



Radiated Composite Gain Data of 6GHz

Appendix B

Θ(120°)	-18.8/-17.9	-19.06/-16.79	-18.79/-18.01	-18.53/-19.28	-18.18/-18.21	-19.29/-17.91	-18.03/-19.19	-18.82/-18.99	-18.19/-18.9	-18.13/-17.95	-19.32/-17.76	-17.65/-17.56	-18.17/-18.26	-18.72/-17.79	-18.41/-17.92	-18.5/-19.18	-18.08/-18.15	-18.05/-18.46	-18.83/-19.05	-18.84/-17.88	-18.45/-18.51	-19.32/-18.95	-19.07/-18.85	-16.54/-19.18
Θ(127.5°)	-17.72/-18.48	-18.21/-17.73	-19.04/-19.4	-18.12/-18.28	-19.28/-18.79	-19.17/-19.09	-17.71/-18.55	-19.28/-18.93	-18.5/-18.15	-18.2/-19.05	-18.42/-17.68	-18.94/-18.52	-17.91/-17.3	-19.11/-19.42	-19.21/-17.59	-17.37/-18.54	-19.19/-19.1	-18.28/-18.46	-18.62/-18.85	-17.17/-18.94	-18.45/-18	-18.14/-18.22	-18.28/-19.28	-19.19/-17.56
Θ(135°)	-18.46/-17.33	-17.11/-17.91	-18.67/-18.54	-17.78/-18.21	-18.57/-17.84	-16.66/-19.12	-17.94/-18.12	-15.5/-17.86	-17.34/-19.05	-17.4/-18.1	-18.48/-17.31	-18.77/-18.62	-17.84/-18.02	-17.94/-17.99	-18.65/-17.99	-19.33/-18.6	-18.22/-17.95	-17.27/-18.64	-19.2/-18.64	-18.3/-17.97	-17.64/-18.99	-17.9/-18.37	-19.72/-18.42	-17.34/-18.56
Θ(142.5°)	-18.09/-19.13	-18.28/-19.22	-18.5/-18.16	-19.29/-18.94	-17.91/-18.31	-18.68/-18.63	-18.92/-19.12	-18.71/-18.18	-17.97/-17.39	-18.85/-18.15	-18.43/-19.07	-19.14/-18.08	-17.75/-19.19	-18.44/-16.26	-18.01/-18.25	-18.12/-18.6	-17.99/-17.84	-18.44/-18.38	-17.46/-18.51	-18.75/-18.99	-18.71/-18.89	-19.04/-19.25	-17.98/-18.69	-18.04/-17.83
Θ(150°)	-18.51/-18.08	-18.14/-18.28	-17.33/-18.91	-17.32/-18.06	-19.24/-18.01	-18.38/-19.11	-17.73/-18.3	-18.26/-18.15	-17.79/-17.96	-18.31/-17.77	-18.5/-18.09	-18.71/-18.98	-19.11/-17.67	-19.21/-19.16	-18.85/-17.8	-18.58/-18	-18.5/-17.84	-19.36/-18.65	-18.33/-19.21	-17.39/-17.99	-18.58/-18.41	-17.96/-18.18	-19.07/-16.15	-18.13/-19
Θ(157.5°)	-19.01/-19.3	-18.07/-18.81	-18.53/-18.26	-18.2/-18.55	-18.57/-18.59	-18.97/-18.1	-18.75/-17.92	-18.87/-19.01	-18.68/-18.9	-18.32/-17.82	-18.65/-17.37	-18.71/-18.75	-18.27/-18.27	-19.25/-18.25	-17.94/-18.19	-18.63/-17.65	-18.77/-18.51	-17.71/-18.92	-18.05/-17.41	-18.33/-17.96	-18.18/-18.7	-17.37/-18.83	-19.27/-17.7	-18.43/-18.11
Θ(165°)	-18.36/-17.37	-18.4/-18.13	-18.85/-18.01	-18.43/-18.77	-18.42/-17.79	-19.22/-18.9	-18.65/-18.53	-18.34/-18.54	-18.72/-18.95	-18.94/-18.72	-18.61/-19.18	-17.13/-17.21	-19.1/-17	-17.44/-19.07	-18.94/-18.88	-17.55/-18.22	-18.73/-18.62	-18.49/-18.03	-18.81/-18.99	-17.71/-19.09	-18.18/-18.02	-17.92/-18.21	-19.43/-17.68	-17.71/-17.92
Θ(172.5°)	-17.27/-19.01	-19.07/-18.98	-19.08/-19.22	-17.45/-18.81	-17.74/-18.92	-17.89/-19.07	-18/-18.02	-17.96/-18.24	-18.83/-18.69	-18.87/-17.92	-18.59/-18.83	-18.44/-18.81	-18.44/-17.07	-18.47/-19.01	-17.94/-18.8	-18.21/-18.14	-18.22/-18.39	-18.77/-18.72	-18.1/-18.36	-17.67/-17.82	-19.09/-18.16	-18.13/-18.9	-18.86/-17.73	-18.71/-18.32
Θ(180°)	-17.94/-18.2	-17.58/-19.07	-18.11/-18.04	-18.53/-18.05	-18.61/-18.33	-18.74/-17.53	-18.58/-18.97	-19.54/-18.67	-18.16/-18.88	-18.42/-18.29	-18.47/-18.36	-17.73/-18.74	-19.18/-18.12	-18.67/-17.65	-18.4/-18.24	-19.12/-19.16	-17.24/-18.41	-18.85/-17.83	-18.28/-18.08	-17.72/-18.23	-18.26/-19.07	-19.07/-18.64	-18.25/-18.29	-18.01/-17.15
Freq(Hz)	6.995GPol.	PhiAnt. 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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°)	-11.21/-11.47	-11.63/-12.77	-13.65/-14.9	-16.34/-18.85	-17.9/-17.94	-17.88/-18.52	-16.48/-14.44	-12.32/-11.65	-10.6/-9.88	-9.29/-8.8	-8.48/-8.4	-8.41/-8.58	-9.35/-10.17	-10.97/-11.94	-12.98/-14.21	-17.39/-19.09	-17.4/-18.58	-19/-18	-18.9/-16.65	-14.8/-13.54	-12.58/-12.05	-11.49/-10.89	-10.41/-10.22	-10.58/-10.93
Θ(7.5°)	-5.05/-5.02	-5.31/-6.03	-6.86/-7.48	-7.6/-8.13	-8.56/-9.97	-9.28/-10.15	-10.86/-12.11	-13.9/-15.3	-17.19/-18.69	-17.63/-16.16	-14.12/-12.83	-12.05/-11.66	-11.54/-11.58	-11.64/-11.9	-12.42/-13.23	-14.35/-14.65	-13.21/-11.42	-9.44/-8.15	-7.48/-6.9	-6.43/-6.54	-6.43/-6.62	-6.72/-6.49	-5.84/-5.25	-5.16/-4.97
Θ(15°)	-3.13/-3.15	-3.46/-4.04	-4.24/-3.8	-3.23/-2.92	-2.61/-2.74	-3.27/-3.94	-5.17/-6.26	-7.17/-7.79	-7.99/-7.82	-8.03/-8.59	-8.4/-8.19	-7.79/-7.86	-8.09/-8.61	-8.56/-8.28	-7.63/-6.57	-5.28/-3.8	-2.3/-1.17	-0.44/-0.06	0/-0.11	-0.27/-0.74	-1.25/-1.87	-2.71/-3.3	-3.57/-3.68	-3.86/-3.49
Θ(22.5°)	-1.91/-3.06	-4.62/-6.35	-6.19/-4.07	-2.79/-2.02	-1.39/-1.08	-1.41/-3.19	-6.87/-11.05	-11.14/-10.33	-9.83/-8.79	-7.95/-6.97	-6.01/-5.42	-5.6/-7.37	-9.46/-10.14	-10.81/-11.36	-1.5/-0.55	0.0/49	0.0/49	0.05/-1.83	2.292/-26	2.122/-18	2.071/-96	2.112/-27	2.21/-175	0.56/-0.91
Θ(30°)	0.59/-1.16	-2.89/-2.75	-0.42/-1.07	0.96/0	-0.58/-0.8	-1.27/-2.53	-3.06/-1.45	-0.5/-0.76	-1.38/-1.84	-2.78/-4	-4.5/-4.59	-4.26/-4.69	-5.18/-3.24	-3.77/-7.45	-9.12/-3.71	0.24/-2.08	2.34/-2.08	2.36/-2.54	2.23/-1.65	1.72/-56	3.66/-4.29	4.48/-4.2	3.59/-3.33	2.91/-2.01
Θ(37.5°)	0.35/-1.48	-1.57/-0.43	1.86/-19	0.73/-0.84	-1.51/-2.29	-4.39/-6.03	-4.06/-1.67	-1.18/-1.95	-2.69/-3.04	-2.63/-2.25	-2.02/-2.88	-3.4/-1.74	0.92/-1.81	1.05/-0.33	-1.4/-1.42	-0.54/-0.17	-1.11/-1.15	-0.77/-0.83	-0.54/-0.95	-1.37/-0.76	-0.04/-0.09	0.75/-197	2.16/-169	1.28/-151
Θ(45°)	-1.58/-2.47	-1.72/-0.66	-0.55/-0.35	0.39/-0.99	1.93/-86	0.33/-1.95	-2.43/-2.24	-1.62/-0.4	1.77/-1.56	1/0.03	-0.14/-0.53	1.35/-0.73	0.94/-0.21	-1.29/-1.57	-4.62/-6.79	-5.72/-2.57	-0.79/-0.93	-2.46/-1.22	-0.09/-0.37	0.12/-1.46	1.89/-116	-0.84/-2.3	-3.49/-3.4	-4.41/-2.64
Θ(52.5°)	-2.54/-1.7	-1.8/-1.81	-2.75/-2.04	-1.47/-0.6	-0.75/-1.44	-0.73/-1.2	-0.34/-0.39	0.67/-1.95	3.06/-2.85	2.26/-1.43	-0.32/-0.85	0.76/-0.6	-3.84/-6.05	-5.65/-7.62	-4.76/-4.89	-3.32/-3.78	-1.88/-1.59	-3.16/-3.48	-1.41/-0.67	-0.5/-1.19	2.07/-21	3.15/-196	-1.29/-3.48	-4.91/-4.61
Θ(60°)	-0.58/-0.5	-0.29/-0.93	-1.24/-0.5	-1.6/-3.96	-8.87/-6.36	-5.55/-9.96	-5.79/-3.94	-4.15/-3	-3.56/-2.75	-2.8/-2.07	-1.64/-4.29	-5.47/-3.85	-3.19/-3.31	-0.75/-0.63	1.36/-0.27	0.38/-1.48	-2.62/-3.71	-3.54/-4.34	-1.83/-1.48	-2.25/-0.11	1.96/-453	4.77/-4.86	2.81/-0.75	-0.21/-1.21
Θ(67.5°)	0.48/-1.17	0.43/-0.74	-0.36/-0.99	-0.5/-0.54	0.06/-1.83	-2.17/-5.69	-6.78/-6.52	-5.01/-2.04	-1.04/-0.51	-1.96/-2.59	-0.75/-0.99	-3.87/-2.48	0.69/-0.45	1.5/-16	2.99/-127	2.04/-193	-0.23/-3.01	-2.84/-2.25	-0.91/-0.97	-0.64/-1.82	2.96/-4.69	4.58/-4.77	3.44/-1.87	1.44/-68
Θ(75°)	-0.25/-0.55	-0.23/-1.16	-0.69/-0.02	-0.96/-0.12	3.04/-2.38	0.99/-0.78	-2.37/-2.34	-0.19/-0.3	2.06/-1	0.49/-0.79	-0.60/-12	-1.46/-2.42	0.71/-1.15	1.40/-93	2.25/-1.03	1.75/-1.02	1.09/-1.49	-1.43/-0.33	0.11/-0.93	-0.31/-1.9	2.82/-3.73	3.05/-3.45	2.56/-1.23	0.85/-0.5
Θ(82.5°)	-1.69/-1.44	-2.3/-2.23	-1.62/-1.91	-2.12/-1.2	2.49/-0.69	1.49/-2.52	-2.99/-2.11	0.94/-0.31	1.71/-0.39	-0.06/-0.76	-1.29/-1.19	-1.79/-3.41	-0.70/-63	0.23/-0.54	-0.05/-1.48	-0.70/-12	0.18/-1.49	-2.39/-0.57	-0.13/-2.6	-1.32/-1.21	1.89/-1.89	-0.04/-0.63	0.32/-1.27	-1.1/-1.66
Θ(90°)	-4.62/-4.96	-5.64/-4.61	-5.05/-5.77	-4.75/-3.92	0.18/-1.37	-0.52/-6.06	-5.79/-5.12	-1.27/-0.33	-0.95/-0.98	-1.95/-2.4	-2.13/-3.22	-3.39/-6.12	-4.75/-2.35	-2.18/-2.24	-3.68/-5.16	-3.37/-2.35	-1.47/-2.79	-3.36/-2.76	-1.55/-5.3	-3.83/-0.71	-0.84/-1.13	-4.39/-3.71	-2.19/-4.19	-4.12/-4.73
Θ(97.5°)	-7.97/-8.95	-8.54/-6.82	-8.86/-10	-6.72/-7.53	-3.1/-4.28	-3.83/-9.21	-8.79/-7.53	-3.66/-2.17	-3.62/-4.27	-4.12/-5.5	-5.14/-5.8	-6.55/-10.45	-11.24/-6.37	-6.15/-4.43	-6.57/-8.43	-7.06/-7.45	-5.17/-6.75	-6.68/-6.5	-4.38/-10.25	-8.28/-3.57	-6.85/-5.41	-9.75/-6.75	-5.3/-8.95	-9.13/-8.85
Θ(105°)	-8.58/-10.35	-9.42/-10.11	-13.09/-10.82	-8.95/-11.21	-5.36/-7.52	-9.01/-10.5	-10.44/-9.45	-7.54/-7.1	-6.37/-8.03	-7.59/-9.02	-11.2/-9.07	-9.97/-13.64	-19.21/-10.74	-10.14/-6.69	-8.32/-9.54	-10.94/-14.04	-12.26/-15.72	-16.8/-17.28	-11.82/-18.83	-18.63/-9.86	-12.5/-8.34	-10.71/-9.01	-8.22/-12.55	-11.06/-9.9
Θ(112.5°)	-12.47/-16.34	-15.46/-15.72	-12.29/-12.12	-15.28/-10.39	-9.85/-8.95	-13.31/-16.14	-18.23/-16.46	-12.24/-9.31	-10.19/-10.17	-11.56/-12.95	-15.83/-12.88	-15.25/-15.89	-18.37/-18.65	-16.11/-12.06	-10.47/-12.02	-10.46/-12.32	-13.77/-11.46	-10.42/-13.52	-14.29/-10.65	-7.66/-7.78	-9.53/-10.68	-8.45/-13.18	-11.89/-13.06	
Θ(120°)	-16.33/-16.48	-12.07/-11.2	-11.19/-17.36	-19.12/-18.77	-13.99/-13.42	-10.24/-16.52	-14.15/-11.72	-13.41/-16.1	-12.79/-13.54	-11.58/-18.35	-16.55/-13.68	-14.91/-14.48	-17.68/-19.33	-17.87/-14.73	-9.95/-13.53	-11.55/-10.66	-13.37/-13.1	-16.67/-11.51	-12.41/-18.52	-12.14/-12.72	-13.66/-10.98	-16.8/-11.59	-9.48/-14.27	-17.92/-18.09
Θ(127.5°)	-12.46/-16.19	-17.77/-18.66	-13.08/-16.12	-18.52/-17.83	-11.51/-10.42	-17.94/-18.87	-18.09/-18.54	-19.19/-13.75	-14.34/-12.99	-16.23/-17.46	-13.66/-12.67	-14.98/-13.4	-14.85/-18.58	-17.47/-18.17	-12.15/-12.35	-18.52/-18.99	-18.07/-16.34	-18.9/-17.75	-15.93/-18.56	-17.66/-17.1	-18.22/-18.47	-18.53/-15.24	-15.5/-19.01	-14.35/-15.05
Θ(135°)	-18.56/-18.94	-18.88/-18.69	-15.87/-19.1	-19.02/-13.89	-17.59/-17.97	-12.54/-14.19	-17.43/-18.19	-19.34/-17.82	-18.9/-16.35	-18.19/-18.54	-18.77/-14.69	-13.45/-14.97	-11.59/-15.52	-18.29/-18.92	-18.9/-14	-10.86/-13.93	-12.88/-11.32	-16.87/-12.17	-10.31/-15.33	-13.99/-13.08	-15.09/-12.18	-14.08/-12.64	-15.4/-15.04	-18/-19.44
Θ(142.5°)	-17.81/-17.62	-17.93/-18.35	-14.32/-13.52	-13.98/-13.23	-12.87/-11.39	-18.79/-18.05	-17.75/-17.59	-18.82/-18.8	-16.65/-15.76	-13.75/-16.73	-18.6/-17.64	-15.21/-11.21	-11/-11.68	-11.91/-17.31	-17.67/-16.93	-18.37/-19.15	-17.8/-17.23	-13.43/-14.03	-18.8/-18.79	-18.41/-14.02	-13.04/-14.34	-13.68/-18.95	-18.31/-18.01	-17.76/-18.47
Θ(150°)	-17.22/-19.64	-16.8/-17.21	-18.04/-19.07	-16.57/-12.13	-18.66/-19.01	-13.1/-10.25	-13.42/-17.75	-19.01/-18.77	-12.92/-12.58	-18.36/-17.93	-18.23/-14.37	-10.84/-9.69	-7.94/-8.8	-11.24/-11.59	-16.94/-17.54	-19.1/-16.2	-18.44/-17.65	-17.94/-18.28	-19/-17.94	-18.57/-18.59	-18.77/-18.45	-17.23/-16.31	-16.64/-18.54	-17.74/-17.11
Θ(157.5°)	-19.3/-19.28	-17.28/-18.32	-19.08/-17.8	-15.33/-16.29	-18.78/-17.84	-18.05/-19.04	-18.95/-19.82	-18.75/-19.06	-15.45/-13.25	-11.88/-11.89	-13.55/-13.88	-12.84/-11.57	-10.08/-10.59	-16.57/-17.81	-16.81/-18.49	-17.52/-18.18	-18.71/-18.18	-18.06/-15.68	-13.91/-15.23	-18.39/-17.83	-18.47/-17.75	-18.26/-18.95	-14.48/-14.08	-17.56/-18.95
Θ(165°)	-18.78/-18.47	-18.49/-18.33	-18.69/-17.96	-18.56/-18.7	-18.81/-17.91	-18.77/-18																		



Freq(Hz)	2.45G	5.2G	5.3G	5.6G	5.785G	5.885G	6.175G	6.475G	6.695G	6.995G
Ant. 1 Max Gain (dBi)	1.76	3.44	3.27	3.16	3.75	5.11	4.19	3.34	4.02	4.41
Ant. 2 Max Gain (dBi)	1.17	2.09	2.62	2.22	2.49	2.91	3.32	2.13	3.01	4.43
Ant. 1 Polarization/Θ(°)/Φ(°)	Theta/52.5/202.5	Theta/75/285	Theta/75/285	Theta/75/315	Theta/82.5/277.5	Theta/75/285	Theta/82.5/277.5	Theta/75/270	Theta/52.5/255	Theta/60/262.5
Ant. 2 Polarization/Θ(°)/Φ(°)	Theta/45/60	Theta/52.5/172.5	Theta/67.5/120	Theta/52.5/165	Theta/52.5/172.5	Theta/52.5/157.5	Theta/75/180	Theta/75/127.5	Theta/75/127.5	Theta/75/112.5
Max Gain (dBi)	1.76	3.44	3.27	3.16	3.75	5.11	4.19	3.34	4.02	4.43





Radiated Composite Gain Data of scan

Appendix C

Θ (22°)	-12.22/-17.87	-16.11/-7.85	-5.65/-5.76	-6.42/-5.03	-2.92/-1.5	-0.43/-0.04	0.04/-0.35	-1.18/-2.44	-3.5/-3.57	-3.42/-3.9	-4.46/-5.05	-5.45/-6.01	-7/-7.65	-7.64/-7.58	-7.02/-5.29	-2.93/-1.14	-0.22/-0.04	-0.03/-0.43	0.51/0.31	0.53/0.53	0.2/-0.26	-1.01/-2.98	-6.74/-9.75	-10.36/-9.97
Θ (30°)	-9.69/-17.7	-14.55/-7.27	-6.27/-7.05	-5.03/-2.52	-1.8/-2.06	-1.94/-1.15	-0.18/-0.1	-0.04/-0.81	-2.18/-2.33	-1.59/-3.2	-4.22/-5.93	-6.37/-5.82	-4.73/-4.27	-4.59/-5.01	-4.87/-3.58	-2.78/-2.74	-3.19/-3.24	-1.75/-0.4	-0.82/-2.22	-2.14/-2.1	-2.2/-1.84	-1.87/-2.5	-4.44/-7.77	-7.59/-6.46
Θ (35°)	-9.69/-17.65	-12.66/-7.7	-8.07/-6.33	-4.05/-2.64	-2.3/-2.65	-2.64/-2	-0.41/-0.8	0.4/-0.91	-2.16/-1.69	-0.59/-2.17	-6.31/-10.55	-12.56/-11.21	-7.43/-6.4	-5.87/-6.24	-7.97/-10.13	-9.93/-8.43	-9.04/-4.31	-0.091/1.88	-1.58/-0.59	-2.53/-1.84	-1.31/-2.5	-4.42/-4.85	-4.98/-4.96	-3.97/-9.92
Θ (45°)	-13.44/-19.06	-18.87/-15.34	-10.81/-7.98	-6.56/-5.09	-3.97/-2.57	-2/-2.34	-1.23/0.37	-0.12/-2.83	-3.81/-2.3	-1.8/-2.92	-6.91/-9.9	-12.12/-17.91	-15.08/-12.26	-12.81/-15.55	-17.31/-13.78	-7.73/-6.17	-5.13/-4.46	-2.74/-0.06	-0.31/-2.51	-5.19/-3.98	-0.85/-1.66	-4.08/-5.36	-4.03/-3.98	-4.88/-8.57
Θ (52.5°)	-15.14/-18.64	-14.38/-12.51	-10.68/-9.7	-9.42/-7.99	-4.68/-2.86	-3.14/-4.15	-2.82/-1	-1.35/-4.26	-4.89/-2.77	-2.74/-5.41	-5.35/-5.96	-9.84/-16.06	-15.07/-15.82	-18.67/-15.56	-14.76/-9.4	-4.84/-3.45	-2.14/-1.52	-4.79/-5.61	-3.27/-0.8	-1.26/-4.93	-3.77/-4.33	-8.09/-6.43	-2.52/-3.27	-7.36/-13.48
Θ (60°)	-11.65/-11.97	-11.21/-9.7	-11.95/-13.59	-11.98/-10.96	-8.26/-5.37	-4.97/-6.92	-5.26/-2.11	-2.21/-5.96	-5.46/-2.03	-1.92/-6.85	-5.93/-2.75	-4.68/-13.8	-17.47/-10.86	-12.68/-8.69	-9.56/-12.43	-8.72/-4.54	-2.79/-1.57	-5.02/-8.11	-3.33/-0.62	-1.06/-5.26	-6.93/-7.26	-7.66/-8.29	-3.8/-3.72	-7.78/-11.4
Θ (67.5°)	-10.39/-10.98	-9.09/-10.35	-18.86/-17.79	-18.31/-19.15	-13.76/-8.02	-7.05/-8.32	-7.44/-4.04	-4.67/-7.99	-4.89/-1.34	-2.32/-9.62	-5.25/-2.28	-5.09/-13.15	-18.71/-14.72	-14.41/-11.23	-14.21/-17.6	-15.98/-8.5	-4.27/-1.73	-4.16/-5.1	-4.35/-1.97	-2.23/-5.59	-7.13/-6.43	-6.83/-7.82	-6.86/-6	-9.12/-10.29
Θ (75°)	-9.54/-11.19	-11.55/-12.25	-18.89/-15.9	-18.46/-18.59	-17.57/-12.42	-8.53/-10.86	-10.99/-5.42	-6.51/-10.7	-6.32/-3.27	-3.31/-12.7	-6.38/-3.21	-5.11/-10.69	-17.85/-15.58	-16.05/-10.14	-17.33/-18.49	-15.45/-18.46	-10.03/-4.15	-4.34/-4.92	-5.15/-3.39	-3.15/-6.56	-8.42/-5.72	-6.49/-6.3	-8.14/-8.4	-10.86/-9.97
Θ (82.5°)	-11.84/-12.56	-10.86/-13.8	-14.83/-14.15	-18.52/-18.06	-18.38/-15.6	-9.66/-11	-11.66/-6.47	-8.87/-13.52	-6.67/-3.91	-5.87/-18.57	-7.34/-4.8	-6.96/-15.31	-18.78/-16.54	-18.61/-17.52	-19.01/-18.25	-11.9/-18.06	-13.03/-6.12	-4.08/-5.79	-8.31/-3.41	-5.24/-7.73	-12.64/-8.3	-7.96/-6.49	-12.54/-14.89	-13.03/-10.38
Θ (90°)	-11.17/-14.27	-11.67/-14.55	-13.41/-13.57	-18.79/-19.29	-18.54/-18.02	-10.69/-12.91	-13.97/-7.99	-10.15/-17.98	-8.19/-5.48	-7.5/-18.51	-10.09/-6.91	-8.19/-13.14	-18.09/-16.59	-18.18/-16.04	-18.32/-16.57	-10.05/-17.67	-18.73/-8.88	-6.56/-6.11	-14.07/-5.71	-6.11/-13.76	-13.93/-11.53	-9.61/-7.5	-14.49/-15.41	-14.84/-10.99
Θ (97.5°)	-13.64/-14.18	-13.8/-13.57	-11.63/-13.69	-17.94/-18.6	-18.61/-16.78	-18.17/-16.78	-14.83/-8.29	-11.51/-18.3	-8.52/-7.14	-10.53/-18.8	-11.45/-8.66	-10.43/-16.89	-18.43/-12.86	-18.89/-17.82	-16.77/-17.82	-11.67/-13.29	-18.78/-18.96	-7.67/-8.73	-16.57/-8.71	-10.67/-14.36	-14.47/-11.4	-11.21/-11.43	-16.75/-16	-14.32/-11.08
Θ (105°)	-12.74/-15.52	-11.93/-13.24	-12.62/-13.98	-17.03/-18.82	-17.73/-17.22	-13.1/-18.53	-16.65/-11.06	-14.74/-18.1	-11.8/-8.32	-11.15/-18.96	-14.9/-76	-11.08/-14.98	-18.48/-14.05	-14.97/-14.2	-16.77/-14.49	-11.24/-14.26	-14.11/-17.27	-18.35/-14.03	-13.28/-5.1	-8.24/-18.19	-15.9/-18.02	-19.32/-16.12	-10.16/-14.78	-15.63/-17.93
Θ (112.5°)	-12.04/-18.14	-13.29/-13.59	-11.61/-14.01	-17.71/-18.05	-16.77/-17.9	-15.44/-18.27	-15.35/-10.92	-15.55/-18.19	-11.5/-10.46	-13.64/-18.05	-16.62/-10.78	-9.61/-15.36	-18.84/-18.09	-15.76/-12.87	-18.5/-17.2	-14.61/-11.4	-11.11/-18.09	-18.19/-15.61	-16.13/-17.03	-17.58/-17.12	-16.23/-10.7	-17.75/-19.01	-18.86/-18.01	-15.53/-12.68
Θ (120°)	-16.09/-14.85	-14.22/-17.79	-17.32/-18.27	-18.44/-19.2	-18.53/-17.93	-17.88/-17.8	-12.92/-12.99	-16.59/-18.57	-12.63/-11.06	-12.34/-18.37	-19.05/-12.42	-9.75/-11.83	-18.72/-17.85	-17.94/-13.31	-18.21/-17.84	-12.7/-12.05	-9.49/-13.31	-18.37/-15.35	-17.84/-12.8	-15.38/-18.74	-12.1/-12.77	-13.07/-17.84	-17.34/-12.48	-14.73/-15.81
Θ (127.5°)	-15.1/-16.95	-18.14/-18.44	-18.45/-19.05	-17.95/-19.37	-17.97/-18.7	-17.73/-15.12	-13.02/-16.66	-16.76/-15.61	-14.34/-13.08	-15.6/-18.36	-16.48/-13.71	-10.26/-11.26	-14.89/-17.45	-14.33/-13.88	-18.41/-19.15	-18.38/-11.4	-18.89/-10.94	-11.37/-13.92	-13.28/-5.1	-8.24/-18.19	-15.9/-18.02	-19.32/-16.12	-10.16/-14.78	-15.63/-17.93
Θ (135°)	-16.71/-18.03	-15.89/-17.43	-15.92/-15.37	-17.03/-15.23	-14.75/-16.79	-16.03/-16	-19.03/-19.22	-17.99/-14.66	-13.71/-13.84	-13.21/-17.21	-19.29/-11.93	-11.68/-9.72	-15.9/-15.53	-19.5/-18.65	-18.45/-19.49	-16.59/-17.72	-19.01/-17.53	-14.5/-14.77	-10.95/-16.78	-12.69/-18.73	-14.6/-12.73	-19.37/-17.04	-12.23/-15.72	-13.25/-16.27
Θ (142.5°)	-16.69/-14.7	-18.36/-17.27	-18.39/-17.48	-16.18/-12.25	-12.09/-14.77	-14.15/-12.32	-18.44/-18.68	-18.83/-18.74	-14.94/-15.49	-18.9/-13.38	-8.68/-11.28	-11.92/-18.79	-17.42/-18.38	-17.19/-18.59	-18.8/-17.87	-19.31/-18.88	-17.09/-11.87	-13.4/-17.58	-14.69/-16.31	-18.16/-17.65	-16.35/-17.87	-18.27/-19.25	-14.81/-17.56	-18.47/-17.69
Θ (150°)	-16.89/-15.5	-18.26/-18.31	-14.61/-13.17	-16.66/-18.39	-15.27/-16.1	-18.54/-18.96	-18.53/-19.06	-17.62/-15.56	-17.39/-15.19	-17.82/-18.13	-18.14/-19.01	-12.09/-12.54	-12/-10.97	-15.29/-17.72	-18.34/-18.49	-18.82/-18.62	-17.66/-18.4	-13.65/-10.88	-13.12/-17.69	-18.73/-13.9	-12.48/-16.38	-18.52/-19.02	-16.39/-16.27	-18.67/-17.9
Θ (157.5°)	-18.16/-16.59	-17.1/-17.82	-15.32/-13.74	-15.49/-18.04	-19.31/-18.37	-18.8/-19.51	-17.02/-16.72	-16.32/-15.56	-13.79/-14.19	-16.47/-18.18	-18.82/-18.16	-15.4/-12.56	-12.15/-16.4	-16.2/-15.36	-18.18/-18.64	-18.18/-18.53	-18.34/-18.01	-16.36/-16.77	-18.33/-17.45	-17.32/-14.2	-17/-19.44	-18.27/-17.51	-15.62/-15.64	-18.85/-18.09
Θ (165°)	-18.45/-18.19	-18.08/-18.68	-18.35/-18.1	-18.45/-18.45	-18.94/-18.12	-18.84/-19.37	-19.29/-18.92	-18.11/-17.32	-18.46/-17.51	-17.96/-18.71	-19.3/-17.76	-17.9/-18.31	-18.33/-17.61	-19.18/-18.89	-18.83/-18.85	-18.87/-19.04	-18.03/-19.07	-16.49/-18.46	-18.92/-17.2	-17.63/-18.36	-18.19/-18.34	-17.78/-15.72	-13.22/-12.25	-14.18/-19.03
Θ (172.5°)	-17.18/-14.71	-14.2/-14.03	-13.82/-14.17	-15.9/-18.08	-18.45/-17.95	-18.59/-18.14	-17.4/-15.98	-13.74/-12.42	-12.04/-11.64	-11.85/-12.38	-12.41/-13.77	-14.87/-15.93	-16.92/-16.73	-17.47/-17.61	-17.37/-17.91	-19.08/-19.12	-18.57/-19.02	-19.18/-19.05	-17.65/-18.72	-19/-19.14	-16.82/-15.14	-14.86/-14.81	-13.68/-13.44	-14.7/-15.77
Θ (180°)	-17.65/-18.13	-14.92/-18.9	-18.48/-18.88	-17.93/-17.65	-17.39/-18.87	-19.1/-18.31	-16.88/-17.63	-17.03/-15.38	-14.45/-13.77	-13.1/-12.12	-12.72/-14.3	-16.2/-17.63	-18.13/-19.37	-18.24/-17.87	-18.94/-18.42	-18.22/-18.37	-18.42/-18.67	-18.04/-16.37	-15.63/-16.51	-16.8/-18.32	-19.12/-18.67	-18.16/-18.78	-18.74/-17.85	
Freq(Hz)	5.3GPol.	ThetaAnt. 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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°)	-1.13/-1.04	-1.01/-1.28	-1.96/-2.63	-3.63/-3.94	-3.98/-5.45	-7.32/-8.97	-9.69/-9.68	-9.59/-9.23	-7.83/-6.22	-0.30/-3.92	-3.58/-3.03	-2.3/-1.85	-1.69/-1.56	-1.69/-1.83	-1.96/-2.39	-3.06/-3.96	-5.62/-7.76	-9.12/-9.75	-11.41/-11.77	-9.09/-8.22	-6.82/-5.12	-4.13/-3.48	-2.97/-2.26	-1.74/-1.46
Θ (7.5°)	-1.37/-0.99	-1/-1.44	-2.17/-3.28	-4.52/-5.48	-6.36/-7.59	-8.56/-10.33	-12.19/-10.27	-9.66/-8.65	-7.99/-6.59	-3.81/-2.92	-2.24/-1.51	-0.92/-0.6	-4.07/-5.57	-0.77/-0.91	-1.17/-1.19	-2.86/-3.79	-4.79/-6.05	-6.81/-6.39	-5.69/-5.49	-5.25/-4.9	-5.66/-5.58	-4.53/-5.24	-5.02/-4.07	-2.75/-1.94
Θ (15°)	-1.41/-1.01	-1.13/-1.53	-1.78/-2.12	-2.01/-2.27	-2.97/-3.74	-5.01/-8.11	-15.6/-18.36	-14.92/-10.31	-7.85/-5.94	-4.01/-2.52	-1.34/-0.35	0.40/-8.9	1.06/-1.01	1.22/-2.27	1.24/-0.99	0.49/-1.02	-0.84/-2.27	-4.43/-5.85	-5.92/-5.64	-5.63/-5.58	-6.71/-6.86	-5.69/-5.3	-5.03/-4.6	-3.18/-2.34
Θ (22.5°)	-3.4/-2.29	-2.2/-3.17	-3.89/-4.21	-3.45/-2.99	-3.07/-3.73	-5.48/-9.69	-18.72/-16.62	-10.61/-7.57	-6.96/-7.93	-6.37/-3.78	-2.29/-1	0.08/-0.69	0.94/-0.8	0.63/-0.49	0.88/-1.42	1.87/-1.73	0.86/-0.43	-1.8/-2.53	-2.6/-2.63	-3.04/-3.68	-5.24/-7.8	-13.62/-14.23	-7.2/-5.84	-5.77/-5.06
Θ (30°)	-5.32/-3.54	-3.28/-5.36	-8.49/-6.96	-7.09/-6.12	-7.05/-7.34	-7.22/-8.26	-10.53/-15.35	-14.87/-7.99	-5.63/-5.95	-7.33/-6.79	-5.81/-5.32	-4.12/-3.05	-3.84/-4.15	-2.56/-0.56	0.31/-0.16	-0.31/-1.53	-3.53/-4.89	-4.46/-3.77	-4.14/-4.56	-4.42/-4.24	-4.39/-6.69	-9.33/-6.22	-5.82/-6.13	
Θ (37.5°)	-7.92/-5.93	-5.48/-7.89	-10.39/-11.94	-11.24/-12.46	-11.84/-10.36	-8.53/-7.97	-7.16/-6.91	-9.99/-10.56	-6.58/-6.5	-6.89/-5	-4.01/-5.48	-8.13/-7.21	-5.18/-4.66	-5.4/-4.92	-3.98/-2.84	-1.58/-0.19	0.06/-0.37	0.75/-0.52	-2.04/-1.57	-0.34/-0.58	-2.91/-4.39	-5.03/-7.07	-7.51/-6.22	-6.43/-8.84
Θ (45°)	-13.39/-17.45	-12.38/-9.26	-8.6/-11.35	-11.84/-10.13	-7.82/-9.37	-9.6/-6.75	-3.53/-1.92	-3.19/-5.47	-5.28/-4.25	-5.23/-3.27	-1.41/-2.69	-6.67/-6.52	-3.29/-2.61	-1.9/-2.4	-2.63/-2.97	-1.98/-0.84	0.71/-1.91	2.73/-2	0.94/-0.01	0.83/-0.76	-1.1/-9.9	-2.2/-3.82	-8.28/-11.21	-7.85/-8.28
Θ (52.5°)	-3.92/-4.72	-18.98/-11.44	-7.37/-7.8	-9.99/-8.8	-5.09/-6.22	-7.81/-4.79	-1.64/-0.89	-2.72/-5.11	-4.24/-2.91	-2.5/-0.84	0.32/-1.92	-5.24/-2.98	-1.05/-1.35	-0.62/-0.37	0.04/-2.38	-3.55/-1.1	-0.82/-0.48	1.77/-2.4	2.24/-3.1	0.84/-0.14	-3.39/-3.4	-1.32/-1.73	-2.73/-5.72	-8.56/-4.02
Θ (60°)	-1.74/-3.64	-8.15/-10.37	-6.72/-5.96	-7.48/-7.2	-5.05/-6.22	-6.34/-7.9	-2.56/-1.84	-3.16/-18	-6.1/-3.47	-2.24/-0.56	1.12/-0.98	-4.43/-1.63	0.34/-0.07	-1.12/-0.39	1.24/-0.69	-3.5/-1.22	-1.69/-1.59	-0.32/-0.14	0.96/-1.15	0.23/-0.86	-3.13/-3.49	-0.35/-0.61	-0.47/-1.74	-5.8/-1.2
Θ (67.5°)	-0.69/-3.48	-6.84/-8.02	-5.61/-5.32	-6.86/-6.16	-6.27/-6.34	-7.77/-7.46	-4.21/-2.67	-4.22/-7.42	-8.36/-4.5	-2.90/-9.1	0.51/-2.63	-3.45/-0.94	0.82/-0.36	-2.40/-5.6										



Radiated Composite Gain Data of scan

Appendix C

Θ(75°)	-11.09/-7.68	-9.69/-12.72	-10.67/-14.03	-18.46/-17.6	-17/-16.58	-10.12/-7.09	-7.82/-8.23	-9.9/-10.97	-14.16/-8.48	-4.24/-10.53	-8.87/-5.72	-5.88/-8.46	-15/-16.66	-18.29/-13.31	-8.81/-17.65	-19.03/-16.36	-12.96/-7.19	-6.44/-4.44	-4.03/-6.48	-5.11/-6.87	-6.96/-8.78	-7.38/-4.11	-8.45/-18.51	-19.11/-15.58
Θ(82.5°)	-9.61/-11.43	-10.24/-11	-9.65/-13.67	-19.2/-18.33	-16.89/-18.55	-11.47/-7.78	-8.45/-7.38	-8.86/-13.99	-13.08/-9.9	-5.36/-16.35	-11.86/-8.76	-6.76/-9.7	-17.85/-16.06	-18.12/-15.51	-11.94/-18.8	-17.95/-17.34	-18.42/-7.15	-8.39/-4.19	-5.14/-8.06	-4.7/-8.76	-9.26/-13.63	-5.66/-5.28	-8.79/-17.63	-18.98/-12.49
Θ(90°)	-9.23/-11.11	-10.31/-10.67	-9.53/-13.61	-18.99/-19.16	-16.86/-17.86	-12.73/-8.33	-7.43/-6.74	-9.16/-12.64	-14.01/-11.36	-6.01/-13.64	-12.64/-10.97	-7.76/-9.76	-17.75/-16.76	-17.47/-18.12	-12.99/-16.76	-17.75/-18.85	-17.64/-10.41	-9.67/-5.84	-6.7/-8.15	-6.41/-11.19	-15.13/-14.5	-6.7/-6.31	-12.5/-15.63	-14.56/-13.07
Θ(97.5°)	-11.69/-9.71	-12.45/-11.68	-10.27/-13.67	-19.06/-18.43	-18.5/-18.07	-12.66/-10.31	-11.67/-8.31	-10.47/-13.98	-17.26/-12.19	-6.94/-15.16	-18.2/-12.09	-9.3/-11.06	-17/-18.31	-13.83/-17.94	-17.14/-12.93	-17.81/-19	-18.63/-13.16	-12.13/-9.72	-15.29/-7.39	-7.98/-17.05	-18.48/-14.56	-9.19/-8.48	-17.88/-18.55	-13.45/-11.78
Θ(105°)	-14.86/-10.26	-9.77/-12.67	-11.18/-16.05	-18.52/-18.35	-18.55/-17.7	-18.45/-12.72	-13.81/-11.11	-12.76/-13.77	-18.35/-12.74	-6.99/-12.93	-18.26/-14.08	-10.8/-11.1	-17.89/-16.41	-19.19/-16.53	-17.94/-15.94	-14.04/-18.51	-18.15/-17.71	-18.17/-15.25	-19.35/-9.77	-12.52/-16.93	-19.07/-13.67	-9.04/-12.08	-17.35/-15.73	-14.02/-9.05
Θ(112.5°)	-13.04/-12.79	-10.08/-11.38	-14.4/-14.44	-14.95/-17.78	-17.43/-18.74	-17.46/-16.76	-15.83/-13.12	-12.67/-14.83	-17.79/-11.63	-8.35/-15.16	-17.79/-14.24	-13.77/-9.16	-17.03/-19.3	-15.05/-17.68	-19/-18.99	-16.61/-16.79	-18.61/-18.33	-18.55/-14.72	-19.58/-12.37	-17.65/-15.58	-16.52/-15.58	-12.81/-13.72	-18.11/-16.39	-12.2/-10.96
Θ(120°)	-12.77/-12.5	-9.36/-14.05	-10.71/-15.44	-17.05/-14.82	-17.91/-17.75	-18.26/-14.16	-14.46/-15.25	-13.19/-17.58	-19.28/-10.91	-10/-15.68	-19/-14.79	-13.49/-8.11	-11.98/-17.85	-11.78/-16.8	-18.64/-17.36	-15.59/-14.18	-10.54/-18.79	-18.19/-18.07	-19.32/-12.85	-18.49/-12.46	-18.72/-8.05	-18.06/-18.88	-18.56/-15.84	-15.2/-13.33
Θ(127.5°)	-15.98/-13.55	-13.84/-15.72	-12.02/-14.85	-18.62/-18.76	-18.3/-18.04	-18.51/-15.03	-14.21/-14.68	-18.51/-18.04	-15.77/-11.6	-12.53/-18.88	-16.05/-13.49	-14.25/-8.29	-11.42/-17.79	-18.2/-10.7	-17.95/-17.04	-17.4/-16.91	-19.07/-18.25	-15.39/-14.92	-16.7/-7.62	-11.57/-18.58	-13.46/-11.04	-16/-18.22	-17.97/-15.14	-13.76/-14.17
Θ(135°)	-15.06/-17.1	-18.35/-17.7	-16.49/-19.02	-18.24/-19.13	-18.03/-18.7	-18.9/-17.59	-16.24/-15.07	-19.04/-18.56	-14.65/-11.28	-11.91/-13.77	-19.06/-13.58	-11.53/-11.01	-12.44/-11.69	-19.64/-17.79	-15.5/-12.79	-15.86/-17.44	-15.6/-14.17	-16.61/-15.08	-18.87/-9.07	-14.89/-14.55	-10.58/-18.17	-15.67/-15.14	-13.09/-12.29	-16.44/-19.04
Θ(142.5°)	-18.89/-18.7	-15.03/-16.7	-18.44/-17.78	-18.83/-19.16	-18.99/-16.29	-13.46/-14.72	-16.85/-16.54	-18.52/-16.34	-13.69/-14.8	-15.8/-17.73	-15.12/-18.88	-16.02/-7.34	-8.73/-10.54	-18.59/-13.66	-16.58/-17.1	-17.42/-18.46	-17.97/-17.39	-17.73/-12.06	-15.11/-17.08	-17.74/-18.45	-16.31/-17.85	-18.81/-18.01	-18.08/-16.63	-19.17/-18.76
Θ(150°)	-18.04/-17.7	-18.51/-14.4	-12.71/-18.56	-18.14/-11.39	-15.2/-19.25	-16.19/-15.74	-14.93/-17.87	-18.32/-17.2	-16.05/-17.72	-18.45/-19.14	-11.28/-12.24	-15.07/-19.08	-17.76/-19.39	-18.87/-18.21	-17.92/-17.35	-17.63/-15.15	-15.85/-18.74	-15.13/-11.1	-13.69/-15.72	-18.61/-13.54	-15.21/-18.09	-19.17/-18.25	-19.17/-18.25	
Θ(157.5°)	-13.12/-15.86	-17.83/-18.2	-12.33/-15.75	-18.39/-18.14	-16.88/-16.93	-17.85/-18.08	-18.91/-19.01	-18.04/-18.66	-17.55/-17.85	-18.34/-17.23	-19.81/-17.69	-17.49/-13.31	-11.82/-12.94	-19.81/-17.93	-19.21/-17.69	-16.61/-15.58	-17.74/-18.63	-19.58/-16.28	-16.66/-19.02	-13.83/-12.18	-12.2/-14.98	-16.27/-15.65	-12.67/-15.93	-18.6/-13.9
Θ(165°)	-15.81/-15.68	-18.79/-18.43	-17.29/-17.66	-18.52/-18.89	-17.86/-19.06	-18.23/-18.57	-18.68/-19.11	-18.52/-17.73	-19.07/-18.77	-17.89/-18.55	-18.41/-18.32	-17.87/-17.75	-17.85/-18.36	-16.79/-15.94	-15.3/-15.44	-17.24/-18.45	-18.95/-18.58	-18.78/-18.74	-18.04/-18.7	-17.82/-18.65	-18.6/-19.59	-15.9/-13.79	-12.59/-15.09	-18.42/-17.33
Θ(172.5°)	-16.57/-16.66	-19.39/-18.5	-18.02/-17.96	-18.52/-17.91	-17.95/-18.41	-18.61/-18.08	-18.52/-17.77	-17.61/-17.73	-17.92/-18.34	-18.91/-18.55	-18.85/-18.01	-17.96/-17.72	-16.76/-15.82	-14.53/-13.9	-15.17/-17.66	-18.91/-18.6	-18.2/-18.96	-18.8/-18.24	-19.33/-18.5	-18.17/-17.95	-18.09/-17.76	-18.22/-18.1	-18.26/-18.8	-18.59/-18.57
Θ(180°)	-12.16/-12.48	-14.12/-14.77	-14.47/-14.71	-16.35/-18.59	-17.95/-18.09	-18.97/-18.68	-17.89/-17.96	-18.81/-18.42	-17.17/-16.65	-13.85/-12.57	-12.65/-12.36	-11.53/-11.22	-12.04/-13.26	-13.93/-14.38	-16.82/-18.14	-17.83/-17.51	-19.19/-18.51	-18.31/-19.04	-18.2/-16.86	-18.35/-16.47	-13.86/-15.04	-14.69/-13.23	-12.15/-13.29	-14.64/-13.16
Freq(Hz)	5.785GPol.	Theta/Ant. 1	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
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°)	-5.36/-5.19	-5.76/-6.66	-6.96/-6.84	-6.87/-7.22	-6.09/-7.77	-7.45/-6.36	-5.86/-7.09	-5.2/-5.03	-4.82/-3.83	-5.52/-6.34	-3.61/-3.78	-3.91/-3.85	-4.25/-4.56	-5.33/-5.9	-6.15/-5.72	-5.26/-5.53	-5.84/-5.48	-5.06/-4.58	-4.69/-4.71	-4.73/-4.84	-4.4/-4.39	-4.64/-4.86	-4.66/-4.9	
Θ(7.5°)	-2.82/-2.69	-3.23/-3.82	-3.72/-3.41	-2.97/-2.44	-2.71/-3.63	-4.34/-5.1	-5.33/-6.7	-7.58/-7.03	-6.65/-6.41	-5.27/-4.12	-3.95/-3.9	-3.39/-3.04	-2.92/-2.57	-2.41/-2.66	-3.02/-3.22	-3.17/-3.39	-4.19/-4.94	-5.11/-5.79	-5.86/-5.02	-4.38/-4.49	-4.17/-3.58	-3.19/-2.94	-2.93/-2.86	-2.78/-2.85
Θ(15°)	-1.37/-1.67	-2.43/-2.45	-2.4/-2.61	-2.85/-3.67	-5.52/-8	-12.81/-19.29	-18.52/-19.24	-14.46/-19.95	-8.74/-6.51	-4.52/-3.26	-2.1/-1.44	-0.93/-5.02	0.23/-0.94	1.33/-1.12	0.58/-0.3	-1.4/-2.15	-2.61/-2.99	-2.96/-2.96	-3.2/-2.93	-2.99/-2.79	-2.29/-1.39	-1.12/-1.66	-2.56/-2.76	-2.04/-1.45
Θ(22.5°)	-3.87/-5.43	-8.88/-4.21	-3.23/-3.12	-4.31/-8.29	-14.29/-17.1	-17.67/-16.32	-14.34/-14.58	-12.29/-10.58	-1.72/-5.08	-3.59/-2.43	-1.94/-1.66	-1.29/-0.68	-0.40/-0.89	0.87/-0.57	-0.14/-1.17	-1.61/-1.58	-1.45/-1.49	-1.26/-1.08	-0.88/-1.13	-1.68/-3.58	-6.92/-6.06	-3.05/-1.91	-2.9/-5.77	-6.26/-4.05
Θ(30°)	-4.03/-5.21	-9.19/-8.02	-6.4/-7.77	-13.32/-11.08	-8.65/-11.76	-15.02/-9.84	-7.37/-5.16	-4.23/-5.45	-5.31/-5.75	-4.9/-2.53	-2.34/-2.1	-2.16/-2.01	-1.66/-1	-0.29/-0.61	-1.16/-1.19	0.08/8	0.71/-0.1	-0.58/-0.34	0.73/-0.01	-0.87/-1.15	-1.8/-1.95	-3.3/-5.02	-5.08/-6.89	-9.05/-5.38
Θ(37.5°)	-4.7/-5.26	-10.28/-11.8	-9.37/-10.57	-10.99/-8.78	-8.43/-9.75	-7.65/-4.29	-2.79/-3.23	-3.67/-3.92	-4.36/-4.8	-5.17/-3.2	-3.4/-3.63	-3.79/-4.45	-5.01/-2.56	-1.46/-1.33	-2.13/-2.15	-1.62/-0.69	-0.13/-0.11	-0.63/-2.06	-2.39/-1.29	-0.95/-2.08	-3.41/-2.92	-2.85/-2.56	-2.42/-4	-8.15/-5.5
Θ(45°)	-8.93/-8.14	-14.61/-13.65	-9.94/-8.49	-7.33/-6.78	-8.01/-9.36	-7.64/-4.75	-1.74/-1.51	-3.72/-4.92	-4.42/-4.93	-3.85/-3.04	-1.44/-1.99	-4.09/-6.79	-4.69/-10.48	-7.5/-11.3	-0.86/-0.56	0.10/-29	1.93/-67	3.06/-2.54	1.08/-48	0.48/-308	-2.42/-5.72	-6.38/-3.15	-7.09/-12.31	
Θ(52.5°)	-12.1/-13.1	-14.14/-8.64	-5.52/-5.69	-5.36/-6.06	-10.4/-12.17	-11.05/-7.1	-4.41/-2.86	-1.45/-2.33	-3.44/-3.47	-3.82/-1.71	-0.61/-0.48	-1.29/-5.9	-2.25/-4.3	0.33/-0.26	1.95/-2.38	-0.17/-2.61	-0.62/-0.92	2.39/-6.4	3.25/-2.58	2.10/-48	-0.07/-0.53	-0.74/-2.63	-4.88/-3.89	-2.82/-8.65
Θ(60°)	-3.35/-6.56	-8.41/-4.6	-2.96/-2.35	-3.3/-6.75	-11.91/-13.12	-9.66/-3.96	-2.07/-1.87	-0.5/-0.45	-2.44/-0.47	-2.38/-0.1	0.39/-0.94	-0.82/-2.83	-0.81/-2.4	1.61/-0.49	2.37/-2.1	-0.97/-3.05	-0.66/-0.1	2.87/-2.84	3.71/-1.08	-1.66/-0.21	0.47/-0.75	-3.06/-0.41	-0.66/-3.1	
Θ(67.5°)	-1.25/-5.03	-4.6/-2.1	-1.41/-0.54	-2.76/-8.37	-8.71/-9.91	-6.17/-3.01	-1.91/-1.72	-3.31/-1.03	-2.02/-4.89	-2.16/-0.03	-1.01/-1.27	-1.51/-3.34	1.01/-1.98	1.51/-0.22	2.34/-0.85	0.37/-0.04	-1.01/-2.29	-0.99/-0.51	2.08/-95	2.93/-78	-1.04/-1.68	1.12/-143	1.25/-218	-0.02/-0.91
Θ(75°)	-1.25/-4.17	-5.15/-2.5	-1.88/-1.37	-3.52/-8.32	-6.38/-8.01	-6.82/-4.13	-3.58/-4.94	-3.23/-2.11	-3.17/-4.09	-3.78/-0.36	1.35/-1.37	-2.21/-1.51	0.18/-1	0.66/-0.85	1.43/-2.61	0.27/-0.33	-0.89/-1.37	0.07/-0.18	1.92/-3.6	3.71/-147	-0.83/-1.65	0.98/-0.76	0.47/-2.64	-0.61/-1.56
Θ(82.5°)	-2.31/-4.82	-6.47/-3.39	-2.37/-3.65	-5.29/-6.19	-6.1/-5.5	-5.42/-4.74	-6.69/-4.21	-5.28/-4.88	-3.99/-0.91	0.56/-2.67	-2.97/-1.85	-0.58/-0.37	-1.12/-2.18	0.25/-1.39	-0.97/-1.56	-2.36/-1.47	-0.42/-0.1	1.57/-3.75	3.05/-11	-2.52/-3.2	-1.07/-0.73	-1.25/-1.66	-1.37/-2.6	
Θ(90°)	-1.73/-7.59	-8.08/-5.33	-4.11/-5.15	-6.05/-5.26	-5.13/-8.14	-10.22/-7.1	-6.55/-6.92	-8.73/-6.35	-6.58/-7.05	-4.24/-2.57	-0.92/-4.39	-5.53/-3.56	-2.02/-1.29	-2.56/-3.82	-1.41/-0.83	-2.94/-3.71	-3.47/-2.15	-0.4/-0.73	-1.38/-2.7	2.15/-1.67	-3.02/-0.82	-3.78/-3.03	-4.30/-38	-4.51/-4.35
Θ(97.5°)	-3.45/-7.49	-8.24/-8.03	-7.02/-7.11	-9.02/-6.49	-6.65/-11.22	-12.45/-7.41	-7.25/-8.25	-10.78/-8.5	-8.89/-8.95	-5.71/-3.63	-2.23/-6.45	-7.55/-4.54	-4.12/-2.93	-4.88/-5.56	-3.07/-4.88	-5.39/-5.95	-6.03/-3.86	-2.73/-3.61	-4.88/-0.58	-6.64/-3.79	-5.26/-4.23	-6.85/-4.45	-6.44/-1.62	-6.08/-7.27
Θ(105°)	-3.69/-9.93	-8.41/-8.14	-9.42/-8.93	-9.72/-8.99	-7.07/-11.66	-18.02/-10.31	-9.57/-10.52	-12.29/-11.3	-10.81/-10.53	-7.99/-5.5	-4.9/-3.73	-10.91/-6.55	-5.61/-4.96	-7.47/-6.4	-4.76/-7.19	-6.72/-8.22	-9.15/-7.24	-6.14/-7.25	-13.73/-4.9	-4.02/-8.66	-9.59/-9.49	-8.28/-6.54	-7.03/-4.37	-10.64/-7.92
Θ(112.5°)	-6.76/-7.94	-18.44/-10.65	-10.23/-10.78	-14.31/-8.68	-9.01/-14.36	-17.72/-14.09	-9.59/-11.42	-15.37/-10.61	-14.15/-18.77	-9.42/-6.85	-6.63/-9.47	-10.1/-6.74	-9.39/-7.73	-8.39/-7.73	-7.81/-9.37	-9.33/-16.18	-16.44/-12.93	-10.65/-11.08	-10.24/-7.57	-16.19/-16.3	-8.67/-9.8	-6.12/-6.76	-14.32/-11.27	
Θ(120°)	-12.31/-11.75	-18.37/-15.87	-14.99/-15.05	-15.42/-13.15	-16.74/-17.98	-11.99/-9.34	-18.62/-12.57	-13.85/-13.04	-15.42/-15.12	-13.25/-9	-10.14/-11.16	-9.89/-7.84	-12.13/-7.45	-7.61/-9.38	-8.8/-9.31	-13.27/-11.88	-8.45/-9.35	-14.54/-						



Radiated Composite Gain Data of scan

Appendix C

Θ (112.5°)	-14.45/-8.62	-12.81/-12.13	-14.19/-17.69	-13.7/-17.93	-18.16/-18.41	-12.29/-11.53	-11.66/-18.51	-13.73/-10.07	-15.47/-17.03	-8.33/-10.28	-17.89/-18.43	-6.63/-8.96	-11.33/-18.99	-16.04/-15.95	-13.13/-12.84	-11.01/-15.66	-17.26/-19.04	-18.42/-17.28	-17.92/-17.29	-19.03/-18.71	-18.96/-19.44	-12.27/-15.88	-18.15/-19.07	-12.33/-13.12
Θ (120°)	-12.38/-11.44	-17.52/-14.94	-19.11/-13.79	-14.9/-18.9	-18.74/-18.32	-12.78/-11.66	-18.44/-17.64	-13.89/-15.87	-18.97/-19.06	-8.11/-10.58	-18.45/-16.35	-9.16/-8.45	-10.15/-15.43	-18.62/-15.29	-17.98/-16.23	-17.61/-13.46	-9.69/-14.95	-14.87/-18.38	-17.88/-16.45	-18.18/-11.34	-17.95/-15.08	-12.79/-19	-17.59/-18.41	-11.3/-15.02
Θ (127.5°)	-18.19/-13.17	-15.8/-12.78	-15.89/-15.88	-15.97/-18.18	-19.02/-19.53	-16.28/-18.05	-16.08/-16.42	-11.46/-15.14	-19.13/-13.86	-8.93/-11.8	-14.23/-16.68	-10.97/-9.66	-8.79/-13.4	-19.15/-15.69	-17.41/-17.46	-13.61/-15.27	-12.79/-17.21	-11.72/-14.88	-18.78/-10.23	-11.33/-18.23	-17.46/-10.54	-17.17/-17.88	-18.86/-17.94	-18.84/-11.85
Θ (135°)	-16.63/-15.94	-14.41/-15.4	-14.67/-16.48	-16.87/-18.26	-18.62/-16.9	-17.49/-16.73	-15.54/-17.2	-18.06/-18.63	-18.52/-18.56	-13.85/-13.71	-12.13/-16.47	-11.45/-7.56	-10.17/-13.05	-10.47/-19.04	-18.46/-15.96	-18.9/-12.3	-17.73/-11.07	-13.08/-19.44	-18.87/-10.75	-16.33/-18.08	-13.27/-18.28	-13.39/-11.66	-19.38/-17.19	-18.75/-10.14
Θ (142.5°)	-15.21/-18.61	-18.37/-18.95	-17.65/-18.12	-18.95/-18.15	-19/-18.39	-18.81/-17.66	-15.43/-16.34	-18/-18.34	-18.09/-17.85	-18.9/-18.71	-14.22/-13.78	-15.84/-12.61	-8.61/-9.27	-11.18/-16.89	-17.87/-18.86	-17.24/-17.83	-19.27/-18.14	-18.69/-14.79	-16.08/-17.9	-19.02/-18.64	-18.2/-17.72	-19.02/-18.74	-18.98/-12.57	-18.45/-16.28
Θ (150°)	-17.44/-17.03	-14.93/-17.4	-18.32/-18.35	-17.77/-18.69	-18.42/-19	-15.49/-19.52	-15.45/-18.85	-18.17/-17.99	-18.26/-18.21	-19.26/-15.43	-12.98/-15.43	-13.61/-13.5	-10.47/-14.58	-18.58/-19.24	-17.98/-17.32	-18.35/-18.7	-19.06/-16.3	-18.43/-17.89	-18.43/-18.67	-18.72/-18.28	-18.54/-18.01	-18.71/-18.65	-18.96/-18.09	
Θ (157.5°)	-14.96/-18.26	-19.11/-15.72	-16.59/-18.08	-19.09/-13.46	-11.43/-14.05	-17.62/-19.14	-18.88/-18.96	-18.73/-18.34	-17.64/-17.99	-18.16/-17.91	-18.69/-18.06	-17.33/-17.55	-18.22/-16.48	-18.63/-19.07	-16.89/-18.19	-19.09/-17.57	-18.07/-16.48	-19.18/-18.51	-17.44/-19.69	-14.98/-17.14	-17.62/-18.49	-15.19/-12.6	-12.54/-14.61	-12.65/-10.71
Θ (165°)	-15.95/-14.98	-17.72/-15.28	-13.65/-15.79	-15.52/-15.81	-18.53/-16.08	-18.7/-18.63	-18.56/-19.01	-10.16/-16.43	-18.77/-18.45	-18.07/-17.47	-17.54/-16.69	-15.26/-15.04	-15.75/-16.4	-15.05/-12.82	-10.18/-9.52	-11.6/-13.62	-17.87/-17.96	-18.82/-18.71	-18.47/-13.14	-12.91/-18.48	-17.53/-18.67	-16.62/-15.66	-13.85/-17.47	-17.49/-15.44
Θ (172.5°)	-17.66/-18.27	-17.86/-17.98	-18.83/-18.16	-17.84/-18.96	-17.65/-18.49	-18.86/-18.6	-18.41/-18.6	-18.77/-19.13	-19.52/-15.59	-12.95/-11.34	-11.35/-11.71	-12.21/-13.51	-14.61/-15.65	-14.75/-14.51	-17.28/-18.81	-17.34/-18.28	-17.81/-18.86	-17.96/-18.6	-18.13/-18.73	-18.49/-17.56	-17.63/-18.63	-17.96/-18.99	-18.16/-17.08	-15.87/-17.55
Θ (180°)	-12.89/-14.02	-12.5/-12.4	-14.28/-17.26	-18.72/-19.04	-18.27/-18.19	-18.66/-17.65	-18.67/-18	-18.17/-17.9	-15.4/-15.11	-16.82/-16.92	-16.53/-16.58	-16.11/-14.73	-14.25/-14.75	-14.82/-15.46	-18.5/-17.85	-18.7/-18.7	-18.29/-17.92	-18.97/-18.3	-17.91/-14.04	-11.98/-11.2	-10.68/-10.21	-10.43/-9.88	-10.03/-10.78	-11.98/-12.66
Freq[Hz]	6.175GPol.	Theta/Ant. 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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°)	-3.36/-2.98	-2.46/-2.09	-1.93/-1.4	-1.01/-1.15	-1.78/-2.15	-2.1/-2.7	-3.45/-4.19	-4.29/-4.98	-5.93/-6.31	-6.9/-6.98	-6.56/-5.83	-5.15/-4.14	-3.47/-2.82	-2.08/-1.45	-1.11/-1.1	-1.36/-1.56	-1.37/-1.86	-3.13/-3.05	-3.73/-4.93	-5.57/-6.21	-7.01/-6.66	-6.63/-5.97	-5.43/-4.52	-3.97/-3.9
Θ (7.5°)	-3.7/-3.41	-3.22/-3.93	-2.47/-1.67	-1.42/-2.25	-3.41/-4.6	-5.02/-5.98	-6.89/-7.46	-7.75/-6.86	-6.69/-6.54	-4.93/-4.38	-3.9/-3.45	-4.28/-4.78	-4.9/-4.6	-4.63/-4.7	-4.59/-3.85	-3.56/-4.18	-4.46/-4.56	-5.29/-4.69	-6.12/-6.56	-5.51/-4.81	-4.31/-3.93	-3.16/-3.1	-3.06/-3.41	
Θ (15°)	-4.14/-5.13	-4.6/-3.91	-3.75/-4.13	-5.66/-7.97	-8.85/-9.03	-8.73/-8.26	-9.64/-6.34	-7.9/-6.63	-4.14/-3.15	-3.05/-2.71	-2.19/-2.77	-3.85/-3.99	-4.09/-4.2	-4.05/-3.82	-3.28/-2.55	-1.98/-1.16	-0.65/-1.14	-1.82/-2.97	-4.32/-4.22	-3.94/-1.77	-3.13/-1.91	-1.27/-1.14	-1.36/-2.52	
Θ (22.5°)	-11.4/-9.64	-8.06/-6.74	-6.18/-7.4	-8.65/-6.82	-5.81/-7.03	-10.67/-18.87	-18.58/-16.13	-13.84/-11.59	-6.18/-3.46	-2.03/-1.57	-1.65/-1.64	-1.53/-1.8	-1.87/-0.88	-0.47/-0.73	-1.7/-3.8	-5.95/-6.94	-5.97/-4.19	-3.1/-2.12	-1.91/-3.22	-6.11/-7.63	-4.45/-1.43	-1.01/-2.53	-3.91/-4.59	-6.4/-8.14
Θ (30°)	-8.52/-14.22	-12.99/-10.47	-12.19/-10.74	-12.96/-10.48	-10.78/-8.78	-11.14/-10.81	-6.93/-6.11	-6.81/-7.32	-9.94/-9	-6.5/-11	-6.21/-6.31	-4.97/-3.49	-2.22/-1.47	-0.53/-0.28	-0.11/-1.11	-1.99/-2.22	-1.88/-1.99	-2.37/-1.38	-0.15/-0.19	-0.53/-0.62	-0.5/-2.25	-3.43/-4.58	-4.85/-8.53	-7.98/-9.84
Θ (37.5°)	-5.35/-8.13	-9.8/-12.46	-15.95/-17.82	-12.01/-13.8	-8.62/-9.72	-6.65/-6.34	-1.51/-1.83	-3.21/-5.64	-6.81/-6.49	-8.23/-6.5	-6.45/-8.73	-8.32/-8.65	-1.71/-6.07	-2.41/-4.12	1.22/0.22	-3.88/-2.42	-3.15/-4.57	-5.59/-4.5	-5.43/-3.11	0.21/-0.58	-3.38/-5.64	-4.78/-4.69	-4.15/-4.36	
Θ (45°)	-10/-5.95	-6.68/-11.19	-12.86/-12.32	-11.85/-13.36	-15.8/-15.36	-10.12/-7.36	-3.97/-1.97	-1.97/-4.09	-6.19/-6.78	-7.65/-10.01	-4.63/-3.4	-5.56/-6.37	-6.75/-6.11	-3.19/-1.37	-1.52/-0.42	1.26/-1.42	1.51/-3.8	-0.49/-2.47	-0.8/-0.02	-2.08/-1	2.21/2.77	-1.21/-12.77	-3.84/-1.76	-3.48/-8.19
Θ (52.5°)	-17.98/-8.84	-6.55/-6.46	-6.68/-4.09	-7.97/-17.79	-13.95/-12.07	-10.01/-6.43	-3.42/-1.85	-1.82/-3.15	-4.46/-5.06	-7.08/-6.66	-2.13/-0.03	-1.98/-2.31	-3.38/-0.88	-0.46/-1.03	-1.06/-1.99	2.45/-1.74	2.17/2.77	1.9/2.2	2.71/2.32	0.39/0.73	3.28/2.96	-0.87/-7.9	-6.41/-3.7	-1.87/-5.1
Θ (60°)	-8.57/-7.24	-3.84/-2.94	-2.25/-1.69	-6.75/-10.5	-2.71/-6.67	-7.16/-8.94	-7.45/-4.77	-0.66/-2.67	0.05/-0.33	-0.02/-0.15	-20.53	1.46/-0.58	0.26/-1.51	3.42/-6.5	1.34/0.64	-1.13/-1.14	3.42/-6.5	-2.94/-2.26	1.91/2.12	0.91/2.12	-0.35/-4.27	-1.74/-0.95	-0.3/-2.3	
Θ (67.5°)	-3.53/-5.62	-3.33/-1.68	-1.06/-1.57	-6.23/-3.87	-4.79/-6.49	-6.06/-4.78	-8.08/-9.8	-10.22/-10.01	-5.54/-2.09	-2.35/-1.22	1.68/3.27	0.38/-0.73	-0.96/-1.13	1.06/-0.73	-0.01/-0.96	-0.97/-1.04	1.79/-0.2	-2.01/-0.93	2.79/2.28	-2.28/-3.1	2.36/2.35	0.35/-1.61	0.51/-0.75	-1.04/-1.48
Θ (75°)	-2.69/-5.26	-3.01/-2.66	-2.41/-2.27	-5.98/-2.07	-4.8/-7.77	-4.48/-3.12	-4.54/-9.74	-12.32/-13.98	-9.91/-3.71	-2.4/-0.12	1.67/2.76	-0.13/-1.62	-0.97/0	-0.17/-1.77	-1.2/-2.68	2.05/0.97	-0.31/-1.28	2.41/3.86	-0.7/-2.27	2.41/2.8	-0.46/-6.01	0.28/-0.68	-2.63/-2.41	
Θ (82.5°)	-3.78/-6.59	-3.42/-9.83	-3.51/-3.18	-5.29/-3.24	-5.28/-8.72	-5.68/-2.94	-3.55/-7.44	-12.41/-9.34	-2.89/-0.33	1.07/1.1	-1.6/-3.21	-1.08/-1.07	-1.41/-5.45	-2.68/-2.38	1.76/-1.69	1.04/0.47	-0.63/-1.09	2.024 /-1.9	1.09/-1.83	1.98/-6.1	-2.06/-1.95	-0.96/-2.15	-3.95/-3.82	
Θ (90°)	-6.76/-9.46	-6.89/-4.76	-5.47/-3.96	-4.89/-3.91	-6.13/-8.54	-6.58/-3.16	-4.35/-4.89	-10.79/-8.64	-8.65/-6.98	-3.3/-2.22	-0.76/-0.61	-2.48/-5.49	-1.99/-2.18	-2.8/-7.95	-5.02/-4.7	-3.96/-5.44	-1.89/-2.16	-1.27/-0.79	0.23/2.94	0.18/-2.95	-0.29/-0.08	-5.7/-3.99	-3.5/-2.54	-3.98/-6.4
Θ (97.5°)	-9.79/-14.28	-11.94/-7.75	-5.91/-6.39	-6.32/-5.58	-6.67/-9.24	-8.02/-4.92	-5.9/-5.71	-10.38/-7.8	-8.6/-8.39	-4.63/-3.85	-2.23/-3.52	-3.98/-6.72	-2.54/-2.68	-3.66/-10.4	-6.15/-5.25	-5.35/-8.72	-5.19/-4.77	-3.47/-2.85	-3.43/-0.84	-2.63/-5.45	-3.24/-2.98	-8.25/-9.19	-5.45/-3.83	-5.44/-7.28
Θ (105°)	-14.74/-17.48	-15.07/-10.96	-6.73/-8.62	-9.78/-9.27	-7.98/-8.92	7.81/-9.44	-9.27/-9.52	-12.11/-8.88	-7.58/-10.41	-6.54/-7.98	-4.76/-7.51	-3.75/-3.6	-5.06/-12.16	-7.37/-7.8	-7.99/-10.38	-9.38/-10.35	-8.09/-9.67	-9.6/-3.29	-7.24/-9.79	-7.54/-8.66	-6.97/-8.33	-9.71/-7.28	-5.55/-1.75	
Θ (112.5°)	-10.69/-17.3	-13.59/-12.64	-11.48/-11.51	-15.27/-12.21	-13.48/-10.99	-8.17/-9.33	-8.86/-10.55	-12.48/-9.73	-8.98/-14.72	-10.72/-11.44	-7.03/-8.31	-7.33/-8.48	-5.51/-4.74	-6.24/-13.08	-7.89/-10.34	-7.33/-9.68	-10.75/-11.82	-13.29/-18.54	-8.51/-6.62	-6.62/-16.3	-9.52/-11.39	-10.21/-9.92	-9.08/-12.62	-10.1/-9.59
Θ (120°)	-13.55/-17.18	-14.28/-14.12	-18.6/-15.86	-16.08/-12.79	-18.1/-17.11	-12.9/-10.57	-9.73/-12.31	-13.4/-11.54	-14.1/-11.74	-13.55/-12.03	-9.8/-9.75	-0.95/-9.18	-6.87/-7.23	-7.43/-10.68	-7.13/-9.66	-12.5/-12.56	-12.55/-14.81	-14.12/-8.63	-6.22/-8.72	-17.45/-12.73	-17.83/-9.15	-7.24/-13.55	-16.41/-16.12	
Θ (127.5°)	-18/-18.75	-18.6/-19.01	-18.02/-13.64	-16.78/-14.16	-13.36/-12.12	-10.71/-10.43	-11.75/-11.91	-10.31/-9.58	-13.01/-12.93	-15.77/-18.35	-16.06/-9.81	-8.97/-7.67	-8.84/-9.91	-7.54/-8.32	-10.03/-11.32	-18.59/-16.1	-18.94/-11.09	-13.5/-9.33	-16.21/-7.88	-6.75/-14.88	-18.35/-10.14	-10.01/-18.7	-12.07/-12.71	-14.43/-12.42
Θ (135°)	-16.61/-18.56	-16.05/-18.79	-17.67/-17.73	-14.66/-14.33	-17.94/-15.19	-15.44/-13.57	-11.33/-12.01	-15.57/-16.08	-14.6/-14.78	-15.94/-18.95	-18.31/-17.79	-15.84/-9.96	-12.12/-15.21	-11.93/-11.59	-12.33/-8.18	-17.99/-19.04	-15.39/-14.19	-17.21/-18.77	-15.96/-10.15	-10.09/-14.65	-18.73/-12.06	-15.33/-18.34	-18.64/-17.57	-17.12/-11.88
Θ (142.5°)	-18.46/-18.59	-17.93/-18.13	-18.53/-17.12	-17.39/-14.85	-15.69/-17.32	-16.11/-15.45	-17.39/-15.84	-12.86/-12.99	-15.81/-14.91	-14.23/-16.99	-16.51/-16.5	-16.41/-14.18	-10.71/-17.03	-12.81/-9.68	-13.93/-14.7	-11.41/-18.83	-15.72/-14.74	-14.64/-11.44	-17.51/-15.57	-11.92/-19.13	-18.09/-14.67	-17.74/-16.96	-19.28/-18.14	-17.95/-14.21
Θ (150°)	-18.16/-18.18	-17.77/-18.42	-18.99/-17.82	-17.39/-18.46	-18.71/-18.46	-14.23/-12.22	-13.2/-13.12	-17.05/-16.1	-14.59/-14.47	-14.41/-15.08	-17.06/-17.12	-14.95/-12.6	-13.5/-15.38	-14.34/-11.41	-11.88/-12.34	-11.92/-18.9	-17.82/-18.95	-15.72/-18.83	-17.68/-17.73	-17.49/-18.69	-18.63/-19.26	-18.96/-18.27	-17.71/-18.55	-18.13/-18.44
Θ (157.5°)	-16.2/-17.76	-18.72/-18.76	-18.04/-17.62	-17.2/-15.49	-14.85/-14.5	-19.12/-18.25	-17.72/-17.48	-15.37/-12.03	-11.46/-13.21	-13.96/-14.57	-14.6/-15.66	-18.02/-18.8	-16.77/-11.63	-										



Radiated Composite Gain Data of scan

Appendix C

Θ (157.5°)	-17.46/-15.78	-15.79/-18.69	-17.55/-13.28	-11.54/-11.88	-15.71/-16.55	-16.29/-17.97	-18.48/-17.57	-19.01/-18.21	-18.58/-19.08	-19.55/-15.97	-18.65/-17.41	-19.17/-18.21	-18.11/-16.15	-17.83/-13.26	-13.08/-18.66	-15.61/-18.12	-19.21/-18.14	-18.08/-16.75	-15.01/-17.76	-13.57/-16.45	-18.28/-14.38	-13.49/-13.23	-15.65/-15.02	-13.87/-13.18
Θ (165°)	-19.08/-14.11	-12.12/-12.85	-13.68/-13.59	-14.31/-12.89	-14.39/-18.17	-18.11/-17.18	-18.45/-17.6	-18.7/-17.27	-17.31/-17.08	-19.28/-18.05	-18.89/-18.27	-17.72/-17.86	-18.52/-17.99	-17.69/-18.12	-17.68/-16.67	-16.86/-18.42	-17.47/-18.19	-15.9/-13.55	-13.92/-15.4	-18.44/-18.74	-15.56/-14.34	-19.21/-19.08	-15.59/-10.96	-11.24/-16.53
Θ (172.5°)	-17.87/-16.86	-13.86/-15.74	-18.94/-19.27	-17.35/-17.53	-18.26/-16.25	-15.77/-14.07	-14.66/-12.85	-11.8/-11.13	-11.57/-11.39	-16.61/-11.16	-12.92/-14.73	-16.23/-18.91	-17.83/-18.03	-14.69/-12.9	-13.91/-14.11	-16.08/-18.36	-18.14/-18.5	-18.98/-19.28	-18.6/-15.66	-17.84/-18.74	-15.5/-14.9	-15.5/-14.3	-13.96/-16.68	-19.34/-18.06
Θ (180°)	-12.65/-13.54	-15.72/-14.99	-13.5/-14.95	-14.88/-14.45	-14.55/-15.95	-16.25/-15	-12.72/-13.89	-14.41/-15.1	-15.93/-15.4	-15.35/-15.97	-18.54/-19.76	-17.72/-18.1	-19.12/-17.63	-18.81/-19.21	-19.17/-17.28	-18.71/-18.87	-18.82/-18.89	-17.06/-16.22	-15.71/-14.05	-15.09/-15.46	-14.63/-16.11	-14.8/-13.63	-15.15/-14.84	-13.72/-12.1
Freq(Hz)	6.995GPol.	Theta/Ant. 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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°)	-0.82/-0.45	-0.01/0.2	-0.09/0.07	0.45/0.49	0.31/-0.25	-0.05/0.05	-0.67/-1.16	-1.34/-2.01	-2.33/-2.45	-2.99/-2.73	-2.27/-2.18	-1.91/-1.87	-1.91/-1.51	-1.05/-0.97	-0.67/-0.45	-0.74/-0.69	-0.71/-1.04	-1.1/-1.25	-1.59/-1.95	-1.78/-1.84	-1.92/-2.15	-2.03/-1.86	-1.3/-1.24	-1.38/-1.09
Θ (7.5°)	-3.56/-3.26	-2.93/-2.75	-3.07/-2.97	-3.17/-2.93	-2.64/-2.91	-2.96/-2.51	-2.74/-2.67	-2.63/-2.67	-2.69/-3.28	-3.02/-2.59	-2.45/-2.48	-2.41/-2.13	-1.83/-1.09	-0.62/-0.32	0.17/0.52	0.47/0.31	0.62/0.73	-0.01/0.27	-0.02/-0.7	-1.82/-1.23	-3.02/-3.55	-3.83/-3.87	-4.73/-4.31	
Θ (15°)	-5.46/-5.59	-4.83/-5.79	-7.3/-7.53	-6.68/-5.04	-4.72/-5.66	-6.81/-7.96	-9.02/-10.63	-11.18/-8.67	-7.79/-8.1	-7.23/-16.7	-5.33/-4.98	-5.12/-4.69	-4.6/-4.6	-5.35/-6.24	-6.69/-6.94	-6.92/-6.89	-5.07/-3.04	-2.93/-2.61	-1.83/-2.58	-2.11/-1.48	-2.17/-1.7	-1.56/-1.67	-1.98/-3.41	-5.26/-5.62
Θ (22.5°)	-6.98/-5.98	-4.43/-5.58	-6.36/-6.01	-6.42/-9.22	-12.25/-14.31	-18.93/-17.99	-18.16/-14.63	-12.77/-9.74	-8.1/-7.39	-6.37/-5.94	-4.96/-4.19	-4.6/-2.91	-2.27/-2.89	-3.21/-2.69	-2.64/-2.83	-3.32/-3.43	-3.02/-2.45	-2.1/-1.87	-1.56/-2.17	-1.52/0.22	-0.18/-0.68	-2.38/-2.68	-2.25/-3.87	-5.7/-7.58
Θ (30°)	-14.78/-11.67	-10.74/-9.63	-7.63/-8.12	-11.27/-17.77	-18.24/-19.76	-9.06/-4.49	-3.03/-2.34	-2.43/-3.18	-2.83/-2.88	-4.39/-4.74	-4.52/-4.61	-5.66/-3.71	-1.94/-1.53	-1.33/0.1	1.09/0.13	-2.49/-5.17	-4.72/-3.32	-1.2/-0.41	-0.28/-0.48	-0.59/-1.7	-5.11/-9.43	-8.72/-6.13	-4.74/-5.49	-8.98/-13.06
Θ (37.5°)	-6.09/-5	-9.01/-14.75	-13.51/-13.8	-13.9/-14.63	-15.66/-18.76	-11.43/-1.18	-5.41/-4.33	-1.13/-2.92	-1.97/-1.62	-2.83/-4.95	-6.57/-6.94	-6.33/-4.89	-1.97/-1.56	-1.45/-0.04	0.75/1.5	1.21/-0.28	-2.46/-3.75	-4.44/-2.18	-1.12/-1.31	-1.59/-2.62	-4.09/-7.02	-3.61/-1.71	-2.36/-1.48	-2.74/-6.51
Θ (45°)	-4.88/-4.21	-5.42/-8.12	-9.6/-12.68	-14.57/-18.83	-14.45/-13.18	-13.53/-17.26	-3.91/-3.39	-4.5/-3.97	-3.1/-2.72	-3.28/-5.64	-5.54/-4.14	-4.04/-6.22	-5.22/-2.23	-0.16/1.04	1.27/0.81	1.51/61	0.62/0.27	-1.82/-3.67	-3.42/-4.88	-5.02/-1.7	0/-1.49	-3.39/-0.95	-0.43/-1.83	-3.71/-8.39
Θ (52.5°)	-8.42/-7.39	-5.39/-4.92	-4.89/-11.25	-14.26/-9.84	-10.09/-8.64	-13.91/-18.75	-17.7/-12.03	-7.63/-5.73	-3.71/-3.32	-1.7/-3.52	-2.92/-1.25	-1.04/-3.79	-3.3/-0.88	1.92/0.05	0.78/-1.23	1.61/237	4.023.17	0.95/0.08	-0.52/-1.83	3.25/1.14	-1.67/-1.77	-2.41/-1.22	-4.74/-11.3	
Θ (60°)	-5.07/-5.82	-3.14/-1.29	-1.08/-5.74	-6.11/-6.05	-7.17/0.7	-5.44/-7.23	-7.46/-6.46	-5.7/-4.59	-5.66/-7.45	-2.48/-0.29	-1.01/0.65	0.42/-1.09	-0.68/0.06	2.13/2.7	0.86/0.74	0.94/0.58	-0.69/0.92	2.13/0.43	2.86/0.88	-1.31/0.23	2.46/-3.1	-2.72/-1.45	0.58/-0.27	-0.11/-2.4
Θ (67.5°)	-1.58/-1.86	-3.12/-0.15	-0.15/-4.06	-4.12/-5.92	-6.82/-6.64	-3.61/-3.71	-4.71/-2.93	-4.5/-3.82	-2.63/-7.6	-2.96/0.87	0.78/1.94	0.28/1.26	1.41/1.26	2.27/1.28	1.45/1.12	-0.04/-1.27	-1.62/-0.84	-1.04/0.78	2.7/0.55	-3.67/-1.47	2.09/1.59	-1.89/-1.15	3.23/0.9	2.53/0.61
Θ (75°)	-0.33/-1.54	-3.09/-1.54	-0.84/-3.14	-4.33/-4.38	-6.13/-8.85	-3.87/-8.57	-6.97/-3.93	-3.26/-3.52	-1.92/-0.45	-4.48/0.5	1.93/1.63	1.06/0.17	1.91/1.36	1.34/0.16	0.97/0.63	0.19/-0.33	-0.71/1.1	1.11/1.04	3.27/2.84	0.61/0.29	3.32/-46	-2.31/-1.02	3.4/0.91	2.15/-1.59
Θ (82.5°)	-5.44/-1.19	-3.49/-2.87	-3.33/-4.3	-4.76/-4.55	-6.22/-9.09	-9.03/-6.42	-3.2/-2.53	-4.9/-2.88	-2.3/-2.89	-5.13/0.49	1.26/0.87	-0.28/-0.84	0.7/0.96	-0.72/-1.71	-1.43/-1.69	-1.32/-1.95	-2.02/0.9	1.84/1.73	3.09/3.23	1.88/0.83	3.05/0.73	-2.61/-6.1	2.17/-0.79	0.58/0.99
Θ (90°)	-2/-2.47	-4.29/-3.66	-5.19/-5.59	-5.67/-6.18	-7.53/-8.52	-10.43/-3.3	-3.62/-2	-5.08/-4.83	-3.86/-2.48	-6.35/-1.42	0.3/-0.78	-1.13/-4.07	-1.68/-0.6	-3.15/-3.66	-3.32/-2.53	-2.29/-4.21	-3.82/-0.53	0.85/0.29	1.18/2.67	1.52/0.4	1.54/-1.47	-5.29/-2.2	-0.84/-2.86	-2.37/0.2
Θ (97.5°)	-3.47/-3.85	-6.43/-5.4	-6.88/-7.78	-5.65/-7.23	-10.71/-7.42	-9.43/-6.3	-6.22/-2.69	-4.91/-7.03	-3.73/-4.56	-6.93/-3.9	-1.62/-2.33	-5.19/-6.38	-4.15/-3.39	-5.2/-6.72	-4.19/-7.29	-7.21/-5.05	-1.84/-3.09	-1.76/0.23	-0.98/-2.2	-1.66/-4.67	-6.46/-3.9	-3.4/-5.15	-5.57/-1.09	
Θ (105°)	-5.66/-2	-9.64/-9	-8.17/-10.23	-7.19/-8.32	-13.49/-9.88	-11.32/-6.06	-6.15/-3.93	-6.93/-7.88	-4.66/-6.44	-9.36/-6.31	-3.99/-4	-8/-8.7	-5.78/-7.48	-5.23/-5.38	-9.89/-6.18	-11.77/-14.7	-6.52/-7.25	-8.27/-6.46	-6.74/-5.72	-5.15/-5.55	-7.66/-10.79	-4.01/-5.76	-6.68/-5.05	
Θ (112.5°)	-11.09/-13.35	-11.63/-12.67	-8.63/-14.77	-12.11/-13.43	-16.19/-15.57	-8.03/-12.16	-7.89/-7.66	-9.45/-9.85	-6.04/-10.23	-16.88/-6.13	-10.62/-5.03	-10.9/-11.76	-5.15/-6.99	-4.72/-8.7	-9.15/-8.7	-17.4/-11.97	-11.19/-8.01	-10.35/-11.42	-5.93/-9.25	-13.1/-6.41	-5.3/-5.95	-10.25/-17.11	-6.71/-8.45	-5.32/-8.83
Θ (120°)	-12.12/-13.64	-16.15/-15.03	-12.82/-16.23	-18.72/-18.07	-15.52/-8.94	-9.28/-8.83	-11.35/-11.6	-10.74/-9.66	-5.35/-9.19	-17.29/-6.96	-10.12/-10.43	-5.63/-7.74	-6.88/-10.4	-8.27/-9.15	-18.39/-10.43	-9.35/-9.4	-7.03/-8.61	-6.45/-6.06	-11.68/-16.51	-10.42/-10.5	-9.94/-12.45	-10.85/-10.7	-9.94/-12.45	-7.29/-9.39
Θ (127.5°)	-10.76/-14.78	-12.65/-15.84	-15.42/-17.79	-15.51/-15.69	-14.2/-11.87	-9.16/-12.02	-10.76/-8.07	-9.47/-19.06	-10.02/-8.82	-14.67/-18.66	-12.64/-12.62	-13.28/-17.82	-6.83/-9.59	-8.23/-9.2	-13.62/-9.64	-14.13/-9.62	-13.12/-13.36	-18.01/-9.59	-14.31/-12.19	-12.7/-16.29	-18.22/-13	-10.45/-8.08	-8.43/-11.36	-16.52/-16.55
Θ (135°)	-14.27/-18.1	-18.77/-19.09	-17.74/-18.63	-14.94/-14.51	-13.84/-14.63	-17.84/-15.38	-11.8/-11.52	-17.52/-14.12	-10.05/-13.79	-15.38/-18.21	-18.01/-15.11	-14.28/-13.32	-7.05/-8.4	-8.85/-9.39	-18.3/-14.31	-10.9/-10.58	-17.91/-9.96	-15.59/-12.32	-12.48/-13.75	-9.06/-10.85	-16.17/-13.5	-17.29/-11.33	-13.72/-10.99	-13.34/-13.65
Θ (142.5°)	-15.71/-17.69	-17.11/-19.02	-17.38/-18.1	-17.38/-14.69	-16.32/-18.34	-15.34/-11.67	-9.86/-12.41	-18.79/-18.16	-14.32/-13.39	-11.51/-16.15	-18.9/-18.62	-18.5/-13.6	-12.4/-15.75	-11.39/-17.98	-18.63/-11.72	-14.33/-17.75	-15.52/-9.41	-16.45/-13.31	-11.41/-11.72	-18.29/-17.57	-13.03/-10.69	-11.61/-15.41	-14.21/-16.87	
Θ (150°)	-18.03/-14.94	-17.22/-17.73	-18.08/-17.81	-17.96/-18.43	-14.59/-10.53	-11.24/-18.97	-16.95/-17.66	-16.97/-18.35	-12.6/-11.97	-12.84/-18.15	-14.38/-12.15	-13.93/-17.64	-10.22/-10.76	-11.02/-13.96	-16.15/-18.48	-14.26/-11.95	-16.78/-18.1	-14.26/-11.95	-16.11/-17.96	-15.23/-14.34	-17.78/-17.92	-18.23/-16.82	-16.51/-18.81	
Θ (157.5°)	-16.73/-18.17	-18.35/-17.97	-17.6/-19	-17.14/-18.2	-18.32/-13.98	-10.72/-12.06	-14.12/-18.7	-19.09/-18.38	-13.81/-10.27	-10.03/-12.46	-17.59/-18.83	-15.97/-14.31	-14.19/-13.51	-14.11/-12.55	-11.85/-10.92	-13.36/-18.36	-19.16/-16.19	-11.92/-15.91	-18.06/-18.27	-16.61/-11.76	-10.21/-12.7	-18.02/-18.78	-17.49/-16	-18.05/-15.11
Θ (165°)	-19.03/-19.06	-18.35/-18.29	-17.84/-16.29	-14.17/-11.67	-11.95/-12.47	-16.08/-17.35	-18.21/-18.14	-17.47/-13.65	-13.61/-14.17	-14.76/-18.28	-18.49/-18.66	-15.19/-15.13	-15.27/-14.19	-15.22/-15.35	-12.91/-14.08	-18.2/-18.96	-17.65/-18.89	-14.56/-13.34	-15.59/-16.82	-17.34/-17.98	-15.17/-19.26	-17.91/-17.95	-14.72/-14.82	-18.06/-18.63
Θ (172.5°)	-17.15/-18.95	-18.97/-19.06	-17.82/-17.87	-18.46/-18.24	-19.38/-18.98	-18.46/-17.67	-16.17/-14.55	-13.17/-14.55	-16.03/-18.6	-17.38/-18.58	-18.67/-14.82	-19.5/-16.63	-17.37/-13.54	-16.42/-16.65	-15.51/-12.59	-10.84/-11.23	-12.52/-13.21	-11.94/-10.22	-9.5/-9.68	-9.45/-9.83	-11.66/-13.97	-15.32/-17.92	-18.82/-17.63	
Θ (180°)	-13.81/-15.33	-13.42/-11.83	-12.72/-15.46	-16.88/-15.68	-15.31/-18.75	-18.44/-16.76	-14.62/-17.19	-16.11/-15.59	-15.78/-13.59	-13.44/-14.05	-12.77/-13.88	-15.4/-14.28	-15.03/-16.52	-15.11/-17.31	-18.28/-18.12	-17.75/-17.82	-19.17/-12.04	-18.02/-18.29	-18.59/-18.52	-18.94/-17.54	-16.14/-15.13	-14.56/-14.98	-17.56/-15.28	
Freq(Hz)	6.995GPol.	Phi/Ant. 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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°)	-2.18/-1.88	-1.86/-2.27	-2.41/-2.02	-1.68/-1.46	-1.48/-1.33	-1/-1.03	-0.74/-0.32	-0.52/-0.17	0.01/-0.08	-0.04/-0.15	-0.29/-0.5	-0.78/-0.87	-1.22/-1.5	-1.55/-1.8	-2.04/-1.67	-1.75/-1.99	-1.23/-1.03	-1.55/-0.94	-1.29/-1.05	-0.88/-1.19	-0.61/-0.87	-1.13/-0.55	-0.68/-1.11	-1.45/-1.79
Θ (7.5°)	-1.5/-1.69	-1.71/-1.82	-1.75/-1.91	-2.35/-2.58	-2.45/-2.23	-2.22/-1.85	-1.06																	



Radiated Composite Gain Data of scan

Appendix C

Θ(75°)	-6.04/4.77	-3.78/-3	-2.42/-2.1	-1.94/-1.88	-1.83/-1.84	-1.97/-2.3	-2.84/-3.49	-4.38/-5.56	-7.13/-8.89	-11.06/-13.8	-15.92/-14.96	-12.55/-10.15	-8.18/-6.36	-4.89/-3.75	-2.82/-2.17	-1.74/-1.44	-1.22/-1.16	-1.25/-1.48	-1.82/-2.3	-3.11/-4.27	-5.81/-7.63	-9.8/-12.42	-14.61/-13.84	-10.33/-7.85
Θ(15°)	-3.79/-3.02	-2.34/-1.83	-1.55/-1.56	-1.72/-1.95	-2.15/-2.38	-2.69/-3.12	-3.55/-3.97	-4.44/-4.9	-5.34/-5.82	-6.42/-6.87	-6.85/-6.49	-5.93/-5.1	-4.74/-4.21	-3.78/-3.45	-2.82/-2.86	-2.68/-2.4	-2.15/-1.94	-1.91/-2.02	-2.33/-2.77	-3.48/-4.55	-5.75/-6.83	-7.8/-8.63	-8.79/-8.74	-6.34/-4.88
Θ(127.5°)	-1.76/-1.32	-0.84/-0.5	-0.43/-0.61	-0.28/-1.28	-1.61/-1.94	-2.33/-2.74	-2.97/-2.99	-2.68/-2.74	-2.62/-2.76	-3.07/-3.29	-3.22/-2.99	-2.53/-2.23	-2.12/-2.29	-2.71/-3.28	-3.82/-4.19	-4.26/-4.04	-3.55/-3.12	-2.93/-3.04	-3.37/-3.86	-4.45/-5.06	-5.33/-5.29	-5.22/-5.11	-4.63/-3.82	-2.99/-2.29
Θ(30°)	-0.28/-0.02	0.27/0.42	0.380/2	0.07/0.05	-0.18/-0.45	-0.89/-1.31	-1.38/-1.04	-0.63/-0.41	-0.54/-1.02	-1.59/-1.95	-1.9/-1.44	-0.96/-0.67	-0.77/-1.22	-2.08/-3.25	-4.48/-5.48	-5.87/-5.63	-4.97/-4.41	-4.21/-4.35	-4.66/-4.91	-4.93/-4.62	-4.05/-3.46	-3.06/-2.62	-1.92/-1.31	-0.83/-0.51
Θ(37.5°)	0.43/0.7	0.84/0.79	0.61/0.52	0.65/0.86	0.94/0.72	0.22/-0.25	-0.19/-0.37	0.83/0.9	0.43/-0.38	-1.17/-1.51	-1.21/-0.57	-0.08/-0.06	-0.16/-0.73	-1.68/-2.98	-4.44/-5.7	-5.68/-6.69	-6.18/-5.51	-5.17/-5.11	-4.96/-4.52	-3.97/-3.34	-2.82/-2.42	-2.05/-1.47	-0.73/-0.26	0.02/2
Θ(45°)	0.50/81	0.76/0.41	-0.03/-0.17	0.18/0.78	1.17/1.1	0.62/0.09	0.09/0.52	0.91/0.89	0.38/-0.4	-1.06/-1.14	-0.65/-0.04	0.27/0.22	-0.05/-0.42	-1.04/-1.95	-3.11/-4.36	-5.42/-6.05	-6.12/-5.74	-5.48/-5.25	-4.63/-3.6	-2.66/-2.14	-1.87/-1.7	-1.47/-1.06	-0.62/-0.45	-0.30/0.5
Θ(52.5°)	0.02/0.28	0.02/-0.57	-1.19/-1.32	-0.78/0.15	0.79/0.85	0.43/-0.04	-0.18/0	0.2/0.2	-0.06/-0.44	-0.66/-0.42	0.12/0.58	0.61/0.28	-0.07/-0.25	-0.47/-1.07	-2.1/-3.24	-4.24/-4.98	-5.28/-5.13	-5.14/-5.08	-4.25/-2.95	-2.04/-1.72	-1.85/-1.56	-1.42/-1.23	-1.19/-1.33	-1.24/-0.66
Θ(60°)	-0.65/-0.51	-0.99/-1.73	-2.34/-2.4	-1.77/-0.78	-0.07/0.06	-0.39/-1.11	-1.55/-1.47	-0.97/-0.52	-0.34/-0.28	-0.09/0.27	0.75/1.03	0.83/0.16	-0.45/-0.57	-0.59/-1.01	-1.97/-2.89	-3.54/-4.13	-4.41/-4.32	-4.49/-4.97	-4.55/-3.15	-2.13/-1.95	-2.13/-2.2	-2.22/-2.34	-2.58/-2.74	-3.96/-1.46
Θ(67.5°)	-1.39/-1.08	-1.55/-2.34	-2.9/-3.18	-2.98/-2.26	-1.58/-1.37	-1.78/-2.5	-2.96/-2.55	-1.53/-0.84	-0.74/-0.68	-0.38/-0.05	0.23/0.32	-0.09/-1.01	-1.8/-2.06	-2.12/-2.62	-3.44/-3.9	-4.18/-4.65	-4.75/-4.1	-4.37/-4.83	-4.74/-3.51	-2.37/-2.1	-2.45/-2.89	-3.43/-4.3	-5.18/-5.12	-3.96/-2.5
Θ(75°)	-1.82/-1.31	-1.76/-2.66	-3.57/-4.52	-5.08/-4.67	-3.68/-2.98	-3.01/-3.65	-4.41/-4.16	-2.79/-2.02	-2.3/-2.4	-1.81/-1.45	-1.36/-1.3	-1.57/-2.5	-3.58/-4.13	-4.21/-4.44	-4.9/-4.9	-4.87/-5.15	-5.18/-4.81	-4.49/-4.85	-5.46/-5.01	-3.85/-3.09	-2.92/-3.24	-4.02/-5.35	-6.9/-6.92	-5.3/-3.26
Θ(82.5°)	-2.37/-1.96	-2.42/-3.68	-4.6/-5.83	-6.8/-6.55	-5.3/-4.13	-3.95/-5.03	-6.88/-6.47	-4.02/-3.08	-3.75/-3.87	-2.7/-2.26	-2.43/-2.53	-2.88/-3.86	-5.12/-5.83	-5.39/-5.35	-5.63/-5.16	-4.66/-4.99	-5.73/-5.97	-5.53/-5.51	-6.41/-6.82	-5.86/-4.99	-4.46/-4.68	-5.58/-6.92	-7.87/-7.38	-5.86/-3.99
Θ(90°)	-3.48/-2.73	-3.69/-4.93	-5.63/-6.95	-9.05/-9.93	-8.55/-6.57	-5.86/-7.03	-8.88/-1.2	-4.39/-3.86	-5.56/-6.26	-4.36/-3.8	-4.6/-5.18	-5.61/-6.73	-8.72/-9.68	-8.09/-7.58	-7.25/-5.66	-4.89/-4.95	-5.83/-6.71	-7.04/-6.77	-7.55/-9.3	-6.87/-6.65	-5.95/-6.21	-7.44/-9.58	-10.07/-8.4	-7.05/-5.37
Θ(97.5°)	-2.91/-1.74	-2.85/-5.13	-6.56/-8.13	-10.42/-11.05	-9.31/-6.82	-5.51/-6.34	-8.66/-8.97	-7.36/-7.9	-11.79/-9.53	-5.19/-4.39	-4.84/-4.98	-6.29/-9.57	-13.62/-12.79	-10.07/-9.36	-7.96/-6.33	-5.98/-6.13	-6.25/-6.77	-7.54/-7.35	-7.92/-11.31	-13.67/-9.57	-7.77/-7.32	-7.95/-10.36	-10.87/-7.9	-6.01/-4.83
Θ(105°)	-3.1/-1.98	-2.78/-4.59	-8.28/-10.14	-11.91/-11.69	-9.44/-6.94	-5.71/-6.9	-6.88/-6.47	-4.02/-3.08	-3.75/-3.87	-2.7/-2.26	-2.43/-2.53	-3.71/-4.13	-6.45/-12.5	-18.51/-16.57	-12.44/-10.01	-8.12/-8.11	-9.11/-8.62	-7.42/-7.79	-18.11/-13.49	-9.45/-8.04	-7.41/-8.81	-10.69/-8.08	-5.45/-4.25	
Θ(112.5°)	-3.57/-2.77	-3.24/-5.71	-9.52/-12.78	-12.93/-10.41	-8.05/-6.58	-6.5/-8.88	-16.41/-19.21	-14.85/-15.35	-14.15/-8.09	-5.18/-4.63	-4.1/-4.27	-7.47/-14.37	-14.79/-11.38	-8.85/-8.67	-10.64/-10.3	-8.88/-9.21	-11.46/-10.81	-7.58/-7	-10.55/-17.17	-12.51/-9.15	-6.81/-6.32	-7.17/-6.8	-5.14/-4.23	
Θ(120°)	-3.46/-3.23	-3.42/-4.57	-6.83/-9.58	-11.99/-11.92	-10.3/-9.29	-9.76/-12.02	-15.37/-15.96	-15.99/-16.06	-12.63/-8.9	-6.72/-5.53	-4.32/-4.22	-6.77/-12.12	-15.51/-13.3	-10.59/-9.89	-11.73/-14.58	-17.02/-18.23	-16.93/-16.45	-19.08/-17.84	-8.82/-5.82	-6.57/-11.12	-19.42/-16.9	-10.65/-7.91	-7.38/-6.93	-5.45/-4.28
Θ(127.5°)	-6.17/-6.91	-8.03/-9.4	-11.74/-15.69	-16.28/-12.77	-11.54/-13.2	-17.75/-18.83	-14.2/-12.29	-12.6/-8.17	-14.68/-14	-12.39/-10.07	-7.81/-7.67	-10.45/-16.45	-17.62/-13.88	-12.24/-13.88	-15.3/-16.46	-18.88/-18.19	-18.49/-14.99	-14.74/-18.54	-14.47/-8.88	-8.45/-12.12	-18.62/-19.02	-12.2/-8.42	-7.47/-7.93	-7.52/-6.43
Θ(135°)	-7.62/-8.11	-9.31/-10.56	-11.6/-12.57	-11.5/-10.07	-18.02/-19.01	-15.24/-13.44	-17.3/-18.7	-17.84/-18.59	-19.13/-18.18	-17.67/-13.77	-15.48/-19.21	-16.99/-17.23	-17.67/-13.86	-18.82/-16.46	-16.17/-17.07	-18.86/-14.35	-18.79/-19.25	-17.05/-10.3	-8.79/-10.66	-15.51/-18.22	-15.38/-10.37	-8.14/-9.99	-8.37/-8.04	
Θ(142.5°)	-13.33/-12.47	-12.22/-12.76	-14.26/-16.48	-17.57/-15.38	-14.09/-16.2	-18.78/-17.49	-14.7/-13.54	-15.01/-17.79	-18.54/-18.86	-17.22/-17.93	-18.25/-18.79	-18.15/-19.03	-16.94/-17.61	-18.36/-15.45	-12.15/-10.95	-10.84/-11.44	-12.88/-14.53	-15.37/-17.31	-18.16/-13.73	-11.43/-11.89	-14.25/-18.32	-19.15/-17.43	-16.23/-14.29	-14.46/-14.62
Θ(150°)	-12.38/-12.48	-12.92/-14.13	-15.89/-16.06	-14.46/-12.99	-12.73/-14.06	-17.38/-19.35	-17.81/-17.46	-18.16/-17.74	-19.15/-14.64	-12.16/-11.84	-13.51/-18.25	-18.72/-18.27	-18.35/-16.68	-17.39/-17.42	-12.84/-10.72	-10.18/-10.69	-11.8/-12.49	-12.17/-11.98	-12.99/-14.88	-16.56/-16.16	-16.16/-16.18	-16.64/-17.27	-16.17/-14.06	-12.74/-12.27
Θ(157.5°)	-9.94/-9.66	-9.48/-9.72	-10.31/-10.94	-11.41/-11.91	-12.79/-14.51	-17.55/-14.54	-17.83/-18.02	-18.81/-16.35	-12.8/-10.48	-9.38/-9.56	-10.96/-13.5	-14.78/-14.57	-13.8/-13.88	-14.75/-15.24	-14.22/-12.62	-11.86/-12.18	-13.04/-13.3	-12.57/-11.85	-11.69/-12.52	-14.09/-14.53	-16.16/-15.98	-15.47/-15.07	-14.09/-12.61	-11.77/-10.31
Θ(165°)	-11.79/-11.23	-10.79/-10.71	-11.32/-12.52	-14.05/-15.39	-16.29/-17.03	-17.35/-16.87	-15.28/-13.39	-11.97/-11.02	-10.29/-9.67	-9.42/-9.7	-10.47/-11.46	-12.37/-13.06	-13.48/-13.84	-14.28/-16.3	-12.66/-17.55	-16.59/-16.34	-16.28/-15.48	-14.21/-13.35	-13.39/-14.2	-15.48/-15.66	-16.65/-15.86	-14.83/-14.62	-14.73/-14.42	-13.55/-12.61
Θ(172.5°)	-14.51/-15.4	-16.29/-17.05	-18.12/-19.54	-17.74/-17.29	-18.73/-19.09	-17.74/-16.25	-14.79/-13.46	-12.52/-12.1	-11.85/-11.75	-11.91/-12.29	-12.96/-13.81	-14.79/-16.05	-17.59/-18.26	-18.48/-18.2	-19.15/-17.29	-18.84/-18.33	-18.75/-19.15	-18.45/-18.14	-18.63/-17.76	-18.65/-18.82	-17.53/-17.49	-15.29/-14.3	-13.94/-13.79	-13.86/-14.08
Θ(180°)	-15.33/-17.07	-18.18/-17.49	-17.2/-19.04	-19.19/-18.23	-19.02/-17.81	-19.22/-19.19	-18.83/-19.11	-17.03/-15.51	-14.74/-14.64	-14.96/-15.42	-15.73/-16.14	-16.44/-16.74	-16.78/-16.84	-17.12/-17.43	-17.84/-18.71	-19.08/-18.45	-17.4/-18.58	-18.19/-18.14	-18.55/-18.75	-18.76/-18.35	-17.11/-15.63	-14.32/-13.25	-12.46/-12.27	-12.77/-13.8
FreqHz	5.2GPol.	PhiAnt. 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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°)	-0.75/-0.94	-1.28/-1.45	-1.75/-2.19	-2.77/-3.7	-5.04/-6.57	8.02/-9.79	-10.87/-10.17	-8.56/-6.79	-5.34/-4.12	-3.11/-2.4	-1.91/-5.22	-1.24/-1.14	-1.43/-1.74	-2.13/-2.31	-2.67/-3.5	-4.89/-10.53	-9.88/-10.53	-7.65/-6.58	-5.27/-3.97	-2.86/-1.98	-1.42/-1.26	-1.23/-1.03	-	-
Θ(7.5°)	-2.5/-2.46	-3.01/-3.69	-4.12/-4.59	-5.75/-7.46	-9.49/-11.33	-13.36/-15.27	-14.48/-11.53	-8.91/-6.75	-5.25/-3.94	-2.74/-1.91	-1.48/-1.29	-1.14/-0.97	-1.22/-1.51	-1.51/-1.41	-1.05/-1.23	-1.89/-2.65	-3.5/-4.34	-5.32/-7.13	-9.33/-10.27	-9.5/-7.72	-5.98/-4.56	-3.82/-3.45	-3.17/-3.09	-2.96/-2.67
Θ(15°)	-1.14/-0.4	-0.25/-0.46	-0.94/-1.5	-2.68/-4.61	-7.11/-10.4	-14.39/-18.69	-18.48/-14.49	-15.9/-9.7	-6.46/-4.32	-2.47/-1.12	-0.33/0.23	0.28/-0.07	-0.4/-0.4	-0.64/-1.32	-1.74/-1.58	-1.64/-2.35	-3.22/-3.87	-4.83/-7.09	-11.55/-19.11	-13.75/-19.27	-7.2/-6.29	-5.92/-5.55	-4.62/-3.13	-2.05/-1.68
Θ(22.5°)	0.04/0.16	-0.11/-0.74	-1.47/-2.09	-2.92/-4.11	-5.66/-7.29	-9.15/-11.47	-16.02/-18.6	-19.05/-14.02	-8.86/-5.93	-3.91/-2.46	-1.32/-0.52	-0.47/-1.11	-1.76/-1.76	-1.86/-1.21	-1.52/-2.35	-3.33/-4.39	-4.84/-4.96	-6.07/-8.92	-15.28/-18.22	-14.58/-10.34	-8.02/-6.36	-4.77/-3.17	-1.69/-0.5	-0.12/-0.17
Θ(30°)	-0.08/0.19	0.13/-0.49	-2.01/-4.14	-3.55/-5.9	-6.44/-7.28	-8.78/-11.69	-15.02/-17.93	-17.07/-13.86	-10.67/-8.33	-5.93/-3.92	-2.6/-1.41	-0.88/-1.47	-2.57/-3.45	-3.85/-3.89	-3.75/-3.28	-3.03/-3.42	-3.3/-3.75	-5.81/-10.63	-19.21/-17.84	-16.28/-11.73	-8.29/-6.13	-2.72/-8.8	-2.01/-1.44	-1.02/-0.53
Θ(37.5°)	-0.42/0.24	0.58/0.5	-0.08/-1.79	-4.22/-6.26	-7.48/-8.19	-10.65/-16.79	-17.33/-16.23	-10.45/-9.79	-7.89/-9.24	-8.94/-6.76	-5.33/-2.51	-0.23/0.21	-0.97/-3.67	-4.95/-3.61	-3.02/-3.45	-3.66/-3.78	-3.61/-3.38	-5.97/-10.46	-17.78/-18.69	-15.83/-9.97	-7.44/-6.14	-4.94/-4.23	-4.08/-2.95	-1.78/-0.88
Θ(45°)	-1.53/-0.79	-0.47/-0.31	0.07/-0.18	-1.01/-2.51	-4.54/-5.36	-7.66/-15.73	-18.81/-18.01	-9.42/-7.29	-8.42/-11.27	-10.81/-9.33	-8.28/-4.92	-2.66/-1.29	-1.95/-3.75	-4.8/-4.16	-4.2/-3.39	-4.41/-4.73	-6.91/-14.16	-18.47/-16.69	-10.45/-7.88	-7.85/-7.63	-6.07/-4.62	-3.88/-2.85	-1.99/-2.01	
Θ(52.5°)	-2.05/-1.29	-0.96/-1.63	-1.45/-0.62	-0.36/-0.86	-2.5/-3.23	-4.56/-12.17	-18.88/-18.75	-1.6/-1.06	-3.1/-8.55	-6.99/-6.53	-5.43/-18	-4.67/-6.19	-4.75/-3.09	-4.91/-5.95	-3.81/-5.07	-4.49/-4.76	-6.38/-9.69	-11.65/-17.69	-18.33/-11.91	-8.54/-7.82	-6.67/-5.67	-4.59/-4.94	-5.86/-4.14	
Θ(60°)	-2.08/-1.07	-0.93/-2.48	-3.24/-2.3	-1.5/-1.1	-2.06/-3.18	-4.34/-9.74	-18.53/-17.67																	



Radiated Composite Gain Data of scan

Appendix C

Θ(60°)	-2.54/-1.05	-1.66/-3.25	-4.45/-5.18	-3.42/-2.52	-2.71/-1.42	-2.74/-4.52	-1.38/0.2	0.71/0.8	1.95/1.15	0.28/-0.46	-0.84/-0.97	-0.81/0.15	0.54/0.07	-0.61/-1.57	-2.01/-1.3	-1.33/-2.53	-2.98/-3.79	-4.44/-3.79	-4.46/-11.04	-8.04/-6.3	-7.19/-5.39	-2.8/-3.7	-6.71/-10.88	-9.81/-4.54
Θ(67.5°)	-2.93/-0.8	-0.93/-2.35	-6.12/-8.37	-5.51/-2.95	-2.58/-1.52	-2.29/-4.18	-1.63/0.32	0.47/0.92	2.62/1.67	0.71/-0.25	0.11/-0.54	-0.49/0.43	0.27/-0.03	-0.75/-0.92	-0.84/-0.19	-0.34/-2.52	-1.52/-1.37	-2.61/-2.54	-2.57/-9.07	-6.58/-5.69	-7.34/-3.76	-1.92/-4.42	-9.43/-12.63	-10.49/-6.78
Θ(75°)	-3.15/-1.66	-1.04/-2.35	-5.68/-8.07	-7.63/-4.23	-3.1/-2.41	-2.39/-3.66	-2.27/-0.58	-0.47/0.29	1.18/1.65	-0.41/-0.56	0.25/-1.16	-1.08/-0.05	-1.29/-1.03	-1.35/-0.38	-1.28/-0.72	-0.89/-0.82	-1.0/-8.9	-1.48/-1.76	-1.46/-8.62	-5.53/-3.57	-7.81/-4.92	-2.58/-5.92	-11.61/-10.67	-8.54/-5.96
Θ(82.5°)	-4.46/-2.87	-1.87/-3.37	-6.37/-9.1	-8.24/-4.77	-3.42/-2.95	-4.1/-4.94	-3.84/-1.26	-1.81/0.68	-0.67/-0.04	-2.73/-1.66	-1.02/-2.73	-2.16/-1.17	-2.53/-3.36	-3.15/-1.26	-2.61/-1.35	0.75/-0.77	-0.42/-1.04	-3.15/-1.62	-1.2/-7.06	-7.09/-4.45	-9.01/-5.43	-4.09/-7.49	-15.58/-12.08	-9.3/-7.11
Θ(90°)	-6.56/-5.55	-4.13/-5.58	-11.71/-9.77	-9.94/-7.05	-4.42/-4.31	-5.71/-5.47	-6.2/-2.71	-3.56/-1.87	-2.43/-2.71	-5.6/-2.44	-2.36/-4.87	-3.98/-1.88	-2.48/-3.99	-5.42/-3.78	-5.88/-3.94	-0.29/-1.29	-1.95/-1.42	-3.72/-3.36	-2.16/-6.27	-9.58/-7.21	-8.18/-5.95	-6.52/-9.88	-13.53/-10.01	-8.2/-7.07
Θ(97.5°)	-8.27/-6.47	-5.24/-6.59	-7.47/-8.9	-10.11/-8.57	-5.52/-6.4	-7/-7.1	-7.49/-3.76	-5.28/-3.27	-4.88/-5.36	-6.22/-4.46	-4.26/-6.36	-6.55/-4.09	-2.62/-6.15	-7.99/-6.86	-8.77/-8.66	-3.95/-4.4	-6.15/-5.06	-6.83/-9.55	-11.13/-6.88	-7.71/-7.4	-9.78/-12.33	-13.53/-10.76	-9.5/-7.4	
Θ(105°)	-7.45/-6.77	-6.55/-8.58	-8.97/-11.44	-14.96/-9.14	-6.77/-8.26	-7.07/-9.4	-8.16/-4.96	-6.32/-6.04	-7.98/-6.52	-14.08/-7.01	-7.35/-9.06	-9.57/-5.64	-4.62/-6.43	-10.31/-8.8	-11.07/-15	-7.08/-5.45	-7.07/-9.37	-9.44/-8.87	-11.12/-13.18	-11.84/-19.02	-7.91/-7.43	-11.98/-13.94	-15.39/-10.84	-9.71/-7.04
Θ(112.5°)	-8/-6.88	-9.23/-10.44	-12.04/-16.06	-18.71/-11.12	-8.32/-9.11	-8.48/-11.9	-7.25/-7.55	-8.29/-8.06	-9.81/-7.9	-13.61/-11.25	-11.26/-13.91	-9.66/-7.59	-10.2/-12.79	-15.44/-9.43	-11.97/-17.03	-12.08/-8.01	-11.47/-13.67	-11.55/-11.41	-17.44/-17.96	-12.65/-17.68	-8.81/-6.94	-15.05/-15.18	-15.76/-12.39	-11.94/-8
Θ(120°)	-11.48/-10.63	-10.73/-12.75	-14.47/-17.61	-16.63/-12.64	-14.32/-12.06	-11.12/-13.09	-8.33/-9.64	-11.55/-14.21	-7.81/-8.96	-12.27/-8.51	-12.54/-15.11	-10.26/-6.96	-12.45/-17.52	-12.84/-10.94	-13.71/-13.02	-7.5/-9.79	-12.81/-9.98	-16.45/-12.75	-13.33/-17.71	-18.81/-16.39	-12.35/-7.71	-10.17/-18.97	-16.51/-17.49	-12.82/-13.65
Θ(127.5°)	-11.8/-12.59	-12.31/-12.76	-12.23/-14.18	-16.99/-18.44	-18.09/-13.45	-15.64/-15.45	-13.51/-14.55	-13.38/-11.1	-9.32/-11.3	-14.41/-7.93	-11.84/-13.28	-8.89/-11.49	-8.81/-17.49	-12.05/-15.53	-15.08/-9.74	-11.57/-10.44	-13.91/-18.36	-18.11/-10.55	-9.31/-13.34	-15.57/-15.89	-18.09/-17.81	-13.59/-19.1	-14.74/-19.35	-15.02/-11.36
Θ(135°)	-9.45/-15.76	-19.23/-17.08	-15.79/-14.56	-17.49/-18.2	-16.52/-17.41	-18.09/-17.86	-15.25/-16.39	-14.87/-15.53	-12.93/-13.7	-14.8/-13.25	-15.12/-17.05	-12.61/-13.38	-17.45/-19.01	-12.09/-15.32	-15.06/-10.19	-12.94/-18.51	-19.09/-17.56	-16.98/-11.23	-11.21/-17.81	-17.06/-16.29	-19.43/-16.46	-17.25/-13.92	-9.94/-13.73	-11.1/-10.47
Θ(142.5°)	-14.52/-11.99	-13.83/-14.68	-15.6/-18.77	-18.54/-18.26	-17.91/-18.47	-14.82/-16.71	-17.75/-18.22	-18.98/-17.54	-15.41/-14.77	-15.91/-16.14	-12.55/-11.42	-11.96/-17.37	-18.79/-16	-13.61/-14.16	-18.94/-18.55	-18.82/-18.41	-14.64/-13.27	-12.08/-13.7	-17.86/-17.98	-17.96/-17.59	-13.74/-14.65	-14.34/-18.15	-16.77/-18.77	-18.77/-19.01
Θ(150°)	-18.86/-14.49	-12.86/-13.61	-15/-15.92	-17.46/-18.31	-19.12/-18.43	-17.27/-17.99	-14.65/-15.22	-17.83/-13.35	-10.91/-12.95	-16.58/-19.03	-17.57/-18.63	-17.72/-19.11	-18.15/-17.12	-19.19/-18.32	-18.87/-18.16	-18.83/-17.53	-15.23/-17.41	-18.91/-19.31	-16.43/-16.65	-18.14/-18.63	-19.17/-18.59	-18.61/-18.95	-18.72/-19.04	-18.52/-19.32
Θ(157.5°)	-15.48/-16.34	-15.51/-13.6	-11.84/-12.78	-14.38/-15.1	-14.61/-14.79	-14.83/-14.59	-13.72/-14.91	-18.92/-18.76	-17.58/-17.24	-14.86/-12.75	-16.17/-17.7	-17.22/-18.82	-18.66/-18.05	-18.07/-18.69	-18.16/-15.7	-13.13/-13.66	-16.61/-5.3	-17.87/-18.84	-17.77/-18.13	-18.08/-18.21	-18.03/-17.97	-17.97/-18.95	-18.87/-16.23	
Θ(165°)	-14.71/-16.72	-15.56/-16.57	-18.73/-13.8	-18.4/-18.98	-18.79/-18.29	-19.28/-18.76	-17.98/-19.13	-17.32/-17.48	-18.43/-18.3	-18.91/-18.77	-18.57/-18.95	-18.45/-18.71	-18.48/-18.85	-18.07/-18.71	-18.21/-18.75	-18.01/-18.35	-18.04/-19.61	-17.48/-18	-18.71/-19.02	-17.63/-17.73	-16.11/-17.52	-17.96/-18.95	-17.52/-16.5	-13.59/-13.05
Θ(172.5°)	-17.19/-16.09	-16.13/-17.44	-18.58/-17.44	-17.68/-19.05	-17.83/-18.83	-18.27/-15.72	-13.75/-12.69	-12.42/-13.07	-13.71/-14.46	-15.36/-16.1	-16.96/-18.89	-17.37/-17.61	-18.65/-17.99	-19.13/-18.8	-18.96/-18.71	-17.11/-16.88	-16.23/-16.28	-15.17/-14.75	-15.84/-17.43	-17.43/-18.83	-19.24/-18.65	-18.55/-18.41	-16.89/-15.89	-15.74/-16.85
Θ(180°)	-18.11/-18.55	-18.12/-18.88	-19.01/-18.9	-18.67/-18.21	-18.32/-19	-19.37/-17.94	-16.42/-15.97	-15.72/-16.09	-17.49/-18.42	-18.54/-19.16	-18.01/-18.45	-18.89/-18.07	-17.35/-17.71	-18.18/-18.72	-17.26/-16.56	-16.43/-16.29	-15.37/-14.4	-12.92/-12.26	-12.69/-14.56	-15.61/-15.92	-16.9/-17.7	-18.96/-19.12	-19.27/-18.55	
Freq(Hz)	5.6GPol.	PhiAnt. 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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°)	-2.84/-2.91	-3.28/-3.4	-3.63/-4.07	-4.41/-4.92	-5.56/-6.15	-6.46/-6.22	-5.87/-5.32	-4.66/-0.41	-3.64/-3.45	-3.34/-3.24	-3.17/-3.04	-2.65/-2.42	-2.57/-2.8	-3.1/-2.97	-2.9/-3.25	-3.5/-3.43	-4.91/-5.35	-5.33/-4.77	-5.13/-4.78	-4.17/-14.4	-3.82/-3.26	-3.03/-2.86	-2.65/-2.59	-2.73/-2.82
Θ(7.5°)	-0.75/-0.8	-0.85/-1.02	-0.89/-0.65	-1.24/-2.37	-3.43/-3.99	-4.74/-5.56	-6/-6.19	-6.61/-6.77	-6.62/-6.45	-6.21/-5.58	-4.71/-3.92	-3.42/-4.65	-1.55/-1.3	-1.17/-1.07	-0.73/-1.01	-0.21/-3.29	-4.66/-6.04	-6.72/-6.68	-6.34/-5.16	-4.65/-4.76	-5.07/-4.76	-4.85/-4.5	-4.21/-3.74	-2.92/-1.71
Θ(15°)	-1.54/-1.49	-1.9/-2.39	-2.45/-2.5	-2.83/-3.83	-5.3/-7.06	-8.91/-10.14	-10.06/-9.25	-8.37/-7.49	-6.73/-6.3	-5.78/-5	-3.97/-2.98	-2.36/-2.18	-2.13/-2	-1.38/-0.86	-0.87/-0.82	-0.43/-0.58	-1.87/-3.92	-6.24/-8.3	-9.65/-9.2	-8.74/-8.79	-8.88/-7.38	-4.8/-3.04	-2.05/-1.52	-1.42/-1.44
Θ(22.5°)	-0.53/-0.13	0.11/-0.36	-1.81/-3.81	-5.91/-7.37	-9.59/-12.22	-16.66/-18.8	-15.84/-11.4	-8.06/-5.94	-4.84/-4.24	-3.67/-2.87	-2.07/-1.5	-1.09/-0.69	-0.31/-0.06	0.27/-0.19	-1.14/-2.42	-3.52/-3.45	-5.59/-7.6	-10.37/-15.31	-16.18/-12.5	-8.89/-8.62	-6.61/-6.89	-2.08/-1.7	-2.32/-2.86	-2.52/-1.46
Θ(30°)	-0.27/0.03	0.10/-45	0.55/-0.66	-3.54/-6.76	-9.61/-14.04	-18.16/-18.22	-15.62/-12.98	-9.94/-8.05	-7.09/-6.13	-4.58/-2.88	-2.1/-2.4	-2.41/-2.31	-2.51/-1.69	-0.32/0.51	-2.31/-4.96	-6.05/-9.83	-11.88/-10.89	-16.38/-15.69	-8.93/-3.37	-5.53/-5.36	-2.79/-3.49	-5.28/-4	-2.03/-0.78	
Θ(37.5°)	-2.11/-2.63	-3.26/-2.1	-0.26/-0.27	-2.29/-4.7	-7.71/-14.22	-18.05/-14.71	-9.96/-9.87	-9.56/-8.24	-8.33/-8.44	-7.72/-6.98	-6.32/-4.89	-1.42/-0.55	-2.01/-3.6	-3.65/-3.15	-2.25/-2.36	-4.23/-3.95	-3.3/-7.27	-17.42/-9.03	-10.02/-16.3	-10.58/-8.61	-8.05/-5.69	-4.47/-5.31	-5.14/-2.88	-2.17/-2.18
Θ(45°)	-1.63/-1.89	-2.47/-3.43	-3.03/-2.3	-3.36/-4.01	-4.81/-8.96	-13.51/-13.97	-10.36/-9.45	-8.64/-7.85	-8.93/-10.76	-10.61/-10.05	-9.52/-6.88	-2.23/-0.17	-0.98/-4.85	-1.31/-3.65	-3.39/-2.69	-2.28/-3.15	-3.77/-3.36	-16.66/-17.9	-12.38/-18.2	-16.76/-14.7	-11.85/-8.1	-6.78/-4.74	-6.29/-9.42	-4.28/-2.23
Θ(52.5°)	-1.99/-3.05	-3.4/-3.07	-3.85/-4.66	-6.04/-5.09	-3.99/-6.06	-7.19/-11.24	-15.71/-12.22	-9.69/-8.31	-7.26/-7.34	-6.38/-5.91	-6.03/-5.59	-6.36/-5.34	-5.98/-5.28	-5.54/-4.1	-4.11/-3.78	-6.49/-8.29	-14.47/-7.69	-19.18/-18.84	-14.71/-17.43	-14/-10.12	-10.31/-10.82	-9.85/-8.52	-6.06/-2.56	
Θ(60°)	-5.18/-5.93	-5.67/-3.6	-3.98/-5.36	-6.2/-6.55	-5.74/-6.85	-5.27/-7.6	-18.82/-18.81	-13.8/-10.8	-7.68/-6.89	-7.76/-7.32	-5.53/-2.9	-4.01/-8.56	-6.64/-2.88	-3.68/-5.06	-3.83/-10.16	-10.83/-7.29	-10.1/-14.64	-12.73/-19.06	-18.67/-18.94	-15.35/-17.59	-15.66/-18.33	-17.78/-18.51	-11.98/-11.2	-7.71/-5.31
Θ(67.5°)	-9.01/-9.98	-6.69/-6.31	-5.61/-6.67	-6.52/-7.6	-7.45/-8.08	-6.62/-8.12	-15.17/-18.76	-18.48/-10.57	-10.39/-12.33	-18.35/-14.38	-7.26/-2.89	-3.05/-4.38	-3.5/-2.67	-4.15/-3.78	-4.54/-9.71	-11.57/-10.16	-11.02/-18.54	-14.61/-15.35	-14.96/-18.3	-10.41/-14.07	-14.11/-19.05	-14.39/-18.41	-15.53/-14.93	-9.89/-8.72
Θ(75°)	-12.44/-11.87	-13.58/-9.91	-7.49/-8.97	-7.81/-8.03	-8.44/-9.78	-8.42/-8.53	-13.46/-13.42	-17.81/-15.59	-15.18/-18.39	-16.88/-19.04	-11.31/-5.93	-5.58/-3.22	-2.94/-5.71	-5.84/-7.59	-7.62/-8.35	-7.27/-9.49	-10.68/-18	-18.08/-12.28	-12.24/-14.55	-8.74/-14.25	-13.75/-15.72	-11.11/-14.72	-17.54/-13.96	-10.55/-11.42
Θ(82.5°)	-14.73/-15.89	-16.81/-14.63	-10.46/-12.01	-10.58/-10.57	-10.36/-10.99	-12.36/-11.17	-12.95/-14.08	-18.31/-17.72	-18.19/-15.85	-14.11/-16.71	-12.77/-9.5	-10.36/-4.35	-3.81/-9.14	-7.24/-8.83	-11.3/-8.43	-6.06/-9.29	-12.32/-17.98	-18.02/-12.2	-11.32/-13.18	-9.69/-15.76	-10.68/-16.65	-15.43/-17.96	-19.56/-17.11	-12.29/-13.57
Θ(90°)	-16.05/-17.87	-18.92/-17.68	-13.4/-15.56	-14.28/-13.11	-12.23/-13.87	-15.45/-11.9	-13.21/-13.04	-17.86/-18.18	-18.71/-16.72	-11.31/-16.41	-18.98/-11.21	-16.19/-8.46	-6.17/-11.38	-9.34/-8.1	-8.28/-7.4	-17.98/-14.9	-19.24/-12.23	-14.12/-14.34	-9.84/-15	-11.43/-17.2	-15.03/-18.04	-18.18/-17.76	-14.84/-14.72	
Θ(97.5°)	-17.59/-16.71	-18.39/-17.88	-13.63/-16.06	-18.96/-16.99	-16.24/-17.38	-17.29/-14.18	-15.76/-13.4	-17.78/-13.7	-18.79/-18.37	-10.23/-18.54	-18.99/-12.11	-17.82/-12.54	-10.13/-10.78	-14.4/-11.26	-11.45/-9.72	-17.91/-16.68	-17.52/-11.89	-13.66/-15.34	-11.65/-15.53	-13.31/-19.25	-14.15/-14.78	-17.39/-19.12	-15.41/-15.03	
Θ(105°)	-17.87/-16.65	-18.26/-18.25	-16.46/-19.54	-18.09/-17.65	-17.91/-19	-18.73/-14.82	-17.51/-15.07	-17.78/-17.11	-19.12/-19.9	-9.52/-17.93	-18.36/-16.79	-18.57/-17.38	-16.91/-17.56	-11.91/-11.51	-15.92/-13.22	-16.8/-13.7								



Radiated Composite Gain Data of scan

Appendix C

Θ (105°)	-17.04/-7.92	-6.44/-12.22	-15.14/-9.57	-4.1/-4.62	-4.87/-8.16	-8.02/-8.29	-5.68/-6.66	-4.46/-8.6	-3.43/-6.39	-9.47/-9.69	-10.24/-11.39	-7.13/-5.34	-4.88/-3.02	-8.73/-6.97	-12.31/-12.38	-8.64/-5.09	-6.97/-10.92	-10.82/-9.82	-10.88/-11.8	-8.12/-11.23	-12.13/-8.04	-7.44/-11.61	-16.9/-16.9	-14.45/-10.17
Θ (112.5°)	-17.87/-11.94	-9.51/-12.49	-9.42/-8.27	-5.75/-7.03	-7.58/-9.88	-9.38/-6.31	-10.46/-6.89	-6.64/-7.09	-5.03/-13.21	-13.11/-11.42	-10.74/-12.28	-9.03/-10.87	-8.08/-5.81	-10.64/-9.45	-12/-13.33	-8.51/-10.23	-8.86/-16.96	-13.19/-11.75	-11.81/-18.1	-8.15/-12.63	-18.35/-11.71	-7.9/-11.71	-12.88/-11.96	-16.33/-8.33
Θ (120°)	-14.39/-15	-15.19/-14.42	-11.95/-18.1	-14.68/-12.48	-10.71/-7.26	-7.66/-8.73	-12.29/-6.56	-9.04/-8.24	-10.47/-11.09	-13.75/-9.98	-12.46/-17.08	-10.52/-12.87	-13.91/-11.02	-10.83/-7.49	-15.13/-11.36	-6.56/-23.9	-7.5/-18.97	-16.41/-17.9	-16.51/-10.68	-11.62/-18.53	-14.31/-17.72	-12.31/-16.98	-11.66/-10.53	-15.53/-11.98
Θ (127.5°)	-12.97/-12.14	-13.05/-15.47	-17.88/-18.12	-18.53/-12.14	-12.63/-11.6	-13.05/-12.23	-10.58/-11.06	-10.87/-13.36	-12.95/-8.3	-11.78/-9.78	-19.33/-9.78	-10.57/-10.25	-11.27/-10.61	-11.14/-10.16	-18.14/-15.65	-6.93/-10.11	-18.62/-18.93	-15.95/-9.49	-19.02/-12.76	-15.15/-15.64	-12.44/-12.13	-16.4/-19.36	-12.38/-13.06	-11.83/-13.59
Θ (135°)	-17.94/-16.25	-10.87/-11.16	-14.45/-18.09	-19.37/-18.92	-17.99/-14.88	-14.9/-14.4	-16.88/-14.22	-11.33/-14.68	-14.67/-11.82	-16.61/-11.83	-18.28/-8.7	-9.71/-12.01	-13.88/-14.6	-14.38/-9.96	-11.17/-18.72	-18.27/-16.57	-18.88/-17.99	-18.55/-16.33	-18.21/-18.21	-15.81/-18.51	-14.43/-17.81	-14.85/-17.81	-18.12/-14.5	-12.5/-19.38
Θ (142.5°)	-17.11/-17.13	-10.82/-18.68	-17.95/-19	-18.86/-19.14	-15.29/-12.97	-19.06/-19.43	-16.21/-8.67	-14.41/-15.66	-18.17/-15.97	-17.05/-13.98	-18.78/-12.77	-12.28/-11.21	-18.29/-15.86	-8.18/-12.21	-12.79/-14.71	-16.93/-18.51	-17.24/-16.19	-18.86/-18.68	-18.71/-17.72	-14.77/-17.24	-17.27/-16.47	-14.95/-13.06	-13.67/-19.3	-18.23/-17.65
Θ (150°)	-18.5/-14.41	-14.53/-13.23	-16.05/-18.53	-16.6/-17.24	-18.45/-19.31	-17.86/-17.97	-18.51/-17.78	-11.73/-12.36	-19.05/-18.12	-17.65/-16.86	-17.83/-19.12	-18.58/-18.02	-18.77/-16.11	-14.35/-15.93	-17.49/-16.45	-18.66/-18.1	-16.98/-17.29	-17.25/-17.67	-18.17/-17.35	-18.52/-19.24	-18.9/-17.92	-18.5/-19	-18.6/-18.59	-18.74/-18.94
Θ (157.5°)	-15.37/-17.27	-19.63/-17.79	-19.64/-16.48	-17.97/-18.72	-18.15/-19.32	-19.6/-18.28	-18.55/-18	-16.28/-14.81	-17.73/-18.08	-17.27/-12.32	-10.57/-10.8	-11.53/-18.58	-18.69/-18.46	-19.11/-18.72	-18.75/-18.36	-18.98/-18.94	-18.41/-18.07	-17.47/-18.65	-19.03/-17.95	-18.77/-18.68	-17.96/-18.03	-18.93/-18.28	-17.58/-17.24	-16.55/-16.16
Θ (165°)	-18.36/-16.42	-15.16/-15.15	-16.19/-17.76	-19.45/-18.25	-16.61/-14.24	-14.16/-15.93	-18.62/-18.55	-17.88/-16.31	-16.07/-19.39	-18.64/-18.57	-18.73/-17.87	-17.87/-17.85	-18.21/-17.63	-18.82/-18	-15.26/-13.17	-12.9/-14.94	-18.05/-18.73	-18.51/-18.67	-17.17/-17.54	-17.19/-17.17	-18.64/-18.92	-19.04/-18.53		
Θ (172.5°)	-19.36/-17.77	-19.13/-17.8	-17.11/-16.03	-15.07/-14.34	-15.16/-17.94	-17.53/-18.4	-17.78/-18.03	-16.49/-15.99	-15.38/-15.17	-14.86/-15.07	-15.19/-14.48	-13.9/-15.35	-15.52/-15.56	-16.73/-18.33	-19.04/-18	-18.4/-17.61	-17.82/-17.5	-18.84/-18.86	-19.16/-17.11	-14.8/-13.8	-13.27/-13.88	-15.1/-16.33	-17.75/-19.23	-18.32/-17.81
Θ (180°)	-14.29/-14.56	-15/-15.99	-18.48/-18.21	-18.22/-19.01	-19.08/-18.01	-19.13/-18.15	-18.08/-16.71	-16.99/-17.62	-17.44/-18.95	-18.93/-18.04	-19.71/-19.46	-17.63/-18.27	-17.21/-17.48	-17.56/-18.06	-17.61/-18.06	-18.33/-18.24	-18.16/-19.35	-19.18/-17.9	-17.96/-17.74	-17.8/-18.65	-17.65/-16.18	-15.07/-14.5	-14.01/-14.62	-14.28/-14.28
Freq(Hz)	5.885GPol.	PhiAnt. 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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°)	-4.35/-3.87	-3.46/-3.29	-2.45/-1.89	-1.86/-2.04	-1.89/-1.97	-2.14/-2.35	-2.41/-2.71	-3.4/-3.93	-4.3/-4.29	-4.3/-4.06	-3.62/-2.99	-2.69/-2.44	-1.86/-1.47	-0.92/-0.66	-0.62/-0.34	-0.48/-0.82	-1.18/-1.3	-1.47/-1.74	-2.44/-3.28	-3.94/-4.5	-4.96/-5.38	-5.25/-5.05	-4.94/-4.78	-4.27/-4.05
Θ (7.5°)	-0.73/-0.35	-0.02/-0.15	-0.39/-0.61	-0.87/-1.34	-1.92/-2.52	-3.02/-3.18	-3.21/-3.5	-3.92/-4.18	-4.5/-4.71	-4.87/-5.15	-5.48/-5.24	-5/-4.8	-4.57/-4.18	-4/-3.77	-4.36/-4.66	-4.69/-5.18	-5.01/-4.25	-3.59/-3.03	-3.18/-3.62	-3.99/-4.72	-5.3/-5.7	-4.95/-4.02	-3.02/-3.25	-1.36/-0.91
Θ (15°)	-1.17/-1.39	-2.04/-2.8	-3.34/-3.95	-4.95/-6.1	-7.24/-8.02	-8.19/-7.74	-6.84/-6.16	-5.24/-4.06	-3.24/-3.06	-3.45/-4.26	-5.15/-5.56	-5.23/-4.59	-3.83/-2.52	-1.37/-0.81	-0.77/-1.21	-1.72/-3.12	-5.68/-7.04	-6.65/-5.36	-4.72/-5.13	-6.54/-8.71	-9.78/-7.22	-4.49/-3.06	-2.36/-2.05	-1.49/-1.21
Θ (22.5°)	0.20/55	-0.16/-0.81	-0.96/-1.67	-3.54/-6.24	-7.63/-8.19	-8.46/-8.2	-8.26/-8.86	-6.24/-4.75	-2.82/-2.18	-2.85/-3.97	-4.8/-5.45	-5.45/-4.67	-3.77/-2.8	-2.21/-1.72	-3.77/-4.56	-5.65/-6.95	-8.17/-7.52	-6.97/-7.97	-11.95/-13.61	-8.33/-5.42	-4.73/-5.13	-5.4/-3.85	-2.14/-1.8	
Θ (30°)	-1/-1.31	-1.46/-1.56	-1.94/-3.01	-4.49/-6.74	-9.49/-11.25	-10.93/-9.88	-9.28/-9.58	-11.42/-11.79	-8.58/-6.19	-4.91/-3.42	-2.47/-3.71	-5.39/-6.04	-4.65/-2.55	-1.72/-2.06	-2.81/-3.91	-5.47/-6.93	-7.98/-7.99	-6.99/-6.31	-7.07/-11.57	-15.2/-9.87	-6.91/-13	-6.19/-6.08	-3.18/-1.9	-0.87/-1.16
Θ (37.5°)	-1.87/-0.98	-0.5/-1.29	-3.29/-5.42	-7.12/-10.87	-14.14/-14.62	-17.97/-18.84	-10.63/-7.37	-9.51/-11.6	-7.81/-6.08	-4.78/-3.71	-5.17/-4.19	-5.61/-5.63	-4.19/-3.94	-4.98/-4.68	-6.35/-5.52	-7.51/-9.76	-7.95/-14.71	-10.5/-6.55	-6.05/-5.81	-6.27/-5.5	-2.21/-1.12	-1.9/-1.85		
Θ (45°)	-3.09/-2.65	-2.77/-2.84	-4.06/-6.6	-8.11/-10.91	-13.92/-13.77	-15.13/-18.47	-11.14/-63	-7.96/-8.04	-4.75/-5.91	-7.87/-8.88	-8.53/-8.71	-2.54/-2.07	-0.89/-5.69	-8.05/-3.98	-2.22/-1.54	-2.32/-2.52	-3.7/-12.18	-7.65/-7.37	-13.8/-15.04	-11.19/-10.12	-9.51/-6.26	-7.36/-8.09	-5.53/-4.26	-4.14/-3.43
Θ (52.5°)	-6/-5.51	-5.72/-5.85	-5.06/-5.68	-6.36/-7.54	-11.4/-12.73	-10.03/-11.78	-14.6/-8.1	-8.09/-8.35	-5.77/-7.03	-6.37/-4.11	-5.47/-6.68	-4.23/-2.09	-2.99/-6.27	-6.15/-4.52	-6.17/-3.81	-2.79/-3.64	-4.96/-1.88	-11.61/-11.35	-14.61/-19.19	-14.01/-16.63	-14.99/-10.81	-13.36/-10.96	-7.88/-5.85	-4.47/-5.66
Θ (60°)	-9.99/-7.79	-6.87/-8.18	-6.17/-5.15	-5.05/-4.81	-6.42/-7.53	-10.54/-10.77	-18.19/-11.33	-13.63/-8.88	-6.86/-8.09	-7.61/-4.36	-4.71/-4.65	-4/-6.23	-7.12/-4.46	-4.72/-3.93	-4.65/-10.06	-6.86/-8.2	-10.85/-9.88	-18.07/-17.37	-18.41/-17.97	-15.35/-13.74	-9.79/-15.54	-17.94/-11.88	-10.88/-8.84	-6.1/-8.45
Θ (67.5°)	-12.81/-12.38	-9.51/-8.62	-7.7/-6.29	-7.32/-5.82	-5.9/-4.95	-8.09/-10.9	-17.96/-9.74	-16.62/-12.09	-9.39/-10.19	-10.27/-9.36	-7.44/-4.87	-2.69/-3.17	-12.82/-7.22	-13.76/-17	-10.92/-11.1	-18.53/-11.64	-18.18/-36	-12.78/-9.93	-9.72/-17.19	-18.88/-13.7	-15.03/-8.81	-17.61/-14.71	-10.32/-8.1	-7.83/-11.4
Θ (75°)	-13.06/-12.28	-10.37/-8.31	-7.76/-6.44	-10.61/-9.3	-9.38/-7.17	-7.62/-9.93	-16.96/-12.95	-16.84/-17.91	-12.67/-13.47	-18.46/-18.09	-10.7/-8.08	-4.31/-2.73	-1.96/-3.85	-6/-10.53	-6.22/-5.38	-8.45/-10.06	-16.15/-15.16	-16.45/-17.29	-11.47/-14.2	-10.2/-10.41	-9.55/-19.45	-17.55/-14.76	-16.15/-10.48	-10.09/-12.59
Θ (82.5°)	-13.13/-10.53	-12.09/-8.52	-8.83/-7.94	-12.44/-10.47	-12.01/-8.68	-7.18/-11.41	-14.55/-12.02	-17.74/-17.53	-13.24/-14.75	-16.45/-11.91	-9.95/-8.96	-7.48/-3.93	-3.22/-1.78	-9.44/-9.19	-7.66/-9.41	-14.03/-18.59	-15.37/-11.74	-9.83/-11.49	-10.27/-10.92	-14.46/-16.25	-16.71/-18.66	-19.31/-10.72	-12.49/-10.45	
Θ (90°)	-13.12/-13.06	-12.48/-8.86	-11.68/-10.22	-14.31/-14.07	-18.57/-12.78	-9.45/-12.86	-14.61/-15.38	-13.91/-19.26	-12.12/-14.2	-13.94/-13.78	-13.32/-10.24	-11.92/-7.21	-8.44/-11.77	-9.27/-8.38	-16.23/-12.06	-8.5/-9.5	-13.3/-16.97	-10.77/-10.89	-10.42/-12.56	-10.89/-15.7	-12.88/-13.72	-13.73/-19.31	-19.38/-13.54	-12.41/-15.73
Θ (97.5°)	-15.48/-18.87	-11.67/-10.57	-13.44/-10.97	-14.41/-13.2	-17.91/-13.08	-11.03/-14.01	-11.99/-13.49	-16.77/-13.93	-13.01/-14.97	-10.95/-12.74	-17.33/-10.6	-18.37/-11.59	-10.12/-19.12	-13.01/-8.84	-17.39/-11.76	-9.43/-12.44	-18.93/-18.64	-13.55/-11.84	-12.63/-14.43	-11.77/-19.42	-10.06/-15.21	-16.29/-18.15	-18.87/-14.63	-15.72/-14.53
Θ (105°)	-16.37/-16.78	-10.66/-13.99	-16.01/-12.97	-14.29/-12.01	-17.08/-14.22	-16.87/-13.57	-11.64/-14.39	-19.3/-15.71	-14.68/-17.51	-10.99/-12.01	-17.98/-11.56	-17.69/-18.1	-14.4/-13.56	-15.75/-9.17	-17.33/-12.78	-14.13/-17.48	-16.18/-18.49	-18.46/-10.56	-11.56/-16.12	-11.48/-16.63	-8.99/-13.43	-15.02/-18.99	-14.66/-18.38	-18.39/-14.24
Θ (112.5°)	-16.87/-16.04	-14.22/-15.9	-15.23/-13.81	-15.68/-14.21	-15.67/-12.55	-16.02/-15.59	-15/-13	-18.2/-14.26	-17.1/-18.34	-13.94/-14.28	-14.97/-12.57	-18.75/-18.04	-19.28/-16.26	-16.97/-14.58	-15.71/-15.86	-14.8/-15.46	-19.21/-15.66	-18.66/-10.63	-15.05/-15.19	-12.98/-16.93	-10.17/-16.35	-19.16/-15.31	-14.22/-18.34	-16.81/-18.26
Θ (120°)	-17.27/-19.07	-18.55/-16.44	-19.14/-17.63	-17.31/-15.43	-17.46/-16.71	-15.15/-13.12	-16.39/-11.94	-16.88/-14.53	-18.43/-14.55	-15.41/-13.28	-8.52/-12.34	-18.11/-17.84	-17.69/-17.56	-14.03/-18.58	-15.11/-17.16	-14.59/-17.48	-17.81/-14.33	-12.47/-11.35	-10.12/-12.6	-15.74/-16.67	-15.15/-19.28	-14.95/-15.76	-11.86/-13.51	-18.84/-18.79
Θ (127.5°)	-13.4/-18.25	-18.4/-17.85	-18.74/-17.63	-11.09/-10.43	-15.41/-11.9	-15.79/-15.19	-15.97/-12.76	-18.27/-9.18	-18.76/-18.94	-17.86/-16.7	-11.15/-18.65	-18.19/-11.04	-10.71/-18.51	-13.87/-13.86	-18.49/-13.17	-16.31/-17.88	-12.17/-15.1	-10.35/-13.78	-19.19/-13.8	-14.14/-18.56	-12.2/-18.46	-15.7/-18.61	-16.44/-16.99	
Θ (135°)	-4.76/-18.1	-17.71/-18.82	-18.06/-17.7	-11.39/-17.6	-13.84/-11.77	-16.29/-14.37	-10.19/-10.75	-18.88/-11.47	-14.85/-18.7	-13.64/-18.4	-14.71/-12.72	-11.19/-13.72	-8.22/-16.62	-15.35/-18.09	-13.74/-16.8	-11.36/-18.84	-11.36/-18.84	-17.59/-16.12	-14.68/-19.29	-13.45/-17.99	-15.69/-16.12	-14.98/-15.45		
Θ (142.5°)	-16.62/-15.55	-18/-16.91	-14.81/-13.15	-18.1/-13.89	-10.26/-15.34	-16.8/-13.93	-18.31/-12.21	-16.43/-17.66	-15.2/-15.7	-17.49/-17.7	-13.52/-10.89	-18.94/-16.16	-9.08/-13.23	-15.77/-12.08	-16.42/-18.12	-18.78/-17.45	-17.96/-18.74	-18.91/-18.2	-17.54/-18.31	-18.47/-18.13	-18.34/-13.33	-17.32/-18.14	-17.78/-18.85	-15.53/-13.86
Θ (150°)	-12.69/-10.52	-13.79/-18.03																						



Radiated Composite Gain Data of scan

Appendix C

Θ (150°)	-19.07/-17.74	-18.38/-18.92	-18.05/-18.55	-18.61/-17.76	-19.27/-18.45	-14.96/-14.15	-18.54/-14.41	-11.66/-18.25	-15.89/-13.02	-13.98/-17.29	-16.58/-17.96	-17.93/-17.18	-15.58/-13.07	-13.93/-18.12	-17.25/-18.35	-18.31/-18.56	-18.5/-18.39	-19.25/-19.35	-18.23/-18.72	-18/-17.39	-17.69/-18.66	-18.58/-17.52	-16.19/-14.02	-15.33/-17.15	
Θ (157.5°)	-17.87/-15.1	-16.2/-15.14	-13.33/-11.06	-10.91/-13.12	-14.04/-15.31	-16.82/-18.18	-19.34/-17.9	-13.88/-11.91	-10.95/-13.02	-18.78/-17.74	-18.45/-18.39	-14.03/-11.49	-11.87/-14.67	-13.53/-13.16	-15.47/-17.85	-16.06/-13.42	-15.36/-17.86	-18.82/-18.15	-18.64/-18.43	-17.83/-18.87	-17.94/-18.78	-19.05/-14.86	-15.33/-18.92	-19/-18.99	
Θ (165°)	-19.02/-17.74	-16.03/-15.1	-12.07/-12.33	-13.91/-14.56	-14.88/-16.48	-16.68/-17.94	-19.06/-16.15	-16.33/-18.22	-17.71/-19.24	-18.49/-17.79	-16.22/-17.43	-18.38/-18.09	-18.36/-18.09	-16.68/-16.58	-13.76/-14.32	-16.2/-17.5	-15.24/-12.74	-13.01/-15.75	-17.75/-18.34	-17.71/-18.69	-18.07/-17.65	-19.18/-17.28	-19.68/-18.09	-17.19/-18.76	
Θ (172.5°)	-18.44/-18.79	-18.52/-18.53	-18.53/-17.77	-18.85/-18.7	-18.18/-15.17	-16.38/-18.27	-18.21/-17.88	-18/-18.07	-17.71/-19.1	-19.01/-17.81	-18.81/-18.18	-17.17/-16.45	-16.38/-15.64	-13.57/-12.5	-12.84/-13.33	-14.9/-17.77	-18.87/-17.5	-18.6/-18.52	-18.62/-18	-18.66/-18.98	-19.01/-17.86	-18.1/-17.84	-18.66/-19.09	-18.55/-18.08	
Θ (180°)	-12.22/-11.25	-11.49/-12.67	-12.86/-14.03	-15.75/-18.51	-19.21/-18.64	-18.68/-18.38	-18.74/-18.82	-18.75/-16.74	-14.36/-13.1	-12.44/-12.82	-13.67/-15.16	-14.33/-12.8	-11.83/-12.92	-15.85/-17.37	-18.62/-18.83	-18.53/-18.45	-18.92/-18.27	-19.13/-18.43	-17.66/-18.9	-19.19/-17.4	-15.95/-14.99	-14.27/-12.85	-11.76/-12.03	-12.28/-12.01	
Freq(Hz)	6.475GPol.	PhiAnt. 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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°)	-2.42/-2.04	-1.56/-1.15	-1.28/-1.5	-1.63/-2.06	-2.68/-3.33	-4.02/-5.1	-6.08/-7.04	-8.25/-8.67	-7.95/-6.7	-5.15/-3.75	-3.21/-3.5	-3.57/-2.78	-2.04/-2.32	-2.62/-2.1	-2.38/-2.99	-3.32/-3.31	-3.69/-4.74	-6.17/-6.59	-7.13/-7.71	-8.23/-8.21	-8.03/-7.93	-7.69/-6.82	-5.93/-5.14	-3.68/-2.97	
Θ (7.5°)	-2.52/-2.53	-2.97/-3.15	-3.24/-3.78	-4.98/-5.61	-5.66/-6.24	-6.66/-6.59	-5.93/-5.58	-5.33/-5.2	-5.29/-5.13	-4.88/-3.89	-3.67/-3.96	-4.52/-4.27	-3.62/-3.5	-3.58/-3.28	-2.49/-1.95	-1.58/-1.15	-0.92/-1.45	-2.37/-3.95	-4.88/-5.01	-4.37/-3.66	-2.89/-2.91	-2.57/-2.67	-3.04/-3.49	-3.36/-3.01	
Θ (15°)	-1.49/-1.36	-1.71/-1.88	-1.9/-2.58	-3.68/-4.59	-4.87/-5.62	-6.35/-5.65	-4.28/-2.96	-2.18/-2.42	-3.46/-4.85	-6.01/-5.8	-5.49/-5.42	-5.43/-6.09	-6.57/-5.93	-5.18/-5.12	-6.06/-6.59	-6.09/-4.54	-2.41/-1.16	-0.96/-1.72	-2.91/-4.43	-5.08/-4.84	-3.93/-4.76	-5.84/-6.45	-5.2/-3.69	-2.44/-1.91	
Θ (22.5°)	-1.02/-0.79	-1.44/-2.65	-3.16/-3.15	-2.98/-3.27	-3.61/-4.28	-4.68/-4.79	-4.58/-3.78	-2.61/-2.18	-3.28/-4.86	-4.81/-4.53	-5.05/-5.14	-5.03/-5.24	-5.14/-4.52	-4.21/-3.97	-3.14/-2.12	-1.71/-2.33	-2.84/-1.81	-1.44/-2.36	-5.3/-8.72	-6.52/-4.01	-3.5/-5.16	-5.14/-3.61	-1.93/-1.39	-1.15/-1.11	
Θ (30°)	-2.69/-3.01	-3.3/-3.98	-5.91/-9.49	-10.02/-7.75	-8.31/-8.41	-6.23/-4.86	-5.19/-5.14	-3.02/-1.99	-3.39/-6.71	-5.87/-4.24	-4.82/-6.01	-5.05/-10.7	-4.89/-3.84	-2.62/-3.09	-4.99/-3.9	-3.4/-17	-5.92/-4.57	-2.62/-3.95	-10.02/-10.15	-6.65/-3.87	-5.1/-8.57	-5.19/-3.48	-3/-3.08	-2.53/-2.24	
Θ (37.5°)	-1.69/-2.52	-2.86/-2.72	-3.42/-5.93	-11.4/-12.5	-12.41/-14.92	-11.71/-7.76	-5.37/-3.13	-2.61/-5.09	-9.69/-9.27	-5.45/-3.3	-1.66/-1.53	-4.18/-7.39	-6.36/-3.87	-3.16/-5	-6.65/-6.19	-6.71/-8.46	-8.78/-9.28	-4.2/-2.33	-9.22/-6.78	-5.57/-5.63	-4.46/-6.51	-5.14/-6.13	-6.12/-4.64	-3.11/-2.34	
Θ (45°)	-4.13/-5.2	-5.08/-5.36	-6.19/-7.7	-10.25/-11.89	-10.56/-17.6	-15.97/-11.38	-10.91/-2.83	-2.35/-4.24	-4.97/-6.94	-7.8/-9.13	-6.97/-5.38	-5.58/-3.32	-4.01/-4.4	-5.16/-8.73	-8.59/-5.25	-3.48/-5.85	-9.42/-6.71	-5.04/-3.18	-7.32/-9.51	-10.9/-7.8	-5.76/-9.63	-9.64/-7.54	-4.2/-2.23	-3.64/-3.16	
Θ (52.5°)	-6.41/-6.56	-3.97/-3.59	-6.59/-9.6	-10.71/-11.57	-6.83/-11.68	-17.77/-13.78	-16.32/-4.46	-4.04/-4.17	-3.73/-6.23	-7.33/-7.18	-8.61/-8.55	-3.94/-0.91	-3.68/-10.03	-9.6/-6.15	-5.86/-5.91	-3.66/-4.29	-6.11/-8.99	-7.47/-5.75	-8.98/-17.75	-16.88/-1.15	-8.32/-8.55	-7.72/-5.84	-5.71/-5.19	-1.83/-2.24	
Θ (60°)	-3.58/-4.07	-2.87/-2.7	-5.71/-9.62	-8.61/-11.84	-8.01/-9.31	-8.33/-17.96	-14.5/-7.51	-5.09/-6.11	-6.18/-10.76	-7.34/-5.46	-6.74/-8.56	-6.45/-5.24	-5.4/-8.96	-11.09/-6.31	-7.27/-7.16	-10.77/-10.87	-5.42/-10.06	-8.52/-9.59	-13.75/-13.71	-14.24/-7.74	-9.66/-11.69	-9.67/-9.69	-8.28/-5.06	-4.39/-3.83	
Θ (67.5°)	-3.66/-4.54	-3.88/-3.98	-7.07/-9.82	-10.52/-12.32	-12.5/-11.72	-6.65/-16.51	-12.42/-18.78	-7.27/-13.3	-11.97/-13.08	-12.36/-9.99	-12.87/-8.01	-3.89/-6.12	-17.3/-4.66	-7.41/-6.26	-8.34/-7.91	-13.13/-17.92	-8.21/-14.23	-10.87/-16.88	-19.12/-10.16	-14.84/-9.02	-14.29/-14.74	-15.97/-12.52	-10.46/-6.23	-6.39/-4.41	
Θ (75°)	-4.85/-5.75	-4.46/-4.8	-8.89/-9.1	-11.06/-10.1	-14.39/-11.71	-7.22/-12.9	-13.69/-17.78	-11.01/-10.13	-16.52/-18.16	-18.66/-16.94	-17.31/-11.94	-3.4/-2.96	-5.55/-4.23	-7.92/-4.17	-5.65/-8.42	-8.62/-10.3	-16.51/-13.69	-12.57/-14.81	-16.42/-11.03	-14.37/-10.76	-17.6/-18.45	-19.04/-18.38	-14.04/-8.9	-8.14/-5.98	
Θ (82.5°)	-6.68/-8.32	-6.91/-7.03	-11.41/-9.76	-15.27/-12.01	-14.42/-17.08	9.01/-10.8	-10.71/-7.59	-15/-13.68	-17.29/-19.41	-17.52/-17.97	-12.78/-15.15	-4.09/-3.23	-5.6/-6	-11.29/-9.43	-6.88/-12.87	-6.96/-8.9	-19.15/-15.87	-17.36/-18.92	-12.44/-10.01	-13.18/-11.72	-17.8/-17.11	-18.96/-18.86	-13.2/-10.49	-10.77/-8.46	
Θ (90°)	-10.51/-11.25	-9.48/-8.27	-11.42/-8.35	-13.09/-10.55	-12.06/-13.81	-10.39/-10.53	-12.22/-14.19	-10.38/-14.24	-17.1/-14.82	-15.46/-17.5	-8.99/-5.07	-5.2/-9.25	-12.01/-13.7	-6.17/-19.2	-9.74/-9.44	-17.13/-18.84	-18.24/-18.05	-10.33/-17.12	-15.59/-14.63	-18.09/-13.48	-16.73/-18.21	-18.74/-11.97	-13.37/-12.38	-13.77/-13.78	
Θ (97.5°)	-12.71/-15.24	-12.15/-9.83	-11.25/-9.81	-15.83/-11.68	-15.48/-13.06	-17.67/-12.81	-13.17/-14.1	-19.2/-14.1	-18.22/-13.73	-16.25/-17.47	-16.21/-13.25	-14.56/-9.68	-7.4/-12.18	-10.09/-15.28	-8.88/-18.69	-10.29/-14.05	-17.69/-16.85	-11.71/-11.86	-16.71/-16.79	-14.53/-16.31	-18.05/-11.8	-15.2/-15.46	-19.24/-11.8	-15.48/-16.36	
Θ (105°)	-15.39/-16.16	-16.18/-16.21	-15.87/-9.99	-13.92/-10.61	-12.4/-12.49	-12.29/-12.11	-14.49/-12.94	-17.98/-13.49	-18.15/-12.13	-17.58/-15.25	-18.96/-10.91	-18.88/-12.73	-7.92/-17.97	-12.04/-15.53	-10.54/-14.03	-15.15/-17.07	-17.97/-18.35	-18.54/-17.96	-11.28/-19.15	-15.44/-17.47	-14.29/-11.57	-19.06/-13.87	-18.34/-19.67	-17.49/-13.91	
Θ (112.5°)	-16.23/-18.57	-12.36/-15.5	-13.23/-13.28	-10.46/-13.9	-11.96/-11.97	-11.41/-12.28	-15.25/-13.58	-17.17/-14.13	-18.01/-11.48	-16.09/-12.76	-17.85/-11.69	-16.71/-18.48	-14.81/-14.21	-17.51/-16.94	-16.38/-17.74	-18.07/-19.36	-17.69/-16.65	-9.03/-14.98	-16.78/-17.32	-13.72/-11.61	-19.25/-16.92	-16.54/-16.65	-17.49/-15.55	-17.49/-15.55	
Θ (120°)	-16.56/-17.51	-17.98/-18.65	-16.91/-16.45	-10.4/-12.94	-11.67/-15.99	-10.59/-13.28	-9.11/-12.96	-12.32/-15.43	-18.47/-12.26	-18.24/-15.24	-17.89/-14.99	-18.47/-18.47	-16.76/-15.43	-15.61/-19.29	-18.3/-11.92	-17.66/-18.9	-12.37/-19.07	-14.8/-14.25	-10.25/-14.13	-17.51/-15.68	-16.0/-6.96	-14.56/-12.91	-12.72/-16.23	-18.63/-18.29	
Θ (127.5°)	-13.36/-14.15	-18.79/-18.11	-17.8/-13.78	-14.77/-19.2	-11.97/-12.99	-9.78/-14.29	-10.99/-13.63	-10.11/-17.88	-18.2/-17.7	-15.26/-18.86	-15.23/-18.38	-15.72/-17.85	-17.43/-15.12	-13.13/-18	-15.69/-12.7	-18.8/-18.99	-15.11/-18.16	-12.29/-13.14	-10.55/-9.28	-18.02/-18.13	-10.16/-11.33	-16.43/-17.87	-13.21/-14.04	-15.23/-12.98	
Θ (135°)	-16.48/-15.44	-18.95/-18.21	-18.28/-15.25	-18.45/-12.94	-13.12/-17.77	-17.63/-12.14	-13.12/-19.29	-9.83/-17.68	-14.49/-19.36	-13.83/-17.64	-17.37/-17.89	-12.82/-17.73	-16.57/-18.39	-15.11/-16.76	-19.73/-15.62	-16.53/-14.28	-14.48/-18.46	-18.28/-15.32	-17.94/-15.54	-18.11/-14.94	-17.12/-16.36	-18.28/-15.49	-17.51/-17.87	-17.57/-11.7	
Θ (142.5°)	-13.28/-14.24	-17.96/-18.91	-17.63/-18.06	-14.55/-15.78	-14.22/-11.6	-18.49/-11.51	-17.18/-11.36	-13.14/-21	-15.78/-18.54	-18.91/-16.58	-17.91/-18.18	-15.03/-18.78	-14.92/-14.12	-17.32/-12.53	-15.05/-18.05	-17.49/-17.69	-19.24/-15.2	-18.68/-18.96	-18.59/-19.01	-13.72/-12.53	-18.48/-19.04	-18.06/-19.03	-16.8/-17.41	-18.83/-16.05	-14.24/-14.19
Θ (150°)	-16.35/-17.67	-17.74/-18.42	-19.15/-17.65	-18.79/-19.06	-14.82/-15.85	-17.92/-11.4	-13.13/-18.92	-17.29/-18.96	-18.89/-14.63	-12.85/-16.09	-14.66/-13.16	-14.19/-15.27	-8.91/-8.32	-16.29/-14.41	-16.36/-19.2	-18.11/-17.83	-18.08/-19.04	-15.89/-17.02	-17.35/-17.37	-17.39/-17.89	-19.25/-18.6	-18.26/-17.11	-17.35/-12.87	-16.9/-18.15	
Θ (157.5°)	-19.41/-18.67	-18.84/-17.11	-16.6/-18.48	-18.66/-18.08	-16.69/-19.07	-19.28/-17.58	-17.19/-18.88	-17.9/-13.5	-13.86/-12.02	-13.27/-17.87	-14.6/-13.18	-13.93/-18.53	-15.25/-18.25	-16.47/-10.84	-12.12/-19.11	-19.21/-18.36	-17.96/-17.91	-14.58/-12.9	-14.21/-18.57	-17.83/-16.76	-16.15/-14.27	-17.61/-18.84	-18.75/-18.06	-17.09/-18.3	
Θ (165°)	-18.3/-17.72	-18.07/-17.09	-18.39/-16.66	-17.92/-19.25	-18.06/-17.97	-18.39/-13.98	-10.68/-10.17	-12.92/-17.67	-17.85/-14.68	-11.78/-11.43	-12.9/-16.32	-18.61/-17.98	-16.04/-15.27	-16.41/-17.34	-16.19/-10	-9.21/-11.69	-19.07/-16.69	-17.01/-16.98	-18.82/-16.04	-17.51/-14.81	-16.71/-17.81	-17.39/-17.98	-17.92/-18.36	-17.86/-18.79	
Θ (172.5°)	-15.9/-18.8	-18.04/-19.13	-17.84/-18.24	-18.01/-17.79	-17.24/-18.33	-14.99/-13.72	-12.39/-12.53	-13.44/-15.4	-17.86/-17.79	-18.88/-18.82	-18.49/-17.7	-15.84/-12.63	-17.34/-17.21	-18.51/-18.77	-18.68/-18.6	-18.67/-18.06	-17.3/-15.97	-15.66/-17.52	-18.13/-16.83	-14.44/-13.2	-13.81/-15.63	-15.93/-14.78	-15.48/-16.54	-16.91/-15.2	
Θ (180°)	-19.22/-17.74	-17.9/-18.59	-17.47/-16.03	-15.13/-15.3	-16.02/-15.49	-15.08/-14.42	-14.19/-14.03	-13.73/-14.92	-16.27/-18.13	-18.9/-19	-18.74/-18.82	-17.95/-17.1	-18.73/-19.07	-18.75/-18.47	-19.25/-17.1	-14.86/-13.79	-13.13/-13.8	-15.33/-15.2	-14.69/-14.24	-15.07/-13.47	-13.45/-14.08	-16.43/-18.76	-18.93/-18.54	-17.77/-18.93	
Freq(Hz)	6.475GPol.	ThetaAnt. 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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																		



Radiated Composite Gain Data of scan

Appendix C

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°)	-5.14/-4.91	-5.03/-4.32	-4.02/-4.3	-4.19/-3.88	-3.59/-3.41	-3.37/-3.73	-3.93/-4.07	-3.81/-4.25	-4.9/-5.27	-5.43/-5.67	-5.74/-4.91	-4.56/-4.65	-4/-2.63	-2.5/-2.95	-2.59/-2.14	-2.52/-2.55	-2.41/-2.45	-2.9/-3.27	-3.67/-3.65	-4.03/-4.31	-4.6/-4.71	-4.69/-4.69	-4.89/-5.12	-5.46/-5.82
Θ(7.5°)	-1.67/-1.14	-0.96/-0.54	-0.75/-1.06	-1.15/-1.36	-1.59/-1.74	-2.23/-3.16	-4.12/-4.66	-5.21/-6.04	-6.38/-6.44	-6.2/-5.92	-5.63/-4.9	-4.32/-4.2	-4.24/-3.76	-3.63/-3.73	-4.13/-4.39	-4.84/-5.44	-6.1/-6.4	-5.98/-4.85	-4.35/-4.19	-4.53/-5.15	-6.09/-6.79	-7.26/-6.49	-5.08/-3.73	-2.89/-2.17
Θ(15°)	-1.35/-2.1	-2.99/-4.14	-4.79/-5.07	-4.1/-2.58	-1.21/-0.2	0.03/-0.62	-1.76/-2.56	-2.95/-2.8	-2.41/-2.8	-3.42/-3.64	-3.44/-3.41	-3.95/-5.35	-7.28/-9.65	-10.13/-8.33	-5.62/-3.22	-1.21/-0.01	0.64/-0.34	-2.77/-6.85	-6.49/-2.92	-1.53/-2.22	-5.09/-8.38	-6.98/-3.97	-2.87/-2.06	-1.64/-1.47
Θ(22.5°)	-3.34/-4.7	-6.29/-6.35	-7.52/-11.71	-17.4/-19.34	-10.92/-6.38	-3.37/-1.55	-1.12/-1.12	-1.36/-0.61	-0.35/-1.68	-4.71/-7.38	-6.93/-9.41	-1.8/-0.96	-2.28/-5.44	-6.66/-5.57	-5.37/-4.48	-3.02/-1.6	0.03/0.4	-0.77/-5.29	-7.32/-1.81	-0.51/-2.29	-6.29/-6.14	-3.4/-2.35	-2.52/-2.77	-3.29/-3.07
Θ(30°)	-2.82/-4.46	-7.19/-7.79	-8.01/-9.13	-10.02/-13.09	-18.4/-14.75	-8.59/-5.56	-4.49/-4.91	-4.98/-1.57	0.5/-0.19	-3.42/-5.49	-7.53/-9.16	-6.35/-4.46	-6.02/-10.01	-12.74/-13.37	-5.67/-3.4	-4.8/-2.18	0.14/-0.75	-3.25/-6.18	-6.54/-5	-5.22/-6.15	-4.96/-3.88	-5.14/-5.54	-3.4/-1.92	-1.84/-2
Θ(37.5°)	-3.59/-4.13	-7.09/-8.98	-10.23/-10.07	-11.33/-14.18	-14.29/-16.53	-9.01/-6.64	-6.51/-10.39	-5.3/-3.48	-3.97/-5.84	-5.13/-3.33	-3.57/-3.74	-5.67/-8.89	-6.04/-3.1	-3.37/-5.16	-4.12/-3.08	-7.01/-8.37	-3.8/-2.51	-2.01/-5.3	-6.18/-5.37	-8.63/-6.51	-6.52/-9.24	-8.67/-4.51	-2.35/-1.67	-2.4/-2.97
Θ(45°)	-1.51/-1.28	-3.15/-5.19	-5.33/-8.72	-19.11/-18.53	-17.17/-18.51	-10.28/-6.74	-3.64/-6.94	-1.85/-5.1	-10.74/-8.71	-6.08/-4.86	-5.47/-3.44	-4.63/-5.78	-6.93/-5.57	-7.64/-14.74	-8.66/-8.5	-12.42/-13.07	-5.15/-3.18	-1.36/-2.52	-6.09/-7.82	-7.96/-3.95	-5.72/-6.85	-5.93/-6.62	-3.78/-2.7	-3.67/-2.77
Θ(52.5°)	-1.11/-1.1	-2.65/-3.7	-3.67/-5.57	-14.52/-17.98	-19.09/-18.61	-12.48/-11.26	-4.37/-5.08	-1.66/-8.28	-3.74/-6.37	-7.19/-11.49	-13.89/-10.19	-5.87/-2.1	-3.59/-7.07	-4.69/-8.61	-5.03/-3.93	-8.15/-8.85	-4.82/-4.9	-4.76/-3.76	-9.41/-11.81	-5.61/-3.07	-6.78/-7.14	-8.26/-10.55	-6.25/-4.02	-3.99/-2.24
Θ(60°)	-4.42/-3.07	-4.38/-3.79	-4.75/-6.28	-10.71/-18.19	-17.31/-15.89	-14.41/-14.46	-11.73/-8.08	-2.55/-6.4	-5.14/-8.52	-6.03/-4.88	-4.42/-6.3	-7.83/-7.3	-4.79/-8.77	-9.01/-9.85	-19.18/-5.78	-11.08/-8.61	-4.85/-10.1	-6.71/-6.58	-15.12/-10.81	-8.01/-7.93	-11.34/-12.82	-14.18/-15.8	-8.53/-5.43	-4.84/-5.56
Θ(67.5°)	-6.12/-5.64	-8.32/-6.16	-4.77/-7.08	-8.04/-11.28	-16.56/-15.23	-17.96/-12.6	-14.04/-13.49	-5.35/-9.25	-8.25/-11.54	-6.6/-7.82	-7.41/-5.97	-4.72/-9.28	-9.35/-8.03	-14.85/-7.35	-8.15/-11.67	-17.6/-18.93	-6.1/-15.46	-7.9/-14.65	-18.28/-18.19	-10.7/-18.37	-17.59/-18.93	-19.13/-12.84	-8.88/-5.39	-4.79/-6.79
Θ(75°)	-8.13/-7.35	-10.17/-8.3	-5.08/-7.26	-6.61/-10.83	-11.63/-12.24	-18/-12.2	-17.6/-12.74	-10.62/-9.61	-14.45/-14.57	-11.89/-17.56	-19.11/-8.5	-4.86/-4.59	-8.77/-7.49	-9.52/-7.34	-4.79/-9.7	-11.81/-11.48	-11.03/-14.16	-9.97/-18.57	-16.28/-18.75	-14.12/-18.47	-17.68/-15.94	-18.27/-13.9	-10.4/-6.65	-5.18/-8.94
Θ(82.5°)	-10.1/-9.08	-12.61/-10.29	-7.04/-8.22	-6.7/-9.23	-9.92/-9.18	-18.53/-15.82	-19.1/-12.42	-17.45/-10.91	-15.36/-18.85	-15.99/-18.21	-16.64/-16.02	-7.3/-5.53	-6.77/-5.2	-9.83/-8.1	-7.79/-9.2	-10.7/-7.56	-12.12/-16.31	-12.17/-16.22	-12.95/-17.19	-12.82/-19.15	-12.03/-12.52	-17.68/-14.96	-9.69/-8.27	-7.32/-11.41
Θ(90°)	-12.08/-10.5	-13.7/-13.05	-10.74/-9.24	-7.13/-9.77	-10.06/-9.4	-13.09/-16.56	-18.34/-9.26	-17.97/-11.87	-15.65/-16.23	-18.18/-17.58	-13.19/-18.93	-10.79/-6.46	-8.97/-5.85	-13.61/-9.03	-10.45/-12.36	-9.07/-8.82	-11.55/-18.32	-15.58/-15.14	-15.82/-14.02	-13.88/-16.97	-11.26/-11.85	-17.14/-19.04	-12.98/-11.4	-9.45/-13.74
Θ(97.5°)	-13.63/-12.66	-15.39/-14.32	-12.29/-11.57	-9.36/-11.87	-12.55/-11.26	-12.53/-17.8	-17.34/-11.07	-18.43/-15.09	-13.57/-13.54	-18.29/-19	-14.11/-18.42	-12.51/-8.99	-10.57/-10.14	-15.35/-12.31	-11.23/-18.8	-11.93/-11.81	-16.22/-19.24	-19.67/-17.74	-18.75/-14.08	-17.38/-17.09	-11.18/-14.21	-18.6/-17.9	-17.11/-12.11	-12.52/-12.49
Θ(105°)	-14.31/-12.03	-15.61/-14.87	-12.66/-14	-10.37/-12.47	-12.88/-10.6	-11.52/-18.7	-17.89/-14.42	-18.55/-18.14	-12.09/-13.75	-16.64/-17.85	-17.44/-12.61	-17.55/-17.87	-12.19/-17.03	-18.8/-11.6	-13.22/-14.77	-15.65/-18.28	-17.83/-18.31	-13.72/-18.23	-16.99/-13.37	-10.78/-18.71	-10.6/-12.88	-19.09/-17.89	-16.84/-19.34	-12.69/-11.08
Θ(112.5°)	-13.89/-13.79	-16.58/-15.91	-17.26/-16.24	-12.42/-13.21	-17.43/-12.35	-11.28/-12.45	-17.56/-10.59	-13.18/-18.78	-18.63/-13.47	-14.78/-18.07	-18.28/-12.74	-18.64/-18.56	-12.3/-15.61	-17.53/-18.91	-19.28/-12.24	-17.34/-11.98	-17.52/-18.8	-15.29/-16.8	-12.99/-9.42	-18.04/-11.15	-8.15/-11.34	-16.4/-17.13	-12.26/-11.42	-18.63/-17.23
Θ(120°)	-17.83/-18.94	-18.71/-16.6	-18.75/-13.13	-12.81/-14.18	-13.99/-13.46	-11.61/-11.66	-13.75/-12.41	-15.63/-19.3	-19.32/-12.87	-14.81/-12.76	-18.03/-13.28	-19/-18.36	-18.31/-14.57	-17.87/-14.96	-18.5/-17.85	-18.91/-15.38	-15.79/-18.37	-17.6/-17.77	-11.15/-8.89	-13.87/-16.24	-17.94/-17.39	-11.76/-11.63	-18.42/-17.42	
Θ(127.5°)	-15.5/-18.1	-18.94/-13.8	-15.69/-16.06	-14.5/-13.04	-12.88/-12.33	-12.67/-12.68	-15.05/-14.5	-11.79/-19.16	-18.51/-16.32	-15.88/-12.05	-16.08/-17.62	-17.94/-17.86	-17.17/-18.23	-14.8/-17.34	-16.28/-19.3	-14.57/-17.17	-11.76/-17.7	-18.16/-12.54	-11.52/-13.81	-15.57/-13.31	-11.9/-14.5	-18.17/-13.95	-17.7/-18.33	-15.94/-13.06
Θ(135°)	-18.28/-18.09	-17.71/-18.71	-18.37/-16.01	-11.53/-14.72	-17.24/-17.83	-13.31/-13.71	-14.86/-16.64	-9.97/-17.64	-13.27/-17.5	-14.21/-18.64	-14.7/-13.21	-15.3/-14.73	-14.27/-18.48	-15.3/-19	-19.2/-18.26	-15.56/-14.3	-18.5/-15.46	-19.13/-15.49	-17.8/-18.21	-13.46/-19.18	-17.78/-18.22	-16.04/-16.72	-14.6/-14.59	-18.63/-17.23
Θ(142.5°)	-17.75/-17.84	-18.61/-15.61	-18.75/-13.13	-12.81/-14.18	-13.99/-13.46	-11.61/-11.66	-13.75/-12.41	-15.63/-19.3	-19.32/-12.87	-14.81/-12.76	-18.03/-13.28	-19/-18.36	-18.31/-14.57	-17.87/-14.96	-18.5/-17.85	-18.91/-15.38	-15.79/-18.37	-17.6/-17.77	-11.15/-8.89	-13.87/-16.24	-17.94/-17.39	-11.76/-11.63	-18.42/-17.42	
Θ(150°)	-19.17/-18.9	-18.79/-18.21	-15.13/-13.23	-12.33/-12.15	-17.52/-18.31	-17.94/-18.09	-17.59/-16.5	-18.96/-18.23	-18.78/-17.01	-16.86/-15.85	-15.44/-10.07	-14.61/-18.19	-7.36/-8.77	-14.29/-11.26	-12.41/-18.36	-18.42/-17.53	-14.79/-18.45	-15.91/-11.95	-12/-17.96	-18.66/-18.92	-18.69/-17.87	-17.65/-18.98	-17.26/-19.42	-18.36/-18.71
Θ(157.5°)	-18.7/-18.46	-19.21/-19.03	-18.99/-17.77	-19.23/-18.21	-16.22/-12.56	-14.27/-17.54	-18.92/-18.92	-18.69/-18.05	-13.58/-9.92	-9.13/-10.9	-16.63/-8.81	-9.67/-10.89	-17.55/-18.89	-17.41/-13.81	-18.06/-17.61	-18.22/-18.5	-16.83/-15.8	-18.8/-18.11	-19.09/-18.46	-19.7/-17.97	-18.56/-18.8	-17.26/-18.81	-18.59/-11.4	-16.23/-17.24
Θ(165°)	-17.6/-17.24	-18.66/-15.43	-17.09/-17.36	-15.33/-15.9	-15.73/-13.35	-12.93/-15.3	-18.92/-15.33	-11.35/-10.11	-14.02/-18.25	-12.04/-16.68	-13.24/-15.7	-17.45/-12.32	-13.54/-16.14	-17.72/-16.84	-12.49/-11.83	-13.74/-17.7	-16.27/-13.24	-13.14/-16.58	-18.22/-18.6	-18.35/-18.66	-18.21/-15.88	-15.29/-18.41	-18.66/-17.87	-17.86/-18.91
Θ(172.5°)	-18.01/-19.39	-19.09/-17.94	-17.9/-18.66	-17.9/-18.55	-18.27/-18.89	-18.11/-17.38	-16.62/-13.17	-14.02/-12.1	-13.34/-14.76	-18.51/-18.67	-17.99/-17.22	-18.08/-18.91	-18.79/-18.74	-17.74/-13.94	-11.41/-11.09	-12.92/-14.74	-15.83/-16.33	-18.51/-18.28	-17.94/-18.46	-18.09/-18.74	-18.68/-18.48	-18.63/-17.64	-18.82/-19.59	-17.75/-18.57
Θ(180°)	-17.75/-18.94	-14.87/-16.61	-15.71/-16	-17.03/-18.2	-17.93/-17.54	-18.07/-19.06	-17.29/-18.5	-18.39/-18.04	-18.96/-19.16	-18.23/-15.44	-13.66/-13.47	-13.56/-14.08	-13.54/-13.98	-13.09/-12.02	-11.49/-12.3	-14.59/-18.17	-18.99/-18.27	-18.58/-18.82	-18.28/-19.16	-17.92/-19.15	-18.77/-17.45	-17.01/-19.42	-18.01/-17.12	-16.84/-16.06
Freq(Hz)	6.995GHz	6.995GHz	6.995GHz	6.995GHz	6.995GHz	6.995GHz	6.995GHz	6.995GHz	6.995GHz	6.995GHz	6.995GHz	6.995GHz	6.995GHz	6.995GHz	6.995GHz	6.995GHz	6.995GHz	6.995GHz	6.995GHz	6.995GHz	6.995GHz	6.995GHz	6.995GHz	6.995GHz
Theta/Ant. 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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°)	-5.34/-6.06	-5.36/-5.29	-5.91/-6.41	-6.45/-6.21	-6.17/-6.26	-6.3/-5.95	-6.03/-6.11	-5.17/-4.44	-4.1/-3.95	-3.49/-3	-2.79/-2.5	-2.19/-2.93	-3.17/-3.3	-4.15/-4.88	-5.21/-5.18	-5.91/-6.3	-5.2/-4.93	-4.52/-4.91	-4.54/-4.16	-4.23/-4.46	-4.34/-4.41	-4.66/-4.74	-4.44/-4.39	-4.36/-4.39
Θ(7.5°)	-7.84/-8.28	-7.94/-7.39	-7.06/-6.16	-5.42/-5.04	-4.28/-3.61	-3.24/-3.41	-3.93/-4.07	-3.62/-3.24	-3.04/-2.77	-2.52/-2.48	-2.54/-2.8	-2.84/-3.2	-3.74/-4.54	-5.88/-6.32	-7.94/-9.96	-11.71/-12.88	-13.06/-11.1	-9.24/-8.82	-7.46/-5.84	-4.3/-3.36	-2.55/-2.29	-2.23/-2.4	-2.89/-3.58	-5.16/-6.48
Θ(15°)	-11.25/-9.69	-9.15/-8.25	-7.74/-8.37	-9.5/-9.52	-7.96/-6.43	-6/-5.9	-6.2/-5.64	-4.26/-2.78	-1.47/-0.54	-0.06/0.09	-0.23/-0.77	-0.72/-0.56	-0.94/-1.25	-1.04/-1.05	-1.43/-2.5	-2.86/-3.67	-7.12/-10.73	-9.61/-7.47	-6.09/-5.28	-4.24/-3.29	-2.35/-2.87	-4.5/-6.86	-10.84/-14.58	-15.81/-12.7
Θ(22.5°)	-5.24/-5.04	-5.64/-5.35	-3.81/-3.14	-3.6/-4.89	-6.08/-7.22	-7.29/-6.74	-6.29/-6.3	-6.17/-5.15	-4.02/-3.45	-3.37/-3.24	-2.88/-2.71	-2.77/-2.58	-2.27/-1.99	-1.97/-2.28	-3.1/-3.71	-2.75/-2.48	-3.38/-4.51	-6.93/-9.6	-7.39/-5.75	-5.25/-5.46	-5.9/-9.66	-18.34/-16.35	-12.94/-11.41	-7.42/-5.48
Θ(30°)	-5.01/-2.43	-1.03/-1.68	-3.02/-3.7	-3.22/-2.51	-2.91/-4.65	-6.09/-5.97	-3.88/-2.97	-2.92/-0.97	0.21/-1.05	-3.04/-3.43														

Total Gain Data

Freq(Hz)	245GPol	TotalAnt.1	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
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°)	-0.83/-0.69	-0.56/-0.60	-0.73/-0.82	-0.45/-0.74	-0.60/-0.48	-0.45/-0.44	-0.30/-0.22	-0.15/-0.23	-0.39/-0.57	-0.63/-0.55	-0.48/-0.57	-0.83/-1.16	-1.42/-1.60	-1.53/-1.36	-1.24/-1.23	-1.27/-1.25	-1.24/-1.18	-1.12/-1.04	-0.91/-0.66	-0.36/-0.12	-0.09/-0.24	-0.47/-0.66	-0.76/-0.84	-0.89/-0.90
Θ(7.5°)	-1.11/-0.96	-0.88/-1.01	-1.23/-1.40	-1.39/-1.35	-1.19/-1.04	-0.95/-0.98	-1.00/-0.92	-0.72/-0.56	-0.50/-0.72	-0.98/-0.93	-0.67/-0.53	-0.61/-0.84	-0.94/-0.94	-0.83/-0.77	-0.74/-0.76	-0.70/-0.61	-0.55/-0.54	-0.57/-0.53	-0.35/-0.11	0.17/0.29	0.27/0.17	-0.00/-0.20	-0.44/-0.74	-1.01/-1.15
Θ(15°)	-0.92/-0.95	-1.06/-1.36	-1.78/-2.07	-2.21/-2.11	-1.94/-1.84	-1.87/-2.03	-2.11/-1.87	-1.40/-0.93	-0.70/-0.87	-1.29/-1.49	-1.23/-0.91	-0.77/-0.72	-0.51/-0.29	-0.03/-0.12	0.12/0.13	0.12/0.22	0.28/0.28	0.16/0.09	0.18/0.39	0.60/0.70	0.68/0.71	0.76/0.74	0.58/0.22	-0.26/-0.67
Θ(22.5°)	-0.43/-0.81	-1.24/-1.80	-2.32/-2.75	-2.97/-3.09	-3.22/-3.43	-3.76/-3.86	-3.54/-2.78	-1.73/-0.85	-0.33/-0.31	-0.70/-1.12	-1.20/-1.05	-0.99/-0.95	-0.46/-0.21	0.74/0.03	1.10/1.08	1.12/1.16	1.12/0.97	0.79/0.72	0.73/0.76	0.80/0.88	1.00/1.22	1.48/1.65	1.62/1.32	0.80/1.05
Θ(30°)	-0.32/-0.49	-1.68/-2.40	-2.99/-3.35	-3.76/-4.24	-4.96/-5.57	-5.48/-4.38	-2.81/-4.12	-0.34/-0.33	0.77/0.98	0.97/0.70	0.32/-0.06	-0.44/-0.62	-0.31/-0.55	1.45/0.29	2.38/2.40	2.31/2.17	1.97/1.83	1.78/1.83	1.82/1.68	1.52/1.45	1.52/1.75	2.05/2.24	2.16/1.80	1.21/0.42
Θ(37.5°)	-0.36/-0.92	-1.67/-2.53	-3.08/-3.33	-3.83/-4.58	-5.31/-6.26	-4.05/-2.08	-0.22/1.15	1.94/2.18	2.15/2.13	2.14/1.97	1.49/0.91	0.21/-0.21	-0.00/-0.97	2.22/3.10	3.44/3.37	3.10/2.80	2.61/2.57	2.64/2.70	2.72/2.64	2.48/2.34	2.29/2.35	2.47/2.53	2.29/1.70	0.94/0.20
Θ(45°)	-0.82/-0.83	-1.31/-1.95	-2.32/-2.60	-3.32/-4.17	-3.80/-2.92	-1.75/-0.25	1.30/2.58	3.35/3.57	3.37/2.95	2.54/2.17	1.62/0.97	0.37/-0.06	-0.17/0.82	2.20/3.17	3.48/3.34	3.96/2.85	2.52/2.61	2.78/2.91	2.86/2.54	2.10/1.78	1.77/1.89	1.99/1.92	1.44/0.52	-0.45/-0.90
Θ(52.5°)	-2.07/-1.21	-1.01/-0.98	-1.56/-1.96	-2.97/-3.71	-2.60/-1.57	-0.78/0.15	1.40/2.65	3.55/3.92	3.77/3.21	2.52/1.88	1.23/0.62	-0.13/-0.62	-0.50/-0.47	1.76/2.61	2.84/2.66	2.39/2.17	2.19/2.53	3.00/3.33	3.25/2.59	1.41/0.33	-0.00/-0.25	0.60/0.58	-0.12/-1.54	-3.00/-3.13
Θ(60°)	-2.90/-1.63	-1.05/-0.94	-1.08/-1.63	-2.86/-3.49	-2.51/-1.24	-0.77/0.26	0.73/1.96	2.96/3.45	3.44/2.96	0.03/-0.12	-1.08/-0.23	-2.10/-1.07	0.47/1.51	1.74/1.54	1.48/1.43	1.52/2.08	2.82/3.36	3.46/2.85	1.36/-0.51	-1.51/-1.33	-0.56/-0.20	-1.02/-3.02	-4.79/-4.40	
Θ(67.5°)	-3.46/-2.07	-1.29/-0.95	-1.23/-1.95	-3.13/-1.78	-2.54/-1.78	-1.56/-1.12	-0.13/1.01	1.95/2.52	2.63/2.35	1.79/0.95	0.55/-1.29	-0.70/-3.56	-3.56/-2.31	-0.68/1.11	0.22/0.37	0.74/0.61	0.59/1.28	2.09/2.60	2.67/0.26	0.34/-0.21	-0.40/-3.93	-2.38/-1.21	-1.96/-5.47	-



Antenna Pattern of 2.4GHz&5GHz&5.9GHz

Appendix D

Θ(22.5°)	-0.830/-1.1	0.750/-1.9	-1.33/-2.43	-2.74/-3.02	-3.45/-3.27	-2.84/-2.20	-2.06/-2.38	-2.26/-1.29	-2.41/-2.94	-4.23/-4.49	-3.56/-2.82	-1.85/-1.56	-1.60/-2.13	-2.15/-1.22	-0.01/-1.0	2.29/2.82	2.46/2.12	2.31/2.95	3.54/3.61	3.19/2.87	2.34/1.46	0.44/-0.80	-2.43/-3.69	-2.97/-2.25
Θ(30°)	-0.42/-0.62	0.380/-4.6	-1.10/-2.29	-2.94/-3.93	-7.61/-9.43	-5.39/-4.21	-4.71/-5.46	-3.42/-1.38	-0.42/-2.04	-0.82/-1.57	-1.36/-0.64	-0.38/-0.40	-0.97/-1.36	-1.42/-0.62	0.09/0.62	1.48/2.01	2.26/1.93	2.13/2.96	3.06/2.40	1.89/1.53	1.31/1.15	1.36/1.13	0.40/-0.55	-1.63/-1.15
Θ(142.5°)	0.680/-1.4	-0.56/-0.45	-2.36/-5.82	-6.69/-7.48	-11.28/-8.00	-5.45/-3.85	-4.20/-5.72	-5.86/-3.36	-0.67/1.01	1.17/0.46	-0.43/-0.51	-0.63/-1.63	-2.77/-2.79	-1.80/-0.81	-0.69/-0.48	0.06/1.07	1.71/1.24	1.40/-1.56	1.73/2.59	3.50/3.19	2.12/1.06	0.60/0.36	0.13/-0.75	-1.58/-0.61
Θ(45°)	0.83/2.25	0.83/-1.23	-2.59/-4.64	-5.31/-7.12	-9.69/-12.01	-9.53/-5.17	-4.71/-5.38	-3.64/-2.07	-0.730/0.93	1.750/0.85	-0.92/-0.78	0.50/-0.11	-1.55/-0.76	0.070/0.57	0.37/0.31	-0.95/-1.45	-0.17/-1.34	-1.01/-0.59	-0.100/0.87	1.22/1.03	1.40/2.49	2.80/3.38	4.14/3.08	0.94/-0.23
Θ(52.5°)	-1.850/-11	0.03/-3.28	-3.47/-3.02	-2.95/-6.38	-6.43/-8.05	-5.51/-3.65	-3.72/-2.89	-0.95/-0.22	-0.21/1.23	2.23/1.37	-0.33/-0.18	-0.15/0.14	0.100/0.28	0.280/0.48	0.55/-0.78	-3.15/-5.51	-3.17/-3.33	-1.58/-0.78	-0.76/-1.31	-1.53/0.44	2.28/2.99	2.61/2.31	2.92/2.80	1.62/-0.06
Θ(60°)	-0.94/-0.85	0.47/-1.70	-4.63/-3.26	-1.93/-1.03	-3.22/-6.08	-2.91/0.15	-0.69/-1.25	-0.53/-0.24	-0.25/0.24	1.45/1.43	-0.59/-0.42	-1.30/-0.50	0.04/-1.49	0.59/-0.55	-0.54/-1.41	-3.55/-5.00	-4.40/-3.94	-2.20/-1.54	-2.21/-3.76	-3.44/-1.32	0.49/1.02	2.22/3.57	3.90/3.11	2.95/-1.10
Θ(67.5°)	-0.21/-0.57	1.07/0.45	-2.60/-1.96	-1.74/-1.39	-2.29/-3.85	0.16/2.50	1.30/0.31	-0.03/-1.11	-1.53/-1.13	-0.89/0.28	-1.64/-5.16	-3.70/-1.99	-0.91/1.10	0.20/-1.23	-1.37/-2.94	-3.56/-3.32	-3.27/-3.03	-0.46/-0.29	-1.96/-2.74	-1.93/-3.07	-1.36/0.65	3.65/5.21	5.25/5.28	4.06/2.08
Θ(75°)	-1.15/-1.20	0.54/0.89	-2.26/-2.23	-1.34/-2.08	-2.32/-4.01	0.52/2.51	1.14/0.01	-0.50/-1.33	-2.68/-2.85	-3.42/-1.67	-2.48/-6.97	-5.53/-0.44	-1.82/-0.49	-1.20/-1.83	-2.69/-3.88	-2.82/-1.91	-3.04/-2.32	0.42/1.25	0.07/-0.89	-0.40/-3.78	-2.66/0.07	3.29/4.44	4.86/5.24	3.64/0.81
Θ(82.5°)	-2.46/-2.75	-1.40/-0.99	-3.35/-3.05	-2.79/-3.10	-2.39/-3.23	0.04/1.30	-0.46/-1.29	-1.79/-2.09	-3.27/-3.94	-5.83/-3.11	-4.36/-6.11	-9.56/-4.89	-2.23/-2.31	-3.26/-3.12	-3.87/-5.33	-2.87/-3.21	-3.87/-2.88	0.44/-1.46	0.68/-0.58	-0.58/-3.66	-3.65/-1.01	1.61/1.85	2.93/4.00	-1.75/-1.37
Θ(90°)	-4.78/-4.07	-3.94/-4.06	-5.08/-4.10	-3.46/-4.78	-3.50/-3.52	-2.02/-0.42	-1.77/-2.50	-3.72/-4.60	-5.31/-5.73	-8.01/-4.61	-4.41/-9.26	-8.32/-7.96	-3.37/-2.28	-4.07/-4.17	-5.33/-6.68	-4.09/-4.08	-4.91/-4.59	-0.97/-1.13	0.28/-1.01	-1.71/-4.12	-4.87/-2.47	-1.24/-1.86	-0.24/-1.12	0.39/-5.65
Θ(97.5°)	-6.04/-6.13	-5.18/-6.11	-7.87/-5.33	-5.25/-5.85	-4.88/-4.39	-4.68/-3.19	-3.72/-4.19	-2.58/-6.21	-6.12/-7.49	-11.05/-6.23	-6.73/-8.11	-10.67/-9.24	-3.40/-3.35	-6.56/-4.84	-6.49/-8.50	-5.71/-5.05	-6.32/-7.25	-4.23/-1.82	-1.82/-3.60	-4.76/-6.03	-9.40/-7.46	-0.07/-4.06	-3.51/-1.98	-2.19/-5.79
Θ(105°)	-7.69/-6.47	-5.31/-7.30	-7.72/-7.93	-7.18/-7.02	-6.88/-6.02	-5.47/-6.41	-7.41/-7.43	-7.25/-6.69	-7.68/-9.04	-11.24/-8.33	-7.53/-11.54	-15.09/-10.44	-4.55/-4.26	-7.16/-5.82	-7.70/-11.30	-7.64/-6.26	-6.69/-9.44	-6.32/-4.38	-2.95/-6.58	-6.42/-10.94	-8.38/-6.34	-6.32/-4.54	-3.92/-4.73	-3.44/-6.60
Θ(112.5°)	-13.21/-9.06	-5.02/-5.40	-12.07/-8.31	-8.28/-10.29	-10.49/-11.35	-8.48/-9.62	-10.01/-9.68	-7.07/-6.84	-8.99/-13.11	-10.60/-9.08	-7.14/-9.68	-15.67/-11.32	-5.88/-6.45	-8.51/-6.89	-8.93/-13.33	-10.86/-8.18	-8.59/-10.96	-8.16/-7.58	-5.68/-12.79	-13.05/-13.80	-11.65/-10.25	-5.38/-4.59	-4.63/-8.25	-9.91/-5.91
Θ(120°)	-12.44/-10.28	-9.37/-8.84	-10.42/-12.57	-10.36/-14.75	-12.18/-15.69	-11.24/-8.63	-8.12/-7.47	-7.08/-8.74	-12.49/-14.91	-8.82/-10.02	-12.35/-10.48	-14.69/-10.36	-7.22/-8.84	-8.32/-9.33	-9.96/-10.40	-13.28/-12.05	-12.44/-13.51	-10.81/-7.69	-6.47/-6.74	-9.09/-12.88	-10.68/-12.01	-14.07/-8.91	-6.98/-7.37	-13.77/-12.00
Θ(127.5°)	-8.48/-4.44	-13.46/-15.85	-13.33/-14.14	-14.29/-13.64	-11.80/-10.05	-13.66/-9.52	-7.66/-8.38	-12.34/-14.10	-15.49/-12.56	-12.05/-10.36	-10.79/-15.76	-14.75/-10.09	-10.81/-10.47	-8.58/-13.40	-12.52/-11.71	-15.95/-14.40	-11.61/-12.05	-10.97/-13.02	-6.78/-7.94	-10.35/-10.88	-11.45/-12.09	-8.85/-14.02	-10.88/-7.06	-7.75/-13.97
Θ(135°)	-13.37/-13.78	-11.06/-11.15	-15.40/-10.14	-11.78/-13.46	-14.63/-15.21	-11.66/-10.04	-8.90/-10.33	-13.22/-13.25	-12.39/-14.42	-14.44/-9.93	-8.80/-12.34	-11.14/-12.81	-8.47/-12.27	-15.14/-12.97	-12.31/-13.33	-12.72/-14.17	-12.93/-14.53	-14.90/-13.13	-11.32/-12.02	-15.23/-15.02	-9.60/-15.35	-9.30/-8.58	-8.35/-15.22	-10.18/-15.84
Θ(142.5°)	-10.26/-12.42	-13.36/-12.14	-14.46/-12.38	-9.79/-10.25	-13.80/-14.69	-8.99/-8.36	-10.31/-11.82	-13.77/-13.74	-13.68/-12.01	-9.83/-10.23	-12.70/-13.00	-11.08/-6.61	-9.63/-10.31	-15.36/-11.18	-9.25/-13.73	-14.81/-14.75	-14.28/-14.52	-11.93/-7.49	-8.07/-6.17	-9.40/-8.87	-11.79/-10.85	-9.84/-8.89	-13.72/-12.42	-15.82/-14.22
Θ(150°)	-14.35/-12.71	-11.67/-13.63	-13.44/-12.53	-12.36/-10.24	-10.28/-10.19	-10.98/-11.42	-11.83/-11.95	-12.89/-12.12	-10.74/-9.31	-9.24/-10.61	-12.56/-12.42	-10.84/-7.95	-9.86/-10.32	-10.38/-9.63	-9.86/-12.87	-15.27/-15.15	-15.25/-14.40	-13.65/-14.40	-13.49/-13.33	-15.60/-11.38	-10.23/-10.79	-12.75/-14.67	-15.84/-12.97	-13.71/-13.20
Θ(157.5°)	-12.86/-13.21	-11.57/-12.96	-13.78/-13.89	-11.88/-10.06	-11.35/-12.75	-11.08/-12.15	-11.48/-11.95	-11.53/-9.60	-8.66/-9.22	-11.44/-11.34	-11.70/-9.78	-9.17/-10.87	-12.09/-15.54	-15.97/-10.49	-9.98/-14.18	-15.03/-14.26	-14.64/-15.96	-16.00/-13.88	-15.27/-14.11	-10.00/-8.64	-8.90/-11.54	-14.63/-13.42	-11.50/-9.61	-8.76/-9.64
Θ(165°)	-14.70/-12.45	-11.39/-12.76	-12.83/-10.72	-8.28/-11.7	-8.11/-11.17	-11.57/-9.99	-9.07/-9.31	-9.36/-9.04	-8.64/-8.45	-8.11/-8.06	-7.48/-7.20	-7.99/-9.36	-10.82/-13.06	-14.55/-14.34	-13.80/-12.57	-11.38/-12.30	-13.20/-15.61	-15.77/-13.43	-14.13/-13.12	-15.09/-14.78	-13.55/-12.52	-11.15/-12.46	-12.45/-12.07	-14.58/-15.71
Θ(172.5°)	-14.94/-14.34	-13.65/-12.77	-12.44/-11.01	-10.43/-9.50	-9.64/-10.19	-9.66/-8.93	-8.74/-7.84	-7.25/-8.16	-9.42/-10.00	-10.27/-11.11	-12.10/-13.01	-12.23/-13.22	-14.41/-12.49	-11.69/-12.18	-12.70/-13.25	-13.29/-14.36	-14.01/-13.45	-14.00/-13.08	-11.66/-10.91	-10.80/-10.49	-11.16/-13.04	-14.15/-13.87	-13.51/-13.31	-13.95/-14.36
Θ(180°)	-13.27/-14.06	-14.08/-14.17	-13.75/-13.93	-12.62/-12.02	-11.86/-11.12	-11.66/-11.88	-10.30/-11.02	-11.81/-11.43	-10.79/-10.32	-10.08/-10.18	-10.75/-12.08	-11.99/-12.49	-12.87/-12.30	-13.20/-13.85	-14.65/-15.54	-15.44/-15.89	-15.19/-15.82	-15.52/-13.87	-13.08/-13.75	-12.71/-12.71	-13.89/-12.99	-12.39/-13.18	-13.77/-13.20	
Freq(Hz)	5.885GPol.	TotalAnt. 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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°)	-3.35/-4.04	-4.55/-4.62	-4.45/-4.31	-4.54/-4.66	-4.73/-4.87	-5.20/-4.57	-3.69/-3.64	-3.78/-4.10	-4.47/-4.54	-4.26/-4.39	-4.43/-4.19	-4.36/-4.43	-3.95/-3.80	-3.68/-3.83	-4.00/-3.83	-3.83/-3.86	-3.43/-3.32	-3.62/-3.87	-3.48/-3.16	-3.22/-3.21	-3.43/-3.50	-3.18/-3.47	-3.60/-3.53	-3.74/-3.51
Θ(7.5°)	-2.34/-2.42	-2.33/-2.38	-2.56/-2.80	-3.02/-3.32	-3.48/-4.39	-3.81/-4.01	-3.73/-3.37	-3.25/-3.44	-3.69/-4.35	-3.11/-2.75	-3.06/-3.49	-3.83/-3.87	-3.65/-3.69	-3.85/-3.89	-3.92/-3.78	-3.66/-4.10	-4.70/-5.15	-5.16/-4.97	-5.25/-5.46	-5.11/-4.97	-5.07/-4.24	-3.56/-3.30	-3.27/-2.85	
Θ(15°)	-0.45/-0.33	-0.41/-1.12	-2.16/-2.96	-3.56/-3.74	-3.83/-3.81	-3.56/-3.37	-3.48/-3.36	-3.25/-3.60	-4.38/-4.29	-4.09/-3.88	-3.93/-2.98	-3.65/-3.31	-3.75/-3.95	-3.70/-3.02	-2.06/-1.07	0.090/0.57	0.70/0.69	0.690/0.73	0.92/1.08	0.940/0.58	0.04/-0.48	-1.07/-1.19	-1.45/-1.38	-1.29/-0.97
Θ(22.5°)	-2.22/-0.75	-0.00/-0.35	-1.67/-2.47	-3.42/-4.45	-5.36/-4.97	-3.34/-2.28	-2.00/-2.18	-2.30/-2.49	-3.40/-4.00	-3.83/-4.33	-3.47/-1.77	-1.98/-2.95	-2.27/-1.76	-1.98/-2.13	-1.73/-0.54	0.89/1.98	2.30/2.14	2.01/2.24	2.44/2.47	2.64/2.65	2.37/1.68	0.34/-1.68	-3.63/-3.94	-3.25/-2.95
Θ(30°)	-1.79/-2.16	-0.98/-0.68	-1.73/-2.36	-3.18/-5.81	-10.50/-6.16	-3.76/-4.16	-5.49/-5.71	-4.39/-2.54	-1.06/-2.03	-0.14/-0.51	-0.78/-0.53	-1.02/-2.53	-2.82/-2.05	-1.79/-1.15	-0.85/-0.87	-0.55/0.87	1.48/1.67	1.41/1.32	1.49/1.22	1.09/1.72	2.68/3.08	2.66/1.98	1.12/0.01	-0.09/-0.85
Θ(37.5°)	1.10/-0.11	-1.04/-1.11	-3.58/-6.87	-5.56/-6.65	-7.85/-6.33	-5.29/-5.22	-6.04/-7.38	-7.20/-4.71	-2.54/-0.53	0.44/0.01	-0.30/0.72	0.62/-1.02	-1.92/-0.55	-0.40/-0.93	-1.23/-0.62	-0.21/0.43	1.64/1.64	1.26/1.28	1.14/1.81	2.91/3.47	3.12/2.57	1.60/0.27	-1.25/-1.99	-0.81/0.35
Θ(45°)	1.76/1.40	-0.12/-0.74	-1.58/-4.67	-7.61/-11.29	-7.44/-9.26	-10.12/-5.65	-6.22/-6.76	-4.03/-3.44	1.24/0.88	0.49/1.92	2.22/1.70	0.94/0.00	0.57/0.94	-0.22/-0.03	-0.27/-1.22	-0.66/-0.35	0.10/0.45	0.64/1.11	0.84/1.20	2.48/3.89	4.29/4.11	3.75/2.60	0.73/2.80	
Θ(52.5°)	-0.47/0.55	-1.31/-3.61	-1.78/-2.46	-3.78/-5.96	-5.71/-5.33	-5.60/-4.73	-3.55/-3.05	-2.06/-1.66	-0.64/0.58	1.46/1.73	-0.25/0.87	1.39/0.67	1.61/2.01	0.15/-0.10	0.55/-0.30	-0.45/-2.33	-2.50/-2.43	-1.33/0.19	0.76/0.05	-0.81/-1.33	3.83/4.68	3.99/3.39	3.24/2.76	1.78/-0.60
Θ(60°)	-0.16/-0.11	-1.41/-2.85	-1.27/-1.22	-1.77/-2.38	-4.30/-3.12	-0.95/-0.39	-0.72/-1.41	-1.87/-1.74	-0.24/0.83	1.21/0.98	-1.42/-3.13	-0.41/1.11	2.20/3.17	1.09/-0.92	-0.04/-2.69	-2.63/-2.59	-2.92/-3.79	-2.29/-1.25	-1.90/-2.96	-1.98/-0.13	2.13/3.01	3.47/4.12	3.64/3.41	2.97/0.30
Θ(67.5°)	0.12/-0.45	0.380/2.3	-0.08/-0.87	-0.82/-0.90	-2.19/-1.68	1.15/0.10	-0.56/-0.16	-1.61/-2.86	-1.20/-0.05	0.11/0.06	-2.96/-4.23	-3.05/0.35	2.08/2.06	0.29/-0.87	-1.20/-4.71	-3.53/-1.52	-1.81/-3.42	-0.54/-0.16	-2.05/-3.87	-3.32/-2.23	1.29/2.77	4.41/5.88	5.88/5.41	3.31/0.11
Θ(75°)	-0.58/-0.76																							



Antenna Pattern of 2.4GHz&5GHz&5.9GHz

Appendix D

Θ(75°)	-1.90/-2.86	-1.86/-3.16	-2.20/-3.10	-3.21/-2.57	-2.14/-3.36	-3.60/-3.35	-3.13/-2.05	-2.47/-5.64	-4.38/-3.04	-1.31/-4.36	-3.19/-2.03	-0.86/-1.99	-0.53/-0.27	0.55/-0.05	-0.01/-0.18	0.35/-0.74	1.39/-2.09	1.20/-2.58	-2.37/-1.64	-1.00/-1.34	0.05/-2.87	-5.02/-5.49	-3.72/-6.75	-7.70/-3.54
Θ(82.5°)	-3.53/-3.55	-4.23/-3.62	-3.81/-4.84	-6.01/-4.43	-4.36/-5.65	-6.01/-5.58	-4.38/-2.57	-2.95/-6.06	-6.34/-4.71	-1.84/-5.27	-4.69/-2.32	-2.25/-3.08	-0.58/-1.48	-1.43/-2.84	-1.95/-1.12	0.52/-2.01	1.20/-4.14	-2.98/-0.83	-1.00/-1.83	-0.85/-5.66	-5.09/-5.55	-4.32/-10.38	-6.40/-5.07	
Θ(90°)	-6.39/-4.44	-5.44/-7.62	-6.78/-7.05	-6.08/-7.72	-7.64/-8.14	-6.08/-7.72	-7.64/-8.14	-4.06/-6.65	-8.07/-5.10	-3.57/-6.87	-6.53/-4.24	-3.90/-3.54	-4.68/-5.56	-5.32/-6.63	-1.54/-3.06	-1.43/-3.05	-0.15/-4.26	-4.61/-2.00	-1.54/-3.59	-3.55/-7.28	-6.18/-7.59	-5.51/-9.13	-7.76/-7.74	
Θ(97.5°)	-8.32/-5.66	-7.11/-9.49	-7.77/-8.14	-8.63/-6.86	-7.74/-8.18	-8.77/-10.06	-9.32/-6.50	-5.57/-8.56	-9.86/-6.36	-4.25/-9.28	-7.30/-6.34	-5.27/-4.67	-7.14/-7.61	-4.24/-6.05	-6.85/-9.27	-7.44/-7.75	-3.83/-2.72	-3.01/-5.91	-6.24/-4.54	-4.81/-7.28	-7.31/-8.40	-7.71/-11.33	-5.82/-11.06	-9.59/-8.08
Θ(105°)	-10.35/-8.49	-9.75/-10.55	-9.64/-9.47	-9.94/-8.93	-9.03/-7.63	-8.75/-11.02	-8.50/-6.88	-7.39/-8.99	-11.71/-8.25	-5.51/-9.95	-9.93/-6.03	-6.45/-6.91	-8.31/-7.31	-6.74/-8.12	-10.12/-12.21	-13.13/-9.19	-9.13/-4.77	-8.42/-9.93	-7.07/-9.93	-7.50/-8.87	-11.35/-8.41	-10.06/-13.32	-7.49/-9.21	-12.88/-6.89
Θ(112.5°)	-11.67/-10.69	-15.13/-13.03	-10.40/-9.67	-10.36/-12.59	-11.95/-9.14	-10.47/-12.66	-10.04/-8.13	-8.09/-10.30	-11.29/-11.19	-7.89/-11.33	-9.32/-9.79	-8.71/-8.47	-7.24/-10.32	-9.81/-13.24	-10.53/-11.64	-14.19/-12.18	-8.92/-12.11	-10.93/-13.68	-9.53/-10.44	-15.54/-7.94	-12.02/-13.08	-12.83/-11.14	-14.59/-9.48	
Θ(120°)	-10.21/-10.41	-11.56/-13.39	-13.22/-10.17	-10.98/-12.82	-14.21/-14.94	-12.89/-11.39	-11.26/-10.35	-10.59/-11.55	-11.81/-13.96	-11.27/-14.23	-9.82/-9.46	-9.48/-9.86	-13.59/-10.76	-9.74/-11.49	-11.98/-11.85	-10.71/-10.49	-15.26/-10.16	-9.69/-11.20	-12.50/-9.51	-10.13/-12.90	-15.45/-10.38	-14.61/-13.18	-15.02/-10.50	-13.94/-12.31
Θ(127.5°)	-11.10/-8.51	-11.05/-10.50	-10.06/-14.03	-12.44/-11.16	-10.57/-12.61	-12.51/-11.98	-12.86/-15.40	-11.94/-10.15	-12.25/-15.82	-10.25/-14.69	-8.74/-8.91	-11.14/-10.28	-10.80/-9.80	-9.61/-13.99	-10.77/-11.20	-8.15/-8.52	-8.85/-12.03	-10.96/-10.78	-10.64/-11.05	-15.14/-14.87	-16.03/-9.02	-15.41/-10.95	-15.71/-12.98	-11.05/-15.39
Θ(135°)	-14.81/-11.17	-10.08/-10.70	-12.92/-12.80	-12.16/-13.85	-15.53/-15.87	-15.68/-13.95	-13.48/-14.75	-12.28/-9.43	-12.25/-14.86	-11.30/-14.70	-11.88/-10.39	-12.08/-11.04	-10.42/-13.79	-15.47/-9.41	-9.85/-10.70	-11.13/-12.97	-13.52/-15.33	-9.59/-11.24	-12.10/-13.73	-15.61/-12.06	-13.52/-15.33	-15.74/-9.31	-10.88/-16.15	-11.62/-12.11
Θ(142.5°)	-7.84/-15.05	-15.75/-14.34	-12.17/-13.36	-14.75/-15.32	-15.04/-12.56	-12.01/-13.22	-14.64/-15.63	-14.19/-13.50	-15.75/-12.43	-11.47/-14.84	-9.13/-12.03	-15.92/-15.76	-11.07/-8.38	-8.77/-12.43	-15.19/-14.87	-11.09/-10.87	-12.14/-15.50	-15.39/-14.08	-11.83/-15.13	-14.94/-14.05	-14.88/-15.49	-14.30/-15.57	-13.16/-14.99	-14.83/-7.17
Θ(150°)	-13.29/-13.69	-14.06/-12.78	-13.56/-14.65	-14.14/-15.25	-14.85/-14.68	-15.84/-15.82	-15.04/-13.09	-12.98/-15.36	-15.72/-13.40	-15.66/-14.89	-11.13/-10.58	-13.09/-14.30	-15.62/-11.43	-9.55/-10.72	-12.03/-15.69	-15.27/-14.60	-11.86/-16.19	-13.66/-10.78	-11.59/-15.37	-14.73/-14.02	-13.14/-16.02	-11.73/-14.47	-14.93/-12.09	-12.69/-15.07
Θ(157.5°)	-14.86/-15.07	-13.06/-12.00	-11.42/-12.43	-13.63/-13.04	-12.38/-12.09	-12.23/-12.78	-13.95/-15.09	-12.77/-13.29	-11.77/-12.64	-12.41/-14.19	-15.80/-14.91	-14.69/-12.89	-12.92/-14.76	-14.81/-15.72	-15.28/-15.64	-12.40/-14.20	-14.58/-15.91	-14.98/-13.70	-13.60/-15.31	-15.10/-15.14	-15.12/-14.94	-16.23/-16.07		
Θ(165°)	-12.79/-13.40	-15.02/-15.19	-14.81/-13.70	-11.52/-11.23	-13.27/-14.89	-15.32/-15.19	-14.20/-12.10	-10.88/-10.75	-12.25/-15.04	-14.19/-14.18	-14.99/-14.27	-15.56/-12.88	-12.22/-11.76	-12.97/-15.43	-12.66/-12.00	-12.03/-12.20	-13.01/-14.13	-15.57/-16.44	-15.20/-12.97	-11.53/-11.11	-11.53/-13.60	-16.13/-15.41	-15.24/-14.97	-13.85/-12.27
Θ(172.5°)	-13.97/-13.94	-14.40/-14.93	-14.88/-15.35	-14.64/-13.72	-12.30/-11.01	-8.86/-9.23	-8.72/-8.77	-9.55/-10.88	-12.88/-14.91	-15.38/-15.64	-14.89/-15.77	-15.43/-15.08	-16.16/-15.26	-13.03/-10.89	-9.64/-9.39	-8.94/-9.22	-9.88/-10.27	-10.97/-11.06	-11.32/-11.51	-12.18/-14.39	-14.74/-15.11	-15.79/-14.75	-14.65/-14.03	-13.58/-13.22
Θ(180°)	-15.74/-15.25	-14.70/-14.57	-14.27/-13.86	-14.02/-14.72	-15.17/-15.15	-14.91/-15.53	-14.80/-14.99	-14.50/-14.08	-15.44/-15.59	-15.70/-16.03	-15.88/-15.23	-15.03/-15.16	-15.39/-15.19	-15.29/-15.64	-15.00/-14.72	-14.56/-14.43	-14.01/-13.94	-13.53/-13.32	-13.65/-14.02	-14.36/-15.79	-15.23/-15.02	-15.45/-15.97	-15.54/-15.34	-15.08/-15.99
Freq(Hz)	5.6GPol.	TotalAnt. 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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°)	-2.48/-2.22	-2.21/-2.28	-2.19/-2.02	-2.07/-2.22	-2.40/-2.11	-2.14/-2.27	-2.43/-2.59	-2.49/-2.07	-1.82/-1.86	-1.95/-1.83	-1.81/-1.87	-1.60/-1.57	-1.78/-1.59	-1.80/-1.57	-1.60/-1.66	-1.86/-1.71	-1.42/-1.80	-2.30/-2.42	-2.46/-2.26	-2.13/-1.97	-1.81/-1.97	-1.81/-1.97	-1.81/-1.97	-1.81/-1.97
Θ(7.5°)	-1.68/-1.60	-1.85/-2.03	-2.17/-1.91	-1.81/-2.57	-2.84/-2.42	-2.60/-3.20	-3.24/-2.99	-3.19/-3.22	-3.03/-2.88	-2.64/-2.51	-2.78/-3.16	-3.24/-3.28	-3.27/-3.15	-3.11/-3.46	-3.49/-3.00	-2.78/-3.17	-2.64/-2.24	-2.45/-2.40	-2.36/-2.09	-2.03/-2.31	-2.16/-2.03	-2.07/-1.89	-1.80/-1.89	-2.07/-1.93
Θ(15°)	-1.54/-1.69	-1.93/-2.47	-2.96/-2.99	-2.66/-2.49	-2.30/-2.49	-2.42/-2.95	-3.77/-3.92	-3.57/-2.98	-2.26/-1.77	-1.36/-1.29	-1.44/-1.40	-1.12/-0.75	-0.54/-0.18	0.25/-0.25	-0.11/-0.67	-1.69/-2.45	-2.04/-1.78	-1.64/-0.89	-0.45/-0.68	-1.41/-2.36	-2.90/-3.62	-4.24/-3.87	-3.06/-3.23	-2.11/-1.61
Θ(22.5°)	-1.74/-2.11	-2.26/-2.17	-2.17/-2.38	-2.70/-2.85	-2.60/-2.06	-1.69/-1.49	-1.51/-1.62	-0.54/-0.62	-3.09/-1.45	-0.26/-0.92	-0.30/-0.62	-0.93/-0.62	-0.98/-1.25	-1.27/-0.81	-0.61/-1.13	-2.45/-2.88	-2.35/-3.04	1.33/-2.30	2.07/-0.50	-2.17/-5.59	-6.60/-4.28	-2.19/-1.19	-1.30/-1.25	
Θ(30°)	-6.78/-5.19	-3.38/-1.91	-0.68/-0.19	-0.29/-0.61	-0.39/-0.29	0.52/-0.25	0.03/-0.07	0.27/-0.30	-1.59/-1.89	-1.17/-0.68	-1.15/-0.37	0.90/-0.00	-1.09/-0.94	-0.25/-0.50	0.52/-0.09	-0.56/-1.24	-1.41/-1.71	-3.59/-5.08	-2.99/-0.85	-0.31/-1.10	-3.10/-6.60	-6.40/-4.12	-3.46/-4.14	-5.68/-6.88
Θ(37.5°)	-6.35/-3.88	-2.57/-1.36	-1.32/-1.53	-0.92/-0.46	-0.81/-0.09	1.05/-0.95	-0.32/-1.42	-0.50/-0.45	-1.00/-1.70	-0.53/-1.31	-0.87/-2.15	1.10/-0.17	1.54/-2.70	2.87/-1.70	-0.02/-0.07	-0.72/-0.82	-2.44/-1.84	-0.76/-1.23	-2.31/-1.40	-0.43/-1.55	-4.43/-6.23	-8.93/-7.74	-6.29/-8.31	-12.41/-10.49
Θ(45°)	-2.98/-1.03	-0.83/-0.30	-1.12/-1.62	0.26/-1.53	-0.54/-0.93	-0.31/-0.68	0.24/-1.64	-2.02/-0.04	-0.38/-2.31	-0.95/-2.38	-0.80/-0.94	-0.16/-0.00	1.25/-4.72	1.42/-0.54	2.33/-8.89	3.07/-0.88	0.49/-1.51	-1.17/-0.58	-0.03/-2.62	-0.92/-1.12	-3.45/-4.78	-5.40/-6.66	-9.12/-7.73	-10.65/-7.03
Θ(52.5°)	-1.52/-0.68	-0.61/-0.79	0.35/-0.12	0.82/-0.09	0.37/-0.28	0.44/-0.90	0.78/-0.53	-2.07/-0.73	-0.81/-2.91	-2.16/-5.11	-1.62/-1.61	-0.60/-1.32	1.07/-0.87	-0.41/-0.04	1.31/-2.00	2.41/-2.02	1.41/-0.41	-0.61/-0.11	0.72/-1.55	-2.70/-1.10	-2.33/-5.84	-4.52/-4.00	-6.04/-7.15	-8.05/-3.02
Θ(60°)	-1.46/-1.51	-1.21/-0.44	0.13/-0.29	0.68/-0.08	-0.71/-1.32	-0.80/-0.35	0.51/-0.03	-0.83/-2.11	-1.78/-4.33	-2.22/-5.45	-2.52/-2.98	0.97/-1.46	-0.12/-0.89	0.17/-0.16	-0.27/-0.88	1.52/-1.02	0.17/-0.92	-1.51/-1.59	-0.57/-1.08	-3.29/-0.63	-1.74/-6.65	-3.62/-3.29	-4.12/-6.80	-5.15/-2.18
Θ(67.5°)	-2.47/-2.69	-3.37/-2.08	-1.04/-0.56	-0.29/-0.00	-1.38/-4.59	-4.02/-0.84	-0.55/-0.77	-0.18/-1.73	-3.95/-3.88	-1.11/-4.18	-1.81/-4.81	2.33/-0.68	0.04/-1.46	0.62/-0.43	1.17/-2.40	3.16/-2.13	1.57/-0.09	-1.39/-1.25	-1.64/-0.02	-1.01/-0.71	-0.35/-7.73	-2.25/-2.82	-4.34/-8.02	-3.84/-2.32
Θ(75°)	-4.37/-4.24	-6.42/-3.55	-2.10/-2.32	-2.47/-0.77	-2.39/-6.44	-7.08/-3.14	-2.53/-2.11	0.22/-1.45	-5.96/-4.14	-1.45/-3.82	-1.82/-1.35	2.33/-0.63	-1.05/-0.15	0.34/-0.38	0.62/-1.38	2.20/-2.23	2.53/-1.92	-0.83/-1.84	-1.00/-0.45	0.67/-0.79	-0.86/-7.31	-2.27/-3.60	-5.05/-9.04	-4.18/-3.19
Θ(82.5°)	-5.72/-6.90	-6.83/-4.17	-4.17/-4.84	-4.27/-2.28	-3.72/-6.49	-9.38/-6.26	-5.79/-4.78	-1.51/-2.48	-7.17/-15.16	-2.54/-0.02	-2.96/-1.68	1.04/-1.92	-2.96/-1.33	0.16/-0.55	-0.91/-1.85	-0.18/-0.14	2.16/-2.57	-0.51/-3.96	-0.36/-0.22	0.74/-0.51	-1.86/-6.73	-1.91/-5.18	-7.73/-8.10	-4.88/-3.94
Θ(90°)	-6.85/-8.45	-6.15/-4.67	-5.75/-8.31	-7.10/-4.04	-4.80/-7.70	-10.87/-7.18	-5.84/-7.40	-4.25/-3.72	-7.21/-7.64	-4.32/-4.77	-3.89/-2.22	-1.26/-0.05	-4.58/-6.24	-1.91/-2.41	-3.01/-1.66	-4.24/-2.50	-0.12/-1.13	-0.33/-7.50	-1.35/-0.97	-0.59/-0.68	-4.41/-9.42	-2.90/-6.65	-8.93/-9.60	-5.77/-6.25
Θ(97.5°)	-7.09/-10.37	-9.30/-7.02	-8.36/-9.48	-7.77/-5.08	-5.91/-9.23	-10.30/-8.77	-7.57/-7.74	-6.77/-5.51	-8.20/-7.86	-6.56/-5.88	-6.49/-2.72	-3.83/-4.86	-7.18/-8.57	-3.02/-4.68	-5.24/-7.96	-9.39/-7.51	-2.34/-1.51	-1.91/-9.95	-3.43/-2.62	-3.48/-3.77	-6.99/-10.11	-4.84/-8.45	-1.01/-9.70	-7.02/-10.44
Θ(105°)	-8.42/-10.27	-12.32/-9.95	-9.06/-8.99	-10.29/-9.87	-9.55/-9.06	-9.12/-12.35	-12.27/-10.51	-8.78/-15.16	-9.20/-10.47	-8.50/-5.94	-8.89/-3.82	-6.20/-5.69	-8.06/-8.88	-6.23/-6.91	-8.75/-7.76	-11.93/-10.62	-7.06/-8.09	-7.28/-11.91	-8.83/-4.76	-6.09/-6.60	-10.21/-12.52	-6.82/-7.70	-8.70/-13.62	-8.65/-13.27
Θ(112.5°)	-13.82/-12.56	-12.68/-12.56	-11.52/-9.48	-10.61/-14.14	-12.39/-9.05	-9.88/-13.17	-12.52/-10.16	-8.69/-5.69	-11.62/-10.40	-13.51/-7.69	-10.12/-5.09	-9.42/-6.87	-9.55/-7.47	-6.29/-7.19	-11.29/-11.14	-11.45/-11.98	-9.73/-9.89	-9.89/-11.65	-10.35/-8.75	-6.94/-10.89	-9.91/-11.14	-9.85/-11.73	-10.28/-14.26	-9.31/-12.47
Θ(120°)	-15.64/-14.52	-10.31/-9.36	-11.66/-13.06	-12.33/-11.50	-8.82/-7.64	-11.08/-11.00	-8.64/-10.04	-9.98/-7.52	-15.22/-13.36	-15.44/-8.07	-13.63/-6.41	-12.87/-7.29	-11.21/-12.46	-14.52/-8.51	-13.14/-8.80	-13.83/-10.27	-8.08/-14.54	-7.38/-8.34	-7.68/-13.81	-8.84/-9.09	-2.91/-1			



Antenna Pattern of 2.4GHz&5GHz&5.9GHz

Appendix D

Θ (127.5°)	-9.23/-6.83	-8.74/-12.50	-9.08/-9.08	-11.14/-11.85	-12.15/-13.48	-11.45/-8.21	-7.39/-8.40	-9.75/-10.01	-8.71/-7.79	-8.48/-11.57	-13.80/-12.64	-9.75/-8.76	-7.77/-6.22	-5.67/-5.66	-4.95/-4.38	-4.80/-5.50	-5.31/-4.37	-3.85/-4.17	-4.89/-5.03	-5.13/-6.18	-7.49/-7.01	-6.03/-5.77	-6.99/-10.31	-14.19/-14.11
Θ (135°)	-12.05/-11.94	-13.79/-15.28	-11.42/-11.40	-13.58/-13.67	-11.91/-11.50	-10.99/-9.53	-8.63/-8.50	-8.48/-8.56	-8.20/-8.00	-9.73/-12.92	-15.67/-12.61	-9.42/-8.27	-7.57/-6.68	-5.97/-5.09	-4.16/-4.05	-5.13/-6.52	-6.50/-5.62	-5.31/-5.85	-6.10/-5.14	-4.64/-5.62	-7.53/-8.45	-7.89/-7.46	-7.81/-9.15	-10.80/-11.72
Θ (142.5°)	-12.21/-12.20	-12.84/-14.31	-12.94/-12.93	-14.91/-15.18	-11.91/-10.78	-10.51/-9.53	-9.05/-8.69	-10.75/-10.98	-11.17/-11.80	-13.26/-13.52	-13.44/-12.03	-9.68/-8.29	-7.38/-6.59	-6.23/-5.87	-5.67/-5.79	-6.80/-8.11	-7.67/-7.06	-7.27/-8.05	-7.78/-6.54	-5.95/-6.81	-8.81/-10.83	-11.14/-10.41	-9.57/-9.39	-10.14/-11.23
Θ (150°)	-14.65/-15.23	-14.95/-14.45	-13.56/-13.76	-13.43/-13.21	-13.74/-12.64	-12.29/-11.90	-11.72/-11.79	-12.19/-12.79	-12.53/-11.99	-11.07/-10.27	-9.99/-9.67	-9.85/-9.38	-9.04/-8.91	-8.90/-8.90	-8.98/-9.34	-9.99/-10.15	-8.69/-7.99	-8.31/-8.98	-9.08/-8.61	-8.65/-9.90	-12.20/-14.73	-14.29/-14.00	-12.57/-11.81	-12.90/-13.72
Θ (157.5°)	-14.19/-15.95	-14.78/-15.91	-14.64/-12.59	-11.41/-11.52	-12.18/-13.25	-13.97/-13.43	-14.66/-13.46	-11.87/-12.52	-9.54/-8.82	-8.27/-7.83	-7.85/-8.16	-8.66/-8.89	-9.18/-9.72	-10.38/-10.72	-10.46/-10.00	-8.79/-7.54	-6.78/-6.64	-7.23/-8.20	-9.22/-10.40	-11.93/-13.28	-14.53/-14.72	-13.86/-12.32	-11.27/-10.76	-11.27/-12.46
Θ (165°)	-10.96/-11.77	-11.89/-11.86	-11.35/-11.61	-11.60/-11.71	-12.23/-13.05	-14.60/-14.56	-13.41/-12.00	-11.51/-10.63	-10.07/-9.29	-8.70/-8.42	-8.15/-8.05	-8.02/-8.00	-8.27/-9.04	-9.56/-9.48	-8.78/-8.11	-7.78/-7.48	-7.83/-8.37	-9.42/-10.79	-12.61/-14.15	-14.53/-15.12	-12.35/-13.34	-10.48/-9.93	-9.69/-10.08	
Θ (172.5°)	-12.93/-13.14	-13.61/-13.43	-13.17/-14.07	-14.37/-15.09	-14.81/-15.58	-15.34/-15.11	-14.31/-13.44	-12.07/-11.36	-11.18/-11.18	-10.88/-10.32	-9.88/-9.57	-9.46/-9.37	-9.46/-9.49	-10.07/-10.31	-10.67/-10.78	-11.38/-11.62	-12.41/-13.46	-14.61/-14.78	-15.58/-14.66	-15.28/-14.88	-14.52/-14.05	-13.79/-13.40	-13.01/-12.46	-12.29/-12.44
Θ (180°)	-15.61/-14.88	-14.99/-15.18	-15.71/-15.59	-14.90/-14.55	-14.07/-13.80	-13.24/-12.25	-11.98/-11.98	-11.98/-12.16	-12.89/-13.52	-14.71/-15.51	-15.18/-15.17	-14.00/-14.22	-15.08/-15.72	-15.84/-15.44	-16.02/-15.07	-15.36/-15.99	-14.48/-15.54	-15.53/-15.10	-15.01/-15.81	-15.81/-15.72	-16.10/-15.43	-14.74/-15.20	-15.43/-15.06	-15.08/-15.91
Freq(Hz)	5.2GPdL	TotalAnt. 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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°)	0.150/0.08	-0.020/0.09	0.190/0.29	0.090/-0.01	-0.000/0.07	0.230/0.29	0.12/-0.02	-0.23/-0.20	-0.28/-0.30	-0.28/-0.04	0.110/0.28	0.530/0.71	0.740/0.51	0.16/-0.03	0.020/0.14	0.250/0.26	0.170/0.14	0.010/-0.17	-0.33/-0.31	-0.17/-0.21	-0.33/-0.43	-0.46/-0.44	-0.220/0.10	0.270/0.35
Θ (7.5°)	0.380/0.31	0.230/0.31	0.620/0.84	0.750/0.61	0.470/0.19	0.14/-0.05	-0.32/-0.33	-0.41/-0.30	-0.25/-0.25	-0.09/-0.03	0.080/0.37	0.821/0.21	1.190/0.93	0.090/-0.04	0.490/0.61	0.510/0.24	-0.020/-0.16	-0.13/-0.19	-0.18/-0.10	-0.06/-0.20	-0.19/-0.26	-0.28/-0.21	-0.120/0.17	0.360/0.49
Θ (15°)	1.141/0.04	0.750/0.27	0.411/0.08	1.491/0.42	1.030/0.34	-0.45/-1.14	-1.47/-1.26	-1.11/-0.85	-0.60/-0.42	-0.020/0.38	0.650/0.94	1.391/0.84	1.941/0.83	1.481/0.08	0.950/0.89	0.830/0.54	0.230/0.04	-0.16/-0.42	-0.38/-0.23	0.080/0.16	0.13/-0.03	-0.35/-0.53	-0.65/-0.43	0.000/0.83
Θ (22.5°)	1.521/0.50	0.83/-0.10	-0.61/-0.25	0.621/-0.26	1.431/-1.16	0.26/-0.80	-1.70/-1.64	-0.98/-0.57	-0.85/-1.36	-1.55/-1.09	-0.56/-0.19	0.460/0.95	1.391/0.66	1.621/-0.26	0.940/0.83	0.900/0.90	0.710/-0.17	-0.86/-1.72	-2.25/-2.14	-1.95/-1.72	-1.88/-1.26	-2.73/-3.31	-3.18/-2.13	-0.760/0.71
Θ (30°)	1.721/0.50	1.070/0.78	0.740/0.59	0.430/0.55	1.071/0.39	1.400/0.83	-0.60/-1.65	-0.470/0.29	0.00/-1.66	-2.55/-2.00	-1.84/-2.66	-2.84/-1.40	0.451/0.59	1.961/0.84	1.461/0.20	1.491/0.85	1.771/0.34	0.520/-0.05	-0.18/-0.07	-0.15/-0.25	-1.06/-2.32	-3.23/-3.27	-2.86/-1.27	0.611/0.62
Θ (37.5°)	1.532/0.00	2.081/0.79	2.092/0.51	2.361/0.48	0.620/0.63	1.181/0.32	0.46/-1.78	-2.66/-0.77	-0.63/-2.60	-3.10/-1.85	-1.74/-3.90	-6.84/-3.90	-0.131/0.81	2.220/1.93	1.721/0.83	2.062/0.12	1.730/0.83	-0.000/-0.26	0.891/0.19	1.010/0.89	0.63/-0.13	-0.60/-0.45	-1.10/-1.29	-0.280/0.60
Θ (45°)	0.360/0.88	-0.61/-0.80	1.522/0.91	3.743/0.85	3.373/0.15	2.762/0.00	0.95/-0.57	-2.62/-2.49	-1.92/-3.22	-4.14/-2.20	-1.50/-2.76	-4.43/-2.81	0.121/0.74	2.091/0.76	2.022/0.67	2.802/0.46	1.720/0.77	-0.020/-0.21	0.441/0.18	1.050/0.36	-0.28/-1.30	-1.570/0.03	-0.30/-1.80	-1.77/-1.72
Θ (52.5°)	-0.89/-1.25	-1.172/-0.57	1.611/0.93	1.951/0.89	2.112/0.93	3.372/0.21	-1.32/-0.47	-4.65/-4.22	-3.33/-3.42	-4.40/-1.30	-0.81/-2.05	-2.29/-0.72	0.942/0.12	2.542/0.02	2.192/0.44	2.291/0.89	0.700/0.33	0.420/0.91	1.051/0.07	0.606/-0.29	-1.30/-2.39	-3.78/-1.69	-1.77/-3.02	-1.60/-1.55
Θ (60°)	-0.77/-1.75	-0.340/0.66	1.581/0.53	2.412/0.94	3.102/0.45	2.583/0.00	0.73/-4.40	-7.86/-6.28	-5.03/-3.96	-3.65/-1.27	-0.28/-1.02	-1.630/0.51	1.992/0.25	2.631/0.73	1.871/0.98	1.761/0.71	-0.10/-1.38	-1.070/0.32	1.231/0.84	1.520/0.21	-1.38/-2.90	-4.81/-2.48	-2.25/-2.16	0.230/0.26
Θ (67.5°)	-1.74/-2.28	-0.740/0.21	1.322/0.69	4.114/0.73	4.593/0.49	2.953/0.12	2.131/-0.58	-5.88/-3.07	-3.05/-2.65	-2.48/-0.71	0.070/-0.13	-1.920/0.66	2.001/0.16	1.641/-0.26	1.050/0.62	0.130/0.75	-1.75/-2.61	-1.050/0.52	0.941/0.29	0.810/0.08	-1.02/-1.99	-4.19/-3.12	-2.67/-1.08	1.490/0.60
Θ (75°)	-2.46/-2.15	-1.730/-0.99	0.332/0.22	3.104/0.55	4.263/0.28	2.291/0.94	1.750/-0.01	-3.58/-2.00	-1.23/-1.66	-2.86/-2.58	-1.06/-0.86	-2.36/-1.01	0.71/-0.47	1.501/0.43	-0.24/-0.98	1.881/0.17	-3.20/-3.82	-1.97/-0.32	0.871/0.47	0.67/-0.04	-0.55/-0.97	-2.49/-2.55	-3.40/-2.45	1.110/0.31
Θ (82.5°)	-3.36/-3.55	-4.83/-2.57	-1.450/0.74	0.772/0.66	1.801/0.75	0.960/0.51	0.42/-0.84	-3.13/-1.43	-1.05/-2.03	-3.35/-3.78	-3.12/-2.51	-3.86/-2.61	-0.70/-2.04	-1.25/-0.63	-1.89/-3.69	-4.24/-3.24	-4.35/-6.07	-3.74/-1.20	-0.050/0.36	-0.12/-0.50	-0.79/-1.26	-2.23/-2.68	-3.50/-3.01	-0.14/-1.07
Θ (90°)	-4.75/-4.22	-7.20/-4.14	-3.390/0.83	-2.200/-0.40	-1.85/-1.31	-1.87/-1.56	-1.32/-1.58	-4.20/-3.02	-2.41/-3.52	-3.96/-5.14	-4.67/-6.06	-5.26/-5.17	-2.72/-3.43	-4.54/-2.65	-3.65/-6.83	-7.28/-7.04	-6.78/-6.49	-5.05/-2.14	-4.46/-1.22	-1.23/-2.08	-1.51/-1.72	-3.40/-3.26	-4.40/-4.96	-3.28/-2.59
Θ (97.5°)	-5.69/-7.25	-8.86/-5.25	-5.072/-2.56	-3.51/-2.26	-6.56/-4.97	-5.97/-3.06	-2.53/-3.74	-5.63/-5.33	-4.03/-4.92	-5.94/-6.24	-6.87/-8.06	-7.22/-6.15	-3.18/-5.75	-6.19/-5.93	-5.30/-5.96	-8.44/-8.37	-10.00/-9.44	-6.31/-3.52	-4.53/-2.73	-3.50/-1.57	-4.22/-3.35	-4.28/-5.02	-6.17/-6.11	-3.47/-4.44
Θ (105°)	-7.02/-9.17	-11.03/-9.11	-6.04/-4.41	-3.42/-3.98	-5.74/-6.41	-7.33/-5.37	-4.63/-6.36	-8.71/-7.98	-6.76/-8.15	-7.87/-7.74	-8.00/-8.60	-8.69/-8.03	-6.08/-8.23	-9.00/-6.00	-6.73/-6.65	-7.90/-11.90	-11.77/-11.21	-8.62/-5.52	-7.91/-5.64	-5.77/-9.78	-7.85/-6.51	-7.39/-7.65	-9.04/-13.53	-6.38/-5.59
Θ (112.5°)	-9.26/-13.52	-15.30/-11.64	-8.31/-12.96	-4.99/-4.12	-6.09/-7.11	-4.84/-8.81	-7.37/-10.97	-12.69/-10.60	-10.23/-13.01	-10.33/-8.64	-10.03/-9.25	-11.40/-8.11	-6.46/-11.55	-9.79/-8.70	-7.44/-6.18	-8.51/-15.43	-11.39/-11.81	-7.76/-6.46	-12.04/-9.03	-8.45/-12.01	-11.82/-6.62	-8.89/-12.43	-10.98/-11.75	-7.89/-8.12
Θ (120°)	-8.84/-15.56	-13.29/-13.63	-9.98/-11.69	-13.14/-10.18	-15.09/-14.61	-11.78/-11.06	-8.66/-7.17	-9.76/-11.33	-11.76/-11.71	-13.31/-10.36	-14.06/-10.51	-10.61/-7.85	-6.25/-7.94	-8.90/-9.26	-8.48/-6.83	-9.40/-15.60	-11.33/-10.18	-7.08/-7.35	-6.80/-7.61	-8.35/-9.06	-12.33/-8.26	-10.96/-13.54	-11.18/-8.76	-9.05/-7.87
Θ (127.5°)	-8.20/-15.97	-13.25/-10.78	-9.22/-11.83	-9.60/-11.50	-11.47/-12.84	-15.15/-9.32	-9.60/-9.23	-12.61/-11.03	-11.79/-12.75	-15.44/-11.89	-12.25/-15.34	-14.42/-10.00	-10.29/-7.72	-9.04/-10.90	-6.76/-8.94	-8.38/-14.70	-9.41/-10.14	-6.98/-1.75	-6.50/-8.05	-8.29/-10.24	-10.51/-11.33	-10.82/-9.72	-12.96/-10.94	-11.90/-9.46
Θ (135°)	-8.90/-10.55	-8.07/-9.08	-12.70/-9.80	-9.73/-11.94	-12.65/-12.94	-12.65/-9.78	-9.21/-12.57	-15.53/-13.20	-15.30/-15.62	-14.95/-14.52	-14.20/-14.67	-14.82/-13.78	-9.49/-8.92	-11.61/-8.78	-9.62/-7.83	-9.87/-12.60	-12.54/-9.16	-7.86/-12.92	-13.14/-11.51	-8.84/-12.60	-8.73/-14.14	-11.45/-7.05	-12.72/-15.51	-14.09/-8.82
Θ (142.5°)	-8.72/-11.49	-12.91/-10.91	-11.61/-14.32	-14.50/-15.91	-16.26/-11.92	-10.95/-10.29	-11.22/-14.42	-15.53/-15.74	-15.61/-15.46	-14.34/-14.60	-15.79/-15.96	-15.29/-10.41	-7.45/-8.27	-9.21/-9.50	-8.80/-9.36	-14.08/-12.53	-13.45/-7.80	-8.82/-10.15	-10.13/-11.21	-9.31/-7.93	-7.71/-11.91	-11.85/-7.88	-8.29/-9.10	-11.07/-10.98
Θ (150°)	-11.86/-11.54	-14.48/-15.19	-12.50/-10.85	-9.75/-9.67	-11.77/-13.57	-14.17/-15.18	-14.94/-15.13	-15.72/-15.19	-15.92/-15.34	-15.01/-13.34	-14.05/-15.55	-15.18/-11.69	-10.16/-10.45	-12.25/-9.90	-11.49/-13.44	-15.62/-15.56	-15.31/-11.90	-10.82/-10.57	-10.61/-11.60	-11.51/-10.22	-10.78/-10.40	-11.94/-14.13	-12.29/-8.92	-9.07/-11.23
Θ (157.5°)	-14.81/-14.34	-13.60/-14.98	-15.21/-15.29	-13.48/-12.56	-14.23/-15.10	-13.84/-11.57	-11.71/-12.67	-12.41/-12.12	-11.99/-13.51	-15.08/-14.03	-12.98/-14.91	-14.64/-12.03	-10.68/-11.10	-11.64/-12.01	-11.84/-12.69	-14.99/-14.21	-13.14/-13.61	-12.83/-10.68	-10.15/-10.86	-13.20/-15.09	-15.48/-12.32	-11.72/-12.49	-14.36/-13.59	-11.30/-12.36
Θ (165°)	-12.15/-15.48	-12.40/-10.66	-10.92/-13.72	-15.43/-14.97	-15.07/-12.67	-11.95/-12.72	-14.94/-16.01	-14.58/-12.69	-12.29/-14.05	-14.90/-15.23	-13.96/-12.92	-12.76/-12.94	-12.65/-12.74	-12.51/-13.04	-13.47/-13.04	-12.10/-11.33	-11.66/-12.24	-12.76/-13.13	-12.73/-12.29	-12.77/-13.53	-15.52/-13.30	-13.03/-12.54	-11.15/-8.78	-7.79/-8.14
Θ (172.5°)	-12.46/-11.89	-12.50/-12.59	-12.29/-11.97																					



Antenna Pattern of 2.4GHz&5GHz&5.9GHz

Appendix D

Θ (180°)	-12.87/-12.96	-13.40/-12.64	-13.42/-13.34	-13.38/-14.03	-14.23/-14.46	-14.15/-13.35	-12.92/-12.61	-13.50/-14.09	-13.60/-13.01	-13.54/-13.60	-13.52/-15.25	-15.68/-14.95	-14.97/-15.14	-13.85/-12.92	-12.84/-13.13	-14.17/-13.92	-13.82/-12.79	-12.88/-12.98	-14.75/-15.30	-15.00/-15.09	-14.33/-13.99	-13.92/-14.43	-15.73/-15.32	-15.01/-13.75
Freq(Hz)	5.885GPol.	TotalAnt.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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°)	-3.50/-3.12	-3.43/-3.53	-3.32/-3.04	-3.03/-3.25	-3.51/-3.90	-3.91/-3.81	-3.79/-3.82	-3.80/-3.59	-3.65/-3.57	-3.32/-3.34	-3.34/-3.27	-3.49/-3.59	-3.45/-3.63	-3.37/-3.30	-3.54/-3.88	-3.85/-3.44	-3.18/-3.26	-3.49/-3.82	-4.01/-3.96	-3.78/-3.78	-3.76/-3.74	-3.66/-3.45	-3.55/-3.57	-3.76/-3.72
Θ (7.5°)	-2.78/-2.54	-2.63/-2.88	-2.78/-2.51	-2.43/-2.67	-2.76/-2.67	-2.85/-2.79	-2.78/-3.22	-3.33/-3.54	-3.84/-3.92	-3.84/-3.71	-3.62/-3.42	-3.61/-3.41	-3.13/-3.10	-3.03/-2.84	-2.62/-2.58	-2.46/-2.65	-2.79/-3.13	-3.33/-3.49	-3.71/-3.64	-3.68/-3.64	-3.90/-3.97	-3.84/-3.58	-3.55/-3.67	-3.69/-3.29
Θ (15°)	-0.93/-0.79	-0.88/-1.44	-1.79/-1.59	-1.27/-1.36	-1.15/-0.67	-0.250/0.03	0.140/0.08	-0.16/-0.60	-1.09/-1.46	-1.35/-1.14	-0.83/-0.52	-0.06/-0.19	-0.32/-0.26	-0.20/-0.37	-0.82/-1.22	-2.63/-3.31	-3.85/-4.24	-4.46/-4.64	-4.85/-4.34	-3.28/-2.78	-1.47/-0.91	-0.77/-0.74	-	-
Θ (22.5°)	-0.390/56	1.31/1.49	1.19/0.94	0.52/-0.49	-1.65/-2.41	-2.24/-1.14	-0.39/-0.38	-1.00/-2.34	-3.23/-2.47	-1.58/-0.94	-0.000/91	1.38/1.23	0.590/41	0.85/157	1.86/1.43	0.32/-0.50	-0.96/-1.34	-2.06/-3.15	-3.84/-3.37	-2.37/-1.71	-1.27/-0.70	-0.140/34	0.800/63	-0.23/-0.77
Θ (30°)	0.15/-0.08	-0.51/-0.20	0.47/1.02	1.32/1.66	1.60/1.03	0.21/-0.55	-0.21/0.88	1.06/-0.54	-2.70/-2.66	-2.93/-5.27	-8.19/-5.19	-2.11/-0.92	-0.68/-0.30	0.64/1.53	1.99/1.86	1.28/0.50	-0.35/-1.27	-2.20/-3.46	-4.80/-4.28	-3.19/-2.36	-1.40/-1.08	-1.51/-0.83	0.510/91	0.230/15
Θ (37.5°)	1.200/23	1.923/40	2.86/1.43	0.670/49	0.630/98	1.160/37	1.160/37	1.160/37	1.160/37	1.160/37	1.160/37	1.160/37	1.160/37	1.160/37	1.160/37	1.160/37	1.160/37	1.160/37	1.160/37	1.160/37	1.160/37	1.160/37	1.160/37	1.160/37
Θ (45°)	1.110/76	2.34/2.70	1.33/1.49	3.724/1.49	2.770/67	-0.540/74	1.64/1.55	2.312/18	-0.17/-2.01	-2.61/-2.80	-4.61/-5.78	-3.64/-2.26	-0.63/-0.00	-1.11/-0.71	1.21/2.28	2.10/2.02	1.31/-0.67	-1.99/-2.66	-2.30/-1.65	-1.19/-0.45	0.36/-0.20	-1.06/-3.08	-2.37/-0.07	0.20/1.26
Θ (52.5°)	1.15/1.33	1.170/73	0.753/12	4.564/79	4.112/68	0.820/63	1.67/1.84	1.370/50	-0.10/-0.17	-0.80/-1.86	-2.75/-2.03	-0.09/-1.05	-0.96/-0.02	-0.96/-0.02	1.702/63	1.99/1.90	0.98/-0.93	-2.40/-2.83	-1.64/-0.42	0.17/0.66	1.050/03	-0.69/-1.65	-3.79/-2.42	-2.71/-0.59
Θ (60°)	2.62/1.77	1.32/2.11	0.94/2.38	3.254/08	3.793/00	0.60/-1.70	-2.24/-1.27	-0.90/-2.99	-4.13/-2.55	-1.49/-1.07	-0.79/-1.13	0.94/-0.92	-3.16/-1.06	-1.59/-1.11	1.21/2.41	1.59/1.15	0.62/-1.52	-2.29/-1.87	-1.42/-0.12	1.23/1.43	1.550/09	-1.48/-1.91	-2.74/-1.99	-2.41/-1.34
Θ (67.5°)	3.72/2.27	2.25/2.61	0.08/2.31	4.966/32	5.293/82	1.22/-0.89	-1.92/-1.96	-0.58/-1.08	-1.95/-1.85	-1.67/-2.13	-0.84/-2.91	-0.80/-3.26	-4.20/-0.70	-1.94/-2.13	0.030/98	0.280/79	0.68/-1.51	-3.34/-2.09	-1.37/-0.11	1.53/1.96	1.90/1.45	0.43/-1.39	-1.95/-0.52	0.09/2.87
Θ (75°)	3.24/1.67	2.62/1.97	-0.76/2.31	5.696/61	5.453/88	2.00/0.34	-1.10/-1.84	-0.21/-1.22	0.58/-0.41	-1.62/-2.41	-2.31/-3.99	-1.80/-3.58	-5.29/-1.41	-2.48/-3.14	-0.77/-1.03	-1.37/-0.26	0.50/-0.68	-4.13/-3.84	-2.52/-0.45	1.43/1.50	2.09/1.78	0.80/-1.18	-2.49/-0.62	0.18/2.27
Θ (82.5°)	1.25/-0.15	0.74/-0.48	-2.20/1.45	4.895/22	3.54/2.70	1.38/-0.43	-1.72/-2.32	-0.33/-1.42	0.46/-0.57	-2.22/-4.14	-4.05/-6.68	-4.02/-4.29	-6.55/-2.23	-4.58/-3.75	-2.88/-4.35	-0.17/-0.34	0.53/-2.16	-3.14/-3.38	-0.35/-2.16	-0.430/75	2.05/1.94	0.95/-1.92	-2.72/-1.81	-0.42/-0.00
Θ (90°)	-1.33/-1.71	-2.43/-3.80	-4.35/-1.75	2.64/2.35	0.31/-0.04	-1.18/-2.38	-2.57/-3.27	-2.27/-0.21	-1.25/-1.83	-3.09/-5.12	-5.33/-7.07	-6.12/-4.25	-7.14/-4.44	-6.18/-7.69	-5.56/-6.09	-5.37/-3.06	-2.16/-1.93	-2.28/-3.86	-5.14/-4.46	-1.93/-0.78	1.500/58	-0.33/-3.60	-5.92/-4.57	-2.62/-0.68
Θ (97.5°)	-4.68/-3.29	-5.76/-5.32	-6.95/-1.49	0.01/-2.23	-4.17/-3.44	-4.36/-5.16	-4.56/-4.50	-3.83/-1.82	-3.77/-4.43	-6.45/-6.90	-7.31/-7.72	-7.83/-9.41	-8.93/-6.08	-9.81/-7.81	-5.96/-6.69	-6.92/-6.47	-4.18/-5.83	-4.07/-4.33	-8.52/-6.88	-4.99/-4.90	-1.85/-1.10	-3.46/-6.21	-5.60/-6.82	-4.52/-1.90
Θ (105°)	-7.09/-4.37	-4.59/-6.24	-7.76/-4.53	-1.61/-4.47	-6.19/-7.95	-7.22/-5.23	-5.39/-5.25	-6.73/-4.27	-5.22/-5.62	-9.88/-10.48	-10.61/-8.48	-9.16/-7.25	-8.05/-6.04	-10.67/-8.89	-8.23/-5.19	-11.67/-6.80	-6.66/-9.05	-7.74/-5.80	-8.43/-9.11	-7.71/-9.47	-5.08/-6.41	-15.21/-7.02	-5.58/-4.24	-
Θ (112.5°)	-9.37/-5.04	-5.53/-7.22	-6.77/-4.32	-1.65/-2.38	-4.16/-8.57	-14.67/-13.01	-9.86/-7.42	-7.16/-6.70	-7.10/-10.06	-13.92/-11.59	-12.41/-8.96	-7.86/-8.50	-10.28/-13.38	-12.75/-10.46	-6.24/-6.34	-8.29/-7.44	-5.74/-6.27	-11.72/-8.36	-10.43/-8.85	-8.73/-11.44	-10.36/-3.87	-8.32/-9.17	-12.76/-9.66	-6.28/-6.77
Θ (120°)	-8.65/-6.01	-7.08/-12.17	-11.24/-12.61	-9.11/-6.78	-6.26/-9.03	-13.33/-10.97	-10.64/-11.49	-8.88/-7.48	-9.65/-14.74	-12.31/-14.21	-12.28/-12.51	-7.30/-3.93	-9.20/-10.05	-11.59/-12.93	-8.53/-8.77	-6.62/-8.69	-8.61/-5.16	-11.04/-7.34	-8.48/-7.71	-10.87/-8.53	-9.04/-6.56	-7.63/-7.03	-11.04/-10.61	-8.82/-6.50
Θ (127.5°)	-9.04/-13.50	-10.50/-13.72	-11.16/-10.44	-8.35/-8.43	-10.13/-15.41	-8.40/-6.50	-5.96/-7.39	-7.84/-8.51	-11.85/-13.17	-11.28/-12.32	-10.97/-12.13	-14.49/-11.95	-15.03/-11.35	-8.78/-10.85	-11.00/-7.54	-11.37/-8.05	-12.13/-8.29	-9.83/-8.60	-10.58/-9.20	-10.88/-11.56	-10.60/-10.99	-8.93/-14.28	-11.71/-12.50	-10.75/-5.54
Θ (135°)	-7.63/-5.65	-7.19/-8.15	-10.84/-7.53	-6.41/-7.14	-12.74/-15.88	-9.14/-13.38	-10.38/-10.39	-12.55/-12.26	-11.84/-11.99	-12.15/-12.15	-11.63/-7.79	-9.80/-10.17	-11.89/-12.80	-12.29/-12.58	-3.96/-7.90	-9.48/-10.24	-9.35/-13.12	-7.12/-12.74	-10.95/-12.63	-10.35/-9.39	-10.37/-14.04	-6.27/-11.36	-14.45/-13.89	-8.97/-9.67
Θ (142.5°)	-14.10/-11.16	-15.53/-10.34	-9.40/-10.16	-15.21/-14.92	-14.85/-11.05	-11.58/-11.96	-10.28/-12.79	-13.96/-14.51	-13.77/-15.99	-15.48/-12.57	-14.73/-12.63	-11.57/-9.76	-9.00/-9.96	-11.88/-10.46	-8.04/-6.40	-11.52/-13.11	-12.98/-11.79	-7.22/-13.16	-9.90/-11.56	-8.66/-10.83	-8.79/-10.52	-15.39/-10.31	-10.44/-17.13	-7.56/-12.99
Θ (150°)	-10.15/-6.82	-8.51/-13.90	-15.60/-11.68	-11.37/-11.91	-15.22/-14.91	-13.39/-10.46	-11.68/-14.41	-12.68/-15.58	-14.13/-11.39	-14.43/-15.99	-12.06/-9.49	-8.10/-10.92	-8.99/-8.53	-12.65/-15.28	-13.77/-14.39	-15.53/-10.77	-12.80/-14.34	-13.11/-12.93	-10.54/-14.24	-14.54/-13.16	-13.48/-14.71	-11.13/-9.87	-	-
Θ (157.5°)	-12.11/-13.28	-14.22/-14.96	-14.96/-15.02	-14.96/-12.68	-11.36/-11.30	-12.04/-13.62	-11.11/-9.84	-9.63/-10.81	-12.96/-14.59	-15.36/-15.80	-13.34/-12.64	-11.94/-11.71	-13.06/-14.49	-13.45/-12.58	-10.11/-9.43	-12.51/-15.64	-13.74/-13.47	-15.06/-15.26	-12.32/-12.08	-11.21/-12.20	-14.39/-14.94	-14.86/-12.06	-12.55/-12.94	-13.09/-11.60
Θ (165°)	-10.72/-10.33	-10.85/-11.91	-10.63/-12.38	-15.06/-15.16	-15.51/-15.00	-15.29/-15.99	-15.23/-15.86	-15.46/-14.57	-11.09/-9.40	-8.52/-11.06	-12.10/-14.25	-13.88/-12.49	-12.25/-12.13	-13.15/-12.66	-11.17/-8.93	-8.57/-7.58	-7.59/-9.15	-10.69/-11.14	-10.87/-9.92	-9.24/-10.04	-10.10/-10.56	-11.77/-12.54	-14.16/-16.80	-12.59/-10.75
Θ (172.5°)	-11.93/-10.97	-9.78/-8.41	-8.88/-9.08	-8.88/-8.08	-8.16/-8.36	-9.17/-9.91	-9.77/-10.28	-11.00/-11.68	-12.76/-13.30	-12.70/-11.96	-11.16/-11.99	-10.00/-9.47	-9.18/-9.88	-8.67/-9.67	-9.40/-9.91	-10.79/-12.30	-13.75/-15.50	-13.47/-11.63	-11.21/-12.62	-12.88/-13.42	-13.08/-13.42	-14.48/-14.81	-14.18/-14.05	-
Θ (180°)	-14.06/-13.81	-12.14/-11.03	-12.15/-13.34	-14.14/-14.40	-14.23/-13.89	-15.11/-14.20	-14.31/-15.80	-14.18/-15.19	-15.98/-15.64	-15.32/-14.90	-14.76/-15.71	-14.90/-15.50	-14.73/-15.26	-18.91/-15.50	-15.79/-15.13	-10.91/-14.43	-13.96/-14.03	-13.90/-14.80	-14.82/-14.76	-14.27/-13.01	-11.90/-11.40	-12.71/-11.90	-12.31/-12.61	-12.59/-14.19
Freq(Hz)	2.45GPol.	TotalAnt.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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°)	1.64/1.49	1.38/1.32	1.33/1.36	1.43/1.51	1.54/1.56	1.64/1.75	1.85/1.95	2.10/2.26	2.38/2.51	2.64/2.66	2.50/2.31	2.32/2.21	2.11/1.87	1.58/1.41	1.36/1.40	1.44/1.45	1.48/1.53	1.64/1.77	1.86/1.91	1.94/1.96	2.00/1.98	1.95/1.89	1.84/1.75	-
Θ (7.5°)	2.17/1.97	1.77/1.58	1.41/1.28	1.21/1.14	1.05/0.95	0.88/0.86	0.840/86	0.91/0.98	1.06/1.16	1.27/1.31	1.22/1.16	1.20/1.24	1.18/1.04	0.94/0.98	1.13/1.28	1.46/1.59	1.75/1.97	2.20/2.42	2.56/2.64	2.68/2.74	2.79/2.78	2.80/2.79	2.72/2.61	2.48/2.35
Θ (15°)	2.02/1.82	1.60/1.36	1.16/0.98	0.880/75	0.560/34	0.13/-0.05	-0.22/-0.38	-0.49/-0.52	-0.57/-0.63	-0.71/-0.62	-0.58/-0.46	-0.23/-0.04	0.050/07	0.160/38	0.70/1.03	1.30/1.50	1.70/1.98	2.26/2.54	2.71/2.79	2.88/2.91	2.94/2.92	2.89/2.83	2.73/2.56	2.39/2.20
Θ (22.5°)	1.68/1.42	1.160/90	0.630/43	0.260/08	-0.18/-0.46	-0.70/-0.89	-1.03/-1.14	-1.15/-1.12	-1.20/-1.52	-1.41/-1.91	-1.77/-1.52	-1.23/-0.99	-0.88/-0.85	-0.69/-0.36	0.120/46	0.750/93	1.12/1.39	1.73/2.05	2.26/2.39	2.52/2.68	2.60/2.88	2.91/2.89	2.79/2.57	2.28/1.98
Θ (30°)	1.76/1.39	1.04/0.64	0.25/-0.10	-0.40/-0.71	-0.98/-1.21	-1.33/-1.31	-1.21/-1.07	-0.97/-0.91	-0.99/-1.26	-1.45/-1.42	-1.27/-1.12	-0.94/-0.79	-0.82/-1.09	-1.44/-1.52	-1.									

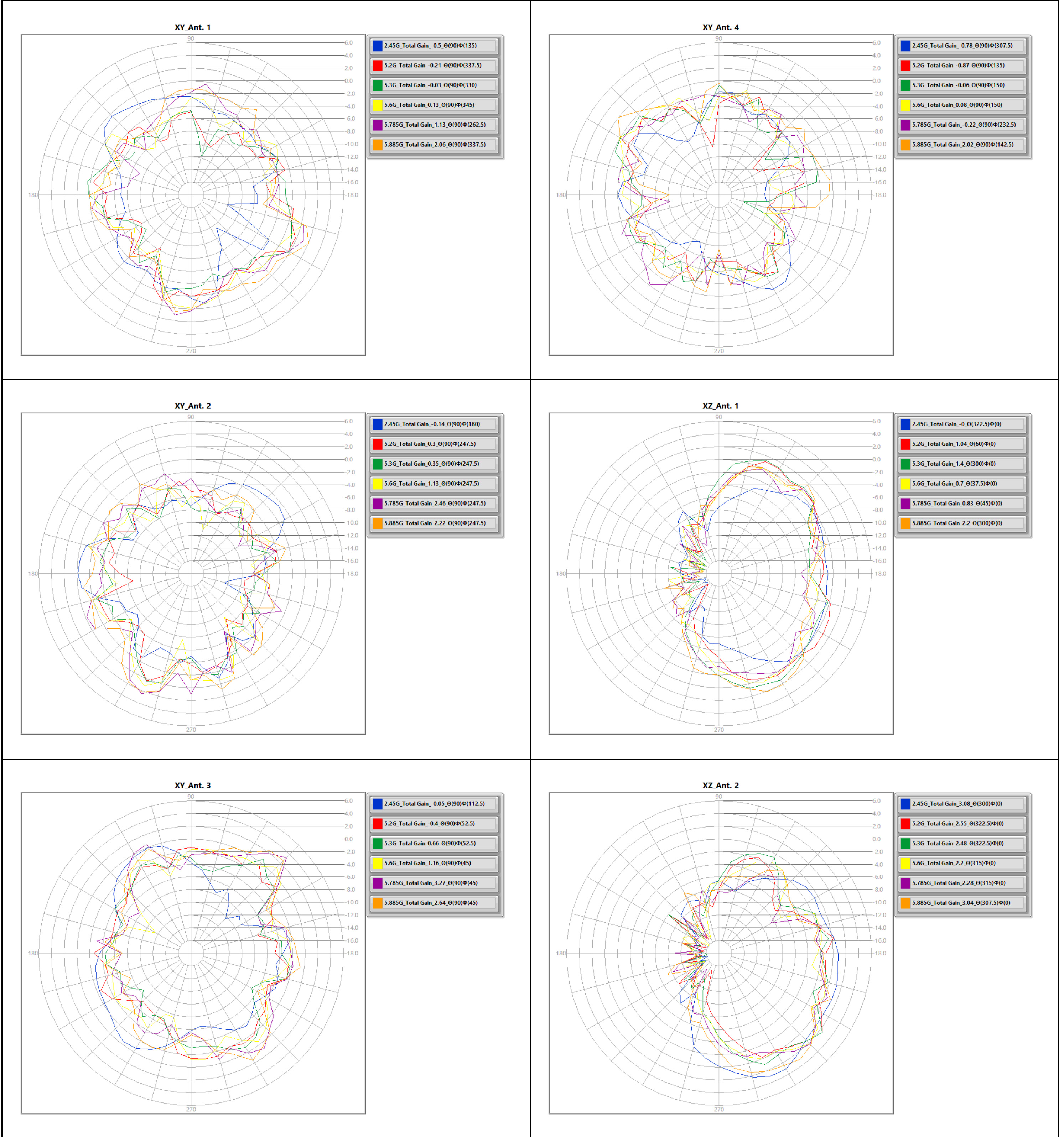


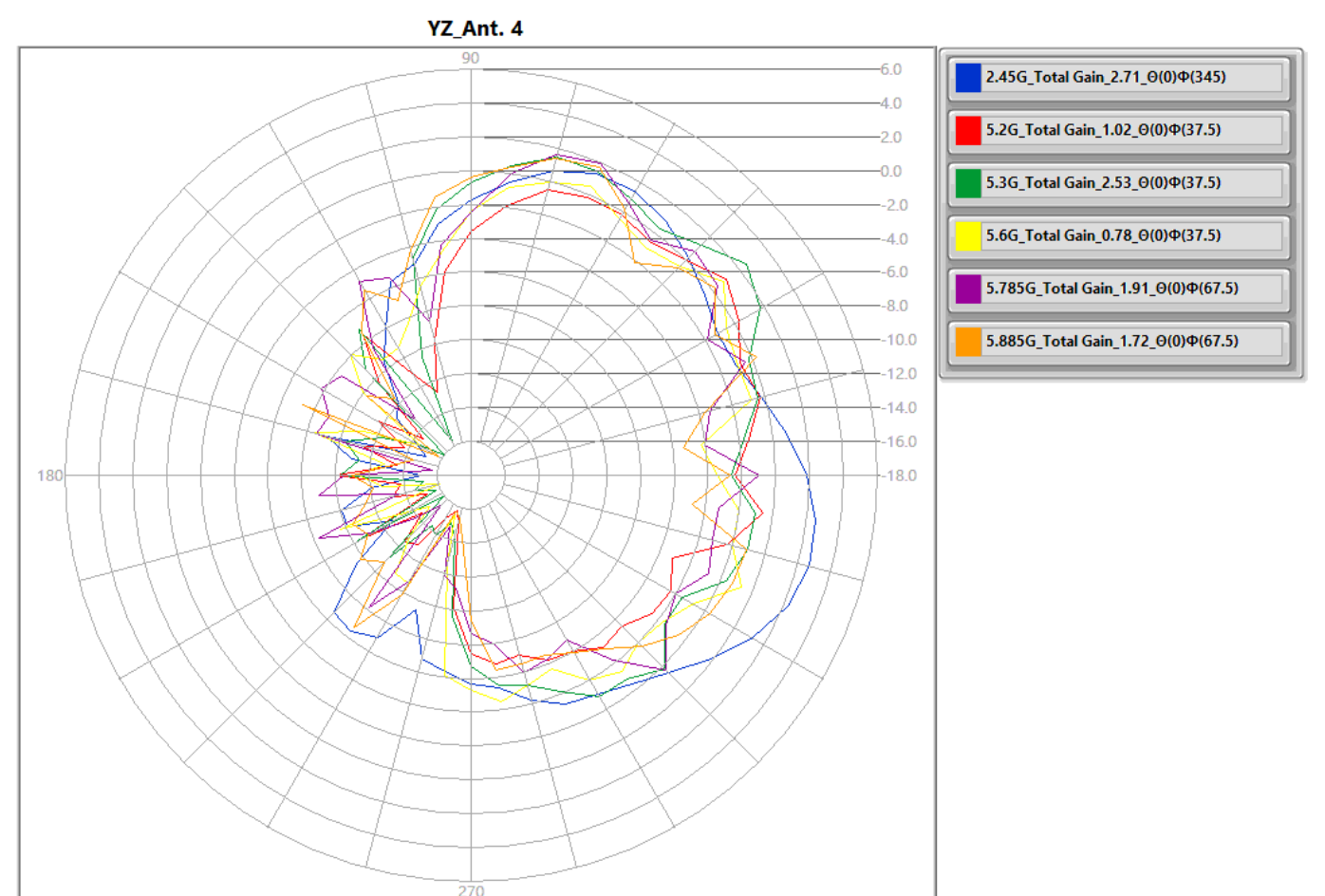
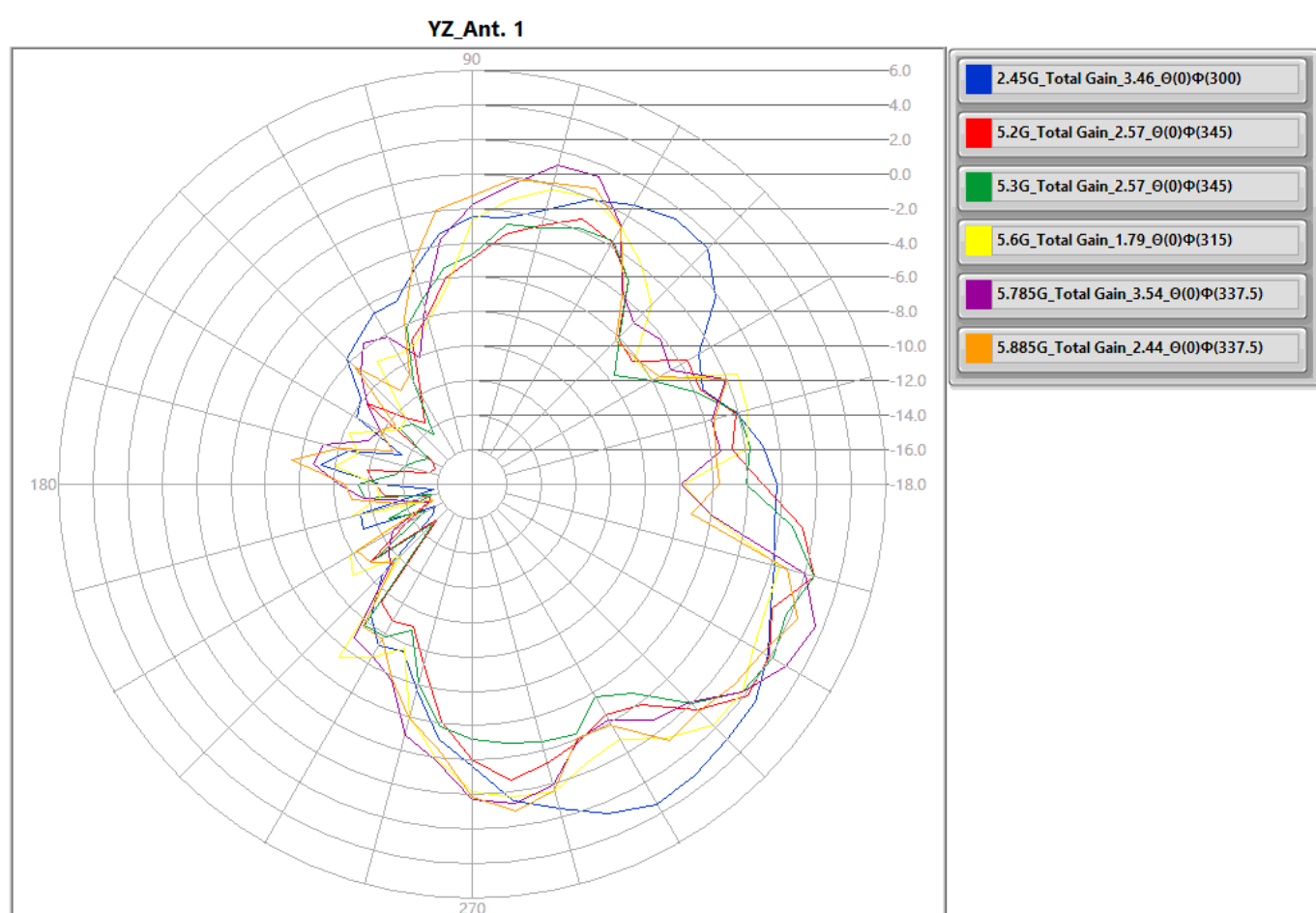
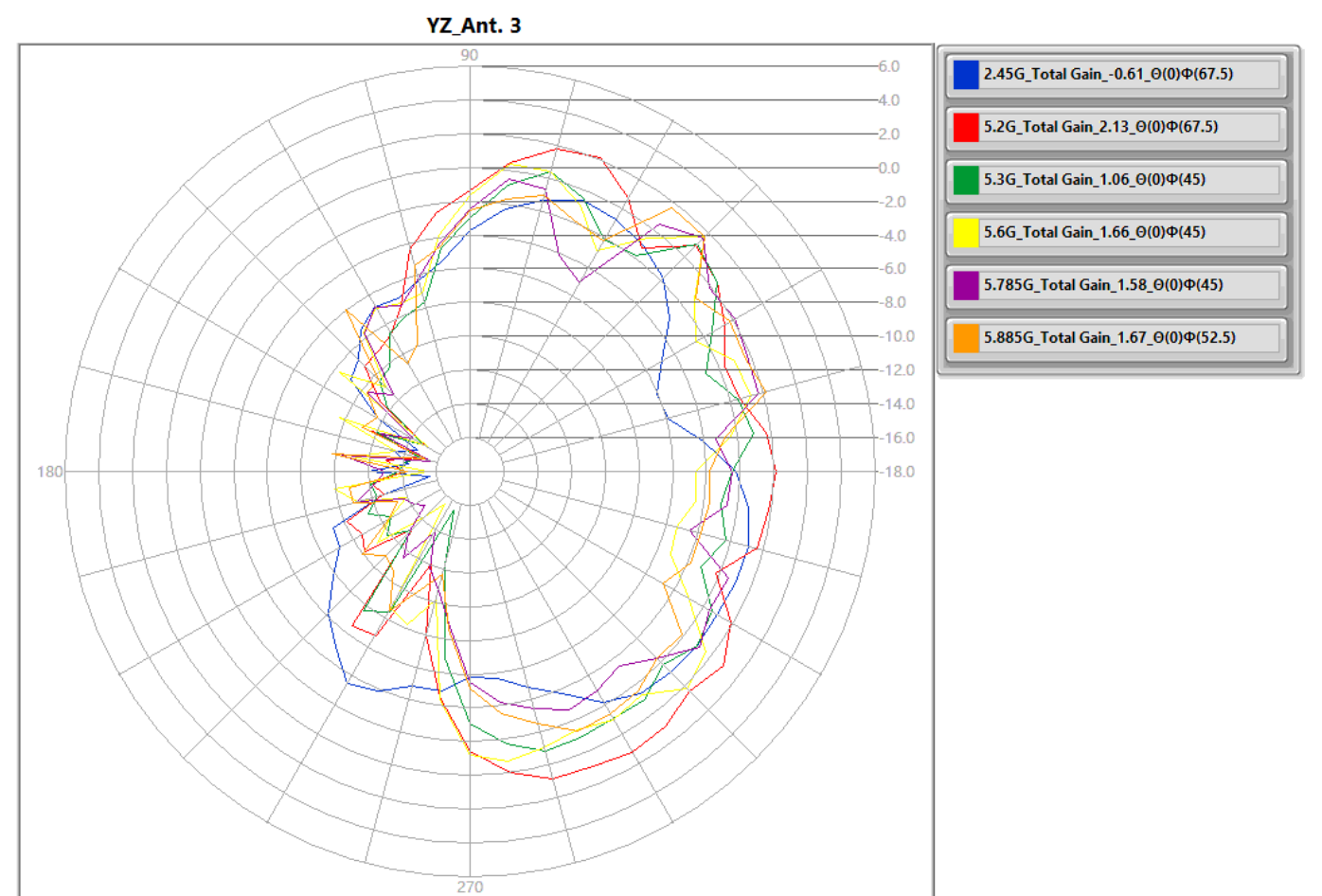
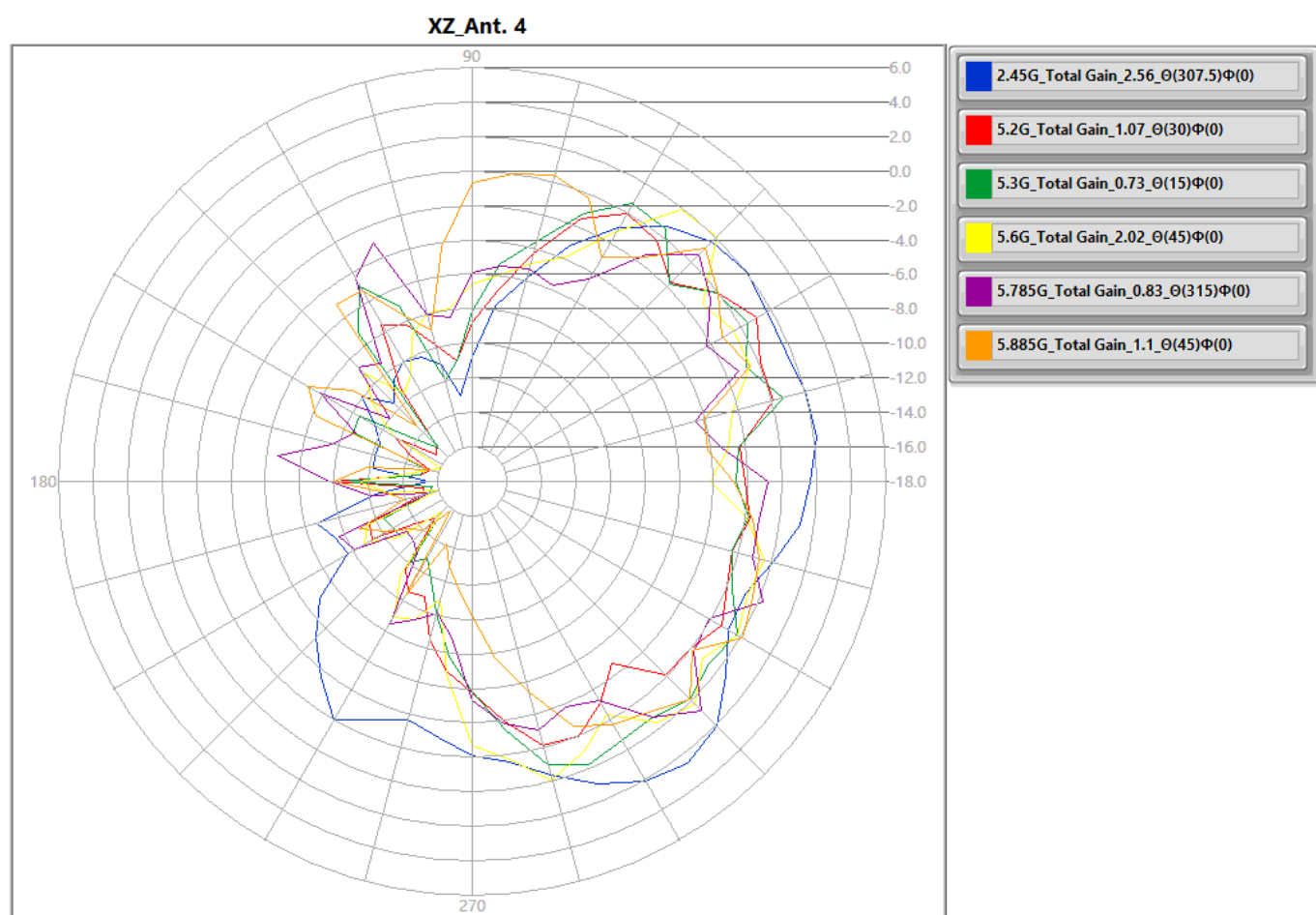
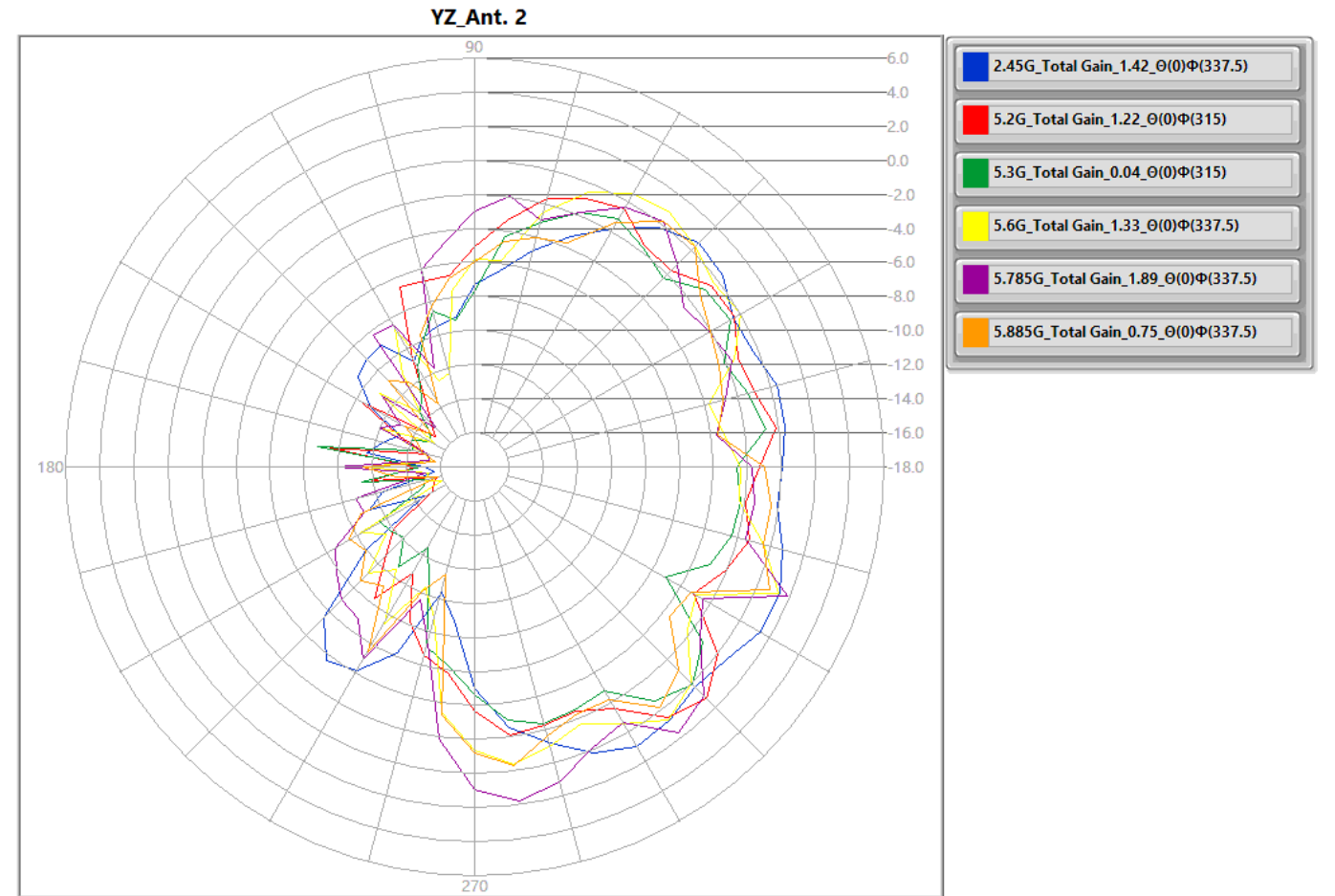
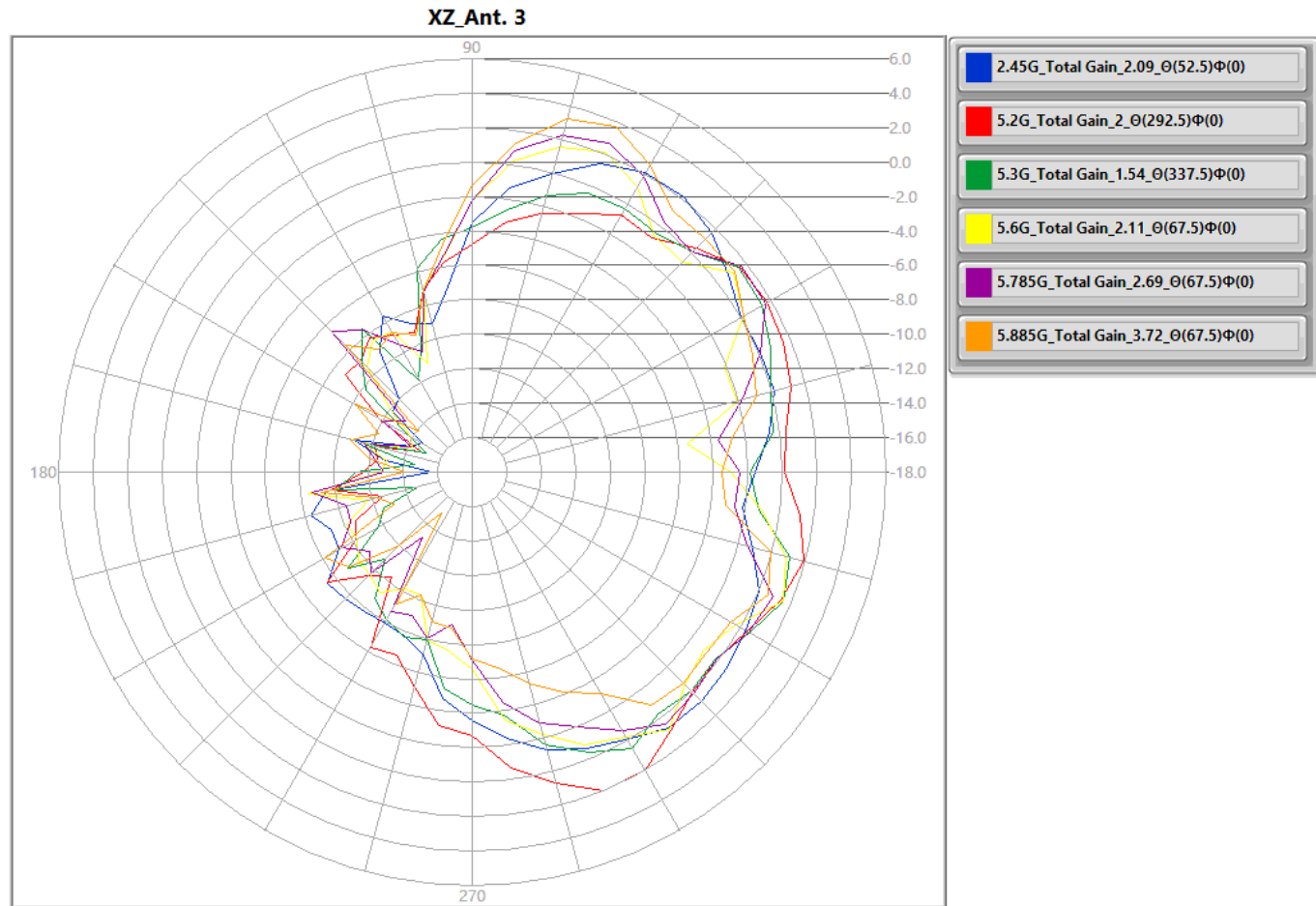
Antenna Pattern of 2.4GHz&5GHz&5.9GHz

Appendix D

Θ(22.5°)	-0.57/-0.88	-0.90/-0.96	-1.31/-1.83	-2.11/-1.84	-0.85/-0.35	-0.49/-0.96	-0.99/-0.64	-0.06/0.27	0.45/0.02	-0.82/-2.00	-3.43/-4.22	-3.47/-1.96	-0.73/-0.29	-0.56/-1.31	-1.97/-1.72	-1.56/-2.00	-3.31/-4.49	-3.84/-2.22	-0.71/-0.21	-0.22/-0.54	-0.85/-1.47	-2.13/-2.36	-1.95/-1.37	-0.87/-0.62
Θ(30°)	-0.51/-0.44	0.28/0.69	0.58/-0.04	-1.49/-2.54	-1.64/-1.47	-1.83/-1.34	-0.55/0.31	0.78/0.71	0.07/-0.39	-0.27/-0.05	0.01/-0.29	-0.52/-0.50	-0.24/0.00	-0.40/-2.01	-3.65/-2.98	-2.16/-2.88	-7.11/-14.94	-8.10/-4.38	-2.83/-1.90	-1.31/-0.82	-0.61/-1.16	-2.02/-2.66	-2.89/-2.22	-1.25/-0.69
Θ(37.5°)	-1.17/-2.25	-1.73/-1.23	-1.08/-0.51	-1.37/-2.58	-1.02/-0.47	-0.02/0.37	0.78/1.79	2.38/1.84	0.78/0.42	0.59/0.00	-1.18/-1.94	-1.48/-1.59	-1.11/0.22	0.16/-2.17	-4.97/-4.62	-3.96/-5.18	-7.83/-10.26	-8.23/-5.42	-3.77/-1.66	-0.11/0.66	0.67/0.02	-0.86/-0.50	-0.14/0.27	0.56/0.13
Θ(45°)	2.02/1.06	-0.73/-0.87	-1.20/-0.93	-1.22/-2.05	0.28/0.54	0.15/-1.15	-0.51/1.81	2.24/1.89	1.84/2.63	2.61/1.52	-0.29/-0.33	0.48/0.46	0.27/-0.32	-1.25/-2.35	-2.62/-2.71	-3.98/-5.86	-9.55/-15.92	-8.19/-6.96	-4.06/-0.54	0.45/1.00	1.55/1.24	0.46/0.59	0.72/0.86	1.86/2.37
Θ(52.5°)	1.90/1.86	-0.07/-0.83	-1.24/-1.69	-0.67/-2.05	-0.42/-0.66	-1.53/-4.35	-1.09/0.33	-0.13/0.74	1.84/2.72	2.74/2.16	1.08/1.15	0.94/0.33	-0.41/-3.35	-5.95/-6.37	-4.17/-2.93	-4.10/-8.22	-11.90/-11.15	-5.89/-5.40	-3.40/-1.19	-0.87/0.24	1.70/1.70	0.60/0.62	0.24/-0.32	-0.44/0.64
Θ(60°)	-1.26/-0.21	-0.49/-1.24	-1.48/-3.22	-0.50/-2.01	-1.99/-1.56	-0.36/-1.65	-0.51/-0.31	0.46/1.59	1.76/2.75	3.57/2.52	0.81/-0.04	-0.52/-1.86	-2.35/-2.62	-1.98/-2.71	-4.75/-3.56	-3.32/-9.15	-10.08/-7.30	-5.41/-5.55	-4.05/-1.93	-1.86/0.27	1.90/1.59	-0.06/-0.91	-2.33/-3.20	-3.77/-2.18
Θ(67.5°)	-3.96/-3.00	-1.43/-1.22	-1.00/-3.11	-0.77/-2.25	-1.74/-0.89	0.84/0.37	0.51/0.42	1.17/2.10	1.61/3.15	4.35/2.56	0.45/-1.53	-0.85/-0.92	-1.05/-0.98	0.71/0.29	-3.65/-2.73	-2.31/-8.70	-7.88/-5.17	-5.61/-5.87	-5.63/-4.62	-2.36/0.13	0.66/0.23	-2.08/-3.36	-5.73/-6.11	-5.80/-4.14
Θ(75°)	-4.89/-6.70	-3.66/-1.57	-0.95/-3.00	-2.04/-2.13	-1.14/-0.88	1.29/0.48	-0.05/-0.55	0.18/1.87	1.48/2.61	3.97/2.52	1.32/-0.76	-0.17/-0.23	-0.08/-2.50	0.18/0.41	-1.81/-2.79	-1.47/-6.51	-6.15/-4.02	-4.24/-4.33	-5.17/-5.24	-2.04/-0.61	-0.76/-1.16	-3.83/-3.52	-5.11/-7.79	-7.00/-6.03
Θ(82.5°)	-5.97/-8.49	-6.59/-2.61	-2.01/-3.22	-2.01/-3.22	-1.84/-2.04	0.44/-0.52	-0.81/-3.13	-1.74/0.75	0.18/1.26	1.83/0.98	1.24/-0.82	-1.53/-1.56	-1.74/-4.28	-1.77/-0.85	-2.42/-3.01	-1.81/-4.63	-4.91/-3.98	-5.38/-4.48	-4.52/-5.27	-1.80/-1.20	-1.49/-2.34	-4.31/-3.43	-5.38/-9.91	-7.25/-6.74
Θ(90°)	-6.55/-9.40	-10.07/-4.05	-3.96/-4.61	-5.36/-2.66	-3.31/-3.26	-1.00/-2.49	-2.37/-6.26	-4.40/-1.41	-1.83/-0.75	-1.02/-1.45	0.08/-1.64	-2.16/-3.09	-2.66/-5.15	-4.88/-3.77	-3.93/-5.35	-3.50/-5.89	-4.82/-5.74	-5.31/-6.09	-5.33/-6.68	-4.23/-3.19	-3.32/-5.35	-7.26/-5.44	-6.39/-10.35	-6.92/-6.16
Θ(97.5°)	-7.88/-8.89	-8.59/-4.29	-6.45/-5.57	-6.37/-3.10	-6.31/-4.06	-2.93/-4.59	-4.66/-8.71	-6.09/-4.04	-3.85/-3.46	-3.30/-3.97	-2.03/-4.60	-7.22/-5.49	-6.71/-5.95	-6.70/-6.31	-7.36/-6.88	-5.99/-5.81	-6.11/-9.59	-7.44/-9.93	-6.09/-8.50	-6.37/-6.08	-4.97/-7.66	-7.68/-6.59	-7.82/-10.48	-7.42/-5.72
Θ(105°)	-7.93/-8.09	-6.59/-4.90	-8.00/-6.21	-5.95/-5.24	-8.56/-6.52	-5.45/-5.27	-6.42/-7.70	-7.99/-6.60	-6.09/-6.26	-4.99/-5.78	-4.51/-6.72	-10.83/-10.20	-10.89/-8.24	-6.76/-7.08	-9.95/-11.40	-9.57/-9.21	-9.11/-14.87	-9.21/-12.41	-12.55/-8.37	-11.22/-10.23	-6.75/-8.71	-7.80/-5.63	-9.25/-13.65	-9.54/-8.29
Θ(112.5°)	-8.83/-6.90	-6.23/-6.05	-7.29/-8.22	-7.79/-9.24	-11.05/-8.42	-8.21/-6.05	-8.29/-8.07	-10.97/-8.75	-8.53/-11.97	-6.27/-6.69	-10.88/-14.78	-13.62/-9.39	-9.31/-10.46	-7.11/-9.49	-8.39/-13.19	-9.45/-13.05	-15.40/-14.38	-8.97/-10.49	-15.44/-10.74	-9.63/-9.37	-7.68/-8.68	-7.43/-6.84	-11.31/-13.88	-10.70/-12.41
Θ(120°)	-10.85/-8.57	-9.74/-11.47	-8.29/-11.92	-12.25/-12.08	-12.11/-12.15	-8.30/-7.52	-9.34/-12.08	-14.60/-12.55	-10.61/-9.33	-8.87/-9.08	-15.33/-14.59	-9.58/-9.87	-8.91/-11.16	-5.93/-6.33	-8.24/-13.90	-8.06/-13.26	-15.97/-12.89	-13.17/-9.70	-10.63/-12.26	-9.55/-8.16	-13.10/-8.16	-11.18/-14.07	-14.08/-11.94	-13.68/-11.12
Θ(127.5°)	-11.54/-12.39	-15.22/-13.13	-11.54/-14.20	-9.64/-11.38	-13.53/-10.27	-6.99/-11.76	-9.42/-10.45	-11.22/-9.91	-10.20/-8.78	-13.44/-12.85	-10.64/-12.13	-8.64/-12.11	-11.15/-10.18	-9.03/-14.77	-10.82/-14.75	-8.64/-8.23	-12.71/-15.03	-15.33/-10.99	-10.65/-14.25	-11.98/-8.28	-6.69/-7.77	-10.89/-11.94	-11.33/-13.91	-12.99/-10.10
Θ(135°)	-9.20/-10.35	-12.39/-9.72	-11.19/-10.39	-12.17/-13.04	-9.83/-10.80	-13.57/-14.18	-7.91/-9.90	-14.77/-12.93	-12.43/-13.28	-11.36/-10.15	-10.77/-13.21	-14.22/-14.54	-15.57/-15.47	-10.31/-11.40	-8.36/-8.96	-8.75/-12.24	-11.49/-13.17	-13.77/-13.52	-12.82/-13.95	-13.53/-13.44	-9.91/-10.30	-11.33/-13.69	-12.31/-15.84	-14.47/-11.18
Θ(142.5°)	-10.80/-9.71	-9.52/-12.16	-12.71/-11.92	-12.90/-9.60	-10.46/-15.54	-12.51/-13.35	-9.93/-11.27	-14.09/-13.49	-12.51/-14.04	-10.96/-11.18	-15.31/-13.33	-13.37/-14.52	-12.77/-14.12	-12.54/-12.84	-12.12/-13.20	-11.50/-12.83	-12.77/-10.62	-11.02/-15.44	-14.93/-10.68	-8.66/-11.91	-15.53/-14.99	-14.77/-10.71	-9.75/-11.82	-11.44/-11.31
Θ(150°)	-12.71/-15.58	-15.27/-14.04	-11.44/-14.06	-16.18/-9.90	-10.22/-13.30	-9.87/-9.63	-14.48/-14.33	-10.71/-12.23	-14.33/-14.63	-10.32/-9.10	-10.03/-13.36	-15.61/-13.79	-10.81/-14.02	-15.68/-13.48	-15.18/-11.53	-9.93/-15.01	-13.49/-11.95	-15.68/-13.48	-14.02/-12.55	-12.72/-14.43	-15.48/-15.35	-15.57/-13.48	-11.37/-12.39	
Θ(157.5°)	-16.07/-13.59	-13.34/-13.17	-13.31/-16.22	-14.61/-12.52	-14.06/-15.41	-11.87/-9.51	-11.12/-14.90	-15.86/-12.50	-10.71/-10.83	-11.21/-11.15	-10.82/-11.81	-13.01/-12.02	-11.41/-12.94	-14.37/-15.37	-14.13/-14.74	-15.42/-15.15	-14.80/-12.88	-10.50/-9.53	-9.65/-10.84	-14.51/-15.46	-13.69/-13.54	-13.57/-11.91	-13.08/-14.98	-15.08/-15.55
Θ(165°)	-15.40/-15.03	-15.55/-14.51	-14.25/-13.62	-13.59/-13.43	-14.26/-14.44	-12.17/-12.25	-8.36/-8.21	-9.60/-11.57	-11.39/-9.49	-8.88/-9.87	-12.40/-15.36	-15.56/-14.79	-16.00/-14.84	-11.91/-9.68	-10.23/-13.29	-14.64/-15.87	-14.34/-14.94	-15.91/-15.78	-16.04/-14.89	-13.67/-14.60	-15.94/-14.82	-14.37/-15.28	-15.42/-15.14	-15.69/-15.48
Θ(172.5°)	-14.34/-14.13	-12.62/-11.22	-10.47/-10.13	-10.35/-10.94	-11.49/-13.36	-13.78/-12.83	-12.83/-12.24	-12.57/-13.77	-14.10/-14.61	-13.87/-13.37	-14.32/-15.81	-14.66/-14.10	-13.08/-12.78	-12.54/-13.29	-14.66/-15.31	-15.04/-14.91	-15.97/-14.88	-14.77/-14.88	-12.76/-11.71	-10.07/-10.34	-10.69/-11.49	-11.39/-11.33	-12.74/-13.72	-13.96/-14.13
Θ(180°)	-11.37/-11.51	-11.92/-11.91	-12.08/-13.19	-13.46/-12.67	-12.03/-11.29	-10.80/-11.15	-11.31/-11.76	-11.87/-11.79	-11.70/-11.96	-12.21/-11.61	-11.75/-11.87	-12.38/-13.65	-12.78/-11.21	-9.72/-6.68	-8.13/-8.29	-10.71/-11.89	-12.35/-13.94	-15.02/-14.71	-14.33/-12.83	-11.73/-10.84	-10.32/-10.15	-10.25/-11.42	-12.27/-12.17	
Freq(Hz)	5.785GPol.	TotalAnt. 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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°)	-0.87/-0.89	-0.63/-0.45	-0.42/-0.51	-0.55/-0.68	-0.79/-0.72	-0.60/-0.82	-0.99/-1.03	-0.87/-0.76	-0.64/-0.45	-0.84/-0.50	-1.23/-1.26	-1.28/-1.26	-1.18/-1.40	-1.16/-1.01	-0.84/-0.73	-0.81/-0.74	-0.65/-0.50	-0.36/-0.51	-0.47/-0.63	-0.57/-0.43	-0.52/-0.49	-0.64/-0.79	-0.70/-0.89	
Θ(7.5°)	-3.35/-3.08	-2.98/-2.74	-2.62/-2.47	-2.68/-2.81	-3.21/-3.38	-3.59/-3.83	-4.06/-3.84	-3.58/-3.20	-2.87/-2.37	-2.17/-1.88	-1.85/-1.50	-1.50/-1.37	-1.18/-1.06	-0.86/-0.74	-0.81/-0.91	-1.26/-1.53	-1.89/-2.24	-2.73/-3.22	-3.22/-3.40	-3.45/-3.31	-3.20/-2.84	-3.09/-3.38	-3.35/-3.38	-3.38/-3.47
Θ(15°)	-4.59/-4.60	-4.03/-3.38	-2.86/-1.98	-2.11/-2.47	-3.38/-4.34	-4.89/-4.49	-3.39/-1.95	-1.26/-0.88	-1.19/-1.89	-2.60/-3.07	-2.94/-2.47	-1.96/-1.47	-1.16/-1.23	-1.40/-1.47	-1.50/-1.65	-2.07/-2.59	-3.70/-4.68	-4.87/-4.19	-3.25/-2.55	-1.94/-1.86	-1.79/-1.91	-2.23/-2.76	-3.30/-4.12	-4.56/-4.57
Θ(22.5°)	-1.28/-1.36	-2.26/-3.02	-3.24/-2.33	-1.59/-1.56	-1.68/-1.44	-0.97/-0.71	-0.49/-0.53	-0.29/-0.15	-0.44/-1.32	-2.60/-3.51	-3.95/-3.94	-2.54/-0.82	-0.24/-0.34	-3.62/-2.53	-3.72/-3.45	-3.36/-4.00	-4.23/-4.21	-2.35/-2.35	-2.78/-3.24	-2.66/-1.97	-1.53/-1.27	-1.33/-1.54	-1.68/-1.92	-1.82/-1.60
Θ(30°)	-2.27/-2.18	-1.58/-1.29	-2.22/-2.41	-1.65/-2.58	-2.97/-0.85	0.23/-0.28	-1.59/-2.77	-1.89/-0.80	-0.56/-0.80	-0.26/0.83	1.24/0.79	0.00/-1.37	-2.16/-1.27	-0.94/-2.62	-6.64/-7.07	-6.62/-8.78	-8.30/-6.09	-4.93/-4.53	-4.00/-3.74	-2.63/-1.72	-1.62/-2.08	-2.75/-2.61	-0.96/-0.15	-0.38/-1.33
Θ(37.5°)	-0.57/-1.35	-2.90/-2.90	-2.50/-2.10	-0.52/-2.26	-2.88/0.43	1.01/0.41	0.39/0.50	0.69/-0.01	-1.82/-2.90	-2.43/-0.64	-0.58/-1.91	-2.67/-1.71	-1.78/-0.55	0.93/-0.30	-4.18/-5.33	-7.48/-13.62	-13.51/-10.32	-7.24/-6.03	-3.47/-1.47	-0.85/-0.82	-0.59/-0.95	-1.51/-1.78	-0.39/0.54	0.69/0.10
Θ(45°)	0.65/-1.57	0.63/-1.76	-1.14/-2.20	-2.59/-2.33	-2.43/-3.71	-1.52/-1.50	0.73/0.78	0.74/1.67	1.73/1.79	1.14/-0.30	0.05/0.68	0.27/-0.70	0.17/0.53	0.83/0.23	-0.63/-1.06	-1.23/-1.92	-4.69/-8.03	-9.16/-8.46	-8.67/-4.90	-1.73/-0.97	-1.54/-1.23	0.18/0.35	-0.48/-0.59	-0.29/-0.37
Θ(52.5°)	-1.41/0.81	1.89/-0.71	-1.97/-3.08	-2.99/-1.91	-1.38/0.41	0.31/-0.75	-0.50/2.07	0.30/0.30	0.89/0.08	1.25/1.54	1.60/2.08	2.80/0.73	-0.77/-2.13	-4.70/-3.54	-1.09/-2.10	-6.61/-6.90	-4.94/-4.02	-7.01/-8.45	-4.19/-3.43	-2.69/-0.23	1.03/0.20	-0.35/-0.54	-2.55/-3.56	-3.70/-1.95
Θ(60°)	-4.43/-0.94	1.82/-1.38	-1.34/-1.79	-2.93/-0.60	-3.37/-1.58	0.47/-0.92	0.63/3.24	0.82/-1.34	1.61/0.43	2.76/-2.10	-0.45/0.96	2.47/0.17	-3.30/-6.04	-2.50/-2.28	-2.77/-1.46	-4.66/-6.16	-11.20/-6.80	-9.54/-5.57	-6.78/-4.59	-1.86/-0.64	0.34/-0.74	-0.98/-0.77	-5.04/-7.43	-5.14/-3.82
Θ(67.5°)	-6.69/-2.22	-0.20/2.02	0.15/-0.16	-2.36/0.80	-1.41/-1.76	1.20/0.02	1.91/3.07	1.57/2.88	1.79/1.36	4.58/2.26	0.11/0.76	0.89/-1.50	-3.86/-5.12	0.59/0.89	-1.36/-0.08	-4.44/-2.51	-4.48/-4.23	-6.81/-2.35	-6.23/-4.07	-2.69/-2.89	-1.19/-1.20	-0.72/0.28	-2.19/-4.93	-3.86/-5.84
Θ(7																								

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 $\Theta(0-180)\Phi(270)$





Total Gain Data

Freq(Hz)	6.1750Pol	TotalAnt. 1	+	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-				
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°)	-12.69/-12.47	-12.59/-12.36	-13.18/-13.18	-13.33/-13.82	-13.49/-12.55	-12.45/-12.20	-12.32/-12.79	-12.56/-13.35	-12.59/-12.04	-12.04/-12.21	-12.74/-11.97	-11.73/-12.11	-12.29/-12.28	-11.89/-11.64	-11.61/-11.81	-12.15/-12.21	-11.73/-11.02	-10.79/-11.81	-12.89/-12.90	-11.69/-10.67	-10.70/-11.78	-12.75/-12.60	-11.65/-11.28	-12.10/-12.84
Θ(7.5°)	-10.49/-10.07	-9.75/-9.67	-9.59/-9.51	-9.47/-9.20	-8.84/-8.64	-9.10/-9.68	-10.22/-11.03	-11.22/-11.66	-12.31/-11.71	-11.73/-12.41	-13.08/-11.97	-12.08/-12.35	-12.12/-12.78	-12.68/-11.80	-12.36/-9.40	-7.47/-4.73	-8.76/-8.88	-8.86/-8.80	-8.14/-7.45	-7.49/-7.46	-7.83/-8.30	-8.71/-9.25	-9.55/-10.31	-10.98/-10.77
Θ(15°)	-10.64/-10.26	-9.21/-9.37	-9.07/-8.42	-7.82/-6.94	-6.54/-6.06	-5.71/-5.41	-6.00/-7.77	-10.56/-13.83	-14.80/-13.70	-12.31/-10.62	-9.23/-8.31	-8.54/-8.79	-10.01/-9.85	-7.84/-5.65	-4.76/-4.29	-4.46/-5.11	-6.01/-6.33	-5.68/-4.34	-3.11/-2.46	-2.17/-2.06	-1.92/-1.50	-1.34/-1.58	-2.46/-3.92	-6.22/-8.62
Θ(22.5°)	-8.17/-9.20	-7.68/-6.54	-5.97/-5.34	-4.47/-3.54	-2.96/-2.47	-2.41/-2.90	-4.22/-6.19	-7.99/-7.38	-5.99/-4.97	-4.39/-3.91	-3.47/-2.98	-2.77/-2.68	-2.33/-1.65	-1.32/-1.54	-2.06/-2.56	-3.32/-4.76	-6.40/-6.48	-5.23/-3.39	-1.84/-0.97	-0.97/-1.46	-1.70/-1.75	-2.01/-2.12	-2.02/-2.35	-3.45/-2.54
Θ(30°)	-2.74/-2.14	-0.69/-0.30	0.81/-0.63	0.42/-2.00	-2.99/-2.80	-2.64/-2.76	-3.42/-3.47	-5.36/-5.08	-3.72/-2.41	-6.31/-3.76	-2.70/-3.06	-1.77/-0.16	1.19/-1.76	0.93/-1.74	0.23/-0.79	-5.94/-5.85	-4.82/-3.62	-2.85/-2.82	-3.62/-4.87	-5.06/-4.02	-2.88/-1.79	-1.42/-2.41	-2.92/-2.60	
Θ(37.5°)	-1.75/-2.02	-1.59/-0.48	0.65/-1.11	0.36/-1.68	-4.72/-6.81	-5.09/-3.12	-2.02/-1.46	-1.49/-1.44	-1.45/-1.73	-2.10/-2.79	-3.63/-4.32	-2.49/-0.09	1.60/-1.65	0.78/-0.05	-1.00/-1.10	-0.94/-1.01	-0.500/5.4	1.360/5.0	-1.28/-1.64	-0.271/0.2	1.151/0.5	0.970/2.7	-0.28/-1.03	-1.68/-1.77
Θ(45°)	-5.27/-6.52	-6.57/-4.62	-2.09/-0.21	1.06/-1.28	-3.62/-4.31	-3.14/-1.56	0.171/1.77	2.381/9.8	1.15/-0.15	1.93/-3.90	-4.37/-0.41	-2.74/-0.82	0.890/7.2	-0.57/-2.32	-2.13/-2.07	-3.31/-4.87	-4.51/-2.09	-0.86/-1.81	-3.61/-3.77	-2.09/-0.35	0.16/-0.28	-0.010/0.5	-0.60/-1.90	-3.29/-4.77
Θ(52.5°)	-5.52/-3.35	-1.81/-0.89	0.38/-1.53	0.08/-0.78	-1.03/-0.81	0.81/-0.05	2.41/-5.5	3.83/-6.6	3.09/-1.97	0.790/3.6	-0.80/-1.04	-0.560/1.8	1.020/5.8	-0.29/-0.92	-0.97/-3.50	-3.71/-3.31	-3.47/-3.00	-2.76/-2.42	-4.00/-2.71	-2.84/-4.07	-4.07/-3.00	-1.71/-1.35	-2.79/-4.87	
Θ(60°)	-1.46/-0.02	1.84/-2.62	3.14/-3.13	2.18/-0.32	0.16/-1.60	2.59/-2.92	3.40/-3.84	3.75/-3.58	3.96/-3.16	2.14/-2.4	2.59/-2.1	1.030/9.6	1.44/-1.40	1.26/-0.13	0.57/-0.87	0.64/-1.49	0.99/-0.39	-2.31/-3.94	-4.28/-5.31	-4.25/-3.25	-2.38/-1.03	0.08/-0.44	-0.02/-1.45	0.47/-0.77
Θ(67.5°)	0.15/-1.41	2.91/-3.26	3.26/-2.75	1.25/-1.27	-0.33/-1.42	1.91/-2.13	2.65/-2.32	2.25/-2.33	2.64/-2.70	1.53/-1.51	1.80/-2.01	1.62/-0.94	0.59/-1.33	1.88/-1.67	0.74/-0.55	1.39/-2.37	1.84/-0.58	-0.82/-2.60	-2.87/-3.63	-2.58/-0.88				



Antenna Pattern of 6GHz

Appendix E

Θ (22.5°)	-1.67/-0.28	0.54/1.06	1.25/0.64	-0.64/-2.19	-3.72/-5.45	-7.35/-8.61	-8.19/-6.47	-4.63/-3.26	-2.60/-2.40	-2.03/-1.85	-1.91/-2.32	-2.60/-2.48	-2.65/-3.05	-3.06/-2.33	-1.97/-2.10	-2.22/-2.04	-1.43/-0.65	-0.30/-0.19	0.11/0.68	1.29/1.66	1.67/1.73	1.61/1.04	0.04/-1.29	-2.98/-3.59
Θ (30°)	-2.25/-0.71	-0.14/-0.20	-0.44/-1.87	-3.83/-5.18	-5.92/-6.04	-5.02/-3.78	-2.26/-0.56	0.96/1.76	1.66/0.50	-1.43/-2.56	-2.95/-3.13	-2.75/-1.98	-0.94/-0.4	0.28/-0.22	-1.12/-1.93	-1.82/-1.20	0.06/0.68	0.69/1.09	1.82/2.58	3.18/3.42	3.11/2.26	1.13/-0.17	-1.28/-1.50	-1.28/-1.89
Θ (37.5°)	0.59/-0.68	0.38/0.30	1.29/0.95	-0.02/-1.52	-3.37/-3.86	-2.46/-0.63	0.67/1.91	3.04/3.47	3.01/0.60	-0.23/-0.46	-1.76/-4.31	-3.12/-1.58	0.43/1.94	2.14/1.58	0.52/-1.15	-2.38/-2.65	-2.24/-1.74	-1.69/-1.41	-0.35/-1.13	1.83/1.41	0.93/0.88	0.42/-0.55	-1.22/-0.88	0.18/1.30
Θ (45°)	0.14/-0.68	0.12/1.29	2.50/2.30	1.45/0.71	-0.49/-2.77	-4.03/-2.60	-1.16/-0.69	-0.13/0.65	1.13/0.71	-0.72/-2.74	-3.62/-2.93	-2.28/-1.10	0.82/2.53	3.34/3.54	3.27/1.46	0.47/-0.37	0.11/0.53	0.77/0.83	1.55/2.10	1.61/0.53	-0.65/-2.33	-4.96/-6.94	-7.04/-4.43	-2.10/-0.54
Θ (52.5°)	-2.88/-2.88	-1.84/-1.04	-0.60/-1.43	-3.03/-3.61	-3.70/-5.05	-7.22/-6.73	-3.70/-1.67	-1.22/-1.02	-0.19/0.65	0.49/-0.72	-2.33/-2.48	-2.10/-1.16	1.08/2.65	3.48/3.70	2.47/1.59	1.74/1.73	1.40/1.74	1.40/1.74	1.97/1.71	1.76/1.97	1.23/-0.75	-4.81/-9.25	-6.75/-5.54	-4.71/-4.39
Θ (60°)	-1.23/-1.69	-2.50/-2.10	-1.44/-0.84	-0.78/-0.61	-0.63/-0.36	-0.79/-2.62	-1.92/0.84	1.70/1.01	0.46/1.45	-0.79/-2.60	-1.11/-2.47	-2.89/-2.03	3.33/3.44	3.34/2.56	1.95/0.93	1.32/1.04	0.89/1.21	0.97/0.62	1.12/1.81	1.64/0.26	-1.45/-2.61	-1.71/-1.02	-0.73/-0.42	
Θ (67.5°)	0.32/-1.33	-2.49/-0.79	1.02/2.16	2.66/2.99	2.61/2.85	1.08/-0.68	-0.47/1.56	2.25/1.37	-0.14/0.70	1.04/-0.23	-1.82/-2.94	-3.43/-2.54	0.11/1.38	1.95/1.98	2.23/1.26	0.19/-0.88	-0.76/-0.74	-0.23/0.77	0.53/0.36	1.20/2.27	2.14/0.83	-0.46/-1.29	-0.28/0.42	1.07/1.50
Θ (75°)	-0.48/-1.71	-3.49/-1.62	0.80/2.35	2.73/2.64	3.17/2.93	1.14/0.41	-0.03/-1.1	0.92/0.34	-1.33/-0.80	0.01/-1.78	-3.17/-3.74	-4.14/-3.54	-0.99/-0.09	0.80/0.46	0.30/-0.49	-1.73/-3.20	-2.84/-2.28	-1.91/-0.59	-0.06/0.04	1.18/2.46	2.11/0.47	-1.34/-2.51	-1.68/-0.82	-0.35/0.78
Θ (82.5°)	-2.69/-3.24	-4.81/-4.21	-1.99/0.13	0.85/0.77	2.25/0.79	0.13/-0.77	-1.81/-1.15	-1.02/-3.19	-4.17/-3.34	-2.70/-4.02	-4.65/-4.49	-4.50/-4.17	-2.90/-2.17	-0.43/-0.55	-1.62/-3.30	-6.20/-6.21	-4.74/-2.90	-2.98/-2.22	-1.63/-1.39	-0.05/-1.16	0.64/-0.97	-2.95/-4.45	-3.66/-2.61	-3.14/-1.35
Θ (90°)	-6.00/-5.78	-6.45/-7.69	-5.96/-3.50	-2.36/-2.34	-0.39/-2.06	-1.08/-2.82	-5.16/-5.77	-3.78/-6.05	-6.73/-5.68	-5.82/-5.53	-4.92/-5.03	-6.15/-7.15	-6.59/-5.13	-2.42/-2.26	-3.99/-6.33	-9.00/-9.78	-6.37/-5.30	-5.20/-5.62	-5.05/-3.86	-2.53/-0.56	-1.02/-3.34	-5.82/-7.74	-7.30/-5.30	-6.07/4.05
Θ (97.5°)	-8.45/-8.82	-8.70/-11.02	-8.26/-6.67	-5.92/-5.73	-3.37/-5.30	-3.47/-5.63	-8.07/-9.57	-6.54/-8.59	-8.41/-7.83	-8.29/-7.78	-7.42/-8.27	-9.63/-9.04	-9.00/-7.47	-4.66/-6.40	-5.92/-8.64	-11.39/-14.01	-9.34/-8.74	-7.68/-8.77	-9.75/-7.12	-13.65/-11.46	-11.21/-11.20	-9.24/-13.29	-15.95/-14.48	-11.85/-9.90
Θ (105°)	-10.21/-11.46	-10.48/-11.97	-11.95/-10.08	-8.88/-8.94	-7.85/-9.27	-6.40/-8.29	-10.05/-11.23	-8.43/-9.96	-9.59/-10.16	-11.30/-10.37	-9.72/-13.00	-12.89/-10.04	-11.05/-10.19	-8.49/-8.22	-7.17/-9.88	-11.67/-15.64	-13.78/-14.49	-12.60/-11.45	-13.65/-11.46	-11.21/-11.20	-9.24/-13.29	-15.95/-14.48	-11.85/-9.90	-11.52/-8.63
Θ (112.5°)	-14.02/-15.70	-15.89/-14.93	-14.75/-11.32	-10.16/-10.68	-12.29/-10.02	-9.34/-13.38	-14.16/-13.86	-11.93/-12.18	-13.85/-15.17	-13.71/-13.15	-13.20/-15.05	-11.72/-10.11	-13.66/-14.54	-12.56/-10.03	-9.32/-10.21	-11.19/-15.29	-14.91/-14.33	-12.69/-13.07	-13.62/-13.54	-15.86/-14.64	-10.44/-13.09	-14.28/-15.80	-12.10/-12.35	-15.75/-15.05
Θ (120°)	-15.68/-15.42	-15.82/-13.48	-12.52/-14.22	-12.98/-14.90	-11.62/-13.63	-12.01/-13.21	-13.69/-12.30	-12.13/-15.75	-15.22/-15.43	-15.73/-14.46	-15.64/-14.76	-13.00/-11.70	-14.51/-14.58	-14.94/-12.39	-12.65/-11.38	-12.33/-13.90	-13.84/-14.29	-12.81/-10.48	-13.90/-15.33	-9.21/-9.81	-9.59/-13.97	-13.97/-14.37	-15.85/-15.31	
Θ (127.5°)	-14.55/-11.26	-14.35/-14.74	-14.74/-14.16	-13.25/-15.16	-14.30/-12.70	-14.20/-16.28	-15.66/-14.79	-14.80/-13.45	-14.42/-15.22	-15.40/-15.26	-15.12/-15.37	-14.58/-14.53	-15.10/-13.28	-14.72/-12.73	-15.86/-13.05	-10.92/-11.96	-15.63/-15.97	-15.84/-15.69	-14.68/-14.66	-15.48/-14.63	-15.90/-15.66	-15.61/-14.97	-15.27/-14.37	-15.22/-12.50
Θ (135°)	-15.64/-14.90	-15.16/-15.30	-14.19/-13.43	-14.06/-14.74	-15.91/-15.36	-15.85/-15.45	-15.38/-15.31	-16.32/-15.62	-15.20/-14.97	-14.99/-14.56	-13.52/-15.56	-15.27/-15.38	-15.35/-14.46	-15.16/-15.81	-16.13/-14.96	-12.65/-12.93	-14.86/-14.09	-15.16/-15.41	-15.42/-15.28	-15.76/-15.30	-15.43/-15.59	-14.09/-15.00	-15.26/-14.70	-15.27/-15.75
Θ (142.5°)	-15.58/-16.12	-15.57/-15.55	-15.76/-15.13	-16.01/-15.13	-15.56/-15.99	-14.26/-15.58	-14.99/-15.71	-14.65/-15.86	-16.19/-15.27	-15.35/-14.95	-14.63/-15.64	-15.03/-14.64	-13.17/-13.32	-14.94/-14.93	-13.13/-15.76	-15.85/-15.65	-15.17/-16.54	-13.60/-13.19	-12.54/-15.79	-15.48/-15.11	-13.99/-15.33	-15.25/-15.32	-15.09/-15.61	-12.06/-12.05
Θ (150°)	-15.02/-14.91	-15.09/-15.35	-13.91/-12.13	-13.90/-13.95	-14.87/-15.28	-15.80/-14.19	-14.96/-15.58	-15.38/-13.58	-14.16/-16.07	-14.54/-13.74	-14.67/-14.36	-13.71/-14.57	-13.83/-14.57	-15.62/-14.56	-14.91/-15.14	-15.44/-15.18	-15.27/-15.99	-15.44/-15.08	-13.72/-14.59	-15.27/-15.43	-16.16/-15.43	-14.86/-13.23		
Θ (157.5°)	-13.38/-15.35	-14.85/-14.90	-15.48/-15.22	-14.86/-15.57	-14.81/-15.66	-15.13/-15.80	-14.19/-13.93	-14.27/-13.83	-12.68/-13.43	-14.81/-15.36	-14.26/-13.95	-13.59/-13.27	-14.49/-14.65	-13.21/-14.78	-15.50/-15.78	-14.85/-14.07	-15.22/-15.54	-14.07/-13.78	-15.78/-15.63	-15.19/-14.82	-14.98/-15.29	-15.55/-15.99	-14.07/-12.27	-13.97/-16.02
Θ (165°)	-16.15/-15.52	-16.05/-15.08	-15.37/-15.59	-15.25/-15.45	-15.58/-14.44	-15.18/-14.95	-14.34/-13.70	-15.54/-15.63	-15.27/-15.03	-14.85/-15.11	-15.37/-15.54	-14.27/-14.55	-15.73/-15.47	-15.24/-15.69	-15.06/-16.16	-15.31/-14.96	-15.41/-14.84	-14.45/-15.34	-15.59/-15.37	-14.02/-13.53	-14.33/-15.75	-15.04/-14.96	-15.71/-14.89	-15.95/-14.30
Θ (172.5°)	-15.93/-14.53	-14.90/-15.24	-15.65/-15.53	-15.65/-15.68	-15.85/-15.17	-15.29/-15.71	-14.55/-15.30	-15.57/-15.00	-15.48/-15.14	-14.19/-14.15	-14.39/-15.17	-14.89/-15.03	-15.26/-15.32	-15.57/-15.47	-15.34/-14.68	-15.20/-15.62	-15.73/-14.79	-14.87/-15.50	-14.16/-14.21	-15.00/-15.68	-15.35/-15.20			
Θ (180°)	-12.89/-14.04	-14.58/-15.73	-15.14/-14.94	-15.91/-15.81	-15.67/-14.90	-14.98/-15.90	-15.84/-15.85	-15.08/-15.82	-15.37/-14.73	-14.68/-15.64	-15.84/-15.13	-15.24/-14.63	-13.37/-13.54	-13.67/-14.03	-14.92/-15.29	-15.52/-15.36	-16.17/-15.24	-15.36/-15.52	-14.57/-14.32	-14.11/-12.86	-12.18/-12.27	-12.66/-12.68		
Freq(Hz)	6.475GPol.	TotalAnt. 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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°)	-6.40/-6.53	-6.63/-6.47	-6.37/-6.07	-5.67/-5.55	-5.37/-5.18	-4.82/-4.73	-4.68/-4.60	-4.48/-4.37	-4.59/-4.92	-5.64/-5.94	-5.85/-5.38	-5.33/-5.67	-5.31/-6.44	-6.27/-5.91	-5.49/-5.47	-5.42/-5.62	-5.66/-5.60	-5.64/-5.54	-5.57/-5.64	-5.65/-5.74	-5.92/-5.65	-5.25/-5.48	-5.76/-5.83	-6.11/-6.00
Θ (7.5°)	-5.56/-5.79	-6.22/-6.25	-6.33/-6.58	-6.80/-7.05	-7.13/-7.14	-7.09/-7.05	-7.02/-6.83	-6.43/-6.08	-5.81/-5.87	-5.91/-6.02	-5.73/-5.02	-4.28/-3.95	-3.84/-3.87	-4.17/-4.54	-4.65/-4.75	-4.78/-4.89	-4.91/-5.04	-5.18/-5.11	-5.12/-4.89	-4.88/-4.56	-4.49/-4.53	-4.39/-4.47	-4.58/-4.75	-4.93/-5.14
Θ (15°)	-5.55/-5.76	-5.65/-4.99	-5.10/-5.07	-6.60/-6.74	-8.37/-8.58	-8.39/-8.28	-8.27/-8.07	-4.44/-3.34	-2.76/-2.74	-3.41/-4.59	-4.89/-4.46	-4.67/-5.30	-6.45/-7.24	-7.30/-6.62	-5.43/-4.39	-4.03/-3.96	-3.91/-4.23	-4.36/-4.39	-4.03/-3.78	-3.39/-3.52	-3.84/-4.05	-4.29/-4.18	-4.51/-5.13	
Θ (22.5°)	-1.18/-0.08	0.56/0.84	0.41/-0.86	-2.56/-4.28	-6.07/-7.35	-8.16/-7.73	-5.68/-3.94	-2.33/-1.56	-1.48/-1.38	-0.91/-0.42	-0.35/-1.28	-2.24/-2.83	-3.13/-3.07	-6.42/-5.25	-2.19/-2.41	-2.63/-2.43	-2.40/-1.83	-1.42/-1.27	-1.18/-0.78	-0.19/0.32	0.47/0.18	-0.38/-1.31	-2.78/-4.28	-4.58/-3.11
Θ (30°)	-1.13/0.54	0.77/0.42	-0.84/-2.95	-4.40/-4.94	-4.94/-4.97	-4.58/-3.91	-2.14/0.07	1.68/2.14	1.43/0.14	-0.92/-0.60	-0.10/-0.05	-0.44/-0.65	-0.51/0.07	1.19/1.35	1.24/1.32	1.68/2.00	2.02/2.10	1.90/1.58	1.51/1.69	2.16/2.47	2.24/1.11	-0.69/-2.23	-2.73/-2.10	-2.09/-2.55
Θ (37.5°)	0.77/-0.43	-0.79/-0.90	-0.84/-2.24	-3.55/-3.72	-2.40/-1.28	-0.61/-0.31	0.12/1.32	2.56/2.88	2.00/0.08	-1.53/-2.15	-1.87/-1.44	-1.51/-0.82	0.18/1.22	1.74/1.41	1.79/1.67	0.94/-0.26	-1.58/-1.57	-0.91/-0.06	0.63/1.70	2.04/0.71	0.26/0.21	0.66/0.61	0.18/0.31	1.21/1.81
Θ (45°)	0.56/-1.10	-0.72/0.76	2.00/2.06	1.58/1.12	0.69/-0.24	-0.47/-0.97	-1.80/-2.62	-2.30/-1.50	-1.07/-1.67	-3.27/-3.95	-3.74/-2.51	-1.38/-0.00	0.87/1.31	1.24/1.11	1.41/-0.58	-1.04/-1.44	-0.38/0.58	1.69/2.34	2.08/0.31	-2.10/-2.94	-4.10/-3.52	-2.97/-1.15	0.59/1.26	
Θ (52.5°)	-3.33/-3.56	-2.89/-1.99	-1.36/-1.60	-2.09/-1.70	-1.69/-2.18	-2.95/-0.42	-4.89/-6.68	-7.07/-5.31	-3.10/-2.18	-2.74/-2.95	-2.05/-1.03	-0.13/0.93	1.47/1.59	1.93/2.78	2.79/1.81	1.89/1.53	1.62/0.36	0.04/0.59	1.54/1.76	1.94/1.99	0.91/-0.81	-3.61/-7.24	-8.64/-5.29	-2.59/-2.47
Θ (60°)	-4.61/-4.28	-4.25/-4.92	-3.71/-4.96	-6.69/-3.32	-1.31/0.53	-0.84/-2.99	-2.72/-1.72	-0.72/0.19	0.06/-0.21	-0.38/-0.60	-0.06/0.17	0.32/0.94	1.83/2.98	3.23/2.43	2.09/1.34	2.15/0.87	0.26/0.29	-0.09/0.20	0.91/1.64	1.17/-0.02	-1.17/-1.34	-0.46/0.06	-0.43/-2.37	
Θ (67.5°)	-2.24/-1.98	-1.96/-1.01	0.36/0.43	0.61/1.26	2.65/2.86	1.96/-0.11	0.06/1.35	1.51/1.42	1.25/0.26	0.73/0.79	0.78/0.30	-1.50/-2.31	-1.07/-0.25	1.54/2.03	2.27/1.49	0.92/0.53	2.31/3.14	1.10/0.69	-1.18/-1.27	0.16/1.95	1.47/0.04	0.09/0.78	1.14/-5.00	0.20/-0.51
Θ (75°																								



Antenna Pattern of 6GHz

Appendix E

Θ(75°)	-1.91/-0.15	0.37/1.22	1.80/1.60	0.80/-0.47	-1.88/-2.08	-2.00/-1.10	-0.13/-0.13	0.99/1.59	2.95/1.76	1.31/1.18	1.130.48	0.98/1.25	0.28/-0.71	-0.24/-0.21	0.73/1.60	1.07/0.83	1.34/-0.36	-1.99/-0.68	-1.34/-0.34	0.34/0.36	0.81/-0.47	-0.67/-1.68	-0.79/-1.50	-1.45/-1.19
Θ(82.5°)	-4.36/-3.19	-2.04/-1.12	-0.49/-1.16	-1.49/-3.19	-4.56/-4.14	-2.96/-3.43	-3.99/-2.85	-0.34/0.10	1.17/-0.37	-0.35/-0.68	-0.61/-1.48	-1.01/-0.63	-1.27/-2.79	-2.93/-3.36	-1.49/-1.03	-1.18/-0.69	0.66/0.01	-1.73/-1.96	-1.73/-1.54	-0.63/-1.11	-1.63/-4.42	-3.16/-3.97	-3.76/-3.98	-4.60/-3.40
Θ(90°)	-4.58/-6.29	-4.45/-4.46	-3.85/-4.50	-4.53/-5.82	-6.58/-6.10	-4.99/-7.39	-8.81/-5.73	-0.30/-2.25	-2.51/-2.60	-2.10/-3.24	-4.07/-5.32	-3.34/-3.00	-6.04/-4.96	-6.01/-7.60	-4.91/-5.11	-3.90/-2.85	-2.35/-3.32	-2.11/-3.99	-2.68/-4.65	-2.42/-2.47	-4.14/-8.47	-6.44/-5.67	-6.70/-7.31	-8.92/-6.08
Θ(97.5°)	-10.92/-9.71	-7.49/-8.28	-7.58/-8.12	-7.40/-8.53	-8.75/-8.70	-8.23/-10.00	-12.62/-7.77	-6.65/-3.84	-5.39/-5.05	-5.09/-6.10	-7.46/-8.60	-5.66/-6.11	-6.74/-7.18	-8.96/-11.68	-8.43/-8.86	-7.65/-5.34	-5.49/-5.24	-5.17/-8.12	-6.51/-8.23	-6.61/-5.78	-8.81/-12.23	-9.37/-9.24	-9.38/-9.13	-12.01/-9.39
Θ(105°)	-13.07/-13.43	-10.41/-11.54	-10.86/-10.83	-10.22/-11.70	-11.30/-12.84	-11.33/-11.35	-12.74/-11.06	-10.20/-9.88	-7.05/-7.12	-8.72/-9.27	-10.13/-11.42	-8.56/-8.85	-8.50/-7.86	-8.42/-13.80	-11.52/-14.28	-12.48/-9.52	-9.99/-12.49	-10.70/-12.05	-13.88/-12.40	-14.18/-10.17	-12.98/-13.64	-11.25/-10.51	-12.72/-12.82	-13.86/-12.16
Θ(112.5°)	-12.33/-14.81	-13.03/-11.35	-10.23/-11.56	-13.25/-13.69	-12.90/-12.82	-13.39/-12.17	-12.95/-15.02	-13.28/-11.00	-9.91/-10.10	-14.24/-9.68	-11.26/-13.70	-11.81/-11.69	-11.63/-10.50	-12.61/-13.96	-15.24/-14.86	-14.66/-9.97	-12.07/-15.86	-15.19/-15.29	-15.70/-14.40	-14.13/-13.26	-14.03/-12.29	-12.17/-12.41	-15.22/-13.15	-13.87/-14.32
Θ(120°)	-15.31/-14.47	-13.25/-11.90	-10.64/-12.01	-13.70/-13.76	-12.71/-13.97	-14.68/-14.65	-15.15/-15.86	-12.92/-13.44	-12.67/-12.50	-14.64/-11.87	-13.96/-13.32	-13.81/-14.30	-11.71/-10.24	-11.90/-15.82	-14.99/-14.89	-13.99/-12.58	-10.54/-15.06	-15.43/-11.06	-11.57/-13.22	-11.63/-10.10	-14.31/-12.47	-13.58/-13.68	-15.65/-14.06	-15.91/-15.73
Θ(127.5°)	-15.16/-14.61	-15.67/-15.00	-16.05/-15.08	-14.92/-15.97	-15.03/-15.49	-16.27/-15.01	-16.14/-13.58	-15.24/-14.95	-14.03/-15.30	-13.12/-12.89	-15.59/-14.02	-14.80/-13.99	-12.21/-11.50	-13.03/-15.62	-14.85/-15.51	-15.80/-14.85	-14.36/-13.35	-15.33/-15.36	-12.46/-12.96	-15.55/-15.22	-13.00/-13.61	-13.31/-15.02	-15.45/-15.06	-15.78/-14.60
Θ(135°)	-15.75/-14.52	-15.58/-15.91	-15.06/-15.86	-15.71/-14.77	-15.19/-14.94	-15.31/-15.37	-15.12/-15.00	-15.27/-14.44	-13.14/-15.62	-15.51/-14.93	-14.64/-13.41	-14.51/-13.29	-13.01/-13.31	-13.88/-13.82	-14.58/-15.55	-14.72/-14.13	-15.27/-15.04	-15.82/-14.83	-14.43/-14.87	-15.52/-15.78	-13.97/-15.65	-15.71/-14.95	-16.23/-15.49	-15.31/-15.17
Θ(142.5°)	-15.27/-16.10	-14.24/-15.65	-15.56/-15.69	-15.62/-14.93	-15.53/-14.93	-15.58/-15.92	-15.49/-15.12	-14.71/-15.61	-14.55/-15.68	-15.86/-14.92	-14.95/-14.81	-13.35/-14.04	-15.77/-14.51	-14.91/-13.49	-14.88/-14.23	-13.82/-11.57	-13.55/-15.17	-15.40/-15.23	-14.91/-15.18	-12.95/-15.24	-15.23/-14.90	-15.42/-15.10	-14.08/-15.77	-15.07/-15.74
Θ(150°)	-15.86/-15.18	-15.55/-15.51	-14.75/-15.18	-15.74/-16.14	-15.60/-14.89	-15.64/-15.39	-15.77/-15.24	-15.87/-15.48	-15.76/-15.14	-15.88/-14.52	-15.61/-15.34	-14.54/-13.04	-13.34/-15.72	-15.33/-15.46	-15.57/-14.96	-14.74/-15.64	-15.03/-15.27	-15.57/-15.92	-15.00/-14.24	-15.60/-15.53	-15.55/-15.81	-14.99/-15.85	-13.35/-15.01	-16.11/-15.46
Θ(157.5°)	-14.74/-15.41	-15.09/-15.63	-15.49/-15.06	-14.84/-15.41	-15.44/-15.80	-15.67/-15.55	-15.41/-15.11	-14.83/-15.15	-14.12/-14.35	-15.25/-15.50	-15.18/-15.39	-15.43/-15.01	-14.02/-14.07	-15.73/-14.76	-15.59/-14.88	-14.73/-15.14	-15.63/-14.75	-14.54/-15.53	-15.22/-15.42	-14.88/-15.34	-16.23/-14.65	-15.99/-15.49		
Θ(165°)	-14.62/-15.05	-14.31/-15.86	-15.47/-15.81	-15.76/-15.22	-14.95/-14.83	-15.57/-14.82	-14.98/-15.68	-15.01/-15.55	-15.17/-14.81	-15.17/-15.86	-14.68/-15.30	-15.13/-15.55	-15.47/-15.62	-14.82/-15.90	-15.05/-14.61	-14.99/-14.79	-15.28/-15.56	-15.90/-15.09	-15.86/-15.37	-14.03/-14.30	-15.96/-15.26	-15.83/-14.92	-14.29/-14.99	-15.03/-15.14
Θ(172.5°)	-15.78/-15.41	-15.41/-15.12	-14.21/-14.72	-14.48/-14.96	-15.43/-15.39	-15.61/-15.55	-14.91/-15.45	-15.37/-15.03	-15.07/-15.63	-15.19/-14.82	-14.96/-15.57	-15.13/-15.04	-15.64/-15.71	-15.15/-15.44	-16.06/-14.54	-14.93/-14.24	-15.15/-15.40	-15.12/-15.01	-15.51/-15.25	-16.05/-15.37	-15.81/-15.37	-15.42/-15.99	-15.88/-15.63	-14.75/-15.53
Θ(180°)	-15.31/-14.97	-15.17/-15.57	-15.19/-15.58	-15.14/-14.67	-15.54/-14.93	-15.77/-15.43	-15.93/-15.01	-14.83/-15.52	-15.65/-16.00	-15.13/-14.60	-14.78/-14.64	-13.45/-12.66	-12.43/-13.44	-15.05/-14.82	-14.71/-15.58	-15.84/-15.14	-14.77/-15.35	-15.47/-14.89	-15.29/-15.28	-15.10/-15.17	-14.91/-15.36	-15.27/-15.43	-16.02/-15.74	-16.02/-14.89
Freq(Hz)	6.475GPdL	TotalAnt.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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°)	-5.50/-5.52	-5.34/-5.23	-5.14/-4.91	-4.56/-4.54	-4.73/-5.03	-5.09/-4.92	-4.64/-4.84	-5.35/-5.94	-6.22/-6.51	-6.44/-5.47	-5.68/-5.47	-5.41/-5.47	-5.40/-5.14	-6.01/-6.68	-4.79/-5.16	-5.44/-5.48	-6.00/-5.96	-5.76/-6.17	-6.38/-6.35	-6.82/-6.73	-6.82/-6.73	-6.82/-6.73	-6.82/-6.73	-6.82/-6.73
Θ(7.5°)	-6.98/-7.16	-7.37/-7.21	-7.20/-7.20	-7.06/-7.10	-7.20/-7.27	-7.33/-7.21	-7.03/-7.02	-7.20/-7.54	-8.22/-8.60	-8.53/-8.59	-8.77/-8.99	-9.15/-9.20	-8.86/-7.74	-6.88/-5.49	-4.75/-4.18	-3.91/-3.44	-2.79/-2.17	-1.73/-1.76	-1.94/-2.19	-2.54/-2.74	-3.08/-3.56	-4.03/-4.65	-5.32/-5.91	-6.52/-6.83
Θ(15°)	-5.53/-6.16	-7.47/-9.04	-10.33/-9.98	-9.13/-87.7	-9.29/-10.03	-10.20/-9.56	-8.90/-8.45	-8.86/-9.46	-8.92/-7.52	-6.80/-5.21	-4.92/-6.19	-5.56/-6.00	-5.98/-5.52	-4.55/-3.76	-3.34/-3.30	-3.37/-3.61	-3.86/-3.88	-3.60/-3.35	-3.24/-3.24	-3.48/-3.78	-4.05/-4.03	-3.93/-3.65	-3.27/-3.34	-3.83/-4.62
Θ(22.5°)	-1.66/-2.13	-4.44/-6.54	-7.47/-9.98	-4.32/-2.89	-1.96/-1.87	-1.87/-2.41	-2.87/-4.21	-1.89/-4.63	-4.91/-3.20	-1.84/-3.20	-0.21/-0.20	-0.76/-1.21	-1.09/-1.23	-0.95/-1.47	-1.69/-1.28	-1.09/-1.75	-3.86/-6.05	-8.28/-8.81	-7.42/-5.38	-2.98/-3.31	-2.58/-2.54	-3.98/-3.38	-2.98/-2.05	-1.37/-1.33
Θ(30°)	-0.39/-0.71	-1.10/-1.61	-1.23/-0.44	1.01/0.30	2.79/2.82	2.34/1.35	0.07/-1.11	-1.65/-1.83	-2.01/-2.19	-2.11/-1.81	-1.44/-1.50	-1.77/-1.33	-0.53/-1.15	-3.02/-4.65	-5.32/-6.17	-6.73/-6.53	-6.35/-5.21	-4.13/-3.29	-2.62/-1.72	-0.93/-0.59	-1.19/-1.89	-2.87/-3.59	-3.22/-2.31	-1.25/-0.59
Θ(37.5°)	0.29/0.65	0.69/0.16	0.23/0.38	0.80/0.99	1.35/1.75	1.83/0.87	-0.87/-0.90	0.13/0.04	-0.87/-0.27	-2.50/-0.74	-0.10/-0.72	-1.49/-1.40	-2.60/-3.32	-3.26/-3.09	-2.94/-1.81	-0.76/-0.77	-1.30/-1.00	-0.98/-0.26	-0.07/-0.50	-0.81/-0.46	-0.29/-0.46	-1.34/-2.52	-3.04/-2.64	-2.35/-0.79
Θ(45°)	1.93/2.06	1.60/1.44	1.30/0.85	-0.43/-2.61	-4.21/-5.10	-3.26/-1.81	-1.80/-0.64	0.35/-0.33	-1.07/-0.72	-1.05/-0.42	0.43/1.13	1.62/1.20	-0.28/-0.82	0.37/1.58	1.84/0.64	-0.64/-1.77	-3.28/-4.04	-2.09/-0.48	-1.62/-0.43	-5.98/-4.74	-2.88/-2.39	-1.43/-0.81	-1.01/-1.37	-0.97/-0.77
Θ(52.5°)	2.33/2.20	2.00/2.50	2.73/2.78	1.88/0.00	-1.79/-2.27	-1.21/-0.53	0.01/0.49	0.42/-0.58	-0.29/0.00	-3.29/-8.21	-6.42/-2.99	-1.84/-0.59	-0.62/-1.37	-1.46/-0.37	-0.98/-3.89	-4.55/-3.82	-2.76/-2.54	-2.65/-1.57	0.09/-0.27	-1.63/-0.70	0.28/-0.05	0.20/0.94	1.46/0.49	0.12/1.32
Θ(60°)	0.83/0.97	1.91/3.14	3.70/3.89	3.33/2.29	1.31/1.36	1.42/1.42	1.92/1.43	0.07/0.76	2.26/2.10	-1.93/-2.95	-0.08/-0.06	-2.19/-2.18	-1.94/-2.23	-2.47/-2.37	-0.74/-0.10	-3.38/-1.61	-2.28/-2.36	-3.67/-2.88	-0.70/0.52	-0.01/1.13	1.73/0.84	1.58/1.74	2.25/1.27	0.16/0.25
Θ(67.5°)	-1.35/-0.30	1.19/2.32	3.66/3.62	3.44/2.60	2.30/1.68	2.29/2.12	2.06/0.93	0.48/1.42	3.74/3.27	1.55/1.46	2.97/2.38	0.73/-0.47	-1.12/-0.41	0.49/0.37	1.74/2.48	1.79/1.20	0.84/0.15	-3.16/-3.36	-0.69/1.71	1.30/1.22	0.79/-0.14	1.50/1.25	0.78/-0.06	-1.14/-1.70
Θ(75°)	-2.85/-1.60	0.05/1.93	2.55/2.55	2.27/0.95	0.74/1.10	1.33/-0.00	0.07/-0.94	-1.22/1.50	2.30/2.90	2.14/1.41	2.55/2.11	1.22/0.15	-0.68/0.26	0.79/0.98	2.32/2.11	1.40/1.11	1.25/1.29	-0.70/-1.69	-0.78/1.11	1.16/0.88	-1.08/-2.29	-0.00/-0.66	-0.97/-1.91	-3.00/-3.37
Θ(82.5°)	-5.52/-0.40	-2.37/-0.34	0.28/0.56	-0.34/-1.10	-1.06/-0.31	-1.83/-1.63	-0.64/-1.92	-4.06/0.28	0.57/1.64	0.37/-1.23	0.47/0.31	0.08/0.83	-1.08/-0.64	-0.45/-0.18	1.29/0.44	-0.42/0.25	0.43/0.45	-0.38/-1.63	-0.87/-0.80	-0.14/-0.12	-2.47/-5.61	-2.81/-2.39	-3.11/-3.96	-5.32/-6.23
Θ(90°)	-7.56/-6.33	-6.74/-3.33	-2.97/-2.27	-3.21/-3.78	-3.77/-3.00	-4.91/-3.00	-2.95/-4.30	-5.64/-2.37	-1.36/-1.07	-3.19/-4.40	-1.59/-1.18	-2.52/-3.97	-3.79/-3.91	-4.08/-3.88	-1.20/-2.93	-3.03/-1.26	-0.23/-0.52	-1.31/-4.79	-2.40/-2.58	-1.84/-3.56	-4.89/-8.16	-6.59/-6.45	-5.27/-4.47	-6.90/-8.47
Θ(97.5°)	-8.96/-7.96	-8.27/-5.92	-5.84/-4.93	-6.34/-6.05	-6.90/-6.15	-8.43/-5.40	-5.39/-7.22	-8.21/-4.81	-5.20/-3.51	-6.06/-6.79	-4.50/-4.40	-6.08/-7.08	-6.65/-7.53	-7.79/-7.43	-4.78/-7.65	-8.26/-5.49	-3.61/-3.52	-4.10/-8.50	-7.36/-6.36	-5.51/-7.21	-9.64/-12.91	-8.73/-9.15	-8.45/-6.97	-8.99/-10.14
Θ(105°)	-10.87/-9.32	-9.90/-7.94	-8.67/-8.28	-10.05/-8.37	-10.49/-8.07	-10.42/-10.39	-9.58/-11.07	-11.93/-4.76	-10.92/-6.54	-8.65/-8.51	-7.45/-7.95	-10.41/-10.46	-8.07/-11.18	-11.80/-12.61	-9.53/-10.27	-12.65/-12.04	-10.20/-9.00	-9.60/-12.65	-15.34/-13.88	-10.87/-10.88	-15.02/-13.55	-9.55/-12.51	-11.63/-9.73	-10.76/-11.87
Θ(112.5°)	-14.29/-13.76	-12.81/-14.88	-11.79/-11.34	-10.73/-10.37	-11.69/-11.77	-12.71/-13.89	-11.55/-13.35	-11.63/-11.06	-9.91/-9.66	-12.29/-10.00	-9.93/-9.75	-11.35/-11.36	-11.03/-13.89	-13.18/-15.35	-9.83/-10.17	-10.00/-9.35	-10.65/-12.89	-13.64/-11.89	-14.61/-13.96	-14.30/-12.19	-13.25/-13.69	-11.09/-13.22	-13.10/-14.36	-13.41/-13.95
Θ(120°)	-16.07/-15.58	-15.33/-14.48	-12.33/-12.44	-12.38/-12.41	-13.31/-13.66	-15.39/-12.33	-11.25/-15.63	-15.30/-14.66	-10.82/-12.57	-15.80/-														

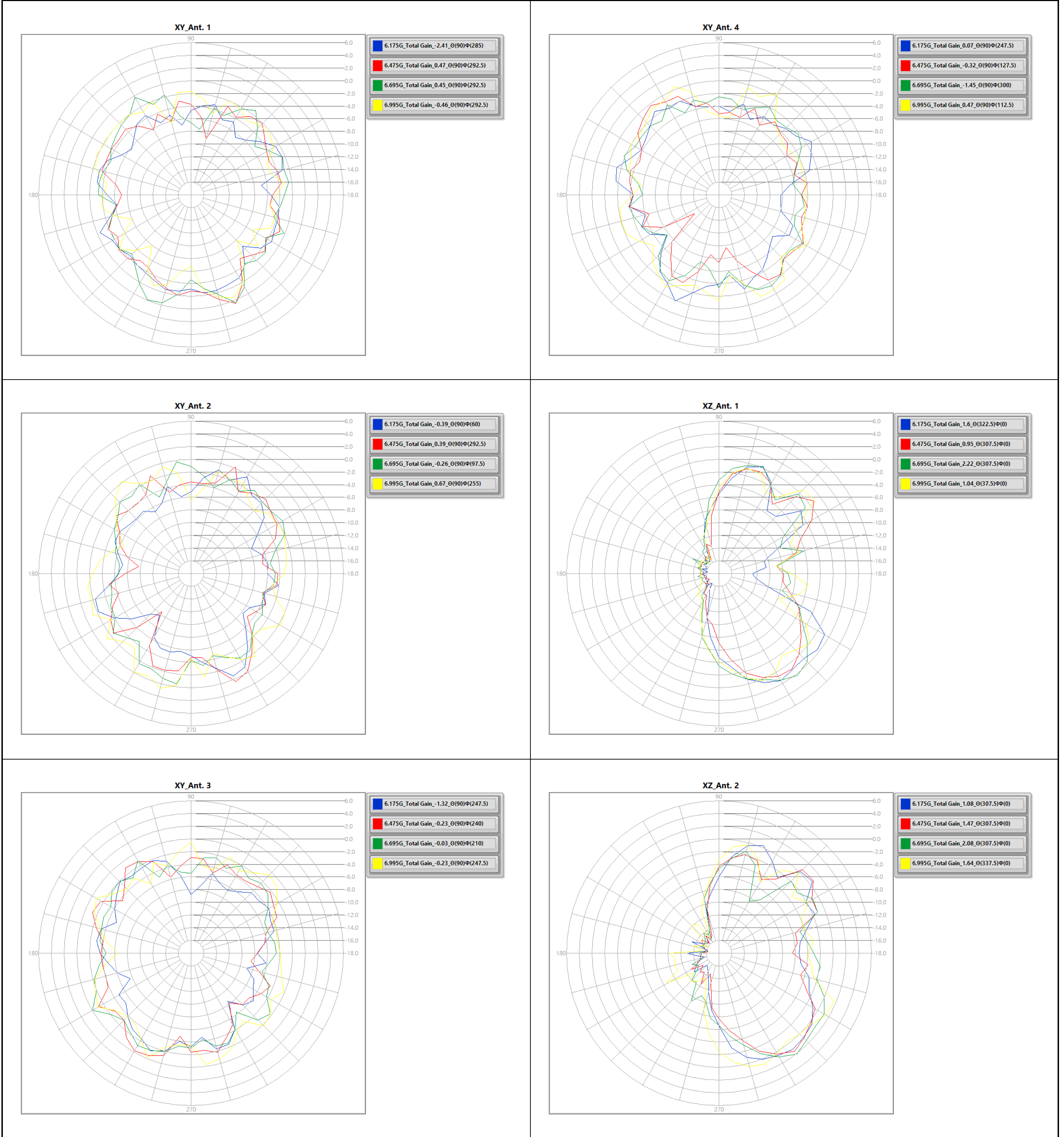


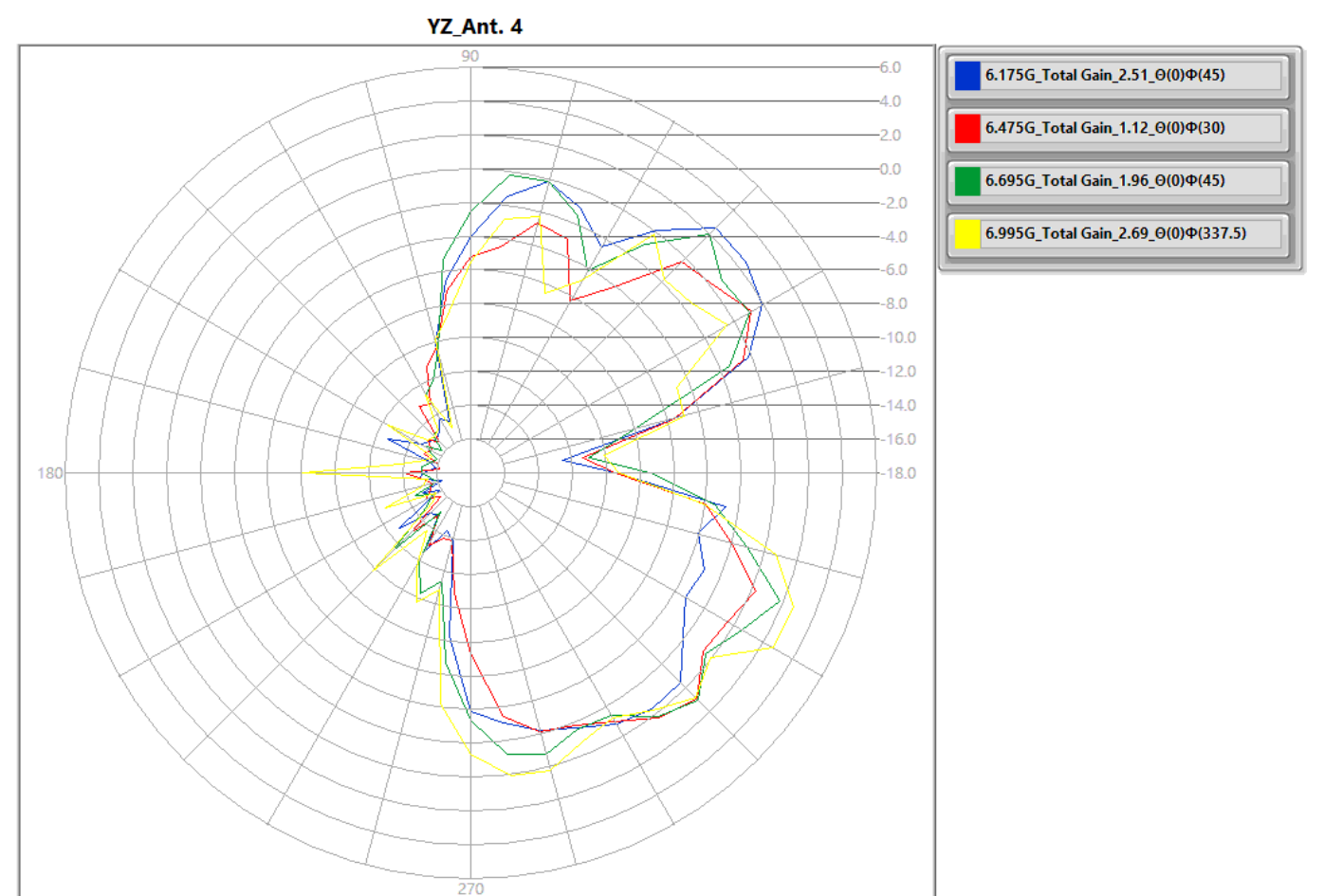
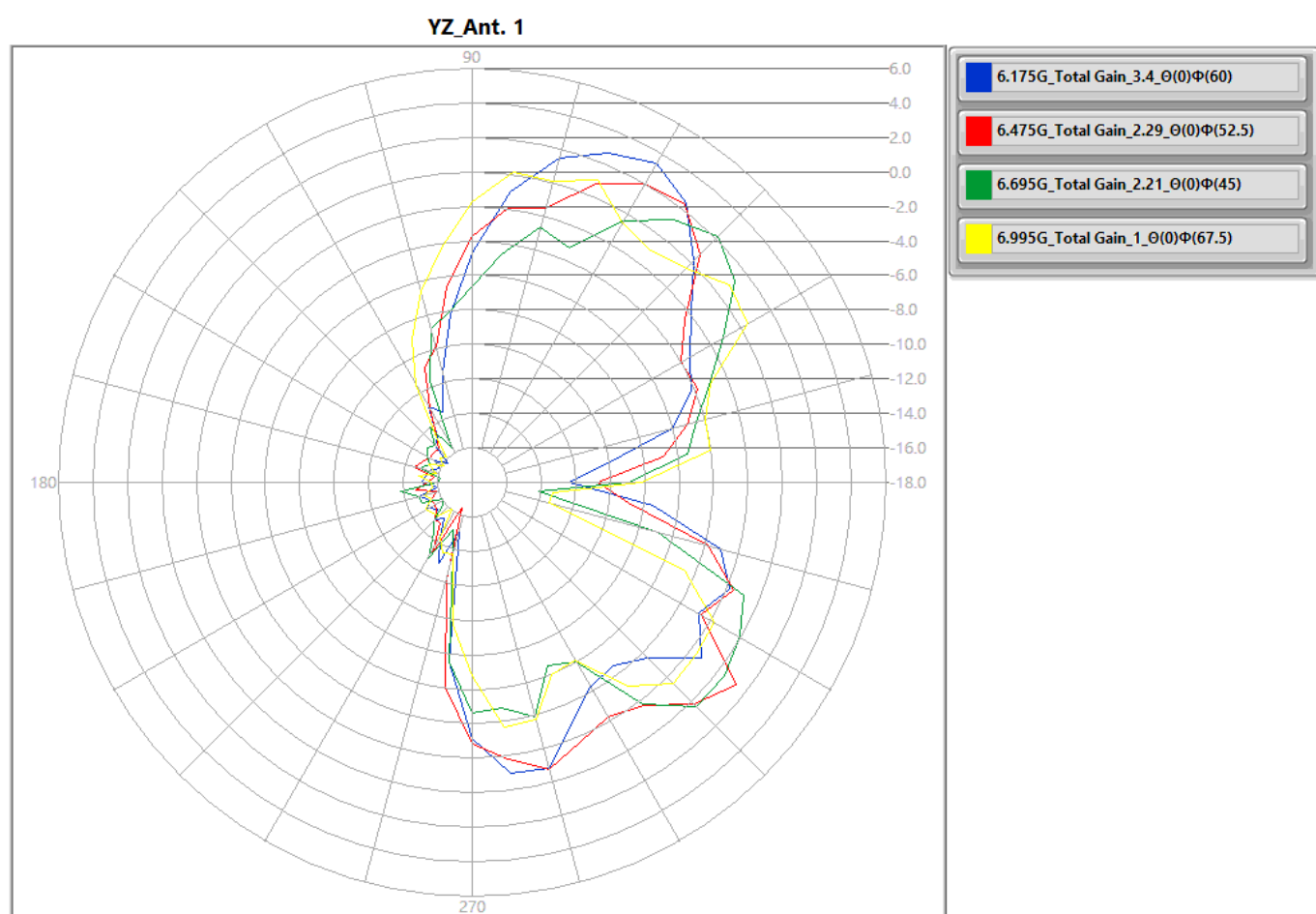
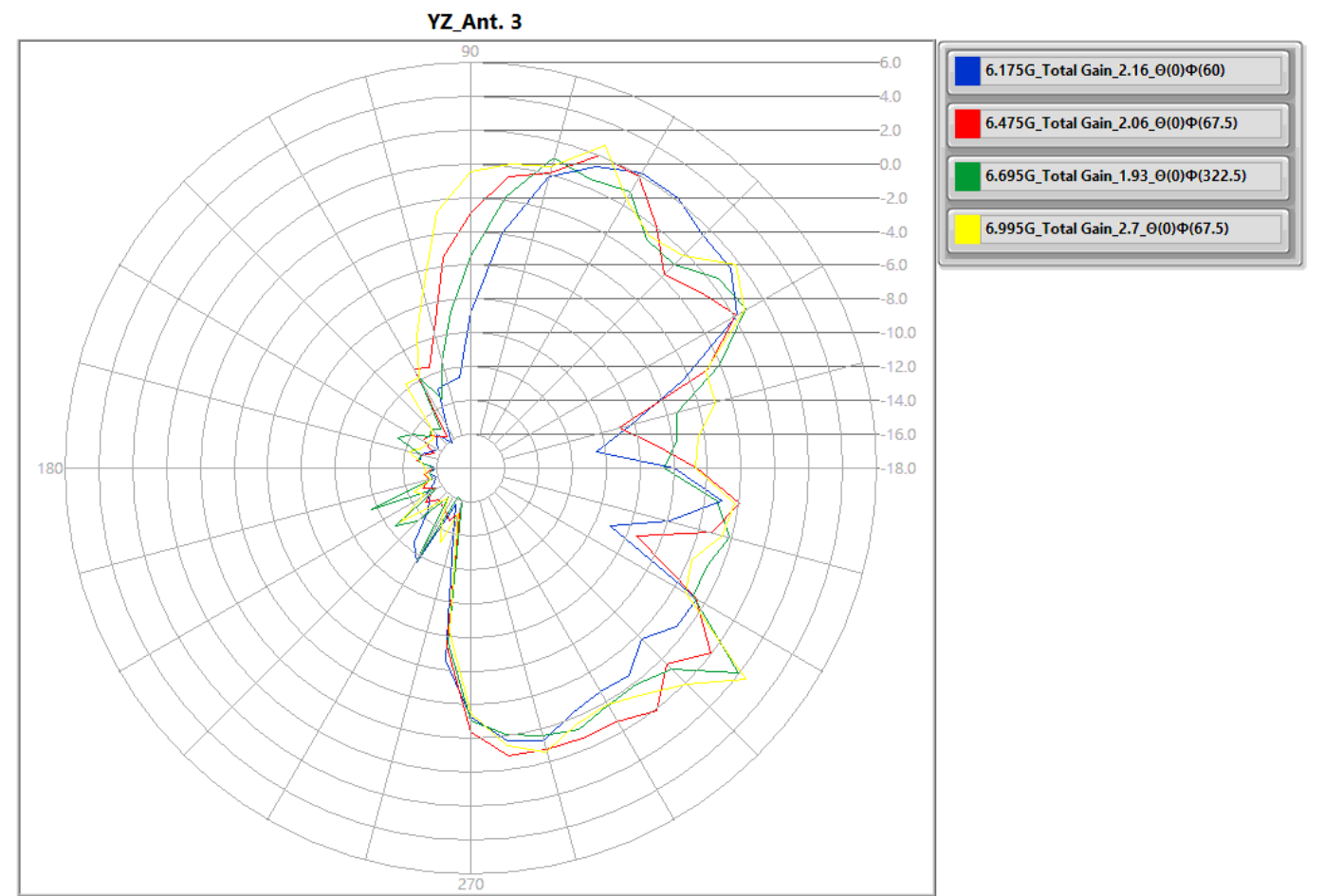
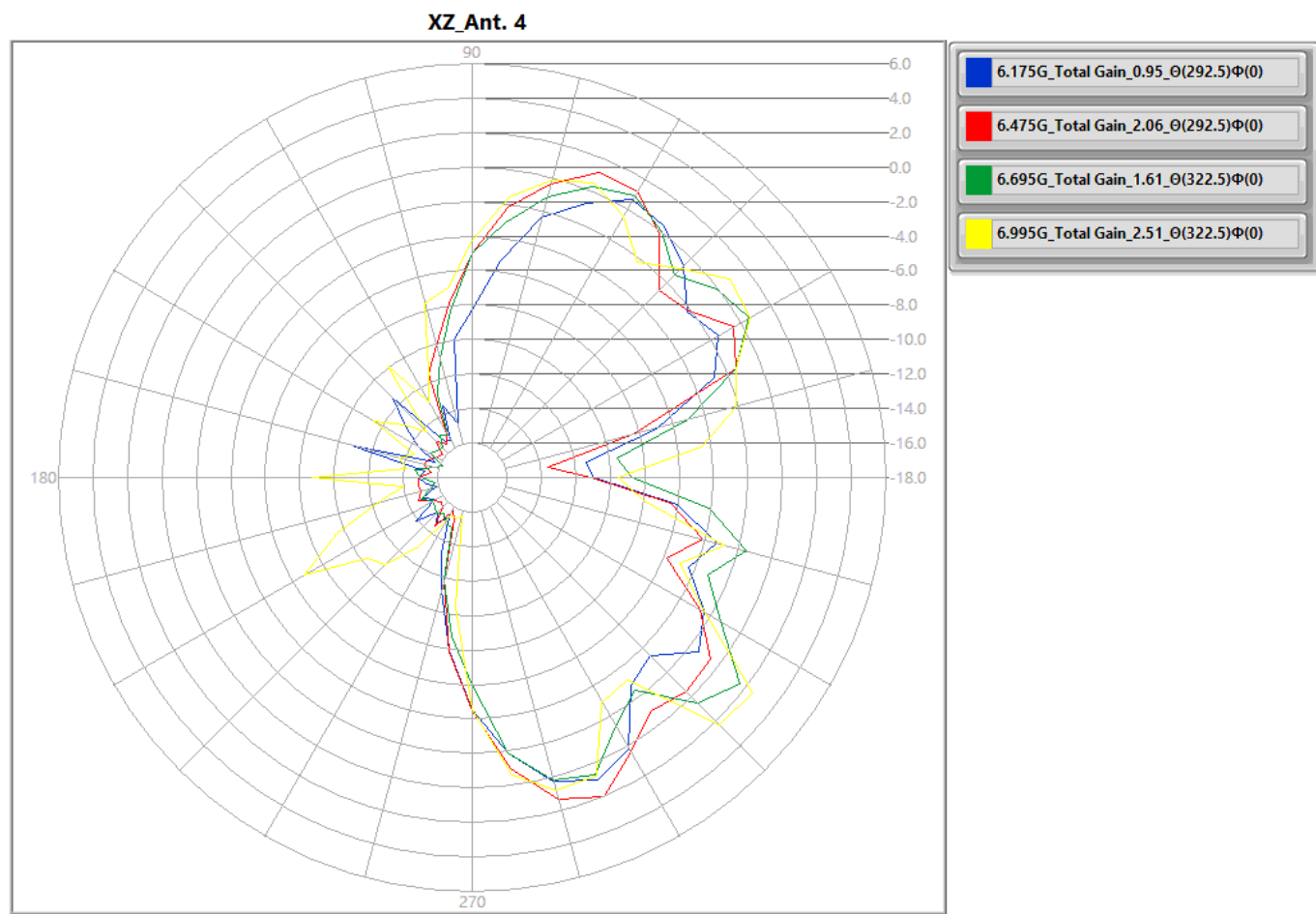
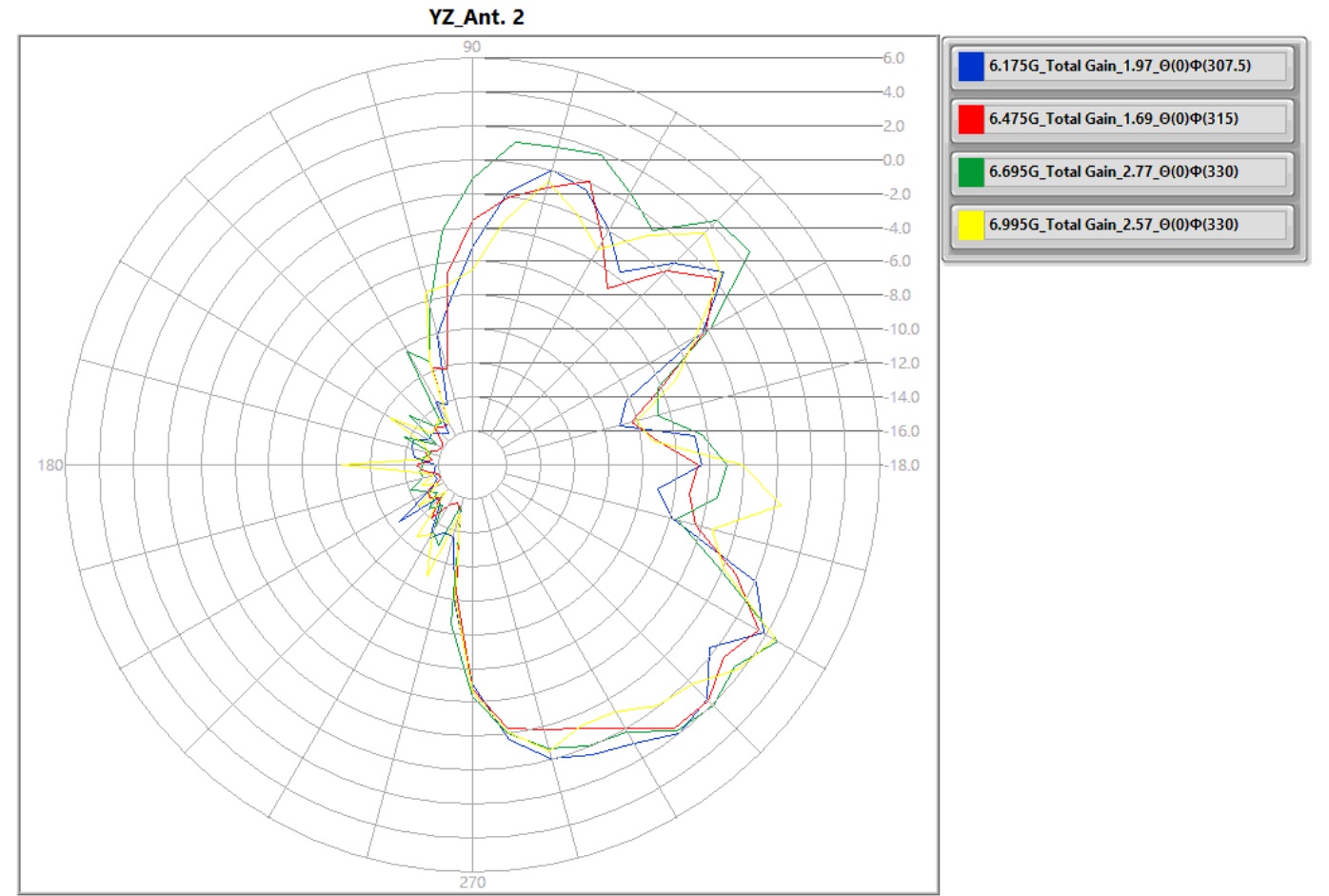
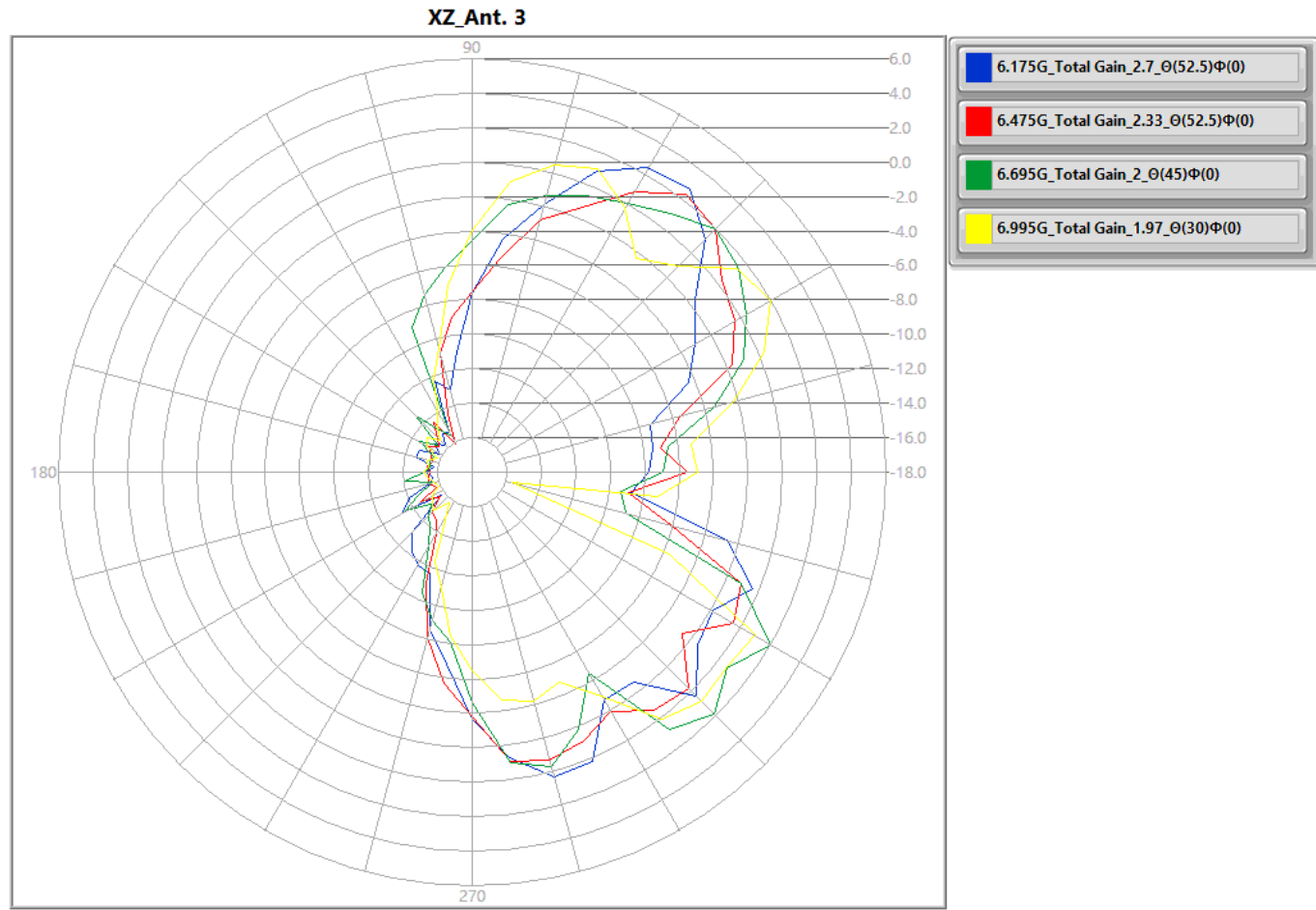
Antenna Pattern of 6GHz

Appendix E

Θ (120°)	-15.49/-13.33	-15.01/-15.64	-13.71/-13.66	-13.56/-13.87	-14.82/-13.89	-15.65/-13.98	-14.32/-13.29	-12.59/-13.36	-15.21/-12.23	-12.40/-14.15	-15.29/-11.72	-10.93/-12.31	-15.32/-14.49	-15.17/-12.48	-12.58/-15.99	-11.75/-12.33	-10.05/-10.52	-14.80/-11.12	-12.70/-16.43	-12.90/-13.26	-12.99/-12.63	-15.37/-13.67	-13.42/-13.40	-15.76/-15.56
Θ (127.5°)	-15.41/-15.39	-14.65/-12.71	-10.73/-12.49	-13.94/-15.21	-14.68/-12.85	-13.94/-15.14	-14.91/-15.71	-15.78/-15.81	-12.89/-12.68	-13.21/-15.38	-15.06/-12.85	-12.39/-15.15	-14.63/-15.61	-15.15/-13.12	-14.18/-15.88	-14.90/-15.73	-14.94/-14.16	-15.24/-15.23	-14.79/-15.92	-14.89/-13.62	-15.18/-15.52	-15.53/-14.86	-13.25/-15.09	-15.03/-14.98
Θ (135°)	-11.48/-11.85	-12.76/-14.81	-15.67/-14.87	-15.26/-16.06	-15.54/-14.75	-13.32/-14.88	-15.15/-15.77	-15.71/-13.74	-13.96/-14.27	-13.06/-13.01	-14.07/-13.93	-14.54/-15.98	-15.16/-13.85	-15.06/-15.51	-15.46/-15.46	-15.68/-15.35	-15.22/-15.48	-14.65/-14.37	-14.59/-15.92	-15.29/-14.55	-15.88/-15.83	-16.14/-15.03	-12.89/-13.76	-14.34/-15.13
Θ (142.5°)	-13.14/-12.39	-15.62/-15.35	-15.55/-15.09	-15.48/-12.23	-11.07/-14.43	-13.97/-14.59	-14.93/-15.96	-15.28/-14.83	-15.12/-15.63	-15.14/-14.20	-15.32/-14.98	-14.68/-15.59	-13.86/-14.68	-14.88/-15.76	-15.82/-15.82	-14.87/-14.52	-12.82/-15.68	-15.40/-14.08	-12.64/-15.34	-15.92/-15.23	-14.88/-15.96	-15.79/-15.64	-13.98/-11.37	-10.93/-12.36
Θ (150°)	-14.42/-14.93	-15.36/-15.37	-15.28/-14.63	-13.68/-14.03	-14.66/-14.66	-13.50/-15.08	-14.64/-15.10	-15.08/-15.18	-15.77/-14.46	-15.37/-15.33	-15.32/-15.22	-15.10/-15.12	-15.48/-14.63	-14.85/-16.49	-14.02/-15.58	-14.89/-16.03	-15.31/-15.04	-16.10/-14.22	-15.85/-14.80	-14.91/-15.08	-14.70/-14.58	-15.90/-15.65	-15.10/-14.41	-15.13/-12.11
Θ (157.5°)	-15.67/-15.42	-15.37/-14.37	-12.64/-12.43	-14.08/-15.34	-13.39/-13.02	-13.79/-12.69	-12.71/-13.19	-12.12/-11.80	-12.32/-12.94	-15.70/-15.39	-15.85/-15.05	-13.59/-13.27	-14.86/-14.63	-14.53/-15.31	-15.64/-14.96	-15.89/-14.86	-15.46/-15.82	-15.28/-15.74	-14.93/-15.33	-14.87/-15.22	-15.82/-14.99	-15.47/-15.59	-15.50/-15.63	-15.69/-15.66
Θ (165°)	-10.78/-11.24	-13.22/-14.99	-14.91/-15.34	-15.25/-15.43	-15.11/-15.74	-15.43/-15.37	-15.47/-15.81	-15.33/-15.41	-15.38/-14.80	-15.14/-15.89	-13.86/-13.37	-14.65/-14.95	-15.87/-14.31	-15.69/-15.04	-15.26/-15.52	-15.28/-15.56	-15.44/-14.26	-15.43/-15.20	-16.26/-15.01	-15.13/-15.68	-14.30/-14.27	-14.59/-14.88	-15.28/-14.49	-13.28/-11.90
Θ (172.5°)	-15.24/-14.51	-13.40/-12.50	-12.96/-13.75	-14.85/-14.99	-15.59/-15.29	-15.62/-15.62	-15.91/-15.19	-15.28/-14.75	-14.28/-14.77	-15.20/-15.21	-15.60/-15.64	-15.15/-14.74	-15.27/-13.23	-12.18/-12.36	-13.54/-15.25	-15.60/-15.44	-16.15/-15.41	-14.81/-14.88	-14.96/-14.59	-13.51/-13.22	-14.12/-14.62	-14.51/-15.19	-15.18/-15.99	-15.40/-15.29
Θ (180°)	-14.91/-14.79	-14.10/-14.28	-14.83/-14.64	-14.86/-15.23	-15.20/-15.38	-14.64/-14.82	-15.21/-15.10	-15.04/-14.40	-14.78/-14.42	-14.68/-15.04	-15.53/-15.20	-15.21/-14.87	-14.86/-15.20	-14.94/-14.63	-14.71/-15.10	-15.09/-15.54	-15.62/-15.35	-15.28/-15.35	-14.88/-14.37	-15.46/-15.01	-15.19/-15.31	-15.15/-15.06	-14.71/-14.67	
Freq(Hz)	6.475GPol.	TotalAnt. 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)Ψ(7.5°)	Φ(15°)Ψ(22.5°)	Φ(30°)Ψ(37.5°)	Φ(45°)Ψ(52.5°)	Φ(60°)Ψ(67.5°)	Φ(75°)Ψ(82.5°)	Φ(90°)Ψ(97.5°)	Φ(105°)Ψ(112.5°)	Φ(120°)Ψ(127.5°)	Φ(135°)Ψ(142.5°)	Φ(150°)Ψ(157.5°)	Φ(165°)Ψ(172.5°)	Φ(180°)Ψ(187.5°)	Φ(195°)Ψ(202.5°)	Φ(210°)Ψ(217.5°)	Φ(225°)Ψ(232.5°)	Φ(240°)Ψ(247.5°)	Φ(255°)Ψ(262.5°)	Φ(270°)Ψ(277.5°)	Φ(285°)Ψ(292.5°)	Φ(300°)Ψ(307.5°)	Φ(315°)Ψ(322.5°)	Φ(330°)Ψ(337.5°)	Φ(345°)Ψ(352.5°)
Θ (0°)	-11.09/-10.92	-11.13/-11.13	-11.18/-11.20	-10.87/-10.59	-10.41/-10.19	-10.14/-9.74	-9.47/-9.41	-9.22/-8.99	-9.02/-8.94	-9.12/-9.71	-10.10/-10.58	-11.23/-11.50	-11.81/-12.19	-12.71/-12.24	-12.08/-11.75	-11.56/-11.69	-11.60/-11.81	-11.65/-11.28	-11.09/-11.04	-10.77/-10.60	-10.32/-9.83	-9.42/-9.62	-9.57/-9.92	-10.52/-10.13
Θ (7.5°)	-13.56/-14.22	-14.00/-13.38	-13.11/-11.99	-11.47/-10.80	-10.66/-10.69	-10.78/-11.04	-11.30/-11.90	-12.17/-12.64	-12.84/-11.94	-10.30/-9.74	-9.14/-8.24	-7.43/-6.86	-6.41/-6.10	-5.67/-5.17	-4.72/-4.18	-3.96/-3.61	-3.47/-3.50	-3.66/-3.75	-3.95/-4.08	-4.48/-5.18	-5.89/-6.65	-7.49/-8.72	-10.28/-11.18	-12.15/-12.69
Θ (15°)	-8.30/-8.94	-9.10/-9.35	-8.82/-7.44	-6.21/-5.35	-5.02/-4.99	-5.14/-5.18	-5.56/-6.07	-6.98/-7.74	-8.21/-8.16	-7.48/-7.02	-6.69/-6.91	-5.06/-4.49	-4.17/-3.67	-2.99/-2.10	-1.52/-0.88	-0.59/-0.34	-0.43/-0.77	-1.21/-1.64	-2.09/-2.71	-3.47/-4.22	-4.85/-5.05	-5.04/-5.18	-5.35/-5.57	-6.09/-6.87
Θ (22.5°)	-1.41/-2.53	-3.30/-3.20	-2.28/-0.95	-0.30/-0.18	-0.44/-0.58	-0.60/-0.60	-0.54/-0.69	-1.08/-1.68	-2.37/-3.11	-4.25/-6.61	-9.99/-11.37	-10.81/-9.24	-5.74/-2.56	-1.00/-0.72	-1.41/-1.68	-1.14/-0.35	0.08/0.49	0.67/0.46	0.32/-0.04	0.28/0.64	-0.45/-0.14	0.28/0.64	0.75/0.76	0.47/-0.16
Θ (30°)	-0.48/-0.96	-0.15/0.50	0.74/0.71	0.29/-0.16	-0.37/-0.62	-0.75/-0.06	1.12/1.79	1.77/1.07	-0.34/-2.12	-3.49/-4.81	-6.54/-8.44	-9.56/-7.42	-2.75/0.41	1.33/1.09	-0.09/-1.56	-1.76/-1.23	-0.79/-0.48	-0.77/-1.02	-0.45/0.91	1.92/2.53	3.22/3.82	3.84/3.22	2.05/1.03	0.69/0.37
Θ (37.5°)	-2.19/-0.57	0.99/1.36	0.31/-0.58	-0.97/-0.35	0.29/0.00	-0.28/0.13	0.20/-0.29	-0.85/-1.23	-1.45/-2.15	-3.37/-4.65	-4.94/-3.99	-3.03/-1.92	-0.62/0.41	1.31/1.61	0.04/-2.50	-4.87/-7.64	-7.55/-4.95	-3.17/-1.56	-0.67/0.11	1.03/1.43	1.49/1.89	1.47/0.45	-1.14/-3.22	-4.44/-3.45
Θ (45°)	-2.66/-0.21	1.37/0.93	-0.91/-1.29	-0.77/-0.16	-0.04/0.05	0.77/1.03	-0.38/-1.63	-0.54/1.33	2.46/2.97	2.60/0.97	-1.73/-2.96	-1.39/0.05	-0.49/-2.84	-3.57/-3.26	-3.98/-3.47	-1.99/-3.17	-4.16/-3.78	-1.10/0.58	-0.89/1.33	1.76/2.19	2.35/2.29	1.15/-0.92	-4.55/-7.05	-6.99/-6.01
Θ (52.5°)	-0.13/0.94	1.44/1.26	0.17/-0.56	-2.07/-4.53	-6.26/-5.52	-3.63/-3.67	-4.10/-3.77	-2.13/-0.77	-0.25/-0.00	0.55/0.25	-1.33/-3.39	-3.24/-1.60	-0.91/-0.54	-1.78/-2.05	-1.19/-1.27	-1.21/-1.35	-1.40/-1.90	-0.20/0.54	0.23/0.89	1.32/1.54	2.26/3.44	3.13/2.13	0.56/-1.10	-1.36/-1.12
Θ (60°)	1.13/1.43	0.97/1.33	1.29/0.77	-0.39/-2.83	-3.28/-2.38	-4.66/-6.78	-6.25/-9.33	-5.96/-4.71	-2.24/-1.65	-2.01/-2.83	-2.92/-2.65	-2.79/-1.27	-0.39/1.52	1.64/1.42	1.90/0.47	-1.30/-1.75	-0.43/-1.28	-1.81/-1.26	-0.99/-1.40	-0.42/0.39	2.40/4.19	4.24/4.18	3.18/-1.86	1.22/1.04
Θ (67.5°)	1.14/1.08	0.25/0.94	1.45/1.44	0.94/0.82	1.09/0.71	-0.79/-1.41	-3.03/-2.85	-0.66/0.77	2.77/3.03	2.05/1.77	-1.11/-1.10	-0.41/0.12	2.06/1.94	2.00/2.17	2.30/1.00	-0.97/-1.45	-0.70/0.26	-1.73/-2.70	-1.87/-2.90	-1.10/0.55	2.57/4.11	4.18/3.89	3.47/2.21	1.33/-1.48
Θ (75°)	-0.36/-0.12	-1.28/-0.58	-0.01/0.74	0.92/1.44	0.93/1.33	-0.23/-1.31	-2.72/-1.71	0.68/2.60	3.05/3.80	2.53/1.18	-0.67/-1.22	-0.36/0.37	1.32/0.50	-0.01/0.19	0.54/-1.03	-1.79/-2.23	0.16/0.50	-1.80/-4.41	-2.15/-4.86	-2.27/-0.63	1.77/2.73	2.47/2.40	2.05/0.77	-0.18/0.18
Θ (82.5°)	-2.21/-1.60	-2.94/-2.18	-2.21/-1.17	-0.98/-0.36	-1.84/-0.34	-2.40/-3.23	-4.53/-2.67	-1.25/1.43	-4.53/-2.67	-1.25/1.43	-4.53/-2.67	-1.25/1.43	-4.53/-2.67	-1.25/1.43	-4.53/-2.67	-1.25/1.43	-4.53/-2.67	-1.25/1.43	-4.53/-2.67	-1.25/1.43	-4.53/-2.67	-1.25/1.43	-4.53/-2.67	-1.25/1.43
Θ (90°)	-5.00/-3.99	-5.75/-4.76	-5.69/-4.46	-4.39/-3.50	-5.29/-3.31	-5.39/-4.91	-5.23/-3.36	-3.61/-1.17	-1.09/-0.32	-1.08/-1.87	-3.94/-4.50	-3.50/-3.87	-4.44/-3.70	-6.65/-5.06	-7.80/-13.31	-7.48/-5.59	-3.21/-3.07	-5.46/-8.46	-7.29/-9.60	-7.34/-4.86	-2.50/-2.13	-3.61/-3.30	-2.65/-3.83	-4.57/-3.91
Θ (97.5°)	-7.81/-7.70	-8.47/-8.26	-8.32/-6.99	-7.20/-6.52	-7.88/-5.72	-7.93/-8.07	-7.10/-5.41	-7.15/-3.91	-4.34/-2.59	-3.46/-4.20	-6.27/-6.58	-5.75/-6.37	-7.84/-5.83	-8.29/-7.02	-9.90/-15.98	-10.15/-8.50	-6.30/-5.79	-9.29/-9.75	-10.84/-12.75	-9.84/-9.11	-7.98/-6.23	-6.97/-7.25	-6.47/-8.19	-7.59/-7.07
Θ (105°)	-10.05/-11.77	-10.27/-10.30	-8.79/-9.08	-9.39/-9.40	-9.53/-9.90	-9.92/-8.83	-10.31/-9.18	-11.11/-7.03	-8.09/-5.20	-6.85/-6.82	-7.99/-8.27	-8.01/-9.10	-11.74/-8.13	-8.94/-7.83	-9.17/-13.92	-12.26/-10.35	-10.98/-12.02	-14.31/-12.92	-13.82/-15.90	-13.33/-13.81	-12.46/-9.44	-13.25/-10.36	-9.07/-10.45	-10.62/-11.98
Θ (112.5°)	-11.45/-12.55	-10.53/-11.36	-10.43/-12.26	-12.40/-12.14	-10.90/-15.09	-12.64/-15.77	-11.27/-10.90	-12.59/-10.76	-8.54/-8.73	-7.73/-10.16	-11.11/-11.29	-11.63/-12.69	-15.37/-11.18	-16.12/-10.92	-11.34/-15.53	-14.28/-9.03	-10.84/-12.02	-13.93/-13.40	-13.80/-15.50	-13.60/-12.97	-12.70/-10.06	-12.58/-11.62	-10.91/-11.77	-12.72/-12.51
Θ (120°)	-15.10/-14.53	-14.06/-15.42	-14.30/-14.42	-16.35/-12.68	-13.28/-12.09	-15.93/-15.05	-13.31/-14.78	-15.81/-11.84	-11.39/-9.74	-9.30/-11.19	-13.73/-13.26	-13.64/-14.64	-15.73/-15.05	-14.88/-12.62	-12.76/-14.66	-14.77/-12.94	-8.75/-12.65	-14.07/-13.96	-13.06/-15.30	-15.68/-12.32	-10.55/-13.72	-14.93/-13.79	-14.88/-12.42	-15.55/-13.44
Θ (127.5°)	-15.57/-15.58	-15.83/-15.03	-13.62/-12.09	-14.93/-13.60	-13.41/-14.97	-15.08/-14.04	-13.02/-15.16	-15.49/-15.47	-14.85/-11.89	-13.71/-15.27	-15.33/-15.20	-15.08/-15.54	-14.47/-15.58	-15.95/-12.74	-12.66/-14.99	-14.99/-15.39	-14.49/-15.40	-15.08/-15.56	-14.83/-15.30	-15.70/-15.49	-14.61/-14.09	-14.83/-13.45	-13.10/-14.06	-15.29/-15.32
Θ (135°)	-15.11/-13.57	-14.05/-15.49	-14.68/-15.47	-14.83/-15.28	-15.02/-14.95	-16.32/-14.64	-15.40/-15.32	-15.52/-14.56	-12.56/-12.55	-12.41/-15.07	-14.40/-15.26	-15.18/-15.77	-15.62/-14.55	-15.37/-15.44	-14.72/-15.51	-15.03/-14.85	-13.99/-15.14	-15.15/-13.92	-13.09/-15.46	-14.72/-12.98	-14.95/-15.46	-16.13/-13.17	-13.08/-12.11	-13.54/-15.39
Θ (142.5°)	-15.81/-14.98	-15.23/-14.47	-14.29/-15.42	-15.00/-15.08	-15.81/-15.00	-15.45/-15.03	-14.85/-15.58	-15.87/-14.95	-14.24/-13.23	-14.43/-15.19	-15.08/-15.09	-15.45/-13.19	-15.72/-15.62	-15.22/-15.81	-14.44/-14.58	-15.69/-14.45	-12.84/-15.89	-15.78/-15.01	-15.73/-15.82	-16.04/-15.33	-14.55/-14.78	-15.34/-15.17	-15.51/-15.57	-14.86/-15.39
Θ (150°)	-15.62/-15.76	-15.32/-15.33	-15.45/-15.49	-15.10/-15.17	-15.33/-15.14	-13.81/-15.10	-15.31/-15.66	-15.29/-15.80	-15.64/-15.89	-15.48/-15.93	-15.92/-15.36	-15.64/-13.41	-15.30/-15.71	-15.65/-15.19	-15.29/-15.18	-14.91/-15.24	-15.42/-14.65	-15.65/-15.41	-15.02/-15.86	-15.49/-15.76	-15.80/-15.14	-15.49/-15.64	-15.96/-15.57	-15.01/-15.27
Θ (157.5°)	-15.28/-15.68	-14.53/-15.55	-15.24/-15.41	-14.78/-14.90	-15.00/-14.82	-15.20/-14.82	-15.02/-15.12	-14.87/-15.55	-15.40/-13.61	-12.47/-14.14	-15.99/-14.72	-14.01/-12.99	-14.60/-15.30	-15.59/-16.23	-15.31/-15.18	-15.61/-14.76								

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 $\Theta(0-180)\Phi(270)$





Total Gain Data

Freq(Hz)	245GP/Lot	TotalAnt.1	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+				
Gain	Φ(0°)Ψ(7.5°)	Φ(15°)Ψ(22.5°)	Φ(30°)Ψ(37.5°)	Φ(45°)Ψ(52.5°)	Φ(60°)Ψ(67.5°)	Φ(75°)Ψ(82.5°)	Φ(90°)Ψ(97.5°)	Φ(105°)Ψ(112.5°)	Φ(120°)Ψ(127.5°)	Φ(135°)Ψ(142.5°)	Φ(150°)Ψ(157.5°)	Φ(165°)Ψ(172.5°)	Φ(180°)Ψ(187.5°)	Φ(195°)Ψ(202.5°)	Φ(210°)Ψ(217.5°)	Φ(225°)Ψ(232.5°)	Φ(240°)Ψ(247.5°)	Φ(255°)Ψ(262.5°)	Φ(270°)Ψ(277.5°)	Φ(285°)Ψ(292.5°)	Φ(300°)Ψ(307.5°)	Φ(315°)Ψ(322.5°)	Φ(330°)Ψ(337.5°)	Φ(345°)Ψ(352.5°)
Θ(0°)	1.35/-1.38	1.36/-1.42	1.57/-1.70	1.76/-1.67	1.51/-1.38	1.36/-1.33	1.19/-0.98	0.84/-0.87	0.97/-1.04	1.04/-1.01	1.00/-1.06	1.17/-1.33	1.41/-1.38	1.35/-1.32	1.30/-1.21	1.06/-0.99	1.11/-1.32	1.40/-1.26	1.06/-0.95	1.01/-1.10	1.05/-0.97	0.99/-1.04	1.05/-1.09	1.16/-1.28
Θ(7.5°)	1.60/-1.56	1.53/-1.62	1.81/-1.93	1.92/-1.70	1.39/-1.22	1.20/-1.16	1.02/-0.77	0.47/-0.23	0.17/-0.20	0.29/-0.36	0.37/-0.38	0.48/-0.60	0.70/-0.73	0.76/-0.83	0.89/-0.90	0.89/-0.91	1.06/-1.18	1.19/-1.12	1.02/-0.95	0.95/-0.96	0.83/-0.77	0.89/-1.06	1.21/-1.38	1.50/-1.60
Θ(15°)	1.05/-1.06	1.10/-1.23	1.38/-1.37	1.21/-0.84	0.47/-0.28	0.26/-0.28	0.25/-0.06	-0.42/-1.01	-1.43/-1.43	-1.06/-0.74	-0.65/-0.69	-0.70/-0.61	-0.53/-0.47	-0.36/-0.16	0.07/-0.26	0.46/-0.66	0.93/-0.02	0.92/-0.76	0.65/-0.60	0.51/-0.26	-0.15/-0.43	-0.37/-0.14	0.20/-0.52	0.77/-0.96
Θ(22.5°)	0.24/-0.30	0.34/-0.44	0.47/-0.27	-0.10/-0.49	-0.75/-0.87	-0.93/-0.93	-0.84/-0.78	-1.04/-1.52	-1.95/-2.07	-1.68/-1.14	-0.95/-1.05	-1.15/-1.25	-1.43/-1.57	-1.51/-1.29	-1.00/-0.71	-0.33/-0.13	0.57/-0.81	0.77/-0.65	0.56/-0.56	0.55/-0.27	-0.42/-1.26	-1.71/-1.66	-1.36/-0.89	-0.41/-0.11
Θ(30°)	-0.22/-0.19	-0.10/-0.09	0.03/-0.34	-0.73/-0.81	-0.63/-0.54	-0.63/-0.86	-1.05/-1.06	-0.93/-0.83	-0.81/-0.96	-0.87/-0.41	-0.10/-0.05	-0.24/-0.56	-1.00/-1.30	-1.42/-1.34	-1.13/-0.84	-0.48/-0.09	0.31/-0.52	0.51/-0.42	0.35/-0.37	0.44/-0.31	-0.22/-1.19	-2.25/-2.84	-2.64/-1.93	-1.10/-0.47
Θ(37.5°)	-0.30/-0.10	0.39/-0.80	0.71/-0.30	0.07/-0.25	0.60/-0.82	0.77/-0.35	0.30/-0.80	-0.67/-0.10	0.36/-0.32	0.23/-0.45	0.87/-1.15	1.02/-0.62	0.17/-0.09	-0.07/-0.21	0.46/-0.63	0.79/-0.98	1.15/-1.11	0.83/-0.48	0.25/-0.14	0.05/-0.11	-0.42/-1.06	-2.01/-2.83	-2.62/-1.74	-0.93/-0.47
Θ(45°)	-0.17/-0.39	1.23/-0.66	1.50/-1.16	1.16/-1.40	0.59/-0.69	1.60/-1.09	0.17/-0.93	-1.38/-0.72	0.22/-0.66	0.68/-0.79	1.27/-1.67	1.62/-1.24	0.82/-0.65	0.98/-1.60	1.95/-0.27	2.20/-2.40	2.52/-2.33	1.74/-0.85	0.04/-0.34	-0.32/-0.26	-0.47/-1.06	-1.85/-2.41	-2.04/-1.06	-0.42/-0.30
Θ(52.5°)	-0.31/-0.65	1.58/-1.87	1.66/-1.51	1.69/-1.81	1.78/-1.72	1.63/-1.18	0.15/-1.53	-2.88/-2.28	-0.57/-0.47	0.74/-0.99	1.45/-1.73	1.48/-1.09	0.87/-0.95	1.73/-2.52	2.80/-2.81	2.83/-2.92	2.96/-2.73	1.92/-0.44	-1.29/-2.18	-1.90/-1.32	-1.15/-1.75	-2.65/-2.73	-1.82/-0.67	-0.18/-0.44
Θ(60°)	-0.77/-0.43	1.30/-1.56	1.56/-1.71	1.99/-1.96	1.58/-1.36	1.41/-1.12	0.07/-2.01	-4.40/-4.01	-1.57/-0.09	0.32/-0.51	0.97/-1.20	0.63/-0.02	0.06/-0.52	1.52/-2.29	2.35/-1.98	1.68/-1.77	2.05/-1.20	1.55/-0.05	-2.78/-4.78	-4.35/-3.14	-2.32/-2.74	-4.23/-4.22	-2.32/-0.84	-0.39/-0.96
Θ(67.5°)	-1.55/-0.32	0.39/-0.63	0.91/-1.32	1.71/-1.55	0.97/-0.62	0.75/-0.57	-0.46/-2.53	-4.53/-4.18	-2.28/-1.07	-0.55/-0.12	0.25/-0.15	-1.03/-1.72	-0.97/-0.01	0.88/-1.33	0.31/-0.59	1.03/-0.34	1.09/-0.39	-3.48/-1.65	-5.70/-3.82	-2.64/-2.96	-4.81/-5.58	-3.46/-		