

KI7 LTE Antenna Report in DVT2

2024/12/06



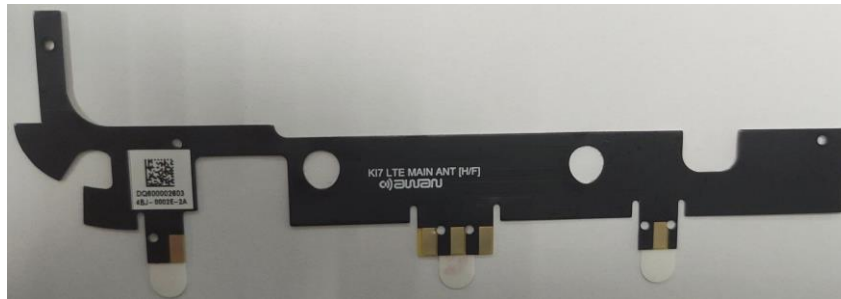
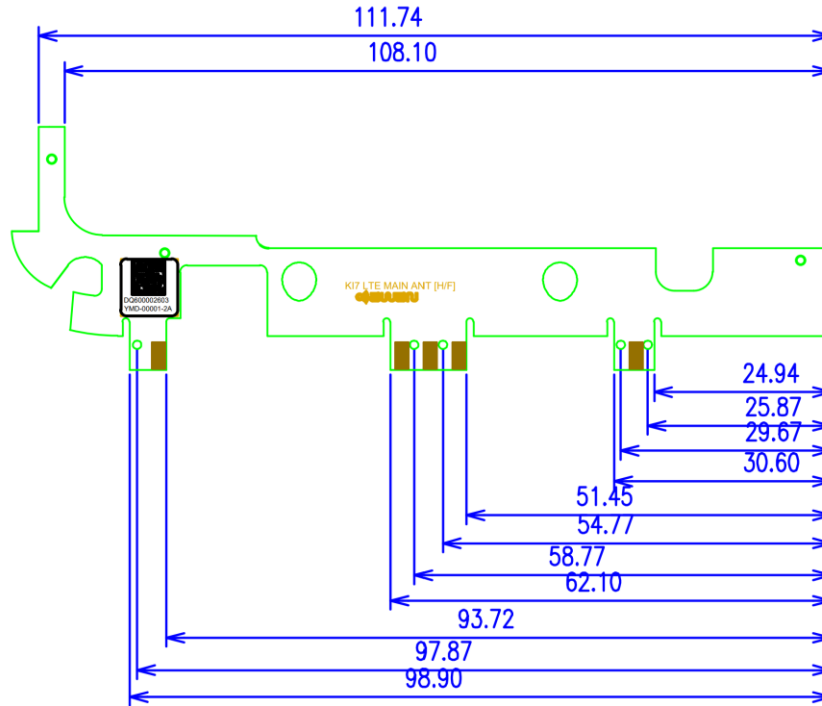
Quanta
Product Design Center

LTE Antenna Information

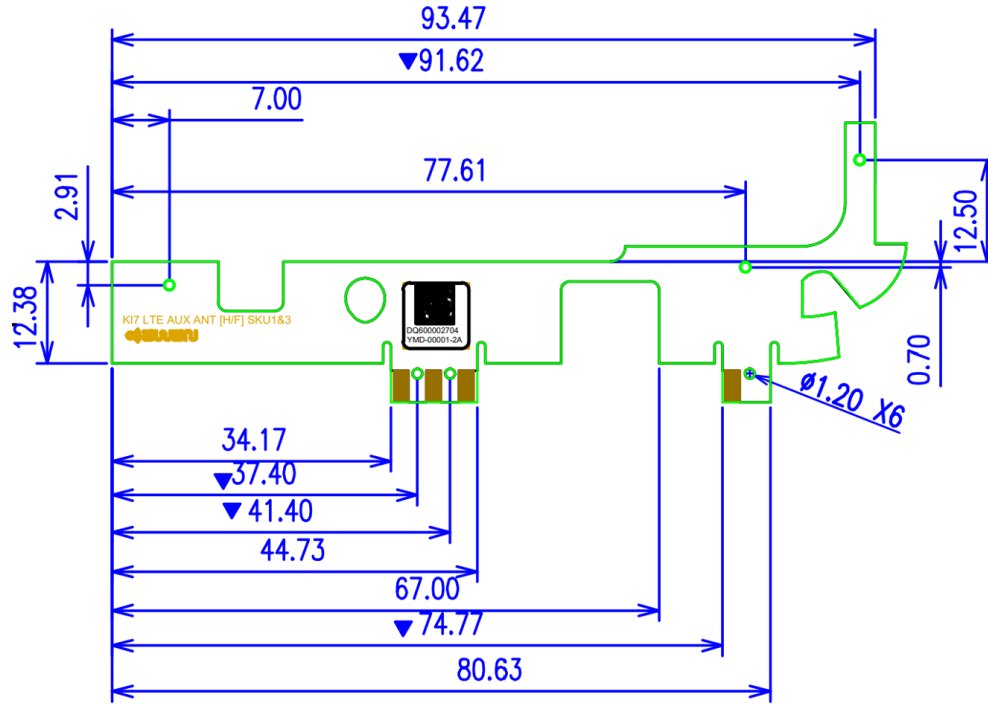
Antenna	Antenna Type	Manufacturer name	Model Name
LTE Main	Monopole Antenna	Advanced Wireless & Antenna INC.	ALF00-000026B
LTE Aux	Monopole Antenna	Advanced Wireless & Antenna INC.	ALF00-000027B



LTE Main Antenna Dimensions and Photos



LTE Aux Antenna Dimensions and Photos



LTE Antenna Placement

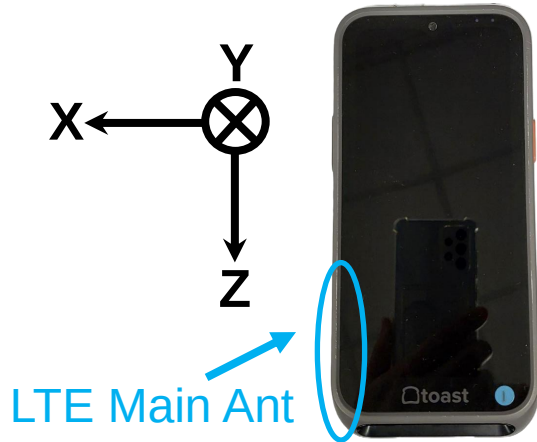


DVT2 - LTE Ant Radiation Efficiency

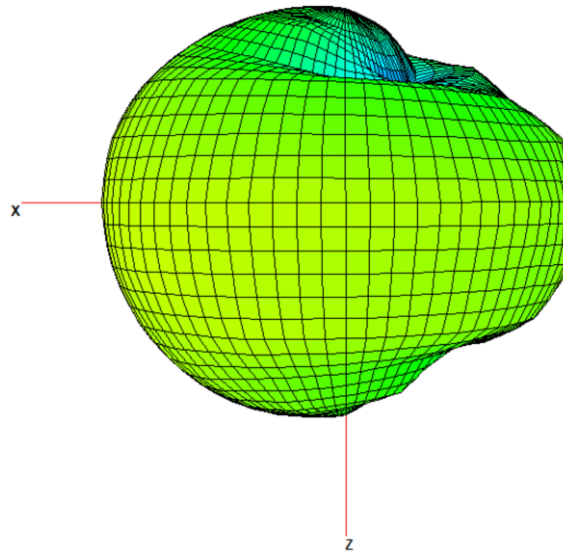
	Freq. (MHz)	LTE Main Antenna in DVT2				LTE Aux Antenna in DVT2			
		Radiation Efficiency (dB)	Radiation Efficiency (%)	Average (dB)	Average (%)	Radiation Efficiency (dB)	Radiation Efficiency (%)	Average (dB)	Average (%)
Low Band	699	-7.08	19.6	-7.69	17.0	-8.74	13.4	-7.89	16.3
	715	-6.43	22.7			-6.72	21.3		
	740	-6.41	22.8			-6.68	21.5		
	758	-6.73	21.2			-6.49	22.4		
	782	-6.62	21.8			-6.46	22.6		
	791	-6.66	21.6			-6.88	20.5		
	803	-6.89	20.5			-7.35	18.4		
	821	-8.38	14.5			-8.43	14.4		
	832	-8.58	13.9			-8.69	13.5		
	862	-9.26	11.9			-9.29	11.8		
	900	-9.83	10.4			-9.82	10.4		
	925	-9.91	10.2			-9.68	10.8		
	960	-9.90	10.2			-9.82	10.4		
Middle Band	1710	-5.74	26.6	-5.03	31.4	-4.56	35.0	-5.12	30.8
	1785	-5.47	28.4			-4.34	36.8		
	1880	-5.51	28.1			-4.84	32.8		
	1950	-5.01	31.5			-4.80	33.1		
	1990	-5.04	31.3			-5.27	29.7		
	2010	-4.96	31.9			-5.44	28.6		
	2110	-4.85	32.7			-5.60	27.5		
	2140	-4.51	35.4			-5.78	26.5		
	2170	-4.39	36.4			-5.73	26.8		
High Band	2390	-4.37	36.6	-4.82	32.9	-5.24	29.9	-5.30	29.5
	2500	-4.38	36.5			-4.71	33.8		
	2570	-5.01	31.5			-5.08	31.1		
	2620	-5.47	28.4			-5.80	26.3		
	2690	-5.00	31.6			-5.75	26.6		



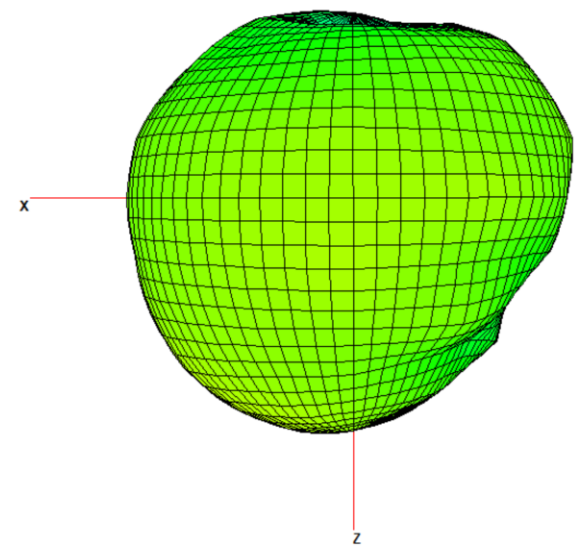
LTE Main Ant 3D Radiation Pattern



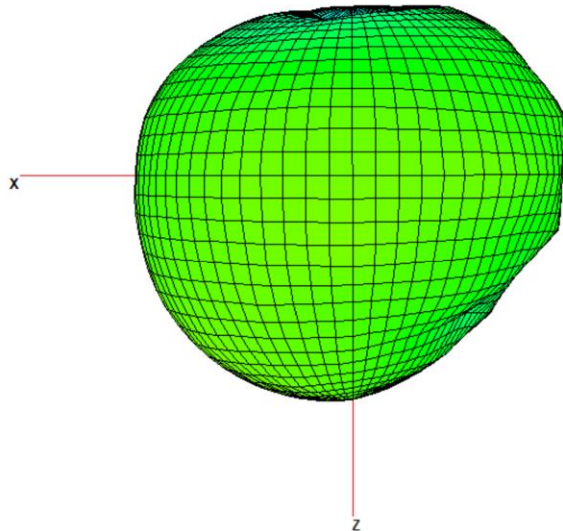
B12/B28



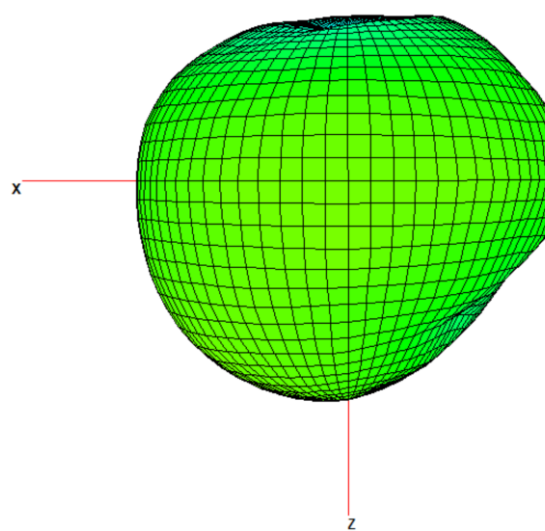
B13



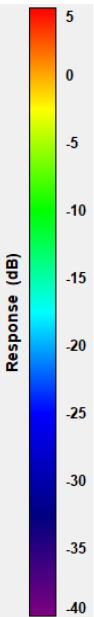
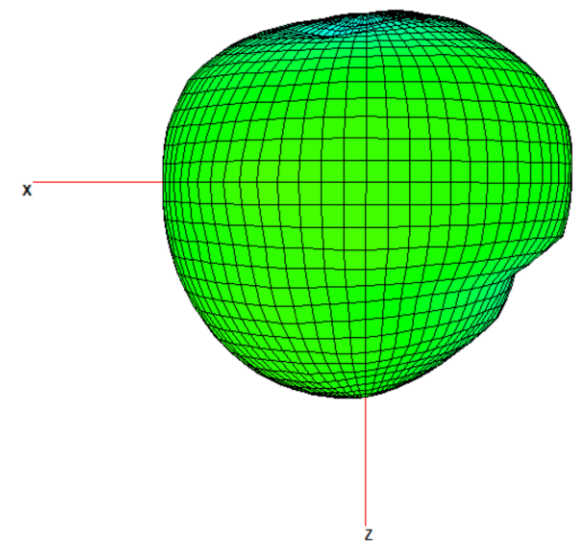
B18/B26



B5/B19/B20

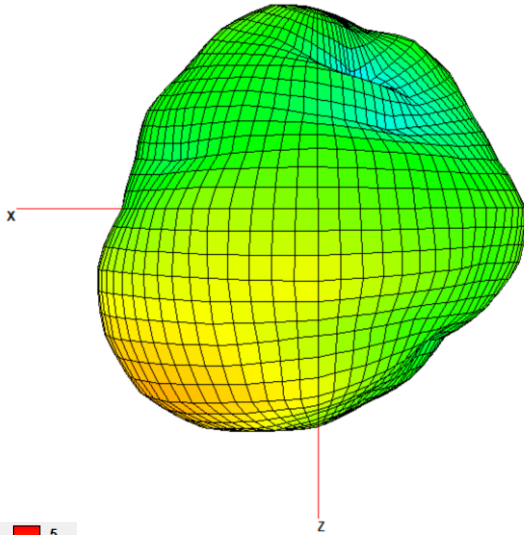


B8

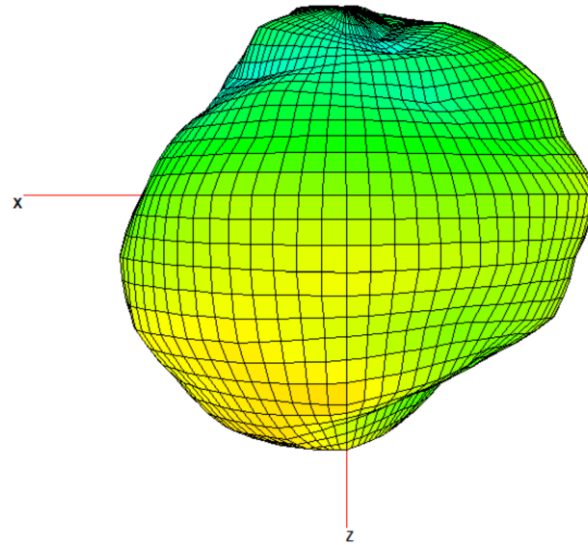


LTE Main Ant 3D Radiation Pattern

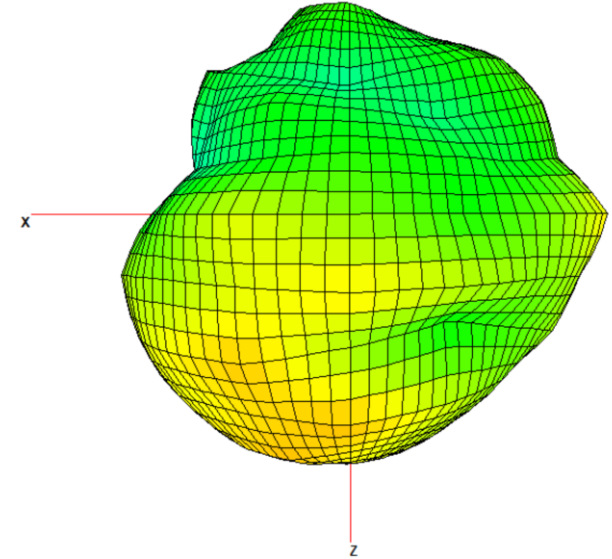
B3/B4/B66



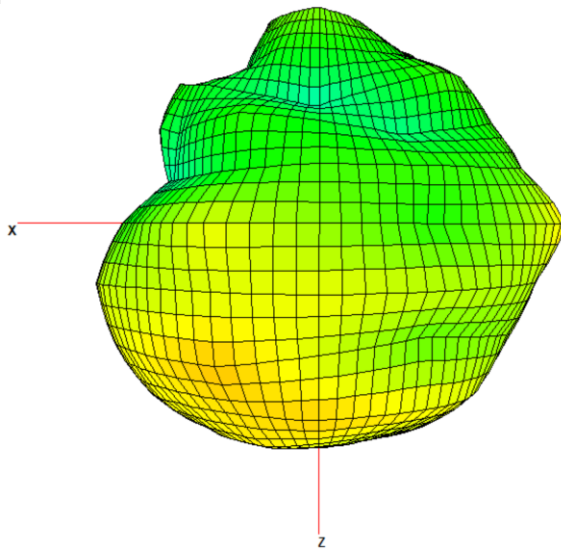
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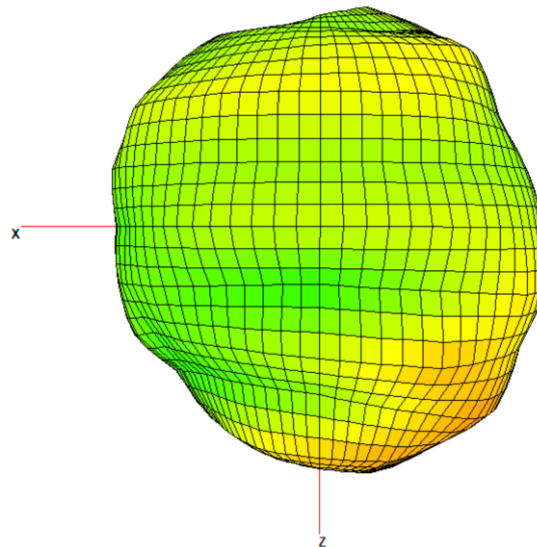
B1



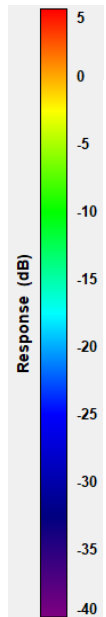
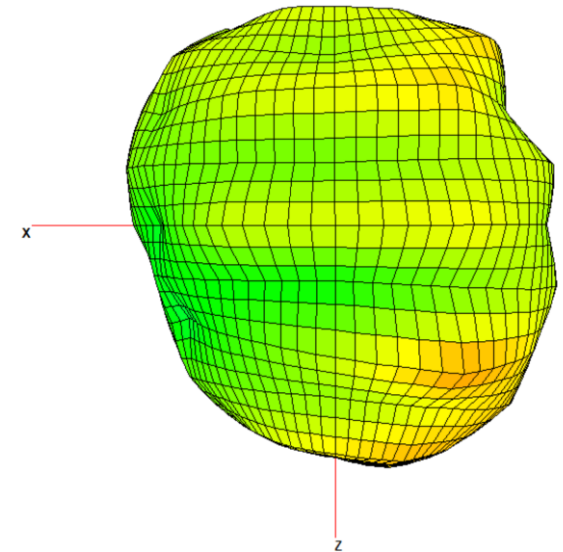
B34



B40



B7/B38/B41

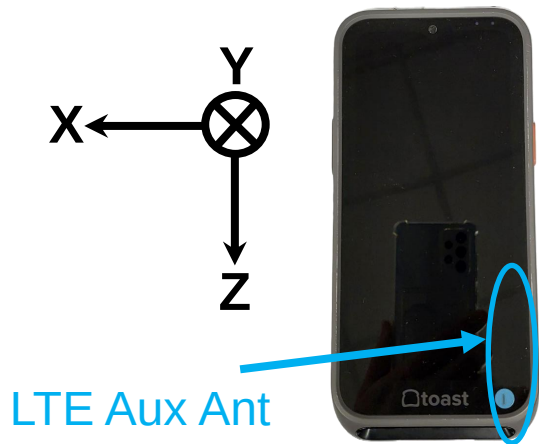


LTE Main Ant Peak Gain

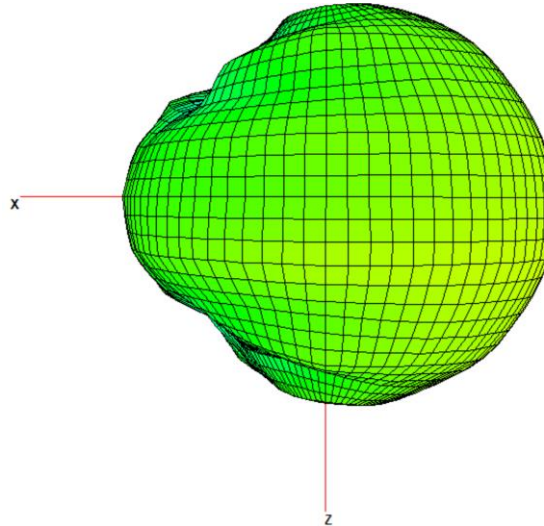
	Freq. (MHz)	Type1 LTE Main Ant Peak Gain	
		Peak Gain (dBi)	Band
Low Band	699	-3.93	
	715	-3.29	B12/B28
	740	-3.46	
	758	-4.11	
	782	-3.83	B13
	791	-3.69	
	803	-3.65	
	821	-5.09	B18/B26
	832	-5.37	B5/B19/B20
	862	-6.17	
	900	-6.41	B8
	925	-6.28	
	960	-5.89	
Middle Band	1710	0.19	B3/B4/B66
	1785	0.13	
	1880	0.35	B2/B25/B39
	1950	0.42	B1
	1990	0.15	
	2010	0.12	B34
	2110	0.10	
	2140	0.30	
	2170	0.38	
High Band	2390	0.62	B40
	2500	0.74	
	2570	0.97	B7/B38/B41
	2620	0.76	
	2690	0.58	



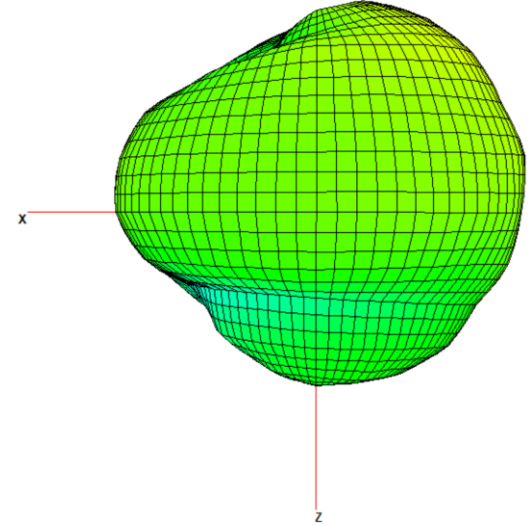
LTE Aux Ant 3D Radiation Pattern



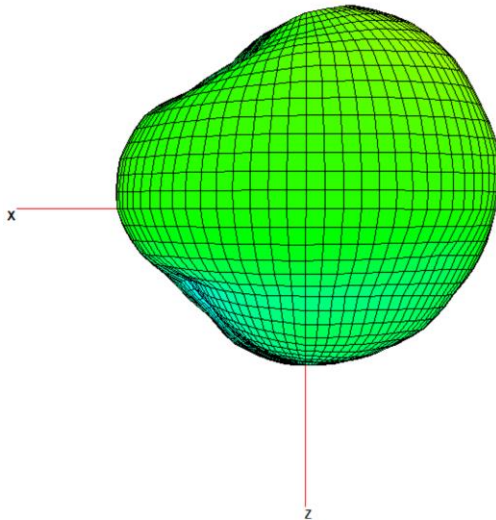
B12/B28



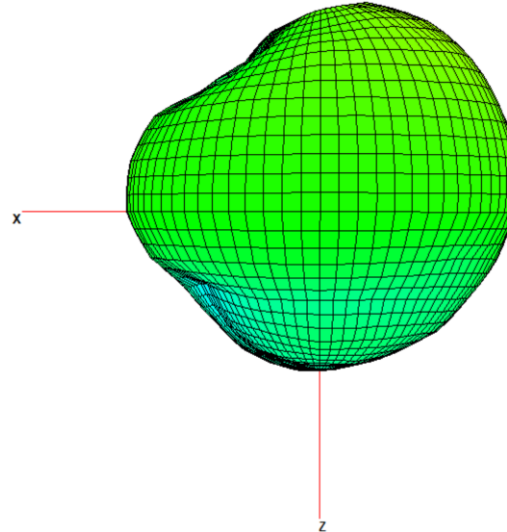
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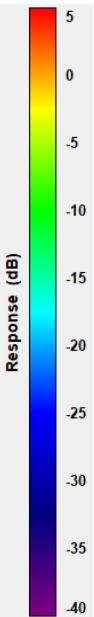
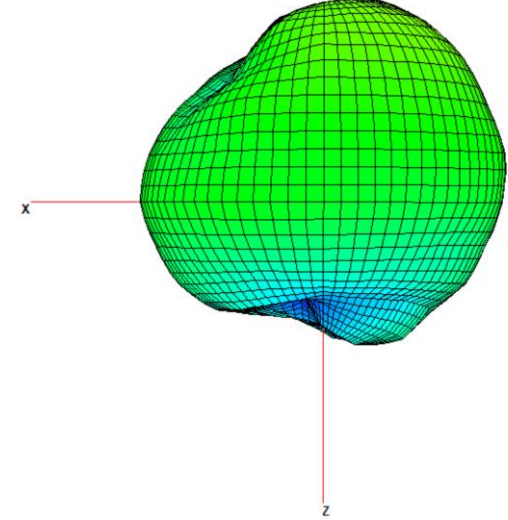
B18/B26



B5/B19/B20



B8

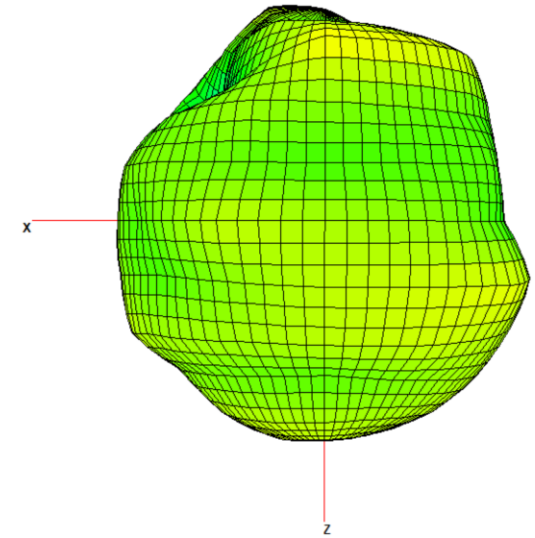
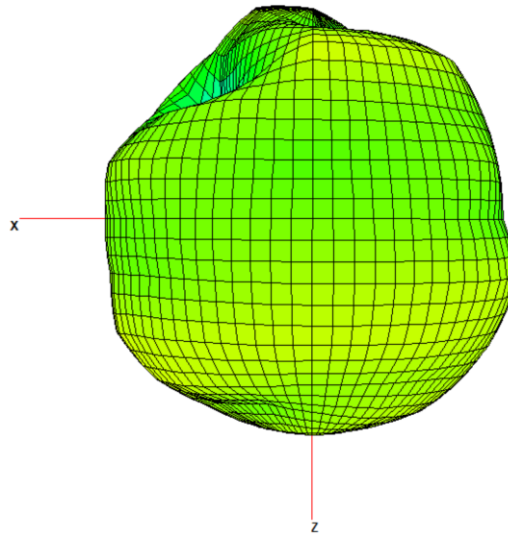
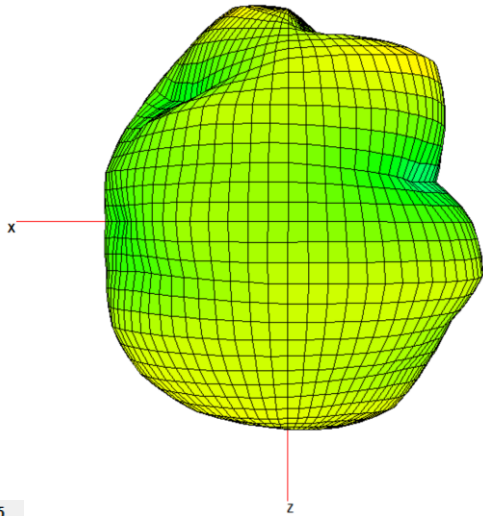


LTE Aux Ant 3D Radiation Pattern

B3/B4/B66

B2/B25/B39

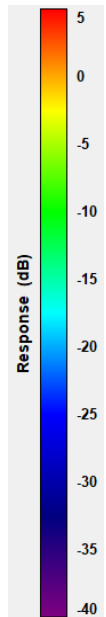
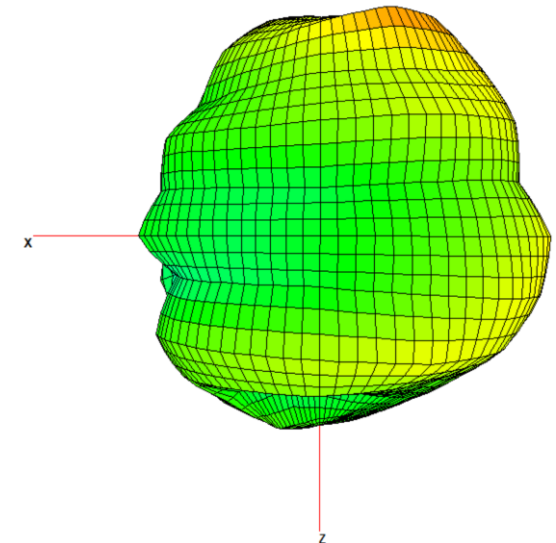
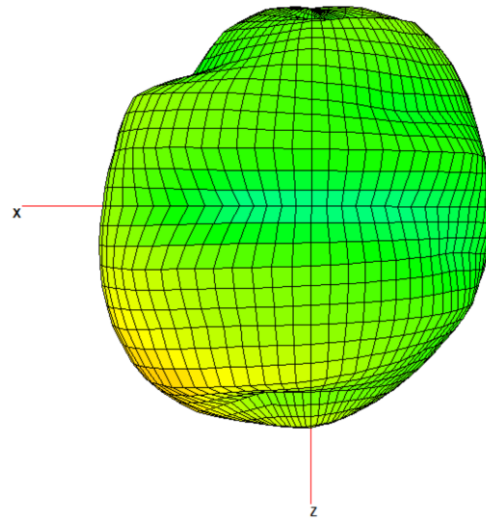
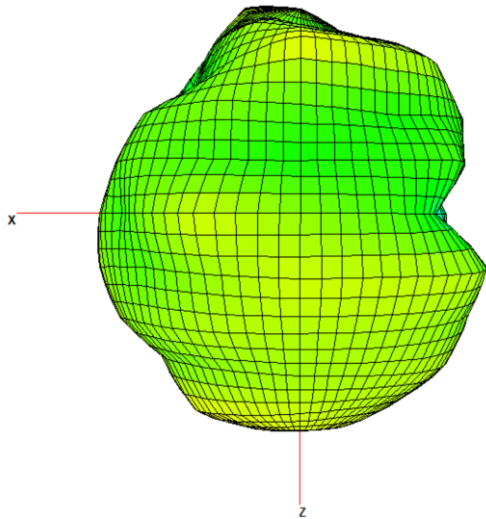
B1



B34

B40

B7/B38/B41



LTE Aux Ant Peak Gain

	Freq. (MHz)	LTE Aux Ant Peak Gain	
		Peak Gain (dBi)	Band
Low Band	699	-5.63	
	715	-3.73	B12/B28
	740	-3.88	
	758	-3.36	
	782	-2.57	B13
	791	-2.92	
	803	-3.47	
	821	-4.67	B18/B26
	832	-4.91	B5/B19/B20
	862	-5.10	
	900	-5.47	B8
	925	-5.73	
	960	-5.26	
Middle Band	1710	-0.83	B3/B4/B66
	1785	-0.92	
	1880	-0.94	B2/B25/B39
	1950	-0.25	B1
	1990	-0.29	
	2010	-0.37	B34
	2110	-0.61	
	2140	-0.09	
	2170	0.55	
High Band	2390	1.61	B40
	2500	0.57	
	2570	1.22	B7/B38/B41
	2620	-0.18	
	2690	-0.59	

