



Radiated Composite Gain Data <6GHz U-NII5~UNII-8>

Appendix B

Theta	Phi	Phi(15)	Phi(22.5)	Phi(30)	Phi(37.5)	Phi(45)	Phi(52.5)	Phi(60)	Phi(67.5)	Phi(75)	Phi(82.5)	Phi(90)	Phi(97.5)	Phi(105)	Phi(112.5)	Phi(120)	Phi(127.5)	Phi(135)	Phi(142.5)	Phi(150)	Phi(157.5)	Phi(165)	Phi(172.5)	Phi(180)	
Theta(7.5)	Phi(0)	-8.11796	-8.7592	-7.071649	-6.76169	-7.59826	-9.261117	-10.65194	-8.511737	-6.231564	-5.351549	-5.751658	-7.11195	-9.06192	-10.05194	-9.35108	-8.221837	-9.3811027	-10.6411079	-10.21864	-7.551634	-6.08183	-7.01157	-5.711744	-8.061954
Theta(15)	Phi(0)	-3.551392	-4.741595	-6.461599	-6.051622	-7.121713	-8.381105	-12.111206	-11.721037	-8.571738	-6.951747	-8.591618	-9.191140	-10.221903	-6.921504	-4.4138	-3.691394	-4.941627	-7.681833	-7.661736	-7.321609	-5.351451	-3.071196	-1.95124	-3.431392
Theta(22.5)	Phi(0)	-3.701218	-3.371443	-5.991596	-6.881738	-8.411944	-9.411811	-7.141654	-7.101037	-12.871214	-12.651945	-6.241616	-5.14148	-4.841665	-4.291395	-4.161503	-6.09173	-7.391665	-5.191469	-4.371566	-5.011456	-2.741173	-1.621238	-3.831394	
Theta(30)	Phi(0)	-4.031385	-3.911331	-2.361298	-4.15151	-7.261906	-10.011107	-10.53198	-10.031111	-11.751026	-7.521223	-3.141451	-4.9124	-4.871552	-6.711673	-6.28189	-10.411874	-6.181483	-4.31244	-4.481517	-5.351844	-4.461425	-2.5912	-2.691462	-4.671458
Theta(37.5)	Phi(0)	-3.11172	-1.331186	-2.111175	-2.151336	-4.351607	-7.561747	-7.531867	-11.111229	-11.081762	-6.221474	-6.461741	-8.8711186	-12.181232	-11.351486	-8.42187	-6.831972	-7.591608	-4.331486	-4.29139	-5.491337	-1.941231	-4.531411	-3.371294	-3.051359
Theta(45)	Phi(0)	-1.541191	-2.221136	-2.211145	-3.74133	-5.61683	-6.881569	-7.161907	-9.071992	-10.251953	-8.291868	-8.9112	-7.031657	-7.21689	-5.761622	-5.04146	-6.111487	-5.371	-1.311209	-4.961462	-2.951294	-3.411414	-4.641279	-0.611079	-2.61124
Theta(52.5)	Phi(0)	-0.631206	-2.881137	-2.03135	-3.831554	-7.218	-7.8811004	-7.961562	-6.151745	-8.891697	-5.511581	-5.841779	-8.161559	-5.91664	-6.841512	-3.151639	-5.151455	-3.931169	-2.81272	-1.421168	-1.59106	0.441031	-1.111108	0.131138	0.611037
Theta(60)	Phi(0)	0.881005	0.10163	-1.441154	-2.771468	-5.711549	-4.93167	-7.131802	-9.751971	-9.161714	-6.961669	-8.571748	-3.641403	-5.9116	-3.71155	-3.221473	-4.091188	-21133	-2.951191	-0.341045	1.191068	1.521672	2.1156	0.881056	
Theta(67.5)	Phi(0)	1.43109	1.18108	-0.11058	-3.181505	-5.691578	-7.871808	-6.93173	-8.621905	-8.51104	-9.591856	-9.321816	-7.241653	-6.941827	-7.521764	-5.991362	-2.911209	-0.791136	-1.481132	-0.041008	0.331101	-0.96185	2.36181	0.09164	
Theta(75)	Phi(0)	-0.171136	-0.411064	-1.81151	-4.471366	-6.91898	-8.61761	-8.741897	-7.81891	-8.011843	-7.711948	-12.311079	-8.981021	-8.651703	-8.671759	-4.981491	-3.971424	-3.611392	-3.381208	-2.051088	1.251238	2.96178	0.32138	1.151144	-0.221063
Theta(82.5)	Phi(0)	1.26107	-0.051001	0.311123	-2.541072	-4.891695	-5.951725	-8.891782	-8.631991	-8.961868	-10.641981	-9.49177	-7.751764	-6.581754	-4.981657	-5.261476	-2.61278	-1.42123	0.081242	-1.651209	0.621212	1.581046	-0.661206	1.87197	1.79195
Theta(90)	Phi(0)	-0.171017	-0.191259	-0.561193	-4.51593	-7.081883	-12.121036	-8.741138	-9.991155	-8.47158	-8.651112	-5.881854	-6.061578	-5.331699	-8.581311	-3.511433	-3.691432	-1.221255	-4.71152	-1.551349	2.15171	1.81182	1.87109	2.64151	0.87192
Theta(97.5)	Phi(0)	1.061032	-0.241185	-0.561157	-4.611718	-12.031849	-4.931987	-11.41897	-12.541001	-9.611021	-6.951856	-8.991924	-9.131115	-7.581577	-5.841798	-5.661448	-2.061776	-1.831229	0.241003	-3.61306	2.19193	1.311147	0.13164	3.371236	1.90155
Theta(105)	Phi(0)	1.961205	0.581231	-1.61286	-2.211414	-6.291164	-6.1834	-10.381828	-7.591993	-11.21951	-7.29194	-9.441878	-8.281638	-6.61451	-5.661848	-5.96133	-3.661414	-4.51474	0.031026	-5.051359	2.27195	1.071065	0.791204	2.441108	2.16115
Theta(112.5)	Phi(0)	0.221196	-0.651143	-1.931966	-8.861475	-3.931825	-8.751694	-7.441855	-9.291213	-10.7319	-9.491939	-9.41893	-7.761702	-7.591436	-5.1112	-3.66126	-4.721152	-1.751349	2.15171	-1.281208	2.28157	1.281208	0.95134	2.63105	1.071163
Theta(120)	Phi(0)	0.671135	-2.311289	-4.111339	-6.271878	-6.111596	-10.211819	-7.791887	-11.111115	-11.591259	-10.51193	-8.071929	-9.371835	-6.471458	-5.991604	-3.261073	-5.871144	-0.841387	2.431222	-2.681247	2.21117	2.8411	0.21149	3.741194	3.39114
Theta(127.5)	Phi(0)	1.021015	-1.891108	-1.61286	-1.891533	-3.841704	-7.831016	-10.331043	-10.47121	-11.491146	-6.661575	-6.831489	-8.571804	-6.21244	-7.161889	-5.961647	-3.221133	-1.92189	1.53136	-2.82184	0.10121	2.251302	-1.64176	0.911706	1.511215
Theta(135)	Phi(0)	-1.861139	-1.261053	-0.421104	-1.671259	-3.771554	-5.391616	-6.99167	-7.811928	-9.681936	-9.291965	-7.771021	-8.721053	-7.791717	-4.73177	-4.861487	-3.961342	-0.091057	-0.081314	-2.73127	-0.28153	-1.631029	-0.031098	-0.09198	
Theta(142.5)	Phi(0)	-1.371268	-3.651277	-1.251146	-2.391308	-3.951548	-5.721698	-7.691667	-7.51921	-11.481103	-7.65169	-7.261908	-11.231909	-8.921637	-8.21651	-7.271761	-7.521691	-5.661381	-1.381128	-3.991322	-1.591262	-0.961011	-1.281047	-0.561064	-0.99189
Theta(150)	Phi(0)	-2.91243	-1.51118	-1.44119	-2.351322	-5.041612	-6.771869	-10.811014	-6.221753	-7.131841	-9.31191	-8.24177	-8.81195	-9.871929	-11.281966	-10.761106	-8.081768	-8.611743	-2.191248	-4.551309	-1.531248	-2.98119	-0.55104	0.061405	-1.541263
Theta(157.5)	Phi(0)	-4.311406	-3.761391	-3.88141	-5.191641	-9.041974	-8.991957	-9.311845	-8.181089	-6.82158	-5.141549	-5.271414	-3.45133	-4.56179	-7.461793	-8.731723	-6.571743	-8.461834	-6.51578	-3.711195	-1.721236	-3.091401	-3.761305	-2.751328	-4.371242
Theta(165)	Phi(0)	-6.69171	-7.481661	-5.831602	-7.461764	-8.491854	-8.661104	-9.481969	-11.571242	-10.621839	-5.921448	-3.481283	-2.591318	-4.191538	-5.721512	-3.891271	-4.251336	-5.271633	-6.521452	-3.47126	-1.21124	-3.07103	-5.171665	-8.321839	-7.591757
Theta(172.5)	Phi(0)	-0.091639	-5.681553	-5.581627	-7.861993	-10.911098	-11.11108	-10.41937	-9.841104	-11.1104	-9.261718	-6.031548	-5.261508	-4.54139	-3.431301	-2.711264	-2.581309	-4.25187	-8.23104	-5.451389	-3128	-3.711542	-7.381773	-6.851667	-5.791532
Theta(180)	Phi(0)	-4.661509	-4.81847	-5.241671	-8.141871	-9.241005	-9.031798	-7.311718	-6.951979	-6.211531	-4.611438	-4.561482	-5.371659	-5.841599	-6.09165	-7.04174	-7.511736	-7.92184	-8.26174	-6.841655	-6.151562	-6.111717	-7.841779	-7.1168	-6.71564
Freq(Hz)	Phi(0)	6.995GPol.	Phi(15)	Phi(22.5)	Phi(30)	Phi(37.5)	Phi(45)	Phi(52.5)	Phi(60)	Phi(67.5)	Phi(75)	Phi(82.5)	Phi(90)	Phi(97.5)	Phi(105)	Phi(112.5)	Phi(120)	Phi(127.5)	Phi(135)	Phi(142.5)	Phi(150)	Phi(157.5)	Phi(165)	Phi(172.5)	Phi(180)
DG(dB)	Phi(0)	Phi(7.5)	Phi(15)	Phi(22.5)	Phi(30)	Phi(37.5)	Phi(45)	Phi(52.5)	Phi(60)	Phi(67.5)	Phi(75)	Phi(82.5)	Phi(90)	Phi(97.5)	Phi(105)	Phi(112.5)	Phi(120)	Phi(127.5)	Phi(135)	Phi(142.5)	Phi(150)	Phi(157.5)	Phi(165)	Phi(172.5)	Phi(180)
Theta(7.5)	Phi(0)	-8.091765	-7.461629	-7.07128	-7.11726	-6.661551	-4.37126	-3.88135	-3.51104	-4.691534	-5.551698	-6.631873	-8.81195	-7.521696	-6.31621	-6.291606	-5.721543	-5.411529	-5.351542	-5.361583	-5.88167	-7.721869	-8.71932	-9.951933	-9.571911
Theta(15)	Phi(0)	-3.321305	-3.451347	-4.941169	-5.871612	-6.351059	-5.051455	-5.25157	-7.521755	-7.781761	-7.42181	-7.011633	-4.04134	-3.261316	-2.821249	-1.74115	-0.471001	0.510187	0.661031	-0.15162	-1.251262	-3.111371	-4.531634	-0.711575	-4.721389
Theta(22.5)	Phi(0)	-1.911179	-1.631127	-0.941076	-1.91382	-6.141752	-8.221649	-5.831539	-5.771851	-7.591787	-6.971573	-4.641407	-3.841284	-2.591269	-2.391138	-0.16196	1.141108	0.941069	0.041043	-0.611075	-1.011152	-2.37125	-1.72117	-2.31285	-2.921236
Theta(30)	Phi(0)	-3.381372	-3.041183	-1.141102	-2.63136	-4.11479	-5.071501	-4.551497	-4.151439	-5.271557	-4.331327	-3.051288	-1.841121	-0.821001	1.161149	1.16101	-0.491112	-1.231063	-0.861184	-2.211201	-1.12125	-2.071228	-1.511086	-0.61099	-1.731277
Theta(37.5)	Phi(0)	-1.451186	-3.61336	-2.061306	-4.151344	-3.971399	-4.231396	-2.941334	-2.516	-4.941563	-4.781292	-1.871197	-1.71125	0.771164	2.32191	2.28189	-0.21132	0.341154	1.371055	0.171104	0.481108	-2.431234	-0.36152	0.90139	-0.341099
Theta(45)	Phi(0)	0.071055	-1.971257	-3.811361	-3.151334	-2.71225	-3.61136	-3.071392	-3.111395	-3.971298	-2.931337	-1.711098	-1.1710	-0.111015	2.72128	2.39197	-0.88112	-0.091021	0.56109	1.671246	1.871045	0.91126	1.21061	-0.561026	-0.44106
Theta(52.5)	Phi(0)	0.091093	-1.281104	-2.481253	-3.421461	-4.661343	-3.06134	-3.141328	-4.541264	-2.221364	-3.651301	-1.14129	-2.581206	-3.561225	-1.531061	-1.2513	-1.621094	2.74182	3.331223	2.23104	2.091022	1.13171	0.491053	-0.871165	
Theta(60)	Phi(0)	-0.651146	-1.341231	-1.691187	-1.4125	-3.331331	-3.161324	-2.421171	-0.27105	-2.31217	-3.5815	-4.38101	-4.74144	-5.251565	-2.53117	-1.31039	1.1832	4.08174	2.96106	1.67132	1.531016	-1.241182	-1		



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Appendix B

Theta (°)	147/0.12	0.51/0.72	1.38/0.15	-3.35/5.38	-8.75/5.06	-2.82/6.53	-10.05/9.55	-9.35/9.5	-9.5/11.58	-9.14/6.39	-6.94/9.76	-7.63/10.34	-9.68/5.78	-5.17/7.05	-8.81/3.51	-4.17/4.35	-3.62/4.04	-0.61/2.58	-4.53/3.19	-0.37/0.45	0.66/0.05	0.56/2.29	2.59/2.49	0.37/0.67
Theta (97.5°)	1.130/0.13	0.85/0.17	1.25/0.01	-2.71/5.55	-10.64/7.08	-2.93/7.36	-9.33/8.63	-11.52/10.8	-10.51/12.01	-6.88/8.81	-10.31/9.56	-9.22/11.6	-8.9/7.08	-7.3/10.12	-6.06/5.86	-3.15/7.66	-2.3/2.49	0.29/0.14	-3.64/3.68	1.34/1.17	-0.15/1.87	0.11/2.93	3.15/2.23	1.40/5.3
Theta (105°)	1.86/0.34	0.58/1.95	-0.6/1.66	-4.41/4.43	-4.19/5.94	-5.04/6.84	-8.4/7.95	-8.17/11.48	-9.92/7.97	-8.88/12.11	-9.67/9.86	-10.73/9.13	-8.99/5.88	-7.62/10.11	-6.52/4.48	-3.82/4.07	-4.65/5.34	-0.27/1.37	-5.68/4.69	0.87/1.08	0.18/1.45	-0.15/1.62	2.32/1.14	1.68/0.36
Theta (112.5°)	0.51/1.51	0.03/0.88	-1.47/4.27	-8.61/5.28	-3.3/6.46	-7.1/6.29	-7.48/8.66	-8.06/9.36	-8.74/9.02	-8.97/9.98	-7.99/10.58	-9.58/9.69	-8.93/5.7	-6.69/9.76	-5.05/2.91	-5.11/2.3	-2.25/4.34	2.11/1.23	-5.6/3.95	1.11/2.27	0/2.37	-0.16/2.6	2.28/0.3	1.13/1.16
Theta (120°)	0.85/1.03	-1.13/1.33	-2.83/2.79	-6.09/6.83	-3.53/3.47	-7.11/7.77	-8.04/7.21	-7.16/7.72	-8.21/9.01	-8.38/8.13	-8.21/8.85	-9.65/9.83	-7.97/6.82	-8.22/9.34	-4.69/1.53	-6.61/1.39	-1.24/4.39	2.51/1.53	-4.18/5.32	1.09/0.94	1.22/1.8	-0.81/3.47	3.44/1.16	2.43/0.01
Theta (127.5°)	-0.57/0.94	-2.99/1.7	-2.35/3.22	-2.76/4.5	-7.21/6.68	-7.24/8.69	-8.42/8.46	-7.33/5.71	-7.26/7.6	-6.62/7.16	-8.88/10.55	-11.6/10.37	-8.89/8.72	-8.24/12.23	-7.92/7.36	-3.8/1.18	-1.55/2.91	1.58/1.86	-3.34/6.51	-2.28/0.73	0.14/4.47	-2.64/1.08	0.91/0.84	0.51/0.2
Theta (135°)	-1.65/1.44	-1.79/1.27	-1.5/1.98	-2.2/2.5	-3.89/5.37	-5.37/6.21	-6.38/6.12	-6.05/6.06	-7.22/7.12	-8.01/10.31	-9.87/8.7	-11.33/11.9	-9.16/6.81	-6.81/8.74	-6.04/8.51	-5.44/5.46	-4.09/3.42	-0.42/1	-2.41/6.04	-4.33/2.98	-3.3/2.46	-2.38/0.64	-1.41/1.56	-1.01/1.24
Theta (142.5°)	-2.54/3.56	-3.63/2.25	-1.05/1.17	-2.14/2.74	-3.67/5.16	-5.37/5.58	-5.29/4.25	4.57/8.03	-11.21/10.12	-8.04/8.18	-7.99/9.39	-11.16/9.18	-8.41/6.26	-7.16/5.84	-7.14/7.6	-7.48/6.57	-5.77/3.68	-2.47/3.14	-7.12/6.84	-3.39/2.6	-2.3/1.06	-1.62/0.38	-1/2.08	-2.22/2.45
Theta (150°)	-1.9/1.3	-0.63/0.52	-0.96/1.71	-2.39/3.08	-5.11/6.46	-7.46/9.23	-10.83/10.18	-8.69/9.21	-8.81/7.68	-6.82/6.64	-6.3/6.99	-8.59/9.05	-7.92/7.26	-8.53/8.7	-9.3/8.93	-7.62/7.49	-8.94/4.91	-3.97/5.31	-6.43/6.39	-6.1/6.27	-5.11/3.67	-2.84/2.77	-2.47/2.29	-1.91/2.02
Theta (157.5°)	-1.06/0.86	-0.86/1.24	-1.93/2.8	4.79/7.13	-9.54/11.29	-11.13/11.75	-10.66/9.9	-9.78/10.52	-8.43/7.47	-7.59/8.6	-8.37/6.71	-5.54/5.13	-6.48/9.47	-9.1/8.16	-7.58/6.41	-7.15/8.71	-9.63/9.93	-9.33/9.87	-8.15/6.77	-7.59/9.04	-7.98/6.69	-4.56/3.46	-2.71/1.97	-1.42/1.14
Theta (165°)	-3.65/4.16	-4.93/4.84	-5.14/6.07	-7.84/9.04	-10.21/11.31	-10.98/11.01	-9.38/3.22	-10.07/10.27	-9.09/7.61	-6.67/6.61	-6.28/5.54	-4.48/4.09	-4.22/4.46	-3.97/2.89	-1.84/1.66	-2.15/3.49	-5.15/6.11	-6.18/5.98	-5.75/5.36	-6.09/7.4	-8.46/6.84	-4.77/4.44	-5.41/5.14	-5.01/4.55
Theta (172.5°)	-6.27/6.3	-5.48/5.12	-4.99/5.59	-6.99/8.88	-10.58/10.77	-10.43/9.7	-8.48/7.68	-7.46/7.69	-7.92/7.73	-7.04/6.47	-6.2/6.2	-6.07/5.66	-4.64/3.89	-3.38/3.03	-3/3.16	-3.16/3.41	-4.18/5.73	-8.1/8.46	-7.25/6.65	-6.44/6.74	-7.11/7.78	-7.52/7.38	-6.58/6.35	-6/5.62
Theta (180°)	-3.46/3.8	-3.56/3.68	-4.65/6.77	-8.7/9.19	-9.56/10.57	-10.85/10.15	-9.65/9.69	-9.47/9.76	-8.58/8.02	-7.05/6.26	-5.65/5.36	-5.46/5.39	-5.46/5.57	-5.67/6.19	-6.78/7.22	-7.77/8.15	-9.4/10.73	-11.33/12.19	-11.96/12.1	-10.71/9.4	-8.38/7.84	-6.87/6.07	-5.48/5.36	-5.41/4.21
Freq(MHz)	6.995GPol.	Phi	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DC(dBm)	Phi(0°)Phi(7.5°)	Phi(15°)Phi(22.5°)	Phi(30°)Phi(37.5°)	Phi(45°)Phi(52.5°)	Phi(60°)Phi(67.5°)	Phi(75°)Phi(82.5°)	Phi(90°)Phi(97.5°)	Phi(105°)Phi(112.5°)	Phi(120°)Phi(127.5°)	Phi(135°)Phi(142.5°)	Phi(150°)Phi(157.5°)	Phi(165°)Phi(172.5°)	Phi(180°)Phi(187.5°)	Phi(195°)Phi(202.5°)	Phi(210°)Phi(217.5°)	Phi(225°)Phi(232.5°)	Phi(240°)Phi(247.5°)	Phi(255°)Phi(262.5°)	Phi(270°)Phi(277.5°)	Phi(285°)Phi(292.5°)	Phi(300°)Phi(307.5°)	Phi(315°)Phi(322.5°)	Phi(330°)Phi(337.5°)	Phi(345°)Phi(352.5°)
Theta (0°)	-4.75/5.26	-4.43/4.43	-5.11/5.71	-6.59/7.01	-7.34/7.33	-7.3/8.12	-8.81/8.47	-8.93/9.57	-8.59/7.61	-6.97/7.21	-7.24/6.86	-6.59/6.79	-6.95/7.09	-7.22/7.63	-8.22/8.72	-8.98/9.28	-9.45/9.36	-9.42/9.04	-8.69/8.28	-8/7.8	-7.79/8.16	-7.14/6.65	-6.11/6.03	-5.27/4.99
Theta (7.5°)	-6.29/6.21	-6.73/5.97	-7.1/7.68	-7.9/8.73	-8.94/7.36	-6.46/6.44	-6.14/5.71	-5.8/6.54	-7.55/7.56	-7.57/8.62	-9.29/8.43	-7.69/6.33	-5.58/4.87	-4.37/4.48	-4.68/4.75	-4.77/4.87	-5.1/5.11	-5.28/5.57	-5.98/6.53	-7.07/7.92	-8.14/7.93	-7.44/7.75	-7.86/7.21	-6.96/6.82
Theta (15°)	-3.8/3.58	-3.68/3.4	-4.64/5.73	-5.43/5.58	-5.91/5.09	-5.42/5.79	-6.97/8.23	-8.35/8.08	-8.53/9.06	-8.85/9.75	-7.84/5.5	-3.93/3.08	-2.68/2.41	-2.09/1.99	-1.75/1.95	-2.02/1.97	-1.6/1.59	-2.1/2.28	-2.37/2.51	-3.05/3.7	-4.44/4.78	-5.27/5.58	-7/6.29	-5.51/4.22
Theta (22.5°)	-1.47/1.47	-1.69/1.63	-1.33/1.01	-1.73/2.95	-4.1/4.26	-4.98/5.66	-6.38/6.94	-7.09/7.28	-7.34/7.59	-8.18/8.11	-7.52/7.39	-6.92/4.93	-3.84/3.93	-3.64/2.52	-1.45/0.6	-0.23/0.12	-0.25/0.82	-1.83/3.02	-3.21/3	-2.94/3.1	-3.46/3.39	-2.84/2.56	-2.67/3.06	-2.68/2.12
Theta (30°)	-2.56/2.66	-1.74/1.47	-0.89/0.45	-1.51/1.78	-1.52/1.61	-2.27/2.37	-2.58/2.36	-2.28/2.81	-3.38/3.86	-4.04/4.58	-5.64/5.6	-4.32/2.99	-2.58/1.75	-0.18/0.22	-0.71/2.93	-3.19/2.32	-1.6/1.12	-1.98/4.48	-4.51/3.02	-2.09/2.21	-2.53/2.84	-2.15/1.94	-1.85/2.02	-1.7/2.02
Theta (37.5°)	-2.23/1.66	-2.29/1.58	-0.72/1.1	-1.28/1.29	-0.87/0.61	-0.56/0.45	0.2/0.19	-1.63/2.22	-2.39/3.55	-4.1/3.43	-3.38/3.42	-2.98/2.02	-1.13/0.34	-0.21/0.18	-0.75/3.5	-5.25/4.54	-1.53/0.36	-1.36/2.24	-1.87/0.27	0.03/1.38	-2.85/2.56	-1.9/1	-0.68/0.7	-1.54/2.17
Theta (45°)	-0.09/0.22	-0.87/0.79	-0.56/0.11	0.55/0.59	1.03/1.47	0.46/0.73	0.55/0.76	-1.42/2.37	-3.31/3.49	-2.86/3.54	-2.85/2.23	-2.17/1.27	-1.37/2.07	-2.67/1.43	-1.01/2.59	-4.94/3.2	-1.99/1.19	-0.93/0.1	1.19/1.09	0.07/0.42	0.05/1	-0.03/1.4	-1.65/1.74	-1.59/1.6
Theta (52.5°)	-0.96/1.06	-0.52/0.14	-0.41/0.15	0.09/0.13	-0.3/0.16	0.22/0.72	0.74/0.39	-0.75/0.03	-0.3/2.33	-4.13/3.64	-2.4/2.18	-1.01/0.83	-1.97/1.97	-3.91/4.49	-4.48/5.1	-4.89/3.29	-1.73/0.41	1.55/0.14	-0.07/0.6	0.55/0.64	-0.73/0.09	-0.16/0.77	0.04/0.47	-1.07/2.16
Theta (60°)	0.44/0.82	1.12/0.35	0.39/0.36	0.24/0.2	-0.45/0.39	0.54/0.89	1.05/0.85	1.16/1.97	0.7/0.02	-2.92/4.91	-3.12/9.99	-1.19/0.94	-2.71/2.97	-4.33/3.83	-2.66/2.51	-3.67/1.62	0.25/0.24	-0.48/0.92	-0.41/0.94	-0.63/1.96	-1.63/1.51	-2.1/0.16	-0.56/0.59	-1.26/0.11
Theta (67.5°)	0.54/0.61	-0.35/0.3	0.57/1.09	1.61/0.88	0.13/0.06	2.07/2.58	2.36/1.74	1.75/0.54	-1.05/1.56	-2.03/3.06	-3.88/4.13	-1.96/2.43	-1.66/3.92	-3.76/3.42	-2.6/3.99	-4.55/2.65	-1.7/2.38	-2.26/2.48	-5.9/3.09	-3.27/2.07	-1.73/1.1	-0.47/1.22	1.76/1.32	0.93/1.22
Theta (75°)	-0.7/0.66	-0.27/0.3	0.42/1.05	1.81/2.26	1.66/1.21	1.39/1.98	0.47/0.77	0.55/0.34	-0.67/0.71	-0.33/1.74	-3.21/4.35	-3.84/4.31	-4.16/4.23	-4.31/5.56	-6.72/6.3	-4.53/7.25	-4.6/2.6	-0.76/4.31	-3.94/1.27	-0.18/2.59	-1.74/1.22	-0.02/0.37	0.96/0.17	-0.58/1.43
Theta (82.5°)	-0.03/0.24	1.29/1.66	2.43/2.1	2.65/2.01	1.51/1.69	1.56/0.91	1.21/1.76	-0.07/0.85	-0.5/1.35	-1.62/3.05	-4.13/2.27	-6.57/5.13	-6.86/6.62	-7.79/8.98	-7.02/6.1	-4.04/4.6	-4.52/1.1	0.52/3.01	-2.99/0.45	-1.48/3.8	-1.37/2.53	-0.77/0.85	0.19/0.56	-1.24/0.66
Theta (90°)	-0.32/0.58	2.63/2.95	2.41/1.76	2.42/4.5	2.71/1.93	1.94/1.38	1.56/1.29	0.70/0.92	0.2/0.53	-1.85/2.54	-4.62/5.62	-4.54/4.45	-4.04/6.86	-7.48/8.72	-9.35/4.91	-3.46/0.75	-0.42/2.97	-4.09/1.16	-2.4/1.09	0.27/0.72	-3.82/1.4	0.16/0.47	-0.69/0.58	
Theta (97.5°)	0.38/1.19	1.03/0.26	-1.49/0.41	0.77/0.58	0.49/0.17	2.24/2.44	1.58/1.07	-1.06/2.21	-1.57/4.13	-3.05/2.79	-3.33/5.24	-6.39/4.78	-6.55/6.65	-4.7/8.11	-7.09/7.22	-3.71/2.91	-4.51/1.16	-0.34/0.26	-1.83/3.19	-3.29/1.63	-1.15/0.6	-0.64/0.78	-0.86/0.34	-0.97/0.37
Theta (105°)	-0.98/1.19	-1.15/1.22	-1.02/1.85	-1.17/1.64	-0.58/1.69	-1.17/1.66	1.18/0.83	0.03/0.24	0.1/2.15	-1.59/3.66	-4.28/4.16	-4.22/5.12	-6.15/5.57	-5.75/10.87	-7.76/7.14	-4.22/3.84	-4.84/1.77	-1.14/1.82	-2.34/3.05	-0.85/0.07	-3.07/4.12	-1.93/1.72	-1.34/0.44	-1.49/1.5
Theta (112.5°)	-1.5/2.14	-0.99/1.14	-0.6/0.8	0.22/1.01	-1.38/0.44	-1.96/2.53	-0.72/0.26	-1.19/0.27	-2.11/3.33	-3.86/4.01	-3.07/3.47	-6.68/8.28	-8.58/5.43	4.96/8.6	-7.92/6.76	-4.43/3.22	-3.78/1.73	-0.54/1.16	0.17/2.92	-1.94/2.12	-2.08/0.39	-1.44/3.8	-3.24/1.61	-2.32/2.52
Theta (120°)	-4.16/2.66	-1.82/1.49	-0.34/0.55	-0.69/1.03	-2.77/1.46	0.1/0.26	-2.05/1.77	-0.68/1.83	-2.66/1.58	-3.78/5.55	-6.09/6.7	-5.4/5.06	-6.37/6.32	-10.67/9.57	-6.77/5.91	-2.52/4.29	-2.46/2.69	-1.78/4.87	-6.48/5.92	-6.83/3.66	-1.86/1.47	-1.62/3.87	-5.49/5.35	
Theta (127.5°)	-7.75/5.33	-5.84/4.92	-4.66/2.69	-2.28/1.73	-1.72/2.57	-1.09/0.84	-0.37/0.4	-0.54/2.17	-2.5/3.23	-4.12/4.19	-6.48/10.64	-11.06/8.61	-7.47/7.55	-7.51/9.95	-8.55/6.11	-4.91/3.51	-6.3/6.09	-5.18/3.74	-2					



Radiated Composite Gain Data <6GHz U-NII5~UNII-8>

Appendix B

Gain Result

Freq(Hz)	6.175GPol.	PhiAnt.1	Phi(0°)	Phi(15°)	Phi(30°)	Phi(45°)	Phi(60°)	Phi(75°)	Phi(90°)	Phi(105°)	Phi(120°)	Phi(135°)	Phi(150°)	Phi(165°)	Phi(180°)	Phi(195°)	Phi(210°)	Phi(225°)	Phi(240°)	Phi(255°)	Phi(270°)	Phi(285°)	Phi(300°)	Phi(315°)	Phi(330°)	Phi(345°)
Gain	Phi(0°)	Phi(15°)	Phi(30°)	Phi(45°)	Phi(60°)	Phi(75°)	Phi(90°)	Phi(105°)	Phi(120°)	Phi(135°)	Phi(150°)	Phi(165°)	Phi(180°)	Phi(195°)	Phi(210°)	Phi(225°)	Phi(240°)	Phi(255°)	Phi(270°)	Phi(285°)	Phi(300°)	Phi(315°)	Phi(330°)	Phi(345°)	Phi(360°)	
Theta(°)	Phi(0°)	Phi(15°)	Phi(30°)	Phi(45°)	Phi(60°)	Phi(75°)	Phi(90°)	Phi(105°)	Phi(120°)	Phi(135°)	Phi(150°)	Phi(165°)	Phi(180°)	Phi(195°)	Phi(210°)	Phi(225°)	Phi(240°)	Phi(255°)	Phi(270°)	Phi(285°)	Phi(300°)	Phi(315°)	Phi(330°)	Phi(345°)	Phi(360°)	
Theta(7.5°)	-17.58-19.05	-18.91-18.78	-18.56-14.9	-12.66-11.49	-11.49-10.98	-10.19-9.44	-9.01-8.64	-8.72-9.42	-10.83-12.31	-12.26-12.11	-11.46-10.86	-10.18-10.21	-9.81-9.79	-9.51-9.17	-8.47-7.35	-6.65-6.52	-6.52-6.48	-6.31-6.09	-6.1-6.21	-6.32-7.27	-7.95-9.29	-12.16-16.18	-18.52-18.83	-18.65-18.74		
Theta(15°)	-10.29-10.79	-10.06-9.73	-9.31-9.4	-8.66-7.38	-7.01-6.92	-7.71-8.16	-8.27-7.0	-5.85-6.07	-6.99-8.17	-9.98-12.81	-15.91-15.03	-13.09-11.41	-9.21-7.49	-5.98-6.44	-3.68-7.28	-2.26-2.33	-2.46-3.09	-3.83-4.42	-4.84-4.79	-4.86-5.75	-6.77-8.1	-10.95-14.59	-18.13-17.66	-15.1-10.64		
Theta(22.5°)	-10.19-10.17	-8.11-5.46	-3.64-2.43	-2.24-2.44	-3.09-5.02	-4.73-9.18	-10.46-11.56	-14.48-14.52	-15.21-15.74	-15.71-18.36	-18.07-18.35	-14.94-11.15	-7.98-5.18	-3.44-3.14	-3.42-3.68	-3.89-3.99	-4.26-4.69	-5.61-7.81	-9.48-8.75	-7.61-7.79	-8.14-9.24	-11.05-12.59	-12.05-13.61	-10.47-10.01		
Theta(30°)	-12.32-17.21	-19.24-18.56	-11.1-7.82	-7.85-8.45	-10.04-13.22	-15.9-15.6	-12.11-11.38	-13.82-17.38	-18.96-18.31	-19.74-13.81	-10.04-7.78	-7.17-7.56	-5.07-2.63	-1.36-0.65	-0.21-0.34	-1.45-2.8	-3.91-4.48	-5.16-5.88	-5.84-6.24	-7.34-8.32	-8.43-8.48	-9.31-9.75	-9.62-9.48	-8.68-10.71		
Theta(37.5°)	-11.47-16.79	-15.63-13.37	-14.75-15.89	-17.79-14.6	-11.9-14.79	-16.85-17.73	-18.38-17.96	-17.53-15.76	-18.64-15.86	-18.32-12.24	-17.9-7.76	-7.57-7.13	-0.04-1.37	2.06-2.09	0.71-0.96	0.71-0.96	-2.22-4.73	-7.79-9.43	-11.73-11.88	-7.33-5.9	-7.86-11.46	-11.42-9.97	-5.71-5.65	-6.37-9.25		
Theta(45°)	-8.74-13.81	-16.08-17.06	-19.14-17.74	-15.88-13.85	-12.61-10.78	-9.45-12.59	-18.66-15.24	-14.52-17.72	-18.19-18.06	-13.92-12.01	-7.94-15.87	-6.73-5.53	-1.03-0.7	0.37-0.57	1.06-0.3	0.21-0.89	-4.25-5.54	-7.18-8.25	-11.47-6.73	-7.78-8.88	-7.36-6.32					
Theta(52.5°)	-9.07-14	-17.77-18.57	-17.71-17.92	-18.03-15.59	-18.42-13.4	-15.27-19.28	-17.96-17.58	-17.69-18.01	-16.53-17.55	-17.78-11.35	-7.1-7.94	-5.55-3.69	-4.96-2.55	0.14-0.17	-1.33-1.24	2.77-0.53	3.52-2.35	1.25-0.55	-1.97-4.53	-4.98-5.82	-8.43-8.31	-6.98-7.54	-7.27-7.68	-11.15-10.88		
Theta(60°)	-15.08-12.06	-11.65-11.26	-13.34-15.03	-15.69-17.1	-18.5-18.76	-18.13-17.7	-14.48-12.64	-15.31-17.15	-18.88-16.66	-16.65-12.49	-17.28-19.11	-13.08-9.96	-7.77-8.23	0.38-0.43	1.06-2.79	3.11-1.18	3.12-1.18	1.95-0.26	-5.16-8.67	-6.87-8.67	-8.93-10.7	-13.69-14	-15.74-18.57			
Theta(67.5°)	-14.05-13.75	-17.96-18.68	-16.95-17.34	-17.76-12.23	-12.38-13.45	-13.63-13.47	-16.71-11.93	-17.16-13.51	-13.41-12.24	-14.11-13.68	-19.36-18.52	-17.61-10.01	-10.07-8.86	-3.72-3.09	-3.82-2.38	-2.01-2.57	2.31-1.05	0.01-3.96	-4.13-5.33	-8.54-11.1	-6.31-6.08	-7.24-6.98	-8.06-9.9	-9.81-10.07		
Theta(75°)	-8.92-11.53	-12.82-18.77	-17.89-17.24	-15.14-18.98	-18.33-17.67	-13.09-13.73	-16.64-18.53	-10.25-16.92	-17.34-18.36	-19.2-16.93	-16.97-12.33	-15.96-11.28	-7.69-5.41	-1.82-0.29	0.36-1.45	-1.28-0.64	0.18-0.69	-2.59-14.13	-10.88-4.43	-3.61-12.91	-7.37-5.28	-7.18-8.42	-11.41-14.59	-10.35-6.67		
Theta(82.5°)	-7.18-8.24	-9.36-17.73	-13.02-10.22	-10.13-7.85	-10.62-18.83	-19.06-18	-18.2-13.43	-11.73-11.59	-17.33-18.82	-16.76-18.82	-17.25-18.13	-12.35-11.66	-6.79-5.96	-4.96-1.84	-1.3-5.04	-4.89-2.07	0.10-0.62	-1.31-3.65	-2.57-3.2	-2.42-6.19	-9.52-6.4	-7.34-18.12	-11.55-13.12	-9.51-3.75		
Theta(90°)	-9.01-6.68	-8.94-9.44	-15.32-16.5	-18.5-10.26	-13.26-16.83	-9.99-11.51	-17.11-10.51	-6.33-9.17	-13.25-14.52	-9.11-10.41	-12.87-17.59	-18.69-18.02	-15.09-7.9	-7.85-4.16	-2.2-5.72	-13.08-3.64	0.80-99	-3.94-8.38	-5.120-36	0.62-5.39	-6.2-5.99	-3.71-15.99	-5.79-6.95	-6.24-4.06		
Theta(97.5°)	-8.17-12.82	-12.41-18.06	-13.77-11.91	-13.78-14.95	-10.57-18.93	-16.27-14.83	-17.08-18.03	-8.96-10.05	-13.71-18.22	-16.29-16.72	-16.59-18.88	-10.17-7.92	-9.92-6.44	-6.2-4.04	-0.81-2.8	-7.87-1.65	0.95-0.49	-2.51-7.33	-8.81-1.54	1.95-5.08	-2.88-4.76	-4.99-8.41	-18.14-14.05	-7.25-2.06		
Theta(105°)	-14.97-15.37	-10.14-10.26	-11.49-18.01	-15.87-15.05	-17.81-11.56	-14.07-13.04	-18.61-19.15	-12.09-12.68	-17.13-11.48	-16.32-15.44	-18.83-11.89	-19.3-9.67	-8.26-2.59	-5.64-3.07	1.1-1.4	-6.99-8.03	20.32	0.86-1.35	0.23-5.3	2.29-3.37	0.085-9.2	-7.23-8.47	-8.78-15.19	-13.21-7.77		
Theta(112.5°)	-10.79-12.08	-13.96-17.92	-17.03-14	-10.86-16.16	-12.02-12.37	-14.47-19.25	-18.73-9.99	-13.09-18.5	-18.51-15.4	-18.33-18.36	-19.17-11.16	-18.59-5.9	-8.45-2.12	-2.88-0.53	2.03-2.25	-9.4-2.04	0.51-0.17	-0.98-0.23	1.62-4.46	-6.87-1.72	-3.88-3.81	-11.42-18.18	-15.42-16.18	-13.11-6.86		
Theta(120°)	-8.22-16.77	-15.54-18.64	-17.97-17.35	-18.75-17.48	-17.71-14.56	-11.71-14.56	-11.67-17.32	-19.19-17.41	-13.48-18.06	-16.73-11.28	-10.75-10.5	-7.86-4.67	-4.56-2.42	-4.78-4.46	-4.83-15.61	-0.93-1.82	0.81-1.44	-1.98-1.91	-0.88-2.37	0.04-12.78	-10.13-6.01	-4.84-8.82	-13.55-17.32	-18.25-9.93		
Theta(127.5°)	-11.46-17.9	-15.81-19.21	-17.57-17.66	-18.31-18.3	-18.72-17.97	-15.85-10.4	-10.79-16.3	-17.29-18.75	-13.37-14.35	-11.73-9.64	-6.91-5.62	-5.82-7.89	-7.01-5.55	-11.49-10.16	-8.59-9.97	-5.12-3.96	-2.07-0.06	-3.26-3.7	-2.32-1.93	-1.52-9.32	-15.45-10.41	-8.71-9.09	-11.45-16.58	-14.93-10.95		
Theta(135°)	-13.44-14.77	-18.17-18.21	-10.35-10.07	-11.59-17.72	-17.51-12.79	-16.54-18.04	-15.95-16.61	-11.61-11.21	-17.69-17.31	-14.54-12.11	-16.78-14.8	-10.34-12.08	-11.68-13.54	-9.66-3.83	-2.41-0	0.62-0.52	-2.48-1.57	-5.88-8.64	-6.55-19.03	-3.41-4.58	-8.44-6.07	-5.63-7.16	-6.78-10.12	-15.43-15.64		
Theta(142.5°)	-17.55-17.62	-15.77-13.11	-14.87-19.15	-11.55-12.3	-3.75-6.66	-8.75-13.11	-19.21-19.54	-11.61-11.41	-13.31-17.75	-16.83-14.58	-12.73-11.63	-11.77-9.5	-8.92-8.17	-4.88-2.42	-1.22-0.77	-0.68-2.17	-4.68-5.77	-8.75-9.08	-8.02-17.27	-10.68-6.8	-7.33-7.77	-6.97-6.42	-4.68-6.62	-14.46-18.2		
Theta(150°)	-13.91-11.05	-9.49-8.95	-9.66-12.63	-19.08-16.88	-10.12-9.47	-10.93-12.89	-16.65-17.44	-18.79-14.7	-11.44-10.17	-10.78-12.56	-12.98-13.02	-12.91-10.71	-8.7-6.65	-5.23-9.4	-3.07-1.87	-1.16-1.81	-4.57-8.89	-11.04-7.95	-6.13-10.22	-17.26-4.96	-2.11-2.93	-6.64-11.56	-17.44-18.07	-17.26-16.69		
Theta(157.5°)	-18.74-15.07	-17.68-18.52	-18.41-16.95	-11.82-9.96	-9.41-11.08	-12.63-13.41	-16.54-17.95	-18.96-14.42	-11.75-11.22	-12.7-14.18	-13.31-11.35	-9.82-9.24	-9.34-9.08	-7.34-5.46	-3.92-3.15	-2.59-2.45	-2.88-3.34	-2.24-0.68	0.18-0.83	-3.99-6.75	-6.34-5.52	-6.33-9.87	-13.91-18.8	-18.43-18.96		
Theta(165°)	-14.28-13.32	-10.64-8.59	-8.11-8.34	-9.01-10.04	-11.71-13.83	-14.35-13.83	-13.35-13.28	-11.41-14.64	-16.85-18.66	-18.96-17.75	-18.83-17.85	-16.5-15.59	-14.66-13.92	-14.42-13.24	-13.22-12.22	-10.86-8.09	-7.1-6.41	-5.13-3.72	-2.95-3.34	-4.66-7.28	-11.39-17.71	-19.31-18.71	-19.01-18.83	-17.13-16.77		
Theta(172.5°)	-11.92-11.56	-12.46-11.82	-11.21-10.02	-9.43-9.63	-10.45-11.36	-12.85-15.21	-16.16-16.08	-15.66-15.37	-16.17-16.81	-17.65-19.44	-19.13-18.76	-18.81-19.13	-18.15-15.92	-13.64-12.07	-10.01-8.59	-7.54-6.97	-6.44-5.56	-4.85-4.47	-4.16-4.07	-4.27-5.39	-7.32-10.16	-13.95-17.99	-18.25-16.28	-13.87-13		
Theta(180°)	-16.06-15.64	-15.18-13.54	-11.76-11.08	-10.1-10.71	-11.82-12.13	-12.24-12.12	-11.26-11.25	-11.72-12.43	-12.69-12.75	-12.6-13.36	-13.7-13.64	-13.75-13.52	-13.76-12.83	-11.56-10.69	-9.83-9.12	-8.21-7.51	-6.92-6.31	-5.78-5.53	-5.7-6.15	-7.01-8.49	-10.1-11.28	-12.43-15.35	-16.28-16.26	-16.51-17.76		
Gain	Phi(0°)	Phi(15°)	Phi(30°)	Phi(45°)	Phi(60°)	Phi(75°)	Phi(90°)	Phi(105°)	Phi(120°)	Phi(135°)	Phi(150°)	Phi(165°)	Phi(180°)	Phi(195°)	Phi(210°)	Phi(225°)	Phi(240°)	Phi(255°)	Phi(270°)	Phi(285°)	Phi(300°)	Phi(315°)	Phi(330°)	Phi(345°)	Phi(360°)	
Theta(7.5°)	-13.56-10.79	-9.5-8.83	-8.84-8.18	-9.04-10.29	-10.74-10.52	-11.03-11.96	-12.64-13.32	-14.13-14.79	-14.84-15.58	-15.42-14.92	-14.21-13.18	-12.35-11.21	-10.64-10.51	-10.52-10.39	-10.6-10.36	-10.15-14.14	-10.63-11.41	-11.88-12.06	-12.67-18.17	-13.13-15.52	-12.28-12.36	-13.13-14.52	-17.33-16.78	-14.93-14.69		
Theta(15°)	-16.09-11.51	-10.65-9.6	-9.59-8.75	-10.01-11.25	-11.87-12.2	-12.97-14.07	-13.51-12.92	-12.25-11.02	-10.31-9.57	-9.45-9.66	-10.44-11.4	-12.29-11.84	-11.16-10.51	-10.29-9.38	-9.07-8.62	-8.4-8.44	-9.65-10.67	-11.59-13.43	-15.54-18.37	-17.83-15.54	-12.91-11.86	-11.19-9.22	-9.37-11.54	-15.31-15.32		
Theta(22.5°)	-14.42-17.92	-17.77-18.95	-17.82-17.22	-18.58-19.1	-19.21-18.2	-18.48-18.17	-18.25-17.73	-16.18-13.09	-9.8-7.27	-6.16-6.28	-7.13-8.13	-9.08-8.57	-7.98-7.01	-6.52-6.14	-6.27-7.72	-9.08-10.23	-11									



Radiated Composite Gain Data <6GHz U-NII5~UNII-8>

Appendix B

Theta	17.98-17.03	14.25-10.68	-7.57/5.88	-5.59/7.13	-10.71/16.52	-18.19/18.13	-12.11/10.26	-10.94/14.33	-18.11/16.78	-14.11/12.86	-11.26/10.58	-10.28/10.2	-9.84/9.39	-8.42/6.89	-4.98/3.7	-3.07/3.56	-4.4/1.4	-5.01/4.57	-5.87/6.28	-8.19/8.53	-7.41/7.05	-7.57/8.19	-9.69/14.23	-16.22/18.12
Theta(30°)	-18.33-19.44	-14.21-12.18	-9.31/5.78	-5.57/5.72	-13.02/16.58	-18.64/18.11	-13.91/10.62	-9.11/9.61	-12.63/13.58	-16.63/14.4	-13.21/14.3	-13.71/11.92	-11.62/10.46	-7.69/5.34	-3.63/2.89	-2.78/4.1	-5.69/7.27	-7.02/7.49	-9.13/14.33	-16.76/12.24	-9.12/5.91	-4.97/5.37	-5.72/7.51	-12.07/15.83
Theta(35°)	-7.91/8.22	-14.86/15.23	-12.11/9.06	-12.09/19.33	-19/18.54	-17.41/16.62	-17.71/19.05	-16.17/17.1	-15.56/12.4	-11.98/10.72	-10.98/11.59	-10.05/9.6	-8.91/7.68	-6.78/6.12	-5.01/3.56	-3.88/4.55	-3.48/3.14	-3.62/3.55	-2.11/2.92	-6.87/9.62	-6.16/3.09	-4.51/8.96	-13.75/8.91	-5.86/6.2
Theta(45°)	-9.99/8.74	-12.71/18.91	-18.26/17.73	-17.71/19.06	-13.96/10.73	-10.84/10.49	-12.26/12.65	-14.02/17.54	-18.82/13.07	-11.97/11.87	-11.65/15.27	-10.63/6.64	-6.23/5.07	-1.88/0.2	0.38/0.7	-1.6/2.47	-0.19/0.28	-1.11/2.65	-5.04/4.37	-4.28/3.41	-2.94/4.05	-6.15/6.16	-8.06/5.78	-7.18/6.68
Theta(52.5°)	-6.89/8.14	-13.17/10.37	-10.62/12.16	-13.45/16.33	-12.34/11.64	-14.69/18.46	-17.97/19.28	-18.76/13.57	-9.03/17.73	-17.36/18.67	-18.48/18.77	-18.72/10.71	-7.16/7.67	-3.88/1.72	-3.32/6.38	-2.54/0.65	0.73/1.13	1.76/2.23	2.08/0.49	-1.51/2.18	-2.48/4.26	-6.56/8.09	-11.38/12.91	-11.87/37
Theta(60°)	-13.51/18.68	-19.31/12.52	-6.34/9.62	-6.39/12.78	-10.91/17.84	-16.44/13.92	-6.92/5.59	-8.17/11.53	-17.64/9.58	-19.31/18.79	-17.44/18.26	-15.16/8.75	-8.96/8.58	-2.10/9.93	-1.16/0.93	1.76/3.76	5.53/8.9	0.0/0.2	-4.25/8.25	-5.67/6.69	-8.17/6.69	-10.42/12.16	-16.61/13.73	
Theta(67.5°)	-12.13/14.96	-18.84/13.82	-17.04/15.41	-18.81/11.07	-10.41/9.45	-6.1/8.06	-11.33/12.73	-9.33/9.08	-13.53/17.63	-13.88/18.9	-19.1/14.46	-13.73/9.89	-5.44/9.55	-3.22/2.8	-1.96/3.64	-3.69/0.48	2.87/3.13	4.28/2.69	2.23/0.43	-6.88/6.7	-4.91/7.5	-8.67/5.96	-12.18/17.46	-18.97/19.13
Theta(75°)	-8.23/9.53	-12.79/13.55	-11.9/13.63	-16.92/18.86	-14.37/10.02	-11.72/10	-10.42/14.52	-10.78/14.8	-8.69/15.79	-17.22/16.64	-18.12/14.29	-10.65/9.59	-12.2/14.15	-5.2/4.01	-2.61/2.6	-3.1/0.31	1.77/0.7	-1.85/1.58	-0.11/1.51	-11.52/7.16	-7.59/12.92	-8.59/8.47	-10.15/16.61	-17.22/12.96
Theta(82.5°)	-18.93/15.2	-12.35/13.22	-18.71/12.99	-15.11/11.51	-8.92/14.73	-17.99/18.66	-18.64/18.94	-18.88/8.02	-7.8/18.26	-16.49/17.92	-17.91/17.67	-18.56/11.76	-10.47/15.23	-3.87/0.91	0.82/2.28	-5.64/2.92	-0.03/1.38	-3.79/1.8	-5.63/1.99	-5.76/6.9	-7.1/7.1	-14.88/10.71	-14.16/18.82	-17.18/17.86
Theta(90°)	-13.49/14.15	-18.91/14.82	-11.82/8.8	-10.91/10.07	-9.83/8.72	-11.28/18.17	-11.62/17.98	-15.76/8.31	-9.81/18.77	-8.96/18.57	-18.19/17.16	-9.48/6.82	-7.99/5.57	-5.94/2.98	0.3/2.64	-3.73/0.69	-0.88/0.92	-2.04/8.45	-4.17/1.9	-4.45/5.53	-7.23/13.09	-10.09/7.09	-10.94/15.32	-10.72/11.14
Theta(97.5°)	-14.16/13.28	-10.92/18.63	-18.78/10.56	-14.81/12.51	-11.08/12.96	-15.14/11.01	-9.78/19.31	-11.6/13.46	-17.1/19.49	-17.77/14.74	-15.23/14.31	-11.12/9.4	-7.17/13.42	-1.91/0.7	0.02/1.69	-2.77/1.29	1.22/1.4	-0.83/10.5	-3.35/1.01	-18.8/11	-4.31/3.38	-3.12/9.75	-16.87/15.61	-8.02/6.99
Theta(105°)	-13.82/14.04	-18.46/11.3	-9.04/5.44	-13.28/13.66	-14.2/16.66	-16.66/19.04	-14.2/16.66	-19.39/11.47	-13.61/13.95	-16.21/19.62	-10.67/18.28	-10.57/9.63	-6.26/0.85	2.4/1.35	-5.82/0.68	2.03/2.16	3.25/3.11	-1.82/3.83	-1.63/2.99	-3.45/4.71	-3.59/12.61	-19.15/15.43	-8.74/9.37	
Theta(112.5°)	-17.87/13.93	-11.77/13.95	-18.83/16.85	-9.54/15.95	-15.93/19.06	-18.4/16.12	-10.95/19.07	-15.06/13.32	-16.85/10.19	-17.88/17.56	-11.15/9.16	-9.67/6.89	-5.41/3.52	-2.94/3.25	1.82/0.2	-18.85/4.16	0.76/2.06	1.02/3.59	1.74/3.52	0.44/1.11	-1.38/8.85	-2.85/4.08	-8.25/17.73	-12.22/12.82
Theta(120°)	-18.65/17.97	-18.29/13.79	-9.23/7.37	-8.83/19.09	-17.68/14.1	-10.9/17.9	-11.45/14.84	-10.09/15.15	-18.17/16.78	-17.7/12.29	-14.88/9.94	-8.59/3.89	-4.61/3.13	-2.42/7	-14.8/2.46	0.74/2.3	-0.66/3.23	1.58/3.75	0.82/0.42	-2.82/4.42	-10.09/10.95	-14.52/12.02	-7.98/9.55	
Theta(127.5°)	-12.63/17.95	-17.4/16.71	-18.6/16.26	-13.41/10.05	-10.16/8.89	-9.25/14.69	-16.12/16.83	-14.79/13.36	-12.74/14.46	-18.69/18.16	-13.72/15.16	-12.36/14.37	-15.46/8.38	-9.45/5.69	-4.72/3.87	-4.02/1.76	-1.62/1.37	-1.38/2.56	0.64/3.24	1.87/6.35	-4.01/4.52	-9.05/9.41	-10.22/13.44	-12.51/8.63
Theta(135°)	-17.8/19.4	-19.06/18.56	-17.82/18.9	-19.11/17.11	-18.97/19.22	-19.89/14.02	-10.59/10.38	-17.18/15.97	-11.97/11.92	-15.47/17.77	-10.81/10.71	-11.01/18.4	-18.05/14.9	-18.88/6.59	-4.51/4.72	-2.24/0.8	-0.85/0.18	-2.93/4.82	-0.44/1.05	-0.19/10.56	-9.58/11.95	-19.22/10.16	-10.2/14.31	-11.57/14.16
Theta(142.5°)	-18.82/17.41	-18.16/19.37	-18.11/17.97	-11.84/8.63	-7.68/4.89	-11.91/14.51	-15.68/13.98	-15.73/18.95	-18.16/17.64	-15.19/13.35	-11.7/17.44	-15.72/17.66	-13.35/12.11	-9.27/3.38	-2.33/1.44	-1.38/0.96	-3.44/6.13	-9.11/7.4	-4.87/4.04	-6.85/4.88	-12.98/18.12	-18.25/13.52	-8.66/7.02	-18.56/16.69
Theta(150°)	-14.74/11.4	-10.78/12.94	-14.88/16.62	-14.28/8.3	-8.03/10.14	-13.61/17.38	-15.86/16.65	-12.2/10.05	-9.7/10.18	-10.41/9.23	-7.57/7.69	-8.63/7.46	-10.97/5.68	-4.89/2.81	-0.86/0.06	0.53/0.21	-2.71/4.98	-6.17/5.11	-2.71/9.3	-4.32/5.46	-4.18/4.23	-5.14/9.98	-14.53/16.31	
Theta(157.5°)	-10.16/9.25	-8.32/8.16	-8.52/8.73	-9.15/11.28	-14.93/15.99	-13.4/11.42	-10.39/11.15	-13.12/19.32	-18.46/18	-11.68/7.58	-5.55/5.47	-5.65/4.92	-4.35/4.82	-5.76/6	-5.28/3.62	-2.4/2.67	-4.08/5.84	-5.97/4.23	-2.81/2.2	-2.39/2.97	-4.02/5.12	-5.85/6.82	-7.65/10.17	-13.18/11.86
Theta(165°)	-16.03/15.05	-14.15/15.57	-14.06/13.04	-12.32/11.96	-12.08/12.25	-11.54/11.82	-13.01/17.33	-16.65/17.78	-18.17/19.97	-17.18/15.13	-14.58/13.43	-11.44/9.59	-8.22/7.26	-6.29/5.75	-5.13/4.43	-3.78/3.27	-3.7/4.18	-4.43/3.85	-2.91/2.11	-2.08/3.25	-5.43/9.2	-14.26/18.64	-19.09/18.17	-18.56/15.69
Theta(172.5°)	-9.5/9.64	-9.11/7.57	-6.76/6.19	-6.81/8.24	-9.54/12.02	-12.37/12.33	-12.78/12.81	-13.89/14.69	-14.21/13.96	-13.36/13.33	-13.68/15.26	-16.85/17.43	-12.26/11.02	-9.84/9.88	-9.56/9.64	-9.81/10.33	-10.59/9.57	-9.54/9.16	-10.31/13.59	-10.59/12.92	-18.86/17	-18.19/19.09	-18.86/17	-14.59/11.93
Theta(180°)	-7.57/7.16	-5.49/4.92	-4.86/4.55	-4.63/5.25	-6.5/7.39	-8.35/9.31	-10.05/11.35	-12.55/13.04	-12.95/12.28	-10.14/9.1	-8.65/8.19	-7.59/7.61	-7.46/6.97	-6.66/6.52	-7.2/7.57	-8.12/8.53	-9.37/10.82	-11.45/12.69	-12.89/13.63	-14.3/14.91	-15.25/16.54	-12.83/9.11	-8/8.22	
Freq(Hz)	6.995GPol.	ThetaAnt.1	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Gain	Phi(0°)Phi(7.5°)	Phi(15°)Phi(22.5°)	Phi(30°)Phi(37.5°)	Phi(45°)Phi(52.5°)	Phi(60°)Phi(67.5°)	Phi(75°)Phi(82.5°)	Phi(90°)Phi(97.5°)	Phi(105°)Phi(112.5°)	Phi(120°)Phi(127.5°)	Phi(135°)Phi(142.5°)	Phi(150°)Phi(157.5°)	Phi(165°)Phi(172.5°)	Phi(180°)Phi(187.5°)	Phi(195°)Phi(202.5°)	Phi(210°)Phi(217.5°)	Phi(225°)Phi(232.5°)	Phi(240°)Phi(247.5°)	Phi(255°)Phi(262.5°)	Phi(270°)Phi(277.5°)	Phi(285°)Phi(292.5°)	Phi(300°)Phi(307.5°)	Phi(315°)Phi(322.5°)	Phi(330°)Phi(337.5°)	Phi(345°)Phi(352.5°)
Theta(0°)	-17.22/14.22	-11.59/11.66	-12.84/13.98	-17.93/17.91	-18.13/18.29	-18.38/18.43	-15.87/14.16	-13.27/12.79	-11.53/10.57	-10.76/11.58	-12.26/12.61	-12.53/12.72	-13.51/13.86	-15.28/15.97	-18.09/18.35	-18.75/18.85	-17.2/19.15	-19.24/15.75	-15.13/13.61	-10.99/10.87	-9.56/9.42	-10.09/8.8	-9.39/13.33	-12.45/12.44
Theta(7.5°)	-11.03/12.88	-16.6/17.85	-14.69/13.23	-16.33/18	-18.84/18.93	-18/18.44	-14.32/10.67	-9.15/8.27	-7.45/9.69	-6.52/6.3	-6.46/6.78	-7.46/8.62	-10.15/12.36	-15.23/17.36	-18.43/14.89	-14.18/13.95	-15.16/16.46	-17.57/17.38	-15.3/11.96	-10.48/9.99	-8.03/8.53	-9.23/7.14	-6.91/8.93	-9.9/12.57
Theta(15°)	-6.18/7.22	-8.54/9.63	-12.26/14.28	-13.88/16.85	-18.52/18.68	-18.54/18.6	-15.96/17.24	-10.53/8.06	-7.04/7.39	-8.41/9.07	-11.04/15.21	-16.84/18.93	-15.49/11.85	-11.81/10.26	-9.34/8.59	-9.52/10.83	-11.34/10.76	-9.75/9.98	-10.75/9.93	-6.51/6.62	-3.54/2.11	-1.93/2.35	-4.47/5.56	
Theta(22.5°)	-6.14/5.67	-5.02/5.78	-7.18/9.06	-12.34/15.39	-19.06/18.99	-18.76/18.87	-15.85/11.01	-10.08/12.72	-18.62/18.66	-18.95/17.14	-10.92/8.41	-8.32/9.56	-12.05/12.38	-10.52/9.6	-10.95/15.29	-16.88/14.23	-14.35/11.8	-8.97/8.22	-9.08/9.52	-9.73/9.25	-10.02/9.04	-4.74/3.2	-3.6/5.48	-6.94/6.38
Theta(30°)	-9.36/12.24	-13.57/11.33	-9/10.71	-15.52/17.81	-18.97/18.68	-18.28/19.92	-15.06/12.24	-12.23/13.74	-14.77/11.72	-9.47/6.66	-6.94/1.4	-10.36/11.95	-11.35/11.62	-13.5/13.98	-10.67/14.39	-17.09/14.39	-12.94/10.77	-10.71/11.67	-9.39/3.84	-8.35/8.75	-8.31/6.97	-6.17/6.54	-5.44/7.28	-6.6/7.77
Theta(37.5°)	-18.71/11.15	-10.12/10.87	-9.56/9.21	-11.22/12.57	-14.5/19.48	-18.91/15.46	-11.11/11.8	-12.79/18.94	-15.96/11.33	-8.92/9.62	-11.99/13.45	-19.18/18.96	-17.37/17.12	-17.89/13.27	-12.38/14.58	-18.84/14.46	-11.33/10.79	-10.9/8.81	-6.9/5.96	-7.69/7.36	-5.97/9.91	-18.91/19.28	-11.68/10.47	-10.57/16.63
Theta(45°)	-16.69/17.71	-16.09/14.74	-17.33/17.76	-15.39/16.54	-19.34/18.79	-14.18/11.23	-11.91/15.5	-12.98/14.04	-13.98/10.03	-10.55/11.23	-11.54/13.68	-11.23/9.65	-12.14/12.07	-8.2/8.1	-8.82/8.74	-8.55/9.14	-9.36/8.18	-8.85/9.56	-15.9/8.91	-8.61/11.83	-16.92/14.64	-18.5/15.94	-9.51/11.73	-17.94/15.86
Theta(52.5°)	-9.98/																							



Radiated Composite Gain Data <6GHz U-NII5~UNII-8>

Appendix B

Theta (112.5°)	-6.45/-5.64	-6.61/-6.63	-6.34/-6.63	-4.96/-4.15	-2.64/-1.94	-2.49/-1.94	-0.71/0.27	-0.21/-1.69	-2.09/-1.53	-2.05/-2.85	-4.37/-7.57	-10.72/-13.73	-14.28/-12.16	-15.35/-17.62	-18.06/-12.44	-13.07/-16.14	-12.98/-10.34	-8.37/-14.32	-18.02/-17.9	-13.87/-12.53	-11.67/-19.16	-17.91/-16.23	-16.94/-9.59	-8.16/-12.72																								
Theta (120°)	-12.52/-11.04	-9.45/-6.13	-3.61/-2.86	-2.69/-1.97	-0.68/-1.1	1.39/0.38	-0.81/-0.85	-0.85/-1.69	-3.29/-3.89	-5.01/-5.83	-7.62/-9.98	-11.23/-12.13	-13.37/-11.51	-11.76/-12.31	-16.19/-18.64	-17.73/-15.62	-10.32/-8.49	-9.58/-16.79	-12.16/-10.71	-10.78/-12.52	-17.44/-18.74	-16.13/-13.23	-13.15/-10.36	-13.39/-11.72																								
Theta (127.5°)	-14.08/-9.62	-6.84/-5	-3.43/-2.43	-2.32/-2.43	-3.32/-3.01	-1.38/-0.63	-0.71/-1.51	-2.11/-2.08	-2.39/-3.79	-6.07/-8.82	-9.74/-11.65	-11.71/-11.21	-10.17/-14.9	-11.53/-18.55	-15.37/-17.68	-17.73/-18.53	-11.97/-13.33	-11.67/-13.2	-11.71/-19.06	-15.18/-18.72	-18.33/-18.6	-17.21/-18.8	-17.54/-18.93	-18.25/-17.87																								
Theta (135°)	-13.29/-11.59	-9.73/-9.44	-9.22/-8.84	-7.83/-5.95	-4.59/-4.03	-3.87/-3.71	-2.96/-3.09	4.05/-4.14	-3.59/-3.37	-4.11/-5.69	-8.35/-13.04	-17.6/-16.61	-11.67/-11.75	-18.44/-13.79	-10.89/-14.77	-16.63/-19.19	-17.83/-18.79	-11.87/-15.26	-17.77/-19.36	-18.42/-17.98	-18.62/-16.01	-16.87/-17.7	-17.23/-17.62	-18.72/-17.15																								
Theta (142.5°)	-7.86/-6.25	-5.2/-5.16	-6.05/-7.56	-9.05/-9.36	-10.08/-10.3	-8.41/-6.1	-5.4/-5.6	4.24/-4.11	-4.14/-4.92	-6.13/-8.1	-8.85/-8.88	-8.51/-7.36	-7.92/-8.27	-11.49/-12.71	-12.2/-14.14	-12.54/-12.09	-18.62/-13.58	-10.92/-9.86	-10.81/-15.17	-18.05/-16.78	-18.32/-17.05	-14.25/-14.71	-15.45/-14.12	-12.88/-10.43																								
Theta (150°)	-12.71/-12.24	-10.74/-9.3	-8.23/-7.6	-7.75/-7.64	-6.35/-5.08	-4.45/-4.48	-4.72/-4.87	-4.84/-6.9	-5.16/-6.59	-8.46/-9.96	-10.01/-9.42	-9.41/-9.85	-11.25/-10.21	-9.27/-9.52	-9.78/-11.98	-16.85/-18.66	-15.46/-12.59	-14.65/-17.44	-15.76/-17.81	-17.71/-14.32	-18.25/-18.41	-18.48/-16.18	-13.28/-11.38	-10.99/-11.63																								
Theta (157.5°)	-9.49/-8.64	-8.06/-7.86	-7.74/-8.03	-8.45/-8.37	-7.56/-6.51	-6.02/-6	-6.2/-6.37	-6.51/-6.77	-7.03/-8	-10.45/-14.86	-18.77/-17.63	-15.62/-14.64	-11.75/-6.61	-7.17/-6.58	-6.55/-7.85	-10.91/-16.56	-18.45/-19.15	-18.81/-19.11	-18.91/-14.79	-12.94/-13.41	-13.53/-12.41	-11.32/-11.53	-12.88/-12.97	-11.07/-9.87																								
Theta (165°)	-6.62/-6.7	-7.03/-7.7	-8.82/-10.35	-11.51/-13.2	-10.11/-9.2	-9.33/-8.85	-10.11/-10.67	-11.38/-12.13	-11.71/-13.57	-13.29/-12.81	-11.56/-9.88	-8.36/-7.44	-6.94/-6.99	-7.72/-9.16	-11.21/-9.1	-16.76/-15.96	-16.54/-17.34	-16.72/-15.89	-14.97/-15.26	-15.46/-14.71	-15.16/-13.63	-11.02/-8.91	-7.66/-7.15	-17.18/-18.2																								
Theta (172.5°)	-18.12/-18.22	-17.94/-17.48	-18.29/-18.69	-18.28/-18.79	-18.9/-18.93	-17.25/-18.79	-17.67/-17.46	-18.51/-18.81	-18.81/-18.23	-18.24/-19.16	-17.93/-18.04	-19.26/-18.37	-18.58/-19.04	-18.31/-16.51	-14.62/-12.91	-11.46/-10.64	-10.29/-10.2	-10.5/-11.1	-12.39/-13.77	-15.06/-15.56	-15.17/-14.78	-14.19/-14.62	-15.41/-16.12	-17.18/-18.08																								
Theta (180°)	-17.11/-16.46	-15.76/-15.26	-15.23/-13.66	-12.57/-12.88	-13.35/-14.07	-13.86/-14.3	-15.37/-16.35	-16.79/-16.06	-14.79/-13.6	-13.41/-14.86	-15.41/-14.74	-13.07/-11.76	-10.45/-9.84	-9.51/-9.3	-9.44/-9.99	-10.59/-11.11	-11.68/-11.97	-12.25/-12.45	-13.16/-13.62	-14.42/-15.34	-15.62/-15.32	-15.56/-15.9	-16.27/-16.1	-15.88/-16.59																								
Gain	Phi(0°)	Phi(7.5°)	Phi(15°)	Phi(22.5°)	Phi(30°)	Phi(37.5°)	Phi(45°)	Phi(52.5°)	Phi(60°)	Phi(67.5°)	Phi(75°)	Phi(82.5°)	Phi(90°)	Phi(97.5°)	Phi(105°)	Phi(112.5°)	Phi(120°)	Phi(127.5°)	Phi(135°)	Phi(142.5°)	Phi(150°)	Phi(157.5°)	Phi(165°)	Phi(172.5°)	Phi(180°)	Phi(187.5°)	Phi(195°)	Phi(202.5°)	Phi(210°)	Phi(217.5°)	Phi(225°)	Phi(232.5°)	Phi(240°)	Phi(247.5°)	Phi(255°)	Phi(262.5°)	Phi(270°)	Phi(277.5°)	Phi(285°)	Phi(292.5°)	Phi(300°)	Phi(307.5°)	Phi(315°)	Phi(322.5°)	Phi(330°)	Phi(337.5°)	Phi(345°)	Phi(352.5°)
Theta (0°)	-8.07/-9.99	-13.28/-18.35	-17.86/-18.19	-17.24/-15.49	-12.26/-9.99	-8.63/-7.85	-6.87/-6.34	-5.83/-5.88	-5.82/-5.82	-5.69/-5.2	-5.09/-5.4	-6.16/-7.49	-9.46/-12.67	-16.41/-17.81	-18.78/-18.58	-16.31/-13.76	-11.38/-9.51	-8.08/-6.72	-5.73/-4.76	-4.35/-4.38	-4.41/-4.35	-4.56/-4.95	-5.38/-5.86	-6.57/-7.21																								
Theta (7.5°)	-11.07/-13.8	-17.9/-18.7	-17.62/-18.73	-16.48/-13.84	-10.88/-9.24	-7.96/-6.85	-6.82/-5.06	-4.7/-4.18	-4.06/-4.07	-3.68/-3.53	-3.58/-3.95	-4.71/-5.86	-7.95/-10.95	-14.36/-18.99	-17.37/-18.44	-13.04/-11.27	-9.44/-7.4	-6.57/-5.65	-5.63/-5.61	-6.68/-6.99	-6.33/-6.74	-7.09/-7.85	-8.83/-9.68	-11.07/-13.8																								
Theta (15°)	-17.99/-17.46	-17.78/-18.85	-16.11/-14.16	-13.35/-12.09	-10.42/-9.18	-8.14/-6.87	-6.07/-5.62	-5.16/-4.9	-4.48/-4.04	-4.01/-4.24	-4.57/-4.9	-5.34/-5.97	-7.08/-8.85	-11.27/-13.66	-16.14/-17.45	-16.19/-14.94	-12.51/-11.34	-10.41/-10	-9.52/-9.32	-10.35/-12.14	-14.75/-17.39	-16.84/-18.18	-18.25/-18.93																									
Theta (22.5°)	-13.19/-14.18	-14.87/-14.5	-13.49/-13.73	-12.68/-10.85	-9.16/-8.39	-7.75/-7.34	-6.84/-6.26	-6.24/-6.24	-6.08/-5.56	-5.66/-6.06	-6.48/-6.89	-7.77/-8.62	-9.22/-9.08	-9.49/-10.66	-12.73/-15.2	-18.91/-19.07	-17.51/-17.05	-14.27/-13.03	-12.75/-12.5	-12.33/-12.09	-12.52/-13.13	-15.74/-18.49	-18.84/-18.61	-14.91/-13.61																								
Theta (30°)	-16.11/-18.65	-15.96/-14.42	-13.47/-12.63	-11.45/-10.53	-10.63/-10.29	-9.65/-8.88	-8.41/-8.05	-7.31/-7.29	-6.1/-5.4	-5.47/-5.82	-6.58/-6.62	-6.96/-7.79	-8.69/-10.58	-14.33/-17.68	-17.73/-17.37	-18.11/-18.61	-18.62/-13.59	-11.69/-12.36	-12.81/-13.88	-13.82/-12.18	-13.86/-17.73	-18.92/-18.74	-16.82/-14.51	-15.24/-14.71																								
Theta (37.5°)	-11.21/-9.39	-9.36/-10.24	-11.47/-12.21	-12.73/-13.16	-10.67/-10.36	-12.89/-11.74	-9.72/-9.04	-6.59/-4.97	-3.54/-2.9	-2.97/-3.71	-5.41/-6.17	-6.79/-6.53	-6.14/-7.65	-14.11/-10.38	-10.99/-18.16	-14.92/-12.04	-9.38/-10.5	-15.26/-18.97	-17.96/-19.4	-13.62/-17.83	-15.19/-13.59	-14.34/-13.15	-12.42/-12.03																									
Theta (45°)	-13.16/-15.03	-18.51/-17.21	-17.86/-18.5	-18.22/-14.61	-11.11/9.69	-10.01/-10.28	-11.77/-13.53	-13.48/-9.82	-7.54/-3	-6.24/-6.51	-8.37/-8.29	-8.92/-8.15	-9.07/-12.15	-17.21/-17.89	-15.77/-10.31	-9.55/-11.15	-16.28/-16.53	-15.98/-13.58	-17.81/-18.06	-18.08/-18.16	-18.45/-17.87	-18.06/-15.8	-16.78/-11.12	-10.16/-11.61																								
Theta (52.5°)	-17.77/-15.21	-17.96/-18.89	-19.17/-14.69	-10.45/-7.7	-5.89/-5.03	-5.11/-5.22	-6.14/-7.98	-9.47/-11.65	-13.63/-14.31	-12.62/-9.88	-10.78/-12.48	-16.14/-14.8	-18.23/-18.76	-19.64/-18.79	-17.75/-16.46	-16.19/-19.06	-16.23/-12.18	-16.53/-19.1	-16.12/-14.19	-17.91/-14.74	-11.59/-13.2	-18.53/-15.09	-11.73/-10.51	-8.95/-11.68																								
Theta (60°)	-17.16/-17.66	-18.94/-17.33	-18.94/-13.82	-8.64/-4.88	-3.23/-3.31	-4.03/-6.05	-8.49/-9.4	-8.79/-6.64	-13.83/-12.81	-10.56/-8.2	-8.32/-8.13	-9.75/-10.47	-12.98/-10.48	-14.39/-16.93	-19.34/-18.13	-16.29/-11.09	-14.97/-14.24	-12.75/-19.58	-16.56/-14.76	-14.41/-18.24	-16.78/-18.74																											
Theta (67.5°)	-14.55/-15.5	-18.05/-19.01	-18.14/-14.04	-10.47/-8.14	-6.46/-6.01	-8.04/-12.48	-16/-14.74	-13.91/-10.98	-9.18/-12.58	-13.84/-9.56	-9.48/-10.87	-14.02/-11.5	-10.32/-7.47	-10.24/-12.26	-13.14/-14.39	-16.02/-18.99	-17.41/-17.3	-16.46/-18.56	-17.04/-18.46	-17.81/-18.28	-18.08/-18.34	-19.02/-18.42	-18.46/-15.04	-13.49/-12.9																								
Theta (75°)	-14.61/-14.83	-15.54/-18.86	-18.42/-18.5	-10.85/-13.29	-10.92/-8	-7.04/-6.67	-7.96/-10.06	-10.83/-12.26	-14.84/-15.19	-19.31/-17.86	-12.17/-11.47	-10.67/-12.37	-16.81/-18.7	-17.85/-18.21	-17.69/-18.62	-16.81/-18.34	-15.71/-15.87	-16.08/-18.43	-18.77/-18.93	-18.15/-18.52	-18.74/-16.08	-11.31/-13.42	-14.91/-15.51																									
Theta (82.5°)	-19.15/-18.84	-13.84/-8.65	-7.37/-7.9	-10.86/-15.24	-10.01/-9.87	-10.75/-12.31	-14.77/-12.34	-10.8/-20.3	-9.12/-11.7	-18.12/-13.66	-12.19/-11.02	-10.12/-11.62	-13.49/-18.63	-18.19/-18.26	-17.97/-14.83	-18.08/-18.27	-18.02/-10.67	-17.33/-17.66	-18.74/-18.03	-19.46/-13.35	-18.73/-16.15	-18.97/-17.55	-17.44/-16.55																									
Theta (90°)	-11.32/-9.4	-7.21/-5.32	-4.05/-4.12	-7.27/-13.78	-12.22/-7.57	-6.89/-9.48	-12.01/-15.21	-13.89/-12.32	-16.05/-17.36	-15.27/-11.77	-10.89/-12.4	-15.06/-19.11	-18.66/-15.57	-12.67/-14.24	-17.99/-18.6	-18.53/-18.47	-17.71/-11.45	-10.73/-19.21	-17.71/-17.57	-17.23/-16.22	-15.66/-18.65	-15.86/-18.63	-18.76/-18.45	-19.06/-16.54																								
Theta (97.5°)	-17.41/-13.1	-8.34/-5.68	-5.27/-6.1	-8.03/-10.2	-13.34/-10.53	-7.58/-7.57	-11.41/-12.34	-15.15/-14.62	-16.03/-17.95	-18.05/-18.98	-15.52/-17.39	-17.34/-17.1	-18.02/-18.77	-18.87/-18.44	-17.46/-14.19	-17.56/-17.33	-18.95/-17.36	-18.06/-19.39	-15.77/-17.97	-12.99/-18.03	-18.76/-14.02	-19.11/-19.39	-18.46/-17.89	-18.94/-17.82																								
Theta (105°)	-18.16/-18.73	-17.94/-13.84	-9.74/-4.44	-7.73/-8.59	-10.45/-13.62	-11.88/-11.28	-11.19/-15.75	-16.17/-16.09	-13.71/-11.28	-13.78/-14.54	-19.36/-16.99	-19.97/-19.99	-18.88/-18.82	-17.77/-18.61	-17.11/-18.83	-18.94/-18.33	-18.74/-17.79	-18.94/-19.19	-17.58/-18.85	-13.94/-18.01	-18.64/-14.25	-14.29/-18.67	-17.65/-17.89	-19.26/-17.46																								
Theta (112.5°)	-14.04/-13.04	-11.53/-11.28	-10.77/-13.43	-17.59/-18.71	-13.25/-10.34	-11.17/-14.39	-18.38/-18.88	-12.92/-10.23	-10.01/-12.35	-12.13/-8.77	-9.48/-12.95	-14.71/-16.2	-14.64/-14.96	-16.32/-13.78	-13.62/-15.57	-19.31/-19.02	-14.43/-17.67	-17.09/-19.07	-15.5/-18.76	-19.28/-18.41	-15.12/-18.86	-18.43/-14.88	-16.04/-16.93	-16.09/-13.69																								
Theta (120°)	-11.49/-9.08	-7.87/-7.46	-9.47/-13.44	-16.89/-13.23	-6.68/-6.93	-8.28/-15.48	-18.52/-9.92	-7.14/-7.63	-7.89/-9.1	-9.74/-11.2	-13.51/-17.9	-13.96/-15.28	-17.36/-16.17	-18.71/-18.06	-15.46/-18.57	-16.41/-12.88	-14.99/-14.81	-17.17/-18.91	-18.47/-18.91	-18.94/-19.87	-18.79/-19	-18.74/-18.2	-16.52/-18.46	-14.82/-12.54																								
Theta (127.5°)	-18.99/-17.68	-14.88/-15.07	-18.06/-18.93	-16.10/-26	-8.55/-4.97	-12.88/-13.04	-9.67/-8.37	-8.44/-6.63	-6.51/-7.56	-10.74/-15.11	-14.63/-15.3	-17.21/-18	-17.88/-16.31	-14.43/-19.39	-18.91/-17.39	-16.38/-16.16	-14.95/-18.27	-17.72/-18.55	-18.71/-18.94	-18.21/-17.87	-17.75/-18.9	-15.31/-17.96	-18.68/-18.37	-18.05/-18.76																								
Theta (135°)	-12.34/-15.1	-14.61/-16.27	-16.12/-14.32	-16.04/-18.12	-18.87/-17.61	-17.22/-19.7	-15.22/-11.97	-9.64/-8.95	-9.43/-9.91	-10.91/-11.85	-11.82/-11.12	-14.55/-18.41	-13.57/-10.45	-10.09/-13.9	-13.26/-13.98	-16.39/-14.19	-13.25/-18.12	-18.48/-17.35	-18.09/-18.04	-18.73/-17.16	-17.66/-17.56	-18.07/-18.39	-17.87/-12.86	-11.12/-12.13																								
Theta (142.5°)	-11.75/-12.95	-13.17/-13.62	-14.46/-13.27	-12.19/-13.55	-16.3/-15.78	-12.95/-10.36	-8.3/-6.97	-7.02/-9.18	-13.64/-13.82	-18.97/-18.84	-18.61/-18.3	-18.78/-13.1	-12.94/-10.8	-9.94/-11.72	-15.93/-17.67	-16.57/-16.37	-17.78/-17.73	-17.4/-18.02	-18.71/-17.39	-15.41/-14.81	-15.57/-18.13	-17.04/-15.88	-17.94/-19.08	-13.11/-12.49																								
Theta (150°)	-6.33/-5.5	-5.31/-6.09	-7.54/-9.41	-12.63/-16.94	-17.84/-16.01	-15.83/-17.49	-18.43/-18.26	-18.12/-14.23	-8.69/-7.02	-6.01/-6.22	-7.19/-8.96	-9.86/-10.7	-10.59/-9.11	-12.11/-12.18	-12.22/-11.65	-13.57/-14.																																



Radiated Composite Gain Data <6GHz U-NII5~UNII-8>

Appendix B

Theta (°)	Phi (°)	Phi(7.5°)	Phi(15°)	Phi(30°)	Phi(45°)	Phi(60°)	Phi(75°)	Phi(90°)	Phi(105°)	Phi(120°)	Phi(135°)	Phi(150°)	Phi(165°)	Phi(180°)	Phi(195°)	Phi(210°)	Phi(225°)	Phi(240°)	Phi(255°)	Phi(270°)	Phi(285°)	Phi(300°)	Phi(315°)	Phi(330°)	Phi(345°)
Theta (165°)	Phi(0°)	-17.58/-18.68	-18.28/-17.96	-18.68/-19.04	-18.18/-18.4	-18.73/-18.11	-19.03/-19.07	-17.66/-19.15	-19.54/-18.82	-18.62/-18.82	-18.51/-17.55	-17.44/-16.25	-14.84/-13.76	-12.04/-10.5	-9.52/-9.28	-9.92/-11.08	-11.91/-12.34	-11.83/-11.48	-11.24/-11.08	-11.66/-12.97	-14.39/-14.86	-14.47/-13.89	-14.2/-16.45	-19.13/-18.75	-17.87/-17.63
Theta (172.5°)	Phi(0°)	-18.27/-17.01	-16.53/-16.53	-16.18/-16.79	-17.76/-19.42	-18.18/-18.4	-18.27/-18.57	-18.18/-18.98	-18.39/-18.62	-18.08/-17.52	-17.99/-15.84	-13.58/-12.58	-11.25/-10.76	-10.3/-10.1	-10.12/-9.84	-9.48/-9.58	-10.48/-11.84	-12.91/-13.55	-14.06/-14.47	-15.28/-16.95	-18.18/-18.23	-18.31/-18.81	-17.96/-14.31	-18.1/-18.1	-18.32/-18.73
Theta (180°)	Phi(0°)	-18.43/-18.32	-18.08/-16.68	-16.18/-16.88	-17.53/-18.97	-17.41/-18.69	-18.73/-18.69	-18.03/-17.52	-18.18/-18.62	-18.92/-18.33	-17.33/-16.91	-16.15/-15.91	-15.32/-14.88	-14.98/-15.13	-15.56/-16.79	-17.56/-19.07	-10.48/-11.84	-12.91/-13.55	-14.06/-14.47	-15.28/-16.95	-18.18/-18.23	-18.31/-18.81	-17.96/-14.31	-18.1/-18.1	-18.32/-18.73
Theta (7.5°)	Phi(0°)	-19.01/-18.11	-14.33/-11.34	-9.08/-7.61	-6.64/-5.83	-5.17/-4.75	-4.46/-3.47	-4.39/-4.57	-4.93/-5.49	-4.48/-7.64	-8.95/-10.63	-12.91/-15.11	-17.16/-18.27	-18.05/-16.35	-14.46/-12.84	-11.39/-10.8	-10.87/-10.45	-9.57/-8.54	-7.57/-7.02	-6.78/-6.59	-6.38/-6.31	-6.25/-6.66	-7.39/-8.58	-10.43/-13.65	-18.49/-18.74
Theta (15°)	Phi(0°)	-18.09/-16.07	-13.09/-10.82	-8.91/-7.34	-6.45/-5.67	-4.98/-4.38	-4.07/-3.97	-4.05/-4.55	-5.02/-5.79	-6.81/-7.25	-7.89/-8.92	-8.85/-10.69	-10.99/-10.58	-10.54/-10.91	-11.41/-12.05	-12.72/-13.49	-13.92/-13.91	-12.84/-11.19	-10.17/-9.51	-8.99/-8.26	-7.71/-7.13	-6.84/-6.76	-7.26/-8.56	-10.81/-14.35	-18.97/-17.99
Theta (30°)	Phi(0°)	-16.31/-12.56	-11.16/-10.39	-8.92/-7.37	-6.44/-5.78	-4.98/-4.26	-3.81/-3.56	-3.61/-3.98	-4.54/-5.33	-6.06/-6.55	-7.02/-7.12	-7.34/-7.04	-7.5/-7.93	-8.51/-9.29	-10.21/-11.22	-12.07/-12.22	-12.41/-12.35	-12.16/-12.77	-12.82/-12.43	-11.81/-10.82	-10.09/-9.27	-8.81/-9.01	-10.04/-11.58	-13.76/-18.08	-18.44/-18.12
Theta (45°)	Phi(0°)	-9.08/-7.28	-5.89/-5.28	-4.79/-4.09	-3.86/-4.19	-4.03/-3.55	-3.24/-2.96	-2.93/-2.23	-3.83/-4.42	-4.88/-5.1	-5.46/-5.73	-6.07/-6.37	-6.72/-7.09	-7.29/-7.29	-8.08/-9.21	-10.69/-12.58	-14.94/-15.73	-14.44/-13.22	-12.22/-11.94	-11.62/-10.58	-9.54/-9.16	-9.37/-10.27	-12.63/-17.2	-19.04/-16.32	-12.64/-10.78
Theta (37.5°)	Phi(0°)	-8.14/-6.72	-5.32/-4.3	-3.56/-2.58	-2.16/-2.51	-2.57/-2.67	-2.56/-2.46	-2.82/-3.48	-3.93/-3.83	-3.29/-2.67	-2.47/-2.57	-4.59/-5.38	-6.24/-7.39	-9.26/-11.85	-11.65/-10.63	-9.78/-10.08	-13.58/-18.81	-18.24/-17.97	-13.41/-12.14	-12.33/-12.53	-11.39/-12.71	-14.47/-17.8	-17.75/-14.31	-10.97/-9.14	
Theta (45°)	Phi(0°)	-6.26/-5.49	-5.21/-4.96	-4.12/-4.12	-3.09/-2.4	-2.56/-1.14	-0.95/-1.12	-1.71/-2.19	-1.94/-0.98	-0.39/-2.27	-0.51/-1.15	-2.23/-2.39	-4.33/-5.1	-5.87/-6.59	-9.26/-8.86	-9.87/-11.88	-10.97/-10.62	-10.11/-11.44	-14.43/-12.03	-12.35/-12.78	-12.68/-12.59	-15.91/-16.63	-17.19/-17.69	-17.27/-12.68	-8.79/-6.87
Theta (52.5°)	Phi(0°)	-4.19/-3.32	-2.82/-2.65	-2.92/-3.79	-4.35/-4.09	-2.14/-0.18	0.940/0.81	-0.19/-1.5	-1.56/-0.42	0.590/0.66	0.52/-0.36	-1.96/-3.76	-5.1/-5.83	-5.62/-5.78	-6.42/-6.75	-8.86/-11.63	-14.5/-11.5	-11.21/-11.78	-14.64/-18.23	-17.78/-18.35	-13.48/-14.02	-14.19/-15.01	-13.95/-12.26	-10.1/-8.64	-6.59/-4.95
Theta (60°)	Phi(0°)	-3.93/-3.34	-2.62/-1.91	-1.41/-1.21	-3.61/-4.32	-1.830/0.68	1.992/1.1	1.390/5.1	0.24/-0.26	0.280/0.6	0.39/-0.26	-1.49/-2.95	-3.99/-4.81	-5.71/-6.79	-7.55/-7.95	-9.04/-9.99	-12.84/-12.75	-10.05/-10.37	-11.31/-15.5	-12.68/-10.41	-11.95/-13.29	-14.98/-14.67	-11.18/-10.4	-8.62/-9.42	-5.52/-4.4
Theta (67.5°)	Phi(0°)	-5.48/-3.39	-2.87/-2.04	-0.47/-0.84	-2.6/-4.3	-1.891/5.5	3.283/4.7	2.711/3.1	0.530/0.66	1.302/1.3	2.111/4.4	0.14/-1.31	-2.12/-2.79	-3.09/-3.42	-5.15/-6.26	-9.04/-10.88	-13.17/-15.86	-10.28/-12.81	-18.35/-15.26	-13.94/-14.86	-16.51/-13.23	-10.96/-9.71	-10.19/-9.48	-8.16/-5.67	
Theta (75°)	Phi(0°)	-6.72/-4.28	-2.99/-0.88	-0.32/-0.47	-2.39/-3.19	-1.161/4.9	3.213/7.1	3.212/1.9	0.850/0.74	1.772/7.8	3.22/7.5	1.49/-0.09	-1.78/-2.6	-3.21/-3.31	-3.83/-4.63	-6.47/-11.44	-15.77/-14.9	-16.67/-14.64	-14.71/-14.91	-15.93/-11.75	-10.15/-11.15	-14.73/-14.2	-10.78/-11.62	-10.4/-10.6	-8.87/-6.9
Theta (82.5°)	Phi(0°)	-6.88/-4.07	-2.67/-0.0	-0.55/-1.25	-3.29/-3.79	-1.221/1.4	2.563/1.6	3.272/2.5	0.840/0.6	1.523/3.4	2.642/1.6	1.203/0.3	-1.83/-0.6	-4.34/-3.1	-5.57/-6.12	-8.2/-8.73	-10.65/-13.23	-13.16/-17.87	-13.51/-9.88	-14.85/-18.87	-10.31/-11.29	-17.59/-15.55	-12.13/-12.77	-17.19/-14.64	-11.18/-1.41
Theta (90°)	Phi(0°)	-6.64/-4.68	-2.87/-2.15	-2.4/-2.93	-3.04/-1.51	0.67/2	2.552/8.6	2.852/8.7	1.970/0.9	0.480/0.7	0.890/0.7	-0.91/0.11	-1.91/4.22	-6.74/-6.2	-7.99/-9.09	-9.31/-9.77	-9.95/-10	-13.75/-19.31	-11.91/-9.76	-15.84/-13.26	-15.54/-16.73	-18.3/-16.88	-14.14/-12.01	-10.39/-8.69	
Theta (97.5°)	Phi(0°)	-6.87/-6.51	-5.9/-5.69	-4.98/-4.18	-2.210/2.3	2.242/8.6	2.782/2.2	2.422/0.9	1.610/9.5	-0.21/-1.06	-1.19/-1.09	-0.78/-0.5	-1.92/-4.38	-7.5/-9.42	-11.57/-11.47	-10.8/-9.51	-10.02/-15.24	-15.64/-11.48	-13.26/-17.75	-18.71/-8.3	-19.17/-19.19	-19.05/-18.67	-14.55/-13.59	-14.64/-13.92	-11.06/-8.19
Theta (105°)	Phi(0°)	-6.82/-6.89	-7.09/-6.44	-6.15/-4.41	-1.810/1.6	1.421/4.8	0.820/4.3	1.342/4.2	2.371/5.4	0.16/-0.42	-0.85/-1.12	-0.49/-0.46	-1.12/-3.46	-6.03/-8.98	-11.15/-11.41	-10.19/-10.56	-13.49/-12.9	-17.65/-14.08	-12.01/-13.71	-15.14/-14.34	-16.79/-18.4	-13.11/-18.49	-18.4/-19.1	-19.27/-18.4	-12.49/-8.8
Theta (112.5°)	Phi(0°)	-8.37/-6.87	-6.06/-3.72	-2.140/8.8	-0.120/7.6	0.940/2.2	-1.95/2.56	-0.171/6.6	2.271/3.1	-0.08/-1.1	-0.21/2.34	-2.19/-1.75	-1.81/-2.82	-4.41/7.01	-10.21/14.14	-15.42/15.26	-14.73/18.3	-13.27/13.23	-13.27/13.23	-17.47/-18.27	-18.18/-13.69	-15.81/-15.85	-15.72/13.6	-15.72/13.6	-11.36/8.69
Theta (120°)	Phi(0°)	-8.98/-6.49	-4.35/-2.67	-0.870/2.1	0.62/-0.06	-1.71/4.81	-5.39/-2.94	-0.171/4.5	1.671/1.7	0.03/-0.77	-1.43/-2.46	-3.56/-4.01	-3.62/-4.25	-4.86/-7.29	-7.63/-8.35	-7.22/-8.97	-16.1/-17.8	-19.22/-19.04	-15.81/-18.32	-18.89/-18.82	-15.98/-19.02	-18.52/-16.22	-13.54/-12.44	-15.34/-16.51	-15.63/-11.72
Theta (127.5°)	Phi(0°)	-10.59/-8.76	-6.62/-3.97	-2.31/-3.5	-1.01/-1.97	-4.52/-8.7	-6.87/-11.6	0.290/7.9	0.760/3.9	0.10/0.2	-1.151/-1.79	-3.83/-3.12	-3.94/-3.61	-3.55/-4.65	-4.94/-7.47	-9.29/-11.89	-14.41/-17.9	-15.93/-19.18	-16.48/-18.12	-13.66/-17.32	-15.34/-17.52	-15.13/-17.43	-18.52/-15.76	-13.41/-14.4	
Theta (135°)	Phi(0°)	-8.21/-7.48	-7.16/-6.04	-5.08/-4.23	-4.25/-2.53	-4.00/-3.47	-10.92/-5.1	-1.84/-0.54	-0.090/0.1	-0.10/0.6	-1.57/3.06	-4.59/-5.8	-6.43/-6.99	-10.14/-11.39	-14.68/-14.99	-17.85/-13.91	-18.48/-16.06	-18.51/-18.85	-13.55/-17.96	-14.51/-16.66	-12.99/-15.41	-15.13/-14.71	-15.13/-14.71	-9.01/-8.55	
Theta (142.5°)	Phi(0°)	-12.88/-12.13	-11.67/-10.58	-9.99/-9.49	-9.49/-9.96	-11.34/-13.35	-10.21/-6.23	-3.99/-2.22	-1.84/-1.59	-1.99/-3.31	-1.47/-6.14	-7.49/-9.01	-12.06/-15.31	-16.78/-19.58	-18.31/-16.5	-15.19/-14.66	-14.46/-12.3	-10.44/-11.63	-16.19/-17.13	-17.24/-16.84	-13.61/-15.75	-19.54/-16.07	-11.29/-9.35	-9.02/-9.73	-10.71/-12.07
Theta (150°)	Phi(0°)	-13.12/-13.18	-12.95/-13.05	-13.23/-13.46	-13.82/-13.63	-13.58/-15	-15.13/-13.19	-10.75/-9.79	-7.65/-7.53	-7.62/-7.91	-8.72/-9.31	-9.08/-9.88	-9.09/-2.3	-1.03/-15.34	-18.24/-17.84	-17.31/-19.13	-17.93/-15.79	-15.83/-19.16	-16.45/-16.67	-18.22/-18.22	-18.15/-19	-16.91/-17.99	-18.12/-16.4	-14.04/-13.98	-13.11/-12.3
Theta (157.5°)	Phi(0°)	-12.18/-13.11	-13.81/-15.04	-16.96/-19.24	-17.94/-18.08	-18.47/-17.82	-17.81/-15.45	-13.32/-11.77	-10.81/-10	-9.18/-9.77	-6.77/-6.07	-6.81/-6.21	-6.43/-6.56	-7.17/-9.36	-11.66/-15.81	-14.58/-13.64	-13.42/-14.39	-16.21/-17.9	-18.35/-17.16	-17.23/-18.94	-19.01/-18.61	-18.53/-18.91	-15.64/-13.9	-12.82/-12.06	
Theta (165°)	Phi(0°)	-19.38/-18.44	-17.88/-19.15	-19.22/-18.27	-18.11/-18.18	-17.87/-18.51	-17.68/-18.87	-19.03/-17.92	-15.12/-13.07	-11.22/-9.73	-8.27/-7.08	-6.21/-5.9	-6.14/-6.86	-7.91/-8.78	-9.22/-10.31	-11.23/-13.19	-16.29/-18.06	-18.08/-18.91	-16.71/-13.83	-12.13/-11.38	-11.98/-13.55	-16.09/-19.23	-17.18/-18.57	-19.07/-18.84	-18.63/-17.54
Theta (172.5°)	Phi(0°)	-18.56/-17.86	-17.68/-17.91	-18.09/-19.09	-18.91/-19.21	-18.17/-17.32	-16.81/-15.73	-13.94/-12.28	-11.14/-10.37	-8.69/-9.34	-9.14/-8.85	-8.99/-9.23	-9.86/-10.64	-11.65/-12.91	-15.41/-18.62	-19.5/-18.5	-15.97/-14.32	-13.67/-13.5	-13.35/-13.31	-13.71/-14.26	-15.74/-17.68	-19.07/-17.36	-18.8/-18.31	-18.32/-18.28	-17.88/-17.51
Theta (180°)	Phi(0°)	-18.49/-17.51	-19.41/-18.95	-18.42/-18.6	-17.62/-18.31	-18.22/-18.76	-17.15/-17.2	-16.34/-15.27	-14.71/-14.65	-14.69/-15.17	-16.48/-17.63	-18.15/-18.2	-18.54/-18.23	-18.25/-18.58	-17.24/-17.66	-18.18/-19.06	-18.75/-18.33	-17.51/-19.06	-18.85/-18.29	-18.47/-18.49	-18.98/-18.34	-18.62/-18.2	-18.39/-19.05	-18.25/-18.54	-19.15/-18.51
Theta (7.5°)	Phi(0°)	-8.54/-8.82	-9.15/-9.65	-10.04/-10.58	-11.89/-13.01	-14.24/-14.1	-16.02/-16.61	-17.49/-17.1	-15.98/-14.76	-13.59/-12.3	-11.23/-10.33	-9.75/-9.23	-8.9/-8.36	-8.13/-7.62	-7.24/7.61	-8.81/-10.12	-11.64/-13.19	-14.49/-15.48	-16.59/-18.38	-18.12/-18.19	-15.96/-14.31	-12.81/-11.69	-10.22/-10.44	-9.78/-9.29	-8.73/-8.66
Theta (15°)	Phi(0°)	-6.26/-6.75	-7.26/-7.94	-8.44/-9.42	-11.18/-12.85	-15.11/-18.07	-18.71/-18.45	-17.46/-15.4	-13.96/-12.98	-11.86/-11.25	-10.76/-10.76	-10.73/-11.07	-12.03/-13.12	-13.69/-13.15	-11.99/-11.11	-10.71/-10.43	-11.65/-13.21	-14.5/-15.85	-16.87/-17.2	-17.29/-16.54	-14.83/-13.06	-11.71/-10.41	-9.46/-8.44	-7.64/-6.96	-6.42/-6.33
Theta (3																									



Radiated Composite Gain Data <6GHz U-NII5~UNII-8>

Appendix B

Theta (°)	-15.51-12.99	-10.79-9.69	-9.03-8.61	-8.07-7.47	-6.97-6.82	-7.19-7.89	-8.58-9.99	-9.41-9.77	-9.79-10.15	-10.71-11.26	-12-12.62	-13.28-13.66	-13.51-13.26	-13.05-13.4	-12.92-12.25	-11.51-11.59	-12-12-12.18	-13.14-16.47	-16.16-17.41	-17.29-17.41	-18.76-19.03	-18.28-18.07	-18.13-19.36	-18.51-18.65
Theta (22.5°)	-13.29-11.11	-9.26-7.72	-6.85-6.26	-5.66-5.13	-4.79-4.85	-5.34-5.87	-6.57-7.37	-8.27-8.46	-8.37-9.71	-7.92-8.7	-9.87-11.52	-12.77-13.44	-14.38-14.92	-15.83-15.78	-15.79-15.07	-13.36-12.74	-12.56-13.27	-14.82-16.47	-17.48-17.97	-17.71-17.66	-16.63-16.56	-18.06-18.59	-18.03-19.08	-18.72-15.24
Theta (30°)	-9.93-8.99	-7.92-6.86	-5.95-5.43	-4.91-4.06	-3.27-3.19	-3.64-4.53	-5.63-6.02	-6.16-4.12	-3.51-3.6	-4.03-4.66	-6.04-7.73	-10.31-10.01	-10.91-12.39	-14.84-18.78	-17.61-17.55	-13.07-12.48	-11.63-14.67	-18.11-18.26	-17.18-18.26	-17.33-13.35	-14.73-16.72	-15.99-19.09	-19.52-17.38	-14.61-11.2
Theta (37.5°)	-6.39-5.25	-4.21-3.95	-4.42-3.13	-5.04-2.43	-3.25-2.95	-3.52-4.67	-5.19-4.01	-2.21-1.06	-1.1-1.66	-2.65-4.04	-5.81-7.65	-9.06-9.12	-9.4-9.6	-9.12-9.77	-11.34-14.97	-17.91-13.74	-10.66-11.13	-13.91-18.38	-17.85-19.48	-14.63-13.79	-14.06-15.61	-17.39-16.42	-15.08-11.05	-8.94-7.37
Theta (45°)	-6.93-6.85	-4.44-3.39	-2.73-2.81	-2.86-2.53	-1.85-1.66	-2.24-3.59	-3.69-1.61	0.02-0.77	0.94-0.51	-0.45-1.92	-4.09-5.66	-6.86-7.31	-7.61-8.54	-8.96-8.62	-8.51-9.52	-14.15-17.67	-15.12-13.19	-11.41-14.43	-13.45-14.10	-11.34-14.47	-16.72-17.48	-17.86-17.37	-15.84-11.73	-9.24-7.98
Theta (52.5°)	-6.93-6.4	-5.61-5.97	-5.23-4.1	-2.97-1.55	-0.26-0.55	0.34-0.77	-0.76-1.12	1.04-1.18	1.41-1.35	-0.53-1.03	-3.61-5.7	-5.99-5.43	-6.17-6.18	-7.65-8.65	-9.89-10.7	-16.32-18.31	-16.35-10.77	-11.95-15.73	-14.51-12.57	-11.94-13.05	-14.19-15.18	-18.02-18.87	-14.85-13.94	-10.09-7.71
Theta (60°)	-6.25-4.22	-3.44-3.43	-4.59-5.66	-4.34-1.53	0.92-2.15	2.28-1.28	0.61-0.99	1.05-1.03	1.14-1.35	1.22-2.03	-1.13-2.57	-3.69-4.29	-5.37-6.75	-8.42-9.03	-9.98-11.01	-13.63-17.66	-18.48-14.54	-11.78-15.76	-17.97-15.91	-12.16-12.42	-17.15-17.45	-17.12-12.47	-11.78-10.17	-9.54-7.17
Theta (67.5°)	-5.97-3.88	-2.21-1.15	-1.53-2.98	-4.17-2.22	0.49-2.19	2.72-2.4	1.82-0.76	0.21-0.68	1.73-2.16	2.01-0.78	-0.87-2.65	-3.91-5.14	-6.6-6.83	-7.33-6.16	-8.67-12.01	-10.83-16.93	-18.91-16.76	-13.09-16.4	-16.96-11.6	-11.87-16.51	-18.53-17.82	-16.94-17.62	-14.66-11.2	-8.61-6.72
Theta (75°)	-5.06-3.39	-2.29-1.95	-1.63-2.25	-3.04-2.69	0.02-2.02	2.69-2.98	2.83-1.95	0.49-1.12	2.62-9.1	2.68-1.32	-0.95-3.45	-4.91-5.64	-6.98-9.16	-10.74-9.03	-7.59-8.4	-10.89-15.3	-17.86-16.67	-15.55-19.25	-16.67-18.5	-16.48-11.7	-14.46-18.34	-12.71-11.99	-12.71-10.29	-9.11-6.13
Theta (82.5°)	-3.89-2.61	-1.94-1.97	-2.61-4.1	4.21-2.08	0.07-1.56	2.43-3.26	3.45-2.87	2.25-2.59	3.63-3.28	2.88-1.79	-0.26-2.46	-4.23-4.1	-4.25-4.85	-6.69-10.59	-11.37-12.49	-12.56-15.21	-19-16.04	-18.52-17.6	-17.76-15.74	-17.21-12.55	-14.38-16.06	-14.98-15.34	-10.88-10.9	-6.94-5.21
Theta (90°)	-3.83-6.62	-6.19-6	-5.43-5.28	-3.95-1.15	0.17-0.66	0.43-2.05	3.35-3.18	2.05-1.83	2.71-2.45	1.70-0.99	-2-3.27	-3.99-3.26	-4.19-7.96	-9.31-15.14	-9.01-9.5	-18.04-11.91	-11.87-17.96	-17.85-16.83	-15.81-15.69	-14.48-17.7	-15.91-16.29	-14.48-17.1	-15.3-13.89	-15.47-14.7
Theta (97.5°)	-14.35-12.25	-10.6-9	-4.78-3.01	-1.29-2.04	0.44-0.25	-0.95-1.17	3.02-3.45	2.15-0.99	1.99-3.22	1.71-0.64	-1.74-3.58	-5.44-9.91	-6.67-8.88	-8.19-10.59	-10.54-10.52	-15.63-11.91	-9.17-15.29	-18.74-17.46	-17.99-14.44	-17.91-18.4	-19.1-17.52	-19.13-19.22	-19.15-14.07	
Theta (105°)	-16.04-11.9	-7.03-4.67	-2.21-0.78	0.41-0.9	0.18-1.98	-2.19-0.28	2.34-3.11	1.69-0.57	0.46-0.85	0.44-0.24	0.19-0.06	-1.27-3.47	-5.72-7.11	-8.12-7.32	-7.69-7.41	-9.21-15.79	-16.21-14.19	-12.05-13.69	-18.47-14.18	-12.36-14.51	-15.69-17.98	-19.35-17.84	-18.81-18.63	-18.62-18.5
Theta (112.5°)	-9.25-7.37	-4.88-3.49	-2.04-1.15	-1.42-2.67	-3.03-3.36	-2.65-1.03	0.81-2.5	1.25-0.07	-0.27-0.35	-0.69-1.86	-2.03-1.53	-1.91-3.7	-5.2-8.05	-10.22-10.25	-12.76-12.51	-18.42-12.96	-14.67-17.49	-18.06-19.06	-15.66-17.52	-18.63-16.54	-17.67-12.8	-15.73-19.9	-16.71-12.8	-11.65-9.39
Theta (120°)	-9.93-6.94	-4.98-2.83	-1.73-1.76	-3.17-0.67	-7.54-4.86	-2.88-2.36	-0.86-0.09	-0.43-0.05	-1.44-2.23	-3.98-5.87	-5.16-4.26	-3.33-4.37	-5.18-7.68	-7.77-10.2	-11.38-11.65	-16.62-17.92	-17.57-12.78	-13.72-19.29	-11.91-19.03	-11.86-12.63	-12.98-19.55	-18.84-15.47	-16.57-14.95	-13.16-10.57
Theta (127.5°)	-9.26-8.83	-7.87-6.33	-5.19-4.37	-5.4-7.47	-8-6.27	-4.45-3.47	-3.57-2.11	-1.29-0.79	-0.58-1.44	-3.82-7.4	-8.56-7.22	-5.5-6.55	-5.65-8.48	-7.07-9.18	-8.93-10.31	-18.59-16.5	-11.73-15.28	-15.91-17.98	-18.23-18.77	-13.56-15.05	-11.37-18.39	-17.13-16.87	-16.88-11.59	-10.13-9.83
Theta (135°)	-12.29-13.76	-13.52-14.61	-12.61-10.85	-8.74-6.81	-10.45-12.41	-8.18-4.16	-2.23-1.8	-0.93-0.26	-0.26-1.07	-3.2-5.78	-9.08-11.63	-10.51-9.3	-7.94-8.07	-5.81-6.8	-8.96-12.59	-17.91-18.77	-12.16-19.24	-18.19-15.8	-18.61-13.88	-19.14-18.9	-13.51-13.28	-12.46-13.18	-12.11-10.9	
Theta (142.5°)	-18.41-18.63	-18.41-17.76	-14.41-11.65	-11.03-9.98	-12.75-15.64	-9.39-5.28	-3.15-2.53	-2.72-2.61	-2.95-3.45	-4.03-9.95	-9.03-10.55	-13.76-14.26	-14.17-14.15	-13.03-13.44	-12.14-12.78	-14.21-17.19	-18.92-16.82	-18.21-18.28	-17.05-15.83	-19.33-13.41	-18.11-18.96	-15.34-14.96	-18.46-18.8	-12.11-17.56
Theta (150°)	-16.78-16.28	-14.46-13.59	-13.4-14.16	-16.44-19.36	-18.03-18.29	-11.29-7.14	-5.22-4.71	-5.34-6.05	-6.29-6.47	-7.24-7.74	-9.22-11.85	-15.17-19.56	-18.37-17.51	-18.31-17.85	-14.16-12.44	-14.69-17.69	-18.25-19.06	-19.18-18.38	-18.41-18.34	-18.71-16.71	-18.52-18.41	-17.96-19.29	-18.89-18.98	-18.12-17.46
Theta (157.5°)	-12.24-11.82	-11.55-11.64	-12.11-14.55	-18.62-17.65	-18.22-18.99	-13.66-10.52	-9.33-9.61	-10.92-12.26	-13.25-14.02	-15.66-17.18	-16.37-16.13	-16.09-14.22	-12.89-11.57	-12.3-14.7	-17.73-16.77	-14.43-14.04	-16.64-17.45	-15.51-14.43	-13.34-14.32	-16.91-17.52	-14.81-13.02	-12.78-12.78	-12.71-13.39	-13.93-13
Theta (165°)	-19.03-17.69	-18.49-17.4	-19.14-18.17	-18.33-18.29	-18.56-18.46	-17.77-17.37	-18.49-16.71	-14.57-13	-11.84-10.94	-10.02-9.7	-9.7-9.84	-10.24-11.7	-13.53-15.68	-17.87-18.35	-18.6-18.58	-18.44-17.65	-19.34-18.58	-17.8-14.22	-13.1-12.92	-13.74-14.6	-15.68-18.57	-18.96-18.25	-17.48-17.59	-18.01-18.69
Theta (172.5°)	-18.61-18.86	-18.79-19.43	-17.73-19.22	-18.87-19.16	-18.15-18.67	-18.37-17.26	-15.17-13.02	-11.62-10.73	-10.21-9.88	-9.67-9.61	-10.01-11.09	-12.4-13.84	-16.08-16.45	-18.53-17.69	-17.92-18.45	-18.29-18.55	-19.55-17.43	-17.46-16.81	-14.52-13.73	-13.95-13.4	-13.91-15.37	-16.52-15.82	-15.55-16.74	-17.99-18.59
Theta (180°)	-18.95-19.66	-18.91-19.02	-18.66-18.09	-17.49-18.56	-18.45-18.71	-19.08-16.55	-14.64-13.66	-12.83-12.29	-11.96-11.71	-11.62-11.61	-11.73-11.44	-11.62-12.47	-13.47-14.43	-14.8-15.84	-16.91-18.82	-18.98-18.86	-18.84-18.01	-18.74-15.18	-17.86-18.81	-18.06-18.11	-18.47-19.1	-17.24-19.16	-18.28-18.39	-18.64-18.37
Theta (15°)	-11.28-11.82	-12.38-13.05	-14.01-14.82	-15.22-16.58	-18.78-17.47	-16.39-14.83	-13.49-12.53	-12.02-12.4	-13.36-14.93	-18.38-17.76	-18.05-19.08	-16.48-13.55	-12.11-11.61	-12.19-13.84	-14.7-12.26	-9.24-7.93	-8.05-8.84	-9.37-10.19	-11.96-14.11	-16.71-18.38	-18.99-18.97	-18.84-18.59	-17.68-15.26	-13.66-11.64
Theta (22.5°)	-9.29-9.78	-10.38-10.82	-10.88-12.04	-13.76-14.73	-19.12-17.59	-19.15-15.83	-14.38-14.02	-14.95-16.08	-17.35-17.24	-18.31-15.63	-13.71-12.54	-11.32-10.81	-10.91-11.64	-13.56-16.34	-16.06-13.99	-11.99-10.42	-9.52-9.58	-8.66-10.42	-13.36-15.45	-15.71-14.11	-13.52-10.99	-12.44-11.97	-11.04-10.17	-9.98-9.21
Theta (30°)	-12.63-13.35	-12.93-13.05	-14.42-12.62	-13.47-15.01	-18.22-18.08	-18.38-18.63	-16.84-15.91	-17.59-18.47	-18.77-17.17	-14.96-14.23	-15.11-16.74	-18.29-18.4	-19.02-19.06	-17.45-16.74	-16.56-17.89	-19.06-18.13	-17.08-12.32	-10.71-11.29	-14.42-14.74	-12.15-11.49	-10.73-11.26	-10.82-10.06	-9.19-8.77	-9.57-10.99
Theta (37.5°)	-13.11-15.79	-16.94-16.29	-14.37-13.05	-13.53-15.72	-18.51-18.78	-18.78-19.14	-19.03-18.95	-17.69-19.32	-17.31-18.06	-18.51-18.43	-19.01-19.16	-18.56-18.71	-19.02-18.89	-18.52-17.63	-18.52-19.45	-17.91-17.95	-16.82-14.01	-15.01-17.53	-17.28-14.56	-12.18-11.24	-12.14-12.62	-12.14-11.39	-10.52-10.26	-10.55-11.48
Theta (45°)	-18.45-18.52	-18.46-15.76	-12.32-10.86	-11.12-12.89	-15.54-18.27	-19.04-18.68	-19.04-17.54	-18-18.78	-18.59-18.7	-18.51-18.49	-18.91-17.35	-16.08-14.2	-13.34-14.14	-15.24-16.27	-16.61-14.94	-16.74-18.44	-18.47-17.63	-17.6-17.41	-19.05-17.97	-11.34-9.91	-9.79-10.32	-10.69-10.73	-10.69-12.02	-13.61-15.5
Theta (52.5°)	-18.93-18.42	-18.29-18.55	-17.24-13.1	-10.69-9.52	-10.31-13.8	-18.79-18.62	-19.06-16.93	-16.35-17.6	-19.34-18.67	-17.94-17.59	-17.78-17.76	-17.78-17.69	-18.74-17.95	-18.68-16.28	-18.53-17.74	-18.79-18.38	-19.02-18.36	-16.34-15.29	-18.66-14.72	-13.53-13.25	-15.92-17.57	-17.92-16.02	-14.62-12.87	-13.81-16.15
Theta (60°)	-18.02-18.05	-18.03-18.35	-11.14-18.77	-15.13-12.26	-12.64-13.74	-18.95-19.28	-15.93-14.42	-13.89-17.46	-19.06-19.09	-14.22-11.14	-11.02-14.41	-19.06-18.75	-18.12-18.84	-17.16-18.33	-18.86-18.07	-15.84-19.43	-17.57-19.19	-18.56-17.41	-19.16-17.94	-18.86-16.25	-13.51-14.95	-13.51-15.1	-11.51-11	-10.46-16.19
Theta (67.5°)	-15.25-15.22	-17																						



Radiated Composite Gain Data <6GHz U-NII5~UNII-8>

Appendix B

Theta (°)	-0.98/-1.38	-1.24/-2.25	-4.03/-5.34	-5.3/-7.81	-17.97/-19.73	-19/-17.77	-18.64/-17.9	-18.35/-19.24	-18.18/-17.9	-17.95/-18.81	-18.31/-16.93	-18.44/-17.98	-11.91/-9.2	-11.64/-11.89	-12.09/-12.35	-10.63/-8.09	-5.83/-3.93	-2.49/-1.61	-0.88/-0.71	0.76/0.13	0.12/1.51	1.93/2.99	3.65/2.82	0.43/-0.23
Theta (67.5°)	-0.64/-1.41	-0.73/-2.18	-2.92/-5.14	-7.25/-10.78	-14.92/-10.74	-9.48/-10.62	-15.67/-18.42	-16.11/-14.74	-17.71/-16.61	-16.51/-14.22	-15/-14.12	-17.72/-18.29	-7.54/-8.12	-15.64/-12.28	-13.43/-9.31	-5.41/-4.71	-3.44/-0.82	1.17/0.8	0.66/2.21	3.68/3.83	2.53/2.44	1.24/2.35	3.44/3.13	0.33/0.44
Theta (75°)	0.57/-2.23	0.09/-3.27	-2.92/-3.14	-6.51/-8.43	-9.65/-7.53	-6.86/-13.21	-18.59/-18.11	-14.22/-14.21	-19.04/-18.13	-18.33/-14.57	-17.93/-13.61	-15.46/-17.4	-10.73/-7.85	-14.08/-14.93	-12.23/-6.65	-3.72/-3.42	-1.16/-0.62	1.39/1.11	2.50/2.29	4.62/4.66	4.65/3.73	1.48/1.5	3.17/4.03	0.15/-1.58
Theta (82.5°)	1.55/-2.4	0.21/-5.81	-2.55/-2.52	-7.32/-10.2	-7.54/-6.86	-15.11/-14.69	-14.02/-12.59	-19.12/-16.62	-14.38/-18.09	-18.11/-12.33	-18.71/-14.63	-14.72/-18.84	9.21/-11.09	-16.31/-15.79	-10.23/-5.51	-3.65/-3.02	-0.06/-1.21	0.54/1.51	0.94/3.04	3.66/4.52	4.56/3.86	2.12/2.02	2.89/4.66	0.57/0.05
Theta (90°)	1.41/-2.85	-0.81/-5.9	-2.59/-3.62	-10.11/-12.82	-6.5/-6.85	-18.71/-14.69	-12.79/-12.44	-18.56/-17.5	-16.77/-19.13	-19.03/-12.56	-14.21/-10.4	-12.26/-13.5	-8.95/-11.21	-13.79/-15.73	-10.37/-5.4	-3.22/-3.64	-1.81/-2.5	0.63/1.34	-1.16/0.52	2.72/2.97	3.44/2.43	1.79/3.22	3.54/4.08	0.68/0.6
Theta (97.5°)	0.32/-2.18	-3.46/-4.44	-2.41/-5.06	-13.41/-11.35	-4.5/-4.43	-16.23/-9.96	-13.42/-13.87	-10.63/-13.58	-18.75/-14.36	-11.94/-12.17	-18.63/-15.85	-10.07/-15.98	-10.84/-7.52	-10.17/-7.71	-14.05/-5.3	-2.02/-4.6	-2.37/-0.77	2.20/1.46	3.00/4.4	2.27/1.35	1.44/1.2	3.77/2.63	1.50/1.97	
Theta (105°)	-0.13/-2.47	-3.88/-3.32	-4.91/-3.75	-7.36/-12.95	-8.85/-4.57	-8.82/-17.34	-15.57/-18.08	-15.76/-11.92	-17.31/-15.74	-9.73/-14.57	-18.71/-17.89	-6.45/-10.46	-11.8/-6.2	-4.39/-7.02	-11.05/-4.8	-3.38/0.95	-6.77/-4.27	3.57/0.67	-5.66/-2.21	4.37/4.63	3.42/0.83	-2.21/2.85	3.79/0.93	0.52/-0.6
Theta (112.5°)	-3.62/-5.04	-7.7/-4.5	-7.87/-6.45	-5.11/-9.49	-16.21/9.38	-9.05/-11.48	-14.81/-17.91	-15.25/-10.15	-16.45/-15.83	-12.74/-16.66	-17.66/-11.99	-11.78/-9.66	-11.79/-10.69	-8.86/-17.51	-3.19/-3.48	-0.73/0.99	-18.46/-1.12	3.89/3.98	-5.85/-0.79	4.54/2.06	2.9/0.92	-3.08/3.69	2.72/-5.06	-0.99/-3.04
Theta (120°)	-5.99/-2.26	-7.83/-5.07	-7.61/9.43	-5.77/-6.81	-10.56/-17.58	-11.16/-13.8	-11.43/-12.26	-14.71/-12.06	-8.96/-11.6	-13.88/-18.38	-17.88/-15.44	-11.19/-9.4	-14.61/-16.14	-8.66/-18.55	-2.18/-9.15	-3.52/-0.02	-5.99/-1.04	4.62/1.59	-4.29/-0.24	2.77/1.35	1.49/1.66	-3.81/1.64	1.94/3.39	-1.82/-0.23
Theta (127.5°)	-8.45/-3.62	-5.84/-6.98	-6.39/9.86	-7.77/-9.07	-10.26/-12.22	-13.12/-11.24	-9.92/-11.27	-11.92/-13.25	-13.95/-13.51	-11.98/-12.54	-17.83/-14.96	-10.3/-18.76	-13.12/-12.83	-12.47/-10.09	-6.42/-15.83	-2.99/-2.22	-10.43/-0.44	3.97/0.76	-6.07/-2.35	-1.11/4.4	-2.55/-7.26	-10.44/-3.84	-1.26/-4.4	-4.32/-4.26
Theta (135°)	-8.62/-8.03	-7.05/-10.2	-9.92/-8.81	-12.09/-15.15	-16.41/-15.65	-17.14/-18.35	-13.97/-15.8	-17.81/-14.14	-17.94/-18.98	-18.21/-13.4	-16.07/-12.37	-13.08/-12.25	-17.33/-11.26	-17.09/-15.41	-4.28/-8.27	-0.21/3.7	-7.7/-7.82	-8.87/-4.46	-5.06/-10.31	-6.5/-4.7	-2.87/-4.52	-6.15/-3.74	-2.87/-4.52	-6.15/-3.74
Theta (142.5°)	-8.64/-8.61	-8.21/-7.7	-8.29/-8.65	-10.34/-14.68	-18.89/-18.84	-17.96/-19.03	-16.64/-19.04	-19.01/-18.76	-19.13/-18.76	-18.52/-13.57	-14.73/-13.19	-13.77/-13.12	-10.49/-16.76	-13.11/-11.95	-13.29/-15.28	-13.89/-17.1	-5.91/-15.36	-17.56/-10.38	-9.53/-10.49	-6.56/-6.03	-5.66/-4.03	-5.66/-4.03	-5.66/-4.03	-5.66/-4.03
Theta (150°)	-9.24/-8.76	-8.89/-9.83	-10.79/-10.48	-9.91/9.53	-9.45/-10.81	-12.21/-13.58	-15.85/-18.94	-17.84/-18.91	-19.16/-18.89	-16.45/-17.57	-16.94/-14.17	-14.33/-15.97	-17.29/-17.53	-16.45/-15.51	-17.29/-17.66	-19.11/-17.91	-10.91/8.94	-14.72/-16.88	-17.62/-19.02	-15.16/-16.52	-11.25/-12.79	-8.87/-5.84	-6.71/-8.54	-9.74/-10.42
Theta (157.5°)	-10.96/-10.55	-8.77/-11.1	-6.4/-6.91	-8.64/-12.13	-15.13/-18.16	-18.71/-19.04	-17.81/-18.86	-18.91/-18.69	-18.18/-27	-17.21/-17.35	-18.64/-18.21	-18.34/-19.29	-19.08/-18.41	-16.51/-17.22	-16.57/-15.81	-14.01/-11.79	-10.63/-10.83	-12.08/-13.93	-15.66/-16.79	-17.03/-17.07	-13.41/-10.67	-9.35/-8.42	-8.41/-11.15	-13.51/-13.71
Theta (165°)	-11.37/-10.11	-10.63/-10.71	-12.31/-12.68	-12.53/-13.42	-14.96/-17.23	-18.96/-17.96	-18.45/-18.36	-17.68/-15.81	-18.38/-18.84	-18.41/-18.46	-17.84/-17.64	-17.87/-18.69	-15.65/-16.16	-17.37/-14.82	-11.71/9.47	-0.90/-10.2	-14.09/-18.18	-18.72/-19.05	-17.19/-18.32	-16.33/-15.97	-13.71/4.86	-14.88/-14.34	-14.74/-15.38	-14.11/-12.09
Theta (172.5°)	-19.05/-18.47	-18.15/-15.42	-13.77/-14.19	-14.91/16.66	-18.21/19.91	-18.95/-18.27	-18.97/-18.26	-18.05/-19.15	-17.43/-17.99	-17.89/-17.7	-17.26/-18.64	-18.13/-18.57	-17.74/-18.9	-18.51/-16.87	-15.33/-14.77	-15.42/-16.48	-17.44/-16.8	-16.22/-16.32	-17.33/-17.31	-15.56/-14.62	-14.37/-15.14	-16.81/16.99	-151/-16.04	-15.44/-18.59
Theta (180°)	-19.21/-18.22	-18.05/-19.02	-19.35/-17.59	-19.31/18.09	-18.12/-18.61	-17.78/-19.26	-18.21/-17.68	-18.65/-18.13	-17.27/-18.38	-17.83/-18.85	-18.11/-18.62	-18.36/-18.69	-17.73/-17.05	-16.75/-15.97	-16.24/-16.6	-16.75/-16.39	-16.88/-17.51	-19.17/-18.14	-18.45/-18.8	-18.83/-18.69	-19.13/-18.02	-18.98/-18.49	-18.88/-18.86	-18.71/-18.32
Freq(Hz)	6475GPol	PhiAnt 4																						
Gain	Phi(0°)Phi(7.5°)	Phi(15°)Phi(22.5°)	Phi(30°)Phi(37.5°)	Phi(45°)Phi(52.5°)	Phi(60°)Phi(67.5°)	Phi(75°)Phi(82.5°)	Phi(90°)Phi(97.5°)	Phi(105°)Phi(112.5°)	Phi(120°)Phi(127.5°)	Phi(135°)Phi(142.5°)	Phi(150°)Phi(157.5°)	Phi(165°)Phi(172.5°)	Phi(180°)Phi(187.5°)	Phi(195°)Phi(202.5°)	Phi(210°)Phi(217.5°)	Phi(225°)Phi(232.5°)	Phi(240°)Phi(247.5°)	Phi(255°)Phi(262.5°)	Phi(270°)Phi(277.5°)	Phi(285°)Phi(292.5°)	Phi(300°)Phi(307.5°)	Phi(315°)Phi(322.5°)	Phi(330°)Phi(337.5°)	Phi(345°)Phi(352.5°)
Theta (0°)	-17.78/-17.82	-17.81/-18.03	-17.88/-17.58	-19.11/-18.36	-18.95/-17.73	-17.55/-17.81	-18.37/-18.68	-18.32/-18.1	-17.96/-18.27	-17.25/-18.66	-18.37/-18.48	-18.63/-18.74	-17.31/-18.27	-18.79/-17.47	-18.28/-19.16	-17.77/-18.85	-18.12/-18.88	-18.35/-19.45	-18.56/-17.85	-18.81/-18.41	-18.76/-18.39	-18.72/-18.29	-18.33/-18.3	
Theta (7.5°)	-17.81/-18.16	-18.42/-18.57	-18.46/-17.81	-18.06/-17.2	-18.36/-16.12	-18.05/-16.98	-18.22/-17.82	-18.67/-18.51	-18.88/-17.78	-18.93/-18.41	-18.18/-18.52	-18.78/-19.34	-18.18/-19.59	-18.48/-18.04	-17.95/-18.42	-18.17/17.72	-17.97/-18.88	-19.29/-18.67	-17.65/-17.16	-18.44/-18.86	-18.88/-18.43	-18.51/-18.52	-18.11/-18.86	-17.36/-17.52
Theta (15°)	-19.01/-17.13	-19.05/-18.66	-17.75/-18.46	-17.47/-19.27	-18.67/-17.9	-18.04/-17.62	-19.07/-18.35	-19.13/-18.84	-18.08/-19.59	-18.55/-18.56	-18.56/-18.64	-18.11/-19.24	-18.31/-18.69	-18.74/-19.06	-18.95/-17.71	-18.57/-18.42	-18.09/-19.26	-18.39/-18.75	-18.86/-17.75	-17.45/-17.95	-18.22/-17.93	-18.47/-18.27	-17.65/-19.01	-18.51/-17.78
Theta (22.5°)	-17.83/-18.82	-16.65/-17.15	-17.49/-13.99	-16.45/-18.22	-18.82/-17.3	-18.51/-17.35	-17.51/-17.38	-19.11/-19.29	-19.34/-18.21	-18.11/-18.25	-17.43/-17.76	-18.16/-18.23	-18.44/-18.61	-18.64/-19.02	-18.74/-18.04	-18.64/-19.02	-14.99/-14.01	-13.34/-14.18	-15.94/-17.27	-15.17/-14.47	-13.25/-13.81	-14.03/-11.88	-11.08/-10.49	-11.39/-16.19
Theta (30°)	-18.51/-17.98	-19.02/-17.77	-17.71/18.49	-19.09/-17.41	-18.63/-17.73	-18.08/-18.31	-18.74/-17.7	-17.09/-17.35	-17.82/-18.05	-18.07/-18.01	-18.76/-18.42	-19.05/-19.09	-18.31/-18.4	-19.37/-18.64	-18.72/-15.08	-13.33/-13.18	-13.84/-14.29	-13.07/-12.93	-13.71/-15.98	-18.28/-17.67	-16.99/-17.14	-18.18/-15.67	-18.38/-17.93	
Theta (37.5°)	-18.41/-18.7	-18.62/-17.66	-18.31/18.18	-19.03/-18.63	-18.82/-17.02	-18.61/-19.15	-17.68/-17.48	-18.69/-19.01	-19.33/-18.51	-19.67/-19.01	-18.61/18.17	-18.71/-18.74	-17.97/-18.61	-17.61/-15.83	-14.17/-13.1	-12.93/-13.87	-14.46/-13.94	-11.75/-11.14	-11.28/-11.84	-12.09/-11.38	-12.01/-12.83	-13.27/-14.58	-15.95/-13.38	-13.07/-14.34
Theta (45°)	-16.36/-17.01	-14.71/-16.65	-17.76/-15.67	-18.63/-18.65	-14.05/-12.21	-14.75/-14.54	-17.69/-17.61	-18.32/-18.97	-18.14/-18.36	-18.51/-18.26	-18.03/-18.31	-19.21/-19.47	-19.29/-17.57	-15.74/-11.83	-10.11/-13.94	-19.07/-17.24	-14.99/-14.01	-13.34/-14.18	-15.94/-17.27	-15.17/-14.47	-13.25/-13.81	-14.03/-11.88	-11.08/-10.49	-11.39/-16.19
Theta (52.5°)	-14.77/-15.96	-18.11/-18.95	-16.28/-14.64	-14.06/-12.57	-14.42/-17.76	-16.77/-15.52	-18.49/-18.2	-18.87/-16.37	-18.77/-19.28	-17.33/-19.28	-18.77/-19.12	-17.43/-19.15	-18.91/-18.13	-18.94/-17.71	-17.51/-17.89	-17.65/-14.79	-11.42/-12.46	-12.96/-12.13	-11.54/-10.5	-9.96/-9.81	-8.96/-10.54	-12.38/-16.31	-15.39/-18.53	
Theta (60°)	-14.88/-14.19	-17.23/-14.37	-16.29/-17.08	-12.33/-17.12	-17.86/-17.94	-17.88/-15.48	-13.68/-15.2	-17.33/-16.76	-18.85/-17.28	-18.73/-18.95	-18.47/-18.12	-18.93/-17.8	-15.59/-13.52	-19.29/-18.13	-18.79/-16.26	-17.58/-13.24	-13.65/-16.76	-11.51/-10.94	-11.61/-11.11	-9.37/-9.59	-9.67/-12.57	-14.46/-16.24	-13.29/-12.47	-12.92/-16.3
Theta (67.5°)	-18.48/-14.39	-18.64/-17.61	-17.97/-18.42	-15.57/-15.71	-17.77/-18.94	-17.48/-16.19	-15.91/-13.53	-16.15/15.04	-17.22/-18.56	-18.23/-18.58	-18.69/-18.36	-17.61/-23.2	-16.73/-13.63	-19.37/-16.21	-17.52/-15.55	-13.21/14.66	-13.44/-14.25	-14.68/-14.71	-13.95/-10.52	-8.82/-10.47	-11.05/-12.39	-12.31/-12.11	-11.97/-11.76	-15.02/-16.91
Theta (75°)	-18.47/-15.27	-15.79/-14.26	-18.56/-18.46	-16.55/-17.63	-16.24/-18.2	-17.75/-18.9	-18.31/-18.99	-19.07/-19.1	-17.61/18.18	-18.65/-18.71	-18.55/-17.39	-18.46/-18.96	-18.45/-17.73	-16.49/-18.17	-13.91/-15.77	-17.61/15.33	-15.01/-12.86	-11.17/-10.79	-8.41/0.87	-10.49/-12.95	-13.21/13.99	-12.59/-11.24	-13.62/-18.99	
Theta (82.5°)	-19.65/-17.46	-18.34/-15.41	-18.08/-16.2	-18.61/15.51	-15.55/-18.58	-17.62/-17.74	-18.27/-17																	



Radiated Composite Gain Data <6GHz U-NII5~UNII-8>

Appendix B

Theta (112.5°)	-0.53/-5.19	-1.94/-4.99	-4.39/-5.97	-15.66/-8.05	-8.21/-17.74	-15.11/-13.26	-18.43/-17.84	-18.71/-17.6	-14.88/-17.88	-16.58/-12.41	-13.06/-18.31	-16.33/-13.05	-14.64/-4.26	-6.4/-19.11	-8.01/-3.97	-7.51/-2.11	-5.74/-0.07	1.32/0.78	-8.26/-2.85	3.31/3.09	0.64/-2.92	0.74/3.82	2.36/-0.65	0.16/-4.27
Theta (120°)	-1.11/-4.89	-4.61/-4.3	-7.13/-5.47	-8.53/-14.29	-10.02/-7.86	-15.96/-13.97	-19.16/-18.52	-19.51/-18.26	-19.35/-18.63	-13.84/-15.45	-16.39/-17.62	-17.6/-17.62	-11.89/-10.7	-12.98/-19.44	-5.65/-1.26	-14.7/-0.03	-1.55/-6.42	3.64/1.2	-3.83/-3.27	2.81/1.1	0.86/-4.91	-2.72/3.65	2.53/-2.26	0.61/-4.88
Theta (127.5°)	-3.78/-1.7	-6.73/-3.34	-6.14/-7.26	-8.06/-9.51	-12.01/-11.8	-15.52/-18.97	-17.92/-18.53	-12.82/-18.26	-16.81/-18.54	-19.09/-15.7	-16.61/-17.81	-17.65/-14.93	-17.04/-11.48	-9.02/-18.4	-6.78/-8.83	-5.14/-1.46	-5.37/-4.28	3.08/1.45	-12.32/-9.29	-1.92/1.71	-2.04/-10.74	-7.29/3.33	-0.82/-4.19	-1.78/-2.74
Theta (135°)	-5.58/-8.3	-9.72/-8.58	-6.26/-8.31	-11.17/-11.21	-11.24/-10.17	-9.13/-6.66	-11.31/-18.9	-19.12/-11.95	-12.97/-16.73	-18.71/-19.19	-17.92/-18.92	-19.27/-16.87	-11.89/-8.85	-10.27/-13.5	-8.37/-12.58	-7.54/-9.07	-16.57/-3.82	0.82/-1.26	-4.67/-9.94	-5.11/5.53	-5.79/-6.33	-5.98/-3.06	-3.91/-6.35	-5.16/-5.33
Theta (142.5°)	-8.18/-9.79	-10.47/-11.23	-11.91/-10.31	-10.12/-10.86	-11.19/-15.57	-17.1/-15.66	-15.43/-13.7	-13.08/-18.52	-19.43/-13.2	-14.03/-16.17	-17.99/-18.2	-14.26/-13.57	-13.76/-15.9	-14.59/-12.4	-14.81/-17.56	-17.04/-17.94	-11.73/-4.54	-5.74/-6.05	-11.12/-14.55	-5.74/-8.4	-10.21/-5.64	-5.68/-3.32	-3.01/-5.88	-9.07/-8.07
Theta (150°)	-10.45/-10.95	-11.91/-11.26	-10.49/-10.79	-9.54/-10.34	-14.31/-16	-15.45/-18.73	-18.34/-15.9	-13.08/-16.34	-19/-18.3	-18.84/-15.4	-17.94/-15.96	-17.07/-17.42	-13.78/-15.18	-15.07/-14.1	-12.32/-9.29	-9.29/-6.83	-10.13/-18.46	-16.23/-10.04	-10.17/-7.34	-5.75/-5.69	-5.87/-8.26	-9.16/-9.78		
Theta (157.5°)	-9.08/-10.14	-9.33/-9.01	-9.71/-10.28	-11.51/-12.63	-14.62/-18	-18.31/-18.8	-18.63/-17.98	-18.15/-18.89	-18.09/-18.26	-17.64/-17.34	-18.06/-17.39	-18.99/-19.19	-17.87/-17.67	-17.74/-18.38	-15.88/-12.35	-10.96/-11.92	-15.69/-18.76	-15.46/-11.56	-11.95/-13.74	-14.23/-10.57	-8.05/-6.92	-7.65/-9.35	-10.41/-11.76	-10.7/-9.58
Theta (165°)	-10.94/-10.41	-12.21/-10.78	-10.15/-10.92	-12.11/-12.08	-13.91/-16.92	-18.76/-18.89	-16.58/-17.63	-17.75/-18.31	-18.53/-17.31	-17.33/-19.19	-18.81/-16.49	-15.21/-14.97	-14.2/-14.23	-13.73/-13.25	-11.65/-10.23	-9.62/-10.64	-12.36/-11.92	-11.17/-12.33	-15.53/-17.7	-18.64/-18.06	-14.71/-11.23	-10.92/-12.22	-13.27/-13.23	-13.54/-12.94
Theta (172.5°)	-18.59/-18.69	-17.35/-18.18	-15.51/-12.39	-12.26/-15.31	-18.51/-18.62	-18.01/-17.87	-17.57/-16.91	-15.5/-16.87	-17.14/-17.38	-18.48/-18.6	-18.07/-19.12	-18.81/-19.14	-18.26/-18.34	-18.99/-18.4	-18.32/-19.04	-16.41/-17.61	-16.12/-15.57	-15.12/-15.7	-16.17/-17.26	-18.81/-18.11	-18.34/-18.08	-17.47/-17.97	-17.53/-19.06	-17.78/-16.98
Theta (180°)	-15.96/-14.87	-15.97/-14.34	-13.89/-15.19	-18.62/-17.83	-18.36/-17.78	-18.73/-17.84	-17.62/-17.98	-17.68/-18.33	-18.41/-18.53	-17.77/-18.01	-18.53/-18.74	-18.77/-18.34	-18.55/-17.88	-17.76/-17.31	-17.73/-17.79	-18.47/-17.93	-18.47/-18.44	-17.84/-18.48	-18.16/-18.49	-18.24/-18.01	-17.52/-18.28	-19.34/-18.47	-18.02/-18.4	-19.12/-17.97
Gain	Phi(0°)Phi(7.5°)	Phi(15°)Phi(22.5°)	Phi(30°)Phi(37.5°)	Phi(45°)Phi(52.5°)	Phi(60°)Phi(67.5°)	Phi(75°)Phi(82.5°)	Phi(90°)Phi(97.5°)	Phi(105°)Phi(112.5°)	Phi(120°)Phi(127.5°)	Phi(135°)Phi(142.5°)	Phi(150°)Phi(157.5°)	Phi(165°)Phi(172.5°)	Phi(180°)Phi(187.5°)	Phi(195°)Phi(202.5°)	Phi(210°)Phi(217.5°)	Phi(225°)Phi(232.5°)	Phi(240°)Phi(247.5°)	Phi(255°)Phi(262.5°)	Phi(270°)Phi(277.5°)	Phi(285°)Phi(292.5°)	Phi(300°)Phi(307.5°)	Phi(315°)Phi(322.5°)	Phi(330°)Phi(337.5°)	Phi(345°)Phi(352.5°)
Theta (0°)	-14.86/-17.51	-15.35/-18.44	-18/-17.61	-18.52/-19.04	-18.6/-16.46	-16.55/-16.66	-16.36/-14.11	-14.93/-18.02	-16.22/-15.42	-15.02/-16.07	-16.74/-18.8	-17.87/-19.15	-19.12/-19.16	-18.94/-18.82	-17.88/-18.35	-17.38/-18.2	-18.65/-17.74	-18.96/-17.39	-17.36/-16.71	-15.54/-17.15	-17.93/-18.93	-17.03/-17.13	-17.25/-17.96	-18.67/-15.09
Theta (7.5°)	-15.31/-15.43	-17.57/-11.93	-16.75/-17.9	-17.45/-16.68	-16.17/-15.73	-15.46/-16.19	-15.94/-14.84	-14.84/-15.42	-18.38/-18.7	-17.38/-18.69	-18.56/-17.56	-18.9/-19.3	-18.45/-19.03	-18.53/-18.24	-18.67/-18.63	-18.04/-15.28	-14.07/-13.07	-12.81/-12.59	-13.13/-15.36	-16.78/-19.34	-18.61/-19.21	-18.11/-18.16	-18.11/-18.06	-18.86/-16.94
Theta (15°)	-18.42/-18.98	-18.38/-11.93	-12.12/-15.58	-18.24/-17.39	-19.05/-17.23	-19.17/-17.93	-18.64/-18.65	-16.61/-16.69	-15.47/-14.7	-15.17/-16.52	-16.66/-17.96	-18.08/-17.83	-18.14/-17.9	-17.28/-18.66	-18.08/-18.72	-18.69/-16.55	-13.87/-12.73	-13.01/-13.99	-15.02/-14.87	-16.04/-19.06	-19.29/-18.13	-16.67/-18.86	-18.99/-18.96	-18.23/-18.15
Theta (22.5°)	-19.36/-17.88	-19.23/-17.97	-19.58/-17.76	-17.67/-15.59	-17.68/-19.5	-19.07/-17.98	-18.26/-16.2	-14.77/-15.53	-15.23/-15.47	-18.38/-17.2	-15.04/-15.59	-18.21/-19.03	-18.02/-18.14	-18.51/-17.6	-19.45/-19.08	-18.13/-16.29	-13.36/-12.05	-12.12/-12.01	-12.34/-13.23	-14.31/-14.28	-15.13/-16.29	-14.67/-15.35	-18.18/-18.44	-18.87/-18.79
Theta (30°)	-17.99/-16.26	-13.5/-15.18	-18.26/-18.21	-19.73/-18.1	-18.4/-18.16	-18.61/-17.82	-18.48/-17.73	-17.41/-18.58	-18.17/-7.8	-16.86/-15.61	-14.43/-13.06	-15.38/-18.12	-17.76/-16.17	-13.21/-11.49	-11.03/-12.86	-16.18/-16.18	-12.41/-10.91	-11.08/-12.87	-15.65/-17.3	-15.66/-14.87	-14.68/-15.23	-15.97/-17.9	-14.72/-18.44	-18.28/-18.99
Theta (37.5°)	-18.21/-11.61	-13.69/-14.38	-16.21/-16.32	-17.04/-18.79	-18.24/-17.39	-15.66/-17.62	-16.44/-15.79	-17.42/-18.92	-16.66/-15.86	-15.83/-15.21	-14.34/-13.45	-17.09/-18.23	-17.21/-12.66	-11.21/-8.26	-7.96/-11.77	-11.71/-10.54	-11.11/-15.16	-18.99/-14.99	-14.93/-17.41	-16.97/-16.97	-15.35/-14.9	-13.37/-13.15	-12.14/-9.76	
Theta (45°)	-14.61/-17.2	-18.9/-19.02	-13.58/-15.07	-19.07/-18.95	-15.68/-16.51	-13.5/-13.49	-14.34/-18.11	-18.73/-18.12	-17.63/-18.57	-17.59/-18.92	-18.06/-18.2	-18.56/-19.33	-18.06/-17.8	-18.71/-18.28	-14.99/-12.61	-11.62/-13.75	-14.13/-14.56	-12.11/-13.87	-17.41/-13.97	-10.58/-10.51	-10.89/-9.74	-10.93/-11.55	-12.99/-15.63	-12.88/-16.96
Theta (52.5°)	-8.69/-11.64	-12.89/-14.33	-14.66/-17.02	-14.25/-14	-15.17/-14.6	-16.73/-12.23	-13.13/-12.07	-12.93/-17.84	-18.46/-18.62	-18.06/-14.32	-11.84/-18.49	-18.62/-14.7	-18.81/-12.09	-19.05/-18.42	-15.93/-13.29	-17.73/-18.92	-16.05/-17.67	-19.27/-18.4	-18.51/-16.78	-16.74/-18.16	-16.07/-14.73	-13.56/-16.1	-17.19/-17.28	-15.63/-12.76
Theta (60°)	-16.67/-16.51	-17.99/-19.76	-14.28/-12.09	-14.6/-16.44	-12.31/-11.39	-17.69/-17.23	-18.68/-16.74	-13.19/-7.9	-9.41/-13.62	-15.91/-15.48	-15.99/-15.43	-18.14/-14.49	-16.81/-10.31	-16.02/-18.36	-17.7/-18.63	-16.97/-18.34	-17.83/-17.29	-16.28/-13.09	-14.97/-18.15	-18.89/-13.9	-11.51/-11.02	-13.25/-12.34	-14.53/-18.47	-19.01/-16.97
Theta (67.5°)	-18.14/-18.74	-17.78/-13.79	-15.6/-18.15	-11.15/-11.64	-11.24/-18.75	-15.52/-14.39	-15.93/-15.66	-15.92/-19.14	-18.65/-15.97	-15.53/-18.14	-18.34/-17.12	-17.74/-16.93	-17.38/-13.38	-12.62/-18.67	-13.36/-12.94	-15.72/-18.14	-17.23/-16.17	-13.61/-15.78	-19.1/-12.75	-11.77/-11.91	-9.8/-10.47	-10.72/-9.91	-9.76/-10.48	-16.29/-18.03
Theta (75°)	-17.03/-17.7	-18.39/-18.14	-17.76/-17.14	-18.52/-19.33	-16.91/-13.3	-15.43/-13.73	-17.92/-19.04	-17.95/-16.64	-18.44/-19.2	-18.44/-18.2	-15.06/-18.16	-15.71/-17.42	-18.26/-16.97	-16.01/-17.1	-18.83/-13.4	-15.9/-18.4	-16.56/-14.89	-12.16/-12.83	-18.84/-11.61	-7.49/-9.66	-10.62/-13.43	-11.99/-16.12	-15.46/-18.17	-15.21/-15.54
Theta (82.5°)	-14.53/-13.48	-18.03/-16.85	-14.24/-19.36	-18.59/-18.24	-18.13/-15.7	-18.24/-17.83	-15.94/-18.02	-18.78/-18.5	-18.44/-18.8	-19.17/-8.6	-13.55/-16.11	-18.36/-16.32	-17.46/-14.42	-18.04/-15.1	-14.52/-16.46	-15.07/-17.77	-18.26/-12.36	-17.72/-13.05	-14.89/-9.92	-13.34/-14.11	-12.54/-13.51	-14.53/-18.47	-19.01/-16.97	
Theta (90°)	-18.66/-17.11	-15.05/-19.03	-16.61/-16.47	-18.58/-17.86	-17.62/-17.85	-17.76/-18.59	-16.78/-15.76	-13.61/-16.57	-16.51/-14.83	-18.82/-17.61	-15.83/-16.84	-18.46/-19.22	-16.62/-18.08	-18.66/-15.38	-18.51/-15.29	-13.89/-17.85	-18.2/-14.2	-18.01/-10.36	-15.04/-12.67	-13.52/-10.08	-10.08/-14.05	-15.25/-14.63	-13.02/-13.82	-16.66/-14.89
Theta (97.5°)	-12.73/-12.72	-14.71/-11.99	-17.31/-18.13	-18.4/-17.54	-18.07/-18.45	-18.18/-19.25	-18.03/-18.37	-17.56/-18.66	-16.63/-15.07	-16.81/-15.45	-18.97/-16.05	-18.91/-12.76	-19.11/-18.12	-15.84/-17.45	-19.04/-18.7	-19.21/-18.66	-18.11/-18.56	-18.6/-14.77	-12.85/-16.19	-14.09/-15.52	-15.38/-14.22	-15.27/-11.39	-13.77/-13.33	-14.13/-3.2
Theta (105°)	-12.19/-12.9	-14.69/-12.65	-18.29/-11.88	-18.62/-14.62	-17.64/-13.58	-17.08/-18.66	-17.93/-17.94	-17.23/-19.22	-14.01/-18.6	-17.14/-17.35	-19.34/-14.9	-12.18/-15.99	-17.17/-18.5	-13.66/-17.5	-18.15/-11.99	-15.55/-14.56	-15.47/-18.78	-14.01/-13.71	-18.82/-18.61	-17.55/-18.55	-19.19/-18.61	-15.88/-15.55	-13.08/-13.28	
Theta (112.5°)	-16.43/-15.55	-15.39/-16.02	-18.49/-17.17	-13.26/-16.49	-17.82/-13.39	-15.25/-17.59	-17.92/-17.7	-18.89/-17.99	-19.8/-17.63	-17.22/-17.49	-19.79/-12.27	-17.79/-19.22	-15.65/-12.49	-17.37/-19.2	-18.66/-18.54	-18.06/-17.83	-15.91/-17.85	-16.44/-12.66	-15.91/-18.2	-16.89/-17.79	-17.87/-18.14	-14.71/-13.45	-17.45/-17.87	-18.08/-17.75
Theta (120°)	-18.51/-13.23	-18.43/-17.81	-17.46/-16.18	-18.88/-17.42	-16.06/-18.58	-15.31/-16.2	-18.22/-16.6	-18.59/-17.85	-18.19/-17.62	-18.97/-19.43	-18.16/-14.2	-16.86/-18.61	-19.09/-11.1	-18.29/-17.11	-18.03/-9.37	-9.97/-17.12	-11.67/-16.36	-16.11/-11.97	-10.57/-13.18	-18.91/-18.27	-17.95/-16.68	-11.61/-17.1	-12.26/-18.37	-18.47/-18.72
Theta (127.5°)	-17.99/-15.06	-18.68/-16.01	-18.57/-18.22	-17.65/-17.49	-18.04/-17.04	-19.09/-19.06	-17.44/-18.8	-17.31/-18.61	-18.51/-18.76	-18.42/-14.32	-14.37/-18.52	-18.15/-18.01	-13.49/-13.99	-14.51/-17.13	-13.56/-9.88	-12.83/-9.44	-7.13/-13.91	-9.33/-10.91	-9.74/-17.65	-18.47/-15.35	-13.08/-14.03	-10.17/-14.42	-18.79/-18.76	-18.99/-16.91
Theta (135°)	-19.18/-18.3	-17.61/-18.01	-18.64/-18.69	-17.79/-17.81	-18.62/-17.92	-16.61/-17.92	-13.68/-15.98	-14.79/-19.22	-16.98/-15.63	-14.96/-15.94	-16.64/-14.65	-17.56/-16.89	-14.25/-12.21	-13.65/-16.35	-14.54/-19.16	-13.97/-9.28	-11.03/-16.43	-9.39/-9.84	-11.88/-18.04	-16.88/-12.13	-14.97/-13.52	-10.88/-13.53	-13.42/-12.03	-14.54/-18.35
Theta (142.5°)	-16.27/-14.57	-15.16/-14.86	-18.27/-19.1	-18.85/-17.18	-18.17/-18.35	-19.19/-18.07	-14.35/-18.26	-18.84/-18.44	-18.99/-19.1	-17.98/-18.14	-17.48/-18.37	-18.06/-18.98	-18.61/-17.09	-14.13/-14.14	-15.27/-15.05	-12.43/-12.97	-17.02/-17.22	-10.01/-18.54	-17.58/-19.02	-19.14/-14.11	-14.33/-17.94	-15.02/-18.19	-16.59/-12.93	-17.71/-18.



Radiated Composite Gain Data <6GHz U-NII5~UNII-8>

Appendix B

Theta (°)	-13.91~10.34	-11.11~13.8	-15.14~14.04	-14.48~17.67	-18.99~17.83	-18.84~17.13	-18.31~18.11	-14.23~11.27	-9.37~8.56	-8.84~9.9	-11.07~10.66	-9.49~8.84	-8.87~9.78	-10.51~10.28	-9.43~9.6	-11.38~15.14	-18.93~18.33	-18.44~17.07	-14.71~16.82	-18.41~15.78	-12.33~9.31	-7.2~6.38	-7.96~12.23	-19.21~19.81	
Theta (°)	-15.39~13.54	-13.11~13.73	-13.38~12.63	-14.32~16.89	-18.11~17.75	-14.86~12.83	-12.38~12.07	-11.78~11.74	-12.31~13.14	-13.54~13.34	-12.19~15.0	-9.32~8.08	-8.73~11.16	-13.55~17.2	-18.32~18.77	-18.06~18.54	-18.57~18.33	-18.07~19	-19.16~17.92	-16.47~12.63	-11.78~13.09	-14.28~15.57	-18.68~17.51	-18.42~17.66	
Theta (°)	-17.03~16.14	-15.79~14.76	-14.01~14.26	-15.31~16.64	-16.46~16.51	-15.24~14.12	-14.96~14.2	-13.23~12.74	-12.55~12.73	-13.51~14.32	-18.16~16.77	-18.61~17.98	-18.75~17.89	-18.06~18.06	-18.32~18.17	-19.01~18.89	-18.91~18.9	-18.14~18.74	-18.51~16.23	-16.33~18.5	-18.58~16.55	-18.79~12.19	-18.28~15.33		
Freq(Hz)	6.475GPol.	PhiAnt 5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Gain	Phi(0°)Phi(7.5°)	Phi(15°)Phi(22.5°)	Phi(30°)Phi(37.5°)	Phi(45°)Phi(52.5°)	Phi(60°)Phi(67.5°)	Phi(75°)Phi(82.5°)	Phi(90°)Phi(97.5°)	Phi(105°)Phi(112.5°)	Phi(120°)Phi(127.5°)	Phi(135°)Phi(142.5°)	Phi(150°)Phi(157.5°)	Phi(165°)Phi(172.5°)	Phi(180°)Phi(187.5°)	Phi(195°)Phi(202.5°)	Phi(210°)Phi(217.5°)	Phi(225°)Phi(232.5°)	Phi(240°)Phi(247.5°)	Phi(255°)Phi(262.5°)	Phi(270°)Phi(277.5°)	Phi(285°)Phi(292.5°)	Phi(300°)Phi(307.5°)	Phi(315°)Phi(322.5°)	Phi(330°)Phi(337.5°)	Phi(345°)Phi(352.5°)	
Theta (0°)	-3.82~3.95	-4.48~5.03	-4.83~5.55	-6.75~8.09	-8.71~11.25	-11.38~11.09	-10.09~9.21	-8.61~7.84	-7.22~6.61	-5.93~5.41	-4.85~4.72	-4.69~4.91	-5.01~5.04	-5.36~5.77	-6.58~7.23	-7.71~8.02	-8.76~9.78	-9.98~9.65	-9.05~7.83	-7.04~6.21	-5.11~4.36	-4.19~3.9	-4.11~4		
Theta (7.5°)	-7.05~6.44	-6.16~6.16	-6.79~7	-6.78~6.8	-6.99~6.87	-6.66~6.56	-6.01~5.74	-5.73~5.93	-5.79~5.6	-5.34~4.97	-4.52~3.87	-3.42~3.24	-3.2~3.29	-3.24~3.08	-3.27~3.45	-4.36~5.79	-7.85~10.41	-12.73~14.71	-14.76~14.96	-14.89~13.44	-12.55~10.67	-9.37~8.85	-8.57~8.36	-8.3~7.6	
Theta (15°)	-16.52~16.53	-12.49~9.39	-8.2~7.82	-7.26~6.81	-5.9~5.4	-4.75~4.16	-3.92~3.88	-4.02~4.56	-5.01~5.32	-5.46~5.4	-5.09~4.47	-3.85~3.39	-3.04~2.96	-3.15~3.23	-3.41~3.71	-4.37~5.25	-6.59~8.01	-9.86~12.49	-14.79~17.2	-19.35~18.33	-18.3~18.83	-18.43~17.95	-18.37~16.44	-17.32~15.66	
Theta (22.5°)	-6.91~7.42	-8.04~8.95	-8.9~8.93	-9.11~8.42	-6.27~4.78	-3.94~3.61	-3.57~3.67	-3.45~3.33	-3.57~3.72	-3.8~3.87	-3.48~3.26	-3.21~3.07	-3.09~3.39	-3.73~3.67	-3.68~3.52	-3.73~3.95	-4.39~5.3	-6.26~7	-7.65~8.06	-8.98~9.84	-10.23~9.72	-8.45~7.3	-6.38~6.05	-6.55~6.59	
Theta (30°)	-5.43~5.68	-5.39~5.91	-5.73~4.92	-4.9~5.22	-5.52~5.34	-4.62~3.73	-2.72~3.27	-2.2~2.22	-2.17~2.31	-2.51~2.71	-2.6~2.42	-2.22~2.13	-2.25~2.21	-2.32~2.27	-3.21~3.9	-3.97~3.37	-3.46~3.73	-4.54~5.82	-6.92~7.79	-7.2~5.75	-5.37~5.09	-4.67~4.92	-5.52~6.07	-5.93~6.02	
Theta (37.5°)	-3.84~3.17	-3.68~3.99	-3.24~3.29	-4.39~5.06	-4.96~3.9	-2.96~2.57	-2.37~2.17	-1.54~1.11	-1.35~2.2	-2.83~3.47	-3.63~3.39	-3.03~3.2	-3.39~3.09	-3.65~4.02	-3.73~3.68	-4.5~5.27	-7.19~8.48	-7.37~5.61	-5.48~5.66	-5.67~5.48	-5.8~5.63	-5.14~4.75	-5.14~4.95	-5.29~5.47	
Theta (45°)	-1.42~0.47	1.02~0.05	-1.55~2.06	-2.37~2.09	-2.07~2.75	-4.23~4.35	-2.91~1.73	-7.03~0.5	-0.96~2.36	-4.07~5.6	-7.09~7.56	-7.19~6.66	-6.75~6.23	-5.52~5.59	-5.92~4.61	-4.42~3.12	-3.22~4.58	-7.5~7.6	-4.98~3.32	-2.69~4.47	-7.43~6.1	-4.51~4.24	-4.08~3.06	-1.66~1.39	
Theta (52.5°)	-1.35~0.89	-0.01~0.02	-0.3~0.78	-1.95~2.77	-3.19~2.88	-2.67~2.56	-2.89~2.56	-2.19~2.34	-3.14~4.11	-6.32~9.62	-6.05~6.53	-5.35~5	-5.1~5.69	-6.5~29	-3.52~4.23	-1.64~1.09	-1.95~4.04	-8.25~4.67	-4.39~3.28	-3.71~4.89	-4.45~3.91	-5.06~5.22	-3.59~3.59	-2.44~1.35	
Theta (60°)	-0.87~1	-2.5~2.62	-1.51~0.59	-0.48~1.25	-2.95~3.6	-3.58~2.65	-2.02~1.58	-1.87~1.87	-4.41~7.79	-10.08~1.09	-3.87~2.68	-3~4.12	-4.18~4.04	-3.98~3.04	-2.76~2.02	-1.51~2	-2.5~4.55	-6.86~8.06	-8.49~9.73	-5.14~4.56	-5.6~5.97	-3.34~1.72	-1.71~2.42	-2.06~1.81	
Theta (67.5°)	-1.41~1.23	-2.3~3.64	-4.29~3.66	-2.1~1.11	-2.65~5.24	-4.29~3.64	-1.76~1.89	-3.87~4.87	-6.37~8.63	-7.83~4.36	-1.56~0.92	-1.15~2.47	-2.79~3.25	-3.76~4.23	-2.47~1.16	-2.68~2.99	-2.15~4.22	-7.83~10.15	-6.22~4.97	-5.22~6.7	-4.43~6.53	-3.64~4.4	-5.1~3.94	-2.41~1.06	
Theta (75°)	-1.6~1.13	-2.99~3.48	-4.08~4.18	-5.67~7.26	-8.84~6.33	-6.61~5.34	-6.09~5.13	-2.86~4.26	-7.82~6.6	-3.76~3.41	-2.84~2.46	-2.29~2.69	-2.31~2.71	-2.58~2.4	-2.74~2.76	-3.17~2.46	-2.17~4.6	-4.74~6.86	-6.23~6.56	-7.64~9.28	-6.29~4.59	-6.14~7.1	-4.84~3.62	-2.46~0.99	
Theta (82.5°)	-1.68~2.25	-4.78~7.43	-7.91~5.71	-3.52~3.13	-4.53~6.33	-6.84~6.99	-6.94~5.21	-4.53~6.02	-10.61~6.37	-2.47~2.23	-2.57~3.19	-3.93~3.32	-3.71~4.4	-3.15~3.18	-2.86~3.05	-3.16~1.47	-2.49~3.4	-3.69~4.27	-3.52~3.37	-4.22~2.51	-4.99~3.93	-4.87~4.15	-6.63~3.8	-1.67~0.31	
Theta (90°)	-4.02~4.5	-7.3~14.22	-11.9~13.85	-11.54~9.51	-8.53~7.53	-8.34~11.6	-8.01~4.87	-6.07~8.32	-6.26~4.62	-4.94~2.03	-1.94~2.07	-3.32~4.34	-4.6~5.3	-4.84~3.57	-2.97~4	-2.52~2.82	-6.69~4.71	-3.67~4.22	-2.69~4.47	-7.43~6.1	-3.25~4.4	-2.62~4.82	-3.77~2.36		
Theta (97.5°)	-5.54~8.04	-9.46~18.23	-16.45~13.14	-11.87~11.02	-19.46~14.5	-8.24~9.22	-8.78~8.19	-5.91~6.6	-8.88~4.84	-2.81~4.62	-5.55~6.03	-5.2~5.32	-5.23~6.13	-4.97~4.31	-5.92~5.77	-3.19~2.8	-4.26~3.54	-3.46~3.28	-1.89~1.46	-2.65~5.92	-4.25~3.13	-5.09~8.58	-10.95~9.22	-6.77~4.73	
Theta (105°)	-9.53~11.41	-10.14~12.32	-11.05~10.98	-10.03~9.16	-19.11~13.45	-8.62~10.18	-12.62~11.62	-4.63~4.69	-11.24~6.5	-11.47~2.65	-4.88~5.19	-4.57~6.24	-5.42~9.22	-4.47~2.88	-3.45~2.28	-3.25~2.82	-2.15~3.69	-1.03~0.17	-1.75~3.71	-5.71~6.02	-7.54~8.47	-11.97~16.35	-13.25~8.61		
Theta (112.5°)	-5.56~10.62	-6.94~14.76	-15.29~15.68	-16.03~12.03	-13.22~18.87	-9.29~7.18	-7.04~6.99	-6.57~5.44	-7.76~7.3	-7.53~6.18	-4.63~3.84	-4.04~3.77	-3.28~4.8	-6.46~4.7	-5.97~5.62	-5.8~5.07	-1.37~1.38	-2.69~4.58	-16.41~16.1	-13.51~14.9	-13.51~14.9	-13.51~14.9	-13.51~14.9	-13.51~14.9	
Theta (120°)	-18.34~15.82	-14.75~13.62	-12.22~11.07	-13.27~15.16	-13.53~10.5	-8.75~6.92	-7.14~9.12	-14.02~16.14	-7.79~8.37	-12.84~7.33	-6.99~4.94	-6.03~3.74	-3.05~2.23	-1.6~2.15	-3.76~7.43	-7~5.09	-4.82~5	-9.76~7.93	-4.81~3.18	-5.52~9.46	-18.45~10.98	-10.14~11.93	-13.19~12.66	-12.21~16.12	
Theta (127.5°)	-18.84~13.81	-12.96~11.06	-10.65~13.32	-15.51~17.87	-11.61~11.04	-11.1~17.92	-7.52~11.02	-4.11~9.55	-7.79~4.93	-11.11~9.27	-8.95~9.25	-6.82~6	-6.67~6.47	-6.77~7.37	-7.25~4.3	-4.33~6.61	-5.16~2.5	-3.84~6.05	-6.19~7.04	-7.67~3.42	-9.25~18.2	-10.44~7.1	-8.25~11.36	-18.21~14.16	-13.41~16.72
Theta (135°)	-17.51~15.67	-10.69~11.58	-11.78~17.48	-18.96~13.84	-11.73~16.16	-11.46~12.39	-10.27~7.39	-8.47~11.27	-16.28~8.37	-8.21~10.09	-8.6~4.73	-8.17~10.9	-8.6~4.73	-8.17~10.9	-9.05~5.49	-8.29~11.2	-3.98~9.88	-18.46~19	-13.14~12.59	-11.88~19.13	-18.34~14.94	-13.25~12.68	-14.79~18.29		
Theta (142.5°)	-18.65~19.77	-12.43~9.15	-7.14~7.77	-9.6~11.95	-10.66~9.98	-10.67~12.06	-13.23~14.32	-14.91~14.13	-13.82~14.37	-13.62~12.37	-13.06~10.06	-8.51~7.24	-7.59~8.08	-5.5~5.19	-8.62~11.94	-9.42~5.12	-4.05~7.87	-5.77~10.91	-16.08~7.43	-8.36~10.55	-9.92~13.93	-9.77~13.3	-12.19~11.26	-16.18~19.32	
Theta (150°)	-9.51~15.405	-17.51~15.01	-16.12~18.68	-17.13~135	-11.13~9.46	-10.35~13.71	-19.04~17.75	-17.43~19.11	-17.75~18.75	-15.05~18.78	-10.7~10.81	-10.55~8.5	-8.34~7.39	-4.48~3.5	-4.7~4.69	-8.83~9.65	-9.87~6.63	-7.91~12.26	-13.14~9.88	-8.92~14.28	-16.93~18.09	-13.51~13.42	-16.96~15.55	-11.24~8.4	
Theta (157.5°)	-18.98~18.61	-17.96~18.84	-19.51~18.06	-17.66~19.22	-16.76~18.6	-18.24~17.97	-19.02~18.22	-19.34~18.9	-14.78~10.65	-9.53~10.44	-12.68~13.71	-12.94~11.78	-11.01~10.15	-9.05~8.49	-7.64~9.2	-8.96~10.36	-8.29~10	-12.71~12.83	-11.86~12.59	-11.86~12.59	-11.86~12.59	-11.86~12.59	-11.86~12.59	-11.86~12.59	
Theta (165°)	-12.95~13.3	-14.87~14.59	-15.68~17.61	-18.9~18.79	-18.31~18.72	-18.51~18.57	-19.41~18.6	-16.09~13.62	-12~11.47	-11.79~11.39	-9.87~8.7	-8.39~8.64	-8.69~8.24	-8.08~8.84	-9.45~8.88	-7.36~6.16	-6.71~9.87	-16.02~19.25	-18.87~17.27	-17.32~16.76	-14.33~14.56	-19.11~18.51	-18.1~17.47	-18.58~16.16	
Theta (172.5°)	-17.11~15.73	-14.84~15.2	-15.08~14.28	-15.05~15.2	-14.61~14.83	-15.53~15.79	-16.83~16.46	-15.26~14.34	-14.21~14.08	-13.41~12.05	-11.13~11.07	-11.37~11.43	-10.84~9.54	-8.52~9.19	-8.48~9.53	-10.92~12.47	-14.29~16.42	-17.69~18.68	-18.77~18.18	-16.52~18.17	-18.35~19.29	-18.77~18.7	-18.71~18.7	-16.14~15.73	
Theta (180°)	-18.76~18.33	-18.53~18.67	-19.08~18.31	-18.47~18.87	-17.82~18.64	-18.75~18.53	-17.9~17.96	-17.71~18.16	-18.66~17.53	-16.24~15.3	-15.04~14.96	-14.34~10.54	-14.05~13.94	-14.21~15.59	-16.12~17.21	-17.51~16.16	-14.38~12.44	-11.04~10.69	-11.3~12.44	-12.68~13.84	-14.95~15.47	-15.37~14.3	-14.34~15.69	-19.18~18.74	
Freq(Hz)	6.475GPol.	PhiAnt 5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Gain	Phi(0°)Phi(7.5°)	Phi(15°)Phi(22.5°)	Phi(30°)Phi(37.5°)	Phi(45°)Phi(52.5°)	Phi(60°)Phi(67.5°)	Phi(75°)Phi(82.5°)	Phi(90°)Phi(97.5°)	Phi(105°)Phi(112.5°)	Phi(120°)Phi(127.5°)	Phi(135°)Phi(142.5°)	Phi(150°)Phi(157.5°)	Phi(165°)Phi(172.5°)	Phi(180°)Phi(187.5°)	Phi(195°)Phi(202.5°)	Phi(210°)Phi(217.5°)	Phi(225°)Phi(232.5°)	Phi(240°)Phi(247.5°)	Phi(255°)Phi(262.5°)	Phi(270°)Phi(277.5°)	Phi(285°)Phi(292.5°)	Phi(300°)Phi(307.5°)	Phi(315°)Phi(322.5°)</			



Radiated Composite Gain Data <6GHz U-NII5~UNII-8>

Appendix B

Theta	Phi	Gain	Phi(0°)	Phi(15°)	Phi(30°)	Phi(45°)	Phi(60°)	Phi(75°)	Phi(90°)	Phi(105°)	Phi(120°)	Phi(135°)	Phi(150°)	Phi(165°)	Phi(180°)	Phi(195°)	Phi(210°)	Phi(225°)	Phi(240°)	Phi(255°)	Phi(270°)	Phi(285°)	Phi(300°)	Phi(315°)	Phi(330°)	Phi(345°)
Theta(112.5°)	Phi(0°)	-3.24/-6.72	-4.42/-6.35	-4.88/-6.44	-2.56/-3.93	-3.71/-2.64	-7.41/-6.06	-3.64/-5.39	-8.86/-6.33	-9.09/-15.9	-14.68/-15.33	-18.78/-14.78	-16.34/-11.06	-12.92/-9.73	-10.53/-17.29	-12.74/-8.37	-5.59/-3.37	-3.38/-1.69	-0.07/1.65	0.76/-0.67	-0.07/0.17	-0.89/-1.21	-3.98/-6.18	-4.16/-2.71	-4.22/-6.41	
Theta(120°)	Phi(0°)	-6.43/-6.94	-5.03/-4.31	-3.25/-5	-4.16/-3.44	-6.58/-3.21	-2.03/-3.22	-6.31/-9.74	-7.72/-7.36	-15.11/-11.09	-14.12/-16.99	-18.33/-16.73	-15.88/-8.52	-10.43/-9.58	-17.82/-17.26	-15.08/-18.36	-10.67/-7.42	-4.52/-3.05	-2.24/-2.49	-3.73/-5.38	-7.15/-6.82	-12.65/-8.57	-11.09/-8.45	-5.43/-2.23	-5.33/-8.58	
Theta(127.5°)	Phi(0°)	-8.43/-5.69	-9.92/-6.78	-6.83/-5.1	-7.97/-3.95	-3.63/-5.36	-2.58/-4.1	-5.51	-6.56/-11.53	-9.22/-10.47	-15.32/-12.23	-12.62/-18.85	-18.41/-11.96	-14.01/-10.88	-12.43/-18.85	-14.29/-12.31	-10.66/-10.72	-5.21/-5.53	-2.22/-5.53	-2.92/-7.96	-7.09/-2.44	-4.32/-5.98	-9.59/-8.11	-6.49/-8.61	-7.07/-11.4	
Theta(135°)	Phi(0°)	-6.81/-6.8	-6.43/-7.16	-5.64/-6.28	-5.81/-6.9	-6.74/-4.2	-8.4/-0.9	-3.71/-4.9	-7.04/-9.21	-12.21/-19.08	-18.32/-13.26	-10.29/-12.76	-16.61/-17.23	-14.27/-6	-7.78/-11.73	-16.69/-10.55	-8.65/-9.12	-6.98/-15.68	-10.24/-2.62	-11.91/-18.1	-7.22/-8.93	-5.21/-8.64	-11.74/-6.52	-2.12/-2.74	-6.24/-7	
Theta(142.5°)	Phi(0°)	-4.48/-4.08	-3.97/-4.82	-4.31/-3.1	-3.65/-3.63	-6.38/-10.12	-10.92/-8.71	-7.47/-6.37	-5.32/-6.16	-8.44/-5.65	-13.32/-18.73	-17.97/-14.72	-18.5/-15.51	-17.91/-11.14	-8.78/-11.73	-19.02/-17.29	-9.86/-8.24	-7.42/-5.46	-10.43/-17.08	-5.33/-3.13	-4.86/-4.36	-10.54/-11.7	-6.82/-3.95	-4.46/-6.17		
Theta(150°)	Phi(0°)	-14.02/-11.29	-12.34/-9.69	-11.13/-13.49	-13.32/-12.43	-8.85/-7.12	-7.02/-6.84	-7/-8.4	-11.15/-12.91	-12.85/-12.13	-10.87/-12.81	-18.69/-17.36	-13.22/-17.47	-14.39/-16.54	-14.89/-12.03	-13.44/-17.76	-16.86/-18.29	-11.66/-12.33	-5.21/-5.87	-12.85/-15.89	-16.45/-12.31	-9.57/-5.56	-9.49/-10.73	-6.84/-8.21	-9.71/-15.22	
Theta(157.5°)	Phi(0°)	-13.45/-14.74	-17.27/-16.34	-11.87/-10.39	-11.78/-14.67	-19.03/-18.84	-17.59/-15.69	-14.9/-13.68	-12.06/-9.76	-7.6/-7.37	-8.62/-9.31	-10.32/-13.94	-17.77/-17.21	-15.82/-17.87	-13.61/-10.61	-11.38/-14.24	-18.41/-19.35	-19.17/-18.26	-14.63/-11.86	-10.59/-9.58	-8.93/-8.16	-6.95/-5.62	-5.56/-5.84	-6.72/-9.06	-10.56/-12.32	
Theta(165°)	Phi(0°)	-9.11/-10.03	-9.64/-9.39	-9.59/-8.76	-7.49/-6.8	-6.92/-8.99	-11.21/-10.83	-10.18/-10.06	-9.82/-10.67	-14.41/-18.03	-16.26/-12.42	-11.11/-11.77	-12.61/-16.99	-18.81/-17.08	-16.64/-18.94	-17.04/-11.11	-8.88/-9.38	-11.45/-13.87	-16.78/-19.08	-18.13/-17.06	-15.78/-16.16	-12.25/-10	-9.21/-8.53	-7.88/-7.77	-7.85/-5.51	
Theta(172.5°)	Phi(0°)	-9.78/-9.3	-9.63/-11.58	-13.61/-13.72	-13.61/-16.76	-9.78/-19.24	-18.31/-17.75	-17.37/-19.04	-14.26/-13.09	-12.33/-12.06	-12.08/-13.01	-14.68/-11.67	-18.71/-18.03	-15.73/-10.57	-8.66/-7.42	-6.57/-6.53	-7.21/-8.24	-9.27/-9.72	-9.77/-10.26	-10.93/-12.01	-13.71/-15.77	-15.83/-12.84	-10.09/-9.05	-9.26/-9.02	-8.91/-9.72	
Theta(180°)	Phi(0°)	-9.78/-9.09	-9.27/-9.06	-8.02/-7.3	-6.59/-6.36	-7.12/-8.23	-8.79/-10.15	-11.52/-11.35	-11.51/-12.18	-13.25/-14.17	-16.51/-19.29	-17.05/-15.18	-12.93/-11.3	-10.16/-9.38	-9.12/-9.22	-9.52/-9.77	-10.49/-10.98	-11.45/-11.85	-12.11/-12.28	-12.86/-13.87	-15.55/-17.29	-17.32/-15.24	-14.36/-13.3	-13.08/-11.71	-10.86/-10.43	
Phi(0°)	Theta(112.5°)	Phi(15°)	Phi(30°)	Phi(45°)	Phi(60°)	Phi(75°)	Phi(90°)	Phi(105°)	Phi(120°)	Phi(135°)	Phi(150°)	Phi(165°)	Phi(180°)	Phi(195°)	Phi(210°)	Phi(225°)	Phi(240°)	Phi(255°)	Phi(270°)	Phi(285°)	Phi(300°)	Phi(315°)	Phi(330°)	Phi(345°)		
Theta(0°)	Phi(0°)	-14.12/-14.28	-15.35/-17.81	-17.88/-17.84	-18.79/-19.08	-17.41/-18.01	-16.35/-13.63	-12.33/-11.36	-10.56/-10.88	-11.53/-13.01	-13.97/-14.07	-13.09/-12.71	-12.87/-14.35	-15.02/-16.16	-16.55/-17.78	-15.85/-15.22	-14/-12.98	-12.58/-12.28	-12.28/-12.65	-12.56/-12.28	-11.45/-10.78	-10.94/-11.08	-12.28/-12.86	-12.69/-11.17	-11.21/-12.57	
Theta(7.5°)	Phi(0°)	-14.13/-13.26	-17.66/-18.59	-18.02/-17.74	-18.61/-19.85	-17.78/-18.97	-18.11/-17.9	-15.49/-14.19	-12.25/-10.89	-10.31/-11.42	-12.31/-13.83	-13.51/-14.05	-13.11/-13.9	-16.85/-19.01	-18.46/-18.48	-18.05/-17.75	-17.64/-18.63	-18.92/-17.06	-17.84/-19.06	-17.83/-16.44	-14.36/-13.35	-12.98/-12.97	-14.51/-15.7	-16.01/-14.36	-14.31/-14.91	
Theta(15°)	Phi(0°)	-10.39/-11.38	-13.58/-13.08	-13.79/-13.94	-15.17/-17.56	-18.01/-18.46	-18.19/-19.09	-18.01/-18.54	-18.22/-19.04	-17.52/-16.11	-14.81/-15.26	-16.83/-16.7	-17.43/-17.55	-17.62/-18.34	-18.36/-18.62	-16.73/-15.93	-16.21/-16.7	-16.85/-16.51	-15.11/-15.25	-15.53/-16.09	-16.52/-17.02	-16.32/-15.23	-16.16/-16.37	-18.91/-16.41	-13.51/-11.23	
Theta(22.5°)	Phi(0°)	-12.63/-12.68	-12.12/-12.36	-10.95/-10.3	-11.33/-11.69	-12.61/-14.67	-18.18/-18.47	-17.26/-16.22	-14.95/-13.92	-12.74/-13.89	-16.79/-17.27	-18.32/-17.1	-15.47/-12.59	-13.53/-15.44	-16.81/-17.93	-17.64/-15.82	-14.51/-14.59	-16.69/-19.04	-18.54/-17.9	-19.39/-17.67	-16.83/-16.46	-16.41/-17.13	-18.19/-16.96	-14.54/-12.94	-11.92/-12.41	
Theta(30°)	Phi(0°)	-14.74/-15.07	-12.94/-12.94	-13.65/-11.32	-9.73/-9.85	-11.21/-12.55	-15.63/-19.19	-18.64/-17.58	-18.65/-17.86	-17.55/-16.47	-17.99/-18.16	-17.96/-18.85	-17.57/-15.3	-15.57/-18.49	-18.99/-17.41	-16.56/-14.31	-11.93/-11.17	-11.61/-13.77	-18.21/-18.76	-17.38/-18.07	-19.23/-17.97	-15.87/-12.37	-11.87/-12.13	-16.24/-17.29	-16.42/-14.67	
Theta(37.5°)	Phi(0°)	-15.51/-13.48	-12.33/-12.05	-10.23/-9.4	-9.39/-11.81	-15.15/-18.7	-18.11/-18.78	-18.51/-17.78	-17.46/-15.88	-14.74/-13.66	-12.92/-13.47	-11.49/-15.85	-18.09/-18.16	-17.39/-14.25	-11.67/-12.47	-15.61/-15.77	-14.43/-13.34	-13.65/-17.17	-18.25/-18.92	-18.89/-18.31	-17.91/-17.58	-18.91/-18.53	-18.95/-18.67	-18.32/-18.85		
Theta(45°)	Phi(0°)	-15.23/-12.3	-8.94/-8	-10.54/-10.62	-10.64/-13.21	-14.33/-16.39	-19.31/-18.69	-18.41/-17.33	-18.26/-15.54	-13.41/-11.87	-11.21/-12.94	-19.06/-17.16	-17.92/-15.39	-14.87/-15.47	-16.18/-14.67	-14.13/-14.36	-12.63/-13.33	-14.75/-18.38	-18.73/-14.73	-13.12/-13	-12.09/-14.56	-13.69/-17.1	-18.89/-17.92	-18.07/-18.97		
Theta(52.5°)	Phi(0°)	-13.04/-10.17	-8.81/-7.93	-9.21/-10.39	-9.05/-9.97	-12.24/-16.26	-18.01/-18.84	-19.03/-16.65	-15.62/-15.46	-13.81/-13.11	-16.05/-18.18	-18.91/-17.83	-17.77/-17.81	-17.57/-14.62	-12.91/-13	-15.35/-17.47	-18.98/-18.24	-18.13/-18.46	-17.58/-18.19	-16.76/-11.31	-10.61/-10.04	-10.36/-12.2	-16.35/-19.24	-17.93/-17.46	-16.08/-13.62	
Theta(60°)	Phi(0°)	-12.41/-9.49	-6.71/-4.86	-5.94/-5.15	-9.11/-9.66	-12/-16.08	-17.55/-16.39	-16.14/-18.87	-18.98/-14.37	-11.59/-11.54	-18.28/-17.61	-18.84/-17.13	-12.98/-12.85	-12.11/-11.53	-11.43/-12.13	-11.85/-14.10	-13.37/-13.81	-14.27/-19.1	-17.83/-18.72	-19.44/-17.86	-17.36/-15.54	-13.37/-18.88	-18.37/-17.53	-17.04/-17.62	-15.34/-16.11	
Theta(67.5°)	Phi(0°)	-14.91/-10.24	-9.04/-8.02	-9.65/-14.29	-14.67/-14.72	-14.11/-17.99	-18.21/-18.52	-17.63/-18.4	-18.45/-18.33	-15.15/-14.1	-17.07/-18.81	-18.47/-18.21	-14.58/-15.19	-14.49/-17.2	-15.81/-16.24	-17.19/-15.15	-15.15/-18.27	-18.73/-17.53	-18.86/-18.29	-15.72/-18.97	-17.04/-18.48	-18.65/-17.79	-18.52/-17.67	-18.59/-16.54		
Theta(75°)	Phi(0°)	-15.23/-10.24	-11.61/-10.74	-9.22/-17.64	-12.81/-11.8	-15.31/-18.94	-17.89/-17.39	-18.61/-17.78	-18.18/-17.16	-19.08/-17.99	-18.37/-17.39	-18.12/-18.62	-13.82/-13.7	-13.12/-12.63	-9.85/-11.36	-9.6/-9.7	-8.94/-9.84	-15.63/-16.67	-18.13/-18.48	-14.28/-14.13	-14.28/-14.13	-17.07/-16.29	-18.27/-17.04	-18.37/-18.15	-17.14/-18.22	
Theta(82.5°)	Phi(0°)	-11.05/-8.1	-10.41/-10.35	-16.1/-16	-17.03/-18.22	-18.25/-15.49	-18.36/-18.93	-17.96/-18.31	-18.22/-18.7	-17.29/-19.03	-17.68/-18.33	-18.82/-18.74	-17.41/-15.04	-16.48/-14.08	-14.78/-14.25	-14.19/-16.92	-14.42/-13.79	-17.44/-17.8	-17.91/-18.69	-18.45/-18.5	-15.83/-15.46	-15.48/-17.75	-18.76/-18.47	-18.45/-19.29	-16.63/-12.83	
Theta(90°)	Phi(0°)	-18.31/-18.97	-17.51/-14.81	-16.42/-16.44	-14.62/-15.28	-13.04/-12.67	-14.58/-18.24	-19.29/-19.27	-18.29/-18.28	-17.88/-15.42	-14.21/-17.82	-18.61/-17.83	-18.07/-15.25	-17.07/-17.58	-17.22/-14.25	-17.96/-13.9	-11.99/-11.37	-13.29/-18.56	-17.59/-18.05	-13.91/-16.88	-17.76/-15.91	-18.56/-17.76	-18.72/-16.48	-14.19/-12.97	-14.38/-18.25	
Theta(97.5°)	Phi(0°)	-18.76/-17.92	-18.29/-15.69	-15.54/-14.14	-14.51/-19.1	-13.41/-17.67	-17.45/-18.21	-18.52/-17.82	-17.97/-18.89	-18.56/-17.68	-19.08/-18.54	-18.88/-18.35	-17.61/-18.35	-16.06/-15.99	-17.18/-19.19	-16.77/-16.48	-13.86/-11.01	-14.21/-17.42	-19.07/-18.36	-13.64/-13.38	-13.34/-14.1	-16.72/-18.77	-19.12/-19.27	-18.42/-16.43	-17.94/-18.33	
Theta(105°)	Phi(0°)	-18.63/-18.46	-13.71/-11.56	-16.73/-18.39	-14.87/-13.26	-13.48/-15.24	-17.25/-16.1	-15.76/-17.08	-15.42/-18.54	-18.76/-17.61	-18.86/-18.89	-18.54/-17.83	-16.23/-19.33	-14.74/-17.52	-15.61/-18	-15.62/-18.24	-17.91/-15.03	-17.87/-18.29	-18.58/-17.51	-14.62/-15.13	-16.31/-18.82	-19.01/-18.69	-18.55/-15.81	-17.15/-13.82	-10.62/-18.21	
Theta(112.5°)	Phi(0°)	-17.75/-17.07	-17.08/-17.96	-16.76/-15.31	-15.08/-17.12	-13.77/-14.68	-14.33/-15.11	-17.74/-17.66	-17.43/-16.66	-18.41/-17.49	-14.23/-18.52	-17.38/-19.47	-17.11/-19.09	-15.31/-18.41	-18.76/-17.84	-18.34/-15.43	-15.42/-14.94	-14.33/-13.87	-11.24/-11.13	-15.73/-18.65	-17.41/-16.97	-16.95/-18.16	-16.81/-13.82	-18.38/-18.22		
Theta(120°)	Phi(0°)	-18.99/-13.51	-18.46/-15.95	-11.59/-5.62	-10.67/-10.14	-14.61/-15.14	-18.61/-19.23	-18.72/-17.74	-15.27/-15.01	-17.35/-14.22	-16.32/-16.11	-14.81/-19.13	-18.62/-16.97	-17.88/-15.44	-16.07/-17.83	-18.43/-18.87	-18.34/-17.92	-18.49/-12.45	-16.78/-15.62	-12.04/-19.5	-19.53/-18.39	-19.58/-18.65	-16.38/-18.16	-17.99/-18.33	-18.65/-15.06	
Theta(127.5°)	Phi(0°)	-18.71/-17.8	-13.82/-15.3	-8.87/-12.1	-9.69/-12.14	-12/-17.73	-18.05/-17.62	-19.02/-17.72	-18.46/-19.49	-17.85/-17.66	-18.05/-14.58	-18.31/-16.12	-18.74/-19.12	-16.61/-17.46	-1											



Radiated Composite Gain Data <6GHz U-NII5~UNII-8>

Appendix B

Theta (°)	157.5	162	167.5	172.5	177.5	182.5	187.5	192.5	197.5	202.5	207.5	212.5	217.5	222.5	227.5	232.5	237.5	242.5	247.5	252.5	257.5	262.5	267.5	272.5	277.5	282.5	287.5	292.5	297.5	302.5	307.5	312.5	317.5	322.5	327.5	332.5	337.5	342.5	347.5	352.5																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Gain (dBi)	-14.61	-14.44	-14.27	-14.10	-13.93	-13.76	-13.59	-13.42	-13.25	-13.08	-12.91	-12.74	-12.57	-12.40	-12.23	-12.06	-11.89	-11.72	-11.55	-11.38	-11.21	-11.04	-10.87	-10.70	-10.53	-10.36	-10.19	-10.02	-9.85	-9.68	-9.51	-9.34	-9.17	-9.00	-8.83	-8.66	-8.49	-8.32	-8.15	-7.98	-7.81	-7.64	-7.47	-7.30	-7.13	-6.96	-6.79	-6.62	-6.45	-6.28	-6.11	-5.94	-5.77	-5.60	-5.43	-5.26	-5.09	-4.92	-4.75	-4.58	-4.41	-4.24	-4.07	-3.90	-3.73	-3.56	-3.39	-3.22	-3.05	-2.88	-2.71	-2.54	-2.37	-2.20	-2.03	-1.86	-1.69	-1.52	-1.35	-1.18	-1.01	-0.84	-0.67	-0.50	-0.33	-0.16	0.01	0.18	0.35	0.52	0.69	0.86	1.03	1.20	1.37	1.54	1.71	1.88	2.05	2.22	2.39	2.56	2.73	2.90	3.07	3.24	3.41	3.58	3.75	3.92	4.09	4.26	4.43	4.60	4.77	4.94	5.11	5.28	5.45	5.62	5.79	5.96	6.13	6.30	6.47	6.64	6.81	6.98	7.15	7.32	7.49	7.66	7.83	8.00	8.17	8.34	8.51	8.68	8.85	9.02	9.19	9.36	9.53	9.70	9.87	10.04	10.21	10.38	10.55	10.72	10.89	11.06	11.23	11.40	11.57	11.74	11.91	12.08	12.25	12.42	12.59	12.76	12.93	13.10	13.27	13.44	13.61	13.78	13.95	14.12	14.29	14.46	14.63	14.80	14.97	15.14	15.31	15.48	15.65	15.82	15.99	16.16	16.33	16.50	16.67	16.84	17.01	17.18	17.35	17.52	17.69	17.86	18.03	18.20	18.37	18.54	18.71	18.88	19.05	19.22	19.39	19.56	19.73	19.90	20.07	20.24	20.41	20.58	20.75	20.92	21.09	21.26	21.43	21.60	21.77	21.94	22.11	22.28	22.45	22.62	22.79	22.96	23.13	23.30	23.47	23.64	23.81	23.98	24.15	24.32	24.49	24.66	24.83	25.00	25.17	25.34	25.51	25.68	25.85	26.02	26.19	26.36	26.53	26.70	26.87	27.04	27.21	27.38	27.55	27.72	27.89	28.06	28.23	28.40	28.57	28.74	28.91	29.08	29.25	29.42	29.59	29.76	29.93	30.10	30.27	30.44	30.61	30.78	30.95	31.12	31.29	31.46	31.63	31.80	31.97	32.14	32.31	32.48	32.65	32.82	32.99	33.16	33.33	33.50	33.67	33.84	34.01	34.18	34.35	34.52	34.69	34.86	35.03	35.20	35.37	35.54	35.71	35.88	36.05	36.22	36.39	36.56	36.73	36.90	37.07	37.24	37.41	37.58	37.75	37.92	38.09	38.26	38.43	38.60	38.77	38.94	39.11	39.28	39.45	39.62	39.79	39.96	40.13	40.30	40.47	40.64	40.81	40.98	41.15	41.32	41.49	41.66	41.83	42.00	42.17	42.34	42.51	42.68	42.85	43.02	43.19	43.36	43.53	43.70	43.87	44.04	44.21	44.38	44.55	44.72	44.89	45.06	45.23	45.40	45.57	45.74	45.91	46.08	46.25	46.42	46.59	46.76	46.93	47.10	47.27	47.44	47.61	47.78	47.95	48.12	48.29	48.46	48.63	48.80	48.97	49.14	49.31	49.48	49.65	49.82	49.99	50.16	50.33	50.50	50.67	50.84	51.01	51.18	51.35	51.52	51.69	51.86	52.03	52.20	52.37	52.54	52.71	52.88	53.05	53.22	53.39	53.56	53.73	53.90	54.07	54.24	54.41	54.58	54.75	54.92	55.09	55.26	55.43	55.60	55.77	55.94	56.11	56.28	56.45	56.62	56.79	56.96	57.13	57.30	57.47	57.64	57.81	57.98	58.15	58.32	58.49	58.66	58.83	59.00	59.17	59.34	59.51	59.68	59.85	60.02	60.19	60.36	60.53	60.70	60.87	61.04	61.21	61.38	61.55	61.72	61.89	62.06	62.23	62.40	62.57	62.74	62.91	63.08	63.25	63.42	63.59	63.76	63.93	64.10	64.27	64.44	64.61	64.78	64.95	65.12	65.29	65.46	65.63	65.80	65.97	66.14	66.31	66.48	66.65	66.82	66.99	67.16	67.33	67.50	67.67	67.84	68.01	68.18	68.35	68.52	68.69	68.86	69.03	69.20	69.37	69.54	69.71	69.88	70.05	70.22	70.39	70.56	70.73	70.90	71.07	71.24	71.41	71.58	71.75	71.92	72.09	72.26	72.43	72.60	72.77	72.94	73.11	73.28	73.45	73.62	73.79	73.96	74.13	74.30	74.47	74.64	74.81	74.98	75.15	75.32	75.49	75.66	75.83	76.00	76.17	76.34	76.51	76.68	76.85	77.02	77.19	77.36	77.53	77.70	77.87	78.04	78.21	78.38	78.55	78.72	78.89	79.06	79.23	79.40	79.57	79.74	79.91	80.08	80.25	80.42	80.59	80.76	80.93	81.10	81.27	81.44	81.61	81.78	81.95	82.12	82.29	82.46	82.63	82.80	82.97	83.14	83.31	83.48	83.65	83.82	83.99	84.16	84.33	84.50	84.67	84.84	85.01	85.18	85.35	85.52	85.69	85.86	86.03	86.20	86.37	86.54	86.71	86.88	87.05	87.22	87.39	87.56	87.73	87.90	88.07	88.24	88.41	88.58	88.75	88.92	89.09	89.26	89.43	89.60	89.77	89.94	90.11	90.28	90.45	90.62	90.79	90.96	91.13	91.30	91.47	91.64	91.81	91.98	92.15	92.32	92.49	92.66	92.83	93.00	93.17	93.34	93.51	93.68	93.85	94.02	94.19	94.36	94.53	94.70	94.87	95.04	95.21	95.38	95.55	95.72	95.89	96.06	96.23	96.40	96.57	96.74	96.91	97.08	97.25	97.42	97.59	97.76	97.93	98.10	98.27	98.44	98.61	98.78	98.95	99.12	99.29	99.46	99.63	99.80	99.97	100.14	100.31	100.48	100.65	100.82	100.99	101.16	101.33	101.50	101.67	101.84	102.01	102.18	102.35	102.52	102.69	102.86	103.03	103.20	103.37	103.54	103.71	103.88	104.05	104.22	104.39	104.56	104.73	104.90	105.07	105.24	105.41	105.58	105.75	105.92	106.09	106.26	106.43	106.60	106.77	106.94	107.11	107.28	107.45	107.62	107.79	107.96	108.13	108.30	108.47	108.64	108.81	108.98	109.15	109.32	109.49	109.66	109.83	110.00	110.17	110.34	110.51	110.68	110.85	111.02	111.19	111.36	111.53	111.70	111.87	112.04	112.21	112.38	112.55	112.72	112.89	113.06	113.23	113.40	113.57	113.74	113.91	114.08	114.25	114.42	114.59	114.76	114.93	115.10	115.27	115.44	115.61	115.78	115.95	116.12	116.29	116.46	116.63	116.80	116.97	117.14	117.31	117.48	117.65	117.82	117.99	118.16	118.33	118.50	118.67	118.84	119.01	119.18	119.35	119.52	119.69	119.86	120.03	120.20	120.37	120.54	120.71	120.88	121.05	121.22	121.39	121.56	121.73	121.90	122.07	122.24	122.41	122.58	122.75	122.92	123.09	123.26	123.43	123.60	123.77	123.94	124.11	124.28	124.45	124.62	124.79	124.96	125.13	125.30	125.47	125.64	125.81	125.98	126.15	126.32	126.49	126.66	126.83	127.00	127.17	127.34	127.51	127.68	127.85	128.02	128.19	128.36	128.53	128.70	128.87	129.04	129.21	129.38	129.55	129.72	129.89	130.06	130.23	130.40	130.57	130.74	130.91	131.08	131.25	131.42	131.59	131.76	131.93	132.10	132.27	132.44	132.61	132.78	132.95	133.12	133.29	133.46	133.63	133.80	133.97	134.14	134.31	134.48	134.65	134.82	134.99	135.16	135.33	135.50	135.67	135.84	136.01	136.18	136.35	136.52	136.69	136.86	137.03	137.20	137.37	137.54	137.71	137.88	138.05	138.22	138.39	138.56	138.73	138.90	139.07	139.24	139.41	139.58	139.75	139.92	140.09	140.26	140.43	140.60	140.77	140.94	141.11	141.28	141.45	141.62	141.79	141.96	142.13	142.30	142.47	142.64	142.81	142.98	143.15	143.32	143.49	143.66	143.83	144.00	144.17	144.34	144.51	144.68	144.85	145.02	145.19	145.36	145.53	145.70	145.87	146.04	146.21	146.38	146.55	146.72	146.89	147.06	147.23	147.40	147.57	147.74	147.91	148.08	148.25	148.42	148.59	148.76	148.93	149.10	149.27	149.44	149.61	149.78	149.95	150.12	150.29	150.46	150.63	150.80	150.97	151.14	151.31	151.48	151.65	151.82	151.99	152.16	152.33	152.50	152.67	152.84	153.01	153.18	153.35	153.52	153.69	153.86	154.03	154.20	154.37	154.54	154.71	154.88	155.05	155.22	155.39	155.56	155.73	155.90	156.07	156.24	156.41	156.58	156.75	156.92	157.09	157.26	157.43	157.60	157.77	157.94	158.11	158.28	158.45	158.62	158.79	158.96	159.13	159.30	159.47	159.64	159.81	159.98	160.15	160.32	160.49	160.66	160.83	161.00	161.17	161.34	161.51	161.68	161.85	162.02	162.19	162.36	162.53	162.70	162.87	163.04	163.21	163.38	163.55	163.72	163.89	164.06	164.23	164.40	164.57	164.74	164.91	165.08	165.25	165.42	165.59	165.76	165.93	166.10	166.27	166.44	166.61	166.78	166.95	167.12	167.29	167.46	167.63	167.80	167.97	168.14	168.31	168.48	168.65	168.82	168.99	169.16	169.33	169.50	169.67	169.84	170.01	170.18	170.35	170.52	170.69	170.86	171.03	171.20	171.37	171.54	171.71	171.88	172.05	172.22	172.39	172.56	172.73	172.90	173.07	173.24	173.41	173.58	173.75	173.92	174.09	174.26	174.43	174.60	174.77	174.94	175.11	175.28	175.45	175.62	175.79	175.96	176.13	176.30	176.47	176.64	176.81	176.98	177.15	177.32	177.49	177.66	177.83	178.00	178.17	178.34	178.51	178.68	178.85	179.02	179.19	179.36	179.53



Radiated Composite Gain Data <6GHz U-NII5~UNII-8>

Appendix B

Theta	Phi	Gain	Phi(7.5)	Phi(15)	Phi(22.5)	Phi(30)	Phi(37.5)	Phi(45)	Phi(52.5)	Phi(60)	Phi(67.5)	Phi(75)	Phi(82.5)	Phi(90)	Phi(97.5)	Phi(105)	Phi(112.5)	Phi(120)	Phi(127.5)	Phi(135)	Phi(142.5)	Phi(150)	Phi(157.5)	Phi(165)	Phi(172.5)	Phi(180)	Phi(187.5)	Phi(195)	Phi(202.5)	Phi(210)	Phi(217.5)	Phi(225)	Phi(232.5)	Phi(240)	Phi(247.5)	Phi(255)	Phi(262.5)	Phi(270)	Phi(277.5)	Phi(285)	Phi(292.5)	Phi(300)	Phi(307.5)	Phi(315)	Phi(322.5)	Phi(330)	Phi(337.5)	Phi(345)	Phi(352.5)																								
Theta(0)	Phi(0)	-2.62-4.52	-4.96-5.26	-5.81-5.53	-7.61-6.25	-5.53-7.31	-9.43-8.67	-8.81-11.46	-14.79-8.74	-5.87-6.93	-11.66-9.12	-9.95-11.44	-14.81-11.19	-7.21-7.42	-9.77-12.46	-17.68-8.42	-9.04-16.15	-18.09-18.53	-19.28-13.52	-19.17-17.06	-10.01-6.67	-4.48-3.33	-4.05-3.46	-2.58-2.52	-3.18-4.99	Theta(67.5)	Phi(7.5)	Phi(15)	Phi(22.5)	Phi(30)	Phi(37.5)	Phi(45)	Phi(52.5)	Phi(60)	Phi(67.5)	Phi(75)	Phi(82.5)	Phi(90)	Phi(97.5)	Phi(105)	Phi(112.5)	Phi(120)	Phi(127.5)	Phi(135)	Phi(142.5)	Phi(150)	Phi(157.5)	Phi(165)	Phi(172.5)	Phi(180)	Phi(187.5)	Phi(195)	Phi(202.5)	Phi(210)	Phi(217.5)	Phi(225)	Phi(232.5)	Phi(240)	Phi(247.5)	Phi(255)	Phi(262.5)	Phi(270)	Phi(277.5)	Phi(285)	Phi(292.5)	Phi(300)	Phi(307.5)	Phi(315)	Phi(322.5)	Phi(330)	Phi(337.5)	Phi(345)	Phi(352.5)
Theta(75)	Phi(7.5)	-3.61-4.53	-4.39-5.11	-7.12-6.62	-7.95-10.24	-13.03-8.87	-7.24-7.96	-10.69-11.86	-16.36-14.91	-9.51-9.92	-9.73-6.33	-6.93-10.31	-18.09-15.8	-9.29-8.86	-7.91-11.2	-12.43-14	-15.11-8.94	-10.02-9.69	-6.51-10.03	-10.34-17.12	-11.41-5.84	-4.75-5.42	-10.29-9.21	-5.35-4.36	-4.38-1.64	Theta(90)	Phi(15)	Phi(22.5)	Phi(30)	Phi(37.5)	Phi(45)	Phi(52.5)	Phi(60)	Phi(67.5)	Phi(75)	Phi(82.5)	Phi(90)	Phi(97.5)	Phi(105)	Phi(112.5)	Phi(120)	Phi(127.5)	Phi(135)	Phi(142.5)	Phi(150)	Phi(157.5)	Phi(165)	Phi(172.5)	Phi(180)	Phi(187.5)	Phi(195)	Phi(202.5)	Phi(210)	Phi(217.5)	Phi(225)	Phi(232.5)	Phi(240)	Phi(247.5)	Phi(255)	Phi(262.5)	Phi(270)	Phi(277.5)	Phi(285)	Phi(292.5)	Phi(300)	Phi(307.5)	Phi(315)	Phi(322.5)	Phi(330)	Phi(337.5)	Phi(345)	Phi(352.5)	
Theta(90)	Phi(90)	-2.45-4.87	-5.26-3.53	-4.26-4.49	-7.12-18.9	-8.84-11.15	-9.77-12.45	-18.04-18.17	-17.93-18.61	-18.26-15.36	-19.17-8.6	-17.65-15.04	-9.09-8.73	-12.72-16.77	-10.18-10.49	-10.31-20.21	-8.87-9.88	-8.81-10.09	-2.12-17.81	-11.91-5.98	-13.15-6.98	-3.23-3.84	-8.55-4.62	-2.75-3.36	-1.85-2.25	Theta(105)	Phi(22.5)	Phi(30)	Phi(37.5)	Phi(45)	Phi(52.5)	Phi(60)	Phi(67.5)	Phi(75)	Phi(82.5)	Phi(90)	Phi(97.5)	Phi(105)	Phi(112.5)	Phi(120)	Phi(127.5)	Phi(135)	Phi(142.5)	Phi(150)	Phi(157.5)	Phi(165)	Phi(172.5)	Phi(180)	Phi(187.5)	Phi(195)	Phi(202.5)	Phi(210)	Phi(217.5)	Phi(225)	Phi(232.5)	Phi(240)	Phi(247.5)	Phi(255)	Phi(262.5)	Phi(270)	Phi(277.5)	Phi(285)	Phi(292.5)	Phi(300)	Phi(307.5)	Phi(315)	Phi(322.5)	Phi(330)	Phi(337.5)	Phi(345)	Phi(352.5)		
Theta(105)	Phi(105)	-0.37-2.36	-2.25-2.84	-3.01-2.79	-5.39-4.94	-5.78-12.25	-13.41-10.73	-10.41-17.93	-9.69-18.96	-15.31-13.26	-19.32-15.5	-11.95-16.51	-17.99-18.03	-16.13-15.16	-13.91-15.9	-8.17-5.66	-9.12-8.74	-9.05-9.22	-3.58-1.18	-3.27-12.71	-9.51-10.78	-13.73-7.42	-4.84-3.01	-1.39-2.35	-0.91-2.62	Theta(120)	Phi(30)	Phi(37.5)	Phi(45)	Phi(52.5)	Phi(60)	Phi(67.5)	Phi(75)	Phi(82.5)	Phi(90)	Phi(97.5)	Phi(105)	Phi(112.5)	Phi(120)	Phi(127.5)	Phi(135)	Phi(142.5)	Phi(150)	Phi(157.5)	Phi(165)	Phi(172.5)	Phi(180)	Phi(187.5)	Phi(195)	Phi(202.5)	Phi(210)	Phi(217.5)	Phi(225)	Phi(232.5)	Phi(240)	Phi(247.5)	Phi(255)	Phi(262.5)	Phi(270)	Phi(277.5)	Phi(285)	Phi(292.5)	Phi(300)	Phi(307.5)	Phi(315)	Phi(322.5)	Phi(330)	Phi(337.5)	Phi(345)	Phi(352.5)			
Theta(120)	Phi(120)	-1.89-3.13	-2.88-3.71	-6.31-6.93	-5.71-5.33	-5.45-7.27	-8.15-9.4	-9.81-11	-15.72-16.86	-11.37-12.68	-11.94-14.94	-18.72-18.32	-14.64-11.61	-13.98-16.23	-16.39-13.81	-10.91-7.94	-9.27-6.72	-7.52-7.87	-2.38-1.12	-4.21-14.45	-4.01-4.74	-3.81-7.01	-1.79-3.2	-1.53-2.28	-2.26-2.66	Theta(135)	Phi(37.5)	Phi(45)	Phi(52.5)	Phi(60)	Phi(67.5)	Phi(75)	Phi(82.5)	Phi(90)	Phi(97.5)	Phi(105)	Phi(112.5)	Phi(120)	Phi(127.5)	Phi(135)	Phi(142.5)	Phi(150)	Phi(157.5)	Phi(165)	Phi(172.5)	Phi(180)	Phi(187.5)	Phi(195)	Phi(202.5)	Phi(210)	Phi(217.5)	Phi(225)	Phi(232.5)	Phi(240)	Phi(247.5)	Phi(255)	Phi(262.5)	Phi(270)	Phi(277.5)	Phi(285)	Phi(292.5)	Phi(300)	Phi(307.5)	Phi(315)	Phi(322.5)	Phi(330)	Phi(337.5)	Phi(345)	Phi(352.5)				
Theta(135)	Phi(135)	-5.67-8.88	-12.95-9.26	-8.11-9.49	-10.62-10.7	-9.89-14.03	-16.62-8.29	-8.74-12.95	-14.94-18.67	-19.21-18.56	-19.03-17.89	-19.12-14.51	-17.35-16.57	-16.58-12.81	-9.96-9.34	-9.84-4.11	-6.23-5.85	-5.21-6.07	-1.11-1.66	-3.81-15.17	-5.01-2.76	-1.73-5.52	-4.23-2.82	-0.87-1.98	-1.38-3.73	Theta(150)	Phi(45)	Phi(52.5)	Phi(60)	Phi(67.5)	Phi(75)	Phi(82.5)	Phi(90)	Phi(97.5)	Phi(105)	Phi(112.5)	Phi(120)	Phi(127.5)	Phi(135)	Phi(142.5)	Phi(150)	Phi(157.5)	Phi(165)	Phi(172.5)	Phi(180)	Phi(187.5)	Phi(195)	Phi(202.5)	Phi(210)	Phi(217.5)	Phi(225)	Phi(232.5)	Phi(240)	Phi(247.5)	Phi(255)	Phi(262.5)	Phi(270)	Phi(277.5)	Phi(285)	Phi(292.5)	Phi(300)	Phi(307.5)	Phi(315)	Phi(322.5)	Phi(330)	Phi(337.5)	Phi(345)	Phi(352.5)					
Theta(150)	Phi(150)	-2.38-1.08	0.09-0.02	-0.17-0.2	-0.38-2.08	-5.11-7.58	-10.28-13.89	-15.63-12.79	-12.34-18.76	-18.46-17.89	-18.41-17.03	-13.65-12.87	-15.92-16.37	-16.18-18.79	-18.55-16.14	-15.11-12.14	-9.76-12.08	-19.14-18.22	-14.05-7.73	-8.91-13.34	-10.01-11.84	-12.82-7.54	-4.03-3.97	-4.06-2.91	-3.02-2.77	Theta(165)	Phi(52.5)	Phi(60)	Phi(67.5)	Phi(75)	Phi(82.5)	Phi(90)	Phi(97.5)	Phi(105)	Phi(112.5)	Phi(120)	Phi(127.5)	Phi(135)	Phi(142.5)	Phi(150)	Phi(157.5)	Phi(165)	Phi(172.5)	Phi(180)	Phi(187.5)	Phi(195)	Phi(202.5)	Phi(210)	Phi(217.5)	Phi(225)	Phi(232.5)	Phi(240)	Phi(247.5)	Phi(255)	Phi(262.5)	Phi(270)	Phi(277.5)	Phi(285)	Phi(292.5)	Phi(300)	Phi(307.5)	Phi(315)	Phi(322.5)	Phi(330)	Phi(337.5)	Phi(345)	Phi(352.5)						
Theta(165)	Phi(165)	-4.04-3.4	-3.82-3.16	-3.81-7.2	-14.33-11.86	-12.47-14.52	-13.65-12.18	-14.35-18.26	-14.71-10.61	-10.47-12.33	-15.63-18.07	-14.71-10.61	-10.47-12.33	-15.63-18.07	-14.71-10.61	-10.47-12.33	-15.63-18.07	-14.71-10.61	-10.47-12.33	-15.63-18.07	-14.71-10.61	-10.47-12.33	-15.63-18.07	-14.71-10.61	-10.47-12.33	Theta(180)	Phi(60)	Phi(67.5)	Phi(75)	Phi(82.5)	Phi(90)	Phi(97.5)	Phi(105)	Phi(112.5)	Phi(120)	Phi(127.5)	Phi(135)	Phi(142.5)	Phi(150)	Phi(157.5)	Phi(165)	Phi(172.5)	Phi(180)	Phi(187.5)	Phi(195)	Phi(202.5)	Phi(210)	Phi(217.5)	Phi(225)	Phi(232.5)	Phi(240)	Phi(247.5)	Phi(255)	Phi(262.5)	Phi(270)	Phi(277.5)	Phi(285)	Phi(292.5)	Phi(300)	Phi(307.5)	Phi(315)	Phi(322.5)	Phi(330)	Phi(337.5)	Phi(345)	Phi(352.5)							
Theta(180)	Phi(180)	-6.71-8.2	-9.94-14.48	-16.36-18.7	-15.77-11.17	-9.14-9.53	-12.99-19.51	-18.81-18.28	-18.03-18.97	-16.28-14.22	-13.26-11.7	-10.47-9.73	-8.49-7.4	-6.56-6.26	-6.21-6.64	-7.21-9.91	-8.82-9.7	-10.64-11.77	-12.32-13.22	-15.26-19.1	-19.21-16.56	-13.42-10.91	-9.46-8.79	-7.34-7.03	-6.93-6.62	Theta(195)	Phi(67.5)	Phi(75)	Phi(82.5)	Phi(90)	Phi(97.5)	Phi(105)	Phi(112.5)	Phi(120)	Phi(127.5)	Phi(135)	Phi(142.5)	Phi(150)	Phi(157.5)	Phi(165)	Phi(172.5)	Phi(180)	Phi(187.5)	Phi(195)	Phi(202.5)	Phi(210)	Phi(217.5)	Phi(225)	Phi(232.5)	Phi(240)	Phi(247.5)	Phi(255)	Phi(262.5)	Phi(270)	Phi(277.5)	Phi(285)	Phi(292.5)	Phi(300)	Phi(307.5)	Phi(315)	Phi(322.5)	Phi(330)	Phi(337.5)	Phi(345)	Phi(352.5)								
Theta(195)	Phi(195)	-1.55-17.17	-19.03-19.04	-18.52-18.59	-15.51-13.87	-13.89-13.27	-11.62-10.33	-9.01-8.56	-6.96-9.67	-12.85-18.37	-10.51-18.97	-14.78-16.63	-14.82-13.14	-10.61-9.46	-8.91-8.6	-7.52-7.53	-6.75-7.54	-7.71-7.01	-6.75-7.54	-7.92-8.42	-9.17-10.38	-16.72-12.54	-15.39-17.07	-17.82-14.29	Theta(210)	Phi(75)	Phi(82.5)	Phi(90)	Phi(97.5)	Phi(105)	Phi(112.5)	Phi(120)	Phi(127.5)	Phi(135)	Phi(142.5)	Phi(150)	Phi(157.5)	Phi(165)	Phi(172.5)	Phi(180)	Phi(187.5)	Phi(195)	Phi(202.5)	Phi(210)	Phi(217.5)	Phi(225)	Phi(232.5)	Phi(240)	Phi(247.5)	Phi(255)	Phi(262.5)	Phi(270)	Phi(277.5)	Phi(285)	Phi(292.5)	Phi(300)	Phi(307.5)	Phi(315)	Phi(322.5)	Phi(330)	Phi(337.5)	Phi(345)	Phi(352.5)										
Theta(210)	Phi(210)	-18.61-18.1	-18.11-19.23	-17.37-15.09	-15.11-14.92	-13.65-12.18	-11.62-11.74	-13.41-14.4	-15.78-16.55	-13.71-11.25	-9.48-9.97	-11.09-12.21	-12.93-13.07	-13.05-13.07	-12.64-12.7	-12.83-11.75	-9.56-7.64	-6.17-5.54	-5.31-5.37	-5.23-5.15	-5.55-5.82	-6.51-7.36	-8.23-9.41	-10.87-15.51	-16.38-18.46	Theta(225)	Phi(82.5)	Phi(90)	Phi(97.5)	Phi(105)	Phi(112.5)	Phi(120)	Phi(127.5)	Phi(135)	Phi(142.5)	Phi(150)	Phi(157.5)	Phi(165)	Phi(172.5)	Phi(180)	Phi(187.5)	Phi(195)	Phi(202.5)	Phi(210)	Phi(217.5)	Phi(225)	Phi(232.5)	Phi(240)	Phi(247.5)	Phi(255)	Phi(262.5)	Phi(270)	Phi(277.5)	Phi(285)	Phi(292.5)	Phi(300)	Phi(307.5)	Phi(315)	Phi(322.5)	Phi(330)	Phi(337.5)	Phi(345)	Phi(352.5)										
Theta(225)	Phi(225)	-7.02-8.61	-12.43-12.11	-10.63-12.23	-19.17-16.21	-13.41-11.78	-12.56-18.58	-19.28-17.81	-18.42-18.67	-19.26-19.16	-15.09-14.96	-11.82-14.52	-15.65-16.87	-17.73-12.35	-16.65-17.9	-13.11-13.84	-7.52-7.53	-7.53-8.14	-9.66-9.98	-8.01-6.45	-5.28-5.19	-4.51-4.04	-3.94-3.86	-3.74-3.7	-3.86-2.4	Theta(232.5)	Phi(90)	Phi(97.5)	Phi(105)	Phi(112.5)	Phi(120)	Phi(127.5)	Phi(135)	Phi(142.5)	Phi(150)	Phi(157.5)	Phi(165)	Phi(172.5)	Phi(180)	Phi(187.5)	Phi(195)	Phi(202.5)	Phi(210)	Phi(217.5)	Phi(225)	Phi(232.5)	Phi(240)	Phi(247.5)	Phi(255)	Phi(262.5)	Phi(270)	Phi(277.5)	Phi(285)	Phi(292.5)	Phi(300)	Phi(307.5)	Phi(315)	Phi(322.5)	Phi(330)	Phi(337.5)	Phi(345)	Phi(352.5)											
Theta(232.5)	Phi(232.5)	-4.07-4.59	-6.19-6.82	-6.09-9.43	-12.32-13.81	-17.84-18.03	-18.68-17.97	-18.04-15.66	-12.32-12.26	-12.27-13.83	-16.02-18.92	-18.78-13.39	-11.65-11.51	-7.83-6.03	-2.09-1.79	-2.27-3.53	-4.34-7.63	-8.86-8.23	-7.31-6.11	-4.75-4.94	-4.82-4.49	-4.07-3.2	-2.26-1.77	-2.52-0.47	-5.07-4.8	Theta(247.5)	Phi(97.5)	Phi(105)	Phi(112.5)	Phi(120)	Phi(127.5)	Phi(135)	Phi(142.5)	Phi(150)	Phi(157.5)	Phi(165)	Phi(172.5)	Phi(180)	Phi(187.5)	Phi(195)	Phi(202.5)	Phi(210)	Phi(217.5)	Phi(225)	Phi(232.5)	Phi(240)	Phi(247.5)	Phi(255)	Phi(262.5)																								



Radiated Composite Gain Data <6GHz U-NII5~UNII-8>

Appendix B

Θ(112.5°)	-0.94/-3.56	-2.3/-4.83	-3.82/-6.05	-10/-8.41	-8.68/-9.31	-12.89/-18.57	-18.94/-12.79	-9.43/-17.76	-17.61/-18.67	-17.06/-15.73	-18.07/-12.34	-11.3/-10.03	-10.43/-16.87	-12.76/-11.42	-3.81/-2.89	-8.12/-8.15	-2.61/-11.93	-0.71/-1.26	-4.53/-18.53	-6.43/-3.73	-1.05/-1.45	-3.72/0.06	1.49/0	0.69/-2.86
Θ(120°)	-1.81/-5.05	-5.54/-8.71	-10.35/-10.63	-16.97/-13.12	-9.93/-8.12	-12.08/-18.28	-19.21/-16.52	-16.31/-17.46	-14.08/-16.35	-15.17/-12.21	-12.01/-11.63	-10.62/-10.24	-13.92/-18.45	-12.51/-10.13	-17.51/-14.98	-17.15/-13.32	-4.18/-18.22	-5.1/-0.66	-2.02/-10.78	-3.76/-1.97	-2.78/-4.22	-1.68/1.7	2.94/-0.09	1.31/-1.27
Θ(127.5°)	-2.34/-2.07	-2.63/-5.01	-7.34/-4.71	-3.61/-6.47	-16.02/-19.03	-18.15/-14.69	-14.1/-19.08	-17.38/-17.12	-15.41/-15.76	-18.69/-11.78	-16/-17.39	-14.03/-18.1	-16.67/-10.38	-10.25/-18.68	-18.4/-17.84	-11.51/-11.55	-10.97/-16.77	-9.7/-2.63	-1.44/-7.31	-5.88/-2.71	-4.29/-5.51	0.52/2.72	2.55/1.59	1.93/-0.77
Θ(135°)	-1.99/-1.64	-1.26/-1.65	-5.5/-7.68	-2.83/-1.53	-3.75/-6.09	-7.53/-7.66	-10.61/-12.67	-11.38/-12.58	-12.56/-15.95	-18.07/-10.31	-7.06/-8.31	-12.52/-19.2	-17.2/-14.38	-17.79/-17.67	-13.43/-11.54	-6.47/-12.4	-18.26/-13.01	-7.67/-2.05	-2.42/-5.61	-8.8/-9.18	-4.67/-5.3	-2.46/-0.88	-0.62/0.48	0.9/-1.17
Θ(142.5°)	-0.81/-0.32	-0.99/-1.05	-0.79/0.53	1.37/0.23	-1.85/-5.46	-9.57/-10.26	-11.29/-9.64	-10.56/-18.3	-19.21/-15.76	-9.35/-8.65	-11.33/-15.99	-15.57/-17.48	-11.17/-6.97	-6.11/-5.15	-6.7/-10.55	-13.88/-17.72	-18.59/-11.05	-6.45/-4.93	-2.94/-3.39	-6.94/-6.43	-6.51/-7.12	-2.96/-4.9	-3.54/-1.9	-1.03/-0.74
Θ(150°)	-2.72/-2.59	-1.22/-0.19	-0.27/-1.55	-2.06/-1.03	-2.52/-7.14	-11.14/-10.46	-13.28/-12.6	-10.95/-16.31	-17.54/-17.15	-18.55/-16.39	-13.35/-11.64	-12.76/-14.61	-14.84/-13.26	-11.44/-9.91	-13.28/-18.25	-12/-9.96	-10.37/-13.07	-11.07/-6.67	-5.71/-8.85	-9.75/-11.73	-10.74/-9.94	-6.55/-5.66	-6.14/-4.18	-2.76/-2.81
Θ(157.5°)	-5.3/-4.91	-4.46/-4.68	-4.66/-3.97	-3.41/-4.69	-7.08/-12.84	-16.64/-16.06	-18.56/-18.17	-18.23/-18.35	-15.29/-13.48	-13.61/-13.63	-13.43/-11.48	-11.65/-14.1	-17.78/-19.02	-18.48/-17.93	-13.76/-14.07	-18.54/-17.96	-13.01/-10.83	-11.52/-12.59	-15.04/-18.82	-9.38/-9.5	-19.34/-18.52	-18.44/-13.43	-10.07/-9.11	-7.02/-6.35
Θ(165°)	-10.14/-10.41	-10.16/-10.62	-12.4/-14.85	-13.21/-11.84	-16.18/-18.08	-18.13/-15.96	-18.47/-17.67	-18.77/-17.7	-17.9/-18.85	-18.48/-13.07	-10.78/-10.01	-10.43/-10.91	-11.14/-12.58	-16.26/-18.6	-19.11/-14.35	-8.49/-5.7	-4.35/-4.96	-7.78/-12.91	-16.86/-12.09	-7.71/-5.85	-6.71/-9.63	-12.51/-12.2	-11.24/-11.51	-10.03/-8.58
Θ(172.5°)	-5.57/-6.33	-6.05/-5.9	-7.33/-9.56	-13.38/-18.43	-15.43/-10.06	-10.46/-12.52	-16.2/-18.7	-18.59/-18.66	-17.32/-14.25	-13.03/-12.56	-13.41/-13.32	-12.5/-10.87	-8.98/-7.59	-7.5/-7.32	-7.08/-6.7	-6.02/-6.26	-6.83/-8.81	-12.63/-16.26	-16.93/-13.38	-9.57/-7.18	-5.75/-5.02	-5.26/-5.37	-4.61/-4.73	-5.45/-4.86
Θ(180°)	-4.77/-5.55	-7.26/-9.09	-11.79/-13.46	-15.91/-10.71	-6.88/-7.29	-9.87/-14.67	-17.65/-17.7	-18.09/-17.35	-11.52/-8.64	-6.81/-6.24	-5.89/-5.56	-5.2/-5.26	-5.25/-5.52	-5.96/-6.44	-6.39/-6.71	-6.83/-6.92	-7.44/-8.89	-10.61/-11.87	-12.3/-13.51	-13.67/-11.03	-8.9/-7.09	-6.11/-5.8	-4.48/-4.32	-4.46/-4.76



Antenna Pattern <2.4GHz and 5GHz U-NII 1~U-NII 4>

Appendix C

Theta (°)	Phi (°)	Gain (dBi)	Phi(15°)	Phi(22.5°)	Phi(30°)	Phi(37.5°)	Phi(45°)	Phi(52.5°)	Phi(60°)	Phi(67.5°)	Phi(75°)	Phi(82.5°)	Phi(90°)	Phi(97.5°)	Phi(105°)	Phi(112.5°)	Phi(120°)	Phi(127.5°)	Phi(135°)	Phi(142.5°)	Phi(150°)	Phi(157.5°)	Phi(165°)	Phi(172.5°)	Phi(180°)	Phi(187.5°)	Phi(195°)	Phi(202.5°)	Phi(210°)	Phi(217.5°)	Phi(225°)	Phi(232.5°)	Phi(240°)	Phi(247.5°)	Phi(255°)	Phi(262.5°)	Phi(270°)	Phi(277.5°)	Phi(285°)	Phi(292.5°)	Phi(300°)	Phi(307.5°)	Phi(315°)	Phi(322.5°)	Phi(330°)	Phi(337.5°)	Phi(345°)	Phi(352.5°)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
Theta (15°)	Phi(0°)	-9.15/-9.77	-9.87/-10.18	-9.82/-9.18	-9.05/-9.26	-9.40/-9.35	-8.90/-8.36	-7.89/-7.53	-7.10/-6.75	-6.52/-6.27	-6.16/-6.09	-5.74/-5.32	-4.96/-4.77	-4.94/-5.39	-5.85/-6.09	-6.31/-6.74	-7.18/-7.79	-8.32/-8.27	-8.39/-8.35	-8.59/-8.55	-8.75/-8.55	-8.52/-8.59	-8.42/-8.23	-8.22/-7.94	-8.22/-8.57	Theta (22.5°)	Phi(7.5°)	-5.75/-5.84	-6.39/-7.10	-7.48/-7.88	-8.42/-9.50	-10.75/-11.58	-10.97/-10.12	-8.74/-7.27	-6.16/-6.52	-5.13/-4.86	-4.91/-4.99	-4.64/-4.50	-4.24/-4.61	-4.63/-4.21	-3.80/-3.84	-4.33/-2.25	-6.66/-8.20	-9.17/-10.48	-11.14/-12.47	-13.57/-13.67	-13.07/-12.21	-10.77/-9.36	-7.39/-6.50	-5.82/-5.60	Theta (30°)	Phi(15°)	-3.42/-3.00	-2.95/-3.10	-3.88/-4.57	-5.98/-3.89	-9.98/-12.22	-11.46/-9.81	-7.99/-6.85	-6.26/-5.94	-5.43/-4.61	-4.16/-4.29	-4.63/-4.61	-4.76/-5.27	-5.07/-4.38	-3.65/-3.22	-2.81/-3.01	-3.87/-4.97	-6.09/-7.62	-9.00/-9.18	-7.53/-6.97	-7.26/-8.61	-9.08/-8.02	-7.64/-6.57	-6.10/-4.41	-3.92/-3.73	Theta (37.5°)	Phi(22.5°)	-3.16/-3.20	-3.38/-3.18	-3.43/-3.74	-4.59/-5.80	-6.68/-8.37	-9.77/-10.02	-8.66/-7.43	-6.24/-5.58	-4.84/-3.91	-3.32/-3.48	-3.68/-3.32	-4.37/-4.47	-4.01/-3.56	-3.41/-3.10	-2.64/-2.49	-3.22/-3.42	-4.08/-3.99	-6.81/-7.48	-7.37/-6.67	-5.72/-5.35	-6.26/-7.89	-8.23/-6.99	-5.66/-4.56	-3.61/-3.09	Theta (45°)	Phi(30°)	-3.43/-3.81	-3.97/-3.28	-3.28/-3.24	-3.47/-4.27	-4.88/-5.50	-8.18/-4.39	-3.88/-3.46	-3.16/-2.58	-2.10/-1.97	-2.18/-2.95	-3.54/-3.32	-3.62/-3.28	-2.82/-2.58	-2.30/-1.63	-1.21/-1.73	-2.86/-3.30	-5.37/-7.05	-6.64/-5.43	-4.35/-3.58	-3.33/-4.80	-7.12/-9.01	-12.01/-12.16	-8.95/-6.05	-4.91/-3.66	Theta (52.5°)	Phi(37.5°)	-3.44/-2.67	-2.70/-2.04	-1.78/-1.99	-2.31/-2.86	-3.23/-3.76	-3.34/-2.47	-1.69/-1.42	-1.50/-1.21	-1.11/-1.53	-2.04/-2.35	-2.37/-2.19	-2.12/-2.08	-2.53/-2.29	-1.70/-1.70	-1.17/-1.60	-2.23/-3.17	-4.92/-5.69	-4.87/-3.61	-6.48/-2.94	-4.13/-3.51	-6.48/-1.95	-9.69/-9.99	-9.33/-8.35	-6.46/-4.55	Theta (60°)	Phi(45°)	-3.02/-2.79	-2.42/-1.86	-1.21/-0.48	0.04/-0.21	-0.98/-2.15	-2.78/-2.49	-1.71/-0.79	-0.26/-0.10	-0.42/-0.84	-1.23/-1.85	-2.27/-2.95	-3.73/-3.85	-3.53/-2.70	-1.33/-0.68	-0.08/-0.08	-0.67/-1.80	-3.70/-4.19	-4.18/-3.86	-3.50/-3.53	-3.27/-2.88	-3.63/-5.71	-8.58/-10.91	-10.08/-5.74	-4.28/-3.32	Theta (67.5°)	Phi(52.5°)	-0.43/-0.71	-0.60/-0.85	-0.98/-1.03	-0.88/-0.91	-0.78/-0.84	-0.89/-1.11	-0.65/-0.41	1.23/-1.24	0.93/-0.40	-0.33/-1.51	-2.71/-3.12	-3.12/-4.23	-2.41/-1.53	-1.31/-1.16	-0.73/-1.01	-1.82/-2.26	-3.23/-3.53	-4.20/-3.56	-2.85/-1.95	-1.74/-2.83	-6.91/-12.89	-11.77/-3.30	-3.65/-2.11	-1.79/-1.11	Theta (75°)	Phi(60°)	-0.09/-0.29	0.18/-0.19	-0.17/-0.52	-0.94/-1.84	-1.76/-1.17	-0.43/-0.11	0.54/-0.68	1.04/-1.17	1.17/-0.50	-0.35/-2.01	-2.60/-2.79	-2.56/-2.21	-1.51/-0.86	-0.40/-2.26	-0.27/-1.21	-2.08/-4.99	-6.21/-6.85	-6.76/-6.64	-5.67/-4.26	-4.42/-7.91	-10.13/-6.88	-3.91/-2.26	-1.85/-0.58	-0.63/-0.73	Theta (82.5°)	Phi(67.5°)	-2.13/-2.67	-2.18/-1.76	-0.48/-0.19	-0.07/-0.97	-1.46/-1.69	-0.48/-0.73	1.49/-1.85	1.13/-2.06	0.19/-0.26	-0.97/-2.70	-1.72/-1.04	-0.15/-0.31	-0.03/-0.44	0.70/-1.16	-2.63/-3.53	-4.17/-6.44	-8.07/-9.03	-7.81/-5.65	-4.58/-3.20	-4.72/-8.73	-8.21/-6.46	-4.56/-3.03	-2.34/-1.51	-1.48/-1.88	Theta (90°)	Phi(75°)	-0.87/-1.00	-1.17/-1.51	-1.29/-1.56	-1.57/-1.98	-1.41/-1.01	-1.17/-1.74	1.04/-0.94	0.52/-0.59	-1.55/-1.88	-1.34/-1.20	0.41/-1.24	1.67/-1.80	1.41/-0.74	0.10/-1.03	-0.68/-1.62	-3.09/-5.19	-6.42/-6.51	-5.93/-6.42	-4.67/-5.03	-4.58/-7.54	-5.87/-3.57	-3.28/-3.02	-2.90/-1.90	-1.20/-1.85	Theta (97.5°)	Phi(82.5°)	0.02/-0.03	-0.19/-0.58	-1.23/-1.93	-1.66/-2.12	-2.57/-2.08	-1.09/-0.52	-0.66/-0.58	-1.68/-3.17	-3.61/-2.86	-1.70/-2.73	0.21/-0.22	2.54/-2.11	1.87/-0.93	0.82/-0.88	-0.66/-0.64	-2.28/-2.65	-2.40/-2.89	-3.25/-2.99	-3.45/-3.20	-5.37/-9.30	-5.61/-3.09	-3.19/-4.46	-2.65/-1.87	-0.80/-0.75	Theta (105°)	Phi(90°)	-5.41/-5.22	-3.40/-2.28	-0.80/-0.22	-0.10/-0.52	-1.39/-1.87	-1.59/-0.81	-2.00/-3.77	-5.57/-6.37	-4.62/-3.14	-1.47/-1.57	0.46/-0.92	2.14/-1.34	1.52/-0.25	-0.14/-0.27	-2.00/-2.04	-2.33/-2.16	-2.97/-3.06	-6.52/-7.88	-3.87/-3.60	-3.58/-6.25	-4.96/-5.30	-4.51/-5.09	-5.28/-4.27	-3.95/-7.03	Theta (112.5°)	Phi(97.5°)	-5.40/-5.54	-6.89/-5.45	-0.19/-0.57	-0.57/-1.29	-2.21/-2.26	-2.27/-2.52	-3.61/-4.62	-4.81/-2.76	-1.56/-0.08	1.16/-1.69	2.08/-1.09	1.15/-1.24	-0.54/-0.16	-1.39/-1.03	-0.42/-0.95	-2.08/-5.05	-1.14/-11.31	-6.01/-3.51	-2.95/-6.59	-4.92/-6.59	-4.52/-6.66	-6.05/-4.69	-4.13/-6.44	Theta (120°)	Phi(105°)	-5.87/-4.97	-6.66/-4.38	-5.63/-3.07	-1.69/-0.36	-0.67/-1.07	-2.08/-3.69	-4.73/-3.95	-2.36/-1.12	-0.36/-0.41	-0.42/-0.30	-0.24/-0.61	0.50/-0.80	1.06/-3.55	-2.50/-1.99	-2.85/-2.94	-2.35/-3.69	-4.31/-4.21	-4.17/-9.21	-4.31/-4.92	-5.03/-10.18	-12.11/-7.43	-5.65/-6.82	-5.66/-4.89	-3.77/-7.35	Theta (127.5°)	Phi(112.5°)	-3.16/-2.11	-2.80/-2.48	-2.33/-1.82	-1.75/-0.98	-0.91/-1.16	-1.28/-1.23	-1.11/-1.20	-1.20/-1.82	-1.67/-2.26	-2.37/-1.94	-2.39/-1.93	-3.94/-3.62	-4.50/-3.79	-2.88/-1.31	-1.87/-3.04	-3.49/-2.80	-5.72/-12.55	-8.11/-10.05	-5.99/-5.35	-8.33/-8.75	-5.15/-5.74	-3.99/-4.01	-2.56/-1.87	Theta (135°)	Phi(120°)	-2.28/-1.04	-0.60/-1.90	-2.88/-3.98	-4.40/-3.90	-2.90/-2.60	-2.00/-1.70	-1.82/-1.79	-1.07/-1.32	-0.05/-0.14	-0.47/-1.13	-1.68/-4.38	-3.20/-4.21	-4.23/-3.95	-4.05/-2.76	-2.95/-5.95	-8.41/-14.58	-7.00/-6.16	-6.44/-3.31	-9.88/-11.18	-13.27/-3.32	-6.34/-6.69	-6.78/-6.07	-6.42/-3.61	-2.76/-2.93	Theta (142.5°)	Phi(135°)	-5.59/-5.44	-4.07/-3.95	-3.63/-3.58	-4.42/-4.74	-4.79/-3.84	-2.93/-2.08	-1.03/-0.20	0.17/-0.33	0.39/-0.57	-1.76/-2.03	-3.49/-3.45	-1.66/-6.65	-3.41/-4.67	-7.05/-6.70	-7.56/-5.15	-5.30/-10.08	-7.37/-8.87	-7.25/-6.15	-5.30/-10.08	-9.05/-8.38	-9.20/-6.40	-4.46/-5.41	-4.83/-5.75	Theta (150°)	Phi(142.5°)	-6.54/-8.52	-10.24/-10.22	-9.78/-9.82	-10.40/-11.58	-10.72/-9.83	-8.57/-7.73	-6.42/-4.04	-2.10/-1.55	-1.74/-2.04	-2.86/-3.81	-4.29/-6.21	-9.08/-8.56	-10.31/-10.51	-5.79/-4.21	-5.40/-10.10	-11.06/-9.74	-12.92/-10.06	-9.09/-11.58	-12.94/-15.02	-11.89/-9.11	-12.29/-11.92	-11.19/-13.36	-9.94/-8.52	-0.88/-6.57	Theta (157.5°)	Phi(150°)	-6.08/-8.54	-7.30/-7.77	-7.13/-3.75	-8.93/-10.54	-10.29/-10.02	-10.16/-8.40	-6.31/-5.13	-4.30/-3.49	-3.09/-3.19	-3.44/-3.45	-4.18/-5.99	-6.46/-6.94	-4.55/-5.03	-5.06/-4.97	-5.69/-6.24	-7.10/-8.88	-9.13/-7.61	-7.03/-6.63	-8.07/-10.38	-10.63/-12.38	-14.61/-13.21	-10.34/-7.89	-7.53/-9.00	-8.16/-6.65	Theta (165°)	Phi(157.5°)	-9.33/-8.64	-7.78/-8.35	-9.25/-10.57	-12.70/-15.17	-15.40/-14.10	-12.64/-11.86	-10.48/-9.69	-9.25/-8.96	-8.43/-8.02	-7.50/-7.10	-6.72/-6.15	-5.32/-4.59	-4.45/-4.79	-5.90/-7.70	-8.98/-9.89	-10.12/-10.71	-10.60/-11.03	-10.66/-10.43	-10.55/-10.03	-10.44/-10.78	-10.08/-9.16	-8.11/-7.39	-7.07/-7.77	-8.64/-9.38	Theta (172.5°)	Phi(165°)	-9.51/-10.38	-12.50/-14.11	-14.65/-15.48	-13.81/-13.63	-13.18/-14.50	-14.78/-14.78	-15.87/-14.59	-13.66/-13.41	-12.63/-11.77	-10.81/-9.75	-8.72/-8.32	-8.51/-9.31	-10.12/-10.38	-10.42/-11.45	-11.60/-11.20	-10.32/-9.37	-8.71/-8.94	-9.57/-10.01	-10.09/-10.49	-11.66/-12.31	-12.31/-11.57	-10.43/-10.08	-10.56/-11.36	-11.45/-10.07	Theta (180°)	Phi(172.5°)	-14.08/-14.91	-15.13/-15.45	-15.53/-15.48	-15.45/-15.51	-15.35/-15.75	-15.48/-15.06	-15.27/-14.70	-14.31/-14.14	-14.34/-14.24	-14.66/-14.66	-14.56/-14.63	-15.09/-15.24	-15.67/-15.27	-14.80/-15.24	-15.36/-15.47	-14.48/-13.73	-12.57/-11.20	-10.11/-9.85	-10.12/-10.70	-11.08/-11.52	-12.55/-14.25	-14.81/-14.15	-14.55/-13.47	-13.73/-13.95	Theta (187.5°)	Phi(180°)	5.20/5.00	5.30/5.00	5.40/5.00	5.50/5.00	5.60/5.00	5.70/5.00	5.80/5.00	5.90/5.00	6.00/5.00	6.10/5.00	6.20/5.00	6.30/5.00	6.40/5.00	6.50/5.00	6.60/5.00	6.70/5.00	6.80/5.00	6.90/5.00	7.00/5.00	7.10/5.00	7.20/5.00	7.30/5.00	7.40/5.00	7.50/5.00	7.60/5.00	7.70/5.00	7.80/5.00	7.90/5.00	8.00/5.00	8.10/5.00	8.20/5.00	8.30/5.00	8.40/5.00	8.50/5.00	8.60/5.00	8.70/5.00	8.80/5.00	8.90/5.00	9.00/5.00	9.10/5.00	9.20/5.00	9.30/5.00	9.40/5.00	9.50/5.00	9.60/5.00	9.70/5.00	9.80/5.00	9.90/5.00	10.00/5.00	10.10/5.00	10.20/5.00	10.30/5.00	10.40/5.00	10.50/5.00	10.60/5.00	10.70/5.00	10.80/5.00	10.90/5.00	11.00/5.00	11.10/5.00	11.20/5.00	11.30/5.00	11.40/5.00	11.50/5.00	11.60/5.00	11.70/5.00	11.80/5.00	11.90/5.00	12.00/5.00	12.10/5.00	12.20/5.00	12.30/5.00	12.40/5.00	12.50/5.00	12.60/5.00	12.70/5.00	12.80/5.00	12.90/5.00	13.00/5.00	13.10/5.00	13.20/5.00	13.30/5.00	13.40/5.00	13.50/5.00	13.60/5.00	13.70/5.00	13.80/5.00	13.90/5.00	14.00/5.00	14.10/5.00	14.20/5.00	14.30/5.00	14.40/5.00	14.50/5.00	14.60/5.00	14.70/5.00	14.80/5.00	14.90/5.00	15.00/5.00	15.10/5.00	15.20/5.00	15.30/5.00	15.40/5.00	15.50/5.00	15.60/5.00	15.70/5.00	15.80/5.00	15.90/5.00	16.00/5.00	16.10/5.00	16.20/5.00	16.30/5.00	16.40/5.00	16.50/5.00	16.60/5.00	16.70/5.00	16.80/5.00	16.90/5.00	17.00/5.00	17.10/5.00	17.20/5.00	17.30/5.00	17.40/5.00	17.50/5.00	17.60/5.00	17.70/5.00	17.80/5.00	17.90/5.00	18.00/5.00	18.10/5.00	18.20/5.00	18.30/5.00	18.40/5.00	18.50/5.00	18.60/5.00	18.70/5.00	18.80/5.00	18.90/5.00	19.00/5.00	19.10/5.00	19.20/5.00	19.30/5.00	19.40/5.00	19.50/5.00	19.60/5.00	19.70/5.00	19.80/5.00	19.90/5.00	20.00/5.00	20.10/5.00	20.20/5.00	20.30/5.00	20.40/5.00	20.50/5.00	20.60/5.00	20.70/5.00	20.80/5.00	20.90/5.00	21.00/5.00	21.10/5.00	21.20/5.00	21.30/5.00	21.40/5.00	21.50/5.00	21.60/5.00	21.70/5



Antenna Pattern <2.4GHz and 5GHz U-NII 1~U-NII 4>

Appendix C

θ (75°)	1.23070	-0.94/-2.14	-1.32/-0.85	-1.05/-0.15	0.32/0.06	-0.40/-2.20	-5.23/-8.02	-10.41/-13.12	-12.42/-11.20	-8.12/-6.29	-5.46/-3.61	-1.57/-1.81	-2.78/-3.55	-3.99/-5.92	-8.39/-6.63	-3.74/-3.67	-5.27/-7.00	-8.74/-5.86	-4.39/-3.56	-3.47/-3.92	-3.28/-2.55	-0.41/0.91	2.17/3.07	2.82/3.93
Gain	Φ(0°)Φ(75°)	Φ(15°)Φ(22.5°)	Φ(30°)Φ(37.5°)	Φ(45°)Φ(52.5°)	Φ(60°)Φ(67.5°)	Φ(75°)Φ(82.5°)	Φ(90°)Φ(97.5°)	Φ(105°)Φ(112.5°)	Φ(120°)Φ(127.5°)	Φ(135°)Φ(142.5°)	Φ(150°)Φ(157.5°)	Φ(165°)Φ(172.5°)	Φ(180°)Φ(187.5°)	Φ(195°)Φ(202.5°)	Φ(210°)Φ(217.5°)	Φ(225°)Φ(232.5°)	Φ(240°)Φ(247.5°)	Φ(255°)Φ(262.5°)	Φ(270°)Φ(277.5°)	Φ(285°)Φ(292.5°)	Φ(300°)Φ(307.5°)	Φ(315°)Φ(322.5°)	Φ(330°)Φ(337.5°)	Φ(345°)Φ(352.5°)
Gain	0.18/0.30	0.44/0.56	0.69/0.75	0.76/0.81	0.92/1.04	1.17/1.25	1.27/1.31	1.25/1.09	0.85/0.63	0.43/0.30	0.26/0.24	0.15/0.13	0.08/0.05	0.06/0.05	0.00/0.00	0.25/0.46	0.64/0.78	0.88/0.83	0.71/0.58	0.49/0.39	0.29/0.21	0.17/0.13	0.12/0.10	0.12/0.16
Gain	0.01/0.08	-0.14/-0.16	-0.17/-0.23	-0.28/-0.29	-0.24/-0.17	-0.07/0.01	0.04/0.03	-0.08/0.26	-0.48/-0.75	-0.64/-0.51	-0.33/-0.18	-0.10/0.11	-0.08/0.11	-0.08/0.11	-0.08/0.11	-0.08/0.11	-0.08/0.11	-0.08/0.11	-0.08/0.11	-0.08/0.11	-0.08/0.11	-0.08/0.11	-0.08/0.11	-0.08/0.11
Gain	0.58/0.79	-0.92/-0.95	-1.01/-1.10	-1.19/-1.23	-1.19/-1.22	-1.27/-1.23	-1.19/-1.19	-1.30/-1.54	-1.71/-1.91	-2.03/-2.01	-1.86/-1.63	-1.32/-0.97	-0.71/0.46	-0.18/0.13	0.48/0.85	1.24/1.57	1.82/1.75	2.42/2.29	2.62/2.47	2.42/2.29	2.06/1.77	1.50/1.30	0.99/0.25	0.09/0.25
Gain	-0.92/-1.02	-0.96/-0.84	-0.77/-0.77	-0.80/-0.87	-0.97/-1.18	-1.46/-1.56	-1.58/-1.55	-1.65/-1.49	-1.64/-2.28	-2.61/-2.69	-2.82/-2.16	-1.83/-1.52	-1.17/-0.82	-0.39/0.10	1.56/2.20	2.39/2.66	2.89/2.94	3.24/2.92	3.42/2.86	3.24/2.92	2.81/2.56	2.23/1.89	1.59/1.24	0.90/0.25
Gain	-0.99/-0.78	-0.50/-0.24	-0.28/-0.20	0.13/0.12	0.30/0.26	0.48/0.43	0.61/0.51	0.67/0.49	0.43/0.32	0.34/0.32	0.26/0.26	0.19/0.19	0.12/0.12	0.08/0.08	0.04/0.04	0.04/0.04	0.04/0.04	0.04/0.04	0.04/0.04	0.04/0.04	0.04/0.04	0.04/0.04	0.04/0.04	0.04/0.04
Gain	-1.01/0.90	-0.77/0.74	-0.71/0.56	-0.34/0.11	0.13/0.12	-0.12/0.41	-0.77/1.14	-1.52/1.86	-2.33/2.91	-3.67/4.44	-4.80/4.43	-3.66/2.95	-2.48/1.96	-1.33/0.56	0.22/0.94	1.59/2.05	2.39/2.60	2.66/2.53	2.20/1.77	1.33/0.91	0.48/0.05	-0.63/-1.11	-1.31/-1.26	-1.16/-1.10
Gain	-2.20/-2.49	-2.72/-2.84	-2.72/-2.29	-1.61/-0.79	-0.05/0.40	0.59/0.40	0.05/0.50	-1.20/-1.91	-2.80/-3.72	-4.63/4.50	-5.70/-5.25	-4.23/-3.22	-2.47/-1.96	-1.48/0.94	0.74/1.09	1.56/2.00	2.39/2.66	2.66/2.53	2.20/1.77	1.33/0.91	0.48/0.05	-0.63/-1.11	-1.31/-1.26	-1.16/-1.10
Gain	-2.31/-3.02	-2.58/-2.00	-0.39/0.56	-1.48/0.10	-0.39/0.56	-1.48/0.10	-0.39/0.56	-1.48/0.10	-0.39/0.56	-1.48/0.10	-0.39/0.56	-1.48/0.10	-0.39/0.56	-1.48/0.10	-0.39/0.56	-1.48/0.10	-0.39/0.56	-1.48/0.10	-0.39/0.56	-1.48/0.10	-0.39/0.56	-1.48/0.10	-0.39/0.56	-1.48/0.10
Gain	-2.88/-2.52	-2.17/-1.99	-2.03/-1.26	-2.17/-2.09	-2.14/-2.56	-3.33/-4.42	-5.23/-6.61	-6.97/9.99	-8.67/11.71	-9.59/12.28	-10.06/11.71	-9.59/12.28	-8.67/11.71	-6.97/9.99	-5.23/6.61	-3.33/4.42	-2.03/1.26	-2.17/2.09	-2.14/2.56	-3.33/4.42	-5.23/6.61	-6.97/9.99	-8.67/11.71	-9.59/12.28
Gain	-4.50/-4.82	-5.51/-6.49	-7.59/-8.70	-6.74/-5.10	-3.48/-2.24	-1.63/-1.66	-2.32/-3.37	-4.80/-6.17	-7.27/8.53	-9.54/11.62	-11.86/11.62	-12.74/8.53	-11.86/11.62	-9.54/11.62	-7.27/8.53	-4.80/6.17	-2.32/3.37	-1.63/1.66	-2.32/3.37	-4.80/6.17	-7.27/8.53	-9.54/11.62	-11.86/11.62	-12.74/8.53
Gain	-7.72/-8.53	-9.50/-10.79	-10.95/-10.09	-8.57/-6.43	-4.65/-3.23	-3.33/-3.69	-4.42/4.54	-6.37/7.13	-7.59/7.98	-8.62/9.44	-10.46/10.77	-12.55/10.77	-14.54/9.44	-16.44/6.17	-17.82/6.17	-18.50/6.17	-18.50/6.17	-18.50/6.17	-18.50/6.17	-18.50/6.17	-18.50/6.17	-18.50/6.17	-18.50/6.17	-18.50/6.17
Gain	-7.92/-8.96	-10.06/-10.39	-9.70/-8.27	-6.72/-4.89	-3.54/-3.07	-3.49/4.56	-6.09/7.96	-10.55/12.25	-10.87/9.45	-9.65/-11.40	-13.91/12.70	-10.80/7.64	-5.53/-4.02	-2.90/1.93	-0.90/0.16	1.09/1.91	2.53/2.82	2.97/2.84	2.47/1.92	1.25/0.35	-0.76/-1.78	-2.35/-2.77	-3.47/4.58	-5.93/7.15
Gain	-7.20/-7.01	-7.04/-7.42	-7.81/-7.67	-7.06/-6.53	-4.45/-3.38	-2.92/-2.94	-3.28/-4.54	-4.74/-12.64	-11.84/-7.76	-6.50/-7.29	-10.06/-14.33	-13.37/8.82	-5.81/-3.87	-2.35/-0.97	0.22/1.20	2.07/2.80	3.43/3.64	3.70/3.53	3.22/2.89	2.48/1.79	0.91/0.08	-1.21/-2.49	-4.20/5.96	-6.97/7.14
Gain	-1.97/-2.49	-3.49/-5.11	-7.20/9.35	-11.39/-11.78	-8.75/-9.90	-4.45/-3.79	-3.73/3.56	-6.61/8.86	-13.40/8.86	-8.81/11.43	-9.76/6.96	-5.81/11.43	-2.80/11.43	-0.27/10.48	-0.27/10.48	-0.27/10.48	-0.27/10.48	-0.27/10.48	-0.27/10.48	-0.27/10.48	-0.27/10.48	-0.27/10.48	-0.27/10.48	-0.27/10.48
Gain	-1.06/-1.66	-2.79/4.48	-6.46/-8.59	-10.47/-12.30	-11.27/-8.77	-7.47/-7.11	-7.08/7.31	-9.06/-12.18	-10.34/-6.35	-4.88/-5.63	-7.92/-11.11	-12.02/9.45	-6.93/-5.10	-3.44/-1.67	-0.11/1.24	2.43/3.34	3.97/4.32	4.29/3.82	3.05/2.29	1.51/0.70	0.05/0.32	-0.41/-0.37	-0.43/-0.56	-0.71/0.91
Gain	-0.82/-1.13	-2.04/-3.51	-5.11/-6.28	-7.86/-10.25	-12.79/-11.82	-9.11/-6.75	-5.06/-4.42	-5.28/-7.78	-8.57/-7.78	-4.38/-5.13	-6.89/-7.97	-8.23/-6.22	-6.26/-4.94	-3.61/-2.11	-0.54/0.74	2.03/3.56	4.25/4.51	4.20/3.29	2.08/1.13	0.74/0.76	0.94/1.10	1.22/1.12	0.68/0.05	-0.73/-1.01



Antenna Pattern <2.4GHz and 5GHz U-NII 1~U-NII 4>

Appendix C

Theta (°)	2.41-1.86	1.38-0.95	-0.63-0.25	0.050-26	0.661-0.2	1.201-41	1.661-87	1.931-89	1.751-63	1.421-14	0.840-53	0.250-10	-0.11-0.18	-0.26-0.35	-0.39-0.35	-0.32-0.21	-0.21-0.28	-0.42-0.73	-1.00-1.25	-1.63-2.04	-2.29-2.43	-2.53-2.69	-2.66-2.56	-2.63-2.33
Theta (20°)	-3.88-3.10	-2.73-2.46	-2.11-1.19	-0.91-0.25	0.470-84	1.281-81	2.082-23	2.202-08	1.831-48	1.090-62	0.088-58	-1.03-1.31	-1.59-1.77	-1.86-1.80	-1.53-1.28	-1.02-0.76	-0.64-0.70	-0.90-1.29	-1.67-1.88	-2.11-2.52	-2.95-3.12	-3.34-3.88	-4.55-4.72	-4.89-4.43
Theta (35°)	-5.47-4.56	-4.10-3.70	-3.04-1.96	-0.80-0.16	0.871-16	1.681-92	1.921-95	2.052-07	1.851-57	1.290-96	0.510-22	-0.69-0.33	-1.05-1.86	-2.25-2.26	-2.46-2.57	-1.52-1.62	-1.27-1.17	-1.24-1.77	-2.72-3.37	-3.28-2.93	-2.94-3.44	-3.86-4.27	-4.70-5.03	-5.31-5.96
Theta (50°)	-8.20-5.32	-4.82-4.20	-3.11-1.81	-0.80-0.04	0.611-08	1.581-63	1.701-75	1.661-61	1.551-40	1.291-05	0.590-22	0.05-0.69	-1.56-2.13	-2.72-3.35	-3.73-3.36	-2.83-2.96	-3.38-3.41	-5.37-6.57	-5.06-5.13	-5.79-6.22	-5.78-6.78	-6.15-6.54	-7.20-7.79	-7.38-6.76
Theta (65°)	-4.80-7.35	-6.07-4.57	-2.69-0.99	0.250-95	1.511-81	2.192-13	2.031-92	1.721-59	1.581-53	1.471-35	0.820-17	-0.29-0.83	-1.18-1.41	-1.73-2.48	-3.64-4.42	-4.68-4.52	-4.20-3.96	-3.70-4.06	-4.77-6.10	-4.66-6.31	-7.20-7.96	-8.96-9.83	-11.34-11.72	-10.91-9.74
Theta (80°)	-1.19-6.30	-5.14-3.44	-0.50-0.57	0.571-36	1.962-25	2.382-44	2.422-24	2.051-83	1.691-39	0.790-27	-0.51-1.17	-1.50-1.99	-1.31-2.49	-4.85-6.05	-6.81-6.89	-7.09-7.42	-8.32-8.13	-7.60-7.19	-6.94-7.68	-9.41-10.05	-11.10-12.37	-12.18-11.85	-10.99-8.41	
Theta (95°)	-12.99-10.12	-8.42-6.26	-4.09-2.10	-0.490-68	1.531-98	2.282-50	2.672-78	2.712-58	2.351-95	1.180-24	-0.94-2.05	-2.65-3.22	-4.02-4.74	-5.21-5.01	-4.87-5.69	-6.07-6.49	-6.96-6.32	-7.52-7.28	-6.81-7.49	-9.34-10.59	-11.87-15.18	-13.91-13.81	-14.49-15.90	-14.94-14.46
Theta (110°)	-11.96-10.31	-8.02-6.53	-4.88-3.24	-1.48-0.25	0.641-28	1.551-50	1.421-65	2.032-42	2.832-83	2.231-07	-0.38-1.96	-3.40-5.14	-4.78-8.39	-8.31-8.01	-7.66-7.41	-7.58-8.57	-9.54-12.21	-13.90-10.94	-11.09-14.64	-11.66-15.48	-11.65-13.47	-15.30-13.79	-15.31-14.99	-15.24-13.74
Theta (125°)	-10.12-9.29	-7.72-6.11	-4.01-2.33	-1.33-0.73	-0.090-16	1.010-26	0.350-06	-0.140-10	0.731-21	1.320-62	-0.09-2.48	-4.61-6.29	-7.80-9.44	-10.75-12.97	-11.31-11.22	-11.20-9.99	-10.95-12.64	-11.05-14.47	-13.63-13.38	-10.44-12.69	-10.14-12.95	-15.74-15.33	-15.00-14.62	-14.28-10.98
Theta (140°)	-11.74-9.60	-7.90-6.43	-4.98-3.59	-1.85-0.18	0.811-16	1.050-26	-0.88-1.51	-1.48-1.01	-0.55-0.36	-0.88-2.46	-4.56-6.55	-8.52-10.27	-12.46-13.95	-16.03-15.15	-15.61-15.45	-12.90-11.86	-12.93-15.33	-14.98-12.22	-14.84-12.87	-11.74-11.16	-14.99-15.97	-14.86-15.03	-15.98-15.13	-15.73-13.31
Theta (155°)	-12.78-11.43	-10.18-7.74	-5.31-3.39	-2.12-1.06	0.201-18	1.521-47	0.970-22	-0.14-0.11	-0.25-0.89	-0.40-1.74	-4.30-6.16	-8.35-10.47	-12.38-13.58	-13.02-14.52	-14.92-15.32	-14.84-13.84	-14.10-13.47	-10.22-14.93	-15.88-15.60	-14.67-15.48	-15.89-13.20	-14.42-15.84	-15.60-15.77	-12.19-11.22
Theta (170°)	-14.41-15.40	-13.41-9.80	-7.86-6.63	-4.89-2.64	-0.760-67	1.691-96	1.589-87	0.480-45	0.42-0.25	-1.85-3.39	-5.32-7.68	-11.69-13.80	-15.31-15.89	-15.30-15.27	-14.82-14.85	-15.23-16.18	-14.12-14.74	-11.43-13.52	-15.97-15.35	-14.76-15.57	-15.52-14.20	-14.06-14.78	-14.99-15.09	-15.26-15.40
Theta (185°)	-13.54-14.12	-12.08-9.07	-6.22-4.32	-3.34-2.72	-2.15-1.10	-0.260-62	1.110-84	0.17-0.37	-1.01-1.20	-1.53-2.95	-5.20-7.87	-10.33-12.33	-13.27-14.38	-13.58-14.19	-15.44-14.87	-15.23-15.09	-15.70-12.59	-13.44-14.91	-15.14-13.99	-15.14-14.42	-13.69-12.59	-13.68-14.96	-14.82-13.58	-13.26-13.12
Theta (200°)	-15.16-12.96	-8.82-7.23	-6.05-5.22	-4.38-2.87	-1.76-1.15	-0.83-0.74	-0.85-0.35	0.091-16	-0.67-1.48	-2.90-4.28	-5.64-8.16	-9.97-12.88	-14.80-14.46	-15.62-14.90	-14.98-15.54	-14.43-12.48	-11.63-11.51	-15.44-15.58	-15.87-15.69	-14.40-12.87	-13.29-12.78	-15.19-12.78	-12.53-12.48	-13.24-15.28
Theta (215°)	-12.97-11.22	-9.35-8.78	-7.36-5.57	-5.70-3.50	-4.63-4.36	-2.68-2.01	-1.07-0.60	-0.47-0.58	-1.28-2.35	-2.97-4.09	-4.70-5.60	-6.39-6.50	-7.72-8.16	-9.53-11.17	-12.47-12.53	-13.88-14.80	-16.37-11.58	-13.60-15.78	-15.01-15.51	-15.40-13.37	-15.25-15.59	-14.64-15.78	-15.86-15.99	-14.88-15.15
Theta (230°)	-10.73-10.83	-8.44-8.11	-6.62-6.00	-5.26-4.91	-5.06-4.65	-3.79-2.82	-1.92-0.91	-0.250-13	0.360-09	-0.97-2.71	-4.55-6.20	-7.17-7.85	-9.90-10.69	-10.94-12.96	-13.67-14.09	-12.52-14.87	-14.47-15.59	-11.62-15.12	-15.43-15.45	-15.21-15.47	-14.29-14.17	-14.84-14.44	-13.45-12.83	-12.36-10.78
Theta (245°)	-9.74-9.06	-8.52-8.33	-7.54-6.12	-4.49-2.57	-1.33-0.57	-0.080-18	0.340-66	1.221-64	1.550-71	0.871-76	-0.87-2.76	-4.86-6.59	-8.69-10.36	-10.84-12.03	-11.09-9.90	-11.17-11.10	-10.66-8.41	-13.35-14.81	-15.61-16.22	-14.41-15.75	-15.06-13.76	-14.41-15.75	-15.21-14.30	-11.70-7.88
Theta (260°)	-15.03-14.31	-11.81-9.22	-6.54-4.98	-3.93-2.68	-1.30-0.22	0.500-92	1.311-06	0.900-68	0.15-0.97	-2.33-3.58	-4.94-6.71	-8.50-10.40	-10.83-12.64	-11.99-13.34	-14.34-12.64	-15.53-9.92	-9.53-10.69	-13.00-15.84	-15.38-15.50	-14.60-13.77	-14.66-12.48	-15.13-12.30	-10.96-12.92	-13.50-15.56
Theta (275°)	-4.98-3.78	-3.99-4.67	-4.83-5.03	-5.09-4.44	-3.23-1.95	-0.94-0.21	0.250-42	0.11-0.76	-1.97-3.01	-3.32-2.91	-2.34-2.29	-2.53-2.51	-2.91-4.04	-4.89-5.54	-7.09-9.02	-10.58-12.72	-14.14-13.10	-13.92-14.68	-14.73-13.76	-11.56-11.46	-12.00-14.79	-13.93-9.82	-7.66-6.29	-5.47-6.54
Theta (290°)	-7.92-7.06	-6.66-6.73	-6.32-5.97	-5.75-5.47	-4.91-3.89	-2.76-1.83	-1.44-1.66	-2.43-3.57	-4.69-5.47	-5.60-5.32	-5.09-4.77	-4.25-3.66	-3.42-3.49	-3.45-3.44	-3.91-5.07	-6.97-9.35	-10.89-10.74	-10.31-10.31	-10.83-11.31	-11.62-11.50	-11.85-13.42	-15.53-11.29	-9.16-8.88	-9.77-9.05
Theta (305°)	-10.91-10.44	-8.66-8.95	-8.26-7.50	-6.57-6.75	-4.97-4.22	-3.59-3.11	-3.08-3.37	-3.86-4.29	-4.77-4.97	-4.92-4.75	-4.52-3.98	-3.66-3.32	-3.28-3.81	-5.07-7.02	-9.89-13.71	-15.60-15.47	-15.78-15.93	-16.03-15.06	-14.98-15.03	-15.47-14.35	-12.27-12.18	-13.97-15.57	-15.20-15.62	-13.99-12.59
Theta (320°)	-13.20-12.33	-11.97-11.91	-12.09-11.49	-10.73-9.86	-9.19-8.68	-8.32-7.93	-8.20-8.77	-9.59-10.46	-11.91-13.48	-14.54-15.45	-15.61-15.17	-14.11-14.15	-15.54-15.75	-15.67-14.32	-12.72-12.71	-12.00-11.84	-12.25-12.96	-13.89-13.98	-13.87-13.44	-14.27-15.24	-14.88-13.30	-13.21-14.84	-14.70-15.25	-14.36-13.72
Theta (335°)	-14.48-14.02	-13.82-14.09	-14.21-15.61	-15.53-15.76	-15.41-15.51	-15.84-14.78	-14.95-14.86	-15.50-15.58	-14.85-15.51	-14.94-14.55	-14.21-13.30	-12.74-12.03	-12.12-12.31	-12.29-12.91	-13.10-12.96	-12.87-13.39	-14.50-15.62	-14.56-14.79	-14.44-14.84	-15.17-15.56	-15.24-15.03	-15.17-15.69	-15.40-15.02	-15.47-14.50
Theta (350°)	5.20-5.00	4.50-4.50	3.50-4.50	2.50-4.50	1.50-4.50	0.50-4.50	-0.50-4.50	-1.50-4.50	-2.50-4.50	-3.50-4.50	-4.50-4.50	-5.50-4.50	-6.50-4.50	-7.50-4.50	-8.50-4.50	-9.50-4.50	-10.50-4.50	-11.50-4.50	-12.50-4.50	-13.50-4.50	-14.50-4.50	-15.50-4.50	-16.50-4.50	-17.50-4.50
Theta (365°)	0.570-4.30	0.350-4.20	0.170-4.10	0.200-4.10	0.080-4.00	-0.15-0.12	-0.18-0.18	-0.140-0.11	0.160-0.25	0.240-0.12	0.020-0.15	-0.210-0.08	0.060-0.07	-0.010-0.02	0.050-0.12	0.090-0.02	-0.030-0.07	-0.000-0.15	0.260-0.28	0.250-0.19	0.200-0.12	0.150-0.21	0.300-0.40	0.560-0.63
Theta (7.5°)	-0.11-0.00	0.130-0.09	-0.03-0.13	-0.09-0.09	-0.18-0.22	-0.120-0.11	0.040-0.07	0.070-0.12	0.320-0.44	0.480-0.51	0.480-0.37	0.370-0.38	0.340-0.28	0.270-0.13	-0.05-0.18	-0.31-0.37	-0.43-0.53	-0.47-0.47	-0.50-0.59	-0.69-0.69	-0.66-0.66	-0.61-0.49	-0.36-0.26	-0.10-0.00
Theta (15°)	-1.50-1.55	-1.49-1.56	-1.47-1.28	-0.92-0.66	-0.46-0.09	0.260-51	0.720-85	0.950-99	0.990-88	0.710-45	0.280-11	0.010-0.05	-0.26-0.39	-0.58-0.64	-0.68-0.74	-0.82-0.97	-1.23-1.37	-1.46-1.59	-1.73-2.12	-2.34-2.35	-2.37-2.36	-2.17-1.97	-1.77-1.62	-1.41-1.50
Theta (22.5°)	-4.35-4.82	-4.65-4.03	-3.12-2.34	-1.56-1.16	-0.570-15	0.571-10	1.582-01	2.332-41	2.281-91	1.400-94	0.610-28	-0.09-0.58	-0.97-1.14	-1.01-0.75	-0.65-0.60	-0.73-1.00	-1.26-1.46	-1.63-1.89	-2.34-3.00	-3.95-4.28	-4.25-4.54	-4.78-4.92	-4.52-4.13	-3.89-4.16
Theta (30°)	-6.98-6.83	-6.79-4.36	-2.84-1.89	-1.20-0.69	0.130-92	1.382-01	2.593-33	3.203-24	3.102-67	1.991-41	1.060-57	0.09-0.26	-0.66-1.31	-2.11-2.77	-3.07-3.01	-2.78-2.12	-1.38-1.24	-2.07-3.27	-3.86-4.07	-4.57-5.96	-7.02-6.97	-7.23-7.37	-7.00-7.74	-7.46-7.10
Theta (37.5°)	-7.91-7.45	-6.63-3.79	-2.94-1.15	-1.07-0.69	1.321-64	1.942-54	2.291-33	3.520-49	3.322-83	2.001-31	0.69-0.15	-0.73-0.99	-1.60-2.67	-3.42-3.79	-4.15-4.09	-3.35-1.94	-1.71-2.27	-2.94-3.74	-4.70-5.80	-6.26-5.40	-5.56-5.56	-6.73-9.44	-8.93-8.25	-8.58-8.25
Theta (45°)	-4.96-4.21	-2.84-2.16	-1.55-0.87	-0.100-74	1.191-36	1.411-69	2.032-38	2.662-79	2.652-37	1.801-31	1.050-53	0.04-0.42	-1.27-1.93	-2.71-3.57	-4.80-5.46	-4.59-3.28	-3.10-3.78	-5.19-6.45	-6.77-5.79	-5.00-6.79	-9.29-10.74	-10.29-10.18	-9.58-7.72	-6.26-5.25
Theta (52.5°)	-6.80-5.30	-3.74-2.74	-0.980-80	2.092-85	2.922-75	2.482-14	1.861-62	1.651-86																



Antenna Pattern <2.4GHz and 5GHz U-NII 1~U-NII 4>

Appendix C

θ (°)	φ (°)	Gain	Φ(0°)Φ(7.5°)	Φ(15°)Φ(22.5°)	Φ(30°)Φ(37.5°)	Φ(45°)Φ(52.5°)	Φ(60°)Φ(67.5°)	Φ(75°)Φ(82.5°)	Φ(90°)Φ(97.5°)	Φ(105°)Φ(112.5°)	Φ(120°)Φ(127.5°)	Φ(135°)Φ(142.5°)	Φ(150°)Φ(157.5°)	Φ(165°)Φ(172.5°)	Φ(180°)Φ(187.5°)	Φ(195°)Φ(202.5°)	Φ(210°)Φ(217.5°)	Φ(225°)Φ(232.5°)	Φ(240°)Φ(247.5°)	Φ(255°)Φ(262.5°)	Φ(270°)Φ(277.5°)	Φ(285°)Φ(292.5°)	Φ(300°)Φ(307.5°)	Φ(315°)Φ(322.5°)	Φ(330°)Φ(337.5°)	Φ(345°)Φ(352.5°)	
θ (67.5°)	-6.75/-7.10	-6.49/-5.92	-6.10/-6.15	-6.14/-6.98	-8.84/-11.82	-10.98/-10.71	-13.94/-13.66	-12.47/-9.34	-10.26/-11.92	-11.36/-7.07	-5.24/-4.55	-3.36/-3.08	-0.64/1.05	1.20/1.70	1.71/0.68	0.31/-1.26	-2.61/-0.92	-0.22/-0.91	-3.81/-4.94	-4.32/-5.77	-6.28/-8.04	-5.15/-6.52	-6.96/-9.75	-10.50/-7.53			
θ (75°)	-7.21/-10.82	-11.24/-11.84	-11.62/-13.31	-12.58/-13.80	-12.73/-11.55	-11.32/-10.90	-11.47/-9.74	-11.32/-12.92	-10.11/-7.80	-6.92/-7.11	-7.99/-7.15	-3.69/-2.23	-1.64/0.20	1.37/1.62	1.20/-0.00	-1.15/-3.47	-3.04/-1.28	-2.09/-3.97	-5.91/-4.92	-1.74/-5.67	-8.87/-6.67	-4.02/-7.50	-7.84/-9.13	-8.31/-6.17			
θ (82.5°)	-4.66/-6.90	-8.83/-10.23	-12.23/-13.24	-13.37/-11.94	-11.76/-12.61	-11.84/-9.94	-9.66/-11.54	-8.64/-10.89	-11.96/-9.33	-7.06/-5.18	-3.48/-2.86	-1.58/-0.59	-0.48/0.40	1.78/2.03	1.56/0.79	-3.10/-2.25	-0.11/-2.55	-4.09/-2.61	0.19/-2.64	-6.66/-6.93	-6.87/-8.72	-10.57/-14.26	-10.57/-14.26	-6.87/-8.72			
θ (90°)	-7.62/-10.54	-9.57/-7.56	-7.73/-3.35	-8.85/-7.69	-10.41/-14.93	-15.25/-13.06	-12.77/-12.17	-11.93/-11.18	-10.44/-10.92	-11.91/-7.29	-3.28/-2.62	-1.47/-0.99	-0.26/0.33	1.32/2.72	2.62/0.17	0.07/1.14	2.13/2.41	2.50/2.27	1.69/0.00	-0.53/-9.97	-5.84/-5.49	-5.16/-4.76	-4.04/-7.83	-8.40/-6.82			
θ (97.5°)	-4.79/-8.28	-8.13/-8.19	-11.20/-12.12	-11.31/-9.94	-10.06/-12.13	-15.26/-12.56	-15.43/-15.46	-15.48/-15.55	-10.10/-7.34	-6.98/-6.06	-3.72/-4.92	-2.45/-0.72	0.24/2.91	3.24/0.54	-0.06/1.88	2.77/3.00	-3.22/0.26	0.98/-3.15	-3.53/-1.51	-6.20/-10.04	-11.13/-12.14	-7.87/-5.01					
θ (105°)	-3.77/-9.23	-11.46/-12.71	-13.44/-9.07	-8.44/-12.57	-15.18/-11.04	-7.50/-7.38	-8.27/-14.39	-10.46/-10.95	-11.71/-13.87	-12.94/-8.88	-5.51/-4.78	-2.79/-2.06	0.69/1.08	2.20/4.44	4.13/1.26	-1.08/0.99	1.66/3.31	2.71/0.19	-6.47/-0.14	1.52/-3.67	-5.41/-0.64	-2.58/-5.68	-4.34/-10.42	-10.11/-13.13			
θ (112.5°)	-4.45/-4.84	-6.04/-6.58	-10.27/-11.96	-9.41/-8.75	-11.42/-15.38	-13.78/-11.91	-11.42/-12.74	-14.09/-12.47	-12.34/-11.80	-9.90/-5.79	-5.91/-3.64	-2.01/-1.62	0.23/-0.25	0.87/2.90	1.48/-3.64	-0.56/1.78	3.67/4.05	4.02/0.19	-3.14/1.79	2.89/-1.30	-3.61/-1.33	-2.16/-4.70	-2.35/-5.20	-9.22/-5.93			
θ (120°)	-5.91/-6.63	-7.55/-8.60	-9.50/-6.86	-6.70/-9.11	-10.90/-13.08	-15.28/-15.79	-15.68/-14.00	-11.99/-11.47	-13.91/-12.45	-13.42/-14.02	-15.35/-8.73	-6.38/-5.15	-4.71/-4.83	-0.69/0.53	-2.52/-3.66	-0.10/1.11	2.64/1.69	2.08/-1.86	-2.36/3.06	3.30/-2.00	-5.86/-1.35	-3.49/-4.88	-4.27/-1.56	-3.47/-4.53			
θ (127.5°)	-1.105/-7.09	-8.42/-7.95	-4.60/-5.85	-10.25/-15.40	-15.25/-14.03	-8.85/-10.10	-13.26/-12.82	-11.08/-11.62	-11.41/-11.21	-14.38/-15.34	-13.62/-11.05	-9.89/-8.63	-4.24/-3.42	-2.95/-1.67	-2.15/-2.27	1.07/0.29	-0.80/-6.51	-7.29/0.00	2.05/-0.84	-4.72/-5.10	-2.05/-2.49	-4.39/-5.39	-10.78/-14.52				
θ (135°)	-3.90/-7.11	-6.54/-5.88	-5.21/-7.26	-11.54/-13.17	-12.47/9.66	-8.28/-9.03	-11.10/-10.77	-8.16/-7.24	-6.09/-6.44	-9.20/-12.79	-13.79/-11.20	-8.06/-6.72	-6.74/-5.02	-2.58/-0.87	-0.43/-1.66	-2.50/-1.02	-0.79/-1.42	-3.07/-7.87	-7.81/-2.65	-0.49/-2.37	-6.68/-5.39	-2.73/-5.60	-9.56/-7.49	-3.10/-2.17			
θ (142.5°)	-12.67/-14.36	-15.18/-16.29	-13.64/-6.87	-5.95/-9.32	-3.26/-3.53	-4.94/-7.33	-9.76/-11.14	-10.90/-9.98	-7.42/-6.80	-6.55/-7.46	-8.26/-6.80	-4.65/-3.87	-3.96/-3.34	-1.97/-1.55	-1.75/-0.54	-0.02/-0.73	-1.82/-3.10	-4.85/-7.67	-9.01/-4.06	-0.04/-0.37	-6.47/-14.60	-14.98/-9.07	-5.51/-4.68	-4.17/-7.18			
θ (150°)	-8.32/-8.64	-8.25/-7.80	-6.23/-9.55	-10.43/-8.72	-7.72/-8.67	-4.59/-4.34	-7.17/-7.52	-8.59/-9.60	-8.67/-7.19	-6.32/-5.52	-4.51/-4.01	-4.30/-5.31	-3.67/-3.38	-6.18/-4.23	-2.39/-1.65	-4.64/-4.33	-6.67/-6.63	-8.99/-7.69	-1.07/0.81	-1.54/-2.59	-3.66/-4.84	-5.74/-6.42	-7.18/-8.07				
θ (157.5°)	-10.32/-10.64	-11.14/-12.48	-12.05/-11.34	-10.08/-10.31	-11.94/-13.29	-13.87/-11.93	-9.05/-8.43	-9.20/-9.60	-9.22/-7.85	-6.00/-4.35	-3.32/-3.32	-3.76/-4.00	-4.05/-3.97	-3.54/-2.96	-2.28/-2.14	-2.40/-2.61	-3.27/-3.83	-3.69/-3.25	-3.50/-2.84	-1.14/0.67	0.82/0.13	-1.46/-5.39	-10.20/-10.95	-8.77/-8.53			
θ (165°)	-7.77/-9.12	-10.26/-11.36	-11.10/-10.14	-10.37/-11.39	-12.37/-12.14	-12.90/-12.59	-11.89/-11.45	-11.98/-12.32	-11.39/-8.87	-6.88/-5.62	-4.85/-5.64	-7.47/-9.68	-11.61/-12.46	-12.29/-10.62	-8.87/-6.60	-6.65/-6.00	-5.21/-4.12	-2.94/-2.38	-3.27/-3.16	-2.94/-3.36	-2.71/-3.16	-4.87/-5.99	-6.83/-7.56	-6.62/-7.81			
θ (172.5°)	-10.92/-10.75	-10.52/-10.06	-10.39/-10.13	-10.35/-9.67	-8.18/-8.16	-9.08/-10.00	-12.62/-13.71	-14.01/-14.24	-15.95/-15.10	-13.53/-12.65	-13.05/-13.67	-14.24/-14.77	-15.49/-15.33	-15.05/-16.83	-14.66/-13.82	-11.94/-9.59	-7.82/-6.44	-6.47/-6.86	-2.77/-7.39	-7.68/-5.80	-11.58/-15.25	-10.80/-8.00	-8.27/-10.59	-12.61/-12.99			
θ (180°)	-9.14/-8.97	-9.20/-10.07	-11.20/-12.05	-14.03/-12.61	-11.06/-10.80	-11.65/-12.25	-13.60/-13.29	-11.84/-11.22	-10.88/-11.29	-11.23/-10.62	-9.63/-8.87	-8.29/-7.64	-7.59/-7.79	-8.14/-8.34	-8.97/-9.58	-8.66/-9.09	-8.61/-8.27	-8.46/-8.91	-9.41/-10.06	-11.18/-12.43	-14.40/-15.20	-9.86/-6.38	-6.68/-8.07	-8.91/-9.24			
Freq(Hz)	5.60GPol.	TotalAnt.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)Φ(7.5°)	Φ(15°)Φ(22.5°)	Φ(30°)Φ(37.5°)	Φ(45°)Φ(52.5°)	Φ(60°)Φ(67.5°)	Φ(75°)Φ(82.5°)	Φ(90°)Φ(97.5°)	Φ(105°)Φ(112.5°)	Φ(120°)Φ(127.5°)	Φ(135°)Φ(142.5°)	Φ(150°)Φ(157.5°)	Φ(165°)Φ(172.5°)	Φ(180°)Φ(187.5°)	Φ(195°)Φ(202.5°)	Φ(210°)Φ(217.5°)	Φ(225°)Φ(232.5°)	Φ(240°)Φ(247.5°)	Φ(255°)Φ(262.5°)	Φ(270°)Φ(277.5°)	Φ(285°)Φ(292.5°)	Φ(300°)Φ(307.5°)	Φ(315°)Φ(322.5°)	Φ(330°)Φ(337.5°)	Φ(345°)Φ(352.5°)			
θ (0°)	-6.13/6.14	-6.01/6.37	-6.56/6.01	-5.38/5.33	-5.54/5.07	-5.25/5.38	-5.07/5.54	-5.75/6.04	-5.93/5.94	-5.91/6.12	-6.26/6.51	-6.53/6.68	-6.64/6.72	-7.13/7.66	-8.17/8.39	-8.86/8.67	-8.78/8.66	-8.98/9.08	-8.50/7.91	-7.58/7.29	-6.75/7.08	-7.40/6.87	-6.71/6.34	-6.08/6.24			
θ (7.5°)	-8.34/-8.18	-8.35/-8.51	-9.21/9.55	-8.87/-8.10	-7.86/-7.01	-6.95/-7.21	-7.20/-7.23	-7.06/-6.90	-6.81/-6.92	-7.11/6.78	-6.26/6.75	-5.32/4.60	-3.86/-3.34	-2.93/-2.48	-2.38/-3.29	-2.50/-2.76	-2.71/2.58	-2.95/-3.19	-3.69/-4.03	-4.38/4.56	-5.05/5.42	-6.10/6.79	-7.18/7.14	-8.29/8.45			
θ (15°)	-4.69/-5.12	-6.78/6.68	-6.23/5.82	-5.33/5.11	-5.24/5.02	-4.58/4.34	-3.61/3.25	-2.76/2.48	-2.72/3.40	-4.67/5.80	-6.88/6.98	-5.76/4.10	-2.71/1.72	-0.89/0.53	-0.39/0.44	-0.46/0.72	-1.02/1.14	-1.37/1.46	-1.86/2.51	-5.48/5.96	-6.40/5.93	-5.08/3.62	-5.30/5.00				
θ (22.5°)	-2.14/-2.77	-4.88/6.36	-5.96/4.88	-4.17/4.48	-5.32/6.72	-9.10/9.23	-7.58/6.06	-4.83/3.84	-2.97/2.58	-3.12/4.70	-6.82/7.82	-7.41/5.59	-3.71/1.94	-0.86/0.30	-0.33/0.90	-1.55/2.32	-2.84/2.96	-2.93/2.66	-2.45/2.88	-3.34/4.45	-5.61/6.13	-6.12/4.93	-3.60/2.43	-3.26/2.30			
θ (30°)	-3.75/-6.91	-6.30/6.88	-7.21/5.76	-4.32/3.59	-3.69/4.42	-5.97/5.05	-9.63/10.82	-10.13/9.46	-8.48/8.68	-4.91/3.93	-4.10/4.45	-4.25/3.73	-2.80/1.92	-0.90/0.20	-0.03/0.22	-0.62/0.76	-1.10/1.87	-2.56/3.82	-5.19/6.93	-7.04/7.56	-6.88/6.13	-5.23/4.27	-3.14/2.56	-4.42/5.51			
θ (37.5°)	-15.66/10.76	-7.80/-7.21	-6.77/7.02	-6.77/7.46	-7.17/7.17	-6.25/6.71	-9.17/8.90	-6.79/6.78	-7.30/6.46	-5.24/3.39	-4.12/3.39	-2.04/1.84	-0.99/0.31	0.65/0.28	1.01/0.15	-1.94/4.77	0.10/1.15	-0.90/0.58	0.06/0.78	1.01/0.15	-1.94/4.77	0.10/1.15	-0.90/0.58	0.06/0.78			
θ (45°)	-8.77/8.58	-6.25/6.17	-6.44/5.98	-7.92/12.28	-14.62/15.33	-13.86/15.09	-15.23/15.06	-14.37/10.74	-6.60/4.60	-3.71/4.77	-5.37/3.56	-2.62/3.39	-2.27/0.08	1.11/1.00	0.63/0.44	-0.69/0.16	0.95/1.16	-0.03/1.62	-1.86/1.61	-1.59/2.37	-5.11/7.13	-8.69/11.25	-13.20/15.21	-11.97/8.06			
θ (52.5°)	-7.03/-6.46	-12.26/-11.47	-9.96/8.75	-10.84/12.66	-11.62/11.08	-11.19/12.00	-13.63/15.54	-14.13/-14.47	-8.85/-7.65	-5.15/3.96	-4.60/2.47	-0.23/0.57	0.75/2.63	2.59/2.68	2.70/2.65	2.31/4.44	0.91/0.04	-2.18/-3.07	-1.93/3.06	-4.61/3.93	-7.57/9.27	-9.91/11.31	-11.03/7.25				
θ (60°)	-9.95/-11.37	-15.44/-13.27	-9.80/9.94	-9.80/13.89	-14.15/10.76	-8.46/8.85	-12.35/13.23	-10.80/8.92	-9.87/9.82	-8.60/6.55	-2.72/2.75	-1.90/1.23	2.49/2.03	0.86/0.25	2.23/4.02	1.33/0.30	-1.33/0.03	-0.53/1.26	-2.69/3.10	-1.74/5.98	-7.44/10.04	-12.13/10.09					
θ (67.5°)	-6.13/10.81	-11.59/8.80	-6.55/5.54	-4.67/5.80	-9.56/13.18	-11.53/9.49	-10.73/13.38	-15.08/15.03	-11.77/9.68	-11.37/7.88	-5.42/5.35	-2.48/2.59	-3.25/0.16	1.37/1.73	1.74/1.65	2.48/2.11	0.07/1.07	0.61/1.15	-3.23/1.62	0.01/2.49	-4.45/3.53	-5.72/7.02	-6.04/6.24	-5.03/3.76			
θ (75°)	-7.75/6.89	-9.18/7.34	-9.43/11.69	-12.15/11.99	-14.67/13.30	-11.79/9.22	-10.09/10.30	-8.94/9.27	-13.50/11.85	-10.75/9.40	-6.31/6.32	-4.54/1.11	-0.46/0.54	2.20/2.81	2.38/1.14	1.07/0.12	-0.81/0.59	1.22/2.27	-2.73/1.22	-0.16/4.97	-7.70/5.63	-5.21/6.75	-8.71/8.49	-6.83/6.82			
θ (82.5°)	-9.20/12.59	-12.53/12.83	-13.44/12.92	-10.61/9.86	-11.19/15.51	-14.61/12.62	-11.81/11.14	-10.52/10.47	-12.32/10.98	-9.90/10.64	-9.63/6.41	-5.51/2.64	-1.59/0.79	0.36/0.31	0.08/1.51	-3.21/4.41</											



Antenna Pattern <2.4GHz and 5GHz U-NII 1~U-NII 4>

Appendix C

Theta (°)	Phi (°)	Gain (dBi)	Phi(0°)	Phi(15°)	Phi(30°)	Phi(45°)	Phi(60°)	Phi(75°)	Phi(90°)	Phi(105°)	Phi(120°)	Phi(135°)	Phi(150°)	Phi(165°)	Phi(180°)	Phi(195°)	Phi(210°)	Phi(225°)	Phi(240°)	Phi(255°)	Phi(270°)	Phi(285°)	Phi(300°)	Phi(315°)	Phi(330°)	Phi(345°)			
Theta (120°)	Phi(0°)	-4.81/3.40	-1.69/-0.11	0.24/1.12	1.26/1.37	2.40/2.93	3.00/3.09	2.51/0.95	-1.13/-2.02	-3.54/-4.32	-4.32/-6.45	-6.93/-5.83	-3.76/-2.86	-4.31/-3.82	-6.28/-5.22	-7.25/-8.46	-8.63/-5.66	-4.51/-4.23	-5.81/-6.76	-7.75/-7.31	-10.11/8.35	-13.37/-13.78	-10.07/-5.22	-7.24/-9.80	-10.13/6.61				
Theta (127.5°)	Phi(0°)	-2.88/-2.45	-1.91/-1.59	-1.79/-1.72	-0.53/0.83	2.01/2.57	2.48/2.22	1.78/1.10	0.10/-1.52	-3.44/-3.81	-3.55/-3.19	-4.28/-9.21	-15.71/-12.81	-8.93/-9.01	-10.35/-9.75	-15.03/-10.75	-9.12/-8.38	-8.24/-9.33	-9.23/-10.09	-12.37/-9.16	-5.73/-4.03	-6.51/-7.15	-5.36/-3.93	-4.11/-4.72	-5.31/-3.98				
Theta (135°)	Phi(0°)	-5.07/-4.58	-4.37/-4.56	-3.42/-2.60	-1.73/-1.34	-1.41/-1.37	-1.05/-0.82	-0.21/0.59	0.71/0.04	-0.88/-2.19	-3.87/-4.28	-4.38/-6.20	-7.08/-6.29	-5.10/-3.73	-3.43/-5.24	-7.70/-8.52	-6.42/-5.51	-4.27/-5.02	-2.24/-2.06	-2.43/-2.58	-2.24/-2.06	-3.29/-6.08	-7.78/-8.75	-9.93/-9.60	-5.98/-2.47				
Theta (142.5°)	Phi(0°)	-4.81/4.42	-4.53/4.77	-3.68/3.59	-3.81/3.35	-3.59/3.31	-3.01/3.18	-3.26/3.00	-3.03/3.66	-5.74/-10.11	-12.09/6.68	-4.17/-3.21	-3.48/-6.10	-10.26/-10.29	-7.63/-7.03	-6.52/-5.92	-4.98/-5.40	-6.33/-6.23	-6.66/-7.24	-8.73/-10.65	-11.86/9.67	-5.41/4.93	-4.65/-3.79	-4.78/-5.94	-4.23/-3.91				
Theta (150°)	Phi(0°)	0.26/0.89	1.36/1.45	1.29/1.14	0.97/0.75	0.32/0.68	-1.88/-2.98	-2.98/-3.14	-4.09/-5.39	-7.36/-7.46	-5.60/-4.31	-4.06/-4.67	-6.03/-7.46	-8.70/-9.31	-7.97/-6.41	-4.90/-5.11	-6.41/-7.68	-9.64/-11.04	-9.84/-7.66	-7.14/-5.99	-3.44/-2.72	-3.11/-2.79	-1.40/-1.05	-4.50/-1.57					
Theta (157.5°)	Phi(0°)	-0.73/0.03	0.79/1.44	2.90/4.21	2.30/1.77	0.75/-1.16	-0.20/4.13	-4.41/-4.22	-2.76/-5.75	-6.73/-7.31	-8.23/-7.51	-6.31/-5.31	-4.97/-4.50	-3.96/-3.98	-4.59/-4.83	-6.28/-3.59	-6.90/-4.73	-6.96/-6.49	-10.85/-10.57	-8.83/-7.56	-7.15/-5.89	-4.44/-3.98	-4.89/-5.63	-4.67/-3.76	-2.63/-1.27				
Theta (165°)	Phi(0°)	0.61/1.08	1.40/1.45	1.31/0.81	-0.26/-2.03	-1.41/-6.88	-10.67/-13.63	-13.80/-13.96	-16.03/-13.78	-11.90/-10.43	-9.69/-8.57	-7.88/-7.30	-7.49/-7.46	-6.71/-5.79	-4.97/-4.54	-4.73/-5.04	-6.64/-6.57	-7.72/-9.56	-11.86/-13.65	-11.98/-10.18	-10.47/-10.25	-8.16/-6.20	-4.87/-3.86	-2.10/-1.06	-0.52/0.05				
Theta (172.5°)	Phi(0°)	-3.51/-4.35	-4.99/-5.75	-6.92/-8.54	-10.58/-12.70	-12.66/-12.70	-12.36/-11.06	-10.05/-9.24	-8.63/-7.45	-6.53/-8.57	-6.42/-7.83	-9.35/-10.26	-10.10/-9.28	-8.59/-8.46	-9.03/-10.41	-12.70/-15.81	-15.56/-13.87	-11.95/-11.49	-11.29/-11.85	-12.10/-12.05	-11.97/-11.26	-10.62/-9.35	-8.03/-6.89	-5.36/-4.32	-3.88/-3.75				
Theta (180°)	Phi(0°)	-14.18/-13.41	-11.72/-9.70	-8.85/-8.10	-8.77/-9.73	-11.21/-11.58	-11.85/-11.30	-10.34/-9.65	-9.50/-8.68	-7.87/-7.35	-7.17/-8.27	-10.10/-10.10	-11.36/-10.93	-11.53/-12.14	-13.13/-13.51	-14.72/-13.48	-11.72/-10.24	-9.34/-8.99	-8.85/-8.96	-9.12/-8.84	-8.58/-8.65	-9.42/-9.99	-11.51/-11.76	-13.47/-14.20	-14.23/-13.99				
Phi(0°)	Phi(0°)	5.32/5.15	4.81/4.41	4.57/4.16	4.50/4.38	4.27/4.16	4.15/4.03	4.05/3.93	3.95/3.83	3.85/3.73	3.75/3.63	3.65/3.53	3.55/3.43	3.45/3.33	3.35/3.23	3.25/3.13	3.15/3.03	3.05/2.93	2.95/2.83	2.85/2.73	2.75/2.63	2.65/2.53	2.55/2.43	2.45/2.33	2.35/2.23	2.25/2.13	2.15/2.03	2.05/1.93	
Phi(7.5°)	Phi(0°)	-3.70/4.10	-3.95/4.27	-4.46/4.61	-4.76/4.85	-5.01/5.13	-5.31/5.42	-5.72/5.61	-5.46/5.15	-5.22/5.10	-5.04/5.12	-4.98/4.95	-4.85/4.99	-5.06/5.30	-5.83/6.15	-6.37/6.65	-6.80/6.74	-6.81/6.80	-6.88/7.00	-7.17/7.51	-7.28/6.77	-6.34/6.05	-5.64/5.30	-5.17/4.97	-4.93/4.79				
Phi(15°)	Phi(0°)	-3.88/3.88	-3.87/3.12	-3.27/3.02	-2.80/2.76	-2.86/2.63	-3.29/3.86	-3.29/3.86	-3.29/3.86	-3.29/3.86	-3.29/3.86	-3.29/3.86	-3.29/3.86	-3.29/3.86	-3.29/3.86	-3.29/3.86	-3.29/3.86	-3.29/3.86	-3.29/3.86	-3.29/3.86	-3.29/3.86	-3.29/3.86	-3.29/3.86	-3.29/3.86	-3.29/3.86	-3.29/3.86	-3.29/3.86	-3.29/3.86	-3.29/3.86
Phi(22.5°)	Phi(0°)	-5.39/5.22	-5.27/5.31	-5.55/5.73	-5.77/5.66	-4.72/4.34	-4.24/4.08	-4.07/4.35	-4.43/3.95	-3.27/2.66	-2.59/2.62	-3.40/4.04	-4.45/4.58	-4.56/5.22	-5.94/6.57	-6.85/6.61	-6.00/5.36	-4.94/4.78	-4.76/4.98	-5.72/6.47	-6.99/7.31	-7.52/7.20	-6.56/6.09	-5.76/5.36	-5.07/4.75				
Phi(30°)	Phi(0°)	-5.99/4.88	-4.08/3.94	-4.01/3.60	-3.23/2.95	-2.77/2.93	-2.67/2.80	-3.08/2.68	-1.82/1.25	-1.43/2.04	-2.57/3.16	-3.58/3.70	-3.55/3.38	-4.27/6.15	-9.10/12.64	-13.22/11.73	-9.75/8.11	-6.41/5.07	4.45/4.31	4.40/5.37	6.19/5.68	5.32/5.45	5.38/5.22	5.55/6.20	6.75/7.10				
Phi(37.5°)	Phi(0°)	-3.58/2.84	-2.17/1.79	-1.12/0.15	0.65/0.72	0.93/0.05	0.96/0.47	0.72/1.35	1.69/1.50	0.47/1.11	-3.02/5.01	-5.99/5.93	-5.11/4.43	-4.67/6.17	-6.37/7.17	-13.35/10.41	-9.39/8.81	-9.72/10.03	-7.87/4.54	-3.25/2.56	-3.51/5.38	-6.47/4.74	-8.97/9.56	-6.72/6.22	-6.07/5.29				
Phi(45°)	Phi(0°)	-5.34/3.94	-2.92/1.80	-2.92/1.80	0.06/0.46	1.90/2.08	1.46/0.62	0.34/0.46	1.01/0.76	1.68/0.33	-2.17/5.02	-6.78/7.02	-6.41/5.57	-5.14/5.75	-6.31/5.82	-8.88/9.28	-11.61/8.99	-12.17/15.57	-10.83/8.39	-9.35/8.44	-8.38/11.04	-10.57/11.47	-7.35/6.24	-5.21/5.44					
Phi(52.5°)	Phi(0°)	-6.57/3.78	-2.54/1.79	-0.88/1.05	-1.54/1.22	0.95/1.92	2.28/2.23	1.64/1.00	1.25/1.87	1.97/0.31	-2.66/5.02	-5.72/6.12	-9.52/9.95	-7.79/6.49	-5.70/5.55	-5.97/6.81	-7.82/9.58	-12.19/8.84	-5.94/4.82	-5.94/8.40	-11.31/10.91	-9.74/9.93	-9.51/11.12	-9.17/9.83	-10.01/10.43				
Phi(60°)	Phi(0°)	-8.01/6.53	-4.71/4.15	-2.63/1.58	-0.27/1.05	1.79/2.65	3.14/2.77	1.27/1.07	-1.45/2.09	-2.82/2.64	-3.35/4.03	-5.66/9.70	-16.02/14.47	-10.52/10.39	-14.55/12.31	-8.06/5.30	-3.74/2.99	-2.96/2.32	-4.46/7.04	-7.24/7.47	-8.39/11.01	-11.46/11.44	-13.32/15.44	-16.11/13.16					
Phi(67.5°)	Phi(0°)	-12.11/10.51	-1.72/4.03	-1.96/0.82	-0.42/0.52	-1.12/0.25	1.69/2.51	2.45/1.56	0.26/0.73	-1.96/3.05	-4.74/3.74	-3.19/2.88	-3.40/5.18	-7.17/9.08	-12.37/12.94	-8.09/6.72	-6.69/8.53	-11.98/15.17	-15.29/12.01	-9.89/9.74	-10.71/12.80	-12.32/10.57	-10.71/8.82						
Phi(75°)	Phi(0°)	-11.93/12.84	-8.60/7.68	-5.34/3.80	-2.54/1.57	-1.02/1.10	-0.84/0.22	-0.42/1.85	-3.60/4.38	-3.50/1.33	-1.03/1.77	-3.68/7.78	-7.29/6.09	-2.81/1.09	-3.34/6.23	-9.57/13.53	-10.33/11.69	-13.18/8.78	-8.73/14.47	-15.67/13.61	-10.36/14.64	-15.00/12.86	-13.43/11.54	-14.26/16.21	-14.53/12.19				
Phi(82.5°)	Phi(0°)	-8.09/6.67	-6.58/4.19	-2.47/1.32	-0.96/0.18	0.08/0.22	-0.25/0.19	-0.17/0.51	-1.61/1.67	-0.00/0.15	-5.52/9.84	-5.93/3.98	-6.00/0.83	-4.76/1.22	-9.92/6.54	-12.10/4.26	-9.79/11.73	-9.50/8.75	-12.01/6.78	-6.02/8.95	-11.92/10.56	-12.90/15.58	-8.20/7.55	-8.20/7.55					
Phi(90°)	Phi(0°)	-2.99/2.11	-2.22/6.07	0.08/0.61	0.06/0.81	-0.77/0.17	0.11/0.02	-0.02/0.04	0.31/0.88	0.62/0.40	-2.49/4.47	-5.53/7.09	-9.32/14.69	-13.64/13.23	-8.59/8.25	-9.49/8.73	-6.37/4.43	-8.09/10.34	-12.63/14.03	-15.98/14.20	-11.62/12.04	-10.67/8.09	-9.72/7.60	-3.99/2.85	-2.03/2.25				
Phi(97.5°)	Phi(0°)	-4.92/4.14	-4.79/1.88	-0.39/0.35	0.19/0.90	-1.64/2.13	-1.54/1.05	-0.99/1.40	-1.55/1.33	-1.77/1.94	-2.56/1.22	-1.68/1.33	-2.77/3.54	-5.99/5.32	-7.26/10.98	-11.20/12.33	-11.61/12.87	-10.04/9.50	-6.01/9.31	-11.67/11.66	-7.20/5.62	-7.19/9.18	-8.99/6.60	-6.74/6.86	-7.07/6.44				
Phi(105°)	Phi(0°)	-4.51/4.80	-2.65/1.03	0.73/1.74	2.25/2.24	1.59/0.76	0.57/1.13	1.34/0.58	-1.69/4.36	-3.48/3.32	0.58/0.20	-1.43/1.50	-1.54/0.83	-0.87/0.68	-3.08/3.74	-10.10/6.65	-6.27/8.42	-13.56/12.68	-7.14/12.53	-12.71/9.60	-6.49/7.75	-7.87/7.62	-9.28/7.66	-7.36/9.91	-7.39/6.52				
Phi(112.5°)	Phi(0°)	-4.32/3.08	-1.68/0.85	2.13/0.09	3.27/3.05	2.33/2.16	2.66/2.45	1.64/1.01	-0.39/3.64	-5.01/3.34	-1.79/2.31	-3.20/5.18	-6.80/6.04	-5.17/4.28	-7.31/7.47	-9.92/11.83	-7.87/10.20	-8.00/9.66	-6.94/8.52	-4.40/5.33	-10.76/13.99	-14.61/13.20	-15.55/10.19	-7.25/7.22	-6.40/5.93				
Phi(120°)	Phi(0°)	-5.29/2.75	-1.18/0.37	1.20/1.56	1.11/0.63	0.65/0.68	0.50/0.65	0.73/0.78	0.50/0.65	-0.34/2.17	-2.18/2.41	-2.03/3.42	-4.67/4.59	-4.00/4.01	-4.34/4.74	-7.30/9.12	-11.67/9.78	-3.41/5.38	-9.64/13.29	-13.02/10.38	-15.35/15.96	-14.86/10.98	-9.56/8.08	-9.05/8.87	-8.73/8.43				
Phi(127.5°)	Phi(0°)	-3.97/3.89	-3.26/2.97	-2.62/1.60	-0.90/0.25	0.92/0.83	0.56/0.80	1.25/1.11	0.65/0.10	-0.97/1.23	-1.92/2.36	-3.19/6.64	-13.99/15.45	-11.96/9.49	-9.69/9.75	-11.57/12.67	-12.12/12.27	-11.92/8.88	-7.60/8.81	-9.33/8.37	-7.53/6.38	-9.46/7.22	-6.72/8.51	-7.19/6.71	-5.93/4.15				
Phi(135°)	Phi(0°)	-9.83/9.81	-8.34/5.81	-4.40/3.73	-3.41/3.81	-4.54/5.44	-5.63/4.63	-4.43/4.20	-3.23/2.82	-2.54/2.64	-3.59/5.15	-7.03/8.04	-4.78/4.93	-4.80/6.11	-10.81/14.42	-8.09/5.95	-6.97/8.46	-9.64/9.07	-6.40/5.33	-5.03/6.16	-8.52/9.29	-9.51/15.10	-13.21/8.71	-7.59/8.55					
Phi(142.5°)	Phi(0°)	-1.15/0.77	-1.07/1.22	-1.38/1.94	-2.91/4.11	-5.64/5.80	-5.97/6.89	-6.27/7.20	-7.41/7.81	-7.79/8.06	-6.64/11.06	-10.05/7.67	-6.45/7.49	-12.65/13.50	-11.12/9.90	-8.49/7.35	-6.14/6.29	-7.73/9.16	-12.80/12.50	-13.52/13.14	-11.73/11.13	-8.45/7.48	-6.63/3.15	-4.22/1.47	-3.21/2.25				
Phi(150°)	Phi(0°)	-3.44/1.18	-0.38/0.08	0.10/0.30	-0.96/1.71	-2.71/4.15	-5																						



Antenna Pattern <2.4GHz and 5GHz U-NII 1~U-NII 4>

Appendix C

θ (172.5°)	-3.471-2.82	-2.351-1.89	-1.882-2.24	-2.921-3.61	-4.031-3.40	-4.511-4.78	-5.151-6.02	-8.101-9.65	-10.901-12.20	-12.131-11.52	-11.211-10.35	-9.181-8.02	-7.311-6.53	-5.711-5.12	-5.041-5.37	-6.231-7.67	-9.701-11.81	-12.821-11.96	-11.601-12.90	-15.241-15.14	-14.201-12.88	-10.641-8.73	-7.261-6.26	-5.481-4.41
θ (180°)	-7.411-6.89	-6.201-5.99	-6.281-6.86	-7.971-9.31	-9.761-9.76	-10.411-9.88	-9.021-9.42	-10.351-10.58	-9.001-8.44	-8.211-8.50	-9.121-9.68	-9.971-10.06	-10.351-11.27	-12.561-13.86	-14.341-15.24	-15.231-14.14	-12.011-10.34	-8.611-7.61	-7.061-7.48	-8.241-9.16	-10.741-12.58	-12.041-11.05	-9.731-8.41	-7.671-7.54
Freq(Hz)	5.201	5.201	5.201	5.201	5.201	5.201	5.201	5.201	5.201	5.201	5.201	5.201	5.201	5.201	5.201	5.201	5.201	5.201	5.201	5.201	5.201	5.201	5.201	5.201
Gain	Φ(0°)Φ(7.5°)	Φ(15°)Φ(22.5°)	Φ(30°)Φ(37.5°)	Φ(45°)Φ(52.5°)	Φ(60°)Φ(67.5°)	Φ(75°)Φ(82.5°)	Φ(90°)Φ(97.5°)	Φ(105°)Φ(112.5°)	Φ(120°)Φ(127.5°)	Φ(135°)Φ(142.5°)	Φ(150°)Φ(157.5°)	Φ(165°)Φ(172.5°)	Φ(180°)Φ(187.5°)	Φ(195°)Φ(202.5°)	Φ(210°)Φ(217.5°)	Φ(225°)Φ(232.5°)	Φ(240°)Φ(247.5°)	Φ(255°)Φ(262.5°)	Φ(270°)Φ(277.5°)	Φ(285°)Φ(292.5°)	Φ(300°)Φ(307.5°)	Φ(315°)Φ(322.5°)	Φ(330°)Φ(337.5°)	Φ(345°)Φ(352.5°)
θ (0°)	-7.471-7.97	-8.071-7.67	-6.401-8.44	-8.071-7.42	-7.061-6.88	-6.931-7.32	-7.371-7.32	-7.251-7.10	-6.741-6.60	-6.781-6.62	-6.331-6.57	-5.381-5.38	-5.661-6.04	-6.741-7.49	-8.131-8.02	-7.541-7.06	-6.911-7.06	-6.911-7.03	-7.151-7.07	-7.421-7.61	-7.421-7.61	-7.691-7.78	-7.551-7.66	-7.331-6.96
θ (7.5°)	-6.121-6.18	-6.471-6.92	-7.271-7.36	-7.041-6.42	-6.081-5.86	-5.631-6.08	-5.891-6.13	-6.131-6.41	-6.711-7.00	-7.021-7.09	-6.801-6.48	-6.521-6.77	-7.231-7.73	-7.981-8.07	-7.951-7.77	-7.681-8.00	-7.651-7.46	-7.331-7.33	-7.361-7.19	-7.041-6.93	-6.741-6.42	-6.421-6.17	-6.171-6.42	-6.421-6.17
θ (15°)	-5.861-5.87	-6.241-6.69	-6.781-6.69	-6.331-5.70	-5.161-4.54	-4.191-3.90	-3.891-3.96	-3.991-3.74	-3.411-2.98	-2.931-3.18	-3.831-4.57	-5.321-5.95	-6.161-6.02	-5.731-5.58	-5.841-6.03	-6.581-7.29	-7.861-8.44	-8.421-8.66	-8.361-8.20	-8.551-8.70	-8.901-9.80	-8.661-8.45	-7.891-7.13	-6.561-6.17
θ (22.5°)	-5.801-5.42	-4.731-4.16	-4.331-3.90	-3.931-3.77	-3.681-3.31	-2.871-2.42	-2.251-2.29	-2.541-2.56	-2.351-2.22	-2.061-2.15	-2.561-3.28	-4.221-5.02	-5.261-5.18	-6.021-6.25	-6.431-6.61	-7.391-8.31	-9.441-10.51	-11.741-11.93	-11.771-11.98	-12.421-13.04	-13.601-12.24	-10.441-8.67	-7.401-6.37	-5.971-5.92
θ (30°)	-5.291-4.86	-4.381-3.88	-3.531-2.98	-2.751-2.61	-2.791-2.83	-2.511-1.95	-1.401-0.63	-0.501-0.54	-0.681-0.79	-0.721-0.78	-1.101-1.68	-2.461-3.44	-4.631-6.18	-7.341-7.81	-7.961-8.14	-8.581-9.70	-11.531-13.78	-14.731-13.95	-13.171-12.85	-10.651-10.50	-10.881-12.14	-11.971-8.85	-8.381-7.37	-6.701-5.92
θ (37.5°)	-2.311-1.68	-1.381-1.11	-0.941-1.05	-1.481-2.10	-2.591-2.49	-1.621-0.59	0.361-0.94	1.051-0.73	0.141-0.15	-0.321-0.46	-1.021-1.89	-2.461-3.55	-4.801-5.36	-6.891-6.91	-5.451-6.39	-7.561-9.55	-12.091-12.37	-10.951-10.35	-11.301-13.61	-15.261-14.71	-14.031-14.90	-13.921-10.28	-7.911-5.47	-4.061-2.90
θ (45°)	-0.821-0.03	0.781-1.40	1.901-9.95	1.4801-56	-1.061-4.23	-1.761-0.49	1.051-6.10	1.741-6.33	1.531-4.43	1.1801-85	0.251-0.66	-1.771-2.94	-3.931-4.76	-6.021-6.25	-6.431-6.61	-7.391-8.31	-9.441-10.51	-11.741-11.93	-11.771-11.98	-12.421-13.04	-13.601-12.24	-10.441-8.67	-7.401-6.37	-5.971-5.92
θ (52.5°)	-1.511-0.41	0.841-2.05	2.941-26	3.0821-38	1.071-0.32	-0.821-0.02	1.4521-11	1.871-42	1.611-45	1.421-17	0.401-1.00	-2.751-4.16	-5.531-6.92	-7.121-7.05	-7.511-9.18	-11.001-10.50	-10.201-9.91	-10.791-12.95	-15.621-13.10	-10.651-10.05	-10.881-12.14	-11.971-8.85	-8.381-7.37	-6.701-5.92
θ (60°)	-2.011-1.13	0.361-1.59	2.651-38	3.661-26	1.9701-41	-0.0901-79	1.921-49	2.301-81	1.501-45	1.2301-75	0.151-0.62	-1.801-3.42	-4.771-5.79	-6.361-7.61	-8.531-10.74	-10.921-10.62	-10.241-10.82	-11.461-13.38	-15.451-11.37	-9.301-10.48	-14.341-15.03	-11.361-9.06	-6.991-5.59	-4.541-2.93
θ (67.5°)	-1.801-0.52	0.831-1.57	2.411-87	2.9421-76	2.221-47	1.211-67	2.2521-35	2.121-92	1.661-25	0.8601-31	-0.511-1.25	-2.191-3.43	-5.081-6.02	-6.301-6.72	-7.091-8.84	-11.201-11.79	-12.741-10.79	-12.201-13.32	-13.281-13.68	-12.161-13.45	-16.111-12.37	-11.231-9.33	-8.171-6.94	-4.811-3.92
θ (75°)	-3.071-1.50	0.0301-75	1.341-61	1.541-44	1.411-74	2.5321-86	2.581-83	0.8301-67	1.111-03	0.4901-65	0.4801-17	-0.471-1.91	-3.141-4.41	-5.041-5.73	-7.471-10.17	-12.561-10.62	-10.091-10.73	-10.911-15.00	-13.631-12.58	-11.721-13.57	-13.841-11.42	-9.101-9.07	-6.171-6.94	-5.941-4.37
θ (82.5°)	-4.971-2.38	-0.331-1.16	2.251-47	1.431-0.67	-2.271-0.53	2.1031-40	3.121-70	0.5601-83	1.471-51	0.6001-23	0.4201-74	0.381-1.04	-2.051-4.51	-6.061-7.18	-9.841-11.59	-10.071-10.35	-13.041-15.41	-15.261-14.63	-14.781-12.98	-9.901-12.47	-14.451-12.38	-10.211-8.46	-9.031-9.29	-9.091-6.92
θ (90°)	-5.021-2.42	-0.4801-94	1.9821-17	1.511-0.64	-4.551-2.73	1.5331-52	3.5021-22	0.321-1.02	0.7501-75	0.291-0.05	0.581-0.11	1.2601-20	-0.621-2.43	-3.681-4.89	-7.601-9.37	-10.041-8.06	-11.591-14.63	-12.051-13.74	-14.321-13.13	-11.121-11.95	-14.271-13.56	-10.271-9.73	-10.631-11.71	-10.581-11.74
θ (97.5°)	-5.611-3.25	-0.681-1.03	2.471-78	1.941-0.99	-4.821-2.77	1.3531-50	2.4701-39	-0.601-1.17	0.5901-40	-1.351-3.88	-0.941-1.20	-0.551-1.04	0.391-0.81	-1.671-1.58	-8.941-9.84	-10.771-9.65	-11.281-15.63	-13.251-14.79	-14.191-14.19	-11.801-13.04	-15.091-14.88	-13.251-15.19	-13.701-14.70	-10.861-11.69
θ (105°)	-4.861-2.87	-1.2001-30	1.391-47	0.621-2.41	-5.751-1.43	1.6121-40	1.721-0.17	-1.4201-17	1.241-18	-0.071-1.19	-1.521-0.75	0.131-0.11	-0.251-2.05	-4.111-6.07	-8.451-11.29	-12.071-10.11	-9.891-13.20	-12.251-11.72	-14.241-14.65	-12.431-15.23	-15.211-14.04	-14.441-12.88	-13.821-12.02	-9.221-6.06
θ (112.5°)	-9.371-5.08	-2.721-1.00	-0.051-3.50	-1.821-4.00	-3.891-0.76	1.7721-37	0.931-1.04	-0.8101-72	1.7811-35	-0.041-0.90	-2.331-2.31	-2.151-1.70	-2.321-3.02	-3.901-4.63	-4.351-7.26	-11.071-8.79	-7.101-6.59	-8.711-10.51	-14.271-13.08	-9.911-14.57	-15.521-15.01	-14.971-14.25	-13.551-13.22	-10.501-11.14
θ (120°)	-8.891-7.52	-4.291-2.50	-1.131-5.56	-0.951-1.61	-1.991-0.64	0.4901-74	-0.121-1.83	-2.111-0.73	1.031-37	-0.091-1.12	-2.471-2.86	-2.811-2.52	-3.301-3.52	-5.511-5.58	-5.421-8.50	-6.911-6.47	-11.451-12.65	-14.911-13.35	-10.471-14.76	-12.471-13.91	-14.721-15.70	-14.501-13.33	-13.761-12.16	
θ (127.5°)	-10.791-9.18	-7.581-6.01	-4.201-2.72	-1.811-1.16	-1.221-1.56	-2.491-4.03	-3.941-2.14	-0.981-0.17	0.2201-02	-0.301-1.11	-2.531-4.54	-5.921-7.54	-7.131-6.26	-7.861-7.56	-7.401-10.56	-12.291-12.12	-9.601-11.79	-10.191-13.51	-15.701-15.19	-11.481-15.34	-9.811-15.42	-15.771-15.49	-15.301-14.35	-12.021-11.25
θ (135°)	-7.281-6.04	-5.501-4.49	-3.491-3.93	-2.831-3.09	-4.001-0.76	-7.561-2.82	-6.421-5.38	-1.611-0.74	-0.561-1.04	-2.171-3.21	-4.321-5.60	-6.141-7.86	-8.621-9.74	-11.611-10.44	-10.391-12.81	-15.781-11.97	-12.051-11.80	-10.011-12.62	-15.641-15.11	-12.451-14.68	-13.651-12.89	-14.011-12.84	-11.221-9.93	-8.721-6.71
θ (142.5°)	-7.391-7.12	-6.621-6.25	-5.981-6.19	-6.511-7.75	-9.371-7.16	-14.671-15.15	-10.211-9.63	-3.621-2.63	-3.051-4.08	-5.271-6.45	-7.131-7.50	-6.931-5.40	-4.731-5.35	-6.641-8.33	-9.441-10.73	-13.651-8.83	-7.651-10.54	-14.231-15.06	-14.091-12.96	-11.551-14.74	-12.471-13.91	-14.701-15.20	-10.591-9.63	-6.061-7.24
θ (150°)	-7.691-8.33	-9.321-9.65	-9.311-8.94	-8.971-9.47	-10.661-12.50	-15.021-15.68	-13.591-10.06	-8.381-6.60	-5.371-4.78	-4.571-5.40	-4.701-5.32	-5.961-5.92	-6.031-7.07	-8.431-8.29	-7.211-7.83	-8.561-9.11	-11.271-15.37	-15.071-13.10	-12.831-12.49	-11.321-9.56	-9.441-12.82	-14.801-11.75	-10.131-9.46	-8.231-7.67
θ (157.5°)	-6.241-6.71	-7.441-8.00	-8.301-8.86	-9.661-10.77	-12.041-13.48	-16.161-15.75	-15.031-14.51	-12.701-13.04	-8.581-7.74	-7.271-6.89	-6.841-7.25	-7.851-8.49	-8.991-9.80	-8.791-8.06	-8.051-9.01	-10.771-12.21	-14.011-15.62	-12.481-11.82	-12.851-15.28	-14.131-13.60	-12.791-13.58	-14.281-13.85	-10.391-9.29	-6.891-6.10
θ (165°)	-8.641-9.15	-9.211-9.66	-10.271-11.00	-11.391-11.52	-11.931-12.99	-14.591-15.17	-13.811-12.43	-10.541-9.15	-8.341-8.15	-6.871-6.51	-10.811-11.34	-10.691-10.61	-8.061-7.14	-6.721-7.13	-7.731-11.21	-11.791-12.56	-10.051-9.10	-9.751-10.68	-12.221-13.56	-13.351-13.06	-14.021-13.49	-12.771-11.37	-10.021-9.91	
θ (172.5°)	-12.291-14.14	-15.001-14.61	-14.731-14.03	-13.951-13.34	-13.351-13.67	-14.031-15.17	-15.161-14.24	-12.231-10.88	-9.491-8.39	-7.761-7.25	-7.131-7.39	-7.381-7.27	-7.121-6.94	-6.941-7.22	-8.341-8.88	-12.011-13.86	-13.581-12.40	-11.421-11.46	-11.881-13.20	-14.041-15.60	-14.901-14.09	-13.751-12.81	-12.051-11.52	-11.461-11.83
θ (180°)	-15.131-15.07	-15.661-15.11	-15.181-15.13	-14.841-14.77	-15.501-15.40	-14.771-14.55	-13.901-14.15	-14.011-13.95	-13.711-13.68	-13.911-14.39	-14.961-15.16	-15.501-15.22	-15.611-15.26	-15.741-15.49	-15.931-15.13	-15.271-16.31	-15.521-15.18	-15.811-15.61	-15.651-15.63	-15.941-15.59	-15.541-15.91	-15.151-15.47	-14.091-14.46	-15.991-15.83
Gain	Φ(0°)Φ(7.5°)	Φ(15°)Φ(22.5°)	Φ(30°)Φ(37.5°)	Φ(45°)Φ(52.5°)	Φ(60°)Φ(67.5°)	Φ(75°)Φ(82.5°)	Φ(90°)Φ(97.5°)	Φ(105°)Φ(112.5°)	Φ(120°)Φ(127.5°)	Φ(135°)Φ(142.5°)	Φ(150°)Φ(157.5°)	Φ(165°)Φ(172.5°)	Φ(180°)Φ(187.5°)	Φ(195°)Φ(202.5°)	Φ(210°)Φ(217.5°)	Φ(225°)Φ(232.5°)	Φ(240°)Φ(247.5°)	Φ(255°)Φ(262.5°)	Φ(270°)Φ(277.5°)	Φ(285°)Φ(292.5°)	Φ(300°)Φ(307.5°)	Φ(315°)Φ(322.5°)	Φ(330°)Φ(337.5°)	Φ(345°)Φ(352.5°)
θ (0°)	-7.581-7.61	-7.951-8.24	-10.461-8.93	9.341-90	9.851-97	-9.521-22	-9.971-81	-9.981-18	-9.051-8.98	-8.671-8.19	-7.801-7.84	-8.081-7.6	-9.501-9.77	-9.821-9.53	-9.931-9.53	-9.881-9.72	-8.671-9.04	-8.991-8.83	-8.651-8.47	-8.321-8.04	-7.951-7.76	-7.591-7.64	-7.721-7.55	
θ (7.5°)	-7.521-8.04	-8.241-8.64	-8.501-8.70	-7.331-7.45	-6.431-6.92	-5.601-6.17	-5.871-5.75	-5.871-5.48	-5.521-5.66	-5.73														



Antenna Pattern <2.4GHz and 5GHz U-NII 1~U-NII 4>

Appendix C

Theta (°)	-7.66/-7.57	-7.46/-7.20	-6.89/-6.31	-5.75/-5.03	-4.03/-3.28	-2.52/-1.98	-1.79/-1.70	-1.56/-1.62	-1.84/-2.14	-2.59/-3.14	-3.87/-4.58	-5.06/-5.32	-5.53/-5.65	-5.56/-5.37	-5.44/-5.56	-5.61/-5.91	-6.29/-6.34	-5.89/-5.61	-5.22/-6.11	-4.83/-4.79	-4.86/-5.35	-6.02/-6.51	-6.98/-7.22	-6.95/-7.20	
Theta (20°)	-5.31/-4.96	-4.40/-4.02	-3.80/-3.66	-3.75/-3.55	-3.00/-2.63	-1.94/-1.40	-0.94/-0.69	-0.67/-0.83	-1.34/-1.95	-2.69/-3.57	-4.52/-5.26	-5.86/-6.48	-7.00/-7.64	-8.18/-8.54	-8.71/-8.44	-7.65/-7.09	-6.85/-6.49	-6.41/-6.15	-6.08/-6.15	-6.52/-7.02	-7.61/-8.04	-8.38/-8.09	-7.46/-6.75	-5.88/-5.66	
Theta (35°)	-4.51/-3.61	-2.48/-1.58	-1.21/-0.92	-0.79/-1.00	-1.20/-1.52	-1.30/-0.81	-0.30/-0.13	-0.55/-1.00	-1.87/-2.54	-2.94/-3.65	-4.50/-5.15	-5.55/-6.11	-7.47/-9.46	-10.91/-11.26	-10.31/-9.47	-8.39/-7.99	-6.80/-6.31	-6.02/-6.45	-6.37/-8.44	-9.13/-9.04	-10.43/-10.87	-10.71/-9.14	-7.94/-6.55	-5.58/-4.99	
Theta (50°)	-3.42/-3.05	-2.57/-1.58	-0.70/-2.05	0.20/0.41	0.35/0.35	0.45/0.34	0.24/0.00	-0.45/-1.07	-1.84/-2.35	-2.70/-3.10	-3.89/-4.53	-4.90/-5.59	-6.26/-6.30	-6.24/-6.72	-7.80/-9.33	-9.46/-8.89	-8.75/-9.38	-8.69/-9.34	-9.67/-9.06	-8.82/-10.09	-12.48/-12.59	-10.27/-8.21	-6.77/-5.80	-5.19/-4.31	
Theta (65°)	-2.72/-1.59	-0.77/-0.47	0.01/-0.07	-0.07/-0.08	0.44/0.00	1.37/1.35	0.73/0.04	-0.58/-3.07	0.17/0.21	0.10/-0.02	-0.49/-1.32	-2.29/-3.21	-3.77/-4.79	-6.75/-6.89	-10.75/-11.15	-9.68/-8.92	-10.22/-10.20	-11.46/-13.85	-13.16/-11.47	-11.42/-10.98	-11.13/-12.21	-11.92/-11.81	-9.48/-6.26	-4.47/-3.23	
Theta (80°)	-0.99/-0.32	0.07/0.52	0.70/1.56	-0.17/-0.79	-0.37/0.91	1.70/1.95	1.01/5.95	0.65/1.27	1.73/1.45	-0.55/-0.60	-1.48/-2.15	-3.01/-3.55	-3.99/-5.34	-6.45/-7.43	-8.49/-7.98	-7.75/-8.20	-8.80/-10.94	-12.13/-11.07	-11.88/-12.77	-12.82/-13.02	-13.99/-12.36	-10.95/-8.26	-5.50/-3.83	-2.49/-1.63	
Theta (95°)	-1.66/-0.09	1.17/1.80	1.84/1.64	0.57/-0.96	-1.45/0.53	2.31/2.87	2.16/1.40	1.69/2.58	2.83/2.45	1.89/1.25	0.48/-0.24	-1.66/-2.78	-3.45/-4.28	-4.84/-5.44	-6.25/-7.10	-9.28/-8.81	-8.78/-8.84	-11.37/-12.85	-13.26/-11.79	-11.60/-11.78	-10.35/-10.49	-9.05/-6.73	-6.41/-4.80	-3.88/-2.40	
Theta (110°)	-6.18/-3.82	-1.17/0.67	1.78/2.13	1.41/-0.65	-2.54/-0.57	2.24/3.70	3.41/2.61	2.40/2.45	2.30/2.30	2.47/2.44	1.72/0.26	-2.15/-3.66	-4.77/-5.92	-5.32/-4.95	-5.01/-6.93	-11.16/-11.31	-8.46/-8.49	-11.22/-13.08	-12.03/-11.92	-10.84/-9.73	-9.45/-10.32	-11.32/-10.67	-8.24/-8.73	-7.81/-7.65	
Theta (125°)	-0.72/-4.65	-2.35/-0.35	1.06/1.36	0.37/-1.69	-3.90/-1.09	1.97/3.63	3.85/3.21	2.47/1.84	1.29/1.55	2.67/3.48	3.24/1.68	-0.41/-2.75	-4.00/-4.79	-6.15/-6.14	-6.47/8.07	-10.53/-12.33	-9.59/-8.41	-11.20/-13.11	-11.65/-12.32	-10.33/-10.80	-9.00/-9.97	-11.65/-12.32	-12.53/-10.48	-10.01/-10.22	-9.54/-7.41
Theta (140°)	-6.54/-4.55	-3.25/-2.13	-0.90/0.01	-0.33/-1.87	-3.15/-0.89	1.37/2.80	3.33/3.45	2.78/1.20	0.25/1.45	3.05/3.74	3.83/2.45	0.54/-2.66	-4.18/-4.16	-6.71/6.84	-8.02/-8.89	-8.68/-9.50	-9.18/-7.72	-7.45/-7.39	-15.18/-12.69	-8.68/-6.49	-9.23/-15.60	-11.10/-9.37	-10.54/-12.47	-12.03/-7.91	
Theta (155°)	-4.98/-3.57	-2.59/-1.73	-1.16/-1.22	-2.27/-1.93	0.21/2.20	3.08/2.90	2.86/3.30	3.24/2.27	1.08/1.11	1.87/1.85	1.44/0.22	-1.28/-3.45	-4.62/-6.85	-8.82/-7.68	-6.75/-6.73	-8.00/-10.43	-9.97/-8.53	-8.00/-10.43	-13.01/-15.09	-10.76/-10.05	-12.32/-15.02	-13.58/-11.97	-14.06/-12.96	-8.58/-5.85	
Theta (170°)	-0.04/-4.42	-4.04/-3.45	-2.93/-3.39	-3.82/-1.57	1.87/4.05	4.14/3.18	2.74/3.70	3.55/3.03	0.97/1.68	2.41/2.07	1.47/0.21	-2.63/-6.10	-7.09/-3.99	-7.26/7.76	-8.22/-10.75	-15.36/-11.74	-7.03/-8.93	-13.87/-14.19	-13.32/-14.07	-13.51/-10.47	-12.13/-15.40	-15.73/-13.89	-13.10/-10.72	-9.49/-6.68	
Theta (185°)	-6.51/-5.84	-3.92/-2.96	-2.22/-2.16	-2.04/0.10	2.57/4.04	3.69/2.42	1.90/3.34	4.10/3.10	1.57/1.15	1.51/1.42	0.82/0.04	-1.08/-1.83	-3.89/-7.13	-12.34/-14.37	-12.53/-12.13	-13.04/-12.64	-12.77/-11.24	-13.69/-15.48	-14.76/-14.54	-14.23/-14.67	-15.33/-14.61	-15.64/-15.38	-15.04/-12.52	-9.96/-9.23	
Theta (200°)	-4.38/-2.77	-1.40/-0.67	0.17/0.51	0.96/2.02	3.25/3.95	3.16/0.96	0.76/2.52	3.90/3.78	2.39/1.54	1.25/0.63	0.12/-0.35	-0.79/-2.19	-3.49/-6.02	-7.63/-10.33	-10.81/-13.67	-15.42/-13.58	-10.00/-9.56	-11.33/-14.05	-12.02/-12.15	-13.80/-12.15	-15.26/-15.02	-14.02/-12.15	-11.45/-12.16	-10.97/-10.95	-8.60/-7.79
Theta (215°)	-4.00/-2.63	-1.44/-0.54	0.56/1.59	2.31/2.69	2.45/1.83	1.05/0.22	0.17/2.04	3.13/3.12	2.85/2.28	1.38/0.53	-1.06/-2.00	-3.11/-3.20	-4.06/-6.54	-5.71/-6.80	-5.53/-6.07	-10.67/-8.06	-9.01/-9.91	-12.50/-13.63	-13.09/-11.34	-12.55/-13.81	-15.11/-12.70	-11.44/-8.43	-8.34/-8.43	-7.01/-5.36	
Theta (230°)	-6.77/-5.83	-4.55/-3.20	-1.76/-0.43	1.07/1.32	0.72/-0.92	-3.38/-2.00	0.74/2.46	3.55/3.53	2.99/2.44	2.11/1.61	0.77/0.54	-2.49/-2.74	-4.22/-3.82	-4.42/-6.06	-7.61/-11.58	-16.06/-14.52	-10.65/-8.12	-10.58/-15.16	-15.85/-13.58	-11.76/-15.23	-9.53/-10.22	-9.19/-12.54	-12.33/-11.88	-9.66/-8.23	
Theta (245°)	-6.93/-5.99	-4.97/-3.99	-3.10/-2.39	-1.63/-1.37	-2.07/-3.67	-5.72/-4.63	-0.95/1.25	2.11/2.34	1.80/1.09	0.90/0.63	-0.12/-1.81	-4.13/-5.94	-7.24/-6.45	-6.07/-7.48	-7.83/-9.92	-12.91/-15.97	-14.32/-11.84	-11.57/-12.42	-14.99/-15.78	-10.51/-10.79	-10.91/-12.29	-9.91/-8.98	-7.94/-6.54	-7.90/-6.93	
Theta (260°)	-7.63/-6.69	-5.88/-5.49	-5.14/-4.80	-4.38/-4.23	-4.06/-4.63	-4.76/-5.53	-4.62/-2.10	-0.77/0.55	-0.67/-1.07	-1.83/-2.61	-3.44/-4.21	-4.74/-5.64	-7.42/-6.78	-10.01/-11.28	-11.26/-11.08	-9.23/-11.16	-9.80/-11.31	-15.75/-15.55	-14.07/-13.93	-13.11/-13.58	-16.37/-15.29	-11.07/-7.70	-6.64/-6.27	-7.02/-7.44	
Theta (275°)	-8.54/-8.83	-9.12/-8.71	-7.95/-8.46	-9.55/-10.17	-10.79/-11.54	-12.36/-11.02	-8.76/-6.66	-5.28/-4.37	-4.29/-4.61	-4.76/-4.51	-4.25/-4.05	-4.17/-4.56	-5.40/-6.19	-6.76/-7.54	-8.30/-8.91	-9.28/-10.88	-12.17/-11.01	-10.69/-11.49	-13.02/-13.17	-11.60/-9.35	-10.01/-12.71	-14.78/-11.85	-9.79/-8.83	-8.52/-8.67	
Theta (290°)	-8.79/-8.38	-8.35/-8.25	-8.60/-9.29	-9.95/-10.00	-10.12/-10.41	-11.66/-13.35	-13.74/-12.01	-9.96/-8.30	-7.35/-6.40	-5.19/-4.19	-3.53/-3.16	-2.97/-3.22	-3.91/-4.61	-4.85/-4.96	-5.39/-6.05	-7.44/-10.43	-14.45/-15.26	-14.25/-11.49	-11.58/-12.60	-12.17/-11.06	-9.84/-9.93	-11.10/-12.66	-11.34/-9.68	-9.08/-8.89	
Theta (305°)	-12.02/-12.20	-12.48/-12.90	-12.66/-11.81	-11.49/-11.20	-11.32/-12.14	-13.55/-14.01	-16.03/-12.86	-10.98/-9.13	-7.73/-6.96	-6.33/-5.79	-5.00/-4.59	-4.13/-3.89	-3.91/-4.20	-4.16/-4.31	-5.24/-6.90	-9.35/-12.50	-10.77/-11.57	-9.11/-7.74	-7.60/-8.09	-8.82/-9.23	-9.65/-9.96	-10.27/-10.44	-10.45/-10.59	-10.88/-11.45	
Theta (320°)	-14.51/-14.87	-15.45/-14.99	-14.15/-13.65	-12.55/-12.39	-12.60/-13.37	-14.13/-15.98	-15.24/-14.42	-12.88/-11.32	-10.23/-9.58	-9.18/-8.98	-8.05/-9.12	-9.19/-9.43	-8.44/-8.72	-7.73/-7.31	-7.86/-8.84	-10.04/-10.71	-11.47/-10.96	-11.46/-12.32	-13.80/-13.23	-14.28/-15.16	-15.10/-15.76	-15.31/-14.90	-14.68/-15.32		
Theta (335°)	-15.34/-15.40	-15.64/-15.29	-16.66/-15.41	-15.69/-15.73	-15.24/-14.42	-12.95/-12.93	-12.31/-12.14	-11.87/-12.15	-12.14/-12.48	-13.17/-13.73	-13.94/-13.44	-12.76/-12.46	-12.02/-12.22	-12.94/-13.08	-13.32/-13.01	-14.01/-14.36	-14.81/-15.20	-15.03/-15.38	-15.45/-15.07	-15.11/-15.47	-15.70/-14.99	-15.48/-15.54	-15.65/-15.30	-15.73/-15.89	
Theta (350°)	5.20/Pol.	TotalAnt. 8																							
Gain	Phi(0°)Phi(7.5°)	Phi(15°)Phi(22.5°)	Phi(30°)Phi(37.5°)	Phi(45°)Phi(52.5°)	Phi(60°)Phi(67.5°)	Phi(75°)Phi(82.5°)	Phi(90°)Phi(97.5°)	Phi(105°)Phi(112.5°)	Phi(120°)Phi(127.5°)	Phi(135°)Phi(142.5°)	Phi(150°)Phi(157.5°)	Phi(165°)Phi(172.5°)	Phi(180°)Phi(187.5°)	Phi(195°)Phi(202.5°)	Phi(210°)Phi(217.5°)	Phi(225°)Phi(232.5°)	Phi(240°)Phi(247.5°)	Phi(255°)Phi(262.5°)	Phi(270°)Phi(277.5°)	Phi(285°)Phi(292.5°)	Phi(300°)Phi(307.5°)	Phi(315°)Phi(322.5°)	Phi(330°)Phi(337.5°)	Phi(345°)Phi(352.5°)	
Theta (0°)	-14.16/-12.99	-12.23/-12.76	-12.25/-12.29	-11.84/-11.86	-12.89/-12.95	-12.65/-13.15	-13.44/-13.90	-14.91/-14.05	-13.84/-13.58	-14.59/-14.14	-14.40/-14.48	-14.90/-14.76	-15.49/-15.81	-15.40/-15.67	-14.87/-13.97	-13.97/-12.95	-12.74/-12.71	-12.85/-13.36	-13.93/-13.71	-13.97/-14.34	-13.84/-13.70	-13.02/-12.57	-11.96/-13.64	-14.23/-14.83	
Theta (7.5°)	-14.22/-14.95	-14.86/-13.53	-12.13/-9.97	-8.62/-6.67	-8.83/-6.54	-8.24/-9.55	-9.74/-10.22	-10.55/-11.00	-11.17/-9.69	-8.81/-9.36	-9.22/-10.63	-10.77/-11.47	-11.01/-11.55	-11.22/-12.54	-12.36/-12.51	-13.02/-12.54	-13.04/-12.78	-12.36/-12.31	-13.71/-13.70	-12.12/-12.32	-12.71/-13.13	-12.34/-12.31	-11.66/-13.56		
Theta (15°)	-8.65/-9.02	-8.08/-7.27	-6.51/-5.60	-5.24/-6.34	-7.27/-8.70	-10.91/-12.94	-13.23/-13.71	-11.71/-10.93	-10.17/-9.85	-10.34/-10.06	-9.54/-9.23	-9.21/-9.80	-9.01/-8.36	-7.62/-7.15	-6.91/-7.41	-7.83/-8.49	-9.58/-9.85	-11.19/-11.64	-12.93/-13.61	-14.46/-14.23	-12.58/-10.98	-9.23/-9.97	-10.67/-9.43	-7.52/-6.87	
Theta (22.5°)	-5.73/-5.17	-4.31/-3.83	-3.60/-3.93	-5.23/-7.73	-9.61/-11.58	-13.05/-12.68	-14.91/-15.63	-15.39/-13.93	-12.67/-11.89	-10.66/-9.36	-8.94/-9.71	-11.25/-14.81	-12.68/-9.76	-7.62/-6.49	-6.04/-6.12	-6.27/-6.85	-7.91/-9.14	-11.64/-13.92	-14.63/-13.84	-12.10/-9.85	-7.97/-9.67	-6.39/-6.29	-6.86/-6.24	-6.07/-6.40	
Theta (30°)	-5.39/-5.20	-5.23/-5.40	-5.67/-6.63	-7.67/-9.63	-11.11/-10.46	-9.30/-9.40	-10.83/-11.99	-9.95/-9.32	-8.88/-8.53	-8.88/-8.27	-8.76/-11.24	-12.69/-11.89	-9.18/-7.36	-6.99/-7.14	-7.73/-8.63	-10.41/-11.56	-12.23/-9.65	-7.40/-7.88	-8.43/-8.02	-6.62/-6.87	-5.24/-4.68	-4.77/-4.84	-5.61/-5.49		
Theta (37.5°)	-3.88/-3.46	-3.22/-3.71	-5.09/-6.10	-7.53/-10.63	-11.01/-9.52	-8.14/-9.94	-8.97/-7.54	-6.93/-6.81	-7.99/-8.28	-7.38/-7.02	-8.62/-10.16	-9.63/-10.65	-11.86/-9.75	-8.28/-7.96	-8.15/-9.67	-11.18/-12.83	-13.78/-11.92	-12.05/-11.22	-9.78/-8.48	-10.15/-12.09	-9.78/-6.60	-5.00/-2.83	-2.85/-3.14	-3.02/-3.07	
Theta (45°)	-2.82/-2.03	-1.95/-3.09	-5.94/-7.36	-7.66/-6.71	-7.66/-8.20	-8.28/-6.6																			



Antenna Pattern <2.4GHz and 5GHz U-NII 1~U-NII 4>

Appendix C

Theta (°)	2.780/0.05	-1.03/-0.93	-1.79/-1.27	-3.28/-8.06	-10.02/-9.18	-8.51/-5.68	-3.51/-4.67	-10.76/-14.93	-13.33/-16.14	-13.85/-12.20	-10.23/-13.22	-14.79/-15.66	-10.34/-8.82	-10.60/-9.88	-10.84/-8.39	-6.03/-3.72	-2.19/-0.69	0.78/0.92	1.16/2.47	3.58/4.71	3.86/3.19	2.07/1.97	3.47/4.31	2.63/0.67
Theta (75°)	4.41/1.50	1.11/0.41	-1.42/0.59	-1.82/-5.63	-8.79/-12.82	-9.59/-4.47	-4.12/-6.71	-9.83/-11.34	-11.81/-15.70	-10.85/-6.93	-5.96/-8.13	-9.96/-11.06	-8.36/-8.36	-9.96/-7.94	-7.58/-5.05	-4.36/-2.20	-0.94/-0.29	1.19/1.28	1.85/4.53	5.00/5.53	5.44/5.12	4.19/3.41	4.62/5.31	4.05/1.10
Theta (82.5°)	5.16/1.84	2.37/1.45	-1.23/-0.33	-2.47/-5.00	-6.33/-7.60	-7.60/-7.93	-9.50/-9.74	-13.04/-13.35	-11.43/-10.81	-12.17/-11.44	-12.02/-12.61	-15.59/-15.08	-12.36/-10.40	-10.30/-10.41	-8.87/-3.64	-2.90/-0.54	-0.31/0.32	3.17/2.81	3.05/4.24	5.85/5.13	5.65/4.74	3.92/3.40	4.06/4.98	4.52/1.44
Theta (90°)	3.55/2.04	2.42/-0.12	-3.29/-2.01	-5.03/-7.42	-10.46/-10.09	-7.70/-7.21	-14.39/-12.57	-8.85/-7.69	-10.03/-8.53	-9.90/-9.55	-13.68/-14.05	-11.93/-11.38	-12.89/-10.92	-7.29/-8.38	-9.90/-5.28	-2.69/0.69	-0.88/-1.79	3.50/2.19	0.34/1.46	4.49/4.68	4.20/2.51	1.24/3.34	3.53/3.48	2.02/0.25
Theta (97.5°)	1.46/0.52	0.87/-0.68	-3.70/-4.14	-8.67/-13.47	-15.57/-12.10	-5.96/-5.66	-11.19/-11.35	-9.94/-6.75	-4.74/-4.60	-6.73/-7.23	-9.43/-7.09	-7.40/-8.40	-9.27/-6.29	-6.01/-8.94	-6.12/-4.40	-3.74/-0.12	-4.47/-2.21	2.77/0.94	-0.47/1.26	4.18/4.44	3.36/1.20	0.60/4.17	4.62/3.43	1.55/1.38
Theta (105°)	-0.46/-0.43	-0.92/-1.08	-4.99/-10.21	-9.23/-7.15	-9.09/-13.91	-10.85/-7.08	-9.04/-11.38	-8.43/-7.34	-5.55/-7.48	-8.70/-12.72	-15.43/-11.66	-5.88/-10.38	-4.26/-5.48	-3.31/-8.34	-4.41/-5.09	-1.88/-0.44	-7.28/0.02	4.85/0.06	-1.08/1.54	4.06/4.00	3.71/1.55	0.24/2.58	3.87/2.99	1.38/0.24
Theta (112.5°)	-3.20/-0.85	-2.29/-2.57	-7.87/-10.07	-10.31/-12.66	-9.41/-9.54	-9.40/-9.08	-7.23/-8.45	-9.66/-8.79	-6.97/-6.33	-9.33/-10.65	-9.00/-11.71	-4.33/-13.40	-10.78/-7.72	-3.02/-8.06	-3.40/-7.72	-2.23/-0.63	-5.36/1.09	4.02/-3.93	-3.10/2.08	2.32/2.34	0.78/-2.62	-1.59/0.25	2.51/-1.07	-1.93/-1.99
Theta (120°)	-8.38/-3.32	-3.70/-3.81	-3.69/-7.96	-6.59/-7.67	-6.23/-7.27	-12.13/-10.75	-8.74/-10.71	-10.85/-7.12	-9.32/-8.11	-10.62/-7.16	-7.94/-7.21	-5.17/-15.46	-8.33/-13.40	-7.64/-9.20	-3.41/-13.80	-2.37/-1.43	-14.84/-2.53	2.47/-3.91	-5.79/0.61	0.21/2.41	-2.63/-2.55	-12.66/-3.27	0.46/-0.88	-5.26/-2.27
Theta (127.5°)	-5.62/-4.89	-3.97/-6.96	-3.51/-5.48	-4.73/-5.62	-8.57/-8.95	-7.77/-8.49	-11.01/-11.68	-11.59/-9.79	-10.50/-8.86	-9.21/-8.12	-10.29/-9.78	-12.59/-9.16	-10.44/-10.66	-11.90/-6.28	-11.06/-4.87	-1.98/-4.75	-8.34/-3.40	1.46/-3.66	-9.02/-3.75	-3.43/-0.94	-1.90/-4.36	-8.98/-3.01	-1.40/-2.63	-6.97/-2.76
Theta (135°)	-4.63/-5.71	-5.81/-7.58	-7.12/-6.26	-6.81/-5.55	-7.73/-11.99	-12.69/-11.13	-11.75/-12.28	-11.42/-11.60	-10.15/-11.52	-13.56/-16.11	-15.09/-10.55	-8.67/-10.55	-14.51/-10.88	-8.25/-7.98	-14.20/-7.97	-6.57/-9.45	-10.69/-5.56	-1.58/-4.87	-10.70/-9.22	-8.18/-10.69	-7.98/-8.87	-5.93/-2.62	-1.96/-3.39	-5.79/-5.92
Theta (142.5°)	-7.20/-8.08	-9.30/-10.36	-8.18/-7.07	-9.86/-10.44	-8.30/-6.85	-7.22/-7.32	-7.99/-9.30	-11.72/-12.30	-11.76/-13.02	-11.79/-9.25	-8.59/-9.70	-12.94/-14.89	-15.38/-8.62	-5.64/-6.82	-10.58/-8.47	-7.04/-10.11	-6.53/-4.96	-5.67/-6.93	-7.26/-6.28	-4.87/-4.05	-4.06/-6.26	-8.15/-5.48	-5.07/-5.37	-4.93/-6.08
Theta (150°)	-8.63/-6.91	-5.75/-6.46	-8.34/-9.81	-10.99/-12.41	-12.52/-14.11	-15.29/-14.76	-14.87/-15.51	-15.31/-12.80	-11.64/-12.34	-11.32/-9.96	-11.59/-14.78	-10.79/-10.25	-9.73/-6.12	-5.36/-9.66	-14.90/-9.59	-8.30/-7.82	-6.68/-7.28	-10.11/-13.76	-13.56/-9.28	-7.74/-7.39	-7.57/-9.13	-11.41/-9.81	-7.36/-7.49	-7.44/-8.29
Theta (157.5°)	-12.34/-9.70	-8.12/-8.52	-11.32/-15.38	-14.78/-12.37	-11.24/-10.93	-10.50/-10.71	-12.28/-14.83	-14.55/-14.67	-15.61/-15.36	-14.16/-11.11	-10.09/-10.68	-11.22/-11.24	-10.16/-8.51	-8.68/-11.29	-12.81/-9.24	-6.02/-3.75	-3.55/-5.75	-9.23/-13.39	-12.48/-11.72	-11.91/-11.73	-10.48/-8.40	-6.10/-5.13	-4.93/-6.45	-8.48/-9.83
Theta (165°)	-12.24/-11.85	-12.81/-15.51	-16.06/-13.25	-11.86/-11.03	-10.05/-9.81	-10.22/-12.19	-14.13/-14.56	-15.52/-14.59	-15.71/-15.38	-13.35/-12.37	-12.47/-11.43	-9.95/-8.51	-7.72/-7.54	-8.93/-11.16	-10.91/-8.53	-6.91/-6.09	-6.64/-7.85	-8.58/-8.38	-8.23/-8.58	-8.08/-7.87	-8.25/-8.34	-9.07/-8.96	-8.25/-8.45	-9.16/-11.43
Theta (172.5°)	-14.59/-14.95	-13.61/-11.76	-10.95/-11.31	-11.30/-11.50	-10.69/-10.62	-11.20/-12.20	-12.89/-12.76	-12.36/-12.36	-11.96/-11.61	-11.24/-11.55	-11.78/-11.85	-11.48/-11.41	-11.29/-10.74	-10.58/-10.62	-10.60/-11.06	-10.72/-10.37	-10.53/-10.51	-10.82/-10.44	-10.27/-10.56	-11.39/-11.72	-11.51/-11.83	-12.09/-12.47	-12.45/-13.32	-14.32/-15.81
Theta (180°)	-12.25/-12.40	-10.85/-10.52	-9.73/-10.28	-10.43/-10.76	-11.14/-11.81	-12.31/-12.59	-12.81/-13.84	-14.27/-14.72	-15.87/-15.17	-15.37/-14.89	-15.78/-15.38	-15.27/-15.42	-14.62/-15.60	-15.10/-15.58	-15.67/-15.76	-15.30/-15.72	-14.67/-14.97	-14.74/-15.07	-15.44/-16.27	-15.33/-14.37	-14.53/-15.27	-14.62/-13.08	-12.73/-12.21	-13.10/-11.95
Freq(Hz)	5.885GPol.	TotalAnt. 8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Phi(0°)Phi(7.5°)	Phi(15°)Phi(22.5°)	Phi(30°)Phi(37.5°)	Phi(45°)Phi(52.5°)	Phi(60°)Phi(67.5°)	Phi(75°)Phi(82.5°)	Phi(90°)Phi(97.5°)	Phi(105°)Phi(112.5°)	Phi(120°)Phi(127.5°)	Phi(135°)Phi(142.5°)	Phi(150°)Phi(157.5°)	Phi(165°)Phi(172.5°)	Phi(180°)Phi(187.5°)	Phi(195°)Phi(202.5°)	Phi(210°)Phi(217.5°)	Phi(225°)Phi(232.5°)	Phi(240°)Phi(247.5°)	Phi(255°)Phi(262.5°)	Phi(270°)Phi(277.5°)	Phi(285°)Phi(292.5°)	Phi(300°)Phi(307.5°)	Phi(315°)Phi(322.5°)	Phi(330°)Phi(337.5°)	Phi(345°)Phi(352.5°)
Theta (0°)	-8.10/-7.24	-7.77/-8.14	-9.92/-10.30	-10.43/-8.72	-8.05/-8.01	-8.88/-8.81	-10.94/-11.68	-12.64/-11.20	-9.56/-8.89	-9.33/-9.85	-10.62/-10.16	-9.30/-9.12	-9.15/-9.42	-9.47/-9.29	-9.10/-9.23	-9.70/-9.78	-9.53/-9.52	-9.78/-10.04	-10.25/-9.04	-9.04/-9.15	-10.09/-10.13	-9.34/-8.59	-8.60/-9.32	-10.33/-9.87
Theta (7.5°)	-9.45/-8.55	-8.17/-8.40	-9.46/-10.59	-9.93/-10.06	-9.55/-9.24	-9.61/-10.14	-10.61/-11.96	-13.42/-14.27	-13.61/-10.99	-11.34/-11.56	-11.64/-11.10	-10.24/-9.61	-10.01/-10.04	-10.10/-10.11	-9.96/-10.44	-10.44/-10.48	-10.06/-9.74	-9.62/-9.56	-10.01/-9.46	-9.24/-8.79	-9.14/-9.83	-9.87/-9.23	-8.24/-8.13	-8.96/-8.61
Theta (15°)	-7.73/-8.55	-9.51/-10.33	-11.04/-10.80	-10.97/-11.53	-11.43/-11.09	-11.16/-11.59	-11.76/-12.94	-13.24/-13.27	-12.28/-11.52	-12.31/-13.21	-14.28/-13.45	-12.32/-11.87	-11.18/-11.12	-10.85/-10.55	-10.27/-10.17	-9.97/-9.79	-9.62/-9.84	-9.76/-10.36	-10.53/-10.41	-10.26/-10.34	-9.63/-9.26	-8.36/-7.59	-6.90/-7.06	
Theta (22.5°)	-8.43/-9.73	-10.40/-9.93	-9.92/-11.15	-13.12/-16.09	-15.48/-15.49	-14.66/-10.63	-9.15/-8.37	-8.97/-10.15	-11.41/-11.44	-11.96/-12.85	-14.80/-15.11	-16.34/-13.54	-12.62/-13.01	-13.28/-13.90	-14.50/-12.92	-11.57/-10.49	-9.70/-9.20	-8.02/-7.24	-6.46/-5.83	-5.99/-6.17	-6.82/-8.42	-9.89/-9.54	-7.43/-5.84	-5.28/-6.45
Theta (30°)	-5.32/-6.14	-6.77/-6.93	-7.40/-9.04	-12.42/-15.23	-15.78/-13.07	-11.47/-10.12	-9.61/-9.13	-9.68/-10.61	-11.98/-12.49	-12.11/-12.17	-12.54/-13.36	-14.64/-13.32	-13.02/-13.40	-12.96/-13.54	-13.16/-11.46	-10.42/-10.57	-8.16/-6.90	-6.01/-5.69	-4.51/-2.60	-2.25/-2.60	-2.90/-3.81	-5.08/-5.53	-4.98/-4.86	-5.08/-6.14
Theta (37.5°)	-2.38/-2.28	-4.15/-7.62	-7.89/-5.59	-4.98/-6.27	-8.25/-11.46	-12.19/-11.51	-12.08/-13.34	-14.11/-13.01	-13.58/-14.86	-15.33/-14.10	-12.85/-12.51	-11.77/-13.13	-15.37/-14.23	-13.01/-10.90	-10.34/-9.67	-9.36/-8.98	-8.97/-7.69	-4.67/-3.02	-3.06/-5.29	-6.78/-6.01	-4.33/-3.19	-2.55/-1.27	-1.57/-2.70	-4.96/-4.25
Theta (45°)	-1.16/-1.24	-2.57/-3.00	-3.64/-5.03	-6.26/-6.49	-7.19/-9.64	-12.12/-12.95	-11.58/-11.17	-12.69/-15.25	-14.63/-15.77	-15.51/-14.90	-14.55/-13.23	-11.65/-12.52	-14.30/-10.84	-7.72/-6.97	-8.09/-10.42	-8.18/-8.38	-7.67/-7.73	-7.76/-6.43	-5.51/-4.45	-5.14/-5.62	-2.82/-0.30	-0.50/-0.40	0.43/0.25	-0.17/-1.15
Theta (52.5°)	1.18/0.97	-0.18/-1.70	-2.77/-3.94	-5.12/-5.86	-5.71/-8.11	-10.35/-10.59	-10.53/-11.35	-12.82/-15.45	-15.82/-13.97	-16.15/-15.13	-14.89/-14.82	-13.49/-13.87	-10.08/-8.39	-7.23/-6.78	-7.51/-7.83	-8.13/-6.72	-5.39/-3.46	-2.53/-2.92	-3.57/-4.16	-3.29/-3.11	-1.62/0.87	1.33/1.96	2.33/0.68	-0.71/0.62
Theta (60°)	0.77/-0.17	-0.24/-0.59	-3.09/-2.94	-3.64/-5.57	-7.33/-9.18	-9.10/-8.89	-9.10/-10.29	-13.21/-13.93	-15.54/-15.70	-14.98/-14.07	-11.06/-12.56	-13.17/-14.91	-9.35/-9.49	-9.79/-8.56	-9.44/-10.98	-6.03/-3.99	-3.11/-1.16	-0.02/-1.06	-1.06/-0.35	1.50/1.60	0.06/0.96	0.97/2.17	3.27/2.33	-1.06/-1.14
Theta (67.5°)	1.28/-1.10	0.14/0.56	-1.94/-2.10	-2.95/-4.75	-7.74/-11.92	-13.99/-13.52	-8.27/-7.36	-11.76/-14.16	-15.50/-15.22	-14.54/-13.53	-12.74/-13.74	-13.49/-15.05	-8.87/-9.46	-13.63/-13.87	-15.66/-8.65	-4.14/-3.12	-2.66/-0.40	2.21/1.93	1.72/3.47	4.62/5.69	4.35/4.01	2.43/2.64	4.38/4.29	1.07/-1.22
Theta (75°)	2.85/1.02	2.30/2.45	0.48/-0.28	-2.95/-4.08	-5.10/-6.83	-9.73/-9.04	-7.58/-9.32	-11.93/-13.19	-14.52/-14.89	-12.41/-9.98	-9.15/-10.44	-12.32/-12.48	-8.77/-8.95	-12.47/-9.70	-8.37/-4.98	-3.54/-2.10	-0.78/-0.44	1.66/2.57	3.32/5.22	6.03/6.75	6.38/5.88	4.64/3.81	4.67/5.51	3.77/0.92
Theta (82.5°)	4.49/0.87	2.87/2.37	0.79/0.30	-4.48/-5.50	-6.89/-5.59	-5.79/-11.47	-12.54/-12.52	-12.03/-11.63	-13.86/-13.60	-14.76/-10.45	-15.35/-11.50	-15.72/-15.58	-10.76/-9.07	-10.06/-9.95	-7.23/-2.02	-2.13/-0.74	0.80/1.10	2.82/2.93	3.32/4.84	5.89/5.47	5.79/4.91	3.81/3.56	4.07/5.18	3.81/1.32
Theta (90°)	3.86/-1.19	1.45/2.04	0.92/-0.72	-8.15/-7.29	-7.23/-4.71	-8.44/-13.01	-15.62/-14.80	-14.99/-13.06	-15.18/-10.59	-11.90/-9.93	-12.50/-10.78	-9.88/-10.53	-8.99/-9.83	-8.35/-9.35	-10.35/-3.45	-1.63/0.82	-0.37/-0.75	4.28/2.37	0.67/2.36	5.45/5.04	4.42/3.13	2.41/4.23	4.53/4.99	4.81/1.38
Theta (97.5°)	0.85/-2.																							

E1(XY plane) – $\Theta(90)\Phi(0-360)$
 E2(XZ plane) – $\Theta(0-180)\Phi(0)$ and $\Theta(0-180)\Phi(180)$
 E3(YZ plane) – $\Theta(0-180)\Phi(90)$ and $\Theta(0-180)\Phi(270)$

