

Test Report

OTA Test Results for Frequency 433.000 MHz

OTA Evaluation Results:

Total Radiated Power	-5.93 dBm
Peak EIRP	-1.15 dBm
Directivity	4.78 dBi
Efficiency	-5.93 dB
Efficiency	25.53 %
Gain	-1.15 dBi
NHPRP 45°	-7.94 dBm
NHPRP 45° / TRP	-2.01 dB
NHPRP 45° / TRP	62.99 %
NHPRP 30°	-9.79 dBm
NHPRP 30° / TRP	-3.86 dB
NHPRP 30° / TRP	41.13 %
NHPRP 22.5°	-11.05 dBm
NHPRP 22.5° / TRP	-5.12 dB
NHPRP 22.5° / TRP	30.75 %
UHRP	-8.93 dBm
UHRP / TRP	-3.00 dB
UHRP / TRP	50.17 %
LHRP	-8.96 dBm
LHRP / TRP	-3.03 dB
LHRP / TRP	49.83 %
Front/Back Ratio	5.57
PhiBW	227.9 deg
PhiBW Up	98.7 deg
PhiBW Down	129.2 deg
ThetaBW	48.3 deg
ThetaBW Up	27.8 deg
ThetaBW Down	20.5 deg
Boresight Phi	330 deg
Boresight Theta	150 deg
Maximum Power	-1.15 dBm
Minimum Power	-23.39 dBm
Average Power	-5.42 dBm
Max/Min Ratio	22.24 dB
Max/Avg Ratio	4.27 dB
Min/Avg Ratio	-17.97 dB
Best Single Value	-1.70 dBm
Best Position	Phi = 315 deg; Theta = 150 deg; Pol = Hor

RP_433.000_tot

Azimuth (deg)	Elevation 0 deg (dB)	Elevation 15 deg (dB)	Elevation 30 deg (dB)	Elevation 45 deg (dB)	Elevation 60 deg (dB)	Elevation 75 deg (dB)	Elevation 90 deg (dB)	Elevation 105 deg (dB)	Elevation 120 deg (dB)	Elevation 135 deg (dB)	Elevation 150 deg (dB)	Elevation 165 deg (dB)	Elevation 180 deg (dB)
0.00	-5.86	-6.97	-10.41	-13.59	-7.72	-4.68	-5.17	-8.49	-6.52	-2.53	-1.37	-1.96	-3.87
15.00	-5.61	-6.80	-10.33	-14.03	-8.48	-5.33	-5.47	-8.10	-6.35	-2.85	-1.59	-2.03	-3.62
30.00	-5.37	-6.75	-9.95	-12.81	-9.03	-5.88	-5.78	-7.92	-6.37	-3.39	-2.04	-2.32	-3.32
45.00	-5.38	-6.76	-9.33	-10.89	-8.79	-6.10	-6.05	-7.99	-6.59	-4.05	-2.67	-2.76	-3.14
60.00	-5.58	-6.80	-8.57	-9.05	-7.94	-6.02	-6.27	-8.25	-6.97	-4.92	-3.54	-3.46	-3.12
75.00	-6.03	-6.86	-7.79	-7.61	-6.94	-5.75	-6.47	-8.76	-7.44	-5.76	-4.59	-4.25	-3.14
90.00	-6.62	-6.95	-7.12	-6.63	-6.05	-5.46	-6.68	-9.65	-8.12	-6.79	-5.77	-5.21	-3.16
105.00	-7.36	-7.15	-6.66	-6.02	-5.38	-5.23	-6.97	-10.87	-8.88	-7.60	-6.94	-6.10	-3.14
120.00	-8.18	-7.42	-6.54	-5.73	-5.01	-5.19	-7.39	-12.64	-9.59	-8.19	-7.86	-6.68	-3.07
135.00	-8.98	-7.70	-6.60	-5.68	-4.87	-5.31	-8.01	-14.69	-9.83	-8.14	-8.18	-6.90	-2.96
150.00	-9.42	-7.83	-6.71	-5.73	-4.91	-5.59	-8.77	-16.51	-9.36	-7.48	-7.69	-6.59	-2.82
165.00	-9.39	-7.65	-6.76	-5.75	-5.01	-5.90	-9.65	-17.52	-8.42	-6.43	-6.68	-5.94	-2.70
180.00	-8.89	-7.23	-6.53	-5.60	-5.05	-6.11	-10.52	-17.78	-7.44	-5.45	-5.52	-5.17	-2.54
195.00	-8.11	-6.61	-6.07	-5.29	-4.91	-6.04	-11.03	-18.02	-6.73	-4.56	-4.49	-4.40	-2.45
210.00	-7.37	-6.03	-5.64	-4.88	-4.59	-5.63	-10.84	-18.72	-6.32	-3.89	-3.61	-3.72	-2.45
225.00	-6.73	-5.69	-5.33	-4.57	-4.17	-5.01	-9.97	-20.08	-6.19	-3.40	-2.93	-3.22	-2.56
240.00	-6.34	-5.64	-5.30	-4.48	-3.74	-4.37	-8.90	-22.13	-6.31	-3.04	-2.43	-2.89	-2.81
255.00	-6.20	-5.90	-5.64	-4.65	-3.47	-3.75	-7.78	-23.39	-6.63	-2.80	-2.03	-2.66	-3.15
270.00	-6.29	-6.37	-6.35	-5.15	-3.37	-3.32	-6.83	-20.84	-7.06	-2.63	-1.75	-2.50	-3.55
285.00	-6.48	-6.99	-7.41	-6.00	-3.47	-3.08	-6.08	-17.21	-7.44	-2.51	-1.54	-2.34	-3.94
300.00	-6.66	-7.45	-8.77	-7.14	-3.84	-3.04	-5.54	-14.27	-7.70	-2.40	-1.35	-2.24	-4.25
315.00	-6.72	-7.62	-9.86	-8.58	-4.41	-3.18	-5.16	-11.93	-7.64	-2.31	-1.22	-2.13	-4.47
330.00	-6.61	-7.54	-10.68	-10.20	-5.17	-3.50	-5.00	-10.40	-7.33	-2.29	-1.15	-2.04	-4.51
345.00	-6.32	-7.26	-10.84	-11.93	-6.19	-3.99	-5.00	-9.30	-6.91	-2.34	-1.15	-2.01	-4.35
360.00	-5.96	-7.02	-10.68	-13.25	-7.31	-4.53	-5.17	-8.61	-6.53	-2.45	-1.25	-1.90	-3.99

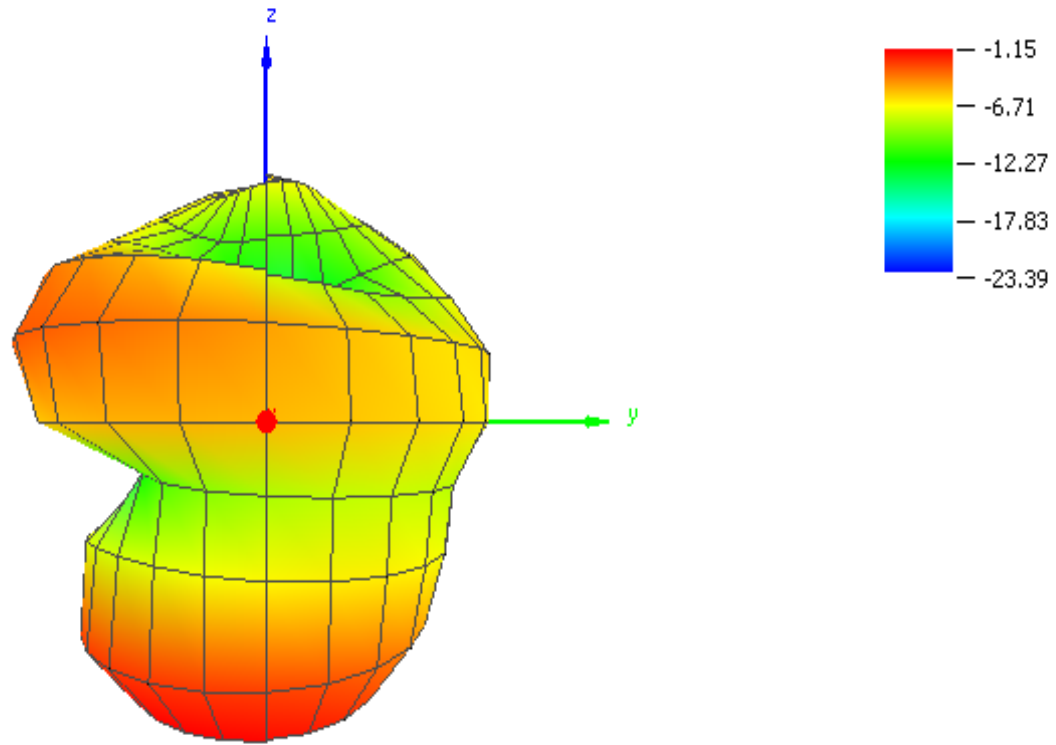
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Azimuth (deg)	Elevation 0 deg (dB)	Elevation 15 deg (dB)	Elevation 30 deg (dB)	Elevation 45 deg (dB)	Elevation 60 deg (dB)	Elevation 75 deg (dB)	Elevation 90 deg (dB)	Elevation 105 deg (dB)	Elevation 120 deg (dB)	Elevation 135 deg (dB)	Elevation 150 deg (dB)	Elevation 165 deg (dB)	Elevation 180 deg (dB)
0.0	-8.96	-9.61	-13.11	-13.95	-9.12	-7.46	-9.82	-27.92	-10.07	-5.42	-4.52	-6.14	-10.33
15.0	-10.66	-11.93	-15.72	-15.47	-9.70	-8.15	-10.62	-27.91	-11.07	-7.10	-5.85	-8.89	-14.32
30.0	-14.07	-16.20	-20.86	-14.88	-9.99	-8.62	-11.12	-26.04	-12.61	-9.37	-8.18	-13.84	-22.23
45.0	-20.58	-23.02	-20.95	-12.47	-9.47	-8.57	-11.43	-24.29	-13.77	-11.50	-10.93	-22.78	-15.38
60.0	-31.52	-19.44	-15.11	-10.02	-8.43	-8.13	-11.41	-22.63	-13.84	-12.51	-13.40	-18.09	-10.05
75.0	-18.66	-13.96	-11.37	-8.15	-7.33	-7.56	-11.24	-21.99	-12.86	-11.63	-13.49	-12.18	-6.92
90.0	-14.06	-10.96	-9.02	-6.91	-6.43	-7.08	-11.05	-22.31	-11.77	-10.26	-11.75	-9.15	-4.93
105.0	-11.65	-9.32	-7.62	-6.18	-5.82	-6.78	-11.06	-23.75	-10.85	-9.19	-10.10	-7.59	-3.73
120.0	-10.47	-8.58	-7.01	-5.92	-5.60	-6.78	-11.26	-26.36	-10.30	-8.60	-9.16	-6.97	-3.14
135.0	-10.13	-8.55	-6.98	-6.11	-5.70	-7.05	-11.79	-26.30	-9.90	-8.37	-8.85	-7.17	-3.10
150.0	-10.48	-9.19	-7.47	-6.67	-6.14	-7.61	-12.62	-22.66	-9.58	-8.36	-8.94	-8.11	-3.60
165.0	-11.55	-10.49	-8.51	-7.60	-6.83	-8.38	-13.70	-20.28	-9.28	-8.36	-9.26	-10.07	-4.73
180.0	-13.63	-12.67	-10.08	-8.74	-7.71	-9.12	-14.86	-19.45	-9.10	-8.27	-9.50	-13.13	-6.64
195.0	-17.08	-16.20	-12.08	-10.07	-8.52	-9.57	-15.42	-20.10	-9.18	-7.95	-9.15	-16.64	-9.60
210.0	-25.14	-22.43	-14.97	-11.34	-9.09	-9.43	-14.83	-22.41	-9.45	-7.34	-8.10	-14.47	-15.47
225.0	-26.82	-26.70	-18.44	-12.29	-9.15	-8.82	-13.31	-26.89	-9.71	-6.43	-6.59	-10.24	-31.10
240.0	-17.49	-18.67	-21.27	-12.65	-8.81	-8.00	-11.84	-37.98	-9.71	-5.39	-5.10	-7.15	-15.46
255.0	-13.03	-14.22	-19.81	-12.46	-8.25	-7.16	-10.59	-31.34	-9.36	-4.38	-3.76	-4.96	-9.92
270.0	-10.42	-11.48	-16.48	-11.89	-7.69	-6.52	-9.69	-26.02	-8.82	-3.58	-2.75	-3.57	-7.11
285.0	-8.61	-9.64	-13.89	-11.29	-7.22	-6.08	-9.13	-24.03	-8.29	-3.03	-2.07	-2.67	-5.44
300.0	-7.48	-8.42	-12.21	-10.87	-6.98	-5.89	-8.86	-23.48	-7.94	-2.76	-1.70	-2.31	-4.65
315.0	-6.81	-7.74	-11.08	-10.76	-6.99	-5.93	-8.81	-23.88	-7.86	-2.83	-1.70	-2.42	-4.56
330.0	-6.72	-7.66	-10.76	-11.18	-7.28	-6.19	-9.01	-25.15	-8.12	-3.25	-2.06	-2.99	-5.21
345.0	-7.25	-8.17	-11.20	-12.15	-7.91	-6.70	-9.40	-26.94	-8.70	-4.05	-2.80	-4.14	-6.68
360.0	-8.36	-9.05	-12.64	-13.44	-8.74	-7.27	-9.93	-28.00	-9.66	-4.96	-3.95	-5.32	-9.25

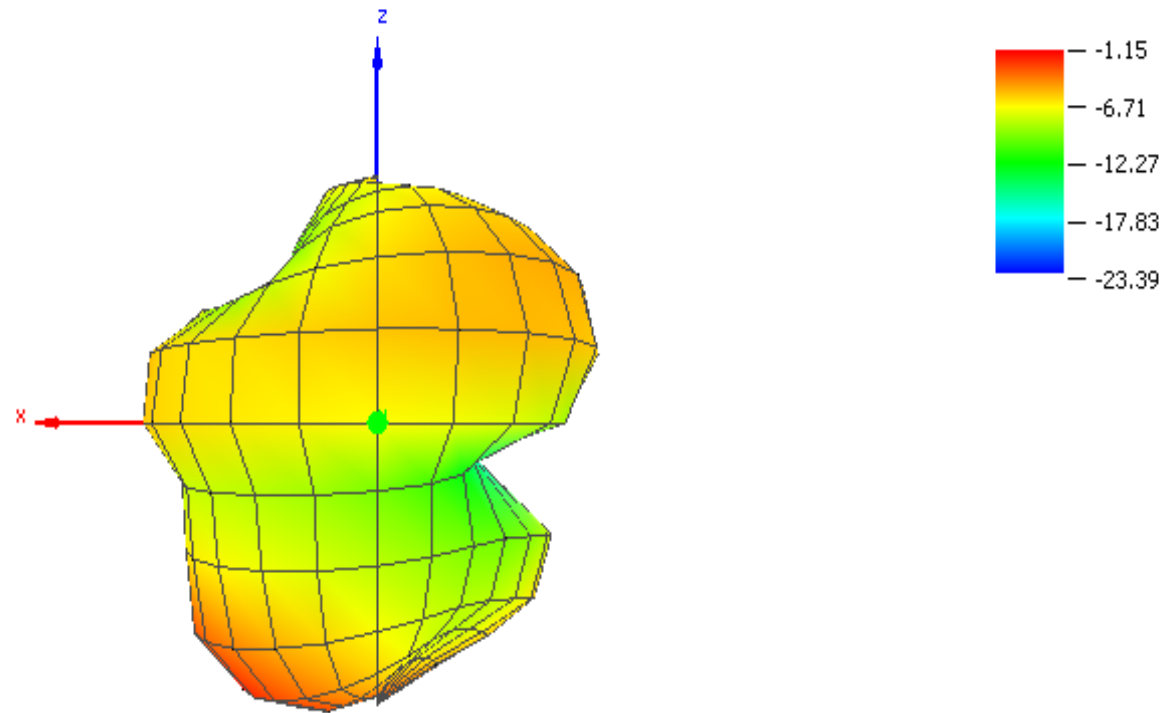
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Azimuth (deg)	Elevation 0 deg (dB)	Elevation 15 deg (dB)	Elevation 30 deg (dB)	Elevation 45 deg (dB)	Elevation 60 deg (dB)	Elevation 75 deg (dB)	Elevation 90 deg (dB)	Elevation 105 deg (dB)	Elevation 120 deg (dB)	Elevation 135 deg (dB)	Elevation 150 deg (dB)	Elevation 165 deg (dB)	Elevation 180 deg (dB)
0.0	-8.78	-10.39	-13.75	-24.56	-13.30	-7.93	-7.00	-8.54	-9.05	-5.66	-4.25	-4.05	-4.98
15.0	-7.23	-8.38	-11.80	-19.52	-14.58	-8.54	-7.05	-8.15	-8.14	-4.90	-3.63	-3.04	-4.01
30.0	-6.00	-7.27	-10.32	-17.01	-16.02	-9.17	-7.28	-7.99	-7.55	-4.65	-3.25	-2.64	-3.38
45.0	-5.52	-6.86	-9.64	-16.04	-17.17	-9.73	-7.54	-8.09	-7.51	-4.92	-3.38	-2.81	-3.41
60.0	-5.59	-7.05	-9.67	-16.08	-17.73	-10.17	-7.86	-8.41	-7.97	-5.75	-4.01	-3.61	-4.11
75.0	-6.27	-7.80	-10.30	-16.93	-17.57	-10.42	-8.22	-8.97	-8.90	-7.06	-5.19	-5.01	-5.50
90.0	-7.48	-9.14	-11.61	-18.65	-16.78	-10.53	-8.66	-9.89	-10.57	-9.39	-7.03	-7.45	-7.90
105.0	-9.39	-11.18	-13.68	-20.29	-15.47	-10.45	-9.12	-11.10	-13.27	-12.73	-9.80	-11.45	-12.09
120.0	-12.05	-13.71	-16.44	-19.27	-13.98	-10.32	-9.68	-12.82	-17.85	-18.66	-13.72	-18.55	-20.94
135.0	-15.30	-15.17	-17.40	-15.91	-12.44	-10.12	-10.36	-15.00	-27.94	-21.04	-16.66	-19.11	-18.02
150.0	-16.06	-13.53	-14.65	-12.83	-10.97	-9.88	-11.07	-17.72	-22.26	-14.83	-13.72	-11.88	-10.67
165.0	-13.47	-10.83	-11.55	-10.34	-9.66	-9.52	-11.82	-20.79	-15.87	-10.87	-10.17	-8.07	-6.97
180.0	-10.67	-8.69	-9.06	-8.49	-8.43	-9.12	-12.52	-22.75	-12.42	-8.65	-7.74	-5.93	-4.68
195.0	-8.70	-7.11	-7.32	-7.04	-7.39	-8.58	-12.99	-22.22	-10.39	-7.23	-6.30	-4.67	-3.39
210.0	-7.45	-6.13	-6.18	-6.00	-6.50	-7.97	-13.05	-21.14	-9.22	-6.50	-5.52	-4.10	-2.67
225.0	-6.77	-5.73	-5.55	-5.38	-5.83	-7.35	-12.67	-21.09	-8.75	-6.39	-5.38	-4.18	-2.56
240.0	-6.69	-5.86	-5.41	-5.20	-5.36	-6.84	-11.97	-22.24	-8.97	-6.84	-5.81	-4.94	-3.05
255.0	-7.21	-6.60	-5.81	-5.44	-5.22	-6.40	-11.00	-24.15	-9.94	-7.96	-6.86	-6.51	-4.17
270.0	-8.42	-7.98	-6.80	-6.18	-5.37	-6.15	-10.00	-22.41	-11.84	-9.70	-8.59	-9.08	-6.08
285.0	-10.59	-10.40	-8.51	-7.52	-5.86	-6.10	-9.05	-18.23	-14.97	-12.03	-10.91	-13.79	-9.28
300.0	-14.35	-14.40	-11.39	-9.54	-6.73	-6.21	-8.26	-14.83	-20.47	-13.35	-12.43	-20.35	-14.78
315.0	-23.70	-23.58	-15.97	-12.61	-7.90	-6.47	-7.61	-12.22	-20.84	-11.78	-11.05	-14.03	-21.08
330.0	-22.43	-23.16	-28.39	-17.16	-9.32	-6.84	-7.20	-10.54	-15.16	-9.31	-8.37	-9.13	-12.76
345.0	-13.51	-14.50	-21.89	-24.99	-11.04	-7.33	-6.96	-9.38	-11.63	-7.20	-6.15	-6.11	-8.17
360.0	-9.67	-11.30	-15.07	-26.85	-12.80	-7.83	-6.93	-8.67	-9.43	-6.03	-4.60	-4.53	-5.52

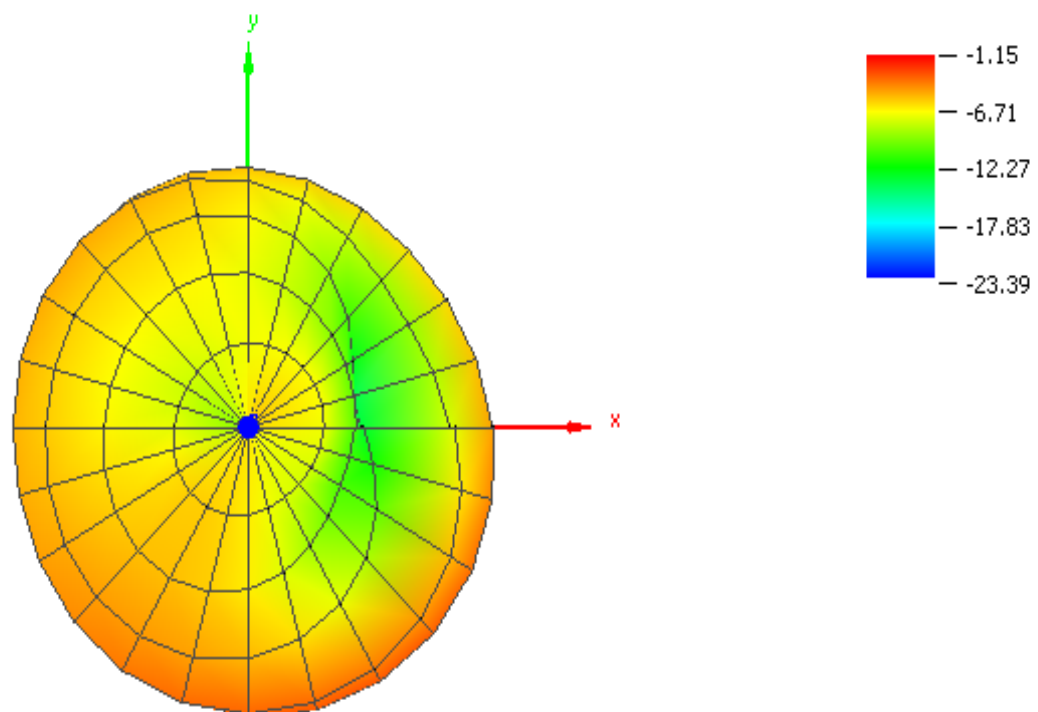
Theta = 90, Phi = 0



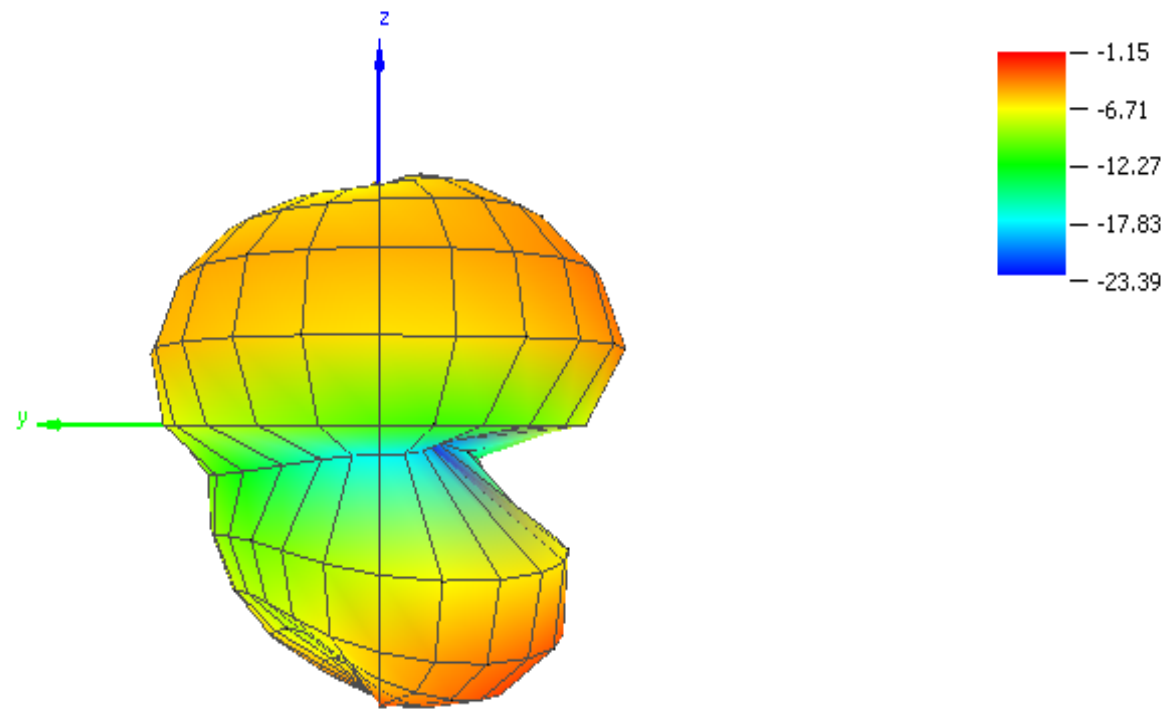
Theta = 90, Phi = 90



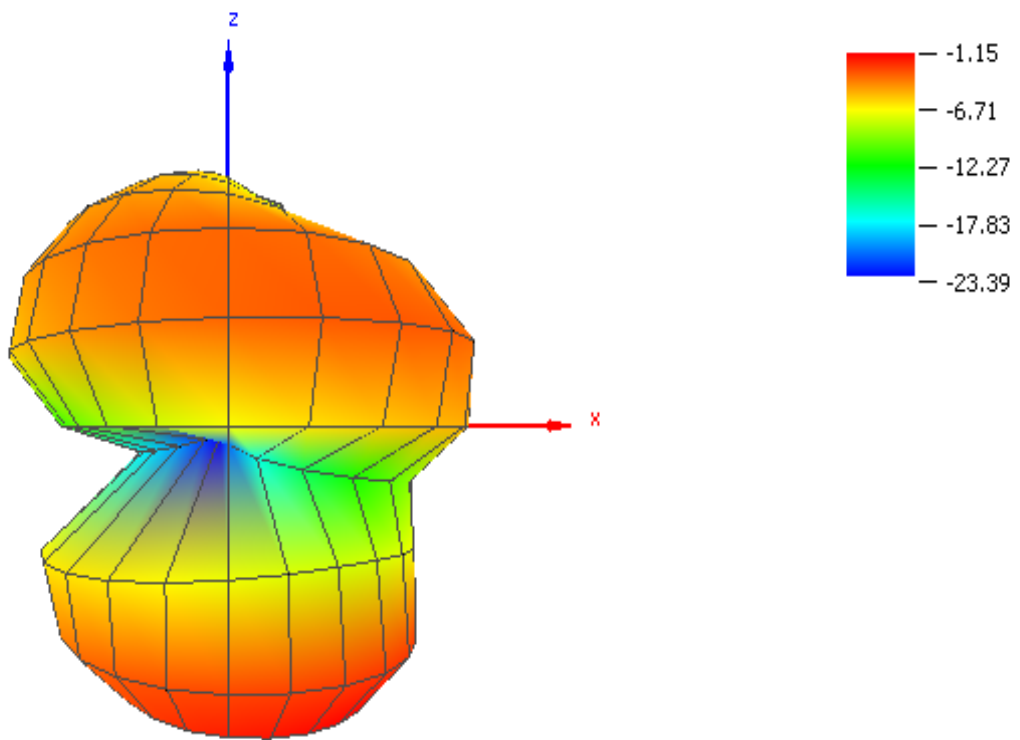
Theta = 0, Phi = 0



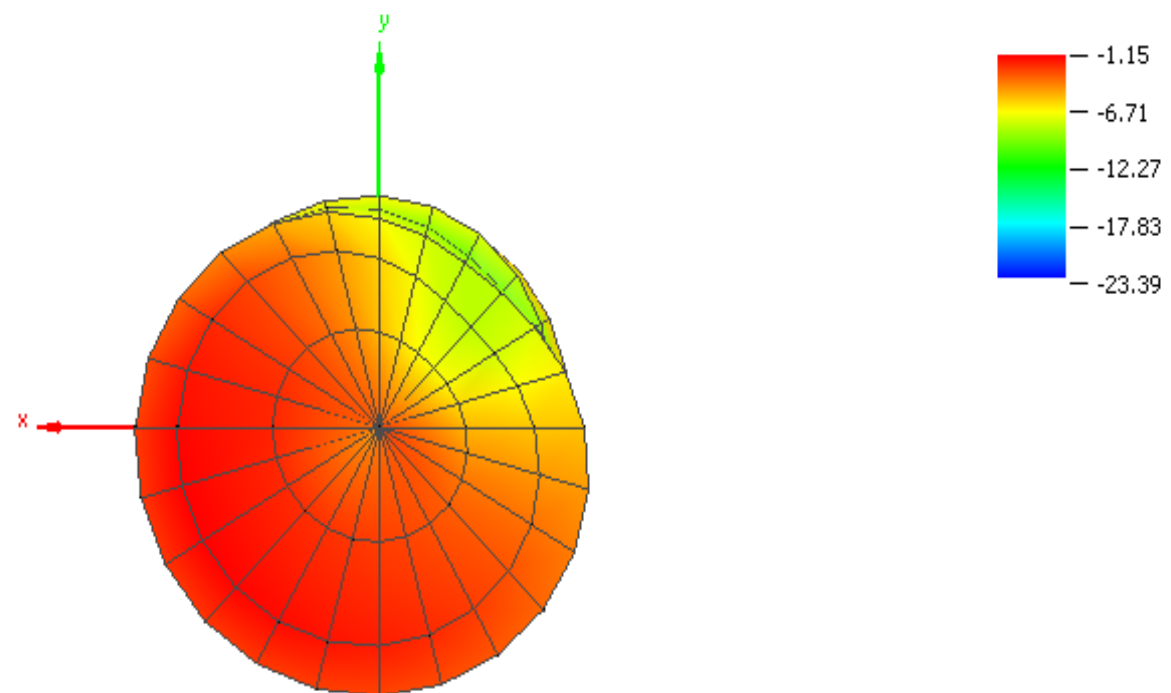
Theta = 90, Phi = 180



Theta = 90, Phi = 270



Theta = 180, Phi = 0



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