

# Antenna Test Report

**APPLICANT** : **Motorola Mobility LLC**

**EQUIPMENT** : **Mobile Cellular Phone**

**BRAND NAME** : **Motorola**

**MODEL NAME** : **XT2241-2**

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1. Peak Gain
2. Gain Plots

- **TX Antenna Peak Gain**

**WWAN 2/3/4G: IFA antenna**

Test / Position	Free Space				
bands	TX Antenna Peak Gain				
	Ant 0	Ant 1	Ant 2		Ant 3
GSM 850	-4.9	-5.7			
E-GSM 900	-5.2	-4.8			
DCS 1800	-2.3	-2.6			
GSM 1900	-3.6	-1.6			
W FDD I	-4.4	-2			
W FDD II	-3.6	-1.6			
W FDD IV	-2.3	-2.6			
W FDD V	-4.9	-5.7			
W FDD VIII	-5.2	-4.8			
BC0	-4.9	-5.7			
LTE B1	-4.4	-2			
LTE B2	-3.6	-1.6			
LTE B3	-2.3	-2.6			
LTE B4	-2.3	-2.6			
LTE B5	-4.9	-5.7			
LTE B7	-3.8	-2.4			
LTE B8	-5.2	-4.8			
LTE B12	-5	-6.9			
LTE B13	-4.8	-7			
LTE B17	-5	-6.9			
LTE B18	-4.9	-5.7			
LTE B19	-4.8	-5.7			
LTE B20	-4.8	-5.7			

LTE B25		-3.6	-1.6			
LTE B26		-4.8	-5.7			
LTE B28		-4.9	-6.3			
LTE B32		-4.2	-3.7			
LTE B34		-5.2	-1.6			
LTE B38		-3.6	-2.1			
LTE B39		-4.1	-1.6			
LTE B40		-2.3	-2.6			
LTE B41		-3.6	-2.1			
LTE B42				-4.1		
LTE B43				-4.1		
LTE B48				-4.1		
LTE B66		-2.3	-2.6			

**FR1 SUB6 : IFA antenna**

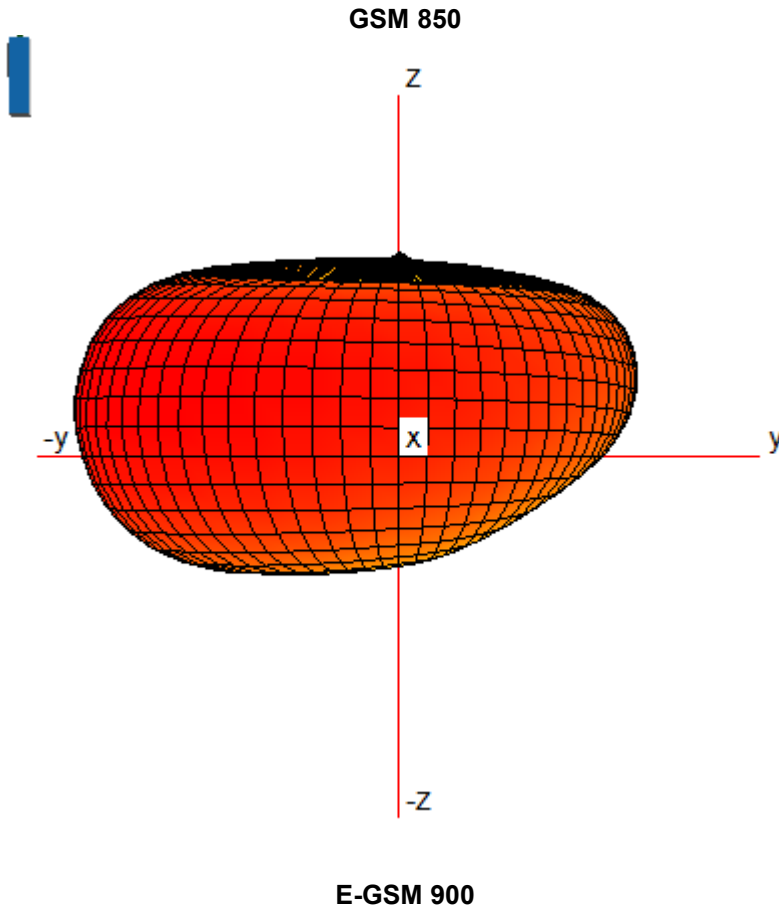
Test / Position	Free Space						
bands	Frequency	TX Antenna Peak Gain					
		Ant 0	Ant 1	Ant 2	Ant 3	Ant 5	Ant 7
n1		-4.4	-2				
n2		-3.6	-1.6				
n3		-2.3	-2.6				
n5		-4.9	-5.7				
n7		-3.8	-2.4				
n8		-5.2	-4.8				
n20		-4.8	-5.7				
n28		-4.9	-6.3				
n66		-2.3	-2.6				
n38		-3.6	-2.1				
n40		-2.3	-2.6				
n41		-3.6	-2.1				
n77				-4.1	-4.5	-4.3	-4.4
n78				-4.1	-4.5	-4.3	-4.4

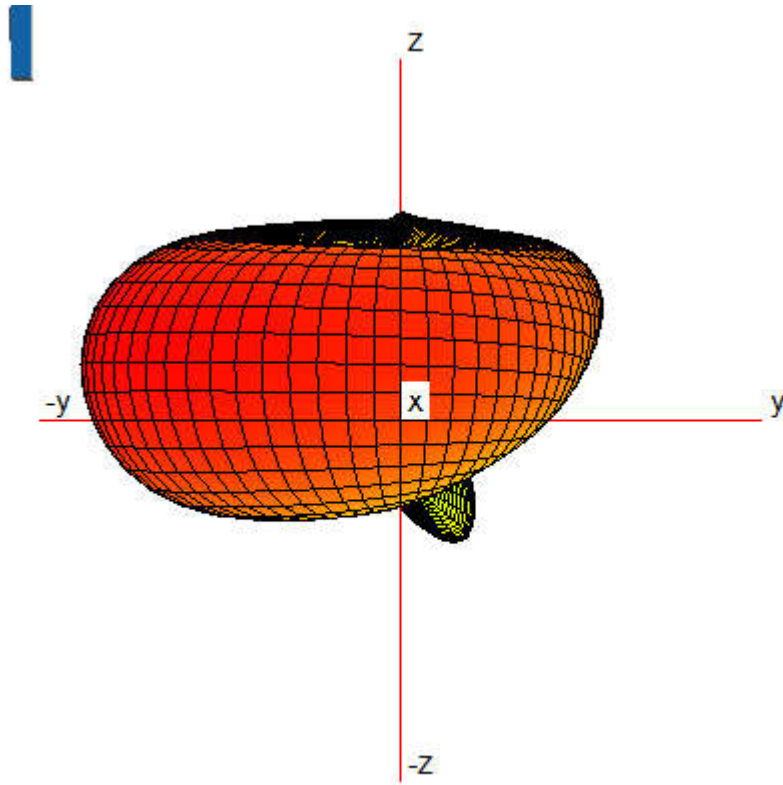
**WLAN 2.4&5G&6e: IFA antenna**

Test / Position	Free Space				
bands	Frequency	TX Antenna Peak Gain			
		Ant 2	Ant 4	Ant 5	Ant 6
BT	2402-2480MHz		-3.3		-3.7
WiFi 2.4G	2410-2477MHz		-3.3		-3.7
WiFi 5G B1	5150~5250M Hz	-3.1			-3.2
WiFi 5G B2	5250~5350M Hz	-3.3			-3.3
WiFi 5G B3	5470~5725M Hz	-3.2			-3.2
WiFi 5G B4	5725~5850M Hz	-3.3			-3.4
WiFi 6E UNII-5	5925~6425M Hz	-6.5			-5.9
WiFi 6E UNII-6	6425~6525M Hz	-6.4			-6.1
WiFi 6E UNII-7	6525~6875M Hz	-6.4			-6.1
WiFi 6E UNII-8	6875~7125M Hz	-6.3			-6.4

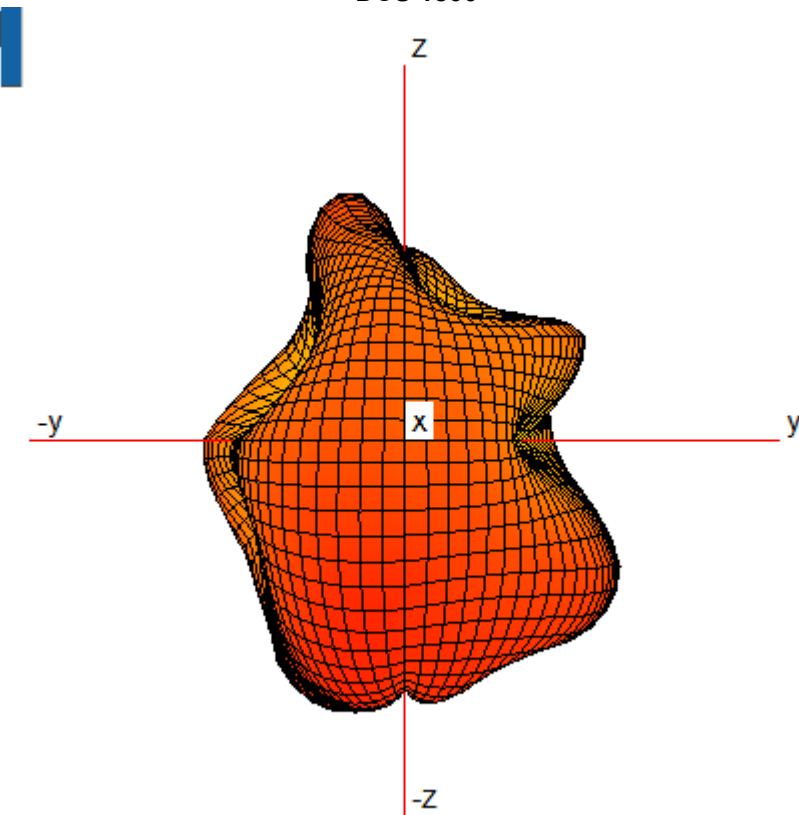
## 1. Gain Plots

ANT0

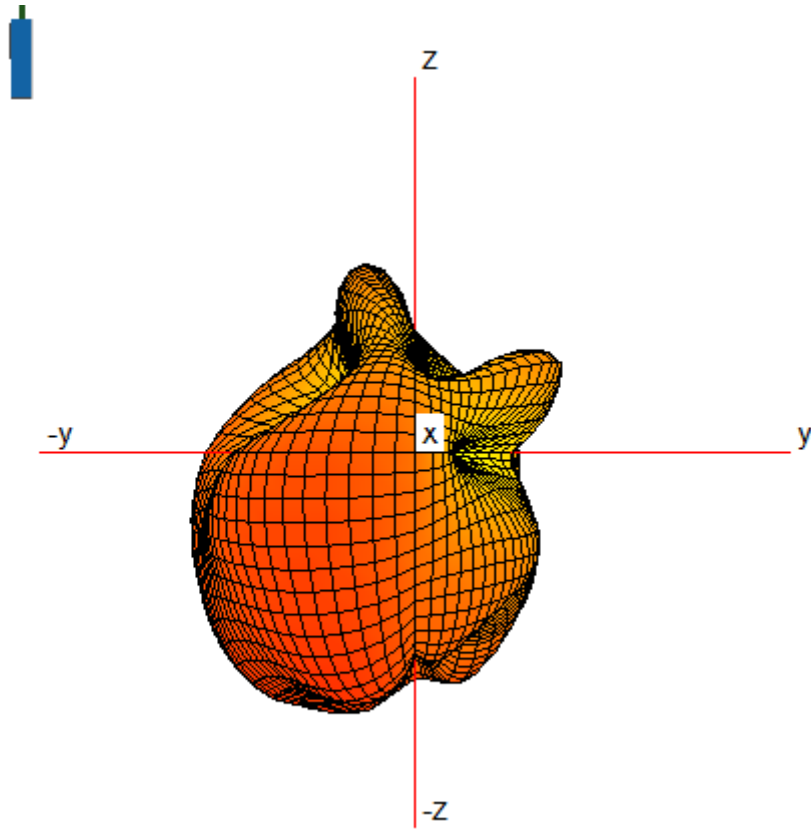




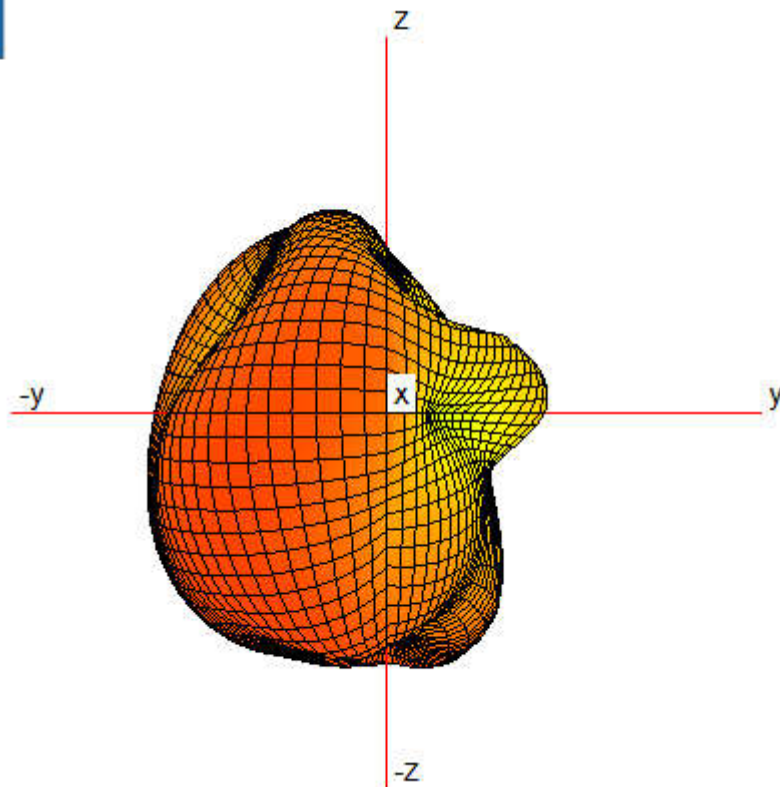
**DCS 1800**



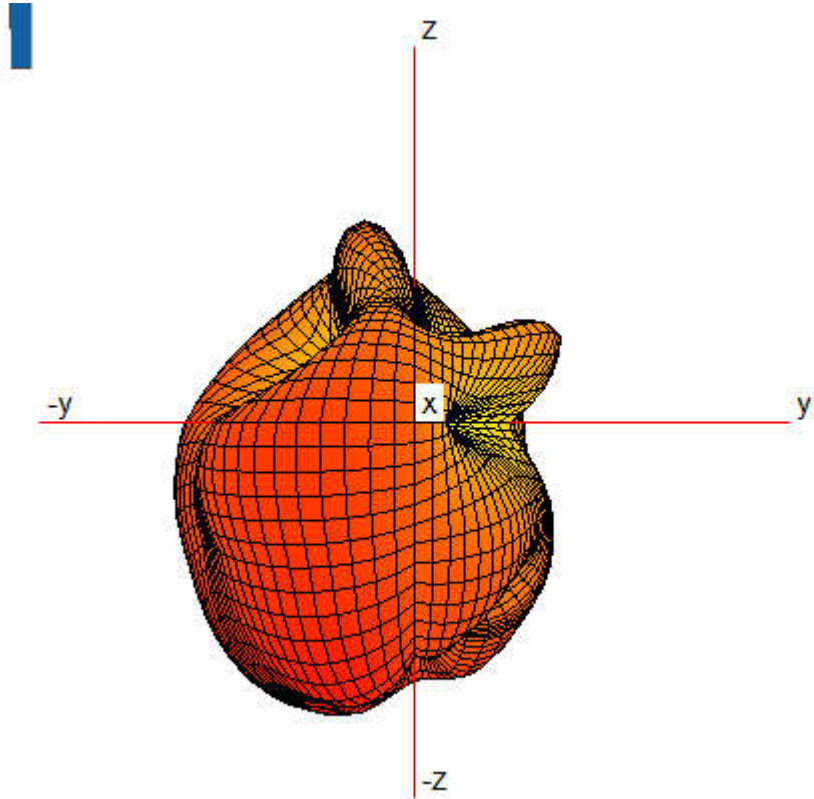
**GSM 1900**



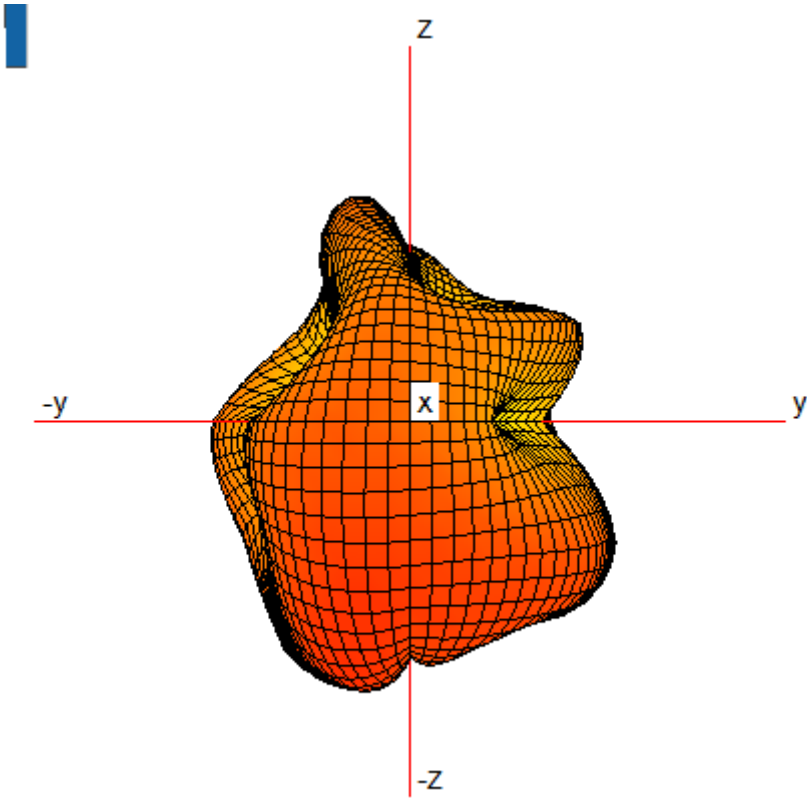
W FDD I



W FDD II

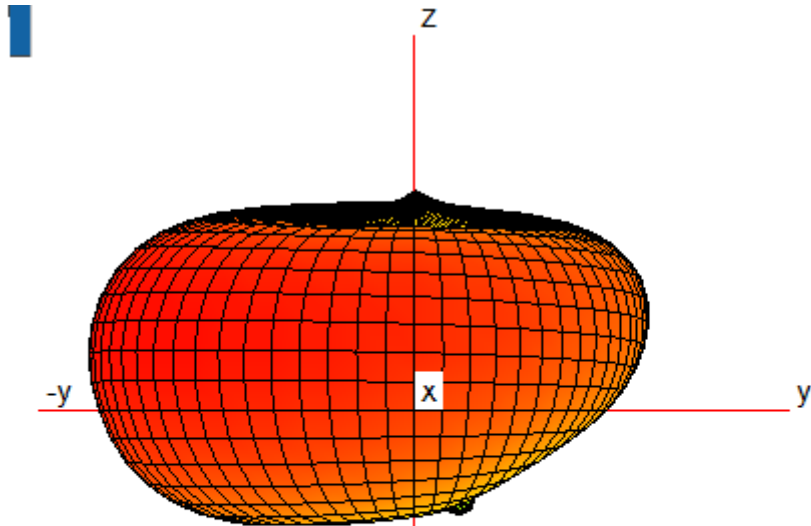


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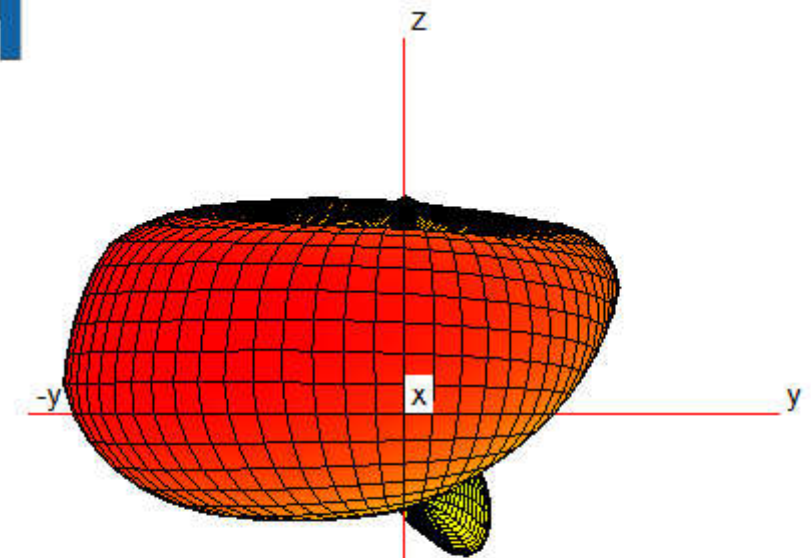


W FDD V

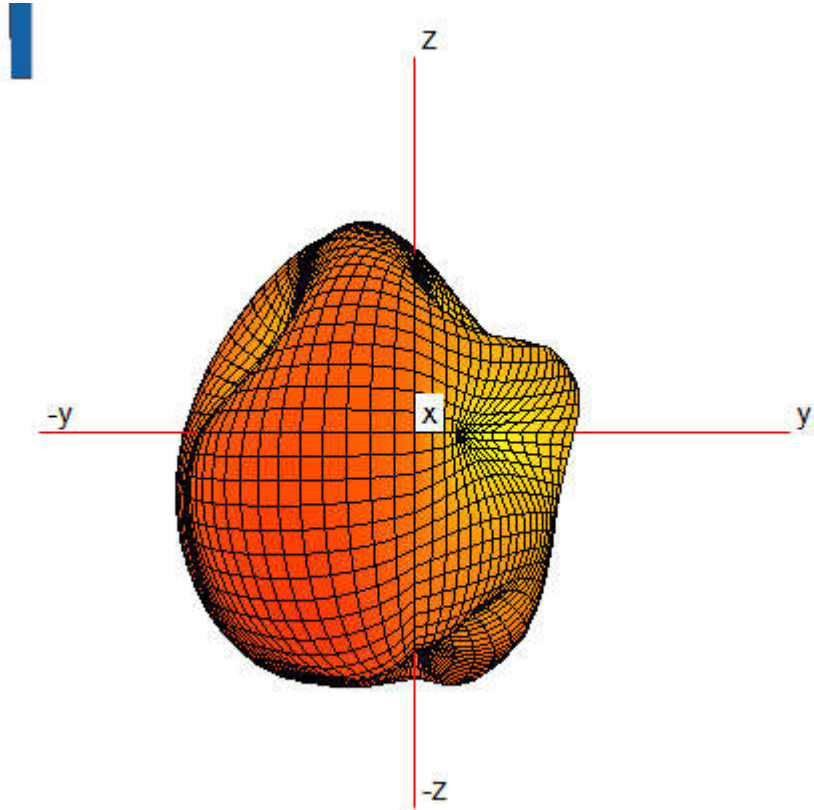




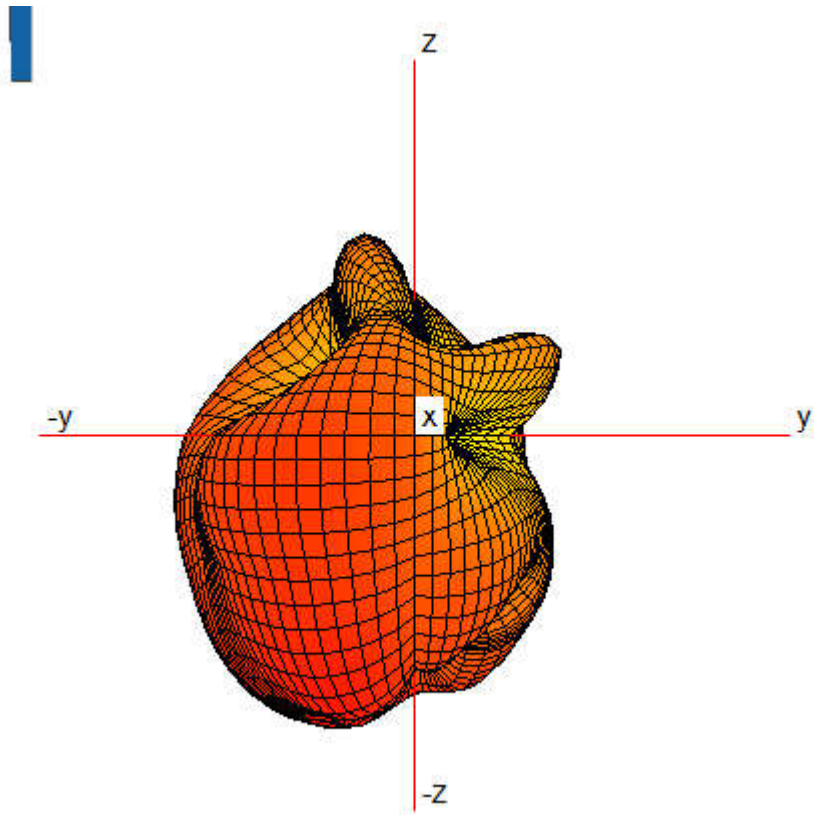
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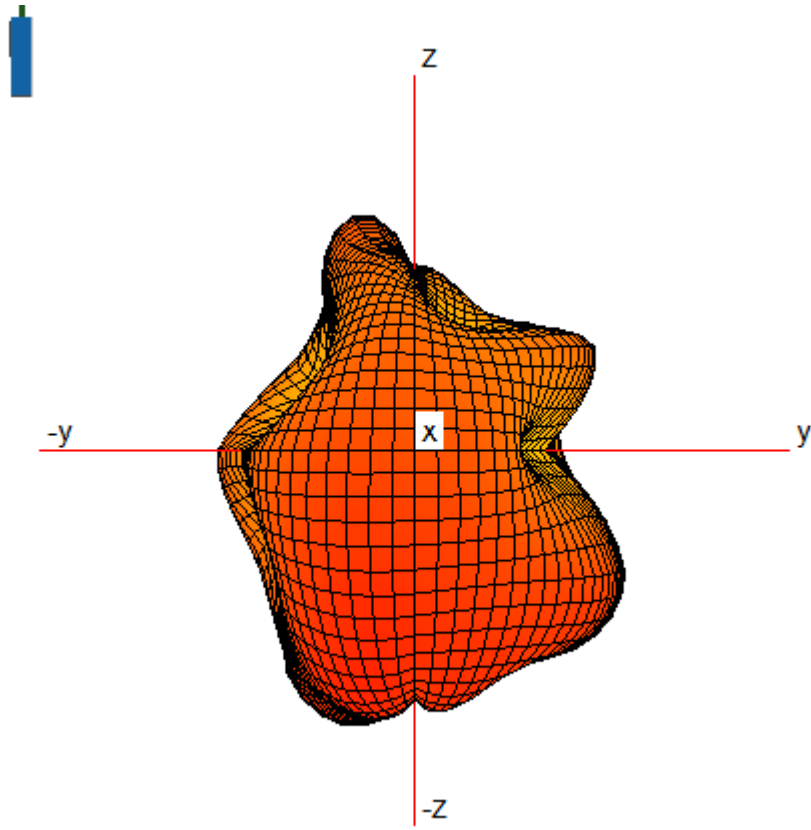
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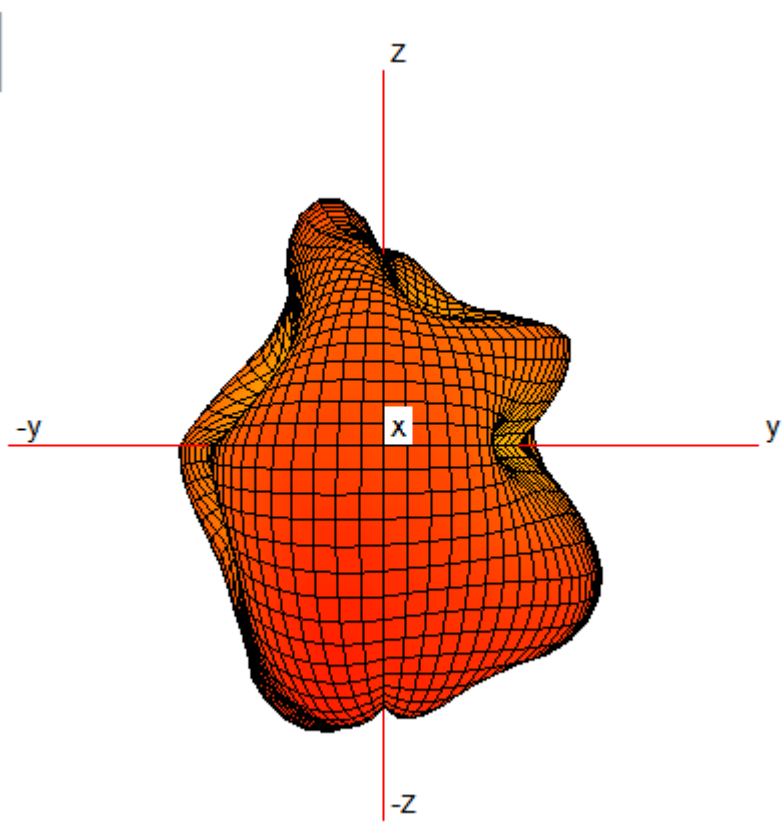
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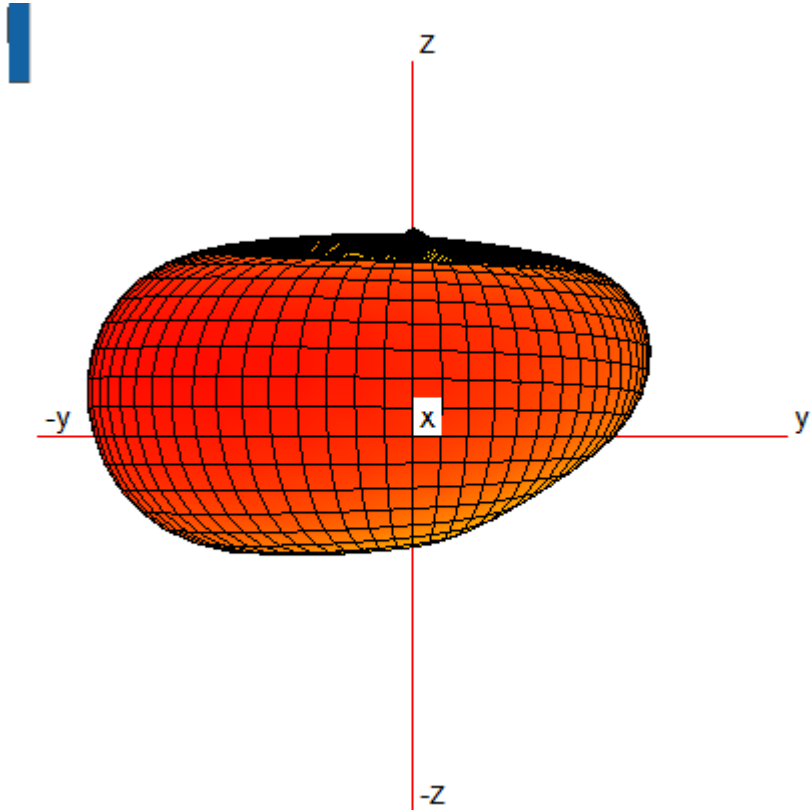
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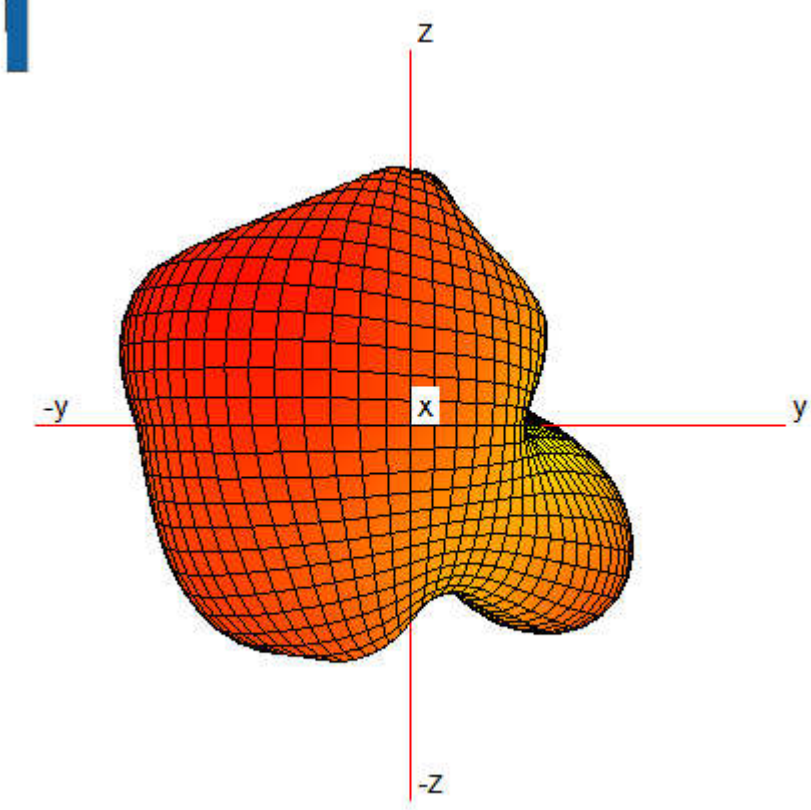
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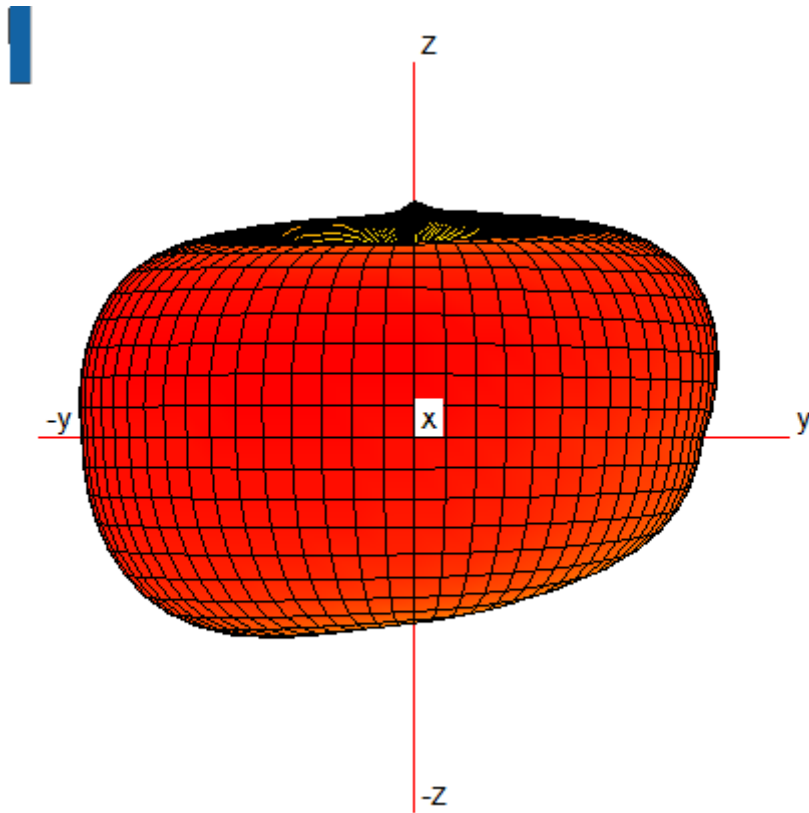
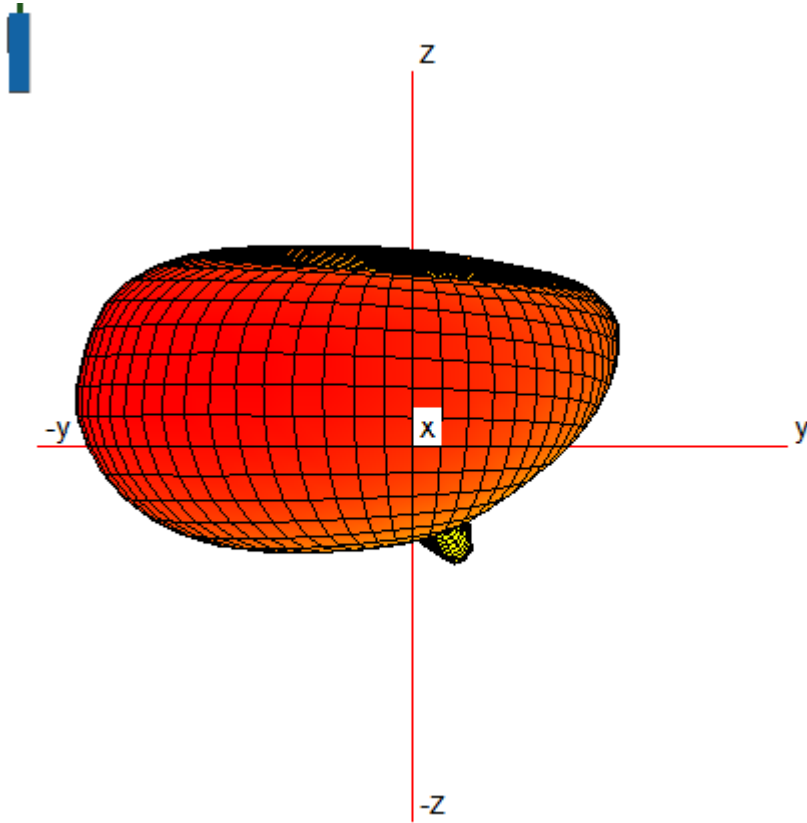
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LTE B7

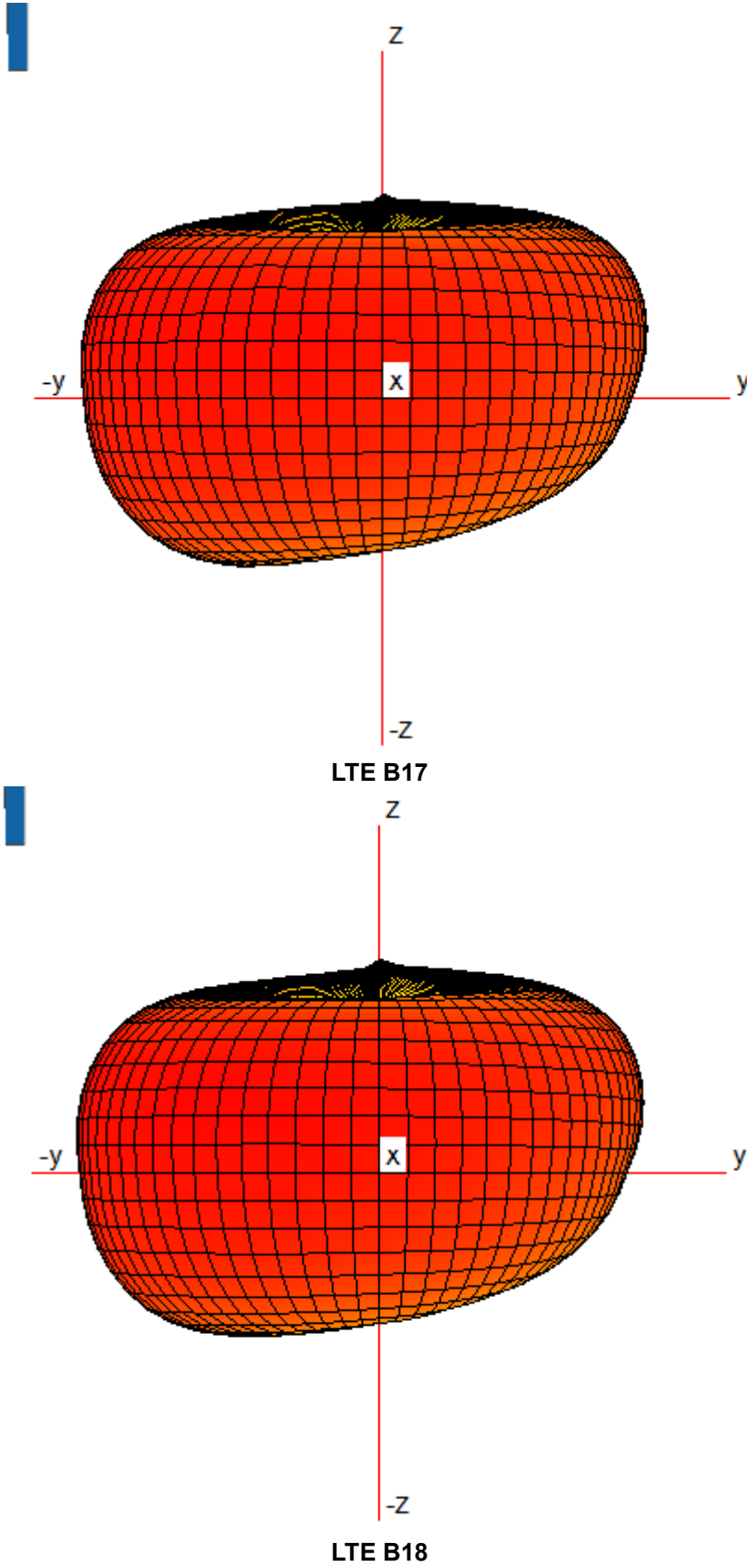


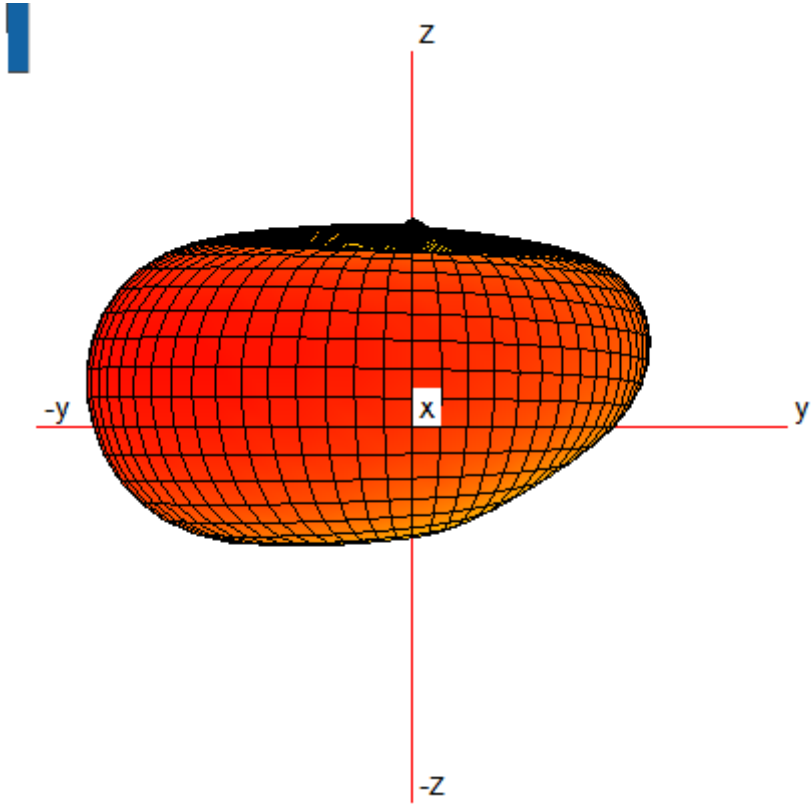
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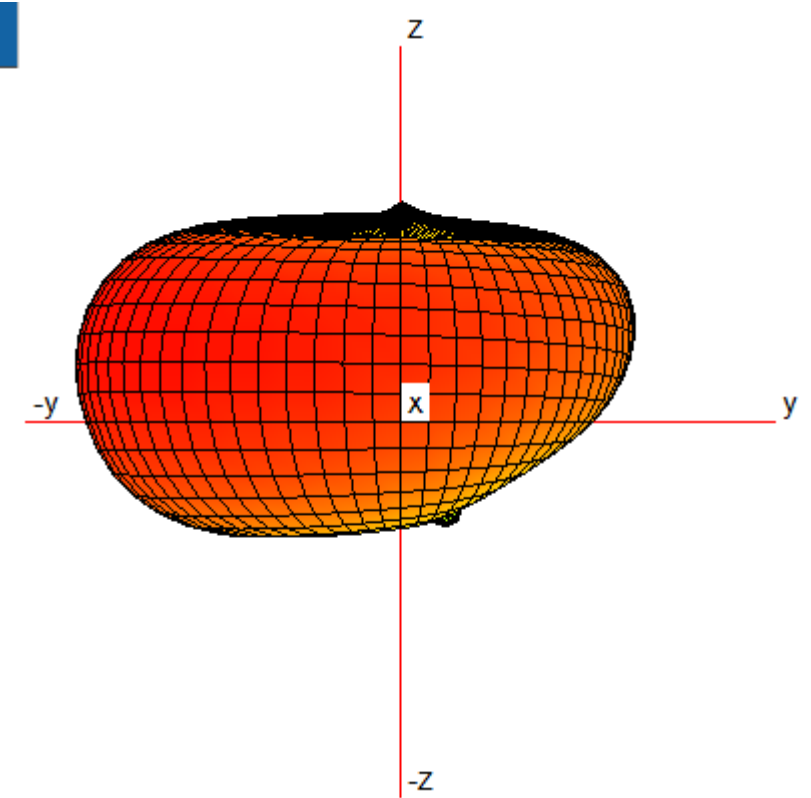
LTE B1

LTE B13

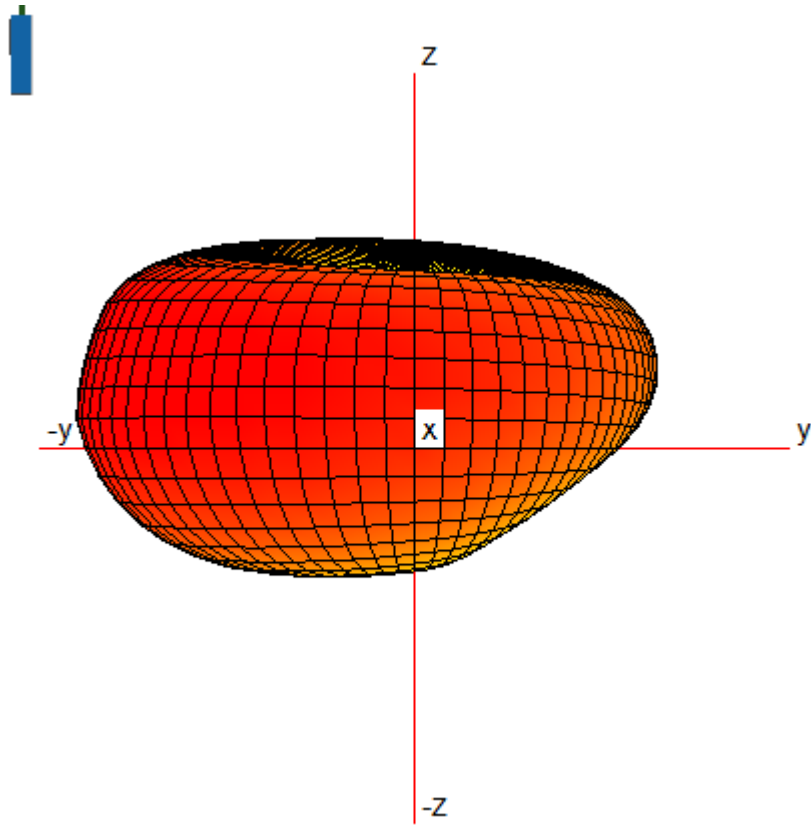




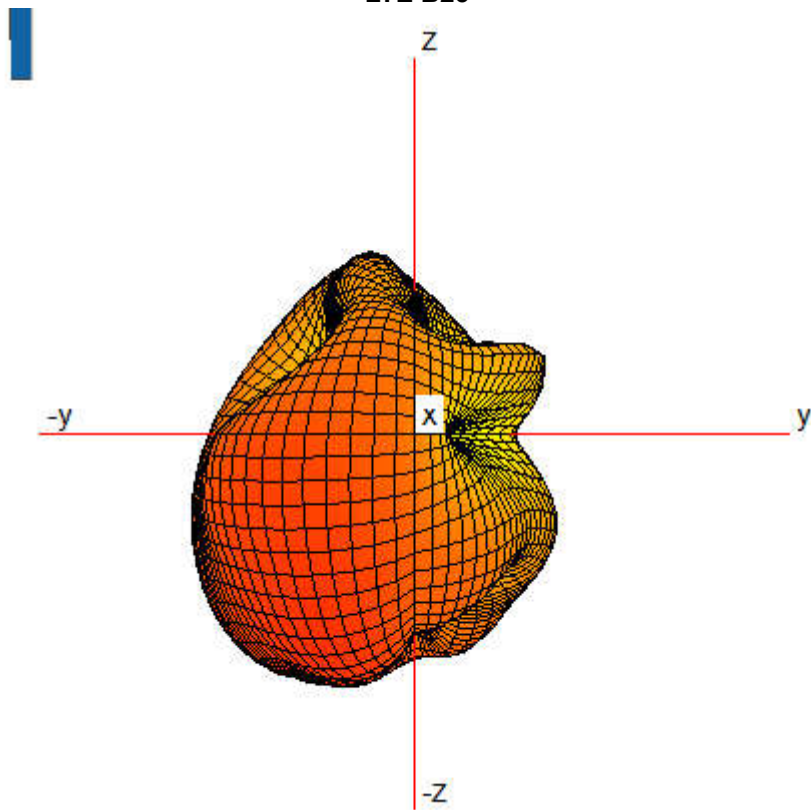
LTE B19



LTE B20

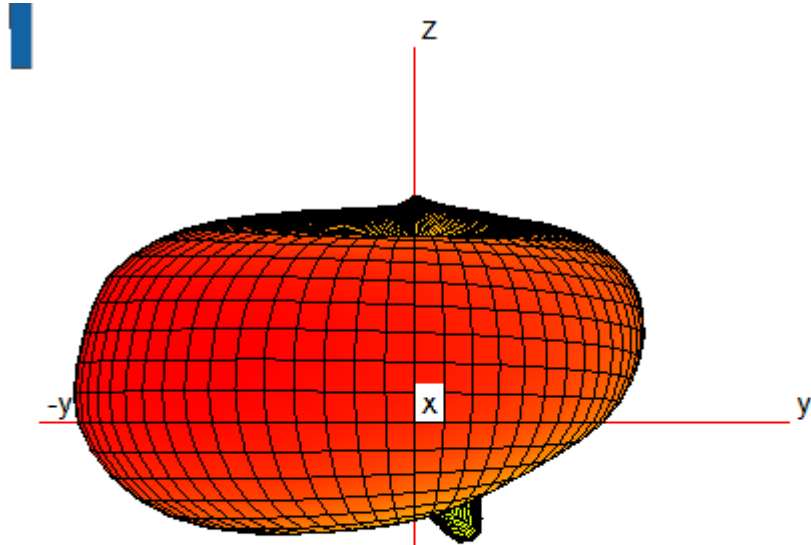


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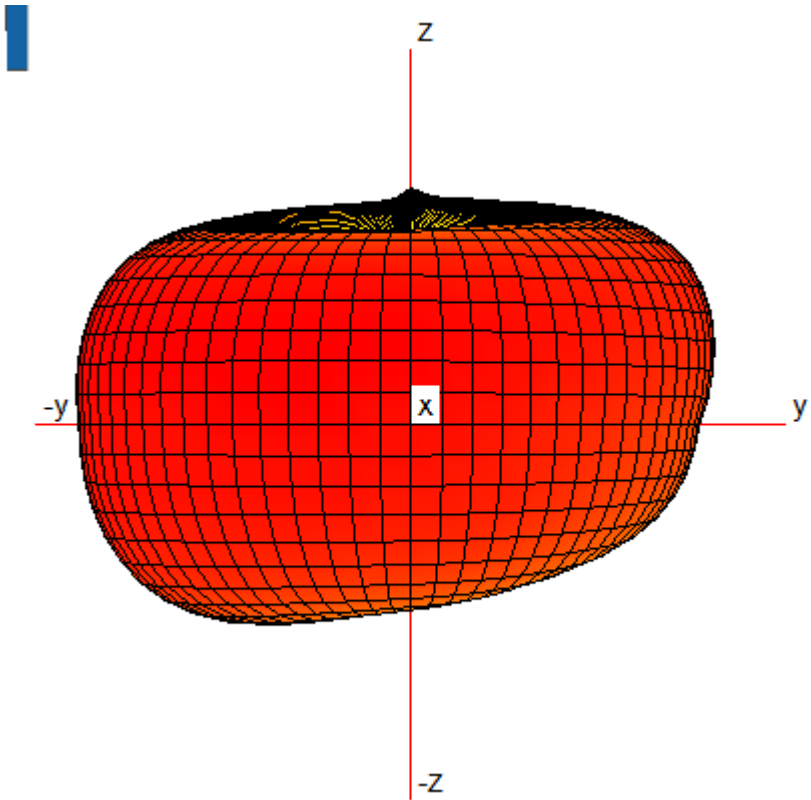


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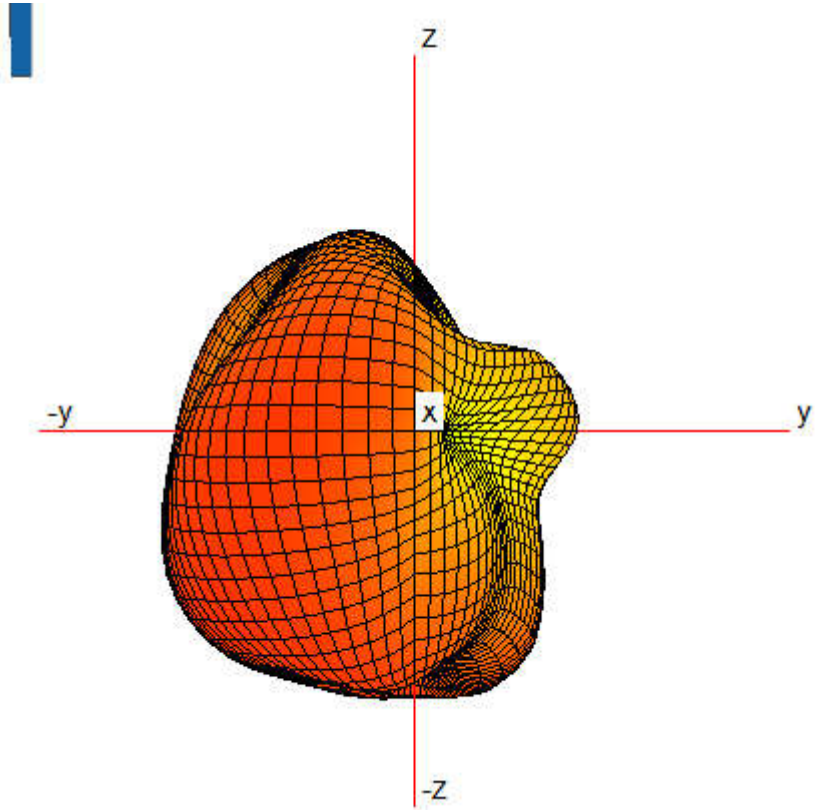




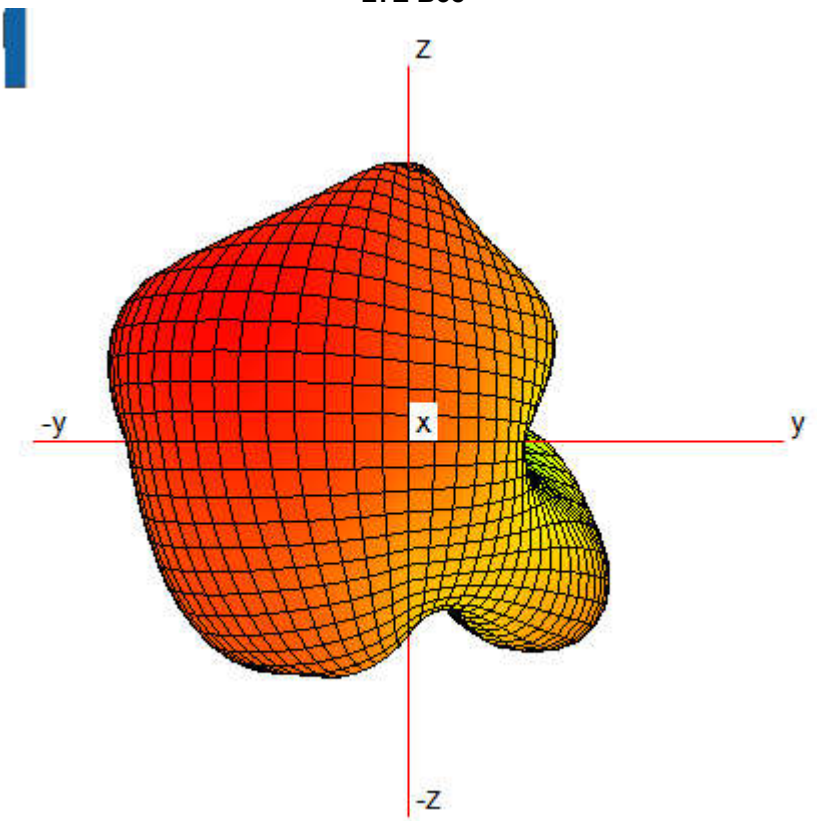
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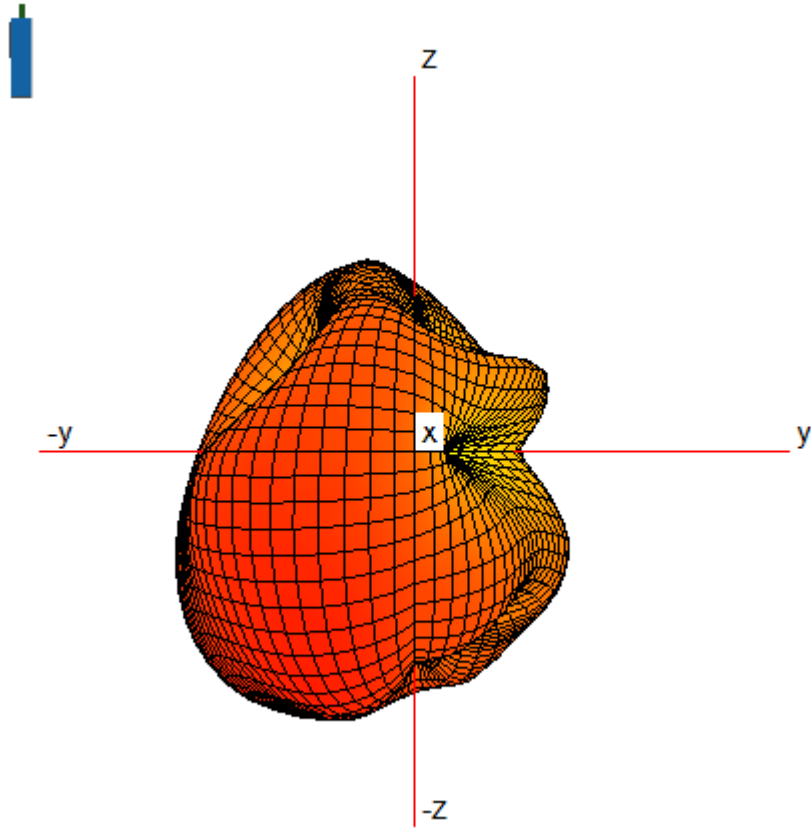
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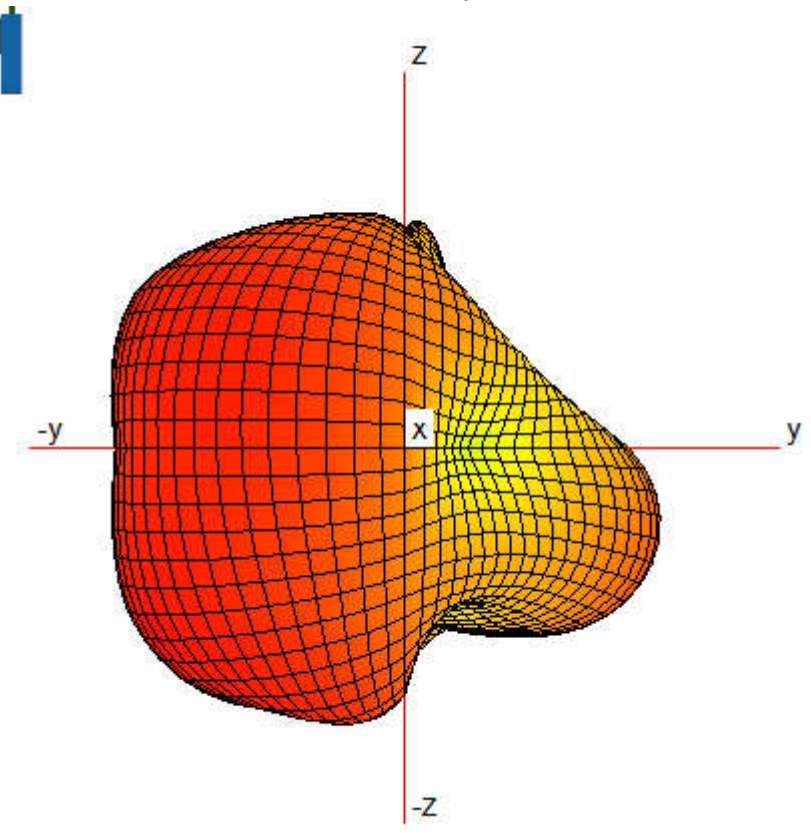
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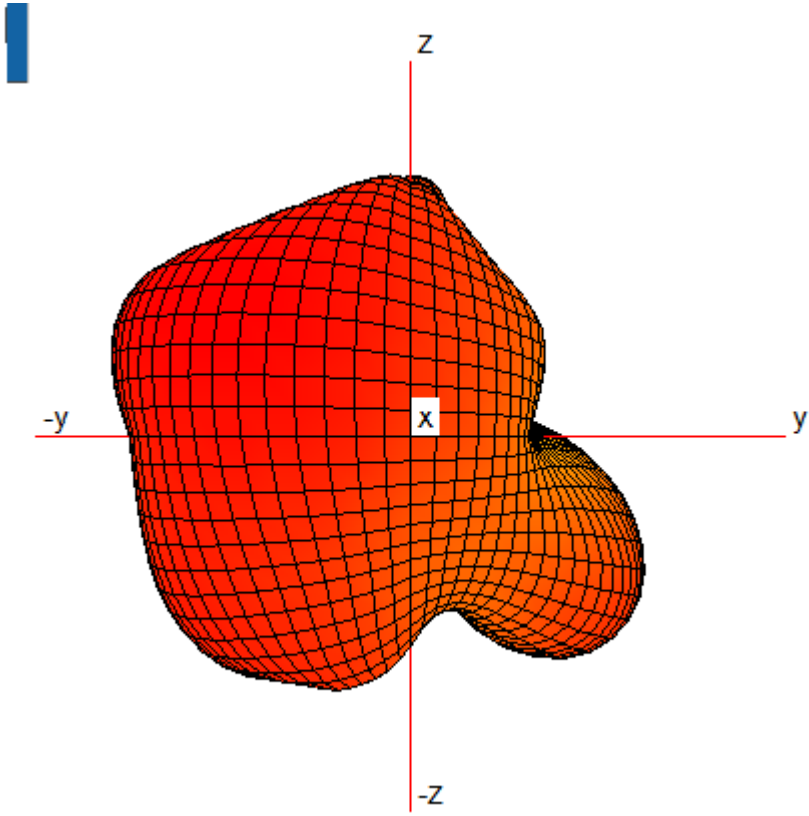
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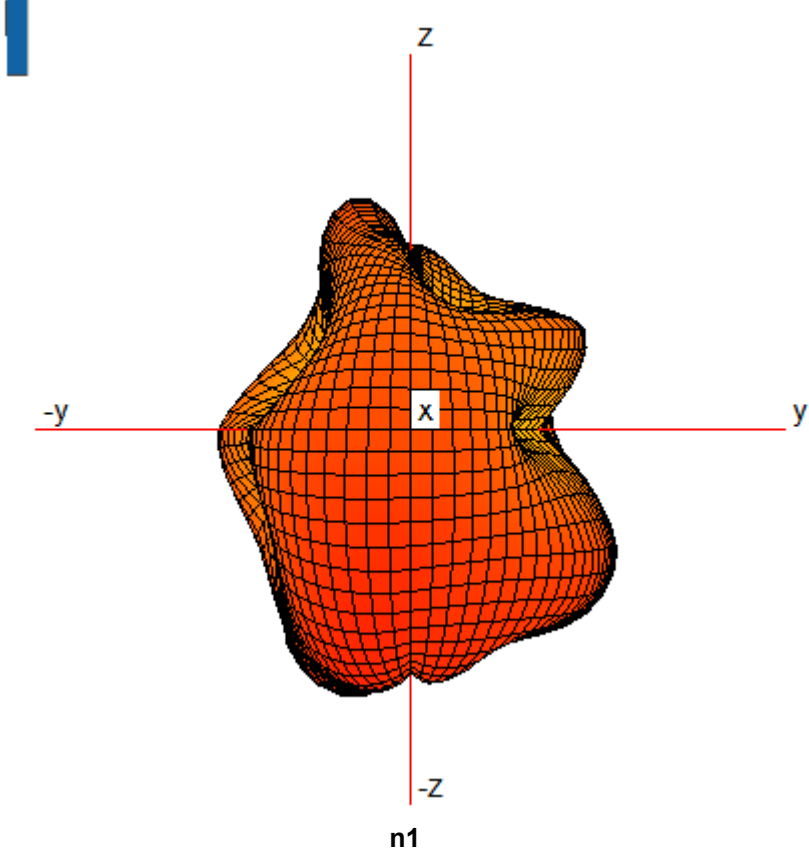
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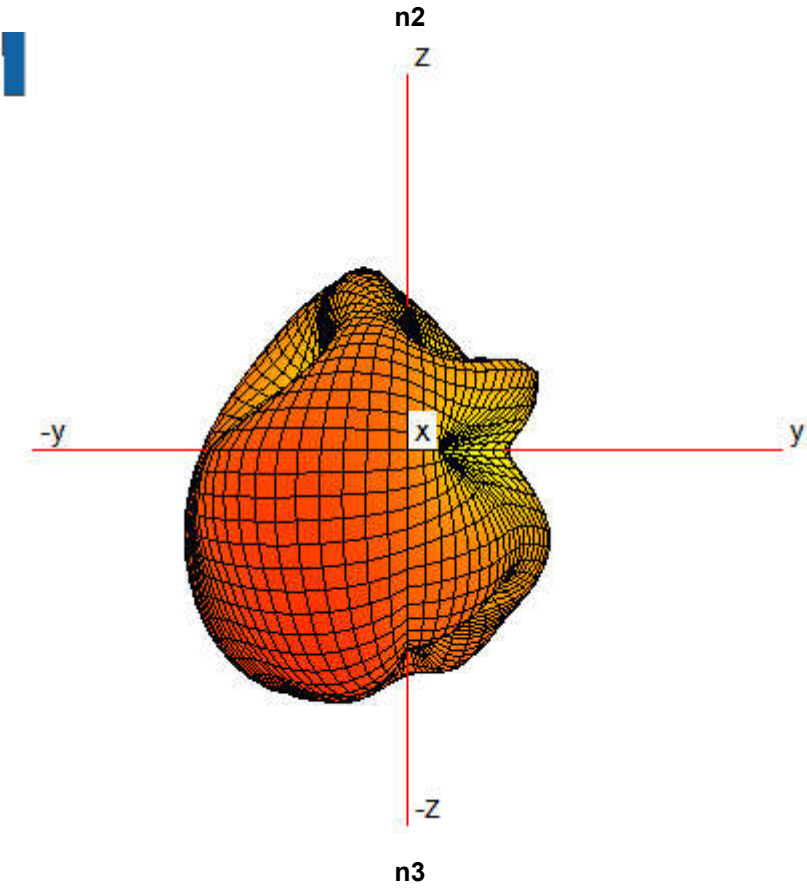
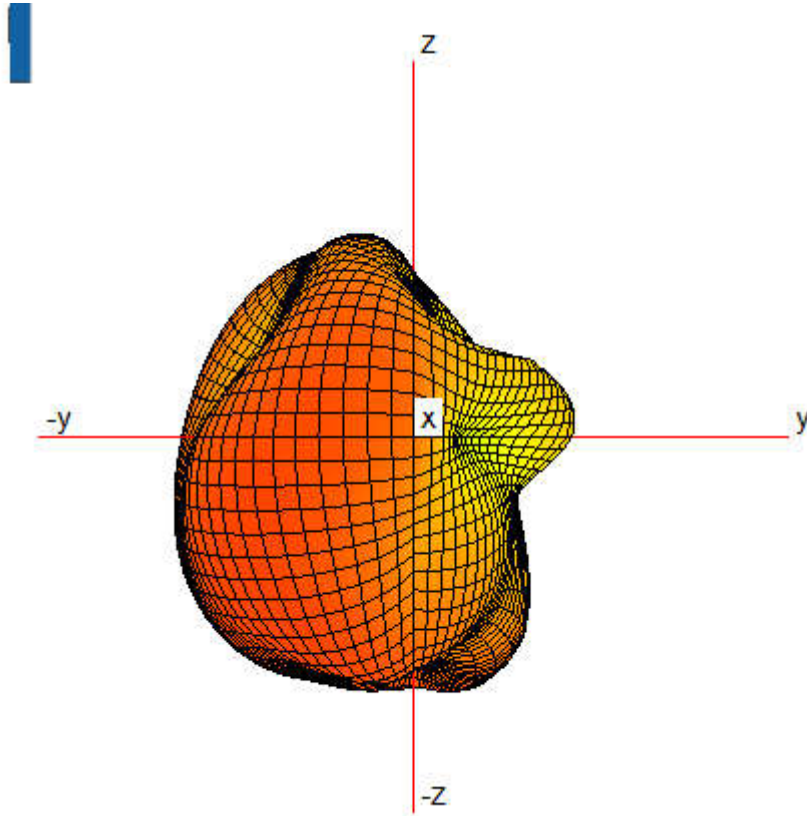


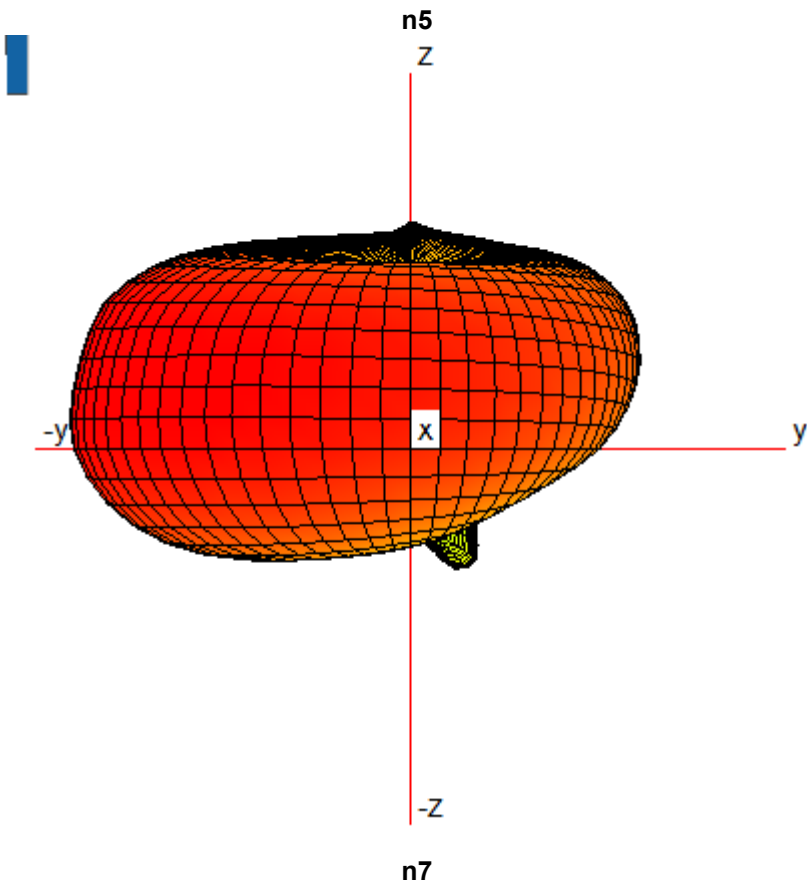
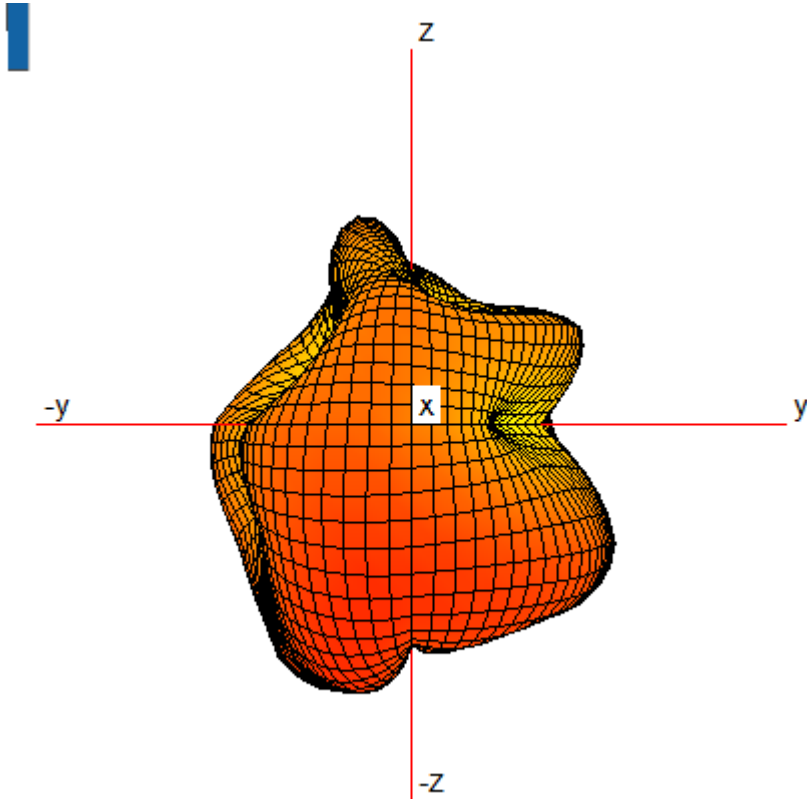
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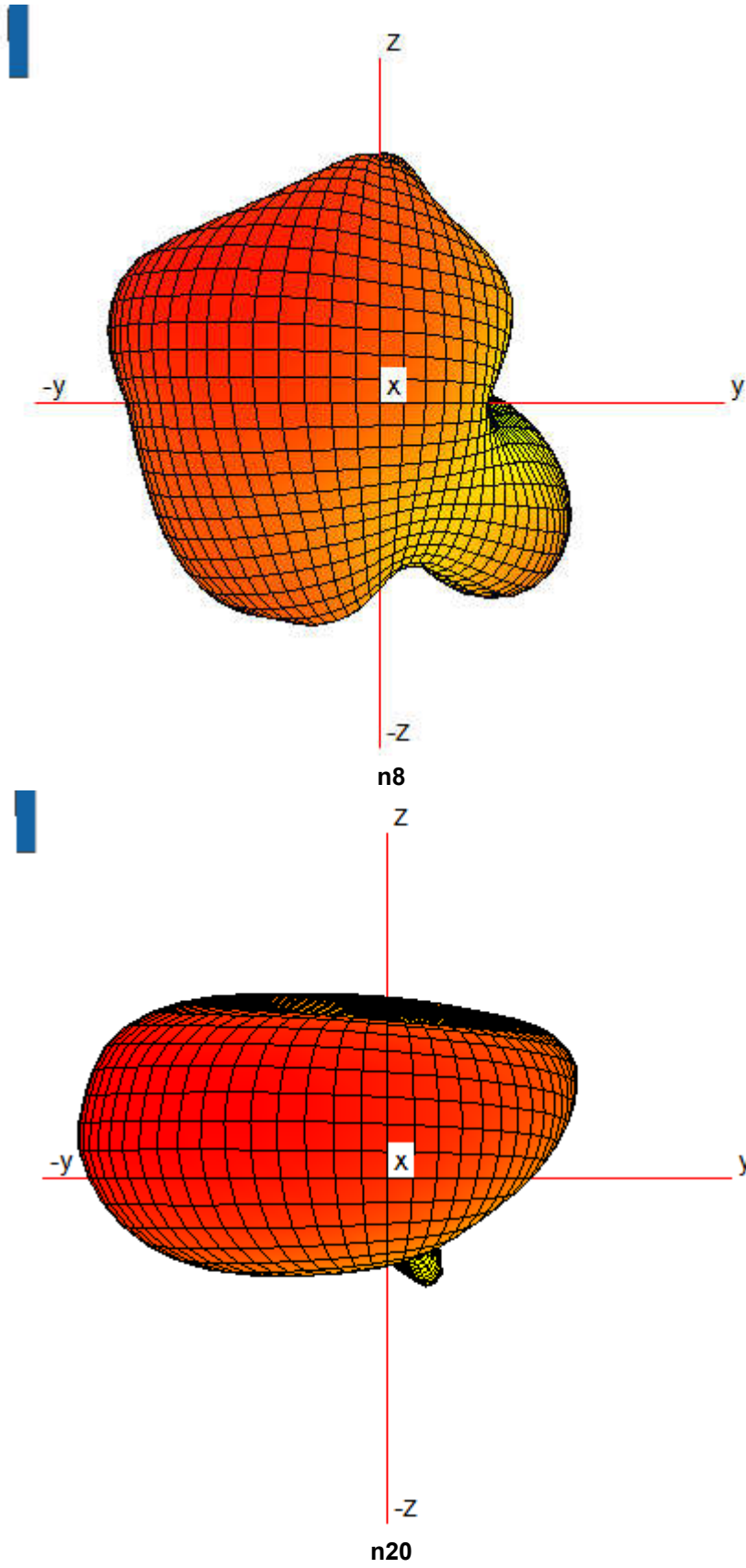


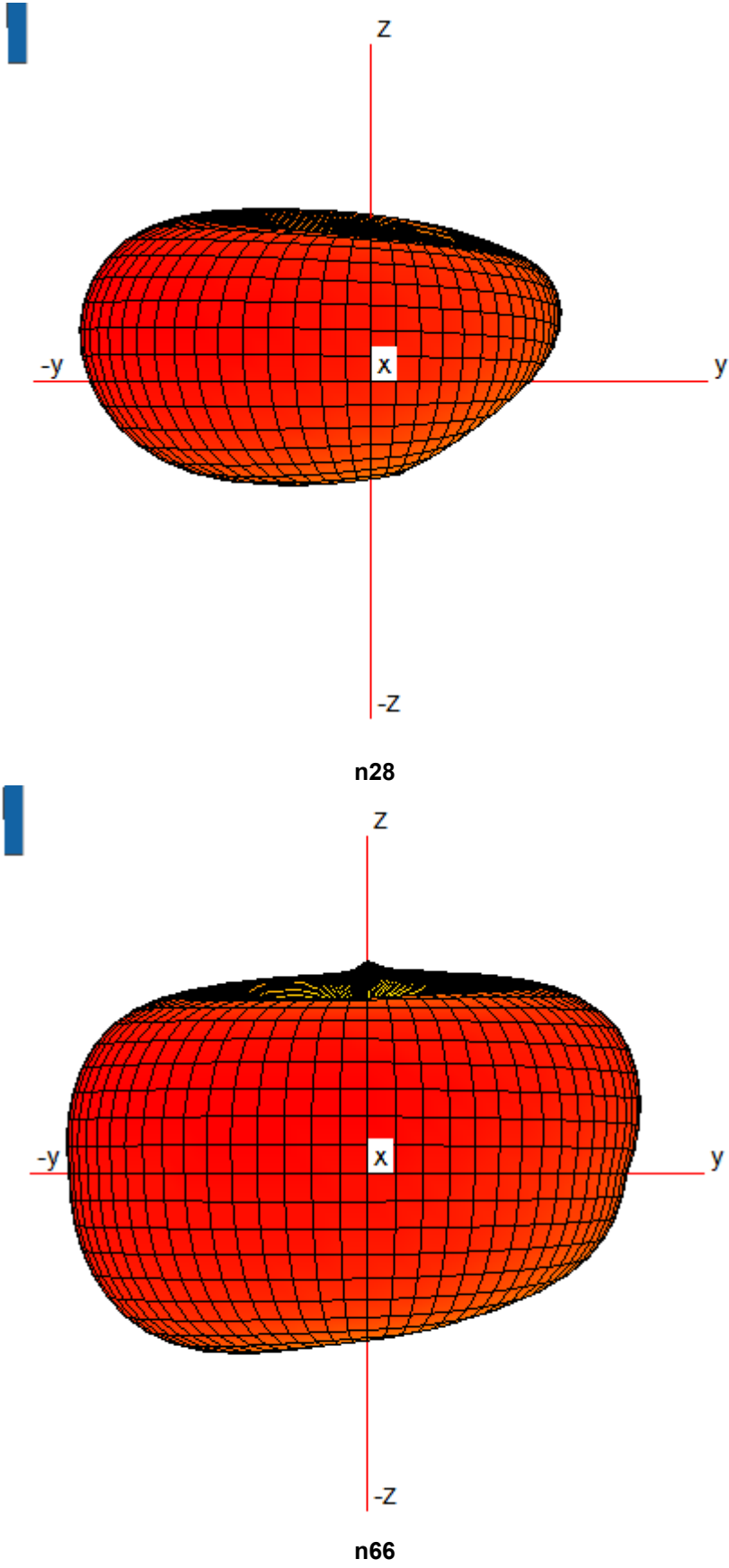
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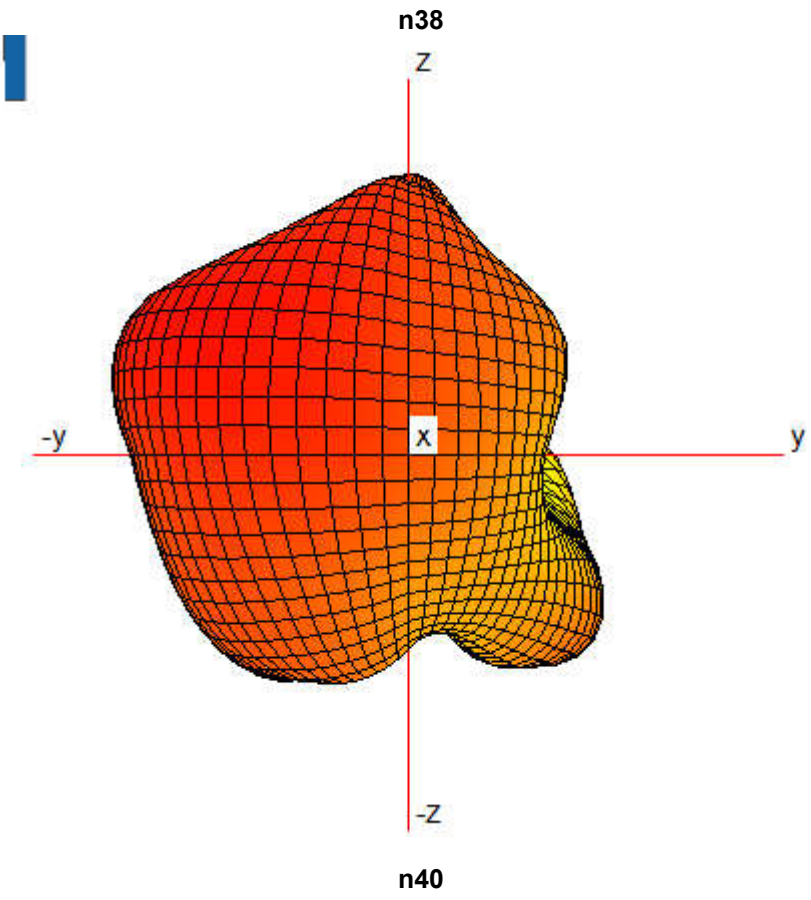
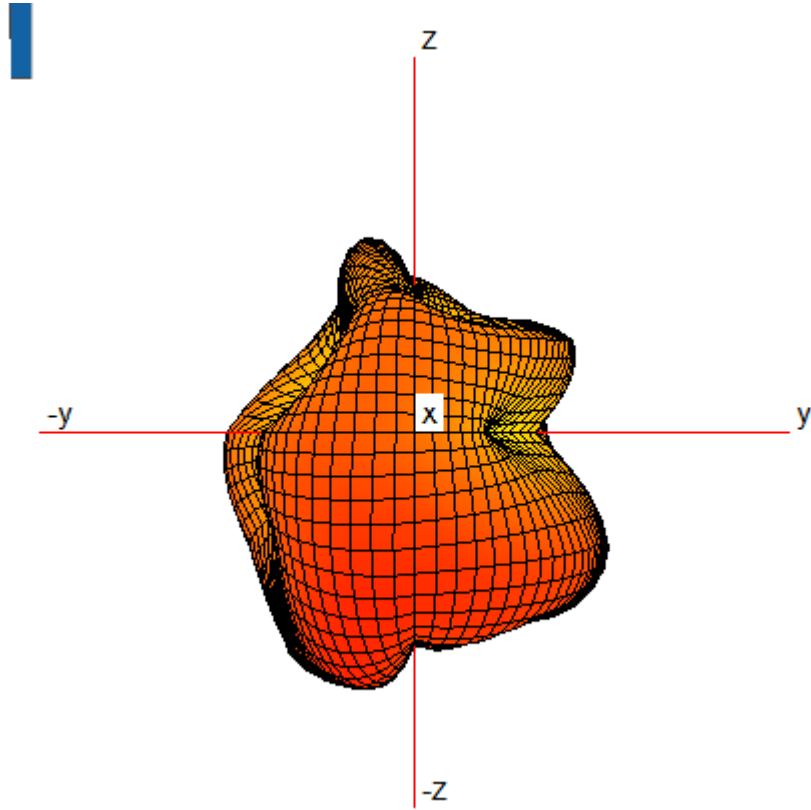


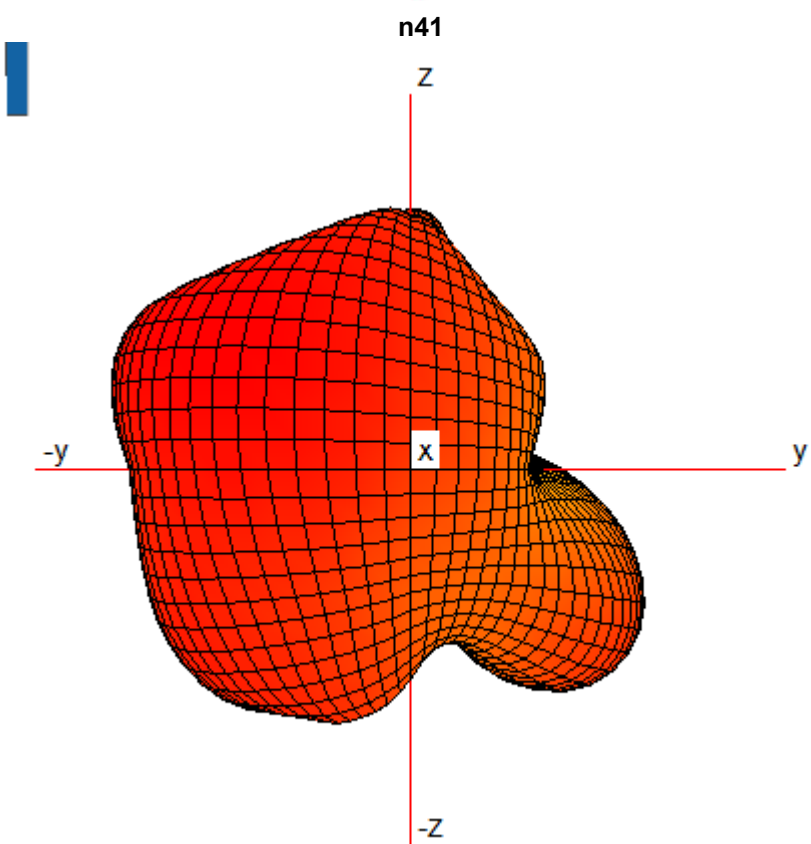
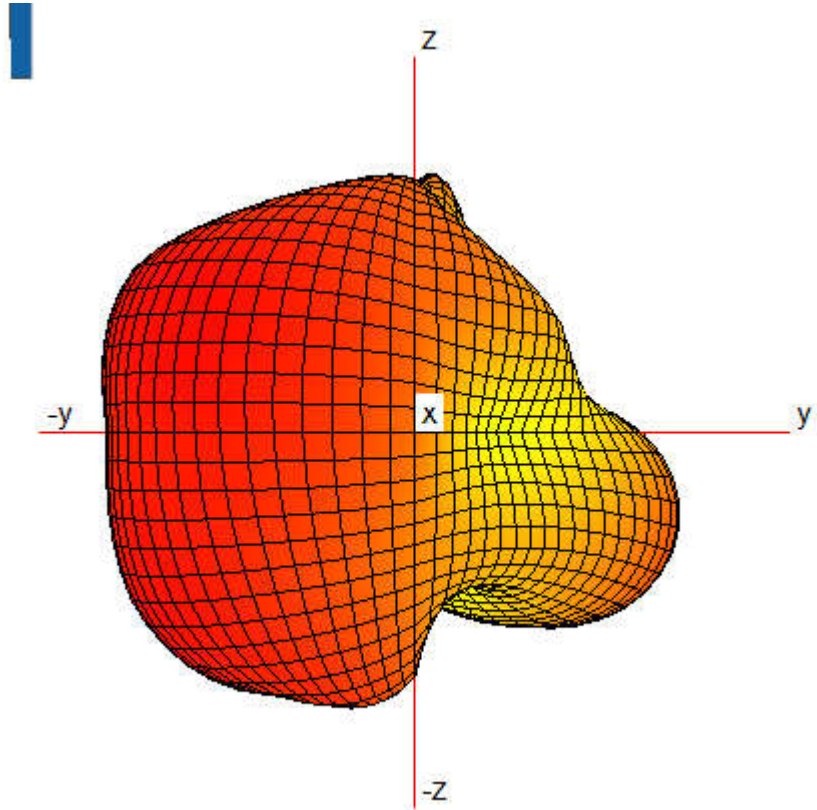




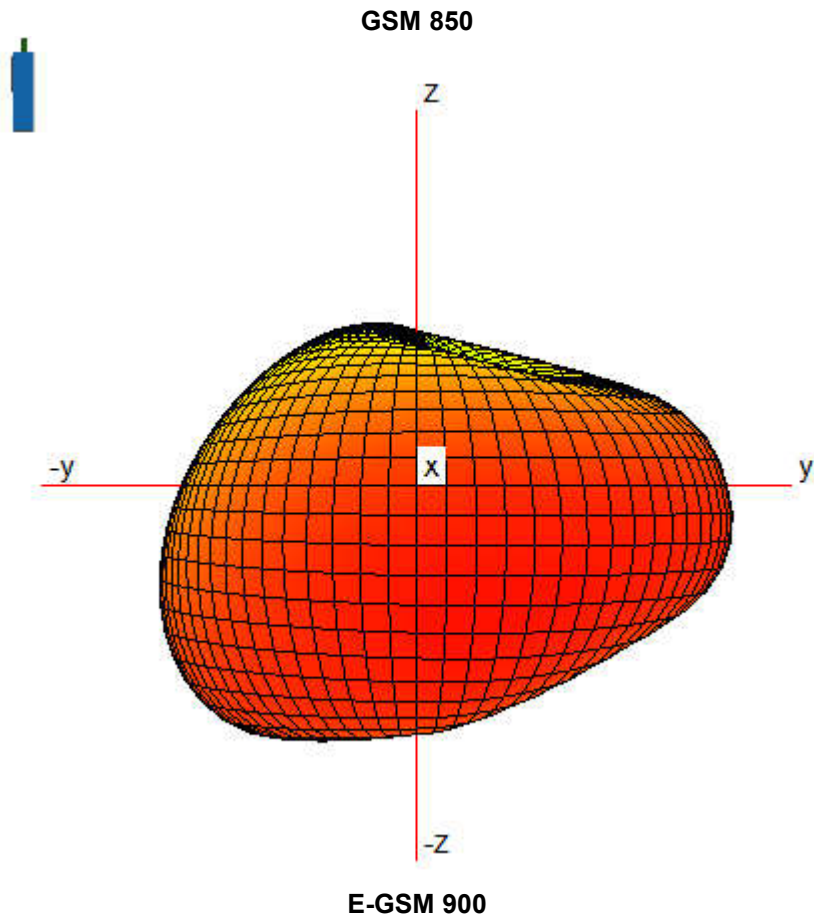


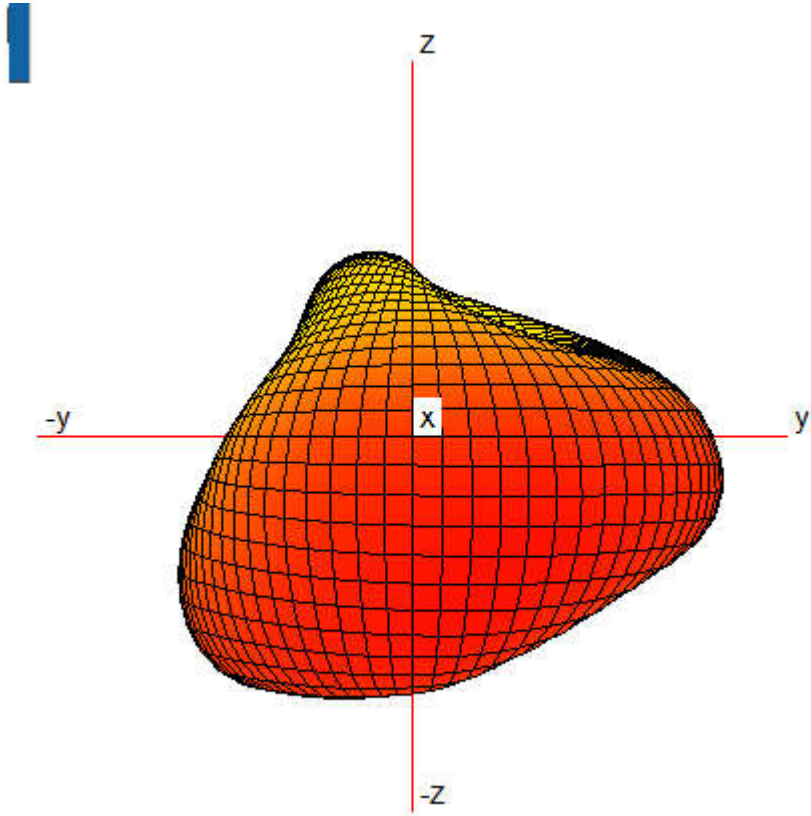




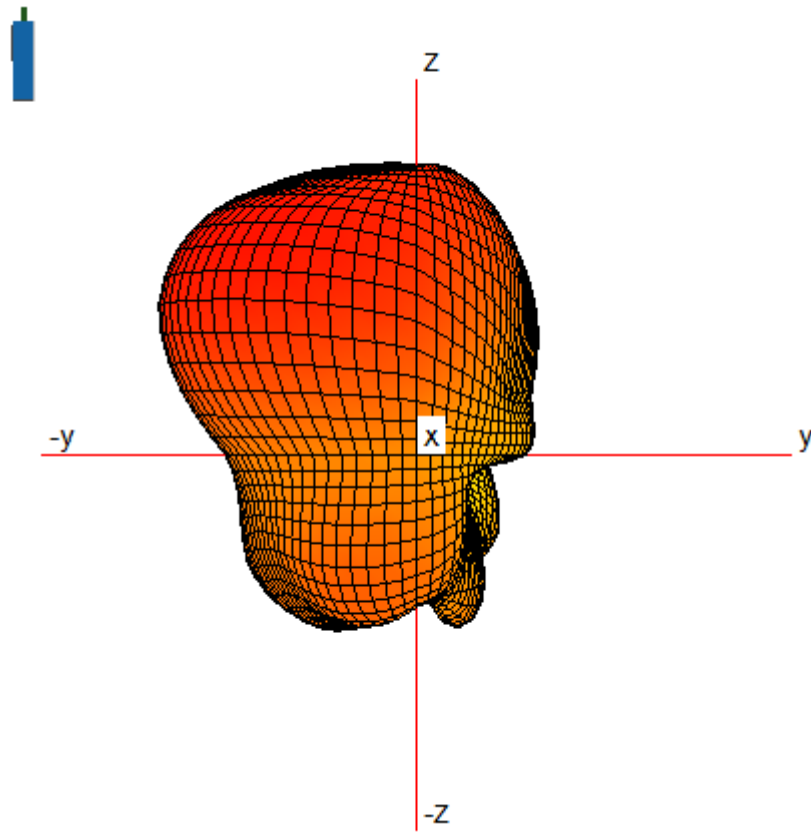


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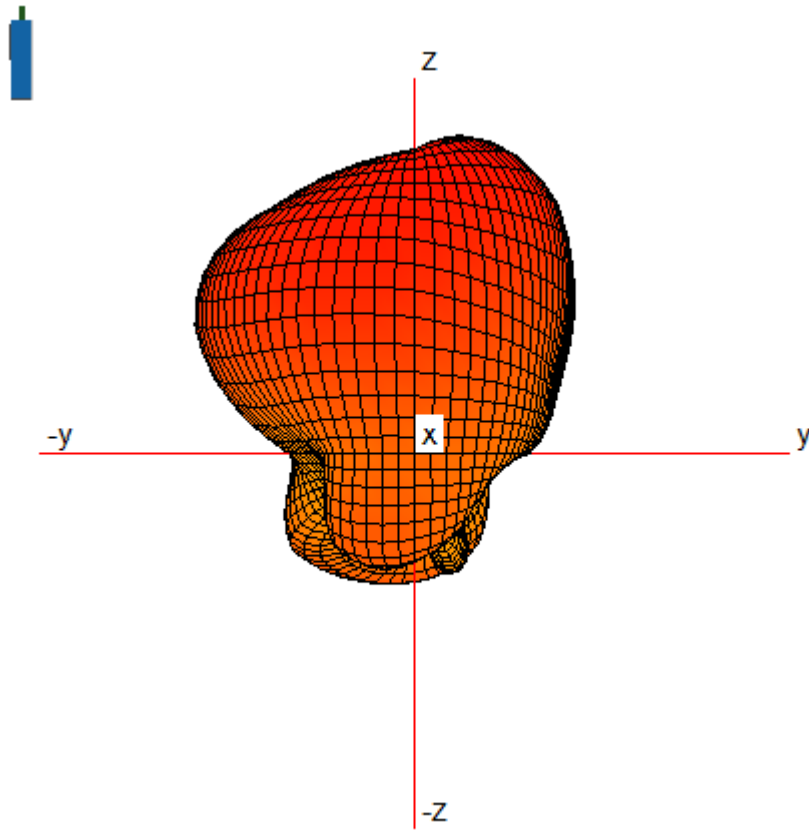




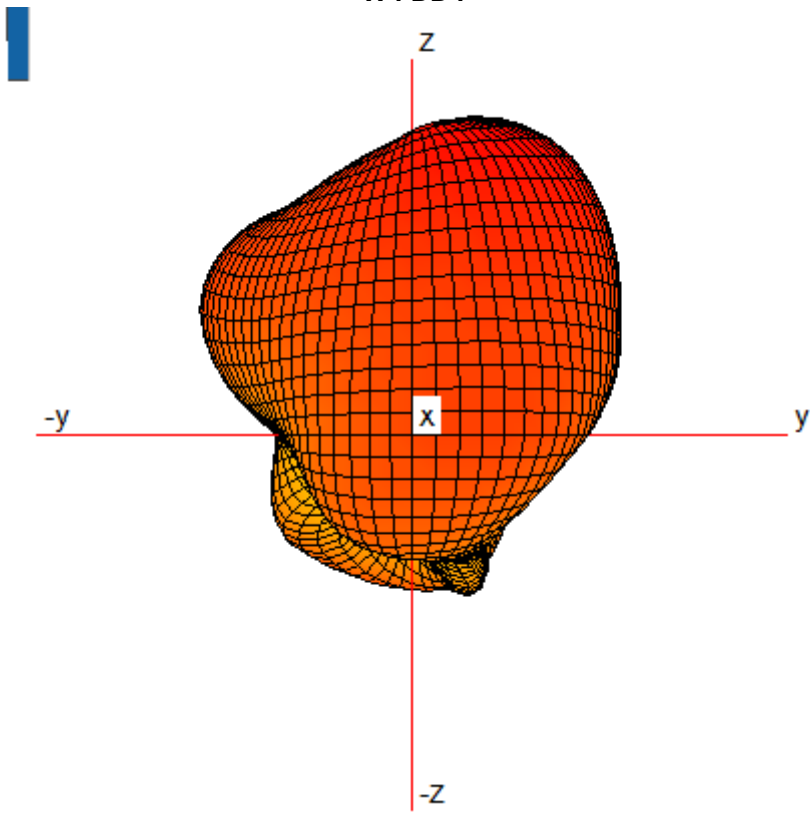
DCS 1800



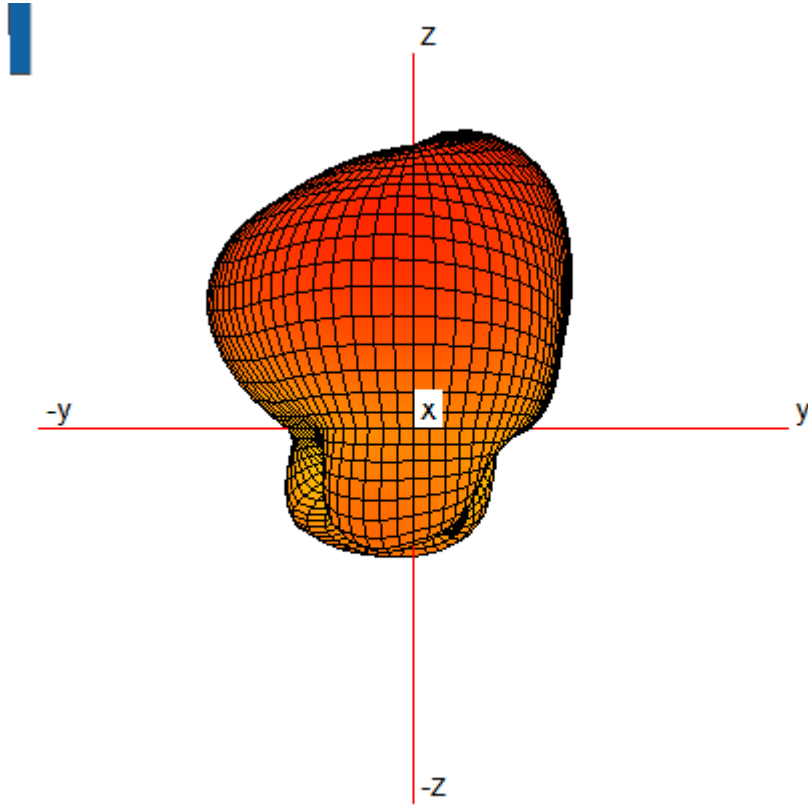
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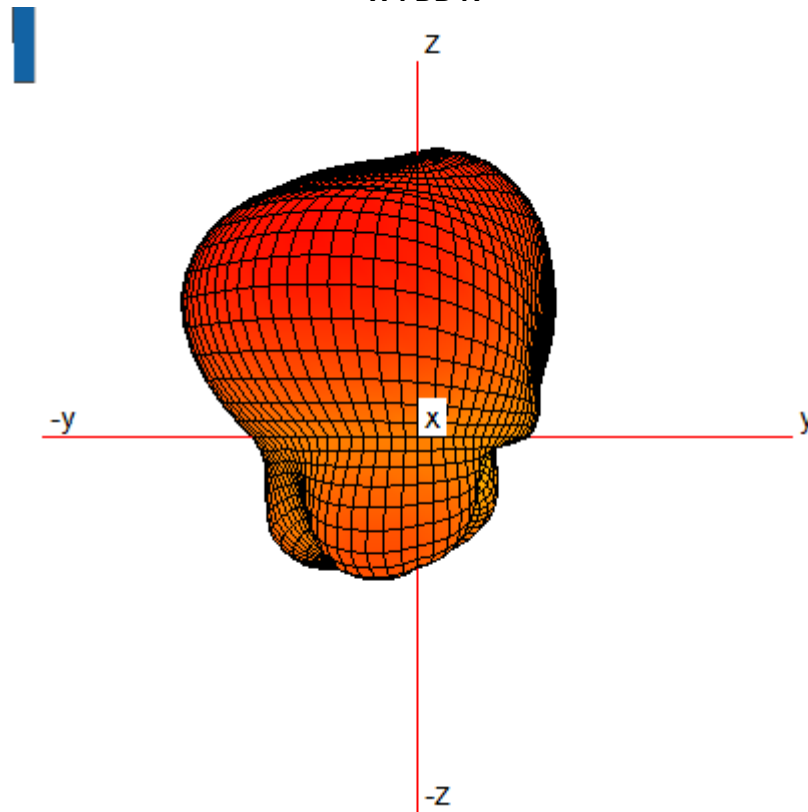
W FDD I



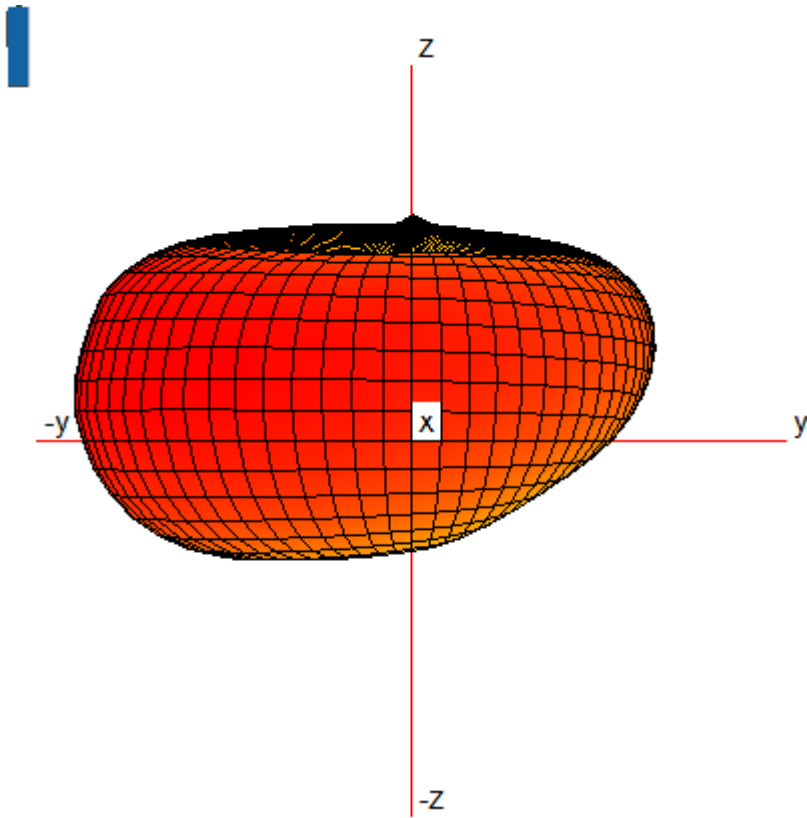
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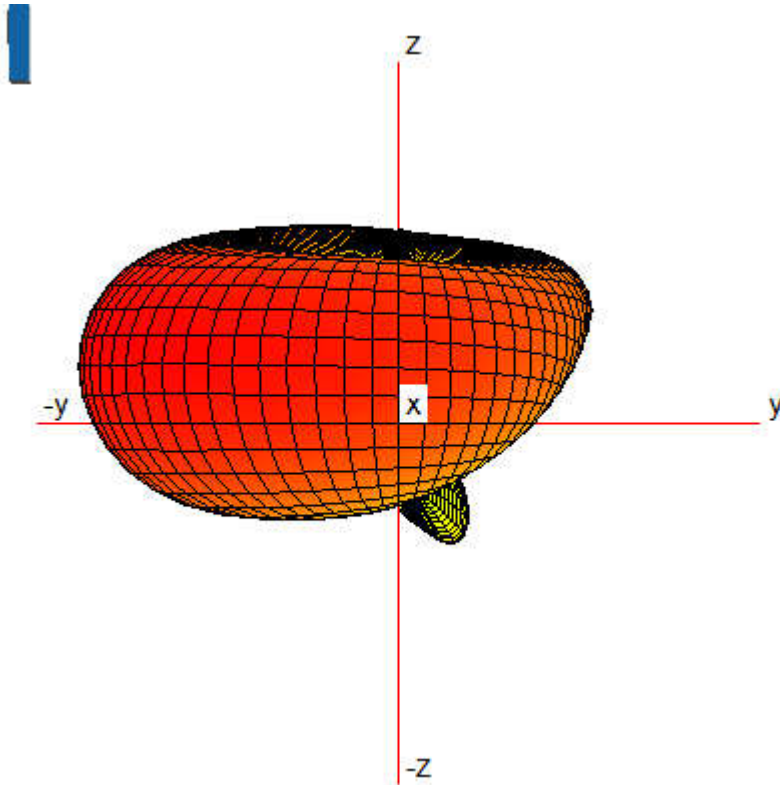
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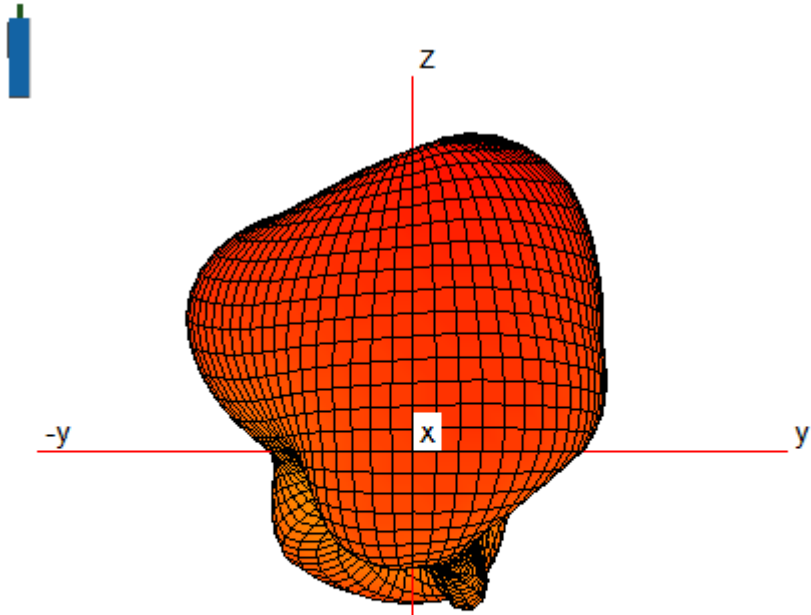
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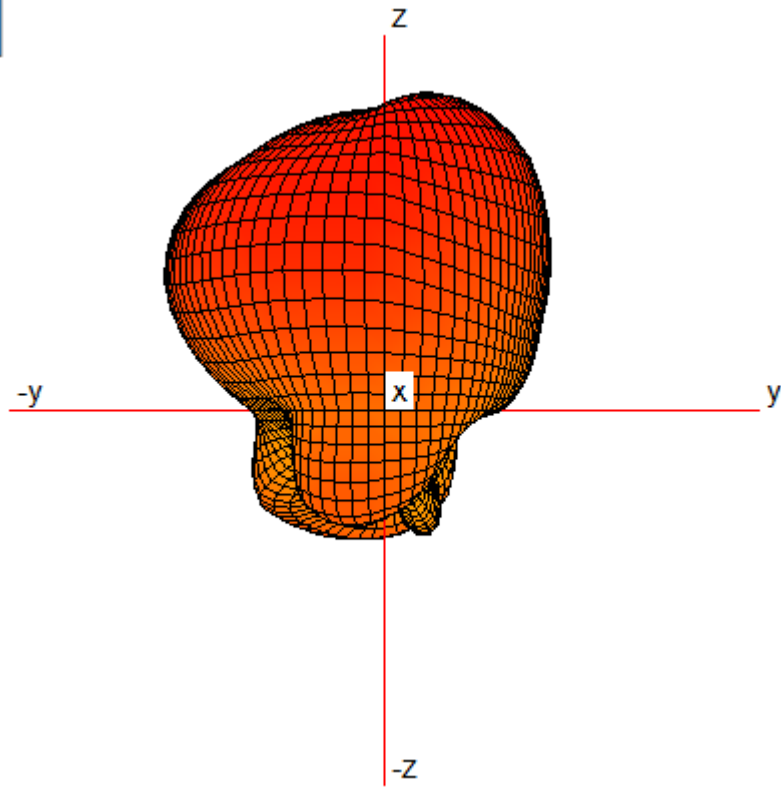
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LTE B1

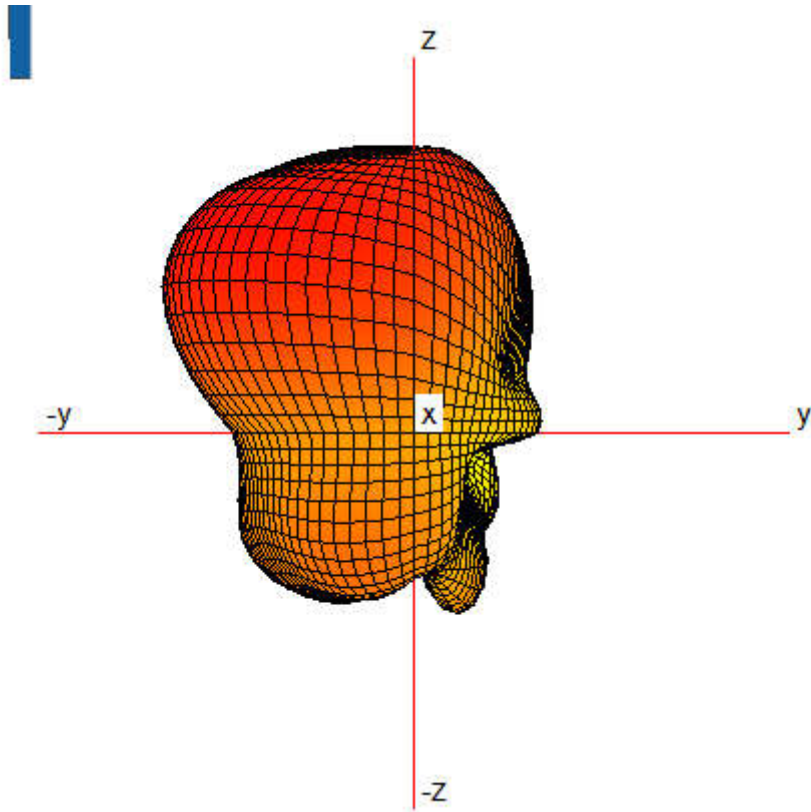


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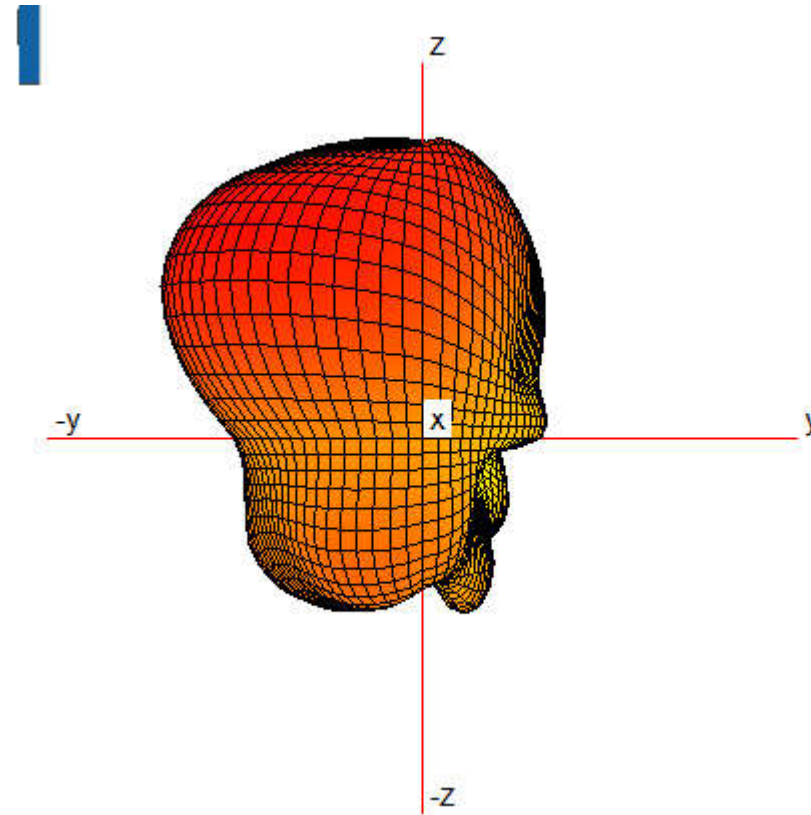


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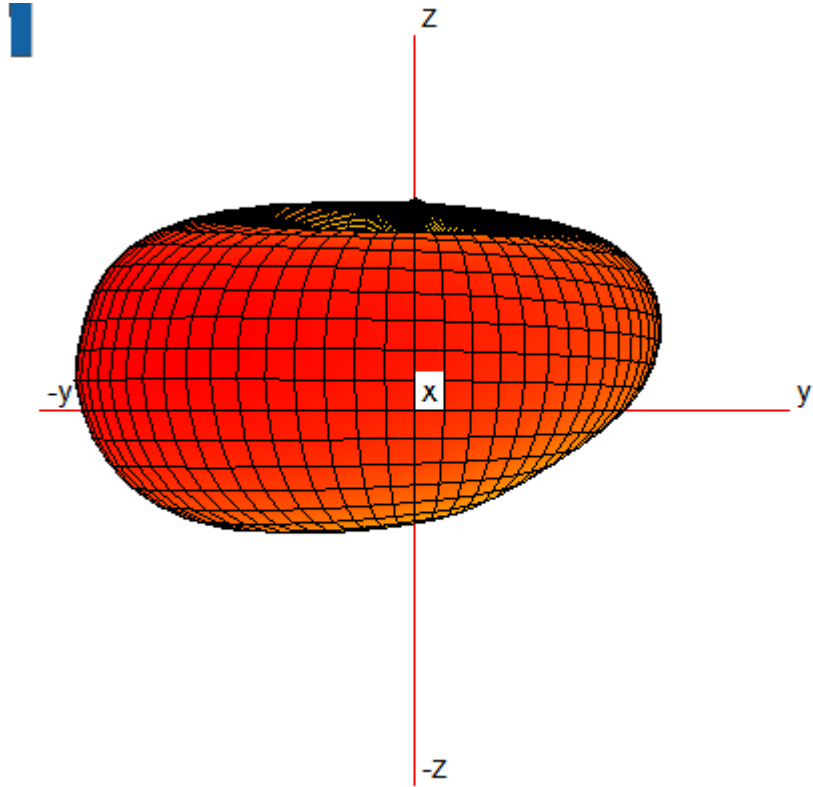




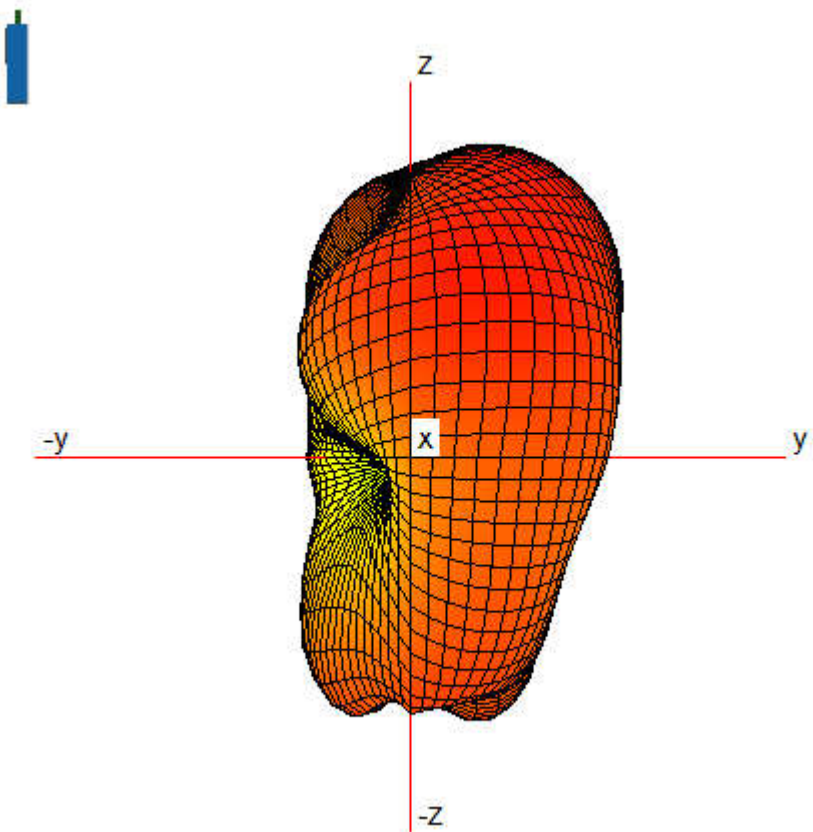
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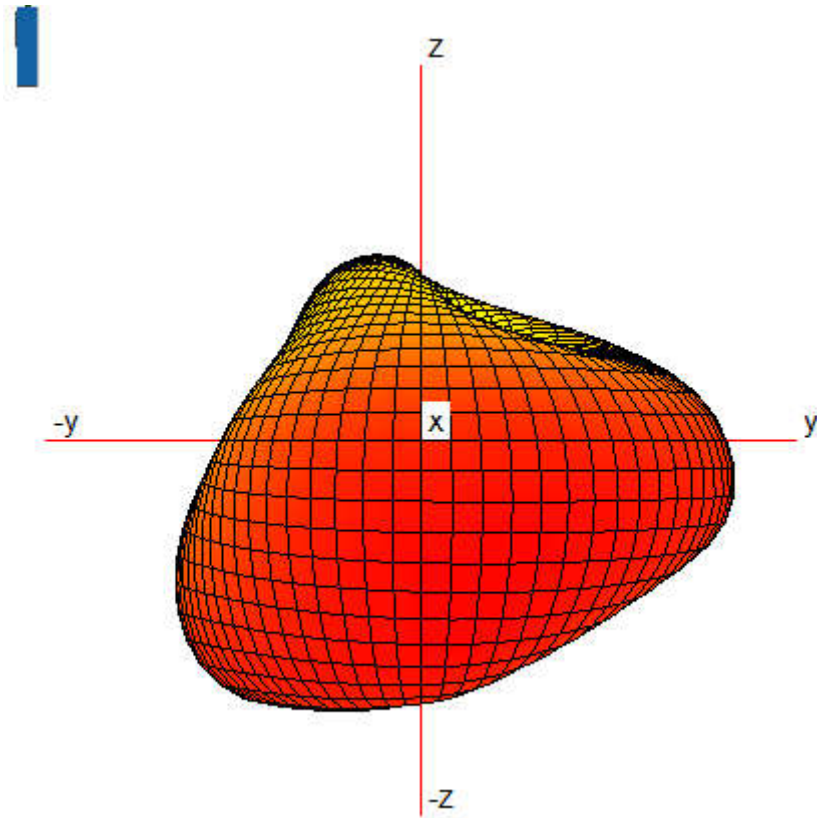
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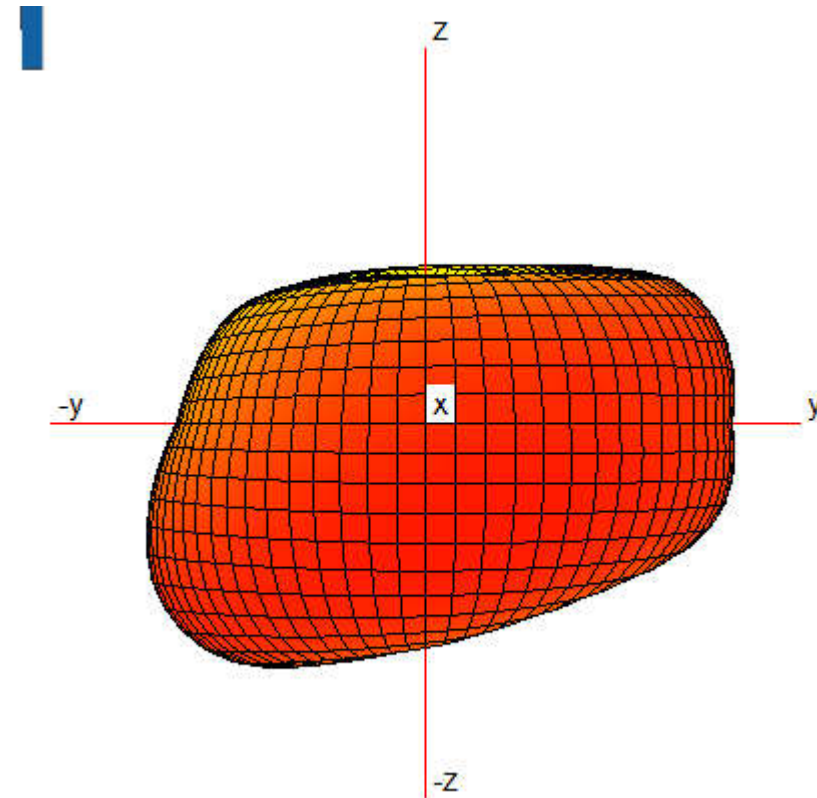
LTE B7



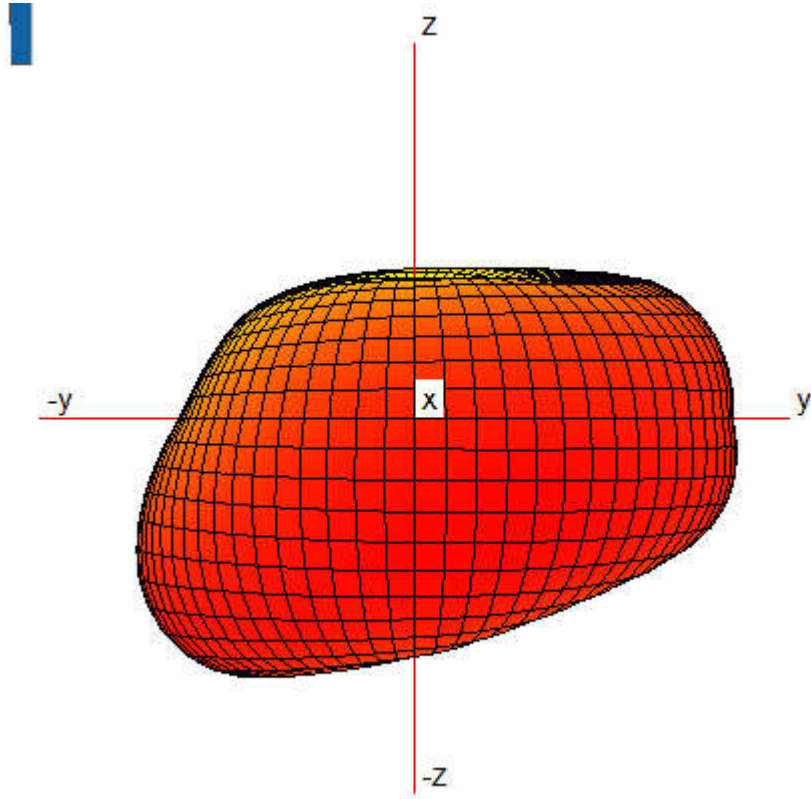
LTE B8



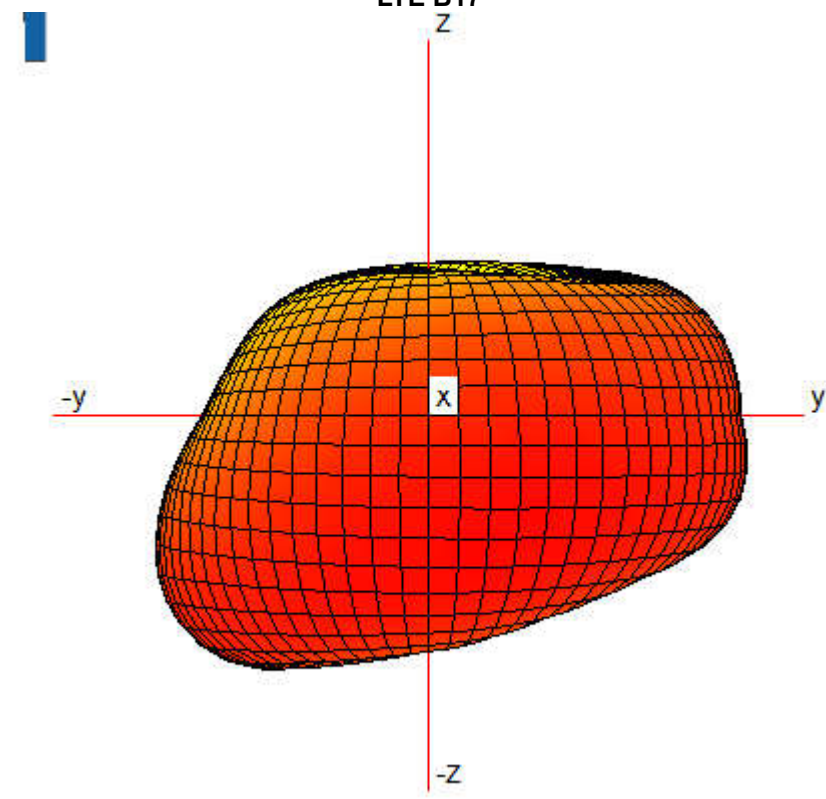
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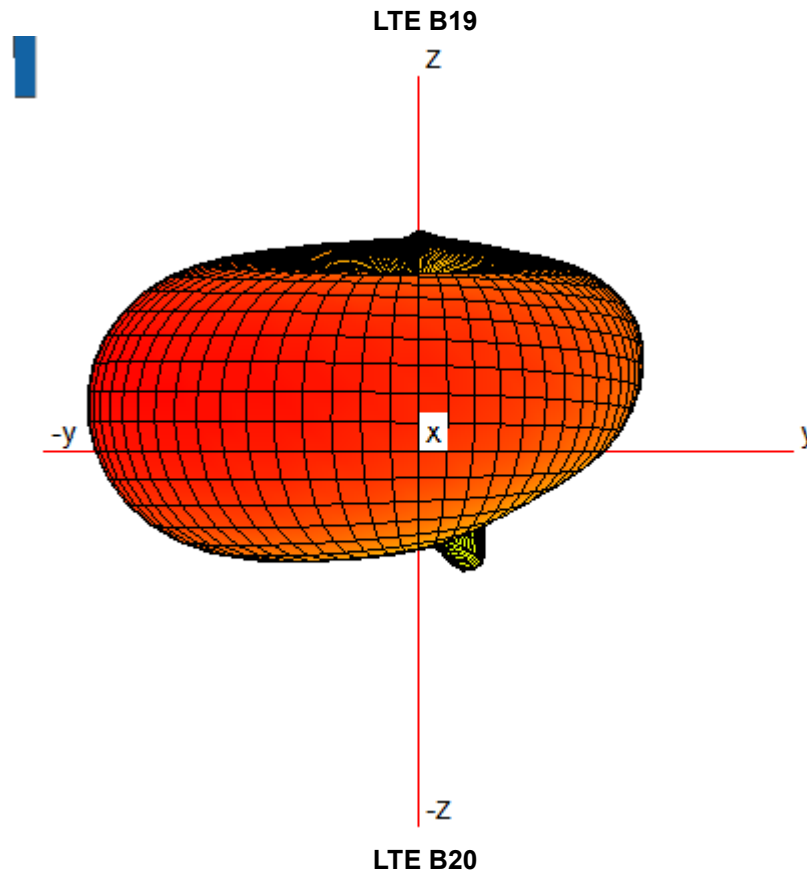
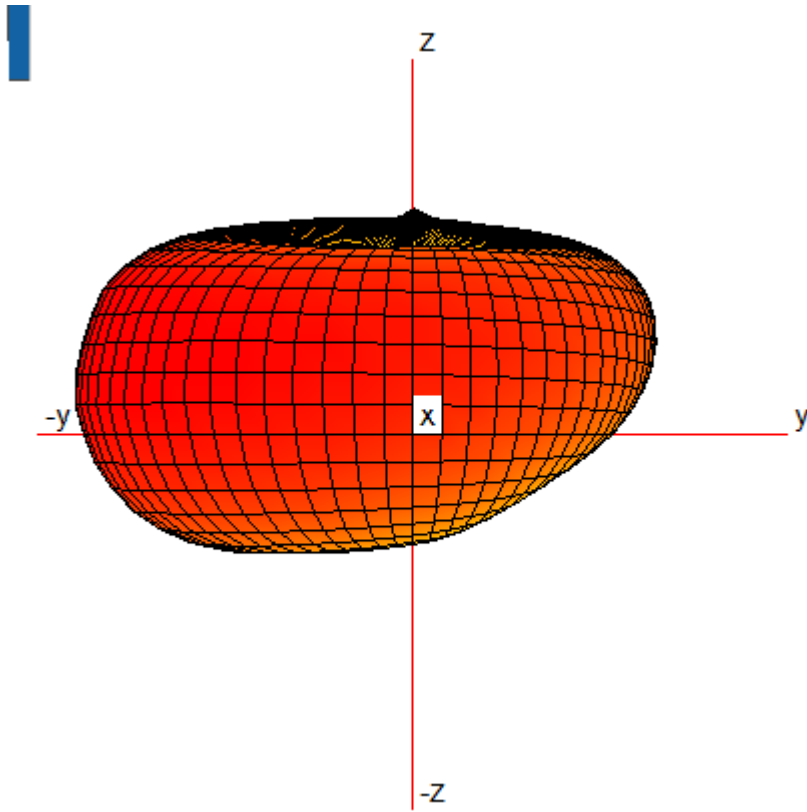
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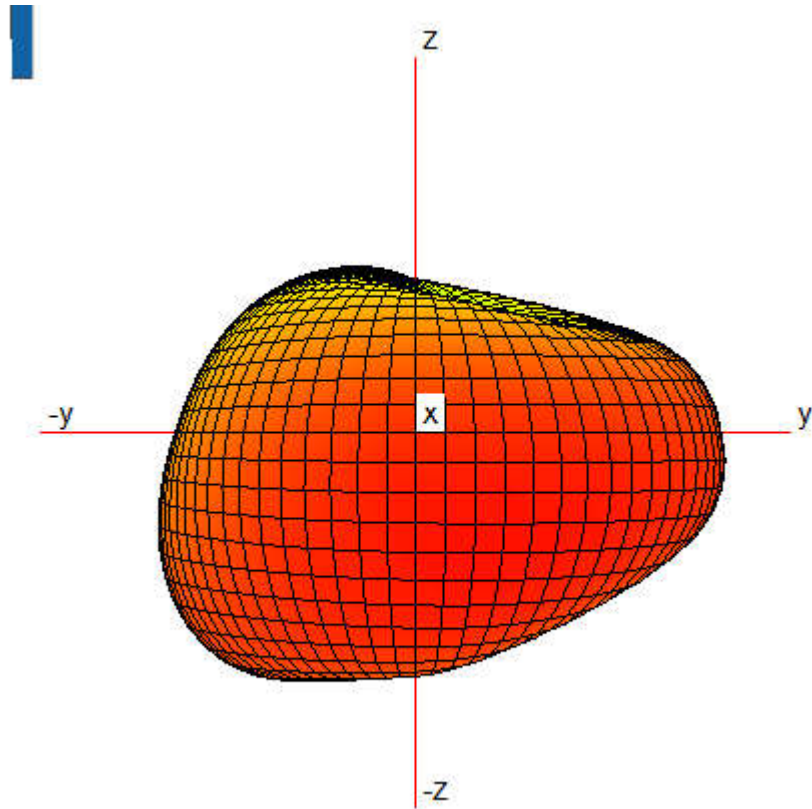


LTE B17  
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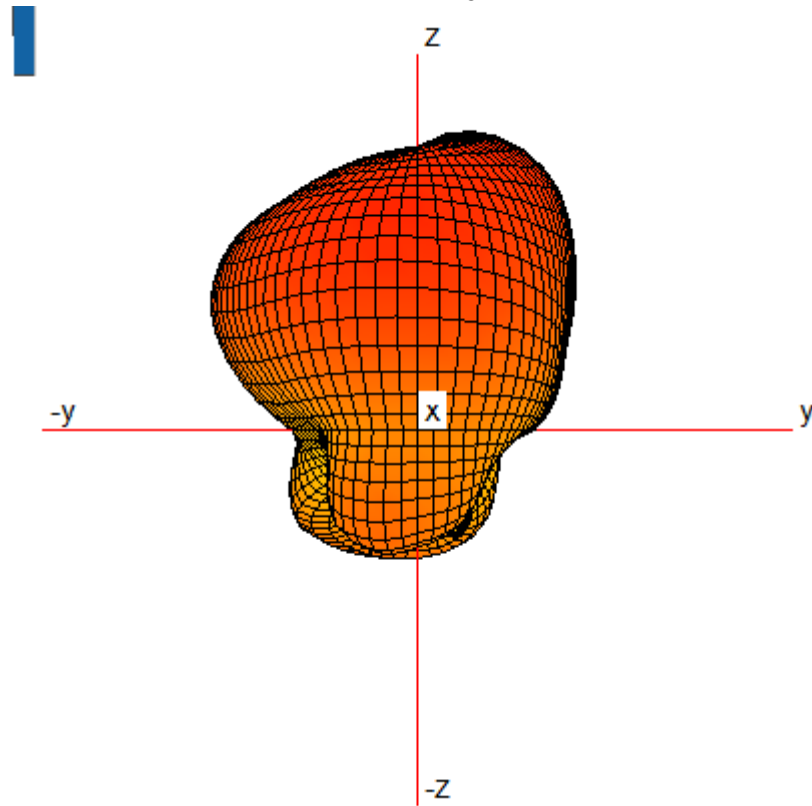


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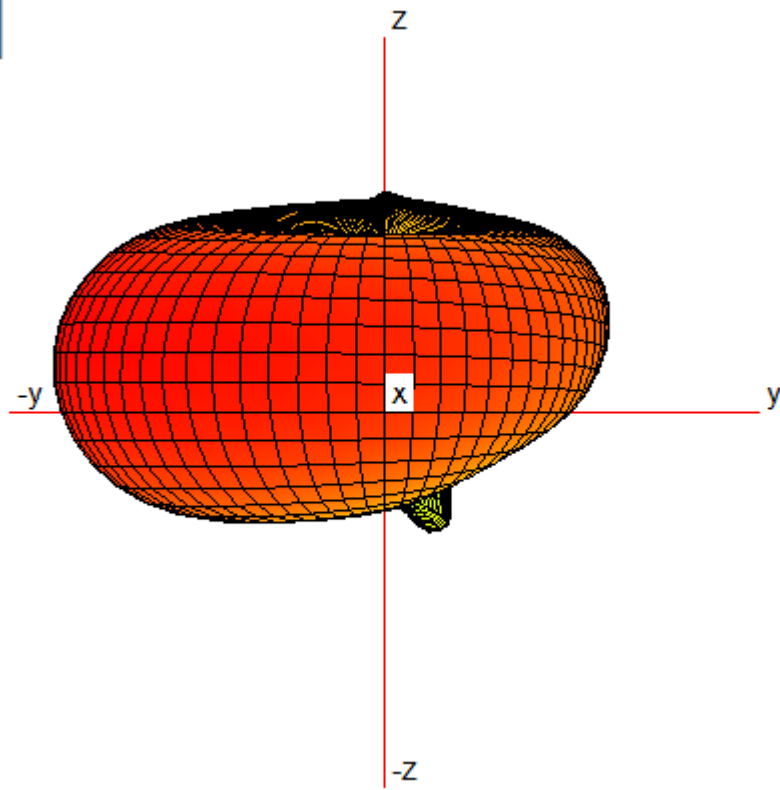




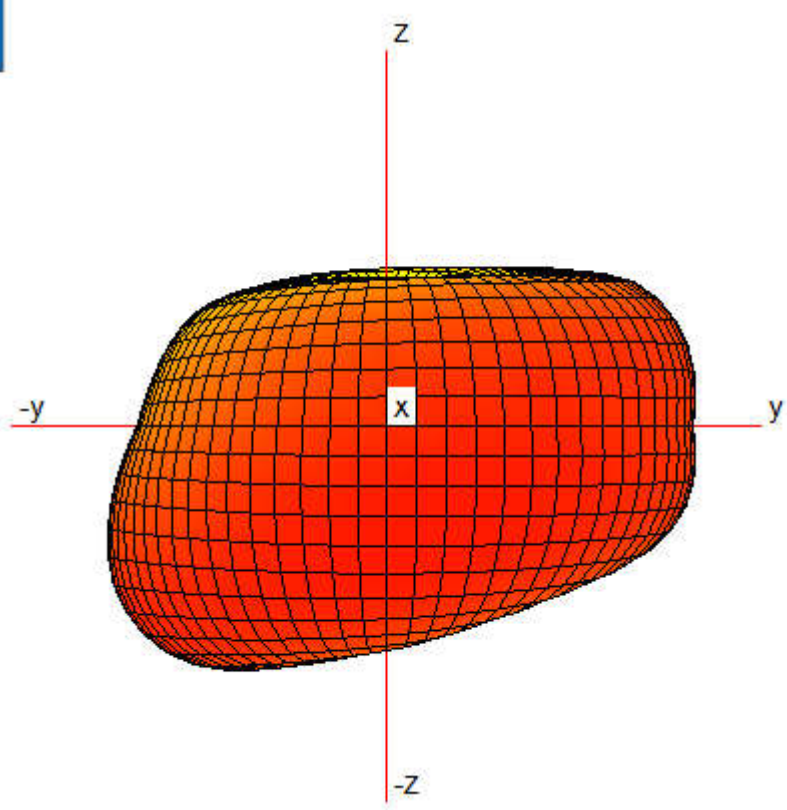
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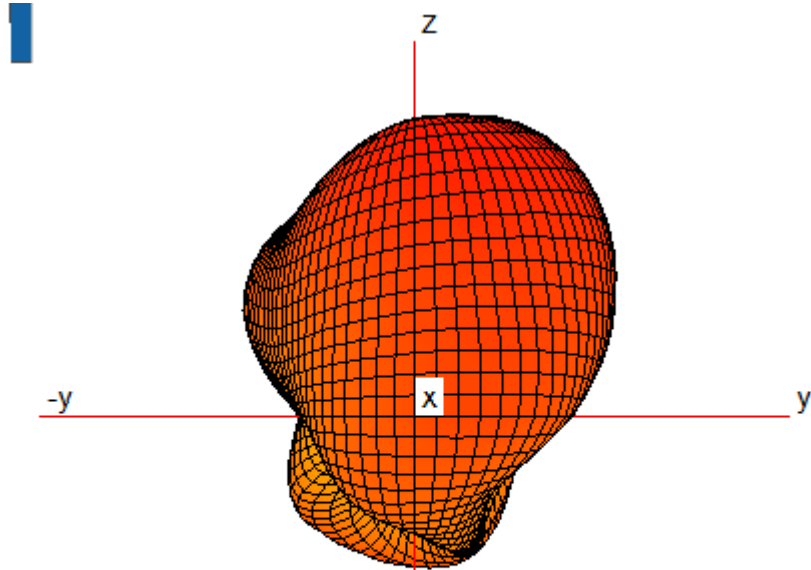
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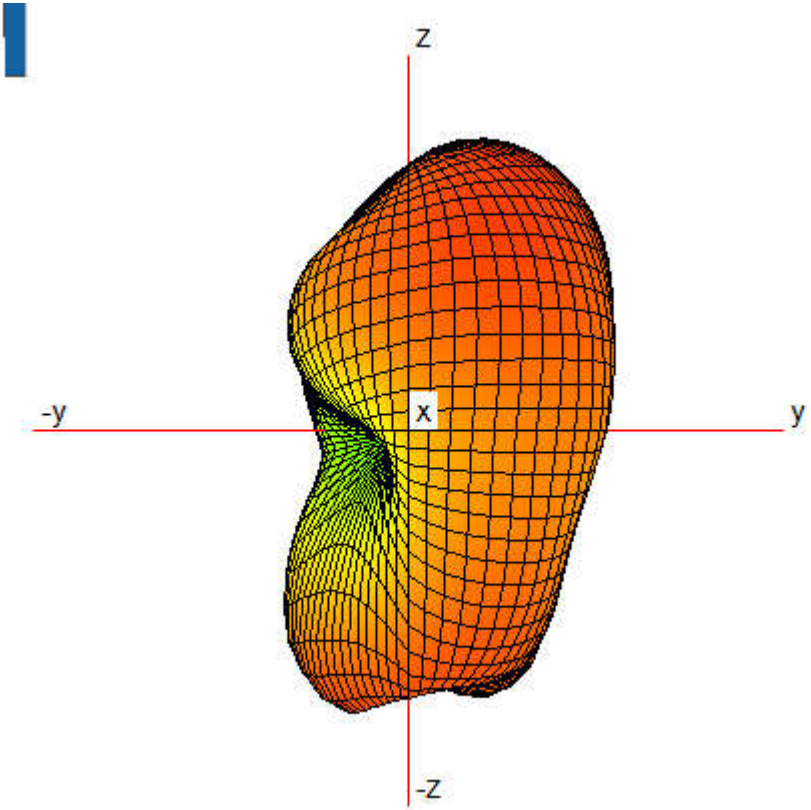
LTE B28



LTE B34

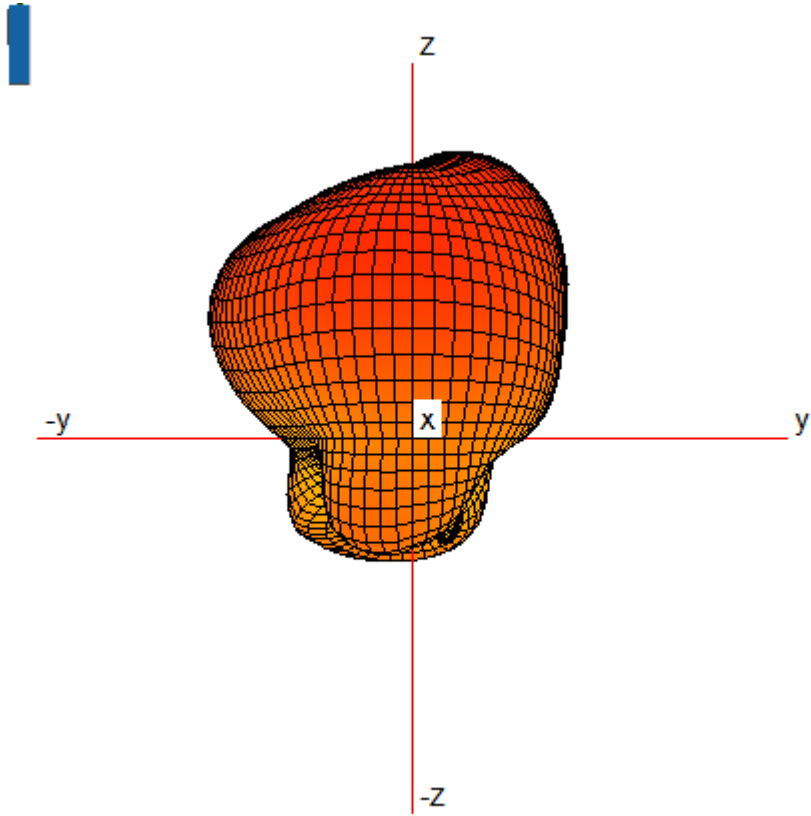


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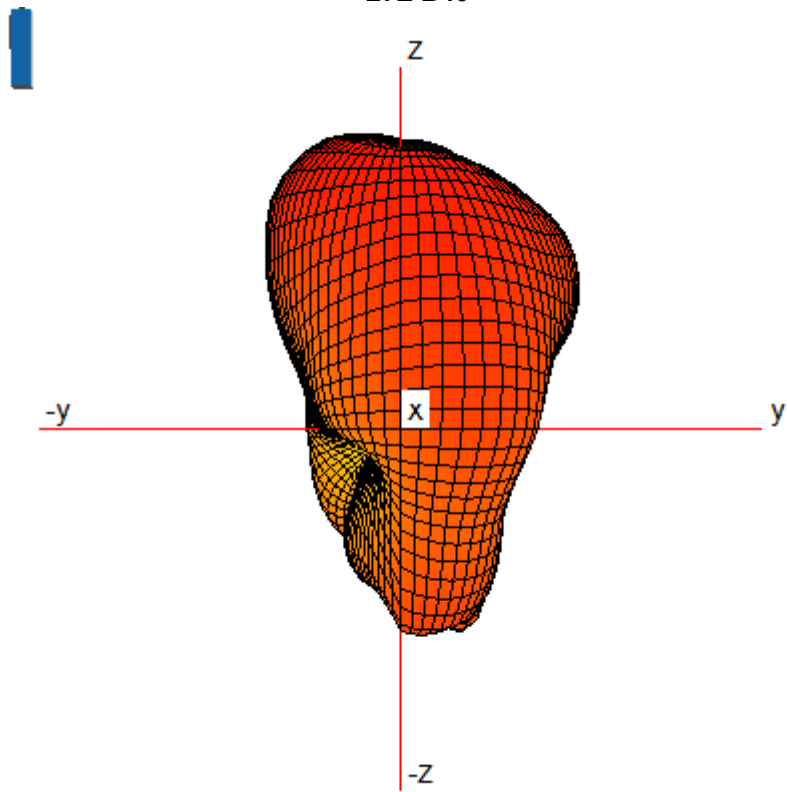


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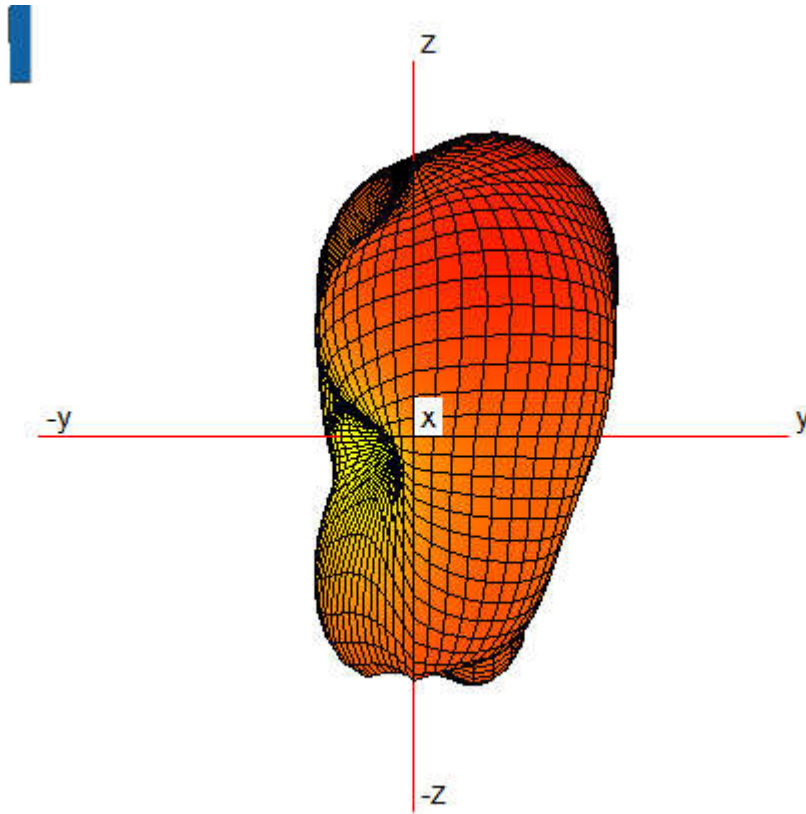




LTE B40



LTE B41



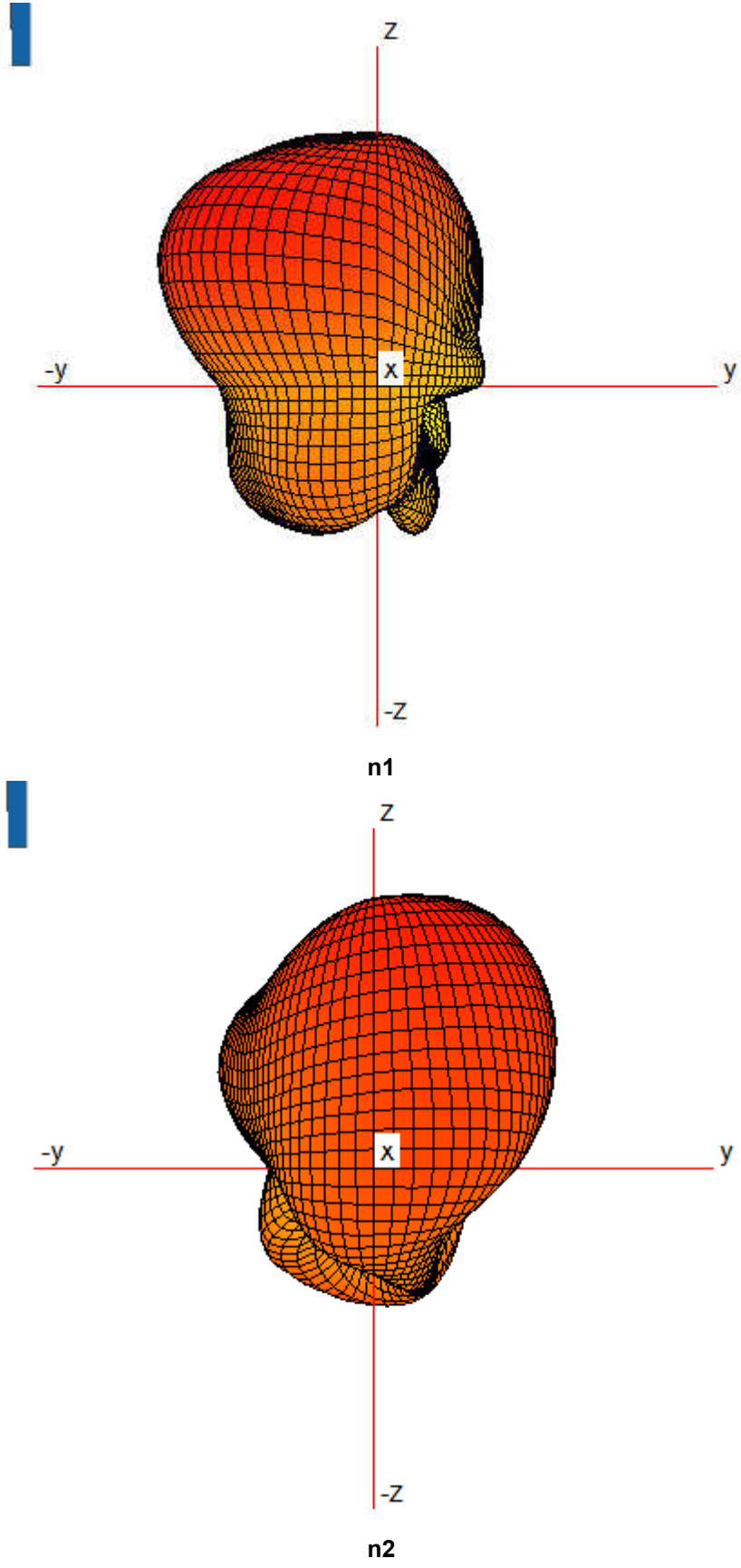
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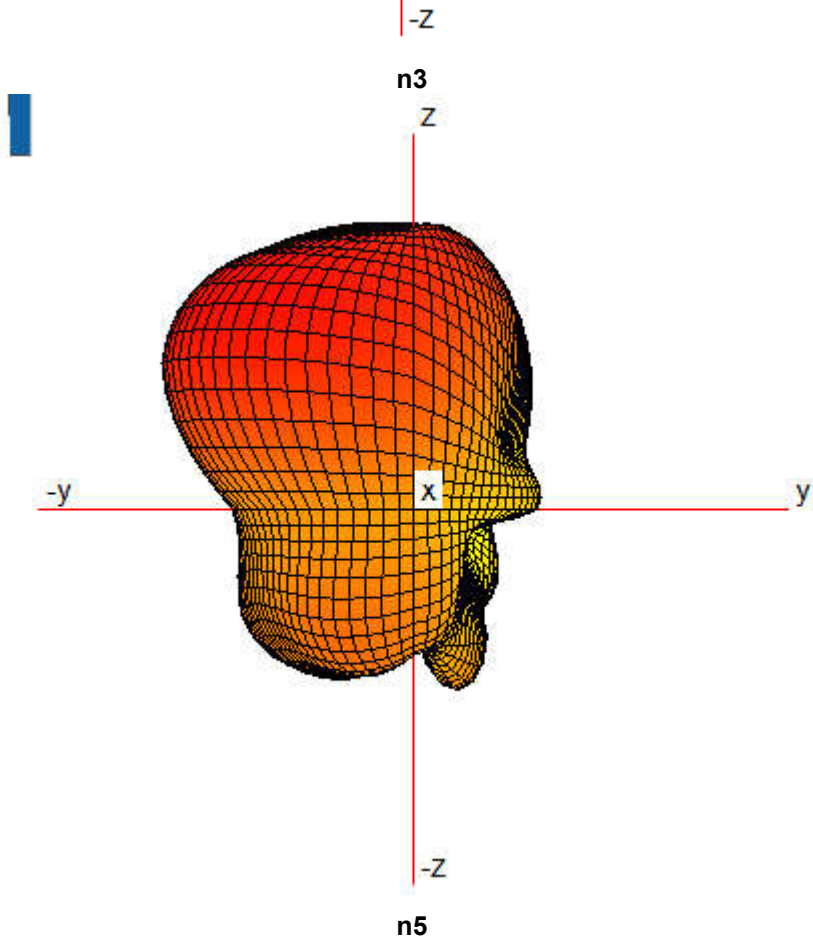
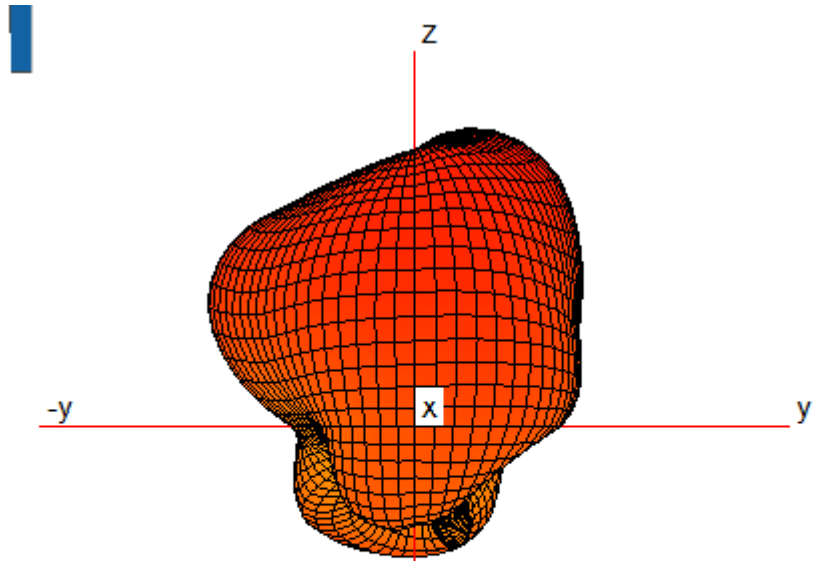
**LTE B42**

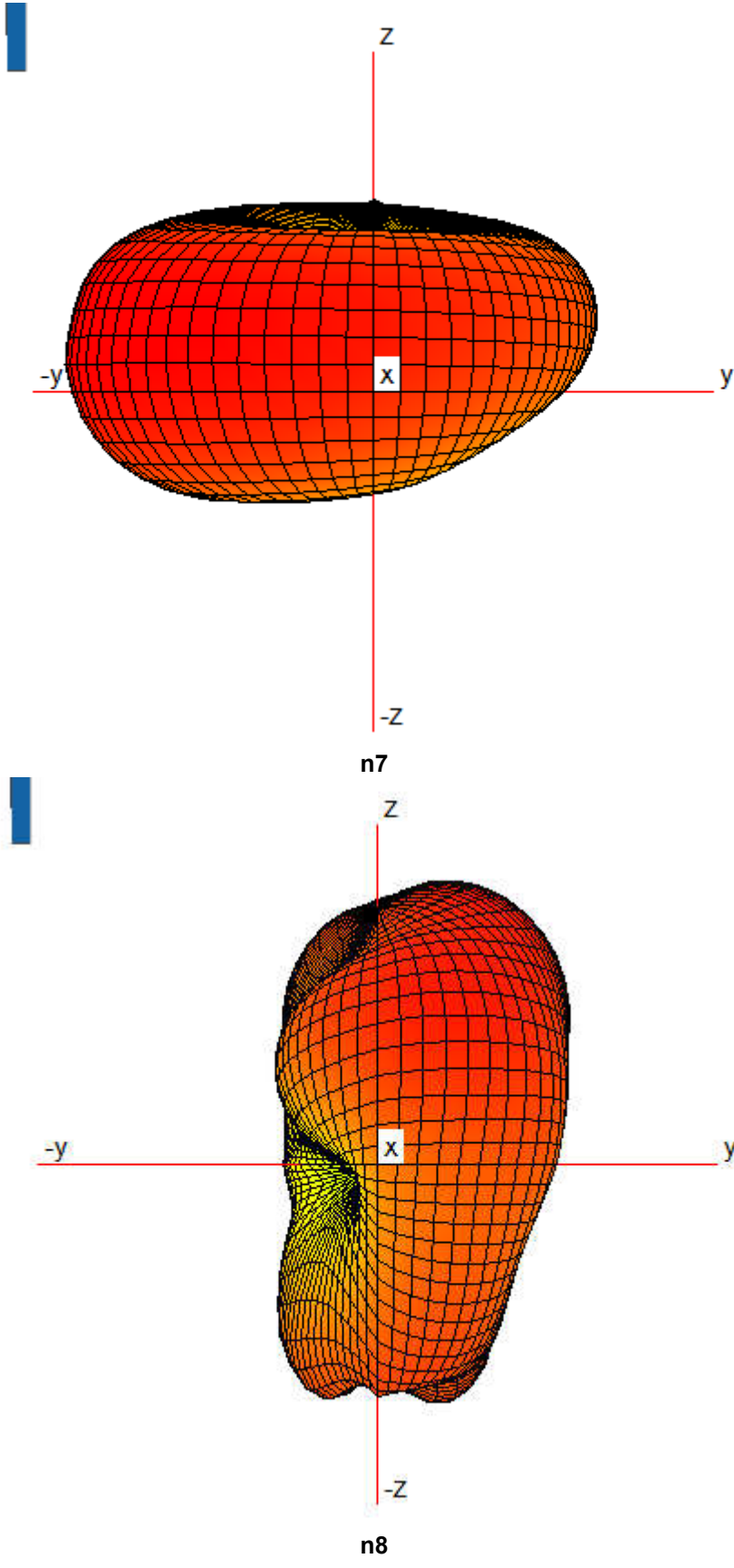
**LTE B43**

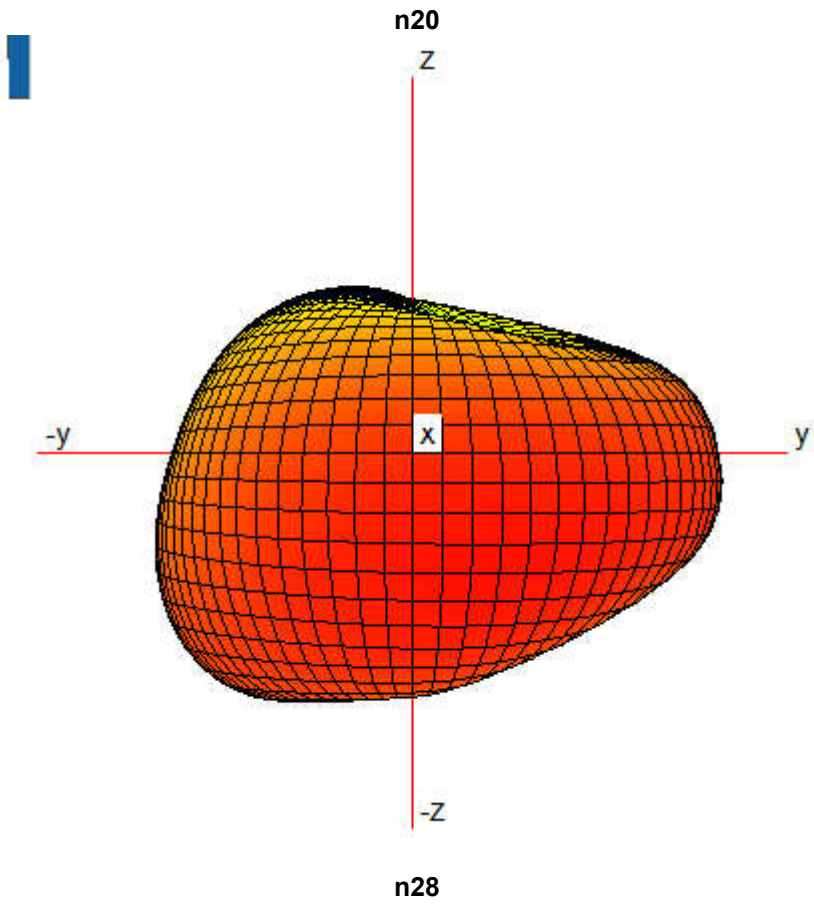
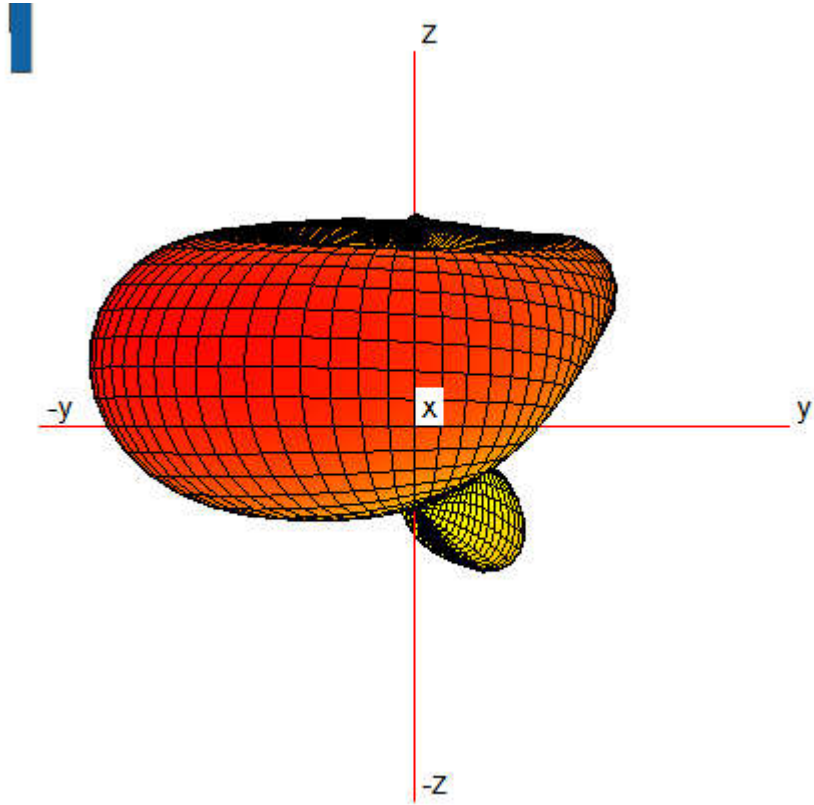
**LTE B48**

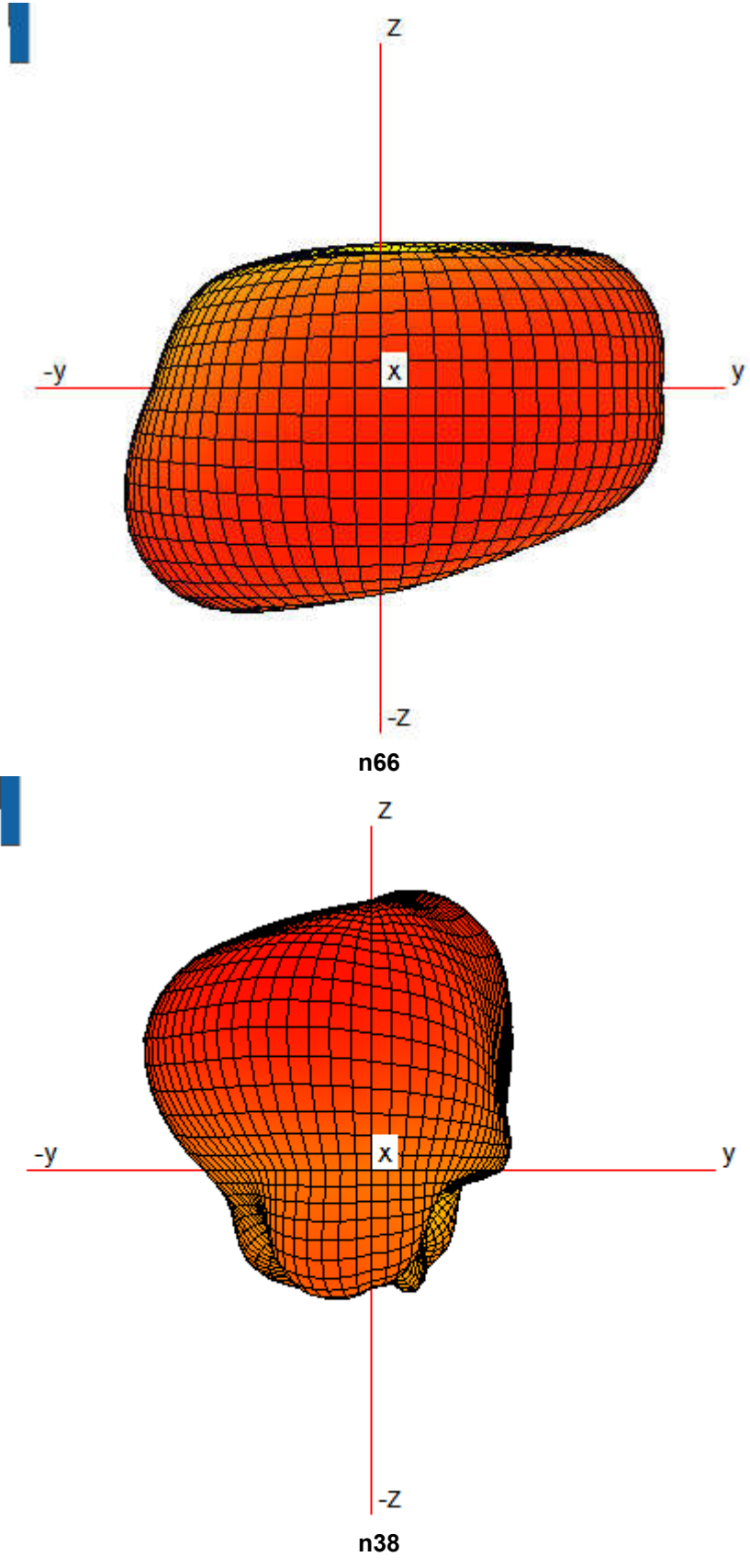
**LTE B66**

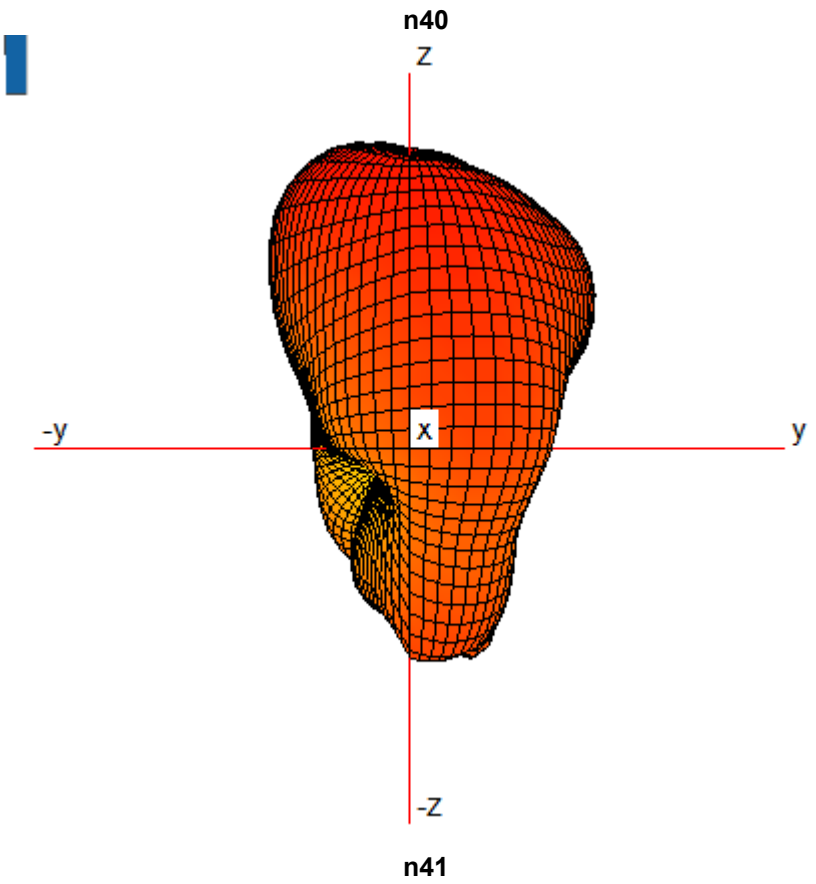
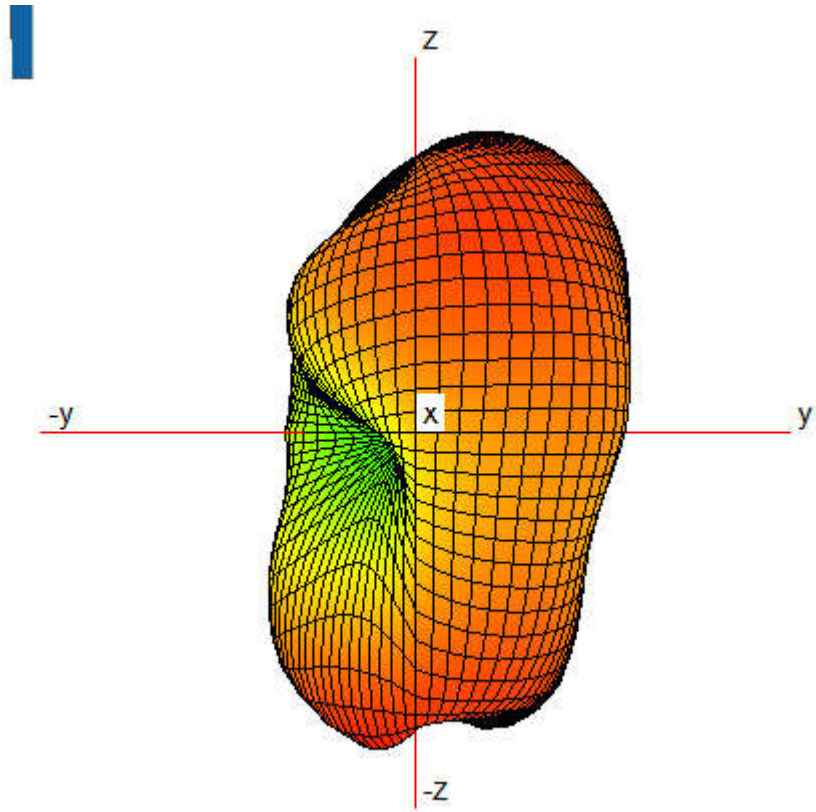




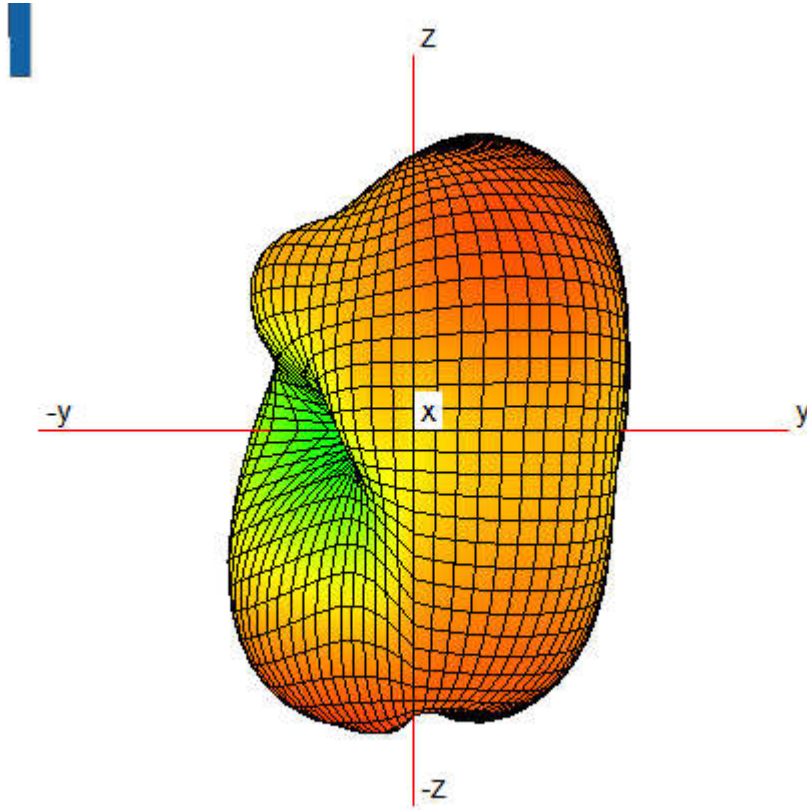






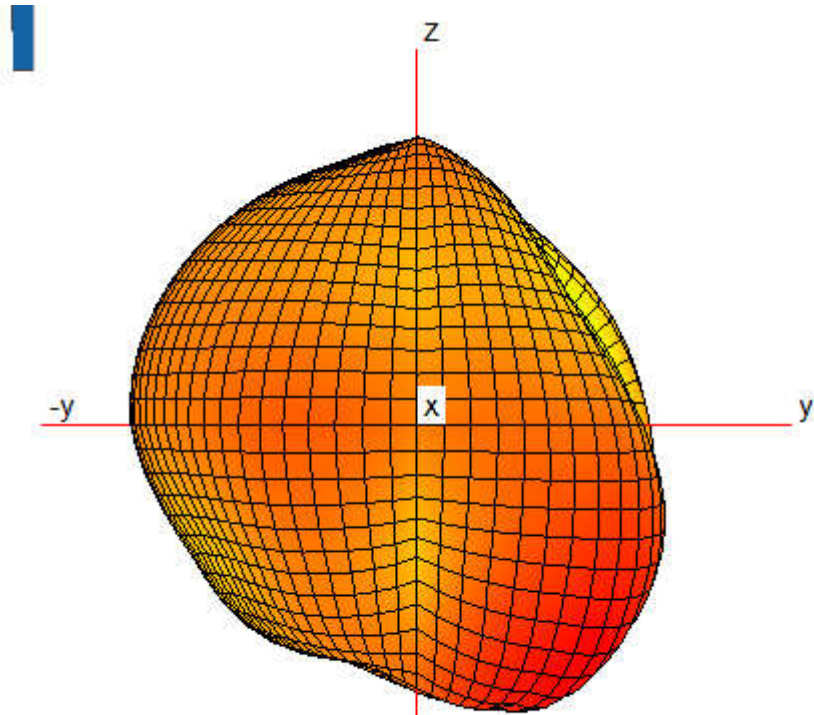




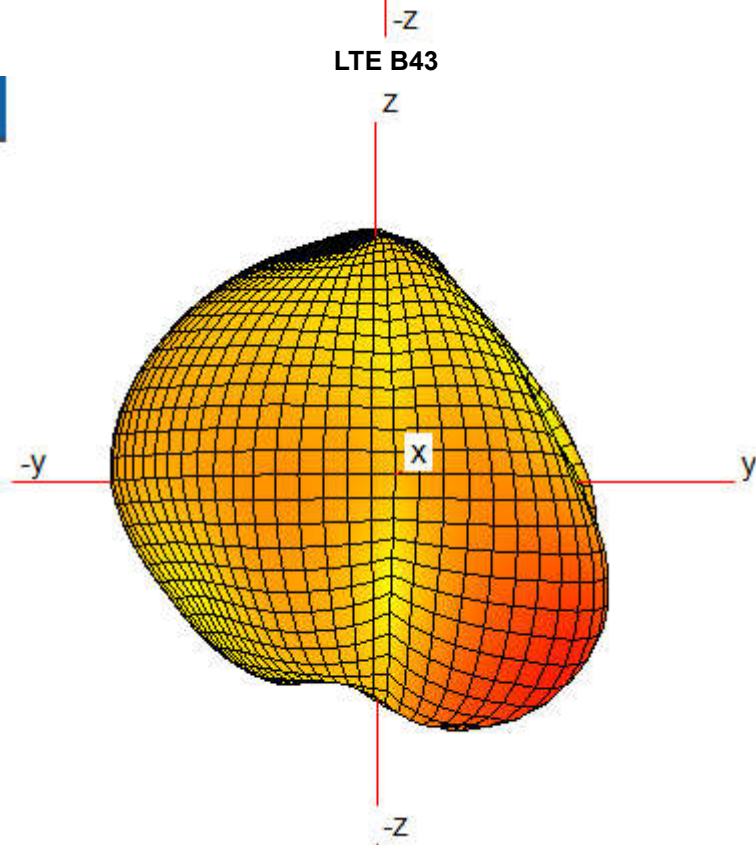


**ANT2**

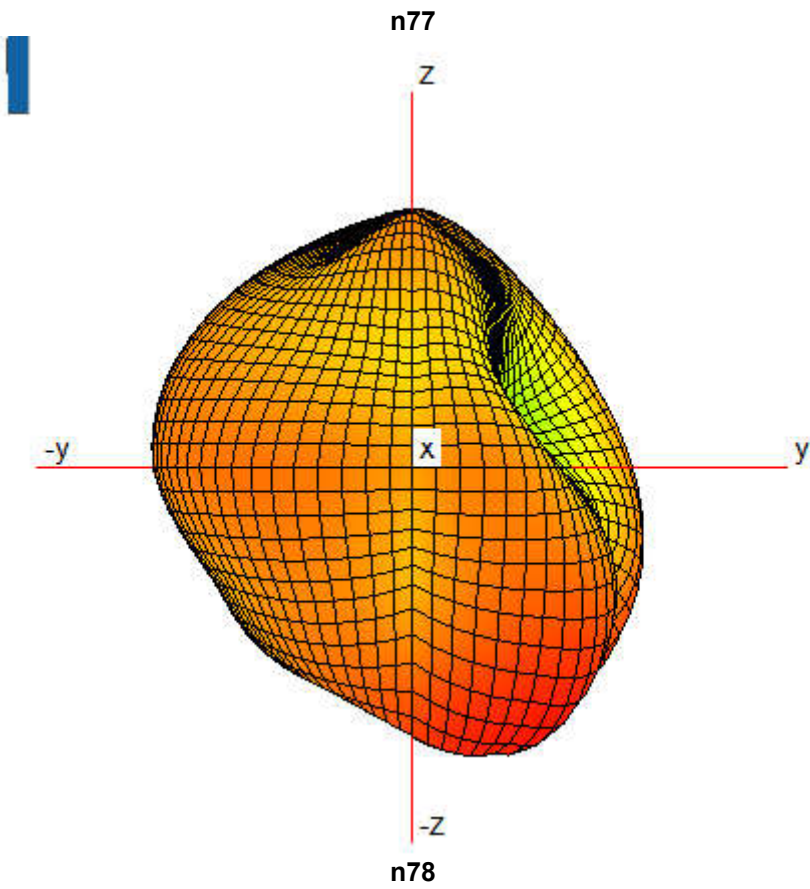
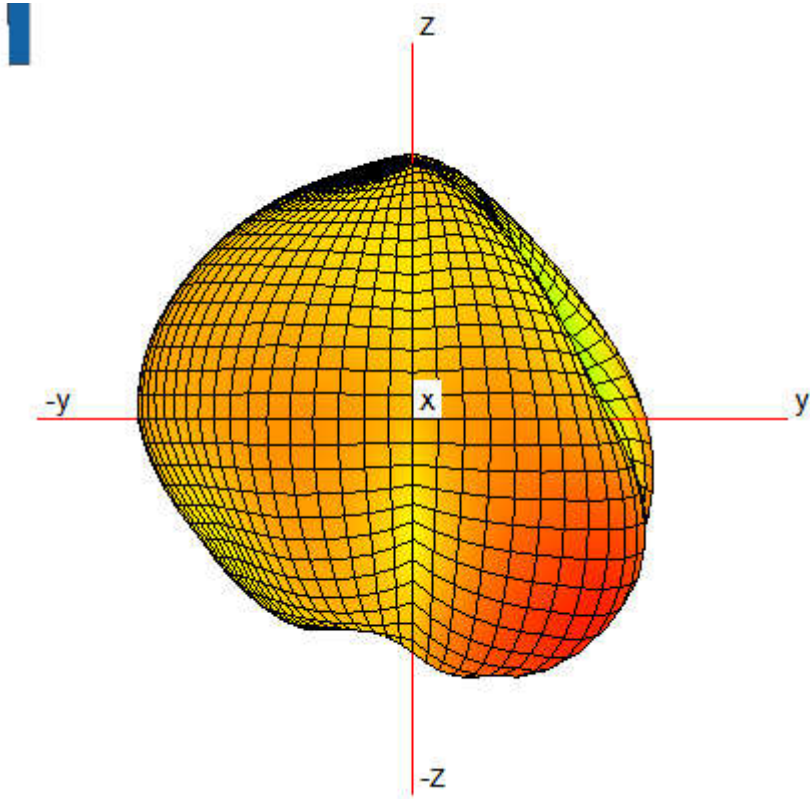
**LTE B42**

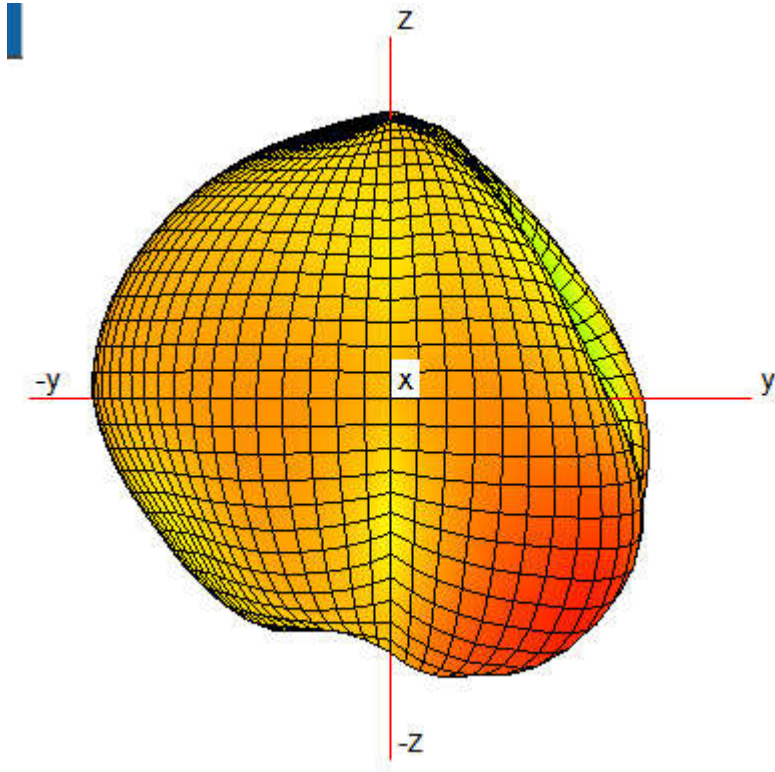


LTE B43



LTE B48

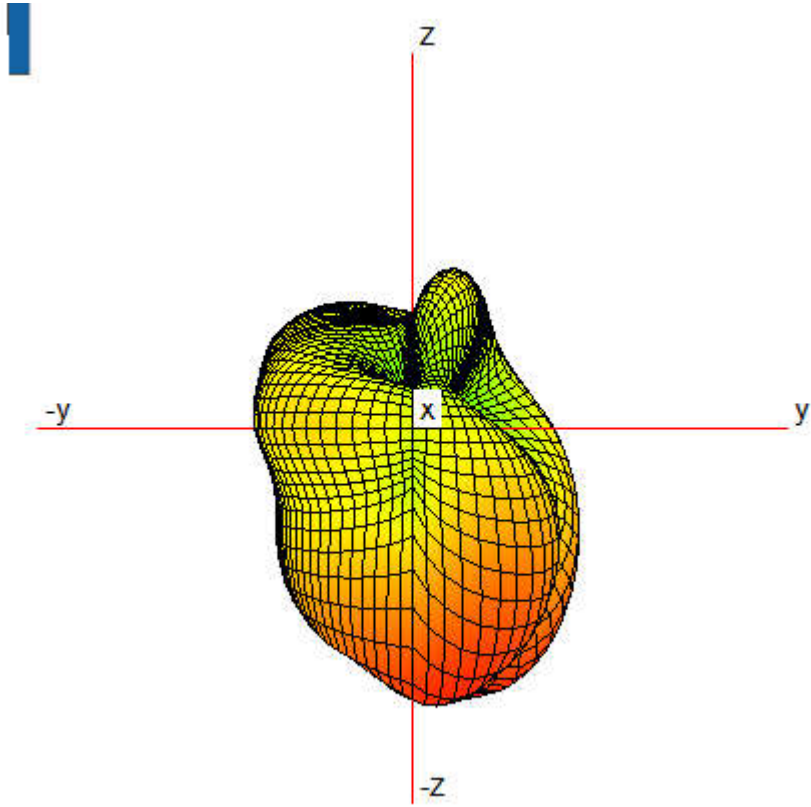




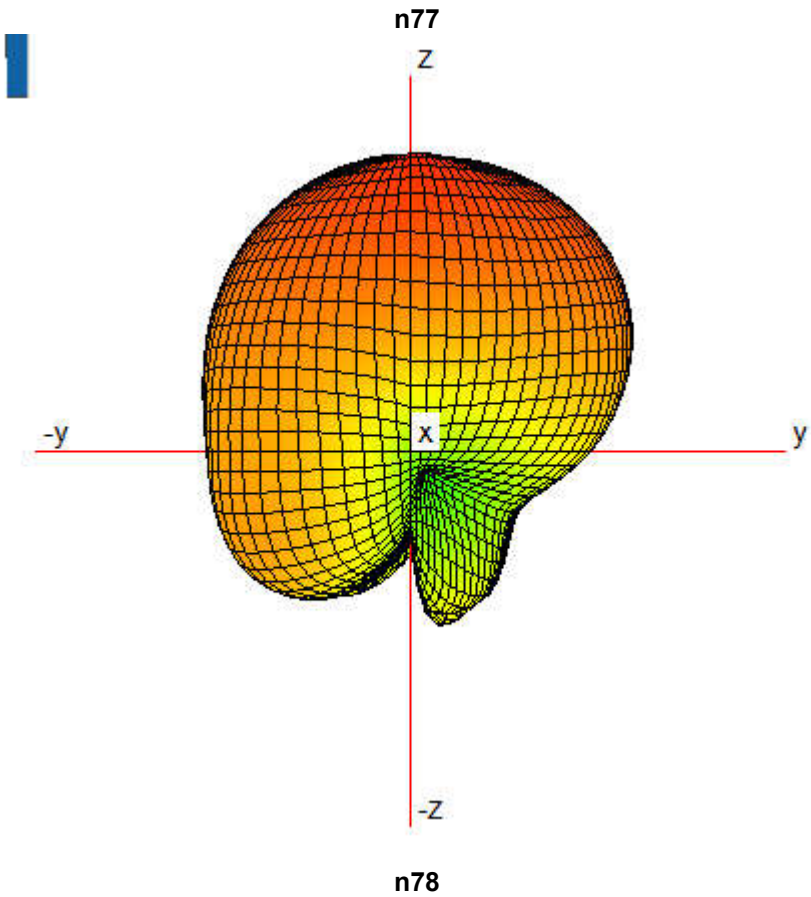
**ANT3**

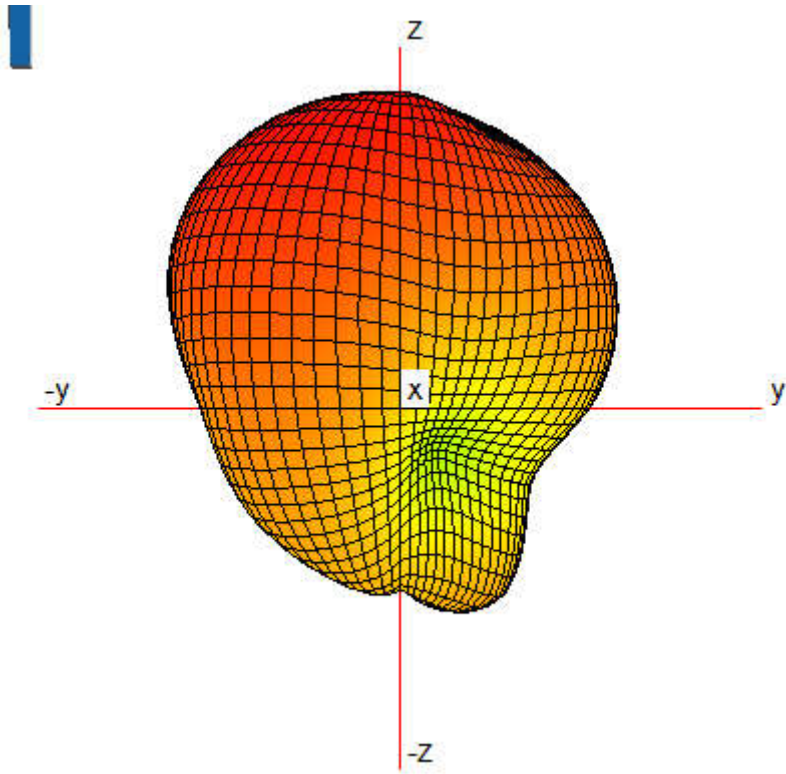
**n77**

**n78**

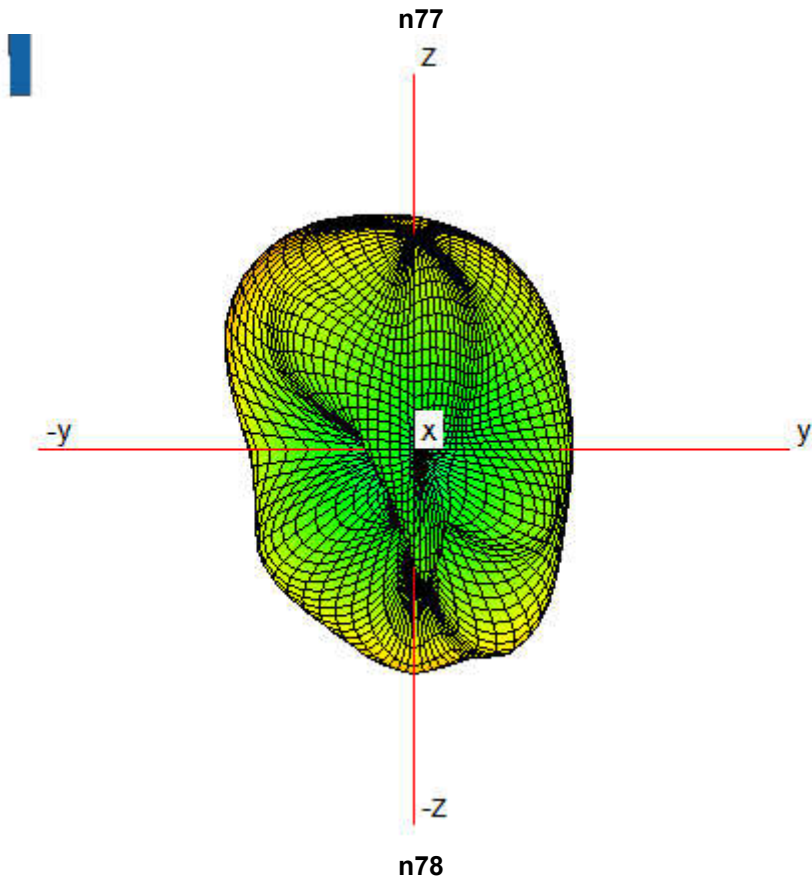


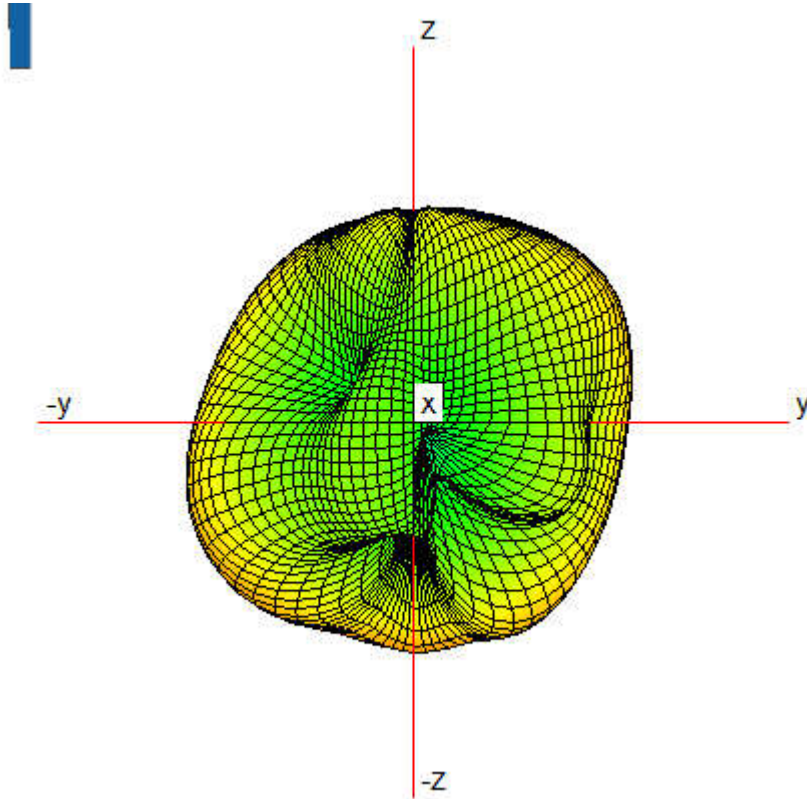
ANT5





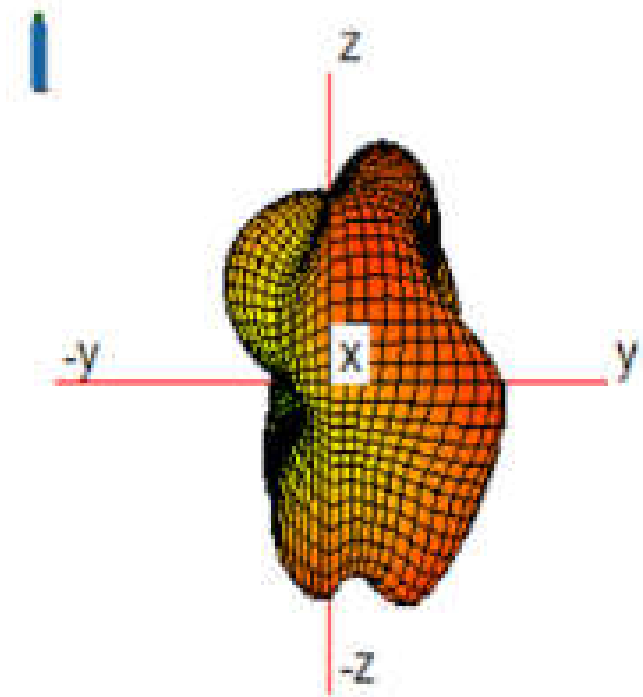
ANT7





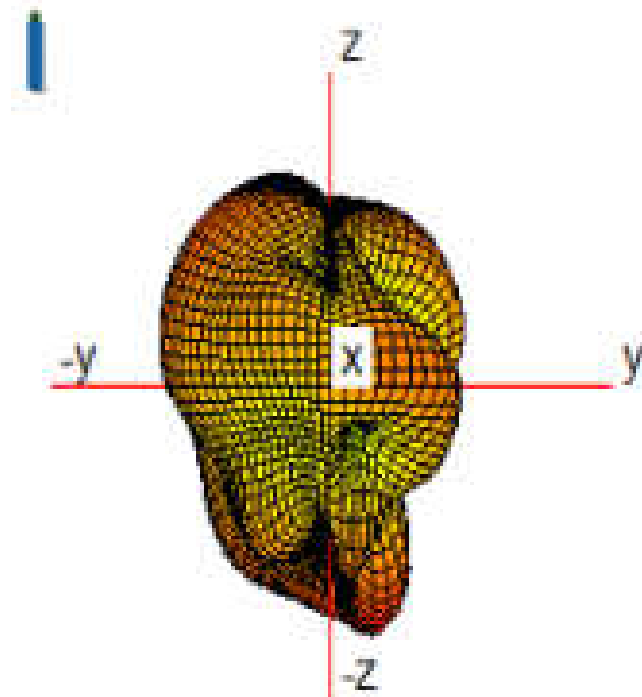
**ANT4 WIFI 2.4G TRx0**

**2450MHz**



**ANT2 WIFI 5G TRx0**

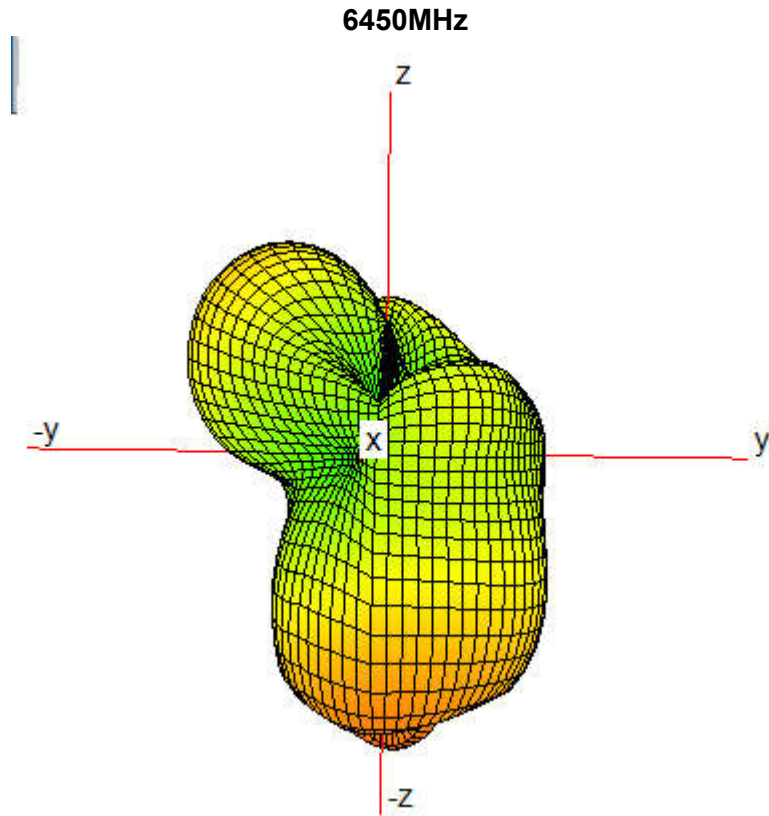
5450MHz



1

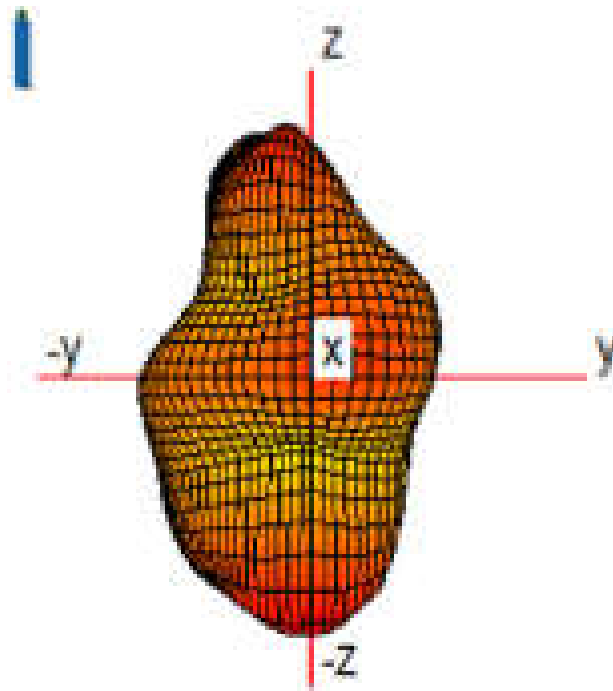


**ANT2 WIFI 6E TRx0**

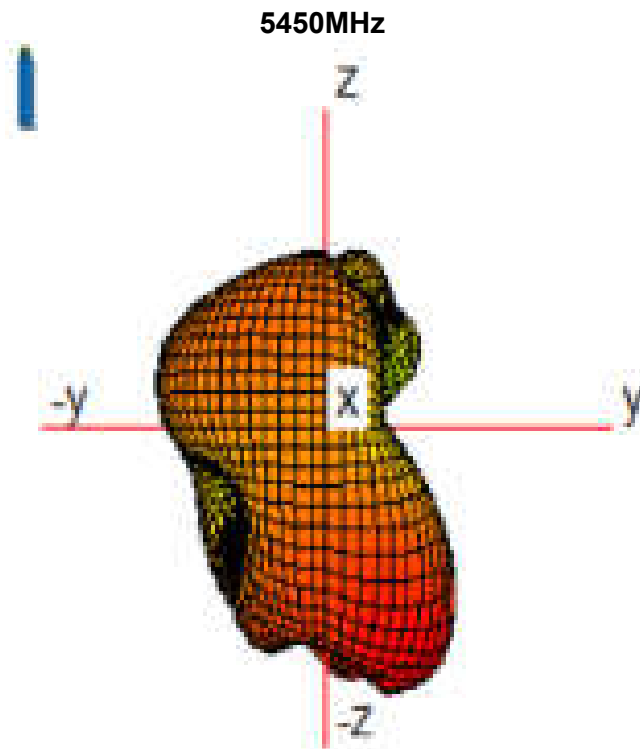


**ANT6 WIFI 2.4G/5G TRx1**

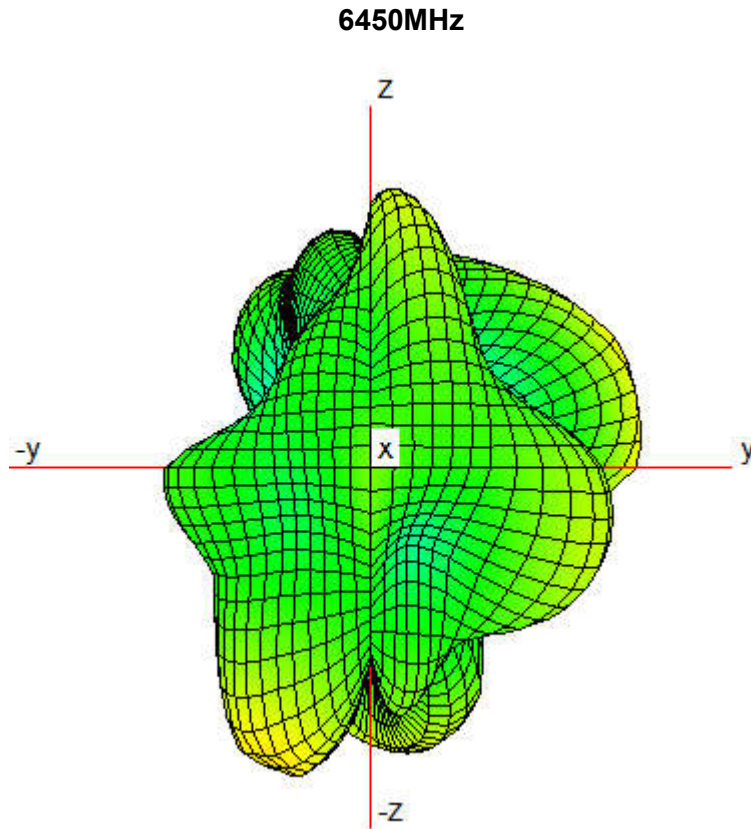
2450MHz



**ANT6 WIFI 5G TRx1**



**ANT6 WIFI 6E TRx1**



**S**