

CTIA Report (RP_910.000_tot)

Test Information

Test Method:	Antenna Measurement
Test Condition:	FS: Free Space
Frequency:	910.000 MHz
Test Time:	Start: 6/13/2023 11:32:29 AM; Stop: 6/13/2023 11:38:58 AM
Cal Data Phi:	38.97 dB (ZNB PORT2 to HOR MA1)
Cal Data Theta:	38.75 dB (ZNB PORT3 to VER MA1)

OTA Evaluation Results

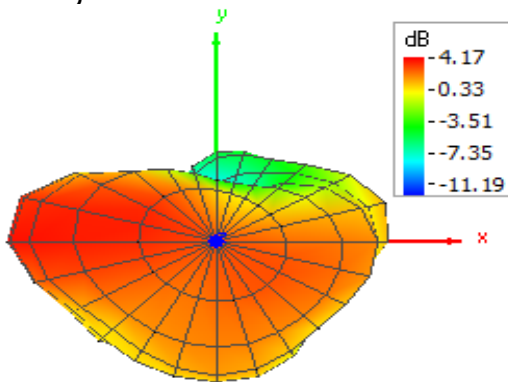
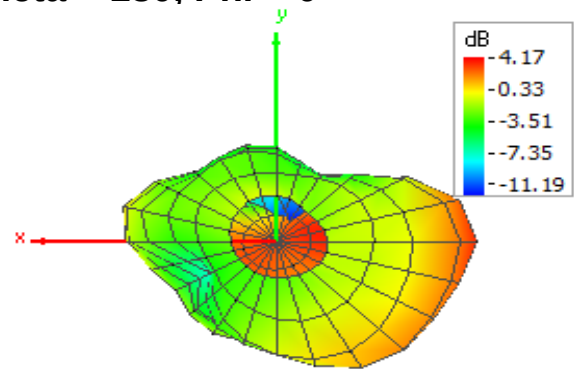
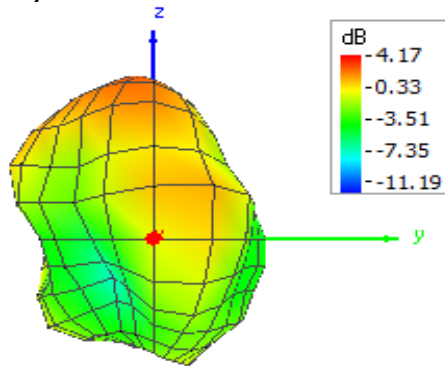
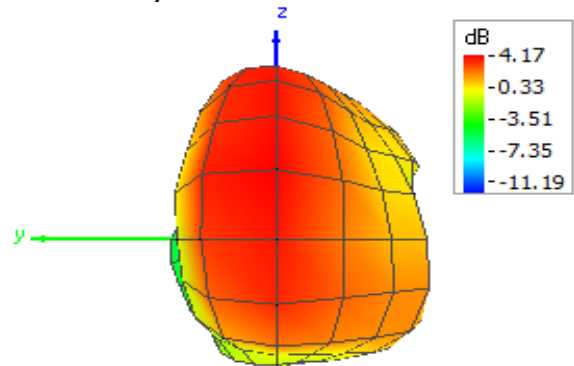
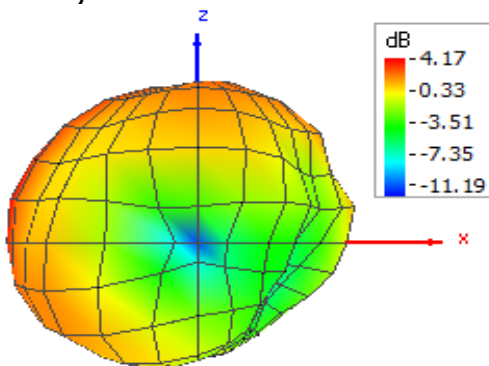
Total Radiated Power	-0.30 dBm
Directivity	4.47 dBi
Total Efficiency	-0.30 dB
Total Efficiency	93.41 %
Peak Realized Gain	4.17 dBi
NHPRP 45°	-2.23 dBm
NHPRP 45° / TRP	-1.94 dB
NHPRP 45° / TRP	64.03 %
NHPRP 30°	-3.85 dBm
NHPRP 30° / TRP	-3.55 dB
NHPRP 30° / TRP	44.13 %
NHPRP 22.5°	-5.09 dBm
NHPRP 22.5° / TRP	-4.80 dB
NHPRP 22.5° / TRP	33.13 %
UHRP	-2.71 dBm
UHRP / TRP	-2.42 dB
UHRP / TRP	57.30 %
LHRP	-4.25 dBm
LHRP / TRP	-3.95 dB
LHRP / TRP	40.23 %
PGRP (0-120°)	-1.38 dBm
PGRP / TRP	-1.09 dB
PGRP / TRP	77.88 %
Front/Back Ratio	4.96
PhiBW	54.1 deg
PhiBW Up	27.6 deg
PhiBW Down	26.5 deg
ThetaBW	183.0 deg
ThetaBW Up	53.1 deg
ThetaBW Down	129.9 deg
Boresight Phi	180 deg
Boresight Theta	75 deg
Maximum Power	4.17 dBm
Minimum Power	-11.19 dBm
Average Power	0.27 dBm
Max/Min Ratio	15.36 dB
Max/Avg Ratio	3.90 dB
Min/Avg Ratio	-11.47 dB
Worst Single Value	-44.25 dBm
Worst Position	Azi = 165 deg; Elev = 120 deg; Pol = Theta
Best Single Value	4.16 dBm
Best Position	Azi = 180 deg; Elev = 75 deg; Pol = Phi

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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)
0.00	3.02	2.50	2.34	2.09	0.69	1.27	0.06	-0.79	-1.98
15.00	3.02	2.00	1.51	1.21	0.30	1.50	0.80	-0.24	-1.07
30.00	3.02	1.32	0.11	-0.75	-1.29	-0.10	-0.91	-1.86	-2.22
45.00	3.02	0.78	-1.48	-3.43	-3.33	-2.51	-3.27	-3.66	-3.52
60.00	3.02	0.48	-2.95	-6.23	-5.01	-3.90	-3.90	-3.63	-3.66
75.00	3.02	0.53	-3.54	-8.30	-6.04	-4.39	-3.81	-3.43	-3.34
90.00	3.02	0.90	-3.37	-9.87	-7.42	-5.00	-4.19	-3.83	-3.62
105.00	3.02	1.61	-2.14	-9.48	-9.97	-6.53	-5.59	-5.26	-4.71
120.00	3.02	2.36	-0.41	-5.84	-11.19	-9.46	-8.34	-6.81	-5.32
135.00	3.02	3.04	1.40	-1.58	-4.76	-5.78	-6.67	-5.09	-3.41
150.00	3.02	3.54	2.88	1.72	0.64	0.40	-0.33	-0.45	-0.47
165.00	3.02	3.70	3.68	3.53	3.39	3.69	3.26	2.68	1.63
180.00	3.02	3.55	3.76	3.91	3.93	4.17	3.85	3.59	2.39
195.00	3.02	3.23	3.19	3.00	2.57	2.52	2.28	2.66	2.17
210.00	3.02	2.84	2.49	1.61	0.84	0.91	1.34	2.09	2.01
225.00	3.02	2.54	2.02	0.91	0.61	0.71	1.26	2.00	2.09
240.00	3.02	2.38	1.99	1.12	0.74	-0.82	-1.03	0.28	1.41
255.00	3.02	2.41	2.09	1.52	0.84	-2.97	-7.35	-3.69	-0.13
270.00	3.02	2.59	2.18	1.82	0.95	-2.54	-9.97	-6.95	-1.59
285.00	3.02	2.72	2.20	1.63	0.90	-1.35	-5.25	-5.46	-2.25
300.00	3.02	2.87	2.09	1.12	0.19	-0.96	-3.30	-3.63	-2.90
315.00	3.02	2.93	2.16	0.74	-1.04	-1.35	-3.25	-3.84	-4.47
330.00	3.02	2.98	2.36	1.13	-1.42	-2.05	-4.61	-5.94	-6.62
345.00	3.02	2.87	2.53	1.90	-0.04	-0.54	-2.82	-4.38	-5.12
360.00	3.02	2.50	2.34	2.09	0.69	1.27	0.06	-0.79	-1.98

(continuation of the "RP_910.000_tot" table from column 10 ...)

Azimuth (deg)	Elevation 135 deg (dB)	Elevation 150 deg (dB)	Elevation 165 deg (dB)
0.00	-2.95	-2.63	-1.88
15.00	-1.97	-1.89	-1.35
30.00	-1.90	-1.49	-0.94
45.00	-2.19	-1.57	-0.54
60.00	-2.08	-1.78	-0.17
75.00	-2.20	-2.16	0.02
90.00	-2.75	-2.37	-0.24
105.00	-3.86	-2.35	-0.64
120.00	-4.12	-1.74	-1.32
135.00	-2.62	-0.96	-1.69
150.00	-1.15	-0.47	-1.57
165.00	-0.28	-0.33	-0.98
180.00	0.14	-0.37	-0.70
195.00	0.19	-0.55	-0.61
210.00	0.40	-0.39	-0.71
225.00	0.91	-0.19	-1.24
240.00	1.13	-0.22	-1.75
255.00	0.72	-0.48	-2.22
270.00	-0.16	-1.11	-2.33
285.00	-1.23	-1.81	-2.50
300.00	-2.54	-2.45	-2.59
315.00	-4.09	-2.91	-2.63
330.00	-5.50	-3.44	-2.50
345.00	-5.05	-3.23	-2.24
360.00	-2.95	-2.63	-1.88

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