



Radiated Composite Gain of 2.4GHz and 5GHz UNII 1~3

Appendix A

Θ(112.5°)	-2.24/-5.54	-3.66/-7.19	-5.29/-5.94	-7.86/-4.2	-8.39/-7.12	-6.86/-7.64	-9.6/-6.23	-4.13/-11.89	-6.25/-3.38	-3.52/-3.25	-5.25/-5.73	-0.99/0.03	-1.32/-0.15	0.66/0.63	-2.19/0.13	-6.4/-3.86	-3.44/-0.73	-6.29/-3.33	-18.03/-5.28	-1.71/-15.9	-2.71/-6.13	-4.6/-2.15	0.41/-4.02	-4.29/-1.39
Θ(120°)	-10.48/-12.3	-12.5/-17.83	-16.81/-17.7	-18.27/-16.69	-10.32/-11.6	-13.61/-13.33	-16.55/-11.25	-10.07/-8.79	-19.18/-19.05	-10.37/-7.31	-10.76/-12.78	-8.33/-7.76	-5.89/-10.62	-7.61/-5.1	-5.31/-9.01	-6.76/-6.58	-5.37/-4.65	-5.59/-7.51	-11.3/-9.99	-4.58/-16.44	-1.88/-4.07	-6.68/-13.71	-9.53/-18.48	-13.59/-8.84
Θ(127.5°)	-5.39/-4.1	-7.51/-7.87	-10.42/-6.65	-10.14/-18.83	-8.6/-9.36	-12.9/-18.72	-10.97/-15.49	-12.77/-13.8	-9.58/-7.83	-9.46/-17.69	-12.87/-13.48	-13.29/-11.41	-16.28/-11.16	-16.27/-13.48	-10.19/-11.81	-14.65/-17.98	-11.19/-4.43	-10.04/-8.06	-16.23/-17.49	-15.81/-11.2	-11.68/-7.69	-8.25/-6.24	-6.63/-7.07	-6.56/-11.9
Θ(135°)	-12.56/-18.05	-17.57/-12.38	-5.22/-6.65	-3.27/-13.14	-8.37/-5.91	-9.28/-7.56	-9.67/-6.78	-7.97/-18.99	-16.58/-12.65	-5.59/-8.3	-8.58/-13.07	-9.86/-5.8	-6.89/-8.52	-7.66/-10.58	-17.36/-12.46	-19.61/-13.85	-10.39/-17.65	-15.02/-18.53	-18.6/-10.41	-6.73/-5.75	-17.97/-11.53	-4.64/-7.25	-5.2/-6.84	-10.25/-17.66
Θ(142.5°)	-18.15/-18.9	-9.17/-3.88	-4.5/-5.21	-10.32/-19.18	-9.18/-3.42	-6.76/-8.88	-7.9/-1.01	-2.81/-11.61	-13.69/-7.7	-6.16/-6.79	-4.91/-7.04	-7.43/-7.05	-8.48/-6.56	-5.23/-3.98	-2.53/-8.01	-18.32/-9.01	-7.93/-4.24	-8.87/-18.23	-8.4/-10.37	-6.68/-2.39	-7.99/-10.48	-9.99/-18.83	-15.23/-9.29	-11.49/-14.27
Θ(150°)	-12.43/-11.26	-8/-9.4	-18.52/-13.19	-9.74/-8.91	-8.87/-8.26	-7.21/-4.57	-5.63/-5.44	-5.3/-6.62	-6.58/-6	-4.97/-4.38	-0.75/-0.24	-0.95/-0.13	-0.44/-0.66	-1.39/-1.77	-2.65/-3.05	-4.44/-4.9	-6.69/-3.98	-5.29/-12.67	-13.29/-4.67	-3.49/-3.8	-4.63/-9.85	-11.16/-8.72	-10.91/-16.56	-17.02/-13.98
Θ(157.5°)	-11.59/-9.59	-13.22/-10.6	-7.18/-5.39	-5.71/-3.68	-2.92/-4.76	-8.64/-9.82	-7.37/-3.69	-2.82/-5.36	-8.75/-8.87	-4.87/-2.27	-2.46/-2.96	-5.14/-9.17	-10.33/-8.9	-7.39/-3.83	-2.34/-1.79	-2.18/-0.98	-2.47/-6.65	-18.62/-5.8	-3.27/-3.33	-7.66/-16.31	-6.08/-5.28	-8.31/-13.83	-15.66/-18.44	-18.55/-15.16
Θ(165°)	-9.18/-9.56	-9.45/-9.03	-9.69/-10.45	-7.39/-5.78	-5.85/-6.2	-7.73/-8.2	-9.39/-8.26	-5.49/-4.77	-5.16/-5.42	-5.83/-6.92	-8.02/-7.54	-7.79/-6.14	-4.57/-3.98	-3.5/-3.4	-3.47/-3.82	-4.56/-7.35	-9.59/-9.34	-14.94/-11.7	-5.49/-3.99	-4.55/-7.35	-8.89/-7.6	-9.71/-8.62	-7.71/-7.15	
Θ(172.5°)	-16.81/-18.6	-17.9/-13.84	-14.49/-13.02	-12.3/-10.95	-10/-8.85	-8.14/-8.11	-9.32/-11.29	-14.71/-15.86	-15.56/-9.33	-6.93/-5.52	-4.49/-4.71	-5.21/-5.83	-10.57/-15.9	-11.31/-9.32	-7.57/-7.84	-11.74/-14.29	-7.44/-4.5	-3.95/-5.28	-5.82/-7.6	-9.32/-11.76	-17.59/-14.77	-9.53/-8.96	-11.74/-13.64	
Θ(180°)	-8.73/-8.88	-8.82/-9.26	-8.72/-8.34	-9.09/-9.92	-9.16/-9.65	-11.09/-12.27	-12.4/-13.38	-13.9/-15.05	-15/-17.63	-15.63/-12.96	-10.77/-9.47	-8.37/-8.54	-8.3/-7.62	-6.28/-4.71	-4.01/-4.26	-6.02/-10.17	-15.68/-13.15	-11.79/-12.74	-17.63/-17.69	-16.28/-10.92	-7.56/-6.44	-8.91/-8.87	-13.62/-10.84	-9.38/-7.92
Freq(Hz)	2.45GPol.	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°)	-13.08/-12.49	-13.49/-14.98	-15.78/-15.78	-15.75/-15.96	-16.27/-17.25	-18.05/-17.84	-17.75/-17.59	-18.52/-18.8	-18.94/-17.82	-16.41/-15.22	-14.52/-16.01	-16.97/-14.77	-13.47/-13.6	-15.63/-19.59	-18.42/-17.54	-17.77/-16.41	-16.22/-16.85	-18.41/-18.98	-17.74/-18.56	-19.15/-17.12	-17.01/-19.04	-18.38/-15.8	-13.83/-14.36	-15.44/-15.47
Θ(7.5°)	-16.14/-15.49	-16.86/-18.6	-18.52/-18.42	-18.15/-18.05	-18.09/-17.79	-19.35/-18.74	-19.05/-18.74	-18.38/-17.95	-18.8/-18.14	-17.67/-15.07	-13.08/-13.32	-15.02/-14.18	-11.93/-11.27	-12.37/-14.64	-16.14/-15.83	-14.98/-14.6	-15.29/-16.88	-18.61/-18.03	-19.16/-19.47	-18.23/-16	-15.44/-17.35	-18.4/-16.98	-15.27/-17.37	-16.96/-18.47
Θ(15°)	-17.46/-17.05	-19.27/-18.08	-18.51/-18.46	-18.49/-18.71	-18.9/-18.14	-19.46/-17.82	-18.63/-17.54	-18.94/-19.15	-18.21/-16.51	-13.99/-14	-15.21/-14.57	-11.93/-10.42	-10.81/-12.51	-13.77/-14.02	-13.83/-14.33	-15.91/-16.8	-16.91/-17.92	-18.44/-17.72	-16.91/-16.09	-15.91/-17.17	-18.44/-17.2	-16.05/-16.62	-17.92/-19.59	
Θ(22.5°)	-17.69/-18.9	-17.21/-17.77	-18.21/-18.83	-19.22/-18.53	-18.81/-19.09	-16.07/-14.96	-15.73/-16.97	-17.63/-18.25	-18.32/-17.51	-18.71/-18.85	-18.71/-18.12	-18.79/-18.1	-15.08/-11.97	-11.57/-13.26	-14.35/-14.47	-14.69/-15.69	-17.7/-19.45	-18.61/-18.73	-18.17/-18.37	-18.71/-18.66	-18.79/-19.33	-18.15/-18.89	-18.73/-18	-18.15/-18.19
Θ(30°)	-18.38/-18.5	-17.95/-18.69	-18.62/-18.63	-18.5/-18.6	-18.54/-17.7	-16.67/-14.81	-15.1/-15.94	-16.44/-16.98	-17.37/-17.2	-17.3/-19.35	-19.02/-17.2	-18.23/-19.09	-16.88/-17.48	-15.52/-15.25	-15.59/-16.89	-18.48/-17.64	-18.96/-18.7	-18.59/-17.23	-17.19/-18.8	-17.55/-17.64	-18.04/-18.45	-18.3/-19.19	-17.73/-17.78	-17.49/-18.44
Θ(37.5°)	-18.83/-18.34	-18.48/-15.17	-15.05/-13.37	-18.74/-17.91	-15.87/-18.66	-19.11/-17.6	-15.1/-17.56	-17.56/-17.9	-16.58/-14.31	-16.31/-16.16	-16.53/-18.71	-18.63/-18	-16.74/-16.21	-16.81/-16.03	-15.76/-16.89	-18.62/-18.34	-19.06/-18.34	-19.24/-17.24	-15.9/-17.45	-19.3/-18.74	-17.77/-18.62	-19.28/-19.18	-17.92/-17.8	-16.66/-17.13
Θ(45°)	-16.53/-17.45	-18.38/-13.25	-12.67/-15.84	-17.39/-18.84	-18.74/-18.52	-19.24/-16.1	-17.07/-18.12	-18.56/-17.95	-18.06/-15.97	-13.46/-13.36	-16.87/-18.62	-18.5/-18.07	-15.81/-16.65	-16.33/-13.64	-14.04/-18.23	-18.57/-16.94	-15.98/-19.29	-18.83/-18.47	-15.19/-15.82	-19.42/-18.8	-16.71/-13.57	-12.97/-14.43	-18.55/-18.93	-17.73/-15.43
Θ(52.5°)	-15.37/-18.45	-18.36/-13.9	-12.35/-14.57	-17.78/-18.61	-19.25/-17.86	-14.48/-12.41	-13.39/-13.52	-14.33/-18.83	-18.24/-15.93	-13.64/-13.24	-14.61/-18.4	-17.59/-13.53	-13.24/-16.92	-16.86/-12.51	-13.85/-18.09	-16.59/-12.24	-12.51/-16.61	-19.25/-19.32	-15.58/-17.32	-17.71/-17.95	-12.87/-10.2	-8.19/-10	-13.36/-17.67	-18.01/-16.01
Θ(60°)	-16.74/-17.74	-17.27/-18.32	-14.58/-15.11	-18.41/-14.62	-16.07/-18.36	-13.01/-11.32	-10.69/-9.62	-10.85/-14.77	-14.6/-12.66	-13.13/-13.99	-14.61/-15.94	-19.4/-18.15	-16.52/-16.52	-18.01/-13.64	-14.74/-18.23	-16.25/-12.41	-13.21/-15.86	-17.92/-16.92	-16.53/-19.12	-18.55/-17.26	-13.78/-10.01	-7.53/-7.15	-9.28/-15.25	-18.56/-17.56
Θ(67.5°)	-14.72/-18.35	-19/-18.84	-14.76/-14.8	-18.02/-15.87	-16.4/-15.55	-11.67/-11.91	-10.85/-9.16	-10.95/-13.04	-11.09/-11.26	-13.93/-16.59	-16.36/-15.08	-17.92/-18.43	-17.85/-17.67	-17.67/-19.14	-18.87/-19.4	-16.69/-16.39	-19.04/-18.86	-14.43/-13.14	-14.74/-14.01	-13.85/-14.2	-14.63/-12.99	-9.57/-7.78	-8.42/-11.78	-15.04/-14.02
Θ(75°)	-12.93/-18.59	-18.14/-17.82	-13.49/-12.76	-18.02/-18.48	-16.42/-13.09	-11.04/-11.9	-11.17/-10.39	-12.77/-12.7	-10.42/-11.79	-15.6/-18.02	-15.85/-13.82	-14.33/-18.8	-18.09/-17.45	-18.13/-18.96	-18.33/-14.04	-16.71/-18.23	-18.27/-15.78	-11.55/-12.62	-14.14/-12.1	-12.35/-13.89	-14.25/-15.89	-14.68/-11.89	-10.66/-12.75	-13.99/-12.08
Θ(82.5°)	-16.35/-19.12	-19.12/-17.46	-12.26/-15.02	-16.49/-19.29	-13.99/-11.7	-10.94/-11.4	-11.09/-11.98	-13.66/-14.12	-10.58/-13.18	-14.64/-15.62	-13.68/-12.04	-12.43/-16.05	-17.79/-18.61	-18.91/-19.28	-17.93/-16.86	-18.62/-18.71	-17.98/-17.61	-13.34/-15.73	-15.86/-11.94	-12.54/-15.82	-16.41/-18.54	-19.35/-15.87	-14.95/-17.94	-18.54/-15.82
Θ(90°)	-19.14/-14.99	-14.66/-17.63	-11.55/-8.75	-14.65/-14.3	-10.81/-11.66	-11.91/-11.33	-11.2/-13.4	-15.54/-13.59	-13.93/-18.62	-18.68/-17.12	-12.05/-10.46	-12.05/-13.76	-16.88/-19.26	-18.32/-18.57	-15.54/-16.53	-18.09/-18.19	-18.38/-18.18	-14.02/-18.08	-16.93/-11.72	-12.42/-16.61	-17.75/-18.31	-17.74/-13.97	-13.15/-18.11	-19.1/-18.06
Θ(97.5°)	-13.36/-12.63	-11.92/-17.9	-9.83/-6.97	-13.3/-19.1	-9.17/-11.44	-12.55/-11.98	-11.96/-12.28	-13.56/-13.72	-15.39/-19	-18.48/-17.58	-12.91/-11.91	-13.28/-14.44	-18/-18.74	-15.07/-16.92	-14.03/-14.31	-18.81/-19.16	-17.58/-16.76	-13.39/-13.99	-18.02/-12	-11.85/-16.56	-18.86/-18.48	-18.52/-13.18	-11.37/-15.51	-18.32/-18.4
Θ(105°)	-18.25/-13.77	-12.49/-18.69	-7.25/-6.67	-8.98/-18.77	-12.22/-14.32	-12.3/-11.02	-11.89/-11.64	-12.23/-12.33	-12.11/-14.47	-18.18/-18.09	-16.31/-11.58	-11.31/-13.25	-13.61/-16.11	-12.59/-12.87	-17.49/-14.39	-17.38/-19.32	-16.14/-18.85	-17.82/-12.54	-11.83/-16.48	-17.84/-18.53	-19.25/-14.99	-11.81/-14.93	-18.79/-19.21	
Θ(112.5°)	-15.99/-10.65	-11.07/-17.42	-14.19/-8.65	-10.67/-17.36	-14.63/-19.24	-16.5/-12.1	-10.9/-10.57	-12.21/-12.35	-11.49/-13.93	-19.33/-19.53	-13.7/-10.28	-10.91/-16.75	-18.41/-12.83	-15.16/-16.76	-12.56/-14.09	-16.99/-13.6	-18.77/-18.89	-14.72/-17.45	-17.48/-14.83	-14.05/-18.7	-18.02/-19.07	-18.37/-13.15	-11.99/-16.16	-18.04/-18.07
Θ(120°)	-14.43/-12.16	-12.86/-19.3	-17.52/-12.46	-15.37/-18.65	-17.58/-17.93	-19.41/-16.97	-12.58/-11.48	-13.88/-14.23	-11.97/-12.59	-13.34/-17.13	-9.21/-7.83	-9.2/-15.09	-18.97/-16.92	-15.54/-11.53	-10.49/-13.61	-17.28/-14.13	-18.27/-18.28	-18.52/-19.12	-19.22/-18.99	-18.05/-19.12	-17.56/-18.1	-18.94/-17.23	-15.83/-18.99	-19.53/-14.28
Θ(127.5°)	-16.23/-14.31	-14.67/-19.57	-19.13/-15.16	-15.17/-16.79	-17.93/-18.99	-19.28/-15.33	-12.8/-13.13	-17.27/-17.42	-13.78/-13.51	-12.93/-11.26	-9.8/-13.3	-15.02/-18.16	-16.57/-15.05	-11.47/-8.57	-8.97/-13.02	-17.97/-15.15	-15.03/-17.41	-17.63/-17.56	-17.51/-19.06	-17.1/-18.72	-17.58/-17.99	-17.31/-17.56	-19.48/-18.65	-18.76/-16.58
Θ(135°)	-11.56/-10.93	-11.93/-13.93	-16.02/-17.77	-18.68/-18.61	-16.89/-14.91	-11.9/-9.96	-9.55/-11.13	-15.94/-17.63	-17.95/-17.94	-16.12/-14.71	-15.33/-17.66	-19.04/-17.66	-17.04/-14.3	-9.35/-7.31	-8.23/-12.26	-17.79/-18.75	-14.03/-13.8	-16.68/-18.99	-17.87/-18.28	-18.41/-17.26	-15.42/-15.41	-17.25/-17.41	-15.85/-16.97	-17.32/-13.68
Θ(142.5°)	-9.49/-9.82	-12.07/-15.1	-17.53/-19.77	-18.79/-17.84	-17.53/-13.52	-9.99/-8.14	-7.93/-9.44	-12.78/-16.82	-19.04/-17.64	-16.15/-15.71	-15.38/-14.56	-15.12/-18.58	-18.05/-12.58	-8.85/-4.78	-8.07/-10.62	-15.11/-15.7	-13.62/-13.94	-16.79/-19.05	-18.78/-18.46	-17.07/-15.23	-15.27/-18.14	-19.1/-19.01	-19.03/-17.86	-14.15/-11.08
Θ(150°)	-11.73/-12.3	-14.88/-18.26	-17.72/-19.12	-17.64/-18	-17.89/-14.35	-11.41/-9.41	-8.69/-9.22	-10.68/-11.94	-12.37/-12.01	-12.13/-12.49	-12.82/-13.62	-16.67/-18.72	-18.18/-											



Radiated Composite Gain of 2.4GHz and 5GHz UNII 1~3

Appendix A

Θ (165°)	-9.33/-7.61	-8.24/-7.7	-6.36/-5.58	-5.82/-7.67	-12.26/-17.4	-12.78/-9.72	-9.99/-10.32	-12.56/-10.75	-11.1/-11.64	-12.35/-11.76	-11.8/-10.66	-7.97/-7.98	-6.68/-9.96	-13.24/-12.54	-8.31/-7.62	-8.3/-8.42	-9.68/-10.95	-10.59/-8.99	-8.4/-6.82	-5.91/-8.21	-12.53/-16.06	-14.22/-11.34	-9.29/-8.53	-8.03/-9.67
Θ (172.5°)	-13.62/-14.7	-13.89/-12.41	-10.5/-10.36	-10.86/-11.84	-14.31/-16.58	-18.27/-17.52	-15.69/-13.86	-13.18/-18.56	-9.63/-8.41	-7.23/-6.35	-6.45/-6.81	-8.24/-9.12	-9.44/-6.46	-6.1/-7.53	-11.41/-16.15	-12.77/-11.06	-12.45/-13.75	-14.14/-11.86	-11.97/-14.54	-18.59/-16.83	-18.93/-11.7	-10.22/-10.23	-11.02/-12.7	-13.87/-13.04
Θ (180°)	-17.51/-19.09	-18.33/-19.13	-17.86/-17.32	-18.78/-18.66	-18.92/-18.46	-17.05/-19.57	-18.55/-18.55	-18.62/-12.59	-18.68/-18.33	-19.37/-17.9	-19.24/-19.4	-17.25/-14.86	-12.68/-11.5	-13.12/-12.85	-13.75/-14.36	-17.5/-18.27	-18.93/-18.99	-18.87/-14.73	-14.42/-15.37	-17.79/-16.43	-12.88/-12.03	-12.79/-14.92	-17.96/-19.18	-18.44/-18.8
Freq(Hz)	5.3GPol.	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°)	-18.24/-17.88	-17.84/-18.68	-15.87/-13.82	-12.53/-12.01	-12.09/-11.1	-11.33/-11.5	-11.25/-10.46	-10.97/-13.6	-15.43/-12.17	-14.36/-18.39	-15.7/-17.82	-17.84/-19.1	-18.33/-15.88	-14.88/-18.69	-16.37/-13.3	-13.29/-12.85	-12.43/-12.16	-12.69/-12.68	-11.2/-9.67	-11.19/-14.73	-12.92/-14.2	-14.22/-12.81	-14.91/-14.23	-15.97/-15.89
Θ (7.5°)	-18.46/-18.98	-19.25/-17.11	-17.7/-16.49	-13.48/-12.86	-12.25/-11.48	-11.57/-12.62	-13.72/-14.12	-14.75/-13.98	-15.75/-18.27	-13.93/-17.3	-18.8/-15.08	-17.98/-18.84	-17.26/-17.38	-16.46/-16.41	-18.33/-13.56	-11.89/-12.09	-12.53/-15.92	-14.29/-14.34	-13.99/-13.59	-13.87/-13.45	-15.82/-14.96	-15.58/-17.61	-15.33/-18.33	-16.95/-18.95
Θ (15°)	-18.67/-18.37	-18.33/-17.24	-17.15/-16.86	-16.07/-13.73	-11.21/-11.23	-13.57/-16.03	-15.42/-13.75	-12.14/-12.27	-12.67/-15.27	-18.33/-15.78	-12.95/-16.5	-14.61/-18.17	-17.86/-18.86	-18.67/-19.1	-17.56/-17.78	-12.84/-11.28	-11.57/-13.87	-15.71/-16.66	-15.95/-16.41	-17.33/-18.88	-18.45/-15.5	-16.7/-18.88	-19.22/-19.05	-18.29/-17.87
Θ (22.5°)	-19/-18.22	-18.63/-18.55	-19.47/-16.42	-18.2/-18.98	-17.57/-17.67	-16.93/-15.07	-13.68/-13.51	-12.84/-13.32	-16.81/-16.4	-14.34/-10.87	-11.81/-13.3	-16.46/-18.97	-18.92/-17.98	-18.72/-14.86	-18.36/-17.78	-14.83/-13.51	-13.32/-15.29	-15.43/-15.11	-15.95/-18.04	-15.03/-18.04	-18.42/-18.11	-15.94/-18.07	-15.48/-17.52	-18.65/-18.11
Θ (30°)	-18.27/-18.75	-18.92/-17.94	-18.16/-15.06	-14.38/-14.41	-15.74/-18.42	-17.97/-17.97	-19.36/-17.46	-16.04/-13.41	-15.01/-18.89	-17.71/-11.93	-17.03/-18.73	-18.44/-18.84	-17.33/-18.52	-12.02/-13.96	-19.27/-18.47	-14.37/-14.42	-16.95/-16.91	-18.19/-18.74	-16.79/-17.42	-19.29/-17.42	-18.03/-19.41	-17.25/-17.99		
Θ (37.5°)	-17.28/-18.22	-17.46/-18.07	-18.29/-17.92	-18.51/-18.39	-18.48/-18.59	-17.59/-17.31	-18.47/-18.01	-17.94/-16.71	-16.18/-18.18	-17.96/-16.56	-13.7/-18.77	-15.65/-17.44	-18.56/-18.87	-18.74/-18.57	-19.14/-17.82	-17.88/-15.14	-12.66/-19	-18.83/-18.63	-18.4/-13.5	-13.97/-16.39	-18.93/-18.03	-18.25/-18.74	-17.15/-18.91	-18.07/-14.62
Θ (45°)	-13.26/-15.39	-16.67/-15.06	-12.57/-12.06	-12.93/-14.59	-11.06/-13.23	-16.5/-16.62	-13.8/-13.17	-11.66/-13.07	-12.9/-15.53	-18.55/-18.82	-15.57/-19.91	-18.1/-17.77	-18.1/-18.1	-19.95/-18.76	-17.88/-16.38	-11.95/-15.14	-12.06/-14.47	-17.79/-18.82	-18.57/-19.61	-17.67/-12.99	-13.14/-16.8	-13.67/-11.78	-18.12/-17.32	-18.46/-18.19
Θ (52.5°)	-17.63/-13.18	-15.55/-14.31	-11.33/-12.04	-14.25/-13.4	-11.05/-13.06	-16.69/-17.86	-14.08/-13.42	-12.56/-13.88	-9.68/-9.9	-14.71/-18.21	-19.02/-18.95	-16.59/-17.01	-17.56/-19.13	-19.06/-17.77	-15.77/-13.93	-10.46/-17.18	-18.41/-18.63	-17.18/-17.1	-14.77/-15.33	-13.61/-12.69	-13.29/-14.19	-19.06/-15.72	-18.54/-18.59	-15.01/-18.49
Θ (60°)	-18.73/-14.23	-18.41/-17.81	-18.49/-13.33	-10.99/-15.75	-17.56/-13.42	-17.13/-18.66	-17.73/-18.15	-12.12/-15.15	-13.99/-14.27	-18.29/-18.26	-18.78/-16.37	-18.89/-18.05	-18.88/-17.67	-18.44/-17.87	-18.26/-15.48	-18.5/-18.79	-18.34/-17.87	-12.3/-18.84	-17.57/-17.98	-18.46/-17.61	-18.83/-12.3	-13.29/-16.86	-13.44/-14.07	-17.98/-17.95
Θ (67.5°)	-18.03/-14.33	-12.97/-14.73	-15.38/-15.08	-18.06/-18.43	-18.45/-17.73	-10.38/-13.35	-16.75/-14.34	-17.45/-18.57	-12.89/-12.58	-17.52/-18.55	-14.51/-19.1	-17.44/-18.16	-17.68/-15.15	-15.58/-14.09	-11.02/-13.97	-18.33/-18.12	-12.12/-16.15	-15.3/-16.72	-16.1/-16.04	-18.98/-13.55	-13.43/-15.78	-18.12/-17.41	-16.58/-17.78	-18.61/-12.83
Θ (75°)	-18.76/-12.79	-18.11/-18.53	-11.79/-10.5	-16.63/-18.66	-17.54/-18.41	-17.19/-11.47	-12.71/-17.4	-14.61/-15.91	-14.12/-13.98	-15.97/-18.04	-17.9/-18.06	-17.57/-17.92	-16.78/-15.98	-12.72/-12.83	-15.87/-15.79	-12.09/-13.78	-16.4/-18.86	-18.92/-14.16	-14.14/-11.02	-19.25/-14.68	-17.59/-16.97	-18.27/-17.15	-15.23/-17.21	-18.61/-18.44
Θ (82.5°)	-16.58/-11.9	-12.98/-12.15	-18.12/-11.49	-9.2/-17.59	-19.37/-18.36	-18.5/-17.24	-18.72/-18.62	-18.04/-15.73	-14.58/-13.64	-16.93/-18.01	-17.95/-17.47	-17.26/-18.58	-17.03/-19.01	-17.54/-17.64	-17.68/-18.29	-14.81/-18.53	-18.63/-18.68	-13.31/-19.13	-18.58/-12.18	-18.61/-18.96	-15.6/-18.19	-18.62/-18.53	-18.81/-17.06	-18.26/-18.07
Θ (90°)	-19.46/-9.7	-16.15/-18.66	-16.66/-11.6	-18.37/-19.16	-18.08/-18.7	-14.19/-12.95	-17.87/-18.66	-15.57/-13.61	-18.03/-18.57	-17.61/-17.83	-18.76/-18.96	-17.92/-19.3	-19.08/-18.55	-18.27/-9.51	-12.98/-14.38	-14.14/-15.25	-18.57/-16.4	-18.28/-15.96	-19.34/-17.76	-15.51/-16.22	-18.78/-17.03	-16.93/-19.06	-18.39/-15.1	-18.49/-18.48
Θ (97.5°)	-18.64/-17.75	-14.72/-18.83	-12.53/-12.46	-14.76/-15.5	-16.79/-16.4	-19.25/-11.75	-18.28/-16.07	-18.7/-16.85	-15.77/-16.55	-18.73/-18.18	-14.23/-17.42	-13.02/-16.79	-16.23/-17.58	-17.76/-13.89	-14.32/-13.26	-19.14/-13.76	-18.04/-17.34	-15.57/-17.1	-16.31/-18.9	-17.83/-17.52	-18.86/-18.52			
Θ (105°)	-17.82/-18.79	-19.4/-19	-18.79/-17.09	-18.17/-18.53	-18.42/-17.56	-17.89/-15.53	-18.32/-19.67	-16.09/-14.24	-16.47/-19.25	-17.89/-18.95	-17.51/-18.71	-15.42/-16.31	-19.37/-17.91	-18.35/-13.22	-19.95/-18.15	-18.32/-8.47	-11.65/-18.89	-17.6/-17.92	-18.29/-18.4	-9.38/-15.21	-14.68/-18.69	-16.12/-14.97	-15.72/-17.37	-16.26/-17.65
Θ (112.5°)	-18.45/-18.34	-18.03/-18.15	-17.95/-14.85	-15.31/-11.93	-14.77/-18.77	-17.23/-14.48	-15.1/-18.34	-16.83/-18.7	-19.08/-18.13	-17.9/-18.1	-17.73/-17.85	-18.25/-19.04	-18.74/-18.35	-18.88/-14.83	-18.46/-8.91	-15.15/-11.18	-18.54/-18.9	-16.18/-11.54	-18.65/-15.24	-18.27/-17.97	-17.97/-16.76	-15.85/-15.36	-17.84/-17.37	-18.26/-15.01
Θ (120°)	-10.97/-18.56	-16.73/-18.57	-15.52/-13.41	-10.42/-8.23	-17.99/-15.73	-16.97/-11.14	-16.37/-18.33	-18.88/-18.66	-18.55/-19.44	-18.27/-12.63	-13.25/-16.23	-18.37/-17.95	-17.9/-18.16	-18.41/-19.37	-15.3/-8.07	-12.91/-11.43	-11.94/-18.11	-14.25/-15.06	-13.4/-13.42	-18.47/-17.82	-18.12/-13.8	-17.85/-14.08	-16.24/-14.17	-17.82/-11.74
Θ (127.5°)	-18.17/-14.57	-11.87/-18	-14.74/-8.57	-8.82/-9.05	-15.68/-18.29	-19.3/-18.6	-12.72/-14.08	-17.84/-12.13	-17.84/-17.8	-17.26/-14.14	-16/-12.12	-16.69/-17.26	-19.67/-18.34	-11.84/-7.63	-17.61/-17.96	-18.51/-19.41	-13.99/-13.72	-14.55/-16.82	-13.08/-17.78	-17.12/-18.06	-14.32/-17.65	-16.82/-18.5	-15.77/-17.85	-19.21/-17.86
Θ (135°)	-17.78/-19.29	-14.44/-8.24	-9.77/-16.06	-12.69/-4.97	-10.27/-12.83	-9.15/-11.95	-17.91/-16.1	-17.73/-13.19	-17.78/-19.11	-18.91/-17.43	-16.37/-18.05	-17.77/-17.2	-13.22/-9.52	-10.95/-11.3	-18.86/-15.79	-15.93/-12.72	-12.15/-16.62	-11.69/-13.0	-18.18/-13.89	-15.06/-17.57	-12.28/-11.68	-9.97/-9.18	-10.04/-16.73	-18.47/-18.97
Θ (142.5°)	-18.51/-18.8	-13.8/-10.35	-17.93/-10.75	-11.37/-8.54	-15.64/-19.2	-17.95/-18.94	-17.7/-17.96	-18.54/-16.26	-18.4/-16.09	-17.83/-15.6	-12.68/-15.18	-12.65/-15.52	-10.21/-14.2	-15.44/-18.73	-13.15/-15.33	-14.13/-13.69	-18.87/-16.2	-16.37/-18.22	-12.15/-8.58	-12.56/-19.61	-17.63/-13.95	-12.25/-9.66	-8.92/-15.72	-17.91/-18.42
Θ (150°)	-18.46/-17.27	-18.23/-17.75	-18.46/-13.22	-9.53/-12.2	-8.52/-10.69	-16.85/-17.17	-18.48/-17.8	-16.47/-17.56	-18.07/-18.05	-17.48/-17.75	-18.68/-16.42	-13.27/-12.97	-18.48/-18.74	-17.76/-12.04	-18.42/-17.24	-16.11/-14.26	-10.73/-9.94	-11.92/-12.85	-13.8/-13.22	-12.22/-16.14	-18.82/-18.5	-16.92/-18	-15.77/-17.85	-19.21/-17.86
Θ (157.5°)	-18/-18.85	-17.58/-18.45	-18.94/-18.56	-15.16/-11.09	-9.41/-9.43	-11.38/-13.04	-15.09/-17.74	-18.43/-18.85	-17.44/-17.28	-18.27/-16.8	-16.42/-13.71	-13.79/-15	-17.99/-16.81	-10.86/-8.2	-8.09/-11.41	-16.15/-15.65	-12.57/-10.76	-11.44/-17	-17.91/-17.14	-17.16/-10.45	-8.48/-12.5	-15.49/-19.13	-16.35/-18.42	-13.27/-16.94
Θ (165°)	-18.11/-18	-16.64/-17.05	-17.55/-17.92	-18.88/-18.83	-17.69/-18.43	-19.13/-17.76	-15.16/-13.6	-11.79/-13.06	-14.88/-16.15	-17.47/-15.13	-13.82/-12.49	-12.64/-12.52	-12.13/-12	-11.61/-14.15	-18.25/-18.94	-14.39/-15.35	-18.28/-19.04	-18.94/-19.07	-15.9/-15.09	-17.17/-17.95	-17.79/-17.8	-19/-17.92	-19.22/-17.08	-15.96/-17.58
Θ (172.5°)	-18.73/-17.7	-18.25/-17.89	-17.91/-18.96	-18.35/-17.8	-18.04/-17.35	-18.05/-18.3	-18.15/-18.59	-16.42/-14.16	-13.67/-15.23	-15.92/-16.57	-16.82/-18.99	-17.72/-18.45	-18.35/-18.47	-16.04/-17.99	-18.24/-17.5	-17.9/-18.81	-18.13/-16.22	-15.92/-17.48	-16.38/-19.13	-16.92/-18	-16.92/-18	-18.5/-18.33	-19.09/-18.99	
Θ (180°)	-18.43/-17.29	-18.09/-17.89	-17.92/-18.94	-18.92/-17.52	-19.45/-17.2	-18.04/-19.36	-18.33/-17.64	-14.97/-14.62	-15.35/-15.44	-15.15/-14.97	-16.38/-14.98	-14.38/-17.32	-18.51/-18.41	-18.75/-18.71	-17.48/-17.85	-18.37/-18.02	-18.84/-17.94	-16.6/-18.13	-18.29/-19.04	-15.57/-13.21	-12.23/-13.38	-15.37/-16.66	-16.08/-18.69	-17.83/-19.25
Freq(Hz)	5.3GPol.	ThetaAnt. 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)/Φ(7.5°)	Φ(15°)/Φ(22.5°)	Φ(30°)/Φ(37.5°)	Φ(45°)/Φ(52.5°)	Φ(60°)/Φ(67.5°)	Φ(75°)/Φ(82.5°)	Φ(90°)/Φ(97.5°)	Φ(105°)/Φ(112.5°)	Φ(120°)/Φ(127.5°)	Φ(135°)/Φ(142.5°)	Φ(150°)/Φ(157.5°)	Φ(165°)/Φ(172.5°)	Φ(180°)/Φ(187.5°)	Φ(195°)/Φ(202.5°)	Φ(210°)/Φ(217.5°)	Φ(225°)/Φ(232.5°)	Φ(240°)/Φ(247.5°)	Φ(255°)/Φ(262.5°)	Φ(270°)/Φ(277.5°)	Φ(285°)/Φ(292.5°)	Φ(300°)/Φ(307.5°)	Φ(315°)/Φ(322.5°)	Φ(330°)/Φ(337.5°)	Φ(345°)/Φ(352.5°)
Θ (0°)	-11.97/-13.02	-11.91/-12.92	-14.57/-15.46	-15.32/-16.02	-17.45/-17.07	-17.68/-18.18	-18.35/-18.6	-																



Radiated Composite Gain of 2.4GHz and 5GHz UNII 1~3

Appendix A

Θ(7.5°)	-18.08/-18.49	-17.88/-18.57	-18.2/-18.18	-18.92/-17.43	-17.78/-17.51	-17.48/-15.09	-14.11/-15.37	-18.52/-18.84	-17.81/-17.46	-16.33/-19.02	-16.94/-16.33	-18.26/-17.85	-18.22/-18.22	-17.86/-18.5	-17.98/-18.66	-19.06/-18.5	-18.84/-18.05	-17.04/-18.87	-18.71/-15.24	-17.74/-18.22	-16.73/-18.12	-16.99/-19.14	-18.22/-18.49	-19.21/-18.67
Θ(15°)	-15.84/-16.68	-14.23/-18.65	-19.39/-18.12	-18/-17	-16.06/-19.47	-19.4/-18.54	-17.54/-14.95	-13.54/-14.41	-15.72/-16.47	-16.83/-16.35	-17.04/-18.11	-18.04/-17.96	-17.72/-18.08	-17.72/-19.27	-17.6/-18.66	-18.07/-17.56	-18.81/-18.63	-17.31/-17.39	-18.89/-16.67	-13.97/-15.72	-14.63/-15.59	-17.86/-18.59	-17.98/-19.27	-18.31/-18.1
Θ(22.5°)	-18.39/-15.71	-12.84/-13.44	-10.89/-12.06	-19.07/-19.32	-16.42/-15.36	-17.19/-18.26	-17.65/-19.19	-18.64/-18.16	-18.16/-17.9	-14.97/-14.05	-17.37/-19.19	-18.35/-19.06	-19.17/-15.22	-14.94/-18.25	-19.26/-18.62	-17.83/-17.12	-18.56/-18.91	-18.89/-19.12	-18.95/-19.11	-17.55/-14.79	-12.43/-12.53	-13.93/-13.89	-18.52/-18.79	-18.64/-18.68
Θ(30°)	-18.97/-15.23	-11.42/-11.96	-8.5/-9.84	-10.69/-11.74	-15.87/-16.7	-18.08/-17.82	-18.94/-18.2	-17.68/-17.79	-17.78/-17.17	-15.5/-13.38	-16.44/-15.55	-18.16/-19.08	-18.2/-18.96	-17.63/-17.59	-12.81/-11.46	-12.7/-11.92	-11.12/-12.2	-14.82/-18.37	-18.27/-18.18	-16.88/-12.89	-10.33/-11.69	-14.32/-16.62	-18.4/-16.01	-18.35/-18.21
Θ(37.5°)	-15.99/-18.18	-18.29/-18.11	-10.75/-12.13	-10.5/-11.26	-15.83/-18.54	-17.61/-18.8	-19.17/-18.53	-17.77/-19	-17.42/-18.61	-14.2/-11.79	-12.77/-12.55	-14.22/-17.31	-18.04/-17.92	-17.5/-18.37	-17.04/-11.32	-13.07/-18.05	-17.94/-18.85	-17.76/-18.62	-15.42/-11.32	-12.63/-14.03	-9.78/-10.91	-12.61/-11.23	-10.71/-11.49	-16.99/-15.8
Θ(45°)	-19.17/-18.86	-18.85/-16.68	-16.79/-15	-19.24/-16.56	-16.8/-18.51	-17.5/-17.95	-19.1/-18.1	-18.26/-17.94	-17.41/-18.5	-19.92/-16.26	-15.51/-12.1	-14.63/-15.75	-18.66/-19.06	-18.94/-19.09	-18.75/-15.44	-19.18/-19.09	-18.55/-18.24	-19.19/-14.51	-14.32/-11.28	-17.44/-8.95	-9.45/-13.36	-14.95/-14.14	-12.04/-14.82	-15.82/-18.3
Θ(52.5°)	-18.85/-17.49	-17.92/-14.14	-12.19/-11.69	-19.08/-17.18	-12.48/-18.01	-15.55/-17.71	-18.32/-17.11	-17.59/-17.29	-15.1/-19.05	-17.8/-19.01	-13.31/-10.86	-12.85/-18.94	-19.4/-14.69	-12.58/-17.31	-18.94/-18.53	-16.88/-17.36	-18.22/-18.84	-18.31/-17.68	-18/-17.12	-17.6/-17.25	-14.66/-14.51	-11.31/-11.31	-15.01/-16.58	-17.64/-18.26
Θ(60°)	-16.29/-18.46	-17.76/-18.43	-11.58/-13.14	-14.83/-17.88	-15.16/-14.18	-17.04/-19.11	-18.23/-15.26	-17.88/-18.3	-18.04/-13.4	-17.84/-18.92	-17.58/-17.65	-17.88/-17.56	-17.84/-12.69	-17.03/-18.29	-18.92/-13.02	-17.75/-19.42	-17.33/-12.23	-13.52/-17.22	-18.73/-12.53	-14.01/-16.68	-13.52/-13.72	-17.61/-17.91	-13.62/-11.97	-17.27/-17.04
Θ(67.5°)	-17.29/-14.48	-17.54/-18.83	-15.07/-13.67	-18.48/-18.62	-17.86/-18.74	-18.57/-14.85	-18.45/-15.9	-17.78/-15.08	-18.53/-12.81	-18.78/-16.63	-18.85/-18.27	-17.65/-18.31	-18.08/-18.73	-17.86/-18.26	-18/-19.17	-18.47/-14.69	-19.33/-17.41	-17.13/-13.43	-18.18/-17.44	-17.96/-14.61	-15.21/-16.01	-16.5/-14	-12.13/-13.62	-17.76/-18.1
Θ(75°)	-17.88/-18.7	-16.94/-19.27	-18.87/-17.1	-19.13/-13.6	-14.47/-15.44	-15.57/-14.67	-13.87/-14.51	-15.94/-17.97	-19.28/-18.75	-19.13/-17.97	-15.78/-15.05	-18.26/-18.78	-17.54/-18.51	-16.1/-14.7	-18.63/-16.92	-18.63/-18.13	-18.04/-18.14	-16.61/-19.1	-16.74/-14	-18.17/-16.96	-19.12/-17.75	-18.71/-14.27	-13.18/-17.31	-19.2/-18.09
Θ(82.5°)	-18.08/-18	-13.29/-16.11	-11.09/-12.17	-13.81/-19.45	-14.78/-18.97	-16.66/-17.85	-15.17/-17.92	-17.83/-19.06	-13.57/-17.93	-17.78/-18.11	-18.91/-19.26	-19.06/-17.68	-18.62/-15.89	-13.68/-17.98	-18.17/-13.71	-18.17/-17.31	-18.51/-19.16	-18.77/-15.18	-18.63/-11.39	-11.36/-12.43	-17.52/-18.36	-13.24/-11.93	-19.12/-16.75	-14.08/-18.76
Θ(90°)	-18.67/-19.29	-12.46/-18.4	-13.31/-13.26	-11.98/-18.68	-18.46/-19.07	-12.61/-18.48	-16.67/-13.93	-10.85/-18.26	-17.53/-15.11	-19.27/-16.48	-18.39/-17.2	-19.05/-17.48	-18.74/-17.51	-18.09/-17.84	-18.75/-15.94	-15.53/-9.9	-18.36/-15.75	-16.66/-18.87	-14.54/-12.77	-17.65/-13.74	-15.68/-14.32	-15.48/-15.17	-19.84/-15.23	-17.62/-18.83
Θ(97.5°)	-19.15/-18.92	-17.03/-15.37	-9.86/-10.48	-13.73/-15.72	-17.81/-19.18	-13.72/-14.19	-16.84/-16.87	-13.35/-17.86	-19.07/-18.64	-18.99/-18.53	-18.7/-18.27	-17.18/-18.39	-18.33/-16.46	-18.71/-18.46	-14.26/-14.92	-15.51/-16.63	-15.15/-17.87	-18.3/-18.75	-18.66/-11.04	-12.02/-14.66	-16.6/-13.3	-10.53/-11.37	-16.63/-16.9	-18.07/-18.13
Θ(105°)	-17.03/-18.93	-18.43/-15.22	-12.94/-11.94	-14.07/-11.49	-18.55/-14.72	-9.83/-14.17	-17.84/-13.89	-9.46/-15.08	-17.57/-18.09	-18.85/-19.71	-18.08/-18.97	-17.88/-16.46	-18.42/-18.46	-19.45/-18.69	-17.21/-15.24	-18.84/-13.62	-13.68/-13.06	-17.86/-18.53	-19.87/-19.17	-17.83/-14.46	-17.68/-17.48	-18.22/-17.44	-14.77/-16.17	-19.12/-18.84
Θ(112.5°)	-18.32/-18.02	-12.8/-17.86	-17.83/-11.51	-11.75/-14.64	-17.94/-18.83	-10.43/-17.88	-18.46/-15.62	-8.34/-9.88	-16.24/-18.59	-18.13/-18.36	-17.67/-17.57	-16.57/-18.57	-17.47/-18.45	-17.47/-15.91	-13.49/-16.82	-11.19/-18.98	-17.05/-18.07	-17.7/-17.53	-17.7/-18.98	-19.08/-13.8	-17.07/-12.89	-16.35/-11.31	-13.42/-18.56	
Θ(120°)	-15.02/-14.35	-13.54/-15.62	-12.61/-9.46	-8.33/-11.28	-17.04/-17.91	-12.34/-15.04	-19.42/-18.17	-7.39/-8.56	-17.2/-16.2	-18.2/-18.79	-18.7/-17.98	-13.79/-18.42	-18.74/-17.45	-17.48/-19.12	-18.16/-19.04	-17.71/-17.79	-17.23/-14.38	-19.28/-14.32	-17.04/-15.62	-10.31/-10.14	-13.08/-18.41	-13.95/-8.14	-13.49/-15.58	-18.86/-16.03
Θ(127.5°)	-15.97/-10.76	-13.76/-7.09	-10.58/-9.93	-10.62/-10.16	-18.27/-17.76	-16.23/-18.85	-18.11/-16.03	-9.74/-10.9	-13.28/-7.87	-10.79/-12.26	-13.45/-19.33	-17.37/-18.24	-17.26/-18.54	-18.19/-16.99	-18.02/-18.09	-10.96/-18.69	-11.46/-10.98	-9.36/-10.74	-11.48/-16.02	-17.76/-17.6	-18.84/-14.32	-11.21/-18.04	-16.01/-11.22	-18.23/-17.4
Θ(135°)	-12.93/-10.87	-12.12/-10.28	-6.26/-7.98	-10.92/-9.79	-11.91/-14.43	-19.21/-18.76	-17.67/-14.51	-16.75/-13.19	-9.06/-9.28	-10.64/-11.87	-12.31/-12.67	-13.35/-10.14	-9.04/-9.88	-18.08/-18.7	-8.95/-8.78	-12.59/-9.61	-12.51/-18.76	-19.14/-18.52	-14.71/-14.82	-15.49/-12.52	-7.11/-18.74	-13.86/-18.08	-18.25/-18.85	
Θ(142.5°)	-18.98/-18.38	-8.63/-9.08	-8.32/-12.91	-9.24/-13.01	-14.29/-18.5	-15.79/-15.75	-17.64/-19.02	-19.01/-15.86	-11.58/-10.45	-11.61/-13.88	-14.94/-14.64	-12.17/-12.63	-13.36/-15.59	-18.47/-17.72	-17.93/-14.28	-10.43/-6.33	-7.57/-13.62	-12.17/-17.91	-16.99/-9.54	-11.89/-9.22	-6.02/-7.77	-12.32/-8.98	-8.4/-14.06	-16.59/-18.34
Θ(150°)	-18.89/-17.9	-13.1/-12.87	-11.55/-11.7	-8.27/-10.33	-11.55/-17.13	-18.22/-18.36	-18.89/-18.4	-18.3/-16.48	-15.75/-13.3	-12.88/-11.01	-13.11/-12.59	-11.85/-12.48	-17.88/-19.17	-9.48/-8.48	-10.51/-14.39	-8.02/-10.3	-17.56/-13.68	-10.22/-8.73	-10.9/-11.76	-11.21/-10.95	-12.15/-12.17	-18.68/-17.53	-17.38/-16.69	-15.07/-18.87
Θ(157.5°)	-15.84/-18.12	-16.78/-18.53	-17.6/-13.75	-11.38/-11.65	-11.36/-14.12	-15.88/-18.64	-17.25/-19.01	-18.05/-14.3	-13.62/-13.76	-12.71/-12.16	-14.33/-15.57	-16.63/-18.85	-18.59/-18.23	-18.48/-11.56	-10.29/-12.69	-13.13/-16.13	-13.61/-10.66	-12.82/-15.8	-15.01/-16.95	-18.9/-15.41	-14.2/-18.01	-17.56/-18.46	-16.78/-18.52	-16.32/-15.71
Θ(165°)	-18.79/-17.89	-18.4/-16.65	-15.31/-13.62	-13.87/-10.87	-10.03/-11.56	-12.9/-16.11	-18.68/-18.16	-18.68/-19	-14.64/-19.22	-17.56/-18.82	-15.79/-17.01	-16.85/-17.22	-10.7/-8.04	-6.41/-7.49	-14.13/-14.58	-13.73/-12.89	-12.97/-12.42	-15.32/-19.11	-18.07/-16.1	-17.27/-19.5	-17.99/-18.32	-18.09/-19.05	-19.23/-18.87	-18.21/-17.93
Θ(172.5°)	-18.67/-17.53	-17.91/-17.8	-17.37/-15.75	-15.17/-13.13	-13.07/-14.65	-14.48/-13.54	-13.74/-12.27	-15.16/-17.04	-15.87/-13.98	-14.93/-14.47	-13.3/-11.58	-10.48/-9.63	-8.97/-9.85	-12.24/-13.1	-14.46/-13.8	-14.63/-16.82	-17.45/-17.97	-18.09/-18.08	-18.29/-18.33	-18.04/-16.79	-14.16/-13.37	-13.67/-15.22	-16.77/-18.11	-17.35/-18.37
Θ(180°)	-17.26/-18.25	-18.54/-19.2	-17.76/-19.2	-18.86/-19.14	-16.45/-16.76	-18.85/-17.3	-15.01/-14.53	-16.47/-14.67	-13.98/-13.14	-15.85/-14.22	-14.75/-14.92	-13.89/-15.76	-13.78/-17.81	-17.17/-18.47	-18.01/-17.17	-16.13/-16.62	-14.16/-13.26	-14.22/-14.02	-12.35/-10.38	-8.67/-7.99	-7.55/-9.51	-9.99/-11.92	-11.77/-11.32	-12.89/-13.14
Freq(Hz)	5.785GPol.	ThetaAnt. 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°)	-18.7/-18.77	-17.46/-17.47	-17.67/-18.45	-18.58/-17.65	-17.33/-18.47	-18.64/-19.17	-19.09/-17.92	-17.62/-17.23	-17.93/-17.56	-17.61/-16.68	-15.79/-16.72	-15.26/-18.29	-19.25/-18.34	-17.46/-18.38	-17.29/-18.39	-19.17/-19.12	-18.09/-18.03	-18.73/-19.26	-16.5/-14.85	-16.47/-17.77	-13.63/-13.27	-15.23/-18.46	-17.13/-17.66	-19.08/-19.19
Θ(7.5°)	-19.08/-17.53	-17.85/-19.55	-18.71/-17.99	-18.45/-18.35	-19.11/-18.84	-18.13/-15.22	-15.03/-14.09	-12.77/-10.95	-10.95/-12.06	-11.33/-12.71	-13.67/-14.15	-16.48/-13.18	-13.79/-11.35	-14.85/-19.25	-18.74/-16.17	-13.63/-14.06	-14.77/-14.58	-14.78/-18	-18.14/-19.12	-17.14/-17.13	-18.13/-18.47	-18.47/-17.89	-18.02/-17.8	-17.9/-17.98
Θ(15°)	-12.51/-13.73	-14.22/-15.66	-17.77/-18.29	-18.34/-17.73	-18.68/-16.99	-16/-12.26	-10.52/-8.7	-10.48/-11.8	-13.35/-13.72	-13.04/-11.68	-10.76/-11.31	-12.89/-13.92	-15.13/-12.61	-11.55/-14.74	-18.96/-13.86	-11.66/-11.7	-12.82/-12.13	-10.56/-9.31	-8.71/-9.14	-11.17/-11.71	-13.07/-16.12	-15.23/-15.28	-14.42/-14.58	-14.04/-13.38
Θ(22.5°)	-17.63/-17.48	-17.64/-16.97	-11.94/-8.17	-7.88/-8.43	-10.68/-12.96	-10.71/-7.59	-8.31/-12.22	-13.3/-10.8	-9/-7.78	-9.06/-11.25	-9.48/-9.59	-9.36/-10.84	-11.96/-11.68	-7.46/-7.48	-7.1/-5.33	-5.46/-8.46	-12.22/-11.31	-10.76/-12.84	-11.63/-10.75	-13.53/-17.56	-16.19/-15.05	-17.83/-17.82	-17.67/-18.01	-18.16/-18.67
Θ(30°)	-5.91/-6.72	-7.31/-8.03	-7.26/-8.07	-12.21/-7.17	-6.57/-6.39	-6.58/-8.43	-9.67/-6.81	-9.77/-13.34	-9.55/-6.76	-6.38/-6.9	-6.27/-5.18	-4.64/-6.16	-8.37/-8.78	-7.29/-7.18	-6.05/-4.12	-6.11/-8.23	-11.19/-8.67	-8.97/-8.6	-9.59/-12.86	-11.56/-10.67	-10.13/-9.69	-9.94/-8.94	-7.01/-5.01	-4.82/-5.59
Θ(37.5°)	-1.36/-0.95	-3.47/-1.02	-2.19/-2.94	-4.23/-3.96	-8.54/-7.5	-4.93/-4.58	-9.27/-6.79	-6.86/-4.71	-5.82/-6.88	-6.51/-4.83	-3.96/-2.3	-3.22/-6.24	-7.57/-5.03	-4.74/-3.21	-3.79/-7.39	-7.95/-9.53	-5.52/-6.48	-8.08/-11.79	-8.28/-7.89	-7.4/-6.35	-5.18/-5.26			



Freq(Hz)	6.175G	6.475G
Ant. 1 Max Gain (dBi)	1.8	1.69
Ant. 2 Max Gain (dBi)	1.95	1.21
Ant. 3 Max Gain (dBi)	1.82	1.56
Ant. 4 Max Gain (dBi)	1.74	2.31
Ant. 1 Polarization/ $\theta(^{\circ})/\Phi(^{\circ})$	Theta/82.5/127.5	Theta/82.5/7.5
Ant. 2 Polarization/ $\theta(^{\circ})/\Phi(^{\circ})$	Theta/90/60	Theta/82.5/97.5
Ant. 3 Polarization/ $\theta(^{\circ})/\Phi(^{\circ})$	Theta/60/195	Theta/82.5/352.5
Ant. 4 Polarization/ $\theta(^{\circ})/\Phi(^{\circ})$	Theta/60/150	Theta/120/232.5
Max Gain (dBi)	1.95	2.31
DG [1SS] (dBi)	5.66	6.09
DG [2SS] (dBi)	1.95	2.31
DG [4SS] (dBi)	1.95	2.31

Sporton International Inc. Hsinchu Laboratory



Sporton International Inc. Hsinchu Laboratory



Radiated Composite Gain of 6GHz UNII 5 and UNII 6

Appendix B

Θ(22.5°)	-16.77/-16.21	-18.79/-17.63	-14.58/-19.12	-18.5/-16.62	-15.18/-16.61	-17.95/-18.73	-18.9/-15.29	-17.14/-12.41	-16.67/-16.57	-18.58/-15.35	-17.09/-15.26	-14.66/-15.29	-14.47/-14.29	-12.11/-10.83	-13.54/-18.83	-16.25/-17.66	-15.09/-14.35	-13.35/-14.16	-14.36/-14.6	-16.61/-15.52	-17.79/-13	-12.09/-15.47	-19.04/-18.09	-16.36/-18.45
Θ(30°)	-17.82/-14.1	-18.22/-16.52	-12.22/-18.14	-17.54/-16.86	-17.1/-18.07	-18.71/-15.04	-14.38/-12.22	-14.55/-10.2	-13.17/-12.28	-17.31/-18.39	-14.03/-9.68	-13.54/-19.06	-18.26/-18.85	-17.28/-14.03	-15.26/-14.78	-14.08/-16	-18.83/-18.62	-17.95/-18.39	-17.62/-18.19	-16.17/-13.1	-12.54/-15.9	-7.52/-8.87	-8.94/-14.52	-14.52/-18.35
Θ(37.5°)	-13.72/-10.04	-18.16/-19.39	-18.65/-17.82	-13.97/-17.33	-16.77/-19.24	-18.12/-19.43	-13.83/-14.11	-15.55/-11.71	-11.94/-12.62	-16.41/-17.29	-16.72/-15.9	-16.72/-15.75	-18.95/-18.72	-17.96/-17.47	-19.64/-14.14	-18.83/-18.06	-9.68/-12.09	-15.27/-19.01	-19.27/-19	-17.53/-16.24	-19.11/-18.29	-16.54/-14.12	-18.87/-18.06	
Θ(45°)	-15.13/-14.5	-18.79/-11.05	-10.71/-18.92	-13.25/-15.38	-18.86/-18.21	-17.99/-17.95	-18.06/-19.17	-13.46/-12.03	-8.58/-12.85	-13.99/-13.07	-12.81/-18.05	-17.63/-19.46	-18.97/-12.9	-11.51/-19.02	-12.66/-15.82	-17.87/-18.54	-18.89/-17.82	-18.53/-17.05	-18.01/-16.33	-18.34/-12.24	-17.78/-15.9	-17.47/-11.33	-9.42/-18.52	-18.21/-18.74
Θ(52.5°)	-17.24/-18.19	-17.59/-10.09	-12.29/-18.75	-18.4/-16.26	-19.04/-17.41	-19.01/-18.17	-19.42/-19.13	-16.62/-16.46	-16.63/-18.22	-15.9/-18.67	-18.25/-12.37	-17.59/-18.7	-16.54/-12.64	-15.77/-18.35	-17.48/-17.56	-11.13/-12.19	-12.34/-18.37	-13.67/-14.4	-14.19/-14.4	-17.84/-19	-17.06/-16.79	-17.52/-19.24	-15.87/-13.39	-12.5/-13.27
Θ(60°)	-18.07/-14.41	-17.71/-19.22	-18.18/-18.66	-17.39/-17.76	-18.98/-18.68	-18.12/-17.17	-15.66/-17.72	-18.25/-17.85	-19.46/-18.83	-18.1/-18.35	-16.45/-17.64	-18.13/-18.05	-15.65/-12.93	-16.9/-18.69	-18.47/-18.74	-16.23/-18.08	-11.41/-18.19	-15.79/-15.58	-15.61/-18.03	-17.96/-12.11	-17.55/-10.99	-17/-16.12	-17.27/-13.8	
Θ(67.5°)	-15.4/-16.81	-10.98/-18.8	-18.18/-18.56	-15.33/-17.75	-19.17/-18.35	-18.17/-18.58	-15.77/-15.56	-19.06/-16.79	-14.52/-16.69	-17.64/-18.91	-17.23/-18.09	-18.92/-15.51	-19/-15.89	-18.9/-18.47	-19.13/-15.85	-13.91/-17.48	-10.73/-18.2	-14.36/-18.81	-19.01/-18.99	-17.55/-18.56	-18.02/-19.11	-17.31/-13.23	-18.13/-12.59	-13.66/-16.7
Θ(75°)	-12.48/-14.27	-15.97/-18.68	-18.6/-16.1	-18.35/-18.03	-18.42/-19.16	-18.77/-18.28	-17.7/-18.05	-18.91/-13.85	-13.96/-14.47	-11.85/-11.69	-14.21/-12.93	-19.18/-15.09	-18.25/-18.37	-14.46/-17.73	-18.04/-18.36	-18.77/-11.67	-18.94/-18.23	-11.18/-18.7	-19.14/-15.13	-14.51/-17.76	-12.82/-15.93	-13.45/-16.57	-13.58/-18.48	-14.68/-12.84
Θ(82.5°)	-19.04/-18.24	-18.07/-17.62	-18.18/-17.94	-18.97/-18.78	-18.93/-18.03	-18.23/-18.84	-17.95/-16.59	-18.09/-19.37	-18.4/-14.17	-13.71/-10.46	-18.17/-18.37	-18.58/-14.66	-16.37/-15.59	-19.14/-18.05	-17.41/-17.47	-18.39/-18.46	-15.5/-18.07	-16.13/-18	-18.41/-17.68	-17.69/-18.46	-14.41/-17.25	-17.9/-18.92	-14.44/-14.4	-18.78/-19.9
Θ(90°)	-13.19/-15.82	-15.52/-17.23	-15.92/-17.68	-15.96/-18.16	-18.39/-17.68	-17.4/-17.79	-14.39/-16.7	-18.44/-17.61	-13.83/-18.32	-19.13/-12.86	-16.59/-16.05	-19.01/-18.88	-18.96/-17.32	-19.02/-18.52	-17.56/-19.25	-18.84/-18.5	-19.31/-18.99	-16.88/-18.49	-17.86/-18.62	-15.81/-13.71	-18.73/-13.3	-18.02/-14.33	-16.89/-17.51	-13.76/-10.24
Θ(97.5°)	-13.38/-16.27	-17.99/-15.41	-18.47/-16.3	-14.78/-18.98	-14.75/-18.66	-17.89/-18.98	-17.63/-19.29	-17.41/-15.6	-11.59/-9.92	-17.97/-18.14	-14.87/-15.32	-15.57/-19.11	-16.21/-13.15	-17.83/-18.25	-17.86/-18.31	-17.26/-18.33	-18.95/-19.3	-17.91/-19.11	-18.24/-14.58	-19.39/-18.96	-18.6/-18.68	-18.47/-18.73	-17.09/-14.06	
Θ(105°)	-19.13/-18.63	-17.89/-19.06	-18.72/-18.99	-18.89/-17.8	-13.31/-14.6	-18.94/-14.91	-18.85/-18.52	-17.55/-15.67	-16.65/-16.68	-15.94/-19.13	-18.08/-19.08	-14.56/-18.78	-17.77/-19.03	-18.37/-17.92	-17.77/-19.26	-16.12/-17.82	-19.22/-18.76	-18.33/-17.48	-13.21/-18.09	-12.46/-16.57	-16.99/-14.33	-14.06/-15.41	-15.82/-18.16	-19.5/-13.27
Θ(112.5°)	-19.1/-11.35	-15.81/-17.95	-19.06/-18.81	-17.5/-18.9	-17.22/-17.55	-18.81/-16.91	-18.48/-18.45	-17.6/-17.4	-17.22/-18.14	-18.97/-17.05	-19.11/-18.96	-14.08/-17.62	-17.65/-17.08	-18.83/-18.89	-18.78/-15.1	-18.33/-16.22	-16.07/-18.13	-18.47/-18.84	-18.33/-18.75	-15.22/-18	-19.33/-17.12	-10.3/-16.81	-11.1/-17.88	-11.73/-11.45
Θ(120°)	-17.43/-13.22	-18.33/-18.88	-15.97/-17.61	-18.32/-18.16	-17.66/-18.39	-18.62/-17.41	-19.01/-19.26	-17.45/-16.06	-13.56/-17.5	-16.11/-17.5	-19.39/-18.37	-12.15/-18.04	-18.57/-18.51	-17.51/-17.44	-18.52/-14.81	-9.99/-18.39	-17/-17.7	-17.88/-18.06	-18.8/-16.52	-18.74/-16.64	-13.07/-18.9	-17.94/-17.99	-18.47/-17.12	-14.35/-18.7
Θ(127.5°)	-19.08/-9.56	-15.64/-17.76	-13.17/-12.61	-15.45/-18.6	-15.28/-13.7	-18.81/-19.17	-17.79/-15.92	-16.54/-17.82	-17.8/-19.23	-18.32/-18.59	-19.23/-18.33	-17.99/-19.19	-17.56/-17.65	-17.8/-15.94	-18.53/-13.37	-10.07/-19.13	-13.64/-17.4	-12.47/-18.57	-18.86/-18.09	-18.97/-15.61	-18.68/-16.11	-18.97/-14.23	-18.91/-11.81	-17.41/-18.89
Θ(135°)	-13.51/-10.5	-19.02/-18.75	-13.38/-12.03	-19.16/-19.19	-18.58/-15.87	-16.56/-16.49	-15.41/-16.51	-18.73/-16.95	-18.48/-18.89	-14.94/-18.64	-18.01/-17.66	-15.71/-17.79	-18.34/-15.09	-19.06/-19.74	-18.5/-15.21	-17.6/-19.19	-15.22/-18.23	-19.29/-18.47	-17.94/-18.11	-18.01/-17.61	-10.25/-11.6	-18.67/-13.52	-16.95/-10.86	-17.95/-14.31
Θ(142.5°)	-18.31/-18.24	-18.11/-18.72	-18.61/-17.51	-17.47/-18.57	-18.16/-17.71	-18.2/-17.41	-19.08/-19.38	-18.71/-15.55	-16.32/-18.46	-17.61/-18.11	-14.28/-10.6	-12.3/-18.04	-18.78/-18.44	-17.69/-19.06	-19.24/-15.48	-11.26/-17.98	-17.55/-19.14	-17.79/-15.66	-11.89/-11.89	-13.91/-14.02	-12.95/-18.83	-17.07/-15.05	-17.97/-12.87	
Θ(150°)	-18.81/-18.66	-19.09/-15.8	-19.34/-18.18	-18.01/-17.76	-16.93/-18.44	-19.06/-16.48	-18.99/-19.2	-16.95/-14.72	-18.81/-19.32	-14.83/-18.98	-18.11/-17.54	-12.85/-15.18	-19.52/-17.42	-18.49/-19.01	-18.01/-18.87	-17.66/-19.27	-18.65/-17.94	-18.95/-18.41	-13.75/-18.87	-13.75/-14.24	-12.89/-19.37	-19.08/-17.43	-15.24/-15.07	
Θ(157.5°)	-17.22/-18.24	-14.96/-12.14	-16.39/-14.17	-16.21/-18.05	-17.49/-16.81	-17.8/-18.18	-18.88/-19.16	-17.61/-17.51	-18.41/-18.05	-16.59/-17.15	-18.83/-18.77	-17.97/-17.75	-18.37/-17.92	-18.19/-16	-18.39/-18.22	-18.5/-16.7	-18.52/-18.63	-18.34/-19.29	-18.72/-17.94	-18.07/-17.29	-18.35/-17.85	-18.1/-16.09	-15.11/-18.23	-18.09/-18.14
Θ(165°)	-18.9/-18.9	-18.58/-17.24	-17.58/-18.91	-18.61/-17.29	-18.25/-16.77	-17.75/-17.74	-18.39/-18.37	-18.12/-17.82	-19.26/-18.08	-16.87/-14.61	-16.72/-10.71	-18.23/-17.74	-18.33/-18.77	-18.87/-18.11	-18.81/-17.89	-17.54/-17.5	-16.37/-18.74	-19.3/-17.56	-18.44/-17.91	-17.73/-18.51	-18.54/-17.53	-17.82/-17.91	-19.19/-19.11	-17.56/-17.66
Θ(172.5°)	-17.49/-19.17	-18.43/-16.13	-13.62/-13.19	-13.2/-14.45	-12.09/-10.6	-12.66/-12.46	-14.43/-14.1	-15.27/-16.07	-16.8/-18.38	-18.26/-17.43	-18.26/-17.8	-18.79/-18.64	-16.97/-16.19	-19.61/-18.21	-18.31/-18.58	-19.24/-17.09	-18.02/-19.45	-19.08/-18.46	-18.06/-17.81	-17.86/-18.79	-18.36/-18.79	-17.81/-17.27	-17.51/-19.1	
Θ(180°)	-17.02/-18.87	-18.42/-18.96	-18.24/-18.12	-18.95/-17.48	-15.86/-13.89	-14.08/-11.79	-13.39/-12.39	-15.11/-15.26	-14.3/-16.03	-14.66/-14.82	-15.33/-16.4	-15.67/-18.65	-19.31/-17.95	-18.55/-17.92	-14.94/-15.15	-14.61/-15.76	-16.51/-17.3	-18.91/-14.53	-17.4/-16.18	-16.53/-15.23	-12.67/-14.06	-15.95/-16.25	-15.6/-15.04	
Freq(Hz)	6.175GPol.	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°)	-18.74/-18.67	-18.58/-18.53	-19.21/-18.41	-19.32/-18.32	-16.97/-17.59	-17.56/-15	-15.85/-18.07	-16.53/-17.62	-18.33/-18.26	-18.07/-17.97	-18.18/-18.65	-18.53/-18.62	-18.56/-17.83	-18.34/-18.34	-18.83/-18.76	-18.14/-18.34	-17.66/-18.49	-16.76/-18.22	-16.71/-17.61	-18.59/-16.76	-18.09/-17.87	-18.16/-16.69	-18.26/-17.94	-18.94/-18.99
Θ(7.5°)	-16.91/-15.62	-14.13/-15.45	-15.43/-13.03	-13.87/-16.03	-14.12/-15.28	-14.81/-15.95	-18.74/-18.49	-16.77/-15.21	-17.15/-16.62	-15.87/-17.58	-18.99/-18.06	-17.25/-18.19	-18.79/-19.2	-18.76/-18.57	-18.29/-18.13	-16.45/-11.23	-10.01/-8.42	-8.26/-7.99	-6.86/-7.35	-7.42/-9.36	-11.48/-13.1	-16.41/-18.15	-16.63/-18.76	-15.85/-17.32
Θ(15°)	-15.29/-16.32	-12.16/-11.3	-11.41/-10.97	-12.34/-12.64	-11.13/-10.68	-11.56/-10.46	-11.07/-10.71	-13.52/-10.93	-12.82/-14.03	-18.83/-18.33	-14.13/-11.62	-10.51/-10.73	-11.42/-14.11	-18.38/-18.69	-17.4/-15.82	-10.82/-10.18	-11.08/-10.57	-13.92/-13.01	-13.22/-13.5	-12.71/-12.02	-10.01/-11.05	-9.96/-9.59	-13.36/-15.02	-14.26/-13.58
Θ(22.5°)	-15.10/-14.89	-11.21/-10.69	-13.79/-12.52	-10.23/-8.87	-8.01/-6.48	-4.87/-4.8	-3.41/-4.6	-5.68/-7.5	-10.38/-13.99	-18.94/-19.8	-11.16/-9.38	-12.64/-13.44	-11.16/-11.65	-14.2/-10.17	-17.73/-18	-18.78/-19.1	-18.29/-18.36	-18.65/-17.06	-16.82/-16.15	-18.89/-18.85	-19.12/-15.95	-17.41/-13.56	-11.44/-9.6	-8.85/-8.82
Θ(30°)	-4.94/-6.67	-8.55/-10.87	-6.29/-7.43	-4.91/-4.29	-4.78/-5.08	-7.06/-8.35	-6.85/-4.57	-6.05/-6.74	-7.16/-8.94	-3.79/-17.81	-4.86/-10.57	-9.16/-8.7	-2.74/-17.84	-2.78/-14.05	-7.33/-6.57	-1.78/-13.47	-2.99/-10.14	-13.13/-11.59	-7.46/-4.36	-2.92/-2.47	-6.96/-5.91	-7.26/-8.01	-14.07/-10.11	-7.27/-8.54
Θ(37.5°)	-7.4/-3.2	-4.58/-6.11	-1.92/-2.32	-2.81/-2.87	-2.61/-5.46	-8.46/-7.14	-6.61/-4.24	-4.89/-4.46	-6.77/-6.18	-6.8/-8.03	-10.15/-8.94	-10.28/-7.34	-7.19/-8.72	-10.67/-9.05	-9.13/-10.26	-13.74/-19.1	-13.07/-9.87	-6.01/-4.88	-5.23/-8.04	-16.25/-8.37	-6.87/-7	-2.52/-3.22	-4.96/-6.14	-5.4/-10.71
Θ(45°)	-5.59/-6.85	-1.85/-2.93	-2.57/-3.79	-2.36/-1.31	-4.09/-6.06	-5.37/-3.94	-7.43/-6.4	-4.47/-2.61	-4.02/-4.4	-5.47/-4.18	-6.93/-7.99	-7.79/-3.97	-18.28/-8.31	-7.88/-6.05	-6.36/-5.75	-1.93/-1.47	-2.32/-2.65	-3.11/-3.69	-5.16/-5.68	-3.38/-2.02	-2.68/-3.12	-5.53/-7.48	-6.57/-5.53	-7.54/-6.1
Θ(52.5°)	-4.34/-3.56	-6.32/-1.98	-1.38/-5	-4.54/-3.8	-4.09/-4.18	-4.52/-2.38	-3.98/-4.26	-3.95/-5.48	-0.78/-3.46	-5.35/-5.48	-4.71/-5.48	-5.25/-5.32	-6.83/-5.12	-6.98/-2.56	-8.11/-7.41	-5.71/-5.24	-3.21/-3.94	-4.34/-3.58	-4.84/-3.88	-7.28/-4.07	-13.31/-4.37	-1.73/-3.48	-3.77/-4.63	
Θ(60°)	-3.48/-2.25	-3.1/-0.58	-1.59/-2.29	-3.44/-3.1	-0.81/-7.9	-4/-5.39	-3.74/-3.58	-3.89/-1.87	-1.1/-2.6															



Radiated Composite Gain of 6GHz UNII 5 and UNII 6

Appendix B

Θ(67.5°)	-19.21-18.27	-18.821-18.56	-18.371-17.78	-18.511-15.04	-16.881-10.95	-17.531-14.2	-19.081-18.55	-13.441-14.14	-17.691-17.81	-18.761-17.26	-14.491-13.87	-18.491-18.5	-15.311-18.38	-19.151-19.32	-17.541-18.95	-15.821-9.5	-15.871-13.53	-17.261-14.37	-11.221-17.74	-12.141-13.05	-15.361-14.92	-19.121-18.26	-17.511-18.01	-18.981-19.36
Θ(75°)	-18.851-18.96	-18.261-18.39	-15.921-15.27	-16.951-15.42	-11.561-8.81	-14.671-14.12	-12.771-13.69	-14.151-15.27	-17.791-18.27	-18.771-17.98	-18.921-13.18	-18.841-16.8	-19.151-18.76	-16.871-18.75	-15.741-19	-11.361-14.44	-17.431-18.95	-14.061-18.15	-17.741-19.39	-17.761-17.37	-10.031-10.6	-10.331-15.11	-16.241-15.16	-15.641-17.88
Θ(82.5°)	-12.211-18.58	-18.531-19.12	-14.771-12.66	-18.391-15.16	-17.731-14.02	-14.211-18.96	-13.821-18.08	-16.511-17.42	-17.791-13.63	-19.011-17.63	-17.711-18.06	-17.391-18.71	-18.731-18.42	-18.861-18.46	-18.421-15	-18.991-12.3	-17.461-17.11	-15.731-10.92	-17.431-15.26	-16.651-18.74	-19.411-13.46	-11.951-14.55	-11.071-18.26	-16.071-12.42
Θ(90°)	-14.071-19.35	-18.691-16.21	-18.631-17.8	-19.291-12.33	-11.521-9.45	-18.441-10.21	-19.121-16.6	-13.751-17.25	-18.31-18.39	-18.891-18.75	-18.631-18.91	-18.541-14.38	-16.191-17.28	-18.581-18.4	-17.661-14.21	-17.741-19.32	-16.691-17.55	-15.621-18.77	-18.371-19.23	-18.951-16.73	-13.931-12.41	-18.261-13.7	-14.511-17.89	-18.281-16.01
Θ(97.5°)	-15.011-17.98	-18.271-18.04	-14.781-17.77	-13.551-10.04	-15.511-8.94	-18.871-11.15	-17.461-14.12	-15.911-12.5	-15.611-12.5	-18.131-18	-16.251-19.15	-18.441-18.22	-18.351-17.86	-17.971-19.07	-17.641-19	-17.831-18.13	-17.791-11.06	-14.871-11.14	-18.821-16.64	-14.541-16.55	-16.841-13.04	-13.111-9.96	-14.071-13.87	-15.071-13.11
Θ(105°)	-16.941-18.6	-18.541-12.99	-15.811-17.39	-18.51-18.16	-13.171-18.31	-17.731-17.85	-19.181-19.39	-17.651-17.29	-18.111-17.04	-14.651-14.76	-13.611-18.09	-17.611-18.67	-18.841-18.09	-18.81-18.35	-16.951-16.37	-17.911-19.07	-17.791-15.53	-18.121-18.95	-18.711-16.35	-18.841-16.55	-17.871-16.76	-18.031-15.6	-17.271-17.48	-18.661-14.94
Θ(112.5°)	-17.931-17.19	-18.891-18.59	-16.411-18	-18.791-17.36	-16.021-15.87	-16.621-14.73	-16.931-16.65	-16.111-19.23	-17.141-18.59	-18.081-18.73	-18.211-18.35	-18.291-18.79	-18.551-18.24	-18.061-15.1	-18.811-18.87	-11.721-11.01	-18.281-18.03	-19.061-15.11	-15.771-16.19	-18.061-17.99	-17.761-13.64	-16.931-11.94	-17.221-18.09	-18.231-17.58
Θ(120°)	-18.721-17.4	-18.751-18.19	-18.91-17.94	-18.81-16.91	-19.311-15.5	-17.641-10.84	-17.741-16.52	-13.631-14.96	-17.071-18.35	-15.791-18.29	-11.041-19.1	-17.761-18.05	-18.081-16.14	-17.871-18.75	-19.131-18.71	-17.571-17.71	-13.961-19	-19.511-18.93	-14.811-18.83	-19.011-17.24	-13.931-18.02	-11.821-11.46	-18.171-17.92	-18.171-17.74
Θ(127.5°)	-17.031-13.07	-17.171-15.89	-18.611-13.44	-18.721-12.88	-17.561-15.54	-10.751-12.2	-15.341-18.99	-19.381-14.92	-16.711-12.96	-17.071-17.35	-12.711-11.6	-19.091-18.01	-18.441-15.44	-18.411-18.54	-9.641-13	-18.791-17.45	-17.361-18.71	-11.511-15.96	-18.361-12.21	-18.921-18.74	-11.311-10.5	-17.891-12.28	-17.211-16.42	-17.711-17.03
Θ(135°)	-10.651-16.73	-13.071-16.25	-11.331-13.86	-18.321-13.75	-11.191-10.41	-15.551-10.6	-14.691-13.34	-16.21-16.49	-15.181-13.02	-16.921-15.08	-11.441-12.18	-16.431-15.16	-18.271-18.88	-14.211-18.31	-12.421-10.35	-16.211-18.14	-18.711-18.54	-16.571-15.31	-15.241-11.91	-18.231-18.37	-9.011-11.08	-16.621-12.32	-16.471-16.53	-15.221-16.32
Θ(142.5°)	-19.581-16.82	-14.951-16.81	-18.791-13.86	-16.971-14.07	-16.511-12.12	-17.721-11.14	-12.761-13.11	-18.621-16.73	-17.971-17.96	-13.641-13.1	-10.241-8.57	-18.691-14.38	-16.941-10.73	-14.221-17.77	-15.011-18.25	-13.331-18.31	-18.381-19.14	-18.031-14.38	-18.271-17.77	-15.621-19.65	-19.231-17.65	-16.861-10.58	-12.921-13.88	
Θ(150°)	-17.691-17.92	-18.081-17.98	-18.951-14.82	-17.611-17.8	-17.611-17.49	-18.691-18.99	-18.411-18.56	-15.571-16.66	-18.721-18.89	-17.831-18.07	-18.981-17.47	-11.551-11.06	-15.981-18.61	-18.661-18.67	-18.081-12.53	-12.121-9.58	-11.591-14.85	-16.871-17.67	-17.221-18.13	-18.211-18.47	-19.271-17.89	-18.611-18.15	-17.131-18.92	-17.281-18.97
Θ(157.5°)	-16.981-17.53	-18.991-17.7	-16.771-12.79	-17.581-18.97	-151-13.34	-18.711-18.38	-17.451-18.9	-19.731-19	-17.931-18.87	-18.671-19.41	-18.891-16.58	-17.151-15.48	-15.361-18.62	-19.31-18.27	-17.281-17.84	-18.891-17.27	-15.041-15.78	-17.931-17.29	-18.641-19.18	-16.611-16.2	-16.551-19.16	-17.611-17.67	-18.781-18.09	-17.731-15.59
Θ(165°)	-18.261-13.71	-14.611-14.54	-18.131-15.15	-16.411-17.18	-12.551-16.48	-18.911-17.48	-14.891-15.54	-16.561-16.1	-16.671-14.49	-11.411-11.91	-16.221-18.52	-18.061-18.12	-18.651-18.14	-18.091-13.6	-15.611-12.03	-14.521-13.98	-17.911-15.14	-10.451-10.21	-13.021-14.71	-14.931-15.29	-19.271-17.65	-10.071-12.09	-13.911-15	-17.411-17.7
Θ(172.5°)	-18.551-15.63	-18.321-15.69	-18.061-16.02	-17.931-17.74	-16.381-15.65	-141-14.59	-14.91-15.8	-17.491-19.07	-17.941-19.08	-15.131-13.59	-12.871-9.74	-12.211-13.72	-18.131-18.45	-18.091-14.86	-17.171-15.66	-12.951-15.64	-11.311-9.14	-10.211-14.88	-13.441-17.36	-18.891-15.48	-11.941-9.71	-9.271-10.15	-12.251-15.09	-18.931-18.42
Θ(180°)	-19.331-18.38	-19.321-17.74	-19.061-16.24	-17.941-12.45	-12.141-14.65	-14.991-15.48	-18.41-18.26	-17.521-17.49	-17.21-18.23	-18.171-18.36	-19.251-18.93	-18.811-17.89	-18.81-18.75	-19.091-18.26	-18.121-18.33	-18.711-17.51	-16.391-15.22	-16.191-14.5	-13.071-13.12	-12.091-12.12	-12.81-12.82	-14.511-14.67	-16.721-18.65	-18.341-17.93
Freq(Hz)	6.175GPol.	Theta/Ant. 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°)	-13.271-12.69	-12.321-13.24	-15.291-13.81	-18.181-19.22	-18.121-18.38	-17.751-18.09	-18.711-16.28	-16.181-16.04	-14.891-12.81	-11.851-11.44	-11.361-13.1	-12.481-13.96	-15.141-17.2	-19.351-19.2	-181-17.43	-18.581-18.64	-17.651-18.98	-18.331-19.07	-17.751-18.63	-18.071-17.69	-17.291-16.4	-14.661-13.85	-12.441-12.44	-12.111-11.74
Θ(7.5°)	-15.831-15.78	-16.321-14.1	-14.311-13.18	-11.451-17.81	-16.411-14.59	-18.031-19.09	-18.891-17.68	-18.831-18.14	-18.731-18.67	-17.911-14.81	-13.121-12.36	-9.711-18.01	-9.741-10.69	-10.561-10.98	-10.541-11.91	-14.411-14.27	-16.841-18.05	-18.531-18.83	-16.881-14.73	-13.091-13.43	-13.391-12.59	-14.091-14.04	-11.881-12.92	-16.931-15.18
Θ(15°)	-12.581-11.76	-10.811-10.63	-11.171-10.81	-11.721-15.01	-11.921-12.4	-12.531-13.49	-13.391-13.8	-14.211-15.1	-17.711-17.02	-15.911-12.52	-13.451-12.08	-14.841-18.02	-19.581-19.14	-15.861-13.25	-11.111-10.8	-9.241-10	-12.481-11.02	-12.481-15.55	-17.851-14.2	-13.791-15.54	-11.071-12.52	-15.211-15.71	-14.551-16.68	-17.511-11.92
Θ(22.5°)	-8.771-10.37	-12.541-11.6	-13.681-11.27	-11.741-11.61	-19.191-10.26	-9.961-11.27	-14.051-15.25	-14.691-13.19	-13.211-16.15	-17.191-18.59	-17.111-14.09	-16.181-18.65	-18.621-17.28	-15.181-18.26	-18.381-19.03	-18.111-17.61	-14.491-12.35	-12.381-10.27	-7.171-7.6	-11.681-15.21	-12.551-11.6	-8.811-7.32	-7.691-8.12	-6.531-7.19
Θ(30°)	-7.321-10.42	-9.361-8.59	-7.771-8.9	-10.331-13.2	-12.931-13.84	-15.441-10.69	-9.131-18	-10.821-9.01	-14.411-14.74	-10.221-13.16	-4.111-13.31	-2.891-2.59	-2.721-0.53	-7.1711-19.1	-5.41-5.45	-8.131-10.34	-9.291-12.71	-8.891-9.19	-9.451-7.58	-11.311-10.44	-8.931-16.7	-6.051-7.25	-6.081-2.46	-5.431-6.2
Θ(37.5°)	-5.861-5.31	-3.561-4.08	-3.391-5.17	-7.31-9.32	-12.051-9.59	-8.691-7.69	-9.451-14.91	-5.631-7.91	-4.531-6.67	-6.611-6.76	-5.581-3.48	-6.341-8.73	-9.41-6.86	-6.581-6.12	-5.831-4.34	-3.531-4.29	-6.571-7.48	-11.281-4.45	-3.641-9.44	-8.11-5.9	-8.51-6.95	-5.721-4.76	-1.741-2.62	-4.711-3.99
Θ(45°)	-4.031-3.27	-3.51-3.57	-4.691-3.19	-4.781-6.53	-10.591-5.12	-5.891-5.52	-6.651-6.67	-3.611-5.51	-7.091-12.81	-5.631-3.71	-3.191-5.04	-2.191-1.65	-1.311-1.7	-1.381-2.82	-6.661-7.48	-7.31-3.68	-7.371-11	-4.051-5.95	-3.761-2.75	-6.821-0.68	-6.851-4.53	-5.471-7.69	-3.371-1.49	-3.811-4.59
Θ(52.5°)	0.641-1.92	-4.011-3.62	-1.271-6.6	-5.661-4.52	-3.671-1.59	-4.891-4.57	-4.671-3.45	-3.081-7.09	-3.711-2.66	-2.461-3.75	-4.521-6.2	-10.381-10.96	-8.351-3.77	-2.051-1.7	-2.131-2.33	-3.681-2.27	-2.051-1.32	-4.531-4.68	-6.991-0.9	-6.171-10.48	-3.691-9.35	-0.891-7.22	-8.291-6.1	-0.791
Θ(60°)	-0.281-2.28	-1.461-2.94	-4.791-3.1	-3.111-2.04	-2.791-1.61	-5.761-1.06	-4.051-2.42	-4.961-2.89	-0.511-2.91	-4.791-5.24	-1.9201-0.6	0.701-84	1.8201-27	-2.151-1.79	-4.731-2.9	-5.751-4.17	-4.621-5.46	-2.031-6.21	-6.641-4.28	-0.111-3.47	1.81-5.47	-0.961-1.71	-4.721-0.85	
Θ(67.5°)	0.441-1.64	-2.061-2.09	-3.21-5.47	-4.161-1.75	-4.271-2.44	-4.161-1.75	-3.231-4.02	-3.021-2.64	-3.641-2.34	-1.671-2.34	-6.711-3.8	-4.41-5.56	-2.591-3.03	-3.841-1.19	-4.851-1.92	-1.441-1.28	-3.091-4	-4.071-3.33	-1.411-2.19	-7.511-5.79	-1.241-2.64	-4.091-2.7	-1.361-0.47	-2.6801-76
Θ(75°)	-9.970-4.9	-0.171-0.69	-0.701-0.87	-1.9601-38	-3.341-2.8	-4.021-2.64	-2.351-1.85	-0.9611-71	-2.361-1.9	-5.921-1.32	-0.651-0.22	-0.3701-25	-0.521-1	0.8811-43	-0.291-0.41	-2.271-1.56	-4.951-4.57	-5.591-6.31	-2.691-2.58	-3.21-2.44	-2.731-1.25	-0.8901-27	-3.921-0.25	-0.2501-49
Θ(82.5°)	-2.191-0.53	-0.2801-86	0.331-	-3.541-0.68	-1.581-3.5	-3.561-1.28	-3.831-1.33	-2.791-1.96	-2.371-4.46	-1.091-2.79	-2.361-5.43	-1.911-3.58	-4.671-4.77	-2.221-3.58	-1.461-1.78	-7.211-3.85	-6.671-4.49	-3.411-1.95	-3.831-5.62	-1.951-2	-5.51-2.59	-0.8801-05	-0.341-1.99	0.851-136
Θ(90°)	-4.321-2.65	-1.311-3.04	-11-2.7	-2.141-0.18	-2.431-4.67	-5.281-3.14	-4.571-3.2	-2.181-3.39	-2.7711-31	-5.271-1.19	-0.561-4.06	0.8601-01	-2.371-2.19	-0.211-2	-9.311-1.39	-3.551-4.24	-10.251-6.36	-4.431-8.12	-3.281-3.21	-4.841-2.22	-3.131-2.84	-1.241-2.22		



Radiated Composite Gain of 6GHz UNII 5 and UNII 6

Appendix B

Θ(120°)	-14.85/-15.39	-17.67/-12.01	-9.66/-8.88	-8.48/-9.59	-18.34/-17.63	-16.6/-12.49	-14.51/-12.12	-18.98/-18.67	-16.76/-15.07	-17.8/-18.25	-18.44/-18.41	-19.08/-18.83	-17.55/-14.55	-18.78/-15.48	-18.47/-16.8	-14.97/-17.83	-18.53/-12.65	-14.63/-12.45	-16.38/-17.51	-17.65/-10.44	-6.62/-10.58	-17.46/-10.63	-9.68/-18.95	-17.2/-18.64
Θ(127.5°)	-19.42/-18.44	-16.19/-17.47	-11.65/-15.19	-15.26/-15.41	-17.89/-18.46	-17.65/-19.18	-18.56/-17.92	-17.24/-16.81	-17.41/-17.56	-17.12/-18.07	-18.15/-14.17	-18.61/-10.78	-10.52/-17.72	-17.98/-13.35	-11.57/-7.27	-15.56/-18.42	-16.55/-10.88	-15.12/-17.97	-11.48/-13.62	-11.6/-8.64	-12.39/-11.25	-11.36/-19.65	-18.46/-18.65	-19.29/-19.67
Θ(135°)	-16.11/-16.84	-18.74/-17.67	-13/-13.6	-14.57/-19.08	-14.65/-15.36	-14.67/-19.13	-17.86/-13.09	-17.77/-16.36	-14.08/-15.02	-15.83/-12.67	-14.51/-14.99	-15.32/-12.09	-16.7/-18.21	-15.26/-12.03	-15.03/-11.73	-18.62/-18.99	-10.87/-14.61	-15.76/-18.3	-16.78/-18.75	-12.8/-19.17	-19.06/-9.79	-11.75/-11.1	-10.3/-7.76	-11.9/-18.2
Θ(142.5°)	-9.99/-18.55	-11.98/-11.46	-18.09/-13.76	-17.03/-19.07	-14.53/-18.21	-16.64/-10.45	-11.53/-13.79	-18.41/-18.93	-18.44/-18.59	-13.51/-16.75	-14.05/-15.03	-13.12/-16	-13.01/-15.55	-11.71/-13.01	-11.5/-17.22	-18.67/-18.11	-16.54/-14.57	-13.11/-16.15	-18.11/-17.24	-18.44/-16.96	-12.49/-11.31	-14.08/-18.5	-11.29/-9.87	-12.08/-18.49
Θ(150°)	-17.02/-18.7	-18.97/-16.34	-11.47/-16.37	-13.77/-18.22	-15.73/-17.86	-13.46/-11.52	-18.94/-12.9	-16.48/-15.7	-18.56/-18.1	-18.55/-17.83	-17.22/-17.4	-18.25/-18.55	-18.47/-14.12	-11.48/-17.75	-18.01/-18.05	-15.52/-11.66	-15.98/-18.14	-16.47/-17.78	-17.35/-17.64	-12.33/-10.08	-10.55/-13.06	-18.43/-14.15	-11.33/-13.13	-15.12/-13.66
Θ(157.5°)	-13.12/-16.51	-18.36/-19.11	-18.53/-16.45	-14.43/-12.03	-16.59/-18.98	-13.84/-14.5	-18.58/-16.75	-18.17/-17.53	-15.59/-18.69	-15.62/-12.09	-13.18/-16.17	-17.98/-14.23	-10.35/-10.81	-9.28/-13.76	-18.67/-18.22	-18.5/-17.85	-18.33/-18.99	-18.36/-16.92	-13.05/-11.71	-11.98/-12.98	-16.65/-16.33	-17.6/-18.7	-17.56/-18.55	-18.13/-12.52
Θ(165°)	-18.55/-17.92	-18.87/-13.77	-17.97/-17.65	-17.34/-16.83	-14.16/-16.11	-17.74/-15.53	-10.76/-9.87	-13.26/-17.8	-17.83/-14.95	-14.95/-16.14	-11.27/-10.17	-9.7/-13.09	-13.72/-8.48	-9.5/-9.86	-18.08/-18.32	-14.93/-13.48	-14.23/-19.11	-18.94/-17.95	-16.53/-19	-19.02/-15.96	-14.09/-14.75	-9.71/-12.81	-13.24/-15.27	-11.77/-17.25
Θ(172.5°)	-17.79/-16.71	-18.13/-16.33	-15.61/-11.3	-11.25/-11.67	-15.94/-18.02	-19.21/-16.35	-13.77/-13.62	-13.75/-11.33	-14.68/-13.7	-13.71/-16.87	-17.93/-18.67	-18.35/-19.23	-15.81/-17.43	-18.9/-18.63	-18.6/-18.84	-18.74/-18.64	-17.48/-18.92	-16.74/-14.92	-15.76/-17.92	-17.52/-18.3	-16.73/-14.76	-13.14/-13.32	-11.45/-15.51	-16.78/-19.2
Θ(180°)	-16.92/-18.59	-14.77/-19.05	-18.34/-18.34	-19.28/-18.51	-18.67/-17.07	-16.79/-18.93	-17.98/-17.35	-16.65/-13.45	-11.48/-12.16	-13.11/-15.32	-17.24/-17.63	-17.83/-19.39	-18.46/-17.81	-18.59/-18.67	-19.01/-17.77	-18.12/-17.28	-18.87/-18.89	-18.25/-16.36	-17.67/-19.86	-18.29/-18.81	-17.73/-13.49	-14.11/-16.29	-19.63/-18.93	-18.08/-17.77
Freq(Hz)	6.175GPol.	Theta/Ant. 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°)	-14.75/-13.87	-16.23/-15.8	-18.54/-15.96	-15.12/-15.5	-16.03/-15.21	-15.29/-16.92	-18.22/-19.11	-15.92/-16.42	-14.88/-17.36	-17.19/-14.77	-14.11/-14.22	-13.83/-13.22	-13.58/-13.67	-14.81/-12.88	-15.7/-18.73	-18.07/-18.08	-18.58/-18.14	-19.15/-18.45	-17.87/-18.64	-18.61/-17.98	-18.42/-18.77	-18.04/-17.43	-17.85/-15.87	-17.14/-18.51
Θ(7.5°)	-13.28/-11.13	-12.35/-11.39	-10.99/-11.83	-11.04/-11.02	-14.37/-17.44	-17.91/-19.16	-17.55/-18	-14.49/-13.52	-14.9/-14.85	-14.2/-15.95	-14.12/-16.36	-14.21/-14.79	-14.66/-16.28	-16.21/-16.29	-17.05/-17.3	-12.73/-12.28	-11.71/-11.36	-10.71/-11.77	-14.97/-17	-19.15/-16.6	-13.21/-15.55	-14.82/-13.57	-14.01/-13.32	-14.41/-12.86
Θ(15°)	-17.54/-10.55	-12.05/-7.97	-8.75/-4.72	-7.93/-8.89	-10.96/-14.27	-18.44/-16.26	-11.39/-9.8	-7.78/-6.21	-8.19/-9	-9.04/-10.37	-8.94/-10.12	-8.5/-9.21	-9.29/-10.3	-12.14/-15.72	-19.12/-19.09	-14.98/-10.32	-9.38/-10.19	-11.29/-14.69	-14.06/-14.63	-13.5/-12.73	-11.88/-14.38	-16.43/-15.01	-17.29/-12.86	-16.43/-18.21
Θ(22.5°)	-13.63/-11.9	-13.78/-16	-9.71/-10.37	-13.19/-12.44	-9.99/-10.14	-11.72/-10.95	-11.21/-11.23	-14.15/-16.27	-15.47/-13.47	-12.26/-12.66	-10.54/-12.92	-12.02/-11.96	-10.76/-10.44	-9.94/-11.41	-13.94/-18.79	-15.65/-9.98	-6.98/-9.06	-8.1/-6.55	-5.42/-6.15	-3.79/-5.61	-6.77/-5.92	-13.13/-7.6	-8.95/-10.65	-9.9/-10.59
Θ(30°)	-6.26/-4.34	-4.59/-4.23	-4.51/-6.37	-11.75/-7.73	-6.52/-6.21	-9.12/-10.82	-8.34/-12.04	-12.55/-7.06	-6.2/-9.02	-8.75/-7.2	-4.42/-3.5	-3.81/-5.27	-5.48/-4.42	-4.28/-5.12	-6.91/-11.77	-14.78/-6.99	-9.5/-18.88	-8.66/-10.68	-17.75/-8.55	-6.05/-5.31	-5.99/-7.1	-6.46/-5.12	-4.35/-6.8	-7.63/-8.13
Θ(37.5°)	-4.72/-1.58	-2.86/-1.84	-2.4/-1.82	-4.82/-8.78	-4.8/-9.67	-5.09/-4.29	-6.02/-6.56	-5.99/-8.25	-9.73/-6.42	-7.11/-6.82	-5.71/-4.57	-3.37/-1.72	-3.72/-3.75	-6.51/-6.04	-3.04/-1.97	-4.03/-5.66	-6.59/-6.76	-4.07/-7.61	-7.63/-5.51	-4.73/-3.7	-3.83/-3.86	-3.6/-2.85	-2.99/-3.37	-6.85/-8.98
Θ(45°)	-1.21/-2.96	-2.2/-1.53	-4.46/-2.72	-2.6/-6.6	-4.56/-6.59	-4.56/-2.96	-5.36/-4.12	-5.68/-6.39	-3.13/-2.88	-5.54/-5.02	-4.94/-4.45	-5.87/-9.98	-8.57/-7.28	-13.18/-5.35	-5.45/-8.05	-8.1/-6.55	-5.42/-6.15	-3.79/-5.61	-4.47/-4.4	-4.09/-3.87	-3.95/-5.88	-3.13/-3.76	-4.32/-2.81	-3.03/-4.13
Θ(52.5°)	-1.130.61	-0.67/-2.9	-5.43/-3.12	-2.45/-6.32	-1.77/-4.23	-5.12/-7.31	-5.37/-4.71	-4.15/-3.98	-5.04/-4.16	-6.69/-5.48	-4.89/-5.09	-0.530.67	-1.02/-0.52	-1.44/-2.1	-2.98/-3.8	-4.07/-7.42	-7.08/-6.05	-5.23/-4.46	-5.73/-2.65	-4.58/-4.2	-4.48/-6.3	-6.43/-3.64	-1.171.02	1.040.36
Θ(60°)	-0.46/-2.97	-4.67/-4.43	-7.19/-18.1	-2.49/-2.65	-0.96/-5.56	-6.15/-2.88	-4.66/-6.86	-5.53/-4.99	-2.75/-13.3	-0.240.09	1.74/-0.69	-0.61/-13.0	0.39/-1.05	-2.76/-3.63	-13.15/-3.2	-3.79/-2.19	-1.86/-9.39	-3.88/-4.34	-3.02/-4.07	-1.22/-4.44	-3.12/-2.35	-4/-2.56	-4.27/-3.81	-0.87/-0.37
Θ(67.5°)	-2.76/-2.34	-8.81/-3.11	-9.71/-17.3	-1.460.14	-1.13/-4.66	-1.11/-4.95	-3.82/-2.32	-1.14/-4.71	-5.52/-3.76	-3.88/-4.52	-4.25/-2.06	-1.31/-4.63	-2.38/-2.67	-2.59/-0.52	1.51/-3.36	-7.42/-2.23	-2.36/-2.52	-2.28/-4.62	0.310.11	-5.28/-1.28	-1.47/-2.9	-1.05/-0.05	0.91/-1.35	
Θ(75°)	-2.150.7	0.3/-0.36	1.07/-0.27	0.22/-2.38	-5.94/-2.2	-2.67/-3.09	-7.69/-1.89	-4.82/-2.37	-3.02/-1.16	-3.380.42	-1.95/-2.18	-1.99/-0.43	-2.04/-2.1	-1.14/-3.59	-2.98/-3.52	-0.41/-0.76	-4.16/-2.48	-6.68/-1.16	-8/-5.54	-2.62/-1.23	-2.71/-0.15	-0.86/-2.27	0.93/-1.38	0.72/-1.11
Θ(82.5°)	-1.4/-1.25	0.96/-2.83	-2.29/-1.13	-2.65/-2.84	-1.68/-5.83	-1.05/-3.69	-2.45/-1.69	-0.17/-3.78	-8.41/-4.72	-1.75/-7.65	-1.95/-4.98	-2.7/-5.43	-0.89/-4.01	-1.01/-2.92	-5.62/-7.23	-6.01/-6.15	-3.83/-6.73	-4.29/-2.73	-3.68/-3.96	-3.25/-2.52	-3.56/-1.46	0.71/-6.19	0.74/-0.63	0.7/-0.63
Θ(90°)	-0.16/-1.82	1.54/-2.27	-1.37/-1.32	0.73/-1.99	-5.86/-3.22	-1.09/-2.35	-3.22/-2.28	-0.92/-3.95	-1.44/-2.94	-0.62/-2.34	0.85/-3.37	-2.79/-1.65	-0.87/-1.78	-4.26/-3.42	-4.89/-7.1	-6.73/-1.72	-3.41/-4.93	-3.55/-2.06	-2.27/-5.37	-3.02/-2.49	-0.65/-0.65	1.32/-1.19	-0.43/-4.2	-1.73/-7.3
Θ(97.5°)	0.190.63	1.4/-2.28	-1.27/-0.4	-1.94/-3.07	-2.83/-4.25	-1.0/-98	-5.48/-3.15	-0.65/-4.87	-0.31/-1.83	-0.87/-2.7	-0.4/-6.11	1.07/-1.22	0.16/-2.02	-6.07/-0.7	-0.170.57	-4.57/-2.17	-4.57/-1.07	-5.73/-1.78	-6.16/-0.41	-3.18/-1.2	-2.08/-2.29	-0.55/-0.58	-0.46/-0.3	1.080.29
Θ(105°)	-3.89/-0.6	-1.9/-2.46	-2.75/-2.37	-0.62/-1.28	-3.01/-7.31	-2.7/-5.24	-3.41/-1.95	-1.76/-2.01	-3.76/-7.52	-5.07/-3.42	-1.46/-11.48	-3.37/-3.26	-0.19/-8.12	-8.11/-1.38	-1.57/-0.49	-5.31/-0.52	1.72/-2.35	-3.69/-5.03	-4.81/-10.99	-4.03/-4.86	-3.220.26	-3.8/-1.91	-2.16/-2.06	1.03/-2.57
Θ(112.5°)	-3.17/-0.45	0.08/-0.26	-2.31/-0.03	0.07/-2.57	-2.47/-5.1	-3.12/-5.09	-2.62/-3.86	-3.33/-4.66	-9.39/-11.33	-14.04/-6.5	-2.86/-11.48	-2.61/-8.47	-4.32/-6.28	-14.08/-6.29	-1.15/-1.24	-5.78/-2.91	-3.28/-8.08	-3.98/-1.52	-2.47/-10.18	-0.8/-0.57	-5.17/-0.49	-5.92/-0.85	-2.61/-6.9	0.08/-1.28
Θ(120°)	-1.19/-2.03	-1.45/-3.92	-3.93/-1.37	-1.42/-1.7	-2.38/-4.95	-4.4/-9.6	-5.13/-6.39	-3.55/-7.76	-7.73/-6.33	-11.06/-2.7	-7.37/-5.08	-1.46/-8.4	-2.27/-2.31	-8.89/-8.29	-0.65/-0.78	-2.18/-1.61	0.17/-0.55	-1.32/-0.38	-8.39/-10.74	-4.18/-2.35	-2.26/-3.24	-2.03/-11.02	-2.51/-4.4	-0.37/-2.48
Θ(127.5°)	-6.43/-6.84	-5.01/-4.06	-6.18/-8.21	-3.26/-4.59	-6.81/-6.49	-9.35/-8.79	-2.31/-3.91	-4.44/-6.54	-11.67/-6.49	-10.69/-5.23	-15.57/-11.14	-9.91/-13.62	-6.5/-12.68	-16.43/-6.54	-5.19/-6.64	-8.27/-6.49	-3.8/-4.18	-1.57/-3.61	-7.62/-6.69	-4.85/-2.45	-1.68/-6.51	-5.88/-3.82	-1.76/-5.3	-2.62/-6.68
Θ(135°)	-5.05/-2.65	-1.28/-2.92	-5.07/-6.38	-5.85/-4.62	-6.66/-6.93	-6.46/-6.18	-8.77/-9.53	-8.36/-9.69	-16.34/-7.98	-12.29/-7.09	-4.88/-11.5	-4.15/-4.06	-4.91/-13.48	-18.77/-5.96	-5.81/-4.34	-3.72/-4.16	-2.29/-7.62	-8.52/-9.39	-7.67/-6.91	-13.18/-13.03	-5.59/-5.9	-7.44/-6.73	-4.74/-5.24	-5.85/-7.04
Θ(142.5°)	-5.48/-6.03	-6.91/-7.24	-6.04/-8.25	-8.61/-12.77	-8.4/-10.46	-10.04/-12.38	-8.52/-11.34	-11.57/-7.14	-9.94/-8.42	-12.99/-14.46	-9.99/-14.9	-10.65/-4.97	-16.39/-9.36	-18.77/-7.51	-6.09/-5.64	-7.45/-4.28	-6.97/-6.32	-7.49/-18.55	-9.56/-17.88	-18.33/-7.78	-6.93/-8.57	-18.12/-6.54	-6.42/-8.2	-9.78/-8.58
Θ(150°)	-18.62/-17.38	-17.18/-18.13	-13.42/-18.46	-13.96/-11.03	-13.82/-16.77	-13.34/-15.1	-10.64/-9.29	-9.56/-16.7	-16.57/-19.04	-15.8/-19.51	-16.58/-13.25	-18.78/-18.97	-11.89/-12.84	-9.43/-7.26	-6.86/-15.83	-13.52/-4.18	-5.09/-4.38	-7.61/-9.43	-9.96/-13.37	-14.79/-4.16	-5.97/-5.65	-6.93/-12.14	-15.18/-16.05	-17.52/-18.19
Θ(157.5°)	-7.72/-7.16	-8.53/-10.06	-10.59/-12.2	-13.49/-14.52	-10.98/-13.47	-13.95/-12.99	-11.81/-14.86	-14.06/-13.75	-17.64/-12.97	-9.2/-15.13	-17.38/-19.02	-15.64/-13.24	-13.86/-19.22	-9.54/-8.31	-7.31/-8.49	-13.9/-14.23	-13.52/-9.9	-14.59/-10.86	-11.37/-16.24	-18.33/-10.89	-7.39/-7.01	-7.97/-9.54	-10.84/-10.56	-10.26/-8.5
Θ(165°)	-7.61/-5.78	-7.73/-10.26	-19.29/-18.04	-17.56/-18.79	-17.21/-14.2	-17.29/-18.72	-14.09/-16.8	-9.77/-10.3	-18.11/-18.7	-13.81/-13.35	-14.55/-15.95	-18.33/-19.5	-11.											



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Freq(Hz)	6.695G	6.995G
Ant. 1 Max Gain (dBi)	1.38	1.91
Ant. 2 Max Gain (dBi)	2.3	3.01
Ant. 3 Max Gain (dBi)	3.5	3.51
Ant. 4 Max Gain (dBi)	3.29	2.92
Ant. 1 Polarization/ $\theta(^{\circ})/\Phi(^{\circ})$	Theta/82.5/120	Theta/105/97.5
Ant. 2 Polarization/ $\theta(^{\circ})/\Phi(^{\circ})$	Theta/97.5/352.5	Theta/97.5/7.5
Ant. 3 Polarization/ $\theta(^{\circ})/\Phi(^{\circ})$	Theta/120/307.5	Theta/67.5/142.5
Ant. 4 Polarization/ $\theta(^{\circ})/\Phi(^{\circ})$	Theta/82.5/300	Theta/82.5/247.5
Max Gain (dBi)	3.5	3.51
DG [1SS] (dBi)	5.48	5.92
DG [2SS] (dBi)	3.5	3.51
DG [4SS] (dBi)	3.5	3.51



Sporton International Inc. Hsinchu Laboratory

Sporton International Inc. Hsinchu Laboratory



Radiated Composite Gain of 6GHz UNII 7 and UNII 8

Appendix C

Θ(22.5°)	-13.86/-16.13	-18.78/-13.13	-15.22/-19.06	-18.66/-15.11	-10.94/-13.11	-17.63/-18.7	-17.64/-17.94	-19.06/-17.75	-18.46/-16.18	-19.26/-18.48	-18.25/-17.68	-18.94/-15.02	-13.99/-11.53	-12.04/-14.06	-17.93/-18.76	-17.98/-19.36	-16.29/-16.22	-15.51/-17.84	-18.43/-19.01	-17.86/-13.12	-12.69/-16.16	-14.59/-13.94	-13.23/-13.67	-17.91/-14.92
Θ(30°)	-16.09/-18.55	-14.11/-14.17	-18.03/-18.78	-15.9/-17.3	-13.97/-13.93	-12.71/-14.48	-18.89/-19.27	-12.99/-14.48	-15.24/-18.6	-18.88/-17.83	-19.18/-18.77	-14.48/-13.37	-12.09/-10.37	-9.99/-9.92	-15.55/-15.09	-16.87/-12.64	-13.03/-16.45	-17.63/-19.05	-18.74/-18.92	-18.22/-19.28	-18.75/-17.12	-14/-12.92	-12.79/-13.82	-18.97/-18.06
Θ(37.5°)	-13.87/-16.09	-13.31/-15.82	-18.45/-15.82	-11.84/-17.85	-18.33/-18.32	-12.67/-18.27	-16.78/-14.78	-17.51/-15.71	-18.06/-18.65	-16.67/-15.2	-14.83/-15.99	-16.62/-15.2	-14.04/-17.83	-19.1/-9.88	-18.41/-17.71	-12.44/-10.14	-11.04/-16.32	-17.14/-13.99	-18.14/-12.78	-18.14/-12.95	-13.15/-12.4	-18.85/-12.59	-9.92/-10.09	-17.18/-17.99
Θ(45°)	-17.44/-17.49	-19.2/-18.37	-18.48/-12.66	-18.57/-18.09	-18.39/-17.81	-14.07/-11.62	-16.02/-17.84	-17.14/-17.53	-14.99/-9.93	-10.57/-15.18	-11.06/-13.56	-15.2/-18.97	-17.75/-17.65	-17.7/-16.99	-17.49/-19.23	-18.2/-18.1	-18.93/-18.82	-18.04/-19.03	-12.5/-13.4	-18.74/-14.57	-14.42/-17.63	-8.72/-17.71	-14.02/-9.11	-8.41/-11.39
Θ(52.5°)	-18.15/-18	-19.33/-19.21	-17.87/-17.26	-18.28/-18.84	-18.19/-11.45	-17.25/-18.77	-18.33/-18.06	-17.66/-17.22	-9.78/-6.87	-11.79/-15.67	-18.3/-13.84	-13.79/-13.84	-15.75/-14.14	-19.09/-14.48	-13.9/-15.97	-17.13/-14.41	-18.78/-18.81	-18.68/-12.11	-19.14/-18.96	-18.49/-17.06	-16.31/-12.98	-9.32/-11.16	-16.97/-16.03	-9.99/-9.98
Θ(60°)	-13.4/-17.3	-15.61/-12.63	-18.32/-17.66	-17.58/-15.25	-16.14/-13.87	-16.53/-13.99	-16.84/-18.63	-17.93/-14.22	-8.93/-8.01	-11.09/-18.95	-15.43/-11.46	-18.4/-11.23	-11.14/-17.97	-13/-12.84	-10/-16.72	-13.51/-19.64	-11.03/-18.24	-14.01/-18.33	-17.53/-17.05	-17.53/-17.25	-19.02/-15.66	-19.25/-12.19	-9.68/-17.4	
Θ(67.5°)	-12.58/-16.8	-18.73/-19.31	-16.78/-16.34	-15.01/-17.98	-13.08/-18.05	-18.34/-14.01	-17.58/-18.22	-14.17/-9.51	-12.33/-10.1	-8.75/-13	-10.62/-9.92	-16.76/-17.96	-15.6/-18.01	-18.48/-17.81	-15.71/-8.23	-13.44/-14.88	-18.57/-16.12	-17.76/-15.67	-13.78/-19.26	-14.03/-18.19	-10.63/-15.39	-18.65/-13.7	-19.38/-16.34	-8.04/-10.96
Θ(75°)	-18.09/-19.15	-17.27/-17.9	-18.55/-16.57	-16.27/-17.71	-14.43/-14.73	-19.12/-12.04	-13.23/-17.88	-17.63/-12.84	-17.58/-13.11	-13.59/-9.19	-10.6/-11.27	-17.93/-14.88	-14.66/-18.23	-17.66/-18.65	-17.3/-14.13	-16.79/-15.71	-17.85/-15.48	-13.99/-15.5	-19.03/-19.02	-18.01/-14.52	-17.07/-19.59	-17.5/-18.56	-16.64/-15.5	-13.5/-11.44
Θ(82.5°)	-15.69/-13.87	-13.6/-18.6	-18.95/-12.18	-18.69/-18.09	-18.69/-18.24	-17.7/-17.2	-15.11/-13.28	-17.24/-13.67	-18.92/-15.45	-8.6/-9.9	-12.79/-17.56	-16.6/-13.7	-15.83/-19.22	-14.5/-14.42	-15.05/-12.36	-18.73/-17.13	-15.62/-15.42	-14.92/-17.92	-18.68/-19.09	-13.71/-11.71	-11.59/-17.09	-18.92/-15.43	-16.77/-15.22	-12.48/-16.2
Θ(90°)	-12.27/-16.92	-12.81/-16.49	-18.96/-18.55	-18.89/-15.98	-17.88/-13.92	-18.06/-18.38	-19.33/-18.36	-15.38/-19.31	-18.21/-14.85	-8.69/-12.43	-15.47/-18.37	-18.64/-17.46	-18.97/-15.98	-18.52/-12.06	-17.34/-18.91	-13.74/-14.43	-17.83/-14.65	-18.32/-18.73	-17.76/-18.89	-10.2/-17.92	-14.58/-13.24	-18.92/-19.39	-18.54/-18.04	-18.96/-17.81
Θ(97.5°)	-18.3/-14.94	-8.13/-16.22	-11.75/-15.06	-16.97/-15.81	-12.16/-17.22	-13/-17.01	-17.47/-17.59	-14.3/-17.43	-18.64/-13.39	-7.26/-11.02	-15.29/-13.99	-15.49/-18.87	-13.54/-18.43	-14.45/-13.56	-16.2/-18.58	-14.21/-13.36	-15.65/-19.06	-18.14/-18.85	-18.94/-12.82	-12.95/-12.17	-15.36/-14.81	-12.58/-14.51	-18.26/-9.48	-16.79/-17.57
Θ(105°)	-17.56/-18.77	-13.71/-18.13	-16.3/-12.67	-10.9/-16.48	-17.9/-17.48	-13.9/-17.82	-17.76/-18.91	-19.37/-15.95	-19.03/-15.31	-8.19/-9.45	-13.1/-12.46	-9.8/-16.35	-12.4/-14.1	-19/-10.59	-18.44/-17.71	-13.11/-12.69	-15.1/-18.41	-18.4/-15.76	-18.01/-13.77	-18.53/-17.98	-15.92/-10.25	-16.9/-15.92	-15.99/-11.75	-16.93/-15.3
Θ(112.5°)	-14.99/-14.93	-18.35/-18.07	-14.35/-18.54	-14.76/-16.77	-18.43/-14.12	-17.46/-17.99	-18.49/-14.17	-12.76/-19.56	-17.95/-13.24	-14.41/-12.41	-6.74/-15.29	-10.44/-18.18	-15.04/-18.32	-18.22/-16.68	-16.86/-14.28	-18.82/-18.96	-17.37/-18.1	-17.48/-17.35	-18.37/-18.29	-19.27/-18.62	-19.39/-16.51	-12.91/-14.42	-16.42/-13.71	-17.94/-13.25
Θ(120°)	-18.74/-15.25	-18.61/-18.61	-14.46/-18.89	-14.07/-14.62	-17.07/-12.24	-18.42/-19.12	-12.51/-11.41	-19.13/-12.02	-18.28/-10.88	-9.94/-9.78	-4.11/-19.05	-8.71/-15.9	-17.96/-10.52	-11.15/-14.12	-15.52/-18.01	-10.26/-15.61	-18.17/-16.64	-12.92/-15.02	-18.56/-12.88	-19.18/-18.42	-17.42/-17.77	-13.8/-18.51	-15.97/-8.42	
Θ(127.5°)	-18.71/-12.1	-14.62/-14.51	-10.06/-12.18	-19.62/-17.55	-17.78/-12.66	-16.58/-18.51	-15.25/-9.71	-11.9/-14.51	-18.48/-16.99	-13.55/-10.46	-11.26/-17.26	-14.38/-19	-17.24/-14.14	-17.38/-9.12	-8.93/-16.01	-16.84/-17.17	-10.91/-19.25	-15.81/-10.52	-14.71/-18.53	-19.05/-12.92	-17.09/-15.62	-18.01/-11.89	-15.39/-12.61	-15.73/-15.82
Θ(135°)	-17.93/-7.55	-14.9/-13.06	-9.47/-9.34	-11.81/-19.17	-19.85/-14.24	-12.07/-18.28	-17.21/-12.93	-11.15/-11.34	-15.9/-18.34	-18.43/-12.58	-11.01/-16.34	-10.31/-19.02	-17.06/-18.32	-11.4/-10.78	-8.06/-8.28	-9.21/-12.37	-8.81/-15.56	-10.9/-6.41	-16.1/-11.08	-9.45/-11.85	-12.25/-9.61	-16.75/-16.53	-11.08/-10.8	-18.9/-12.49
Θ(142.5°)	-10.19/-12.3	-15.47/-11.89	-14.35/-12.55	-11.84/-15.22	-14.81/-16.01	-18.47/-12.87	-17.1/-13.58	-18.11/-15.12	-15.59/-10.14	-11.25/-13.33	-12.7/-11.52	-12.78/-15.15	-9.97/-13.54	-17.34/-16.39	-9.97/-9.9	-19.81/-17.92	-14.89/-9.14	-12.42/-11.73	-9.11/-10.07	-11.67/-19.4	-17.24/-14.87	-15.12/-15.26	-14.17/-16.89	
Θ(150°)	-19.25/-15.73	-19.25/-16.38	-17.96/-11.14	-10.07/-14	-18.33/-18.01	-17.39/-15.71	-15.46/-13.97	-15.17/-18.23	-18.61/-18.14	-18.38/-18.07	-17.55/-17.55	-12.39/-19.33	-17.68/-14.96	-13.3/-14.2	-11.22/-10.15	-17.91/-17.82	-12.99/-10.7	-14.22/-16.41	-16.83/-14.56	-19.24/-17.38	-14.71/-14.21	-13.38/-14.75	-15.76/-11.12	
Θ(157.5°)	-18.21/-18.85	-18.53/-16.68	-16.54/-15.41	-17.69/-17.26	-10.95/-11.56	-12/-13.06	-12.89/-18.96	-17.55/-14.33	-14.2/-13.89	-15.86/-18.67	-13.24/-10.87	-13.22/-16.15	-16.88/-18.75	-15.72/-13.05	-10.3/-13.6	-10.02/-8.52	-11.83/-11.82	-13.18/-14.1	-17.84/-18.63	-17.96/-17.9	-12.71/-9.85	-10.89/-10.38	-8.02/-8.56	-11.17/-19.18
Θ(165°)	-17.87/-19.49	-17.32/-18.03	-19.1/-16.71	-15.57/-14.79	-15.39/-16.8	-17.84/-18.49	-19.55/-17.01	-18.42/-18.33	-18.39/-13.23	-14.32/-14.01	-16.08/-19.16	-18.41/-16.96	-15.78/-14.49	-13.26/-17.05	-18.67/-18.38	-16.63/-13.55	-11.52/-13.26	-12.2/-13.21	-12.61/-15.66	-12.71/-10.79	-8.6/-6.71	-5.68/-5.08	-4.65/-5.53	-8.03/-14.25
Θ(172.5°)	-11.35/-9.73	-10.22/-8.08	-7.93/-7.72	-8.55/-10.18	-12.49/-15.47	-16.15/-17.49	-17.94/-18.09	-18.2/-15.14	-13.19/-10.82	-9.91/-9.83	-9.92/-10.18	-11.7/-10.46	-16.82/-17.58	-18.07/-18.41	-18.65/-18.2	-14.79/-16.58	-13.01/-15.5	-17.3/-16.89	-18.03/-18.92	-18.58/-17.99	-16.56/-14.29	-12.93/-12.21	-12.75/-14.82	-15.68/-17.2
Θ(180°)	-15.89/-13.65	-13.49/-12.16	-11.38/-10.61	-11.75/-12.38	-11.94/-14.39	-13.3/-13.28	-12.47/-13.61	-11.32/-11.13	-11.51/-10.45	-14.84/-18.63	-18.45/-19.29	-18.45/-18.94	-16.82/-15.42	-13.87/-16.29	-18.99/-19.01	-15.48/-15.82	-17.17/-14.5	-17.15/-13.38	-14.27/-13.64	-14.21/-14.65	-14.76/-16.15	-15.71/-13.97	-15.39/-16.05	-17.77/-16.52
Freq(Hz)	6.695GPol.	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°)	-17.45/-13.84	-12.85/-10.71	-9.01/-9.99	-8.65/-9.14	-7.67/-7.11	-6.95/-8.29	-7.71/-7.25	-8.47/-10.14	-13.95/-11.73	-15.77/-18.21	-18.53/-19.5	-18.67/-17.86	-13.56/-11.18	-10.41/-12.01	-9.92/-10.84	-9.35/-7.25	-6.91/-7.67	-8.01/-8.03	-9/-8.38	-9.75/-10.33	-11.01/-12.88	-14.1/-14.02	-17.43/-18.88	-19.61/-17.82
Θ(7.5°)	-14.39/-12.68	-11.82/-10.26	-10.52/-9.72	-8.64/-8.15	-7.7/-7.61	-7.38/-8.89	-8.16/-8.15	-7.93/-10.36	-10.9/-12.63	-13.59/-11.87	-14.11/-10.75	-17.52/-18.82	-14.98/-13.01	-9.73/-8.95	-8.99/-9.84	-10.53/-10.71	-10.08/-10.54	-12.71/-13.86	-14.04/-15.44	-13.05/-14.94	-15.69/-16.35	-18.81/-18.83	-18.89/-18.4	
Θ(15°)	-11.61/-14.89	-16.4/-15.63	-13.61/-9.12	-11.98/-13.51	-17.86/-19.3	-12.67/-12.38	-11.43/-14.78	-13.98/-12.9	-11.19/-9.63	-7.58/-13.82	-9.87/-13.82	-14.92/-14.42	-13.59/-19.79	-9.73/-9.44	-10.25/-9.08	-8.27/-9.75	-12.65/-14.24	-18.92/-17.7	-16.72/-18.52	-17.34/-18.22	-16.79/-11.53	-11.47/-9.79	-10.56/-10.41	
Θ(22.5°)	-9.18/-10.99	-11.9/-18.13	-17.38/-18.09	-18.52/-18.31	-11.68/-7.61	-6.58/-5.77	-8.26/-9.47	-13.35/-11.64	-11.34/-9.17	-9.28/-18.8	-8.08/-10.33	-10.44/-16.32	-19.22/-12.58	-10.86/-8.93	-7.88/-8.65	-8.4/-9.08	-12.16/-10.1	-14.6/-14.67	-18.99/-16.89	-15.19/-11.81	-13.43/-14.46	-11.87/-13.49	-12.98/-17.52	-18.66/-10.41
Θ(30°)	-15.18/-13.67	-16.05/-10.73	-10.64/-16.8	-8.33/-4.75	-4.03/-5.63	-7.72/-8.8	-10.59/-16.79	-5.3/-4.4	-10.18/-9.7	-7.52/-8.89	-9.08/-10.31	-10.88/-14.29	-10.42/-8.4	-10.78/-9.73	-9.58/-17.6	-6.57/-10.51	-13.88/-12.46	-10.26/-8.99	-10.24/-9.65	-10.24/-10.64	-11.41/-10.95	-7.66/-11.79	-11.45/-9.92	-10.47/-10.32
Θ(37.5°)	-8.37/-7.7	-4.72/-5.93	-12.94/-11.21	-5.32/-3.74	-3.92/-5.61	-7.89/-5.85	-8.14/-10.42	-7.31/-5.42	-6.36/-9.84	-6.89/-6.39	-5.99/-7.62	-7.46/-4.16	-4.67/-9.66	-6.79/-3.71	-4.72/-4.79	-4.88/-2.48	-1.33/-2.42	-5.69/-12.04	-7.45/-7.48	-10.04/-7.07	-11.43/-6.36			
Θ(45°)	-3.48/-3.75	-7.38/-6.66	-3.24/-2.46	-3.48/-5.77	-6.76/-7.71	-4.41/-5.26	-4.81/-8.8	-7.2/-9.85	-5.54/-0.27	-6.5/-10.85	-8.56/-8.09	-4.09/-0.58	-3.14/-6.68	-1.05/-2.41	-4.89/-5.64	-3.39/-5.02	-3.51/-1.33	-4.39/-4.04	-4.04/-0.88	-1.55/-1.21	-4.16/-4.3	-3.73/-4.34	-6.65/-9.28	-6.08/-6.56
Θ(52.5°)	-2.25/-4.3	-3.04/-4.6	-2.42/-3.3	-2.22/-4.34	-3.5/-3.7	-4.28/-3.06	-1.93/-1.37	-3.38/-7.24	-2.27/-2.78	-2.37/-3.52	-9.73/-9.34	-1.39/-1.24	-2.03/-1.41	-2.71/-3.77	-7.2/-16.61	-7.67/-4.48	-2.57/-2.74	-4.76/-5.29	-3.08/-3.08	-3.71/-1.67	-6.65/-8.01	-3.88/-5.02	-10.79/-5.78	-8.65/-15.3
Θ(60°)	-0.59/-4.15	-0.520/-3	-0.750/-6	-1.67/-1.72	-2.0/-38	0.31/-1.13	1.070/-26	-0.83/-0.9	-4.85/-6.1	0.47/-3.8	-4.66/-3.4	-1.691/-78	-3.72/-3.32	-1.18/-4.65	-2.76/-2.57	-1.760/-49	-							