



Radiated Composite Gain Data of 6GHz_6G Ant1~2

Appendix A.5

Θ(22.5°)	-5.13/4.41	-3.5/4.7	-8.5/-11.27	-10.81/-11.57	-13.03/-15.84	-10.07/-7.02	-3.61/3.06	-2.78/-3.24	-2.22/-0.72	-0.14/0.82	-2.43/-2.9	-3.22/-4.19	-6.66/-6.08	-5.41/4.46	-2.98/-1.13	-0.76/-1.4	-3.04/-2.35	-2.03/-3.89	-5.92/-4.64	-3.59/-4.05	-6.29/-8.1	-8.42/-9.06	-8.4/-8.54	-8.21/-5.44
Θ(30°)	-10.6/-10.33	-6.76/-6.77	-9.15/-10.33	-9.84/-8.36	-11.66/-10.95	-9.17/-8.66	-3.75/-1.85	-2.38/-3.69	-4.14/-1.9	-0.48/-2.11	-5.43/-7.35	-7.33/-3.36	-3.04/-4.32	-3.64/-3.17	-4.18/-3.37	-5.82/-6.09	-3.11/-2.43	-2.75/-4.08	-4.52/-2.58	-1.8/-3.44	-6.4/-6.74	-6.67/-6.73	-6.15/-4.12	-4.71/-6.97
Θ(37.5°)	-8.67/-9.1	-7.05/-6.03	-11.48/-10.84	-10.04/-14.71	-15.01/-10.76	-7.47/-7.04	-4.45/-1.88	-0.84/-2.74	-3.02/-2.61	-7.33/-12.72	-11.02/-8.4	-4.55/-6.18	-5.84/-6.54	-5.69/-4.06	-8.39/-10.12	-4.46/-4.56	-6.24/-6.02	-4.95/-7.62	-10.9/-11.06	-9.75/-9.07	-6.57/-5.94	-6.66/-5.64		
Θ(45°)	-11.8/-9.45	-9.47/-7.65	-7.98/-11.88	-8.36/-10.61	-13.86/-14.05	-9.81/-3.14	-2.44/-3.98	-2.42/-4.26	-6.72/-7.21	-5.27/-6.79	-12.12/-13.15	-6.99/-8.48	-6.13/-5.13	-7.54/-13.96	-10.58/-9.1	-7.04/-13.65	-5.15/-5.23	-6.28/-4.15	-7.54/-8.71	-8.05/-6.63	-10.53/-12.61	-13.28/-14.4	-11.41/-9.38	-8.63/-9.05
Θ(52.5°)	-10.5/-6.63	-6.35/-7.43	-5.25/-8.78	-8.54/-9.11	-13.13/-11.56	-14.63/-6.44	-7.6/-3.63	-4.25/-7.58	-5.72/-6.58	-7.89/-9.28	-9.35/-8.63	-8.65/-8.27	-7.76/-7.39	-6.88/-10.91	-12.74/-6.95	-5.56/-12.73	-9.55/-7.55	-5.91/-6.7	-8.61/-10.1	-9.41/-8.05	-12.81/-15.68	-11.31/-9.19	-11.77/-13.29	-6.99/-10.8
Θ(60°)	-7.09/-8.82	-6.58/-10.35	-4.36/-5.69	-9.48/-10.41	-11.31/-8.27	-14.28/-7.58	-8.17/-7.15	-5.28/-5.68	-6.03/-6.38	-10.33/-7.75	-8.5/-9.72	-10.61/-9.74	-9.99/-10.49	-9.53/-9.86	-5.71/-9.9	-14.57/-10.32	-6.78/-8.83	-6.88/-4.29	-9.89/-10.77	-9.19/-8.92	-10.37/-10.79	-5.8/-8.32		
Θ(67.5°)	-9.57/-10.15	-7.38/-9.75	-5.31/-4.19	-6.45/-8.07	-8.76/-5.82	-5.78/-6.25	-9.02/-6.13	-7.82/-3.96	-6.01/-10.91	-6.97/-5.43	-7.75/-8.6	-12.55/-12.36	-6.56/-10.09	-8.09/-10.46	-13.05/-7.67	-9.39/-5.01	-5.99/-7.2	-4.72/-12.88	-13.2/-7.34	-4.77/-4.39	-8.03/-6.81	-9.28/-11.78	-11.64/-10.57	-4.2/-6.66
Θ(75°)	-8.78/-7.12	-5.88/-5.8	-8.22/-4.73	-5.96/-6.2	-8.62/-2.59	-1.52/-3.74	-4.79/-5.65	-6.63/-4.69	-5.69/-9.4	-4.58/-3.8	-6.59/-8.94	-7.78/-10.29	-6.93/-7.87	-7.67/-10.51	-11.9/-8.08	-8.03/-7.14	-4.58/-5.9	-4.33/-13.65	-13.98/-7.25	-2.94/-6.09	-4.37/-4.86	-5.9/-9.28	-8.4/-5.95	-3.33/-6.47
Θ(82.5°)	-14.7/-7.08	-3.9/-5.69	-4.88/-5.26	-4.95/-4.46	-5.09/-2.53	-0.26/-5.37	-4.97/-3.93	-6.69/-4.91	-8.33/-6.87	-2.78/-2.89	-6.8/-9.38	-4.67/-10.46	-7.56/-7.24	-9.62/-6.95	-10.86/-6.71	-6.12/-6.82	-5.42/-3.64	-6.65/-13.57	-9.66/-6.93	-3.25/-8.05	-3.33/-5	-5.32/-9.1	-8.45/-5.71	-3.5/-6.38
Θ(90°)	-12.56/-5.89	-3.72/-6.09	-4.34/-3.89	-7.33/-4.15	-3.67/-3.37	-1.82/-6.61	-5.81/-4.33	-5.67/-4.3	-10.94/-5.67	-3.18/-3.51	-7.98/-7.91	-4.94/-7.59	-7.33/-4.57	-6.92/-5.49	-11.27/-6.56	-5.42/-8.25	-8.89/-4.93	-8.78/-10.69	-14.09/-7.88	-6.64/-11.59	-3.43/-4.41	-6.94/-7.16	-8.63/-6.42	-4.62/-4.02
Θ(97.5°)	-12.97/-8.35	-3.6/-6.15	-4.22/-3.3	-6.52/-3.9	-4/-5.38	-2.24/-6.68	-7.04/-5.7	-4.72/-6.2	-11.84/-5.16	-5.94/-8.95	-9.55/-8.69	-5.71/-7.01	-7.98/-7.61	-5.56/-7.7	-8.96/-10.28	-8.38/-11.97	-8.13/-7.41	-9.63/-9.21	-12.63/-7.96	-8.26/-8.2	-4.71/-4.44	-7.71/-9.01	-6.88/-6.58	-5.11/-3.68
Θ(105°)	-8.09/-7.11	-4.56/-5.89	-5.22/-3.76	-5.1/-4.61	-4.18/-4.99	-4.86/-8.09	-6.46/-7.18	-8.65/-9.65	-12.15/-13.34	-5.63/-10.72	-7.17/-7.92	-9.62/-8.27	-4.2/-8.92	-8.21/-10.62	-8.73/-10.89	-10.85/-13.01	-10.16/-8.7	-12.22/-6.09	-10.13/-6.82	-4.42/-4.66	-8.19/-11.27	-7.2/-6.42	-5.83/-4.05	
Θ(112.5°)	-5.29/-9.07	-9.85/-6.86	-6.76/-4.34	-7.28/-4.7	-6.65/-5.24	-6.95/-6.74	-5.71/-10.52	-8.42/-6.35	-11.17/-9.53	-10.28/-13.4	-3.52/-7.31	-9.3/-9.21	-7.59/-4.74	-6.38/-10.46	-9.24/-11.19	-8.29/-8.14	-9.39/-8.87	-8.26/-7.39	-11.03/-7.66	-12.82/-6.03	-4.94/-6.54	-7.86/-10.4	-9.65/-10.46	-8.09/-4.18
Θ(120°)	-5.3/-8.11	-9.13/-6.33	-6.62/-4.26	-5.39/-3.97	-4.85/-3.82	-7.45/-5.83	-7.58/-8.9	-8.65/-7.55	-13.55/-7.86	-15.6/-14.51	-8.85/-8.91	-14.2/-7.3	-4.79/-7.09	-9.55/-8.6	-14.51/-8.04	-12.35/-5.92	-11.97/-13.4	-8.05/-6.07	-10.48/-10.17	-8.57/-4.29	-4.81/-6.67	-8.57/-7.56	-6.76/-7.68	-8.84/-6.48
Θ(127.5°)	-6.14/-5.63	-5.4/-6.94	-9.11/-8.67	-7.53/-7.09	-12.05/-8.14	-5.2/-7.57	-10.34/-5.34	-7.04/-13.67	-8.61/-7.4	-13.37/-15.98	-12.25/-10.88	-9.94/-12.29	-7.53/-10.77	-12.19/-7.53	-11.25/-12.55	-10.69/-13.69	-15.81/-15.84	-9.3/-8.65	-11.27/-13.19	-9.08/-6.07	-3.66/-7.74	-6.01/-9.2	-6.79/-4.6	-6.86/-9.14
Θ(135°)	-14.71/-11.9	-8.75/-8.83	-8.17/-10.51	-8.55/-10.72	-9.49/-11.3	-5.66/-4.75	-11.17/-11.76	-9.85/-9.45	-11.83/-7.16	-10.35/-12.48	-12.06/-10.76	-10.82/-11.79	-11.56/-8.91	-14.24/-9.54	-10.85/-8.14	-11.56/-14.86	-14.43/-11.43	-11.79/-14.54	-13.33/-11.16	-8.05/-11.61	-6.05/-7.3	-5.72/-7.76	-12.32/-7.7	-7.87/-15.36
Θ(142.5°)	-10.57/-9.47	-12.24/-11.41	-7.67/-7.59	-9.16/-8.22	-5.79/-11.31	-9.23/-10.68	-6.98/-7.82	-12.89/-6.73	-8.78/-5.88	-3.93/-8.26	-11.76/-7.14	-9.49/-9.33	-10.74/-6.49	-5.47/-9.18	-12.43/-13.77	-12.49/-13.61	-12.51/-11.94	-12.48/-11.75	-10.63/-11.04	-3.99/-3.6	-8.14/-8.57	-9.54/-11	-12.06/-8.33	-6.59/-7.47
Θ(150°)	-9.78/-10.6	-11.53/-13.67	-10.2/-9.42	-10.19/-8.89	-9.98/-6.89	-3.9/-6.54	-13.81/-8.81	-9.63/-12.56	-13.67/-15.57	-8.91/-9.2	-11.04/-5.66	-9.71/-11.43	-9.96/-11.26	-12.12/-8.21	-13.51/-11.3	-8.61/-14.58	-14.81/-12.99	-15.75/-11.54	-9.53/-9.03	-9.87/-10.72	-12.19/-13.42	-11.62/-10.38	-6.96/-5.21	-6.43/-8.54
Θ(157.5°)	-5.95/-8.48	-9.6/-8.1	-10.96/-11.8	-8.56/-9.6	-10.42/-8.36	-9/-12.9	-7.31/-6.38	-8.91/-9.25	-7.69/-11.07	-12.83/-11.74	-15.67/-15.49	-15.42/-16.23	-13.14/-8.96	-6.75/-7.7	-8.89/-8.21	-9.92/-12.18	-15.42/-15.74	-15.38/-13.75	-14.38/-12.24	-11.25/-13.66	-13.88/-13.43	-14.37/-10.78	-6.78/-6.21	-5.92/-5.3
Θ(165°)	-15.1/-15.51	-14.45/-13.56	-12.1/-11.02	-11.33/-8.67	-7.13/-6.62	-7.46/-8.12	-9.22/-11.27	-9.82/-9.39	-10.59/-11.27	-10.23/-11.81	-11.24/-15.49	-14.65/-11.35	-9.24/-8.29	-8.27/-8.22	-6.73/-5.79	-5.51/-5.58	-6.22/-4.81	-5.17/-7.05	-9.05/-10.28	-12.27/-14.51	-12.79/-11.56	-10.35/-8.74	-8.56/-8.89	-10.4/-12.23
Θ(172.5°)	-8.84/-9.91	-10.46/-8.52	-7.53/-7.21	-6.98/-7.72	-6.86/-7.72	-7.71/-9.73	-11.87/-14.64	-13.69/-14.02	-13/-11.35	-9.3/-8.2	-7.85/-7.71	-7.06/-5.89	-5.92/-5.98	-5.84/-5.16	-4.51/-3.34	-3.79/-4.44	-4.72/-5.76	-6.92/-7.64	-6.89/-7.33	-6.21/-5	-5.05/-6.05	-7.37/-7.82	-8.02/-7.73	
Θ(180°)	-12.08/-11.53	-11.72/-14.06	-13.36/-11.88	-9.62/-8.79	-9.79/-11.09	-12.55/-14.8	-15.48/-15.61	-14.23/-13.26	-13.38/-11.98	-9.34/-7.6	-6.51/-5.87	-6.51/-5.95	-6.53/-7.4	-7.89/-7.88	-5.61/-6.02	-5.63/-6.32	-6.79/-7.73	-8.48/-8.2	-7.95/-7.8	-9.34/-8.62	-8.14/-7.19	-6.57/-6.52	-7.66/-8.8	-9.98/-10.82
Freq(dB)	6.995GPol.	ThetaL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DG(dB)	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°)	-4.47/-4.1	-3.48/-2.68	-3.24/-3.21	-2.57/-2.88	-2.86/-2.83	-3.24/-4.1	-4.76/-5.18	-5.71/-9.9	-4.12/-3.88	-4.32/-4.77	-3.93/-4.15	-3.91/-2.57	-2.59/-2.35	-1.9/-1.41	-1.41/-1.34	-1.24/-1.47	-2.23/-3.35	-4.64/-5.85	-6.22/-6.57	-6.13/-5.71	-6.88/-5.7	-5.62/-5.43	-5.37/-6.25	-5.48/-5.52
Θ(7.5°)	-4.72/-5.08	-6.38/-7.83	-10.36/-10.23	-9.56/-8.72	-7.88/-7.19	-7.01/-7.72	-8.74/-10.21	-10.66/-8.9	-7.11/-5.66	-3.82/-1.99	-0.82/-0.37	0.210.68	0.810.59	1.31/0.8	0.950.8	0.62/-0.11	-0.4/-1.11	-2.15/-3.8	-4.64/-4.18	-3.88/-4.06	-3.99/-3.71	-3.34/-3.66	-3.73/-3.45	-3.61/-4.34
Θ(15°)	-1.83/-2.71	-3.49/-3.67	-3.64/-2.75	-2.49/-2.89	-4.24/-5.32	-5.79/-4.28	-5.73/-5.56	-5.22/-4.97	-5.04/-6.29	-8.04/-6.7	-4.59/-4.28	-3.25/-2.19	-1.91/-0.6	0.540.93	0.49/-0.36	-1.85/-2.36	-1.44/-0.75	-0.15/-0.15	-0.78/-1.55	-2.42/-3.56	-4.76/-5.44	-5.89/-5.55	-4.53/-2.93	-2.19/-1.62
Θ(22.5°)	0.74/-1.34	0.97/-1.0	-0.99/-0.22	-0.42/-0.84	-0.74/-0.08	0.530.8	-0.09/-1.74	-2.95/-4.05	-4.26/-3.67	-1.56/-0.92	-2.42/-4.86	-5.88/-5.32	-3.05/-0.98	-0.18/-0.24	-6.61/-5.7	-2.33/-2.34	-2.35/-2.31	-2.81/-4.35	-5.04/-3.99	-2.58/-2.3	-2.24/-2.08	-1.49/-1.38	-1.99/-1.7	-1.12/-0.48
Θ(30°)	-0.62/-0.05	-0.79/-0.9	0.56/-1.32	1.22/-15	2.61/-45	0.690.24	-0.58/-2.97	-3.19/-1.31	-0.54/-2.37	-2.43/-1.64	-3.22/-3.6	-2.02/-1.91	-2.53/-2.37	-1.270.53	1.37/1	-2.08/-3.23	-1.16/-1.34	-3.89/-7.04	-10.65/-11.52	-5.8/-2.99	-1.87/-1.9	-2.48/-2.14	-2.03/-2.6	-2.69/-2.16
Θ(37.5°)	1.44/-1.16	-0.25/-1.58	1.65/-2.21	0.86/-2.65	3.87/-2.77	1.762.95	3.080.78	-1.59/-4.56	-5.06/-4.62	-5.34/-6.6	-3.2/-0.45	1.43/-1.35	0.990.42	0.35/-0.59	0.04.3	-1.59/-2.68	-2.31/-3.93	-3.72/-4.51	-5.52/-5.44	-4.11/-3.32	-4.08/-5.13	-1.010.87	0.650.32	0.89/-1.63
Θ(45°)	2.62/68	2.45/-0.6	2.21/-3.75	3.87/-2.96	3.79/-2.4	2.353.2	3.62/63	1.72/-1.51	-0.69/-1.66	1.920.73	3.23/-4.14	3.062.73	0.53/-1.71	2.85/-1.73	2.24/-2.1	1.31/-1.79	-5.24/-4.27	-1.98/-5.02	-4.09/-1.33	0.21/-2.05	0.08/-2.75	-1.760.57	1.292.45	
Θ(52.5°)	3.04/-3.21	3.26/-4.5	3.85/-2.75	5.29/-6.3	5.13/-4.52	1.073.78	4.332.02	1.060.48	0.730.73	2.053.42	5.594.72	2.993.08	1.583.78	4.033.3	3.420.25	0.180.53	-2.03/-3.66	0.56/-4.42	-5.75/-2.61	0.99/-1.4	0.330.76	-1.86/-2.9	-0.892.42	3.383.67
Θ(60°)	4.13/-3.19	2.865.24	5.783.89	6.126.51	5.263.39	0.032.7	2.36/-0.45	1.020.52	-0.14/-2.93	4.965.14	5.384.67	4.474.28	2.523.02	2.52.81	2.372.66	-0.260.9	-0.47/-2.66	2.760.36	-0.61/-1.38	1.563.03	2.75/-0.24	-1.64/-2.6	-5.84/-1.92	4.974.68
Θ(67.5°)	5.432.96	1.564.01	5.184.41	6.015.47	2.861.99	4.047.24	4.24/-1.75	1.21/-0.82	0.63.33	5.795.29	5.35/-2.1	5.334.23	4.122.89	1.962.49	-0.073.58	1.02/-0.41	-1.2/-2.18	2.51/-73	2.360.19	1.733.64	4.110.7	-0.77/-3.64	-3.94/-2.19	5.74/-27
Θ(75°)	5.023.35	1.042/-77	3.363.34	4.343.56	1.782.29	0.694.86	5.79/-4.1	2.11/-2.42	-0.022.86	5.33/-57	4.664.61	4.994.01	4.793.29	1.97/-1.4	0.912.58	1.29/-0.18	-0.78/-3.69	3.262.81	2.720.05	1.782.04	4.142.37	0.8/-2.11	-1.38/-1.9	5.653.83
Θ(82.5°)	3.773.53	0.231.68	1.532.02	2.																				



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Freq(Hz)	6.175G	6.475G	6.695G	6.995G
Ant. 1 Max Gain (dBi)	4.97	3.84	4.55	4.79
Ant. 2 Max Gain (dBi)	5.69	5.41	5.56	5.02
Ant. 3 Max Gain (dBi)	4.2	5.01	3.8	5.01
Ant. 4 Max Gain (dBi)	3.94	4.32	3.2	4.54
Ant. 1 Polarization/Θ(°)/Φ(°)	Theta/60/165	Theta/60/150	Theta/52.5/150	Theta/60/172.5
Ant. 2 Polarization/Θ(°)/Φ(°)	Theta/67.5/15	Theta/52.5/60	Theta/52.5/60	Theta/52.5/67.5
Ant. 3 Polarization/Θ(°)/Φ(°)	Phi/60/60	Phi/75/97.5	Phi/75/285	Phi/82.5/232.5
Ant. 4 Polarization/Θ(°)/Φ(°)	Phi/82.5/277.5	Phi/60/352.5	Phi/67.5/352.5	Phi/37.5/217.5
Max Gain (dBi)	5.69	5.41	5.56	5.02
DG [1SS] (dBi)	5.91	6.8	5.56	6.06
DG [2SS] (dBi)	5.69	5.41	5.56	5.02
DG [4SS] (dBi)	5.69	5.41	5.56	5.02





Radiated Composite Gain Data of 6GHz_6G Ant1~4

Appendix A.6

Θ(22.5°)	-1.76/-2.68	-2.18/-0.99	-1.54/-2.07	-1.43/-1.7	-2.39/-3.75	-2.82/-1.56	-0.23/0.43	1.06/1.1	1.67/2.42	2.51/1.9	0.90/46	0.08/-0.63	-1.81/-0.98	0.10/93	1.36/0.79	-0.21/0.44	1.04/1.89	1.92/0.92	-0.14/0.06	-0.02/-0.87	-1.93/-2.32	-2.81/-3.36	-3.45/-3.95	-3.64/-1.69
Θ(30°)	-1.77/-1.19	-0.07/-0.21	-1.61/-0.98	-0.12/-0.3	-2.09/-1.41	-0.26/-0.77	1.33/2.29	2.23/1.65	1.46/2.46	3.01/2.4	1.14/0.55	0.03/1.37	1.53/0.72	1.73/2.31	2.41/2.77	1.02/0.64	2.45/3.26	3.2/3.3	2.48/3.27	3.22/2.09	0.90/58	-0.32/-1.38	-1.53/-4.07	-0.54/-1.21
Θ(142.5°)	-0.36/0.61	1.98/2	-0.26/0.49	0.4/-2.01	-2.22/-0.74	-0.29/1.06	1.62/26	3.57/2.69	2.18/2.68	2.28/1.51	0.24/-0.38	-0.26/0.7	1.37/0.48	1.46/1.12	1.53/5.15	2.02/1.83	3.29/3.31	2.4/2.02	1.73/1.13	0.27/-1.09	1.66/-0.66	0.46/-1.02	0.45/0.88	0.46/3.41
Θ(45°)	0.54/0.69	1.57/2.83	1.34/0.05	0.08/-0.38	-0.29/-0.22	2.08/3.57	1.92/33	4.23/2.82	1.17/1.15	1.61/0.77	-0.82/-0.73	1.31/24	1.76/0.38	0.99/1.93	1.23/1.57	1.93/0.56	1.64/1.99	2.63/2.91	1.32/0.26	0.69/1.3	-0.26/-0.52	0.07/0.78	1.72/1.95	1.04/0.24
Θ(52.5°)	2.17/2.87	2.83/11	2.51/61	0.54/0.73	-0.38/0.71	0.99/1.26	-0.84/2.37	3.11/0.82	2.34/2.39	1.24/1.49	0.96/1.03	1.29/1.26	0.98/0.46	0.89/3.06	0.98/0.68	1.64/-0.53	0/1.98	2.51/1.91	1.06/-0.06	0.48/1.26	-0.43/-0.33	0.5/1.8	2.36/2.52	3.36/1.29
Θ(60°)	3.04/3.04	3.51/2.68	3.35/2.88	1.75/2.12	1.64/3.04	1.50/57	-0.32/0.35	1.86/1.68	2.32/2.79	0.32/1.09	-0.7/-2.6	-0.92/1.12	0.25/0.66	0.72/0.3	0.47/-0.87	0.27/-0.3	0.41/1.37	2.32/1.51	0.53/1.11	1.96/3.57	1.66/1.89	1.41/1.84	2.59/2.91	4.16/3.41
Θ(67.5°)	3.24/3.16	4/2.3	2.77/3.24	3.03/2.57	2.34/0.7	3.6/2.76	2.79/2.9	2.22/6	1.63/1.09	1.06/1.97	0.31/0.02	-0.03/1.8	1.95/1.17	2.03/2.04	2.30/35	0.1/1.76	1.85/2.81	3.24/1.99	1.75/2.9	3.85/4.34	2.98/2.93	1.37/1.54	1.97/2.07	3.64/4.18
Θ(75°)	3.05/3.1	4.53/2.8	1.68/2.69	2.92/2.65	1.73/4.6	5.19/3.66	3.88/3.68	3.53/3.23	2.35/1.89	3.3/3.3	1.89/2.15	2.03/2.45	2.52/1.57	2.21/1.31	2.58/1.25	2.22/0.4	2.73/3.76	4.12/1.95	1.35/3.31	5.43/3.82	3.77/3.03	2.11/1.38	2.05/2.52	3.33/3.57
Θ(82.5°)	1.37/2.01	4.23/2.33	1.52/1.78	2.52/1.72	1.2/3.76	5/1.3	2.28/3.02	2.86/3.72	2/1.55	3.97/3.47	1.42/2.28	2.86/1.2	2.13/1.79	0.74/1.86	1.91/1.05	3.2/83	2.73/4.54	3.47/1.63	1.32/3.25	5.56/3.3	3.14/1.84	1.78/1.19	2.36/2.37	2.58/2.49
Θ(90°)	0.43/1.79	3.66/1.75	0.68/1.17	0.07/0.71	1.05/2.79	3.09/-1.4	-0.79/0.34	1.04/3.27	0.46/0.36	2.27/1.91	0.04/1.03	1.38/0.24	0.12/1.18	0.36/1.22	0.12/0.04	1.44/1.2	0.96/2.69	0.67/-0.08	-1.34/1.15	2.71/1.55	1.76/0.4	0.49/0.85	1.44/1.42	1.71/2.11
Θ(97.5°)	-1.09/0.05	2.27/0.64	0.30/73	-0.31/-0.22	0.39/0.59	1.85/-2.02	-1.72/-0.68	0.47/1.4	-1.77/-0.18	-0.63/-1.02	-1.78/-0.59	0.15/-0.84	-1.04/-1.2	0.29/-1.18	-1.67/-2.81	-1.24/-2.75	-1.24/-0.59	-2.55/-2.77	-4.13/-1.1	-1.0/-10.28	-1.53/0.1	0.15/-0.36	0.58/0.6	1.36/1.24
Θ(105°)	-1.12/-0.99	0.9/-0.4	-0.38/-0.59	-1.02/-0.26	-0.16/-1.15	-1.37/-0.86	-0.64/-2.05	-2.05/-1.66	-2.5/-2.37	-3.44/-3.2	-1.63/-2.65	-1.12/-1.34	-2.85/-2.73	0.16/-2.89	-1.58/-2.93	-2.1/-3.99	-3.03/-2.27	-2.7/-3.58	-4.24/-0.59	-0.55/-0.92	-0.93/-0.44	-1.32/-2.11	-1.08/-0.49	-0.41/-0.03
Θ(112.5°)	-1.89/-2.52	-1.39/-1.74	-2.32/-2.45	-2.43/0.27	-1.93/-0.45	-2.68/-4.76	-2.56/-8.46	-3.66/-1.71	-4.16/-4.36	-2.81/-5.49	-1.46/-2.72	-1.9/-3.39	-2.62/-0.9	-2.1/-4.38	-4.49/-5.01	-2.22/-1.48	-5.33/-1.78	-2.06/-2.57	-4.64/-1.59	-1.19/-2.5	-2.26/-4.37	-2.35/-3.14	-1.56/-3.25	-2.29/-0.39
Θ(120°)	-1.67/-1.8	-2.82/-2.09	-2.5/-2.48	-2.46/-2.52	-3.35/-0.07	-1.91/-0.58	-0.55/-2.51	-3.78/-5.13	-4.06/-2.92	-6.96/-7.35	-4.41/-3.31	-4.64/-4.17	-1.78/-2.76	-5.39/-4.41	-7.12/-5.78	-4.6/-1.8	-8.13/-5.79	-4.15/-4.26	-7.82/-5.15	-2.43/-2.85	-2.6/-6.14	-3.63/-1.88	-2.43/-3.86	-2.29/-0.79
Θ(127.5°)	-3.29/-2.11	-2.56/-4.57	-3.52/-4.55	-4.39/-3.24	-4.75/-2.48	-2.59/-5.76	-6.09/-2.52	-4.26/-6.25	-4.86/-2.74	-6.13/-7.24	-5.11/-6.57	-8.76/-3.24	-5.15/-5.24	-3.12/-5.44	-9.82/-3.93	-3.67/-5.14	-6.68/-5.47	-3.7/-3.34	-0.67/-4.85	-3.31/-3.64	-2.38/-3.96	-3.72/-5.23		
Θ(135°)	-5.21/-5.06	-4.6/-5.21	-4.39/-6.2	-5.12/-6.35	-6.4/-7.28	-3.78/-3.83	-6.52/-6.1	-5.23/-4.86	-6.67/-3.87	-5.05/-7.01	-5.55/-6.29	-7.55/-9.11	-10.15/-6.86	-8.3/-5.01	-7.78/-5.64	-5.03/-10.36	-5.76/-3.8	-5.03/-9.3	-7/-3.53	-3.67/-4.72	-3.79/-3.52	-3.37/-4.33	-5.8/-4.59	-4.12/-6.03
Θ(142.5°)	-5.1/-5.29	-6.73/-6.74	-6.2/-6.82	-6.11/-6.84	-5.27/-6.65	-5.46/-6.84	-5.38/-6.64	-7.83/-6.54	-4.49/-3.46	-4.87/-4.65	-5.51/-5.15	-8.76/-8.15	-9.12/-6.54	-5.27/-7.06	-9.55/-8.76	-8.71/-10.64	-9.06/-6	-7.8/-8.52	-9.07/-7.8	-8.45/-5.74	-5.73/-5.23	-6.02/-6.15	-5.97/-5.59	-5.33/-4.49
Θ(150°)	-5.2/-5.18	-6.19/-1.9	-7.67/-5.94	-6.66/-6.01	-6.69/-5.79	-3.74/-5.3	-7.61/-6.27	-8.44/-6.76	-5.36/-10.51	-7.62/-5.63	-7.26/-4.35	-8.34/-6.12	-6.17/-6.85	-10.98/-10.01	-8.5/-11.89	-8.82/-8.08	-9.02/-8	-7.11/-5.85	-5.5/-7.65	-7.74/-10.49	-4.71/-6.89	-4.71/-3.82	-3.5/-3.7	
Θ(157.5°)	-3.94/-6.25	-7.74/-6.78	-8.12/-8.85	-7.74/-8.97	-9.63/-8.12	-8.21/-9.45	-6.21/-6.46	-8.53/-7.05	-4.73/-6.19	-8.55/-10.47	-10.32/-9.42	-10.1/-11.58	-11.21/-8.66	-5.39/-6.16	-11.79/-9.2	-9.43/-10.48	-11.39/-10.13	-9.87/-10.82	-11.72/-8.59	-8.11/-11.15	-11.45/-10.52	-8.84/-6.88	-5.22/-4.71	-3.83/-3.43
Θ(165°)	-12.61/-11.23	-9.42/-8.45	-7.96/-7.84	-8.79/-7.46	-6.66/-7.15	-7.52/-7.21	-7.54/-9.02	-9.06/-8.67	-8.05/-7.94	-8.28/-10.09	-9.76/-11.82	-11.33/-9.11	-7.96/-7.92	-7.56/-6.59	-5.49/-5.44	-5.7/-5.48	-5.96/-5.3	-5.63/-7.04	-7.16/-6.57	-7.71/-9.68	-8.99/-8.8	-8.47/-7.31	-7.37/-7.73	-9.61/-10.52
Θ(172.5°)	-7.79/-9.04	-9.6/-7.41	-6.61/-6.44	-6.6/-7.17	-6.78/-7.05	-7.13/-8.97	-10.09/-12.07	-11.77/-10.68	-9.25/-8.42	-7.83/-7.51	-7.8/-7.74	-7.17/-5.92	-5.71/-5.41	-4.97/-4.31	-3.98/-3.23	-3.84/-3.39	-4.52/-4.9	-5.55/-6.33	-5.93/-5.75	-5.71/-6.44	-6.19/-5.2	-4.75/-6.52	-7.52/-7.73	-7.13/-6.9
Θ(180°)	-8/-7.24	-6.75/-7.72	-8.21/-8.21	-7.44/-6.71	-7.13/-8.15	-9.57/-10.94	-11.1/-10.84	-10.09/-9.87	-10.74/-10.19	-8.68/-6.9	-5.56/-4.93	-4.31/-4.2	-4.65/-5.3	-5.43/-5.24	-4.44/-4.17	-3.86/-4.1	-4.48/-4.69	-5.42/-6.16	-7.04/-7	-7.39/-7.33	-7.21/-5.82	-4.74/-5.91	-6.51/-7	-7.56/-7.69
Freq(dB)	6.9595Pol.	ThetaL	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
DG(dB)	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°)	-4.77/-4.87	-4.24/-3.58	-4/-0.05	-3.67/-4.13	-3.93/-4.04	-4.45/-4.93	-5.5/-5.79	-6.06/-5.51	-4.44/-4	-4.14/-4.39	-3.86/-4.14	-3.32/-2.17	-2.37/-2.62	-2.76/-2.58	-2.32/-2.38	-2.34/-2.44	-3.08/-3.65	-4.56/-5.01	-5.17/-5.37	-5.55/-5.55	-5.15/-4.69	-4.81/-5.39	-5.56/-5.45	-5.14/-5.19
Θ(7.5°)	-4.13/-4.45	-4.43/-5.75	-7.05/-0.74	-6.24/-5.97	-5.87/-5.79	-5.99/-6.98	-7.84/-8.61	-8.54/-8.07	-7.3/-6.1	-4.64/-2.87	-1.54/-1.01	-0.74/-0.36	-0.47/-0.9	-0.4/-0.72	-0.06/0.01	-0.38/-1.2	-1.82/-1.98	-2.3/-2.97	-3.16/-3.57	-3.62/-4.08	-3.78/-3.26	-3.87/-3.34	-3.62/-4.01	
Θ(15°)	-1.42/-2.47	-2.99/-3.69	-4.1/-6.23	-3.16/-4.72	-5.01/-4.37	-4.04/-3.7	-3.9/-4.54	-4.96/-6.04	-7.27/-5.99	-4.41/-4.77	-3.89/-2.19	-1.92/-1.36	-0.94/-0.53	-0.22/-0.15	-1.05/-0.42	-0.22/-0.63	-1.28/-1.92	-2.57/-3.83	-4.86/-5.2	-5.36/-4.89	-3.73/-2.24	-1.49/-0.92		
Θ(22.5°)	-0.39/0.36	0.67/-0.63	-2.35/-1.43	-0.82/-0.9	-1.52/-1.63	-0.48/0.46	0.23/-0.97	-2.29/-3.44	-4.37/-4.57	-2.27/-2.27	-3.37/-3.05	-4.16/-5	-3.52/-1.24	-0.24/-1.04	-1.91/-2.32	-2/-1.81	-1.89/-2.3	-2.85/-3.31	-3.48/-2.53	-1.45/-1.48	-1.98/-2.77	-2.31/-2.72	-3.38/-3.03	-2.55/-1.75
Θ(30°)	-1.69/-1.69	-1.55/-1.56	-0.18/0.52	0.85/-1.92	1.89/3.33	0.71/-0.94	-1.63/-3.19	-2.68/-1.17	-0.94/-3.57	-2.52/-0.99	-2.69/-3.3	-2.03/-2.79	-2.93/-1.06	-0.54/-0.84	0.11/1.16	-1.33/-2.54	-0.93/-2.23	-4.26/-6.05	-7.41/-7.3	-5.02/-3.57	-2.03/-1.87	-3.3/-2.54	-2.49/-3.61	-3.04/-2.43
Θ(37.5°)	0.09/-0.37	-0.9/-1.72	0.56/1.09	0.17/1.63	2.94/1.75	0.41/1.41	0.99/-0.25	-1.24/-3.65	-4.19/-4.84	-4/-4.1	-3.08/-1.13	0.2/-0.45	-0.5/-0.16	-0.35/-1.66	-0.73/-0.07	-1.86/-2.67	-1.49/-4.01	-4/-3.27	-4.01/-4.54	-3.67/-4.17	-3.85/-4.21	-2.41/-0.46	-0.48/-0.63	-0.57/-0.16
Θ(45°)	0.82/0.98	0.79/0.64	0.99/2.04	2.24/1.4	2.32/2.31	2.06/1.92	2.05/1.89	1.07/-2.18	-0.93/1.18	0.74/0.37	2.52/2.9	1.54/0.97	-1.19/0.22	1.15/0.3	1.23/0.91	-0.92/-0.63	-3.49/-3.14	-2.43/-4.37	-4.07/-2.32	-0.79/-2.26	-5.37/-1.58	-0.99/-2.67	-2.85/-0.84	-0.03/-0.37
Θ(52.5°)	1.82/2.19	2/3.64	2.87/1.39	3.17/3.67	3.35/2.75	-0.09/2.06	3.36/2.16	1.55/-0.51	-0.45/0.1	0.35/2.29	4.53/3.13	1.31/1.31	0.05/2.43	2.79/1.93	2.46/1.15	-1.35/-0.94	-3.1/-3.65	-0.79/-4.17	-4.11/-3.86	-0.78/-0.23	-0.98/-0.68	-3.06/-3.16	-1.61/1.9	2.81/2.69
Θ(60°)	2.68/2.02	1.89/4.35	4.54/2.29	4.06/4.68	3.57/1.58	-1.06/0.84	1.3/-2.01	1.06/-0.41	-1.23/1.54	2.99/3.44	4.26/2.89	2.22/2.49	1.13/1.28	2.2/2.1	1.55/1.86	-1.62/-0.2	-1.89/-3.09	0.99/-0.73	-0.6/-1.95	-0.14/-1.28	1.11/-1.92	-3.1/-3.67	-5.23/0.74	3.94/3.73
Θ(67.5°)	3.63/1.58	0.65/2.37	3.66/2.29	4.06/3.5	1.79/3.43	-1.82/32	2.68/1.15	4.09/-2.3	1.03/2.25	3.63/3.1	3.44/3.22	3.38/2.47	2.69/1.03	1.63/1.96	-0.69/2.66	-0.48/-0.74	-2.12/-3.32	0.53/0.72	-2.0/-0.62	0.16/1.79	2.02/-0.83	-2.15/-3.85	-3.65/0.8	3.76/3.26
Θ(75°)	3.22/1.51	-0.23/0.89	1.38/-1.26	2.27/1.71	0.82/0.7	-0.72/2.81	4.04/2.79	0.39/-3.49	-1.73/0.88	3.12/1.47	3.12/96	3.44/2.35	3.08/-1.28	1.19/1.13	-0.06/1.79	0.41/0.68	-1.46/-4.22	1.33/1.34	2.13/-1.44	0.04/0.39	2.22/0.63	-0.62/-2.86	-1.72/0.5	3.48/2.28
Θ(82.5°)	1.94/1.49	-1.15/-0.23	-0.31/0.12	0.83/-0.1	-0.92/0.53	-0.81/66	2.41/2.9	-1.1/-3.35	-3.48/-0.86	1.51/0.55	1.21/35	1.91/59	2.64/-0.19	-0.1/-1.07	0.0/89	0.25/0.39	-2/2.05	1.86/1						

Gain Result

[illegible]



Radiated Composite Gain Data of 6GHz_6G Ant1~4

Appendix A.6

Θ(22.5°)	-10.65/-7.81	-8.02/-10.41	-11.78/-11.91	-12.13/-12.99	-13.72/-18.67	-11.04/-5.76	-4.24/-6.19	-6.32/-6.01	-5.31/-4.41	-3.42/-3.13	-3.56/-4.17	-6.1/-10.44	-18.86/-13.08	-10.75/-9.76	-6.84/-2.49	-0.98/-1.7	-4.54/-3.86	-2.69/-3.33	-4.72/-4.77	-5.2/-6.87	-12.19/-19.21	-19.33/-18.35	-18.17/-17.14	-17.73/-12.57
Θ(30°)	-16.95/-18.86	-11.52/-9.71	-9.94/-9.99	-11/-10.1	-12.86/-12.34	-9.59/-10.62	-7.11/-5.95	-5.84/-5.18	-4.21/-2.88	-2.7/-6.39	-10.09/-9.13	-7.43/-8.37	-13.82/-19.38	-11.97/-8.48	-9.81/-6.36	-5.22/-5.96	-3.89/-2.51	-1.16/-2.24	-5.49/-4.5	-3.96/-7.1	-15.66/-18.42	-17.74/-14.56	-10.83/-7.2	-6.57/-10.26
Θ(37.5°)	-12.18/-17.73	-13.81/-10.72	-17.2/-16.03	-16.77/-13.93	-17.71/-13.93	-11.2/-8.31	-7.44/-5.32	-3.25/-3.82	-9.36/-5.11	-8.07/-12.74	-10.38/-18.03	-18.37/-14.44	-9.52/-15.32	-15.01/-10.76	-9.51/-6.21	-7.75/-6.69	-2.54/-3.25	-4.75/-4.98	-0.99/-11.33	-10.16/-15.48	-17.53/-19.48	-14.56/-11.52	-8.45/-7.03	-8.97/-16.66
Θ(45°)	-14.9/-13.96	-15.47/-11.09	-10.53/-17.83	-12.11/-18.65	-17.95/-18.82	-12.21/-5.11	-5.62/-8.86	-4.18/-5.39	-7.46/-14.17	-12.08/-12.69	-18.28/-15.6	-11.87/-18.32	-10.46/-10.71	-17.08/-16.37	-14.42/-12.41	-8.54/-18	-4.04/-6.26	-9.47/-8.7	-8.86/-14.19	-15.94/-12.12	-16.17/-18.25	-17.32/-18.02	-15.09/-12.03	-8.59/-11.93
Θ(52.5°)	-14.4/-8.78	-7.55/-13.45	-7.61/-12.94	-12.8/-15.85	-14.69/-13.33	-17.2/-8.29	-15.55/-9.48	-4.67/-10.79	-5.54/-9.82	-15.09/-19.2	-18.94/-19.23	-15.44/-17.73	-9.62/-13.78	-14.02/-16.32	-18.97/-6.72	-3.96/-12.91	-9.59/-11.26	-10.14/-6.68	-12.04/-15.43	-16.48/-10.04	-14.61/-19.53	-16.48/-16.29	-19.18/-15.16	-7.94/-12.89
Θ(60°)	-10.75/-9.49	-6.49/-17.27	-7.64/-6.63	-10.97/-12.85	-11.92/-7.55	-16.32/-6.67	-9.86/-10.01	-5.96/-8.01	-6.93/-7.37	-19.14/-19.42	-18.78/-18.85	-19.13/-19.15	-11.58/-16.87	-9.66/-16.98	-17.93/-10.16	-5.34/-10.17	-7.18/-16.57	-9.34/-13.5	-14.6/-6.57	-13.74/-16.34	-14.6/-6.57	-17.21/-14.16	-17.59/-18.22	-8.93/-9.55
Θ(67.5°)	-10.67/-12.31	-7.92/-14.86	-7.21/-5.47	-9.03/-8.44	-8.25/-6.42	-7.03/-6.91	-10.02/-9.28	-9.21/-7.46	-7.23/-10.86	-10.61/-17.2	-17.83/-13.63	-15.71/-18.75	-12.66/-10.64	-9.03/-18.5	-14.79/-10.56	-11.24/-9.1	-6.42/-18.99	-5.64/-13.64	-16.22/-13.14	-8.6/-6.39	-12.39/-13.63	-17.49/-17.46	-19.26/-17.91	-10/-10.73
Θ(75°)	-12.4/-9.77	-9.28/-11.39	-7.36/-3.83	-8.22/-7.15	-9.11/-3.46	-3.66/-5.6	-4.63/-11	-6.03/-10.16	-5.28/-9.28	-8.44/-9.99	-15.17/-12.03	-13.83/-14.35	-7.91/-6.85	-13/-14.25	-18.13/-8.42	-10.3/-17.63	-7.45/-11.4	-4.43/-15.13	-16.04/-8.71	-5.94/-10.09	-8.54/-11.39	-11.37/-19.74	-17.93/-16.95	-15.03/-16.25
Θ(82.5°)	-17.5/-8.49	-7.98/-8.38	-6.53/-4.22	-7.27/-5.41	-7.32/-3.59	-1.26/-6.32	-4.81/-7.32	-6.94/-9.33	-7.78/-8.42	-6.63/-6.55	-11.02/-9	-8.57/-13.49	-6.43/-8.23	-18.19/-8.66	-12.07/-5.39	-6.8/-19.29	-11.99/-5.75	-5.71/-15.96	-10.01/-6.75	-4.8/-12.7	-7.85/-11.05	-8.6/-16.64	-18.4/-17.8	-13.38/-15.16
Θ(90°)	-18.95/-13.04	-8.81/-6.47	-6.06/-3.76	-6.98/-5.82	-5.68/-4.15	-2.07/-6.01	-4.84/-6.06	-9.65/-6.22	-10.87/-8.83	-6.88/-5.52	-9.48/-9.4	-7.96/-11.17	-6.83/-6.5	-14.56/-7.79	-14.37/-5.16	-5.46/-16.02	-17.04/-5.91	-8.17/-11.29	-16.09/-6.82	-7.07/-17.2	-6.58/-7.55	-8.41/-14.7	-17.71/-17.79	-18.84/-10.78
Θ(97.5°)	-18.63/-16.71	-9.71/-7.62	-6.72/-4.38	-5.51/-6.44	-4.64/-6.42	-2.19/-6.54	-6.39/-5.52	-6.91/-6.48	-13.93/-9.46	-10.51/-10.47	-10.15/-14.11	-9.75/-9.86	-12.09/-12.08	-9.78/-11.63	-9.33/-10.08	-9.03/-15	-11.26/-6.18	-8.55/-10.44	-13.75/-9.05	-9.34/-9.64	-6.73/-8.27	-8.71/-15.06	-15.24/-18.14	-14.18/-9.26
Θ(105°)	-17.88/-19.1	-11.02/-9.15	-6.94/-8.48	-4.35/-6.45	-4.81/-3.53	-3.42/-3.33	-5.34/-7.27	-7.42/-6	-13.69/-16.68	-17.99/-14.93	-7.05/-15.48	-12.59/-14.02	-16.66/-11.34	-6.35/-13.33	-17.15/-11.55	-9.44/-12.19	-12.11/-14.13	-9.98/-10.38	-12.73/-5.9	-11.91/-18.21	-8.37/-8.77	-9.02/-8.67	-6.22/-8.34	-12.23/-12.32
Θ(112.5°)	-11.29/-14.28	-19.72/-10.96	-9.71/-5.82	-6.1/-3.81	-5.45/-4.22	-5.68/-6.19	-5.03/-10.58	-7.6/-6.05	-17.29/-13.19	-10.98/-18.67	-4.3/-17.39	-19.58/-18.33	-16.76/-8.29	-8.29/-13.29	-8.22/-11.72	-11.51/-7.27	-9.46/-10.95	-7.59/-8.83	-11.4/-7.56	-13.51/-7.29	-6.55/-12.01	-7.37/-9.99	-12.09/-18.32	-14.42/-8.61
Θ(120°)	-11.01/-13.46	-18.54/-11.75	-10.82/-6.98	-7.07/-3.87	-6.63/-5.16	-7.37/-6.21	-6.44/-6.66	-7.55/-6.58	-18.38/-10.49	-19.24/-16.25	-10.42/-18.75	-17.58/-13.35	-16.25/-9.43	-16.16/-15.92	-12.16/-18.12	-7.25/-7.29	-10.71/-11.42	-8.92/-5.79	-7.19/-14.79	-13.49/-7.82	-10.65/-18.74	-10.65/-18.74	-18.85/-9.75	
Θ(127.5°)	-9.28/-9.45	-9.85/-11.73	-11.6/-13.19	-11.24/-6.78	-12.69/-8.04	-4.82/-6.02	-10.57/-4.06	-9.21/-18.89	-8.33/-7.89	-18.66/-18.95	-15.81/-13.2	-9.61/-18.62	-10.97/-15.03	-12.59/-13.34	-13.53/-17.54	-13.78/-15.51	-18.75/-19.03	-8.96/-10.44	-11.91/-18.21	-8.37/-8.77	-6.22/-8.34	-12.23/-12.32	-18.32/-10.82	
Θ(135°)	-17.28/-12.25	-11.22/-10.5	-9.06/-11.33	-10.64/-12.48	-9.04/-11.49	-6.84/-5.5	-11.08/-12.47	-10.54/-11.26	-17.84/-12.19	-12.73/-15.52	-13.04/-11.58	-13.14/-8.7	-17.48/-11.23	-18.87/-12.17	-16.93/-10.34	-14.97/-17.77	-18.49/-11.58	-12.83/-16.39	-15.55/-12.16	-7.03/-12.81	-13.15/-6.39	-4.45/-10.61	-14.49/-15.08	-15.83/-18.82
Θ(142.5°)	-19.06/-12.86	-16.18/-16.27	-10.47/-7.79	-10.76/-6.04	-4.41/-12.94	-11.2/-10.75	-7.06/-8.43	-13.89/-5.66	-9.21/-5.9	-6.06/-12.78	-17.29/-12.71	-12.1/-14.33	-16.87/-17.24	-13.96/-13.88	-14.71/-18.23	-17.78/-17.92	-18.53/-10.48	-18.1/-11.73	-12.41/-13.13	-9.11/-12.15	-16.32/-14.89	-13.93/-13.13	-18.67/-19.07	-15.6/-16.54
Θ(150°)	-15.36/-12.85	-14.17/-17.84	-14.57/-11.19	-12.82/-11.62	-12.48/-6.69	-3.27/-6.84	-12.25/-8.75	-13.56/-13.56	-12.38/-18.98	-11.71/-10.02	-12.13/-14.23	-12.38/-18.86	-19.12/-17.47	-17.53/-11.74	-15.03/-17.55	-13.73/-18.1	-17.62/-14.2	-18.63/-13.1	-9/-8.66	-9.74/-16.2	-16.22/-18.98	-18.95/-11.72	-15.9/-16.71	
Θ(157.5°)	-19.33/-18.85	-17.94/-13.8	-16.14/-13.43	-9.6/-10.63	-10/-8.8	-11/-14.15	-7.23/-6.15	-8.41/-9.02	-8.48/-11.93	-13.56/-18.19	-19.01/-18.31	-18.99/-18.93	-19/-17.47	-17.62/-18.5	-17.17/-14.56	-18.04/-18.06	-19.28/-18.8	-18.13/-16.68	-16.76/-13.27	-11.48/-15.68	-17.86/-15.81	-16/-13.89	-11.29/-13.24	-18.15/-19.04
Θ(165°)	-18.85/-18.64	-17.2/-17.73	-18.83/-17.57	-19.17/-13.27	-11.06/-8.52	-7.85/-8.32	-8.71/-11.58	-16.27/-16.86	-18.75/-18.84	-18.23/-18.33	-12.53/-18.87	-17.35/-14.37	-13.41/-12.71	-14.01/-15.01	-10.94/-10.24	-11.38/-12.35	-13.1/-7.57	-6.02/-7	-8.75/-10.04	-12.45/-19	-18.21/-19.26	-18.39/-18.03	-18.33/-17.87	-16.69/-17.53
Θ(172.5°)	-18.66/-17.6	-19.17/-13.78	-11.59/-11.39	-9.58/-9.01	-7.19/-6.05	-6.9/-10.35	-12.16/-17.17	-18.45/-19.08	-19.12/-19.02	-16.42/-18.43	-18.95/-17.9	-18.12/-18.07	-18.87/-16.98	-16.56/-15.17	-12.95/-8.31	-7.89/-7.23	-6.42/-6.45	-7.31/-7.9	-6.84/-6.6	-7.47/-8.26	-8.67/-8.83	-9.58/-11.83	-14.13/-17.46	-19.43/-19.14
Θ(180°)	-18.44/-18.05	-17.37/-17.89	-15.58/-12.54	-9.66/-9.34	-10.76/-12.15	-15.58/-17.73	-19.08/-17.91	-15.76/-15.72	-18.48/-19.09	-16.37/-15.68	-14.13/-13.23	-14.14/-16.1	-18.17/-18.75	-18.46/-18.28	-13.65/-11.34	-9.49/-8.52	-7.29/-7.64	-8.46/-7.83	-6.91/-6.93	-8.64/-9.52	-9.89/-10.78	-11.81/-11.61	-13.11/-14.25	-15.37/-17.67
Freq(Hz)	6.995GPol.	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°)	-4.21/-4.59	-4.98/-4.97	-6.12/-7.19	-6.76/-8.38	-9.97/-10.88	-12.07/-14.82	-18.34/-17.72	-17.28/-12.99	-12.6/-6.95	-6.17/-5.57	-3.79/-3.22	-3.17/-2.1	-2.7/-2.96	-2.9/-3.06	-3.88/-4.47	-5.57/-6.54	-7.7/-10.71	-14.48/-17.55	-18.41/-16.05	-12.5/-9.82	-7.9/-6.39	-5.71/-5.82	-5.14/-4.5	-4.15/-4.5
Θ(7.5°)	-8.74/-6.6	-10.1/-12.21	-14.91/-16.03	-15.01/-16.2	-15.17/-13.69	-14.12/-16.05	-17.32/-16.42	-12.51/-9.81	-7.25/-5.77	-4.8/-3.29	-2.09/-1.44	-0.96/-0.24	-0.01/-0.24	0.33/-0.39	-0.98/-1.54	-2.13/-3.2	-3.54/-5.3	-6.64/-15.48	-18.99/-16.49	-11.78/-9.3	-8.21/-7.24	-6.54/-7.2	-6.37/-6.28	-7.22/-8.47
Θ(15°)	-7.17/-7.53	-8.5/-8.24	-8.36/-7.31	-7.4/-8.74	-11.44/-13.21	-13.66/-12.93	-12.98/-11.25	-9.75/-9.36	-8.74/-9.4	-8.97/-5.4	-2.84/-2.53	-1.22/-0.42	-0.110.53	1.021/0.2	0.06/-1.25	-3.05/-4.38	-4.14/-4.59	-4.96/-6.52	-8.86/-11.41	-12.31/-13.25	-13.8/-16.01	-18.42/-18.21	-15.16/-11.39	-9.11/-7.58
Θ(22.5°)	-0.36/-0.8	-2.38/-4.85	-8.28/-6.6	-5.75/-8.71	-7.68/-8.65	-17.2/-6.16	-6.44/-6.74	-5.37/-4.71	-4.18/-4.03	-2.01/-1.18	-1.81/-3.25	-4.89/-4.03	-2.63/-1.11	-0.77/-1.59	-3.19/-5.82	-7.17/-5.99	-7.14/-3.2	-10.16/-12.63	-11.82/-8.6	-7.76/-10.74	-16.18/-18.56	-6.72/-9.4	-7.12/-4.72	-2.71/-1.41
Θ(30°)	-5.94/-8.1	-4.89/-5.32	-6.4/-6.28	-3.65/-2.33	-3.77/-6.92	-4.45/-2.36	-3.15/-6.39	-5.65/-3.55	-3.12/-4.26	-4.1/-0.8	-6.31/-4.07	-1.26/-1.65	-3.34/-3.33	-3.79/-1.73	-0.69/-1.01	-5.56/-6.75	-6.16/-10.73	-10.94/-12.13	-14.29/-17.94	-10.16/-7.43	-6.84/-7.95	-11.17/-12.4	-12.11/-12.73	-12.23/-8.93
Θ(37.5°)	-2.78/-4.54	-5.17/-5.3	-4.58/-5.3	-8.08/-5.74	-2.27/-2.38	-3.52/-2.33	-2.38/-5.65	-5.16/-5.16	-8.81/-7.28	-4.59/-5.25	-2.610.14	0.920/0.2	0.48/-0.87	-1.76/-3.15	-2.32/-2.57	-7.37/-8.83	-5.92/-6.22	-8.27/-13.72	-12.83/-10.68	-6.74/-8.42	-7.78/-15.68	-4.94/-2.53	-4.39/-3.51	-2.29/-1.92
Θ(45°)	0.47/-0.3	-0.67/-1.49	-3.29/-2.08	-0.96/-4.77	-5.37/-2.81	-5.63/-1.95	-1.67/-3.9	-3.59/-3.89	-2.11/-0.28	0.22/-1.81	1.43/-0.32	3.05/-2.4	0.970/0.74	1.86/-0.01	-1.22/-1.07	-1.53/-3.32	-8.55/-4.5	-3.12/-13.61	-11.88/-6.64	-5.23/-6.96	-18.75/-7.13	-6.46/-10.78	-10.18/-3.15	-1.320.06
Θ(52.5°)	1.95/0.94	-0.59/-1.6	1.05/-3.93	0.1/0.4	-3.65/-2.82	-13.03/-1.73	0.14/-4.75	-5.1/-2.7	-0.87/-3.87	-0.492/3.7	4.55/-3.73	2.71/-3.24	1.93/-1.9	1.88/-0.01	1.19/0.5	-1.39/0.3	-3.66/-5.67	-2.01/-12.06	-9.6/-5.93	-5.41/-4.04	-3.13/-5.23	-17.86/-7.07	-2.6/-0.02	0.891/6.6
Θ(60°)	1.84/0.38	-3.06/-0.1	3.68/-1.08	0.021/5.9	-0.94/-2.88	-10.5/-1.5	-0.14/-4.19	-1.3/-2.81	-4.4/-3.5	3.54/-2.7	4.15/3.51	3.432/-9.9	0.78/-0.53	-2.87/-1.29	-0.051/0.1	-3.54/-0.18	-4.37/-1.7	-1.55/-9.59	-7.53/-8.08	-2.72/-1.57	-0.79/-6.48	-9.56/-5.01	-5.840.44	2.562/2.9
Θ(67.5°)	2.13/-0.93	-5.01/-4.93	2.75/0.82	-0.261/1.4	-1.82/-3.85	-10.03/-0.86	0.43/-1.65	-0.85/-5.83	-4.372/1.1	4.23/-6.5	3.554/-2.7	2.917/2.1	1.5/-1.34	-4.66/-1.12	-2.331/0.3	-2.854/-2.8	-							



Radiated Composite Gain Data of 6GHz_6G Ant1~4

Appendix A.6

θ(75°)	-9.18/-14.82	-18.01/-11.69	-5.18/-6.42	-5.83/-11.2	-14.21/-13.64	-7.95/-15.3	-18.12/-10.19	-6.13/-6.76	-10.41/-9.67	-5.78/-2.96	-7.62/-9.04	-6.64/-5.16	-6.89/-5.15	-9.37/-7.85	-6.92/-12.4	-14.64/-12.95	-14.18/-18.7	-9.24/-8.54	-12.05/-11.98	-7.42/-6.08	-6.16/-6.47	-5.11/-6.56	-8.25/-6.52	-3.72/-8.45
θ(82.5°)	-10.41/-10.31	-7.97/-12.52	-8.95/-9.65	-7.35/-10.37	-11.39/-14.39	-6.95/-11.91	-18.7/-8.15	-6.89/-8.03	-15.75/-9.54	-4.62/-3.63	-10.18/-8.21	-4.51/-7.75	-11.6/-8.12	-10.37/-9	-6.2/-10.52	-17.06/-15.25	-12.46/-13.18	-10.89/-9.51	-14.51/-13.08	-10.9/-5.79	-4.15/-2.69	-4.8/-4.64	-6.39/-7.17	-4.03/-8.71
θ(90°)	-8.67/-9.94	-9.47/-10.7	-11.78/-9.29	-7.56/-7.94	-7.71/-9.08	-6.71/-10.42	-19.18/-8.54	-5.16/-12.6	-19.05/-6.84	-3.9/-5.39	-10.16/-12.11	-5.28/-6.22	-8.01/-5.11	-5.47/-9.03	-7.16/-7.25	-13.61/-11.24	-13.73/-15.22	-12.75/-16.54	-17.48/-18.06	-14.8/-6.5	-6.7/-5.69	-7.42/-6.2	-7.36/-9.56	-6.17/-8.16
θ(97.5°)	-5.16/-6.06	-8.02/-9.06	-13.09/-13.66	-8.08/-10.52	-8.85/-7.89	-7.81/-8.5	-16.09/-11.68	-6.21/-17.77	-17.7/-9.56	-4.98/-10.25	-13.05/-9.34	-7.21/-6.22	-6.38/-8.42	-6.31/-6.7	-10.03/-5.54	-16.68/-13.39	-18.68/-13.29	-11.74/-18.35	-17.47/-17.65	-18.64/-8.08	-7.5/-6.81	-10.21/-6.96	-6.79/-8.5	-4.86/-7.76
θ(105°)	-6.04/-7.68	-7.93/-7.84	-8.53/-11.31	-14.53/-18.98	-18.46/-15.42	-13.1/-11.05	-13.73/-9.7	-12.27/-18.1	-14.56/-5.65	-9.25/-10.6	-12.23/-8.12	-6.57/-6.24	-10.08/-4.45	-5.58/-11.4	-6.85/-57	-9.26/-11.56	-15.27/-11.39	-13.24/-18.03	-18.71/-18.02	-15.85/-7.91	-6.74/-7.99	-12.32/-8.77	-7.27/-8.53	-5.03/-6.95
θ(112.5°)	-6.75/-7.83	-6.67/-3.97	-7.78/-6.56	-12.48/-18.25	-19.19/-14.65	-12.48/-15.65	-18.83/-17.35	-18.91/-9.88	-8.45/-8.85	-16.39/-18.19	-10.24/-8.56	-4.23/-7.29	-4.45/-1.29	-3.92/-7.21	-9.1/-7.52	-10.67/-12.06	-12.21/-13.21	-13.38/-18.89	-19.11/-17.34	-12.66/-6.75	-5.46/-5.81	-7/-6.88	-7.87/-12.69	-5.72/-6.69
θ(120°)	-2.56/-2.19	-6.63/-3.18	-3.92/-6.78	-9.44/-9.32	-18.43/-11.77	-13.41/-18.73	-18.04/-18.26	-15.89/-9.84	-11.9/-16.18	-15.39/-14.84	-16.33/-11.18	-5.68/-7.35	-8.35/-4.9	-8.57/-12.4	-14.02/-16.22	-10.94/-14.29	-8.26/-18.92	-18.59/-14.17	-18.69/-13.56	-8.68/-7.13	-6.05/-6.61	-7.57/-6.51	-5.35/-3.76	-2.27/-3.17
θ(127.5°)	-5.74/-3.01	-2.8/-2.27	-5.31/-7.31	-12.83/-13.09	-11.08/-13.27	-17.43/-18.36	-13.85/-18.03	-19.09/-14.27	-14.71/-12.02	-15.57/-19.09	-12.18/-11	-8.27/-8.82	-9.65/-8.3	-10.95/-11.68	-14.21/-6.64	-16.7/-6.66	-8.74/-19	-17.95/-18.92	-19.44/-17.73	-9.54/-7.54	-4.85/-8.66	-7.58/-14.73	-5.68/-4.25	-5.5/-3.81
θ(135°)	-13.63/-9.13	-8.83/-11.3	-13.36/-9.2	-8.71/-12.66	-18.95/-18.46	-15.32/-18.01	-9.33/-12.23	-14.42/-11.32	-18.16/-10.31	-13.04/-14.76	-8.81/-14.26	-12.76/-9.01	-5.02/-7.48	-8.89/-11.74	-8.12/-13.54	-6.33/-5.59	-14.17/-14.79	-18.41/-19.22	-15.24/-19.03	-10.57/-7.96	-8.65/-7.26	-12.57/-10.41	-8.94/-4.27	-6.36/-10.97
θ(142.5°)	-17.75/-18.68	-19.3/-13.47	-12.51/-12.66	-15.92/-15.54	-16.58/-14.14	-14.98/-17.98	-13.49/-15.66	-18.91/-13.1	-15.16/-14.65	-9.25/-6.67	-9.38/-11.97	-19.05/-18.1	-7.48/-5.27	-6.62/-9.44	-12.75/-11.87	-6.58/-10.38	-17.71/-16.53	-16.72/-16.93	-15.23/-19.14	-16.71/-10.28	-11.24/-7.68	-6.13/-5.58	-6.24/-6.55	-6.17/-8.12
θ(150°)	-17.84/-12.85	-9.61/-8.65	-8.26/-9.56	-13.66/-15.25	-11.54/-9.09	-8.85/-17.62	-16.41/-10.69	-14.71/-16.77	-10.46/-11.57	-10.09/-7.32	-8.22/-6.55	-5.19/-5.92	-7.42/-6.33	-2.12/-1.71	-5.08/-18.1	-11.72/-10.83	-13.1/-12.47	-17.72/-17.97	-13.74/-14.32	-17.11/-8.12	-14.13/-19.16	-13.88/-7.65	-6.64/-5.88	-4.35/-7.21
θ(157.5°)	-4.86/-7.42	-6.93/-8.66	-13.22/-12.29	-11.62/-12.12	-10.48/-10.63	-12.32/-16.05	-10.68/-8.48	-9.44/-14.21	-17.57/-17.54	-12.23/-9.38	-11.15/-18.13	-14.21/-11.19	-10.02/-10.54	-6.64/-6.53	-10.31/-16.64	-18.28/-17.5	-12/-10.66	-15.71/-19.48	-12.71/-13.86	-16.88/-16.87	-15.56/-14.94	-17.57/-10.25	-4.64/-3.02	-3.54/-4.01
θ(165°)	-6.66/-8.21	-11.72/-18.15	-16.01/-16.13	-17.69/-17.93	-18.97/-18.29	-15.09/-15.01	-18.8/-16.63	-11.88/-11.54	-12.07/-11.92	-13.93/-17.65	-19.31/-18.7	-18.8/-18.87	-18.75/-15.75	-10.17/-8.07	-7.25/-7.33	-7.71/-7.89	-10.83/-14.35	-16.62/-14.63	-13.95/-14.57	-12.57/-12.15	-11.03/-11.73	-12.08/-9.53	-6.97/-7.1	-6.57/-6.1
θ(172.5°)	-12.62/-12.74	-11.19/-9.57	-9.43/-9.96	-10.69/-11.96	-14.36/-14.76	-16.21/-18.02	-17.5/-14.54	-15.52/-19.14	-17.04/-13.31	-10.58/-7.94	-5.61/-4.12	-3.5/-3.04	-2.09/-1.32	-1.3/-1.71	-2.38/-4.19	-6.46/-7.93	-11.23/-17.2	-18.44/-19.46	-17.86/-16.83	-16.92/-16.73	-13.58/-11.79	-8.25/-9	-10.39/-11.43	-11.44/-10.85
θ(180°)	-18.74/-17.64	-17.49/-17.43	-17.98/-18.26	-18.19/-17.46	-17.41/-17.79	-19.16/-18.33	-15.5/-14.26	-14/-14.43	-14.2/-15.57	-15.97/-15.04	-14.59/-14.2	-15.33/-14.72	-15.81/-16.91	-18.44/-18.25	-18.62/-18.8	-18.11/-19.1	-18.87/-17.62	-18.98/-18.31	-15.57/-14.95	-14.56/-13.26	-12.74/-12.61	-11.16/-10.53	-13.63/-16.38	-18.19/-18.74
Freq(Hz)	6.175GPol.	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(97.5°)	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°)	-11.86/-12.83	-12.87/-14.14	-13.49/-10.91	-10.35/-10.8	-10.21/-9.49	-8.72/-8.35	-8.24/-8.07	-7.48/-7.55	-7.92/-8.15	-7.97/-9.16	-7.75/-8.44	-4.88/-9.15	-9.39/-9.5	-10.88/-11.1	-10.35/-9.48	-9.01/-7.63	-6.74/-6.06	-5.66/-5.77	-5.82/-5.62	-4.74/-4.79	-5.86/-7.2	-8/-7.9	-7.71/-8.89	-10.19/-11.25
θ(7.5°)	-15.16/-16.1	-16.6/-14.21	-12.31/-11.24	-9.66/-9.16	-7.96/-7.57	-6.48/-6.16	-6.01/-6.26	-6.83/-6.71	-6.72/-8.63	-10.02/-11.97	-11.04/-9.84	-8.05/-7.43	-6.77/-6.7	-6.54/-6.54	-6.03/-5.27	-4.98/-4.71	-4.49/-4.42	-4.46/-3.79	-3.55/-4.4	-4.61/-3.66	-6.13/-7.86	-9.11/-9.71	-10.14/-13.16	-13.84/-15.86
θ(15°)	-5.75/-5.35	-5.42/-5.37	-4.91/-4.93	-4.72/-5.28	-5.16/-5.66	-5.65/-5.87	-6.36/-6.83	-7.56/-8.4	-6.71/-6.76	-6.86/-7.67	-11.01/-16.09	-18.35/-18.41	-16.75/-13.8	-10.58/-7.07	-4.56/-4.08	-3.83/-3.4	-3.05/-2.59	-1.91/-0.96	-0.02/0.76	1.11/8.09	0.31/-0.23	-1.43/-2.97	-5.27/-7.47	-6.91/-6.41
θ(22.5°)	-0.37/-0.2	-0.92/-2.05	-3.51/-4.16	-2.54/-1.19	-0.51/-0.48	-0.64/-1.22	-2.96/-5.58	-7.89/-8.39	-7.07/-6.49	-8.63/-9.66	-11.35/-17.6	-14.01/-14	-13.65/-13.02	-9.55/-6.18	-4.83/-4.9	-5.26/-5.33	-5.57/-6.04	-6.04/-4.05	-1.85/-0.67	-0.5/-0.74	-0.87/-0.51	0.12/0.46	-0.16/-1.9	-2.74/-1.77
θ(30°)	-1.51/-1.12	-0.22/0.85	-0.21/-1.6	1.32/2.75	1.5/-0.29	0.421/2.9	0.68/-0.36	-3.04/-9.07	-15.66/-15.74	-17.23/-12.12	-12.6/-18.15	-18.58/-13.4	-11.76/-11.82	-8.61/-14.8	-1.91/-1.19	-1.2/-1.97	-4.99/-10.06	-12.23/-6.95	-2.96/-1.69	-2.11/-2.13	-0.37/0.83	0.73/0.69	0.53/-1.18	-3.18/-2.43
θ(37.5°)	-0.87/-3.99	-0.921/4.6	-0.75/-0.98	3.54/4.24	2.07/0.96	2.21/2.09	1.67/-1.21	-5.65/-6.19	-8.8/-8.26	-8.29/-5.82	-6.84/-4.36	-3.13/-2.86	-2.38/-1.65	-1.14/-2.55	-4.88/-4.57	-5.87/-6.86	-6.63/-8.37	-12.87/-15.82	-19.26/-13.85	-8.72/-4.57	-1.35/-0.32	0.11/0.48	-0.21/-0.59	
θ(45°)	1.02/-1.2	0.84/2.81	1.16/1.74	3.49/3.65	2.63/2.54	2.94/1.88	2.33/1.7	2.21/2.02	-9.65/-9.2	-5.41/-4.45	-1.54/-0.25	-1.14/-4.55	-3.97/-1.22	0.54/-1.21	-3.83/-8.91	-6.57/-2.57	-1.51/-3.13	-6.59/-5.84	-6.93/-9.61	-8.64/-5.78	-8.3/-9.58	-5.74/-5.1	-3.47/-1.57	2.13/0.6
θ(52.5°)	2.64/2.63	3.33/3.32	1.83/3.38	3.12/4.44	4.01/3.18	2.68/1.95	2.33/2.24	2.18/1.78	-4.47/-8.28	-2.68/-2.02	0.79/1.25	1.24/-2.16	-1.75/0.27	1.68/-2.57	-2.38/-2.98	-2.17/-1.97	-2.84/-3.03	-3.16/-1.95	-2.24/-6.55	-7.39/-9.45	-4.09/-5.59	-6.89/-2.65	-1.61/-0.12	3.23/2.22
θ(60°)	1.42/3.99	4.75/1.97	2.154/3.53	3.03/3.95	3.24/1.55	0.68/0.7	0.332/-2.55	-1.03/0.96	-2.55/-3.84	1.56/1.58	2.45/1.87	2.21/7.9	1.46/0.52	2.26/-0.5	0.65/1.67	-0.47/-2.36	-1.33/-1.61	-0.21/-0.53	0.51/-0.07	-2.62/-1.7	-6.86/-6.15	-0.04/-1	3.09/1.9	
θ(67.5°)	-1.124/-3.2	5.69/-1.4	1.63/3.64	1.96/3.43	3.16/0.6	1.39/1.79	3.25/1.97	0.26/0.48	-4.21/-1.28	3.45/2.01	2.46/1.65	2.45/3.38	3.75/2.01	1.99/1.18	2.39/1.93	1.01/0.27	-0.14/-1.93	-3.13/-3.3	-2.06/-0.03	2.33/1.17	-2.06/-0.27	-1.78/-8.13	-0.23/2.1	2.75/1.6
θ(75°)	-2.82/2.84	4.67/-0.09	0.05/-1.62	0.15/0.37	0.95/-1.29	0.72/2.19	4.12/3.3	0.23/-2.62	-5.61/-0.84	2.92/0.6	0.28/1.05	1.82/3.06	4.29/2.55	0.97/1.93	2.21/2.23	2.71/1.48	0.62/-1.53	-1.36/-2.19	-4.30/-14	3.4/2.21	-1.36/-0.01	-1.24/-7.54	-3.42/0.72	1.32/1.11
θ(82.5°)	-4.56/1.38	3.88/-0.87	-1.13/-0.27	-3.26/-3.87	-1.09/-3.91	-0.11/-1.25	2.12/0.93	-0.75/-6.49	-6.88/-1.28	0.94/-0.09	-1.22/-1.02	1.62/2.45	3.82/2.24	-1.46/-1.61	0.47/0.77	3.33/1.6	0.88/-0.63	-0.91/-4.35	-3.66/-1.31	3.16/1.05	-0.17/-0.48	-6.72/-0.16	1.06/8.89	
θ(90°)	-4.61/-0.77	2.46/-1.73	-0.54/-3.1	-5.47/-12.25	-4.54/-6.41	-1.22/0.4	-2.38/-2.56	-3.29/-11.07	-7.28/-2.47	-2.21/-3.5	-4.2/-3.61	-0.58/1.59	1.68/1.74	-1.99/-0.84	-3.16/-3.67	1.63/-1.27	-2.46/-1.01	-0.484/-3.6	-1.24/-3.61	0.73/-1.05	-1.42/-1.06	-3.98/-8.29	-9.17/-2.58	-2.14/0.43
θ(97.5°)	-4.15/-2.75	1.72/-1.63	-0.97/-5	-7.31/-17.47	-6.47/-6.14	-3.3/-1.18	-2.07/-1.22	-3.56/-1.74	-5.59/-2.54	-2.36/-9.5	-1.96/0.1	0.60/-49	-4.39/-3.79	-8.81/-4.04	-1.15/-5.44	-2.54/-1.59	-2.51/-5.88	-0.6/-6.65	-2.62/-3.05	-2.27/-2.12	-4.89/-11.82	-9.93/-8.35	-2.54/-0.03	
θ(105°)	-6.39/-4.06	0.37/-2.31	-1.99/-4.76	-6.54/-15.77	-6.03/-8.2	-5.19/-1.01	-2.34/-6.95	-9.83/-5.1	-4.66/-13.8	-11.95/-14.13	-6.71/-1.97	-1.67/-1.54	-6.46/-5.3	-5.49/-5.28	-1.22/-2.07	-3.44/-2.47	-1.68/-3.56	-0.12/-3.05	-5.86/-3.17	-1.88/-3.27	-6.34/-15.92	-16.63/-5.98	-2.71/-2.86	
θ(112.5°)	-7.72/-8.98	-1.92/-4.63	-3.52/-5.21	-6.63/-15.17	-11.95/-11.94	-3.91/-6.56	-5.96/-4.67	-8.71/-11.76	-13.99/-8.36	-10.76/-17.02	-17.01/-6.89	-3.08/-4.12	-5.34/-3.06	-13.53/-18.13	-10.98/-3.94	-2.14/-3.43	-2.93/-6.13	-4.52/-2.68	-1.83/-5.92	-5.72/-1.28	-1.36/-1.42	-8.49/-17.67	-18.3/-7.68	-5.42/-6.24
θ(120°)	-10.51/-15.11	-7.24/-9.97	-7.65/-12.02	-7.32/-8.76	-13.38/-12.5	-8.84/-4.43	-7.9/-5.86	-5.21/-11.46	-8.21/-7.32	-18.01/-18.4	-13.49/-5.78	-3.16/-3.87	-6.21/-6.84	-18.61/-16.8	-18.95/-4.16	-2.37/-6.44	-3.46/-8.56	-3.89/0.93	-4.11/-4.52	-5.89/-0.73	-1.66/-3.34	-9.55/-5.23	-8.89/-7.84	-5.11/-13.38
θ(127.5°)	-18.21/-17.96	-13.97/-10.7	-9.81/-11.37	-11.83/-15																				



Radiated Composite Gain Data of 6GHz_6G Ant1~4

Appendix A.6

Θ(120°)	-6.25/-9.28	-8.5/-7.46	-8.59/-7.58	-9.98/-11.88	-9.29/-8.89	-15.29/-12.62	-18.82/-17.15	-19.73/-18.12	-15.05/-11.27	-18.02/-19.01	-13.6/-8.14	-16.85/-7.98	-5.71/-8.58	-14.41/-13.26	-16.84/-13.04	-14.63/-13.58	-19.19/-14.99	-17.99/-11.33	-17.61/-15.4	-15.42/-9.14	-7.65/-9.39	-15.65/-14.63	-8.97/-6.58	-8.03/-7.43
Θ(127.5°)	-9.03/-7.9	-7.17/-6.01	-12.67/-10.74	-9.89/-15.55	-18.34/-16.05	-13.86/-18.08	-17.45/-17.36	-10.99/-14.4	-16.98/-14.4	-14.57/-19.03	-14.75/-14.64	-18.45/-12.9	-10.13/-12.68	-18.95/-8.42	-15.05/-13.95	-14.03/-18.67	-18.89/-18.68	-17.83/-13.09	-17.54/-14.57	-18.73/-9.4	-4.82/-13.5	-13.19/-19.7	-7.9/-4.58	-5.67/-13.73
Θ(135°)	-18.18/-18.78	-12.34/-13.43	-13.98/-16.46	-16.82/-15.19	-18.34/-18.51	-10.98/-10.82	-10.96/-17.91	-16.04/-13.85	-16.01/-8.54	-14.56/-15.47	-17.72/-16.72	-14.75/-14.74	-16.72/-16.72	-15.88/-12.94	-11.61/-12.04	-14.18/-17.97	-18.83/-16.9	-6.29/-17.66	-17.51/-10.93	-16.21/-7.82	-17.51/-17.95			
Θ(142.5°)	-10.24/-12.11	-14.41/-12.9	-10.9/-14.79	-13.8/-14.31	-18.12/-15.97	-13.43/-18.17	-14.46/-17.11	-18.53/-17.68	-15.48/-13.48	-7.92/-9.3	-12.82/-8.17	-12.92/-10.71	-10.67/-5.47	-5.14/-10.77	-16.48/-15.53	-13.63/-15.49	-13.29/-12.68	-13.15/-19.44	-15.07/-18.04	-17.75/-13.1	-10.12/-9.19	-11.36/-14.98	-12.54/-7.31	-5.97/-7.26
Θ(150°)	-10.81/-14.45	-14.55/-15.66	-12.03/-13.87	-13.6/-12.2	-13.55/-15.05	-13.31/-13.51	-18.56/-16.61	-11.8/-18.19	-18.29/-18.19	-11.93/-15.15	-10.87/-6.07	-13.06/-11.52	-9.41/-11.3	-13.25/-10.73	-18.31/-11.95	-9.93/-17.11	-18.02/-18.28	-18.9/-19.76	-18.6/-17.64	-17.86/-11.81	-13.91/-15.26	-12.14/-12.58	-9.05/-7.4	-5.78/-8.33
Θ(157.5°)	-4.37/-7.56	-9.33/-9.06	-12.24/-16.45	-14.12/-15.12	-19.18/-15.05	-13.15/-18.12	-15.17/-14.61	-17.91/-17.5	-13.69/-16.94	-18.94/-12.29	-18.37/-18.7	-17.9/-19.57	-14.01/-8.63	-7.5/-6.67	-8.64/-8.81	-9.74/-13.03	-17.66/-18.7	-16.65/-16.85	-18.02/-17.11	-16.20/-17.11	-19.02/-13.69	-8.52/-6.49	-4.56/-3.66	
Θ(165°)	-17.42/-18.41	-17.73/-15.54	-12.51/-11.52	-11.26/-10.34	-9.31/-10.9	-14.23/-15.31	-18.24/-18.21	-10.37/-8.9	-10.39/-11.31	-10.09/-12.33	-16.4/-18.14	-17.99/-14.36	-11.22/-10.09	-9.21/-8.6	-8.69/-7.56	-6.38/-5.98	-6.56/-8.07	-11.08/-14.84	-17.49/-18.53	-19.5/-16.26	-13.92/-11.54	-10.19/-8.14	-7.81/-8.39	-11.03/-13.43
Θ(172.5°)	-8.27/-9.89	-10.06/-9.73	-9.6/-9.19	-10.42/-11.81	-13.77/-18.08	-17.71/-16.06	-18.85/-17.6	-15.25/-15.37	-13.72/-11.35	-9.53/-7.32	-6.75/-6.85	-5.96/-4.54	-4.42/-4.9	-4.83/-3.4	-4.21/-4.76	-5.83/-7.68	-9.28/-11.94	-13.69/-14.7	-13.31/-13.65	-13.29/-13.09	-9.81/-7.27	-6.76/-6.96	-7.77/-7.12	-6.84/-6.55
Θ(180°)	-12.68/-12.05	-12.71/-16.33	-17.13/-18.12	-17.18/-15.08	-15.47/-16.62	-17.62/-18.36	-17.94/-19.4	-19.02/-16.86	-14.71/-12.22	-9.62/-7.35	-6.52/-5.99	-5.27/-5.09	-5.3/-6.24	-6.92/-6.95	-7.87/-10.22	-7.87/-10.22	-13.36/-15.62	-16.71/-16.82	-18.79/-18.01	-18.96/-14.42	-12.62/-9.66	-7.8/-7.85	-8.77/-9.1	-11.12/-11.17
Freq(Hz)	6.895GPdL	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(97.5°)	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°)	-12.8/-10.68	-8.33/-6.48	-6.39/-5.35	-4.54/-3.56	-3.1/-2.67	-2.79/-3.09	-3.14/-3.75	-4.48/-4.85	-5.51/-6.83	-8.68/-10.74	-11.95/-14.59	-13.65/-11.49	-9.98/-8.68	-4.99/-4.24	-3.32/-3.47	-3.88/-4.61	-4.76/-4.8	-6.05/-7.72	-9.43/-11.13	-12.55/-15.05	-17.22/-17.69	-17.58/-16.78		
Θ(7.5°)	-6.85/-7.56	-8.73/-9.66	-12.07/-11.13	-10.68/-8.8	-8.04/-7.72	-7.25/-7.46	-8.38/-10.89	-15.02/-14.68	-14.44/-13.05	-9.48/-11.2	-6.02/-5.89	-5.13/-5.08	-5.13/-5.35	-4.37/-3.8	-3.3/-2.94	-2.65/-3.04	-3.28/-3.09	-2.68/-2.56	-2.9/-2.8	-3.78/-5.29	-5.93/-6.23	-6.24/-6.3	-7.13/-6.64	-6.05/-6.36
Θ(15°)	-3/-4.22	-4.87/-5.35	-5.22/-4.44	-3.94/-3.77	-4.44/-5.22	-5.71/-5.55	-5.6/-5.63	-6.93/-6.79	-7.41/-9.4	-13.78/-18.64	-19/-18.69	-19.7/-18.12	-16.65/-11.81	-8.38/-9.65	-6.21/-6.17	-6.64/-6.48	-4.78/-2.96	-1.67/-0.75	-0.61/-0.87	-1.64/-2.84	-4.25/-4.47	-4.47/-4.1	-3.54/-2.62	-2.52/-2.43
Θ(22.5°)	-4.73/-2.64	-1.71/-1.81	-1.14/-0.81	-1.6/-2.25	-1.06/-0.27	-0.53/-0.49	-0.75/-3.13	-6.59/-10.3	-12.1/-10.5	-8.21/-7.99	-11.78/-18.41	-16.52/-17.24	-11.83/-8.32	-6.56/-5.3	-4.06/-3.5	-3.83/-4.76	-3.91/-3.1	-2.94/-4.1	-5.43/-5.65	-3.86/-2	-0.56/-0.04	-3.71/-1.24	-3.29/-4.71	-5.84/-6.22
Θ(30°)	-1.83/-1.61	-2.84/-2.69	0.26/-1.29	-0.29/-0.4	2.02/-1.73	-0.61/-3.2	-4.06/-5.59	-6.79/-5.16	-4.01/-6.66	-7.16/-5.25	-6.16/-10.23	-11.83/-10.23	-8.58/-6.57	-4.8/-3.3	-2.71/-3.14	-4.65/-4.3	-2.55/-2.31	-4.18/-8.38	-13.07/-12.09	-7.64/-4.78	-3.28/-2.66	-2.08/-1.25	-1.19/-1.75	-2.02/-2.55
Θ(37.5°)	-0.51/-0.2	-1.7/-3.94	0.98/-1.5	1.34/-2.94	3.15/-1.48	0.54/-1.73	1.98/-0.22	-4.08/-10.93	-6.62/-9.79	-15.15/-16.72	-12.48/-9.74	-5.11/-3.75	-5.55/-4.74	-3.67/-4.08	-3.75/-6.22	-2.53/-3.9	-4.75/-7.72	-5.43/-3.94	-5.63/-6.44	-7.51/-8.17	-6.46/-4.17	-3.19/-1.77	-0.71/-1.95	-1.96/-0.87
Θ(45°)	-2.84/-0.37	-0.54/-2.43	1.13/-2.87	2.36/-2.99	4.35/-9.98	2.48/-9.11	0.53/-5.21	-6.64/-2.58	-2.63/-2.77	-1.19/-1.82	-4.58/-3.84	-8.28/-3.96	-2.81/-2.77	-0.29/-1.12	-4.47/-6.59	-7.97/-11.38	-7.34/-6.66	-4.04/-2.54	-9.91/-3.5	-4.32/-0.7	-0.43/-2.6	-1.46/-1.78	-2.14/-1.23	
Θ(52.5°)	-2.43/-0.62	1.01/-1.28	0.622/-3.1	4.024/-3.9	5.564/-3.9	2.782/-7.1	2.35/-1.62	0.35/-2.36	-3.97/-0.93	-1.46/-2.12	0.02/-0.92	-4.01/-4.99	-7/-0.55	0.06/-0.58	-0.45/-2.72	-4.56/-6.61	-6.68/-7.79	-2.91/-4.43	-8/-5.32	0.41/-0.29	-2.25/-0.03	0.12/-4.88	-5.44/-1.2	-0.18/-0.46
Θ(60°)	0.33/-0.03	2.03/-0.66	1.762/-47	5.38/-0.56	4.572/-74	0.990/-74	-1.2/-2.78	-2.75/-1.28	-2.06/-0.18	0.07/-0.72	0.13/-0.7	-1.09/-8.07	-1.98/-0.51	1.34/-0.77	-1.28/-1.97	-3.01/-4.59	0.88/-0.75	-0.89/-1.81	-0.34/-1.36	0.23/-0.9	-1.53/-6.26	-13.48/-2.95	1.32/-0.23	
Θ(67.5°)	2.70/-4	1.064/-49	1.55/-94	5.37/-6.3	1.25/-1.11	0.212/-92	1.97/-0.88	-2.86/-2.21	0.76/-0.45	1.03/-0.66	0.81/-0.52	1.61/-1.23	0.70/-0.95	1.49/-0.4	-3.90/-08	-3.43/-2.64	-1.45/-4.66	0.03/-0.52	0.092/-15	2.63/-0.93	-2.49/-8.93	-13.34/-2.28	1.99/-0.49	
Θ(75°)	1.73/-1.31	0.113/-85	0.20/-52	3.22/-1.03	-1.41/-1.3	0.433/-89	4.82/-1.83	-1.24/-2.89	-1.92/-0.77	1.29/-0.71	0.84/-1.17	1.26/-1.93	0.95/-0.94	-0.6/-2.79	-4.26/-0.39	-2.17/-0.96	-1.85/-5.21	0.28/-1.03	1.99/-0.15	0.07/-1.8	3.72/-1.75	-0.67/-6.45	-9.31/-6.31	2.02/-1.37
Θ(82.5°)	-0.45/-1.56	-1.47/-2.72	-1.58/-1.56	0.61/-4.3	3.77/-0.12	0.131/-24	3.44/-0.59	-2.43/-2.7	-3.63/-2.83	-0.14/-1.11	-0.9/-2.39	0.39/-0.6	0.9/-0.75	-3.93/-5.34	-4.09/-1.44	-2.37/-0.21	0.14/-0.36	0.43/-3.7	-1.47/-0.3	2.59/-1.86	-0.74/-9.05	-12.48/-9.1	0.72/-2.37	
Θ(90°)	-2.92/-0.02	-4.05/-1.61	-2.69/-3.55	-2.74/-4.11	-6.82/-3.37	-2.39/-6.12	-0.63/-3.9	-4.45/-3.71	-2.98/-4.07	-1.73/-3.95	-2.81/-4.4	-3.54/-0.64	-0.54/-0.29	-4.86/-10.76	-3.59/-3.88	-1.59/-2.63	-11.43/-2.93	-0.97/-2.26	-1.05/-10.78	-6.62/-5.82	-0.75/-0.3	-2.02/-8.4	-11.08/-9.97	-1.91/-5.01
Θ(97.5°)	-8.1/-2.57	-5.28/-0.88	-1.78/-3.82	-5.12/-7.56	-6.91/-8.21	-3.33/-5.63	-2.59/-3.3	-3.62/-5.84	-10.47/-2.42	-5.18/-6.05	-5.7/-9.71	-3.49/-1.65	-1.36/-1.05	-7.18/-10.87	-5.51/-4.19	-4.47/-4.64	-12.75/-1.26	-3.35/-4.88	-2.41/-5.73	-12.89/-10.39	-4.61/-1.84	-3.67/-6.58	-8.81/-9.91	-3.94/-7.77
Θ(105°)	-10.49/-8.74	-6.12/-3.03	-3.11/-5.16	-5.27/-5.65	-2.52/-5.12	-2.64/-2.06	-3.02/-2.66	-5.2/-8.82	-5.81/-2.83	-7.36/-10.51	-12.61/-16.33	-4.21/-3.05	-1.79/-2.23	-9.11/-16.06	-6.54/-1.5	-7.34/-6.88	-14.55/-16.4	-1.71/-14.5	-1.97/-2.8	-2.7/-2.92	-4.01/-3.63	-8.97/-9.1	-8.83/-12.11	
Θ(112.5°)	-14.27/-7.55	-6.58/-6.24	-5.66/-6.96	-7.48/-6.59	-3.73/-6.76	-3.47/-3.97	-6.01/-5.17	-6.61/-14.08	-9.86/-6.53	-6.24/-14.5	-17.49/-10.02	-6.28/-5.58	-2.94/-3.74	-9.83/-17.85	-9.07/-3.34	-7.71/-10.58	-14.32/-3.14	-4.17/-7.64	-1.71/-11.92	-18.9/-8.06	-1.52/-3.06	-4.62/-7.27	-10.42/-9.85	-9.5/-5.56
Θ(120°)	-14.94/-10.17	-18.86/-8.42	-11.02/-12.21	-10.73/-7.46	-10.33/-17.45	-10.08/-6.48	-7.95/-10.51	-17.92/-8.83	-9.84/-11.54	-8.13/-10.44	-10.44/-8.69	-5.57/-11.89	-8.93/-14.72	-9.75/-19.9	-10.41/-5.94	-10.75/-8.04	-7.99/-5.02	-5.42/-6.74	-5.64/-14.31	-16.99/-7.69	-6.19/-5.57	-4.2/-7.22	-7.84/-9.77	-12.87/-14.49
Θ(127.5°)	-18.6/-18.61	-14.03/-17.84	-15.4/-19.16	-11.54/-17.53	-18.02/-13.6	-4.96/-2.54	-5.15/-6.65	-12.92/-7.24	-17/-15.39	-18.38/-18.79	-13.86/-11.44	-7.52/-11	-18.5/-8.38	-13.59/-11.52	-9.4/-3.71	-6.64/-14.09	-6.01/-3.68	-3.93/-1.27	-2.33/-3.74	-12.75/-4.78	-11.83/-6.51	-7.36/-8.17	-6.85/-6.39	-14.36/-18.25
Θ(135°)	-12.47/-12.58	-11.25/-16.7	-19.32/-15.92	-10.78/-13.05	-12.97/-18.17	-19.03/-13.59	-7.01/-7.36	-19.05/-11.84	-10.06/-15.72	-18.07/-17.03	-9.98/-11.56	-17.99/-18.86	-16.54/-10.32	-7.45/-16.02	-10.12/-8.54	-15.5/-7.6	-3.94/-5.41	-3.20/-42	-2.37/-6.54	-15.21/-12.85	-6.21/-5.99	-8.69/-10.61	-8.37/-6.59	-11.24/-18.97
Θ(142.5°)	-17.67/-18.53	-18.6/-15.1	-15.35/-15.24	-11.93/-7.62	-13.01/-12.12	-7.96/-8.93	-10.59/-7.32	-12.08/-10.98	-7.09/-9.46	-15.11/-14.55	-9.59/-7.39	-12.02/-18	-11.94/-7.81	-10.37/-17.82	-18.41/-14.08	-8.93/-7.6	-6.71/-8.8	-2/-0.2	-5.36/-7.65	-9.1/-13.46	-13.52/-6.62	-7.48/-13.77	-9.25/-7.72	-14.43/-17.83
Θ(150°)	-18.17/-18.61	-18.51/-18.26	-13.97/-8.6	-9.79/-11.12	-8.78/-9.7	-12.33/-12.95	-9.89/-11.6	-18.88/-11.29	-14.26/-17.12	-19.36/-11.17	-10.45/-16.39	-19.81/-17.86	-11.44/-12.68	-14.55/-12.42	-10.99/-5.53	-10.24/-15.29	-15.3/-10.9	-2.04/-2.03	-6.42/-14.09	-8.52/-9.4	-11.89/-1.95	-10.1/-10.4	-9.39/-8.01	-13.14/-18.32
Θ(157.5°)	-18.64/-16.98	-14.11/-15.17	-16.42/-16.89	-17.89/-18.13	-15.19/-11.59	-8.15/-5.78	-7.07/-13.82	-18.85/-18.04	-18.98/-14.6	-12.92/-17.9	-18.35/-17.97	-17.97/-18.89	-18.49/-17.7	-10.97/-3.75	-7.28/-8.76	-10.28/-12.48	-11.41/-7.84	-5.78/-6.26	-9.52/-11.55	-11.19/-10.74	-13.03/-17.05	-15.55/-9.85	-7.54/-7.98	-10.8/-15.22
Θ(165°)	-17.62/-18.2	-17.97/-17.92	-15.79/-12.8	-10.91/-12.79	-17.71/-16.3	-11.96/-12.72	-12.78/-13.3	-6.88/-7.78	-9.92/-10.52	-13.02/-18.3	-18.62/-17.87	-18.61/-16.73	-13.93/-13.12	-12.76/-11.1	-10.22/-10.42	-7.35/-4.51	-2.72/-2.14	-1.87/-2.05	-2.93/-3.63	-7.18/-6.02	-8.61/-14.11	-19.31/-13.53	-13.62/-15.9	-18.61/-17.55
Θ(172.5°)	-18.14/-18.28	-18.63/-18.74	-18.93/-17.48	-16.7/-13.06	-1																			



Radiated Composite Gain Data of 6GHz_6G Ant1~4

Appendix A.6

Θ (172.5°)	-18.15/-12.9	-11.39/-10.89	-11.78/-15.94	-18.81/-18.38	-18.77/-18.23	-19.41/-19.2	-18.23/-19.22	-17.8/-17.81	-16.41/-14.15	-15.31/-18.53	-17.98/-18.38	-18.94/-18.39	-18.99/-18.74	-15.86/-13.92	-12.6/-13.2	-14.9/-17.07	-17.92/-16.37	-14.89/-14.29	-12.37/-10.73	-9.92/-8.71	-9.42/-10.26	-12.96/-15.38	-17.23/-17.66	-19/-19.06
Θ (180°)	-13.85/-15.85	-18.28/-17.96	-18.12/-16.04	-14.74/-17.88	-18.56/-17.83	-18.19/-19.12	-15.86/-13.87	-14.07/-15.21	-16.06/-17.66	-18.41/-17.67	-18.97/-17.31	-19.08/-17.73	-18.21/-17.43	-17.71/-17.51	-16.19/-15.2	-15.98/-16.59	-15.33/-11.57	-11.38/-18.22	-14.2/-16.6	-17.87/-18.91	-18.78/-18.27	-18.86/-18.65	-18.74/-17.62	-16.98/-16.29
Freq(Hz)	6.175GPdL	ThetaAnt_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°)	-12.04/-11.34	-11.66/-11.23	-10.05/-10.06	-9.68/-8.88	-8.52/-8.92	-10.07/-12.93	-15.6/-17.26	-16.32/-15.53	-15.86/-16.6	-18.17/-17.85	-18.38/-16.55	-15.35/-15.28	-16.48/-16.39	-14.71/-13.03	-13.08/-12.92	-12.16/-12.75	-13.18/-14.04	-14.74/-15.4	-17.14/-17.94	-17.67/-18.1	-18.96/-18.05	-17.04/-16.18	-16.07/-15.99	-15.34/-12.86
Θ (7.5°)	-14.05/-10.3	-8.77/-7.54	-7.1/-8.49	-8.57/-8.71	-9.7/-11.81	-8.57/-11.87	-18.93/-17.68	-18.83/-18.25	-17.62/-17.56	-18.71/-17.92	-19.23/-18.92	-16.18/-17.91	-18.54/-18.37	-18.16/-17.04	-14.75/-13.38	-13.03/-13.27	-15.49/-18.59	-17.52/-18.28	-19.02/-19.1	-19.14/-15.6	-14.03/-13.5	-14.04/-14.18	-16.44/-16.98	-15.71/-17.58
Θ (15°)	-10.27/-8.8	-10.14/-10.94	-10.57/-10.05	-11.59/-14.66	-19.04/-18.67	-17.83/-18.8	-19.05/-16.91	-14.22/-11.95	-10.76/-10.97	-15.13/-19.04	-17.73/-14.93	-12/-8.5	-7.21/-9.17	-16.37/-19.43	-12.81/-11.84	-14.03/-16.61	-18.48/-19.09	-18.87/-18.35	-18.57/-15.03	-18.91/-18.1	-15.35/-12.66	-16.16/-18.79	-17.93/-16.62	-18.43/-12.8
Θ (22.5°)	-11.82/-11.8	-14.23/-18.88	-11.21/-8.95	-10.21/-12.28	-13.48/-13.47	-15.04/-12.08	-11.6/-13.91	-18.13/-18.4	-12.11/-8.31	-9.18/-15.56	-12.8/-11.56	-11.04/-9.28	-7.47/-9.15	-18.82/-10.03	-8.35/-11.04	-14.98/-16.74	-14.1/-11.7	-10.53/-12.22	-13.05/-13.49	-14.04/-14.6	-16.86/-17.98	-18.86/-18.79	-18.57/-12.47	-8.32/-8.15
Θ (30°)	-10.86/-8.37	-9.94/-19.08	-14.73/-12.5	-9.88/-8.28	-9.22/-10.9	-9.81/-8.13	-9.27/-11.94	-13.71/-14.57	-12.75/-10.38	-12.58/-15.48	-10.71/-9.12	-12.16/-12.97	-9.13/-13.47	-12.62/-8.35	-13.04/-16.69	-15.19/-19.1	-12.59/-8.78	-8.16/-9.65	-10.69/-12.47	-14.26/-12.08	-14.99/-18.47	-19.46/-12.25	-14.59/-18.55	-16.79/-12.55
Θ (37.5°)	-15.3/-8.9	-13.41/-18.85	-18.04/-19.26	-9.23/-10.08	-13.64/-14.56	-9.37/-9.5	-12.32/-16.52	-18.82/-15.56	-12.57/-10.85	-11.57/-13.39	-7.46/-5.62	-9.45/-11.73	-10.13/-18.36	-12.17/-11.6	-9.96/-12.48	-18.94/-12.12	-7.95/-7.71	-9.23/-11.6	-18.66/-19.15	-14.42/-16.09	-17.65/-18.09	-18.21/-12.8	-11.02/-9.48	-9.45/-12.9
Θ (45°)	-7.88/-12.98	-19.18/-14.37	-13.81/-8.89	-14.6/-19.1	-11.1/-10.16	-12.25/-8.04	-5.29/-8.24	-7.52/-6.67	-10.79/-13.54	-15.78/-13.54	-12.01/-10.51	-5.96/-2.83	-6.25/-11.62	-15.23/-18.07	-18.05/-16.76	-9.42/-9.44	-10.74/-10.1	-11.84/-14.83	-18.59/-18.14	-18.34/-19.68	-18.29/-18.26	-19.06/-16.15	-11.51/-12.37	-13.49/-11.72
Θ (52.5°)	-14.33/-12.6	-11.52/-16.75	-18.8/-18.62	-11.19/-9.42	-14.85/-10.51	-7.75/-9.4	-5.91/-4.97	-7.96/-12.51	-17/-18.35	-19.03/-12.9	-8.56/-11.55	-15.53/-12.68	-13.71/-11.2	-9.54/-7.87	-11.2/-12.41	-9.3/-11.66	-18.17/-17.56	-14.71/-10.62	-13.67/-19.05	-14.21/-12.45	-9.28/-9.98	-8.15/-8.6	-13.65/-10.4	
Θ (60°)	-13.05/-15.63	-15.89/-19.06	-17.3/-16.73	-10.44/-11.74	-18.56/-19.1	-11.42/-9.56	-6.89/-5.47	-10.53/-17.47	-18.15/-17.08	-18.69/-13.75	-10.65/-6.95	-9.22/-7.56	-11.24/-10.16	-15.76/-8.54	-7.39/-5.2	-7.48/-9.93	-7.85/-11.57	-18.35/-19.43	-16.65/-11.92	-11.48/-17.62	-13.59/-12.19	-9.05/-10.46	-7.78/-7.56	-7.98/-11.01
Θ (67.5°)	-10.15/-11.7	-14.75/-14.83	-18.57/-11.98	-11.72/-15.26	-17.88/-18.21	-10.32/-10.63	-7.89/-6.32	-12.72/-13.42	-17.11/-18.89	-18/-11.9	-11.99/-6.61	-8.23/-5.39	-9.89/-9.98	-14.67/-5.77	-6.14/-5.05	-6.23/-5.23	-6.57/-11.61	-18.18/-16.28	-19.08/-17.56	-12.12/-17.26	-16.84/-18.8	-13.34/-15.72	-10.26/-5.98	-6.87/-10.18
Θ (75°)	-9.53/-11.01	-14.05/-16.68	-19.05/-16.58	-12.49/-14.03	-18.08/-13.5	-11.37/-13.56	-8.85/-7.05	-9.9/-9.81	-18.74/-18.94	-18.39/-13.53	-12.88/-4.68	-7.97/-6.17	-7.94/-10.29	-17.07/-6.3	-6.66/-5.78	-5.04/-3.09	-5.06/-14.69	-17.38/-16.24	-16.44/-18.15	-16.39/-18.18	-16.75/-18.62	-17.94/-14.09	-14.22/-5.59	-6.56/-11.55
Θ (82.5°)	-10.58/-10.79	-16.46/-18.87	-18.47/-14.92	-14.96/-18.96	-18.35/-11.22	-13.02/-15.9	-10.04/-7.1	-9.12/-9.97	-18.05/-13.51	-17.49/-10.84	-14.86/-6.89	-8.74/-9.75	-10.79/-10.31	-18.57/-9.5	-8.53/-7.77	-5.16/-3.01	-6.93/-15.59	-12.57/-19.36	-18.82/-17.7	-19.11/-15.81	-14.77/-18.01	-18.79/-15.31	-15.48/-7.1	-7.49/-12.33
Θ (90°)	-11.61/-12.38	-19.89/-19.04	-17.16/-15.27	-14.11/-16.62	-17.34/-12.02	-12.53/-18.08	-15.18/-9.72	-12.3/-11.68	-17.19/-9.92	-13.79/-8.96	-15.74/-9.63	-12.32/-12.81	-18.64/-19.02	-8.87/-11.04	-6.84/-5.33	-10.99/-16.67	-12/-19.37	-17.99/-18.41	-18.12/-12.59	-13.43/-18.58	-18.38/-17.8	-15.51/-7.91	-8.47/-14.97	
Θ (97.5°)	-18.22/-12.76	-18.05/-19.22	-17.22/-16.98	-14.97/-16.65	-18.77/-14.24	-13.26/-18.75	-18.73/-14.3	-15.4/-12.22	-17.98/-8.94	-13.02/-9.24	-17/-15.81	-12.34/-17.13	-15.57/-11.22	-14.87/-18.88	-13.95/-14.03	-9.67/-8.67	-18.53/-14.56	-14.54/-17.32	-17.81/-17.5	-17.98/-12.59	-13.93/-19.19	-18.21/-17.77	-16.36/-9.96	-9.25/-18.34
Θ (105°)	-17.41/-13.34	-17.28/-18.02	-19.42/-18.74	-15.01/-18.89	-18.98/-18.94	-8.75/-17.62	-16.88/-16.73	-18.98/-16.49	-18.4/-11.52	-12.13/-9.32	-19.01/-17.17	-9.83/-12.9	-13.55/-10.27	-11.95/-18.19	-12.76/-16.44	-11.45/-14.08	-17.26/-14.34	-18.3/-16.89	-18.75/-17.98	-18.95/-15.57	-13.95/-17.72	-19.04/-18.38	-15.48/-11.73	-11.63/-19.08
Θ (112.5°)	-19.14/-18.82	-17.8/-18.47	-14.86/-19	-13.94/-18.14	-18.5/-18.92	-18.76/-18.16	-12.68/-11.44	-13.76/-18.54	-10.55/-12.11	-18.43/-13.98	-17.06/-11.62	-8.12/-10.64	-9.49/-6.51	-11.1/-18.69	-14.11/-11.94	-8.21/-14.68	-17.24/-12.01	-18.49/-15.31	-15.46/-17.17	-16.6/-11.86	-18.73/-18	-17.29/-16.68	-12.84/-18.67	-14.44/-13.73
Θ (120°)	-17.32/-18.67	-17.71/-18.81	-19.11/-16.14	-17.85/-15.06	-17.68/-16.67	-18.73/-18.09	-15.85/-11.1	-10.57/-15.7	-7.46/-13.34	-13.62/-13.95	-13.61/-11.89	-6.52/-9.63	-6.92/-5.98	-11.32/-18.82	-13.53/-9.41	-10.71/-16.82	-15.34/-9.82	-17.39/-18.1	-13.18/-18.04	-10.17/-9.84	-13.1/-18.26	-10.83/-15.3	-15.41/-11.97	-13.98/-17.74
Θ (127.5°)	-17.49/-18.5	-17.99/-17.87	-18.37/-12.13	-17.61/-11.81	-17.77/-8.13	-6.05/-11.43	-10.06/-13.55	-6.36/-18.98	-14.5/-16.21	-18.9/-14.93	-8.7/-11.76	-14.18/-11.11	-6.19/-8.24	-10.64/-15.52	-17.03/-6.9	-17.59/-18.35	-11.55/-8.59	-17.3/-14.27	-19.21/-17.94	-13.13/-11.07	-11.3/-13.55	-16.68/-18.9	-13.97/-17.86	-19.31/-18.83
Θ (135°)	-18.5/-18.11	-19.53/-18.75	-16.0/-12.82	-14.69/-12.07	-16.52/-7.99	-8.85/-11.05	-12.57/-11.95	-11.65/-16.7	-18.78/-15	-14.77/-13.86	-9.64/-14.98	-18.17/-15.21	-10.43/-8.42	-10.04/-15.34	-10.48/-12.74	-18.22/-12.06	-13.54/-8.32	-15.52/-14.27	-12.62/-13.19	-11.72/-19.07	-12.31/-15.29	-17.76/-15.35	-13.27/-14.54	-19.55/-15.65
Θ (142.5°)	-18.82/-19.06	-17.37/-17.13	-18.88/-16.38	-10.21/-14	-16.01/-11.07	-14.79/-10.58	-16.62/-18.13	-17.14/-17.77	-16.25/-13.18	-11.91/-9.29	-18.48/-16.03	-18.09/-19.26	-15.7/-8.75	-10.51/-12.48	-13.26/-18.76	-17.91/-17.36	-13.93/-15.73	-15.14/-11.27	-12.96/-14.1	-18.21/-17.28	-17.73/-18.88	-18.99/-18.56	-18.13/-18.74	
Θ (150°)	-18.47/-18.57	-18.65/-18	-18.32/-15.18	-10.61/-15.66	-11.41/-10.6	-17.11/-18.38	-14.8/-18.37	-18.16/-14.42	-13.18/-12.03	-17.49/-18.89	-16.35/-11.41	-11.27/-11.56	-14.02/-14.49	-16.96/-18.48	-18.3/-17.69	-16.66/-19.54	-18.06/-17.38	-15.17/-17.35	-18.25/-18.12	-18.69/-13.84	-17.78/-17.67	-18.83/-16.62	-18.11/-18.99	
Θ (157.5°)	-18.83/-18.71	-19.28/-18.15	-12.83/-10.24	-11.41/-14.54	-12/-11.85	-17.96/-18.51	-15.49/-17.68	-15.93/-15.18	-12.09/-10.68	-14.03/-13.7	-18.61/-18.52	-17.96/-18.88	-16.73/-16.62	-11.72/-10.16	-12.96/-14.84	-18.87/-18.89	-19.05/-17.61	-17.71/-17.23	-19.59/-17.38	-15.61/-14	-16.96/-17.46	-17.53/-17.32	-15.03/-12.16	-18.32/-18.06
Θ (165°)	-11.7/-18.31	-18.94/-18.18	-17.19/-14.92	-11.42/-13.78	-15.8/-18.76	-18.31/-15.68	-18.48/-17.34	-18.8/-15.11	-13.76/-15.5	-18.94/-18.76	-17.63/-15.2	-12/-14.72	-18.51/-11.69	-7.24/-7.69	-10.27/-11.63	-11.48/-13.72	-17.33/-18.28	-18.05/-17.81	-18.74/-17.62	-14.26/-12.05	-11.91/-14.67	-18.67/-18.99	-12.61/-11.66	-12.66/-10.87
Θ (172.5°)	-12.47/-17.9	-18.44/-18.7	-15.51/-11.81	-12.62/-13.78	-16.64/-17.83	-19.05/-18.7	-18.82/-19.44	-17.57/-18.12	-17.63/-18.93	-18.77/-16.96	-17.52/-18.98	-17.14/-18.02	-18.47/-17.66	-15.9/-17.59	-17.49/-18.47	-17.47/-15.65	-15.1/-17.34	-18.67/-18.85	-17.93/-18.21	-18.41/-18.8	-13.98/-12.11	-10.31/-9.84	-10.1/-12.45	-13.64/-11.45
Θ (180°)	-17.77/-17.07	-17.43/-17.72	-18.72/-19.24	-18.81/-18.94	-16.71/-16.27	-16.72/-18.15	-18.56/-17.62	-18.44/-15.37	-13.54/-12.99	-13.26/-15.09	-15.22/-13.21	-12.45/-13.35	-14.92/-17.07	-17.35/-18.86	-17.96/-18.31	-18.42/-18.41	-17.84/-17.5	-15/-12.62	-11.22/-11.6	-12.29/-11.23	-11.11/-12.09	-13.08/-15.42	-17.86/-15.22	-15.29/-18.91
Freq(Hz)	6.475GPdL	PhiAnt_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°)	-13.25/-13.99	-14.83/-16.14	-17.86/-18.7	-17.77/-18.91	-19.05/-18.46	-17.44/-17.51	-15.69/-14.48	-13.64/-14.85	-15.11/-13.06	-11.46/-12.12	-13.67/-12.46	-12.13/-13.89	-15.34/-15.79	-14.96/-13.04	-12.58/-11.54	-10.94/-10.98	-12.13/-14.02	-15.67/-15.65	-15.87/-15.16	-16.33/-17.64	-17.19/-18.68	-14.74/-15.34	-16/-16.47	-13.6/-12.92
Θ (7.5°)	-19.12/-8.02	-18.57/-18.83	-17.67/-11.85	-9.16/-8	-6.91/-5.93	-5.54/-5.12	-5.31/-5.43	-5.19/-4.58	-4.27/-4.67	-4.91/-4.57	-5.08/-5.22	-5.97/-6.97	-8.38/-9.62	-17.18/-13.23	-13.88/-13.72	-13.76/-13.								



Radiated Composite Gain Data of 6GHz_6G Ant1~4

Appendix A.6

Θ(15°)	-15.21/-12.91	-10.33/-12.65	-13.73/-10.83	-9.01/-9.96	-10.06/-10.93	-13.8/-18.48	-18.5/-16.92	-16.69/-19.2	-17.7/-17.55	-18.66/-16.61	-17.09/-18.73	-16.83/-10.08	-9.24/-12.42	-15.83/-14.97	-14.93/-13.69	-12.52/-11.76	-10.54/-10.19	-10.96/-11.49	-11.29/-11.27	-11.91/-15.81	-17.72/-18.02	-19.42/-19.28	-17.82/-18.39	-17.22/-14.35
Θ(22.5°)	-18.73/-15.65	-9.97/-12.43	-17.25/-18.28	-18.94/-18.19	-18.41/-17.35	-18.26/-17.46	-12.73/-11.98	-12.47/-15.75	-18.83/-17.02	-12.92/-16.01	-18.53/-8.73	-8.09/-13.46	-18.1/-18.88	-10.7/-15.1	-17.7/-12.53	-12.15/-15.71	-17.33/-13.36	-10.76/-9.42	-9.24/-8.6	-8.76/-10.05	-11.43/-13.69	-13/-18.28	-18.54/-18.12	-17.35/-15.82
Θ(30°)	-13.21/-18.2	-12.13/-15.47	-15.64/-17.78	-15.64/-18.18	-16.08/-17.65	-18.09/-18.85	-17.57/-14.23	-14.81/-18.58	-17.37/-18.18	-11.97/-8.88	-10.86/-15.92	-9.69/-14	-19.26/-11.55	-8.4/-14.3	-18.1/-9.63	-9.51/-12.51	-14.45/-15.33	-10.75/-16.79	-17.99/-16.09	-9.97/-8.88	-14.53/-11.68	-12.72/-17.87	-15.67/-16.08	-15.67/-16.08
Θ(37.5°)	-13.2/-16.7	-16.74/-17.81	-18.68/-17.28	-19.22/-16.43	-11.09/-13.96	-18.64/-16.65	-18.78/-18.51	-18.05/-18.64	-14.36/-15.88	-11.58/-7.18	-10.25/-11.28	-11.68/-18.41	-15.71/-9.45	-14.67/-18.47	-17.54/-14.08	-11.56/-13.49	-9.99/-13.25	-19.13/-14.76	-13.71/-18.64	-17.36/-15.71	-13.32/-12.44	-17.4/-19.09	-18.4/-17.76	-18.65/-18.24
Θ(45°)	-19.45/-19.05	-16.84/-12.87	-18.13/-18.16	-16.42/-16.73	-10.79/-16.72	-15.29/-15.38	-19.03/-16.37	-18.8/-19.12	-16.55/-13.47	-12.24/-14.71	-7.71/-7.77	-11.61/-14.52	-19.22/-13.48	-14.55/-12.72	-8.87/-12.26	-14.54/-13.51	-9.83/-14.1	-18.27/-17.95	-19.23/-17.67	-16.13/-9.98	-12.34/-14.49	-14.82/-14.44	-18.44/-16.59	-16.28/-18.44
Θ(52.5°)	-13.72/-12.53	-14.98/-10.93	-15.26/-16.26	-18.79/-14.37	-11.48/-13.31	-14.86/-14.85	-10.71/-9.1	-15.98/-15.8	-19.08/-11.21	-16.78/-10.62	-6.57/-10.43	-13.8/-15.57	-19.25/-12.87	-9.58/-10.61	-15.93/-18.66	-16.23/-18.95	-17.52/-13.91	-9.86/-18.22	-18.3/-15.32	-13.99/-18.78	-17.99/-16.8	-15.47/-15.53	-14.34/-12.94	-14.34/-12.94
Θ(60°)	-12.13/-15.66	-15.93/-10.44	-14.23/-15.43	-17.55/-14.33	-11.88/-14.05	-12.7/-15.8	-12.11/-10.09	-11.35/-14.38	-12.9/-11.16	-14.91/-13.07	-8.77/-14.96	-19.33/-12.63	-14.12/-16	-6.17/-6.36	-7.81/-7.5	-16.03/-18.36	-16.29/-16.95	-18.49/-12.3	-7.19/-11.68	-15.78/-17.98	-18.57/-18.82	-19.19/-18.53	-18.66/-18.72	-11.55/-10.58
Θ(67.5°)	-15.88/-16.04	-16.42/-14.46	-12.24/-17.5	-12.57/-16.23	-11.09/-17.22	-18.1/-15.05	-12.31/-8.31	-12.86/-17.88	-17.63/-16.2	-15.7/-18.36	-17.73/-13.24	-13.09/-12.63	-11.35/-16.19	-5.56/-5.87	-9.48/-6.92	-10.77/-13.83	-14.84/-18.17	-19.02/-10.01	-6.86/-10.23	-13.96/-18.1	-18.06/-15.86	-18.44/-18.29	-19.22/-18.37	-17.39/-11.9
Θ(75°)	-16.43/-17.42	-18.23/-14.46	-17.48/-19.1	-16.13/-18.74	-14.52/-18.31	-18.91/-14.91	-12.01/-10.11	-15.93/-18.74	-18.69/-18.18	-17.07/-17.21	-14.68/-10.89	-9.58/-12.09	-11.75/-17.5	-8.31/-6.18	-10.36/-7.17	-9.34/-11.42	-11.06/-18.78	-19.08/-11.69	-7.66/-16.54	-16.22/-19.03	-15.86/-17.2	-18.18/-17.41	-16.68/-18.29	-18.6/-18.11
Θ(82.5°)	-17.34/-18.95	-18.34/-18.75	-17.74/-18.26	-15.12/-16.61	-15.79/-15.62	-17.07/-13.51	-12.58/-11.73	-16.91/-16.85	-18.59/-14.83	-18.3/-18.81	-10.05/-10.4	-11.62/-10.97	-13.6/-14.15	-10.94/-9.76	-10.17/-8.27	-8/-9.87	-10.18/-19.38	-17.75/-11.86	-12.19/-18.06	-17.45/-19.58	-19.02/-16.83	-18.1/-18.64	-18.18/-19.04	-17.9/-18.46
Θ(90°)	-18.68/-16.09	-19.26/-17.87	-17.66/-19.05	-17.55/-18.06	-18.45/-13.66	-13.64/-14.37	-16.21/-15.73	-15.78/-17.24	-18.48/-12.81	-18.69/-14.34	-10.8/-14	-16.49/-11.28	-16.19/-9.66	-11.85/-14.52	-13.19/-9.34	-9.18/-11.6	-10.94/-18.38	-14.94/-14.72	-16.22/-18.4	-16.03/-17.51	-18.13/-19.09	-17.84/-18.27	-17.96/-19.03	-18.39/-13.63
Θ(97.5°)	-17.67/-12.93	-14.9/-17.78	-18.05/-17.26	-18.03/-14.75	-18.64/-14.95	-11.05/-17.15	-17.77/-15.07	-18.11/-18.95	-19.07/-13.55	-18.19/-12.93	-13.29/-18.32	-17.48/-15.57	-15.49/-10.24	-12.21/-12.15	-15.18/-14.4	-11.31/-12.41	-17.59/-18.87	-16.83/-14.85	-17.4/-17.74	-18.87/-18.97	-17.75/-17.63	-16.69/-18.23	-18.63/-18.51	-19.38/-13.71
Θ(105°)	-18.62/-12.99	-14.23/-17.54	-17.13/-17.27	-18.07/-18.96	-19.07/-16.67	-12.3/-14.43	-11.78/-9.61	-18.17/-16.7	-17.74/-11.16	-14.54/-10.86	-17.71/-16.58	-15.21/-16.14	-13.35/-13.66	-18.93/-12.88	-18.2/-10.36	-13.35/-12.82	-18.44/-17.87	-13.28/-14.3	-16.88/-16.64	-15.49/-16.45	-18.49/-16.27	-17.02/-18.88	-14.8/-15.94	-18.78/-18.35
Θ(112.5°)	-18.09/-16.17	-16.23/-16.49	-19.36/-18.21	-18.53/-18.76	-17.86/-18.14	-15.26/-11.72	-9.54/-9.18	-10.48/-14.92	-14.14/-11.36	-15.21/-17.94	-15.45/-8.35	-6.93/-14.35	-9.64/-8.79	-11.85/-14.28	-17.46/-15.22	-13.09/-13.19	-18.63/-17.14	-18.37/-11.69	-18.35/-16.49	-12.99/-8.87	-18.76/-17.27	-16.26/-16.5	-18.3/-13.83	-14.36/-17.76
Θ(120°)	-19.09/-18.19	-18.32/-17.51	-18.4/-18.51	-18.43/-18.34	-18.7/-16.13	-17.26/-9.28	-11.43/-4.74	-9.88/-15.96	-9.94/-16.38	-18.95/-17.83	-8.61/-8.08	-5.77/-10.41	-11.4/-8.8	-11.68/-14.29	-17.74/-12.03	-13.62/-14.68	-17.69/-12.51	-16.98/-9.49	-17.69/-12.52	-11.77/-5.93	-17.95/-17.86	-14.77/-18.37	-18.96/-14.45	-11.51/-18.88
Θ(127.5°)	-19.11/-19.02	-19.57/-18.93	-18.09/-13.31	-18.36/-18.33	-9.27/-7.94	-8.08/-7.07	-10.63/-11.32	-15.26/-19.39	-12.47/-17.76	-11.81/-11.57	-7.56/-10.64	-10.63/-18.56	-7.88/-7.88	-17.92/-8.41	-15.88/-11.38	-7.56/-18.93	-14.08/-8.67	-18.41/-6.28	-12.75/-14.31	-9.88/-6.93	-12.81/-17.63	-18.96/-18.31	-18.82/-18.67	-13.39/-18.29
Θ(135°)	-16.47/-17.94	-14.13/-18.51	-19.08/-13.81	-16.09/-15.22	-10.84/-12.87	-13.89/-17.63	-13.24/-17.31	-17.59/-18.08	-15.69/-13.36	-17.28/-16.53	-12.7/-17.34	-14.82/-16.11	-12.57/-10.77	-11.04/-10.13	-17.39/-9.49	-10.85/-19.18	-8.19/-9.69	-15.98/-7.88	-7.31/-14.45	-14.77/-10.99	-7.35/-18.4	-17.47/-16.92	-17.87/-15.85	-19.17/-16.88
Θ(142.5°)	-17.41/-18.41	-16.63/-12.4	-18.84/-17.77	-18.08/-8.56	-13.09/-12.57	-10.84/-18.28	-18.5/-19.4	-15.27/-10.79	-10.85/-11.06	-13.46/-10.59	-14.32/-13.11	-14.77/-17.55	-12.96/-12.76	-8.78/-15.88	-16.34/-14.59	-19.03/-13.5	-9.75/-11.26	-15.46/-8.6	-10.71/-18.46	-18.52/-12.73	-11.73/-11.65	-17.47/-18.06	-16.77/-18.92	-18.62/-18.88
Θ(150°)	-14.91/-15.75	-17.74/-18.73	-11.5/-14.17	-19.04/-12.13	-17.31/-9.77	-7.29/-15.45	-17.1/-11.43	-11.44/-12.29	-16.81/-15.24	-18.82/-12.54	-15.91/-18.94	-14.83/-19.26	-12.02/-11.24	-16.04/-18.73	-18.65/-15.86	-16.76/-17.29	-15.57/-18.32	-17.87/-8.78	-10.24/-15.34	-18.98/-17.22	-11.39/-11.06	-18.06/-18.17	-13.31/-12.54	-16.02/-18.09
Θ(157.5°)	-13.63/-13.71	-16.79/-14.65	-13.76/-16.34	-17.49/-16.46	-18.69/-12.23	-8.12/-10.63	-18.98/-17.21	-19.11/-17.58	-10.44/-8.7	-14.34/-18.96	-18.49/-18.56	-17.95/-18.18	-18.37/-12.66	-12.6/-10.33	-8.25/-9.91	-12.93/-14.13	-14.35/-18.38	-16.95/-19.42	-17.18/-14.99	-11.57/-12.46	-14.55/-13.75	-13.5/-17.62	-12.75/-14.2	-14.69/-13.73
Θ(165°)	-14.85/-13.81	-10.08/-8.29	-11.4/-17.15	-16.96/-15.51	-17.66/-19.15	-18.37/-16.67	-13.98/-12.87	-16.29/-18.38	-18.27/-18.41	-15.93/-12.06	-11.8/-13.94	-18.98/-18.06	-9.84/-7.84	-10.61/-12.02	-9.08/-8.91	-11.55/-17.55	-19.1/-18.16	-7.38/-9.22	-7.72/-6.29	-7.79/-10.77	-14.52/-14.36	-13.17/-14.15	-16.09/-18.54	-18.31/-18.19
Θ(172.5°)	-13.22/-14.73	-15.15/-18.02	-18.16/-16.05	-15.62/-13.34	-14.05/-16.48	-17.39/-18.92	-18.77/-17.92	-17.39/-18.03	-18.12/-18.05	-18.3/-18.32	-15.16/-13.36	-13.57/-14.14	-16.65/-17.54	-15.59/-14.23	-14.84/-18	-11.15/-11.07	-10.72/-9.87	-10.29/-11.28	-11.98/-12.42	-13.37/-17.65	-18.52/-14.32	-15.77/-13.39	-18.52/-17.63	-15.77/-13.39
Θ(180°)	-13.86/-17.69	-18.97/-18.56	-14.43/-15.92	-18.05/-17.76	-18.71/-18.99	-18.71/-19.26	-18.47/-19.28	-18.87/-16.87	-15.65/-13.8	-13.33/-11.97	-11.8/-11.94	-12.38/-13.19	-13.5/-13.6	-13.52/-13.47	-12.96/-13.71	-14.58/-16.11	-17.26/-11.53	-10.69/-10.46	-9.07/-9.28	-9.98/-12.04	-13.31/-12.87	-11.74/-11.62	-10.46/-10.22	-10.83/-11.21
Freq(Hz)	6.995GPol.	PhiAnt.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°)	-4.89/-5.25	-5.77/-6.61	-6.84/-7.77	-8.08/-8.05	-8.38/-8.38	-9.44/-9.45	-8.8/-8.89	-8.58/-7.65	-6.78/-6.27	-5.74/-6.05	-6.43/-5.84	-5.37/-4.68	-4.24/-4.85	-5.46/-5.99	-6.4/-6.91	-7.29/-7.6	-8.16/-8.45	-8.46/-8.19	-8.02/-8.16	-8.54/-8.35	-7.89/-7.6	-7.2/-6.25	-6.51/-5.31	-5.27/-5.28
Θ(7.5°)	-7.61/-8.2	-9.26/-10.67	-11.16/-12.92	-13.77/-14.97	-18.71/-15.69	-18.71/-15.69	-18.71/-15.69	-8.67/-9.92	-10.85/-12.08	-13.73/-18.15	-18.18/-18.28	-15.35/-15.82	-15.75/-16.77	-14.07/-13.82	-12.87/-13.46	-12.08/-10.69	-8.62/-8.13	-7.58/-7.13	-7.83/-7.97	-8.27/-9.98	-10.13/-10.47	-9.78/-9.91	-8.82/-8.71	-8.82/-8.71
Θ(15°)	-11.38/-10.6	-10.62/-7.97	-5.26/-4.16	-4.84/-6.67	-6.96/-4.11	-2.51/-1.09	-0.86/-0.43	-1.71/-3.68	-4.88/-4.69	-4.41/-5.09	-5.34/-5.1	-9.87/-7.71	-9.18/-10.72	-14/-17.64	-11.71/-6.66	-5.15/-5.52	-7.2/-8.16	-8.48/-8.97	-10.07/-10.28	-8.52/-6.33	-4.15/-2.45	-1.97/-3.43	-7.02/-8.13	-8.57/-11.41
Θ(22.5°)	-3.54/-2.58	-3.19/-5.06	-6.44/-5.51	-6.43/-5.28	-4.06/-3.81	-5.48/-8.4	-13.98/-17.79	-9.48/-6.03	-4.95/-3.13	-2.13/-3.09	-4.39/-5.84	-7.47/-4.14	-2.37/-1.46	-1.62/-3.4	-9.19/-9.84	-9.52/-9.98	-7.93/-6.62	-6.16/-6.44	-6.38/-3.89	-2.91/-3.64	-6.19/-10.63	-16.52/-16.47	-13.81/-11.34	-6.87/-9.49
Θ(30°)	-1.16/-0.02	0.780/-36	-2.29/-4.76	-2.38/-1.42	-2.69/-4.68	-3.05/-1.69	-2.18/-2.85	-1.340/-17	-0.31/-6.2	-2.17/-1.3	-1.18/-0.99	-3.27/-6.66	-5.77/-1.4	0.18/-0.72	-2.84/-4.66	-2.820/-0.7	-0.040/-6	-0.28/-2.4	-0.040/-6	-0.13/-1.4	-1.38/-1.61	-1.54/-1.08	-5.01/-2.83	-1.68/-2.25
Θ(37.5°)	-0.310	0.441/-89	-0.35/-1.16	-1.65/-1.92	-1.66/-1.97	-1.260/-62	1.20/-27	0.771/-66	0.660/-33	-0.07/-1.57	-0.75/-0.08	-2.59/-1.31	0.45/-0.78	-1.31/-0.84	-0.10/-0.3	1.612/-86	0.91/-0.38	0.91/-25	-0.72/-1.27	1.90/-78	-0.68/-0.83	-1.02/-0.8	-2.69/-2.77	-0.1/-0.12
Θ(45°)	0.942/-52	0.071/-18	-1.21/-0.4	-2.14/-16	-2.16/-4.82	-1.732/-6	1.25/-0.3	0.54/-18	2.072/-09	0.3/-2.6	-2.97/-0.32	-1.34/-1.81	-2.04/-3.01	1.31/-37	0.592/-64	2.580/-82	-2.29/-1.05	-0.960/-19	-0.550/-34	1.62/-69	-2.17/-0.37	-0.130/-29	0.890/-34	1.71/-94
Θ(52.5°)	1.613/-08	1.851/-88	-0.91/-104	0.23/-0.01	0.53/-3.54	-0.69/-124	-1.890/-67	1.47/-0.75	2.783/-08	-1.62/-1.95	-2.530/-63	-0.15/-0.89	-0.12/-2.57	1.472/-78	1.25/-0.27</									



Radiated Composite Gain Data of 6GHz_6G Ant1~4

Appendix A.6

Θ(60°)	-6.58/-7.42	-7.58/-6.76	-9.27/-11.98	-16.85/-15.98	-15.45/-12.97	-11.46/-14.36	-12.1/-10.95	-16.3/-6.96	-5.02/-11.92	-18.39/-17.48	-13.77/-18.34	-9.65/-8.83	-15.29/-18.52	-17.68/-14.66	-13.3/-13.83	-15.29/-8.1	-8.88/-15.35	-19.27/-15.73	-10.09/-14.75	-14.37/-12.11	-8.65/-14.29	-15.94/-16.76	-18.56/-18.7	-11.56/-5.84
Θ(67.5°)	-7.19/-9.48	-11.66/-9.95	-10.94/-17.56	-18.71/-18.77	-16.11/-13.21	-11.92/-11.78	-9.12/-13.9	-17.41/-9.53	-6.99/-12.33	-19.2/-17.28	-15.24/-17.48	-8.04/-10.23	-18.33/-18.95	-13.82/-13.53	-14.32/-14.25	-15.22/-8.79	-9.31/-18.16	-17.62/-14.67	-11.87/-18.22	-11.53/-16.34	-15.19/-18.37	-18.81/-15.22	-11.74/-9.49	-6.22/-4.55
Θ(75°)	-14.7/-9.74	-11.7/-10.8	-11.39/-15.19	-18.93/-18.62	-17.4/-16.1	-13.01/-14.04	-10.94/-9.71	-17.76/-13.43	-8.89/-11.31	-19.04/-14.98	-17.66/-16.87	-8.09/-13.31	-18.11/-11.22	-12.8/-13.81	-15.34/-14.89	-16.52/-10.93	-8.71/-15.27	-16.89/-12.54	-8.62/-18.75	-12.61/-19.04	-17.83/-17.44	-12.28/-8.71	-12.28/-8.71	-6.22/-4.55
Θ(82.5°)	-11.16/-11.69	-12.44/-14.47	-12.06/-14.35	-18.94/-19.66	-19.1/-18.29	-18.77/-15.6	-11.65/-12.43	-18.04/-16.08	-11.26/-11.36	-14.92/-14.57	-19.38/-15.29	-9.99/-16.13	-14.74/-10.72	-13.64/-17.4	-16.82/-13.99	-14.51/-16.67	-15.6/-19.15	-17.73/-13.55	-10.82/-12.27	-12.16/-18.36	-18.89/-18.56	-18.72/-17.57	-12.62/-8.38	-6.63/-6.12
Θ(90°)	-9.95/-12.07	-13.48/-18.77	-14.53/-15.08	-17.82/-18.12	-18.91/-18.68	-19.01/-14.93	-12.1/-16.3	-19.02/-13.86	-13.85/-11.57	-13.32/-18.76	-18.79/-17.59	-17.71/-15.67	-10.8/-14.2	-14.5/-15.9	-18.51/-15.57	-19.37/-18.64	-16.09/-18.1	-18.27/-13.84	-11.34/-10.1	-13.24/-18.31	-17.74/-19.03	-17.84/-18.82	-17.22/-9.63	-9.96/-9.12
Θ(97.5°)	-13.86/-13.1	-11.45/-17.88	-17.78/-17.36	-18.94/-18.62	-17.44/-18.26	-19.14/-17.58	-15.19/-16.24	-17.72/-17.62	-16.56/-16.35	-18.12/-18.79	-19.15/-53	-17.52/-13.41	-10.52/-14.32	-15.52/-15.45	-15.84/-18.33	-18.99/-16.89	-16.05/-15.27	-14.1/-14.46	-14.61/-12.73	-15.55/-18.17	-18.24/-17.46	-18.94/-17.15	-18.4/-13.05	-7.33/-12.88
Θ(105°)	-18.89/-14.53	-12.5/-16.47	-17.4/-19.11	-19.26/-18.65	-17.98/-18.42	-19/-16.34	-17.74/-17.97	-19.18/-17.61	-16.14/-17.22	-18.86/-17.05	-17.9/-17.83	-13.44/-12.06	-13.1/-14.54	-16.98/-14.54	-15.18/-18.93	-19.33/-17.36	-17.75/-18.17	-13.76/-13.27	-15.79/-15.17	-19.07/-18.59	-17.78/-19.09	-18.41/-19.17	-17.66/-12.4	-7.95/-11.86
Θ(112.5°)	-17.72/-18.2	-16.48/-12.29	-11.52/-13.63	-15.16/-15.03	-18.24/-18.16	-18.32/-19.05	-18.44/-16.37	-18.5/-15.75	-14.13/-18.39	-15.63/-13.29	-17.82/-16.07	-13.13/-19.37	-18.98/-16.31	-18.07/-15.89	-17.95/-17.11	-18.13/-17.8	-17.86/-13.93	-13.83/-12.99	-16.55/-18.85	-18.85/-17.78	-15.4/-18.08	-18.69/-18.41	-16.37/-12.64	-12.1/-11.11
Θ(120°)	-15.91/-18.67	-18.04/-17.24	-12.51/-18.11	-18.04/-16.02	-18.6/-18.5	-19.13/-18.59	-18.87/-18.32	-18.01/-19.03	-18.47/-19.22	-14.32/-17.98	-18.88/-19.08	-14.12/-16.98	-19.02/-19.13	-17.99/-16.42	-19.06/-16.88	-16.23/-16.51	-18.06/-15.53	-15.6/-14.28	-14.13/-15.85	-15.51/-18.38	-14.12/-18.08	-18.99/-15.84	-17.08/-8.89	-15.13/-8.6
Θ(127.5°)	-18.76/-17.82	-14.99/-16.63	-18.17/-18.66	-18.37/-18.34	-18.94/-17.13	-14.49/-16.08	-14.91/-14.44	-12.62/-18.4	-13.77/-15.46	-18.19/-19.15	-17.49/-18.03	-18.71/-18.84	-17.36/-16.41	-18.52/-18.77	-18.59/-17.36	-10.33/-14.21	-17.9/-11.8	-16.08/-17.91	-10.87/-13.83	-18.1/-18.27	-12.21/-12.9	-16.84/-13.1	-15.02/-11.19	-16.08/-12.97
Θ(135°)	-18.44/-18.39	-17.66/-17.47	-18.54/-18.05	-15.88/-13.72	-18.35/-18.19	-17.54/-19.07	-15.87/-16.13	-17.97/-17.76	-18.99/-15.23	-18.57/-15.67	-18.88/-15.67	-11/-12.39	-18.25/-17.84	-18.16/-17.29	-12.71/-6.77	-10.64/-18.09	-15.02/-17.37	-17.91/-15.26	-11.05/-12.85	-18.21/-17.93	-17.62/-16.45	-16.95/-15.74	-13.36/-18.08	-12.29/-18.82
Θ(142.5°)	-17.52/-13.28	-18.72/-17.81	-18.69/-17.47	-18.02/-18.92	-18.4/-17.86	-18.84/-17.79	-14.54/-16.37	-18.01/-14.91	-19.02/-17.74	-17.44/-15.21	-11.59/-16.08	-14.93/-18.78	-18.21/-12.71	-7.87/-10.17	-18.77/-18.29	-17.68/-16.43	-19.56/-13.89	-14.92/-13.99	-12.21/-11.7	-13.45/-18.2	-18.52/-15.64	-17.87/-13.84	-18.74/-14.16	-13.22/-19.02
Θ(150°)	-18.05/-17.3	-14.56/-14.23	-16.43/-18.52	-17.91/-19.15	-17.98/-18.01	-17.68/-15.36	-13.87/-19.26	-19.19/-13.44	-18.59/-12.89	-10.86/-14.07	-15.72/-16.44	-18.79/-16.57	-9.34/-9.4	-18.76/-17.99	-14.15/-18.43	-18.06/-17.77	-17.24/-15.52	-10.78/-12.13	-13.55/-12.05	-17.51/-18.6	-18.33/-12.85	-11.45/-16.3	-17.13/-17.01	-15.56/-17.5
Θ(157.5°)	-18.35/-19.1	-17.39/-16.68	-17.12/-18.71	-17.85/-16.26	-18.37/-15.95	-12.5/-11.56	-11.96/-11.43	-10.38/-13.58	-18.17/-16.29	-16.88/-17.13	-19.34/-15.78	-15.05/-17.04	-8.95/-9.2	-16.26/-18.2	-10.08/-11.72	-17.12/-17.57	-14.96/-12.44	-11.73/-14.04	-16.46/-17.67	-18.8/-17.32	-18.89/-17.96	-18.53/-18.93	-18.14/-18.79	-18.73/-17.99
Θ(165°)	-18.67/-16.16	-14.06/-13.14	-14.47/-18.04	-18.63/-18.42	-14.45/-11.55	-11.88/-14.54	-19.02/-18.4	-18.8/-18.7	-15.21/-12.2	-11.73/-13.04	-14.22/-14.38	-15.05/-18.12	-12.85/-11.59	-17.39/-18.19	-11.37/-10.46	-9.89/-8.66	-6.59/-6.03	-6.57/-8.78	-11.85/-15.32	-18.83/-18.15	-18.07/-17.68	-18.73/-18.56	-15.3/-15.5	-17.88/-18.69
Θ(172.5°)	-18.58/-18.67	-17.92/-17.77	-18.56/-18.21	-19.18/-19.2	-18.01/-16.37	-15.25/-15.36	-15.76/-18.4	-18.74/-18.25	-18.51/-18.37	-17.25/-17.15	-17.23/-15.39	-13.31/-11.91	-11.89/-12.01	-12.03/-11.86	-11.71/-11.76	-13.44/-17.56	-18.86/-18.28	-18.71/-17.1	-18.42/-15.33	-13.93/-12.47	-11.46/-11.66	-12.13/-13.09	-15.9/-17.74	-18.21/-17.87
Θ(180°)	-14.7/-16.1	-18.41/-18.55	-17.7/-13.63	-11.61/-9.96	-9.82/-10.59	-11.09/-11.16	-10.31/-10.06	-9.88/-10.26	-10.78/-11.33	-12.21/-12.53	-12.52/-13.05	-13.77/-14.62	-17.29/-19.52	-19.1/-17.62	-17.49/-13.57	-11.77/-10.24	-9.46/-9.16	-8.76/-8.15	-7.61/-6.77	-6.5/-6.06	-6.71/-7.26	-8.33/-9.84	-11.92/-13.61	-13.22/-12.32
Freq(Hz)	6.475GPdL	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°)	-18.53/-16.37	-16.35/-14.06	-12.38/-12.1	-12.18/-11.56	-10.37/-9.42	-8.64/-8.14	-8.31/-9.21	-10.34/-11.55	-12.53/-13.88	-15.28/-16.67	-17.85/-18.92	-15.64/-15.56	-15.78/-17.24	-10.83/-9.41	-9.23/-9.62	-9.34/-9.89	-8.77/-8.56	-8.59/-8.81	-9.85/-10.72	-11.43/-12.34	-12.85/-14.23	-15.18/-15.57	-16.58/-18.06	-19.12/-19.37
Θ(7.5°)	-17.93/-18.53	-18.18/-18.69	-19.16/-17.08	-18.26/-17.8	-18.13/-18.61	-17.85/-19.02	-19.56/-18.51	-19.23/-18.05	-17.15/-14.32	-12.82/-10.67	-9.94/-9.46	-10.72/-12.7	-10.41/-11.24	-10.89/-10.91	-13.41/-11.23	-12.31/-14.5	-14.92/-13.53	-16.39/-14.75	-16.99/-18.08	-18.54/-17.34	-15.41/-13.32	-14.72/-13.29	-14.82/-17.89	-17.68/-16.15
Θ(15°)	-17.63/-18.12	-10.99/-6.35	-4.99/-5.08	-5.38/-6.08	-6.11/-6.62	-6.97/-6.93	-6.84/-5.54	-4.23/-3.16	-3.18/-3.47	-3.79/-3.95	-4.29/-4.62	-5.25/-6.01	-7.46/-8.82	-8.43/-8.26	-7.95/-9.61	-12.06/-11.92	-9.57/-7.49	-6.64/-6.53	-6.61/-6.34	-6.62/-7.03	-6.79/-6.51	-6.75/-8.1	-10.95/-14.69	-16.43/-18.79
Θ(22.5°)	-10.99/-12.42	-6.99/-3.44	-1.82/-1.56	-1.83/-1.03	-0.47/-0.66	-1.08/-1.01	-0.84/-0.64	-1.02/-0.85	-0.58/-0.68	-0.71/-1.2	-2.11/-3.41	-5.17/-5.44	-5.27/-5.16	-3.94/-2.63	-2.35/-4.7	-10.14/-15.88	-11.69/-7.65	-5.74/-4.16	-4.57/-4.7	-6/-7.39	-10.22/-11.63	-10.34/-9.46	-9.22/-9.15	-9.21/-9.6
Θ(30°)	-7.5/-10.47	-9.47/-6.28	-4.34/-2.91	-2.52/-1.8	-1.12/-0.23	-1.09/-0.46	-1.17/-1.17	-2.03/-2.2	-0.820/-39	-0.56/-0.28	0.25/-15	1.190/69	0.680/56	-0.21/-23	0.59/-15	1.190/69	0.680/56	-0.21/-23	-0.58/-0.54	-0.56/-2.25	-4.12/-6.84	-3.58/-3.96	-4.58/-4.23	-4.47/-4.98
Θ(37.5°)	-3.24/-5.29	-4.33/-0.94	0.64/-0.01	-1.07/-0.7	-0.31/-1.39	-2.8/-3.03	-1.68/-0.61	-0.91/-2.31	-3.2/-2.6	-1.260/-92	1.21/-0.24	-1.110/65	1.852/21	0.35/-0.38	0.44/-0.4	0.79/-0.17	-0.170/8	1.06/-0.06	-1.84/-2.03	-1.15/-1.41	-3.79/-3.66	-1.29/-1.14	-2.25/-2.04	-1.23/-1.56
Θ(45°)	-0.52/-0.62	-0.182/-38	2.810/76	-1.33/-1.04	0.20/06	-1.81/-2.77	-0.43/-0.7	-0.12/-2.74	-2.52/-1.34	-0.892/08	2.710/95	-0.680/05	0.552/33	2.872/79	1.66/-1.17	-1.640/28	1.571/97	2.011/53	-0.71/-2.27	-1.51/-1.4	-1.71/-1.99	-1.48/-0.84	-0.26/-0.5	-0.440/87
Θ(52.5°)	2.530/95	0.412/-46	2.951/-55	-0.47/-2.07	-0.420/93	0.66/-0.42	0.161/-74	-0.05/-2.03	1.46/-1.57	-2.190/49	0.810/-3	0.060/63	0.852/58	3.192/19	0.610/36	1.1/-1.1	1.31/01	1.561/69	-0.55/-3.13	-1.640/99	0.981/58	0.571/3	1.591/87	1.812/84
Θ(60°)	3.98/1.82	1.152/23	2.080/04	-0.6/-0.9	0.432/79	3.843/06	1.632/78	2.630/54	-1.50/-7.7	-2.87/-2.56	-3.18/-2.85	-1.28/-1.16	-0.871/21	1.21/-0.87	-1.51/-2.86	-1.27/-1.04	-1.54/-0.55	-1.1/-1.4	-2.63/-4.04	-1.771/9	1.042/72	1.861/83	2.243/17	3.424/32
Θ(67.5°)	3.451/73	1.832/72	2.17/-10.2	0.121/23	1.463/21	3.321/95	1.263/05	3.352/-42	1.210/83	-0.33/-2.16	-1.960/37	-0.91/-3.56	-2.380/58	0.440/82	1.91/-1.86	-1.580/63	0.380/32	-0.27/-1.68	0.21/-0.01	0.732/02	2.023/-16	1.881/-62	1.842/-56	2.954/-11
Θ(75°)	2.881/65	1.842/02	0.3/-1.2	-0.27/-0.11	0.942/65	2.071/75	1.933/71	2.932/25	1.752/32	0.37/-0.54	-0.62/-1.22	-0.26/-2.38	-1.520/43	0.722/07	2.92/-0.66	0.872/38	0.860/62	2.370/67	1.331/41	1.971/35	0.81/99	1.547/52	1.20/88	2.143/89
Θ(82.5°)	2.691/31	1.680/98	-1.02/-2.58	-2.14/-1.84	0.110/89	0.171/61	2.462/9	1.4/-0.02	1.711/81	-0.32/-1.21	-1.080/73	-0.98/-2.86	-0.770/95	0.342/05	0.67/-1.26	2.162/9	0.450/39	2.732/-49	2.521/18	2.621/84	-1.2/-2.03	0.780/91	1.050/3	0.973/-36
Θ(90°)	0.890/07	0.77/-0.78	-3.02/-3.87	-3.11/-3.02	-0.83/-1.98	-1.65/-3.1	1.280/81	0.51/-1.34	0.81/-1.07	-3.62/-4.44	-4.42/-1.33	-3.74/-6.07	-3.12/-2	-1.351/53	-0.21/-2.06	-0.390/85	0.16/-0.8	-0.480/84	1.50/-28	0.460/98	-2.97/-1.71	-1.47/-0.78	-0.11/-1.76	-1.191/-97
Θ(97.5°)	-0.65/-1.68	-1.76/-2.03	-3.59/-5.44	-5.02/-5.7	-3.06/-3.22	-5.14/-0.76	-0.71/-0.73	-2.34/-3.93	-1.53/-2.88	-6.28/-6.29	-5.77/-3.01	-4.69/-5.86	-4.72/-5.45	-3.97/-1.42	-2.14/-4.13	-4.25/-4.25	-3.37/-4.08	-3.21/-4.08	-2.38/-2.52	-2.99/-2.52	-7.46/-2.71	-1.89/-2.25	-1.58/-3.14	-2.390/17
Θ(105°)	-3.13/-3.43	-3.84/-3.16	-5.75/-7.49	-6.7/-6.18	-4.41/-1.9	-5.86/-6.7	-5.92/-7.9	-2.99/-5.29	-6.04/-4.22	-6.71/-8.3</														



Radiated Composite Gain Data of 6GHz_6G Ant1~4

Appendix A.6

Θ (112.5°)	-18.52/-18.52	-17.48/-15.94	-18.18/-18.51	-18.17/-18.95	-19.04/-18.31	-18.49/-17.68	-18.26/-18.33	-18.71/-18.6	-17.57/-18.12	-19.08/-18.05	-16/-16.69	-12.95/-16.45	-15.88/-18.44	-19.07/-18.54	-18.61/-18.78	-19.19/-18.82	-17.89/-18.58	-17.25/-18.76	-15.01/-18.9	-17.71/-16.87	-17.74/-16.44	-18.94/-19.15	-18.93/-14.76	-16.6/-18.77
Θ (120°)	-17.46/-19.08	-18.65/-14.11	-19.88/-17.32	-18.69/-19.19	-18.06/-18.47	-19.17/-18.84	-18.96/-18.65	-18.43/-18.96	-17.8/-18.59	-18.22/-14.85	-17.4/-15.44	-12.22/-16.67	-18.38/-16.07	-18.95/-18.37	-19.02/-18.35	-18.79/-18.57	-18.78/-18.34	-18.25/-15	-13.13/-18.42	-17.48/-13.81	-18.56/-18.41	-18.84/-17.03	-17.72/-17.44	-14.88/-17.55
Θ (127.5°)	-18.27/-19.05	-19.01/-14.86	-18.68/-17.48	-18.73/-17.3	-16.47/-17.23	-18.46/-19.18	-15.14/-18.14	-17.82/-18.26	-18.26/-16.91	-17.05/-17.01	-17.88/-18.53	-18.64/-18.21	-17.71/-17.63	-17.63/-13.07	-18.17/-18.62	-11.38/-18.44	-19.01/-8.65	-17.44/-14.52	-13.61/-19.19	-18.83/-11.31	-17.73/-17.6	-17.31/-19.26	-18.95/-18.07	-19.05/-17.27
Θ (135°)	-18.51/-18.44	-17.91/-18.16	-15.61/-16.18	-18.89/-17.86	-18.96/-17.95	-19.08/-17.59	-16.34/-19.13	-16.73/-18.99	-18.36/-18.19	-14.53/-17.75	-17.58/-16.03	-11.85/-18.98	-18.71/-13.68	-19.05/-18	-15.59/-14.04	-9.74/-18.1	-13.83/-16.79	-18.21/-19.61	-18.09/-17.64	-18.45/-17.23	-14.58/-17.37	-18.48/-13.88	-15.33/-12.9	-18.14/-19.4
Θ (142.5°)	-18.37/-18.26	-17.33/-18.49	-19.12/-16.34	-18.49/-17.46	-18.78/-17.67	-18.45/-18.44	-17.25/-18.1	-16.77/-17.5	-14.79/-17.01	-13.93/-16.38	-18.6/-18.51	-17.93/-18.1	-15.41/-17.64	-12.11/-10.65	-14.41/-18.82	-18.51/-18.08	-17.49/-18.07	-18.03/-18.03	-16.98/-18.57	-19.03/-18.42	-18.68/-18.07	-18.33/-17.49	-17.6/-12.75	-14.45/-18.16
Θ (150°)	-14.42/-14.06	-18.86/-18.16	-18.95/-18.26	-18.27/-18.92	-19.04/-18.42	-15.05/-15.71	-17.46/-17.63	-16.61/-9.36	-8.73/-18.72	-18.12/-18.81	-16.4/-17.55	-17.99/-17.64	-12.94/-12.58	-18.33/-17.31	-13.72/-15.9	-11.66/-15.55	-17.73/-12.94	-14.24/-18.77	-15.45/-17.55	-18.4/-14.8	-17.34/-17.48	-16.88/-13.39	-15.77/-10.57	-15.32/-18.86
Θ (157.5°)	-18.57/-19.29	-18.07/-18.55	-18.9/-18.63	-16.3/-19.24	-19.07/-18.12	-13.67/-12.94	-14.79/-16.94	-14.32/-13.54	-18.47/-12.21	-8.95/-16.29	-15.91/-15.21	-18.27/-18.98	-13.88/-12.2	-16.49/-11.51	-10.71/-15.58	-18.6/-17.74	-16.26/-14.84	-15.38/-18.78	-17.12/-15.73	-18.61/-18.73	-18.88/-16.72	-16.55/-15.9	-15.29/-17.87	-15.53/-13.78
Θ (165°)	-18.76/-17.48	-18.86/-17.88	-19.4/-19.87	-18.4/-19.43	-17.85/-13.54	-11.3/-13.51	-18.75/-17.56	-16.21/-17.41	-17.86/-17.85	-17.14/-18.12	-19.05/-17.64	-16.23/-12.98	-13.14/-16.87	-16.51/-11.03	-8.38/-8.62	-7.88/-6.5	-6.52/-9.44	-15.76/-18.71	-19.07/-14.41	-13.05/-13.51	-14.85/-16.57	-17.47/-18.6	-18.1/-17.73	-18.34/-18.72
Θ (172.5°)	-17.8/-18.28	-18.05/-18.79	-18.07/-18.92	-18.27/-16.86	-15.68/-14.53	-12.42/-13.98	-15.29/-18.07	-17.69/-18.51	-18.54/-18.06	-18.5/-16.88	-15.55/-15.48	-14.58/-14.26	-14.14/-15.22	-16.36/-17.43	-16.79/-17.25	-18.68/-18.26	-19/-17.41	-18.27/-18.89	-18.18/-18.5	-16.25/-18.04	-18.02/-18.26	-18.1/-19.32	-18.79/-17.14	-17.88/-18.58
Θ (180°)	-14.73/-16.86	-17.34/-18.68	-19.12/-15.84	-14.96/-13.57	-13.23/-13.17	-12.82/-14.46	-13.53/-12.66	-12.64/-12.16	-12.49/-13.79	-14.5/-14.1	-14.39/-14.35	-15.14/-15.63	-15.65/-17.1	-17.84/-17.87	-18.02/-17.28	-13.56/-13	-11.51/-11.47	-11.24/-11.44	-10.51/-10.07	-9.94/-8.98	-9.97/-10.59	-11.33/-12.85	-12.85/-13.5	-14.65/-14.71
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°)	-13.22/-12.58	-12.72/-13.8	-16.1/-15.2	-14.76/-16.09	-16.16/-14.8	-17.63/-18.73	-18.37/-18.66	-18.79/-18.14	-18.29/-18	-18.33/-18.37	-18.82/-15.74	-14.42/-15.5	-15.21/-13.35	-11.98/-12.02	-12.95/-13.08	-13.61/-12.77	-14.11/-16.5	-18.27/-18.42	-18.2/-19.3	-17.59/-16.28	-14.98/-14.04	-13.81/-12.72	-12.61/-12.37	-12.42/-12.45
Θ (7.5°)	-8.57/-9.49	-10.12/-12.68	-15.34/-14.06	-13.27/-13.34	-11.68/-9.42	-7.79/-6.97	-8.19/-8.96	-10.08/-10.34	-10.3/-9.44	-9.34/-8.66	-7.38/-6.7	-5.88/-5.87	-6.34/-8	-9.48/-12.53	-13.69/-13.15	-12.15/-11.06	-9.47/-8.52	-7.83/-8.63	-9.98/-11.37	-12.73/-13.09	-13.03/-12.75	-11.99/-10.54	-9.8/-8.85	-8.46/-8.48
Θ (15°)	-8.06/-8.55	-7.63/-8.87	-10.61/-7.08	-4.76/-4.27	-3.89/-3.5	-2.86/-3.28	-1.82/-2.39	-7.16/-6.22	-5.61/-6.28	-7.62/-7.83	-7.19/-5.62	-0.92/-0.21	-0.28/-1.51	-2.59/-2.9	-2.92/-3.09	-0.23/-1.5	-2.76/-1.99	-1.02/-0.13	-0.23/-1.5	-3.75/-5.49	-6.19/-6.55	-6.68/-5.92	-5.39/-5.58	-5.85/-6.94
Θ (22.5°)	-4.83/-4.86	-6.2/-7.96	-8.99/-8.8	-6.95/-6.02	-5.08/-4.04	-2.07/-0.68	0.19/0.59	0.53/-0.01	-0.99/-1.77	-2.54/-2.56	-1.56/-0.5	0.04/-0.13	0.3/0.08	-0.67/-1.51	-1.5/-0.76	0.79/1.04	1.01/0.63	1.12/1.2	2.09/0.01	-3.17/-3.85	-2.09/-1.8	-2.96/-4.14	-4.81/-5.03	-4.29/-4.51
Θ (30°)	-2.61/-0.2	0.63/-0.69	-1.3/-1.01	-1.49/-1.17	-1.49/-1.76	-0.35/-1.37	1.53/0.67	-0.3/-0.53	-1.34/-0.95	-0.11/0.71	0.95/0.85	0.27/-1.58	-2.34/-2.15	0.21/-64	1.64/0.9	-0.42/-0.88	-0.09/0.09	0/0.95	2.37/-1.92	-1.12/-2.82	-1.97/-2.86	-5.33/-4.61	-3.05/-5.04	-7.6/-5.81
Θ (37.5°)	-4.24/-0.15	1.13/-1.19	0.72/-1.17	-1.63/-0.08	0.68/0.54	1.58/2.33	0.47/-2.81	-1.97/0.06	0.26/-0.1	0.63/-0.38	-0.39/0.81	1.54/-1.57	1.04/0.93	-0.35/-0.66	2.56/4.54	3.19/-0.71	-0.87/2.17	1.62/-1.02	1.24/2.25	0.89/-0.99	-0.77/-1.06	-2.45/-2.22	0.01/0.11	-3.25/-6.72
Θ (45°)	-0.9/-0.43	0.96/1.22	1.69/0.01	-2.88/-1.35	0.1/-0.07	1.37/2.13	0.45/-1.77	0.48/1.96	0.21/0.31	1.38/0.19	0.94/1.25	0.96/1.31	0.2/-0.49	-1.49/-0.01	-0.66/0.6	0.63/-1.14	-1.6/2.64	2.97/1.44	2.73/4.04	3.11/0.37	0.08/-2.24	-2.43/-0.84	1.09/1.94	1.55/-0.67
Θ (52.5°)	2.7/2	1.98/1.7	1.96/1.27	-1.88/-2.1	-1.64/-0.46	1.09/0.6	0.21/0.46	1.47/0.44	-0.51/-0.59	0.88/0.61	2.25/-1.42	1.37/2.44	0.68/-1.2	-0.45/-1.18	-0.77/-1.19	-1.75/-0.88	0.01/-1.51	0.46/0.86	0.27/1.01	0.73/0.59	1.09/-0.47	0.27/0.76	1.12/-1.95	3.65/-3.4
Θ (60°)	4.07/2.74	1.53/-1.64	1.54/-1.29	-1.82/-2.21	-0.83/-1.73	2.87/0.94	1.41/-2.12	1.83/0.33	-1.49/-1.95	-1.24/-4.34	-1.66/1.26	0.65/-2.07	-2.19/-2.03	-3.97/-4.26	-5.9/-7.16	-2.55/-3.34	-4.65/-2.76	-5.58/-4.88	-2.26/0.81	0.41/0.99	1.73/2.35	-2.45/-2.22	0.01/0.11	-4.13/3.96
Θ (67.5°)	3.98/3.11	1.16/-1.42	1.71/-1.15	-0.85/0.52	-0.45/-2.87	4.28/0.8	1.42/2.1	3.02/2	1.47/1.46	-1.34/-2	-3.74/-4.51	-0.69/0.47	2.26/1.07	-3.28/-3.07	-2.33/-2.4	-3.4/-5.83	-1.14/-2.95	-6.5/-3.56	-3.28/-0.5	1.12/2.48	0.48/1.4	2.25/2.64	0.95/2.56	3.47/2.26
Θ (75°)	1.97/2.05	-0.66/-1.38	0.51/0.29	-1.23/0.81	-0.73/7.8	3.95/-1.03	1.05/0.63	2.13/96	2.55/4.27	1.19/-0.19	-2.12/-0.98	-0.66/0.71	2.29/2.3	-0.07/0.66	0.78/-1.17	-0.41/-0.66	0.06/-1.88	-1.85/0.14	-1.67/-1.79	3.48/2.74	-1.12/-1.18	1.99/-1.29	1.27/2.43	2.34/0.07
Θ (82.5°)	0.69/1.19	-0.07/0.2	-0.59/0.16	-1.3/-0.06	-2.45/3.11	1.28/-1.57	1.41/0.85	-0.56/3.22	0.76/1.54	1.09/-0.29	-1.58/0.04	-0.17/0.09	0.83/1.94	-1.41/-5	1.18/-0.39	0.82/1.24	1.5/-1.11	-0.70/7.1	1.18/3.46	4.45/2.92	-2.87/-0.45	1.36/-0.34	1.53/0.96	0.23/-2.01
Θ (90°)	-1.69/-1.61	-2.22/-1.56	-1.85/-0.93	-2.71/-0.53	-3.03/0.63	-0.16/-0.33	1.11/0	-1.8/2	-1.51/0.53	0.55/-1.56	-2.46/-1.98	-1.29/-1.22	-2.29/0.87	-2.33/-0.19	-1.18/-1.58	-1.35/0.21	0.16/-3.07	-1.45/-1.1	0.35/1.83	3.11/2.49	-5.5/-2.78	-0.26/-2.01	0.66/-0.66	-1/-2.38
Θ (97.5°)	-4.76/-4.9	-2.66/-2.89	-3.13/-2.78	-3.98/-1	-6.76/-0.74	-0.85/-2.95	-1.79/-3.51	-3.41/0.05	-3/-3.16	-1.04/-3.11	-4.69/-3.11	-2.2/-4.14	-3.82/-0.01	-3.39/-0.56	-3.28/-2.45	-2.63/-3.43	-3.78/-8.42	-2.44/-4.93	-2.72/-1	0.11/-0.35	-7.47/-4.13	-3.12/-4.31	-0.77/-2.01	-3.64/-4.22
Θ (105°)	-7.13/-6.12	-2.92/-5.39	-5.82/-3.49	-4.98/-3.84	-7.32/-1.61	-0.44/-7.48	-5.47/-5.67	-4.84/-4.28	-2.17/-6.42	-4.91/-4.52	-8.14/-4.77	-4.48/-5.62	-5.14/-2.33	-5.07/-2.12	-3.27/-5.53	-3.85/-3.48	-6.91/-13.78	-3.69/-5.66	-3.85/-3.43	-1.45/-3.23	-9.54/-5.4	-4.06/-4.14	-4.03/-3.29	-5.56/-5.58
Θ (112.5°)	-7.77/-6.04	-4.71/-7.57	-8.43/-7.06	-7.89/-7.44	-4.35/-4.1	-4.19/-4.64	-4.51/-4.8	-6.77/-8.89	-7.36/-6.79	-11.48/-8.78	-7.63/-6.18	-6.73/-2.14	-7.24/-10.13	-9.2/-12.58	-4.08/-5.95	-5.76/-6.95	-4.08/-5.85	-3.13/-4.02	-2.27/-7.95	-13.2/-4.52	-4.95/-5.94	-4.5/-4.12	-6.58/-6.44	
Θ (120°)	-9.49/-9.5	-7.67/-8	-6.45/-6.47	-10.91/-4.19	-9.02/-3.33	-2.05/-10.92	-16.76/-10.07	-6.28/-8.25	-6.29/-6.04	-6.41/-1.11	-6.13/-7.49	-9.35/-9.78	-14.98/-8.2	-5.48/-3.42	-5.97/-14.06	-10.28/-9.42	-17.94/-18.05	-9.07/-14.94	-7.73/-6.42	-6.48/-14.73	-10.95/-5.58	-7.4/-7.27	-6.34/-7.34	-10.25/-7.24
Θ (127.5°)	-12.27/-8.27	-8.9/-8.61	-6.12/-12.26	-10.34/-7.54	-9.38/-5.7	-7.55/-7.25	-5.14/-7.23	-12.05/-6.78	-9.7/-6.84	-6.4/-7.72	-9.18/-9.44	-10.32/-12.24	-11.06/-13.19	-6.11/-3.75	-14.28/-11.76	-17.08/-7.63	-15.2/-10.62	-7.12/-10.4	-9.06/-5.6	-4.83/-17.59	-10.91/-3.48	-7.8/-10.76	-5.51/-8.02	-8.13/-9.19
Θ (135°)	-11.43/-10.1	-8.05/-6.69	-8.55/-12.17	-9.74/-10.62	-11.87/-9	-6.99/-10.93	-6.42/-5.68	-6.71/-12.49	-17.34/-8.39	-6.24/-6.48	-11.66/-17.84	-16.13/-11.85	-6.56/-6.93	-8.72/-14.85	-8.42/-13.59	-10.15/-7.18	-9.65/-8.99	-5.66/-4.27	-12.27/-19.4	-8.88/-5.04	-5.33/-10.91	-8.91/-9.94	-6.73/-13.95	
Θ (142.5°)	-14.21/-11.69	-8.81/-8.15	-11.33/-12.8	-11.55/-12.16	-18.34/-8.96	-6.43/-8.77	-4.72/-4.47	-8.09/-18.68	-9.07/-10.59	-13.14/-8.93	-7.64/-12.25	-16.08/-15.05	-8.44/-10.32	-13.21/-8.49	-9.61/-10.75	-17.8/-18	-14.19/-7.12	-10.74/-18.43	-18.03/-18.01	-17.59/-15.4	-14.79/-9.04	-12.14/-8.17	-8.09/-17.02	-10.49/-13.15
Θ (150°)	-11.71/-9.02	-7.85/-8.69	-11.68/-10.35	-8.11/-10.15	-15.87/-18.42	-14.88/-12.89	-9.9/-7.8	-8.28/-11.81	-11.59/-9.97	-12.81/-10.57	-7.89/-5.46	-6.26/-15.57	-17.11/-6.59	-4.46/-6.68	-8.15/-11.72	-13.37/-13.98	-14.71/-13.04	-9.3/-10.03	-13.02/-10.59	-10.45/-12.03	-13.73/-17.06	-13.39/-11.23	-12.02/-13.05	-13.64/-13.67
Θ (157.5°)	-14.01/-9.95	-8.73/-10.13	-11.86/-11.67	-12.52/-15.34	-17.47/-17.82	-17.86/-18.09	-16.22/-16.25	-18.18/-18.84	-15.65/-12.72	-17.3/-12.39	-8.87/-6.42	-7.78/-11.16	-12.8/-12.35	-10.86/-11.5	-12.82/-13.33	-1								



Freq(Hz)	2.45G	5.2G	5.3G	5.6G	5.785G	6.175G	6.475G	6.695G	6.995G
Ant. 1 Max Gain (dBi)	3.1	3.54	3.26	3.65	2.58	3.03	3.21	3.62	3.22
Ant. 2 Max Gain (dBi)	2.91	4.08	3.88	4.3	4.67	6.04	5.01	5.64	5.24
Ant. 1 Polarization/Θ(°)/Φ(°)	Theta/22.5/22.5	Phi/22.5/292.5	Phi/22.5/292.5	Phi/30/292.5	Phi/30/285	Phi/37.5/285	Phi/0/292.5	Theta/67.5/202.5	Theta/67.5/202.5
Ant. 2 Polarization/Θ(°)/Φ(°)	Theta/37.5/255	Phi/30/90	Theta/7.5/7.5	Phi/30/292.5	Theta/52.5/75	Theta/52.5/67.5	Theta/75/22.5	Theta/52.5/60	Theta/67.5/337.5
Max Gain (dBi)	3.1	4.08	3.88	4.3	4.67	6.04	5.01	5.64	5.24
DG [1SS] (dBi)	3.95	6.62	6.37	6.99	5.33	6.09	5.99	6.72	5.49
DG [2SS] (dBi)	3.1	4.08	3.88	4.3	4.67	6.04	5.01	5.64	5.24



Radiated Composite Gain Data of Scan Radio_SC Ant1~2

Appendix A.7

DG 1SS Result

Freq(Hz)	2.45G/Pol.	Phi-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
DG(dB)	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°)	-5.66/-5.7	-9.36/-4.7	-7.43/-5.22	-3.53/-2.04	-0.68/0.59	1.55/2.12	2.38/2.48	2.51/2.47	2.31/2.02	1.57/0.95	0.09/-1.08	-2.59/-4.6	-7.06/-9.15	-10.43/-10.33	-7.84/-5.44	-3.53/-1.96	-0.53/0.62	1.43/1.95	2.3/2.54	2.74/2.87	2.81/2.54	2.06/1.36	0.39/-0.83	-2.24/-3.83
Θ(7.5°)	-5.87/-7.7	-9.97/-10.56	-7.72/-5.22	-3.31/-1.81	-0.64/0.51	1.53/2.25	2.63/2.77	2.75/2.63	2.45/2.15	1.72/1.11	0.21/-1.06	-2.8/-5.38	-7.44/-8.62	-8.62/-8.36	-6.2/-3.86	-2.13/-0.84	0.28/1.21	1.88/2.29	2.43/2.38	2.35/2.31	2.21/2.01	1.59/0.9	-0.08/-1.29	-2.74/-3.1
Θ(15°)	-7.29/-9.4	-11.83/-11.25	-9.75/-6.76	-4.42/-2.66	-1.36/-0.14	1.06/2.02	2.65/2.96	3.03/2.95	2.79/2.46	1.92/1.13	-0.02/-1.61	-3.76/-6.6	-7.24/-6.69	-6.66/-5.55	-3.74/-1.69	-0.25/0.66	1.25/1.66	1.98/2.21	2.27/2.13	1.83/1.51	1.31/1.2	0.91/0.31	-0.63/-1.8	-3.24/-5.22
Θ(22.5°)	-7.39/-10.05	-13.34/-15.13	-13.46/-9.8	-6.64/-4.23	-2.44/-0.79	0.75/1.98	2.84/3.33	3.48/3.38	3.08/2.59	1.8/0.66	-0.9/-3.01	-5.81/-7.39	-6.48/-6.13	-5.07/-3.5	-1.69/-0.37	0.64/1.34	1.82/2.07	2.18/2.26	2.38/2.36	2.1/1.54	0.91/0.4	0/-0.51	-1.34/-2.46	-3.87/-5.83
Θ(30°)	-7.65/-10.13	-11.54/-14.02	-15.69/-13.52	-9.48/-5.7	-2.89/-0.65	0.98/2.08	2.9/3.49	3.82/3.81	3.38/2.58	1.39/-0.14	-2.06/-4.67	-7.69/-8.03	-7.7/-6.26	-4.24/-2.3	-1.08/-0.28	0.41/0.3	1.68/2.21	2.49/2.56	2.52/2.51	2.37/1.81	0.76/-0.44	-1.27/-1.73	-2.41/-3.4	-4.67/-6.15
Θ(37.5°)	-7.73/-8.83	-10.25/-13.11	-15.46/-15.51	-11.6/-6.34	-2.81/-0.23	1.3/2.01	2.47/2.95	3.41/3.54	3.12/2.1	0.64/-1.02	-3.01/-6.06	-8.02/-8.53	-8.84/-6.51	-3.96/-2.45	-1.53/-0.98	-0.45/0.19	0.91/1.52	2.01/2.23	2.16/1.93	1.66/1.04	-0.07/-1.44	-2.51/-3.13	-3.85/-4.74	-5.69/-6.84
Θ(45°)	-7.87/-8.9	-10.18/-10.27	-15.27/-15.23	-12.16/-6.19	-2.74/-0.47	0.81/1.4	1.76/2.01	2.27/2.41	2.16/1.49	0.49/-0.68	-2.52/-5.42	-8/-8.82	-9.26/-8.02	-5.88/-4.35	-3.3/-2.6	-1.83/-0.79	0.22/0.87	1.21/1.49	1.61/1.38	0.79/-0.24	-1.76/-3.26	-4.04/-4.6	-4.78/-5.69	-6.27/-6.78
Θ(52.5°)	-7.71/-9.46	-11.47/-12.73	-12.99/-15.07	-11.08/-5.39	-2.42/-0.83	-0.07/0.52	1.31/1.19	0.77/0.51	0.53/0.67	0.54/-0.29	-2.23/-5.25	-8.18/-9.98	-10.41/-8.49	-6.34/-4.83	-4.04/-3.89	-3.5/-2.28	-0.78/0.16	0.56/0.91	1.10/0.97	0.39/-1.06	-3.66/-6.57	-6.94/-6.5	-5.68/-6.96	-7.21/-7.32
Θ(60°)	-8.3/-9.8	-11.67/-12.77	-13.23/-15.35	-11.34/-5.41	-2.36/-1.02	-0.74/-0.43	0.20/2.3	-0.39/-0.98	-1.02/-0.45	-0.15/-0.84	-3.02/-6.45	-8.98/-9.57	-9.81/-8.75	-6.91/-5.34	-4.14/-4.76	-4.82/-3.86	-2.44/-1.29	-0.48/0.35	0.64/0.2	-0.51/-1.75	-4.34/-7.31	-8.07/-8.15	-9.31/-9.81	-8.78/-8.16
Θ(67.5°)	-8.93/-10.06	-11.74/-11.92	-11.96/-14.93	-12.78/-6.36	-2.67/-1.27	-1.46/-1.81	-1.14/-0.59	-0.78/-1.71	-2.38/-2.06	-1.85/-2.57	-4.62/-6.86	-7.35/-8.43	-10.52/-11	-8.92/-6.53	-5.52/-5.72	-5.78/-5.08	-3.94/-2.77	-1.45/0.02	0.3/-0.9	-2.33/-3.29	-5.38/-8.89	-9.03/-8.21	-9.24/-11.08	-11.15/-9.55
Θ(75°)	-8.94/-10.39	-11.67/-10.8	-11/-13.73	-15.31/-6.85	-3.02/-1.75	-2.31/-3.17	-2.24/-1.23	-1.53/-2.94	-4.09/-3.79	-3.01/-2.73	-3.88/-6	-7.57/-9.55	-11.43/-10.74	-8.99/-7.36	-6.82/-6.93	-6.91/-6.13	-5.43/-5.06	-3.59/-1.53	-1.27/-2.97	-4.63/-4.93	-6.77/-11.62	-12.46/-9.65	-9.09/-10.51	-11.37/-10.14
Θ(82.5°)	-10.81/-11.64	-12.18/-10.86	-10.74/-13.87	-15.35/-8.93	-3.93/-2.05	-2.24/-3.4	-3.47/-3.03	-3.52/-4.78	-5.21/-3.91	-2.62/-2.61	-4.65/-7.99	-8.99/-8.88	-9.98/-9.66	-10.11/-9.48	-8.45/-8.14	-8.12/-7.45	-7.65/-8.54	-6.05/-3.29	-2.77/-4.54	-6.38/-5.84	-7.53/-13.33	-15.23/-11.53	-9.47/-10.74	-13.01/-11.24
Θ(90°)	-11.08/-12.87	-13.77/-10.94	-9.78/-10.98	-15.45/-12.34	-5.15/-2.71	-3.09/-5.01	-5.37/-4.88	-4.6/-5.93	-5.71/-4.07	-3.3/-3.78	-6.34/-9.34	-9.2/-9.12	-10.35/-11.42	-10.27/-10.15	-9.57/-10.1	-10.17/-9.43	-8.79/-10.34	-9.01/-4.93	-3.56/-4.95	-7.16/-7.23	-8.33/-13.12	-14.1/-11.4	-10.16/-12.55	-13.84/-11.24
Θ(97.5°)	-9.23/-12.18	-13.59/-11.6	-9.28/-10.49	-13.93/-13.47	-6.5/-3.88	-4.2/-0.68	-6.16/-5.59	-5.99/-7.56	-6.69/-4.62	-3.66/-4.16	-7.19/-10.88	-8.95/-7.78	-9.33/-10.05	-9.83/-11.69	-11.81/-11.87	-10.77/-9.68	-9.13/-11.5	-10.16/-5.43	-3.81/-5.02	-6.8/-7.33	-8.35/-12.56	-12.69/-9.85	-9.22/-12.7	-15.41/-10.59
Θ(105°)	-9.31/-10.73	-12.49/-10.78	-8.08/-8.92	-11.71/-11.95	-6.93/-4.49	-5.21/-8.66	-8.53/-6.21	-5.59/-7.61	-8.5/-8.81	-5.84/-6.08	-6.65/-7.71	-11.52/-11.26	-10.06/-10.86	-11.01/-12	-12.84/-11.32	-10.2/-11.44	-9.39/-6.66	-5.25/-6.8	-8.44/-8.62	-9.78/-13.25	-14.9/-11.23	-9.37/-11.54	-15.87/-12.02	
Θ(112.5°)	-10.42/-11.26	-12.21/-10.43	-7.16/-7.85	-12.19/-12.26	-7.16/-6.02	-5.7/-8.54	-8.6/-7.14	-7.92/-11.71	-12.22/-7.87	-4.93/-6.62	-7.25/-10.36	-10.52/-11.82	-10.97/-8.01	-8.02/-9.24	-10.92/-13.88	-14.66/-12.82	-10.85/-12.57	-12.1/-8.96	-7.79/-8.62	-8.87/-9.07	-11.26/-14.5	-15.67/-12.11	-9.89/-10.83	-15.3/-13.85
Θ(120°)	-11.88/-11.63	-11.66/-10.03	-6.91/-6.71	-9.57/-12.59	-9.6/-7.9	-9.05/-11.62	-9.08/-7.02	-6.53/-8.09	-9.54/-9.33	-5.57/-6.76	-12.55/-12.23	-7.99/-6.93	-7.65/-9.13	-10.81/-12.85	-15.76/-15.03	-15.12/-13.14	-12.96/-13.94	-11.19/-7.15	-6.34/-6.42	-7.01/-8.07	-10.15/-12.12	-11.67/-10.83	-10.97/-12.08	-14.39/-14.06
Θ(127.5°)	-11.91/-10.89	-11.37/-9.52	-7.9/-9.72	-9.51/-8.93	-6.51/-5.81	-7.9/-12.05	-8.53/-6.21	-6.42/-6.65	-11.5/-9.53	-6.77/-6.63	-8.22/-7.26	-6.75/-7.64	-10.29/-14.98	-13.78/-15.65	-14.73/-15.07	-13.5/-12.45	-8.62/-5.92	-5.24/-5.74	-6.56/-7.43	-9.22/-10.35	-9.82/-9.31	-9.88/-11.94	-15.87/-12.02	
Θ(135°)	-10.05/-8.16	-6.58/-6.21	-7.37/-10.39	-13.63/-10.68	-7.16/-6	-5.87/-7.14	-8.94/-8.19	-8.5/-10.43	-9.67/-6.61	-5.08/-5.35	-6.66/-8.08	-9.9/-11.54	-13.27/-13.73	-14.37/-14.55	-13.89/-14.67	-14.57/-12.73	-12.22/-11.56	-9.95/-7.07	-6.16/-6.54	-6.83/-7.57	-8.57/-8.32	-7.76/-7.81	-8.83/-11.27	-12.84/-11.42
Θ(142.5°)	-9.91/-6.36	-4.53/-4.24	-5.64/-9.23	-13.05/-11.63	-9.19/-7.32	-6.47/-6.88	-7.69/-7.48	-7.63/-6.06	-7.74/-6.54	-5.64/-5.53	-6.45/-6.78	-12.46/-14.68	-14.5/-14.04	-15.41/-15.12	-15.73/-14.26	-13.38/-12.16	-12.03/-12.57	-12.04/-8.82	-7.68/-8.62	-9.37/-9.21	-7.52/-6.1	-5.49/-5.57	-6.47/-8.62	-12.09/-12.39
Θ(150°)	-9.26/-7.58	-5.69/-5.16	-6.02/-8.76	-10.52/-8.76	-9.25/-9.95	-10.75/-10.01	-9.04/-8.37	-7.28/-6.14	-5.42/-5.45	-6.35/-8.31	-11.54/-13.45	-13.73/-12.41	-11.82/-10.87	-10.53/-10.25	-11.17/-10.69	-13.48/-10.56	-9.25/-10.07	-11.54/-10.49	-7.65/-5.86	-4.96/-4.71	-5.06/-6.36	-6.47/-8.62		
Θ(157.5°)	-9.2/-8.47	-7.8/-7.9	-9.25/-10.17	-11.42/-10.22	-9.22/-8.52	-9.1/-8.46	-8.8/-9.65	-9.26/-8.43	-6.84/-5.98	-5.95/-6.64	-8.04/-9.84	-10.91/-11.51	-10.52/-9.94	-9.41/-8.91	-8.48/-9.29	-10.05/-11.12	-13.25/-15.7	-14.01/-12.61	-11.6/-11.98	-12.2/-11.31	-9.83/-7.46	-6.03/-5.36	-5.34/-6.07	-7.66/-8.43
Θ(165°)	-8.24/-8.27	-8.34/-9.04	-10.19/-10.63	-9.88/-8.92	-8.62/-8.56	-7.9/-7.39	-7.76/-8.71	-8.88/-9.77	-7.46/-7.08	-7.28/-7.91	-8.39/-9.59	-9.92/-10.64	-10.05/-9.19	-8.94/-9.2	-10.14/-11.3	-12.69/-14.8	-15.92/-14.92	-15.4/-15.33	-15.26/-13.91	-13.55/-12.62	-11.66/-9.14	-7.51/-6.9	-6.9/-7.27	-7.9/-8.28
Θ(172.5°)	-8.09/-8.13	-8.49/-8.91	-9.94/-10.53	-10.57/-10.88	-11.47/-11.45	-11.13/-11.25	-11.47/-11.35	-10.29/-9.3	-8.9/-8.65	-8.77/-9.17	-9.86/-9.75	-10.1/-10.12	-10.62/-10.6	-10.99/-12.46	-14.47/-15.42	-15.98/-14.95	-15.01/-15.19	-15.03/-14.49	-13.67/-12.39	-11.9/-4	-8.31/-8.06	-8.01/-8.1	-8.26/-8.13	
Θ(180°)	-8.82/-9.49	-10.28/-10.9	-11.69/-12.94	-14.85/-15.18	-16.1/-15.64	-15.08/-15.58	-15.22/-13.2	-12.47/-11.94	-11.48/-10.87	-10.58/-10.9	-10.61/-10.77	-10.8/-11.11	-12.08/-13.23	-14.66/-15.55	-15/-13.57	-13.78/-14.85	-16.01/-15.71	-13.9/-13.04	-12.41/-11.56	-10.67/-9.61	-9.04/-8.06	-7.57/-7.53	-7.67/-7.7	-8.12/-8.41
Freq(Hz)	2.45G/Pol.	Theta-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
DG(dB)	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°)	1.77/2.23	2.58/2.71	2.53/-1.96	1.08/-0.02	-1.05/-1.84	-2.62/-3.97	-6.24/-8.83	-10.05/-9.21	-7.61/-6.11	-4.62/-3.12	-1.72/-0.56	0.36/1.09	1.58/1.92	2.13/2.11	1.81/1.28	0.52/-0.36	-1.34/-2.59	-4.28/-6.33	-8.07/-9.62	-10.27/-10.03	-8.37/-6.41	-4.62/-2.99	-1.61/-0.48	0.45/-1.22
Θ(7.5°)	2.34/2.67	2.96/3.13	3.04/6.22	1.91/0.96	0/-0.73	-1.24/-1.96	-3.21/-4.83	-6.16/-6.31	-5.34/-4.11	-3.12/-2.27	-1.45/-0.63	0.08/0.65	1.05/1.31	1.42/1.28	0.86/0.15	-0.85/-1.96	-3.11/-3.47	-5.73/-7.1	-8.58/-10.14	-9.9/-8	-5.59/-3.79	-2.39/-1.23	-0.21/0.65	1.34/-1.93
Θ(15°)	2.96/3.17	3.38/3.54	3.53/2.38	2.85/2.15	1.28/0.4	-0.73/-1.14	-2.22/-3.74	-5.44/-6.06	-4.92/-3.08	-1.67/-1.07	-0.09/0.37	0.60/0.66	0.63/0.61	0.49/0.13	-0.41/-1.01	-1.61/-2.18	-2.64/-2.99	-3.39/-3.86	-4.27/-4.16	-3.64/-2.88	-1.96/-1.06	-0.23/0.52	1.21/-1.83	2.34/-2.72
Θ(22.5°)	3.47/3.6	3.73/3.83	3.86/3.79	3.57/3.1	2.43/1.66	0.94/0.15	-1.07/-3.02	-5.66/-6.32	-3.91/-1.63	-0.21/0.57	1.03/1.2	1.11/0.79	0.37/0.08	-0.61/-1.22	-1.73/-1.84	-1.69/-1.51	-1.43/-1.41	-1.22/-0.97	-0.83/-0.84	-0.9/-0.8	-0.38/0.26	0.93/-1.56	2.15/2.68	3.08/3.34
Θ(30°)	3.51/3.55	3.62/3.7	3.81/3.93	3.95/3.69	3.07/2.24	1.41/0.66	-0.44/-2.09	-3.24/-3.03	-1.67/-0.15	0.91/1.43	1.65/1.67	1.49/1.07	0.44/-0.36	-1.3/-2.08	-2.4/-2.05	-1.31/-0.63	-0.15/0.04	0.29/0.61	0.74/0.56	0.18/-0.06	0.2/0.86	1.52/0.5	2.61/3.15	3.48/3.56
Θ(37.5°)	3.09/3.07	3.19/3.3	3.39/3.54	3.75/3.75	3.32/2.39	1.13/-0.1	-1.27/-1.55	-0.79/-0.33	-0.28/1.08	1.62/1.65	1.42/1.26	1.21/0.95	0.31/-0.63	-1.6/-2.4	-2.67/-2.06	-0.94/0.11	0.91/1.23	1.19/0.91	1.07	0.24/-0.				



Radiated Composite Gain Data of Scan Radio_SC Ant1~2

Appendix A.7

Θ(15°)	-5.35/9.44	-8.71/-6.41	-4.84/-2.77	-0.66/1.23	2.6/3.59	4.45/4.91	5.21/5.43	5.36/5.12	4.86/4.29	3.62/2.69	1.36/0.28	-2.25/-3.87	-5.66/-8.6	-11.8/-11.35	-7.86/-5.38	-3.55/-1.84	0.15/1.66	2.73/3.74	4.48/5.02	5.27/5.3	5.16/4.78	4.4/3.75	2.89/1.43	-0.32/-2.58
Θ(22.5°)	-2.69/-5.96	-9.36/-6.58	-3.77/-1.99	0.01/1.39	2.36/3.07	3.96/4.69	5.09/5.12	5.02/4.85	4.66/4.09	3.12/1.94	0.57/-0.74	-1.95/-3.88	-7.65/-12.6	-12.32/-10.32	-9.18/-5.99	-2.62/-2.09	1.53/2.75	4.04/4.78	5.14/5.8	6.37/6.29	5.48/4.1	2.69/1.85	1.21/0.58	-0.02/-1.1
Θ(30°)	-3.24/-6.8	-8.42/-6.11	-4.63/-3.25	-1.75/-0.26	0.62/1.56	2.73/3.72	4.64/7.3	4.72/2.88	2.33/1.51	0.47/0.01	-0.49/-2.48	-6.95/-10.59	-10.15/-6.98	-13.77/-9.81	-3.77/-1.37	-0.17/0.85	1.12/2.07	3.56/5.47	4.85/5.03	5.29/5.63	5.13/4.44	3.58/2.63	1.19/-0.85	-2.87/-5.36
Θ(37.5°)	-5.3/-6.21	-9.12/-9.33	-7.55/-6.46	-5.04/-1.88	0.23/1.28	2.33/4.3	3.83/3.86	3.61/2.89	2.28/1.82	1.2/0.82	-0.45/-1.16	-1.82/-3.72	-6.42/-7.02	-9.63/-7.49	-4.6/-3.08	-0.41/-2.2	2.02/2.91	3.67/3.65	3.49/3.64	3.97/4.2	3.63/3.29	3.35/2.79	1.78/1.1	-0.76/-4.2
Θ(45°)	-8.19/-10.65	-10.33/-10.26	-7.77/-3.85	-3.39/-2.71	-0.02/-1.25	2.33/3.88	3.79/3.33	2.81/-2.2	0.67/1.24	0.13/-0.44	-1.55/-2.57	-3.13/-4.18	-6.85/-10.17	-13.09/-10.58	-7.62/-4.91	0.82/3.7	3.78/3.79	3.45/3.25	2.85/2.91	2.64/2.18	1.85/0.18	-0.7/0.05	-0.53/-3.61	
Θ(52.5°)	-8.17/-10.76	-11.01/-9.28	-6.53/-2.72	-1.99/-1.64	0.53/1.21	2.08/3.34	2.64/1.85	1.2/-1.3	-2.02/0.2	-1.75/-1.1	-2.11/-2.33	-3.01/-5.17	-5.96/-8.08	-11.21/-9.98	-7.41/-6.77	-3.59/-2.11	-0.18/0.1	2.94/2.94	2.33/2.71	2.24/0.4	0.09/-1.46	-1.71/-1.36	-2.58/-4.65	
Θ(60°)	-7.84/-13.79	-13.37/-9.55	-9.35/-3.42	-1.55/-1.6	0.02/-0.23	1.34/3.14	2.69/1.16	0/-1.55	-2.28/-1.22	-2.35/-3.3	-4.58/-2.25	-3.38/-6.17	-6.58/-6.83	-8.68/-8.75	-6.71/-6.41	-6.33/-5.43	-2.21/-2.07	-0.13/2.29	2.56/2.27	1.99/2.12	0.71/0.39	0/-0.45	-0.63/-1.73	-0.04/-5.33
Θ(67.5°)	-6.45/-12.24	-15.35/-13.33	-11.51/-4.69	-2.51/-2.99	-1.61/-1.01	0.81/1.86	1.07/-0.46	-1.79/-1.16	-1.83/-1.2	-4.18/-4.48	-5.35/-3.27	-6.22/-9.41	-6.56/-5.53	-9.05/-10.59	-10.4/-7.81	-8.75/-6.39	-2.88/-3.13	0.04/2.13	2.47/1.45	1.26/1.37	1.11/-0.21	-1.46/-0.73	-0.64/-2.61	-5.75/-4.97
Θ(75°)	-7.37/-11.97	-16.03/-14.59	-12.39/-9.59	-4.71/-5.32	-3.48/-2.8	-0.61/0.61	0.18/-2.63	-4.9/-4.45	-3.4/-2.81	-4.83/-6.75	-8.05/-4.86	-8.77/-11.11	-8.68/-7.23	-8.11/-9.69	-11.26/-8.72	-12.47/-8.54	-5.34/-4.09	0.01/1.72	1.33/0.35	-0.89/-0.16	2.03/-1.45	-4.56/-4.55	-3.17/-4.35	-9.34/-7.22
Θ(82.5°)	-9.82/-13.49	-15.59/-15.07	-13.18/-11.96	-6.36/-7.63	-4.47/-3.46	-1.16/-1.49	-2.52/-4.27	-7.08/-5.71	-3.45/-4.12	-6.02/-8.23	-9.5/-7.48	-12.77/-14.87	-9.72/-8.17	-10.52/-12.32	-10.17/-9.29	-11.47/-9.68	-9.27/-5.77	-0.67/0.72	-0.25/-1.27	-2.65/-1.5	-3.08/-2.75	-7.61/-9.82	-5.77/-5.86	-10.59/-8.29
Θ(90°)	-12.52/-14.44	-14.08/-15.04	-13.99/-14.37	-7.54/-8.74	-6.2/-4.42	-2.87/-3.84	-6.41/-7.15	-7.7/-5.8	-5.42/-4.59	-8.01/-9.68	-10.38/-8.78	-13.31/-15.19	-12.81/-9.76	-10.46/-11.65	-10.58/-9.81	-9.5/-14.05	-12.27/-7.21	-3.56/-1.72	-2.42/-2.29	-3.87/-3.4	-9.95/-13.09	-8.68/-8.35	-1.71/-1.36	-10.38/-10.23
Θ(97.5°)	-13.2/-13.84	-12.91/-15.33	-13.19/-13.66	-11.01/-8.51	-5.58/-6.15	-3.89/-4.89	-8.98/-9.37	-8.59/-5.18	-6.6/-7.2	-8.33/-11.92	-9.65/-9.04	-15.84/-15.34	-14.71/-12.76	-11.56/-12.02	-12.27/-9.78	-8.65/-15.21	-15.44/-7.51	-7.63/-7.21	-6.15/-5.24	-6.21/-7.35	-6.06/-5.48	-10.39/-12.55	-11.44/-10.42	-11.77/-11.41
Θ(105°)	-11.29/-13.45	-12.62/-15.38	-14.06/-14.96	-12.26/-7.48	-8.27/-8.17	-5.94/-5.79	-9.55/-7.71	-9.35/-6.61	-7.71/-9.31	-13.08/-10.1	-9.32/-9.92	-13.43/-15.33	-12.28/-12.67	-14.72/-12.89	-11.72/-9.83	-7.63/-15.06	-12.22/-9.44	-15.46/-15.13	-8.31/-10.08	-7.25/-8.24	-9.11/-9.85	-9.19/-12.41	-11.48/-12.89	-13.63/-9.72
Θ(112.5°)	-9.16/-11.62	-14.05/-14.52	-13.96/-12.75	-14.4/-10.89	-10.03/-8.72	-8.15/-8.53	-9.44/-9.17	-7.85/-8.05	-9.1/-9.51	-12.1/-12.09	-9.8/-11.52	-15.01/-13.53	-12.95/-13.97	-11.97/-11.71	-10.12/-10.35	-12.1/-12.58	-16.1/-15.33	-8.58/-8.66	-8.3/-10.7	-6.72/-9.83	-8.83/-11.29	-11.36/-13.05	-11.64/-13.12	
Θ(120°)	-11.98/-13.08	-15.29/-14.52	-15.58/-12.52	-12.79/-12.72	-11.15/-10.12	-8.26/-9.02	-8.87/-9.84	-6.86/-10.66	-12.71/-11.22	-13.24/-12.69	-12.79/-12.71	-13.73/-12.03	-11.08/-12.41	-14.11/-13.41	-15.71/-9.24	-10.33/-14.3	-7.62/-12.5	-12.63/-7.32	-7.93/-7.31	-10.3/-10.09	-8.36/-6.89	-8.88/-11.29	-12.68/-15.28	-12.12/-11.27
Θ(127.5°)	-13.71/-13.75	-12.53/-11.18	-12.11/-15.44	-11.01/-13.87	-7.58/-10.23	-7.36/-4.74	-6.2/-8.46	-7.33/-8.34	-12.21/-11.1	-10.87/-12.44	-10.91/-12.23	-10.45/-11.83	-11.86/-12.45	-13.22/-12.29	-10.65/-9.36	-13.94/-15.74	-9.91/-12.69	-11.44/-6.33	-7.61/-9.34	-14.95/-9.74	-9.37/-12.11	-10.12/-12.21	-11.39/-13.23	-14.61/-14.34
Θ(135°)	-9.52/-11.27	-12.97/-11.17	-12.13/-14.95	-11.04/-13.8	-9/-9.28	-9.19/-6.3	-6.72/-7.16	-7.85/-10.57	-7.31/-8.15	-10.48/-9.08	-9.85/-11.81	-13.62/-12.09	-9.74/-9.94	-13.4/-13.35	-10.83/-13.16	-14.1/-13.04	-11.24/-12.46	-9.77/-9.2	-8.75/-7.22	-14.55/-13.37	-8.49/-11.67	-9.96/-6.62	-8.37/-9.52	-15.65/-11.55
Θ(142.5°)	-9.12/-9.52	-12.70/-11.42	-10.74/-11.25	-10.65/-14.89	-9.85/-6.68	-9.29/-8.65	-6.98/-5.73	-6.01/-13.71	-7.24/-7.48	-6.66/-7.3	-10.01/-15.37	-8.1/-8.67	-12.64/-14.56	-13.42/-16.3	-13.12/-11.49	-10.14/-10.08	-12.08/-11.62	-4.87/-6.04	-12.81/-8.66	-8.32/-13.55	-7.07/-6.81	-11.01/-10.6	-8.2/-8.71	
Θ(150°)	-12.38/-14.42	-14.08/-10.67	-13.84/-14.45	-11.9/-12.19	-14.07/-10.87	-10.59/-12.31	-11.8/-11.01	-8.62/-7.8	-9.91/-14.41	-10.14/-8.26	-8.08/-10.22	-11.78/-14.77	-14.24/-11	-12.47/-15.61	-15.67/-15.22	-15.83/-13.57	-11.63/-11.58	-14.65/-12.97	-11.03/-14.15	-11.52/-6.31	-5.52/-8.7	-11.7/-9.7	-10.35/-12.14	-8.64/-9.58
Θ(157.5°)	-13.64/-11.16	-10.97/-10.42	-12.65/-15.14	-12.09/-11.1	-11.8/-13.72	-14.34/-12.95	-11.1/-9.91	-10.77/-10.14	-10.34/-11.64	-11.47/-10.27	-9.23/-11.48	-14.66/-15.52	-15.67/-14.48	-15.39/-15.35	-15.17/-13.73	-11.86/-11.45	-12.22/-11.07	-10.49/-10.72	-11.41/-12.3	-10.22/-7.78	-7.77/-9.08	-10.06/-9.89	-8.6/-10.23	-12.64/-14.48
Θ(165°)	-13.27/-10.86	-9.21/-10.01	-10.48/-11.74	-13.78/-15.25	-13.94/-14.27	-13.23/-12.36	-11.34/-11.25	-11.71/-10.52	-10.86/-11.65	-12.79/-14.34	-14.63/-15.41	-14.84/-15.6	-15.81/-15.92	-13.72/-13.27	-11.81/-10.92	-10.8/-11.31	-12.6/-13.3	-15.02/-15.92	-14.89/-14.66	-12.82/-11.62	-10.42/-9.98	-9.29/-8.65	-8.08/-10.02	-12.28/-13.13
Θ(172.5°)	-15.13/-15.36	-15.62/-15.84	-14.5/-14.23	-14.07/-13.71	-13.28/-12.75	-12.72/-11.86	-11.66/-11.78	-10.72/-10.99	-11.71/-13.1	-14.59/-13.96	-12.44/-12.2	-12.45/-12.56	-11.84/-11.32	-10.67/-11.12	-11.34/-11.59	-12.52/-13.25	-14.58/-16	-13.89/-13.65	-14.09/-13.26	-13.36/-12.27	-11.71/-12.95	-13.54/-14.34	-15.2/-15.02	
Θ(180°)	-14.26/-12.32	-11.57/-10.06	-9.18/-8.84	-8.48/-8.72	-8.24/-7.99	-7.65/-7.61	-8.2/-8.99	-11.06/-12.82	-15.19/-14.35	-13.08/-11.76	-12.71/-13.15	-14.9/-14.04	-12.44/-10.94	-10.31/-10.02	-10/-10.06	-9.82/-9.08	-8.87/-8.63	-8.38/-8.41	-8.36/-8.67	-9.32/-9.82	-10.25/-11.06	-11.72/-12.92	-12.73/-13.18	-13.3/-14.69
Freq(Hz)	5.3GPol	Theta1	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
DG(dB)	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°)	3.21/3.5	3.66/3.74	3.73/3.55	3.25/2.75	1.99/1.06	1.15/-2.21	4.16/-6.56	-10.95/-15.93	-12.22/-8.93	-5.98/-3.6	-1.68/0.04	1.28/1.88	2.43/2.87	3.1/3.2	3.22/3.03	2.55/2.47	1.98/0.73	0.37/-1.67	-3.82/-7.05	-11.19/-15.25	-9.77/-8.5	-4.48/-2.33	-0.65/0.64	1.63/2.58
Θ(7.5°)	4.925.23	5.165.08	5.195.02	4.67/1.11	3.37/2.36	1.10/-2.77	-3.25/-6.06	-9.48/-13.54	-6.14/-7.16	-4.62/9.31	-1.46/0.12	1.69/2.47	2.65/2.84	3.07/3.01	2.82/7.1	2.51/1.94	1.63/0.9	0.47/-1.59	-3.12/-5.98	-9.02/-9.84	-8.89/-5.1	-2.27/0.49	1.2/2.7	3.26/4.14
Θ(15°)	3.91/4.39	4.54/4.55	4.49/4.57	4.56/4.2	3.65/3.12	2.2/0.82	-1.03/-2.91	-5.29/-8.75	-9.87/-7.5	-5.24/-3.53	-2/-0.23	1.48/2.17	2.21/2.21	2.36/2.5	2.53/2.59	2.56/2.25	1.68/0.73	-0.67/-2.32	-4.03/-6.26	-9.49/-10.41	-6.88/-3.7	-1.01/0.67	1.71/2.39	2.63/3.15
Θ(22.5°)	2.89/3.56	4.14/3.1	4.05/3.89	4.15/4.01	3.61/3.3	2.88/1.9	0.36/-1.66	-4.26/-1.85	-10.83/-9.58	-6.58/-3.47	-2.71/-1.27	0.21/1.21	1.59/1.58	1.73/1.9	1.98/1.7	1.24/0.89	0.9/0.4	-1.01/-2.72	-4.73/-6.64	-8.86/-8.33	-5.96/-2.96	-0.11/1.55	2.39/2.32	2.24/2.36
Θ(30°)	2.53/2.83	2.82/69	2.69/3.56	4.65/4.77	4.49/3.93	3.52/2.56	0.22/-2.83	-6.38/-8.33	-9.21/-10	-9.43/-6.63	-7.36/-6.67	-4.74/-2.7	-1.13/-0.09	-0.11/0.04	-1.27/-1.35	-1.07/-0.26	0.02/-0.65	-1.79/-3.91	-5.98/-6.79	-6.79/-4.93	-1.37/0.84	2.05/2.09	2.12/2.36	
Θ(37.5°)	0.01/0.88	1.41/1.39	1.32/1.78	2.92/3.72	3.75/3.51	3.35/2.59	0.44/-1.75	-3.68/-6.77	-8.16/-8.8	-8.85/-9.29	-8.69/-8.86	-6.41/-5.5	-3.5/-3.01	-3.78/-2.7	-1.67/-1.42	-1.93/-2.48	-1.72/-1.16	-1.87/-2.11	-2.16/-3.68	-4.63/-6.53	-8.43/-8.91	-5.95/-3.81	-3.05/-3.42	-10.04/-0.89
Θ(45°)	-1.32/-0.97	0.34/1.37	1.66/1.84	2.22/2.74	2.29/1.59	2.15/2.21	1.01/0.88	0.22/-1.92	-4.67/-4.63	-5.66/-6.69	-5.3/-6.27	-4.74/-3.44	-4.55/-5.18	-6.65/-6.91	-5.18/-3.8	-3.31/-5.22	-4.39/-2.73	-3.72/-4.62	-4.31/-5.24	-8.36/-8.03	-8.56/-9.87	-6.67/-4.32	-1.24/0	-0.55/-2.02
Θ(52.5°)	-0.41/-2.55	-1.98/-0.14	-0.79/-1.41	0.65/1.63	1.71/0.02	-0.11/0.4	0.91/1.14	0.2/-1.33	-2.44/-3.12	-4.71/-6.56	-3.38/-2.45	-2.28/-2.79	-3.1/-4.1	-4.4/-5.53	-4.45/-3.58	-5.54/-3.46	-5.29/-7.42	-3.59/-4.12	-9.71/-8.77	-9.42/-7.54	-6.23/-3.61	-1.52/-1.31	0.71/-0.26	
Θ(60°)	1.53/0.83	-1.01/0.42	-1.05/-0.483	-0.92/0.39	0.7/0.33	-1.36/0.73	0.99/0.47	-1.56/-2.88	-2.56/-3.56	-5.73/-6.45	-2.93/-0.43	-3.71/-1.54	-3.33/-6.15	-3.91/-2.1	-1.4/-1.7	-2.58/-8.87	-6.68/-5.23	-4.73/-7.28	-4.18/-5.86	-7.53/-3.5	-3.75/-5.13	-7.58/-4.33	-2.91/-3.99	-12.64/-0.39
Θ(67.5°)	0.98/1.46	1.06/1.93	1.13/-4.21	-2.86/-0.69	-1.16/0.17	-2.79/-0.9	-0.12/0.15	-2.09/-3.6	-2.55/-3.37	-4.63/-9.16	-1.67/0.17	-0.16/-1.25</												



Radiated Composite Gain Data of Scan Radio_SC Ant1~2

Appendix A.7

θ(60°)	-7.27/-14.14	-10.74/-10.89	-12.09/-4.92	-3.38/-1.41	-1.46/-1.78	-1.19/0.74	0.04/0.99	-0.41/-2.56	-4.6/-3.24	-1.75/-3.31	-2.26/-3.09	-5.52/-5.9	-5.23/-5.47	-7.76/-10.81	-11.18/-9.87	-4.21/-4.65	-4.16/-3.12	-2.39/-0.54	0.16/-1.09	-0.16/0.65	0.35/-1.33	-0.12/-1.42	-4.44/-3.37	-4.83/-5.87
θ(67.5°)	-5.09/-12.75	-14.93/-13.65	-12.64/-4.19	-4.51/-3.68	-3.77/-1.5	-0.87/0.36	-0.68/-1.54	-3.08/-5.1	-6.14/-4.39	-4.29/-3.88	-3.55/-6.7	-6.64/-6.23	-4.54/-3.52	-6.43/-8.3	-12.77/-8.57	-5.25/-5.05	-6.27/-4.94	-1.37/-0.13	-0.21/-0.76	-0.42/-0.52	-1.91/-1.76	-0.65/-2.68	-4.5/-3.2	-5.01/-6.01
θ(75°)	-4.24/-11.51	-14.25/-13.36	-12.81/-4.64	-5.48/-5.35	-5.26/-2.35	-1.76/-0.39	-1.29/-2.79	-4.72/-4.65	-5.93/-3.86	-5.57/-5.08	-5.17/-6.63	-9.36/-5.87	-5.75/-3.83	-5.72/-7.05	-11.04/-6.67	-8.15/-5.84	-8.21/-4.97	-0.63/0.38	0.69/-1.7	-2.15/-1.57	-3.54/-1.79	-2.45/-4.68	-6.16/-4.63	-5.26/-4.72
θ(82.5°)	-6.32/-12.51	-13.35/-12.83	-12.37/-6.15	-7.46/-6.87	-6.46/-3.43	-2.29/-1.74	-2.4/-4.64	-5.97/-7.74	-5.26/-6.32	-7.8/-6.71	-9.25/-9.98	-10.4/-7.97	-6.18/-5.07	-6.86/-5.59	-8.19/-8.07	-13.66/-8.02	-11.26/-6.07	0.7/0.68	0.06/-2.7	-3.64/-3.15	-3.66/-2.37	-5.53/-10.1	-6.01/-4.95	-5.68/-4.97
θ(90°)	-8.93/-13.33	-12.44/-11.92	-13.07/-8.13	-11.99/-9.46	-7.14/-5	-3.54/-4.22	-4.54/-6.67	-5.11/-8.2	-6.18/-7.04	-8/-7.65	-9.83/-9.91	-13.27/-10.79	-7.43/-7.25	-8.15/-6.49	-8.39/-7.33	-14.29/-11.44	-12.06/-8.73	-1.29/-1.59	-2.26/-5.1	-5.78/-6.67	-4.23/-3.69	-8.3/-7.95	-7.63/-6.56	-7.34/-5.02
θ(97.5°)	-11.21/-12.79	-10.44/-12.82	-14.74/-9.11	-10.47/-10.44	-7.98/-6.18	-4.59/-6.38	-7.15/-9.14	-5.61/-9.38	-6.87/-7.88	-7.99/-8.03	-11.37/-13.17	-12.1/-10.79	-6.96/-10.99	-8.38/-6.98	-9.27/-8.58	-14.41/-11.33	-10.91/-10.41	-5.68/-4.75	-6.07/-8.27	-8.92/-8.42	-6.22/-5.13	-12.08/-10.69	-8.46/-7.14	-7.99/-5.66
θ(105°)	-10.64/-12.72	-12.87/-13.4	-14.98/-13.02	-13.12/-10.58	-6.73/-6.69	-8.39/-10.51	-10.69/-11.16	-7.01/-7.79	-8.9/-7.71	-5.26/-8.6	-11.3/-13.55	-11.69/-11.73	9.25/-12.99	-13.41/-9.55	-13.38/-7.43	-10.42/-11.16	-12.33/-11.83	-10.93/-10.59	-12.49/-8.2	-9.18/-10.21	-9.8/-8.69	-9.35/-8.37	-10.1/-10.32	-9.32/-7.77
θ(112.5°)	-11.38/-10.22	-13.64/-16.05	-15.55/-14.14	-10.3/-11.01	-8.6/-7.25	-6.96/-8.62	-8.83/-9.38	-8.14/-8.35	-7.15/-7.96	-5.4/-7.22	-11.66/-12.7	-11.48/-10.88	-10.54/-15.82	-13.39/-13.57	-14.47/-8.91	-10.88/-8.19	-8.84/-12.7	-15.36/-10.79	-10.87/-8.81	-9.1/-8.83	-5.37/-9.91	-8.1/-8.17	-10.51/-11.15	-10.27/-7.82
θ(120°)	-9.69/-11.85	-14.79/-15.35	-15.42/-15.19	-10.15/-12.46	-12.03/-10.82	-7.84/-6.17	-5.37/-7.43	-10.13/-8.15	-6.34/-9.19	-6.94/-7.75	-11.36/-10.04	-14.05/-13.78	-11.65/-13.96	-10.44/-12.83	-14.51/-11.43	-8.62/-8.6	-8.7/-8.81	-11.66/-10.15	-7.94/-7.68	-11.08/-11.3	-5.65/-7.99	-7.73/-6.32	-10.57/-10.65	-9.41/-11.81
θ(127.5°)	-11.68/-12.03	-14.82/-15.84	-15/-12.86	-10.39/-14.49	-12.78/-8.62	-7.96/-8.29	-7.59/-7.4	-10.19/-10.53	-9.6/-9.51	-11.97/-7.36	-9.74/-13.13	-12.64/-12.32	-14.87/-11.75	-11.13/-11.51	-12.89/-10.25	-11.25/-6.74	-11.26/-14.35	-10.31/-10.33	-8.54/-12.14	-13.05/-11.19	-9.56/-9.68	-7.73/-7.26	-6.67/-7.58	-10.03/-15.46
θ(135°)	-12.08/-10.44	-13.29/-10.18	-13.5/-12.98	-10.64/-15.95	-8.66/-7.73	-6.3/-6.68	-10.59/-9.12	-9.23/-10.47	-12.45/-10.64	-14.3/-9.42	-5.79/-9.48	-15.69/-12.99	-12.39/-12	-14.57/-14.16	-13.98/-14.01	-11.81/-11.49	-9.79/-11.26	-8.11/-10.18	-11.45/-10.72	-9.08/-6.94	-9.18/-8.75	-7.09/-8.71	-9.34/-11.78	
θ(142.5°)	-8.21/-9.26	-12.96/-8.74	-9.42/-15.26	-13.49/-12.59	-12.34/-12.18	-8.49/-6.55	-11.77/-14.51	-10.79/-9.11	-11.69/-11.41	-8.54/-10.81	-11.17/-12.78	-11.17/-12.78	-11.17/-12.78	-11.48/-13.3	-15.12/-14.94	-15.96/-15.17	-11.69/-9.62	-8.63/-9.66	-6.34/-9.38	-10.59/-9.79	-8.75/-6.44	-7.87/-8.68	-9.91/-13.82	
θ(150°)	-13.09/-9.98	-11.71/-12.22	-11.4/-12.23	-13.28/-14.95	-12.89/-10.79	-10.21/-9.49	-9.38/-11.75	-13.42/-10.21	-8.62/-9.28	-9.31/-10.05	-9.93/-11.46	-13.41/-12.36	-12.28/-15.19	-15.05/-15.74	-14.77/-15.06	-15.6/-15.26	-11.45/-11.11	-12.62/-8.98	-7.92/-9.4	-7.76/-6.91	-9.32/-12.16	-9.43/-6.25	-7.6/-5.96	-6.61/-10.21
θ(157.5°)	-15.52/-15.58	-15.47/-15.14	-13.09/-13.24	-14.08/-12.36	-10.2/-11.07	-12.61/-12.03	-12.05/-14.03	-12.1/-9.61	-9.21/-8.17	-12.88/-14.25	-15.41/-14.33	-14.23/-15.53	-15.08/-15.23	-13.12/-13.7	-15.18/-12.97	-10.8/-11.54	-13.46/-11.97	-8.49/-7.95	-8.37/-9.02	-9.49/-10.34	-11.08/-10.32	-10.63/-12.75		
θ(165°)	-13.76/-14.93	-15.21/-15.43	-15.56/-14.65	-14.14/-15.18	-15.28/-15.31	-14.77/-14.46	-14.95/-12.13	-15.21/-10.66	-9.08/-8.26	-8.54/-9.6	-11.38/-15.23	-12.84/-15.94	-15.13/-15.72	-15.59/-15.48	-15.47/-15.09	-15.43/-16.09	-14.88/-15.32	-14.29/-14.64	-14.02/-11.01	-8.57/-7.71	-7.51/-7.62	-9.47/-11.27	-10.93/-13.82	
θ(172.5°)	-10.82/-11.55	-12.6/-14.2	-14.31/-14.06	-14.74/-15.58	-15.73/-15.4	-14.67/-15.75	-15/-13.96	-12.77/-12.69	-13.43/-14.4	-15.61/-15.26	-15.36/-15.14	-14.39/-13.89	-14.68/-14.56	-14.92/-15.63	-15.16/-14.68	-15.21/-14.96	-15.56/-15.56	-16.08/-14.98	-14.87/-15.63	-14.34/-12.48	-11.45/-10.67	-9.83/-9.2	-9.17/-9.03	-9.3/-9.99
θ(180°)	-14.4/-15.7	-14.95/-15.4	-15.34/-15.4	-14.92/-14.59	-15.05/-15.59	-15.04/-13.8	-14.01/-13.4	-13.05/-14.01	-15.21/-14.84	-15.3/-14.92	-15.41/-15.54	-15.14/-15.3	-15.39/-16.03	-15.62/-15.31	-15.3/-14.75	-15.68/-15.09	-12.77/-13.34	-12.37/-12.13	-11.15/-10.92	-10.5/-9.16	-9.54/-9.92	-10.5/-10.52	-11.07/-11.24	-10.88/-12.04
Freq(Hz)	5.785GPol.	Theta	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DG(dB)	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°)	3.47/3.55	3.64/3.54	3.54/3.43	2.56/1.54	0.95/-0.18	-1.03/-2.63	-5.03/-6.67	-7.64/-7.14	-6.67/-4.11	-1.97/-0.26	0.84/1.6	2.53/1.2	3.56/3.68	3.64/3.55	3.41/3.03	2.52/1.79	0.82/-0.67	-2.19/-4.05	-6.28/-8.69	-9.12/-7.95	-5.53/-3.26	-1.48/-0.1	0.87/1.7	2.96/3.18
θ(7.5°)	4.794/91	4.934/92	4.694/4	3.912/81	2.021/23	0.18/-0.77	-1.853/-6.66	-5.18/-5.72	-5.41/-3.81	-2.06/-3.04	0.95/1.81	2.53/3.03	3.29/3.43	3.56/3.33	2.99/2.72	1.95/1.27	0.13/-1.43	-3.12/-5.75	-8.10/-9	-11.52/-7.71	-5.14/-2.8	-0.61/0.79	1.84/6.67	3.55/4.32
θ(15°)	4.774/99	4.954/57	4.174/13	3.59/2.5	1.89/1.37	0.62/-0.41	-1.29/-2.53	-4.39/-7.26	-9.21/-8.72	-7.36/-5.73	-3.85/-1.73	-0.64/-0.22	0.22/0.56	0.88/0.64	0.22/-0.2	-0.84/-1.86	-2.82/-3.98	-5.31/-6.11	-7.06/-7.95	-7.92/-6.06	-3.58/-1.35	0.38/1.35	1.96/2.43	3.09/4.01
θ(22.5°)	3.614/23	4.684/5	4.173/8	1.47/1.71	1.32/0.94	0.29/-0.96	-1.46/-1.84	-2.56/-3.59	-6.72/-11.41	-1.96/-10.68	-6.85/-3.05	-1.42/-0.9	-1.08/-1.31	-1.68/-1.98	-8.23/-3.5	-3.53/-4.14	-4.54/-3.93	-4.54/-4.54	-4.35/-4.24	-6.86/-6.65	-5.2/-3.54	-1.07/2	1.64/2.08	2.93/2.84
θ(30°)	3.713/31	3.23/47	3.934/4	4.353/91	2.81/67	0.76/-1.03	-1.55/-1.71	-1.82/-6.69	-1.42/-1.77	-9.29/-4.63	-6.33/-3.91	-2.02/-1.43	-1.49/-1.27	-3.59/-5.43	-8.41/-9.74	-7.51/-6.06	-3.9/-3.21	-2.94/-4.1	-4.64/-4.37	-4.41/-3.07	-2.42/-1.04	0.49/0.84	1.82/8.89	3.03/3.49
θ(37.5°)	0.44/0.03	1.12/2.35	3.0/87	4.25/3.94	3.59/3.27	2.1/0.21	-0.9/-1.77	-2.32/-4.27	-4.21/-2.16	-3.01/-4.87	-4.17/-2.64	-2.02/-2.62	-3.82/-5.58	-8.02/-6.12	-6.2/-8.32	-6.32/-2.26	-1.13/-1.29	-1.5/-1.54	-1.93/-2.72	-3.98/-3.73	-3.01/-3.17	-4.31/-1.63	-0.05/-0.01	-0.28/0.42
θ(45°)	1.84/-0.64	-0.21/0.66	1.84/3.41	4.04/3.07	2.43/3.38	3.15/-1.61	-0.27/-0.99	-2.94/-5.99	-2.48/-0.41	0.15/-0.93	-1.13/0.25	-2.35/-8.81	-4.91/-2.73	-4.18/-7.61	-4.78/-1.31	-0.34/-1.29	-2.56/-0.44	1.21/0.14	-4.15/-3.79	-6.21/-7.09	-5.86/-0.08	0.81/2.13	2.92/2.66	
θ(52.5°)	2.57/-0.99	0.04/0.64	0.48/2.23	3.42/0.8	0.89/1.87	4.25/2.12	-0.10/-0.53	-0.46/-2.51	-4.9/-2.33	0.41/0.56	0.75/1.6	-1.76/-8.25	-1.23/-0.35	-0.17/-1.21	0.75/-1.48	2.28/-1.49	0.11/-0.44	0.51/-2.21	-5.69/-2.06	-0.41/-4.8	-4.09/1.61	2.48/3.4	4.21/4.14	
θ(60°)	0.52/0.7	1.49/1.44	1.11/1.29	2.83/1.87	0.3/0.92	4.04/2.83	-1.89/-1.67	0.52/-1.08	-6.38/-3.97	0.03/0.75	0.42/2.52	3.01/1.14	-2.99/-5.87	-1.35/-1.16	-2.59/-0.23	1.35/0.73	-0.52/-0.28	-1.89/-1.25	-0.69/-3.93	-7.51/-2.02	-2.24/-6.6	-1.61/8.7	1.7/2.9	3.73/3.19
θ(67.5°)	2.22/3.17	2.84/3.17	2.83/1.77	2.52/2.41	0.02/0.18	1.93/1.61	-3.71/-2.94	0.19/-0.27	-4.37/-2.31	-0.18/-0.01	0.18/1.91	2.71/-0.16	-4.59/-5.91	-3.21/-2.84	-1.92/0.61	1.80/4.1	-3.17/-0.72	-1.62/-2.34	-0.73/-1.9	-8.4/-1.81	-2.87/-4.95	-0.24/-1.38	1.01/2.14	2.94/2.95
θ(75°)	1.32/1.8	2.853/96	2.950/83	1.55/1.96	-0.09/-1.59	-1.99/-1.2	-4.44/-3.53	-0.18/-0.93	-2.57/-2.13	-1.63/-1.25	1.33/-1.15	-3.89/-6.15	-4.89/-3.11	-2.35/0.78	1.6/0.04	-3.28/-0.56	-0.29/-1.29	-0.13/-0.36	-5.56/-2.15	-3.68/-2.29	0.22/-0.68	0.27/2.13	1.57/2.38	
θ(82.5°)	-0.65/0.69	1.75/3.13	1.47/-0.46	0.39/0.66	-1.06/-2.39	-6.79/-4.14	-4.6/-3.72	-0.71/-1.89	-2.29/-3	-2.61/-3.24	-1.23/0.35	-0.1/-2.73	-5.57/-6.02	-4.77/-3.74	-2.34/-1.19	0.64/-1.76	-2.33/0.1	-0.51/-0.97	-0.3/-0.73	-4.09/-1.86	-3.73/-2.14	-0.56/-2.86	-1.48/0.36	0.26/2.14
θ(90°)	-3.27/-1.23	-0.87/-1.49	0.81/-1.16	-0.86/-0.57	-2.62/-3	-9.76/-5.38	-6.8/-3.72	-1.54/-2.64	-3.29/-3.49	-3.11/-5.08	-2.3/-0.51	-2.29/-4.43	-6.64/-7.33	-6.16/-6.23	-3.12/-0.28	-1.59/-3.21	-3.87/-1.17	-2.06/-2.64	-1.26/-2.33	-5.21/-3.03	-3.69/-3.26	-2.45/-2.22	-2.38/-1.49	-2.02/0.99
θ(97.5°)	-4.49/-2.31	-3.23/-0.81	-0.59/-2.4	-2.71/-3.48	-5.64/-3.46	-7.66/-8.43	-7.51/-3.98	-2.47/-3.31	-5.11/-4.61	-4.13/-5.9	-2.71/-1.68	-4.35/-6.07	-7.52/-12.06	-9.32/-7.52	-4.05/-1.87	-4.07/-6.09	-6.35/-4.08	-5.49/-6.41	-5.46/-6.85	-8.16/-5.89	-4.64/-4.93	-5.11/-5.58	-3.33/-3.25	-4.29/0.06
θ(105°)	-4.68/-2.95	-4.39/-3.99	-1.39/-2.75	-4.94/-3.48	-8.09/-5.4	-8.06/-8.41	-8.31/-5.71	-5.44/-5	-5.48/-7.2	-4.15/-5.9	-5.45/-3.46	-5.25/-6.58	-8.64/-12.69	-10.44/-10.33	-6.6/-2.08	-3.88/-4.51	-8.38/-7.12	-10.23/-9.71	-8.54/-8.91	-9.98/-5.87	-9.57/-9.68	-6.96/-6.85	-3.06/-3.53	-4.21/-2.26
θ(112.5°)	-4.64/-4.81	-3.87/-5.44	-5.68/-5.32	-4.5/-3.26	-7.58/-8.7	-10.08/-7.43	-9.57/-4.2	-5.59/-5.13	-6.48/-7.72	-6.89/-6.59	-9.4/-8.5	-6.26/-6.75	-9.93/-11.72	-11.38/-12.16	-7.3									



Radiated Composite Gain Data of Scan Radio_SC Ant1~2

Appendix A.7

θ(105°)	-12.93/-8.07	-10.69/-12.93	-14.69/-13.42	-11.74/-5.92	-9.51/-9.86	-5.08/-5	-4.44/-3.73	-7.69/-7.02	-6.04/-5.81	-4.43/-6.93	-6.23/-6.27	-11.32/-11.48	-12.43/-6.71	-10.58/-15.76	-9.07/-9.08	-12.6/-15.09	-10.89/-11.09	-7.09/-7.74	-12.32/-8.81	-13.66/-7.62	-7.18/-6.79	-6.26/-13	-9.02/-10.07	-9.83/-7.46
θ(112.5°)	-11.41/-11.32	-9.98/-15.36	-14.35/-13.69	-14.69/-7.57	-12.51/-11.31	-7.08/-4.75	-4/-5.97	-7.86/-5.77	-7.21/-9.97	-5.82/-6.92	-7.46/-4.81	-8.67/-11.31	-12.6/-9.45	-10.88/-11.89	-14.21/-7.98	-9.59/-14.92	-8.29/-12.75	-13.31/-6.3	-9.51/-6.52	-14.56/-6.25	-11.67/-6.8	-4.33/-11.08	-11.05/-10.7	-10.04/-8.16
θ(120°)	-8.74/-11.09	-10.91/-14.63	-15.12/-14.66	-15.42/-9.9	-9.1/-11.87	-7.68/-6.4	-5.54/-8	-7.36/-6.8	-11.3/-7.62	-10.44/-8.09	-7.25/-8.02	-6.28/-10.67	-10.39/-9.1	-9.75/-12.28	-12.83/-4.58	-6.13/-8.26	-11.64/-9.26	-10.43/-7.99	-12.83/-14.81	-15.36/-9.46	-8.39/-5.46	-8.71/-10.49	-7.69/-6.71	-9.74/-10.49
θ(127.5°)	-11.77/-9.51	-12.63/-12.61	-15.46/-14.75	-15.75/-9.57	-6.04/-10.98	-3.85/-2.92	-1.55/-7.53	-5.2/-8.13	-7.41/-8.81	-6.57/-10.46	-5.55/-9.39	-7.01/-5.61	-6.79/-8.49	-10.96/-15.94	-11.98/-15.08	-7.73/-8.29	-9.08/-15.69	-8.71/-6.95	-10.03/-11.99	-11.03/-10.82	-11.17/-3.6	-6.09/-8.41	-11.3/-6.44	-7.58/-10.73
θ(135°)	-14.74/-9.32	-10.18/-15.57	-13.61/-13.2	-10.13/-10.95	-9.17/-6.55	-3.49/-8.17	-6.34/-8.28	-5.76/-11	-8.0/-8.8	-5.51/-12.97	-7.42/-6.94	-8.02/-9.2	-9.19/-11.95	-9.81/-14.55	-16.21/-15.48	-15.05/-13.04	-12.33/-14.02	-11.14/-7.8	-5.17/-9.02	-8.04/-10.02	-10.51/-9.47	-6.09/-9.23	-12.17/-8.43	-12.08/-7.18
θ(142.5°)	-9.43/-8.33	-9.96/-11.38	-6.48/-9.71	-9.95/-8.81	-12.07/-9.55	-5.45/-6.59	-8.36/-6.47	-8.19/-9.32	-8.07/-10.34	-8.13/-9.49	-6.57/-6.66	-7.73/-11.03	-8.13/-9.45	-10.75/-14.91	-12.79/-14.88	-12.08/-10.6	-12.91/-11.07	-7.51/-8.56	-10.38/-11.7	-12.91/-11.07	-9.51/-8.56	-9.88/-10.41	-9.98/-10.43	-7.82/-6.58
θ(150°)	-11.3/-7.38	-6.26/-5.19	-7.09/-12.6	-12.16/-12.37	-8.87/-7.14	-6.81/-8.15	-9.18/-8.89	-9.22/-9.27	-8.98/-9.75	-15.3/-9.27	-8.34/-8.34	-7.33/-7.98	-15.8/-13.26	-12.62/-13.37	-15.92/-14.94	-14.41/-14.57	-12.54/-14.9	-14.33/-11.11	-10.96/-9.6	-7.54/-7.59	-9.71/-10.39	-12.94/-5.86	-6.22/-8.54	-3.93/-4.69
θ(157.5°)	-7.54/-9.32	-10.27/-11.36	-12.76/-11.33	-8.81/-9.84	-14.67/-10.23	-7.27/-7.8	-9.29/-12.3	-13.5/-12.48	-13.34/-13.67	-6.92/-4.28	-4.28/-2.88	-12.99/-15.12	-15.87/-12.93	-15.4/-11.87	-9.92/-11.11	-14.31/-14.48	-16.3/-13.04	-13.53/-11.96	-10.77/-12.54	-14.59/-12.61	-9.57/-7.79	-9.4/-6.65	-4.25/-6.7	-11.71/-10.63
θ(165°)	-8.86/-10.04	-10.4/-10.55	-13.58/-14.8	-12.85/-12.12	-11.03/-9.93	-9.47/-9.45	-11.22/-11.17	-9.63/-8.75	-8.09/-7.75	-7.57/-8.52	-10.9/-14	-15.55/-14.13	-14.28/-13.94	-12.94/-13.75	-14.1/-15.33	-14.99/-13.88	-9.62/-8.2	-8.74/-9.99	-10.91/-12.16	-12.55/-10.61	-8.55/-8.23	-7.1/-6.11	-6.08/-7.07	-7.66/-8.82
θ(172.5°)	-11.9/-11.13	-12.28/-11.93	-13.11/-13.35	-13.03/-12.31	-11.51/-11.38	-11.17/-12.99	-11.26/-10.46	-9.55/-8.55	-9.06/-10.73	-13.63/-13.79	-12.44/-12.37	-12.46/-15.56	-15.7/-14.78	-15.3/-14.55	-12.36/-11.13	-10.84/-10.67	-11.5/-12.39	-15.28/-13.68	-13.05/-11.59	-11.83/-11.45	-11.31/-10	-9.26/-9.49	-11.05/-13.07	-12.55/-12.13
θ(180°)	-12.79/-12.61	-12.78/-12.56	-13.05/-12.34	-11.34/-10.54	-9.71/-8.6	-8.15/-9.1	-8.55/-8.43	-8.43/-9	-11.19/-12.26	-10.73/-9.94	-11.14/-12.55	-16.14/-15.19	-15.22/-14.96	-15.56/-15.22	-15.74/-15.51	-15.23/-15.72	-13.23/-12.2	-11.01/-10.73	-10.74/-10.46	-10/-10.2	-10.47/-9.9	-10.14/-10.44	-10.93/-12.38	-13.19/-13.08
Freq(Hz)	6.475GPol.	Theta1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DG(dBi)	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°)	3.61/3.99	4.09/3.95	3.73/4.6	3.04/2.68	1.96/1.09	-0.01/-1.15	-2.59/-4.17	-4.82/-5.51	-5.46/-4.01	-1.99/-0.1	1.28/2.46	3.34/3.8	4.24/4.5	4.65/4.7	4.74/2	3.76/3.01	2.29/1.2	-0.11/-1.43	-2.73/-4.05	-4.7/-5.98	-4.92/-3.32	-1.29/0.11	1.3/2.17	2.88/3.22
θ(7.5°)	2.7/83	3.04/3.12	3.3/3.3	2.77/2.06	1.26/-0.4	-2.29/-4.16	-4.23/-4.94	-4.83/-5.52	-6.24/-4.98	-3.41/-1.73	2.11/3.19	4.15/4.46	4.46/4.41	3.87/3.16	2.34/-1.1	-0.06/-1.31	-2.77/-3.61	-4.21/-3.62	-4.06/-3.46	-3.85/-3	-1.29/0.16	1.38/2.03	2.44/2.59	
θ(15°)	1.28/1.28	1.67/1.94	1.59/1.22	1.27/0.71	0.19/-0.29	-2.24/-4.25	-5.56/-4.12	-3.54/-3.75	-4.12/-4.62	-4.62/-3.25	-2.17/-1.23	-0.20/8	1.41/1.58	1.43/0.74	0.16/-0.45	-1.72/-2.65	-3.56/-4.61	-6.45/-5.99	-5.06/-4.36	-4.84/-5	-2.88/0.85	0.72/1.43	1.56/1.73	
θ(22.5°)	-0.95/-2.04	-1.53/-0.25	0.05/-0.15	-0.56/-1.77	-4.01/-4.41	-2.51/-3.68	-4.59/-4.85	-5.41/-4.7	-4.65/-5.55	-5.94/-5.72	-4.99/-5.42	-6.01/-5.45	-4.81/-4.58	-3.05/-2.21	-0.19/-3.56	-7.73/-10.17	-7.94/-7.07	-7.24/-6.53	-7.44/-8.16	-8.5/-7.86	-7.16/-5.59	-3.5/-2.02	-1.26/-0.7	-0.45/-0.45
θ(30°)	-0.46/-0.7	-1.03/-0.85	-0.68/-1.03	-0.69/-0.59	-0.66/-1.81	-2.71/-3.44	-3.68/-3.81	-4.27/-7.44	-7.53/-6.94	-8.38/-8.75	-9.9/-8.35	-4.24/-1.53	-0.79/-0.69	-1.56/-2.1	-1.71/-2.7	-5.19/-9.81	-11.27/-7.23	-5.46/-3.67	-2.27/-2.12	-3.66/-6.36	-5.13/-3.15	-2.52/-1.84	-1.91/-0.26	1.39/0.61
θ(37.5°)	-2.38/-3.08	-3.2/-2	0.58/2.4	2.41/2.32	2.42/0.77	0.350/59	-4.81/-6.53	-2.78/-0.03	-0.89/-3.02	-1.75/0.01	-0.03/0.13	-0.04/-1.51	-1.42/-1.7	-1.71/-3.12	-3.65/-4.44	-5.36/-6.23	-4.81/-4.53	-3.64/-1.92	-2.52/-3.09	-2.67/-0.37	0.05/-1.35	-2.75/-1.59	-1.61/-1.9	
θ(45°)	-4.68/-3.39	-2.68/-0.41	1.99/3.02	2.89/3.89	4.94/4.34	1.650/6.3	1.24/0.17	-4.39/-4.59	-0.50/89	0.43/-2.03	-0.89/-1.06	-2.55/-3.83	-3.03/-1.67	-1.02/5	0.11/-3.73	-6.37/-4.05	-4.55/-4.25	-2.53/-1.04	-0.73/-1.58	-0.51/-3.56	-6.88/-1.27	-1.81/-3.63	-3.72/-1.71	-2.22/-5.86
θ(52.5°)	-1.26/-2.52	-3.08/-1.07	3.97/-0.2	3.71/2.91	4.32/4.49	3.161/66	1.92/-0.63	-1.37/-3.39	-0.15/0.33	-1.50/44	1.71/-1.37	-1.04/-3.66	-2.56/-1.75	0.32/2.31	0.68/-3.7	-4.23/-3.61	-3.89/-2.62	-0.82/0.81	0.75/-1.29	0.75/-3.25	-13.43/-1.25	-2.86/0.5	1.15/-0.78	-0.45/-0.29
θ(60°)	1.66/-1.29	1.23/0.74	1.46/3.54	4.04/3.71	4.12/3.47	3.21/2.15	2.8/-0.19	1.25/-0.13	-0.45/-1	1.29/3.25	3.39/-0.62	0.28/-1.66	-2.52/-2.26	1.81/3.12	0.26/-4.11	-1.46/-2.4	-5.04/-5.45	-1.99/0.17	0.43/-1.23	0.45/-5.28	-7.05/-1.33	-2.11/1.62	1.53/-1.08	0.16/2.32
θ(67.5°)	2.96/2.68	3.16/3.64	1.92/0.93	3.17/3.2	4.44/-1.71	1.68/-1.58	3.67/0.16	1.18/0.21	-1.09/0.87	2.82/4.29	3.3/-1.67	-0.64/-1.48	-2.86/-3.32	2.07/2.85	-1.41/-4.32	-1.3/-3.53	-8.23/-8.49	-3.45/0.47	1.46/0.46	-0.23/-7.06	-4.51/-3.92	-1.63/-3.98	0.05/-0.98	0.98/2.86
θ(75°)	2.73/-1.53	2.67/-4.77	3.9/-0.1	0.55/2.74	3.39/-1.22	0.49/1.2	2.97/0.7	1.49/2.4	-0.29/0.06	3.12/3.48	1.2/-2.59	-2.74/-3.12	-3.56/-3.69	-0.12/2.58	-1.42/-4.23	-2.4/-2.82	-4.98/-3.51	-4.17/1.86	2.56/-1.79	0.33/-3.4	-4.18/-5.35	-0.93/-1.5	-0.21/-0.12	1.31/2.81
θ(82.5°)	2.03/-0.92	0.95/4.3	4.09/0.14	-0.95/0.57	1.82/-0.05	-0.26/0.2	1.17/-0.39	0.42/2.5	-1.11/-1.21	2.67/2.44	-0.61/-4.37	-4.07/-4.03	-4.82/-7.6	-2.07/0.82	-3.41/-4.47	-4.86/-4	-2.39/-2.08	-3.81/2.04	3.41/1.27	-0.26/-4.01	-4.73/-3.52	-0.50/-7.1	-0.98/0.2	0.51/6.3
θ(90°)	-0.02/-2.21	-1.38/2.61	2.79/-1.14	-3.58/-1.8	0.42/-0.53	-0.1/-2.72	-0.91/-2.4	-3.43/-3.06	1.06/-1.25	-2.49/-5.67	-4.84/-6.11	-6.25/-8.39	-5.3/-1.7	-4.68/-6.62	-8.88/-8.02	-3.6/-2.5	-4.81/-4.7	-8.16/-2.56	-0.93/-3.36	-1.37/-0.2	-2.46/-4.47	-8.16/-2.56	-0.43/-0.58	-0.24/-0.4
θ(97.5°)	-2.46/-3.81	-3.48/-1.26	0.45/-1.86	-5.85/-4.24	-1.33/-1.87	-1.71/-1.98	-0.95/-5.43	-2.22/-0.19	-3.21/-5.67	-0.73/0.35	-3.35/-6.38	-5.58/-7.44	-6.59/-9.41	-7.41/-4.25	-4.04/-7.94	-12.87/-14.19	-4.47/-3.72	-7.7/-5.18	-2.46/-5.58	-7.88/-7.44	-10.98/-4.52	-2.64/-2.48	-3.28/-2.27	-1.42/-3
θ(105°)	-5.62/-6.09	-4.05/0.38	-0.92/-6.22	-6.06/-7.19	-3.75/-3.29	-5.32/-5.52	-2.64/-5	-2.74/-2.23	-2.8/-9.62	-3.1/-1.61	-5.25/-7.03	-7.26/-9.81	-7.11/-9.61	-12.21/-7.53	-4.46/-4.59	-15.51/-12.71	-4.47/-8.63	-9.59/-11.07	-6.97/-7.28	-11.55/-6.46	-10.02/-7.05	-5.65/-6.77	-3.54/-5.76	-3.39/-2.81
θ(112.5°)	-7.99/-5.23	-5.66/-2.09	-2.22/-11.64	-7.31/-8.32	-3.14/-4.88	-6.51/-7.28	-6.47/-3.69	-3.85/-4.78	-4.5/-2.22	-2.89/-3.45	-6.59/-7.4	-8.69/-10.43	-7.6/-9.5	-15.75/-6.94	-5.62/-5.55	-11.96/-10.95	-6.5/-4.72	-8.36/-6	-4.06/-3.31	-10.5/-1.9	-9.72/-9.71	-8.04/-7.36	-4.76/-6.89	-6.11/-3.47
θ(120°)	-9.57/-7	-5.52/-5.65	-3.92/-11.37	-7.09/-9.39	-4.94/-5.81	-7.27/-7.36	-7.57/-4.98	-5.59/-3.98	-8.82/-7.43	-6.22/-4.88	-8.13/-9.76	-11.61/-10.86	-8.32/-8.52	-10.7/-10.55	-11.5/-9.55	-12.64/-16.04	-9.61/-10.02	-15.36/-11.34	-7.83/-4.29	-10.43/-6.8	-6.99/-10.1	-9.4/-14.32	-4.08/-7.59	-6.43/-5.53
θ(127.5°)	-9.03/-11.95	-6.55/-4.29	-3.72/-6.03	-8.91/-11.45	-7.26/-8	-12.81/-7.3	-4.59/-5.62	-7.9/-13.84	-10.1/-9.73	-12.78/-10.54	-10.72/-13.48	-13.39/-15.8	-9.96/-8.45	-9.48/-11.17	-14.67/-7.26	-15.5/-7.62	-7.42/-11.41	-13.98/-13.97	-11.67/-6.71	-7.19/-15.42	-8.85/-8.23	-9.92/-7.12	-6.91/-9.8	-7.2/-6.95
θ(135°)	-9.15/-6.87	-6.66/-6.81	-5.54/-7.09	-5.64/-6	-7.81/-9.42	-9.77/-6.3	-8.65/-5.02	-9.5/-16.16	-13.77/-10.47	-12.87/-13.07	-10.68/-15.71	-14.37/-10.1	-10.55/-12.78	-10.32/-9.7	-14.27/-6.85	-11.05/-12.63	-12.41/-13.65	-7.26/-9.5	-8.77/-4.77	-9.44/-14.88	-9.63/-9.8	-8.74/-7.79	-8.87/-6.84	-7.82/-6.95
θ(142.5°)	-10.97/-12	-9.75/-7.02	-5.8/-6.31	-6.05/-9.6	-12.98/-12.32	-12.71/-7.03	-9.04/-11.73	-11.9/-12.04	-15.08/-13.86	-15.75/-16.12	-15.56/-15.47	-12.79/-10.97	-11.34/-11.59	-15.09/-14.3	-15.1/-14.69	-15.58/-12.22	-12.13/-15.17	-12.83/-13.71	-13.49/-10.05	-9.34/-12.34	-15.55/-11.75	-7.52/-7.75	-13.01/-8.07	-7.52/-7.78
θ(150°)	-10.86/-8.14	-8.03/-8.9	-8.95/-9.04	-8.92/-8.71	-7.89/-7.1	-9.23/-14.64	-13.51/-11.76	-10.51/-12.22	-15.59/-15.22	-15.94/-14.87	-15.54/-14.17	-11.52/-9.61	-10.07/-9.73	-14.85/-13.1	-11.94/-15.12	-14.02/-14	-15.41/-8.23	-7.91/-12.7	-13.06/-11.27	-12.49/-15.58	-10.05/-11.97	-13.77/-13.13	-12.46/-11.3	-11.75/-13.08
θ(157.5°)	-13.18/-10.54	-6.66/-9.5	-8.32/-7.12	-7.77/-9.46	-8.9/-8.37	-9.24/-9.1	-9.9/-9.56	-10.27/-11.4	-13.91/-15.91	-15.99/-15.67	-11.72/-10.1	-8.52/-10.97	-12.92/-13.5	-14.63/-12.04										



Radiated Composite Gain Data of Scan Radio_SC Ant1~2

Appendix A.7

Θ(150°)	-11.95/-8.64	-10.68/-11.83	-11.27/-11.98	-12.79/-11.21	-10.35/-12.61	-14.57/-9.72	-8.14/-10.76	-9.24/-8.94	-14.94/-8.28	-7.97/-15.26	-11.19/-10.09	-9.21/-10.76	-15.55/-14.76	-12.26/-13.3	-12.83/-13.51	-14.57/-15.18	-15.32/-12.17	-9.79/-12.71	-10.37/-9.21	-15.27/-10.93	-10.51/-11.62	-11.62/-9.47	-9.16/-15.04	-7.12/-6.54
Θ(157.5°)	-11.15/-11.4	-11.18/-10.67	-12.16/-15.03	-15.27/-15.44	-15.36/-14.9	-13.95/-12.38	-9.49/-8.73	-8.45/-10.63	-13.53/-12.58	-11.02/-8.15	-8.47/-11.24	-14.79/-14.29	-14.65/-15.03	-11.84/-9.61	-10.25/-12.98	-13.2/-15.68	-15.25/-14.88	-15.46/-13.38	-11.1/-14.85	-14.19/-11.5	-11.46/-11.53	-10.27/-8.65	-9.67/-13.91	-12.88/-11.19
Θ(165°)	-13.09/-10.54	-11.45/-11.17	-12.12/-13.09	-13.94/-13.85	-14.36/-12.12	-12.38/-10.9	-10.2/-8.76	-9.22/-10.25	-11.06/-11.02	-10.39/-9.09	-9.78/-12.33	-15.37/-15.39	-15.35/-15.31	-14.84/-13.8	-13.97/-13.93	-15.41/-14.59	-15.24/-15.62	-13.59/-12.67	-13.94/-15.24	-15.16/-12.84	-12.1/-10.74	-8.83/-8.99	-11.1/-11.96	-13.44/-15.06
Θ(172.5°)	-8.21/-9.02	-9.72/-8.98	-10.15/-10.95	-13.43/-12.48	-13.89/-12.1	-12.12/-12.01	-12.62/-13.29	-12.91/-11.89	-9.58/-9.68	-9.94/-10.65	-13.56/-14.87	-14.94/-13.38	-13.21/-12.86	-12.75/-12.27	-14.09/-13.66	-15.04/-15.13	-14.81/-14.85	-15.77/-15.36	-15.52/-15.26	-14.97/-13.02	-12.29/-12.74	-11.51/-12.01	-12.33/-10.63	-8.52/-8.75
Θ(180°)	-15.12/-15.64	-14.02/-14.13	-14.24/-14.73	-14.25/-13.01	-13.41/-14.15	-12.44/-14.92	-13.2/-12.3	-14.2/-14.57	-15.34/-15.63	-14.89/-15.19	-15.06/-15.91	-15.26/-14.83	-15.23/-14.3	-14.8/-13.39	-14.53/-15.26	-14.98/-14.64	-15.34/-14.4	-14.25/-13.2	-12.88/-12.74	-11.66/-12.29	-12.33/-11.4	-11.13/-13.67	-13.95/-14	-13.96/-15.21
Freq(Hz)	6.995GPol.	Theta/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
DG(dB)	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°)	3.72/4.05	3.99/3.85	3.33/2.97	2.96/2.19	1.49/0.41	-1.02/-2.37	-4.12/-4.84	-5.71/-5.56	-4.1/-2.32	-0.72/0.45	1.46/2.18	2.63/3.17	3.59/3.51	3.63/33	3.33/3.17	2.31/7.1	0.71/-0.07	-1.74/-2.78	-4.88/-6.82	-7.57/-6.4	-5.07/-3.09	-1.56/-0.23	1.03/1.75	2.51/3.22
Θ(7.5°)	1.36/2.44	2.66/2.87	2.62/2.36	2.02/1.18	0.35/-0.56	-1.52/-2.23	-3.45/-4.04	-4.9/-4.42	-2.98/-2.39	-1.57/-0.54	0.54/0.66	0.82/0.84	0.74/0.41	0.49/0.04	0.33/0.8	0.28/0.16	-0.01/-0.61	-1/-1.83	-2.39/-4.07	-4.83/-5.38	-5.03/-5.14	-4.8/-3.9	-3.03/-2.28	-1.12/-0.1
Θ(15°)	-0.92/0.57	1.28/1.3	0.84/0.91	0.58/-0.76	-2.23/-4.06	-4.83/-6.17	-6.21/-7.15	-6.27/-5.91	-5.36/-3.7	-2.42/-1.97	-1.53/-1.86	-2.51/-3.46	-3.72/-3.01	-2.08/-1.71	-1.55/-0.95	-0.23/-0.43	-0.39/-1.28	-2.62/-3.07	-3.65/-3.86	-4.31/-4.18	-4.47/-4.53	-4.18/-3	-2.08/-2.51	-2.84/-2.71
Θ(22.5°)	-3.73/-1.65	-0.22/-0.03	0.63/0.68	-0.18/-1.4	-1.68/-1.81	-2.32/-4.1	-6.41/-8.85	-9.34/-10.44	-11.01/-8.92	-7.65/-8.53	-9.24/-8.68	-3.94/-1.93	-1.25/-1.55	-2.72/-3.14	-3.14/-2.16	-1.13/-1.07	-1.75/-4.03	-6.12/-5.07	-4.02/-3.89	-3.79/-3.68	-3.45/-2.16	-1.67/-1.78	-2.3/-2.75	-4.03/-4.5
Θ(30°)	-2.42/-2.19	-1.25/-0.88	-0.96/-1.8	-2.48/-2.17	-2.11/-2.04	-2.41/-3.28	-5.78/-7.68	-8.11/-5.78	-4.15/-4.6	-7.01/-7.64	-4.08/-3.08	-3.2/-4.28	-2.76/-0.96	-1.09/-2.83	-4.12/-4.75	-7.42/-5.67	-4.2/-5.35	-5.18/-2.29	-0.83/-2.92	-6.04/-7.17	-6.32/-6.11	-4.87/-2.77	-2.07/-2.53	-3.1/-4.17
Θ(37.5°)	-0.34/-0.38	0.07/0.59	-0.27/-3.35	-3.1/-0.96	0.39/0.78	0.12/-1.95	-4.7/-5.26	-3.82/-1.36	0.58/0	-3.95/-6.19	-7.09/-6.78	-5.26/-5.82	-5.74/-5.17	-6.34/-7.05	-9.64/-9.75	-10.9/-10.02	-7.21/-6	-4.92/-3.15	-0.3/0.66	-1.75/-4.51	-3.93/-2.82	-0.82/1.24	0.44/0.49	-1.77/-2.39
Θ(45°)	-1.68/-1.34	0.77/0.98	0.91/0.5	0.85/2.68	4.01/4.34	2.59/1.47	0.38/-2.24	-3.21/-0.46	0.84/0.72	-0.39/-2.19	-1.98/0.12	-1.07/-3.87	-6.52/-6.86	-4.78/-2.57	-2.1/-7.27	-13.03/-11.25	-5.82/-6.28	-3.8/-1.07	0.68/1.85	-0.46/-1.96	-1.45/-3.43	-2.06/-0.13	-2/-3.1	-5.86/-2.66
Θ(52.5°)	0.21/-0.34	0.47/1.11	2.35/2.28	2.96/4.31	5/5.37	4.33/2.53	1.3/0.99	-1.21/-0.53	-1.21/1.93	3/0.81	1.03/-0.99	-4.85/-3.79	-4.37/-4.26	-1.38/-1.34	-0.21/-4.31	-7.47/-5.32	-3.15/-3.2	-1.74/1.54	1.41/1.06	1.07/1.52	0.49/-2.94	-0.76/0.66	2.01/2.38	-0.26/0.57
Θ(60°)	3.7/0.57	-0.22/1.09	1.94/4.03	4.34/3.5	4/4.21	4.08/3.8	0.69/1.98	0.57/-0.98	-0.92/1.8	3.26/2.04	1.06/-5.95	-5/-3.09	-6.65/-4.33	0.94/1.9	1.04/-3.15	-9.43/-6.67	-4.15/-2.79	-1.36/1.22	0.73/-3.06	1.17/0.8	-1.66/-3.52	-2.09/-0.52	3.85/4.95	1.98/3.07
Θ(67.5°)	4.39/1.93	3.17/4.74	2.61/5.02	4.96/2.61	3.97/1.69	2.31/1.88	-1.64/2.06	1.32/-1.63	-0.76/1.85	2.15/2.64	-0.71/-4.98	-0.46/-1.89	-5.52/-3.26	1.39/3.37	1.2/-1.46	-2.84/-6.09	-4.87/-3.79	-2.3/0.38	1.71/-0.66	1.84/1.83	-2.1/-3.38	-5.27/-1.2	4.93/5.49	2.87/4.32
Θ(75°)	3.36/2.24	3.73/5.04	3.24/4.46	4.54/0.82	3.66/0.75	0.07/0.1	-1.37/2.69	0.11/-0.34	-0.54/1.59	0.73/2.62	-2.08/-1.72	0.63/1.13	-1.86/-5.23	-0.37/3.2	0.95/-0.43	-1.86/-5.43	-6.66/-2.01	-2.63/1.02	1.78/-0.94	0.59/-3.08	-5.1/-0.28	5.13/4.97	2.73/8.2	
Θ(82.5°)	1.32/1.31	3.3/4.05	2.27/3.35	3.24/-0.34	2.04/-0.02	-2.3/0.65	-2.18/2.35	-0.46/-0.31	-0.43/1.25	0.24/1.82	-3.67/-0.48	1.1/1.58	-1.96/-5.73	-2.39/2.37	-0.27/-2.23	-3.42/-5.68	-4.37/0.51	-4.28/2.07	5.4/-0.32	0.58/-0.17	1.28/-3.39	4.31/-0.13	4.24/3.37	1.9/2.96
Θ(90°)	-0.23/-0.93	2.02/3.03	0.04/0.85	1.41/-2.1	0.52/-0.86	-1.84/-0.76	-3.71/1.62	-2.22/-0.9	-1.53/-0.18	-1.25/0.82	-3.04/-1.67	-0.03/0.16	-2.61/-8.34	-6.96/-0.32	-1.45/-3.75	-7.47/-6.52	-6.43/-0.07	-9.26/0.74	4.36/-1.13	-2.68/-2.06	0.32/-5.41	-6.37/-1.79	2.34/1.35	0/1.43
Θ(97.5°)	-1.78/-3.21	0.51/1.72	-1.51/-2.28	-0.83/-3.91	-2.48/-2.84	-3.61/-2.25	-3.77/-0.56	-2.21/-0.65	-2.85/-1.11	-2.38/-0.68	-4.47/-2.09	-1.44/-2.85	-3.75/-10.99	-7.69/-2.12	-2.44/-7.14	-11.82/-9.76	-8.1/-6.14	-11.58/-2.72	0.68/-5.91	-7.15/-6.61	-2.35/-8.06	-7.74/-3.94	0.52/-1.29	-1.39/0.21
Θ(105°)	-3.09/-5.4	-1.98/-0.4	-1.47/-2.51	-3.38/-4.13	-4.52/-9.43	-3.73/-5.54	-4.69/-3.15	-3.9/-2.65	-3.17/-1.64	-3.99/-1.69	-5.71/-4.96	-3.83/-3.56	-4.78/-10.99	-11.76/-6.08	-4.95/-10.86	-11.53/-12.07	-8.64/-7.27	-13.86/-6.77	-4.34/-5.77	-10/-10.62	-6.4/-9.81	-7.4/-5.39	0.28/-3.18	-1.83/0.42
Θ(112.5°)	-4.76/-8.29	-3.76/-2.77	-2.89/-1.46	-5.8/-5.94	-2.26/-5.34	-5.58/-5.3	-4.47/-5.04	-3.39/-3.83	-3.66/-1.63	-10.43/-3.4	-7.69/-4.7	-5.95/-6.27	-5.83/-8.27	-15.61/-11.04	-10.45/-6.96	-8.51/-12.39	-9.43/-7.25	-4.78/-4.73	-3.21/-6.03	-10.45/-7.42	-5.84/-12.25	-7.13/-5	0.03/-3.69	-3.51/-1.64
Θ(120°)	-7.7/-9.33	-4.37/-3.15	-5.04/-4.14	-6.5/-12.25	-9.1/-6.91	-7.75/-6.27	-7.28/-11.14	-6.62/-6.53	-6.15/-7.42	-11.4/-9.73	-7.78/-6.74	-5.59/-7.57	-6.23/-7.49	-14.75/-11.68	-9.36/-9.11	-8.12/-15.01	-13.08/-9.3	-13.85/-9.18	-10.29/-8.23	-8.79/-5.51	-8.55/-12.23	-12.19/-6.45	-2.35/-6.42	-6.02/-7.42
Θ(127.5°)	-11.58/-13.68	-6.32/-5.18	-11.13/-12.98	-11.9/-11.94	-12.94/-12.62	-8.74/-8.73	-9.31/-7.62	-14.76/-6.43	-10.19/-7.94	-8.37/-12.97	-8.41/-9.65	-8.77/-12.13	-8.25/-10.07	-12.33/-11.97	-13.91/-11.42	-8.64/-13.11	-13.32/-10.63	-10.19/-9.89	-11.11/-9.13	-7.16/-9.96	-13.97/-11.6	-7.95/-9.48	-8.49/-10.66	-8.08/-6.58
Θ(135°)	-11.89/-14.04	-9.08/-5.3	-6.08/-9.5	-11.71/-7.33	-7.07/-11.33	-7.54/-5.99	-8.88/-15.73	-10.9/-8.62	-9.24/-12.95	-11.93/-15.1	-13.26/-10.73	-13.43/-11.44	-13.93/-14.36	-15.56/-14.95	-14.23/-11.45	-8.09/-12.76	-14.78/-12.7	-11.55/-14.46	-11.96/-10.42	-10.93/-9.07	-15.38/-13.47	-9.67/-8.68	-10.08/-7.77	-9.29/-9.89
Θ(142.5°)	-13.05/-12.2	-15.62/-12.25	-14.35/-15.77	-9.92/-5.78	-6.58/-11.47	-12.12/-12.21	-12.97/-14.4	-13.95/-11.05	-7.76/-12.97	-12.75/-12.88	-14.43/-14.91	-14.1/-14.21	-13/-14.06	-13.32/-15.6	-10.72/-10.88	-12.78/-14.67	-14.08/-15.63	-15.54/-14.97	-15.13/-14.09	-13.42/-11.64	-13.74/-8.44	-8.51/-13.99	-13.79/-7.51	-9.15/-14.25
Θ(150°)	-11.11/-7.8	-9.92/-13.61	-9.64/-8.82	-10.77/-12.67	-13.87/-15.46	-15.81/-15.78	-16.05/-15.88	-13.09/-11.71	-12.79/-15.34	-14.43/-15.23	-14.41/-13.25	-15.56/-15.63	-15.91/-15.18	-11.37/-13.42	-14.57/-14.35	-15.76/-15.89	-14.9/-10.84	-11.47/-15.19	-14.94/-13.55	-13.21/-15.14	-15.21/-15.37	-15.96/-13.54	-10.14/-7.23	-12.71/-15.34
Θ(157.5°)	-10.82/-9.48	-9.58/-9.7	-10.08/-12.31	-11.53/-13.88	-15.3/-14.97	-13.74/-12.42	-12.76/-14.11	-15.81/-13.6	-11.28/-10.9	-12.4/-14.97	-14.31/-14.69	-16.22/-15.16	-15.47/-14.78	-13.21/-13.69	-14.94/-14.96	-15.44/-14.71	-15.99/-15.81	-14.95/-15.81	-15.03/-15.45	-15.61/-15.33	-13.55/-15.5	-16/-14.78	-13.36/-13.92	-13.53/-10.09
Θ(165°)	-15.89/-16.02	-14.51/-13.75	-12.7/-11.31	-12.77/-12.8	-15.07/-13.14	-14.99/-13.37	-15.81/-15.62	-15.28/-15.22	-15.41/-14.71	-13.58/-12.77	-13.32/-14.53	-15.04/-16.05	-15.56/-14.04	-14.61/-15.51	-15.35/-15.12	-15.4/-15.73	-15.18/-13.58	-14.9/-13.71	-15.25/-13.67	-11.77/-10.93	-11.24/-13.19	-14.88/-14.9	-14.64/-14.55	-13.58/-14.84
Θ(172.5°)	-15.07/-15.76	-15.83/-16.01	-14.76/-15.29	-15.39/-15.21	-16.01/-14.87	-14.73/-14.51	-14.78/-14.78	-13.09/-13.14	-15.25/-16.02	-14.55/-13.67	-13.18/-13.72	-15.24/-15.08	-15.62/-15.29	-15.05/-15.38	-12.91/-11.57	-10.05/-10.76	-11.02/-11.48	-11.71/-11.64	-13.26/-12.51	-13.59/-13.96	-15.46/-14.57	-15.27/-13.78	-13.29/-12.34	-12.84/-14.8
Θ(180°)	-14.32/-12.8	-12.13/-13.45	-13.54/-12.74	-13.45/-13.25	-13.96/-13.56	-15.91/-15.43	-15.2/-15.03	-14.87/-14.77	-13.94/-13.45	-13.04/-13.53	-15.68/-14.92	-13.22/-13.2	-13.61/-13.29	-13.07/-13.75	-13.88/-13.92	-12.98/-11.45	-11.43/-10.83	-11.48/-11.66	-12.71/-14.77	-15.17/-15.51	-15.48/-14.92	-13.93/-12.64	-11.8/-12.36	-12/-13.63



Sporton International Inc.



Radiated Composite Gain Data of Scan Radio_SC Ant1~2

Appendix A.7

Θ(22.5°)	-6.85/-8.13	-8.84/-11.12	-11.6/-8.22	-4.59/-2.71	-1.46/-0.52	0.39/1.2	1.74/2.37	2.78/2.72	2.61/2.02	1.08/-0.18	-1.89/-3.71	-4.98/-6.92	-11.68/-16.75	-14.99/-15.28	-17.8/-12.89	-8.59/-5.41	-2.05/-0.26	1.25/1.76	1.72/2.4	3.15/3.26	2.51/1.29	0.13/-0.11	-0.54/-1.68	-3.46/-5.43
Θ(30°)	-7.25/-7.05	-8.52/-10.62	-13/-8.93	-6.3/-3.96	-2.96/-1.72	-0.53/-0.04	1.06/1.45	2.08/2.05	1.25/1.01	0.81/0.03	-1.93/-3.29	-3.55/-4.87	-9.67/-13.8	-16.42/-12.93	-7.75/-5.56	-5.41/-4.67	-4.35/-2.73	-0.63/1.02	1.88/2.03	2.07/2.64	1.85/0.71	-0.51/-0.84	-1.25/-2.27	-4.49/-7.27
Θ(37.5°)	-7.28/-6.98	-8.35/-11.33	-12.14/-10.27	-6.6/-4.58	-3.72/-2.2	-0.57/-0.02	0.45/0.5	0.34/0.57	0.66/-0.09	-0.74/-0.38	-1.85/-3.21	-4.02/-5.73	-9.03/-9.85	-15.68/-11.4	-7.45/-6.79	-4.13/-2.19	-0.55/0.07	-0.30/-0.26	0.35/0.46	1.07/2.29	1.66/-0.07	-1.24/-2	-2.82/-3.03	-4.48/-7.27
Θ(45°)	-9.96/-10.97	-10.39/-9.93	-9.11/-7.2	-5.59/-6.15	-5.41/-3.38	-1.51/-0.43	-0.14/-0.31	-0.87/-1.14	-0.87/-0.66	-2.02/-1.74	-2.53/-3.24	-4/-5.34	-9.07/-13.76	-14.14/-12.3	-12.11/-8.45	-6.35/-3.64	-2.37/-1.03	-0.49/-1.24	-1/-0.44	0.03/1.2	0.26/-1.92	-2/-3.22	-3.75/-4.07	-7.71/-6.76
Θ(52.5°)	-12.39/-14.43	-13.06/-10.91	-9.07/-6.89	-5.25/-5.31	-6.18/-6	-3.59/-2.26	-1.46/-1.01	-1.56/-3.13	-1.95/-1.97	-4.39/-5.21	-4.1/-5.36	-5.15/-5.33	-6.19/-8.43	-11.21/-9.68	-8.87/-9.51	-6.12/-4.97	-4/-3.58	-0.97/-0.24	-0.78/-0.21	-0.68/-0.08	-0.39/-3.79	-3.74/-7.3	-4.83/-4.36	-7.51/-9.79
Θ(60°)	-16.14/-18.2	-16.27/-13.99	-13.11/-7.91	-5.76/-5.2	-5.65/-7.23	-4.62/-2.4	-1.73/-2.01	-2.82/-2.73	-4.77/-3.9	-5.54/-5.04	-8.41/-5.4	-5.54/-5.04	-5.92/-7.41	-8.76/-9.1	-8.47/-10.3	-5.97/-5.72	-5.59/-6.25	-3.95/-1.58	-1.93/-1.83	-2.31/-2.97	-3.15/-5.33	-5.75/-5.98	-6.86/-6.93	-8.71/-11.41
Θ(67.5°)	-16.8/-18.95	-18.34/-17.34	-18.96/-9.69	-6.22/-6.22	-6.06/-6.07	-5.24/-3.71	-3.63/-2.68	-3.83/-5.73	-4.34/-0.3	-7.95/-7.73	-10.08/-7.6	-8.47/-8.78	-5.42/-5.2	-8.39/-10.28	-14.36/-12.91	-10.54/-5.33	-4.73/-6	-3.11/-0.88	-1.1/-2.84	-4.41/-6.04	-6.11/-7.8	-11.05/-7.38	-8.27/-9.89	-12.16/-12.39
Θ(75°)	-16.51/-18.43	-18.99/-19.01	-17.56/-14.07	-9.46/-8.68	-7.72/-7.37	-6.71/-4.59	-4.49/-5.25	-7.04/-5.23	-6.08/-7.18	-8.34/-10.42	-15.1/-10.91	-11.53/-11.56	-8.11/-7.32	-8.44/-10.35	-16.62/-12.75	-13.55/-7.96	-5.78/-5.84	-2.86/-0.85	-2.44/-4.05	-7.46/-9.03	-10.86/-11.78	-16.81/-10.65	-11.56/-11	-15.62/-15.39
Θ(82.5°)	-16.32/-16.69	-17.94/-18.3	-18.28/-14.22	-9.53/-8.72	-6.63/-6.2	-7.1/-4.49	-7.01/-5.45	-7.97/-7.88	-5.99/-9.41	-10.11/-12.38	-17.39/-17.41	-18.93/-17.57	-9.42/-7.52	-10.21/-12.67	-11.55/-11.59	-12.03/-9.82	-8.87/-6.62	-3.5/-1.35	-4.3/-6.06	-9.74/-9.7	-13.71/-14.1	-18.78/-14.94	-13.22/-12.64	-18.96/-14.19
Θ(90°)	-15.81/-16.97	-18.52/-18.54	-18.52/-16.47	-10.07/-10	-8.89/-7.51	-6.84/-7.05	-11.27/-9.18	-8.75/-10.2	-9.78/-9.69	-13.24/-13.46	-18.44/-17.62	-17.96/-18.01	-14.87/-10.34	-10.49/-12.29	-14.56/-12.52	-11.93/-17.02	-13.5/-6.92	-6.15/-3.69	-7.46/-6.58	-10.15/-9.92	-15.63/-12.09	-15.13/-17.95	-15.94/-14.4	-17.75/-13.39
Θ(97.5°)	-14.77/-15.93	-17.22/-18.44	-18.07/-15.08	-9.46/-8.47	-7.21/-8.33	-13.45/-12.21	-14.36/-10.43	-11.35/-14.54	-11.16/-17.46	-17.54/-18.3	-18.71/-18.21	-18.38/-13.99	-12.29/-12.37	-15.18/-12.05	-11.45/-18.59	-17.79/-7.01	-9.18/-8.44	-13.95/-12.92	-13.81/-12.9	-11.01/-11.52	-15.63/-17.62	-16.35/-14.67	-18.16/-14.17	
Θ(105°)	-12.02/-17.41	-15.51/-19.51	-17.95/-17.43	-13.21/-12.94	-10.14/-9.73	-8.4/-8.74	-10.84/-11.99	-17.74/-13.94	-15.99/-17.17	-19.31/-14.69	-17.89/-17.54	-15.36/-18.38	-14.02/-13.56	-16.59/-13.51	-16.54/-15.99	-11.71/-16.76	-17.08/-10	-19.17/-8.4	-11.14/-16.86	-11.98/-11.69	-11.48/-14.07	-10.19/-14.86	-12.22/-16.48	-17.98/-12.89
Θ(112.5°)	-12.96/-16.33	-18.64/-19.19	-17.09/-16.22	-16.51/-16.19	-12.57/-9.27	-7.84/-9.44	-10.63/-13.46	-14.24/-17.4	-17.19/-13.56	-18.38/-18.5	-19.4/-18.21	-13.25/-11.97	-17.88/-14.45	-13.84/-18.97	-17.97/-19.04	-15.27/-13.2	-18.52/-17.39	-19.1/-17.72	-11.73/-13.63	-11.15/-12.94	-9.78/-12.03	-14.65/-19.02	-14.81/-16.72	-13.67/-14.85
Θ(120°)	-17.47/-18.31	-18.6/-17.1	-19.34/-16.73	-16.16/-16.87	-13.61/-9.64	-9.37/-10.68	-12/-15.53	-9.82/-15.28	-18.78/-13.34	-17.73/-18.34	-16.98/-14.6	-14.96/-12.57	-11.23/-13.56	-15.32/-15.42	-19.01/-17.96	-18.46/-17.21	-11.33/-16.79	-17.61/-10.9	-9.98/-8.27	-13.45/-15.88	-11.3/-9.9	-12.78/-16.02	-17.66/-18.29	-12.71/-11.21
Θ(127.5°)	-15.69/-14.94	-13.47/-13.92	-15.64/-18.16	-17.56/-14.69	-11.28/-10.02	-10.15/-9.61	-11.28/-14.28	-9.92/-10.3	-18.86/-14.33	-14.4/-17.68	-13.85/-12.99	-12.46/-11.98	-12.58/-15.26	-15.44/-14.81	-17.93/-18.06	-18.81/-19.11	-14.55/-14.58	-18.42/-10.25	-14.78/-12.58	-17.72/-17.27	-18.37/-13.09	-9.85/-12.86	-13.75/-17.66	-16.43/-16.09
Θ(135°)	-10.36/-12.68	-14.65/-13.83	-18.11/-18.52	-19.03/-16.66	-13.14/-12.38	-9.77/-9.17	-8.2/-8.9	-11.25/-15.4	-11.22/-12.34	-13.49/-9.08	-9.68/-16.1	-17.67/-12.82	-9.85/-10.39	-14.16/-18.19	-18.12/-18.25	-17.86/-18.76	-16.44/-15.79	-17.71/-16.37	-18.6/-10.38	-16.12/-17.56	-18.01/-15.42	-10.85/-14.47	-9.63/-12.03	-18.94/-12.1
Θ(142.5°)	-13.76/-14.22	-13.99/-11.48	-12.34/-16.84	-18.12/-13.97	-16.21/-10.7	-8.83/-11.03	-9.63/-6.5	-7.09/-16.32	-13.09/-8.03	-7.81/-7.84	-10.96/-18.15	-11.25/-11.06	-12.65/-12.14	-14.21/-16.19	-15.65/-18.98	-18.53/-17.41	-15.12/-15.52	-18.74/-15.83	-10.51/-10.92	-16.26/-12.14	-10.57/-18.28	-11.53/-15.02	-12.08/-13.05	-12.07/-11.55
Θ(150°)	-10.81/-12.9	-12.91/-16.69	-16.94/-19.97	-19.42/-18.92	-16.24/-15	-14.87/-18.23	-15.67/-11.21	-8.25/-7.75	-9.57/-16.88	-10.11/-7.33	-7.36/-9.72	-12.13/-16.56	-13.61/-12.31	-14.66/-18.75	-19.01/-19.41	-17.77/-18.63	-18.49/-18.32	-16.59/-14.49	-12.52/-15.94	-14.53/-10.41	-10.11/-18.3	-11.54/-13.38	-12.71/-14.03	-13.26/-13.98
Θ(157.5°)	-15.56/-12.78	-14.92/-15.06	-15.34/-18.36	-18.66/-18.51	-17.19/-16.89	-16.1/-13.97	-12.19/-11.55	-13.64/-12.88	-12.81/-12.16	-11.45/-9.84	-9.09/-12.05	-16.6/-19.1	-19.18/-16.76	-19.07/-18.2	-17.27/-17.24	-17.45/-18.05	-19.01/-14.81	-12.11/-10.66	-11.86/-14.24	-14.33/-13.14	-13.66/-12.64	-10.82/-8.56	-7.93/-10.06	-14.1/-16.33
Θ(165°)	-18.96/-17.46	-15.35/-17	-15.05/-15.08	-16.37/-18.87	-17.74/-19.04	-17.1/-17.58	-17.17/-17.45	-16.45/-13.6	-12.26/-11.86	-13.6/-16.08	-17.41/-18.21	-16.79/-18.09	-18.81/-18.93	-17.39/-18.69	-18.04/-18.4	-18.4/-13.3	-17.94/-15.78	-18.04/-19.34	-17.88/-17.46	-14.43/-13.69	-13.25/-12.84	-11.85/-10.52	-9.09/-10.43	-12.89/-14.88
Θ(172.5°)	-18.51/-17.77	-18.28/-18.72	-17.69/-16.27	-15.85/-16.92	-17.58/-17.17	-16.58/-14.83	-13.92/-12.79	-11.24/-10.65	-11.86/-15.56	-18.3/-17.12	-14.93/-14.99	-15.91/-18.07	-18.35/-18.94	-17.77/-18.37	-18.15/-17.46	-18.06/-18.33	-17.81/-19.02	-15.94/-15.61	-15.66/-14.28	-14.69/-14.4	-14.26/-15.01	-15.12/-16.16	-15.21/-16.1	-18.69/-18.29
Θ(180°)	-18.29/-17.65	-18.66/-18.15	-18.58/-19.28	-18.21/-18.49	-15.65/-14.2	-12.28/-10.99	-10.62/-10.15	-11.17/-14.38	-17.95/-16.68	-13.9/-12.47	-13.21/-14.78	-18.05/-17.92	-18.88/-19.03	-18.34/-17.73	-18.09/-18.36	-18.06/-16.77	-16.12/-14.68	-13.87/-13.24	-12.19/-11.92	-12.52/-12.72	-12.59/-12.68	-12.85/-13.54	-13.84/-14.13	-14.91/-16.68
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°)	-0.66/-0.42	-0.12/0.3	0.6/0.6	0.33/-0.26	-0.95/-1.51	-2.59/-4.47	-5.92/-9.79	-11.74/-18.78	-18.71/-16.27	-11.46/-8.34	-5.89/-4.37	-3.11/-2.03	-1.05/-0.33	0.07/0.1	0.09/-0.16	-0.74/-0.39	-0.72/-2.36	-3.18/-4.09	-6.18/-9.16	-12.47/-18.78	-17.97/-14.28	-9.57/-12.2	-4.87/-3.15	-2.03/-1.16
Θ(7.5°)	0.04/0.17	0.13/0.23	0.77/1.04	0.76/0.4	0.14/-0.23	-0.94/-2.19	-4.22/-6.21	-8.96/-15.32	-18.25/-14.72	-11.1/-9.31	-7.25/-5.43	-3.51/-1.96	-1.10/-0.47	-0.04/-0.19	-0.24/-0.24	-2.12/-2.82	-4.64/-5.61	-6.57/-6.16	-13.31/-11.62	-19.41/-12.42	-8.37/-6.15	-3.98/-2.28	-1.12/-0.3	-
Θ(15°)	-1.02/-1.11	-1.24/-0.98	-0.27/0.62	0.64/0.29	-0.33/-0.48	-1.02/-1.88	-3.14/-4.39	-6.28/-9.71	-13.34/-13.73	-12.32/-10.61	-8.24/-5.88	-3.41/-2.09	-1.62/-1.41	-1.29/-1.22	-1.35/-1.14	-0.72/-0.77	-1.12/-1.91	-3.15/-4.55	-6.14/-6.67	-14.45/-19.57	-13.04/-9.04	-6.21/-4.56	-3.14/-2.23	-1.86/-1.15
Θ(22.5°)	-3.01/-2.27	-1.81/-1.56	-1.25/-0.77	-0.25/-0.06	-0.14/-0.29	-0.82/-1.47	-2.69/-3.64	-4.9/-7.4	-11.01/-11.62	-9.59/-6.61	-4.18/-2.96	-1.91/-1.44	-1.76/-2.25	-1.77/-1.72	-1.97/-2.17	-2.19/-1.92	-1.21/-1.42	-2.92/-4.41	-6.07/-7.36	-10.92/-12.54	-11.46/-8.88	-5.81/-4.24	-3.46/-4.06	-4.14/-3.54
Θ(30°)	-3.91/-3.18	-2.95/-2.49	-1.94/-0.83	-0.06/0.07	0.35/0.49	0.57/0.1	-1.81/-3.86	-5.65/-7.41	-8.9/-5.03	-6.24/-6.3	-6.09/-5.3	-5.24/-4.16	-3.47/-3.13	-2.73/-3.35	-3.04/-2.5	-2.61/-2.28	-2.71/-2.69	-3.69/-7.05	-11.22/-12.38	-13.81/-15.37	-11.59/-8.92	-6.12/-5.55	-5.04/-4.15	-
Θ(37.5°)	-6.86/-7.04	-7.43/-6.31	-4.2/-2.52	-1.74/-2.14	-2.72/-2.03	-0.84/0.08	-0.55/-2.54	-4.64/-6.71	-7.14/-8.62	-10.08/-11.13	-9.48/-11.29	-11.04/-10.27	-8.54/-7.42	-6.67/-5.85	-4.58/-3.13	-2.34/-1.45	-1.56/-2.98	-4.33/-3.87	-4.05/-7.26	-8/-9.61	-12.52/-17.73	-18.75/-16.21	-8.92/-6.68	-5.23/-6.13
Θ(45°)	-12.07/-10.48	-11.21/-8.57	-5.03/-3.1	-2.27/-1.74	-2.34/-3.46	-1.41/-1.59	-0.54/-1.14	-2.62/-4.82	-6.89/-6.63	-7.48/-6.61	-9.02/-13.1	-10.98/-10.43	-9.17/-8.91	-6.39/-7.42	-7.08/-5.77	-4.61/-4.73	-3.89/-3.44	-4.65/-4.81	-4.69/-7.38	-11.56/-9.04	-10.56/-16.83	-18.31/-17.48	-8.13/-3.77	-11.51/-18.71
Θ(52.5°)	-7.39/-8.77	-10.41/-8.35	-7.48/-6.41	-3.13/-3.21	-2.85/-4.64	-6.62/-3.73	-1.61/-1.65	-3.93/-5.21	-6.52/-9.03	-4.91/-7.71	-7.19/-9.39	-5.84/-9.58	-4.64/-7.39	-6.21/-4.06	-4.81/-4.86	-3.78/-3.58	-4.64/-2.74	-3.76/-4.46	-3.87/-5.35	-13.68/-14.88	-14.55/-11.05	-16.71/-17.39	-11.61/-18.39	-18.13/-9.8
Θ(60°)	-3.8/-7.8	-12.8/-8.77	-9.95/-10.42	-8.4/-5.55	-4.22/-4.33	-5.34/-4.62	-1.69/-2.1	-5.88/-5.79	-4.37/-2.84	-4.31/-6.36	-7.05/-6.54	-4.94/-6.06	-6.11/-5.02	-2.57/-1.39	-1.88/-3.64	-5.92/-5.49	-7.86/-6.06	-3.61/-6.03	-3.7/-6.38	-15.82/-11.75	-8.72/-9.67	-18.3/-13.3	-9.15/-18.06	-10.58/-6.26
Θ(67.5°)	-5.98/-10.92	-10.24/-12.7	-9.64/-11.07	-9.55/-8.79	-7.81/-7.44	-5.07/-5.57	-2.51/-1.55	-5.63/-3.73	-4.91/-6.2	-3.86/-9.12	-4.09/-2.95	-4.28/-3.44												



Radiated Composite Gain Data of Scan Radio_SC Ant1~2

Appendix A.7

Θ(67.5°)	-11.64/-18.1	-17.61/-18.33	-13.98/-8.67	-7.36/-6.2	-6.79/-8.42	-6.65/-4.75	-3.72/-4.79	-5.86/-7.35	-6.39/-3.32	-4.51/-6.92	-5.84/-6.98	-5.26/-5.51	-5.18/-4.9	-7.35/-7.94	-14.85/-10.32	-8.34/-8.3	-9.63/-9.9	-5.1/-3	-1.75/-2.87	-3.26/-4.84	-8.09/-10.28	-8.28/-9.14	-13.12/-8.77	-9.57/-15.68
Θ(75°)	-10.06/-19.1	-18.97/-17.55	-13.61/-8.7	-8.46/-7.81	-7.73/-10.75	-7.9/-5.54	-4.12/-5.52	-7.12/-6.86	-8.72/-4.37	-5.8/-8.25	-9.14/-7.36	-9.71/-5.85	-7.99/-4.68	-5.37/-6.92	-13.99/-7.56	-12.51/-7.78	-10.04/-9.46	-2.25/-2.92	-1.73/-5.19	-7.19/-17.1	-14.31/-13.03	-11.78/-11.97	-18.47/-12.32	-9.05/-12.6
Θ(82.5°)	-11.15/-18.21	-18.29/-18.73	-12.99/-8.61	-9.55/-9.71	-9.42/-10.65	-7.17/-6.94	-7.87/-11.39	-6.74/-7.26	-8.28/-13.19	-11.71/-11.71	-10.8/-8.84	-10.49/-6.01	-6.32/-6.68	-11.14/-8.6	-18.6/-8.91	-11.25/-9.54	-2/-2.91	-17.52/-42	-8.55/-9.46	-15.82/-13.36	-15.8/-19.34	-15.52/-11.92	-8.48/-12.09	
Θ(90°)	-10.52/-16.09	-18.32/-17.18	-14.25/-11.51	-13.66/-10.84	-11.16/-12.1	-8.86/-8.5	-6.72/-8.19	-7.21/-12.56	-7.95/-8.65	-10.39/-17.42	-18.88/-12.2	-14.16/-11.84	-11.15/-7.89	-6.98/-7.95	-11.06/-7.99	-18.72/-12.61	-12.39/-9.33	-3.53/-5.07	-4.44/-10.54	-10.07/-13.79	-14.13/-13.62	-16.14/-11.87	-17.72/-12.79	-8.9/-9.43
Θ(97.5°)	-12.42/-18.72	-13.78/-17.94	-17.1/-12.51	-13.38/-11.7	-12.01/-13.01	-9.53/-9.5	-8.98/-11.78	-8.25/-8.17	-8.5/-9.97	-11.08/-17.61	-17.64/-14.59	-12.87/-15.79	-9.5/-12.73	-9.36/-8.51	-12.86/-10.08	-17.92/-18.68	-12.85/-10.06	-8.08/-9.2	-7.3/-12.44	-10.98/-15.32	-10.75/-12.53	-15.36/-10.55	-19.17/-11.3	-7.79/-9.27
Θ(105°)	-11.11/-17.17	-18.04/-18.7	-18.1/-14.7	-15.01/-11.65	-10.12/-11.64	-12.37/-10.44	-10.62/-12.98	-9.65/-10.94	-12.27/-10.64	-17.67/-16.84	-11.81/-15.1	-12.88/-15.9	-17.96/-13.38	-19.34/-9.91	-11.95/-17.83	-17.64/-12.03	-14.88/-17.73	-18.83/-12.25	-11.99/-13.21	-10.62/-13.02	-10.5/-10.13	-18.74/-11.8	-8.8/-10.66	
Θ(112.5°)	-12.34/-18.6	-15.74/-18.27	-18.5/-15.65	-11.56/-11.85	-11.7/-9.35	-9.91/-11.26	-11.92/-13.98	-12.9/-13.2	-11.71/-14.34	-7.32/-10.78	-11.91/-13.27	-12.51/-12.3	-11.69/-18.8	-17.67/-18.32	-18.67/-11.08	-10.55/-14.44	-13.7/-18.65	-18.05/-15.24	-14.16/-11.32	-13.23/-11.1	-7.01/-17.82	-11/-10.4	-12.97/-10.97	-10.67/-10.09
Θ(120°)	-13.47/-17.68	-16.77/-17.81	-19.14/-18.5	-12.28/-14	-15.03/-11.43	-8.94/-9.21	-8.37/-11.46	-18.03/-14.08	-11.28/-18.01	-8.53/-9.41	-11.97/-9.71	-16.18/-15.03	-11.89/-16.82	-14.36/-17.6	-18.05/-13.02	-11.26/-12.61	-12.67/-11.1	-13.52/-10.03	-7.47/-8	-12.27/-13.14	-7.92/-11.43	-9.38/-9.67	-11.64/-12.74	-10.16/-14.52
Θ(127.5°)	-11.92/-14.55	-17.8/-19.44	-17.44/-18.07	-14.86/-18.61	-16.35/-11.41	-12.11/-11.42	-10.69/-11.98	-14.28/-15.96	-13.6/-14.16	-12.17/-6.61	-10.2/-15.14	-15.7/-13.24	-17.67/-18.32	-17.32/-14.35	-13.99/-16.43	-18.47/-9.93	-15.24/-18.67	-17.67/-11.4	-15.79/-12.44	-14.3/-14.31	-11.16/-9	-7.49/-8.67	-10.14/-10.24	-9.7/-18.69
Θ(135°)	-13.97/-10.59	-15.69/-19.02	-17.74/-18.59	-18.61/-18.41	-12/-11.02	-12.22/-11.02	-12.36/-11.83	-11.31/-15.9	-13.81/-10.58	-16.87/-11.19	-7.48/-8.73	-18.19/-14	-14.48/-14.37	-17.92/-17.91	-19.11/-17.52	-18.75/-14.37	-17.7/-17.79	-19.33/-17.22	-14.31/-13.24	-12.35/-13.22	-14.24/-9.67	-9.65/-8.53	-7.82/-10.26	-9.08/-16.82
Θ(142.5°)	-13.15/-13.22	-12.75/-16.62	-16.92/-18.74	-18.95/-18.02	-16.71/-13.31	-10.66/-8.76	-11.07/-16.61	-10.52/-8.69	-8.17/-11.21	-12.49/-9.45	-11.83/-13.89	-12.76/-11	-11.65/-15.15	-18.28/-17.96	-18.62/-18.39	-12.35/-9.9	-14.3/-12.31	-7.94/-11.09	-8/-8.68	-16.04/-11.99	-9.91/-8.29	-7.15/-9.59	-14.11/-11.3	-12.52/-16.42
Θ(150°)	-14.17/-11.94	-13.43/-13.3	-14.5/-15.78	-12.28/-18.69	-13.98/-11.15	-9.93/-8.81	-9.03/-12.31	-17.85/-13.02	-10.78/-12.28	-10.46/-10.17	-9.96/-11.81	-12.51/-13.08	-12.95/-17.73	-18.8/-19.05	-17.5/-17.5	-16.8/-17.88	-15.28/-19.02	-18.07/-10.34	-9.99/-9.36	-6.65/-8.17	-7.77/-8	-8.04/-7.94	-14.89/-15.85	
Θ(157.5°)	-18.64/-19.06	-19.1/-17.96	-16.32/-17.04	-16.26/-14.58	-15.28/-13.23	-11.4/-12.72	-13.28/-12.54	-12.61/-16.16	-12.92/-9.59	-8.49/-7.65	-7.79/-10.86	-17.85/-18.31	-18.2/-17.06	-17.15/-18.39	-18.24/-17.4	-14.95/-15.68	-17.51/-12.97	-10.82/-12	-14.74/-12.53	-8.2/-10.99	-11.04/-9.59	-9.75/-11.35	-11.41/-10.12	-12.29/-14.97
Θ(165°)	-17.98/-18.01	-18.54/-17.71	-19.07/-18.09	-18.01/-17.82	-18.77/-17.82	-17.66/-17.39	-17.47/-17.92	-17.82/-18.04	-8.41/-7.36	-7.55/-8.99	-11.45/-18.15	-17.79/-19.55	-17.35/-18.15	-18.44/-19.03	-17.78/-18.58	-17.89/-19.01	-17.37/-18.22	-17.48/-18.1	-18.84/-13.32	-9.38/-8.51	-8.11/-8.28	-10.1/-11.3	-12.52/-16.42	
Θ(172.5°)	-12.67/-13.61	-15.12/-17.76	-17.67/-17.95	-17.7/-18.87	-18.53/-19.07	-17.88/-18.41	-18.01/-18.23	-15.74/-13.84	-15.09/-17.37	-18.24/-18.67	-17.83/-17.42	-15.89/-15.52	-16.82/-16.61	-17.92/-18.79	-18.34/-17.87	-18.62/-17.37	-17.83/-18.85	-19.28/-17.43	-17.48/-18.81	-17.16/-14.17	-13.21/-11.69	-10.35/-8.74	-8.4/-8.53	-8.6/-10.51
Θ(180°)	-16.52/-19.2	-17.96/-18.04	-18.3/-18.09	-17.81/-17.66	-17.36/-18.58	-17.52/-15.38	-16.1/-14.75	-13.82/-16.41	-18.36/-17.63	-18.62/-17.52	-18/-19.04	-17.28/-17.84	-17.68/-19.9	-18.35/-18.48	-18.55/-17.43	-18.66/-17.22	-14.28/-14.09	-13.66/-12.87	-11.53/-11.12	-10.79/-9.49	-9.9/-10.59	-11.32/-11.05	-11.18/-11.81	-11.74/-12.97
Freq(Hz)	5.785GPol.	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°)	0.210/75	0.890/66	0.710/92	-0.12/-0.9	-1.25/-2.47	-3.09/-4.7	-7.6/-8.94	-10.87/-11.98	-11.39/-8.93	-6.38/-4.27	-3.14/-2.11	-1.17/-0.56	-0.010/-13	0.260/36	0.3/-0.1	-0.62/-1.3	-1.9/-3.32	-4.89/-6.37	-8.47/-11.62	-13.12/-12.2	-10.03/-7.81	-5.46/-3.75	-2.75/-1.7	-0.88/-0.26
Θ(7.5°)	0.971/61	2.012/38	2.352/23	2.031/07	0.5/-0.02	-1.01/-1.88	-2.84/-6.6	-6.3/-7.48	-8.14/-7.33	-5.77/-3.92	-1.52/-1.41	-1.19/-0.89	-0.55/-0.8	-1.05/-1.21	-2.51/-3.28	-4.36/-6.09	-7.96/-11.1	-12.33/-17.85	-16.68/-11.1	-7.97/-6.34	-4.38/-1.5	-2.33/-1.63	-0.60/-0.06	
Θ(15°)	0.071	1.31/47	1.36/73	1.54/82	0.07/-0.48	-1.162/-2.06	-2.55/-3.85	-5.73/-8.14	-10.77/-10.76	-10.42/-8.7	-6.39/-4.51	-4.25/-1.4	-4.73/-4.83	-3.41/-3.45	-2.79/-3.33	-7.68/-8.63	-10.19/-10.54	-15.79/-16.44	-18.41/-13.65	-6.85/-6.68	-3.39/-3.08	-3.33/-3.26	-2.4/-3.1	
Θ(22.5°)	-0.250/08	0.580/47	0.280/06	-0.120/02	-0.05/-0.65	-1.13/-1.99	-2.21/-3.15	-4.44/-5.82	-9.4/-12.71	-12.35/-10.97	-7.62/-5.08	-4.75/-4.09	-3.31/-2.81	-3.22/-3.67	-4.83/-6.07	-5.67/-5.78	-5.28/-4.01	-5.24/-6.41	-6.92/-8.63	-11.95/-12.24	-10.15/-7.84	-4.45/-3.35	-3.23/-3.33	-2.3/-1.11
Θ(30°)	-2.49/-4.04	-4.97/-4.08	-2.54/-1.83	-1.08/-0.56	-1.61/-2.49	-2.88/-3.79	-3.14/-3.19	-2.55/-3.05	-4.85/-6.73	-8.85/-7.4	-7.25/-6.36	-5.28/-4.76	-3.96/-3.44	-3.55/-4.72	-7.97/-10.09	-9.08/-8.39	-5.62/-3.15	-3/-4.56	-6.68/-6.42	-7.29/-7.87	-9.3/-8.23	-6.62/-6.34	-4.05/-2.58	-2.38/-1.87
Θ(37.5°)	-5.59/-6.87	-6.33/-4.12	-3.81/-5.38	-1.32/-1.35	-3.48/-4.49	-6.41/-6.48	-5.39/-4.61	-3.09/-3.25	-4.07/-4.27	-4.6/-4.51	-3.72/-4.19	-5.51/-5.86	-7.02/-6.45	-7.21/-3.97	-3.12/-2.77	-1.31/-1.42	-2.22/-3.37	-6.45/-7.42	-7.69/-7.19	-8.59/-6.17	-4.49/-6.24	-8.19/-5.7		
Θ(45°)	-2.89/-8	-6.68/-5.19	-6.52/-6.43	-4.85/-3.71	-4.57/-4.71	-8.08/-8.25	-5.65/-3.12	-4.02/-5.11	-3.83/-2.79	-0.99/-1.58	-3.35/-3.66	-5.27/-6.74	-6.1/-8.26	-9.23/-9.92	-12.04/-14.56	-7.63/-4.17	-2.73/-3.09	-3.79/-1.73	0.09/-1.03	-4.95/-7.72	-8.83/-9.63	-8.37/-5.52	-11.77/-7.41	-3.19/-1.96
Θ(52.5°)	-4.41/-18.13	-11.06/-7.2	-5.58/-3.9	-2.99/-3.2	-3.94/-5.18	-4.5/-11	-5.67/-3.92	-3.35/-5.06	-4.53/-2.9	0.28/-0.19	-2.63/-3.31	-3.25/-3.48	-3.87/-6.57	-3.93/-4.51	-6.28/-9.4	-3.85/-3.04	-0.110/-83	0.190/2	-0.3/-28	-4.18/-5.62	-4.86/-10.96	-8.73/-5.16	-8.27/-5.15	-2.31/-4.8
Θ(60°)	-15.2/-8.82	-7.77/-9.76	-6.98/-3.88	-2.32/-1.65	-1.24/-3.11	-2.5/-6.62	-7.98/-5.39	-2.74/-4.22	-7.45/-3.31	0.73/-0.31	-3.110/-47	-0.91/-11.34	-4.97/-3.03	-1.97/-3.05	-5.28/-4.6	-2.93/-3.87	-4.49/-1.66	-2.132/-5.55	-2.3/-6.4	-6.51/-5.49	-7.38/-11.99	-6.02/-5.19	-8.93/-2.14	-2.82/-4.38
Θ(67.5°)	-7.97/-3.46	-6.24/-6.72	-5.49/-3.43	-1.23/-0.94	-0.6/-2.81	-4.69/-6.75	-9.18/-6.9	-4.21/-3.69	-9.37/-3.88	0.52/-1.74	-1.250/-84	0.31/-3.21	-5.9/-4.64	-2.87/-4.3	-3.56/-2.74	-1.77/-3.19	-9.65/-3.34	-2.91/-4.78	-3.66/-5.81	-8.79/-5.8	-7.68/-10.96	-5.83/-5.17	-4.34/-2.28	-4.36/-5.46
Θ(75°)	-6.04/-3.61	-4.86/-3.61	-4.77/-4.5	-3.08/-2.31	-1.16/-3.46	-8.06/-9.03	-8.45/-8.69	-5.45/-4.95	-7.9/-5.13	-1.01/-2.06	-2.010/-99	-0.173/-75	-6.92/-64	-5.73/-7.59	-3.46/-1.82	-1.1/-2.51	-6.03/-2.96	-1.34/-4.81	-4.88/-2.95	-5.62/-9.59	-9.78/-8.49	-5.79/-8.57	-2.98/-1.45	-6.76/-3.74
Θ(82.5°)	-6.34/-4.01	-5.19/-4.1	-6.23/-4.58	-3.5/-4.04	-2.56/-4.82	-11.47/-9.9	-8.24/-8.33	-6.47/-6.98	-6.95/-5.96	-1.9/-3.65	-2.19/-0.28	-1.02/-5.14	-10.02/-8.02	-9.14/-7.22	-1.89/-0.91	-3.36/-4.04	-2.91/-2.79	-1.34/-4.7	-5.03/-4.09	-4.75/-6.98	-10.13/-8.79	-6.71/-9.44	-3.03/-2.55	-6.7/-12.3
Θ(90°)	-7.03/-4.33	-6.68/-5.05	-6.63/-4.74	-3.15/-3.81	-3.61/-5.09	-12.16/-8.37	-11.46/-8.35	-6.64/-8.38	-7.95/-6.64	-3.93/-5.33	-3.68/-2.17	-3.9/-7.13	-9.93/-10.85	-13.85/-11.15	-3.59/-1.32	-6.29/-8.92	-4.13/-3.41	-3.88/-7.06	-6.25/-6.84	-5.74/-7.25	-13.01/-8.82	-7.77/-10.25	-3.63/-4.42	-7/-2
Θ(97.5°)	-7.12/-6.14	-7.19/-6.1	-6.85/-4.96	-4.79/-4.63	-5.6/-5.23	-10.5/-8.68	-11.67/-8.68	-7.14/-9.07	-9.37/-6.69	-5.53/-6.67	-5.86/-4.69	-6.05/-8.38	-10.5/-18.36	-16.01/-12.56	-4.63/-3.61	-12.48/-14.71	-7.55/-7.14	-7.87/-11.21	-11.19/-11.13	-8.49/-10.68	-12.28/-9.19	-8.54/-10.21	-5.46/-6.44	-7.84/-2.48
Θ(105°)	-7.08/-8	-7.46/-5.29	-4.6/-6.17	-7.6/-98	-7.34/-8.29	-10.1/-11.64	-9.72/-10.48	-9.35/-9.44	-9.98/-6.79	-5.67/-7.81	-9.15/-6.64	-5.92/-8.22	-9.17/-337	-18.56/-15.22	-9.14/-3.13	-9.95/-8.61	-9.39/-11.82	-13.88/-11.88	-14.78/-11.6	-12.22/-9.38	-12.97/-14.63	-9.09/-13.08	-6.45/-8.9	-6.47/-3.35
Θ(112.5°)	-5.63/-9.11	-7.63/-6.98	-7.33/-7.77	-6.91/-7.26	-9.73/-12.05	-17.94/-12.31	-12.55/-6.64	-11.49/-9.39	-11.15/-8	-9.24/-7.63	-11.49/-9.39	-6.59/-7.38	-9.66/-16.06	-15.83/-17.71	-10.45/-6.6	-7.69/-9.19	-9.35/-12.19	-10.46/-12.36	-18.3/-8.85	-13.28/-15.12	-11.17/-12.65	-9.6/-10.93	-5.33/-9.07	-7.21/-5.34
Θ(120°)	-7.83/-6.52	-8.4/-9.4	-8.35/-9.1	-7.57/-6.56	-5.75/-9.4																			



Radiated Composite Gain Data of Scan Radio_SC Ant1~2

Appendix A.7

Θ(120°)	-15.41/-12.53	-13.85/-17.1	-17.69/-19.23	-18.49/-18.25	-14.36/-12.75	-8.66/-8.75	-7.55/-11.17	-8.92/-9.3	-11.86/-8.52	-11.22/-9.31	-6.48/-6.88	-5.19/-10.59	-10.28/-11.61	-15.43/-14.99	-11/-9.45	-11.25/-10.62	-11.77/-9.59	-16.57/-6.54	-7.18/-9.2	-17.92/-8.78	-9.75/-12.14	-8.56/-11.23	-9.09/-9.53	-9.46/-10.66
Θ(127.5°)	-15.73/-12.84	-13.43/-13.61	-18.25/-18.13	-18.49/-18.67	-12.92/-14.87	-9.58/-6.37	-5.4/-9.41	-7.49/-11.36	-9.83/-10.73	-10.04/-11.91	-4.86/-8.1	-6.26/-5.74	-6.11/-11.26	-13.99/-18.55	-13.04/-18.68	-14.19/-7.95	-15.41/-19.14	-15.2/-10.78	-18.89/-16.41	-12.47/-11.38	-13.23/-10.1	-7.73/-12.33	-11.64/-11.66	-8.44/-10.58
Θ(135°)	-17.41/-15.5	-17.59/-18.63	-17.62/-19.26	-18.98/-18.52	-15.98/-11.43	-9.28/-8.74	-14.82/-7.9	-11.99/-10.7	-9.14/-11.22	-8.42/-15.49	-6.15/-6.28	-12.96/-14.02	-10.96/-18.1	-10.96/-18.1	-14.91/-18.74	-17.41/-18.32	-16.81/-14.06	-13.81/-12.04	-8.52/-13.85	-10.93/-15.26	-14.18/-12.37	-9.94/-8.49	-14.41/-18.14	-12.75/-12.42
Θ(142.5°)	-15.33/-18.66	-16.98/-18.56	-18.66/-18.08	-18.37/-16.54	-18.21/-14.31	-11.82/-9.34	-7.55/-9.49	-12.1/-8.92	-9.75/-11.49	-9.62/-10.14	-8.14/-11.02	-7.95/-14.31	-10.46/-11.99	-18.2/-18.4	-17.96/-17.16	-18.39/-17.76	-11.54/-12	-12.9/-10.34	-15.94/-12.28	-9.74/-16.32	-10.94/-13.81	-10.12/-11.5	-13.81/-13.69	-12.27/-14.77
Θ(150°)	-13.36/-10.21	-10.41/-9.39	-13.32/-17.87	-18.71/-16.91	-13.07/-11.1	-8.43/-7.36	-8.62/-9.05	-8.87/-11.68	-14.13/-11.13	-17.66/-8.66	-7.46/-7.72	-6.15/-7.1	-18.33/-14.81	-18.21/-18.36	-18.83/-19.05	-17.92/-17.77	-13.48/-18.96	-18.39/-18.1	-17.52/-9.02	-10.5/-11.66	-10.16/-12.88	-14.55/-7.57	-10.9/-14.88	-8.03/-7.59
Θ(157.5°)	-10.14/-10.37	-10.1/-1.32	-13.58/-18.29	-18.03/-17.41	-16.71/-10.96	-8.78/-14.1	-8.85/-13.29	-14.87/-13.22	-14.45/-17.32	-8.97/-8.56	-4.39/-7.54	-13.53/-17.27	-18.86/-14.06	-18.51/-18.96	-14.84/-13.77	-15.82/-15.77	-19.14/-15.31	-18.41/-14.78	-12.31/-13.29	-17.49/-13.67	-12.82/-13.11	-13.98/-7.03	-6.89/-11.2	-14.99/-10.68
Θ(165°)	-8.96/-9.88	-10.14/-10.72	-15.69/-18.41	-17.57/-15.84	-11.62/-9.52	-9.11/-9.21	-11.27/-11.32	-10.47/-11.4	-11.96/-12.34	-10.8/-9.79	-10.6/-15.61	-18.74/-18.47	-19.59/-15.03	-14.24/-15.37	-15.54/-18.94	-18.16/-16.91	-13.03/-11.42	-12.22/-14.13	-15.35/-15.52	-12.85/-13.7	-13.68/-13.8	-9.08/-6.17	-6.07/-7.35	-8.22/-9.57
Θ(172.5°)	-14.8/-14.25	-17.64/-17.89	-19.07/-18.47	-17.79/-17.25	-15.3/-15.01	-13.01/-13.59	-11.19/-10.34	-10.13/-9.37	-10.12/-24	-16.17/-17.73	-14.47/-12.87	-13.54/-18.36	-18.94/-17.33	-18.66/-19.24	-15.85/-14.62	-15.83/-16.36	-18.21/-17.78	-17.95/-15.44	-13.87/-12	-12.78/-13.49	-13.33/-11.44	-10.81/-11.34	-13.69/-16.67	-14.49/-14.41
Θ(180°)	-13.74/-13.46	-14.34/-14	-14.1/-16.24	-15.97/-15.51	-14.44/-12.71	-12.51/-11.51	-12.77/-12.3	-12.01/-13.04	-16.23/-18.67	-14.13/-11.82	-11.58/-13.6	-18.8/-17.9	-18.19/-17.89	-18.37/-18.1	-19.14/-18.19	-18.09/-18.41	-10.9/-10.77	-10.51/-10.05	-9.53/-10.27	-10.55/-9.33	-9.83/-10.52	-11.44/-13.17	-15.36/-14.42	
Freq(Hz)	6.475GPol.	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°)	0.41/05	1.42/1.41	1.48/1.33	0.89/8.08	0.33/-0.29	-1.32/-2.3	0.89/8.08	-9.05/-13.65	-18.15/-16.06	-10.68/-6.53	-4.26/-2.48	-1.15/-3.07	0.66/1.31	1.33/1.55	2.07/1.87	1.85/1.26	0.84/-0.15	-1.53/-2.97	-4.48/-7.38	-10.55/-18.16	-18/-14.78	-4.99/-5.8	-3.54/-2.05	-0.91/-0.06
Θ(7.5°)	-1.15/-0.72	-0.19/0.27	0.66/0.95	0.53/0.21	-0.01/-0.92	-1.85/-3.22	-3.99/-6.59	-8.09/-11.43	-18.92/-19.24	-13.9/-9.79	-7.45/-5	-3/-1.02	0.38/0.76	0.76/1.08	0.73/0.29	-0.12/-1.1	-1.88/-2.97	-4.53/-5.42	-7.34/-7.94	-10.88/-15.56	-18.19/-18.4	-12.08/-7.83	-4.87/-3.46	-2.48/-1.71
Θ(15°)	-2.14/-1.45	-1.35/-0.93	-0.99/-1.21	-0.74/-1.18	-1.45/-1.31	-2.63/-3.32	-5.1/-5.32	-6.45/-8.6	-11.2/-14.01	-14.87/-11.31	-8.56/-5.91	-3.44/-1.24	-0.15/-0.29	0.44/-0.32	-0.61/-0.81	-2.01/-3.21	-4.91/-7.57	-9.58/-13.04	-15.61/-15.65	-14.07/-12.22	-15.85/-18.74	-14.23/-8.74	-5.53/-4.45	-3.85/-2.93
Θ(22.5°)	-5/-0.5	-3.97/-2.7	-1.94/-1.94	-2.51/-3.32	-5.66/-5.25	-7.31/-4.91	-6.48/-6.5	-7.21/-7.34	-7.54/-10.32	-11.99/-13.58	-12.93/-11.91	-9.76/-6.86	-5.14/-4.34	-3.17/-3.67	-4.28/-6.29	-10.07/-14.27	-15.68/-15.7	-16.61/-12.74	-14.45/-17.44	-18.78/-17.91	-17.97/-15.06	-10.94/-8.16	-6.1/-4.97	-4.5/-6.3
Θ(30°)	-5.52/-6.29	-6.25/-5.98	-4.9/-4.33	-4.3/-4.46	-4.63/-5.12	-5.71/-9.51	-10.42/-9.59	-7.83/-10.78	-8.75/-8.05	-8.72/-9.57	-12.43/-14.55	-10.23/-6.98	-4.56/-3.07	-3.68/-5.09	-7.02/-8.55	-10.42/-11.9	-12.69/-10.81	-10.96/-10.68	-8.72/-7.53	-8.73/-13.54	-10.77/-8.35	-7.89/-6.72	-9.35/-6.92	-3.52/-4.66
Θ(37.5°)	-11.29/-10.91	-14.96/-10.89	-6.07/-3.85	-3.22/-3.28	-4.37/-6.18	-3.7/-1.4	-4.54/-8.38	-7.38/-9.89	-13.07/-12.1	-6.31/-9.74	-8.73/-6.93	-7.55/-6.91	-5.59/-5.5	-4.37/-5.32	-7.16/-12.39	-17.21/-19.19	-5.39/-4.92	-3.81/-5.96	-6.82/-3.97	-4.77/-7.56	-10.29/-9.66	-6.24/-8.08	-6.69/-4.35	-3.98/-0.02
Θ(45°)	-13.04/-6.64	-5.98/-5.38	-4.5/-4.48	-2.77/-3.31	-7.37/-3.67	-7.58/-3.78	-4.07/-2.9	-6.98/-4.65	-7.23/-8.03	-4.72/-9.11	-6.46/-6.09	-5.71/-6.32	-5.55/-2.9	-2.58/-2.53	-3.68/-7.73	-18.33/-9.14	-5.05/-4.18	-3.01/-2.07	-1.68/-3.51	-2.99/-7.75	-13.62/-5.83	-6.26/-7.72	-5.64/-2.74	-4.42/-15.55
Θ(52.5°)	-5.19/-4.65	-4.24/-1.84	-1.18/-1.53	-2.08/-2.26	-3/-3.19	-4.02/-3.83	-2.08/-3.15	-3.96/-4.65	-2.49/-3.7	-5.51/-3.85	-2.47/-8.29	-5.07/-5.44	-2.99/-2.07	-0.94/0.54	-2.39/-8.13	-9.75/-7.1	-3.36/-1.76	0/1.36	1.06/-0.97	-4.07/-7.05	-16.05/-5.28	-12.67/-3.59	-2.46/-6.28	-5.37/-5.35
Θ(60°)	-3.79/-3.93	-6.84/-2.82	-2.21/-2.24	-1.95/-1.46	-2.85/-2.93	-3.37/-2.65	-1.73/-3.15	-2.81/-3.42	-1.45/-1.98	-3.54/-1.31	-1.55/-1.11	-4.48/-6	-4.41/-1.84	2.17/2.06	-1.68/-7.06	-3.55/-4.97	-3.8/-3.1	-0.95/-0.89	-0.45/-0.9	-3.35/-8.36	-11.76/-5.11	-9.21/-13.5	-4.91/-6.65	-2.67/-1.98
Θ(67.5°)	-2.04/-2.7	-5.31/-4.41	-3.74/-3.56	-3.60/-1.84	-1.55/-3.41	-2.45/-2.63	-1.6/-2.69	-4.87/-1.4	-2.27/-1.12	-1.28/0.58	-1.81/-11.5	-3.44/-3.54	-6.92/-2.66	1.952/2.7	-1.68/-4.54	-2.36/-5.1	-7.62/-8.39	-3.71/-3.28	-0.63/-4.55	-5.06/-6.83	-6.49/-7.31	-6.01/-2.54	-10.31/-3.35	-1.43/-2.94
Θ(75°)	-1.65/-3.22	-6.46/-3.5	-2.49/-5.54	-6.78/-2.44	-1.95/-2.06	-2.29/-3.06	-1.56/-2.45	-4.84/-1.2	-1.43/-1.66	-0.13/-1.16	-4.16/-6.85	-3.83/-3.93	-8.34/-5.87	-0.47/2.21	-1.32/-3.01	-1.34/-2.28	-3.39/-1.67	-5.04/-1.85	0.36/-3.09	-6.55/-6.67	-6.69/-7.73	-3.88/-3.02	-11.07/-1.92	-1.42/-2.97
Θ(82.5°)	-1.49/-4.07	-6.82/-2.4	-1.75/-3.59	-7.45/-0.43	-3.2/-16	-2.59/-3.17	-2.72/-3.5	-6.43/-6.1	-1.62/-3.15	0/-1.75	-5.58/-5.5	-3.18/-4.06	-9.74/-10.77	-2.40/25	-4.51/-2.97	-3.27/-2.64	-0.95/-2.07	-5.26/-1.54	0.46/-2.2	-7.8/-8.7	-1.75/-6.09	-4.62/-4.19	-10.16/-9.32	-2.85/-2.38
Θ(90°)	-3/-4.07	-7.99/-2.72	-1.66/-5.25	-6.88/-5.77	-3.47/-2.41	-2.49/-3.46	-3.26/-4.65	-6.59/-8.03	-1.23/-1.98	-7.2/-5.11	-4.08/-6.08	-10.12/-14.56	-5.67/-1.65	-5.65/-15.5	-8.53/-6.96	-2.85/-0.97	-6.85/-2.94	-2.53/-4.56	-11.41/-8.08	-14.51/-4.85	-5.66/-4.16	-5.12/-2.65	-3.32/-4.31	
Θ(97.5°)	-5.05/-5.42	-9/-3.84	-2.2/-5.65	-9.21/-5.81	-3.24/-3.36	-2.16/-4.52	-4.97/-6.22	-7.16/-1.88	-3.69/-5.66	-2.99/-2.21	-6.48/-4.96	-5.09/-8.78	-10.74/-10.75	-6.86/-2.41	-4.16/-6.96	-13.57/-15.65	-5.64/-7.28	-10.86/-9.93	-7.62/-10.67	-17.23/-8.99	-15.97/-6.06	-8.21/-6.74	-5.55/-3.38	-3.93/-5.46
Θ(105°)	-8.46/-6.49	-7.46/-6.58	-5.13/-4.79	-10.77/-6.14	-4.1/-3.32	-3.85/-7.26	-9.21/-6.79	-5.86/-3.41	-3.78/-6.44	-5.35/-2.67	-5.78/-5.84	-7.1/-9.68	-8.51/-13.81	-13.2/-9.29	-5.94/-4.89	-18.06/-14.72	-5.85/-15.05	-12.85/-17.74	-16.71/-11.64	-17.82/-8.19	-14.86/-7.45	-12.2/-12.01	-4.65/-5.84	-4.48/-5.53
Θ(112.5°)	-7.15/-7.75	-9.78/-7.15	-9.03/-13.23	-12.95/-4.77	-5.67/-7.15	-6.58/-9.29	-7.85/-2.22	-5.85/-8.09	-6.72/-8.41	-4.87/-4.62	-5.16/-9.24	-7.96/-10.24	-10.51/-14.1	-18.88/-10.05	-7.98/-17.77	-12.84/-12.27	-8.62/-6.97	-7.69/-9.5	-4.07/-7.5	-14.3/-6.02	-9.52/-9.78	-15.73/-16.74	-6.39/-8.15	-4.96/-6.42
Θ(120°)	-9.07/-10.91	-10.69/-9.19	-7.89/-11.42	-12.64/-8.85	-8.1/-8.13	-8.91/-17.55	-11.31/-7.14	-8.48/-11.17	-8.43/-8.52	-9.19/-5.84	-7.96/-10.37	-12.19/-13.96	-12.02/-16.33	-10.45/-14.3	-18.93/-10.7	-13.76/-18.53	-9.07/-16.03	-17.6/-15.62	-10.26/-9.55	-18/-8.99	-9.16/-10.24	-8.75/-18.17	-8.54/-9.99	-6.46/-6.25
Θ(127.5°)	-9.17/-12.29	-10.51/-6.96	-5.86/-6.28	-8.4/-10.99	-10.66/-11.91	-14.19/-12.14	-9.78/-6.66	-7.31/-8.15	-9.61/-9.9	-17.93/-10.3	-10.92/-15	-16.52/-16.93	-14.76/-11.73	-10.28/-11.5	-17.95/-13.11	-18.03/-8.98	-8/-13.53	-17.26/-18.3	-15.69/-16.45	-9.75/-18.38	-11.67/-9.94	-13.13/-11.64	-8.13/-9.86	-9.74/-10.6
Θ(135°)	-12.41/-10.65	-11.23/-10.88	-7.07/-7.77	-6.37/-10.4	-11.05/-16.09	-15.42/-18.62	-13.23/-7.77	-9.41/-19.03	-15.05/-11.8	-15.37/-17.64	-13.94/-18.7	-19.31/-18.78	-18.8/-15.45	-12.3/-10.93	-16.97/-11.41	-11.33/-17.77	-18.87/-15.09	-10.74/-14.48	-8.08/-7.67	-18.29/-17.45	-10.19/-13.56	-9.59/-7.48	-9.36/-9.28	-10.75/-7.4
Θ(142.5°)	-10.96/-12.51	-10.4/-7	-5.39/-5.73	-7.18/-14.39	-16.51/-15.85	-17.32/-13.98	-12.44/-11.1	-12.83/-12.98	-17.45/-15.05	-19.14/-19.02	-18.11/-18.92	-17.17/-18.41	-17.79/-12.35	-18.39/-19.09	-19.27/-18.09	-18.77/-18.66	-19.47/-18.06	-17.95/-15.03	-15.4/-17.19	-13/-13.21	-18.95/-14.5	-6.81/-6.66	-13.62/-10.81	-11.68/-9.18
Θ(150°)	-15.06/-12.72	-10.96/-9.48	-8.29/-8.34	-8.49/-7.73	-8.49/-10.01	-11.29/-16.6	-14.91/-11.91	-10.82/-16.16	-19.04/-17.67	-19.07/-18	-18.15/-17.99	-17.58/-16.26	-19.01/-16.51	-17.65/-18.52	-14.05/-18.11	-15.84/-16.61	-18.2/-14.31	-10.65/-13.66	-17.59/-19.05	-18.57/-18.62	-14.2/-14.04	-15.53/-15.1	-18.95/-11.51	-11.97/-14
Θ(157.5°)	-14.85/-13.69	-11.75/-10.36	-10.83/-10.08	-9.21/-8.87	-8.2/-8.75	-11.25/-11.75	-11.57/-13.13	-12.39/-13.78	-16.53/-17.39	-19.27/-18.4	-18.16/-18.62	-18.71/-15.84	-17.59/-16.22	-12.31/-11.6	-11.94/-13.66	-13.67/-14.5	-17.36/-15.53	-14.85/-13.75	-15.71/-19.35	-13.76/-12.13	-11.89/-15.06	-19.3/-18.24	-17.76/-19.02	-18.85/-17.71
Θ(165°)	-14.12/-13.33	-12.76/-13.09	-11.89/-11.77	-12.53/-11.72	-12.32/-15.84	-17.31/-17.34	-11.79/-9.36	-9.08/-11.57	-14.61/-15.79	-18.81/-19.21	-18.14/-17.58	-18.89/-15.41	-14.18/-15.69	-16.17/-14.11	-14.15/-15.09	-15.07/-18.82	-							



Radiated Composite Gain Data of Scan Radio_SC Ant1~2

Appendix A.7

Θ(127.5°)	-11.19/-12.24	-11.88/-11.89	-13.69/-12.84	-14.72/-13.36	-15.83/-12.97	-12.84/-12.85	-13.65/-14.15	-13.47/-12.46	-9.96/-9.74	-10.02/-11.68	-16.11/-16.99	-17.4/-15.54	-14.45/-14.81	-13.85/-12.74	-16.12/-14.95	-17.64/-18.01	-17.52/-18.13	-19.24/-18.24	-18.66/-18.27	-17.18/-14.52	-13.06/-14.23	-12.89/-13.62	-14.34/-12.85	-10.67/-11.53
Θ(180°)	-18.7/-18.04	-17.16/-18.99	-18.77/-18.48	-18.87/-18.99	-18.73/-19.38	-15.41/-19.19	-17.22/-15.84	-16.03/-16.58	-18.26/-18.38	-17.7/-18.03	-17.54/-18.97	-18.34/-17.92	-17.65/-16.68	-16.65/-15.41	-17.92/-18.53	-18.34/-17.31	-18.2/-18.36	-18.05/-18.14	-18.61/-18.45	-15.21/-15.81	-15.71/-14.14	-13.08/-15.39	-16.23/-15.67	-15.32/-18.42
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°)	-3.09/-2.46	-2.58/-2.35	-2.54/-2.77	-2.41/-3.18	-3/-3.97	-5.47/-6.83	-9.17/-10.78	-14.54/-17.13	-15.87/-11.27	-8.41/-6.66	-5.01/-3.85	-3.18/-2.33	-1.73/-1.7	-1.27/-1.63	-1.4/-1.56	-2.9/-3.21	-4.5/-5.06	-7.53/-8.11	-11.61/-14.68	-18.81/-17.58	-15.81/-12.64	-10.73/-9.13	-6.82/-5.68	-4.76/-4.03
Θ(7.5°)	-2.66/-1.99	-2.23/-1.96	-2.43/-2.61	-2.53/-3.38	-3.67/-4.36	-5.36/-6.09	-8.54/-10.42	-14.38/-15.6	-11.2/-9.08	-7.11/-5.58	-3.24/-1.71	-0.84/-0.58	-0.55/-0.49	-0.08/-0.9	-0.86/-0.45	-1.46/-2.04	-2.68/-4.35	-5.31/-7.25	-8.04/-11.63	-12.21/-12.6	-8.11/-6.75	-5.67/-5.02	-4.68/-4.03	
Θ(15°)	-2.96/-2.02	-1.13/-1.14	-2.18/-2.68	-3.54/-5.74	-7.43/-9.3	-8.66/-9.19	-7.65/-10.04	-10.76/-12.55	-14.74/-12.41	-9.64/-8.35	-7.24/-6.96	-6.03/-6.17	-5.48/-4.52	-3.82/-3.97	-5.26/-5.9	-5.53/-7.13	-7.24/-8.31	-9.8/-10.24	-12.49/-13.67	-15.08/-14.42	-13.81/-11.05	-8.71/-6.79	-5.6/-5.13	-4.44/-3.96
Θ(22.5°)	-3.22/-2.17	-2.11/-2.98	-3.02/-3.19	-3.32/-3.79	-4.27/-5.29	-6.77/-8.85	-8.44/-8.72	-9.98/-11.85	-13.79/-13.13	-13.7/-15.92	-11.09/-8.15	-6.17/-6.61	-5.98/-4.81	-5.18/-5.75	-7.62/-8.22	-8.38/-9.54	-9.93/-12.26	-15.35/-14.71	-13.48/-13.63	-13.5/-14.82	-15.67/-11.17	-8.76/-7.35	-6.6/-5.53	-5.35/-4.63
Θ(30°)	-9.34/-7.82	-7.46/-5.92	-4.75/-5.03	-5.35/-4.53	-4.36/-4.14	-4.67/-4.88	-5.72/-6.63	-7.58/-6.47	-5.91/-8.02	-12.6/-16.31	-10.49/-9.24	-11.43/-17.9	-12.95/-6.11	-4/-6.25	-6.37/-8	-18.63/-18.85	-14.83/-19.32	-13.92/-6.66	-3.62/-6.4	-11.49/-15.34	-11.61/-10.81	-14.94/-10.98	-6.73/-5.97	-6.9/-10.32
Θ(37.5°)	-5.46/-6.53	-7.72/-5.79	-6.14/-8.23	-7.16/-4.52	-4.47/-4.16	-4.43/-5.29	-4.95/-5.37	-6.36/-5.09	-2.71/-4.01	-11.04/-11.07	-13.14/-17.32	-12.64/-14.48	-12.96/-11.76	-13.54/-13.93	-18.47/-17.56	-17.37/-17.37	-18.38/-13.21	-10.32/-7.07	-2.62/-3.21	-8.4/-10.16	-6.38/-4.87	-13.28/-6.62	-6.09/-6.36	-13.08/-9.48
Θ(45°)	-5.6/-6.01	-4.64/-3.5	-4.46/-4.22	-4.92/-5.62	-5.03/-3.37	-3.39/-3.65	-3.45/-4	-5.03/-3.18	-1.66/-1.79	-3.68/-4.72	-9.09/-5.39	-10.03/-17.49	-14.5/-8.62	-4.59/-3.67	-4.63/-9.89	-14.04/-11.1	-8.26/-11.76	-7.59/-4.23	-3.09/-2.47	-7.96/-9.5	-4.38/-6.56	-9.54/-4.16	-6.97/-8.23	-14.22/-4.48
Θ(52.5°)	-3.94/-3.63	-3.99/-3.58	-4.97/-8.93	-4.95/-2.78	-1.34/-1.81	-1.48/-4.09	-3.57/-1.48	-4.14/-1.28	-2.11/-4.09	-0.87/-5.78	-2.95/-4.12	-11.42/-7.87	-6.92/-4.5	-0.48/-0.49	-0.65/-3.69	-9.85/-6.11	-2.75/-25	-4.25/-0.48	-0.46/-1.5	-6.2/-9.92	-5.07/-5.58	-6.02/-7.76	-8.26/-5.24	-8.28/-3.87
Θ(60°)	-1.96/-2.41	-0.77/-0.01	-4.55/-3.83	-2.5/-2.68	-2.47/-3.43	-2.67/-2.01	-4.8/-1.78	-2.85/-1.25	-1.8/-1.07	0.22/-2.38	-0.6/-6.01	-12.13/-10.09	-13.87/-3.25	1.392/6.4	1.08/-4.12	-10.45/-10.53	-3.36/-4.04	-4.01/-11	0.44/-4.82	-6.67/-7.76	-7.39/-5.35	-4.82/-13.36	-4.25/-2.23	-5.83/-5.52
Θ(67.5°)	-2.68/-2.35	0.22/-0.43	-3.53/-0.15	-0.91/-1.56	-0.91/-3.55	-6.26/-2.94	-4.6/-1.95	-1.32/-2.84	-0.6/-1.57	-1.190.34	-1.04/-9.14	-11.03/-18.63	-12.73/-2.77	1.583/2.22	1.08/-0.6	-2.97/-7.61	-6.01/-9.32	-5.94/-0.87	-0.26/-8.6	-6.28/-9.62	-5.9/-5.74	-4/-14	-1.54/-1.6	-3.96/-2.5
Θ(75°)	-3.89/-2.55	0.29/-0.45	-3.99/-0.49	-0.72/-1.79	-0.86/-3.49	-4.95/-5.56	-7.09/-3.04	-2.84/-2.23	-1.14/-1.68	-2.480.94	-1.78/-5.19	-7.29/-7.88	-7.7/-5.04	-0.07/-2.83	1.080.43	-1.48/-6.75	-11.86/-6.97	-4.73/-2.37	-10.4/-8.17	-6.37/-7.79	-4.78/-6.42	-5.72/-8.12	-1.52/-1.66	-3.35/-2.9
Θ(82.5°)	-4.39/-2.59	-0.3/-0.66	-5.14/-1.42	-2.64/-1.5	-1.9/-2.67	-5.99/-4.55	-6.85/-3.83	-3.4/-2.57	-1.85/-2.64	-2.430.46	-3.41/-3.29	-5.41/-4.76	-7.06/-6.61	-1.54/-2.29	-0.18/-2.23	-2.54/-7.44	-9.29/-1.93	-10.47/-1.13	0.97/-12.57	-5.91/-7.84	-5.52/-7.37	-7.98/-7.56	-2.53/-2.17	-2.59/-2.89
Θ(90°)	-4.83/-4.32	-1.59/-1.63	-7.31/-4.1	-4.11/-3.63	-2.43/-2.84	-5.56/-5.94	-6.9/-2.48	-5.14/-6.22	-3.25/-3.91	-2.61/-0.4	-2.89/-4.34	-4.56/-6.17	-8.13/-10.45	-6.34/-0.55	-1.39/-4.66	-6.7/-9.51	-9.19/-2.07	-11.8/-2.26	-0.26/-11.91	-8.49/-9.6	-6.42/-1.15	-9.54/-8.32	-3.27/-2.87	-3.22/-3.49
Θ(97.5°)	-5.42/-4.11	-3.13/-2.95	-7.08/-7.28	-6.17/-6.5	-5.99/-3.73	-11.01/-5.72	-6.73/-4.96	-4.68/-2.13	-4.2/-4.04	-3.55/-1.05	-4.55/-4.5	-5.34/-11.26	-8.87/-14.25	-7.62/-1.15	-2.14/-4.73	-12.52/-11.74	-10.45/-8.04	-10.37/-7.89	-4.17/-16.84	-10.37/-9.95	-6.42/-7.13	-9.06/-8.6	-2.96/-4.97	-3.19/-3.4
Θ(105°)	-5.86/-5.37	-4.64/-6.24	-4.62/-4.75	-6.58/-8.93	-8.65/-10.71	-11.02/-6.75	-8.85/-5.76	-4.68/-3.46	-2.91/-3.3	-6.41/-2.32	-4.38/-5.93	-8.68/-10.36	-7.71/-17.71	-12.31/-4.96	-4.8/-11.09	-11.99/-12.86	-11.98/-10.41	-15.98/-18.03	-13.59/-12.7	-16.54/-10.4	-9.26/-9.38	-8.43/-6.3	-2.14/-3.91	-3.67/-3.15
Θ(112.5°)	-6.78/-7.72	-6.53/-7.97	-7.18/-6.43	-6.71/-8.36	-5.6/-7.75	-7.04/-8.63	-7.14/-8.63	-5.01/-5.56	-4.42/-2.79	-14.6/-4.29	-6.71/-9.48	-12.18/-10.69	-9.77/-9.37	-18.21/-11.47	-10.18/-6.5	-10.11/-15.83	-9.07/-7.33	-8.27/-8.2	-8.38/-12.72	-17.99/-7.77	-9.24/-17.38	-19.19/-5	-2.99/-3.92	-5.78/-4.18
Θ(120°)	-8.64/-8.65	-6.28/-6.52	-12.43/-9.81	-10.61/-12.54	-10.76/-8.11	-10.24/-16	-7.22/-6.12	-11.59/-12.57	-10.62/-9.79	-8.63/-7.18	-17.74/-12.2	-11.58/-8.46	-8.59/-17.29	-15/-13.99	-17.33/-12.99	-17.47/-13.53	-11.47/-8.97	-9.23/-13.26	-13.11/-6.14	-5.48/-6.46	-8.94/-9.88			
Θ(127.5°)	-13.26/-15.17	-9.03/-8.93	-15.64/-14.66	-12.38/-16.48	-14.26/-13.65	-13.2/-13.99	-11.78/-8.18	-18.22/-5.2	-13.26/-8.52	-10.28/-19.5	-10.84/-19.22	-11.46/-16.35	-11.27/-9.61	-13.86/-14.7	-16.5/-11.5	-9.67/-18.05	-14.42/-10.91	-11.99/-14.54	-16.03/-18.33	-14.19/-18.14	-18.73/-12.27	-8.12/-10.93	-9.87/-12.27	-11.24/-11.53
Θ(135°)	-12.24/-19.19	-14.67/-14.08	-10.79/-11.65	-12.72/-9.39	-9.86/-11.76	-10.76/-9.93	-10.94/-19.07	-12.61/-7.85	-11.34/-14.59	-12.26/-18.33	-17.98/-15.33	-18.02/-14.75	-18.03/-17.45	-19.06/-16.79	-18.74/-12.49	-9.15/-19.57	-17.33/-13.44	-11.76/-16.73	-12.83/-14.84	-16.32/-16.16	-18.54/-15.35	-9.41/-11.19	-12.61/-11.25	-14.28/-14.59
Θ(142.5°)	-14.67/-16.64	-18.91/-14.51	-17.16/-18.31	-9.73/-9.82	-8.21/-12.23	-12.86/-13.5	-16.1/-16.99	-17.97/-10.86	-4.46/-13.52	-13.93/-13.26	-16.82/-17.33	-18.06/-18.98	-14.09/-18.12	-14.51/-18.74	-10.41/-13.61	-18.44/-17.25	-17.04/-19.14	-19.05/-17.75	-17.98/-19.15	-17.66/-13.31	-15.09/-9.33	-9.74/-17.95	-16.94/-11.63	-15.85/-17.88
Θ(150°)	-14.92/-12.63	-12.94/-15.08	-9.7/-7.95	-11.01/-14.28	-16.01/-18.64	-18.89/-19.38	-18.8/-19.06	-14.09/-11.96	-14.21/-18.87	-16.11/-18.35	-15.77/-14.42	-18.24/-18.79	-18.91/-18.54	-17.64/-17.71	-17.42/-16.36	-18.58/-19.25	-18.29/-10.63	-11.58/-18.52	-18.55/-18.59	-19.09/-17.83	-18.46/-17.91	-18.84/-15.01	-14.7/-10.62	-15.72/-18.34
Θ(157.5°)	-15.48/-13.47	-11.24/-9.43	-10.99/-13.46	-13.64/-16.99	-17.67/-17.39	-15.05/-13.73	-14.03/-14.69	-19/-16.39	-12.47/-10.72	-12.78/-10.71	-17.07/-16.74	-19.04/-18.25	-18.89/-17.64	-18.5/-18.64	-17.53/-17.84	-18.25/-17.38	-19.06/-19.18	-18.1/-19.26	-17.71/-13.38	-19.01/-18.59	-15.07/-18.56	-19.22/-17.78	-18.86/-16.93	-15.79/-14.46
Θ(165°)	-19.07/-18.85	-16.67/-15.41	-13.41/-11.83	-13.5/-14.22	-18.09/-14.53	-16.83/-14.39	-18.91/-18.25	-18.6/-18.29	-17.16/-16.49	-14.74/-13.91	-14.78/-16.52	-17.45/-19.15	-18.39/-16.34	-18.19/-19.8	-18.76/-18.63	-18.15/-16	-12.85/-15.22	-17.58/-15.58	-12.76/-11.11	-11.75/-14.45	-18.37/-18.98	-18.37/-19.55	-17.86/-19.1	
Θ(172.5°)	-18.68/-18.44	-18.98/-19.24	-18.23/-18.32	-18.81/-18.53	-19.28/-17.76	-18.89/-17.86	-16.94/-17.52	-14.5/-14.19	-18.26/-19.12	-16.98/-14.86	-13.78/-15.33	-17.77/-18.05	-18.34/-17.93	-17.42/-18.54	-13.68/-11.43	-10.08/-11.16	-11.59/-11.78	-12.27/-12.63	-14.1/-13.07	-14.69/-15.52	-17.99/-17.21	-17.5/-15.86	-15.95/-16.44	-16.52/-18.19
Θ(180°)	-18.84/-16.51	-14.58/-16.68	-15.58/-13.46	-14.42/-14.28	-15.18/-14.84	-19.08/-17.87	-17.98/-18.91	-17.83/-16.81	-15.94/-14.6	-14.29/-16.42	-18.8/-14.49	-18.63/-18.06	-18.8/-18.08	-17.45/-18.09	-17.19/-17	-15.5/-13.5	-12.8/-14.14	-12.03/-12.47	-13.98/-16.43	-17.79/-18.14	-18.68/-18.18	-18.19/-18.19	-17.46/-18.99	-17.67/-19.14
Freq(Hz)	2.45GPol.	Phi/Ant. 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°)	-13.97/-14.59	-13.57/-11.2	-9.02/-7.11	-5.61/-4.6	-3.59/-2.82	-2.15/-1.62	-1.28/-1.11	-1.2/-1.58	-2.2/-2.91	-3.64/-4.6	-5.59/-7.31	-9.84/-13.58	-17.96/-18	-13.97/-10.85	-8.47/-6.68	-5.34/-4.31	-3.43/-2.7	-2.16/-1.92	-1.9/-1.97	-2.1/-96	-2.1/-2.49	-3.12/-4.13	-5.64/-7.59	-9.86/-12.16
Θ(7.5°)	-13.83/-12.53	-12.10/-10.17	-9.26/-8.08	-6.81/-5.65	-4.72/-3.98	-2.91/-2.13	-1.47/-0.98	-0.71/-0.75	-1.04/-1.49	-2.06/-2.78	-5.98/-7.54	-15.83/-14.52	-10.18/-7.31	-5.69/-4.13	-3.35/-2.85	-2.5/-2.25	-2.21/-2.39	-2.84/-3.41	-3.91/-4.32	-5.43/-5.06	-3.85/-4.35	-17.99/-9.76	-11.98/-13.78	
Θ(15°)	-17.8/-15.68	-13.2/-11.65	-10.59/-9.38	-7.89/-6.58	-5.61/-4.69	-3.7/-2.73	-1.83/-1.05	-0.45/-0.16	-0.11/-0.32	-0.77/-1.62	-3.14/-5.73	-10.08/-17.93	-14.76/-9.03	-5.83/-4.01	-2.85/-2.13	-1.76/-1.68	-1.73/-1.87	-2.17/-2.76	-3.59/-4.52	-5.55/-6.63	-7.47/-7.82	-7.98/-8.49	-9.79/-11.64	-14/-17.01
Θ(22.5°)	-17.5/-17.93	-19.33/-17.42	-14.26/-1																					



Radiated Composite Gain Data of Scan Radio_SC Ant1~2

Appendix A.7

Θ(22.5°)	2.16/1.69	1.84/2.03	1.43/0.84	0.57/0.64	0.53/0.19	-0.55/-1.99	-4.81/-10.2	-17.14/-12.48	-9.88/-8.93	-8.43/-7.16	-4.71/-3.1	-2.01/-0.44	0.73/1.24	1.39/1.3	1.22/1.14	0.83/0	-1.08/-2	-3.33/-5.37	-8.09/-10.67	-12.17/-9.92	-6.49/-3.48	-1.7/-0.13	1.28/2.03	2.23/2.38
Θ(30°)	0.69/0.71	1.06/1.42	1.22/1.13	1.52/2.05	1.99/1.07	-0.09/-1.42	-4.1/-9.34	-19.21/-17.48	-14.09/-14.39	-14.85/-15.63	-14.7/-11.6	-9.23/-6.38	-3.24/-2.21	-2.22/-1.88	-1.76/-2.05	-2.78/-3.31	-2.71/-2.57	-3.57/-5.89	-7.66/-8.83	-10.25/-10.59	-8.69/-5.13	-2.24/-0.89	-0.6/-0.6	-6.63/-0.14
Θ(35°)	-2.13/-1.55	-0.47/0.58	0.61/0.62	0.76/1.86	3.04/2.72	1.23/-0.93	-4.33/-9.16	-13.34/-17.3	-15.92/-12.48	-10.37/-10.48	-14.43/-18.86	-16.14/-12.38	-7.53/-5.62	-6.89/-4.89	-3.39/-3.65	-6.34/-9.12	-6.38/-4.05	-5.09/-7.48	-8.09/-7.26	-8.56/-12.37	-13.75/-9.83	-6.02/-4.95	-6.01/-6.96	-5.51/-1.72
Θ(45°)	-2.36/-2.55	-1.55/0.32	0.17/-0.37	-1.19/-0.86	0.54/1.62	1.13/-1.18	-5.58/-9.04	-7.94/-7.01	-6.66/-6.3	-7.05/-9.86	-14.29/-19.06	-12.97/-8.66	-7.61/-8.44	-13.73/-9.99	-6.64/-5.24	-4.77/-6.92	-7.16/-6.43	-8.41/-10.01	-9.46/-8.86	-10.05/-10.37	-10.4/-9.3	-6.66/-5.4	-4.18/-2.05	-0.87/-1.69
Θ(52.5°)	-0.76/-0.82	-3.56/-3.69	-2.94/-3.16	-2/-1.86	-3.57/-1.82	-1.2/-2.98	-6.74/-7.89	-4.76/-3.26	-3.45/-5.13	-9.33/-16.53	-13.91/-10.43	-7.11/-6.05	-8/-13.01	-14.25/-15.1	-13.54/-17.6	-5.52/-5.81	-5.52/-6.96	-15.8/-15.88	-14.39/-13.04	-4.32/-5.9	-7.01/-7.1	-5.07/-2.84	-2.06/-1.23	-0.82/-1.09
Θ(60°)	-1.02/0.7	-0.18/-2.06	-2.2/-4.53	-9.87/-2.28	-3.33/-4.01	-3/-5.39	-9.2/-8.57	-4.24/-3.18	-3.8/-7.82	-18.99/-12.43	-9.25/-4.44	-2.09/-3.08	-5.63/-11.14	-10.98/-7.78	-5.7/-5.07	-7.05/-7.78	-4.4/-7.89	-16.63/-13.61	-18.07/-18.23	-8.05/-1.99	-8.84/-9.18	-6.92/-6.75	-6.57/-5.38	-4.1/-2.79
Θ(67.5°)	-0.84/1.82	2.33/-0.01	-0.52/-2.8	-8.06/-2.34	-2.77/-6.25	-6.09/-9.98	-13.28/-9.68	-4.11/-3.64	-4.21/-8.74	-10.89/-7.86	-8.19/-2.86	-0.92/-3.89	-6.77/-10.45	-8.28/-5.22	-4.3/-3.3	-4.29/-8.67	-5.98/-12.28	-11.97/-11.32	-19.11/-17.44	-5.58/-3.57	-9.39/-9.41	-8.44/-9.06	-8.77/-5.61	-2.57/-1.66
Θ(75°)	-1.75/0.97	1.83/-0.14	-0.93/-1.57	-7.45/-3.16	-3.34/-8.14	-8.89/-14.5	-13.78/-9.54	-4.01/-1.45	-4.13/-9.07	-6.14/-5.08	-6.97/-2.31	-1.45/-4.5	-8.02/-11.12	-8.58/-5.86	-4.61/-2.69	-3.24/-8.15	-5.65/-13.3	-11.25/-10.93	-18.49/-17.81	-4.53/-3	-8.22/-9.47	-11.26/-14.19	-11.17/-5.63	-2.36/-1.33
Θ(82.5°)	-2.37/-0.84	-0.6/-2.67	-2.4/-1.49	-5.83/-5.28	-6.26/-12.08	-10.57/-15.18	-11.56/-10.94	-5.04/-5.84	-4.29/-6.72	-4.26/-4.52	-5.68/-1.65	-2.34/-5.39	-16.46/-12.76	-9.52/-5.86	-5.63/-3.71	-5.51/-8.53	-4.48/-11.33	-18.7/-12.49	-14.8/-10.54	-3.64/-2.56	-5.05/-6.11	-11.39/-16.48	-10.88/-5.64	-3.12/-1.8
Θ(90°)	-3.36/-2.45	-2.97/-5.22	-6.56/-2.99	-5.62/-7.55	-8.59/-18.32	-13.49/-14.12	-10.03/-11.77	-6.12/-7.73	-4.54/-6	-3.59/-3.97	-6.45/-2.33	-3.43/-6.09	-11.5/-13.78	-11.71/-7.97	-5.71/-4.03	-5.85/-12.55	-6.82/-10.92	-17.77/-17.27	-11.91/-10.3	-4.35/-3.96	-5.05/-5.55	-9.78/-16.91	-11.95/-7.28	-5.58/-4.07
Θ(97.5°)	-4.6/-4.03	-6.6/-7.37	-9.16/-6.11	-7.74/-10.78	-9.96/-14.5	-18.93/-18.09	-11.47/-14.88	-7.52/-9.22	-5.45/-6.49	-3.81/-5.11	-7.22/-3.8	-5.49/-8.3	-9.54/-11.19	-13.76/-11.63	-6.49/-4.75	-6.84/-17.21	-11.57/-8.68	-12.43/-18.94	-13.44/-12.93	-6.74/-6.19	-6.43/-6.83	-12.5/-14.72	-9.7/-5.94	-6.68/-5.6
Θ(105°)	-8.69/-5.98	-8.14/-8.37	-10.15/-16.43	-12.31/-13	-11.51/-16.81	-18.33/-18.43	-15.21/-15.67	-9.2/-9.48	-6.81/-7.66	-5.21/-6.24	-9.38/-5.14	-5.94/-11.01	-10.98/-13.6	-15.04/-12.95	-9.08/-5.83	-5.92/-15.97	-13.43/-10.2	-12.82/-19.39	-18.76/-18.9	-14.33/-8.77	-11.27/-10.81	-18.88/-18.84	-10.43/-7.36	-11.37/-9.36
Θ(112.5°)	-12.55/-6.81	-9.97/-11.17	-9.64/-14.08	-18.13/-17.43	-12.68/-18.64	-17.44/-16.4	-18.3/-15.97	-11.73/-12.49	-11.53/-10.9	-9.75/-9.38	-10.25/-7.35	-7.5/-12.44	-14.27/-17.61	-14.49/-12.75	-10.99/-7.6	-8.63/-12.9	-12.08/-10.99	-15.41/-18.27	-17.5/-19.26	-17.66/-12.18	-11.54/-11.57	-15.97/-15.69	-12.42/-10.3	-18.84/-13.76
Θ(120°)	-9.33/-7.94	-7.68/-12.61	-12.11/-11.11	-15.83/-17.43	-14.68/-18.84	-15.49/-10.5	-18.81/-15.41	-11.85/-13.74	-10.56/-10.12	-12.01/-9.07	-12.14/-10.17	-10.65/-16.33	-15.64/-14.2	-8.99/-11.78	-11.1/-12.44	-12.41/-16.21	-15.86/-17.5	-17.96/-15.63	-16.67/-10.35	-12.96/-13.29	-15.48/-13.55	-17.33/-14.95	-17.33/-14.95	
Θ(127.5°)	-13.22/-11.42	-10.03/-13.73	-17.5/-12.93	-17.73/-18.72	-15.94/-18.18	-18.69/-13.21	-18.34/-16.14	-11.43/-14.94	-11.21/-9.71	-11.24/-9.74	-10.56/-13.46	-11.31/-15.03	-13.88/-15.25	-10.64/-13.44	-11.85/-12.55	-17.81/-17.66	-14.29/-15.83	-18.69/-17.03	-16.2/-18.24	-18.1/-17.5	-18.31/-18.79	-19.13/-17.77	-12.18/-11.14	-14.49/-17.37
Θ(135°)	-15.15/-13.85	-10.42/-12.26	-17.1/-18.69	-18.24/-18.09	-18.83/-18.87	-17.73/-18.48	-18.1/-17.09	-15.16/-19	-17.85/-14.58	-15.69/-12.44	-11.47/-12.52	-16.43/-17.62	-18.87/-17.34	-17.56/-18.47	-18.86/-19.22	-19.1/-19.02	-12.94/-18.11	-15.69/-17.72	-14.5/-19.18	-18.07/-17.5	-19.29/-17.6	-18.09/-17.8	-14.81/-14.96	-18.59/-17.82
Θ(142.5°)	-11.41/-8.3	-10.42/-15.57	-18.6/-18.75	-18.84/-18.56	-13.36/-15.25	-17.49/-18.4	-17.68/-18.23	-18.3/-18.53	-17.06/-17.76	-14.91/-17.06	-18.1/-16.39	-18.1/-16.39	-17.16/-17.5	-18.53/-18.64	-17.79/-18.96	-18.48/-18.77	-18.93/-17.03	-16.64/-17.31	-19.1/-19.36	-16.67/-18.06	-18.48/-19.4	-18/-15.52	-13.31/-18.25	-17.05/-14.85
Θ(150°)	-18.04/-13.1	-12.21/-14.27	-18.39/-17.43	-18.89/-18.44	-16.91/-18.07	-19.17/-18.62	-18.74/-18.47	-18.37/-18.68	-19.82/-14.16	-18.81/-17.59	-15.42/-13.42	-18.44/-18.84	-18.85/-18.52	-18.59/-19.01	-18.15/-19.2	-17.77/-18.45	-18.38/-18.92	-19.95/-18.26	-18.22/-18.25	-16.35/-18.79	-19/-17.62	-16.35/-17.14	-17.67/-16.82	
Θ(157.5°)	-15.08/-16.58	-15.61/-17.56	-17.25/-19.01	-18.19/-16.11	-14.92/-15.03	-17.05/-19.79	-17.77/-18.98	-17.51/-18.25	-18.19/-18.05	-18.95/-18.49	-17.02/-17.99	-19.04/-17.25	-16.68/-18.86	-17.53/-18.94	-18.83/-18.73	-17.57/-17.98	-19.2/-18.94	-17.47/-19.04	-18.73/-18.22	-17.65/-19.03	-17.85/-18.23	-18.81/-18.04	-18.53/-17.62	-15.66/-13.26
Θ(165°)	-19.25/-17.89	-18.49/-18.02	-18.96/-17.41	-18.52/-18.17	-18.06/-18.36	-19.19/-18.37	-18.55/-17.66	-19.27/-17.27	-18.93/-18.54	-18.66/-19.05	-19.13/-18.81	-15.93/-15.99	-19.49/-18.69	-18.94/-19.21	-19.32/-19.01	-17.35/-16.06	-16/-16.54	-17.51/-16.61	-19.31/-19.06	-18.53/-18.04	-18.72/-18.18	-19.17/-18.9	-19.04/-17.49	-18.18/-19.01
Θ(172.5°)	-16.89/-15.86	-16.94/-17.33	-18.27/-18.67	-17.72/-17.24	-17.79/-18.59	-17.98/-19.07	-17.58/-18.61	-18.5/-18.03	-18.63/-19.14	-17.78/-18.78	-18.84/-18.32	-18.13/-18.24	-17.71/-18.79	-19.23/-17.76	-15.97/-14.51	-14.37/-15.48	-17.21/-17.18	-18.89/-18.16	-18.26/-17.69	-18.82/-18.68	-17.79/-17.3	-18.23/-19.12	-18.28/-16.67	-16.74/-18.01
Θ(180°)	-18.5/-19.03	-19.13/-18.65	-17.87/-17.3	-18.68/-17.89	-17.6/-18.43	-18.7/-18.1	-16.44/-17.32	-18.76/-17.68	-18.12/-18.82	-17.88/-19.2	-17.91/-17.24	-19.01/-18.88	-18.72/-17.88	-16.44/-15.26	-15.8/-16.58	-17.33/-19.07	-17.95/-18.38	-19.13/-18.1	-18.57/-18.89	-17.96/-19.27	-18.25/-16.64	-15.95/-16.75	-18.83/-17.43	-18.5/-17.96
Freq(Pol)	5.3GPol	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°)	-9.65/-14.23	-15.63/-12.08	-8.66/-5.8	-3.59/-1.95	-0.9/-0.01	0.73/1.16	1.34/1.33	1.01/0.75	0.62/0.61	0.33/-0.38	-1.64/-3.18	-4.61/-6.66	-9.28/-13.3	-15.34/-13.12	-9.25/-6.48	-4.36/-2.87	-1.48/-0.43	0.5/1.1	1.5/1.71	1.84/1.76	1.52/1.01	0.43/-0.36	-1.29/-2.33	-0.65/-0.92
Θ(7.5°)	-8.69/-12.67	-11.1/-7.6	-4.62/-2.49	-0.9/-39	1.21/1.68	1.91/95	1.91/77	1.43/1.02	0.53/0.32	0.28/0.31	-1.62/-3.7	-6.45/-8.53	-10.11/-12.36	-12.41/-10.25	-7.73/-5.49	-4.1/-2.67	-1.11/0.04	0.99/1.77	2.35/2.69	2.85/3.01	2.95/2.48	1.68/0.87	-0.13/-1.29	-3/-5.36
Θ(15°)	-11.01/-10.98	-12.88/-7.14	-4.45/-2.84	-1.43/-0.06	1.27/1.92	2.28/2.36	2.23/1.99	1.63/1.3	1.08/0.8	0.42/-0.4	-2.01/-4.3	-6.72/-9.91	-9.91/-11.02	-12.02/-11.43	-9.62/-5.58	-4.99/-3.52	-1.93/-0.82	0.11/0.2	1.58/1.78	2.15/2.42	2.43/2.32	1.80/0.96	-0.01/-1.46	-3.43/-6.29
Θ(22.5°)	-4.69/-9.89	-18.43/-7.12	-3.7/-2.65	-1.65/-0.66	0.09/0.61	1.51/2.13	2.41/1.84	1.16/0.85	0.56/0.02	-0.99/-2.07	-3.02/-3.79	-4.95/-6.87	-9.74/-14.97	-15.68/-11.74	-8.61/-6.33	-3.43/-1.61	-0.95/-0.26	0.81/7.7	2.52/3.16	3.57/3.3	2.38/0.88	-0.79/-2.35	-3.28/-3.25	-2.62/-2.96
Θ(30°)	-5.28/-8.38	-15.83/-7.85	-4.35/-3.74	-3.45/-2.64	-1.86/-1.18	-0.03/1.4	2.08/1.98	1.46/0.54	-0.4/-1.45	-2.47/-3.35	-3.2/-7.2	-3.45/-6.16	-10.27/-13.41	-10.79/-7.8	-5.2/-3.34	-1.4/-0.21	0.02/0.55	1.57/2.07	1.79/2.01	2.49/2.6	2.39/2.09	1.53/0.06	-2.44/-5.8	-7.54/-5.93
Θ(37.5°)	-9.47/-12.25	-18.99/-13.48	-9.23/-8.74	-9.36/-5.22	-1.93/-1.28	-0.80/85	1.18/1.19	0.85/-0.87	-2.29/-2.44	-3.04/-4.88	-5.43/-5.26	-5.73/-7.87	-9.86/-10.21	-10.4/-6.99	-7.73/-5.44	-2.75/-1.41	-1.46/-0.27	1.54/1.46	0.85/-0.07	-0.57/0.62	1.68/1.26	0.11/-0.91	-3.11/-7.16	
Θ(45°)	-12.64/-17.59	-17.84/-18.75	-12.84/-6.53	-7.29/-5.32	-1.16/-0.39	0.06/2	1.62/0.9	0.41/-2.5	-4.11/-3.05	-3.83/-5.58	-7.22/-8.79	-9/-9.55	-10.73/-12.64	-18.64/-15.11	-9.36/-7.42	-4.96/-2.67	-2.06/-0.26	1.87/2.41	1.68/0.87	-0.36/-1.63	-1.05/0.14	-0.39/-2.45	-3.67/-1.98	-2.76/-4.49
Θ(52.5°)	-10.11/-13.15	-15.09/-13.94	-10.03/-4.7	-4.76/-4.04	0.11/0.2	1.11/2.32	0.6/-1.32	-2.07/-6.57	-4.69/-4.14	-5.15/-6.11	-6.28/-3.52	-6.99/-12.46	-13.1/-14.96	-18.9/-18.39	-12.3/-10.06	-7.1/-5.28	-2.45/-2.29	-0.14/0.59	0.59/0.07	-0.69/-0.53	-1.17/-1.57	-2.24/-2.22	-4.59/-4.38	-4.02/-5.95
Θ(60°)	-7.58/-15.6	-16.49/-11.34	-11.67/-5.16	-3.54/0.06	-0.96/-0.51	0.522/0.99	0.89/-1.7	-3.2/-6.88	-5.93/-5.15	-6.99/-7.27	-6.84/-5.12	-7.33/-17.39	-16.09/-13.22	-16.15/-15.6	-9.68/-8.63	-10.3/-12.41	-4.86/-4.05	-2.4/0.06	0.82/0.23	0.11/0.78	-1.51/-1.82	-0.93/-1.51	-1.29/3	-5.86/-6.07
Θ(67.5°)	-5.54/-12.66	-18.38/-15.44	-11.59/-6.09	-4.87/-5.78	-3.39/-2.37	0.05/0.83	-0.52/-4.33	-5.89/-8.91	-5.42/-4.4	-6.49/-7.26	-6.92/-5.13	-10.06/-18.79	-18.53/-19.04	-12.55/-13.3	-13.19/-17.33	-7.24/-6.29	-2.84/-0.89	-0.01/-0.44	0.28/1.26					



Radiated Composite Gain Data of Scan Radio_SC Ant1~2

Appendix A.7

Θ(67.5°)	2.04/3.33	3.69/2.87	1.64/-1.04	0/1.36	-0.98/-1.28	-3/-0.67	0.95/-1.38	-0.44/0.17	-3.15/-4.89	-9.58/-9.07	-3.89/-1.54	0.03/-0.79	-5.41/-12.81	-8.4/-10.2	-6.59/-3.25	-0.15/-1.51	-6.18/-6.15	-5.35/-5.19	-9.78/-16.41	-6.63/-4.33	-8.53/-5.94	-3.24/-1.77	-5.43/-3.96	-0.47/-1.16
Θ(75°)	1.14/2.82	3.6/2.84	1.21/-2.11	-1.41/0.92	-3.13/-4.09	-5.67/-3.47	0/-1.17	-1.92/-4.74	-3.58/-4.37	-9.63/-9.41	-5.04/-4.13	-2.11/-4.09	-9.12/-14.09	-8.54/-13.62	-9.37/-4.98	-2.08/-3.62	-3.65/-3.48	-5.87/-7.41	-11.04/-18.8	-7.22/-4.11	-6.95/-5.67	-5.49/-5.6	-10.79/-5.16	-1.42/-3.13
Θ(82.5°)	-1.40/2.91	2.09/0.7	-0.25/-2.79	-2.55/-0.7	-5.09/-7.62	-8.66/-7.51	-1.64/-1.9	-3.16/-1.86	-4.38/-4.77	-10.76/-11.86	-6.34/-4.95	-3.61/-6.81	-12.51/-16.17	-12.53/-13.21	-9.79/-6.63	-5.26/-6.57	-3.26/-2.78	-7.32/-7.99	-6.88/-16	-6.29/-4.23	-4.97/-5.09	-8.63/-11.73	-15.87/-5.99	-2.33/-1.69
Θ(90°)	-4.41/-1.6	-0.96/-1.62	-0.95/-3.07	-6.21/-3.18	-7.22/-8.96	-8.91/-13.44	-4.65/-3.4	-5.76/-2.94	-4.93/-5.59	-9.38/-13.04	-7.71/-6.69	-7.21/-8.56	-15.18/-12.11	-12.76/-13.91	-10.64/-9.47	-7.28/-11.16	-3.27/-3.53	-9.76/-11.13	-7.41/-14.94	-6.94/-4.73	-5.78/-6.9	-11.27/-17.28	-18.25/-8.4	-4.45/-3.79
Θ(97.5°)	-8.57/-4.23	-4.61/-9.3	-2.36/-3.48	-9.66/-7.12	-11.17/-9.91	-6.66/-16.72	-7.91/-5.66	-8.37/-3.59	-6.22/-8.54	-12.73/-16.99	-10.45/-9.45	-10.66/-14.24	-18.44/-16.71	-19.21/-15.08	-9.92/-10.11	-8.61/-15.46	-3.74/-6.6	-14.92/-9.19	-8.78/-19.3	-11.48/-6.84	-6.63/-10.11	-13.87/-16.21	-17.84/-10.79	-6.69/-6.04
Θ(105°)	-9.93/-4.97	-4.42/-6.58	-4.31/-4	-14.05/-14.21	-13.21/-11.3	-6.62/-15.53	-11.15/-8.96	-15.46/-6.73	-8.19/-11.09	-14.39/-15.22	-9.84/-13.39	-14.18/-15.7	-16.48/-13.24	-9.54/-10.95	-8.07/-17.36	-8.22/-12.41	-19.33/-9.61	-13.33/-17.72	-15.07/-7.16	-8.51/-16.44	-15.68/-7.55	-16.86/-7.55	-8.09/-8.5	
Θ(112.5°)	-13.19/-6.67	-4.9/-7.21	-10.79/-8.39	-11.47/-7.94	-10.57/-17.87	-14.76/-11.86	-6.91/-6.53	-11.93/-13.14	-11.51/-12.63	-12.24/-15.09	-17/-13.21	-9.42/-13.61	-13.54/-17.67	-16/-13.97	-11.83/-15.62	-13.05/-17.53	-12.17/-16	-11.42/-10.22	-17.44/-18.36	-18.17/-8.55	-9.19/-14.12	-18.48/-16.61	-13.08/-8.03	-10.49/-16.47
Θ(120°)	-18.22/-7.54	-9.11/-10.59	-18.19/-11.76	-9.14/-11.05	-8.84/-18.28	-12.34/-17.9	-10.52/-9.98	-14.11/-10.97	-11.02/-16.95	-12.16/-17.66	-19.17/-16.92	-11.49/-9.96	-18.91/-18.57	-17.96/-17.89	-19.03/-15.63	-10.95/-14.97	-18.15/-9.88	-11.67/-9.23	-17.49/-17.82	-18.3/-7.5	-8.07/-11.7	-17.98/-18.64	-12.25/-7.02	-10.85/-13.78
Θ(127.5°)	-9.48/-6.54	-6.75/-11.29	-18.17/-11.15	-8.96/-13.52	-18.17/-15.98	-9.61/-16.14	-15.68/-16.18	-18.66/-8.78	-9.96/-17.96	-18.77/-18.36	-17.51/-15.81	-18.05/-17.89	-18.31/-18.06	-18.16/-17.98	-14.91/-12.5	-10.48/-13.59	-18.55/-13.15	-8.93/-12.09	-18.32/-19.46	-17.23/-15.44	-10.08/-15.28	-13.9/-16.22	-14.52/-12.1	-15.78/-17.51
Θ(135°)	-9.33/-6.56	-5.71/-9.97	-18.02/-13.74	-9.4/-16.3	-18.97/-18.15	-17.85/-17.44	-16.53/-11.74	-14.32/-15.71	-13.77/-18.03	-18.71/-8.7	-16.38/-12.93	-11.22/-16.52	-19.17/-17.9	-13.62/-15.15	-15.21/-19.06	-15.21/-9.41	-18.52/-18.54	-9.01/-9.62	-19.23/-18.4	-14.13/-18.68	-16.06/-19.41	-18.52/-9.61	-11.28/-9.99	-17.59/-19.27
Θ(142.5°)	-9.75/-7.27	-12.94/-19.13	-18.52/-16.65	-18.17/-18.1	-18.95/-13.19	-15.59/-18.83	-18.97/-18.01	-18.42/-19.64	-17.93/-18.51	-18.02/-14.51	-15.35/-18.43	-12.32/-13.32	-18.03/-14.9	-16.14/-17.4	-19.22/-14.46	-18.31/-18.1	-15.97/-16.68	-11.64/-11.43	-14.28/-18.24	-18.97/-13.73	-16.62/-17.09	-17.66/-13.4	-13.52/-14.52	-15.45/-15.27
Θ(150°)	-1.13/-9.9	-9.86/-14.9	-18.92/-13.66	-14.5/-17.1	-13.21/-11.57	-12.33/-16.14	-18.26/-18.24	-17.7/-18	-17.89/-18.66	-17.4/-17.81	-18.85/-19.27	-17.65/-15.89	-17.22/-15.73	-18.64/-17.24	-17.78/-18.37	-15.79/-14.72	-17.87/-18.05	-16.71/-15.67	-16.7/-18.13	-18.1/-15.64	-17.46/-18.16	-14.63/-18.02	-16.28/-18.5	-19.29/-14.96
Θ(157.5°)	-15.45/-14.64	-15.9/-17.59	-18.78/-18.16	-19.18/-16.88	-12.94/-13.1	-16.02/-18.57	-18.08/-18.18	-19.05/-17.65	-17.38/-18	-17.19/-15.62	-16.11/-18.63	-18.77/-17.75	-18.84/-18	-19.2/-18.39	-18.43/-18.6	-18.26/-17.54	-15.66/-13.36	-14.67/-19.44	-18.42/-16.03	-15.5/-17.7	-18.35/-18.28	-18.79/-13.13	-10.15/-11.55	-12.57/-12.72
Θ(165°)	-15.43/-15.87	-16.01/-18.63	-18.92/-17.41	-18.53/-17.79	-17.99/-18.76	-19.19/-18.33	-14.95/-14.5	-15.35/-16.63	-18.35/-18.91	-18.74/-18.53	-18.06/-15.64	-16.21/-16.03	-18.26/-18.48	-18.88/-18.1	-18.91/-17.82	-18.66/-17.8	-18.2/-18.7	-18.18/-15.58	-13.52/-13.41	-13.83/-14.35	-15.29/-15.84	-19.1/-18.47	-18.5/-18.58	-18.45/-15.22
Θ(172.5°)	-15.51/-14.67	-16.08/-16.43	-18.2/-18.9	-19.03/-13.18	-18.31/-17.16	-17.11/-16.91	-16.48/-17.36	-18.49/-17.51	-17.35/-15.58	-14.1/-13.4	-13.93/-13.3	-12.73/-12.9	-13.27/-14.49	-16.34/-17.45	-18.32/-17.85	-17.02/-15.84	-14.87/-14.38	-14.93/-15.87	-18.82/-17.2	-17.46/-18.71	-18.71/-18.43	-19.57/-17	-14.63/-13.12	-13.31/-14.97
Θ(180°)	-19.16/-19.18	-18.24/-19.08	-18.19/-18.04	-18.21/-18.87	-19.06/-18.96	-18.51/-17.15	-18.49/-19.19	-17.82/-18.08	-18.85/-18.08	-17.89/-17.86	-19/-18.82	-18.54/-17.96	-17.67/-16.71	-16.76/-16.64	-16.03/-15.42	-15.63/-15.77	-15.36/-16.31	-19.16/-18.01	-18.11/-18.34	-19.09/-18.19	-18.35/-18.67	-17.53/-17.9	-17.49/-18.46	-19.12/-17.36
Freq(Hz)	5.785GPol.	Phi/Ant. 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°)	-8.74/-12.94	-12.58/-9.73	-7.12/-5.03	-3.47/-2.44	-1.57/-0.77	0.16/0.73	1.21/1.24	1.24/0.98	0.36/-0.21	-0.56/-0.89	-1.85/-3.45	-5.3/-7.35	-9.95/-11.8	-10.62/-8.58	-6.63/-4.89	-3.35/-2.04	-0.98/-0.22	0.50/89	1.18/1.25	1.23/0.73	0.33/0.07	-0.68/-1.87	-3.13/-4.67	-6.51/-7.08
Θ(7.5°)	-7.44/-5.83	-8.05/-6.75	-5.69/-4.52	-3.66/-3.1	-2.73/-2.32	-1.72/-1.03	-0.28/0.14	0.39/0.68	0.74/0.7	0.35/0.02	-0.39/-1.2	-2.48/-5.17	-8.23/-10.93	-13.17/-11.5	-8.08/-5.55	-3.78/-2.13	-0.88/-0.18	0.41/0.85	1.03/1.05	1.14/1.12	0.76/0.53	0.31/-0.67	-1.6/-2.38	-4.27/-6.07
Θ(15°)	-13.47/-12.96	-12.78/-6.29	-4.23/-2.57	-1.87/-2.47	-3.05/-3.11	-2.61/-2.15	-1.17/-0.03	0.85/1.03	0.91/0.74	0.57/0.53	0.12/-1.32	-3.55/-6.82	-11.55/-19.11	-17.2/-16.86	-10.97/-4.74	-1.86/-2.94	-1.12/-0.92	0.09/1.04	1.86/1.82	1.96/2.04	1.86/1.68	1.09/0.02	-1.16/-2.67	-5.17/-4.83
Θ(22.5°)	-15.49/-18.09	-18.8/-13.59	-8.61/-4.67	-2.92/-2.47	-2.11/-1.56	-0.89/0.02	0.39/0.92	1.35/0.67	-1.04/-2.07	-1.09/0.19	0/-2.34	-6.22/-11.48	-16.69/-16.29	-13.34/-11.6	-9.25/-6.28	-3.16/-1.46	-0.40/-3.1	0.78/1.29	1.61/68	1.88/2.13	1.92/1.8	1.78/1.34	0.16/-2.05	-6.58/-12.16
Θ(30°)	-7.06/-13.28	-11.53/-7.35	-9.28/-8.67	-3.67/-1.51	-1.48/-1.03	0.57/0.01	-1.12/-0.6	-0.2/-1.1	-2.69/-3.34	-1.64/-1.06	-2.73/-6.39	-9.09/-9.78	-11.91/-15.75	-14.94/-11.45	-8.23/-6.54	-4.78/-2.19	-0.19/0	-0.24/0.42	1.01/1.24	2.06/-8.2	2.81/1.92	0.66/-1.08	-3.8/-6.36	-7.74/-5.67
Θ(37.5°)	-3.44/-7.04	-19.02/-8.25	-8.17/-10.73	-6.31/-4.62	-5.08/-2.89	0.17/0.2	-1.25/-0.97	-1/-2.03	-2.78/-2.97	-2.97/-4.09	-4.18/-7.67	-12.52/-16.33	-19.06/-12.02	-6.38/-5.54	-6.16/-3.23	-0.38/-1.23	-2.92/-2.34	-1.87/-1.95	-0.53/-2.1	1.27/0.42	0.27/0.03	-1.7/-3.76	-3.66/-3.14	
Θ(45°)	-9.67/-11.4	-17.23/-18.78	-13.86/-17.88	-11.08/-5.85	-7.38/-8.57	-1.68/0.01	-2.41/-1.64	-1.37/-2.04	-3.51/-5.33	-5.95/-7.15	-6.23/-3.99	-5.01/-10.83	-14.74/-10.94	-11.62/-14.65	-13.06/-10.7	-10.76/-7.85	-2.81/-3.06	-5.27/-4.98	-3.91/-3.99	-2.9/-0.65	0.13/-0.64	-1.17/-2.14	-2.91/-2.9	-4.38/-7.81
Θ(52.5°)	-11.39/-13.21	-10.96/-17.64	-14.21/-11.29	-12.51/-3.9	-3.05/-5.3	-3.1/-0.89	-4.45/-1.97	-1.64/-3.25	-6.9/-1.5	-8.14/-17.5	-5.34/-6.1	-8.8/-15.63	-16.35/-10.42	-11.67/-18.61	-18.79/-11.72	-10.62/-14.4	-5.34/-3.69	-6.33/-6.77	-4.67/-1.17	-5.16/-2.24	-1.65/-3.9	-6.34/-5.48	-4.51/-7.93	
Θ(60°)	-7.66/-16.28	-10.99/-11.45	-18.62/-8.9	-7.15/-4.3	-4.2/-3.93	-2.69/-0.7	-3.57/-2.55	-3.54/-6.66	-10.57/-10.24	-9.99/-7.09	-5.67/-8.6	-14.07/-18.81	-12.21/-10.19	-12.32/-16.02	-19.02/-15.48	-13.31/-7.97	-5.96/-3.94	-4.58/-5.03	-5.05/-6.16	-5.61/-14	-2.32/-3.38	-1.88/-2.74	-5.27/-5.49	-6.85/-6.16
Θ(67.5°)	-5.59/-13.52	-18.29/-15.26	-17.72/-5.95	-7.68/-7.22	-6.78/-1.83	-1.78/-0.96	-3.68/-4.32	-6.32/-8.95	-13.21/-11.56	-11.43/-6.87	-7.34/-13.73	-18.94/-15.91	-10.82/-8.53	-12.2/-16.89	-18.82/-13.05	-8.19/-7.82	-8.94/-6.36	-3.71/-3.28	-4.99/-4.78	-3.6/-2.39	-2.61/-1.43	-0.66/-3.23	-4.13/-4.43	-6.7/-5.3
Θ(75°)	-5.13/-11.54	-15.83/-15.33	-18.76/-7.61	-8.52/-8.95	-8.84/-2.06	-2.48/-1.69	-4.49/-6.08	-8.38/-8.55	-8.11/-10.39	-12.7/-10.7	-7.31/-12.75	-16.22/-13.56	-9.6/-9.72	-14.29/-15.04	-14.11/-12.49	-10.1/-10.06	-12.59/-6.72	-2.52/-2.35	-2.96/-4.26	-3.51/-6.22	-2.52/-6.05	-1.84/-5.27	-4.78/-6.41	-7.56/-6.43
Θ(82.5°)	-7.82/-13.47	-14.78/-13.68	-18.7/-9.74	-11.51/-10.66	-9.53/-3.62	-3.77/-3.01	-4.92/-8.14	-10.26/-10.16	-10.14/-12.05	-14.4/-7.25	-8.94/-14.49	-17.16/-13.84	-8.06/-10.8	-15.96/-11.07	-11.27/-14.58	-15.09/-13.85	-18.98/-6.85	-2.63/-1.79	-4.42/-5.05	-5.1/-3.78	-2.54/-1.29	-4.64/-9.52	-5.35/-5.25	-8.9/-5.2
Θ(90°)	-12.69/-16.59	-13.31/-13.14	-18.41/-10.78	-16.59/-14.47	-9.24/-5.24	-4.72/-6.13	-8.47/-11.48	-9.13/-10.04	-10.64/-11.72	-11.67/-6.91	-9.31/-13.7	-19.09/-15.26	-9.78/-13.53	-11.67/-13.58	-16.08/-16.8	-18.96/-15.09	-5.14/-14.16	-6.18/-6.22	-7.68/-6.9	-3.45/-2.9	-8.22/-13.75	-6.79/-7.22	-11.2/-6.83	
Θ(97.5°)	-16.5/-13.62	-13.13/-14.13	-18.46/-11.74	-18.3/-15.64	-10.67/-6.55	-6.03/-9.29	-11.53/-12.57	-9.01/-14.66	-11.53/-11.93	-10.92/-7.34	-12.02/-18.13	-18.15/-12.19	-10.46/-15.49	-14.04/-11.78	-11.74/-13.43	-16.94/-11.46	-15.15/-18.96	-9.34/-6.53	-11.32/-10.25	-12.99/-8.75	-7.94/-5.24	-14.84/-12.71	-7.45/-9.14	-16.16/-8.1
Θ(105°)	-17.26/-14.5	-14.15/-14.6	-17.89/-17.6	-17.41/-16.08	-9.37/-8.12	-10.53/-18.35	-18.5/-15.54	-10.41/-10.67	-11.57/-10.81	-8.92/-8.37	-17.84/-18.46	-17.01/-13.71	-12.77/-18.06	-15.11/-11.81	-14.19/-11.01	-15.22/-11.61	-13.52/-10.91	-13.09/-10.81	-13.11/-10.29	-12.4/-13.73	-13.67/-10.56	-14.73/-12.84	-8.72/-15.2	-18.36/-11.57
Θ(112.5°)	-17.09/-9.94	-17.67/-19.92	-18.62/-18.97	-15.5/-16.92	-11.53/-11.27	-10.03/-12.01	-11.77/-11.04	-9.69/-9.85	-8.85/-8.55	-9.65/-9.71	-18.75/-19.11	-17.05/-15.84	-16.68/-18.86											



Radiated Composite Gain Data of Scan Radio_SC Ant1~2

Appendix A.7

Θ(112.5°)	-8.63/-7.47	-3.87/-8.23	-5.91/-12.99	-5.77/-11.84	-19.01/-11.87	-15.53/-6.84	-4.67/-5.17	-6.48/-5.34	-10.78/-16.49	-16.26/-10.74	-7.8/-7.72	-13.05/-11.18	-8.1/-15.31	-15.38/-14.06	-19.11/-19.02	-11.44/-17.99	-10.21/-9.7	-11.07/-9.65	-9.25/-5.26	-9.26/-10.72	-16.84/-11.29	-12.49/-9.09	-10.22/-12.01	-5.62/-7.89
Θ(120°)	-10.3/-10.95	-4.78/-6.02	-8.42/-12.28	-18.87/-15.78	-10.99/-10.98	-18.22/-9.13	-7.02/-7.18	-18.31/-9.41	-11.26/-12.71	-12.16/-10.17	-13.77/-10.74	-18.06/-11.07	-9.93/-13.15	-14.31/-12.95	-17.68/-17.93	-12.86/-17.98	-19.28/-10.88	-10.64/-8.57	-9.81/-8.57	-9.24/-10.02	-17.6/-12.73	-13.22/-13.72	-13.15/-12.35	-5.07/-8.61
Θ(127.5°)	-16.49/-9.61	-12.44/-12.87	-8.35/-8.33	-16.07/-19.08	-13.9/-8.13	-13.87/-5.98	-4.53/-7.23	-8.7/-10.16	-15.58/-17.12	-10.63/-10.62	-13.97/-18.44	-13.2/-15.59	-18.07/-12.71	-18.41/-17.66	-14.8/-9.49	-11.6/-18.7	-18.69/-16.68	-9.24/-13.49	-10.61/-5.99	-10.68/-11.07	-13.2/-18.73	-6.9/-13.82	-12.18/-16.15	-7.26/-5.99
Θ(135°)	-18.2/-7.23	-5.72/-9.64	-10.38/-12.54	-18.3/-17.96	-15/-11.81	-17.92/-10.71	-11.66/-17.86	-18.69/-17.44	-15.92/-15.16	-18.23/-18.78	-18.31/-16.76	-12.93/-10.78	-9.27/-11.83	-18.98/-15.17	-18.99/-12.5	-18.66/-17.63	-17.44/-18.08	-8.31/-14.79	-15.11/-14.07	-15.61/-12.68	-15.02/-17.09	-10/-18.32	-9.68/-6.5	-10.77/-14.55
Θ(142.5°)	-14.84/-9.44	-8.25/-13.02	-18.81/-16.85	-19.13/-14.98	-17.77/-14.5	-9.08/-8.09	-12.87/-17.14	-18.87/-18.96	-18.26/-15.13	-11.63/-11.91	-16.31/-18.01	-13.76/-10.65	-13.69/-16.21	-12.53/-14.42	-19.09/-16.52	-16.68/-16.55	-16.39/-18.86	-16.71/-17.86	-18.59/-17.56	-18.18/-16.21	-18.81/-13.3	-13.51/-13.76	-15.22/-12.09	-12.13/-16.94
Θ(150°)	-15.82/-8.62	-6.54/-6.81	-9.72/-11.52	-10.43/-9.9	-10.42/-10.47	-10.51/-11.78	-15.91/-19.02	-19.2/-17.51	-19.2/-18.52	-17.56/-18.14	-19.16/-14.45	-12.14/-16.63	-18.51/-16.58	-14.55/-15.11	-18.05/-19.06	-17.66/-16.68	-17.09/-11.2	-12.81/-18.4	-17.28/-17.56	-19.18/-19.11	-17.75/-16.83	-17.7/-14.52	-7.85/-10.4	-18.84/-19.01
Θ(157.5°)	-18.92/-15.91	-13.14/-16.61	-18.62/-17.68	-19.27/-16	-15.31/-18.79	-16.09/-11.61	-11.22/-12.82	-13.94/-13.96	-16.12/-19.18	-18.8/-18.4	-14.26/-12.33	-13.72/-16.79	-14.08/-14.45	-18.7/-18.61	-18.72/-17.82	-15.41/-14.75	-14.23/-13.99	-18.01/-18.18	-17.87/-16.65	-17.14/-19.13	-18.24/-19.1	-18.82/-14.27	-11.34/-12.75	-18.97/-18.81
Θ(165°)	-17.28/-19.15	-18.59/-17.87	-18.55/-17.86	-18.74/-18.47	-18.84/-17.91	-17.84/-18.43	-19.4/-19.3	-14.71/-13.17	-14.39/-15.66	-16.27/-17.07	-18.69/-18.78	-15.32/-12.5	-11.83/-10.8	-9.83/-11.7	-15.07/-12.45	-17.6/-18.4	-15/-13.24	-14.61/-17.14	-15.86/-13.84	-14.93/-19.18	-16.89/-13.56	-13.82/-14.79	-16.03/-16.29	-15.2/-15.99
Θ(172.5°)	-11.87/-14	-16.18/-19.1	-18.87/-18.48	-15.02/-14.07	-12.98/-12.37	-11.75/-12.44	-13.59/-15.03	-16.53/-16.2	-15.27/-13.23	-12.76/-14.84	-16.32/-13.58	-12.92/-14.51	-14.34/-12.03	-10.97/-11.28	-11.54/-12.05	-12.87/-14.19	-16.01/-17.14	-16.23/-15.55	-16.85/-18.41	-19.23/-18.39	-18.76/-18.37	-14.79/-13.19	-12.59/-11.71	-10.64/-10.92
Θ(180°)	-18.36/-18.1	-19/-18.78	-17.9/-18.35	-18.84/-19.32	-18.4/-19.13	-18.3/-17.94	-17.63/-19.26	-18.4/-17.76	-19/-18.28	-18.06/-17.98	-18.03/-18.62	-18.97/-18.08	-18.25/-17.64	-19.07/-18.49	-18.51/-18.12	-18.56/-19.14	-18.97/-17.95	-18.31/-17.81	-18.81/-18.99	-19.01/-17.35	-19.31/-17.92	-18.43/-17.69	-19.03/-19.16	-19.28/-19
Freq(Hz)	6.475GPdL	Phi/Ant. 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°)	-6.92/-6.86	-5.05/-3.2	-2.03/-1.04	0.120/1	1.31/2	2.35/2.74	2.87/2.95	2.72/2.22	1.77/1.4	1.06/0.48	-0.55/-2.08	-3.85/-5.52	-6.68/-6.83	-5.82/-4.26	-2.4/-0.83	0.36/1.03	1.58/2.01	2.09/2.27	2.52/2.21	1.82/1.5	1.23/0.75	-0.02/-1.17	-2.33/-3.23	-5.18/-5.97
Θ(7.5°)	-6.2/-6.51	-9.94/-6.44	-3.24/-1.48	0.03/1.49	2.76/3.3	3.68/4.09	4.14/05	3.75/3.39	3.12/2/7	2.34/1.81	0.42/-1.79	-4.81/-8.49	-13.37/-9.95	-4.82/-1.78	0.61/2.18	3.23/3.82	3.93/3.92	3.68/3.49	3.41/2.88	2.31/1.79	1.30/0.99	-0.35/-1.62	-2.76/-3.37	-4.43/-4.43
Θ(15°)	-4.03/-4.64	-6.04/-3.66	-6.69/-5.75	-4.13/-1.39	1.14/2.89	4.144.58	4.39/3.78	3.36/2.93	2.74/2.39	1.54/0.32	-1.48/-4.52	-10.51/-18.42	-18.66/-8.41	-3.63/-1.2	0.45/1.59	2.46/2.71	2.8/2.77	2.62/5.8	2.02/1.31	0.31/-1.25	-2.02/-1.95	-2.18/-2.44	-3.5/-3.59	
Θ(22.5°)	-4.22/-7.55	-9.4/-9.89	-6.45/-3.91	-2.58/-1.59	-1.84/-1.79	-0.91/0.28	0.92/1.03	1.43/2.05	2.32/2.15	1.31/0.2	-0.99/-2.68	-6.78/-13.67	-12.46/-7.86	-4.57/-2.88	-2.2/-1.84	-1.66/-1.76	-1.68/-1.79	-2.85/-3	-1.20/1.4	0.62/-0.15	-1.44/-1.62	-0.55/-0.07	-0.75/-2.07	-2.88/-2.72
Θ(30°)	-6.49/-6.52	-7.63/-12.77	-8.61/-2.9	-1.11/-0.69	0.06/-0.33	-3.98/-3.83	-1.25/-0.05	0.66/1.51	1.44/0.31	-0.64/-0.56	-1.24/-4.16	-9.46/-13.27	-8.98/-7.09	-8.81/-7.86	-6.28/-5.38	-4.98/-5.34	-4.15/-1.63	-0.77/-1.65	-2/-0.79	0.06/-0.85	-1.35/-0.58	-0.11/-0.2	-0.73/-1.35	-4.32/-3.82
Θ(37.5°)	-2.32/-3.12	-5.66/-11.42	-15.13/-5.36	-0.05/-6.72	-3.74/-1.37	-2.36/-1.22	-0.05/0.51	0.21/0.03	-0.35/-0.92	-2.6/-4.34	-6.84/-11.69	-14.11/-17.05	-14.2/-10.59	-9.84/-10.36	-8.52/-8.74	-6.49/-4.87	-5.68/-2.02	-0.08/-0.89	-3.31/-4.06	-1.83/-0.92	-0.98/0.97	1.3/0.0	-1.75/-3.89	-6.92/-8.99
Θ(45°)	-4.33/-5.26	-9.3/-17.46	-18.21/-10.98	-4.49/-7.82	-9.78/-4.94	-2.98/-0.99	0.26/-0.18	0.19/-1.14	-2.32/-2.94	-5.08/-9.73	-12.03/-12.77	-12.83/-10.11	-12.29/-8.43	-5.73/-6.6	-8.74/-16.94	-15.64/-6.07	-3.26/-3.79	-1.31/-1.11	-2.42/-4.44	-4.5/-3.98	-2.87/0.62	-0.39/-2.4	-2.24/-3.53	-3.77/-3.28
Θ(52.5°)	-7.79/-7.2	-4.1/-5.99	-15.59/-8.69	-6.51/-8.85	-5.74/-5.46	-3.96/-1.18	0.15/-1.63	-1.19/-13.4	-4.71/-6.35	-7.53/-13.3	-14.56/-11.26	-8.1/-7.02	-11.06/-6.79	-5.75/-15.26	-17.87/-19.06	-13.42/-6.58	-4.24/-2.2	-2.89/-5.73	-2.24/-1.8	-7.77/-5.81	-3.88/-0.45	-2.06/-5.1	-6.44/-6.27	-5.06/-5.14
Θ(60°)	-9.51/-9.38	-6.3/-8.83	-7.85/-9.88	-7.52/-8.12	-2.88/-3.41	-0.42/-2.77	-3.73/-4.98	-7.19/-6.36	-8.28/-14.04	-15.18/-15.36	-12.96/-10.48	-15.2/-18.75	-12.92/-7.81	-5.15/-1.85	-4.61/-6.07	-4.63/-6.05	-12.87/-10.16	-7.97/-2.59	-2.66/-5.2	-5.87/-6.64	-5.7/-10.16			
Θ(67.5°)	-7.24/-6.85	-7.62/-17.56	-8.38/-13.94	-6.6/-6.82	-3.29/-3.65	-1.75/-2.98	-1.57/-4.22	-7.01/-7.8	-10.48/-9.09	-9.6/-10.46	-16.47/-10.32	-7.6/-13.83	-14.65/-11.45	-10.27/-16.15	-15.22/-10.88	-18.3/-5.63	-6.97/-3.38	-3.63/-2.72	-2.66/-7.78	-9.53/-8.79	-5.1/-1.54	-2.48/-4.02	-6.73/-6.85	-6.44/-7.34
Θ(75°)	-5.23/-7.97	-8.13/-12.77	-10.84/-16.35	-8.88/-7.4	-5.21/-3.25	-2.36/-2.28	-1.55/-3.84	-9.68/-11.07	-9.53/-7.43	-8.12/-8.71	-12.59/-8.01	-8.16/-11.71	-14.4/-11.26	-9.07/-12.53	-12.4/-7.48	-14.1/-5.34	-12.05/-6.47	-2.26/-0.8	-2.91/-5.79	-4.25/-5.88	-3.76/-1.29	-0.95/-4.69	-6.69/-9.07	-7.84/-5.14
Θ(82.5°)	-6.64/-16.84	-8.27/-7.11	-10.54/-12.95	-12.36/-11.13	-5.94/-6.39	-2.9/-3.81	-4.56/-5.65	-9.65/-9.77	-7.91/-8.34	-9.75/-11.24	-15.13/-8.67	-10.68/-16.69	-18.58/-11.71	-8.49/-14.04	-14.68/-6.36	-14.89/-7.9	-11.85/-5.15	-2.15/-1.05	-2.78/-4.58	-3.64/-3.41	-3.29/-1.98	-1.35/-8.76	-10.91/-12.95	-8.7/-4
Θ(90°)	-8.5/-17.76	-13.31/-6.64	-13.6/-17.59	-14.85/-15.77	-7.44/-8.33	-4.36/-6.64	-9.16/-5.65	-10.37/-8.76	-8.71/-7.8	-10.32/-11.56	-12.63/-10.03	-13.96/-16.74	-18.36/-11.58	-11.79/-15.3	-13.21/-8.19	-13.98/-11.43	-17.03/-9.44	-3.96/-1.59	-3.73/-5.72	-5.34/-3.15	-4.18/-3.94	-3.75/-11.35	-14.82/-13.72	-11.8/-7.64
Θ(97.5°)	-10.81/-12.21	-17.15/-9.32	-17.82/-16.13	-17.01/-9.59	-7.91/-9.34	-6.54/-12.61	-11.38/-5.8	-12.47/-11.1	-11.04/-9.52	-9.28/-9.75	-10.96/-9.71	-12.67/-13.74	-17.08/-14.17	-11.62/-18.76	-12.25/-9.22	-16.85/-15.36	-19.09/-15.25	-8.23/-4	-13.04/-10.4	-12.24/-5.8	-6.44/-6.3	-6.66/-13.32	-17.55/-17.38	-10.01/-14.4
Θ(105°)	-18.64/-10.78	-12.18/-14.41	-18.26/-15.06	-18.63/-6.23	-8.73/-12.62	-8.21/-14.77	-9.93/-9.1	-12.65/-9.36	-9.88/-10.88	-10.75/-9.38	-14.6/-16.57	-13.49/-13.14	-15.58/-18.49	-13.99/-12.4	-13.04/-17.41	-16.09/-17.46	-9.54/-6.74	-16.94/-14.09	-17.71/-9.08	-8.21/-6.84	-6.83/-18.21	-17.62/-19.2	-14.68/-9.37	
Θ(112.5°)	-13.26/-17.85	-12.46/-18.6	-18.68/-15.23	-18.79/-7.42	-14.14/-18.16	-16.28/-15.04	-8.41/-10.33	-10.75/-7.47	-13.27/-13.15	-10.7/-12.26	-13.94/-11.83	-19.25/-15.18	-15.18/-15.35	-10.97/-15.27	-17.61/-12.06	-16.93/-17.6	-15.36/-13.67	-14.92/-5.22	-18.37/-10.27	-1.7/-8.76	-12.13/-5.42	-6.84/-17.83	-17.58/-15.92	-16.61/-11.09
Θ(120°)	-9.19/-16.02	-13.99/-18.22	-18.6/-16.34	-18.37/-9.63	-10.32/-17.12	-13.34/-10.12	-9.67/-10.86	-12.12/-10.35	-17.74/-14.33	-16.47/-13.37	-17.09/-19.29	-17.34/-18.51	-18.32/-12.64	-10.72/-15.61	-15.06/-19	-16.39/-11.4	-18.98/-16.18	-15.17/-8.78	-11.68/-13.9	-18.84/-19	-13.45/-5.9	-16.69/-16.39	-12.69/-9.91	-18.12/-17.5
Θ(127.5°)	-13.92/-12.21	-18.6/-18.25	-18.69/-17.4	-19.04/-9.03	-6.38/-13.19	-4.79/-5.52	-3.8/-11.85	-9/-10.93	-11.05/-13.06	-9.14/-15.38	-15.13/-18.94	-16.8/-12.95	-16.33/-11.74	-13.95/-19.38	-17.51/-17.53	-8.28/-16.81	-9.69/-18.28	-9.25/-9.21	-9.57/-13.79	-15.97/-17.25	-14.86/-10.65	-10.74/-10.68	-18.19/-7.69	-13.45/-18.75
Θ(135°)	-18.1/-10.03	-10.29/-18.54	-15.72/-13.96	-9.68/-10.98	-9.54/-8.02	-4.4/-14.6	-7.06/-16.94	-6.42/-19.43	-13.4/-12.45	-8.62/-16.49	-19.21/-16.44	-15.26/-12.83	-18.28/-18.54	-15.18/-17.05	-19.25/-16.24	-18.77/-14.25	-16.82/-18.05	-12.39/-9.73	-7.85/-10.53	-11.17/-11.26	-12.9/-12.59	-8.34/-18.97	-16.03/-7.7	-18.29/-8.42
Θ(142.5°)	-10.28/-4.73	-10.24/-11.58	-5.13/-9.43	-9.65/-8	-12.78/-11.11	-6.05/-9.86	-18.35/-9.48	-10.38/-18.04	-12.65/-15.71	-12.91/-16.36	-11.14/-13.30	-14.88/-13.77	-11.87/-12.95	-10.84/-17.47	-14.07/-18.69	-14.62/-17.89	-15.22/-18.33	-18.04/-18.91	-15.91/-16.36	-11.38/-8.52	-16.83/-15.72	-11.56/-18.98	-12.24/-13.16	-9.6/-6.37
Θ(150°)	-15.37/-9.02	-8.26/-7.16	-7.75/-14.02	-12.67/-14.08	-10.84/-9.29	-11.48/-18.09	-18.36/-16.16	-17.79/-12.93	-10.27/-14.76	-19.02/-18.59	-18.6/-17.7	-18.75/-18.21	-18.91/-10.42	-13.64/-14.75	-19.03/-16.98	-16.95/-17.72	-18.28/-18.95	-16.41/-11.4	-11.46/-18.83	-10.6/-8.55	-16.38/-13.96	-17.61/-10.4	-7.83/-9.15	-5.97/-7.82
Θ(157.5°)	-10.98/-14.87	-17.83/-17.65	-18.72/-11.63	-8.24/-9.88	-18.78/-16.33	-12.1/-14.69	-18.12/-17.96	-18.54/-18.57	-1															



Radiated Composite Gain Data of Scan Radio_SC Ant1~2

Appendix A.7

Θ(165°)	-18.61/-17.15	-14.48/-12.1	-12.47/-13.35	-11.88/-10.88	-11.95/-12.95	-12.07/-10.06	-8.81/-9.97	-11.93/-15.16	-18.9/-17.22	-18.54/-18.56	-19.06/-19.05	-17.72/-15.52	-14.29/-13.95	-14.58/-15.57	-17.29/-17.79	-18.74/-19	-18.62/-17.63	-14.68/-14.19	-17.13/-17.51	-18.58/-18.19	-19/-18.31	-14.77/-12.52	-13.09/-14.35	-14.56/-17.1
Θ(172.5°)	-16.46/-19.26	-18.7/-18.52	-18.5/-18.99	-17.23/-18.04	-18.8/-18.91	-18.86/-19.59	-19.37/-18.64	-17.46/-16.86	-17.3/-18.21	-18.03/-18.64	-19.03/-18.75	-18.89/-18.29	-18.81/-18.49	-15.72/-12.92	-11.22/-10.92	-10.97/-10.93	-12.11/-13.53	-14.55/-15.13	-15.85/-14.87	-14.68/-14.65	-15.15/-14.61	-14.22/-13.35	-12.72/-12.61	-12.55/-13.45
Θ(180°)	-12.48/-14.14	-15.62/-16.27	-16.04/-17.37	-18.4/-19.18	-15.96/-14.91	-15.46/-19.07	-18.24/-17.59	-19/-19.84	-17.47/-15.45	-16.76/-16.94	-16.04/-17.21	-16.19/-16	-16.12/-16.79	-17.38/-18.92	-19.03/-18.75	-18.55/-17.78	-18.61/-18.09	-18.31/-18.31	-18.22/-17.48	-14.69/-13.72	-13.38/-12.46	-11.06/-10.84	-11.2/-10.94	-11.14/-11.81
Freq(Hz)	6.995GPol.	Phi/Ant. 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°)	-4.3/-5.98	-4.54/-2.66	-1.85/-0.77	0.66/1.65	2.58/3.36	3.75/3.92	4.18/4.22	4.19/3.93	3.28/2.75	2.31/1.48	0.51/-0.3	-1.29/-2.86	-3.95/-4.26	-3.37/-2.34	-1.19/-0.14	0.88/1.56	2.21/2.72	3.42/4	4.24/11	4.14/02	3.78/3.39	3.05/2.53	1.65/0.69	-0.37/-1.79
Θ(7.5°)	-1/-3.17	-7.03/-11.54	-10.96/-4.86	-1.01/1.39	2.81/3.61	4.02/4.07	4.08/4.01	3.59/3	2.19/0.6	-1.52/-3.06	-3.42/-4.33	-5.47/-5.88	-5.97/-4.51	-3.22/-2.68	-1.76/-0.84	-0.04/0.57	1.17/1.66	2.15/2.47	2.45/2.48	2.66/2.66	2.58/2.23	1.75/1.25	0.97/0.76	0.69/0.27
Θ(15°)	-1.29/-2.99	-4.01/-4.41	-6.49/-6.67	-1.83/1.45	3.19/3.51	3.02/2.09	1.89/2.09	2.25/1.91	1.64/1.4	0.14/-1.94	-3.68/-4.63	-5.53/-5.41	-5.13/-3.49	-1.91/-1.54	-1.58/-1.51	-1.45/-1.55	-1.71/-1.27	-0.65/0.21	0.59/1.17	1.51/1.75	1.6/1.3	1.05/1.06	0.83/0.28	-0.33/-0.61
Θ(22.5°)	0.23/-1.43	-6.73/-9.89	-4.34/-3.64	-5.1/-3.82	-0.99/0.42	1.05/1.69	2.37/2.82	2.75/2.2	2.14/1.61	-0.75/-6.28	-15.94/-11.96	-5.8/-4.93	-6.48/-4.52	-2.14/-1.04	-0.35/-1.31	-2.62/-3.32	-3.54/-3.27	-2.41/-0.54	0.42/-0.1	-0.23/0.69	1.09/1.01	0.64/0.1	-1.27/-1.7	-1.3/-0.72
Θ(30°)	-3.94/-6.69	-12.71/-18.32	-13.37/-7.79	-6.6/-5.85	-3.83/-2.43	-0.44/1.69	2.84/3.7	3.41/2.4	0.92/-1.17	-6.09/-18.05	-11.2/-8.11	-7.3/-6.15	-5.37/-6.07	-7.46/-5.94	-5.12/-6.75	-8.32/-5.89	-3.85/-5.62	-5.5/-1.04	0.01/-1.57	-2.23/-0.52	-1.37/-3.71	-2.3/-0.99	-2.15/-2.67	-2.6/-2.3
Θ(37.5°)	-9.95/-11.18	-14.32/-18.32	-7.35/-6.98	-12.26/-4.82	-1.74/-1.22	-0.79/-0.89	-0.52/1.05	0.8/-1	-2.27/-2.14	-5.7/-15.32	-16.17/-14.4	-10.94/-9.43	-8.08/-9.67	-6.2/-4.79	-5.58/-6.12	-5.63/-4.36	-4.08/-6.24	-4.81/-1.54	-0.81/-1.4	-3.04/-1.99	-2.59/-3.75	-1.78/-2.77	-6.29/-5.98	-4.67/-6.71
Θ(45°)	-10.86/-12.97	-18.49/-14.95	-9.55/-8.19	-11.34/-5.91	-4.11/-4.16	-3.09/-1.16	-2.46/-2.29	-3.85/-6.2	-6.3/-6.23	-7.85/-13.76	-18.81/-10.01	-11.4/-9.86	-10/-12.71	-11.77/-5.96	-5.5/-7.96	-7.37/-6.27	-3.37/-3.69	-2.72/-0.99	0.44/0.47	-2.42/-3.86	-6.13/-6.76	-3.56/-4.65	-9.21/-10.03	-10.69/-10.48
Θ(52.5°)	-10.16/-9.43	-8.86/-17.87	-18.56/-18.75	-12.78/-7.89	-11.02/-13.98	-6.15/-1.11	-2.53/-5.1	-8.83/-13.12	-11.5/-8.2	-8.23/-9.41	-17.74/-11.21	-18.73/-12.24	-12.2/-13.24	-10.36/-11.02	-12.31/-11.56	-8.53/-7.55	-7.06/-5.83	-3.29/-1.72	-0.07/-0.01	-3.94/-4.66	-6.48/-5.2	-3.92/-5.74	-4.89/-8.56	-6.94/-9.39
Θ(60°)	-15.28/-9.71	-9.33/-17.34	-18.19/-17.86	-12.92/-8.55	-9.58/-12.85	-5.07/-0.62	-2.11/-5.33	-15.54/-17.11	-10.94/-8.14	-8.84/-7.51	-14.24/-13.44	-18.76/-16.7	-16.46/-17.05	-9.86/-12.78	-18.04/-11.83	-10.09/-6.01	-10.18/-7.54	-7.88/-8.15	-3.41/-2.75	-5.8/-9.58	-9.35/-8.4	-8.85/-10.61	-7.24/-11.93	-12.4/-16.69
Θ(67.5°)	-10.62/-12.19	-11.42/-18.99	-17.09/-18.14	-6.84/-10.33	-7.17/-9.94	-4.87/-11.92	-18.45/-14.59	-11.35/-9.48	-7.37/-6.9	-11.2/-13.97	-12.7/-10.68	-12.19/-19.01	-9.3/-13.38	-15.86/-17.74	-10.27/-6.01	-9.25/-6.57	-10.77/-7.27	-4/-5.18	-9.43/-8.47	-9.86/-8.41	-9.46/-5.28	-8.71/-14.45	-11.5/-11.78	
Θ(75°)	-8.69/-13.54	-14.47/-16.87	-14.2/-13.63	-5.06/-11.71	-13.14/-3.85	-0.64/-2.12	-4.61/-8.86	-19.1/-11.13	-9.76/-10.19	-6.48/-7.68	-11.13/-13.45	-12.84/-10.01	-9.49/-14.61	-10.94/-14.85	-15.93/-18.91	-12.48/-6.24	-8.26/-8.88	-7.63/-3.22	-3.79/-4.11	-4.02/-4.26	-4.81/-6.4	-4.17/-2.29	-3.52/-7.96	-10.93/-12.32
Θ(82.5°)	-7.58/-11.64	-18.22/-18.45	-12.13/-10.73	-4.78/-12.69	-18.86/-2.89	-0.6/-3.13	-6.71/-10.56	-16.94/-9.69	-10.02/-11.52	-5.89/-8.04	-10.92/-11.18	-14.48/-13.17	-11.02/-16.43	-13.87/-15.06	-18.07/-14.1	-11.77/-6.94	-9.08/-8.71	-5.65/-1.17	-2.41/-4.58	-2.81/-1.75	-1.91/-4.73	-2.13/-3.69	-1.87/-7.28	-9.48/-14.06
Θ(90°)	-8.31/-10.89	-18.04/-17.43	-17.06/-11.82	-7.31/-13.05	-19.17/-3.38	-1.24/-6.09	-9.05/-9.02	-10.28/-9.3	-11.9/-9.71	-5.92/-11.45	-12.92/-11.52	-10.18/-15.56	-18.89/-14.27	-18.05/-10.78	-13.78/-10.32	-10.38/-9.8	-7.25/-2.57	-3.22/-7.91	-5.68/-2.28	-1.93/-6.53	-4.05/-5.97	-3.12/-9.3	-8.97/-18.18	
Θ(97.5°)	-12.88/-12.65	-18.17/-14.47	-18.77/-9.75	-11.78/-12.45	-17.97/-3.69	-3.59/-8.65	-9.86/-10.57	-9.98/-8.76	-15.35/-11.1	-7.64/-12.97	-14.64/-10.67	-10.81/-17.48	-11.92/-13.55	-18.25/-17.91	-17.44/-10.62	-12.57/-11.11	-11.54/-12.98	-9.23/-5.92	-7.23/-12.23	-10.66/-8	-4.42/-9.56	-7.96/-6.18	-5.53/-13.3	-11.07/-15.71
Θ(105°)	-17.08/-15.95	-18.81/-14.21	-14.49/-16.73	-16.48/-10.65	-16.4/-5.55	-11.11/-8.86	-11.07/-17.03	-10.18/-9.15	-13.04/-10.17	-7.8/-15.32	-12.51/-12.37	-8.92/-18.76	-16.04/-12.3	-19.2/-15.93	-18.59/-13.87	-14.12/-11.69	-15.19/-18.69	-15.14/-7.68	-7.5/-14.41	-15.16/-12.71	-7.22/-10.74	-11.37/-6.87	-7.17/-17.83	-15.64/-14.87
Θ(112.5°)	-19.24/-12.56	-18.77/-16.73	-13.45/-18.96	-13.55/-10.98	-13.78/-7.54	-14.3/-6.73	-8.87/-7.26	-7.49/-10.63	-16.01/-11.71	-10.87/-15.9	-13.01/-13.02	-11.79/-14.58	-18.15/-14.32	-13.81/-15.75	-15.15/-17.99	-13.39/-14	-17.75/-15.8	-14.58/-9.74	-7.35/-10.67	-12.64/-11.32	-8.46/-6.83	-10.01/-11.71	-6.78/-19.3	-18.53/-14.84
Θ(120°)	-17.82/-14.67	-15.86/-15.78	-18.1/-16.09	-13.54/-17.38	-18.95/-6.24	-5.92/-11.8	-14.72/-7.36	-13.43/-15.87	-12.97/-14.97	-18.53/-15.67	-10.3/-15.23	-16.02/-12.16	-17.24/-17.19	-15.65/-12.52	-14.87/-17.86	-17.25/-13.44	-19.24/-16.15	-18.91/-13.46	-16.18/-10.18	-14.97/-13.2	-18.58/-8.5	-8.35/-12.78	-7.16/-18.15	-16.1/-18.63
Θ(127.5°)	-11.51/-18.39	-18.58/-19.16	-15.03/-12.81	-13.1/-13.19	-10.98/-8.21	-8.03/-8.53	-11.16/-12.97	-14.25/-18.78	-17.86/-12.58	-11.35/-11.65	-11.37/-13.45	-19.02/-13.28	-13.91/-19.07	-16.81/-15.76	-17.35/-17.81	-17.32/-9.16	-17.13/-19.15	-17.26/-7.36	-14.76/-9.17	-13.76/-10.91	-14.43/-9.68	-10.74/-6.13	-11.23/-13.39	-19.83/-19.14
Θ(135°)	-18.64/-12.65	-18.01/-15.32	-18.97/-9.16	-13/-14.96	-8.15/-7.52	-10.87/-18.81	-14.34/-16.24	-15.63/-18.05	-13.98/-16.65	-14.14/-11.05	-15.25/-18.27	-17.32/-18.27	-19.73/-19.44	-18.59/-17.77	-17.93/-17.77	-18.62/-15.45	-18.04/-19.36	-18.09/-12.27	-10.28/-10.81	-10.36/-11.53	-5.92/-10.91	-5.45/-12.46	-15.97/-10.42	-17.66/-14.24
Θ(142.5°)	-15.92/-10.12	-18.57/-9.21	-8.96/-13.61	-12.62/-18.41	-13.72/-15.61	-18.42/-18.24	-14.53/-18.32	-14.34/-9.8	-8.86/-9.51	-13.72/-14.99	-13.49/-15.67	-17.77/-18.55	-19.21/-17.68	-14.05/-17.24	-18.79/-18.91	-18.97/-18.38	-18.55/-10.85	-18.61/-14.86	-18.82/-11.64	-13.56/-10.55	-9.54/-18.2	-6.58/-9.8	-6.39/-9.28	-14.64/-8.03
Θ(150°)	-16.4/-12.34	-15.15/-12.17	-11.45/-12.96	-13.49/-11.28	-10.31/-13.1	-18.24/-12.45	-11.21/-18.97	-14.9/-11.75	-17.61/-18.33	-16.65/-19.2	-17.14/-17.83	-18.75/-18.22	-15.84/-17.06	-18.27/-18.46	-18.24/-17.8	-18.38/-19	-18.04/-18.84	-18.76/-17.48	-19.13/-15.1	-18.25/-15.82	-17.09/-14.89	-11.22/-17.9	-7.88/-7.54	
Θ(157.5°)	-18.74/-18.53	-18.95/-15.33	-15.24/-18.13	-18.17/-17.6	-18.41/-17.21	-15.66/-13.5	-13.84/-15.57	-14.22/-14.22	-12.29/-12.8	-15.19/-18.23	-18.21/-19.14	-18.66/-18.62	-16.24/-18.93	-18.93/-18.39	-18.15/-17.88	-18.93/-18.34	-17.3/-18.47	-16.56/-16.89	-19.45/-12.43	-12.96/-17.95	-14.85/-18.29	-17.87/-17.63		
Θ(165°)	-18.76/-16.99	-15.85/-13.36	-12.56/-13.97	-15.64/-15.89	-16.48/-15.86	-15.85/-15.45	-13.49/-11.75	-11.4/-11.53	-15.01/-18.02	-17.96/-17.86	-16.64/-17.51	-17.85/-17.92	-18.34/-18.57	-18.18/-17.94	-19/-18.78	-18.06/-17.21	-17.91/-18.35	-15.22/-13.41	-15.6/-18.96	-18.69/-14.13	-12.62/-11.34	-12.34/-14.45	-13.16/-12.79	-14.53/-18.84
Θ(172.5°)	-11.26/-11.82	-13.68/-12.09	-12.66/-15.25	-18.58/-18.32	-18.13/-17.95	-18.25/-17.92	-18.19/-19.16	-19.34/-18.31	-16.39/-17.2	-17.39/-16.24	-17.06/-18.88	-18.54/-17.33	-18.45/-17.88	-18.22/-18.88	-18.21/-18.83	-18.49/-18.27	-18.14/-17.59	-18.35/-18.51	-18.41/-17.59	-18.86/-17.85	-18.32/-17.59	-16.52/-16.68	-16.47/-14.5	-12.48/-12
Θ(180°)	-17.6/-19.3	-16.91/-15.61	-15.95/-17.05	-15.91/-13.81	-14.59/-15.4	-15.5/-16.83	-15.31/-14.82	-18.57/-18.72	-18.44/-18.91	-18.11/-18.38	-18.63/-18.88	-18.21/-17.76	-18.88/-17.98	-19.14/-17.52	-17.18/-18.01	-17.66/-18.01	-18.51/-16.56	-16.53/-14.63	-13.83/-13.69	-14.17/-14.81	-14.98/-14.69	-15.35/-18.2	-17.75/-18.59	-19/-18.03
Freq(Hz)	6.995GPol.	Theta/Ant. 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°)	3.35/3.52	3.5/3.16	2.46/2.04	1.81/0.4	-0.25/-1.41	-2.84/-1.3	-5.48/-5.66	-5.26/-4.35	-2.84/-1.84	-0.71/0.22	0.92/1.41	1.73/2.09	2.4/2.25	2.12/1.91	1.76/1.6	1.04/0.26	-0.55/-1.47	-2.62/-3.96	-5.3/-6.73	-6.43/-5.27	-4.06/-2.41	-110.24	1.11/1.66	2.34/3.04
Θ(7.5°)	-0.74/0.65	1.19/1.36	1.26/0.95	0.32/-0.51	-1.75/-2.84	-3.75/-4.47	-4.79/-4.63	-4.25/-3.3	-2.75/-2.82	-2.63/-1.91	-1.76/-3.05	-3.78/-4.11	-4.41/-5.4	-5.94/-5.7	-4.98/-4.42									



Antenna Pattern of 2.4GHz/5GHz 2G5G Ant1~4

Appendix B.1

Total Gain Data

Freq(Hz)	2.45G/Pol.	Total/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°)	-6.67/-6.62	-6.98/-7.21	-7.65/-7.66	-6.83/-5.82	-6.65/-6.56	-7.86/-8.62	-7.69/-6.41	-6.12/-6.61	-7.40/-7.95	-7.54/-7.00	-6.80/-6.94	-7.23/-7.31	-7.18/-6.97	-6.85/-7.05	-6.67/-7.83	-7.21/-7.26	-6.28/-8.71	-6.62/-6.86	-6.22/-5.98	-6.31/-6.58	-6.98/-6.91			
Θ(7.5°)	-6.07/-5.85	-6.13/-6.63	-6.66/-5.85	-4.74/-4.12	-4.19/-4.83	-5.55/-5.81	-5.26/-4.55	-4.13/-4.18	-4.74/-5.49	-5.88/-5.71	-5.56/-5.71	-6.22/-6.95	-7.51/-7.71	-7.78/-8.07	-8.35/-8.69	-8.99/-8.39	-9.85/-10.39	-9.95/-8.58	-7.38/-6.96	-7.27/-7.82	-7.59/-6.65	-5.79/-5.45	-5.70/-6.39	-6.81/-6.70
Θ(15°)	-5.05/-4.90	-5.30/-5.61	-5.10/-3.92	-2.76/-2.09	-2.17/-2.92	-3.99/-4.53	-3.86/-2.90	-2.35/-2.30	-2.66/-3.10	-3.40/-3.48	-3.56/-3.89	-4.58/-5.62	-6.52/-6.77	-7.64/-9.21	-10.51/-11.51	-11.88/-11.64	-11.69/-11.75	-10.78/-9.23	-7.67/-6.76	-6.65/-7.00	-7.04/-6.63	-5.94/-5.46	-5.46/-5.84	-6.01/-5.62
Θ(22.5°)	-3.87/-3.45	-3.48/-3.37	-2.63/-1.78	-1.06/-0.61	-0.50/-0.96	-2.09/-3.30	-3.33/-2.39	-1.53/-1.28	-1.15/-1.04	-1.10/-1.32	-1.64/-2.10	-2.91/-3.82	-4.50/-5.19	-6.68/-9.45	-13.36/-13.79	-15.08/-15.19	-13.80/-12.15	-10.63/-9.16	-7.94/-7.51	-7.81/-8.31	-6.83/-8.54	-7.78/-6.93	-6.29/-5.80	-5.39/-4.70
Θ(30°)	-2.29/-1.63	-1.53/-1.31	-0.68/-0.09	0.230/0.43	0.570/0.37	-0.47/-1.86	-2.81/-2.15	-0.94/-0.35	-0.060/0.39	0.760/0.67	0.20/-0.37	-1.11/-1.89	-2.30/-2.76	-3.96/-5.92	-8.38/-10.14	-9.44/-7.70	-7.08/-8.33	-9.79/-9.38	-8.89/-9.01	-9.88/-11.15	-13.42/-12.38	-9.62/-6.91	-5.41/-4.61	-4.19/-3.40
Θ(37.5°)	-0.570/-0.01	0.000/0.09	0.550/0.92	1.041/1.10	1.151/1.07	0.68/-0.23	-1.37/-1.38	-0.220/-0.44	0.500/0.94	1.751/1.95	1.430/-0.72	-0.00/-0.53	-0.52/-0.56	-1.16/-2.20	-3.75/-5.06	-4.78/-3.96	-4.01/-5.68	-7.58/-8.48	-8.36/-8.48	-9.29/-10.42	-13.29/-14.55	-8.06/-4.57	-3.08/-2.50	-2.24/-1.63
Θ(45°)	0.89/-1.32	0.950/0.65	0.961/1.43	1.661/1.68	1.551/1.31	1.090/0.74	0.10/-0.21	0.390/0.88	0.620/0.79	1.882/3.66	1.981/4.05	0.860/-0.51	0.781/1.13	1.080/4.07	-0.95/-2.77	-3.33/-3.10	-3.63/-5.17	-6.27/-6.64	-6.88/-7.12	-7.61/-8.26	-4.48/-7.14	-4.48/-2.28	-1.22/-0.95	-0.92/-0.19
Θ(52.5°)	1.57/-5.52	1.640/0.78	0.711/1.24	1.671/1.83	1.701/1.39	1.030/0.87	0.37/-0.07	0.461/1.32	1.331/1.00	1.551/1.96	1.731/1.44	1.030/0.70	1.021/1.60	1.891/1.59	0.34/-1.15	-1.81/-2.30	-3.42/-4.99	-7.08/-8.81	-8.52/-8.31	-8.38/-7.80	-7.04/-4.54	-1.68/-0.02	0.41/-0.05	-0.64/-0.15
Θ(60°)	1.32/-2.14	2.141/-2.09	0.650/-0.81	1.121/-2.14	1.241/-1.18	1.020/-0.61	-0.31/-1.16	-0.35/-1.25	1.791/-2.10	0.981/-1.77	0.920/-0.64	0.350/-0.09	0.521/-4.22	2.25/-2.22	1.00/-0.51	-1.44/-2.00	-2.80/-3.73	-5.32/-8.56	-9.67/-8.67	-8.57/-7.19	-7.10/-5.65	-1.81/-0.56	1.431/-1.15	0.19/-0.24
Θ(67.5°)	1.041/-1.16	1.491/-2.00	0.700/-0.77	0.880/-0.74	0.731/-0.00	0.980/-2.16	-1.08/-1.73	-0.750/-0.84	1.751/-2.26	0.440/-2.22	-0.26/-0.68	-0.76/-0.69	-0.00/-1.23	2.171/-1.97	0.94/-0.37	-1.30/-1.80	-3.04/-3.50	-3.96/-6.78	-7.73/-7.05	-7.69/-6.08	-5.42/-5.98	-2.92/-0.45	0.470/-0.98	1.010/0.93
Θ(75°)	1.120/-0.76	0.480/-0.28	0.070/-0.61	1.101/-0.05	1.111/-0.43	1.330/-0.26	-1.28/-1.92	-1.580/-0.04	1.581/-2.26	-0.29/-0.92	-1.31/-1.92	-1.86/-1.71	-0.900/-0.73	1.771/-1.96	1.590/-2.22	-0.73/-1.47	-3.37/-2.95	-2.83/-6.58	-7.87/-5.75	-7.58/-6.33	-4.31/-5.22	-2.82/-0.38	-0.81/-0.99	0.260/-0.78
Θ(82.5°)	-0.040/-0.48	0.380/-0.01	-0.530/-0.02	0.911/-0.04	1.131/-0.55	1.480/-0.52	-0.85/-1.68	-1.300/-0.07	1.090/-0.42	-1.271/-1.55	-2.08/-3.39	-3.55/-2.98	-1.200/-0.61	1.281/-1.88	1.22/-0.49	-0.87/-1.92	-3.52/-2.23	-2.33/-6.14	-5.72/-3.46	-6.52/-5.41	-4.29/-0.44	-0.61/-2.13	-0.56/-0.43	
Θ(90°)	-2.271/-1.19	-0.31/-0.32	-0.78/-0.42	0.460/-0.46	0.310/-0.93	1.250/-1.41	-1.36/-2.10	-1.61/-1.16	-0.43/-0.54	-1.80/-2.13	-3.01/-4.57	-4.05/-3.24	-1.52/-0.60	-0.190/-0.90	-1.51/-1.01	-1.30/-2.70	-4.56/-3.74	-3.20/-7.22	-5.21/-1.77	-3.44/-5.98	-3.77/-4.44	-6.11/-2.32	-1.40/-2.72	-0.53/-0.74
Θ(97.5°)	-2.78/-2.88	-1.35/-1.35	-1.79/-1.37	-0.220/-0.13	-0.140/-0.09	0.04/-1.06	-2.22/-2.23	-2.68/-2.54	-0.95/-0.88	-2.42/-2.67	-3.00/-3.58	-4.19/-4.23	-2.53/-2.02	-0.91/-0.30	-1.61/-2.27	-3.46/-4.04	-4.70/-3.85	-3.52/-9.56	-7.04/-2.12	-3.51/-6.52	-5.07/-5.61	-5.31/-3.63	-3.51/-4.49	-1.13/-0.43
Θ(105°)	-2.75/-3.81	-0.89/-1.25	-2.23/-2.17	-1.740/-1.67	-0.92/-1.15	-1.11/-1.09	-1.26/-2.16	-3.58/-2.60	-2.97/-1.17	-2.97/-1.04	-3.48/-5.58	-6.65/-3.54	-1.50/-1.88	-2.93/-4.43	-4.75/-3.36	-3.46/-2.76	-4.26/-5.78	-5.22/-11.80	-9.66/-3.49	-5.12/-7.74	-5.11/-6.51	-5.68/-3.83	-4.71/-6.12	-2.71/-1.15
Θ(112.5°)	-3.36/-4.70	-2.76/-2.10	-2.65/-2.57	-1.40/-1.13	-1.05/-0.98	-0.83/-0.94	-1.87/-3.25	-3.61/-2.14	-1.42/-2.91	-4.55/-3.91	-3.62/-3.62	-2.92/-2.07	-3.11/-7.01	-9.14/-5.36	-1.82/-1.54	-3.98/-2.79	-6.96/-8.78	-7.99/-15.85	-8.23/-3.85	-5.62/-8.47	-5.66/-6.09	-5.63/-4.42	-5.67/-6.06	-3.23/-1.96
Θ(120°)	-3.25/-4.49	-3.50/-2.63	-3.13/-3.19	-2.26/-1.48	-1.29/-1.34	-1.37/-1.34	-1.60/-2.30	-3.09/-2.86	-2.86/-3.72	-3.43/-2.00	-1.64/-3.07	-5.28/-6.68	-6.86/-5.75	-3.98/-2.69	-1.84/-3.35	-7.11/-9.27	-10.03/-7.64	-7.65/-14.04	-11.40/-5.29	-4.25/-4.90	-5.42/-6.51	-6.15/-4.93	-5.64/-6.29	-4.29/-2.78
Θ(127.5°)	-4.51/-4.44	-3.64/-2.95	-3.81/-4.51	-3.59/-2.36	-1.72/-1.29	-0.98/-0.84	-1.63/-3.67	-5.35/-3.97	-3.08/-3.49	-3.77/-3.32	-3.92/-2.52	-4.53/-2.70	-2.04/-2.51	-3.43/-4.29	-5.44/-8.37	-11.47/-9.98	-7.38/-5.85	-7.14/-12.70	-11.91/-9.65	-4.26/-3.13	-3.79/-6.95	-8.73/-7.05	-6.50/-6.48	-5.49/-4.75
Θ(135°)	-5.47/-4.11	-2.49/-1.77	-2.24/-3.99	-5.06/-4.38	-3.24/-2.31	-1.94/-2.29	-3.85/-6.08	-5.23/-3.28	-3.14/-4.22	-4.13/-2.88	-2.39/-2.26	-1.81/-1.60	-2.33/-3.59	-4.73/-5.78	-7.62/-9.76	-8.91/-6.51	-5.26/-4.57	-5.71/-8.68	-8.88/-6.95	-5.34/-4.35	-6.67/-7.66	-13.28/-10.15	-7.38/-6.45	-5.66/-5.63
Θ(142.5°)	-6.61/-5.87	-3.62/-2.03	-1.58/-2.24	-3.41/-3.90	-3.61/-3.14	-3.05/-3.54	-4.60/-4.47	-2.87/-2.28	-3.28/-4.40	-3.92/-2.95	-2.56/-2.41	-2.47/-3.02	-4.43/-6.01	-6.75/-7.56	-8.97/-7.72	-5.18/-3.74	-3.17/-3.25	-4.25/-5.83	-5.83/-5.18	-4.80/-5.19	-6.55/-10.09	-15.08/-10.79	-7.09/-6.25	-5.69/-5.97
Θ(150°)	-6.74/-7.85	-7.25/-5.66	-4.30/-4.11	-4.48/-4.70	-4.64/-4.72	-5.38/-6.55	-7.46/-6.64	-5.66/-6.00	-7.02/-6.22	-4.19/-2.81	-2.33/-4.25	-3.29/-4.92	-7.64/-10.76	-10.83/-9.74	-8.82/-6.79	-4.48/-4.04	-2.88/-3.39	-4.54/-6.15	-6.84/-6.24	-5.60/-6.01	-7.94/-11.65	-12.44/-8.49	-6.33/-5.62	-5.52/-5.82
Θ(157.5°)	-4.82/-4.96	-5.10/-5.16	-5.20/-5.43	-5.56/-5.36	-5.11/-5.47	-6.31/-6.87	-6.32/-5.31	-4.60/-4.05	-3.17/-2.19	-1.57/-1.54	-2.10/-3.26	-4.79/-7.15	-10.55/-13.66	-12.99/-11.29	-9.94/-8.71	-6.95/-5.52	-5.10/-5.82	-7.45/-9.31	-9.66/-8.77	-8.21/-8.44	-9.21/-9.40	-8.09/-6.51	-5.39/-4.68	-4.37/-4.46
Θ(165°)	-3.56/-3.26	-2.84/-2.70	-2.84/-2.89	-2.64/-2.13	-1.70/-1.61	-1.67/-1.57	-1.49/-1.40	-1.28/-1.14	-1.15/-1.35	-1.79/-2.53	-3.55/-4.92	-6.49/-8.04	-9.59/-11.18	-11.25/-10.29	-9.49/-9.62	-9.59/-9.29	-9.24/-10.13	-11.82/-12.45	-11.09/-10.03	-10.05/-10.35	-9.53/-8.60	-7.36/-6.17	-5.04/-4.17	-3.78/-3.67
Θ(172.5°)	-3.28/-2.99	-2.75/-2.66	-2.65/-2.51	-2.32/-2.04	-1.93/-2.06	-2.16/-2.26	-2.43/-2.47	-2.68/-3.03	-3.60/-4.06	-4.37/-4.83	-5.55/-6.39	-6.95/-7.15	-7.23/-7.73	-8.19/-8.29	-8.52/-9.24	-10.30/-11.26	-11.58/-11.20	-10.59/-9.96	-9.71/-9.83	-7.92/-7.34	-7.20/-7.20	-6.82/-5.81	-4.71/-3.95	-3.60/-3.43
Θ(180°)	-3.28/-3.29	-3.61/-3.82	-3.97/-4.14	-4.33/-4.36	-4.51/-5.02	-5.69/-6.01	-6.25/-6.51	-6.85/-7.10	-7.05/-6.53	-6.21/-6.48	-6.99/-7.25	-7.16/-6.79	-6.63/-6.85	-7.51/-8.03	-8.90/-9.44	-8.47/-6.83	-5.45/-4.88	-5.18/-5.83	-5.77/-4.79	-3.91/-3.61	-4.17/-4.84	-4.98/-4.46	-3.85/-3.59	-3.49/-3.41
Freq(Hz)	5.2G/Pol.	Total/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°)	-7.34/-7.81	-7.22/-6.43	-6.18/-6.65	-6.35/-6.70	-6.62/-6.19	-5.74/-6.49	-5.68/-6.87	-5.36/-4.44	-5.66/-5.70	-5.08/-5.22	-4.95/-4.88	-4.88/-4.39	-4.69/-4.78	-4.92/-5.28	-4.70/-4.72	-5.24/-4.90	-5.78/-6.63	-4.89/-7.50	-5.49/-4.80	-7.51/-5.62	-6.12/-6.39	-6.03/-6.77	-6.12/-6.10	-7.08/-6.95
Θ(7.5°)	-9.06/-8.52	-8.65/-10.09	-9.04/-9.30	-8.89/-7.45	-7.12/-7.70	-4.81/-4.47	-4.85/-3.10	-2.71/-2.56	-2.96/-3.44	-2.91/-2.27	-2.13/-2.91	-3.23/-3.11	-3.52/-3.66	-3.25/-2.91	-4.29/-2.86	-3.06/-2.96	-4.45/-4.92	-4.97/-5.30	-5.03/-4.75	-5.32/-6.04	-4.83/-4.91	-5.63/-5.41	-5.37/-5.44	-6.36/-7.85
Θ(15°)	-6.86/-5.61	-5.86/-7.15	-7.99/-5.80	-9.09/-9.91	-8.67/-8.73	-6.40/-3.76	-5.49/-2.76	-1.41/-1.49	-0.53/-0.81	-0.280/-0.24	0.500/-0.08	-0.83/-2.16	-3.36/-3.88	-2.98/-2.28	-2.18/-2.09	-2.41/-3.54	-6.79/-6.36	-7.71/-7.47	-6.84/-7.01	-7.34/-6.53	-6.03/-6.47	-5.19/-5.53	-5.45/-5.02	-5.20/-6.65
Θ(22.5°)	-3.29/-1.83	-2.22/-3.69	-5.61/-7.07	-8.40/-9.81	-9.29/-9.84	-8.21/-4.48	-3.45/-2.08	-0.120/-0.30	1.240/-0.93	0.200/-0.78	0.67/-0.26	-0.48/-0.97	-2.11/-1.95	-1.14/-0.58	-0.73/-1.88	-2.32/-3.20	-7.48/-11.15	-15.24/-7.70	-6.00/-6.38	-6.52/-10.85	-10.50/-9.81	-8.42/-7.71	-7.48/-5.36	-4.39/-4.02
Θ(30°)	-1.39/-0.16	-0.15/-1.19	-2.85/-5.03	-7.10/-7.80	-6.62/-5.37	-3.53/-2.27	-1.520/-0.05	-0.200/-0.59	1.281/-0.75	1.960/-0.99	0.950/-0.34	-0.69/-0.71	-2.38/-4.03	-1.54/-1.65	-0.57/-1.26	-2.37/-4.85	-8.28/-6.89	-4.50/-3.66	-3.13/-5.95	-8.37/-10.95	-8.73/-5.45	-6.48/-6.36	-5.77/-5.68	
Θ(37.5°)	0.790/-0.38	0.33/-0.63	-0.57/-1.26	-1.57/-1.73	-0.210/-0.16	-0.87/-0.74	-1.94/-0.65	0.64/-0.18	0.380/-0.63	1.930/-0.61	-0.051/-0.45	0.05/-0.86	-0.14/-0.26	-2.20/-2.65	-1.370/-4.02	0.780/-0.03	-0.48/-1.86	-5.43/-7.03	-4.49/-3.54	-1.06/-0.75	-1.95/-3.22	-3.96/-3.50		



Antenna Pattern of 2.4GHz/5GHz 2G5G Ant1~4

Appendix B.1

Θ(22.5°)	-2.82/-1.16	-1.26/-3.43	-4.87/-3.63	-3.62/-3.43	-4.33/-5.04	-4.30/-5.31	-3.68/-3.68	-4.03/-3.42	-3.89/-2.89	-2.60/-3.10	-3.57/-2.81	-2.67/-2.59	-2.42/-2.55	-2.60/-3.02	-3.25/-2.96	-2.16/-2.92	-4.38/-4.51	-5.37/-6.31	-4.80/-2.75	-4.00/-2.78	-2.22/-2.86	-2.44/-1.72	-0.76/-0.81	-1.74/-3.48
Θ(30°)	-2.77/-0.39	0.04/-0.89	-0.52/-0.64	0.74/-0.00	-0.77/-2.37	-3.94/-4.51	-4.25/-2.27	-2.44/-1.49	-2.65/-2.87	-2.10/-1.44	-1.82/-3.07	-2.02/-2.04	-1.73/-3.15	-0.81/-1.73	-2.63/-2.58	-2.05/-1.83	-2.42/-2.27	-3.17/-3.03	-2.52/-2.65	-2.83/-2.84	-2.13/-1.89	-3.62/-3.42	-0.47/-0.19	-1.85/-3.82
Θ(37.5°)	-2.41/-1.17	1.75/-81	2.05/-1.92	-0.07/-0.85	-3.01/-2.24	-0.28/-1.01	-0.53/-1.94	-1.74/-2.25	-0.59/-0.54	-0.90/-0.79	1.83/-2.00	-0.85/-0.43	-0.15/-0.27	0.09/-0.76	-1.58/-2.30	-0.80/-0.58	-0.86/-1.28	-0.70/-2.40	-0.40/-0.69	0.400/63	0.70/-1.41	-1.71/-4.01	-2.96/-2.03	-2.90/-2.50
Θ(45°)	2.47/3.78	3.39/3.30	3.18/-7.6	-0.83/-0.95	-0.05/-0.11	-0.69/-1.92	-1.12/-1.08	-0.54/-1.59	-1.41/0.30	0.48/2.13	2.35/-1.32	-0.62/0.75	0.38/-0.54	-0.31/-0.31	0.40/-0.33	-0.55/-0.47	-0.51/-1.25	-2.99/-4.48	-3.45/-2.95	-0.99/0.50	2.67/-1.29	-1.10/-2.31	-2.09/-1.03	-0.42/-1.62
Θ(52.5°)	4.50/-12.1	1.73/3.38	4.41/-2.22	0.04/-0.16	0.54/-1.18	-2.73/-2.08	-0.20/-0.20	1.49/-1.09	-0.68/-0.32	2.21/2.03	2.74/0.49	0.81/0.59	0.08/-1.02	-1.71/-0.94	-0.48/-1.23	-0.10/-0.16	-0.14/-0.51	-0.06/-1.25	0.34/1.01	0.32/-1.13	2.34/-1.71	-0.31/-3.02	-2.97/-0.55	0.06/-0.68
Θ(60°)	3.68/4.85	1.96/2.25	4.10/-3.45	1.17/0.69	0.39/-0.25	-1.17/0.69	-0.39/-0.25	-0.94/0.93	1.22/-1.97	0.46/-0.35	0.62/2.24	2.22/0.44	-0.51/-0.38	0.50/-1.42	-1.01/-1.65	-0.46/-0.79	-2.08/-1.76	-1.60/-2.24	-0.24/0.11	-0.40/-1.01	0.24/0.63	-1.10/-2.62	-1.66/-3.75	-0.26/-1.56
Θ(67.5°)	2.70/3.99	1.79/2.85	3.57/3.45	1.35/1.08	0.19/0.61	0.01/-1.57	-0.42/-1.33	1.78/2.13	0.49/-0.92	-0.10/-2.49	0.86/0.16	-0.83/0.29	-0.28/-1.03	-0.10/-2.46	-0.98/-1.52	-0.40/-0.16	-1.66/0.48	-0.67/-5.40	-2.65/-1.22	-0.67/0.60	-0.98/-1.47	-3.56/-3.31	-0.38/-3.60	-1.35/-1.76
Θ(75°)	2.17/3.87	0.87/2.50	3.00/-2.22	1.09/1.02	1.20/2.24	0.86/-1.33	-1.10/-0.58	2.20/-1.71	-0.21/-0.85	-0.93/-1.10	-0.23/-0.14	-2.11/-0.27	-0.32/-0.75	1.11/-2.68	-1.30/-1.45	-1.12/-0.56	-3.00/0.78	0.61/-2.83	-4.35/-0.63	0.08/0.48	-1.53/-1.72	-4.88/-3.85	-0.05/-3.28	-1.50/-0.94
Θ(82.5°)	1.14/2.91	1.03/-1.96	1.68/-1.34	1.52/-1.39	1.05/2.52	0.81/-1.64	-1.03/-1.06	1.17/-1.34	-0.98/-1.32	-2.17/0.44	-1.19/-1.27	-1.57/-2.20	-1.07/-1.81	0.22/-2.53	-2.42/-2.47	-3.09/-1.18	-2.76/-1.15	0.18/-2.95	-6.62/0.88	0.90/-1.26	-2.42/-2.68	-5.86/-3.47	-1.29/-3.58	-1.81/-0.07
Θ(90°)	0.17/-1.53	0.55/-1.61	0.61/0.53	1.79/-1.46	0.71/-1.47	0.62/-1.36	-1.26/-2.19	0.12/-0.17	-2.14/-2.27	-2.25/-1.80	-1.11/-2.15	-2.73/-3.41	-2.37/-4.35	-1.70/-3.17	-2.12/-1.92	-3.52/-2.21	-1.20/-3.03	-3.41/-2.75	-8.82/-0.77	0.46/-0.92	-2.69/-3.59	-5.15/-3.41	-2.40/-3.42	-3.44/-0.54
Θ(97.5°)	-1.36/0.76	-0.78/0.70	0.34/-0.01	0.74/0.46	1.09/-1.49	0.36/-0.98	-1.39/-2.61	-1.72/-1.51	-4.25/-2.21	-3.17/-2.72	-2.39/-2.80	-4.56/-4.66	-5.35/-9.03	-5.12/-5.69	-5.71/-2.42	-3.90/-3.29	-3.19/-4.98	-3.31/-7.96	-8.61/-2.83	-2.74/-4.92	-4.34/-3.86	-3.30/-4.47	-3.13/-1.18	
Θ(105°)	-2.35/-0.45	-1.21/-0.53	0.05/-1.58	0.50/-0.49	2.02/0.27	-0.70/-0.45	-2.84/-3.27	-3.39/-1.37	-3.58/-3.77	-4.30/-3.51	-3.36/-2.67	-5.58/-8.05	-6.25/-1.21	-11.21/-6.96	-11.84/-5.98	-3.37/-5.92	-3.59/-4.13	-4.97/-10.65	-6.63/-7.07	-5.20/-7.28	-8.54/-4.67	-4.66/-5.81	-3.59/-2.16	
Θ(112.5°)	-2.40/-1.87	-4.23/-1.29	-2.02/-3.29	0.12/-1.80	0.58/-0.09	-0.94/-1.32	-2.80/-6.49	-1.90/-4.29	-5.57/-5.65	-5.13/-5.75	-2.42/-5.00	-6.53/-7.43	-13.00/-10.04	-13.57/-11.11	-9.58/-14.74	-9.26/-5.92	-5.63/-7.19	-8.31/-8.66	-11.38/-5.37	-9.97/-9.78	-6.90/-11.31	-13.22/-7.14	-6.92/-6.11	-4.34/-3.55
Θ(120°)	-3.66/-2.95	-3.70/-3.01	-2.58/-4.33	-1.00/-2.22	-2.74/-1.31	-2.32/-3.10	-0.51/-2.61	-3.49/-3.70	-4.84/-5.57	-4.57/-5.94	-3.21/-5.62	-8.46/-5.89	-10.97/-13.49	-6.54/-8.28	-9.64/-11.60	-9.95/-7.00	-9.69/-9.57	-8.84/-15.22	-11.89/-5.73	-5.79/-15.27	-11.93/-11.15	-9.35/-8.32	-5.57/-6.48	-15.14/-96
Θ(127.5°)	-5.69/-4.31	-5.56/-4.19	-3.45/-3.54	-2.18/-1.61	-2.69/-2.16	-3.34/-6.26	-1.96/-6.37	-3.84/-2.82	-3.21/-2.78	-5.92/-3.40	-6.20/-5.49	-7.52/-7.73	-6.02/-10.00	-8.38/-15.41	-12.05/-9.66	-4.97/-9.29	-4.89/-6.30	-9.78/-10.84	-13.19/-10.03	-14.52/-13.16	-13.68/-9.09	-12.48/-8.36	-7.70/-6.35	-5.72/-6.82
Θ(135°)	-7.04/-7.56	-9.00/-7.46	-4.25/-3.44	-3.97/-3.13	-4.33/-4.10	-3.99/-7.16	-8.15/-7.45	-5.58/-4.27	-3.31/-3.18	-4.47/-4.63	-4.75/-7.77	-6.03/-6.81	-6.84/-9.68	-10.61/-12.09	-8.13/-11.29	-10.10/-10.22	-12.51/-15.83	-15.33/-8.50	-11.67/-15.27	-15.99/-12.96	-7.35/-13.94	-10.56/-7.76	-11.91/-6.32	-5.44/-8.22
Θ(142.5°)	-9.57/-12.71	-9.50/-8.75	-9.49/-8.07	-5.75/-3.49	-3.66/-5.33	-4.81/-5.23	-2.74/-1.31	-6.77/-4.94	-3.96/-5.94	-4.57/-5.94	-3.25/-3.04	-7.31/-9.92	-6.46/-8.71	-8.32/-9.82	-9.45/-11.36	-10.81/-12.38	-14.79/-14.76	-14.85/-13.97	-11.20/-9.45	-9.02/-9.36	-12.39/-13.02	-8.87/-9.26	-15.13/-9.65	-7.30/-9.93
Θ(150°)	-11.73/-11.51	-10.15/-7.68	-5.96/-8.16	-6.81/-4.45	-3.77/-4.10	-5.44/-5.94	-5.45/-4.79	-3.69/-3.16	-2.96/-3.53	-3.96/-4.59	-5.76/-7.24	-6.83/-9.26	-8.23/-6.97	-6.72/-10.25	-11.42/-11.02	-9.89/-12.12	-12.27/-13.43	-15.04/-12.27	-10.19/-12.62	-10.39/-10.31	-11.51/-13.86	-14.33/-13.75	-15.02/-9.98	-10.86/-14.60
Θ(157.5°)	-11.78/-11.94	-9.34/-7.51	-7.21/-7.82	-9.95/-8.75	-6.06/-4.71	-4.19/-4.24	-6.28/-5.86	-8.97/-8.42	-8.09/-8.10	-7.11/-7.45	-6.89/-4.86	-4.77/-6.04	-8.06/-11.72	-14.99/-15.02	-14.84/-14.18	-13.78/-14.75	-15.41/-14.28	-11.53/-8.11	-10.09/-10.93	-14.79/-14.39	-13.64/-13.43	-11.73/-10.37	-8.99/-8.90	-12.31/-13.57
Θ(165°)	-6.07/-7.74	-9.89/-10.59	-9.89/-8.67	-7.47/-7.21	-6.38/-4.66	-3.40/-3.25	-3.08/-3.04	-4.98/-4.95	-8.78/-12.10	-10.54/-7.67	-5.53/-5.21	-6.73/-9.23	-10.35/-9.88	-8.80/-9.19	-8.95/-9.43	-9.75/-11.22	-10.47/-9.84	-8.14/-10.03	-9.60/-9.05	-9.43/-10.47	-11.76/-10.06	-7.52/-7.37	-7.83/-7.16	-6.92/-5.65
Θ(172.5°)	-4.27/-4.14	-4.82/-4.53	-4.67/-5.03	-5.26/-5.47	-6.71/-7.46	-8.21/-8.56	-8.30/-10.21	-8.21/-7.78	-6.73/-5.90	-6.29/-6.84	-8.02/-10.62	-15.41/-14.69	-13.11/-12.54	-12.09/-13.05	-12.20/-12.99	-13.92/-11.93	-11.45/-9.78	-8.75/-8.54	-8.29/-8.39	-9.07/-9.28	-8.62/-7.80	-7.70/-7.82	-7.55/-7.65	-6.78/-5.49
Θ(180°)	-6.99/-6.71	-6.61/-7.41	-7.57/-6.79	-6.68/-6.63	-7.03/-6.64	-6.93/-6.96	-7.11/-6.87	-6.58/-6.98	-7.96/-9.23	-8.99/-9.62	-11.55/-13.20	-12.99/-13.39	-13.82/-13.16	-11.66/-8.83	-4.86/-6.30	-4.81/-4.77	-5.03/-4.70	-5.46/-5.45	-5.94/-5.46	-5.08/-5.16	-5.46/-5.18	-5.21/-5.95	-6.30/-6.63	-7.21/-7.16
Freq(Hz)	2.45GPol	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°)	0.41/0.36	0.48/0.70	0.89/-1.05	1.15/-1.20	1.23/-1.15	0.93/0.71	0.71/0.77	0.78/0.69	0.59/0.55	0.57/0.71	0.78/0.88	0.88/0.81	0.73/0.71	0.73/0.77	0.81/0.78	0.77/0.80	0.77/0.66	0.43/0.22	0.17/0.16	0.13/0.15	0.20/0.28	0.40/0.57	0.66/0.71	0.71/0.63
Θ(7.5°)	-2.13/-1.98	-1.72/-1.42	-1.07/-0.85	-0.65/-0.36	-0.09/0.16	0.31/-0.49	0.79/-1.10	1.40/-1.66	1.87/2.03	2.19/-2.39	2.60/-2.70	2.74/2.70	2.63/2.52	2.42/2.27	2.08/-1.86	1.61/-1.35	0.98/0.44	-0.31/-1.07	-1.78/-2.47	-3.06/-3.42	-3.61/-3.55	-3.58/-3.35	-3.03/-2.70	-2.43/-2.22
Θ(15°)	-1.79/-1.60	-1.61/-1.66	-1.78/-1.93	-2.08/-2.26	-2.43/-2.39	-2.14/-1.75	-1.25/-0.65	0.05/0.70	1.24/-1.66	2.01/-2.31	2.62/2.80	2.90/-2.91	2.83/2.70	2.50/2.28	2.08/-1.99	1.76/-1.61	1.33/0.84	0.16/-0.75	-2.02/-3.73	-5.74/-7.71	-8.97/-8.89	-7.72/-6.25	-4.86/-3.77	-2.91/-2.26
Θ(22.5°)	0.63/0.77	0.57/0.25	-0.14/-0.49	-0.93/-1.71	-2.73/-3.74	-4.31/-4.35	-4.05/-3.49	-2.67/-1.71	-1.71/0.09	0.66/-1.04	1.30/-1.44	1.48/-1.43	1.34/-1.25	1.14/-1.09	1.08/-1.16	1.25/-1.30	1.33/-1.25	0.97/0.34	-0.85/-2.74	-5.32/-8.07	-9.05/-7.65	-5.72/-4.06	-2.70/-1.64	-0.73/0.07
Θ(30°)	2.31/2.53	2.37/2.02	1.59/-1.15	0.73/0.13	-0.58/-1.51	-2.59/-3.42	-3.88/-4.45	-5.31/-5.71	-4.72/-3.16	-1.92/-1.18	-0.92/-1.00	-1.09/-0.96	-0.66/-0.39	-0.21/-0.07	0.11/0.28	0.35/0.34	0.41/0.58	0.61/0.24	-0.74/-2.49	-4.89/-6.76	-6.12/-4.28	-2.67/-1.52	-0.70/-0.03	0.77/-1.66
Θ(37.5°)	3.00/3.28	3.21/3.00	2.59/2.07	1.57/-1.23	0.98/0.45	-0.46/-1.39	-2.31/-3.24	-4.83/-6.80	-7.71/-6.70	-5.08/-4.05	-3.86/-4.22	-3.80/-2.71	-0.61/-0.22	0.55/0.70	0.73/0.63	0.40/0.07	-0.18/-0.21	-0.16/-0.32	-0.94/-2.17	-3.73/-4.49	-3.62/-2.18	-1.02/-0.25	0.23/0.71	1.42/2.33
Θ(45°)	2.84/-3.11	3.23/-3.15	2.69/-1.94	1.38/-1.28	1.39/-1.17	0.43/-0.62	-1.58/-2.61	-4.23/-6.05	-7.30/-7.69	-7.55/-8.82	-6.46/-6.27	-3.94/-0.75	1.21/2.02	2.21/2.12	1.85/-1.43	0.99/0.62	0.27/0.13	0.21/0.32	0.29/-0.05	-0.69/-1.29	-1.19/-0.56	-0.04/0.17	0.33/0.60	1.32/2.24
Θ(52.5°)	2.03/2.40	2.74/2.88	2.34/-1.32	0.68/0.78	1.04/0.85	0.05/-1.17	-2.34/-3.49	-5.04/-6.02	-6.34/-6.46	-7.34/-7.52	-6.72/-5.18	-1.59/-1.55	3.14/3.66	3.55/-3.11	2.45/-1.88	1.69/-1.62	1.30/0.87	0.71/-1.00	1.38/-1.47	1.06/0.32	0.02/0.30	0.41/0.20	-0.04/-0.13	0.37/-1.37
Θ(60°)	0.94/-1.58	2.15/2.40	1.74/0.50	-0.17/-0.04	0.05/-0.45	-1.61/-3.17	-4.56/-5.42	-6.50/-6.72	-5.87/-5.52	-5.92/-6.62	-5.99/-7.40	-1.19/2.01	3.52/3.88	3.46/2.50	1.45/-1.17	1.73/2.14	1.88/-1.21	1.00/-1.65	2.41/2.56	2.00/0.87	0.05/0.23	0.36/-0.07	-0.57/0.95	-1.04/-0.14
Θ(67.5°)	-0.70/0.24	0.91/-1.14	0.49/-0.59	-0.18/-1.11	-1.33/-1.98	-3.04/-4.31	-5.01/-5.47	-6.31/-6.68	-5.43/-4.66	-5.71/-7.25	-6.79/-5.27	-0.98/2.14	3.42/3.54	2.67/-1.14	0.26/0.89	1.81/2.07	1.57/0.68	0.56/-1.42	2.36/2.77	2.36/-1.09	-0.17/-0.31	-0.07/-0.48	-1.11/-1.56	-2.18/-1.96
Θ(75°)	-2.19/-1.25	-0.56/-0.47	-1.00/-1.73	-2.03/-2.29	-2.43/-2.56	-3.08/-4.03	-4.38/-4.42	-5.44/-7.27	-6.67/-5.49	-6.77/-9.28	-7.53/-5.98	-1.57/-1.70	2.86/2.73	1.53/-0.21	-0.80/0.09	0.92/-1.27	0.99/0.23	0.07/0.69						



Antenna Pattern of 2.4GHz/5GHz 2G5G Ant1~4

Appendix B.1

θ(75°)	1.50/-2.05	0.11/0.33	1.48/-1.45	-0.43/-1.59	2.14/0.62	-1.39/-1.97	-1.30/-1.78	3.13/2.59	1.39/0.32	-1.70/0.38	3.05/3.72	3.32/2.97	4.21/6.23	5.38/3.77	2.26/-1.23	-3.79/0.12	3.05/3.47	4.51/-1.59	0.93/2.14	4.20/3.17	2.27/1.41	1.84/-0.05	0.16/-1.73	0.08/-1.54
θ(82.5°)	-0.56/-4.76	-2.16/-2.91	-1.10/0.22	-1.15/0.48	0.24/-2.15	-3.96/-2.93	-1.35/-1.09	0.90/0.61	-0.38/-2.24	-2.58/-0.16	1.17/2.24	0.92/-0.10	1.65/4.94	4.38/-1.71	1.01/-5.29	-4.71/0.57	2.46/3.86	5.30/2.02	2.01/2.70	2.92/2.45	1.33/-0.80	0.16/-1.22	-0.51/-1.73	-0.39/-0.86
θ(90°)	-1.64/-5.96	-4.15/-3.89	-2.62/-0.77	-1.23/-1.39	-2.94/-4.59	-5.69/-4.59	-3.09/-0.71	-1.31/-0.59	-2.63/-4.51	-2.44/-1.46	-0.25/-0.12	-0.72/-1.92	2.36/-0.22	1.19/-8.07	-6.58/-1.43	0.16/2.00	4.30/-1.76	1.57/2.25	0.73/0.15	-1.93/-3.05	-2.77/-3.33	-0.82/0.43	-1.65/-2.61	
θ(97.5°)	-3.71/-7.65	-6.70/-4.16	-4.46/-1.70	-2.34/-2.62	-4.72/-6.22	-5.98/-5.31	-5.54/-2.83	-3.55/-2.16	-3.69/-5.18	-3.65/-1.95	-2.41/-1.74	-1.77/-1.29	0.13/-2.08	-5.72/-13.16	-10.83/-5.94	-3.79/-0.69	0.97/-2.15	-0.30/-0.33	-2.38/-3.31	-5.57/-4.72	-4.55/-3.46	-1.92/-0.87	-2.89/-5.14	
θ(105°)	-4.54/-7.50	-7.86/-8.58	-3.47/-3.33	-2.92/-2.42	-7.81/-6.15	-5.83/-7.55	-9.42/-6.12	-7.28/-3.82	-3.94/-6.92	-4.42/-7.37	-2.50/-3.14	-4.62/-2.02	-3.58/-2.92	-4.13/-6.28	-10.31/-12.31	-13.70/-10.45	-5.10/-4.02	-3.49/-7.58	-5.01/-7.99	-4.35/-6.17	-8.86/-2.95	-5.74/-4.95	-3.22/-4.77	-4.91/-8.61
θ(112.5°)	-5.49/-10.53	-8.86/-6.79	-2.50/-3.37	-6.09/-5.91	-12.56/-7.59	-6.80/-11.28	-7.85/-8.21	-9.87/-6.56	-7.10/-7.35	-9.48/-3.08	-4.19/-6.11	-7.22/-0.79	-6.76/-5.91	-4.73/-7.91	-10.37/-9.99	-11.38/-9.63	-3.85/-6.98	-8.66/-10.26	-5.59/-7.00	-6.57/-6.00	-9.64/-4.03	-7.74/-6.23	-4.13/-4.52	-9.66/-8.72
θ(120°)	-7.11/-13.35	-7.55/-3.95	-3.20/-3.38	-10.60/-8.53	-10.60/-14.49	-12.85/-11.95	-5.23/-5.03	-9.58/-10.88	-8.85/-15.04	-8.88/-6.46	-6.79/-7.21	-12.58/-12.10	-7.67/-7.33	-5.70/-7.22	-7.99/-9.92	-9.08/-13.40	-8.57/-6.23	-4.51/-7.09	-4.43/-4.10	-9.24/-11.32	-10.74/-5.09	-11.31/-8.77	-5.06/-7.64	-15.85/-12.26
θ(127.5°)	-8.13/-9.64	-7.88/-4.93	-5.47/-3.90	-6.64/-12.61	-10.33/-10.74	-8.43/-10.99	-10.46/-11.34	-9.22/-9.22	-10.63/-13.85	-8.72/-9.64	-9.25/-6.58	-5.72/-8.14	-5.68/-5.05	-5.47/-12.29	-8.57/-7.30	-14.19/-8.83	-14.96/-5.33	-6.27/-10.22	-9.80/-7.79	-15.89/-14.49	-9.01/-9.00	-12.29/-10.50	-6.95/-12.04	-12.87/-9.43
θ(135°)	-9.80/-13.51	-7.99/-5.14	-7.45/-7.26	-9.08/-12.61	-10.06/-12.70	-11.45/-10.88	-14.93/-11.63	-9.71/-8.39	-9.16/-13.01	-13.27/-12.45	-7.01/-6.74	-6.38/-6.56	-10.33/-6.78	-8.11/-11.37	-9.55/-9.76	-15.85/-15.60	-12.65/-8.87	-10.37/-10.86	-10.73/-9.32	-11.48/-12.44	-8.36/-10.43	-7.20/-5.97	-8.90/-11.70	-10.92/-9.06
θ(142.5°)	-10.66/-14.98	-8.75/-4.83	-6.51/-10.58	-11.61/-9.75	-7.25/-11.21	-15.31/-15.35	-12.29/-9.39	-11.09/-14.90	-15.11/-12.88	-15.75/-12.07	-9.08/-15.16	-9.78/-8.84	-9.70/-7.06	-5.40/-6.93	-6.07/-10.41	-12.45/-11.53	-9.12/-10.93	-11.50/-10.29	-8.53/-13.75	-14.36/-12.84	-12.64/-12.70	-5.12/-6.03	-8.70/-9.32	-9.45/-9.54
θ(150°)	-12.87/-8.68	-7.59/-8.26	-8.00/-6.98	-7.66/-9.24	-11.18/-10.76	-11.61/-14.49	-15.21/-15.03	-12.28/-11.01	-13.07/-15.32	-12.91/-12.33	-11.62/-15.03	-15.31/-13.09	-9.94/-10.89	-13.26/-13.46	-13.93/-10.44	-9.50/-11.38	-12.60/-10.92	-13.35/-14.75	-12.39/-14.06	-14.48/-13.34	-13.92/-13.18	-12.63/-12.13	-13.72/-9.24	-9.64/-14.69
θ(157.5°)	-11.72/-9.38	-8.64/-8.81	-9.43/-8.74	-7.59/-7.14	-7.70/-8.93	-10.68/-12.79	-13.71/-11.54	-9.12/-8.43	-8.76/-8.94	-8.62/-9.56	-10.47/-12.17	-14.04/-10.92	-13.86/-14.26	-12.89/-13.47	-14.79/-12.29	-10.31/-9.72	-9.44/-9.65	-10.01/-9.72	-10.34/-12.72	-15.16/-14.21	-10.43/-11.71	-8.22/-10.78	-15.33/-14.03	
θ(165°)	-15.86/-15.00	-14.70/-13.73	-9.76/-8.53	-8.36/-8.49	-9.93/-9.16	-8.83/-10.75	-10.65/-10.40	-9.64/-10.30	-12.82/-13.89	-13.73/-10.87	-9.71/-9.53	-10.00/-11.08	-14.32/-15.05	-14.60/-15.11	-13.93/-11.43	-8.23/-6.82	-7.92/-9.70	-11.06/-10.61	-10.08/-9.80	-9.45/-9.52	-11.36/-14.33	-15.49/-15.81	-15.09/-13.11	-12.08/-13.52
θ(172.5°)	-12.07/-12.25	-11.58/-11.79	-12.96/-12.16	-10.07/-9.38	-9.65/-9.34	-7.89/-9.51	-11.42/-13.05	-15.10/-15.52	-15.48/-13.75	-14.36/-15.25	-14.00/-14.29	-14.01/-12.73	-13.63/-12.65	-12.18/-13.77	-14.46/-12.84	-10.60/-11.83	-12.88/-11.11	-10.22/-10.34	-10.56/-12.31	-13.88/-13.66	-12.09/-11.34	-12.15/-12.59	-12.35/-11.47	-9.89/-11.34
θ(180°)	-10.01/-10.30	-10.26/-9.89	-9.42/-9.70	-9.93/-9.48	-8.47/-7.82	-7.84/-9.04	-9.62/-10.07	-11.48/-12.11	-12.74/-13.14	-13.51/-13.19	-13.00/-12.14	-12.11/-10.96	-10.30/-9.96	-9.93/-9.74	-9.90/-10.28	-9.14/-7.88	-7.48/-7.36	-7.43/-7.30	-6.82/-8.16	-10.62/-11.48	-10.62/-10.14	-8.91/-8.28	-8.41/-8.37	-8.54/-9.32
Freq(Hz)	5.785GPol.	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°)	-3.61/-3.29	-2.91/-3.23	-4.07/-4.03	-3.70/-3.65	-4.20/-4.23	-3.74/-3.65	-3.50/-2.77	-2.59/-2.65	-2.29/-2.25	-2.72/-2.62	-2.39/-2.27	-0.165/-2.39	-2.41/-2.39	-2.42/-2.01	-1.79/-1.76	-2.00/-2.15	-1.90/-1.79	-1.94/-2.06	-2.03/-2.17	-1.73/-2.02	-2.54/-2.57	-2.13/-2.27	-2.67/-3.09	
θ(7.5°)	-6.23/-6.95	-6.93/-7.40	-8.44/-9.08	-9.76/-10.47	-9.82/-9.65	-10.62/-9.85	-8.89/-8.93	-8.33/-6.75	-5.94/-5.74	-5.97/-5.62	-4.46/-3.91	-3.29/-2.85	-2.54/-2.09	-1.74/-1.08	-0.57/-0.53	-0.68/-0.25	-0.07/-0.24	-0.27/-0.14	-0.16/0.07	0.30/-0.13	-0.50/-0.72	-1.25/-1.72	-1.97/-2.59	-3.57/-4.66
θ(15°)	-4.02/-4.64	-5.79/-6.71	-6.97/-6.08	-5.05/-5.10	-5.45/-5.42	-5.00/-5.15	-5.74/-6.20	-5.29/-3.81	-2.53/-2.12	-2.26/-2.78	-2.30/-3.27	-3.29/-2.78	-2.22/-1.85	-1.91/-2.55	-3.51/-3.44	-3.35/-3.55	-2.51/-1.29	-0.95/-0.96	-1.47/-1.21	-2.81/-4.10	-4.78/-4.16	-3.68/-3.26	-2.85/-3.32	
θ(22.5°)	-1.42/-3.87	-0.60/-10.14	-10.88/-6.40	-3.33/-4.85	-4.38/-4.47	-4.54/-4.47	-5.63/-4.52	-2.39/-1.49	-1.54/-1.42	-1.67/-2.99	-3.95/-5.28	-5.61/-5.41	-4.67/-3.61	-2.40/-1.63	-0.95/-0.58	-1.32/-2.20	-2.90/-3.24	-2.19/-1.29	-1.38/-1.04	-0.09/-0.18	-1.62/-3.46	-3.47/-1.75	-0.84/-0.72	-0.46/-0.66
θ(30°)	-6.16/-8.30	-7.97/-6.05	-5.25/-5.09	-4.77/-3.64	-2.22/-1.80	-1.91/-2.56	-3.67/-2.34	-0.65/0.65	0.95/-0.30	-1.04/-1.62	-2.11/-3.29	-2.70/-1.64	-0.85/-1.15	-2.11/-2.62	-2.89/-3.30	-4.09/-4.90	-6.78/-8.75	-7.29/-6.91	-4.84/-1.58	-0.25/-0.82	-2.04/-4.35	-1.90/0.28	0.15/-1.28	-2.27/-3.77
θ(37.5°)	-2.34/-0.07	0.62/0.20	1.14/0.66	0.34/-1.17	1.52/1.05	0.55/0.06	-1.50/-0.64	1.40/-2.89	3.96/2.34	0.60/-1.96	2.57/-1.23	1.71/2.05	-1.78/-3.51	-4.76/-4.57	-5.00/-5.84	-3.28/-1.51	-0.90/-1.86	-2.95/-0.84	1.07/0.81	-1.30/-0.31	-1.69/-0.54	-1.66/-2.76	-2.26/-3.43	
θ(45°)	0.87/2.42	3.80/2.47	3.85/2.47	1.81/2.85	3.33/3.73	2.94/-1.27	2.10/3.44	3.47/3.42	3.98/3.54	1.71/2.62	4.05/3.68	3.69/3.29	2.72/3.70	4.11/2.24	-2.59/4.63	-8.42/-6.67	-1.42/2.64	1.57/2.77	2.89/-1.51	0.30/-0.96	3.31/-0.73	-4.30/-0.55	1.98/-1.40	
θ(52.5°)	1.20/0.82	2.46/3.45	3.16/-1.73	1.32/2.50	3.81/4.31	3.80/-1.95	1.33/4.41	5.22/3.55	3.38/3.60	0.54/2.21	4.47/4.34	4.73/4.61	5.15/6.38	6.16/3.56	-2.52/-7.54	-7.23/-3.31	1.88/4.53	5.23/3.48	2.93/4.09	2.66/-1.14	2.24/2.38	2.84/-1.96	-4.83/-1.53	4.15/3.58
θ(60°)	0.07/-2.79	-1.16/-1.10	1.48/0.40	-0.42/2.56	4.27/4.45	4.32/2.63	-0.14/2.57	3.88/3.06	2.14/3.46	0.09/0.08	4.03/-1.11	4.86/4.72	5.79/6.46	6.21/4.71	1.37/-1.21	-3.04/-2.16	1.06/2.96	2.54/0.63	0.72/2.77	2.32/-1.14	3.27/2.04	-2.15/-1.90	3.63/2.89	
θ(67.5°)	-2.34/-8.13	-2.24/0.19	0.10/-1.57	-1.70/2.32	3.88/2.66	2.70/-1.59	-1.69/-0.59	0.65/-1.26	0.061/0.70	-1.17/-0.10	3.60/4.35	4.15/3.91	4.99/5.62	6.41/5.27	3.60/-1.64	-1.04/-1.37	1.83/3.44	3.01/-0.39	-0.75/-1.90	1.71/-1.72	2.49/0.95	2.35/0.83	0.13/-1.73	1.73/-1.17
θ(75°)	-4.03/-12.31	-3.95/-0.65	-1.61/-3.80	-3.77/1.48	3.26/0.45	-0.68/0.00	-3.19/-2.46	-2.43/-2.13	-1.82/-1.22	-2.77/-0.22	2.52/2.98	2.29/2.14	3.51/3.88	5.46/5.35	4.40/-1.97	-2.23/-2.39	1.94/4.32	5.24/0.11	0.35/-1.06	2.12/2.60	1.78/-1.49	1.02/-0.52	0.34/0.72	-2.16/-0.07
θ(82.5°)	-6.18/-10.34	-4.79/-2.19	-3.39/-5.61	-3.74/0.29	2.24/-0.65	-1.76/-0.76	-5.91/-5.29	-3.99/-4.40	-3.07/-3.62	-4.56/0.01	1.69/0.78	0.09/0.77	1.16/-1.85	4.35/3.96	3.30/-0.32	-3.50/-3.19	0.70/4.20	5.38/0.44	1.19/-1.73	0.93/2.31	1.33/-5.94	-1.41/-1.90	-0.80/-1.47	-4.94/-1.30
θ(90°)	-7.49/-9.00	-4.25/-3.30	-5.07/-7.71	-4.93/-1.69	0.27/-2.14	-3.88/-3.60	-7.92/-8.93	-5.42/-4.50	-4.78/-6.92	-7.10/-0.55	0.49/-1.70	-2.16/-1.73	-2.31/-0.41	2.99/2.50	1.63/-3.14	-6.86/-4.81	-2.19/-1.86	3.78/-0.95	0.78/-0.30	-0.93/0.47	-1.90/-10.44	-4.15/-3.44	-1.36/-3.02	-8.54/-2.85
θ(97.5°)	-8.64/-10.15	-4.23/-6.12	-6.93/-9.20	-4.98/-3.07	-2.23/-3.85	-6.12/-6.13	-10.31/-10.47	-5.87/-6.38	-5.48/-8.23	-7.11/-1.21	-1.03/-3.26	-0.50/-3.42	-4.93/-3.00	0.82/0.85	-0.72/-7.67	-8.99/-8.51	-5.94/-1.74	-0.25/-5.69	-1.23/-3.68	-5.59/-1.93	-6.58/-13.51	-7.58/-4.87	-2.26/-4.07	-10.59/-6.48
θ(105°)	-9.46/-10.48	-3.63/-5.71	-9.05/-9.44	-5.22/-4.11	-3.57/-6.82	-9.62/-8.52	-12.78/-11.75	-7.27/-7.29	-7.02/-10.52	-8.49/-3.75	-3.21/-3.83	-4.46/-6.25	-7.97/-3.73	-0.69/-2.17	-2.67/-7.34	-15.25/-8.38	-9.81/-6.96	-5.55/-12.70	-6.58/-8.85	-9.28/-4.61	-9.73/-6.60	-11.16/-5.69	-2.81/-6.91	-10.35/-6.36
θ(112.5°)	-10.78/-9.59	-4.48/-6.53	-9.41/-10.27	-7.77/-6.24	-5.19/-7.28	-10.23/-10.47	-14.85/-10.92	-9.52/-9.03	-8.39/-10.46	-11.25/-6.55	-6.79/-7.33	9.34/-5.11	-6.20/-5.87	-3.76/-4.57	-4.67/-6.90	-14.98/-13.73	-7.45/-6.59	-6.18/-14.95	-7.98/-10.46	-8.85/-4.96	-12.49/-9.95	-9.71/-5.85	-6.28/-8.57	-12.93/-10.26
θ(120°)	-15.27/-9.33	-5.88/-6.15	-7.16/-9.58	-7.76/-7.49	-8.98/-8.82	-7.80/-13.54	-11.52/-9.29	-12.54/-11.77	-8.23/-7.10	-15.21/-8.11	-6.78/-9.09	-7.39/-5.68	-9.14/-8.59	-6.10/-5.40	-6.54/-5.45	-12.48/-14.53	-9.82/-7.18	-6.43/-11.81	-7.17/-1.70	-8.07/-9.01	-11.99/-10.19	-10.88/-8.68	-7.37/-11.72	-15.41/-14.23
θ(127.5°)	-14.71/-11.84	-7.69/-6.59	-10.17/-12.33	-9.22/-8.74	-11.88/-13.58	-8.49/-11.52	-13.46/-10.26	-1																



Antenna Pattern of 2.4GHz/5GHz 2G5G Ant1~4

Appendix B.1

θ(120°)	-8.87/-7.32	-11.44/-9.45	-10.18/-8.43	-8.17/-5.78	-3.61/-7.53	-10.87/-11.57	-4.54/-4.38	-8.10/-10.58	-13.91/-12.77	-8.98/-6.02	-8.55/-10.46	-10.39/-7.06	-10.76/-9.58	-3.62/-2.06	-3.52/-3.56	-0.58/-4.13	-6.62/-11.71	-9.65/-10.43	-13.13/-6.78	-6.23/-7.83	-10.35/-10.84	-9.87/-14.42	-14.33/-12.20	-7.31/-7.85
θ(127.5°)	-11.65/-12.43	-13.32/-12.76	-10.97/-9.08	-8.28/-6.94	-4.59/-5.20	-10.93/-14.06	-9.93/-7.30	-7.83/-9.06	-10.25/-9.30	-6.93/-8.86	-10.72/-9.33	-10.13/-8.54	-12.20/-5.58	-3.98/-5.66	-9.29/-7.34	-3.91/-6.50	-8.46/-13.71	-8.24/-14.97	-13.64/-8.59	-6.54/-15.53	-8.94/-7.36	-14.97/-12.83	-14.76/-9.30	-7.94/-7.69
θ(135°)	-10.40/-11.45	-13.79/-13.45	-12.44/-12.54	-9.13/-7.73	-8.11/-11.46	-13.54/-11.58	-10.79/-9.73	-10.53/-11.96	-12.65/-11.21	-9.12/-11.75	-7.69/-6.16	-10.69/-9.86	-5.10/-3.44	-5.95/-4.85	-10.13/-9.32	-10.41/-14.96	-9.76/-15.02	-15.30/-7.74	-4.54/-9.86	-15.32/-7.36	-13.78/-15.30	-11.33/-14.40	-9.29/-10.51	
θ(142.5°)	-10.37/-13.20	-15.01/-14.72	-15.57/-12.05	-7.06/-5.85	-8.49/-11.65	-10.54/-12.50	-11.80/-9.56	-9.10/-8.52	-8.93/-12.56	-11.45/-10.66	-9.96/-11.36	-12.91/-13.98	-10.34/-4.95	-5.82/-7.05	-5.99/-8.82	-9.55/-9.80	-15.38/-16.16	-11.75/-12.48	-11.04/-8.55	-10.97/-10.47	-12.23/-9.62	-14.40/-11.39	-12.94/-12.05	-14.31/-15.76
θ(150°)	-13.70/-15.59	-11.36/-9.27	-10.96/-15.91	-11.19/-7.49	-7.05/-8.01	-8.75/-9.61	-10.82/-10.32	-9.50/-9.39	-11.59/-13.37	-9.53/-9.43	-13.45/-9.67	-7.61/-9.76	-11.09/-6.89	-5.27/-7.25	-11.00/-11.24	-11.52/-14.33	-15.00/-14.45	-15.10/-10.09	-13.68/-13.95	-12.89/-13.15	-13.74/-15.27	-15.31/-14.72	-15.61/-15.90	-13.82/-11.65
θ(157.5°)	-10.28/-13.18	-13.40/-11.55	-12.11/-13.31	-12.60/-9.83	-8.84/-8.48	-8.00/-7.24	-8.40/-9.38	-11.53/-15.35	-10.57/-9.57	-6.93/-7.44	-11.53/-12.10	-11.12/-13.29	-11.60/-10.77	-10.61/-11.19	-11.84/-14.80	-15.19/-15.54	-15.96/-15.63	-15.04/-15.61	-13.39/-11.30	-9.91/-10.12	-12.26/-14.60	-15.90/-15.21	-10.75/-9.18	
θ(165°)	-12.08/-15.29	-15.39/-14.95	-14.17/-12.57	-11.59/-10.18	-11.04/-12.81	-11.76/-11.37	-9.90/-9.10	-10.05/-13.26	-14.04/-11.70	-9.52/-9.00	-9.55/-12.55	-14.05/-13.32	-13.23/-13.98	-14.45/-14.89	-14.39/-12.93	-13.35/-14.56	-15.60/-14.19	-13.78/-13.50	-14.88/-14.47	-12.29/-10.31	-9.43/-10.20	-13.64/-15.83	-15.61/-13.16	-11.48/-10.70
θ(172.5°)	-9.53/-8.33	-8.02/-8.17	-8.16/-7.52	-7.11/-7.21	-7.22/-6.90	-6.54/-6.67	-7.55/-8.37	-9.43/-9.93	-10.24/-10.54	-10.39/-10.76	-11.60/-12.55	-12.77/-13.38	-14.41/-14.45	-13.95/-13.91	-13.23/-13.42	-13.58/-12.96	-12.51/-11.87	-11.64/-11.20	-11.25/-10.83	-11.00/-12.08	-12.82/-14.43	-15.33/-15.29	-16.14/-14.62	-12.42/-10.54
θ(180°)	-12.38/-12.53	-11.82/-11.14	-10.51/-10.53	-10.80/-11.09	-11.04/-11.06	-10.86/-11.03	-10.86/-10.75	-10.65/-10.53	-10.45/-10.38	-10.18/-10.45	-10.79/-11.52	-12.74/-13.21	-13.45/-12.66	-11.48/-10.98	-10.92/-11.08	-11.97/-11.66	-11.12/-11.01	-11.42/-11.60	-11.37/-12.15	-12.19/-12.01	-12.87/-12.67	-12.10/-11.28	-11.12/-11.92	-12.65/-12.53
Freq(Hz)	5.6GPol.	TotalAnt.3	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
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°)	-6.52/-6.81	-6.91/-6.96	-6.82/-6.56	-6.65/-7.02	-6.51/-6.37	-6.41/-6.35	-6.13/-6.07	-6.53/-6.38	-6.46/-6.68	-6.77/-6.93	-6.76/-6.74	-6.75/-6.89	-7.44/-7.23	-7.28/-7.37	-7.18/-6.98	-7.39/-7.08	-7.06/-6.73	-6.53/-6.36	-6.08/-6.58	-6.43/-6.64	-6.56/-6.24	-6.41/-6.74	-6.86/-6.94	-6.94/-6.99
θ(7.5°)	-5.86/-5.81	-5.31/-4.47	-4.21/-4.12	-4.30/-4.53	-4.43/-4.38	-4.65/-5.27	-5.07/-4.95	-4.98/-4.58	-4.37/-5.00	-5.29/-5.37	-5.41/-5.77	-6.09/-6.08	-5.92/-5.53	-5.15/-4.97	-4.92/-4.65	-4.98/-5.00	-4.77/-4.84	-5.14/-4.96	-5.80/-5.17	-5.34/-5.86	-5.89/-5.97	-5.63/-6.54	-5.47/-5.33	-5.73/-5.93
θ(15°)	-3.86/-2.69	-1.36/-0.35	0.21/-0.40	0.51/-0.28	-0.54/-1.00	-1.24/-1.51	-1.50/-1.48	-1.22/-1.44	-2.02/-2.66	-3.27/-3.35	-3.52/-3.82	-3.83/-3.40	-2.78/-2.16	-1.90/-1.64	-1.38/-1.64	-2.08/-1.90	-2.24/-2.34	-2.60/-2.55	-2.57/-2.93	-3.18/-3.51	-3.85/-4.10	-4.63/-5.16	-5.42/-5.50	-5.93/-4.99
θ(22.5°)	-1.54/-0.00	1.11/-1.53	1.79/-1.69	1.13/-0.36	-2.40/-3.77	-3.12/-2.69	-2.74/-2.66	-2.52/-2.16	-2.34/-3.90	-1.71/-9.84	-8.16/-6.72	-6.36/-4.92	-3.43/-1.96	-1.10/-3.05	0.06/-0.06	-1.13/-2.26	-4.02/-4.80	-5.50/-6.35	-7.18/-6.85	-9.11/-9.13	-8.06/-5.54	-3.73/-3.12	-3.44/-3.80	-4.48/-3.14
θ(30°)	1.17/-1.40	1.97/-2.76	3.48/-3.59	2.57/-1.05	-0.47/-1.19	-1.44/-1.70	-2.32/-2.54	-2.36/-1.06	0.480/0.28	-1.88/-6.34	-8.89/-7.58	-9.12/-8.07	-3.91/-0.52	1.04/-1.17	0.56/-0.32	-0.92/-1.37	-2.29/-2.91	-1.76/-1.45	-0.74/-0.71	-0.93/-1.09	-0.630/4.00	1.54/-2.23	1.98/-1.29	1.98/-1.29
θ(37.5°)	3.32/-2.49	2.60/-4.23	5.35/-4.87	3.62/-0.94	4.99/-4.56	2.87/-0.68	-1.23/-0.63	-0.13/-0.31	0.410/0.36	-1.37/-4.05	-4.46/-3.00	-3.12/-4.41	-2.01/-0.40	0.22/-0.88	0.460/0.70	0.14/-1.64	-3.54/-4.24	-1.89/-1.10	3.19/-4.48	5.03/-9.77	2.43/-2.53	3.54/-4.15	4.63/-7.71	4.63/-7.71
θ(45°)	2.08/-1.51	1.04/-0.43	5.13/-3.09	1.15/-4.14	6.11/-5.89	4.29/-2.09	1.63/-2.68	2.29/-0.41	-2.33/-2.92	3.12/-0.58	0.92/-0.99	1.30/-2.02	-0.01/-0.69	-0.26/-0.26	1.98/-1.12	-0.93/-1.40	-0.47/-0.69	-1.99/-3.67	1.94/-6.68	5.39/-3.74	1.28/-1.05	1.49/-2.21	0.56/-0.09	0.56/-0.09
θ(52.5°)	0.33/-0.99	-1.03/-0.41	4.30/-0.15	-0.19/-4.47	5.77/-5.53	4.43/-3.89	4.73/-5.45	3.99/-0.14	-4.09/-4.77	-0.52/-1.99	3.28/-2.55	2.98/-1.82	1.47/-0.61	1.25/-4.59	5.86/-4.18	0.69/-0.01	1.44/-0.84	-0.95/-3.11	4.84/-3.99	0.25/-2.23	3.46/-0.39	-4.39/-2.36	-0.40/-0.25	-7.12/-6.33
θ(60°)	-1.72/-4.82	-1.66/-4.38	4.71/-1.55	2.17/-2.51	5.98/-6.05	5.47/-5.59	5.76/-2.19	5.06/-1.59	-4.94/-5.53	1.19/-3.31	3.10/-2.91	4.29/-2.98	2.45/-1.78	2.86/-6.38	6.37/-5.84	2.27/-2.16	3.17/-2.12	-0.73/-1.96	-2.30/-2.71	0.09/-0.21	0.36/-3.94	-6.73/-7.23	-2.02/-0.28	-10.38/-8.63
θ(67.5°)	-4.50/-7.04	-1.74/-3.89	4.81/-2.28	2.10/-4.20	5.25/-5.47	4.93/-5.04	5.41/-5.15	4.83/-1.14	-1.45/-3.57	1.40/-4.14	1.79/-2.46	4.23/-2.38	1.68/-2.13	3.29/-5.60	5.57/-4.78	1.96/-3.74	4.90/-2.66	-1.60/-3.48	-2.31/-1.75	-0.06/-1.93	-0.01/-3.12	-3.91/-12.64	-3.38/-0.39	-8.57/-10.41
θ(75°)	-7.32/-8.46	-3.48/-3.21	3.94/-1.71	0.72/-2.16	3.28/-3.84	3.23/-2.60	4.56/-5.98	3.44/-0.39	-1.67/-3.12	0.27/-4.21	0.63/-1.38	3.06/-1.60	0.28/-1.11	1.25/-4.99	4.16/-3.48	2.71/-5.26	5.99/-4.17	-1.14/-3.01	-2.35/-1.89	-0.37/-1.82	0.04/-2.65	-4.87/-12.28	-3.49/-0.16	-5.71/-12.52
θ(82.5°)	-7.89/-8.75	-3.84/-2.45	2.28/-0.54	-1.36/-0.50	0.52/-1.67	1.11/-0.07	2.18/-4.01	-1.26/-3.90	-4.26/-4.01	-0.07/-3.55	-1.32/-0.17	1.48/-1.63	-1.51/-1.00	0.51/-3.14	1.58/-1.97	2.71/-5.26	6.23/-4.11	-4.49/-4.61	-3.65/-2.78	-1.13/-0.69	0.39/-3.49	-7.12/-14.93	-4.18/-0.09	-4.18/-13.89
θ(90°)	-5.55/-10.61	-4.75/-0.89	0.37/-0.94	-3.39/-2.71	-2.30/-0.43	-1.49/-2.89	-0.38/-2.18	-1.26/-6.63	-4.84/-5.67	-1.84/-2.08	-2.03/-1.29	-0.48/-3.34	-3.58/-3.40	-1.21/-2.28	0.01/-0.08	0.53/-4.40	4.39/-2.09	-4.96/-7.30	-4.16/-5.07	-3.09/-1.68	-1.28/-5.99	-10.95/-15.57	-5.11/-1.09	-4.51/-13.46
θ(97.5°)	-3.63/-11.02	-4.96/-1.88	-2.24/-2.45	-5.02/-3.54	-4.51/-2.59	-4.05/-5.48	-2.27/-0.40	-3.54/-8.11	-5.66/-5.94	-4.30/-2.00	-3.66/-3.91	-2.55/-4.75	-5.16/-6.19	-3.36/-0.17	-1.24/-2.36	-1.44/-0.05	0.95/-1.73	-11.59/-10.29	-5.28/-10.24	-8.53/-8.52	-3.67/-6.45	-14.07/-15.71	-5.66/-3.50	-9.00/-13.02
θ(105°)	-6.59/-10.54	-7.46/-6.31	-4.90/-6.00	-6.75/-6.53	-5.56/-4.02	-5.35/-5.18	-3.65/-2.47	-2.69/-7.60	-7.91/-7.78	-8.77/-2.98	-5.93/-6.15	-14.40/-8.99	-10.16/-8.39	-7.90/-2.98	-3.05/-5.00	-5.53/-4.35	-2.50/-6.32	-1.46/-11.47	-5.64/-12.02	-15.33/-9.70	-8.17/-9.13	-17.16/-11.42	-7.06/-5.33	-7.80/-12.12
θ(112.5°)	-7.52/-13.03	-9.08/-8.56	-7.96/-9.60	-9.19/-5.81	-6.62/-7.70	-6.77/-6.64	-6.71/-6.07	-4.43/-9.47	-12.39/-13.36	-8.28/-3.84	-7.65/-8.89	-6.76/-12.43	-9.12/-10.00	-10.98/-3.49	-5.93/-4.08	-3.10/-1.70	-3.24/-3.40	-13.73/-13.90	-8.39/-7.82	-10.90/-6.43	-7.68/-8.53	-15.79/-13.81	-5.74/-5.40	-13.25/-12.51
θ(120°)	-7.79/-13.16	-10.63/-9.60	-7.74/-9.17	-9.82/-5.82	-5.88/-9.76	-11.14/-8.99	-7.10/-7.71	-8.71/-12.04	-14.59/-11.08	-10.37/-3.40	-6.96/-15.32	-8.21/-8.98	-13.26/-8.40	-5.43/-2.89	-7.82/-10.03	-4.06/-3.89	-2.88/-6.41	-11.02/-13.99	-14.87/-6.91	-9.85/-7.07	-9.90/-7.29	-13.18/-16.06	-6.36/-4.93	-14.54/-12.25
θ(127.5°)	-7.27/-12.14	-12.74/-13.22	-9.22/-9.37	-11.81/-8.73	-5.24/-8.56	-11.31/-14.81	-10.68/-6.92	-7.73/-10.58	-13.28/-8.58	-12.18/-8.21	-10.19/-14.76	-12.76/-6.88	-12.75/-9.39	-4.67/-5.44	-8.68/-8.26	-7.11/-9.76	-6.58/-10.94	-12.94/-14.48	-10.50/-7.09	-8.27/-14.06	-9.60/-9.82	-10.88/-12.77	-7.99/-12.64	-12.77/-10.15
θ(135°)	-9.74/-13.48	-11.93/-12.87	-12.61/-14.91	-15.45/-10.06	-8.23/-8.05	-10.34/-11.82	-13.68/-11.04	-8.68/-9.85	-15.46/-8.95	-8.39/-12.03	-14.45/-14.08	-15.35/-9.65	-12.49/-8.67	-4.39/-6.74	-9.74/-6.30	-8.55/-10.50	-10.50/-13.01	-14.64/-15.23	-10.36/-11.35	-4.79/-14.03	-10.85/-10.59	-14.67/-9.50	-13.82/-14.08	-9.96/-7.83
θ(142.5°)	-8.91/-13.76	-15.40/-13.56	-12.33/-15.65	-13.39/-8.41	-8.71/-9.71	-10.61/-11.67	-9.88/-10.36	-11.83/-14.02	-9.50/-15.52	-10.68/-10.07	-12.70/-10.98	-10.39/-12.78	-9.27/-4.27	-3.84/-6.37	-9.31/-11.48	-15.84/-15.54	-14.93/-14.95	-12.89/-15.40	-14.70/-10.70	-10.72/-14.31	-14.42/-12.91	-15.01/-15.02	-15.01/-15.02	-10.03/-7.82
θ(150°)	-15.87/-14.85	-13.61/-9.06	-8.51/-10.87	-12.69/-11.15	-10.66/-10.63	-9.27/-8.60	-8.07/-9.03	-12.24/-11.59	-10.26/-9.49	-8.41/-10.17	-15.40/-14.12	-10.97/-14.35	-14.89/-9.45	-9.32/-9.81	-11.43/-14.02	-14.80/-15.57	-12.54/-14.18	-15.94/-13.53	-14.66/-15.76	-14.15/-12.29	-13.79/-14.51	-16.01/-14.92	-15.63/-14.55	-10.90/-11.08
θ(157.5°)	-12.27/-12.71	-13.79/-12.64	-14.34/-15.54	-14.91/-15.24	-13.78/-14.03	-10.64/-7.89	-7.59/-8.33	-9.19/-10.60	-12.58/-12.61	-11.14/-10.52	-11.81/-13.81	-12.60/-15.53	-15.61/-13.45	-12.63/-12.95	-13.65/-15.09	-15.86/-15.63	-15.35/-15.10	-14.77/-14.82	-16.13/-13.34	-11.46/-10.81	-11.52/-12.35	-13.48/-12.32	-13.19/-15.21	-12.96/-12.64
θ(165°)	-14.02/-10.74	-14.89/-14.47	-14.08/-13.91	-9.28/-8.86	-9.32/-9.53	-10.37/-9.32	-9.16/-9.72	-10.98/-15.36	-15.82/-15.00	-12.15/-10.09	-8.87/-8.89	-9.84/-10.72	-11.75/-13.15											



Antenna Pattern of 2.4GHz/5GHz_2G5G Ant1~4

Appendix B.1

Θ(165°)	-11.58/-12.28	-10.70/-9.37	-10.35/-11.30	-11.98/-12.27	-13.87/-11.74	-9.81/-9.52	-10.14/-9.25	-7.27/-6.28	-7.18/-8.94	-11.33/-10.14	-8.49/-8.25	-9.03/-9.73	-10.06/-9.63	-9.18/-8.87	-8.32/-8.38	-8.87/-9.33	-10.19/-12.47	-14.39/-12.45	-9.30/-8.30	-8.30/-7.89	-8.53/-9.74	-11.06/-12.53	-11.51/-10.17	-9.44/-11.43
Θ(172.5°)	-8.85/-9.72	-12.07/-13.51	-12.46/-13.00	-13.31/-12.36	-11.70/-10.06	-9.73/-9.86	-9.80/-9.33	-9.72/-9.81	-10.71/-10.29	-9.64/-8.08	-6.87/-6.15	-6.56/-7.38	-8.31/-9.19	-9.44/-8.97	-9.29/-9.39	-10.20/-9.57	-8.63/-8.17	-7.85/-7.29	-6.82/-7.32	-9.52/-12.13	-15.37/-15.50	-15.64/-15.05	-12.13/-10.11	-8.60/-7.93
Θ(180°)	-15.63/-15.42	-15.36/-14.42	-14.00/-13.47	-12.70/-12.69	-13.50/-13.20	-13.07/-12.18	-12.95/-13.23	-13.16/-13.05	-12.72/-11.59	-11.99/-12.07	-12.44/-13.28	-12.85/-12.37	-11.72/-12.92	-14.58/-16.05	-14.72/-14.31	-15.08/-15.29	-14.66/-15.92	-15.84/-15.22	-15.67/-14.87	-14.76/-15.57	-14.99/-14.03	-15.05/-14.79	-14.69/-15.55	-15.01/-15.62
Freq(Hz)	5.3GPol	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°)	-2.54/-2.36	-2.39/-2.73	-3.18/-3.35	-3.19/-3.64	-3.75/-3.74	-4.06/-4.00	-3.93/-3.16	-3.18/-3.29	-2.88/-2.64	-2.89/-3.02	-3.36/-3.77	-3.84/-4.17	-4.75/-4.83	-4.25/-4.15	-4.24/-4.61	-4.66/-4.74	-4.53/-4.57	-4.53/-4.31	-4.10/-3.87	-3.43/-3.38	-2.98/-2.92	-2.57/-2.68	-2.82/-3.21	-3.14/-3.37
Θ(7.5°)	-0.72/-0.48	-0.32/-0.57	-1.16/-1.64	-1.51/-1.66	-1.56/-1.25	-0.93/-0.83	-0.59/-0.04	0.150/-0.27	0.03/-0.06	-0.22/-0.72	-1.07/-1.05	-1.17/-1.55	-2.31/-3.20	-4.03/-4.28	-4.36/-4.87	-5.44/-5.53	-5.02/-5.09	-5.20/-5.25	-4.65/-4.10	-3.54/-3.61	-3.38/-3.16	-2.67/-2.12	-1.51/-1.25	-1.26/-1.37
Θ(15°)	-1.20/-1.73	-1.63/-0.88	-0.64/-0.85	-1.88/-2.86	-3.60/-3.66	-3.52/-3.87	-4.05/-3.12	-1.41/-0.49	-0.40/-0.25	-0.80/-1.18	-0.80/-0.23	0.17/-0.07	-0.77/-1.60	-1.63/-1.27	-0.87/-0.74	-0.80/-1.17	-1.30/-1.66	-2.45/-3.50	-4.00/-3.68	-3.22/-2.87	-2.71/-2.66	-2.49/-2.03	-1.22/-0.59	-0.26/-0.42
Θ(22.5°)	-1.79/-2.18	-1.28/-0.37	-0.09/-0.34	0.46/-0.35	-0.28/-1.04	-1.29/-1.12	-1.51/-2.74	-3.24/-2.84	-1.71/-0.86	-1.43/-1.53	-1.01/-0.04	-0.96/-1.37	-1.42/-1.20	-0.60/-0.30	-0.46/-0.34	0.24/-0.66	0.74/-0.64	0.46/-0.03	-0.70/-1.13	-0.61/-0.35	-0.64/-1.18	-0.25/-0.62	0.47/-0.47	
Θ(30°)	0.11/-0.44	0.19/-0.28	-0.47/-0.44	2.04/-3.54	4.22/-0.48	2.95/-1.29	-0.00/-0.57	-0.75/-1.69	-1.88/-1.26	-0.20/-0.16	-0.72/-0.46	0.43/-0.21	-1.94/-2.03	-1.02/-0.52	-0.87/-1.03	-0.63/-0.15	-0.18/-0.29	0.02/-0.83	0.69/-0.51	-0.95/-1.56	-1.40/-0.22	0.53/-0.15	0.12/-1.30	1.04/-0.36
Θ(37.5°)	1.25/-2.10	1.62/-0.52	0.97/-2.14	2.31/-1.76	1.56/-2.37	3.37/-3.56	2.12/-0.01	-0.16/-1.04	-0.39/-0.49	1.48/-2.55	1.11/-0.75	1.83/-0.95	-0.30/-0.79	2.12/-1.67	0.05/-1.50	-2.54/-4.28	-5.54/-3.26	-1.72/-1.06	-0.53/-0.69	-1.45/-3.01	-4.79/-3.15	0.81/-1.98	2.36/-2.98	2.18/-0.79
Θ(45°)	0.49/-2.55	2.45/-0.79	1.88/-3.58	3.82/-3.75	3.67/-3.86	4.34/-5.11	3.99/-1.86	-0.28/-0.28	0.70/-0.14	2.06/-3.43	2.73/-1.56	2.21/-2.69	1.74/-1.68	2.16/-2.73	3.44/-3.39	3.22/-1.81	-1.55/-3.11	-4.03/-2.98	0.18/-1.69	0.92/-0.51	-2.53/-7.86	-1.36/-1.80	2.14/-2.91	2.00/-0.02
Θ(52.5°)	0.73/-2.52	1.85/-1.90	0.37/-2.28	1.86/-2.93	4.17/-4.64	4.76/-4.29	3.98/-1.87	-0.78/-1.16	-0.25/-1.83	1.92/-3.13	3.48/-1.64	1.72/-2.76	1.00/-1.69	3.31/-3.88	4.41/-3.65	2.83/-1.19	-1.38/-2.08	-2.09/-1.80	-1.27/-1.90	3.56/-1.61	-1.24/-3.90	-2.38/-2.29	0.52/-1.79	1.64/-0.80
Θ(60°)	-0.13/-0.31	-1.26/-4.21	0.50/-2.31	2.08/-0.46	4.89/-3.34	2.77/-3.32	3.47/-2.86	-0.22/-0.92	-0.87/-1.91	1.54/-2.08	3.84/-2.15	0.32/-0.95	-1.24/-0.69	2.57/-3.67	4.28/-2.59	-0.32/-2.17	-2.42/-0.00	0.07/-0.93	1.04/-1.68	3.41/-2.42	0.88/-0.87	-1.46/-1.12	-0.32/-1.19	1.73/-1.12
Θ(67.5°)	-0.15/-1.03	-2.89/-1.64	2.21/-3.02	3.68/-3.58	5.59/-3.33	1.45/-1.90	2.12/-2.75	-1.26/-1.74	3.08/-2.10	1.18/-1.95	2.88/-1.10	-1.35/-0.72	-0.62/-0.62	1.53/-3.83	3.53/-1.64	-0.05/-0.52	0.77/-3.52	2.51/-1.57	2.07/-2.15	3.74/-2.25	1.71/-3.77	0.74/-1.72	-0.37/-0.44	1.24/-0.70
Θ(75°)	0.56/-1.10	-3.94/-1.79	1.63/-1.64	3.14/-3.79	4.66/-3.38	-0.57/-1.04	-0.20/-1.85	-1.07/-3.07	-3.18/-2.50	0.05/-0.72	0.76/-0.34	-2.91/-2.00	-0.13/-0.78	-0.11/-3.78	2.47/-0.46	-0.24/-0.38	2.16/-5.43	4.48/-1.86	2.92/-2.14	2.36/-0.25	2.49/-5.76	2.31/-1.75	-0.60/-0.83	-0.07/-0.30
Θ(82.5°)	0.28/-1.11	-3.46/-1.97	1.34/-0.58	2.69/-0.85	2.87/-2.18	-1.53/-4.34	-2.85/-0.75	-2.55/-5.76	-3.99/-5.33	-1.89/-4.04	-1.45/-0.62	-3.87/-1.40	0.59/-2.14	0.72/-3.41	0.17/-1.81	-1.04/-1.01	2.32/-4.62	3.99/-0.74	1.72/-1.49	1.94/-1.63	1.25/-5.60	2.04/-1.35	-1.36/-2.93	-3.41/-3.09
Θ(90°)	-1.22/-1.72	-3.54/-2.63	-0.60/-1.38	1.12/-1.55	-1.35/-0.78	-4.19/-7.09	-5.59/-3.46	-2.59/-8.54	-5.12/-9.63	-3.00/-1.95	-2.93/-1.34	-3.69/-2.36	-0.72/-1.98	-0.65/-2.69	-0.62/-3.30	-2.61/-2.24	0.49/-2.57	2.90/-3.31	-1.92/-1.47	1.08/-2.81	-1.94/-3.78	0.55/-2.91	-3.34/-3.76	-2.71/-4.67
Θ(97.5°)	-3.09/-4.42	-7.52/-5.84	-4.44/-4.49	-1.92/-3.57	-5.61/-5.52	-7.08/-10.03	-7.76/-7.32	-3.15/-8.25	-6.20/-9.67	-3.09/-3.22	-4.16/-2.66	-4.01/-3.63	-1.88/-1.15	-0.09/-1.59	-0.31/-4.94	-3.65/-3.79	-0.77/-1.26	0.96/-6.19	-11.20/-6.26	-0.59/-3.75	-7.91/-3.43	-2.58/-4.43	-4.54/-4.73	-5.36/-7.15
Θ(105°)	-4.71/-6.81	-9.85/-5.50	-8.42/-6.25	-6.20/-3.23	-4.88/-8.62	-8.18/-8.95	-5.39/-6.41	-5.13/-7.74	-5.89/-9.56	-4.47/-4.40	-5.24/-2.37	-4.34/-3.80	-3.34/-2.73	-1.25/-1.62	0.75/-4.75	-5.20/-5.57	-3.05/-2.02	-0.46/-4.78	-12.05/-11.38	-1.99/-2.32	-14.45/-3.58	-3.52/-5.48	-7.34/-3.98	-4.31/-7.79
Θ(112.5°)	-4.17/-9.48	-15.58/-11.87	-9.58/-6.24	-4.45/-4.23	-3.17/-5.66	-6.43/-7.61	-5.05/-5.30	-6.68/-7.79	-5.99/-6.81	-6.01/-4.86	-5.55/-3.34	-3.72/-1.48	-3.85/-2.78	-0.92/-0.48	-1.42/-5.95	-5.98/-4.87	-4.41/-3.00	-0.09/-3.57	-9.10/-8.01	-2.04/-1.93	-10.03/-3.45	-2.87/-3.44	-8.96/-7.50	-6.47/-6.74
Θ(120°)	-5.93/-5.21	-13.28/-13.61	-6.42/-7.52	-6.94/-9.37	-13.14/-8.23	-10.66/-8.26	-7.59/-7.82	-11.63/-8.87	-6.56/-7.08	-7.57/-3.43	-5.61/-5.83	-4.85/-5.96	-3.08/-3.82	-5.35/-1.08	-1.13/-3.26	-11.82/-7.74	-5.18/-0.24	-2.92/-4.36	-7.46/-11.86	-6.57/-4.44	-8.88/-4.73	-4.02/-3.14	-15.87/-11.26	-10.00/-13.98
Θ(127.5°)	-6.67/-9.87	-15.14/-15.93	-9.81/-9.11	-8.77/-6.86	-8.08/-9.31	-11.71/-8.26	-10.92/-10.32	-9.48/-6.49	-8.28/-5.17	-6.31/-5.46	-5.15/-4.58	-3.53/-5.98	-2.38/-3.29	-3.68/-0.52	-1.36/-10.33	-13.79/-13.52	-6.88/-8.47	-8.79/-8.54	-6.05/-4.35	-6.88/-9.50	-10.53/-1.61	-6.14/-15.32	-7.60/-9.61	-12.55/-14.14
Θ(135°)	-7.50/-10.62	-14.67/-13.92	-12.77/-12.19	-7.87/-4.71	-6.55/-9.61	-11.02/-11.93	-11.11/-16.62	-10.09/-7.84	-12.57/-5.45	-5.38/-6.79	-3.39/-5.10	-4.90/-5.15	-2.78/-4.29	-3.88/-0.25	-1.47/-6.58	-11.00/-5.19	-3.27/-6.11	-6.13/-8.75	-10.80/-12.45	-6.93/-3.48	-4.28/-4.91	-12.89/-6.65	-4.84/-15.69	-15.76/-12.00
Θ(142.5°)	-7.63/-10.56	-14.02/-13.00	-11.49/-9.58	-8.42/-8.55	-8.25/-8.29	-11.41/-14.75	-8.39/-8.45	-10.78/-5.96	-8.26/-12.12	-7.20/-8.35	-6.83/-6.55	-7.31/-8.64	-5.38/-5.35	-4.48/-3.48	-5.08/-11.25	-7.60/-6.99	-9.92/-8.29	-9.69/-14.59	-8.19/-10.06	-10.55/-7.39	-4.66/-7.70	-13.31/-15.74	-8.39/-11.69	-13.12/-10.38
Θ(150°)	-15.17/-15.51	-12.34/-12.71	-15.95/-14.34	-8.19/-6.47	-7.85/-13.74	-15.42/-6.85	-4.69/-7.15	-10.13/-4.82	-5.25/-10.83	-7.21/-6.33	-9.58/-9.17	-1.74/-9.20	-11.84/-8.75	-4.57/-3.79	-4.87/-5.36	-7.24/-10.88	-12.96/-12.35	-13.37/-12.53	-13.27/-11.30	-10.85/-13.04	-11.19/-10.87	-9.28/-8.20	-7.60/-9.61	-12.55/-11.74
Θ(157.5°)	-12.77/-12.63	-11.44/-11.01	-10.76/-13.58	-13.58/-15.18	-14.69/-10.75	-7.41/-6.91	-10.25/-12.86	-7.65/-5.44	-6.64/-9.74	-5.70/-3.72	-4.43/-6.27	-5.16/-5.15	-5.24/-6.85	-7.82/-4.72	-6.63/-7.05	-8.11/-8.06	-12.55/-12.25	-10.65/-10.71	-12.72/-14.09	-11.14/-8.62	-7.54/-8.23	-11.27/-11.76	-10.77/-11.13	
Θ(165°)	-11.73/-13.85	-14.44/-13.19	-12.39/-11.22	-13.17/-14.01	-13.20/-10.71	-9.59/-9.13	-8.47/-7.86	-7.83/-9.14	-10.66/-9.25	-7.40/-6.53	-6.74/-8.31	-9.94/-8.81	-6.44/-5.33	-4.87/-5.25	-5.98/-6.66	-6.86/-7.00	-7.59/-10.04	-12.26/-11.27	-9.94/-9.50	-10.13/-9.78	-8.39/-7.52	-7.54/-9.09	-11.34/-11.23	-11.48/-12.01
Θ(172.5°)	-10.23/-9.34	-9.58/-9.46	-9.73/-11.67	-11.59/-10.99	-10.46/-10.30	-10.45/-10.73	-12.40/-13.92	-14.19/-14.90	-13.61/-10.48	-8.25/-7.15	-6.85/-8.98	-8.13/-9.96	-11.16/-10.87	-10.70/-11.74	-11.63/-11.19	-11.45/-12.39	-12.36/-11.23	-9.78/-9.10	-9.55/-11.06	-12.61/-13.78	-14.51/-14.22	-16.20/-16.09	-15.41/-11.87	-11.10/-10.50
Θ(180°)	-14.01/-13.88	-12.54/-12.29	-11.49/-11.35	-11.54/-11.51	-11.53/-11.38	-11.17/-10.57	-10.25/-10.60	-10.94/-11.08	-10.25/-9.61	-8.79/-9.09	-10.30/-11.63	-12.50/-12.84	-13.36/-13.52	-11.67/-11.29	-11.33/-10.89	-10.89/-12.02	-12.48/-11.30	-10.93/-12.98	-14.48/-13.78	-13.33/-14.83	-14.82/-15.36	-15.09/-15.33	-12.51/-11.47	-12.14/-13.15
Freq(Hz)	5.6GPol	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°)	-2.14/-2.59	-2.93/-2.75	-2.39/-2.52	-2.93/-3.45	-2.66/-2.38	-2.40/-2.56	-2.20/-2.20	-2.66/-2.80	-2.77/-2.84	-2.69/-2.50	-2.26/-2.41	-2.71/-2.84	-2.75/-3.06	-3.59/-3.61	-3.46/-3.14	-3.13/-2.94	-3.07/-3.26	-3.29/-3.44	-3.22/-2.72	-2.95/-3.44	-3.53/-3.00	-2.53/-2.22		
Θ(7.5°)	-1.91/-1.12	-0.80/-0.40	-0.13/-0.01	-0.21/-0.29	0.27/-0.51	0.71/-0.57	0.23/-0.13	-0.19/-0.80	-1.22/-1.39	-1.94/-1.91	-2.19/-3.04	-3.72/-4.29	-4.94/-5.52	-5.86/-6.07	-6.29/-5.47	-4.01/-3.43	-3.68/-3.69	-3.38/-2.81	-2.78/-3.38	-3.95/-4.13	-4.39/-5.07	-5.53/-5.25	-4.92/-4.09	-3.47/-2.50
Θ(15°)	-0.51/-1.22	-1.58/-1.04	-0.81/-0.87	-1.82/-3.35	-1.90/-1.43	-0.87/-0.73	-0.69/-0.73	-1.44/-2.31	-3.79/-4.71	-4.24/-3.34	-2.43/-2.08	-2.55/-3.37	-3.86/-3.85	-3.30/-2										

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

