

CTIA Report (RP_2440.000_tot)

Common Information

Test Description:
 Operating Conditions:
 Operator Name:
 Comment:

Test Information

Test Method:	Antenna Measurement
Test Condition:	FS: Free Space
Frequency:	2440.000 MHz
Test Time:	Start: 6/28/2022 12:07:21 PM; Stop: 6/28/2022 12:12:05 PM
Cal Data Phi:	48.60 dB (Chamber Cal_HOR_07_18_2020_700 HORN, CBT to MA HOR port)
Cal Data Theta:	50.40 dB (Chamber Cal_VER_07_18_2020_700 HORN, Rack_CBT port to MA VER port 04302022)

OTA Evaluation Results

Total Radiated Power	-17.55 dBm
Directivity	5.40 dBi
Total Efficiency	-17.55 dB
Total Efficiency	1.76 %
Peak EIRP	-12.15 dBm
NHPRP 45°	-18.84 dBm
NHPRP 45° / TRP	-1.28 dB
NHPRP 45° / TRP	74.39 %
NHPRP 30°	-20.32 dBm
NHPRP 30° / TRP	-2.76 dB
NHPRP 30° / TRP	52.93 %
NHPRP 22.5°	-21.45 dBm
NHPRP 22.5° / TRP	-3.90 dB
NHPRP 22.5° / TRP	40.77 %
UHRP	-21.82 dBm
UHRP / TRP	-4.26 dB
UHRP / TRP	37.47 %
LHRP	-19.41 dBm
LHRP / TRP	-1.86 dB
LHRP / TRP	65.16 %
PGRP (0-120°)	-19.17 dBm
PGRP / TRP	-1.61 dB
PGRP / TRP	68.95 %
Front/Back Ratio	9.78
PhiBW	97.3 deg
PhiBW Up	41.6 deg
PhiBW Down	55.6 deg
ThetaBW	41.7 deg
ThetaBW Up	13.8 deg
ThetaBW Down	27.9 deg

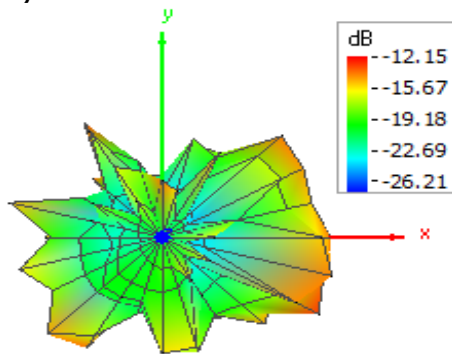
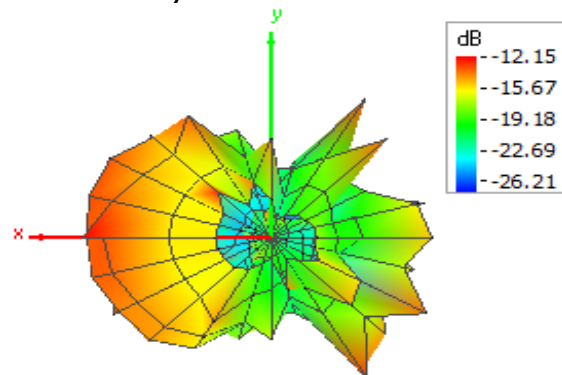
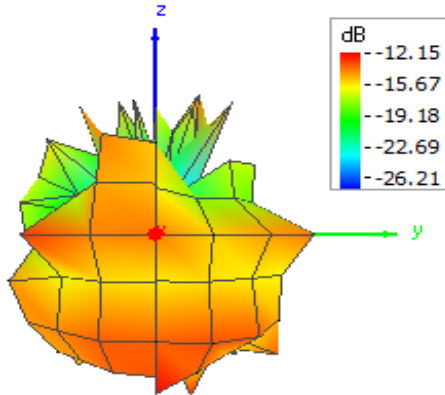
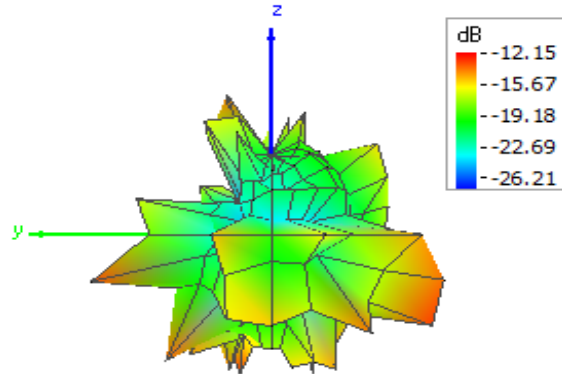
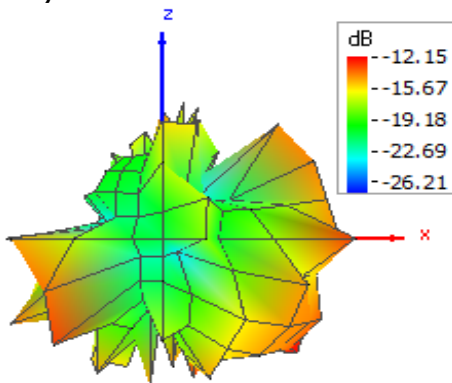
Boresight Phi	0 deg
Boresight Theta	135 deg
Maximum Power	-12.15 dBm
Minimum Power	-24.21 dBm
Average Power	-17.52 dBm
Max/Min Ratio	12.06 dB
Max/Avg Ratio	5.37 dB
Min/Avg Ratio	-6.69 dB
Worst Single Value	-28.58 dBm
Worst Position	Azi = 120 deg; Elev = 45 deg; Pol = Phi
Best Single Value	-12.35 dBm
Best Position	Azi = 0 deg; Elev = 135 deg; Pol = Theta

RP_2440.000_theta

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)
0.0	-25.82	-16.51	-26.17	-24.89	-15.46	-19.17	-15.78	-15.80	-13.73
15.0	-25.82	-25.32	-25.49	-25.16	-21.92	-17.84	-15.36	-15.54	-13.42
30.0	-25.82	-24.08	-25.98	-25.22	-21.16	-17.68	-16.34	-15.85	-13.89
45.0	-25.82	-22.16	-24.92	-24.48	-20.89	-18.47	-14.07	-16.10	-15.08
60.0	-25.82	-22.51	-16.49	-24.65	-21.85	-20.88	-19.19	-17.61	-17.52
75.0	-25.82	-15.49	-21.74	-24.88	-24.22	-24.65	-24.88	-23.20	-21.82
90.0	-25.82	-15.66	-22.34	-25.06	-23.71	-25.43	-24.64	-22.30	-22.63
105.0	-25.82	-20.56	-22.70	-25.85	-26.03	-23.67	-21.18	-21.72	-23.93
120.0	-25.82	-20.39	-16.28	-26.19	-24.44	-21.45	-18.22	-14.83	-19.21
135.0	-25.82	-20.91	-24.09	-25.70	-23.57	-22.38	-24.06	-21.79	-21.45
150.0	-25.82	-21.93	-25.73	-23.59	-24.23	-25.28	-20.67	-22.21	-19.32
165.0	-25.82	-23.15	-25.84	-24.74	-24.00	-23.33	-15.22	-20.47	-16.18
180.0	-25.82	-24.40	-23.86	-24.73	-21.75	-24.63	-19.45	-20.61	-15.51
195.0	-25.82	-26.01	-23.67	-24.73	-22.51	-25.58	-18.71	-20.31	-17.39
210.0	-25.82	-23.55	-23.00	-23.52	-22.24	-24.14	-23.34	-22.52	-16.18
225.0	-25.82	-23.80	-21.06	-21.21	-21.29	-25.93	-14.60	-17.40	-17.32
240.0	-25.82	-21.90	-20.32	-20.26	-21.34	-22.49	-17.02	-13.93	-14.55
255.0	-25.82	-20.18	-19.82	-20.56	-21.16	-22.14	-20.57	-22.57	-21.93
270.0	-25.82	-18.85	-19.45	-15.53	-21.33	-20.24	-21.04	-22.68	-22.20
285.0	-25.82	-19.26	-20.10	-15.75	-21.30	-21.34	-25.01	-26.31	-19.87
300.0	-25.82	-15.53	-21.72	-22.94	-21.76	-20.58	-21.12	-18.48	-15.80
315.0	-25.82	-21.90	-23.43	-24.39	-22.49	-19.81	-17.90	-16.22	-14.56
330.0	-25.82	-15.85	-25.22	-16.13	-22.21	-17.73	-14.21	-16.20	-14.21
345.0	-25.82	-25.17	-25.58	-24.79	-16.36	-14.84	-15.96	-15.61	-13.78
360.0	-25.82	-25.54	-26.17	-25.16	-15.46	-15.17	-15.78	-15.71	-13.73

(continuation of the "RP_2440.000_theta" table from column 10 ...)

Azimuth (deg)	Elevation 135 deg (dB)	Elevation 150 deg (dB)	Elevation 165 deg (dB)
0.0	-12.35	-15.92	-15.78
15.0	-14.08	-16.37	-16.23
30.0	-15.35	-16.82	-16.93
45.0	-15.97	-17.30	-15.02
60.0	-14.44	-18.74	-20.36
75.0	-21.61	-22.70	-16.29
90.0	-23.47	-16.43	-24.87
105.0	-22.91	-24.54	-26.37
120.0	-18.97	-21.58	-25.28
135.0	-15.25	-20.73	-22.22
150.0	-24.92	-20.95	-19.71
165.0	-21.04	-20.73	-18.13
180.0	-19.45	-19.52	-17.58
195.0	-22.24	-20.33	-17.90
210.0	-25.64	-19.66	-19.34
225.0	-18.89	-15.20	-20.77
240.0	-18.79	-20.34	-22.67
255.0	-21.50	-23.16	-16.43
270.0	-21.60	-21.64	-23.41
285.0	-19.74	-21.00	-22.39
300.0	-16.09	-18.17	-19.75
315.0	-14.66	-16.69	-17.82
330.0	-14.44	-16.22	-16.56
345.0	-13.77	-15.91	-15.78
360.0	-13.64	-15.92	-15.87

Theta = 0, Phi = 0**Theta = 180, Phi = 0****Theta = 90, Phi = 0****Theta = 90, Phi = 180****Theta = 90, Phi = 270****Theta = 90, Phi = 90**