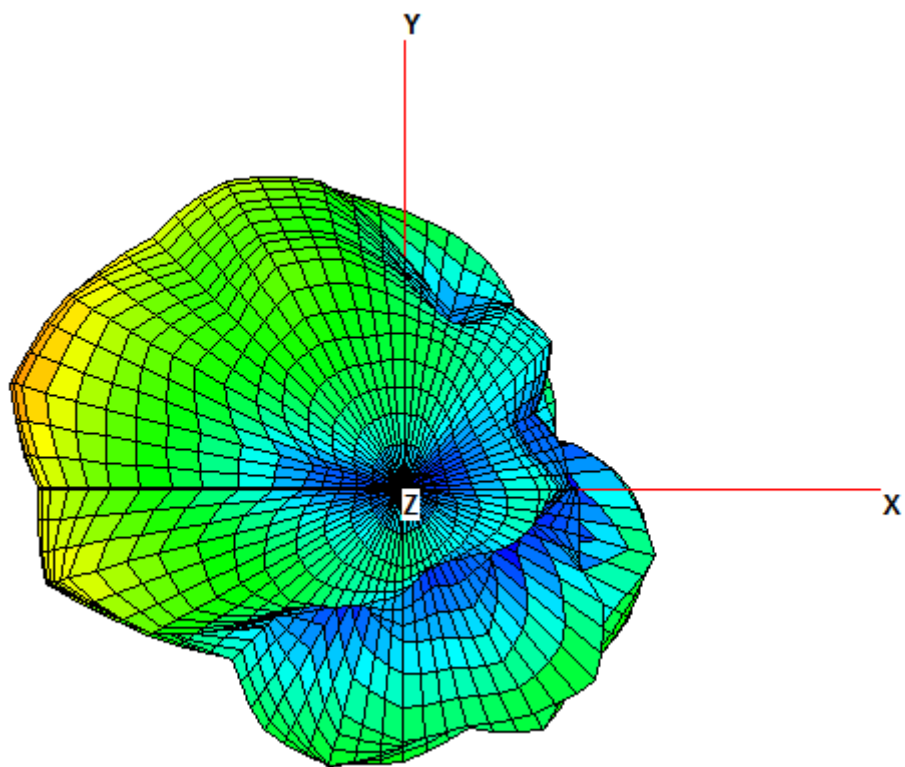
2500MHz



2570MHz



2600MHz

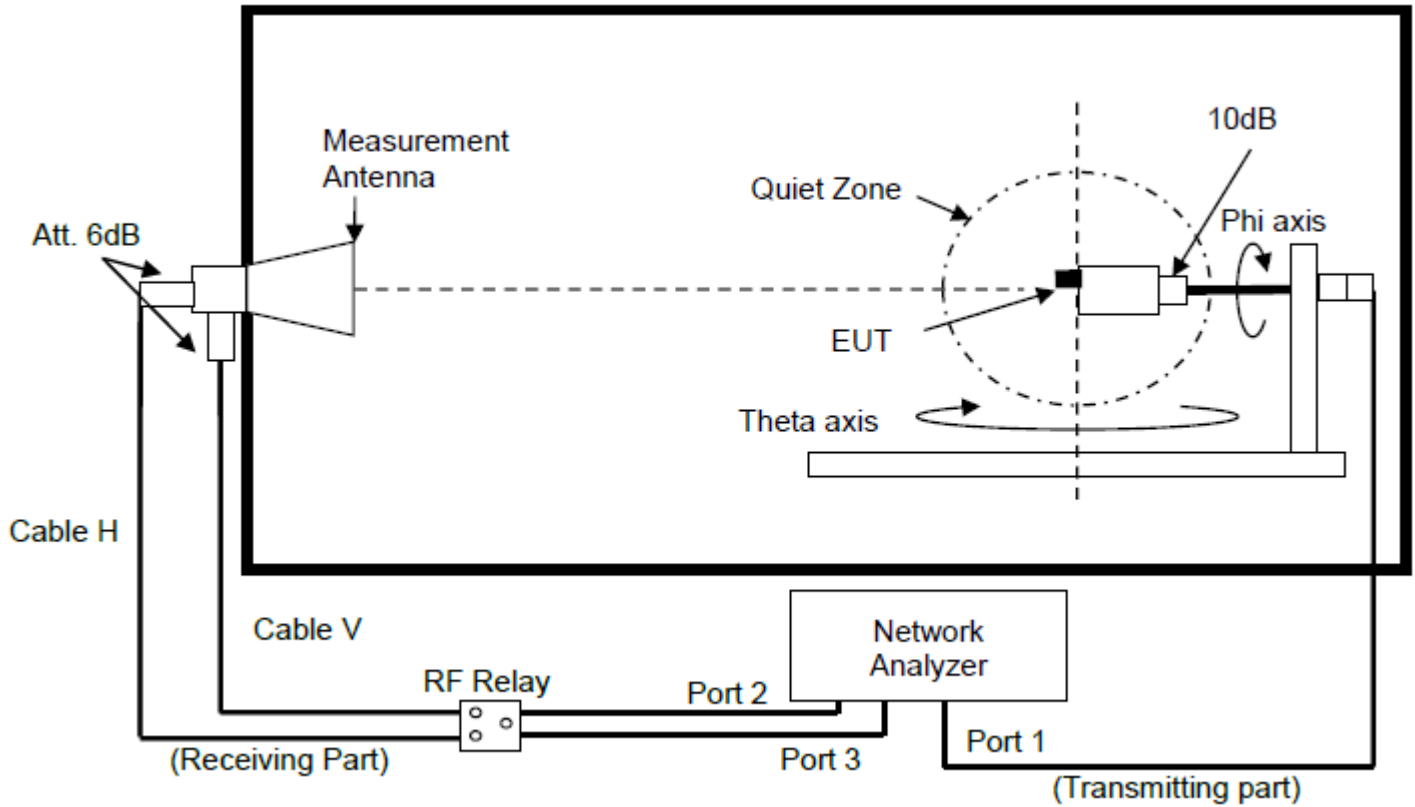


**1. Applicable test methods**

This test report is prepared for F110 antenna testing under a Full Anechoic Chamber.

**2. Test & System Description**

**a. Test setup**



**b. Equipment list**

Name	Manufacturer	Type/Model	Serial Number	Calibration	
				Last Cal.	Due Date
ENA Series Network Analyzer	Keysight	E5071C	MY46106276	2022/9/27	2023/9/26
RF Switch	Keysight	3499A	N/A	NCR	NCR
Multi-Axis Positioner Controller	ETS-Lindgren	2090	N/A	NCR	NCR
Medium-Duty Positioner	ETS-Lindgren	2015	N/A	NCR	NCR
Measurement Horn Antenna	EMCO	3164-10	00239261	NCR	NCR

### 3. Setup photo

