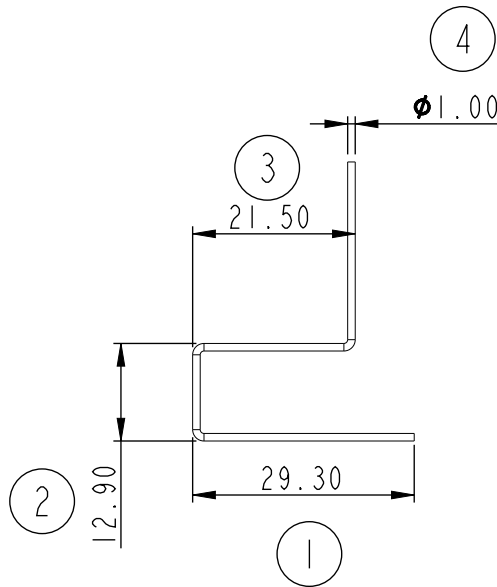
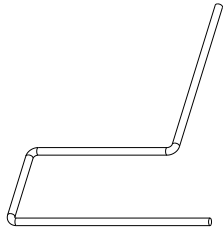


Note:

1. (N) BALL SYMBOLS ARE CRITICAL DIMENSIONS

REVISIONS

REV	DESCRIPTION	ENGR
M01	1ST ISSUE	0801



Climax

CLIMAX PRECISION IND. CO., LTD.
Research and Design

Drawn: Ryan

Designed: Justair

Checked: Amos

Approved: Elane

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DIMENSIONAL TOLERANCES ±	M1	M2	S1	S2	P1	P2	C
0-6	0.05	0.10	0.15	0.20	0.05	0.10	0.5
6-30	0.10	0.20	0.15	0.25	0.10	0.15	1.0
30-80	0.15	0.25	0.20	0.30	0.20	0.40	2.0
80-180	0.15	0.30	0.25	0.45	0.40	0.80	3.0
180-315	0.20	0.50	0.40	0.60	0.60	1.20	3.0
315-800	0.30	0.80	0.70	1.10	0.80	1.50	4.0

Material:
Copper Plated Steel



Treatment:
Tin plating

A4
SIZE

DESCRIPTION:
PRL-1-F1868

PART NO.:
8403000329C

REV.

M01

SCALE 1.000 UNITS MM USED ON

DWG NAME 8403000329C

DWG NO.

DATE

2019/10/22

Antenna OTA 3D Antenna Pattern

Infomation	
Date	43496
Start Time	43496.62153
Finish Time	43496.625
Lab Name	Max860
Operator	ATEN
Project Name	PRL-1
Manufacturer	passive
Model Name	920-2
Hardware V	1
Software V	3.6.1 Beta
Test Condition	Free Space
Temperature	N/A
Humidity	N/A
Note	N/A

Test List
800MHz
804MHz
808MHz
812MHz
816MHz
820MHz
824MHz
828MHz
832MHz
836MHz
840MHz
844MHz
848MHz
852MHz
856MHz
860MHz
864MHz
868MHz
872MHz
876MHz
880MHz
884MHz
888MHz
892MHz

896MHz
900MHz
904MHz
908MHz
912MHz
916MHz
920MHz
924MHz
928MHz
932MHz
936MHz
940MHz
944MHz
948MHz
952MHz
956MHz
960MHz
964MHz
968MHz
972MHz
976MHz
980MHz
984MHz
988MHz
992MHz
996MHz
1GHz

Frequency	800MHz	804MHz	808MHz	812MHz	816MHz	820MHz	824MHz	828MHz	832MHz	836MHz	840MHz	844MHz	848MHz	852MHz	856MHz	860MHz	864MHz	868MHz	872MHz	876MHz	880MHz
Ant. Port Inp. Pow. (dBi)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rad. Pow. (dBi)	-10.59	-10.98	-11.37	-11.8	-12.23	-12.07	-11.95	-12.22	-12.33	-12.42	-12.54	-12.39	-12.36	-12.48	-12.54	-12.39	-12.06	-11.91	-11.63	-11.66	-12.05
Rad. Pow. 0-90 (dBi)	-15.74	-16.1	-16.45	-16.86	-17.27	-17.06	-16.86	-17.03	-17.02	-17	-16.99	-16.68	-16.49	-16.49	-16.4	-16.08	-15.61	-15.31	-14.9	-14.82	-15.11
Rad. Pow. 90-180 (dBi)	-12.18	-12.57	-12.99	-13.42	-13.86	-13.72	-13.65	-13.96	-14.14	-14.28	-14.47	-14.42	-14.49	-14.68	-14.83	-14.82	-14.6	-14.56	-14.4	-14.52	-15.01
Peak EIRP (dBi)	-5.2	-5.62	-5.93	-6.4	-6.74	-6.47	-6.31	-6.61	-6.69	-6.89	-7.01	-6.93	-7.01	-7.23	-7.27	-7.37	-7.04	-7.22	-7.03	-7.35	-8.09
Directivity (dBi)	5.39	5.36	5.44	5.4	5.49	5.6	5.64	5.61	5.64	5.53	5.53	5.46	5.35	5.25	5.27	5.02	5.02	4.69	4.6	4.31	3.96
Efficiency (dB)	-10.59	-10.98	-11.37	-11.8	-12.23	-12.07	-11.95	-12.22	-12.33	-12.42	-12.54	-12.39	-12.36	-12.48	-12.54	-12.39	-12.06	-11.91	-11.63	-11.66	-12.05
Efficiency (%)	8.73	7.98	7.29	6.61	5.98	6.21	6.38	6	5.85	5.73	5.57	5.77	5.81	5.65	5.57	5.77	6.22	6.44	6.87	6.82	6.24
Gain (dBi)	-5.2	-5.62	-5.93	-6.4	-6.74	-6.47	-6.31	-6.61	-6.69	-6.89	-7.01	-6.93	-7.01	-7.23	-7.27	-7.37	-7.04	-7.22	-7.03	-7.35	-8.09
NHPRP +/-30 (dBi)	-14.58	-14.92	-15.24	-15.64	-16.05	-15.85	-15.68	-15.89	-15.95	-15.97	-16.03	-15.77	-15.67	-15.71	-15.7	-15.44	-15.02	-14.77	-14.37	-14.32	-14.61
NHPRP +/-45 (dBi)	-13.17	-13.52	-13.86	-14.25	-14.65	-14.45	-14.28	-14.49	-14.55	-14.58	-14.64	-14.41	-14.32	-14.38	-14.39	-14.17	-13.77	-13.55	-13.19	-13.15	-13.46
Maximum H+V Value (dBi)	-5.2	-5.62	-5.93	-6.4	-6.74	-6.47	-6.31	-6.61	-6.69	-6.89	-7.01	-6.93	-7.01	-7.23	-7.27	-7.37	-7.04	-7.22	-7.03	-7.35	-8.09
Maximum H+V @ Theta (deg.)	135	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150
Maximum H+V @ Phi (deg.)	120	90	105	90	90	90	90	105	90	90	105	105	105	120	105	90	105	120	105	105	105
Minimum H+V Value (dBi)	-19.23	-19.57	-20.04	-20.7	-21.62	-22.27	-23.05	-24.47	-25.75	-27.39	-28.56	-28.88	-31	-32.96	-32.33	-31.34	-32.37	-33.07	-31.06	-29.32	-30.97
Minimum H+V @ Theta (deg.)	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
Minimum H+V @ Phi (deg.)	180	180	180	165	165	180	180	180	180	180	180	180	195	195	195	210	210	210	210	210	225
Horizontal ()																					
Ant. Port Inp. Pow. (dBi)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H Rad. Pow. (dBi)	-12.41	-12.86	-13.33	-13.8	-14.27	-14.14	-14.1	-14.43	-14.62	-14.78	-14.94	-14.85	-14.87	-14.99	-14.97	-14.75	-14.38	-14.18	-13.87	-13.91	-14.3
H Rad. Pow. 0-90 (dBi)	-18.5	-18.9	-19.26	-19.68	-20.05	-19.82	-19.62	-19.76	-19.75	-19.7	-19.63	-19.28	-19.07	-18.99	-18.76	-18.28	-17.71	-17.3	-16.83	-16.72	-16.98
H Rad. Pow. 90-180 (dBi)	-13.63	-14.1	-14.61	-15.1	-15.6	-15.51	-15.54	-15.94	-16.21	-16.47	-16.74	-16.78	-16.94	-17.19	-17.32	-17.3	-17.09	-17.07	-16.94	-17.13	-17.67
H Peak EIRP (dBi)	-6.16	-6.64	-7.15	-7.49	-7.8	-7.44	-7.26	-7.51	-7.54	-7.65	-7.84	-7.81	-7.84	-8.06	-8.19	-8	-7.9	-7.95	-7.77	-8.16	-8.73
H Directivity (dBi)	6.25	6.22	6.18	6.31	6.47	6.7	6.84	6.92	7.08	7.13	7.1	7.04	7.03	6.93	6.78	6.75	6.48	6.23	6.1	5.75	5.57
H Efficiency (dB)	-12.41	-12.86	-13.33	-13.8	-14.27	-14.14	-14.1	-14.43	-14.62	-14.78	-14.94	-14.85	-14.87	-14.99	-14.97	-14.75	-14.38	-14.18	-13.87	-13.91	-14.3
H Efficiency (%)	5.74	5.18	4.65	4.17	3.74	3.85	3.89	3.61	3.45	3.33	3.21	3.27	3.26	3.17	3.18	3.35	3.65	3.82	4.1	4.06	3.72
H Gain (dBi)	-6.16	-6.64	-7.15	-7.49	-7.8	-7.44	-7.26	-7.51	-7.54	-7.65	-7.84	-7.81	-7.84	-8.06	-8.19	-8	-7.9	-7.95	-7.77	-8.16	-8.73
H NHPRP +/-30 (dBi)	-17.29	-17.68	-18.07	-18.51	-18.91	-18.72	-18.6	-18.8	-18.92	-18.93	-18.94	-18.67	-18.54	-18.52	-18.35	-17.94	-17.4	-17.04	-16.56	-16.47	-16.72
H NHPRP +/-45 (dBi)	-15.65	-16.08	-16.49	-16.96	-17.38	-17.22	-17.13	-17.38	-17.53	-17.6	-17.65	-17.44	-17.36	-17.37	-17.23	-16.87	-16.37	-16.03	-15.6	-15.52	-15.8
Maximum H Value (dBi)	-6.16	-6.64	-7.15	-7.49	-7.8	-7.44	-7.26	-7.51	-7.54	-7.65	-7.84	-7.81	-7.84	-8.06	-8.19	-8	-7.9	-7.95	-7.77	-8.16	-8.73
Maximum H @ Theta (deg.)	135	135	135	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150
Maximum H @ Phi (deg.)	105	90	105	75	90	90	90	75	90	75	90	75	90	90	90	90	105	90	90	90	90
Minimum H Value (dBi)	-27.46	-27.68	-27.85	-28.98	-28.88	-29.84	-31.32	-32.59	-32.23	-34.27	-36.36	-37.71	-40.06	-37.39	-39.26	-39.32	-39.36	-50.23	-45.73	-49	-45.57
Minimum H @ Theta (deg.)	45	45	45	45	45	0	0	0	0	165	165	30	30	30	30	30	165	165	165	165	165
Minimum H @ Phi (deg.)	150	150	165	165	165	330	330	330	330	240	240	195	195	195	210	210	225	225	225	225	225
Vertical ()																					
Ant. Port Inp. Pow. (dBi)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
V Rad. Pow. (dBi)	-15.25	-15.52	-15.77	-16.11	-16.49	-16.28	-16.04	-16.21	-16.21	-16.21	-16.27	-16.05	-15.95	-16.06	-16.21	-16.16	-15.89	-15.82	-15.58	-15.59	-15.98
V Rad. Pow. 0-90 (dBi)	-19.01	-19.34	-19.66	-20.06	-20.52	-20.34	-20.14	-20.34	-20.33	-20.36	-20.41	-20.13	-19.99	-20.07	-20.18	-20.07	-19.76	-19.64	-19.34	-19.34	-19.68
V Rad. Pow. 90-180 (dBi)	-17.63	-17.85	-18.05	-18.35	-18.67	-18.44	-18.17	-18.32	-18.34	-18.32	-18.38	-18.2	-18.13	-18.26	-18.44	-18.43	-18.19	-18.14	-17.94	-17.97	-18.4
V Peak EIRP (dBi)	-10.11	-10.16	-10.3	-10.41	-10.59	-10.3	-9.96	-10.1	-9.94	-9.97	-10.04	-9.95	-9.93	-10.14	-10.42	-10.52	-10.17	-10.32	-10.16	-10.16	-10.58
V Directivity (dBi)	5.14	5.36	5.47	5.7	5.9	5.98	6.08	6.11	6.27	6.24	6.23	6.1	6.02	5.92	5.79	5.64	5.72	5.5	5.42	5.43	5.4
V Efficiency (dB)	-15.25	-15.52	-15.77	-16.11	-16.49	-16.28	-16.04	-16.21	-16.21	-16.27	-16.27	-16.05	-15.95	-16.06	-16.21	-16.16	-15.89	-15.82	-15.58	-15.59	-15.98
V Efficiency (%)	2.99	2.81	2.65	2.45	2.24	2.36	2.49	2.39	2.39	2.36	2.36	2.48	2.54	2.48	2.39	2.42	2.58	2.62	2.77	2.76	2.52
V Gain (dBi)	-10.11	-10.16	-10.3	-10.41	-10.59	-10.3	-9.96	-10.1	-9.94	-9.97	-10.04	-9.95	-9.93	-10.14	-10.42	-10.52	-10.17	-10.32	-10.16	-10.16	-10.58
V NHPRP +/-30 (dBi)	-17.92	-18.19	-18.45	-18.81	-19.21	-19.01	-18.79	-19	-19	-19.04	-19.13	-18.9	-18.82	-18.93	-19.1	-19.04	-18.76	-18.68	-18.39	-18.4	-18.76
V NHPRP +/-45 (dBi)	-16.78	-17.03	-17.28	-17.59	-17.95	-17.72	-17.46	-17.62	-17.59	-17.58	-17.65	-17.41	-17.3	-17.4	-17.57	-17.51	-17.24	-17.16	-16.9	-16.91	-17.28
Maximum V Value (dBi)	-10.11	-10.16	-10.3	-10.41	-10.59	-10.3	-9.96	-10.1	-9.94	-9.97	-10.04	-9.95	-9.93	-10.14	-10.42	-10.52	-10.17	-10.32	-10.16	-10.16	-10.58
Maximum V @ Theta (deg.)	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105
Maximum V @ Phi (deg.)	0	330	315	330	330	315	330	315	0	315	330	330	330	0	0	0	330	330	0	0	0
Minimum V Value (dBi)	-36.56	-43.84	-41.42	-36.11	-33.71	-33	-33.28	-35.1	-36.36	-37.22	-44.21	-42.09	-40.02	-46.69	-43.43	-41.57	-43.96	-43.96	-40.88	-38.13	-41
Minimum V @ Theta (deg.)	60	60	60	60	60	60	0	15	15	15	15	15	15	15	15	30	15	15	30	15	15
Minimum V @ Phi (deg.)	240	240	240	240	255	255	195	180	180	195	195	195	210	210	210	195	225	225	210	240	240

Frequency	884MHz	888MHz	892MHz	896MHz	900MHz	904MHz	908MHz	912MHz	916MHz	920MHz	924MHz	928MHz	932MHz	936MHz	940MHz	944MHz	948MHz	952MHz	956MHz	960MHz	964MHz
Ant. Port Inp. Pow. (dBi)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rad. Pow. (dBi)	-11.9	-11.89	-11.78	-11.52	-11.21	-10.78	-10.53	-10.18	-10.27	-10.45	-9.87	-9.48	-9.02	-8.46	-8.03	-8	-7.99	-8.06	-8.02	-8.23	-8.36
Rad. Pow. 0-90 (dBi)	-14.87	-14.78	-14.59	-14.27	-13.89	-13.4	-13.1	-12.74	-12.82	-12.99	-12.41	-12.01	-11.52	-10.97	-10.53	-10.51	-10.52	-10.63	-10.63	-10.89	-11.05
Rad. Pow. 90-180 (dBi)	-14.94	-15.03	-14.99	-14.81	-14.58	-14.21	-14.02	-13.69	-13.8	-13.98	-13.42	-13.04	-12.6	-12.04	-11.6	-11.58	-11.53	-11.56	-11.47	-11.63	-11.71
Peak EIRP (dBi)	-8.16	-8.08	-8.07	-7.65	-7.45	-7.04	-6.79	-6.35	-6.45	-6.67	-5.97	-5.79	-5.38	-4.97	-4.61	-4.73	-4.67	-4.83	-4.69	-4.85	-4.99
Directivity (dBi)	3.74	3.81	3.71	3.87	3.76	3.74	3.74	3.83	3.82	3.78	3.9	3.69	3.64	3.49	3.42	3.27	3.32	3.23	3.33	3.38	3.37
Efficiency (dB)	-11.9	-11.89	-11.78	-11.52	-11.21	-10.78	-10.53	-10.18	-10.27	-10.45	-9.87	-9.48	-9.02	-8.46	-8.03	-8	-7.99	-8.06	-8.02	-8.23	-8.36
Efficiency (%)	6.46	6.47	6.64	7.05	7.57	8.36	8.85	9.59	9.4	9.02	10.3	11.27	12.53	14.26	15.74	15.85	15.89	15.63	15.78	15.03	14.59
Gain (dBi)	-8.16	-8.08	-8.07	-7.65	-7.45	-7.04	-6.79	-6.35	-6.45	-6.67	-5.97	-5.79	-5.38	-4.97	-4.61	-4.73	-4.67	-4.83	-4.69	-4.85	-4.99
NHPRP +/-30 (dBi)	-14.36	-14.28	-14.07	-13.76	-13.39	-12.89	-12.57	-12.18	-12.24	-12.4	-11.82	-11.42	-10.97	-10.42	-10	-9.99	-10	-10.09	-10.07	-10.3	-10.45
NHPRP +/-45 (dBi)	-13.25	-13.18	-13	-12.69	-12.33	-11.84	-11.54	-11.15	-11.21	-11.36	-10.76	-10.35	-9.89	-9.32	-8.88	-8.87	-8.86	-8.94	-8.91	-9.13	-9.27
Maximum H+V Value (dBi)	-8.16	-8.08	-8.07	-7.65	-7.45	-7.04	-6.79	-6.35	-6.45	-6.67	-5.97	-5.79	-5.38	-4.97	-4.61	-4.73	-4.67	-4.83	-4.69	-4.85	-4.99
Maximum H+V @ Theta (deg.)	150	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	105	105	105	105	105
Maximum H+V @ Phi (deg.)	105	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	315	315	315	315	315
Minimum H+V Value (dBi)	-31.45	-31.14	-30.38	-29.12	-29.22	-28.23	-26.76	-24.97	-23.7	-23.02	-21.85	-20.66	-19.72	-19.8	-19.6	-19.87	-19.79	-19.36	-18.71	-18.12	-17.94
Minimum H+V @ Theta (deg.)	30	30	30	30	30	30	30	30	30	30	30	30	135	135	135	135	135	135	135	135	15
Minimum H+V @ Phi (deg.)	225	225	225	240	240	240	240	240	240	255	255	255	90	90	105	105	105	105	120	120	270
Horizontal ()																					
Ant. Port Inp. Pow. (dBi)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H Rad. Pow. (dBi)	-14.06	-13.97	-13.78	-13.4	-12.97	-12.41	-12.04	-11.59	-11.6	-11.7	-11.02	-10.52	-9.98	-9.36	-8.86	-8.79	-8.73	-8.76	-8.68	-8.86	-8.95
H Rad. Pow. 0-90 (dBi)	-16.62	-16.44	-16.18	-15.74	-15.25	-14.64	-14.24	-13.8	-13.81	-13.92	-13.26	-12.79	-12.25	-11.65	-11.18	-11.12	-11.1	-11.18	-11.15	-11.39	-11.53
H Rad. Pow. 90-180 (dBi)	-17.56	-17.6	-17.51	-17.2	-16.87	-16.38	-16.05	-15.59	-15.58	-15.67	-14.96	-14.43	-13.89	-13.23	-12.71	-12.61	-12.49	-12.46	-12.31	-12.42	-12.44
H Peak EIRP (dBi)	-8.88	-9.2	-9.41	-9.17	-8.56	-8.16	-7.9	-7.39	-7.57	-7.7	-7.24	-6.79	-6.29	-5.73	-5.37	-5.31	-5.35	-5.39	-5.2	-5.34	-5.37
H Directivity (dBi)	5.18	4.77	4.37	4.23	4.41	4.25	4.14	4.2	4.03	4	3.78	3.73	3.69	3.63	3.49	3.48	3.38	3.37	3.48	3.52	3.58
H Efficiency (dB)	-14.06	-13.97	-13.78	-13.4	-12.97	-12.41	-12.04	-11.59	-11.6	-11.7	-11.02	-10.52	-9.98	-9.36	-8.86	-8.79	-8.73	-8.76	-8.68	-8.86	-8.95
H Efficiency (%)	3.93	4.01	4.19	4.57	5.05	5.74	6.25	6.93	6.92	6.76	7.91	8.87	10.05	11.59	13	13.21	13.4	13.3	13.55	13	12.74
H Gain (dBi)	-8.88	-9.2	-9.41	-9.17	-8.56	-8.16	-7.9	-7.39	-7.57	-7.7	-7.24	-6.79	-6.29	-5.73	-5.37	-5.31	-5.35	-5.39	-5.2	-5.34	-5.37
H NHPRP +/-30 (dBi)	-16.33	-16.14	-15.85	-15.39	-14.89	-14.24	-13.8	-13.3	-13.27	-13.35	-12.67	-12.19	-11.67	-11.06	-10.59	-10.54	-10.51	-10.56	-10.51	-10.72	-10.84
H NHPRP +/-45 (dBi)	-15.44	-15.26	-14.98	-14.51	-14.02	-13.38	-12.94	-12.43	-12.39	-12.45	-11.75	-11.23	-10.69	-10.06	-9.57	-9.51	-9.45	-9.49	-9.42	-9.62	-9.72
Maximum H Value (dBi)	-8.88	-9.2	-9.41	-9.17	-8.56	-8.16	-7.9	-7.39	-7.57	-7.7	-7.24	-6.79	-6.29	-5.73	-5.37	-5.31	-5.35	-5.39	-5.2	-5.34	-5.37
Maximum H @ Theta (deg.)	150	150	150	75	75	75	75	75	75	60	75	60	60	60	60	60	105	105	105	105	105
Maximum H @ Phi (deg.)	90	90	90	75	75	75	75	90	75	75	90	75	90	75	90	90	315	300	300	315	300
Minimum H Value (dBi)	-39.87	-37.12	-38.09	-40.52	-45.74	-47.31	-39.47	-42.46	-50.07	-40.93	-34.89	-31.49	-33.79	-38.92	-38.81	-36.84	-42.56	-43.81	-32.41	-28.85	-30.43
Minimum H @ Theta (deg.)	165	165	30	30	30	30	30	15	15	15	15	15	165	135	135	165	165	150	150	0	0
Minimum H @ Phi (deg.)	225	225	225	225	225	225	225	210	210	210	210	210	195	45	45	195	195	180	180	210	210
Vertical ()																					
Ant. Port Inp. Pow. (dBi)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
V Rad. Pow. (dBi)	-15.96	-16.09	-16.1	-16.07	-15.98	-15.81	-15.83	-15.75	-16.08	-16.47	-16.23	-16.2	-16.02	-15.76	-15.58	-15.78	-16.02	-16.33	-16.52	-16.92	-17.31
V Rad. Pow. 0-90 (dBi)	-19.65	-19.75	-19.73	-19.68	-19.6	-19.46	-19.47	-19.4	-19.73	-20.14	-19.9	-19.86	-19.65	-19.36	-19.13	-19.31	-19.56	-19.89	-20.09	-20.5	-20.9
V Rad. Pow. 90-180 (dBi)	-18.38	-18.54	-18.57	-18.55	-18.45	-18.27	-18.29	-18.2	-18.53	-18.9	-18.67	-18.65	-18.49	-18.25	-18.1	-18.32	-18.55	-18.85	-19.03	-19.43	-19.82
V Peak EIRP (dBi)	-10.57	-10.73	-10.61	-10.62	-10.51	-10.32	-10.31	-10.19	-10.74	-11.24	-10.94	-10.86	-10.71	-10.56	-10.3	-10.65	-11.14	-11.25	-11.14	-11.27	-11.31
V Directivity (dBi)	5.39	5.36	5.49	5.45	5.47	5.49	5.52	5.56	5.34	5.23	5.29	5.34	5.31	5.2	5.28	5.13	4.88	5.08	5.38	5.65	6
V Efficiency (dB)	-15.96	-16.09	-16.1	-16.07	-15.98	-15.81	-15.83	-15.75	-16.08	-16.47	-16.23	-16.2	-16.02	-15.76	-15.58	-15.78	-16.02	-16.33	-16.52	-16.92	-17.31
V Efficiency (%)	2.54	2.46	2.45	2.47	2.52	2.62	2.61	2.66	2.47	2.25	2.38	2.4	2.5	2.65	2.77	2.64	2.5	2.33	2.23	2.03	1.86
V Gain (dBi)	-10.57	-10.73	-10.61	-10.62	-10.51	-10.32	-10.31	-10.19	-10.74	-11.24	-10.94	-10.86	-10.71	-10.56	-10.3	-10.65	-11.14	-11.25	-11.14	-11.27	-11.31
V NHPRP +/-30 (dBi)	-18.74	-18.84	-18.81	-18.79	-18.72	-18.6	-18.66	-18.6	-19	-19.46	-19.28	-19.34	-19.25	-19.06	-18.94	-19.23	-19.56	-19.97	-20.22	-20.64	-21.03
V NHPRP +/-45 (dBi)	-17.27	-17.38	-17.36	-17.33	-17.24	-17.09	-17.12	-17.06	-17.44	-17.88	-17.69	-17.7	-17.59	-17.37	-17.23	-17.51	-17.82	-18.22	-18.47	-18.92	-19.34
Maximum V Value (dBi)	-10.57	-10.73	-10.61	-10.62	-10.51	-10.32	-10.31	-10.19	-10.74	-11.24	-10.94	-10.86	-10.71	-10.56	-10.3	-10.65	-11.14	-11.25	-11.14	-11.27	-11.31
Maximum V @ Theta (deg.)	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	120	165	165	165	165
Maximum V @ Phi (deg.)	330	0	0	330	330	0	0	0	330	15	15	15	15	15	15	15	330	15	15	15	15
Minimum V Value (dBi)	-39.73	-41.38	-42.72	-52.26	-44.55	-52.99	-40.88	-40.72	-48.9	-44.71	-38.03	-41.58	-48.34	-39.18	-43.17	-58.12	-40.88	-42.31	-45.2	-36.86	-39.18
Minimum V @ Theta (deg.)	75	75	75	15	15	45	150	15	15	15	15	45	45	30	90	120	120	105	90	75	45
Minimum V @ Phi (deg.)	255	255	255	255	255	225	285	270	270	270	270	255	255	270	270	105	105	105	105	105	105

Frequency	968MHz	972MHz	976MHz	980MHz	984MHz	988MHz	992MHz	996MHz	1GHz
Ant. Port Inp. Pow. (dBi)	0	0	0	0	0	0	0	0	0
Rad. Pow. (dBi)	-8.4	-8.67	-8.67	-8.57	-8.55	-8.75	-8.98	-9.01	-9.3
Rad. Pow. 0-90 (dBi)	-11.13	-11.43	-11.46	-11.4	-11.4	-11.63	-11.86	-11.89	-12.17
Rad. Pow. 90-180 (dBi)	-11.72	-11.95	-11.92	-11.77	-11.72	-11.9	-12.13	-12.15	-12.46
Peak EIRP (dBi)	-4.94	-5.17	-5.11	-5.1	-5.02	-5.21	-5.49	-5.57	-5.87
Directivity (dBi)	3.46	3.5	3.56	3.47	3.53	3.54	3.49	3.44	3.43
Efficiency (dB)	-8.4	-8.67	-8.67	-8.57	-8.55	-8.75	-8.98	-9.01	-9.3
Efficiency (%)	14.45	13.58	13.58	13.9	13.96	13.34	12.65	12.56	11.75
Gain (dBi)	-4.94	-5.17	-5.11	-5.1	-5.02	-5.21	-5.49	-5.57	-5.87
NHPRP +/-30 (dBi)	-10.51	-10.79	-10.8	-10.72	-10.69	-10.9	-11.12	-11.13	-11.4
NHPRP +/-45 (dBi)	-9.32	-9.6	-9.61	-9.53	-9.51	-9.72	-9.95	-9.97	-10.27
Maximum H+V Value (dBi)	-4.94	-5.17	-5.11	-5.1	-5.02	-5.21	-5.49	-5.57	-5.87
Maximum H+V @ Theta (deg.)	105	105	105	105	105	105	105	105	105
Maximum H+V @ Phi (deg.)	315	315	315	315	315	315	315	315	315
Minimum H+V Value (dBi)	-18.15	-18.56	-18.71	-19	-19.44	-20.17	-20.88	-21.41	-22.43
Minimum H+V @ Theta (deg.)	15	15	0	0	0	0	0	0	0
Minimum H+V @ Phi (deg.)	270	270	0	0	0	0	0	0	30
Horizontal ()									
Ant. Port Inp. Pow. (dBi)	0	0	0	0	0	0	0	0	0
H Rad. Pow. (dBi)	-8.97	-9.22	-9.21	-9.1	-9.08	-9.27	-9.5	-9.53	-9.82
H Rad. Pow. 0-90 (dBi)	-11.59	-11.87	-11.89	-11.83	-11.82	-12.04	-12.27	-12.3	-12.58
H Rad. Pow. 90-180 (dBi)	-12.41	-12.62	-12.58	-12.42	-12.37	-12.54	-12.76	-12.79	-13.1
H Peak EIRP (dBi)	-5.35	-5.55	-5.52	-5.55	-5.48	-5.7	-5.98	-6.03	-6.38
H Directivity (dBi)	3.62	3.67	3.69	3.55	3.6	3.57	3.52	3.5	3.44
H Efficiency (dB)	-8.97	-9.22	-9.21	-9.1	-9.08	-9.27	-9.5	-9.53	-9.82
H Efficiency (%)	12.68	11.97	11.99	12.3	12.36	11.83	11.22	11.14	10.42
H Gain (dBi)	-5.35	-5.55	-5.52	-5.55	-5.48	-5.7	-5.98	-6.03	-6.38
H NHPRP +/-30 (dBi)	-10.89	-11.17	-11.18	-11.1	-11.08	-11.29	-11.51	-11.53	-11.82
H NHPRP +/-45 (dBi)	-9.75	-10.02	-10.03	-9.94	-9.93	-10.15	-10.38	-10.41	-10.71
Maximum H Value (dBi)	-5.35	-5.55	-5.52	-5.55	-5.48	-5.7	-5.98	-6.03	-6.38
Maximum H @ Theta (deg.)	105	105	105	105	105	105	105	105	105
Maximum H @ Phi (deg.)	315	300	315	300	300	300	300	300	300
Minimum H Value (dBi)	-31.94	-33.29	-34.39	-35.15	-34.39	-34.76	-34.71	-33.77	-36
Minimum H @ Theta (deg.)	0	0	0	0	0	0	0	0	0
Minimum H @ Phi (deg.)	210	210	210	210	210	210	210	225	225
Vertical ()									
Ant. Port Inp. Pow. (dBi)	0	0	0	0	0	0	0	0	0
V Rad. Pow. (dBi)	-17.56	-17.94	-18	-17.96	-17.97	-18.21	-18.51	-18.54	-18.79
V Rad. Pow. 0-90 (dBi)	-21.18	-21.59	-21.69	-21.72	-21.75	-22.01	-22.34	-22.4	-22.65
V Rad. Pow. 90-180 (dBi)	-20.03	-20.4	-20.43	-20.34	-20.32	-20.56	-20.83	-20.85	-21.09
V Peak EIRP (dBi)	-11.19	-11.27	-11.21	-11.01	-10.87	-11.12	-11.27	-11.09	-11.34
V Directivity (dBi)	6.37	6.67	6.79	6.95	7.1	7.09	7.24	7.45	7.45
V Efficiency (dB)	-17.56	-17.94	-18	-17.96	-17.97	-18.21	-18.51	-18.54	-18.79
V Efficiency (%)	1.75	1.61	1.58	1.6	1.6	1.51	1.41	1.4	1.32
V Gain (dBi)	-11.19	-11.27	-11.21	-11.01	-10.87	-11.12	-11.27	-11.09	-11.34
V NHPRP +/-30 (dBi)	-21.25	-21.59	-21.56	-21.48	-21.35	-21.48	-21.69	-21.62	-21.76
V NHPRP +/-45 (dBi)	-19.59	-19.96	-19.97	-19.92	-19.83	-20	-20.25	-20.22	-20.38
Maximum V Value (dBi)	-11.19	-11.27	-11.21	-11.01	-10.87	-11.12	-11.27	-11.09	-11.34
Maximum V @ Theta (deg.)	165	165	165	165	165	165	165	165	165
Maximum V @ Phi (deg.)	15	15	15	15	15	15	15	15	15
Minimum V Value (dBi)	-44.84	-44.85	-47.11	-46.55	-42.47	-46.23	-47.84	-47.95	-49.03
Minimum V @ Theta (deg.)	45	15	15	15	75	90	30	15	15
Minimum V @ Phi (deg.)	105	300	300	300	105	150	300	90	0