



TAOGLAS®

Datasheet

Comet Series

Part No:
MA322.B.001

Description

2-in-1 Comet Series 2*4G MIMO Adhesive / Magnetic Mount Puck Antenna

Features:

2*4G MIMO 699 to 849MHz/1710 to 1780MHz/ 2496 to 2690MHz
Cable: 2.8m 1.5DS
Connector: SMA (M) Straight

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Specification

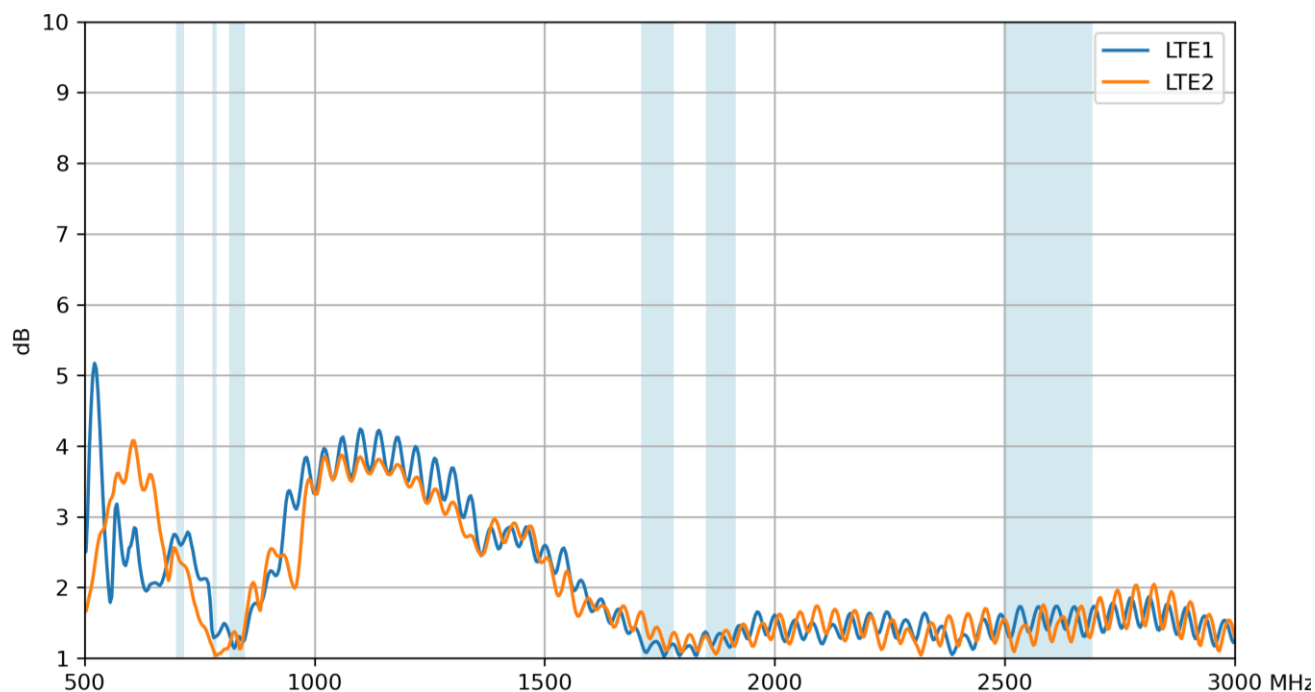
LTE Electrical									
Frequency (MHz)	WCDMA B1	WCDMA B8	LTE B1	LTE B3	LTE B8	LTE B20	LTE 28	LTE B40	LTE B71
	1920 - 1980	880 - 915	1920 - 1980	1710 - 1785	880 - 915	832 - 862	703 - 748	2300 - 2400	1710 - 1780
Efficiency (%)									
LTE1	37.1	32.1	43.3	40.7	32.1	35.1	44.2	38.1	41.2
LTE2	38.8	42.7	45.9	44.9	42.7	38.8	33.3	39.6	44.3
Average Gain (dB)									
LTE1	-4.90	-5.77	-3.98	-3.94	-5.77	-4.54	-3.52	-4.19	-3.85
LTE2	-4.88	-4.02	-3.38	-3.51	-4.02	-4.11	-4.84	-4.03	-3.53
Peak Gain (dBi)									
LTE1	2.21	2.55	2.21	3.38	2.55	-0.80	-0.07	1.04	3.38
LTE2	2.09	1.81	2.09	2.68	1.81	2.47	0.75	0.47	2.68

LTE Electrical														
Frequency (MHz)	LTE B12	LTE B13	LTE B26	LTE B5	WCDMA BV	WCDMA BIV	LTE B4	LTE B66	WCDMA BII	LTE B2	LTE B25	LTE B7	LTE B38	LTE B41
	699-716	777-787	814-849	824-849	824-849	1710-1755	1710-1755	1710-1780	1850-1910	1850-1910	1850-1915	2500-2570	2570-2620	2496-2690
Efficiency (%)														
LTE1	43.3	27.0	30.8	32.2	32.2	38.8	38.8	41.2	40.8	40.8	39.7	31.7	32.3	29.4
LTE2	35.1	36.9	44.1	45.9	45.9	42.9	42.9	44.3	44.3	44.3	43.4	29.7	31.1	31.2
Average Gain (dB)														
LTE1	-3.64	-5.69	-5.11	-4.92	-4.92	-4.11	-4.11	-3.85	-3.89	-3.89	-4.01	-4.98	-4.91	-5.32
LTE2	-4.54	-4.33	-3.56	-3.38	-3.38	-3.67	-3.67	-3.53	-3.54	-3.54	-3.63	-5.27	-5.07	-5.06
Peak Gain (dBi)														
LTE1	1.38	-0.04	-0.52	-0.80	-0.80	2.97	2.97	3.38	2.44	2.44	2.44	-0.33	0.82	0.82
LTE2	2.19	-0.34	2.86	2.86	2.86	1.80	1.80	2.68	2.46	2.46	2.46	0.65	2.20	2.89
Isolation (dB)														
699MHz – 2690MHz	< -15													
Impedance					50 Ω									
Polarization					Linear									
Radiation Pattern					Omni									
Max. input power					10W									

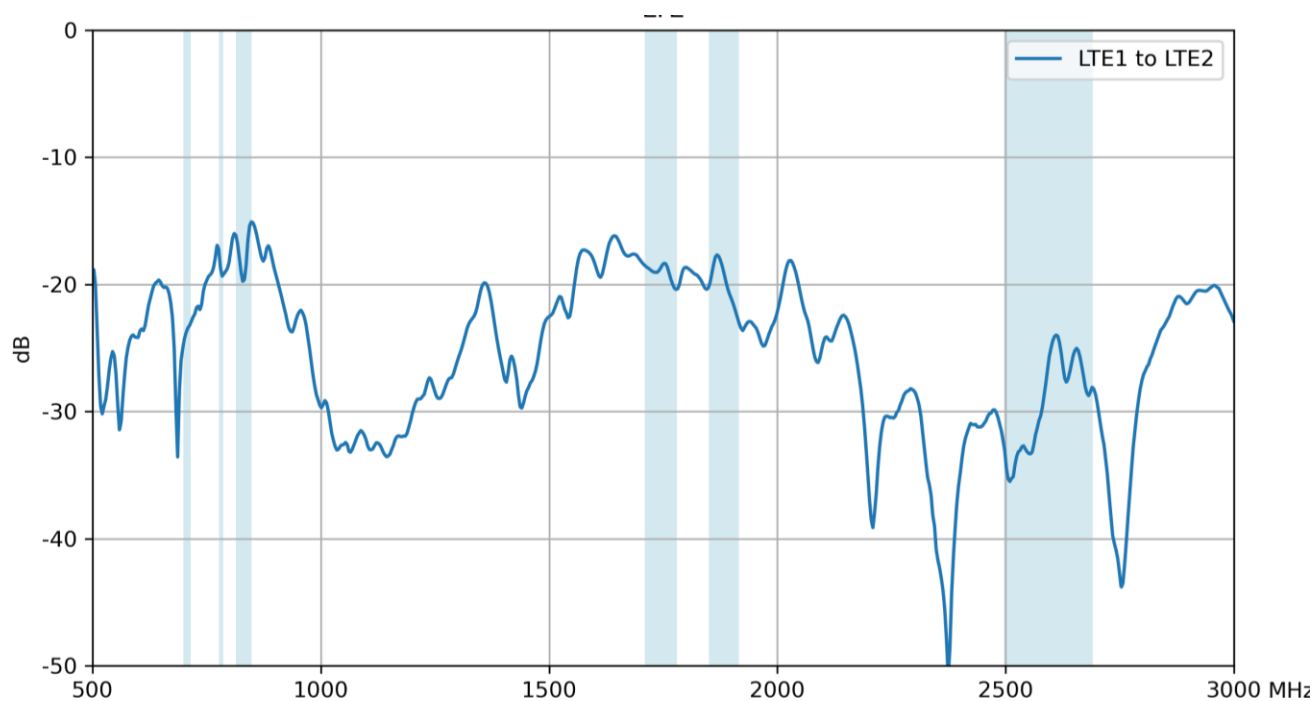
Mechanical	
Dimensions	Ø80mm x 18 mm
Weight	113g
Material	ASA
Connector	SMA(M)ST
Cable	TGS-1.5DS
Environmental	
Waterproof Rating	IP67
Temperature Range	-40°C to 85°C
Humidity	Non-condensing 65°C 95% RH

Antenna Characteristics

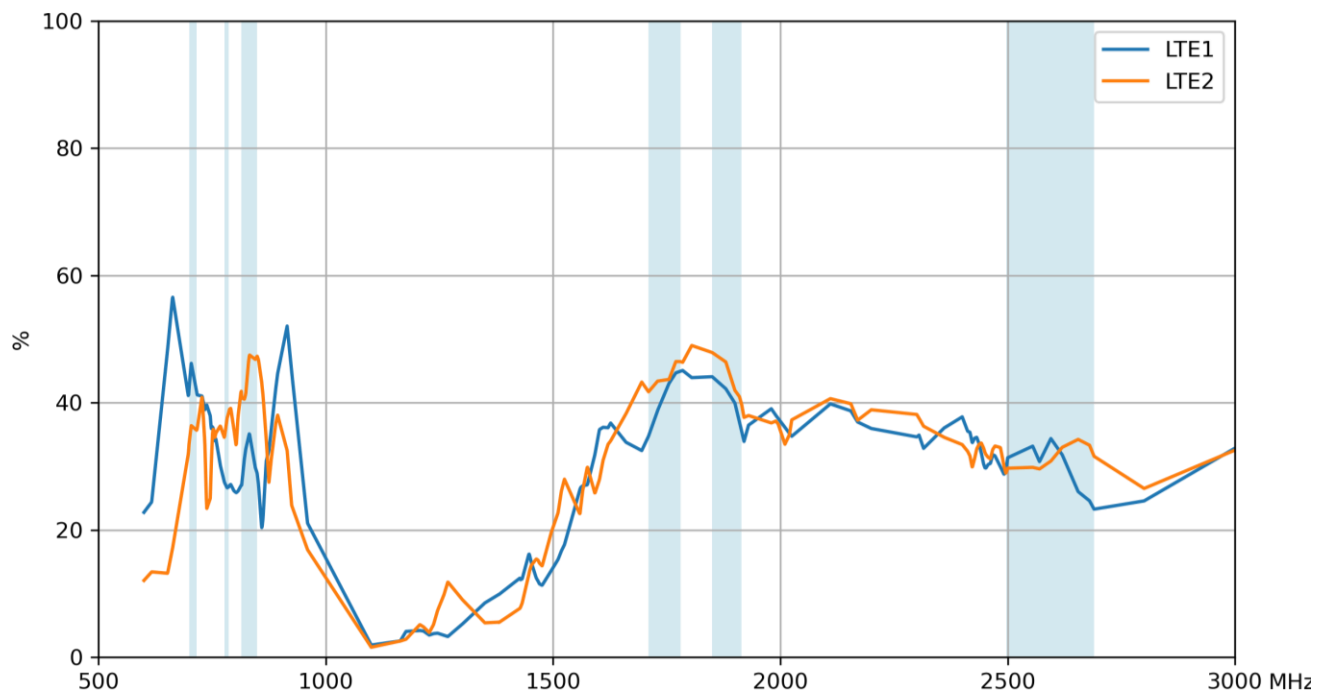
VSWR



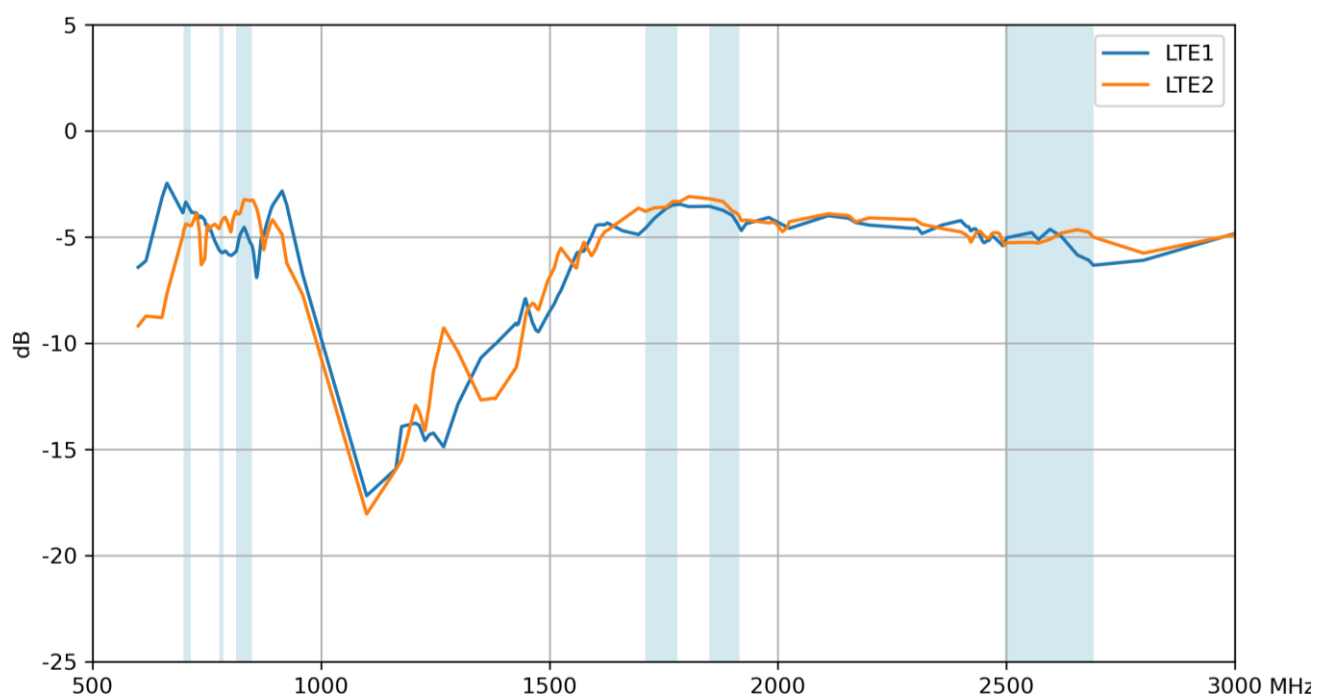
Isolation



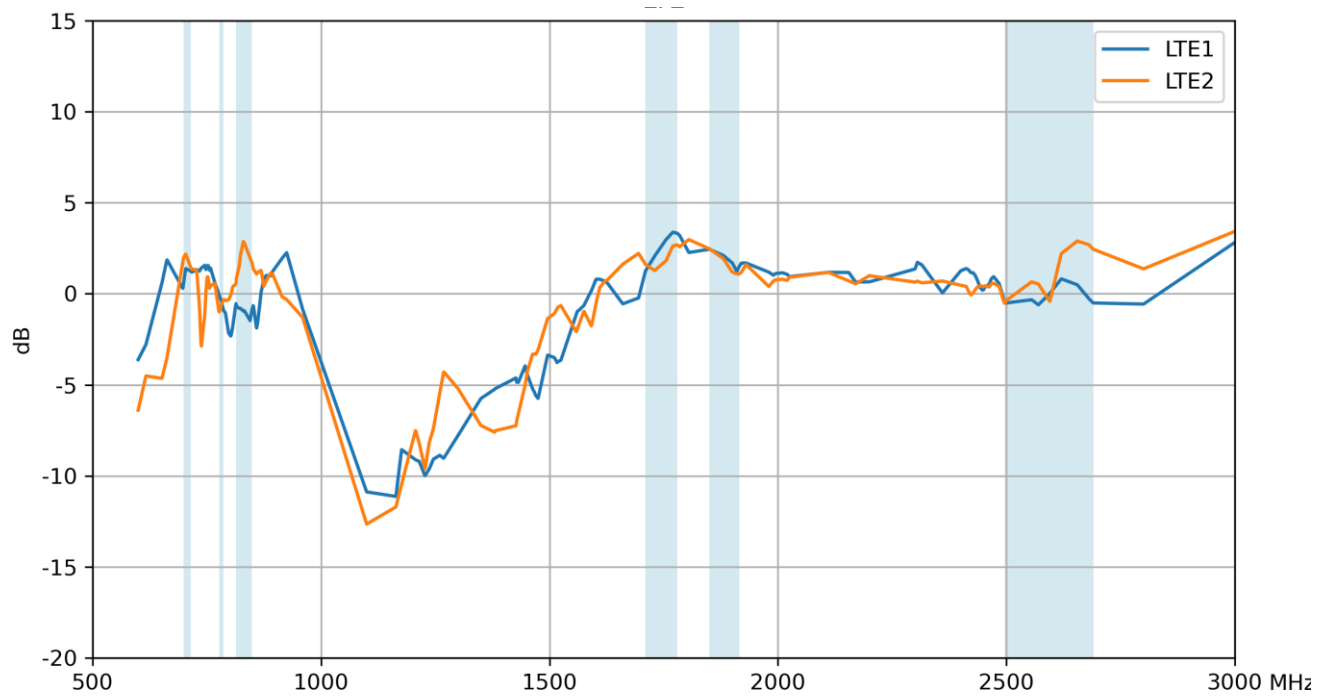
Efficiency



Average Gain



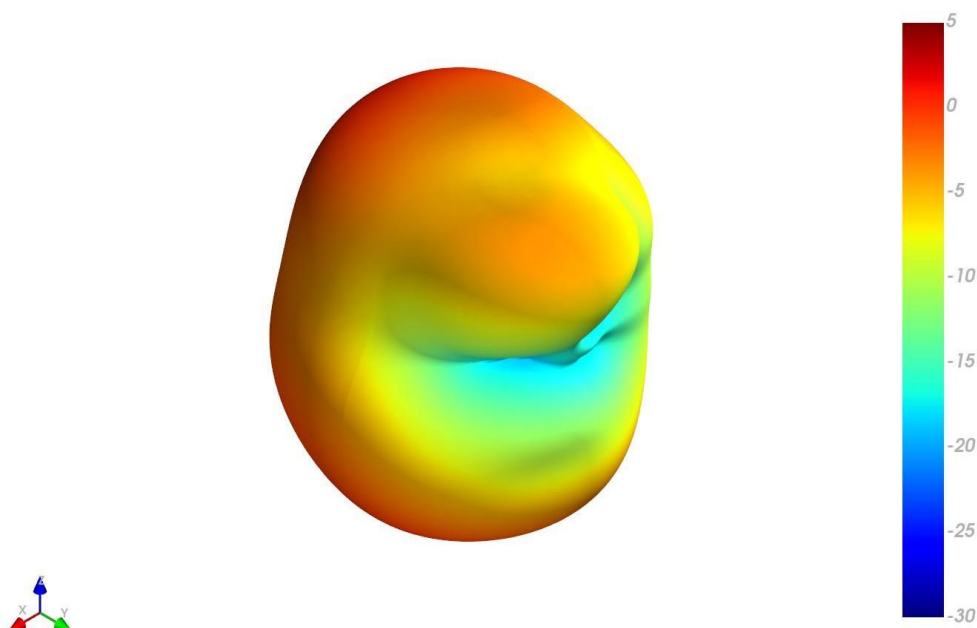
Peak Gain



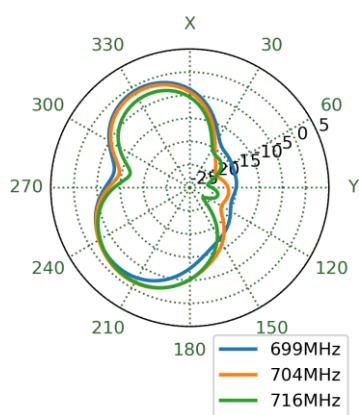
Radiation Patterns

LTE1 3D and 2D Radiation Patterns

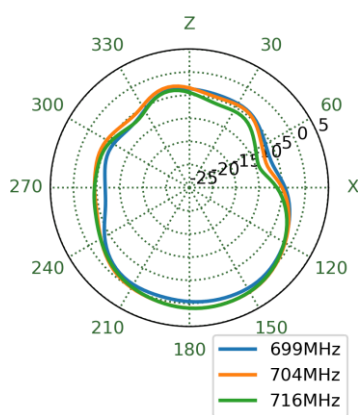
Gain total, 704MHz



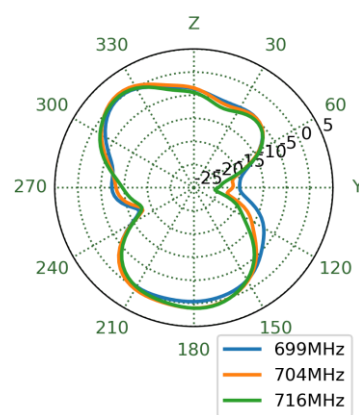
XY Plane



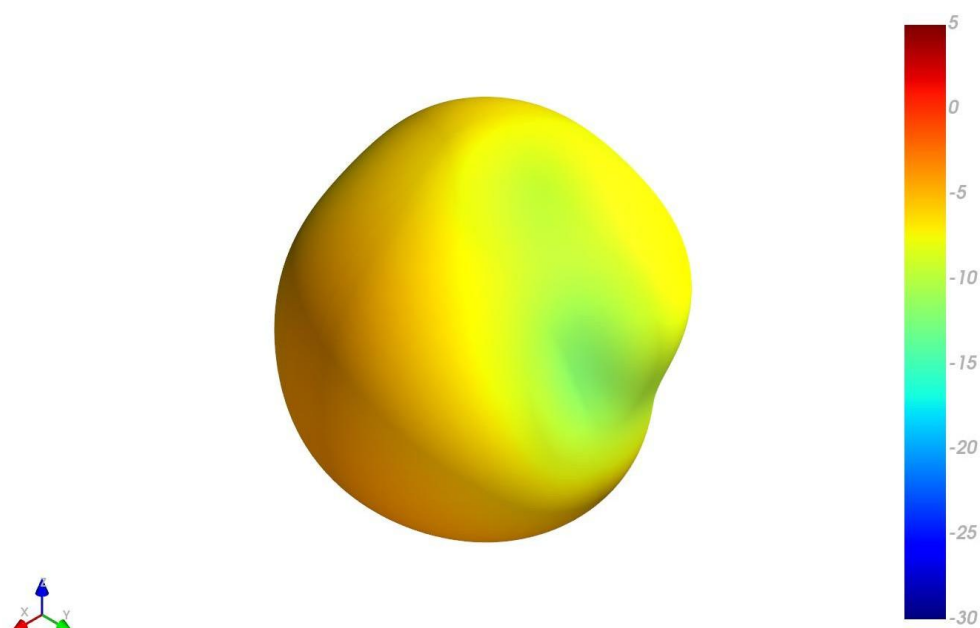
XZ Plane



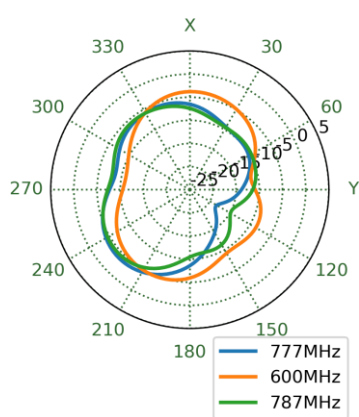
YZ Plane



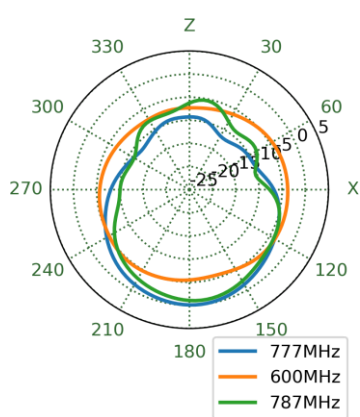
Gain total, 600MHz



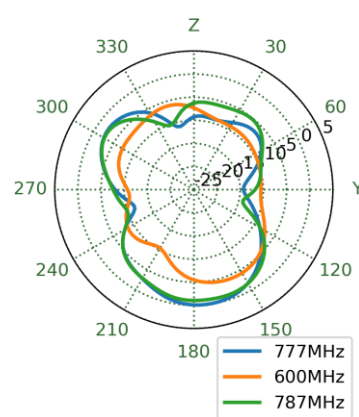
XY Plane



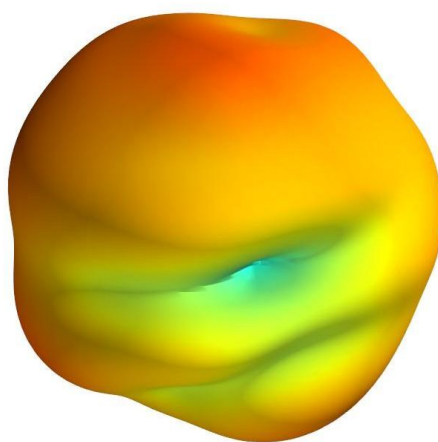
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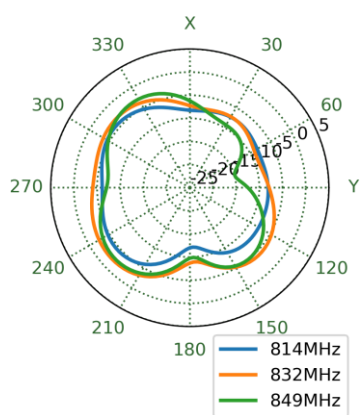
YZ Plane



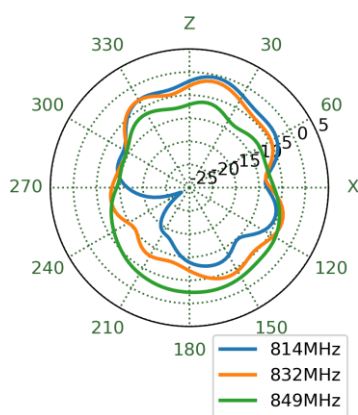
Gain total, 832MHz



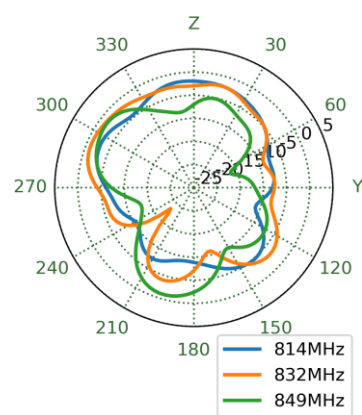
XY Plane



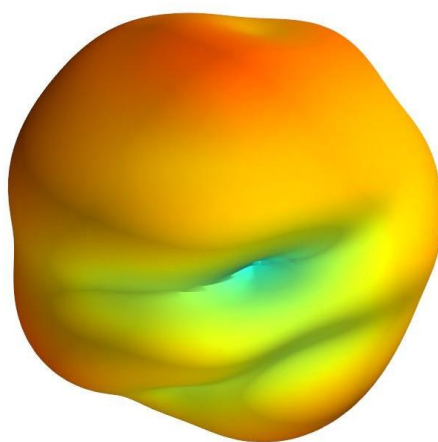
XZ Plane



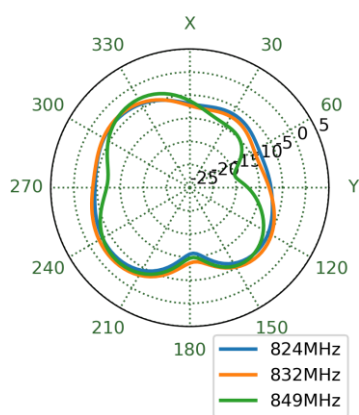
YZ Plane



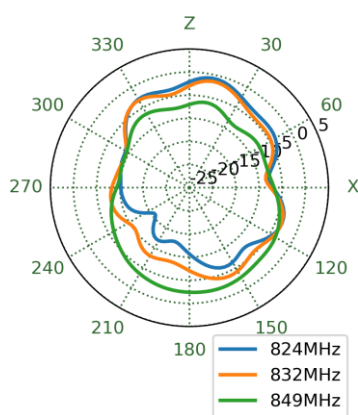
Gain total, 832MHz



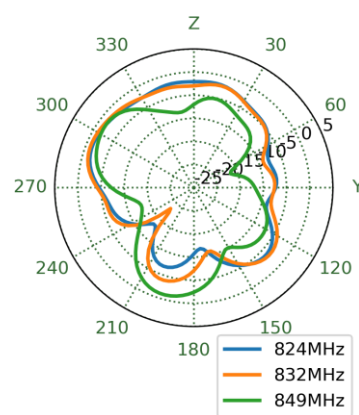
XY Plane



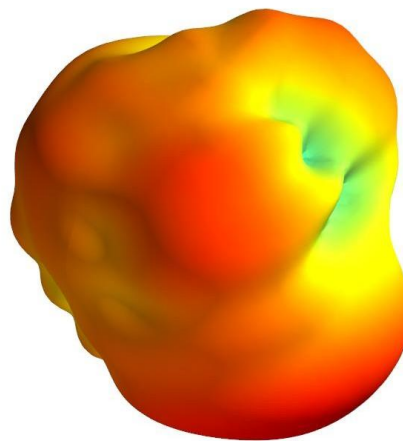
XZ Plane



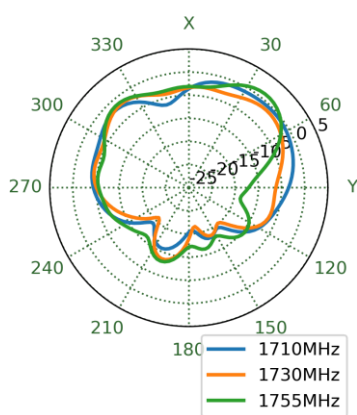
YZ Plane



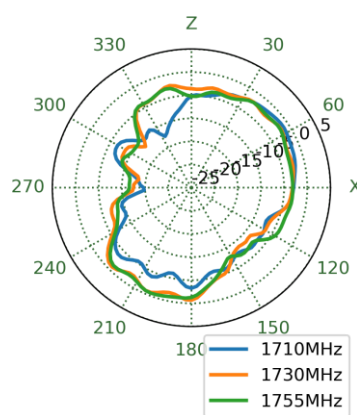
Gain total, 1730MHz



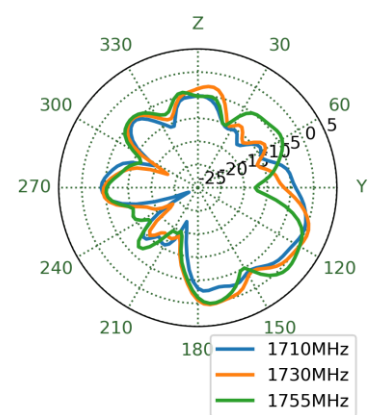
XY Plane



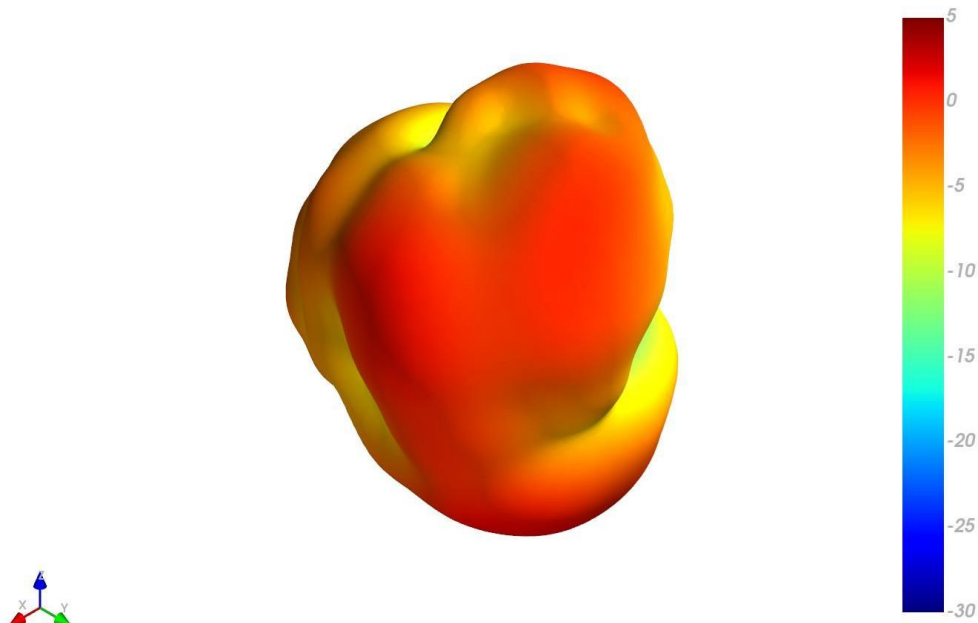
XZ Plane



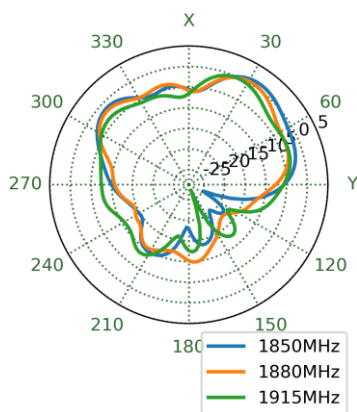
YZ Plane



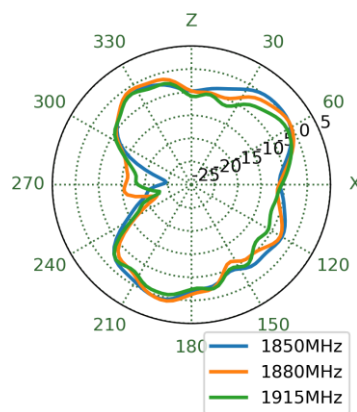
Gain total, 1880MHz



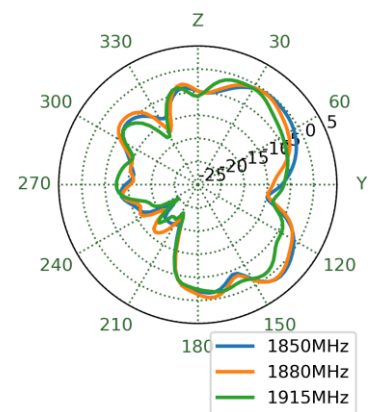
XY Plane



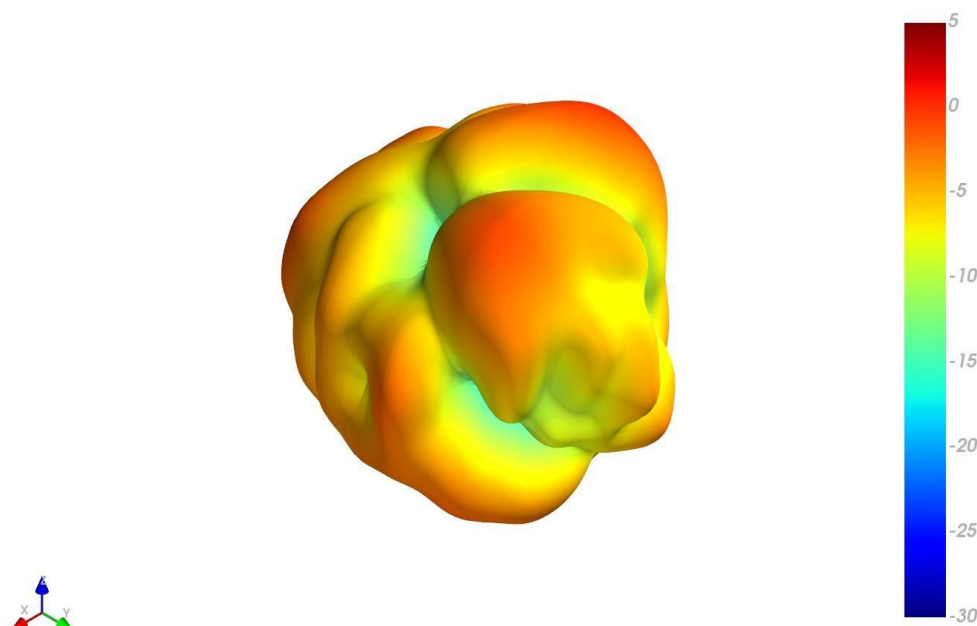
XZ Plane



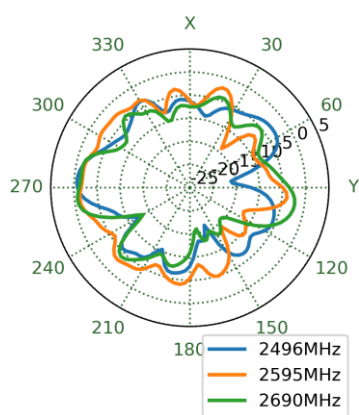
YZ Plane



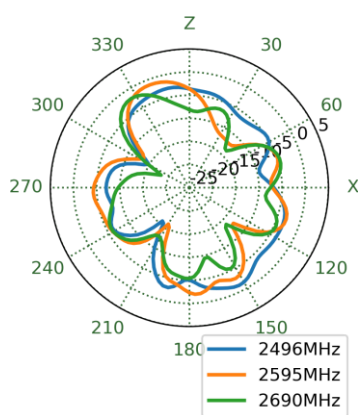
Gain total, 2595MHz



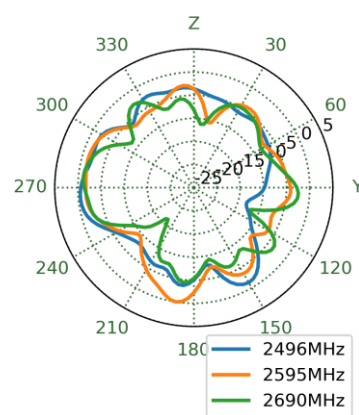
XY Plane



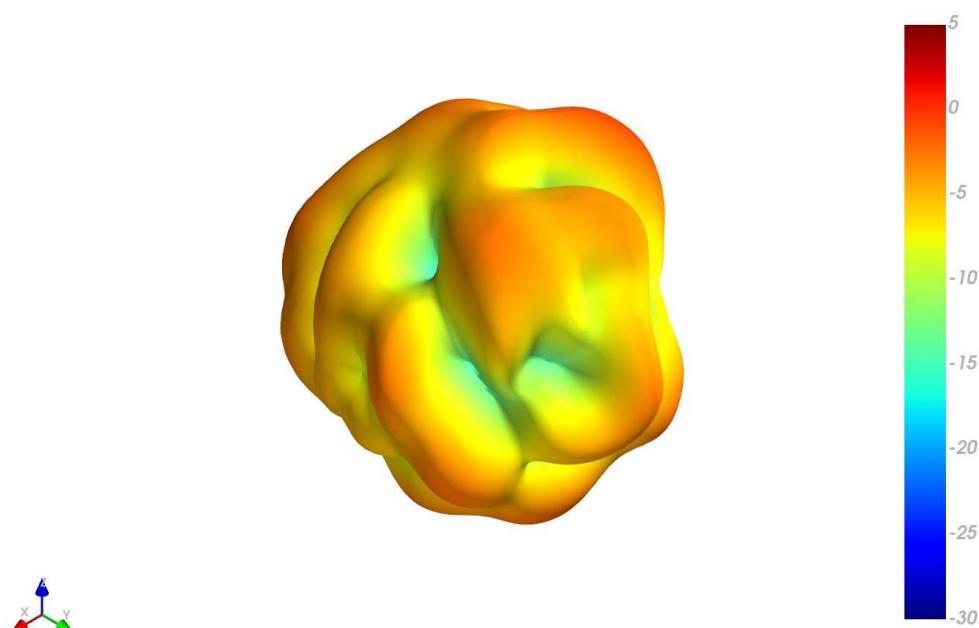
XZ Plane



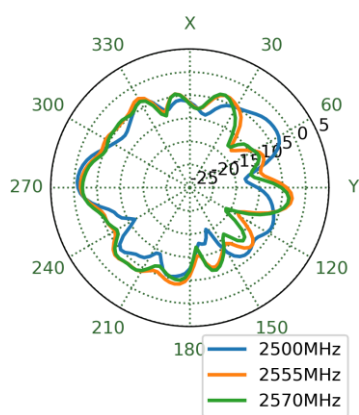
YZ Plane



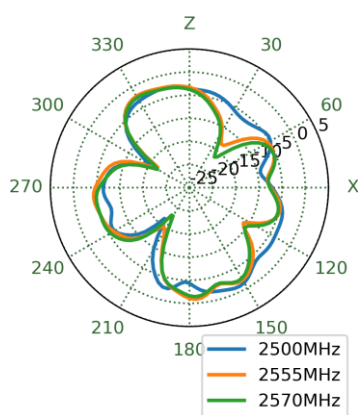
Gain total, 2555MHz



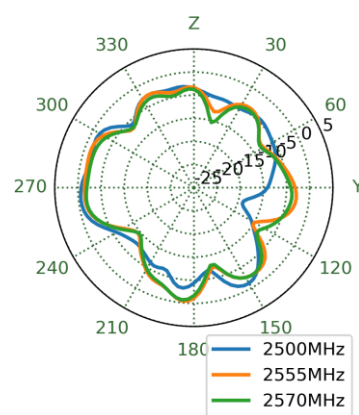
XY Plane



XZ Plane

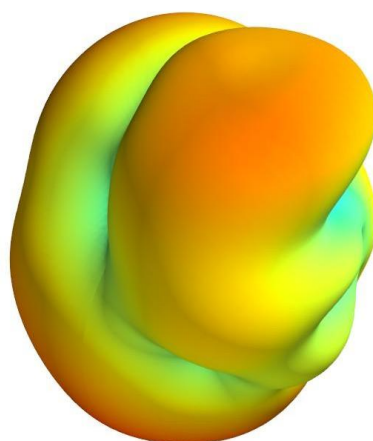


YZ Plane

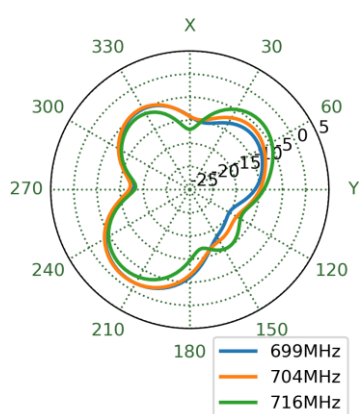


LTE2 3D and 2D Radiation Patterns

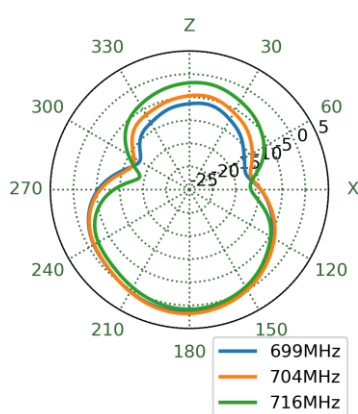
Gain total, 704MHz



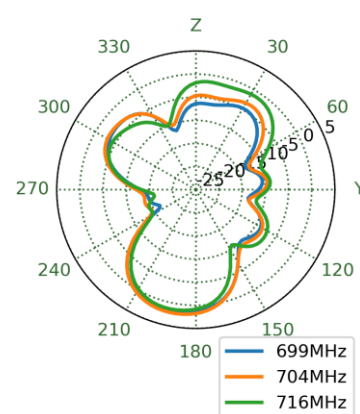
XY Plane



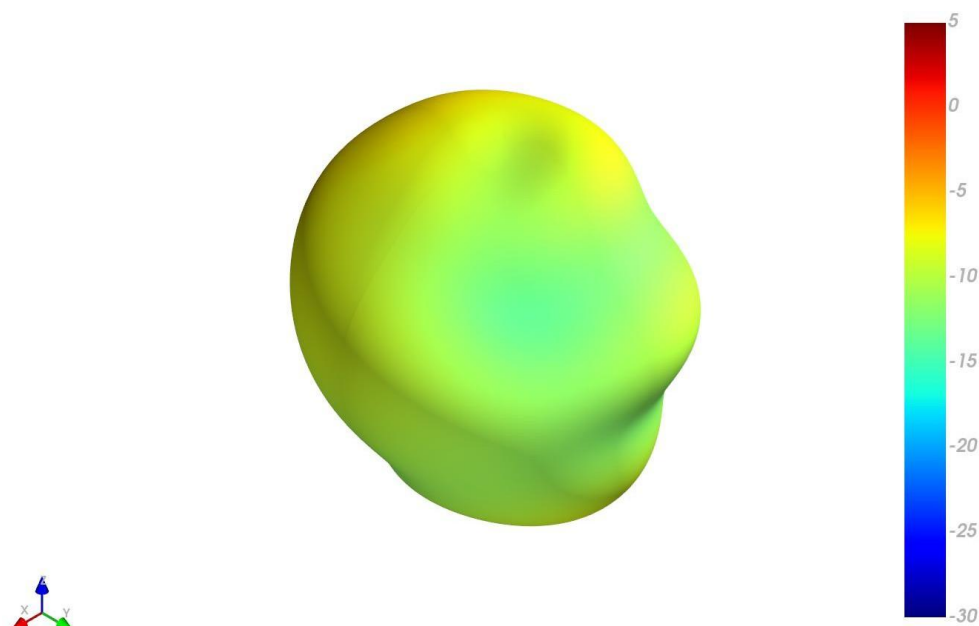
XZ Plane



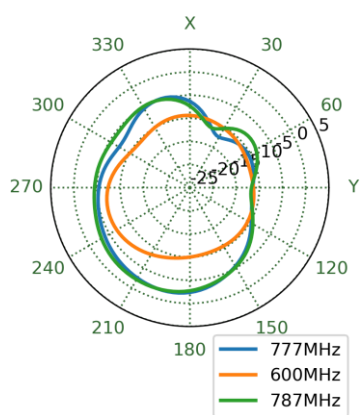
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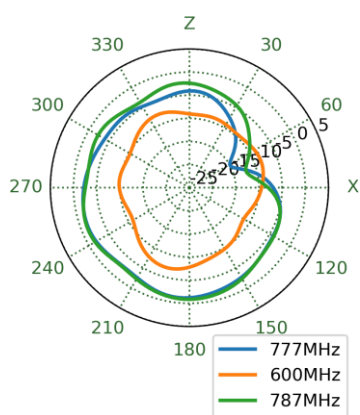
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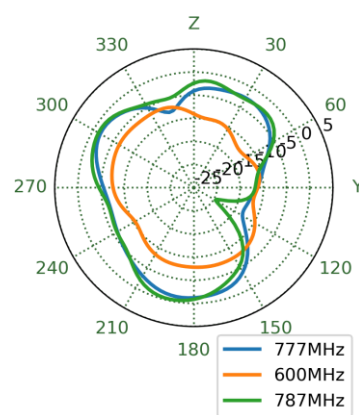
XY Plane



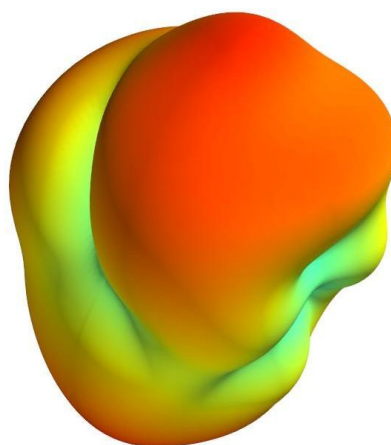
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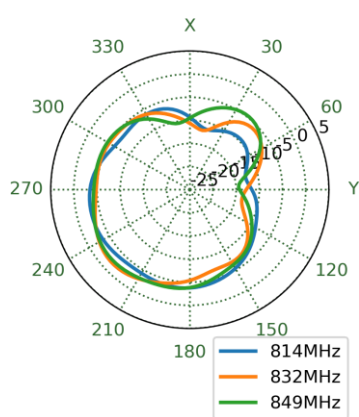
YZ Plane



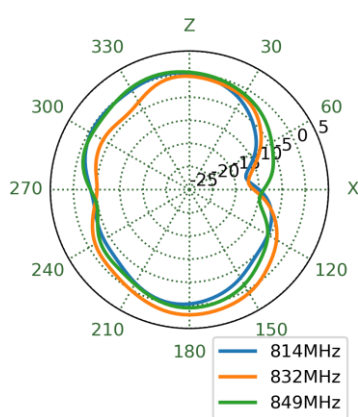
Gain total, 832MHz



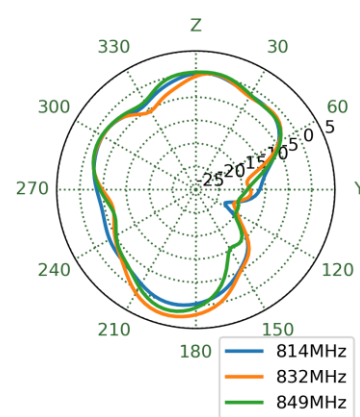
XY Plane



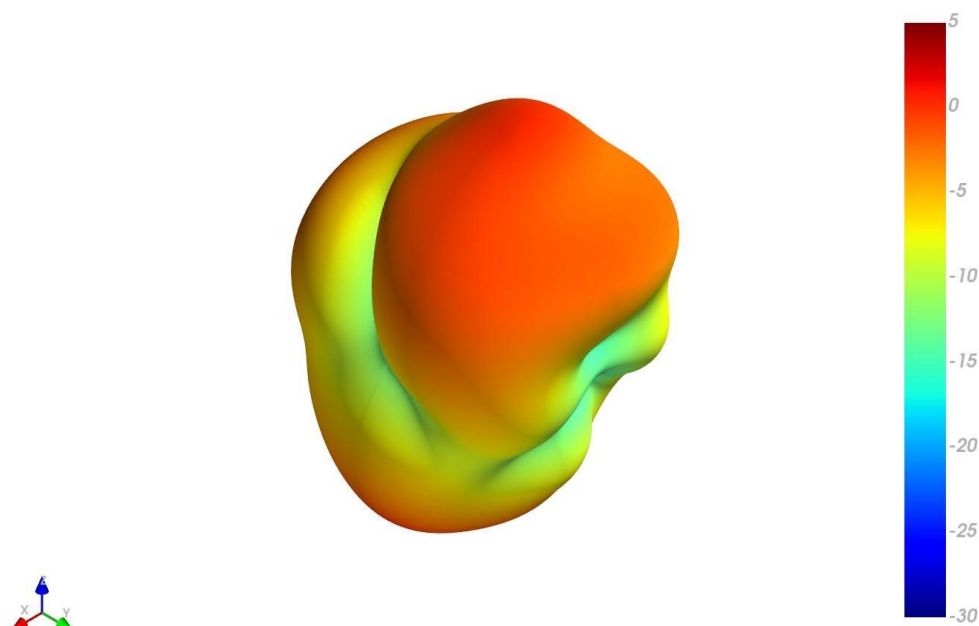
XZ Plane



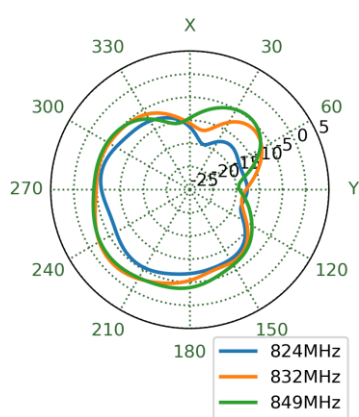
YZ Plane



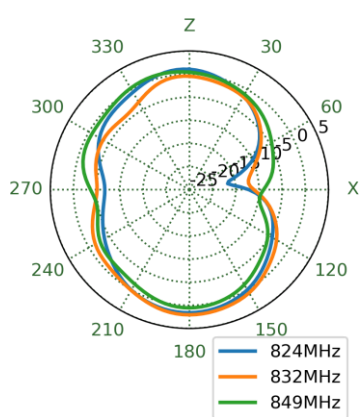
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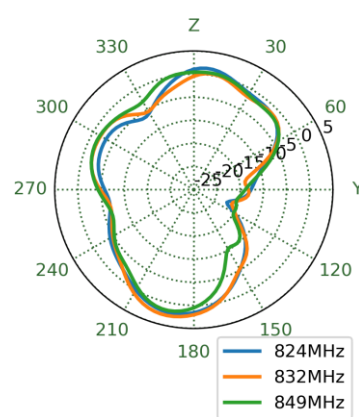
XY Plane



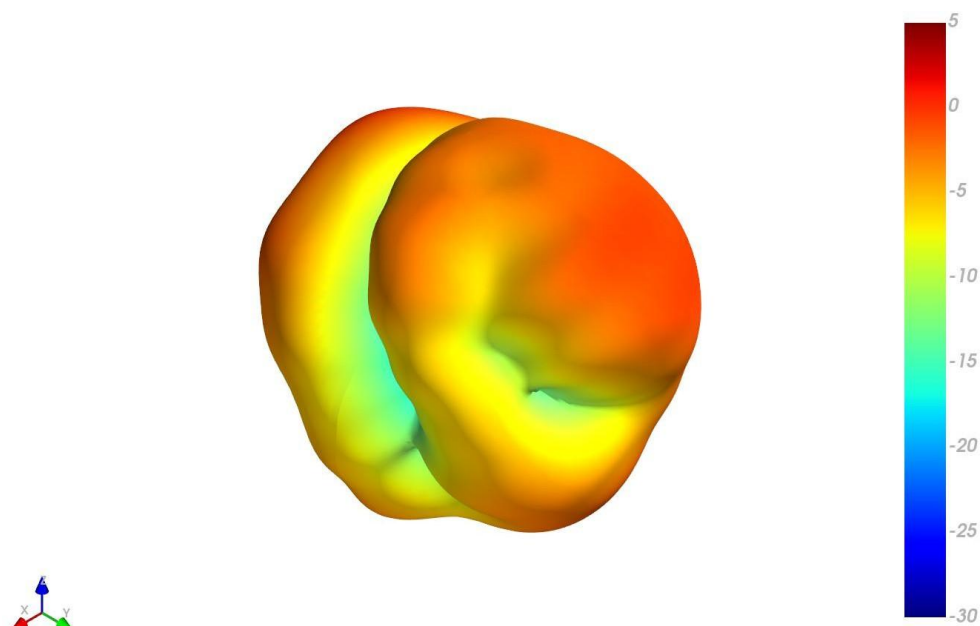
XZ Plane



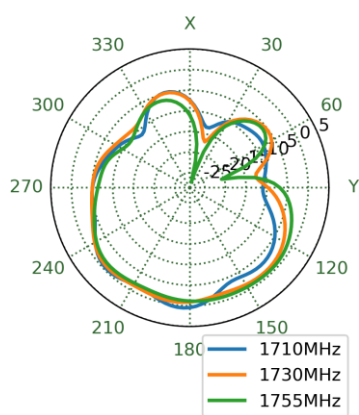
YZ Plane



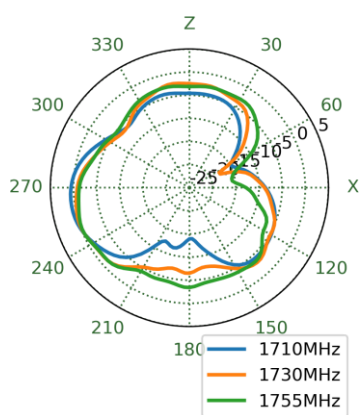
Gain total, 1730MHz



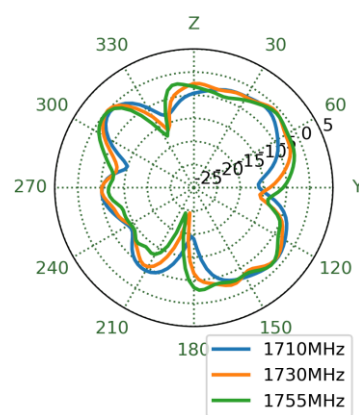
XY Plane



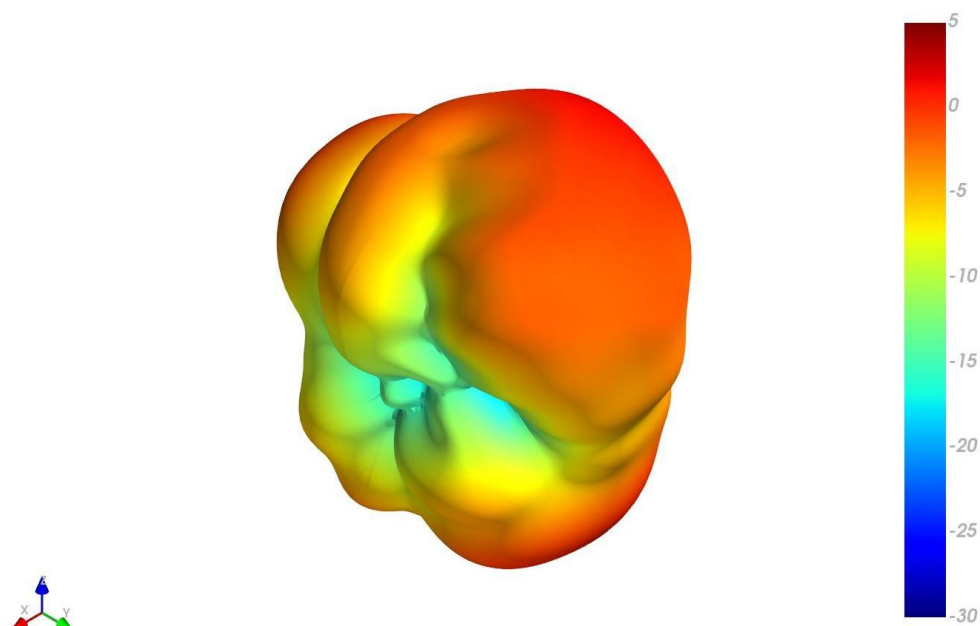
XZ Plane



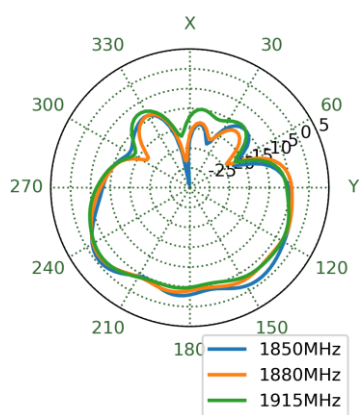
YZ Plane



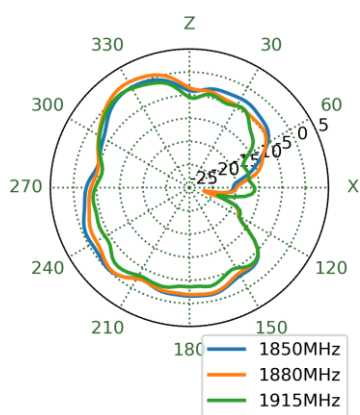
Gain total, 1880MHz



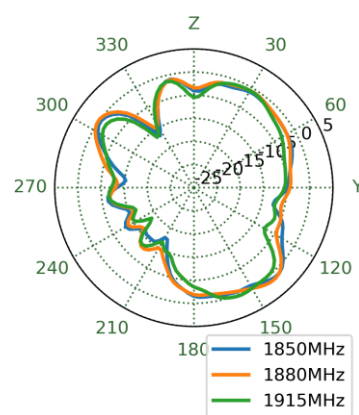
XY Plane



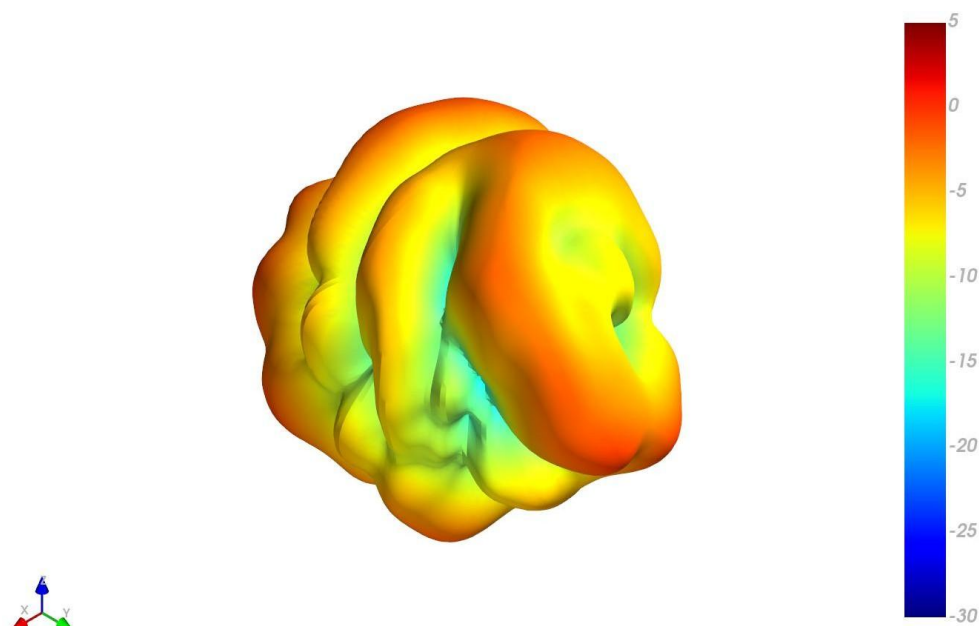
XZ Plane



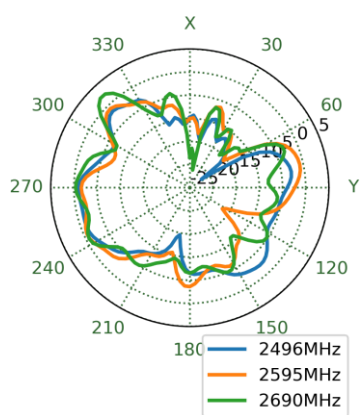
YZ Plane



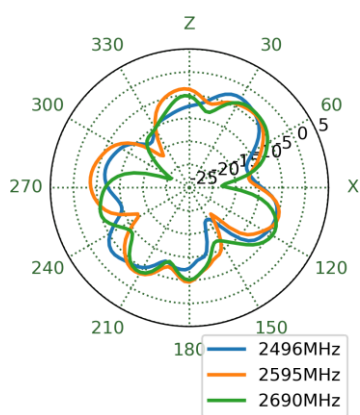
Gain total, 2595MHz



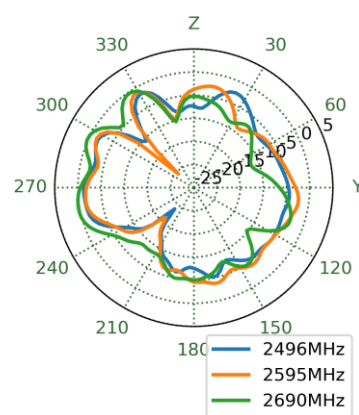
XY Plane



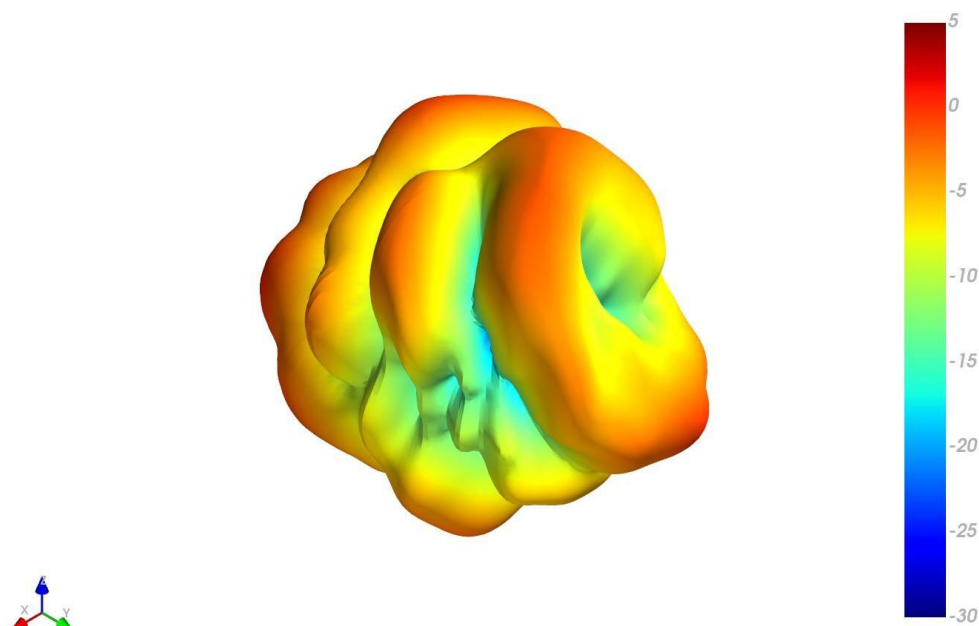
XZ Plane



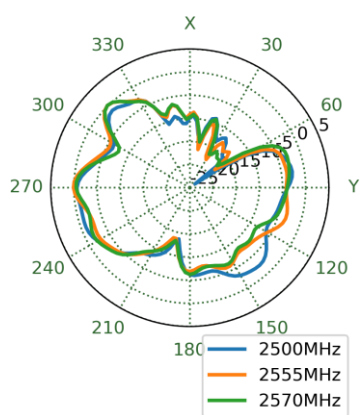
YZ Plane



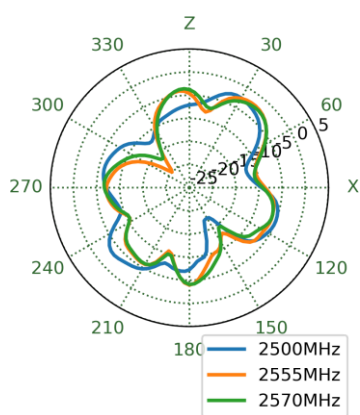
Gain total, 2555MHz



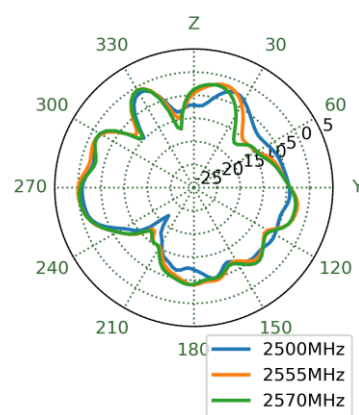
XY Plane



XZ Plane



YZ Plane





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