

Appendix B. Maximum e.i.r.p. at any elevation angle above 30 degrees

1. Maximum e.i.r.p. at any elevation angle above 30 degrees

For 1TX

Mode	Frequency	Modulation	Channel	Data Rate	Conducted Pass Setting	Chain (dBm)	Elevation angle above 30°	Elevation angle above 30°	EIRP Power Limit (dBm)	Test Result
						1	Max gain (dBi)	Max EIRP (dBm)		
Non BF	5180MHz	OFDM	Ch36	6Mbps	68	16.84	4.10	20.94	21	Complies
	5200MHz	OFDM	Ch40	6Mbps	68	16.86	4.10	20.96	21	Complies
	5240MHz	OFDM	Ch48	6Mbps	67	16.71	4.10	20.81	21	Complies
	5180MHz	VHT20	Ch36	MCS0-Nss1	68	16.81	4.10	20.91	21	Complies
	5200MHz	VHT20	Ch40	MCS0-Nss1	68	16.73	4.10	20.83	21	Complies
	5240MHz	VHT20	Ch48	MCS0-Nss1	68	16.88	4.10	20.98	21	Complies
	5190MHz	VHT40	Ch38	MCS0-Nss1	68	16.84	4.10	20.94	21	Complies
	5230MHz	VHT40	Ch46	MCS0-Nss1	67	16.82	4.10	20.92	21	Complies
	5210MHz	VHT80	Ch42	MCS0-Nss1	65	16.81	4.10	20.91	21	Complies

For 2TX

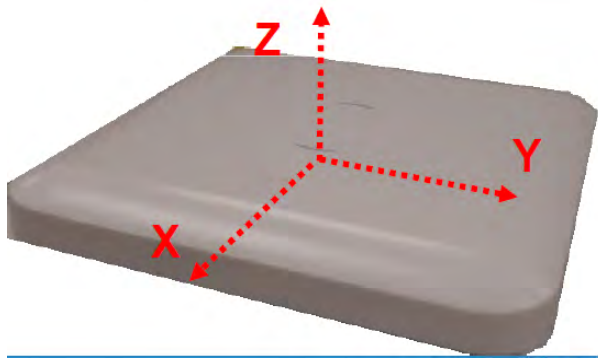
Mode	Frequency	Modulation	Channel	Data Rate	Conducted Pass Setting	Chain (dBm)			Elevation angle above 30°	Elevation angle above 30°	EIRP Power Limit (dBm)	Test Result
						1	2	Total	Max gain (dBi)	Max EIRP (dBm)		
Non BF	5180MHz	OFDM	Ch36	6Mbps	55	13.78	13.89	16.85	4.10	20.95	21	Complies
	5200MHz	OFDM	Ch40	6Mbps	55	13.72	13.81	16.78	4.10	20.88	21	Complies
	5240MHz	OFDM	Ch48	6Mbps	55	13.92	13.72	16.83	4.10	20.93	21	Complies
	5180MHz	VHT20	Ch36	MCS0-Nss1	55	13.59	13.64	16.63	4.10	20.73	21	Complies
	5200MHz	VHT20	Ch40	MCS0-Nss1	55	13.79	13.82	16.82	4.10	20.92	21	Complies
	5240MHz	VHT20	Ch48	MCS0-Nss1	55	13.65	13.53	16.60	4.10	20.70	21	Complies
	5190MHz	VHT40	Ch38	MCS0-Nss1	55	13.76	13.62	16.70	4.10	20.80	21	Complies
	5230MHz	VHT40	Ch46	MCS0-Nss1	55	13.56	14.14	16.87	4.10	20.97	21	Complies
	5210MHz	VHT80	Ch42	MCS0-Nss1	51	13.34	12.49	15.95	4.10	20.05	21	Complies
BF	5180MHz	VHT20	Ch36	MCS0-Nss1	43	10.53	10.75	13.65	7.11	20.76	21	Complies
	5200MHz	VHT20	Ch40	MCS0-Nss1	43	10.35	10.82	13.60	7.11	20.71	21	Complies
	5240MHz	VHT20	Ch48	MCS0-Nss1	43	10.77	10.57	13.68	7.11	20.79	21	Complies
	5190MHz	VHT40	Ch38	MCS0-Nss1	42	10.67	10.82	13.76	7.11	20.87	21	Complies
	5230MHz	VHT40	Ch46	MCS0-Nss1	42	10.82	10.72	13.78	7.11	20.89	21	Complies
	5210MHz	VHT80	Ch42	MCS0-Nss1	40	10.85	10.52	13.70	7.11	20.81	21	Complies

Note: BF: Beamforming

For 3TX

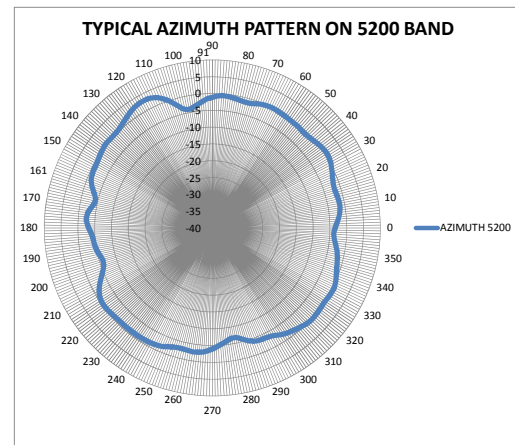
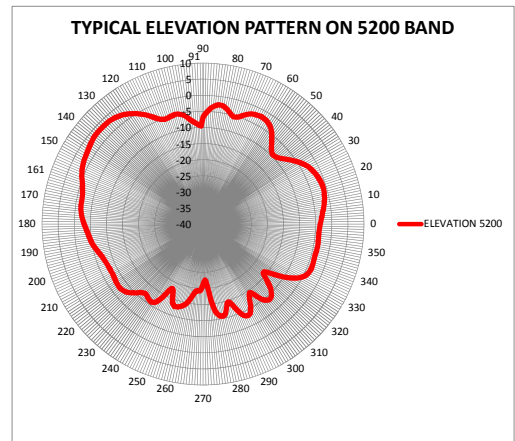
Mode	Frequency	Modulation	Channel	Data Rate	Conducted Pass Setting	Chain (dBm)				Elevation angle above 30°	Elevation angle above 30°	EIRP Power Limit (dBm)	Test Result
						1	2	3	Total	Max gain (dBi)	Max EIRP (dBm)		
Non BF	5180MHz	OFDM	Ch36	6Mbps	50	12.36	11.94	11.64	16.76	4.10	20.86	21	Complies
	5200MHz	OFDM	Ch40	6Mbps	50	12.27	12.14	11.85	16.86	4.10	20.96	21	Complies
	5240MHz	OFDM	Ch48	6Mbps	50	12.54	12.08	11.58	16.86	4.10	20.96	21	Complies
	5180MHz	VHT20	Ch36	MCS0-Nss1	50	12.15	12.13	11.72	16.78	4.10	20.88	21	Complies
	5200MHz	VHT20	Ch40	MCS0-Nss1	50	12.19	12.08	11.94	16.84	4.10	20.94	21	Complies
	5240MHz	VHT20	Ch48	MCS0-Nss1	50	12.29	12.06	11.77	16.82	4.10	20.92	21	Complies
	5190MHz	VHT40	Ch38	MCS0-Nss1	48	12.14	12.05	11.52	16.68	4.10	20.78	21	Complies
	5230MHz	VHT40	Ch46	MCS0-Nss1	48	11.78	12.06	12.03	16.73	4.10	20.83	21	Complies
	5210MHz	VHT80	Ch42	MCS0-Nss1	41	11.03	10.45	11.02	15.61	4.10	19.71	21	Complies
BF	5180MHz	VHT20	Ch36	MCS0-Nss1	31	7.52	7.37	6.95	12.06	8.87	20.93	21	Complies
	5200MHz	VHT20	Ch40	MCS0-Nss1	30	7.48	7.39	6.78	12.00	8.87	20.87	21	Complies
	5240MHz	VHT20	Ch48	MCS0-Nss1	30	7.38	7.19	6.53	11.82	8.87	20.69	21	Complies
	5190MHz	VHT40	Ch38	MCS0-Nss1	29	6.95	7.51	7.24	12.01	8.87	20.88	21	Complies
	5230MHz	VHT40	Ch46	MCS0-Nss1	29	7.04	7.21	6.95	11.84	8.87	20.71	21	Complies
	5210MHz	VHT80	Ch42	MCS0-Nss1	26	7.12	7.36	7.28	12.03	8.87	20.90	21	Complies

Note: BF: Beamforming



Azimuth: XY cut.
Elevation: YZ and XZ cut.

ANGLE LABEL	ANGLE IN DEG	EL ANGLE	BL (TYP)	AZ (TYP)
90	0	90	-6.8165	-1.1523
	1	89	-5.9518	-0.9524
	2	88	-5.1757	-0.7883
	3	87	-4.4659	-0.6617
	4	86	-3.86	-0.5801
	5	85	-3.3715	-0.5416
	6	84	-3.0072	-0.5412
	7	83	-2.7746	-0.5783
	8	82	-2.6769	-0.6511
	9	81	-2.7139	-0.7547
80	10	80	-2.8957	-0.8791
	11	79	-3.2128	-1.0105
	12	78	-3.6401	-1.1332
	13	77	-4.1419	-1.2328
	14	76	-4.655	-1.2951
	15	75	-5.0863	-1.3097
	16	74	-5.3368	-1.2715
	17	73	-5.3317	-1.181
	18	72	-5.0862	-1.0461
	19	71	-4.6736	-0.8802
70	20	70	-4.1892	-0.699
	21	69	-3.7046	-0.5202
	22	68	-3.2699	-0.3592
	23	67	-2.9074	-0.2271
	24	66	-2.6283	-0.1295
	25	65	-2.4207	-0.067
	26	64	-2.2679	-0.0375
	27	63	-2.1662	-0.0386
	28	62	-2.111	-0.0655
	29	61	-2.1037	-0.1115
60	30	60	-2.1507	-0.1688
	31	59	-2.2551	-0.2287
	32	58	-2.4261	-0.2848
	33	57	-2.674	-0.333
	34	56	-3.0012	-0.371
	35	55	-3.4177	-0.3993
	36	54	-3.9281	-0.4205
	37	53	-4.5268	-0.4385
	38	52	-5.2109	-0.4593
	39	51	-5.961	-0.4871
50	40	50	-6.7418	-0.5236
	41	49	-7.5077	-0.5653
	42	48	-8.2033	-0.6061
	43	47	-8.776	-0.6377
	44	46	-9.1858	-0.6511
	45	45	-9.4067	-0.6384
	46	44	-9.4409	-0.5949
	47	43	-9.3118	-0.519
	48	42	-9.0521	-0.4125
	49	41	-8.6941	-0.2783
40	50	40	-8.2654	-0.122
	51	39	-7.7861	0.0486
	52	38	-7.2751	0.2192
	53	37	-6.7446	0.3757
	54	36	-6.2037	0.5057
	55	35	-5.665	0.6004
	56	34	-5.1382	0.6545
	57	33	-4.6328	0.6651
	58	32	-4.1585	0.6296
	59	31	-3.7191	0.5484
30	60	30	-3.3193	0.4231
	61	29	-2.9631	0.2568
	62	28	-2.6459	0.0554
	63	27	-2.3671	-0.1747
	64	26	-2.1236	-0.4249
	65	25	-1.907	-0.6839
	66	24	-1.7165	-0.9398
	67	23	-1.549	-1.1798
	68	22	-1.4	-1.3912
	69	21	-1.2733	-1.5657
20	70	20	-1.1685	-1.6964
	71	19	-1.0869	-1.7799
	72	18	-1.0347	-1.817
	73	17	-1.0125	-1.8112
	74	16	-1.023	-1.7713
	75	15	-1.0699	-1.7101
	76	14	-1.1506	-1.6402
	77	13	-1.2633	-1.5745
	78	12	-1.4042	-1.5243
	79	11	-1.5652	-1.4978
10	80	10	-1.7442	-1.503
	81	9	-1.9373	-1.5458
	82	8	-2.1386	-1.6295
	83	7	-2.3433	-1.7587
	84	6	-2.545	-1.9339
	85	5	-2.7384	-2.1517
	86	4	-2.9245	-2.4053
	87	3	-3.1014	-2.6809
	88	2	-3.2676	-2.9626
	89	1	-3.4212	-3.2335
0	90	0	-3.5564	-3.4725
	91	359	-3.6698	-3.6576
	92	358	-3.7586	-3.7691
	93	357	-3.819	-3.7931
	94	356	-3.8517	-3.7305
	95	355	-3.8594	-3.5919
	96	354	-3.8459	-3.3942
	97	353	-3.8211	-3.1566
	98	352	-3.7936	-2.8988
	99	351	-3.7709	-2.6386
350	100	350	-3.7601	-2.3921
	101	349	-3.7621	-2.1689
	102	348	-3.7757	-1.9725
	103	347	-3.7996	-1.801
	104	346	-3.8249	-1.647
	105	345	-3.844	-1.5022
	106	344	-3.8505	-1.3584
	107	343	-3.8342	-1.2066
	108	342	-3.7985	-1.0414
	109	341	-3.7496	-0.8602
340	110	340	-3.6929	-0.663
	111	339	-3.6476	-0.4572
	112	338	-3.6288	-0.2519
	113	337	-3.6494	-0.058
	114	336	-3.7366	0.1113
	115	335	-3.904	0.2458
	116	334	-4.1654	0.338
	117	333	-4.542	0.3837

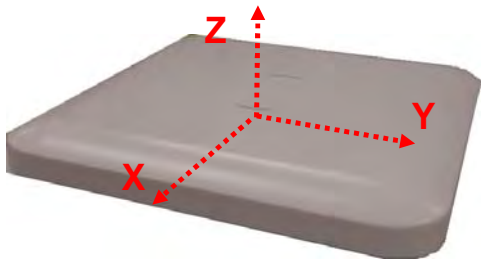


	118	332	-5.0468	0.3851
	119	331	-5.6823	0.3474
330	120	330	-6.449	0.2792
	121	329	-7.3486	0.1937
	122	328	-8.4092	0.1066
	123	327	-9.6475	0.0334
	124	326	-11.028	-0.0125
	125	325	-12.4994	-0.0253
	126	324	-13.9405	-0.0046
	127	323	-15.1692	0.0436
	128	322	-15.8948	0.1067
	129	321	-15.9039	0.1703
320	130	320	-15.1878	0.2208
	131	319	-14.0371	0.2474
	132	318	-12.79	0.2437
	133	317	-11.6692	0.2048
	134	316	-10.7329	0.1279
	135	315	-9.9596	0.0159
	136	314	-9.3598	-0.1247
	137	313	-8.9525	-0.2846
	138	312	-8.7639	-0.4532
	139	311	-8.7844	-0.6249
310	140	310	-9.0194	-0.7968
	141	309	-9.4757	-0.968
	142	308	-10.2754	-1.1422
	143	307	-11.432	-1.3235
	144	306	-12.7674	-1.5173
	145	305	-13.8276	-1.7307
	146	304	-14.1911	-1.9655
	147	303	-13.7423	-2.2202
	148	302	-12.7308	-2.49
	149	301	-11.504	-2.7617
300	150	300	-10.3303	-3.0205
	151	299	-9.3729	-3.2506
	152	298	-8.716	-3.4365
	153	297	-8.3742	-3.5732
	154	296	-8.3136	-3.6628
	155	295	-8.485	-3.7141
	156	294	-8.942	-3.7497
	157	293	-9.7107	-3.7928
	158	292	-10.7666	-3.8645
	159	291	-12.0006	-3.9813
290	160	290	-13.2372	-4.1512
	161	289	-14.2058	-4.3792
	162	288	-14.6166	-4.6685
	163	287	-14.2679	-5.0089
	164	286	-13.3358	-5.3845
	165	285	-12.2192	-5.7705
	166	284	-11.3292	-6.1331
	167	283	-10.8076	-6.4342
	168	282	-10.6531	-6.639
	169	281	-10.7876	-6.7221
280	170	280	-11.1763	-6.6853
	171	279	-11.7944	-6.5427
	172	278	-12.6848	-6.3185
	173	277	-14.0854	-6.0423
	174	276	-16.1056	-5.7394
	175	275	-18.5244	-5.4291
	176	274	-20.7305	-5.1248
	177	273	-22.1327	-4.8282
	178	272	-22.52	-4.5403
	179	271	-22.0782	-4.2622
270	180	270	-21.158	-3.9912
	181	269	-20.1668	-3.7315
	182	268	-19.4377	-3.4887
	183	267	-19.1487	-3.2671
	184	266	-19.1693	-3.0752
	185	265	-19.2284	-2.9184
	186	264	-19.0404	-2.7993
	187	263	-18.5602	-2.7249
	188	262	-17.8203	-2.6947
	189	261	-16.9382	-2.7047
260	190	260	-16.0444	-2.7504
	191	259	-15.2616	-2.818
	192	258	-14.6482	-2.8937
	193	257	-14.1947	-2.9638
	194	256	-13.8214	-3.0103
	195	255	-13.5037	-3.0179
	196	254	-13.2416	-2.9749
	197	253	-13.0622	-2.8742
	198	252	-12.9661	-2.7724
	199	251	-12.9824	-2.538
250	200	250	-13.1586	-2.3321
	201	249	-13.7044	-2.1223
	202	248	-14.7031	-1.9209
	203	247	-16.0176	-1.7372
	204	246	-17.1986	-1.5797
	205	245	-17.7918	-1.4502
	206	244	-17.5882	-1.348
	207	243	-16.7095	-1.2706
	208	242	-15.4092	-1.2117
	209	241	-13.9904	-1.1673
240	210	240	-12.7241	-1.1338
	211	239	-11.8069	-1.1064
	212	238	-11.2711	-1.0821
	213	237	-11.04	-1.0582
	214	236	-10.9768	-1.0321
	215	235	-11.0585	-1.0069
	216	234	-11.2529	-0.9848
	217	233	-11.5201	-0.9672
	218	232	-11.7683	-0.9549
	219	231	-11.913	-0.9464
230	220	230	-11.8952	-0.941
	221	229	-11.7015	-0.9398
	222	228	-11.3293	-0.9408
	223	227	-10.8254	-0.9402
	224	226	-10.2588	-0.9323
	225	225	-9.6881	-0.9104
	226	224	-9.1609	-0.8726
	227	223	-8.7019	-0.8185
	228	222	-8.3114	-0.7489
	229	221	-8.0011	-0.6682
220	230	220	-7.7672	-0.5812
	231	219	-7.5998	-0.4941
	232	218	-7.4962	-0.4174
	233	217	-7.445	-0.3597
	234	216	-7.4385	-0.3307
	235	215	-7.4754	-0.3425
	236	214	-7.5421	-0.4017

	237	213	-7.6295	-0.5147
	238	212	-7.7285	-0.6861
	239	211	-7.8188	-0.9144
210	240	210	-7.8914	-1.2001
	241	209	-7.9383	-1.5414
	242	208	-7.9496	-1.9321
	243	207	-7.932	-2.3681
	244	206	-7.8909	-2.8405
	245	205	-7.8312	-3.3368
	246	204	-7.7646	-3.8449
	247	203	-7.6933	-4.3461
	248	202	-7.6146	-4.8185
	249	201	-7.5258	-5.2406
200	250	200	-7.4147	-5.5886
	251	199	-7.2735	-5.8441
	252	198	-7.1004	-5.9962
	253	197	-6.891	-6.0412
	254	196	-6.6508	-5.9869
	255	195	-6.3886	-5.851
	256	194	-6.1113	-5.6568
	257	193	-5.8343	-5.4351
	258	192	-5.5687	-5.2145
	259	191	-5.3199	-5.0165
190	260	190	-5.0937	-4.8527
	261	189	-4.887	-4.7225
	262	188	-4.6946	-4.6182
	263	187	-4.5159	-4.5314
	264	186	-4.343	-4.4456
	265	185	-4.1688	-4.3415
	266	184	-3.9878	-4.2015
	267	183	-3.7907	-4.01
	268	182	-3.5764	-3.7713
	269	181	-3.3469	-3.5019
180	270	180	-3.1042	-3.2211
	271	179	-2.8593	-2.9543
	272	178	-2.6227	-2.725
	273	177	-2.4023	-2.5524
	274	176	-2.2063	-2.4562
	275	175	-2.038	-2.4478
	276	174	-1.899	-2.5321
	277	173	-1.7937	-2.7099
	278	172	-1.7208	-2.9663
	279	171	-1.6752	-3.2767
170	280	170	-1.6477	-3.6071
	281	169	-1.6247	-3.9116
	282	168	-1.5932	-4.133
	283	167	-1.5406	-4.2185
	284	166	-1.4549	-4.1327
	285	165	-1.3274	-3.8862
	286	164	-1.1531	-3.5162
	287	163	-0.9318	-3.0754
	288	162	-0.6681	-2.6146
161	289	161	-0.3716	-2.1775
	290	160	-0.0552	-1.7936
	291	159	0.2655	-1.4761
	292	158	0.5752	-1.2237
	293	157	0.8615	-1.0304
	294	156	1.1174	-0.8922
	295	155	1.3396	-0.8005
	296	154	1.5289	-0.7416
	297	153	1.6896	-0.6984
	298	152	1.8281	-0.6533
	299	151	1.9543	-0.5963
150	300	150	2.0783	-0.5208
	301	149	2.2074	-0.4236
	302	148	2.3469	-0.3068
	303	147	2.4974	-0.1758
	304	146	2.6549	-0.0391
	305	145	2.8132	0.0888
	306	144	2.9635	0.1955
	307	143	3.0972	0.2727
	308	142	3.2086	0.3187
	309	141	3.2935	0.3365
140	310	140	3.3514	0.3305
	311	139	3.3848	0.3073
	312	138	3.3968	0.2756
	313	137	3.3913	0.2509
	314	136	3.3713	0.2496
	315	135	3.3377	0.285
	316	134	3.2914	0.3645
	317	133	3.2308	0.4895
	318	132	3.152	0.6556
	319	131	3.0478	0.8577
130	320	130	2.9115	1.0885
	321	129	2.7571	1.331
	322	128	2.5203	1.5802
	323	127	2.261	1.8236
	324	126	1.9615	2.0544
	325	125	1.625	2.2696
	326	124	1.2572	2.4669
	327	123	0.8629	2.6435
	328	122	0.4444	2.7954
	329	121	0.0009	2.9185
120	330	120	-0.4707	3.006
	331	119	-0.9757	3.0514
	332	118	-1.5183	3.0496
	333	117	-2.1039	2.9945
	334	116	-2.7261	2.882
	335	115	-3.363	2.707
	336	114	-3.9771	2.4608
	337	113	-4.5233	2.1359
	338	112	-4.9567	1.7292
	339	111	-5.2453	1.2421
110	340	110	-5.3739	0.6799
	341	109	-5.3657	0.0477
	342	108	-5.2685	-0.6437
	343	107	-5.1357	-1.3715
	344	106	-5.0114	-2.098
	345	105	-4.9286	-2.7757
	346	104	-4.9085	-3.354
	347	103	-4.9671	-3.7783
	348	102	-5.1101	-4.0133
	349	101	-5.3442	-4.0527
100	350	100	-5.7049	-3.9272
	351	99	-6.1984	-3.6868
	352	98	-6.7827	-3.382
	353	97	-7.3695	-3.0494
	354	96	-7.8721	-2.7133
	355	95	-8.2691	-2.3869

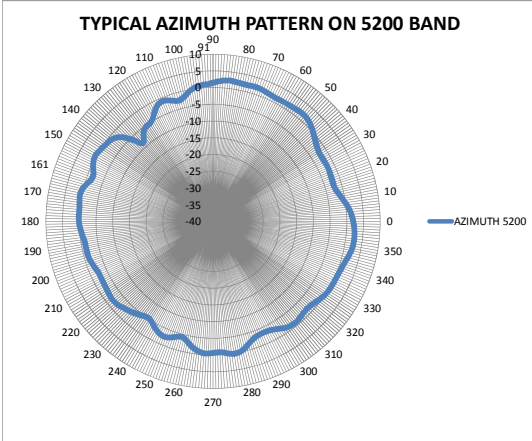
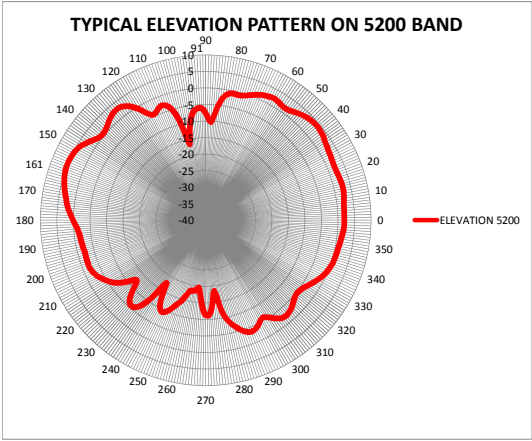
	356	94	-8.6008	-2.0696
	357	93	-8.9065	-1.7607
	358	92	-9.2959	-1.4217
91	359	91	-9.4748	-1.284

MAX GAIN FROM 30 TO 90 DEG			-2.1	
MAX GAIN FROM 90 TO 150 DEG			3.4	
MAX EL FROM 30 TO 150			3.4	



Azimuth: XY cut.
Elevation: XZ , YZ cut.

ANGLE LABLE	ANGLE IN DEG	EL ANGLE	EL	AZ
90	0	90	-7.533897025	1.432167605
	1	89	-8.688497063	1.62070772
	2	88	-9.861539674	1.823803983
	3	87	-10.27380065	2.014404041
	4	86	-9.255314073	2.178301363
	5	85	-7.368482966	2.300747612
	6	84	-5.455656279	2.372884982
	7	83	-3.857959441	2.392968558
	8	82	-2.631729545	2.362066417
	9	81	-1.755629068	2.295194134
80	10	80	-1.183687885	2.210164637
	11	79	-0.869137812	2.124100954
	12	78	-0.75253616	2.057399483
	13	77	-0.765585124	2.024456974
	14	76	-0.829573858	2.029209411
	15	75	-0.862485294	2.063696483
	16	74	-0.80035415	2.115294669
	17	73	-0.621581029	2.159315225
	18	72	-0.346873347	2.177616223
	19	71	-0.019079669	2.157195747
70	20	70	0.31625316	2.091390128
	21	69	0.633417011	1.983950899
	22	68	0.923043277	1.846080423
	23	67	1.185894238	1.698119627
	24	66	1.431450237	1.562081993
	25	65	1.666381845	1.457435677
	26	64	1.868771613	1.395624962
	27	63	2.039744533	1.377891786
	28	62	2.158452324	1.393228014
	29	61	2.203810845	1.426970617
60	30	60	2.177652259	1.464397697
	31	59	2.079522828	1.496286532
	32	58	1.925842629	1.521648373
	33	57	1.752297532	1.54385594
	34	56	1.602157831	1.573963012
	35	55	1.524876001	1.611564523
	36	54	1.55054025	1.672665467
	37	53	1.688190252	1.74169711
	38	52	1.919989668	1.804511545
	39	51	2.204462307	1.859054674
50	40	50	2.509815357	1.877667833
	41	49	2.803267185	1.849415238
	42	48	3.069587151	1.767630271
	43	47	3.308887444	1.622504332
	44	46	3.508804493	1.414531537
	45	45	3.683700183	1.159441179
	46	44	3.833981963	0.860139732
	47	43	3.95483546	0.527122673
	48	42	4.045328139	0.180352985
	49	41	4.100188162	-0.171285617
40	50	40	4.118015582	-0.515541797
	51	39	4.081310459	-0.846414643
	52	38	4.001849903	-1.156299772
	53	37	3.879291431	-1.437545578
	54	36	3.7192169	-1.684324595
	55	35	3.538121859	-1.890483795
	56	34	3.34593278	-2.048098901
	57	33	3.16111571	-2.157691375
	58	32	2.997936508	-2.217290022
	59	31	2.853396662	-2.23463022
30	60	30	2.732356092	-2.220347761
	61	29	2.628027278	-2.186004906
	62	28	2.535380765	-2.143510988
	63	27	2.449318308	-2.104118234
	64	26	2.360263376	-2.0775423
	65	25	2.274827231	-2.067274626
	66	24	2.202476599	-2.079458107
	67	23	2.148891235	-2.114429325
	68	22	2.125553201	-2.168500895
	69	21	2.138938923	-2.235593764
20	70	20	2.188574102	-2.306186043
	71	19	2.266531874	-2.365830212
	72	18	2.361519017	-2.39664814
	73	17	2.460369588	-2.384704148
	74	16	2.551229365	-2.315045365
	75	15	2.616120059	-2.179076072
	76	14	2.644709666	-1.977892731
	77	13	2.63533341	-1.716180414
	78	12	2.599825952	-1.408630458
	79	11	2.526390026	-1.068605956
10	80	10	2.430104129	-0.711957201
	81	9	2.327306819	-0.352374927
	82	8	2.215989193	-0.00211782
	83	7	2.121253177	0.330769294
	84	6	2.04226552	0.636802774
	85	5	1.984946833	0.924928268
	86	4	1.955150216	1.1766358
	87	3	1.938505704	1.398016441
	88	2	1.934808238	1.602794017
	89	1	1.944452672	1.783533823
0	90	0	1.941293371	1.941293371
	91	359	1.927089566	2.084239853
	92	358	1.896885808	2.213822685
	93	357	1.845705253	2.324566698
	94	356	1.774633967	2.42383715
	95	355	1.684665323	2.499441873
	96	354	1.576082673	2.552090543
	97	353	1.464120094	2.582536611
	98	352	1.343038353	2.579188725
	99	351	1.230033382	2.549856858
350	100	350	1.129137147	2.483713687
	101	349	1.039294929	2.382864073
	102	348	0.967018527	2.250208894
	103	347	0.905457406	2.094816905
	104	346	0.85327572	1.920377427
	105	345	0.805079512	1.73689528
	106	344	0.753376797	1.548280533
	107	343	0.690832829	1.364704334
	108	342	0.612743194	1.193709225
	109	341	0.511810986	1.041639402
340	110	340	0.386424743	0.911474559
	111	339	0.23233128	0.803867003
	112	338	0.049250896	0.717634582
	113	337	-0.163515482	0.649385247
	114	336	-0.4050707	0.595874425
	115	335	-0.674347419	0.554229608



	116	334	-0.970586322	0.520652475
	117	333	-1.292338136	0.490727001
	118	332	-1.636089964	0.458799623
	119	331	-1.999704687	0.420791725
330	120	330	-2.375776556	0.376613395
	121	329	-2.759123682	0.302008709
	122	328	-3.141771281	0.209468455
	123	327	-3.510785172	0.085760763
	124	326	-3.853008046	-0.069172836
	125	325	-4.153563195	-0.253241906
	126	324	-4.394558828	-0.460794039
	127	323	-4.562657159	-0.683574014
	128	322	-4.64179807	-0.907734834
	129	321	-4.628917595	-1.12116099
320	130	320	-4.523556197	-1.308081298
	131	319	-4.335302861	-1.456500243
	132	318	-4.081689925	-1.556589733
	133	317	-3.780217047	-1.602469504
	134	316	-3.453878063	-1.594691972
	135	315	-3.126160562	-1.537999151
	136	314	-2.820216522	-1.44181408
	137	313	-2.556537734	-1.321745818
	138	312	-2.35628766	-1.193480988
	139	311	-2.238954891	-1.076401235
310	140	310	-2.217596706	-0.986111565
	141	309	-2.305499153	-0.937660163
	142	308	-2.5106971	-0.942209522
	143	307	-2.837548467	-1.006611748
	144	306	-3.277127663	-1.13268646
	145	305	-3.815128345	-1.317425325
	146	304	-4.40933346	-1.55296194
	147	303	-4.998761674	-1.827999954
	148	302	-5.488616332	-2.124449814
	149	301	-5.780531125	-2.423659816
300	150	300	-5.812180932	-2.706614466
	151	299	-5.591843329	-2.952758186
	152	298	-5.199941423	-3.150354498
	153	297	-4.736591561	-3.294561241
	154	296	-4.289528871	-3.384384168
	155	295	-3.921333564	-3.428141174
	156	294	-3.66778148	-3.435235322
	157	293	-3.552075481	-3.407393908
	158	292	-3.581653442	-3.348023525
	159	291	-3.758575194	-3.244186408
290	160	290	-4.073553335	-3.084293133
	161	289	-4.512024892	-2.852445804
	162	288	-5.04930427	-2.541143897
	163	287	-5.65229485	-2.159467417
	164	286	-6.293550148	-1.727752198
	165	285	-6.956322428	-1.279598128
	166	284	-7.652625379	-0.852420967
	167	283	-8.427359584	-0.478073797
	168	282	-9.362333012	-0.182244621
	169	281	-10.56450066	0.016294177
280	170	280	-12.1568786	0.112979153
	171	279	-14.24916599	0.107446835
	172	278	-16.73188515	0.01288689
	173	277	-18.44854271	-0.149357896
	174	276	-17.55125698	-0.347026753
	175	275	-15.30152079	-0.541922363
	176	274	-13.34938596	-0.695505827
	177	273	-12.01408383	-0.779223499
	178	272	-11.26423224	-0.78555994
	179	271	-11.04728824	-0.726883734
270	180	270	-11.32693849	-0.631577575
	181	269	-12.0837302	-0.532443787
	182	268	-13.32200282	-0.459412838
	183	267	-15.01563257	-0.434418642
	184	266	-17.0000206	-0.471833834
	185	265	-18.78782901	-0.580016185
	186	264	-19.5802888	-0.760228967
	187	263	-19.30350308	-1.013775204
	188	262	-18.71835808	-1.339751176
	189	261	-18.3497087	-1.733280726
260	190	260	-18.28722821	-2.185018998
	191	259	-18.37953764	-2.677289112
	192	258	-18.31351507	-3.175465757
	193	257	-17.8556062	-3.631303868
	194	256	-17.02698063	-3.977693271
	195	255	-16.05524972	-4.15955267
	196	254	-15.13517957	-4.150710947
	197	253	-14.34189147	-3.971935272
	198	252	-13.6433135	-3.682340975
	199	251	-12.96910085	-3.354939178
250	200	250	-12.25627608	-3.047781811
	201	249	-11.50140447	-2.803251761
	202	248	-10.74959536	-2.644620495
	203	247	-10.08538756	-2.580685225
	204	246	-9.589471861	-2.610907844
	205	245	-9.329123441	-2.731694502
	206	244	-9.364704923	-2.932225724
	207	243	-9.749622739	-3.202477367
	208	242	-10.54485179	-3.528329103
	209	241	-11.83821149	-3.89309299
240	210	240	-13.70544979	-4.273565436
	211	239	-16.04848435	-4.637021364
	212	238	-17.6756302	-4.942924581
	213	237	-16.44522711	-5.149073071
	214	236	-13.6976426	-5.224743349
	215	235	-11.20452402	-5.164997298
	216	234	-9.275455133	-4.989738237
	217	233	-7.839646853	-4.741935666
	218	232	-6.808565948	-4.466897335
	219	231	-6.120010232	-4.196595493
230	220	230	-5.735850708	-3.952527425
	221	229	-5.633104507	-3.737270499
	222	228	-5.800475282	-3.541689155
	223	227	-6.238598224	-3.351663733
	224	226	-6.950315243	-3.1528507
	225	225	-7.935164845	-2.937846594
	226	224	-9.16911061	-2.711989376
	227	223	-10.54477095	-2.484472458
	228	222	-11.77470126	-2.274894676
	229	221	-12.36501451	-2.100143279
220	230	220	-12.01878543	-1.974369974
	231	219	-11.01737755	-1.904330973
	232	218	-9.831566876	-1.890130734

	233	217	-8.72440655	-1.92330089
	234	216	-7.777283555	-1.991820493
	235	215	-6.985909013	-2.079529057
	236	214	-6.31806467	-2.170713768
	237	213	-5.738741363	-2.253909371
	238	212	-5.218070376	-2.320331321
	239	211	-4.732874901	-2.37198816
210	240	210	-4.275720362	-2.412555305
	241	209	-3.845435052	-2.446257349
	242	208	-3.445935287	-2.475581569
	243	207	-3.086940153	-2.497689728
	244	206	-2.775498196	-2.506365766
	245	205	-2.520002417	-2.489460985
	246	204	-2.321771543	-2.438927096
	247	203	-2.182784586	-2.34464202
	248	202	-2.099897955	-2.210730964
	249	201	-2.063216386	-2.044009221
200	250	200	-2.065433054	-1.859716387
	251	199	-2.091203862	-1.675820641
	252	198	-2.12506774	-1.510438005
	253	197	-2.153442073	-1.374929461
	254	196	-2.166190742	-1.278239696
	255	195	-2.155462582	-1.219758601
	256	194	-2.120997163	-1.19612654
	257	193	-2.067872839	-1.193965837
	258	192	-2.003990753	-1.199683745
	259	191	-1.934588077	-1.195090936
190	260	190	-1.863721064	-1.165512818
	261	189	-1.793797354	-1.099476908
	262	188	-1.717849722	-0.994639499
	263	187	-1.625517507	-0.853260837
	264	186	-1.506342221	-0.687612131
	265	185	-1.347063757	-0.510235504
	266	184	-1.141413072	-0.336565065
	267	183	-0.885635737	-0.179179805
	268	182	-0.582776159	-0.048692005
	269	181	-0.246885135	0.048705776
180	270	180	0.110457661	0.110457661
	271	179	0.47386598	0.139690496
	272	178	0.829488968	0.144623755
	273	177	1.168980706	0.136042447
	274	176	1.485882802	0.128961878
	275	175	1.779917696	0.137845089
	276	174	2.051524266	0.173772226
	277	173	2.306335043	0.239942052
	278	172	2.551155282	0.329759199
	279	171	2.793405851	0.426234633
170	280	170	3.034693367	0.50734646
	281	169	3.287686105	0.547182146
	282	168	3.540437454	0.523437302
	283	167	3.791580537	0.417594065
	284	166	4.04366462	0.220413826
	285	165	4.272727814	-0.067395562
	286	164	4.489701899	-0.429404981
	287	163	4.673527068	-0.832525886
	288	162	4.827372035	-1.221961303
161	289	161	4.945231025	-1.525997665
	290	160	5.026806494	-1.679558641
	291	159	5.080673526	-1.645937887
	292	158	5.100520865	-1.439995041
	293	157	5.093428271	-1.117800063
	294	156	5.05925269	-0.751000648
	295	155	5.001183935	-0.398938404
	296	154	4.910173191	-0.104492651
	297	153	4.788669318	0.109048543
	298	152	4.624599643	0.234050986
	299	151	4.414077285	0.272900095
150	300	150	4.148087386	0.234537321
	301	149	3.822448293	0.136849618
	302	148	3.43867363	-0.000463287
	303	147	2.993952874	-0.15449678
	304	146	2.512795125	-0.305599456
	305	145	2.013289347	-0.443378849
	306	144	1.52486952	-0.566442963
	307	143	1.099384606	-0.687061077
	308	142	0.773933371	-0.832972394
	309	141	0.580523477	-1.034072766
140	310	140	0.531764062	-1.330358192
	311	139	0.613563894	-1.756611601
	312	138	0.798424227	-2.349263741
	313	137	1.05356311	-3.136398664
	314	136	1.349930594	-4.137046306
	315	135	1.664148872	-5.341686551
	316	134	1.97919607	-6.664291052
	317	133	2.279436276	-7.87725344
	318	132	2.544706512	-8.59116941
	319	131	2.765197085	-8.530878774
130	320	130	2.924974206	-7.877580189
	321	129	2.994867755	-7.040359835
	322	128	2.973601938	-6.298677213
	323	127	2.834256295	-5.759454365
	324	126	2.5753225	-5.438534777
	325	125	2.180864899	-5.292976277
	326	124	1.645269629	-5.243638836
	327	123	0.965232493	-5.187059434
	328	122	0.146228211	-5.015126755
	329	121	-0.793029594	-4.656319265
120	330	120	-1.809795796	-4.120686352
	331	119	-2.818090064	-3.473839793
	332	118	-3.679114866	-2.810936592
	333	117	-4.230897857	-2.204298393
	334	116	-4.378078559	-1.703662219
	335	115	-4.171520854	-1.335664269
	336	114	-3.771964417	-1.108585677
	337	113	-3.346872663	-1.021568432
	338	112	-3.019148472	-1.066274969
	339	111	-2.868892106	-1.226247902
110	340	110	-2.944604343	-1.477919525
	341	109	-3.288716642	-1.783564975
	342	108	-3.941820781	-2.092304104
	343	107	-4.959176752	-2.337576172
	344	106	-6.414909844	-2.453475524
	345	105	-8.424005381	-2.393070339
	346	104	-11.12280931	-2.149703591
	347	103	-14.43219874	-1.76333842
	348	102	-16.53169029	-1.295573941
	349	101	-14.83103486	-0.811192425

100	350	100	-12.11644384	-0.358448071
	351	99	-9.997271885	0.031892115
	352	98	-8.488019707	0.344909163
	353	97	-7.42910137	0.580786246
	354	96	-6.698289291	0.748232301
	355	95	-6.22098424	0.864663444
	356	94	-5.964838394	0.95268305
	357	93	-5.936020631	1.036652821
	358	92	-6.160412515	1.13680431
91	359	91	-6.680258773	1.267958046

MAX GAIN ALL ANGLE			5.100520865
MAX GAIN FROM 30 TO 90 DEG			4.1
MAX GAIN FROM 90 TO 150 DEG			4.1
MAX EL FROM 30 TO 150			4.1