



Radiated Composite Gain Data <2.4GHz and 5GHz U-NII 1~U-NII 4>

Appendix A

)	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°)
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°)	2.52/2.55	2.16/1.58	1.07/0.35	-0.4/-1.28	-2.39/-3.76	-5.36/-6.69	-7.81/-7.13	-5.49/-3.59	-1.74/-0.36	0.77/1.36	1.83/2.24	2.51/2.65	2.57/2.45	2.19/1.65	1.14/0.4	-0.71/-1.9	-3.41/-5.09	-6.6/-7.8	-7.59/-6.4	-4.29/-2.74	-1.35/-0.1	0.77/0.91	1.41/1.76	2.07/2.5
Θ(7.5°)	2.68/2.4	2.07/1.61	1.01/0	-0.76/-1.71	-2.31/-3.34	-4.54/-5.61	-6.12/-6.11	-5.19/-3.74	-2.44/-1.27	-0.34/0.26	0.81/42	1.95/2.19	2.43/2.57	2.46/2.22	1.75/1.07	0.14/-0.97	-2.34/-4.6	-6.56/-8.11	-7.72/-5.51	-3.59/-1.8	-0.41/0.68	1.58/2.01	2.34/2.47	2.63/2.89
Θ(15°)	3.23/3.04	2.99/2.51	1.62/0.94	0.08/-0.48	-1.64/-2.48	-4.42/-6.25	-7.17/-7.35	-5.84/-4.25	-2.9/-1.34	-1.0/-3.3	0.17/0.7	1.35/2.1	2.84/3.36	3.65/3.6	3.14/2.23	0.92/-0.59	-2.12/-3.7	-5.97/-8.66	-8.96/-6.1	-3.58/-1.27	-0.02/0.59	1.14/-1.98	2.6/2.85	3.1/3.43
Θ(22.5°)	4.21/2.29	2.01/1.43	0.84/0.52	0.01/-0.32	-1.09/-2.26	-3.78/-5.64	-7.16/-7.53	-5.6/-3.3	-1.53/-0.84	-0.28/0.86	1.37/1.55	2.2/48	2.99/3.37	3.6/3.58	3.31/2.61	1.51/0.01	-1.35/-3.39	-6.71/-10.36	-11.15/-5.83	-2.36/-0.34	0.56/0.88	1.18/1.29	1.54/1.82	2.26/2.37
Θ(30°)	0.76/0.58	0.36/0.15	-0.04/-0.04	0.11/-0.04	-0.65/-1.81	-4.17/-6.87	-7.54/-7.38	-5.84/-3.53	-1.94/-1.02	-0.28/0.54	1.32/1.76	1.8/1.6	1.52/1.8	2.32/2.65	2.82/2.62	1.98/0.93	0/-0.24	-5.69/-7.45	-7.02/-5.63	-3.9/-2.01	-1.25/-0.44	0.09/-0.03	0.05/0.13	0.37/0.35
Θ(37.5°)	-0.27/-0.41	-1/-1.51	-1.93/-2.36	-2.22/-2.53	-3.66/-5.5	-8.05/-8.94	-9.5/-8.2	-5.92/-3.68	-2.51/-1.93	-1.12/-0.39	0.59/1.54	1.88/1.77	1.29/1.14	1.4/1.43	1.09/0.37	0.09/-0.04	-0.22/-2.34	-4.9/-4.88	-3.79/-3.64	-4.26/-3.27	-2.22/-0.74	0.30/57	0.73/0.63	-0.15/-0.71
Θ(45°)	0.30/5	0/-1.01	-1.53/-1.88	-2.63/-3.74	-4.79/-5.59	-7.53/-9.92	-10/-8.35	-6.36/-4.52	-3.5/-2.15	-0.97/-0.18	0.66/1.6	1.73/1.22	1.29/1.7	1.27/0.23	-0.36/-0.84	-0.84/-0.63	-1.35/-3.11	-5.3/-7.87	-7.91/-4.88	-2.92/-3.2	-2.57/-0.96	0.51/0.1	1/0.8	0.86/0.24
Θ(52.5°)	0.04/-1.14	-3.09/-5.06	-4.67/-3.93	-4.02/-4.14	-4.57/-6.04	-9.65/-10.05	-9.36/-5.98	-4.14/-3.25	-2.63/-1.83	-0.56/0.81	1.05/1.73	1.75/0.84	0.98/2.05	1.76/0.52	-0.37/-1	-1.44/-1.3	-1.3/-1.91	-4.11/-6.99	-5.73/-3.6	-0.93/0.48	-0.10/12	0.7/0.89	1.1/1.33	1.02/0.19
Θ(60°)	-0.26/-1.1	-3.12/-3.72	-4.1/-5.3	-5.7/-9.7	-4.93/-6.25	-8.6/-10.6	-9.15/-6.21	-3.59/-2.3	-1.9/-1.76	-1.19/-0.26	-0.29/0.44	0.91/-0.09	0.66/1.87	1.36/-0.12	-0.78/-1.18	-1.78/-2.75	-2.61/-0.61	-0.27/-2.39	-4.54/-3.68	-1.78/0.6	0.7/0.25	0.6/0.37	1.13/1.36	0.77/-0.57
Θ(67.5°)	-0.38/0.05	-0.37/0.67	-2.81/-4.5	-3.98/-4.65	-7.62/-9.44	-8.9/-7.78	-7.57/-6.99	-5.19/-3.73	-3.19/-2.98	-1.86/-0.96	-0.85/-0.99	-1.51/-1.84	-0.39/-0	-0.16/-0.78	-0.68/-0.88	-0.92/-2.04	-1.85/-2.06	-1.85/-2.42	-2.9/-1.81	0.32/0.84	1.21/0.79	0.86/0.87	1.71/1.13	-0.09/-0.86
Θ(75°)	-1.99/-2.84	-4.18/-2.11	-2.27/-4	-5.92/-6.1	-8.08/-7.7	-6.47/-6.33	-5.86/-4.65	-3.86/-4.31	-3.66/-3.05	-1.54/-2.1	-1.48/-2.4	-1.98/-0.41	-2.61/-1.36	-2.06/-0.92	-1.54/-0.95	-1.74/-1.82	-0.74/-1.13	-1.25/-0.41	0.51/0.2	1.87/1.44	0.52/-0.43	0.51/1.38	0.78/-1.35	
Θ(82.5°)	-3.85/-4.3	-6.38/-3.03	-3.27/-4.78	-4.46/-6.96	-8.54/-8.75	-7.73/-6.17	-5.36/-5.21	-5.5/-5.67	-4.22/-4.1	-3.18/-2.55	-1.49/-2.37	-3.5/-5.15	-3.91/-2.93	-2.76/-2.14	-0.85/-0.64	-0.66/-0.29	-1.59/-0.82	1.25/0.28	0.56/0.52	1.77/1.92	2.53/1.1	-0.26/-0.93	-0.97/-0.54	-1.16/-4.48
Θ(90°)	-2.74/-3.08	-4.17/-2.27	-2.86/-3.2	-2.62/-4.23	-6.68/-6.04	-6.67/-6.36	-6.28/-7.09	-8.35/-9.09	-7.35/-7.54	-7.63/-4.9	-4.52/-4.52	-6.65/-5.4	-4.95/-1.01	-1.86/-4.32	-3.22/-4.98	-3.68/-0.4	-1.03/-1.04	0.23/-2.27	-2.33/0.07	0.72/1.75	1.09/0.41	0.33/-0.9	0.58/-0.56	-1.09/-2.21
Θ(97.5°)	-3.09/-4.61	-5.86/-4.53	-6.99/-8.06	-6.12/-6.47	-6.77/-5.68	-6.86/-5.51	-5.11/-5.61	-6.04/-7.43	-8.13/-7.21	-6.51/-5.88	-9.3/-9.3	-6.21/-3.96	-5.7/-3.47	-1.97/-3.38	-2.7/-1.52	-1.31/-0.27	-0.13/-3.6	-4.23/-2.62	0.82/0.57	0.82/-1.21	-2.06/-2.61	-0.72/-1.57	-2.98/-4.2	
Θ(105°)	-4.73/-7.76	-10.09/7.32	-6.05/-6.06	-6.43/-7.75	-6.95/-5.65	-6.6/-6.53	-7.12/-7.18	-6.43/-7.68	-9.1/-9.1	-6.7/-5.26	-6.25/-6.27	-9.9/-9.9	-6.17/-6.78	-10.84/-9.57	-6.84/-5.18	-1.24/0.18	-0.47/1.51	1.48/-1.83	-2.38/1.29	0.78/0.66	-6.84/-5.06	-2.38/-1.73	0.8/-1.44	-1.83/-3.22
Θ(112.5°)	-5.8/-7.62	-6.54/-7.22	-7.41/-7.83	-4.51/-3.71	-5.59/-5.34	-5.9/-5.27	-4.53/-4.69	-4.16/-5.22	-7.74/-7.69	-8.4/-6.97	-5.84/-4.88	-7.39/-9.44	-5.96/-6.7	-7.83/-9.34	-5.99/-6.43	-2.19/-3.01	-4.2/-1.4	0.15/-3.32	-2.83/2.48	3/1.44	-0.12/-0.04	-2.03/-2.9	-0.5/-1.8	-5.6/-4.04
Θ(120°)	-1.65/-4.87	-3.06/-4.52	-4.92/-4.37	-5.79/-6.26	-6.8/-6.77	-6.58/-7.22	-5.96/-5.35	-4.6/-4.96	-4.25/-3.69	-5/-6.15	-7.15/-6.18	-3.99/-6.73	-3.23/-5.41	-6.9/-6.68	-7.06/-5.79	-2.15/-7.28	-3.96/-3.15	-0.2/-3.8	-4.71/0.93	2.02/0.8	-1.38/-1.07	-5.9/-2.54	-0.48/0.13	-2.69/-2.61
Θ(127.5°)	-3.75/-4.9	-4.69/-3.36	-4.03/-4.18	-5.7/-6.27	-5.41/-6.94	-8.06/-9.11	-9.32/-6.45	-5.41/-4.18	-2/-2.36	-4.06/-5.15	-6.65/-5.58	-5.99/-5.33	-4.87/-7.6	-7.28/-4.82	-8.72/-4.79	-3.74/-7.07	-2.66/-0.17	-0.38/-4.38	-4.41/1.11	1.23/-0.23	-2.13/-3.51	-2.91/-1.97	-1.59/-2.36	-5.08/-5.87
Θ(135°)	-2.03/-3.03	-3.93/-3.67	-3.15/-4.64	-5.23/-3.82	-2.8/-3.39	-7.19/-9.38	-8.63/-7.71	-5.05/-2.87	-2.8/-2.74	-2.82/-3.41	-3.79/-2.93	-3.45/-6.1	-7.76/-7.85	-7.6/-7.55	-7.31/-5.42	-5.53/-5.24	-2.43/-3.1	0.61/-4.72	-6.13/-1.46	-1.08/-1.52	-1.58/-0.49	-6.61/-4.96	-2.5/-2.71	-0.11/0.15
Θ(142.5°)	-2.69/-5.42	-2.94/-1.67	-2.93/-2.89	-2.99/-4.41	-6.52/-8.69	-6.52/-8.69	-4.06/-3.91	-3.68/-3.9	-4.69/-4.17	-5.93/-7.56	-6.35/-5.65	-5.96/-6.91	-6.35/-5.65	-5.96/-6.91	-9.8/-10.51	-5.71/-1.04	-2.96/-5.75	-2.96/-5.75	-1.51/1.04	-2.59/-0.96	-4.56/-4.03	-3.83/-2.93	-1.57/-0.92	-5.11/-8.82
Θ(150°)	-5.75/-3.54	-2.93/-3.75	-4.14/-3.52	-3.37/-3.96	-4.56/-5.16	-5.08/-4.2	-4.2/-3.72	-3.44/-4.06	-4.34/-3.55	-2.89/-2.21	-1.69/-2.25	-2.72/-1.71	-2.42/-4.53	-5.21/-5.47	-7.2/-7.67	-9.39/-12.06	-6.7/-4.85	-5.74/-5.56	-5.42/-3.72	-1.6/-1.59	-3.63/-5.07	-2.72/-2.68	-3.73/-4.56	-5.69/-6.55
Θ(157.5°)	-0.5/-1.5	-3.22/-5.6	-7.43/-7.27	-6.64/-6.23	-5.96/-5.92	-6.62/-6.49	-5.42/-5.03	-4.84/-5.45	-6.17/-5.87	-4.9/-4.02	-3.12/-2.98	-2.54/-2.72	-3.15/-2.79	-1.76/-1.31	-1.61/-3.03	-6.01/-9.09	-8.23/-6.48	-5.64/-4.59	-4.86/-4.8	-3.42/-1.94	-1.8/-2.86	-3.64/-4.37	-4.62/-3.39	-1.44/-0.21
Θ(165°)	-2.98/-3.62	-4.03/-3.87	-2.97/-1.98	-1.89/-2.32	-3.15/-3.91	-5.38/-7.3	-8.95/-9.83	-10.09/-9.87	-7.84/-5.21	-3.1/-1.5	-0.62/-0.44	-0.75/-1.36	-2.07/-3.05	-3.93/-4.59	-5.44/-6.97	-8.26/-9.16	-6.96/-5.37	-5.19/-5.87	-7.29/-6.46	-3.57/-1.68	-0.93/-0.86	-0.79/-0.95	-1.07/-1.53	-2.71/-3.43
Θ(172.5°)	-2.24/-1.49	-1.49/-1.8	-2.17/-2.62	-3.44/-4.14	-4.46/-5.21	-6.63/-8.83	-11.75/-11.98	-11.46/-9.59	-8.5/-7.15	-5.67/-4.91	-4.44/-4.28	-4.67/-5.1	-5.23/-5.12	-4.91/-4.96	-4.73/-4.75	-4.85/-4.78	-4.85/-5.17	-6.16/-6.79	-6.62/-5.97	-4.82/-4.11	-4.3/-4.64	-3.9/-3.61	-4.64/-5.83	-5.16/-3.6
Θ(180°)	-4.13/-4.21	-4.61/-5.39	-7.03/-8.45	-9.21/-9.39	-9.43/-9.27	-9.21/-10	-9.65/-7.83	-5.97/-4.61	-3.74/-3.27	-2.71/-2.39	-1.99/-1.66	-1.64/-1.65	-1.87/-1.94	-2.17/-2.68	-3.26/-4.04	-4.73/-5.32	-6.25/-7.5	-8.64/-8.11	-7.32/-7.11	-7.43/-7.51	-7.58/-7.26	-5.64/-4.42	-3.93/-4.11	-4.31/-4.41
5.6G/Pol	Phi/-	Phi/-	Phi/-	Phi/-	Phi/-	Phi/-	Phi/-	Phi/-	Phi/-	Phi/-	Phi/-	Phi/-	Phi/-	Phi/-	Phi/-	Phi/-	Phi/-	Phi/-	Phi/-	Phi/-	Phi/-	Phi/-	Phi/-	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°)	-8.5/-7.85	-6.01/-4.28	-3.08/-1.75	-0.32/0.65	1.46/2.29	2.51/2.64	2.74/2.7	2.35/1.84	1.19/0.58	-0.13/-1.17	-2.68/-4.93	-7.84/-10.01	-11.23/-10.2	-7.56/-5.25	-3.49/-2.31	-1.39/-0.5	0.22/1.02	1.51/1.69	1.73/1.67	1.52/1.03	0.72/0.07	-1.37/-3.06	-4.19/-5.14	-5.98/-8
Θ(7.5°)	-9.93/-9.11	-6.55/-4.82	-3.49/-2.61	-1.48/-0.71	0.12/1.03	1.39/1.48	1.56/1.48	1.38/1.04	0.42/-0.2	-1.03/-2.04	-3.39/-5.23	-6.36/-7.7	-7.15/-6.24	-4.74/-2.67	-1.13/-0.02	0.95/1.81	2.53/0.06	3.3/3.39	3.32/3.08	2.8/2.21	1.55/0.78	-0.42/-1.84	-3.32/-5.72	-7.64/-9.16
Θ(15°)	-10.25/-7.8	-5.31/-3.08	-1.11/-0.13	0.71/1.19	1.45/1.74	2.08/2.43	2.74/2.67	2.57/2.18	1.67/0.91	-0.2/-1.42	-2.83/-4.47	-5.2/-5.69	-5.81/-5.58	-4.55/-2.73	-1.16/0.16	1.12/2.05	2.76/3.33	3.66/3.87	3.88/3.52	2.95/2.19	1.52/0.7	-0.31/-1.46	-2.84/-9.1	-7.26/-9.46
Θ(22.5°)	-6.68/-3.92	-3.57/-2.62	-1.5/-1.32	-0.67/0.13	0.95/1.02	0.98/1.28	1.76/1.96	2.1/8.3	1.34/0.5	-0.35/-1.46	-2.91/-4.35	-5.54/-6.6	-6.66/-6.17	-4.69/-2.78	-1.21/-0.08	0.74/1.47	2.18/2.91	3.44/3.72	3.69/3.54	3.31/2.72	1.89/0.97	-0.33/-1.24	-2.56/-4.48	-6.65/-7.45
Θ(30°)	-5.06/-5.31	-4.03/-3.46	-3.11/-1.91	-0.67/0.02	0.20/2.29	0.25/0.37	0.24/0.36	0.68/0.81	0.62/0.07	-0.29/-1.02	-2.18/-3.55	-4.43/-4.83	-5.09/-4.72	-3.78/-2.74	-1.65/-0.12	1.14/2.3	3.11/3.76	4.02/3.87	3.36/2.64	2.15/1.95	1.61/0.77	-0.22/-0.64	-1.29/-2.14	-3.41/-4.29
Θ(37.5°)	-8.01/-6.77	-4.6/-3.69	-3.44/-2.65	-1.99/-1.47	-1.08/-0.55	0.07/0.2	0.77/0.68	-0.02/-0.67	-1.18/-1.8	-2.43/-2.57	-2.92/-3.76	-4.59/-4.35	-3.36/-2.24	-0.92/0.52	1.89/2.92	3.61/3.99	4.23/4.46	4.14/4	3.13/2.34	1.44/0.51	-0.89/-2.15			



Radiated Composite Gain Data <2.4GHz and 5GHz U-NII 1~U-NII 4>

Appendix A

Φ(172.5°)	-8.47/-8.44	-6.99/-5.9	-5.32/-5.53	-5.96/-6.74	-7.35/-7.63	-7.72/-7.66	-7.76/-7.97	-8.36/-8.93	-10.22/-11.58	-11.69/-10.89	-10.41/-9.48	-8.19/-6.92	-5.98/-5.65	-5.44/-5.19	-4.93/-4.58	-4.34/-3.68	-3.29/-3.1	-3.02/-2.98	-3.25/-3.94	-5.19/-6.65	-7.58/-8.74	-10.75/-11.7	-10.65/-10.08	-9.68/-8.52
Θ(180°)	-9.87/-9.79	-8.41/-7.49	-5.71/-5.25	-5.22/-4.9	-4.49/-4.24	-4.05/-3.91	-4.26/-4.89	-5.47/-5.99	-6.75/-7.06	-7.52/-7.95	-8.67/-9	-9.32/-10.14	-10.6/-10.5	-10.09/-9.6	-8.91/-8.14	-7.44/-6.78	-6.52/-6.66	-6.36/-5.79	-5.74/-6.28	-6.97/-6.9	-6.9/-7.58	-8.09/-8.22	-8.25/-8.81	-9.01/-8.86
Freq(Hz)	5.785G/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°)	2.84/2.8	2.57/2.22	1.65/1.03	0.44/0.02	-0.86/-1.6	-2.91/-4.59	-5.25/-5.1	-3.64/-2.37	-1.24/-0.16	0.68/1.3	1.78/2.17	2.45/2.58	2.58/2.49	2.22/1.88	1.55/1.12	0.47/-0.51	-1.56/-2.64	-3.88/-4.61	-4.96/-4.35	-3.29/-2.44	-1.26/-0.2	0.77/1.54	1.83/2.31	2.69/2.83
Θ(7.5°)	1.62/1.65	1.62/1.36	0.81/0.04	-0.77/-1.41	-2.24/-2.78	-3.84/-4.41	-5.2/-4.93	-4.13/-3.24	-2.4/-1.58	-0.69/0.16	0.92/1.73	2.29/2.72	2.92/2.67	2.21/1.54	0.76/-0.1	-1.27/-2.75	-3.94/-4.93	-4.53/-3.34	-1.85/-0.77	-0.03/0.66	1.08/1.4	1.6/1.74	1.68/1.49	
Θ(15°)	0.3/-0.17	-0.47/-0.49	-0.46/-0.64	-0.97/-1.28	-2.01/-2.12	-2.74/-3.72	-3.47/-2.94	-2.03/-1.42	-0.78/-0.52	-0.33/-0.4	-0.42/-0.05	0.56/1.34	2.1/2.7	3.05/3.22	3.06/2.6	2/1.01	-0.27/-1.73	-3.37/-4.81	-4.96/-4.18	-2.6/-1.2	-0.48/0.21	0.35/0.39	0.37/0.72	0.79/0.6
Θ(22.5°)	2.19/1.49	0.21/-0.87	-1.07/-0.08	0.13/-0.24	-1.16/-1.47	-2.15/-2.6	-2.84/-2.8	-2.74/-1.8	-0.79/0.05	0.28/0.2	0.39/0.4	0.47/0.59	1.13/1.77	2.29/2.42	2.27/1.8	1.1/0.08	-0.62/-1.04	-2.44/-4.64	-6.33/-5.3	-3.55/-2.44	-1.2/-0.65	-0.88/-1.2	-0.63/0.22	1.59/2.2
Θ(30°)	1.58/1.38	0.15/-0.45	0.07/0.36	0.33/-0.57	-1.76/-2.75	-3.6/-4.31	-5.74/-6.92	-6.34/-4.71	-2.81/-1.09	0.31/1.07	1.34/1.37	1.44/1.39	1.49/1.75	1.95/1.77	1.2/0.69	-0.13/-0.84	-0.71/-1.37	-3.18/-3.61	-2.71/-2.18	-1.38/-1.36	-1.84/-1.4	-1.64/-2	-0.54/0.42	1.36/1.44
Θ(37.5°)	1.18/0.37	0.17/-0.09	0.2/-0.22	-1.02/-1.88	-2.65/-3.05	-3.74/-5.59	-9.1/-8.19	-6.64/-5.06	-2.84/-1.37	-0.76/-0.72	-0.74/-1	-0.99/0.14	1.47/1.81	1.86/2.12	2.48/2.04	1.13/0.73	-0.08/-1.4	-1.37/-1.22	-2.46/-2.36	-1.66/-1.7	-2.31/-1.39	-0.52/0.33	1.33/1.38	1.06/0.72
Θ(45°)	0.43/1.27	1/-0.34	-0.46/-0.06	-1.33/-2.61	-3.49/-5.31	-7.74/-10.52	-11.19/-9.82	-8.06/-6.89	-5.01/-3.18	-1.68/-1.06	-0.76/-0.55	-0.32/-0.46	0.16/1.93	2.94/3.38	3.02/2.2	1.23/0.67	-0.04/-0.21	-1.8/-3.97	-3.18/-1.94	-1.29/-1.76	-2.1/-0.89	0.23/0.86	1.53/1.45	0.42/-0.08
Θ(52.5°)	-0.46/0.1	-0.11/-0.21	-0.33/-0.89	-1.94/-2.16	-2.31/-3.98	-5.84/-6.81	-6.31/-6.61	-7.25/-5.65	-3.29/-1.89	-0.86/0.08	-0.35/-1.52	-0.85/-0.11	-0.45/-0.29	1.68/2.21	1.66/1.98	1.61/0.82	-0.44/-1.35	-1.49/-2.29	-2.38/-2.11	-1.61/-2.3	-2.56/-1.2	-1.57/-1.08	0.38/0.46	0.13/-0.58
Θ(60°)	1.97/1.24	0.7/0.52	-0.85/-1.97	-1.52/-1.68	-1.98/-2.71	-4.92/-7.56	-5.94/-4.13	-4.32/-3.05	-3.26/-1.89	-1.69/-0.47	-0.19/-0.87	-0.41/-0.32	-0.62/-0.28	0.54/0.8	0.01/0.33	0.55/0.41	-0.66/-0.52	-1.9/-2.07	-1.81/-2.03	0.03/0.79	-1.03/-0.36	-1.04/-0.86	0.19/0.52	0.62/0.86
Θ(67.5°)	2.82/0.69	0.4/0.14	-2.06/-1.39	-1.59/-3.54	-4.54/-5.32	-7.85/-9.5	-6.47/-4.69	-4.36/-5.89	-5.84/-3.98	-3.81/-2.94	-1.93/-3	-2.72/-2.32	-1.62/-0.69	-0.43/-0.22	-0.35/-0.68	-0.39/-0.33	-0.48/-0.15	-1.4/-1.64	1.66/3.44	2.32/2.82	1.93/1.45	1.68/1.72	1.48/1.91	
Θ(75°)	1.65/-0.61	-0.68/-0.58	-3.52/-1.89	-3.85/-7.07	-6.83/-7.66	-8.31/-7.06	-6.02/-5.95	-6.29/-5.67	-5.91/-6.05	-6.07/-3.96	-2.84/-4.32	-4.92/-5.98	-4.27/-3.91	-2.54/-2.27	-1.14/-0.27	0.58/-0.39	-0.42/-1.58	-1.06/-1.21	-0.04/-2.48	2.51/2.49	2.14/2.33	2.48/1.93	2.36/2.35	1.26/-0.43
Θ(82.5°)	1.14/-1.45	-1.41/-1.95	-4.39/-3.79	-6.65/-8.39	-8.13/-9.02	-8.11/-6.03	-6.2/-5.58	-6.21/-5.5	-5.8/-6.45	-4.92/-6.41	-3.91/-4.63	-6.5/-6.94	-4.16/-2.93	-2.61/-3.48	-3.24/-1.38	-1.50/-35	0.83/-0.08	-0.43/-0.37	0.72/1.45	2.9/2.22	2.43/2.23	-0.19/-0.1	0.63/1.7	0.84/-2.24
Θ(90°)	0.72/-0.98	-0.65/-2.3	-5.07/-4.01	-5.42/-7.11	-9.54/-9.9	-6.37/-5.05	-4.58/-5.91	-4.58/-3.63	-5.26/-5.73	-6.86/-6.36	-7.11/-8.83	-10.49/-9.84	-8.62/-6.8	-3.45/-3.88	-3.92/-2.67	-1.19/0.62	0.26/-0.29	1.96/0.58	-0.93/0.3	1.75/0.67	1.11/-0.01	-1.55/0.1	0.73/0.47	-0.95/-1.77
Θ(97.5°)	-0.56/-2.57	-2.1/-2.68	-4.62/-5.09	-6.79/-9.15	-10.44/-7.19	-4.18/-3.18	-5.57/-6.92	-6.91/-5.74	-6.05/-6.09	-6.58/-6.11	-8.56/-9.19	-7.57/-8.45	-7.89/-6.3	-5.01/-8.06	-6.15/-3.92	-1.75/0.17	-1.27/-1.26	0.7/0.03	-1.09/-0.18	1.8/1.1	0.69/-1.23	-1.07/1.12	1.06/0.92	0.32/-0.58
Θ(105°)	-2.56/-2.47	-2.8/-3.19	-5.58/-9.41	-6.7/-5.53	-8.8/-10.16	-7.06/-4.64	-5.17/-5.97	-5.79/-8.05	-8.02/-6.71	-5.86/-5.46	-4.32/-4.92	-4.59/-6.64	-2.78/-5.11	-4.29/-4.06	-2.07/0.02	-1.59/0.84	2.74/-0.94	-2.96/-1.67	1.13/1.01	1.16/-0.16	-0.99/1.28	1.43/0.03	0.03/-0.35	
Θ(112.5°)	-5.82/-2.93	-3.65/-4.43	-6.5/-8.58	-8.65/-7.79	-8.18/-8.66	-10.52/-7.71	-4.73/-4.83	-6.4/-7.78	-5.73/-5.53	-4.66/-5.68	-3.7/-3.52	-1.66/-6.15	-6.02/-5.18	-2.49/-3.75	-3.48/-6.88	-2.92/-0.17	-1.73/0.25	0.79/-4.48	-1.98/0.67	-0.13/-0.84	-1.76/-1.87	-1.41/-0.49	-0.43/-4.06	-3.1/-3.25
Θ(120°)	-6.16/-6.18	-4.7/-5.31	-5.57/-7.02	-5.75/-7.17	-6.29/-7.27	-9.69/-9.53	-7.23/-6	-6.89/-6.74	-5.62/-3.56	-4.41/-4.8	-5.11/-5.03	-3/-5.51	-2.8/-5.02	-5.05/-5.3	-3.63/-10.05	-3.14/-2.64	-4.32/-1.42	0.39/-1.42	-1.55/0.15	0.16/-0.14	-3.69/-2.64	-8.34/-3.27	-2.08/-2.71	-4.67/-4.9
Θ(127.5°)	-5.15/-5.54	-5.17/-5.71	-4.54/-5.99	-6.74/-7.22	-8.62/-9.28	-7.37/-6.36	-6.17/-4.96	-5.79/-4.72	-2.44/-1.34	-3.23/-4.66	-5.92/-2.94	-3.35/-4.56	-4.11/-6.38	-7.82/-3.54	-5.4/-5.25	-3.41/-3.84	-3.21/-1.81	0.7/1.02	-1.63/-0.58	-2.74/-2.02	-2.69/-3.21	-6.5/-5.68	-4.97/-4.85	-6.59/-3.24
Θ(135°)	-2.47/-3.66	-5.21/-7.78	-6.22/-5.55	-4.38/-4.06	-4.32/-5.71	-6.41/-6.16	-5.7/-5.32	-4.78/-3.57	-2.16/-1.96	-3.06/-4.47	-5.74/-7.39	-7.67/-8.05	-6.72/-9.21	-4.33/-2.94	-5.7/-5.18	-6.81/-6.31	-5.02/-2.89	-3.33/-3.99	-2.62/-2.66	-5.99/-5.72	-4.32/-0.68	-4.21/-1.99	-1.75/-3.1	-3.1/-1.07
Θ(142.5°)	-5.78/-7.73	-4.48/-2.99	-3.97/-4.13	-4.34/-4.11	-4.42/-5.14	-5.51/-5.98	-6.54/-7.43	-6.73/-5.57	-4.31/-4.22	-5.04/-4.89	-4.69/-4.57	-5.74/-5.21	-5.88/-5.06	-4.27/-5.63	-6.55/-7.84	-7.57/-4.8	-1.82/-1.2	-3.9/-3.38	-1.66/-2.28	-2.79/-4.79	-4.26/-4.26	-6.88/-5.15	-2.16/-2.1	-3.2/-3.3
Θ(150°)	-3.66/-1.38	-1.46/-2.7	-3.73/-4.15	-4.68/-6.41	-9.52/-10.4	-8.73/-8.09	-7.49/-6.88	-6.73/-5.6	-4.9/-5.52	-6.96/-5.66	-3.61/-3.33	-2.66/-1.59	-1.49/-2.21	-4.45/-6.8	-9.2/-8.63	-7.74/-5.25	-2.74/-1.58	-2.62/-4.2	-2.81/-2.47	-2.47/-3.13	-5.69/-8.24	-6.18/-5.01	-3.7/-3.12	-3.72/-5.53
Θ(157.5°)	-0.31/-1.41	-3.37/-5.34	-7.08/-8.03	-9.56/-8.98	-7.97/-6.15	-5.81/-6.04	-6.09/-6.32	-6.91/-7.38	-8.56/-8.69	-8.95/-7.46	-6.1/-4.96	-3.03/-1.46	-1.38/-2.48	-4.35/-6.94	-7.44/-5.76	-3.79/-2.57	-2.55/-4.54	-6.19/-5.42	-3.78/-3.47	-2.61/-2.38	-3.03/-4.25	-4.7/-3.62	-2.07/-1.58	-0.22/0.13
Θ(165°)	-2.33/-2.74	-3.54/-4.27	-5.41/-6.72	-7.52/-7.97	-9.23/-10.31	-10.05/-8.99	-7.98/-6.92	-6.83/-7.2	-7.6/-7.3	-6.42/-6.3	-6.15/-5.13	-2.9/-1.52	-1.09/-1.53	-2.74/-4.61	-6.74/-6.71	-6.55/-6.07	-6.26/-6.56	-6.12/-5.02	-4.42/-4.33	-4.36/-3.17	-1.58/-0.7	-1.17/-2.15	-2.22/-2.2	-2.21/-2.19
Θ(172.5°)	-4.15/-4.17	-5.09/-8.27	-7.76/-8.58	-9.68/-9.93	-9.85/-10.13	-8.3/-8.19	-8.72/-8.6	-7.84/-7.77	-7.94/-7.57	-7.29/-7.4	-7.19/-6.72	-5.74/-5.41	-5.79/-6.36	-6.91/-8.05	-9.92/-11.24	-10.74/-9.96	-9.47/-8.41	-7.69/-7.15	-6.75/-6.1	-5.02/-3.85	-3.23/-2.49	-2.62/-4.3	-5.73/-5.86	-5.37/-4.98
Θ(180°)	-5.45/-6.25	-8.14/-10.28	-11.32/-11.29	-12.05/-10.13	-9.73/-8.66	-7.99/-9.17	-10.76/-11.67	-11.93/-12.01	-10.99/-10.05	-9.65/-9.07	-8.16/-7.67	-7.1/-6.57	-6.85/-7.57	-7.75/-8.17	-8.15/-7.84	-7.65/-7.63	-8.24/-9.73	-11.32/-11.94	-10.54/-8.54	-7.55/-6.97	-7.14/-7.22	-7.73/-8.65	-8.66/-7.64	-7.19/-6.1
Freq(Hz)	5.885G/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°)	-4.11/-3.74	-3.36/-2.49	-1.71/-0.95	0.06/1.24	2.03/2.48	2.69/2.81	2.48/2.18	1.65/1.19	0.58/-0.1	-0.8/-1.48	-2.32/-2.95	-3.69/-4.82	-5.14/-4.27	-2.79/-1.4	-0.29/0.45	1.19/1.8	2.29/2.37	2.35/2.34	2.25/2.3	1.86/1.14	0.36/-0.37	-1.15/-1.56	-2.06/-3.32	-4.35/-4.5
Θ(7.5°)	-4.23/-4.01	-3.03/-1.67	-1.1/-0.82	-0.12/0.7	1.36/1.86	2.15/2.33	2.4/2.16	1.79/1.31	0.7/0.26	-0.76/-1.74	-2.86/-4.1	-5.72/-7.28	-8.43/-7.44	-5.76/-3.66	-1.82/-0.31	0.96/1.89	2.63/0.9	3.29/3.16	2.87/2.53	2.17/1.56	0.76/-0.11	-0.97/-1.36	-1.89/-2.72	-3.81/-4.49
Θ(15°)	-5.42/-6.24	-4.83/-3.15	-2.06/-1.12	-0.94/-0.03	0.69/-1.04	1.42/1.46	1.67/1.67	1.82/1.8	1.61/1.29	0.6/-0.29	-1.45/-2.46	-3.57/-4.61	-5.46/-5.8	-5.46/-4.12	-2.84/-1.28	-0.02/1.04	1.85/2.53	3.06/3.16	3.09/2.68	2.07/1.2	0.16/-0.96	-1.39/-2.03	-2.99/-3.68	-4.75/-5.47
Θ(22.5°)	-3.98/-4.92	-5.28/-5.04	-3.9/-2.27	-1.02/-0.03	0.71/0.91	0.91/0.77	0.41/0.72	1.01/1.35	1.41/2.23	0.55/-0.75	-2.51/-3.81	-5.5/-6.41	-6.85/-6.34	-4.79/-3.07	-1.7/0.56	0.37/1.28	1.99/2.47	3.01/3.47	3.46/2.74	1.41/-0.31	0.17/-2.75	-2.28/-2.11	-1.94/-1.9	-3.02/-3.46
Θ(30°)	-4.46/-4.46	-3.29/-2.06	-1.16/-0.43	0.08/0.01	-0.06/-0.24	-0.27/0.64	1.46/1.49	1.16/1.26	0.99/0.5	-0.39/-1.71	-3.19/-5.05	-7.68/-9.05	-9.14/-7.48	-4.77/-2.74	-1.18/-0.34	0.4								



Radiated Composite Gain Data <2.4GHz and 5GHz U-NII 1~U-NII 4>

Appendix A

Θ(135°)	-3.08/-0.99	-0.75/-2.47	-2.71/-3.87	-4.4/-3.88	-2.49/-1.62	-1.48/-0.51	0.79/1.13	0.26/0.86	-2.19/-2.93	-4.43/-7	-8.56/-7.99	-7.07/-5.2	-3.53/-3.29	-3.41/-4.2	-2.73/-2.15	-6.68/-4.65	-4.82/-3.89	-2.95/-7.44	-7.24/-3.58	-2.3/-0.57	-0.97/-3.89	-7.02/-5.52	-7.65/-5.28	-2.79/-2.77
Θ(142.5°)	-5.15/-4.74	-4.03/-4.21	-5.24/-5.79	-6.54/-5.41	-4.8/-2.95	-1.17/-0.88	-0.83/-0.54	-0.64/-1.87	-4.15/-6.86	-9.14/-6.9	-3.78/-2.79	-2.8/-3.49	-3.25/-2.8	-1.6/-0.78	-2.5/-3.18	-4.3/-4.67	-1.99/-2.35	-4.73/-9.92	-10.1/-6.94	-4.65/-2.94	-1.92/-2.01	-2.6/-5.81	-4.56/-3.22	-4.23/-4.67
Θ(150°)	-1.31/-1.2	-1.79/-2.49	-2.44/-2.44	-1.81/-1.44	-1.2/-1.25	-1.44/-1.81	-2.33/-1.74	-1.42/-1.11	-1.41/-2.19	-3.66/-5.38	-6.98/-8.71	-7.84/-7.35	-9.65/-7.61	-6.02/-8.41	-11.54/-8.31	-4.97/-3.28	-3.68/-5.3	-7.44/-9.81	-8.81/-6.87	-5.92/-4.34	-3.88/-2.68	-1.7/-1.32	-0.04/0.13	-0.51/-1.17
Θ(157.5°)	-1.36/-1.22	-1.16/-1.46	-1.79/-2.37	-2.87/-3.34	-3.59/-3.62	-3.89/-4.21	-4.08/-3.56	-4.08/-3.56	-3.51/-3.82	-4.79/-5.89	-7.53/-7.85	-6.54/-5.09	-4.81/-5.54	-7.18/-8.24	-7.21/-8.88	-5.1/-4.19	-4.22/-5.01	-5.64/-6.65	-6.84/-6.07	-4.88/-4.11	-2.84/-4.86	-5.05/-4.41	-3.55/-3.56	-3.26/-1.95
Θ(165°)	-0.31/-0.46	-0.58/-1.17	-1.91/-2.67	-3.76/-5.04	-5.97/-6.92	-7.73/-7.87	-8.25/-8.66	-9.12/-7.91	-6.39/-5.83	-6.29/-6.88	-6.92/-6.58	-5.77/-4.85	-3.4/-2.4	-2.05/-2.5	-3.79/-5.23	-6.19/-6.1	-5.53/-5.26	-4.94/-5.13	-5.03/-5.07	-5.24/-4.93	-3.85/-2.9	-2.1/-1.71	-0.84/-0.17	-0.19/-0.34
Θ(172.5°)	-4.3/-4.36	-4.58/-4.66	-5.3/-5.85	-6.48/-7.03	-7.11/-7.78	-8.03/-7.27	-7.57/-7.71	-7.28/-6.39	-4.99/-4.07	-4.14/-4.95	-5.5/-5.16	-4.16/-3.18	-2.76/-2.83	-3.43/-4.49	-5.94/-7.54	-7.46/-6.92	-6.12/-5.56	-4.96/-4.98	-5.14/-5.53	-5.76/-6.07	-6.48/-6.83	-7.48/-7.76	-7.36/-6.23	-4.61/-4.68
Θ(180°)	-8.23/-8.42	-8.45/-8.26	-7.46/-7.47	-8.3/-8.97	-10.3/-10.82	-10.87/-11.19	-11.15/-10.19	-8.95/-7.3	-6.11/-5.36	-4.91/-5.08	-5.89/-6.9	-7.8/-7.62	-7.78/-7.93	-8.57/-8.85	-8.6/-8.7	-8.24/-7.87	-7.92/-8.69	-9.11/-9.66	-10/-10.6	-10.17/-9.44	-9.7/-9.38	-9.3/-8.72	-7.87/-7.82	-7.52/-7.91
Freq(Hz)	5.2G/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°)	-5.7/-5.31	-5.01/-4.22	-3.64/-3.27	-3.12/-3.07	-3.23/-3.54	-3.9/-4.19	-4.31/-4.66	-5.02/-5.15	-5.39/-5.65	-5.89/-5.83	-5.71/-5.49	-4.96/-4.66	-4.86/-4.88	-4.62/-4.32	-3.99/-3.49	-3.21/-2.83	-2.5/-2.37	-2.46/-2.85	-3.16/-3.62	-4.49/-4.94	-5.3/-6.19	-6.83/-7.23	-6.9/-6.83	-6.59/-6.17
Θ(7.5°)	-3.97/-4.23	-4.2/-3.67	-3.2/-2.7	-2.31/-2.07	-2.04/-2.1	-2.29/-3.11	-3.27/-4.06	-4.5/-4.7	-5.12/-5.53	-6.52/-7.63	-7.32/-7.12	-6.77/-6.68	-6.4/-6.24	-5.93/-5.63	-5.17/-5.02	-5.08/-5.36	-5.66/-5.63	-5.75/-5.65	-5.5/-5.39	-5.54/-5.12	-4.86/-4.54	-4.44/-4.51	-4.68/-4.61	-4.55/-4.12
Θ(15°)	-2.03/-1.72	-0.91/-0.36	-0.29/-0.36	-0.62/-0.83	-0.98/-0.99	-1.51/-2.2	-2.49/-2.99	-3.38/-3.85	-4.33/-4.32	-4.67/-5.2	-6.2/-6.55	-7.22/-7.44	-6.68/-6.34	-5.52/-4.86	-4.41/-4.27	-3.88/-3.64	-3.93/-4.46	-5.41/-6.04	-6.68/-7.07	-7.14/-6.19	-5.09/-4.01	-3.26/-3.04	-2.99/-3.05	-2.91/-2.8
Θ(22.5°)	-1.37/-0.5	0.29/0.43	0.26/-0.21	-0.38/-0.46	-0.37/-0.45	-0.78/-1.2	-1.63/-2.02	-2.31/-2.52	-2.4/-2.45	-2.89/-3.37	-4.07/-4.77	-5.49/-6.06	-5.41/-4.3	-3.77/-3.61	-3.24/-2.49	-1.76/-1.58	-2.08/-2.49	-2.79/-3.4	-3.97/-5.03	-5.48/-4.08	-3.08/-2.09	-1.74/-1.77	-2.23/-2.35	-2.65/-1.93
Θ(30°)	-0.79/-0.79	-0.6/-0.28	0.42/0.57	0.6/0.38	-0.42/-1.34	-2.16/-2.65	-2.62/-2.01	-0.86/-0.21	-0.04/-0.37	-0.88/-1.42	-1.73/-2.03	-2.67/-2.97	-2.87/-2.77	-2.62/-2.42	-1.69/-0.92	-0.83/-1.01	-0.83/-0.5	-0.94/-1.36	-1.8/-2.68	-3.41/-3.52	-2.53/-1.99	-1.73/-1.53	-1.36/-1.01	-0.09/-0.54
Θ(37.5°)	-0.24/0.25	0.15/0.42	0.86/1.31	1.03/0.34	-0.58/-1.04	-1.44/-1.7	-1.41/-0.67	0.14/0.5	-0.19/-1.27	-1.98/-2.66	-2.03/-1.61	-1.08/-1.08	-1.59/-1.68	-1.32/-1.11	-0.37/-0.17	0.19/0.35	0.01/-0.46	-1.03/-1.32	-1.2/-1.33	-1.51/-1.61	-0.9/-0.42	-0.44/-0.34	-0.51/-0.35	0.1/0.24
Θ(45°)	1.01/1.79	1.93/1.21	1.53/2.1	1.73/1.38	1.31/0.1	0.22/-0.85	-1.34/-1.77	-1.7/-1.71	-2.4/-2.47	-2.49/-2.56	-2.56/-1.96	-1.04/-0.94	-1.76/-1.95	-1.8/-2	-1.98/-1.34	-0.39/-0.88	-2.12/-2.27	-2.85/-3.23	-2.47/-1.36	0.19/0.38	-0.04/0.53	1.04/1.41	1.96/2.6	2.39/1.52
Θ(52.5°)	2.24/1.88	1.34/0.67	0.91/1.05	0.93/1.89	2.18/2.23	2.24/1.53	0.65/-0.19	-1.26/-1.7	-1.92/-2.25	-2.25/-2.29	-2.97/-2.55	-2.37/-2.23	-1.46/-0.96	-1.05/-1.59	-1.88/-2.34	-3.08/-3.77	-3.31/-1.95	-0.68/0.26	0.18/0.09	0.54/1.29	0.98/1.29	2.32/2.71	3.43/3.96	3.42/2.88
Θ(60°)	2.3/1.7	1.28/1.05	1.72/1.69	1.36/1.98	1.96/1.47	0.83/0.08	-0.49/-1.54	-2.06/-2.06	-2.21/-2.5	-2.47/-1.28	-1.57/-0.69	-0.95/-1.58	-0.87/-0.24	-0.86/-2.29	-3.23/-2.86	-1.57/-1.18	-0.21/0.99	1.66/2.02	2.12/2.27	2.27/2.32	2.18/1.58	2.88/3.56	4.25/4.56	3.64/2.57
Θ(67.5°)	3.03/2.1	0.97/1.2	1.82/1.83	2.34/3.12	2.97/2.57	1.87/1	-0.07/-1.19	-2.12/-2.73	-3.24/-2.34	-2.55/-1.26	-0.75/-0.08	0.67/0.23	1.13/1.36	0.75/-0.1	-1.32/-1.29	-0.21/-0.04	-0.25/-0.06	0.31/0.6	1.37/2.15	2.55/2.56	2.83/2.85	2.86/3.51	4.57/5.09	4.33/3.02
Θ(75°)	3.71/3.4	1.7/0.87	0.44/0.67	2.23/3.52	3.54/3.34	2.51/5.7	0.55/-0.97	-1.68/-1.94	-1.37/-0.92	-0.97/-0.33	1.26/0.74	1.41/1.45	2.66/2.98	2.64/0.95	-0.74/0.08	1.1/1.4	0.41/-0.08	1.17/2.11	2.85/3.11	3.83/4.24	4.39/4.29	3.79/3.35	3.2/3.98	4.08/3.45
Θ(82.5°)	3.17/3.92	2.95/2.36	2.06/1.41	1.40/5.08	4.01/1.27	2.28/1.63	0.74/0.35	-1/-1.54	-1.4/-1.43	-2.75/-2.2	-0.69/0.13	0.41/0.3	2.86/3.42	2.28/0.64	0.60/0.92	2.22/1.84	-1.23/-0.85	2/1.33	1.93/3.09	3.57/3.6	3.08/3.3	3.1/3.45	3.99/4.09	3.76/3.32
Θ(90°)	3.69/3.35	2.35/1.72	1.84/1.47	1.95/2.14	2.19/1.87	1.47/0.33	-0.16/-0.31	-0.38/-0.68	-0.48/-1.05	-1.66/-1.27	-1.38/-0.46	0/0.57	0.63/1.19	1.29/0.7	1.01/-0.87	-0.93/0.94	0.52/-0.12	1.4/1.57	1.37/1.47	3.35/3.87	4.22/3.9	3.03/2.66	3.7/4.57	4.29/3.25
Θ(97.5°)	2.37/2.55	2.03/2.54	2.41/2.78	2.12/1.87	2.54/2.66	1.54/0.34	-0.67/-1.21	-0.76/-0.31	0.20/23	-0.53/-1.22	0.27/1.71	1.11/1.12	1.41/1.02	1.74/1.48	1.15/-0.55	1.18/0.85	-1.13/0.54	1.96/-1.27	0.03/2.6	3.68/4.25	3.94/3.4	2.63/3.08	3.47/3.22	3.19/2.01
Θ(105°)	1.62/2.44	1.76/1.43	1.29/1.27	2.95/2.57	2.37/1.23	0.89/0.86	-0.33/-1.27	-0.81/-1.69	-1.05/-0.6	0.21/1.1	-0.96/1.99	0.58/1.63	2.28/2.15	1.13/-0.99	-0.39/0.8	1.45/1.64	0.97/2.33	3.58/1.36	0.26/3.32	4.17/4.52	3.79/3.91	3.01/3.58	3.67/3.11	3.19/1.74
Θ(112.5°)	0.03/0.45	0.95/0.94	1.04/1.91	1.37/1.01	0.96/1.6	1.76/1.54	0.61/0.09	-0.33/-1.06	-1.1/-1.55	-1.54/-1.22	-1.73/0.51	-0.51/0.08	1.24/0.26	0.56/-0.86	-1.63/-2.16	-0.59/0.15	-1.30/0.34	0.9/-2.47	-1.22/1.22	1.57/2.57	1.9/2.25	1.1/1.75	2.57/2.87	1.94/1.24
Θ(120°)	0.92/0.85	1.04/0.58	-1.16/-0.97	-0.9/-1.76	-0.04/0.67	0.38/0.22	0.66/1.24	1.02/0.39	-0.75/-1.71	-1.36/-2.27	-2.12/-1.27	-1.38/-0.88	0.68/0.11	0.62/0.97	-0.68/-0.33	0.8/-1.02	1.58/2.37	1.81/-1.53	-3.6/-2.64	-0.29/0.98	1.72/0.65	-0.26/1.43	2.58/2.79	1.27/0.04
Θ(127.5°)	0.64/0.42	0.01/-0.42	-2.45/-2.87	-1.41/-1.28	-0.85/-0.26	-0.1/-1.17	-1/0.01	0.27/-0.05	-0.1/0.36	0.18/-0.57	-0.88/-1.68	-2.38/-1.47	-0.02/-1.85	-1.24/-0.46	-2.87/-1.08	-0.17/-2.75	-0.47/1.55	1.02/-2.72	-3.96/-1.31	1.13/2.4	2.01/-0.68	-2.55/-1.84	1.15/2.71	2.10/8.88
Θ(135°)	-3.79/-3.74	-3.67/-3.84	-3.73/-3.75	-3.21/-2.33	-1.32/-1.43	-2.58/-3.29	-2.38/-1.56	-0.45/0.23	0.37/-0.41	-0.87/-0.98	-0.95/-0.7	-1.75/-1.42	-1.01/-1.45	-0.92/-1.6	-4.03/-6.2	-2.28/-1.85	0.47/1.97	1.03/-3.68	-5.01/-3.48	-0.6/0.02	1.18/0.81	-1.55/-1.71	-0.58/-0.8	-0.86/-1.74
Θ(142.5°)	-6.27/-5.97	-5.83/-5.95	-4.33/-3.78	-3.94/-2.83	-4.56/-5.11	-4.75/-3.23	-2.52/-2.27	-1.58/-1.66	-2.56/-3.77	-4.68/-5.32	-4.92/-4.87	-3.51/-2.74	-5.78/-7.36	-4.54/-4.37	-4.81/-5.81	-2.62/-1.72	-4.55/-0.74	-0.78/-4.63	-5.41/-4.81	-2.62/-1.72	-3.08/-1.02	-1.34/-1.53	-1.31/-1.61	-1.5/-3.16
Θ(150°)	-7.39/-8.55	-7.66/-6.71	-4.14/-2.73	-1.94/-1.16	-0.36/-0.54	-1.13/-1.88	-1.91/-1.76	-2.26/-3.79	-4.66/-4.53	-3.57/-2.12	-1.74/-2.28	-2.11/-1.98	-3.24/-5.06	-4.7/-4.05	-4.69/-5.72	-5/-6.09	-4.5/-3.47	-4.61/-7.25	-7.7/-6.32	-3.49/-1.86	-2.83/-4.3	-4.48/-5.94	-5.68/-3.68	-2.64/-4.78
Θ(157.5°)	-3.66/-3.64	-4.09/-3.88	-2.53/-1.02	-0.28/-0.68	-1.63/-3.2	-4.13/-4.04	-3.17/-2.6	-3.14/-4.68	-6.11/-6.52	-6.4/-6.37	-5.78/-4.55	-3.68/-4.15	-5.06/-3.14	-1/0.26	-0.27/-0.94	-2.22/-3.56	-4.24/-5.12	-6.91/-6.46	-4.99/-5.36	-6.28/-5.34	-3.38/-2.53	-2.97/-4.33	-6.27/-6.09	-5.04/-4.09
Θ(165°)	-1.62/-1.82	-1.94/-1.98	-1.47/-0.85	-0.59/-1.03	-1.78/-2.99	-4.14/-5.24	-6.17/-7.27	-9.41/-10.15	-10.13/-9.2	-8.41/-8.25	-7.05/-6.44	-6.24/-6.82	-6.8/-6.45	-4.94/-3.32	-2.18/-1.8	-1.6/-1.71	-1.88/-2.45	-3.58/-4.57	-4.72/-4.52	-4.55/-3.79	-3.02/-2.47	-2.35/-2.96	-3.16/-2.67	-2.08/-1.66
Θ(172.5°)	-5.08/-5.27	-4.89/-4.48	-4.37/-5.13	-5.78/-6.82	-8.01/-8.71	-10.12/-11.66	-11.72/-11.51	-10.91/-9.3	-8.07/-7.38	-7.02/-6.79	-6.75/-7.36	-8.88/-9.7	-9.78/-9.1	-7.31/-6.05	-5.54/-5.88	-6.59/-6.26	-6.43/-6.52	-6.45/-6.74	-7/-7.32	-8.06/-8.01	-7.72/-7.21	-6.52/-6.63	-4.74/-4.95	-5.35/-5.66
Θ(180°)	-9.46/-8.65	-7.51/-6.48	-5.57/-4.85	-4.78/-5.45	-5.75/-5.99	-6.28/-5.97	-5.77/-5.67	-6.14/-6.29	-6.54/-6.93	-7.39/-8.03	-8.26/-8.1	-7.81/-7.83	-7.86/-7.96	-8.42/-8.38	-8.18/-8.03	-7.68/-7.12	-6.99/-7	-7.25/-7.92	-8.17/-7.79	-7.34/-7.41	-8.53/-9.36	-9.56/-10.57	-10.81/-10.59	-9.88/-9.75
Freq(Hz)	5.3G/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							



Radiated Composite Gain Data <2.4GHz and 5GHz U-NII 1~U-NII 4>

Appendix A

Θ(105°)	-5.05/-4.89	-4.27/-3.2	-2.95/-1.79	-1.56/-1.86	-2.26/-2.82	-2.71/-2.48	-2.46/-1.18	-0.23/-0.92	-1.26/0.02	1.19/0.01	-2.14/-3.58	-3.68/-4.69	-6.63/-5.83	-7.39/-10.48	-9.51/-9.23	-7.22/-8.62	-8.13/-7.91	-7.12/-6.6	-6.18/-4.54	-6.51/-6.03	-6.12/-4.63	-6.54/-8.09	-9.14/-5.8	-4.6/-4.81
Θ(112.5°)	-8.11/-6.59	-5.87/-4.26	-1.74/-1	-0/-0.27	0.14/-0.64	-1.09/-1.53	-1.64/-0.81	-0.14/-0.56	-1.55/-1.35	-2.39/-3.17	-4.36/-4.5	-6.77/-7.06	-7.73/-10.26	-10.92/-11.44	-8.31/-6.63	-7.73/-6.15	-7.48/-6.68	-5.99/-8.38	-7.72/-4.93	-6.63/-8.99	-7.83/-8.08	-7.8/-9.42	-7.99/-7.85	-7.53/-7.84
Θ(120°)	-12.48/-9.12	-8.53/-5.9	-4.87/-3.33	-1.55/-1.09	-0.97/-0.25	-0.14/-0.13	-0.15/0.04	0.87/1.45	0.5/-1.14	-3.01/-3.42	-4.38/-5.18	-7.04/-9.88	-8.92/-5.94	-7.14/-9.15	-6.06/-9.93	-12.28/-6.45	-9.25/-9.55	-7.25/-9.12	-10.69/-7.11	-5.34/-6.09	-7.97/-10.01	-9.28/-7.54	-7.56/-8.49	-7.67/-8.69
Θ(127.5°)	-6.81/-5.3	-5.47/-4.93	-3.5/-3.06	-1.76/-1.83	-2.14/-0.98	-0.35/-0.58	-0.79/-1.32	-2.01/-2.43	-2.94/-5.52	-6.81/-7.63	-6.16/-6.46	-7.86/-8.8	-8.65/-6.45	-8.21/-7.06	-6.94/-11.51	-11.81/-5.36	-6.42/-6.74	-5/-7.43	-9.95/-8.95	-5.39/-5.75	-6.25/-6.55	-5.25/-5.98	-8.88/-8	-6.96/-5.54
Θ(135°)	-6.79/-4.64	-4.09/-5.09	-4.1/-4	-3.61/-1.95	-2.01/-2.02	-1.67/-1.5	-1.92/-2.04	-2.59/-3.56	-4.57/-6.23	-7.44/-9.52	-8.12/-7.73	-7.78/-7.22	-7.53/-5.48	-6.84/-6.62	-7.36/-9.77	-7.93/-5.78	-8.26/-6.72	-4.21/-5.82	-9.21/-6.53	-4.88/-5.44	-5.9/-7.1	-9.03/-5.75	-7.39/-6.43	-5.34/-6.99
Θ(142.5°)	-4.03/-4.34	-2.24/-1.88	-1.85/-1.18	-2.12/-2.61	-2.48/-2.71	-3.13/-2.99	-2.61/-2.93	-2.97/-2.68	-3.53/-5.33	-2.97/-2.68	-6.96/-6.29	-6.93/-6.4	-6.71/-8.29	-6.63/-5.83	-4.78/-7.84	-7.26/-5.45	-6.06/-8.56	-8.71/-6.3	-5.25/-5.77	-6.62/-4.72	-6.88/-7.05	-4.63/-5.96	-5.66/-3.82	
Θ(150°)	-1.85/-1.44	-1.9/-1.24	-1/-1.61	-2.52/-3.2	-3.3/-3.26	-2.51/-2.58	-2.63/-2.1	-1.68/-1.84	-2.3/-2.52	-3.31/-4.35	-5.79/-6.16	-5.28/-4.97	-6.54/-7.67	-6.59/-9.29	-11.67/-11.62	-9.6/-8.9	-8.62/-6.03	-6.31/-9.23	-9.46/-8.07	-6.83/-7.36	-7.8/-6.72	-6.41/-7.99	-6.5/-5.83	-5.28/-2.99
Θ(157.5°)	-0.7/-0.71	-1.47/-2.04	-2.48/-3.02	-3.3/-3.58	-3.49/-3.84	-4.18/-4.68	-5.19/-5.82	-6.52/-6.2	-5.8/-5.82	-6.04/-6.24	-6.35/-6.23	-5.87/-5.49	-5.13/-4.14	-3.81/-3.98	-4.57/-5.91	-7.28/-6.83	-5.93/-5.68	-6.11/-7.26	-7.12/-7.29	-8.2/-9.59	-9.65/-8.21	-6.75/-5.71	-4.24/-3.79	-3.05/-1.9
Θ(165°)	-3.96/-3.57	-2.99/-3.15	-3.09/-3.27	-4.01/-4.54	-4.62/-4.83	-5.67/-6.33	-7.15/-8.59	-9.57/-8.84	-8.01/-6.65	-5.29/-4.67	-4.33/-3.71	-2.98/-2.37	-1.93/-1.83	-2.17/-3.38	-4.27/-4.39	-4.09/-3.82	-3.83/-4.66	-6.07/-6.53	-6.82/-7.21	-7.22/-7.12	-5.97/-5.2	-4.68/-4.49	-4.7/-5.29	-5.46/-4.49
Θ(172.5°)	-5.35/-5.39	-5.03/-4.2	-3.88/-4.26	-4.89/-5.73	-6.19/-7.31	-8.75/-9.86	-11.34/-12.25	-12.34/-11.37	-9.8/-8.14	-7.74/-7.89	-8.14/-7.95	-7.54/-7.56	-7.68/-7.5	-7.31/-7.07	-6.54/-5.84	-6.07/-5.89	-6.32/-6.97	-7.8/-7.49	-7.48/-7.99	-8.91/-9.24	-8.78/-8.68	-8.95/-8.41	-7.96/-6.72	-5.76/-5.9
Θ(180°)	-9.52/-9.16	-9.44/-9.09	-9.57/-9.48	-9.72/-10.55	-11.21/-11.56	-11.56/-10.81	-9.48/-8.8	-8.15/-7.48	-7.55/-7.99	-8.45/-8.5	-8.47/-8.2	-8.67/-8.74	-8.87/-9.22	-8.6/-8.27	-8.15/-8.19	-7.81/-8.15	-8.02/-8.21	-8.48/-8.66	-8.99/-9.43	-9.04/-9.59	-9.73/-9.87	-10.04/-9.26	-8.41/-8.13	-9/-9.24
Freq(Hz)	5.6G/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°)	-2/-1.72	-1.62/-1.91	-2.17/-2.45	-2.95/-3.75	-4.47/-5.79	-7.05/-8.63	-10.29/-11.59	-12.72/-12.37	-11.99/-10.18	-8.59/-7	-5.4/-4.07	-3.2/-2.67	-2.22/-1.84	-1.56/-1.47	-1.22/-1.48	-2.12/-2.96	-4.06/-5.11	-6.71/-8.23	-10.11/-12.18	-12.5/-12.06	-12.38/-9.7	-7.78/-5.93	-5/-4.04	-3.25/-2.54
Θ(7.5°)	-2.13/-1.58	-1.29/-1.26	-1.32/-1.66	-2.1/-2.7	-3.31/-3.86	-4.46/-5.75	-6.87/-8.49	-10.27/-11.6	-11.33/-9.99	-8.27/-6.94	-5.39/-4.35	-3.43/-2.66	-2.3/-2.17	-2.04/-2.04	-2.38/-2.98	-3.84/-4.96	-6.43/-8.32	-9.92/-10.37	-11.55/-11.79	-11.71/-10.53	-9.08/-7.46	-6.16/-5.4	-4.78/-4.15	-3.6/-2.96
Θ(15°)	-3.59/-3.07	-2.26/-1.9	-1.52/-1.58	-1.41/-1.39	-1.34/-1.22	-2.26/-3.58	-5.08/-6.5	-7.14/-7.13	-6.69/-6.02	-5.84/-5.27	-4.65/-4.19	-4.03/-3.77	-3.71/-3.6	-3.8/-4.24	-4.25/-4.53	-5.16/-6.15	-7.1/-7.24	-7.81/-7.82	-7.56/-6.46	-5.8/-5.12	-4.75/-4.58	-4.79/-4.82	-4.76/-4.68	-4.41/-4.05
Θ(22.5°)	-1.91/-1.09	-0.7/-0.87	-0.8/-0.65	-0.38/0.04	-0.1/-0.14	-0.86/-1.9	-3.26/-5	-6.66/-7.31	-7.12/-7.35	-6.5/-4.8	-4.08/-4.19	-4.6/-4.43	-4.32/-4.33	-3.95/-4.2	-4.56/-5.12	-5.85/-6.16	-5.96/-5.27	-4.81/-4.78	-5.24/-5.8	-6.15/-5.93	-5.83/-5.82	-6.2/-5.98	-5.08/-4.86	-4.25/-2.93
Θ(30°)	0.040/-87	0.80/-22	-0.08/-0.16	0.42/0.51	0.41/0.43	0.51/0.35	0.08/-0.68	-2.37/-3.67	-5.31/-6.25	-7.58/-7.29	-5.9/-5.25	-5.29/-4.87	-4.33/-3.92	-3.51/-3.47	-4.5/-4.9	-5.08/-4.51	-3.93/-3.1	-3.4/-3.6	-4.11/-4.42	-4.33/-4.38	-4.16/-3.78	-3.38/-3.22	-2.5/-1.84	-1.37/-0.76
Θ(37.5°)	1.41/-78	1.66/-16	1.47/-13	0.77/-0.5	-0.74/-0.52	0.85/0.95	0.49/-0.32	-1.12/-2.27	-3.11/-3.98	-5.32/-6.45	-5.68/-4.75	-4.55/-3.38	-2.57/-2.88	-3.34/-3.29	-3.43/-3.16	-3.49/-3.63	-4.03/-4.57	-5.56/-5.48	-4.73/-3.46	-3.09/-2.7	-2.01/-1.65	-1.46/-1.22	0.051/0.9	1.27/0.77
Θ(45°)	3.05/3.4	3.28/2.96	2.74/2.15	1.34/0.62	-0.19/-0.08	0.12/0.28	0.17/-0.51	-1.41/-2.7	-3.11/-3.29	-4.25/-5.37	-4.89/-4.08	-3.68/-2.88	-2.98/-4.43	-4.48/-3.51	-2.85/-2.13	-1.63/-2.53	-4.22/-5.73	-4.24/-2.78	-2.28/-2.22	-2.02/-2.04	-1.79/-0.55	0.6/0.89	1.8/2.12	1.74/2.38
Θ(52.5°)	2.42/2.32	1.99/2.69	2.92/1.8	1.09/0.59	0.41/-0.25	0.06/0.54	0.75/0.23	-0.87/-2.2	-3.55/-4.37	-5.46/-5.6	-4.75/-3.26	-2.31/-1.78	-2.67/-3.33	-2.9/-3.7	-0.53/-0.47	-0.46/-1.57	-2.65/-1.65	0.571/-37	1.16/0.93	0.41/0.28	0.65/-1.48	1.81/-1.84	2.77/3.1	2.59/3.44
Θ(60°)	4.27/3.75	2.76/2.62	2.62/2.45	1.04/0.78	1/1/17	0.96/0.31	-0.4/-0.89	-1.66/-2.22	-2.6/-2.87	-3.01/-4.38	-3.11/-1.9	-0.05/0.06	-0.47/-1.1	-2.08/-2.64	-2.07/-1.71	-1.13/-1.06	-1.57/-0.67	0.41/1	1.35/-1.53	1.74/-1.79	1.16/-1.44	1.77/2.48	3.57/3.93	4.113/8.7
Θ(67.5°)	4.84/4.66	3.5/3.6	2.92/1.5	1.58/0.44	0.2/0.02	-0.43/-0.53	-0.68/0.39	-0.4/-0.86	-1.53/-1.92	-2.57/-3.2	-1.87/-0.14	0.68/1.1	0.58/0.29	-1.02/-1.49	-1.08/-1.23	-2.34/-3.62	-3.05/-0.99	0.030/1.3	0.94/2.46	3.37/3.06	2.51/2.71	3.05/3.74	4.925/5.7	5.013/9.7
Θ(75°)	5.26/4.74	3.56/3.54	2.913/1.7	2.66/1.08	1.14/1.52	2.18/2.22	1.5/0.95	-0.45/-1.13	-2.09/-2.46	-2.67/-2.54	-0.63/0.26	0.33/0.84	1.61/1.81	1.19/0.12	-0.89/-0.13	0.25/0.57	1.16/1.8	2.59/2.89	2.71/2.55	2.53/2.95	3.92/4.09	5.01/5.76	5.56/4.19	
Θ(82.5°)	5.184/1.7	2.972/4.44	1.412/3.7	1.841/68	1.88/2.38	2.36/2.45	1.71/0.67	-0.5/-1.05	-2.55/-3.03	-1.76/-1.59	-0.05/0.51	1.49/1.72	2.39/1.41	1.06/-0.43	-0.29/1.29	1/0.34	0.01/0.7	3.04/3.7	3.96/3.45	3.69/3.63	3.98/3.6	4.55/5.17	5.5/5.9	
Θ(90°)	4.06/3.88	3.44/2.9	2.01/2.1	1.61/-15	0.14/0.87	1.71/2.41	1.28/0.46	-1.48/-2.68	-3.2/-2.85	-2.29/-1.27	0.26/1.06	1.62/1.74	2.32/1.97	1.63/0.49	0.49/0.92	0.48/1.43	3.87/3.62	2.71/-88	2.48/0.05	3.434/-41	4.39/5.34	5.84/6.02	5.73/4.99	
Θ(97.5°)	3.52/3.34	3.28/2.13	1.421/0.7	1.25/1.39	0.83/0.92	1.35/1.8	1.22/0.37	-1.17/-2.31	-2.98/2.84	-3.04/-0.19	-0.51/0.5	1.09/1.1	1.63/2.29	1.59/0.3	0.74/0.67	0.24/2.02	0.22/1.35	1.873/2.27	2.41/1.9	4.13/4.6	5.14/3.96	3.44/4.5	5.67/5.53	4.84/5.5
Θ(105°)	2.05/2.14	1.63/1.22	1.35/1.14	1.72/2.29	2.56/2.56	2.26/1.84	0.78/0.52	0.82/0.1	-1.92/-3	-2.73/-0.75	-0.94/0.21	0.63/-0.65	2.89/1.66	1.42/0.04	-0.05/0.55	1.39/0.98	-1.79/0.97	3.7/0.64	0.22/2.02	3/3.94	3.75/2.89	2.69/3.11	3.69/3.15	3.16/2.83
Θ(112.5°)	-1.25/-0.4	-0.74/0.17	0.28/0.52	0.57/0.79	0.74/1.33	1.86/1.82	0.99/0.16	0.32/0.68	-0.39/-0.13	-1.01/-0.52	-1.65/0.24	1.42/0.55	1.49/-0.52	0.66/-0.71	0.17/0.19	1.01/-0.01	-0.83/2.06	3.37/1.98	2.05/3.35	3.34/3.31	1.99/1.37	1.21/1.89	3.69/2.78	2.24/0.52
Θ(120°)	-1.46/0.17	0.54/-0.34	-0.46/-0.9	-2.74/-1.11	0.16/0.13	1.49/0.76	-0.38/-1.51	-0.57/0.9	0.88/0.39	-1.53/-1.32	-2.25/-0.64	-0.29/-1.11	0.76/-1.77	-3.34/-2.23	-1.69/-4.49	-1.66/-7.99	-3.14/-0.28	1.82/-3.04	-1.56/-1.88	-0.47/-1.88	0.96/1.58	-0.35/0.76	1.77/1.82	-0.48/-0.41
Θ(127.5°)	-0.29/-1.74	-0.73/-1.3	-2.59/-2.73	-4/-2.57	0.21/1.4	1.54/0.57	0.53/1.58	1.37/0.33	-0.75/0.81	-1.82/-2.54	-2.58/-2.23	-3.38/-1.87	-1.32/-4.71	-4.59/-1.65	-2.24/-2.5	-0.44/-0.84	-1.62/0.02	2.27/-1.06	-6.56/-3.36	-0.33/0.01	0.67/-0.43	-1.5/-0.23	1.91/2.58	-0.27/-0.1
Θ(135°)	-2.16/-2.05	-2.3/-1.88	-1.9/-1.95	-2.34/-2.24	-0.88/-0.12	0.19/0.06	-0.17/-0.28	-0.56/-0.86	-1.29/-2.14	-2.79/-3.48	-2.43/-1.54	-1.26/-2.02	-2.91/-4.61	-2.21/-0.97	-4.01/-3.75	-1.78/-3.44	-1.79/-2.69	-0.65/-3.12	-7.24/-5.05	-2.55/-1.61	-1.95/-2.65	-4.85/-4.24	-1.48/0.12	-0.44/-1.59
Θ(142.5°)	-4.78/-2.91	-2.33/-2.83	-3.35/-3.85	-4.17/-4.76	-4.8/-4.98	-4.5/-3.73	-3.08/-2.63	-1.62/-0.35	-0.2/-0.75	-1.48/-2.3	-2.77/-3.08	-4.37/-3.91	-4.21/-3.7	-1.5/-2.15	-4.21/-5.32	-6.72/-4.72	-3.15/-2.04	-0.85/-3.81	-6.63/-6.93	-4.47/-1.95	-1.75/-3.29	-4.97/-5.04	-4.38/-2.93	-2.69/-4.41
Θ(150°)	-3.19/-4.07	-4.06/-4.86	-5.84/-5.6	-5.42/-5.52	-5.47/-4.92	-4.19/-3.73	-4.2/-5.36	-5.98/-5.5	-5.36/-5.96	-5.87/-4.35	-3.97/-5.2	-4.96/-3.59	-5.08/-3.73	-0.68/-0.31	-1.19/-2.04	-3.35/-4.23	-5.01/-4.02	-2.59/-4.14	-5.79/-6.11	-3.98/-1.72	-1.48/-2.05	-2.12/-0.76	0.24/0.71	-0.05/-1.49
Θ(157.5°)	-3.43/-3.59	-3.63/-3.79	-3.87/-4.76	-5.16/-4.42	-3.95/-4.04	-4.1/-4.39	-4.98/-5.23	-5.28/-5.77	-6.33/-6.56	-6.33/-6.37	-6.91/-7.89	-7.16/-6.18	-6.71/-6.81	-4.75/-3.32	-2.47/-2.2	-2.92/-3.33	-3.07/-3.15	-2.69/-2.74	-3.96/-6.63	-8.31/-7.67	-5.75/-4.49	-4.47/-3.05	-1.55/-1.28	-2.2/-2.8
Θ(165°)	-3.2/-2.93	-2.84/-3.15	-3.53/-3.92	-4.55/-6.14	-7.03/-7.29	-6.67/-6.58	-6.14/-6.07	-6.42/-6.9	-6.79/-6	-5.33/-5.14	-5.28/-5.65	-5.5/-3.33	-5.81/-6.38	-7.75/-9.17	-7.66/-6.									



Radiated Composite Gain Data <2.4GHz and 5GHz U-NII 1~U-NII 4>

Appendix A

Θ(75°)	-4.4/-3.23	-1.91/-1.5	-1.66/-1.6	-2.32/-3.1	-3.51/-3.34	-2.95/-1.22	-0.69/-1.66	-2.97/-3.24	-2.38/-2.37	-2.68/-4.13	-4.49/-3.48	-2.8/-2.52	-3.74/-4.02	-5.62/-8.3	-9.97/-10.4	-6.89/-6.14	-6.89/-8.31	-4.58/-5.87	-6.42/-4.11	-3.75/-4.9	-6.01/-5.74	-5.2/-6.4	-8.56/-10.31	-10.2/-6.7
Θ(82.5°)	-6.87/-5.5	-4.19/-3.96	-4.5/-4.53	-5.89/-8.17	-8.27/-5.56	-3.9/-2.47	-1.18/-0.23	-0.75/-1.5	-1.9/-1.86	-2.55/-4.18	-6.29/-5.23	-3.93/-3.85	-4.94/-5.89	-7.32/-9.22	-9.71/-11.18	-8.63/-6.37	-7.6/-7.91	-4.7/-5.26	-5.75/-4.47	-3.35/-3.56	-3.51/-3.74	-4.17/-3.86	-5.28/-7.51	-9.32/-8.13
Θ(90°)	-5.07/-3.83	-2.69/-2.48	-2.93/-4.39	-5.18/-4.81	-3.76/-2.77	-3.65/-4.15	-2.7/-1.45	-0.56/-0.68	-1.31/-0.42	-1.61/-3.68	-5.31/-5.09	-4.19/-4.18	-5.2/-5.68	-6.53/-7.74	-7.07/-6.31	-5.79/-6.85	-8.93/-8.59	-5.96/-8.05	-6.84/-4.72	-3.19/-5.36	-4.95/-4.36	-4.73/-5.41	-6.74/-8.95	-8.23/-6.95
Θ(95°)	-5.07/-4.66	-2.94/-2.57	-2.17/-2.67	-3.42/-3.62	-3.76/-4.23	-1.19/-0.91	-1.19/-1.57	-1.72/-1.51	-0.020/22	-0.89/-2.09	-3/-2.82	-4.25/-3.73	-4.71/-2.94	-4.74/-7.54	-9.02/-7.55	-4.02/-2.13	-3.53/-3.96	-4.42/-7.81	-7.59/-7.69	-4.75/-4.99	-4.14/-4.73	-4.54/-6.84	-7.68/-6.89	-7.48/-6.65
Θ(105°)	-9.58/-9.98	-9.06/-6.22	-4.05/-2.62	-2.17/-1.65	-1.88/-2.15	-1.3/-0.87	-1.89/-2.12	-1.87/-2.35	-1.64/-1.27	-1.3/-3.53	-6.41/-6.27	-5.8/-6.21	-9.83/-8.5	-6.87/-7.25	-8.6/-7.77	-11.8/-7.29	-7.24/-3.96	-2.5/-5.07	-5.14/-5.67	-6.63/-7.16	-6.69/-7.74	-9.34/-9.94	-7.99/-6.49	-6.1/-7.71
Θ(112.5°)	-8.91/-9.17	-10.46/-8.33	-5.63/-3.12	-3.1/-3.11	-1.81/0.06	1.21/0.88	0.39/0.03	-0.28/-1.17	-1.55/-2.88	-3.86/-6.28	-6.72/-5.37	-5.21/-5.22	-5.27/-7.45	-5.92/-7.06	-7.32/-9.55	-9.36/-6.24	-5.32/-5.22	-6.47/-6.85	-5.79/-5.23	-8.3/-7.77	-9.77/-10.63	-8.36/-8.04	-6.37/-6.67	-6.79/-8.31
Θ(120°)	-5.1/-5.76	-5.16/-4.68	-3.9/-2.52	-0.93/-1.36	-0.81/-0.62	-0.04/-1.35	1.34/0.57	0.62/0.2	-1.96/-4.01	-6.51/-6.55	-6.77/-6.14	-6.41/-8.05	-7.31/-7.61	-7.33/-10.06	-7.63/-8.45	-11.87/-9.09	-9.13/-7.19	-8.12/-10.03	-9.11/-7.54	-8.6/-8.9	-8.53/-12.28	-11.06/-7.5	-6.35/-3.42	-3.47/-5.3
Θ(127.5°)	-6.22/-4.32	-4.72/-4.52	-2.51/-1.88	-0.63/-0.35	-0.82/-0.7	-0.48/-0.06	0.11/-0.12	-0.08/-0.82	-1.55/-3.41	-5.5/-5.9	-5.7/-6.34	-7.58/-8.91	-9.41/-9.32	-8.68/-8.61	-6.35/-8.52	-9.5/-7.53	-6.24/-7.81	-5.86/-10.89	-9.71/-10.75	-6.46/-5.05	-8.89/-11.28	-8.14/-5.88	-6.52/-6.77	-5.07/-3.2
Θ(135°)	-3.91/-2.16	-2.18/-3.95	-3.3/-3.12	-2.52/-0.92	-0.62/-0.89	-1.12/-0.64	-0.43/-0.68	-1.41/-2.51	-4.56/-5.76	-6.98/-6.02	-5.34/-5.61	-6.33/-6.2	-6.57/-4.24	-6.16/-5.45	-6.97/-9.69	-7.7/-6.46	-6.16/-9.99	-4.87/-8.01	-10.35/-9.18	-11.15/-8.33	-6.32/-11.56	-7.73/-6.33	-7.43/-8.97	-6.78/-4.72
Θ(142.5°)	-5.3/-3.81	-1.66/-1.78	-1.45/-1.01	-1.36/-1.54	-1.74/-2.31	-2.04/-1.54	-0.71/-0.44	-1.11/-2.11	-2.7/-4.11	-5.06/-5.05	-5.99/-6.23	-7.08/-7.38	-6.66/-5.29	-6.76/-7.66	-8.85/-5.6	-8.19/-6.07	-7.23/-5.21	-5.3/-7.92	-9.39/-7.7	-7.63/-10.07	-5.48/-7.26	-9.61/-7.47	-6.7/-0.8	-6.12/-2.45
Θ(150°)	-2.02/-1.84	-2.96/-2.39	-2.89/-3.61	-4.21/-4.04	-3.99/-4.44	-4.39/-3.85	-3.63/-3.41	-3.12/-3.02	-3.82/-5.19	-6.46/-7.09	-6.96/-7.93	-8.76/-8.82	-8.25/-7.34	-7.64/-10.26	-11.18/-10.55	-10.95/-9.4	-6.83/-4.82	-7.04/-10.65	-11.92/-11.84	-10.69/-10.25	-8.13/-7.45	-9.22/-8.33	-6.67/-5.66	-4.19/-3.03
Θ(157.5°)	-0.87/-0.92	-0.25/-0.45	-1.68/-2.78	-3.57/-4.12	-4.74/-4.96	-4.13/-3.45	-3.24/-3.23	-4.02/-5.07	-6.11/-7.5	-7.97/-7.84	-7.03/-5.83	-5.1/-4.87	-5.18/-5.65	-4.8/-5.18	-7.28/-9.22	-9.82/-9.23	-7.55/-6.38	-5.92/-6.4	-6.93/-7.12	-7.76/-10.49	-12.87/-11.5	-8.36/-5.26	-3.8/-3.13	-1.08/-0.39
Θ(165°)	-5.27/-3.96	-3.6/-4.05	-5.05/-5.52	-5.39/-5.26	-5.08/-4.7	-4.59/-4.59	-4.99/-5.91	-6.77/-8.28	-9.52/-9.58	-9.54/-9.53	-8.48/-6.96	-5.36/-4.41	-4.42/-4.55	-5.14/-5.41	-5.05/-3.9	-3.36/-3.8	-4.95/-6.02	-6.68/-6.68	-6.77/-7.24	-8.41/-10.27	-10.82/-9.84	-8.66/-7.83	-7.12/-7.52	-7.5/-6.84
Θ(172.5°)	-6.33/-7.24	-7.45/-7.35	-5.85/-5.45	-5.55/-5.65	-5.58/-5.75	-6.49/-7.1	-8.17/-9.56	-11.04/-10.58	-10.33/-11.28	-12.23/-10.95	-10.97/-10.63	-9.37/-7.86	-6.76/-5.9	-4.95/-4.32	-4/-3.78	-4.23/-4.25	-4.4/-4.89	-5.78/-6.55	-6.9/-7.08	-7.79/-8.44	-9.1/-9.5	-9.13/-8.45	-7.64/-6.87	-6.61/-6.39
Θ(180°)	-8.41/-8.07	-7.43/-6.29	-6.1/-6.18	-6.41/-7.58	-8.62/-9.03	-10.03/-10.45	-9.91/-9.34	-8.84/-9.33	-9.22/-9.36	-9.22/-9.04	-9.55/-9.84	-9.32/-9.02	-9.07/-9.58	-9.81/-10.51	-10.13/-10.41	-10.62/-10.52	-10.22/-10.08	-10.26/-9.68	-10.08/-11.73	-11.86/-12	-12.56/-12.11	-11.29/-9.96	-8.86/-7.97	-7.83/-8.27
Freq(Hz)	5.885G/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°)	-0.79/-0.56	-0.77/-0.88	-1.46/-2.26	-3.24/-4.29	-5.65/-7.1	-8.81/-10.77	-11.27/-10.75	-9.42/-7.52	-5.69/-4.21	-3.08/-2.14	-1.51/-1.09	-0.79/-0.63	-0.64/-0.81	-1.25/-1.81	-2.32/-3.17	-4.2/-5.44	-7.12/-9.15	-11.04/-11.41	-11.35/-9.55	-7.9/-5.83	-4.4/-3.19	-2.46/-1.72	-1.24/-0.75	-0.6/-0.79
Θ(7.5°)	-1.78/-1.6	-1.86/-2.33	-2.68/-3.28	-3.67/-4.64	-5.6/-6.36	-7.51/-8.83	-9.99/-10.58	-10.12/-8.48	-6.55/-4.86	-3.39/-2.1	-1.13/-0.53	-0.10/0.6	-0.08/-0.43	-0.84/-1.44	-2.18/-3.15	-4.36/-5.8	-7.12/-8.61	-10.05/-9.2	-8.62/-6.89	-6.06/-4.96	-4.39/-3.97	-3.29/-2.7	-2.27/-1.77	-1.64/-1.51
Θ(15°)	-2.35/-2.03	-2.36/-2.61	-2.97/-3	-2.83/-3.45	-4.03/-4.87	-5.72/-5.96	-6.41/-7.11	-8.23/-8.19	-7.36/-6.3	-4.76/-3.23	-2.2/-1.46	-0.78/-0.62	-0.85/-1.46	-2.18/-2.98	-3.77/-5.04	-5.94/-6.78	-7.48/-7.74	-7.4/-6.88	-6.75/-6.17	-5.92/-5.36	-5.05/-4.71	-3.94/-3.36	-3.29/-3.15	-2.74/-2.53
Θ(22.5°)	-2.19/-1.55	-1.1/-0.81	-0.6/-0.58	-1.22/-2.67	-3.91/-5.34	-5.42/-4.35	-3.7/-3.96	-5.05/-5.87	-5.49/-5.2	-4.67/-4.08	-3.58/-2.9	-2.37/-2.32	-2.81/-3.78	-5.04/-5.46	-5.75/-5.95	-6.15/-6.68	-7.47/-8.29	-7.38/-6.61	-5.2/-4.15	-3.9/-3.76	-3.85/-4.12	-4.34/-4.17	-3.68/-3.03	-2.43/-2.32
Θ(30°)	-0.53/-0.03	0.49/1.3	1.67/1.27	0.12/-1.24	-2.29/-2.54	-2.17/-1.6	-1.63/-1.96	-2.55/-3.57	-4.27/-3.71	-3.24/-3.52	-3.85/-4.35	-4.7/-4.92	-5.38/-5.94	-5.66/-5.65	-4.79/-4.2	-3.93/-4.35	-5.14/-5.92	-6.19/-5.57	-3.95/-1.95	-1.43/-1.58	-1.88/-2.24	-2.39/-2.16	-1.62/-1.2	-1.24/-1.11
Θ(37.5°)	1.52/1.92	1.98/1.99	1.77/1.62	0.97/0.23	-0.56/-1.73	-1.88/-1.18	-0.99/-0.92	-1.22/-2.14	-4.16/-4.54	-5.17/-4.79	-4.92/-5.54	-5.71/-6.52	-7.03/-6.04	-5.33/-4.1	-3.28/-2.88	-3.25/-4.13	-4.85/-4.31	-3.19/-2.09	-1.22/-1.58	-1.65/-1.74	-1.93/-0.95	0.28/1.06	0.51/-0.4	-0.64/-0.6
Θ(45°)	43/69	2.823/2.28	3.272/2.4	1.25/1.01	0.68/0.37	0.470/7.7	0.780/2.5	-0.6/-1.85	-3.29/-4.09	-3.58/-2.83	-2.92/-2.54	-3.19/-4.29	-5.41/-5.69	-4.52/-3.63	-2.94/-2.24	-2.35/-2.67	-3.22/-4.43	-5.14/-3.33	-1.69/-1.12	-1.89/-1.42	0.080/9.2	0.81	1.65/2.24	2.93/5.5
Θ(52.5°)	3.824/1.2	3.773/7.4	3.412/9.1	2.39/1.95	1.64/1.14	1.23/1.58	1.6/0.87	0.3/-0.95	-1.03/-0.54	-0.92/-1.51	-2.13/-2.8	-2.86/-3.44	-3.67/-3.24	-2.59/-1.26	-0.22/-0.36	-0.7/-1.66	-2.94/-2.14	0.030/3.1	0.570/7.1	1.34/1.74	1.71/2.68	2.92/3.28	2.18/3.01	
Θ(60°)	3.973/6.7	3.78/3.93	3.283/6.3	3.312/5.9	1.96/1.67	1.81/1.64	1.430/9.9	0.04/-0.8	-1.17/-1.38	-2.08/-2.76	-2.15/-2.29	-1.42/-1.58	-1.04/-1.29	-2.3/-0.86	0.080/-0.5	0.060/0.4	-0.97/-0.29	1.21/1.29	1.82/2.13	2.33/2.58	3.33/2.2	3.444/0.1	4.944/2.7	2.84/3.09
Θ(67.5°)	5.374/5.3	4.634/3.7	3.08/2.93	2.39/1.88	1.61/1.14	0.49/-0.16	-0.30/1.2	0.69/0.42	-0.46/-1.71	-2.31/-3.12	-1.21/-0.49	-0.02/-0.24	0.34/-0.54	-1.48/-0.79	-0.73/-0.58	-0.08/-0.77	-0.820/7	2.09/2.39	2.44/2.81	3.484/0.8	3.52/3.3	2.11/2.64	4.62/5.39	4.484/2.4
Θ(75°)	6/5/22	5.58/5/13	3.94/2.81	1.74/1.39	1.23/1.14	0.750/4	0.571/0.7	1.74/1.39	0.63/-0.82	-1.82/-2.27	-0.82/-0.51	0.12/-0.11	1.030/7.5	0.510/3.9	0.24/1.19	1.230/0.2	-0.520/1.7	1.83/2.61	3.514/5.7	5.15/5.03	4.174/1.9	4.084/6.5	5.726/6.8	5.764/7.9
Θ(82.5°)	6.295/1.9	5.875/5.81	4.97/4	2.1/1.94	1/3	2.03/1.07	0.220/5.2	1.63/2.04	1.05/-0.55	-1.78/-3.06	-2.23/-0.46	-0.01/-0.14	1.440/8.6	0.410/0.1	0.221/8.6	1.010/0.6	1.442/14	2.46/3.45	3.74/3.69	4.23/8.8	3.94/4.3	4.114/6.2	5.316/3.1	5.874/6.7
Θ(90°)	6.214/5.9	5.195/1.4	3.592/2.3	0.420/9.9	0.871/0.1	1.040/7.4	0.570/0.46	0.490/2.2	-1.11/-2.03	-2.42/-1.86	-0.15/-0.1	0.490/5.9	1.88/1.61	1.060/4.2	0.322/0.6	1.7/1.69	1.41/1.33	4.3/3.42	2.82/3.45	4.424/7.5	4.24/3.73	3.844/9.8	5.446/4.1	5.854/6.1
Θ(97.5°)	4.64/6.3	3.93/9.2	3.06/1.45	0.31/-1.29	-0.15/0.13	1.38/1.06	-0.07/-0.65	-0.77/-1.43	-3.27/-2	-1.78/-0.27	1.330/4.6	1.86/0.94	0.21/-0.42	-0.61/1.19	0.19/2.37	0.21/1.25	4.19/4.43	3.39/3.33	4.72/5.05	4.77/4.06	4.38/5.7	5.75/5.85	5.97/4.48	
Θ(105°)	1.72/2.2	1.75/2.53	2.992/0.3	1.920/4.4	-0.120/6.6	1.67/1.69	0.42/1.63	-2.88/-3.87	-5.02/-4.32	-3.39/-3.18	-1.84/-0.23	2.19/-0.06	3.702/14	2.370/1.6	-0.020/3.4	1.38/2.57	0.322/3.9	4.370/4.44	0.39/2.19	4.144/4.9	5.114/6.4	4.054/9.6	4.984/9.1	3.992/7.6
Θ(112.5°)	-0.080/1.6	-0.16/0.9	1.71/1.25	0.81/-0.68	-1.77/-0.18	2.06/2.15	0.55/-0.83	-1.36/-4.02	-4.92/-4.05	-3.24/-3.06	-1.740/1.6	2.18/-0.04	0.960/7.8	0.66/-1.6	-0.05/-0.94	2.09/2.13	1.16/2.93	3.690/5.6	0.31/1.96	3.84/0.1	3.71/1.8	0.380/8.2	2.31/2.51	2.40/6.3
Θ(120°)	-1/0.6	0.020/0.2	1.55/1.15	0.480/1.6	0.01/1.65	1.79/1	0.02/-1.56	-1.67/-1.24	-1.15/-1.06	-2.01/-1.51	-2.6/-1.09	0.59/-2.15	-0.2/-1.48	-2.21/-2.66	-2/-4.66	0.1/1.25	-2.44/-1.15	2.49/-0.28	-0.82/-0.05	1.47/2.21	-0.640/0.2	-0.020/5.9	2.53/1.38	0.95/0.09
Θ(127.5°)	-1.49/-1.41	-1.37/-1.16	-0.76/-0.11	-0.260/3.6	0.95/1.97	2.12/1.36	-0.39/-1.37	-1.07/-1.87	-3.22/-2.33	-3.16/-2.1	-2.38/-1.04	-2.86/-2.45	-2.66/-4.48	-5.65/-1.55	-0.91/-2.43	-0.15/-1.41	-0.94/-0.84	1.71/-1.77	-4.41/-4.51	-0.940/0.1	-0.41/-1.17	-1.91/-0.7	1.84/1.63	-0.39/-0.52
Θ(135°)	-3.26/-3.99	-3.66/-2.99	-2.54/-2.24	-1.04/-0.3	0.44/1.51	2.13/1.52	-0.27/-1.89	-1.94/-1.73	-1.48/-1.92	-3.07/-4.25														



Radiated Composite Gain Data <2.4GHz and 5GHz U-NII 1~U-NII 4>

Appendix A

Θ(22.5°)	-7.82/-6.73	-6.04/-4.52	-3.56/-3.2	-2.89/-2.31	-1.09/-0.44	0.020/0.45	0.380/0.31	-0.02/-0.46	-0.81/-1.38	-1.98/-2.3	-2.65/-3.11	-3.87/-4.48	-4.58/-3.72	-2.54/-1.59	-0.86/-0.53	-0.19/0.04	0.43/0.75	0.79/0.81	0.76/0.64	0.34/-0.36	-1.16/-1.92	-2.72/-3.4	-4.27/-5.37	-6.11/-7.42
Θ(30°)	-4.63/-3.7	-2.93/-2.26	-1.79/-1.86	-1.22/-0.37	0.46/1.05	1.79/1.82	1.180/85	0.29/0.04	-0.2/-0.69	-1.41/-2.33	-3.61/-4.97	-5.8/-6.99	-7.83/-7.86	-7.44/-6.08	-4.39/-2.59	-0.94/0.09	0.40/0.51	1/1.49	1.72/1.55	0.78/-0.28	-1.67/-3.46	-4.8/-5.7	-6.41/-6.99	-6.1/-5.39
Θ(37.5°)	-1.74/-1.63	-1.6/-1.62	-2.35/-2.17	-1.31/-0.67	0.09/0.49	0.52/0.57	0.75/0.75	0.39/0.18	-0.21/-1.01	-1.47/-2.24	-3.67/-5.86	-6.38/-6.68	-7.62/-7.36	-6.1/-4.79	-3.06/-1.45	-0.42/-0.33	-1.01/-0.76	0.14/1.46	1.98/1.72	0.99/-0.38	-1.96/-2.98	-3.77/-4.12	-4.93/-5.57	-4.76/-3.79
Θ(45°)	-4.77/-3.37	-2.85/-2.73	-1.87/-0.92	-0.36/-0.05	0.54/1.03	0.36/-0.45	-0.87/-0.53	0.36/0.59	0.33/-1.06	-2.24/-2.93	-3.76/-5.96	-7.43/-8.75	-8.34/-6.85	-4.6/-3.75	-3.36/-2.76	-2.33/-2.16	-2.45/-2.07	-1.01/-0.51	-0.65/-1.17	-2.52/-4.26	-1.91/-2.99	-3/-2.31	-2.45/-3.86	-4.54/-5.1
Θ(52.5°)	-5.61/-4.61	-4.59/-3.69	-2.96/-2.6	-2.75/-2.61	-0.88/-0.25	-0.26/0.19	-0.17/-0.18	-0.19/-0.01	-0.35/-2.04	-4.19/-6.57	-7.46/-5.76	-10.9/-7.58	-17.46/-6.85	-5.02/-3.66	-2.92/-1.11	-2.92/-3.37	-3.44/-3.04	-3.11/-2.7	-3.18/-3.85	-3.2/-1.87	-4.76/-1.81	-2.23/-3.59	-4.02/-5.2	-5.86/-7.11
Θ(60°)	-8.23/-7.23	-5.17/-4.13	-3.39/-2.73	-1.58/-1.13	-0.89/0.02	0.24/-0.04	-1.34/-2.66	-2.88/-2.12	-2.13/-4.08	-5.6/-6.67	-5/-5.02	-5.53/-7.83	-10.92/-7.78	-5.46/-4.71	-5.03/-3.39	-1.83/-1	-0.45/-0.86	-1.15/-1.94	-1.75/-1.78	-2.52/-2.47	-2.37/-3.24	-4.21/-4.96	-5.34/-6.66	-8.9/-11
Θ(67.5°)	-7.86/-6.7	-5.37/-3.27	-2.17/-1.67	-1.08/-1.26	-2.76/-1.88	-0.17/-0.38	-0.18/-1.1	-1.23/-1.69	-3.21/-4.82	-4.95/-5.1	-3.34/-3.19	-5/-6.48	-8.74/-6.35	-5.39/-5.12	-4.32/-4.59	-4.23/-1.77	-0.86/-0.63	-0.5/-1.22	-1.83/-2.28	-1.96/-1.77	-2.52/-3.28	-4.46/-5.21	-5.59/-5.69	-7.03/-7.76
Θ(75°)	-7.33/-6.13	-4.62/-4.95	-4.32/-3.2	-2.27/-1.95	-0.81/-0.2	-0.62/-1.32	-1.63/-2.77	-3.59/-5.43	-5.69/-4.01	-2.44/-2.66	-3.62/-4.11	-4.27/-4.91	-4.86/-4.56	-3.53/-4.12	-4.19/-6.07	-5.54/-3.25	-2.41/-1.67	-0.36/-0.7	-0.86/-0.6	-1.16/-3.45	-3.87/-5.07	-6.95/-7.76	-8.95/-9.6	
Θ(82.5°)	-6.2/-6.69	-6.59/-4.43	-3.12/-2.05	-1.7/-1.66	-1.84/-1.99	-1.89/-1.7	-2.1/-3.08	-3.74/-2.52	-1.58/-1.14	-1.44/-3.33	-5.44/-6.26	-6.42/-5.63	-4.28/-2.44	-3.64/-5.38	-5.62/-5.55	-2.18/-0.14	-0.87/-1.66	-0.84/-0.87	-0.86/0.23	0.61/-1.12	-2.9/-3.45	-3.61/-5.02	-7.27/-8.67	-8.77/-6.99
Θ(90°)	-3.35/-3.31	-3.81/-3.36	-2.5/-2.35	-2.38/-3.12	-3.19/-2.9	-2.48/-2.2	-1.89/-2.37	-2.51/-2.25	-1.05/-1.23	-2.6/-5.93	-8.77/-8.4	-9.72/-7.99	-4.87/-6.68	-5.43/-7.69	-6.35/-4.59	-1.89/-1.08	-1.45/-3.32	-2.27/-1.92	-1.6/-1.34	-1.55/-1.13	-0.65/-0.6	-1.72/-2.78	-3.08/-3.22	-2.58/-2.7
Θ(97.5°)	-4.14/-5.11	-6.64/-4.74	-4.83/-3.79	-3.94/-3.98	-4.61/-4.85	-4.35/-3.36	-3.26/-4.04	-3.52/-3.79	-4.77/-5.63	-5.01/-4.17	-3.45/-3.01	-2.28/-2.32	-3.92/-2.68	-5.5/-6.55	-6.95/-6.2	-4.63/-5.39	-3.66/-1.58	-0.98/-0.65	0.08/-0.21	0.63/0.77	-0.56/-1.67	-2.44/-1.55	-2.05/-2.1	-3.97/-5.26
Θ(105°)	-3.87/-3.86	-3.84/-2.23	-3.34/-2.41	-2.82/-3.26	-2.34/-2.09	-1.53/-1.94	-2.14/-2.92	-4.17/-4.43	-3.1/-1.77	-1.42/-3.12	-5.09/-3.68	-2.27/-3.36	-3.81/-2.32	-3.52/-6.41	-7.84/-6.18	-2.62/-1.6	-1.99/-1.76	-0.7/-1.81	-0.61/-0.99	-0.94/-0.98	-1.6/-2.51	-3.52/-3.23	-3.57/-3.14	-3.25/-4.1
Θ(112.5°)	-1.86/-0.94	-2.45/-1.76	-1.52/-0.48	0.15/0.01	-0.11/-0.64	-1.4/-2.53	-4.31/-4.82	-4.96/6	-5.64/-4.85	-5.77/-6.36	-5.62/-3.88	-6.95/-7.45	-5.83/-4.7	-5.35/-6.54	-6.98/-5.04	-2.98/-0.07	-1.53/-0.77	-0.23/-0.31	1.38/1.8	0.02/-1.03	-0.61/-0.98	-4.58/-3.9	-3.62/-3.69	-1.54/-4.74
Θ(120°)	-6.11/-3.17	-2.16/-1.21	-0.46/-0.55	-0.68/-1.69	-2.48/-2.37	-2.15/-1.83	-1.84/-2.12	-1.7/-1.76	-2.99/-4.17	-4.66/-5.28	-6.74/-7.91	-6.61/5	-4.76/-4.1	-6.63/-6.97	-6.16/-4.51	-4.47/-2.55	-3.66/-2.48	-1.69/-1.36	-1.42/0.24	0.81/-0.06	-0.6/-0.94	-1.58/-1.98	-4.82/-5.67	-4.03/-4.3
Θ(127.5°)	-3.08/-3.72	-5.39/-5.31	-4.19/-3.69	-3.05/-1.51	-1.73/-2.48	-1.85/-1.04	-1.23/-1.6	-2.05/-3.17	-3.49/-4.42	-4.2/-5.07	-7.21/-8.73	-9.88/-8.05	-4.66/-3.77	-5.37/-7.52	-6.99/-5.63	-3.07/-3.85	-2.33/-5.12	-2.23/-2.32	-1.93/-1.84	-1.33/-1.2	-0.36/0.1	-0.56/-2.09	-1.91/-3.03	-2.6/-3.29
Θ(135°)	-7.25/-3.7	-3.14/-3.69	-3.14/-4.02	-5.55/-5.51	-4.69/-3.75	-4.08/-3.74	-3.68/-3.96	-4.17/-4.3	-5.49/-5.89	-6.7/-8.37	-9.81/-8.11	-9.38/-9.47	-5.28/-5.57	-6.05/-5.61	-4.3/-2.87	-3.14/-1.38	-1.33/-2.39	-1.31/-2.8	-1.76/-0.07	-0.24/-1.12	-0.44/0.05	-0.93/-2.74	-5.31/-7.01	-4.93/-6.05
Θ(142.5°)	-1.32/-2.75	-3.94/-3.65	-3.47/-3.51	-5.01/-5.54	-5.5/-4.13	-3.47/-3.84	-4.73/-4.42	-4.13/-4.84	-6.94/-9.7	-10.8/-9.1	-5.84/-4.25	-3.64/-3.04	-3.85/-4.09	-3.54/-3.72	-4.44/-2.67	-1.95/-0.91	-1.69/-2.58	-3.29/-4.46	-3.42/-2.14	-1.29/-1.09	-1.3/-1.53	-1.59/-3.14	-4.07/-4.45	-3.34/-2.05
Θ(150°)	-3.37/-3.11	-3.79/-4.04	-4.18/-0.52	-4.46/-3.8	-3.39/-3.76	-4.36/-4.95	-5.84/-6.51	-6.4/-6.32	-5.83/-4.53	-3.85/-5.59	-8.65/-9.02	-7.02/-6.42	-6.55/-4.44	-4.63/-6.1	-5.91/-3.96	-2.56/-1.97	-3.69/-4.98	-4.72/-7.49	-3.81/-2.64	-2.65/-3.07	-3.69/-3.43	-3.41/-2.85	-2.08/-2.31	-3.09/-3.3
Θ(157.5°)	-3.04/-2.91	-3.21/-3.66	-3.63/-3.26	-3.49/-4.22	-5.2/-8.3	-5.99/-6.56	-7.26/-7.88	-6.17/-7.52	-6.54/-4.54	-3.29/-3.21	-6.34/-35	-4.18/-3.64	-3.51/-3.95	-4.71/-5.64	-5.68/-5.52	-4.97/-4.26	-4.38/-4.61	-4.96/-4.97	-4.62/-2.77	-1.53/-1.49	-2.13/-2.48	-2.53/-2.64	-2.78/-2.8	-3.23/-3.47
Θ(165°)	-1.11/-1.2	-1.67/-2.74	-3.73/-4.44	-4.79/-4.95	-4.9/-4.91	-5.57/-6.5	-6.89/-7.29	-7.84/-7.99	-7.36/-5.73	-4.37/-3.56	-3.67/-4.03	-3.76/-2.47	-1.12/-0.3	-0.27/-1.14	-2.36/-3.4	-3.36/-3.36	-3.24/-3.26	-2.98/-2.55	-1.73/-1.36	-1.46/-1.52	-1.38/-0.95	-0.57/-0.61	-0.68/-0.69	-0.9/-1.12
Θ(172.5°)	-6.55/-5.94	-5.29/-4.49	-4.12/-3.82	-3.58/-3.43	-3.35/-3.88	-4.78/-5.79	-6.44/-6.75	-6.73/-6.67	-6.59/-6.74	-6.77/-6.97	-6.66/-5.96	-5.05/-4.21	-3.47/-2.98	-2.67/-2.37	-2.1/-1.9	-1.81/-1.79	-2.04/-2.32	-2.41/-2.65	-2.38/-2.61	-2.75/-2.7	-2.77/-2.92	-3.39/-3.74	-4.8/-5.37	-6.91/-6.93
Θ(180°)	-9.96/-10.78	-10.9/-10.27	-9.05/-7.74	-6.65/-5.9	-5.38/-5.02	-4.73/-4.38	-4.11/-3.32	-3.17/-2.94	-3.22/-3.67	-4.17/-4.8	-5.82/-7.14	-8.5/-9.96	-10.62/-9.57	-7.89/-6.42	-5.28/-4.38	-3.56/-3.04	-2.85/-2.97	-3.08/-3.33	-3.1/-3.12	-3.09/-3.22	-3.46/-4.01	-4.64/-5.22	-5.76/-6.48	-7.73/-9.14
Freq(Hz)	5.3G/Pol.	Theta/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
DC(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°)	-0.88/-0.9	-1.04/-1.36	-1.75/-2.21	-2.67/-3.28	-4.15/-4.81	-5.59/-6.29	-6.61/-6.03	-5.22/-4.4	-3.24/-2.4	-1.57/-1.31	-1.11/-1.11	-1.08/-0.9	-0.62/-0.47	-0.47/-0.7	-0.91/-1.22	-1.96/-2.78	-3.79/-4.72	-5.58/-6.15	-5.76/-5.55	-4.78/-4.17	-3.46/-2.9	-2.27/-2.05	-1.6/-1.53	-1.46/-1.09
Θ(7.5°)	0.36/0.24	0.23/0.18	-0.19/-0.74	-0.87/-1.37	-1.91/-2.31	-2.98/-3.87	-4.38/-4.53	-4.54/-4.03	-3.78/-3.2	-2.74/-2.62	-2.71/-2.59	-2.34/-2.24	-2.02/-1.75	-1.73/-1.7	-1.93/-2.53	-3.08/-4.09	-5.09/-6.11	-7.33/-7.84	-7.53/-6.72	-5.7/-4.38	-3.32/-2.58	-1.51/-0.96	-0.63/-0.2	-0.01/0.26
Θ(15°)	1.82/1.98	2.21/2.12	1.72/1.66	1.81/46	0.94/0.36	-0.64/-1.82	-3/-3.88	-4.07/-4.23	-4.52/-4.56	-4.54/-4.76	-4.67/-4.64	-4.05/-3.24	-2.09/-1.21	-0.82/-0.42	-0.48/-0.88	-1.51/-2.44	-3.55/-4.99	-6.59/-8.61	-7.73/-8.05	-7.05/-5.16	-3.92/-2.68	-1.39/-0.19	0.69/1.4	1.54/-1.87
Θ(22.5°)	2.35/2.31	1.94/1.37	1.03/1.27	1.59/1.67	1.34/0.46	-0.68/-2.34	-4.06/-5.31	-5.23/-4.43	-3.66/-3.5	-3.86/-3.98	-4.08/-4.11	-3.59/-2.48	-1.5/-1.07	-0.48/-0.13	-0.05/-0.02	-0.16/-0.76	-1.49/-2.97	-4.94/-7.11	-9.3/-7.7	-5.08/-2.71	-1.27/-0.39	0.44/0.9	1.47/1.85	1.94/2.2
Θ(30°)	1.61/-3.9	1.37/1.03	0.95/-1.41	1.98/1.97	1.35/0.24	-1.56/-3.78	-4.48/-4.68	-4.38/-3.86	-3.29/-3.16	-3.07/-3.29	-2.98/-2.19	-1.72/-1.55	-1.58/-1.72	-1.76/-1.53	-0.52/0.25	0.42/0.04	-0.1/-0.67	-2.2/-3.77	-4.72/-4.91	-3.86/-1.46	-0.2/0.3	0.51/0.58	0.86/0.83	1.03/-1.17
Θ(37.5°)	0.98/1.23	0.81/0	-0.14/0.13	0.29/0.07	-1.05/-2.45	-4.12/-4.73	-4.24/-3.39	-2.66/-2.34	-2.5/-2.69	-2.91/-3.7	-3.43/-2.09	-0.86/-0.1	-0.08/0.56	-0.87/-1.08	-0.56/-0.11	-0.14/-0.18	-0.27/-1.67	-3.68/-4.65	-3.87/-3.23	-2.78/-1.26	-0.02/0.82	1.12/1.16	1.28/1.41	1.46/0.99
Θ(45°)	2.68/2.43	1.68/0.88	0.92/0.94	0.47/-0.15	-0.81/-1.54	-2.97/-4.39	-4.32/-3.84	-3.18/-3.35	-3.28/-3.42	-2.98/-1.43	-0.2/-0.09	-0.69/-1.28	-1.71/-1.43	-0.54/-0.09	0.07/-0.34	-1.9/-3.1	-4.48/-6.55	-7.2/-4.84	-1.73/-0.55	0.49/1.26	1.95/-2.32	2.86/3.48	3.62/2.95	
Θ(52.5°)	3.33/2.94	1.15/-0.39	-0.29/-0.69	-1.23/-0.9	-0.91/-1.96	-3.87/-3.9	-3.57/-3.73	-4.14/-1.47	-4.09/-3.33	-2.63/-1.61	-1.79/-1.17	-1/-1.54	-1.32/-0.34	-0.39/-1.4	-1.49/-1.28	-1.89/-3.41	-3.39/-2.61	-2.81/-2.62	-1.55/-0.04	1.39/1.92	1.92/2.65	3.29/3.55	3.98/4.36	4.09/3.39
Θ(60°)	3.28/2.57	0.46/-0.88	-1.55/-2.49	-2.44/-1.32	-1.16/-1.78	-3.13/-4.29	-4.13/-3.89	-4.81/-5.49	-5.25/-4.29	-3.57/-1.91	-2.83/-2.69	-2.46/-3.29	-2.07/-0.67	-1.23/-3.21	-2.92/-1.94	-2.47/-3.81	-3.87/-1.97	-0.07/-0.51	-0.82/-0.27	0.54/2.13	2.38/2.59	3.63/86	4.74/5.06	4.36/3.07
Θ(67.5°)	2.29/2.3	1.02/0.34	-0.78/-1.93	-1.62/-1.27	-1.61/-1.68	-2.33/-2.38	-3.04/-4.4	-5.47/-5.53	-5.03/-4.06	-2.74/-1.98	-2.41/-1.5	-0.51/-0.56	-0.14/-0.65	-1.9/-3.33	-3.6/-1.11	0.51/0.07	-1.75/-2.93	-2.46/-1.78	-1.04/1.03	2.57/2.88	3.13/2.7	3.02/3.31	4.24/4.68	3.92/2.52
Θ(75°)	1.69/1.76	0.38/1.05	0.51/0.83	-2.03/-1.32	-0.7/-0.27	-0.51/-1.39	-2.94/-5.09	-6.01/-5.67	-5.64/-5.24	-4.51/-4.81	-2.77/-3.06	-4.13/-1.53	0.49/1.05	0.66/-1.56	-2.99/-1.32	-1.1/-0.84	-2.36/-1.83	-0.88/-0.76	0.31/27	2.45/4.34	4.06/3.86	3.38/2.85	3.61/4.48	4.01/2.08
Θ(82.5°)	0.54/0.45	-0.4/1	0.42/-1.39	-1.83/-2.06	-1.79/-1.46	-2.04/-3.42	-3.8/-3.8	-4.27/-5.03	-5.4/-5.34	-4.92/-4.38	-3.37/-3.47	-1.65/-0.97												



Radiated Composite Gain Data <2.4GHz and 5GHz U-NII 1~U-NII 4>

Appendix A

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°)	-9.57/-9.12	-5.83/-4.12	-1.94/-0.49	0.25/0.94	1.34/1.67	1.84/1.77	1.71/-4.44	1.33/1.12	0.6/-0.21	-1.24/-2.76	-4.5/-6.64	-9.4/-10.28	-10.3/-7.89	-5.4/-3.4	-2.3/-1.28	-0.35/0.21	0.88/1.33	1.69/1.78	1.93/1.73	1.47/0.94	0.24/-0.74	-1.5/-2.93	-4.69/-7.23	-8.63/-9.65
Θ(7.5°)	-6.71/-5.8	-4.4/-3.33	-2.56/-1.32	-0.83/-0.23	0.49/0.99	1.35/1.44	1.52/1.61	1.75/1.84	1.51/0.56	-0.55/-1.85	-3.18/-4.93	-7.31/-10.97	-12.69/-10.9	-8.68/-5.93	-3.97/-2.37	-1.08/-0.03	0.67/1.21	1.57/1.67	1.75/1.42	0.83/0.03	-0.8/-1.57	-2.16/-3.77	-6.34/-9.41	-9.69/-7.66
Θ(15°)	-6.18/-5.03	-4.33/-3.86	-3.21/-2.4	-1.64/-0.99	-0.06/0.59	1.09/1.49	1.73/1.96	1.7/-1.41	0.86/0.21	-0.64/-1.53	-3.01/-4.81	-6.43/-7.67	-8.03/-7.41	-6.46/-4.99	-3.4/-1.97	-0.74/0.21	0.86/1.23	1.17/0.81	0.13/-0.71	-1.52/-2.24	-3.12/-3.81	-5.13/-5.74	-6.77/-6.48	
Θ(22.5°)	-5.122/-6.19	-6.22/-5.01	-3.71/-2.16	-1.32/-0.66	0.01/0.64	1.13/1.56	1.95/2	2.02/1.72	1.22/0.41	-0.5/-2.11	-4.12/-6.08	-6.43/-8.25	-8.09/-6.64	-5.15/-3.77	-2.6/-1.62	-0.85/0.16	0.97/1.46	1.52/1.35	0.86/0.06	-0.88/-1.58	-2.23/-2.39	-2.71/-3.11	-3.28/-3.55	-3.81/-4.72
Θ(30°)	-3.77/-3.99	-3.56/-3.16	-2.41/-2.09	-1.87/-1.27	-0.19/0.71	1.11/1.58	2.17/2.24	2.18/1.6	0.89/0.22	-0.73/-2.26	-4.77/-7.14	-7.79/-7.43	-6.99/-6.2	-5.08/-4.29	-3.37/-2.34	-1.38/-0.29	0.56/1.3	1.68/1.6	1.14/0.5	0.02/0.68	-1.32/-1.37	-1.19/-0.95	-0.92/-1.41	-1.85/-2.62
Θ(37.5°)	-3.4/-4.51	-4.83/-3.74	-3.43/-2.51	-1.34/-0.64	-0.17/0.07	0.22/0.61	0.68/0.64	0.73/0.58	-0.17/-1.1	-2.25/-4.18	-6.96/-8.9	-10.15/-8.36	-6.89/-5.74	-4.26/-3.05	-2.23/-0.95	0.07/0.33	0.25/0.14	0.15/0.38	0.72/0.51	-0.13/-0.46	-0.5/-1.09	-1.48/-1.64	-1.95/-1.76	-1.52/-2.41
Θ(45°)	-2.81/-3.08	-3.22/-3.84	-2.99/-1.29	-0.75/-0.95	-0.69/-0.59	-0.77/-0.89	-1.13/-0.99	-0.41/-0.16	-0.32/-1.1	-2.84/-4.58	-6.98/-7.2	-5.94/-6.65	-6.42/-7.5	-4.37/-2.96	-2.03/-0.99	-0.22/0.05	-0.09/-0.44	-1.22/-1.09	-0.28/0.33	0.5/0.02	-0.64/-1.01	-1.17/-1.12	-1.44/-1.92	-2.48/-2.16
Θ(52.5°)	-1.04/-0.28	-0.81/-1.61	-1.68/-1.69	-1.58/-1.17	-0.93/-1.19	-1.31/-0.87	-0.86/-1.59	-1.85/-1.56	-1.6/-2.18	-3.48/-4.21	-4.58/-6.05	-6.8/-6.39	-4.51/-4.5	-3.43/-1.97	-1.73/-1.48	-1.12/-0.65	-0.62/-1.03	-1.96/-2.55	-2.41/-1.99	-0.9/-0.94	-1.5/-2.03	-1.78/-1.02	-0.62/-0.64	-1.58/-1.75
Θ(60°)	-6.04/-5.35	-5.08/-4.33	-2.71/-1.51	-0.88/-0.82	-1.03/-1.51	-1.25/-1.01	-0.77/-0.07	0.14/-0.1	-1.22/-2.31	-3.26/-3.67	-3.57/-3.59	-3.89/-4.65	-5.39/-7.29	-6.78/-6.52	-4.73/-3.06	-1.24/-1.53	-3.08/-3.34	-2.75/-3.21	-3.54/-3.05	-2.9/-2.49	-2.28/-2.35	-3.1/-2.79	-1.99/-2.63	-3.26/-4.61
Θ(67.5°)	-7.09/-5.08	-4.33/-3.13	-2.52/-2.12	-1.77/-2.11	-1.91/-1.2	0.01/0.97	1.24/0.33	-2.1/-2.58	-1.79/-2.57	-4.02/-5.35	-6.4/-4.04	-4.11/-4.83	-5.36/-4.93	-4.59/-5.21	-5.3/-4.09	-2.55/-2.82	-2.59/-2.74	-2.65/-2.31	-1.27/-1.3	-1.74/-1.91	-2.32/-3.12	-3.95/-5.25	-5.21/-5.2	-6.93/-7.21
Θ(75°)	-5.71/-4.17	-4.1/-3.5	-2.81/-2.45	-2.56/-3.3	-4.36/-4.05	-1.13/0.57	0.03/0.96	-2.01/-2.13	-1.98/-3.89	-4.69/-2.8	-1.69/-1.41	-1.62/-2.13	-3.38/-3.23	-3.14/-4.87	-6.07/-6.62	-4.56/-2.54	-1.11/-1.64	-0.73/-0.89	-0.77/-0.08	-1.73/-3.23	-4.79/-6.64	-7.34/-7.32	-7.77/-6.76	
Θ(82.5°)	-5.58/-7.77	-5.92/-3.96	-3.94/-5.02	-5.64/-6.14	-4.88/-3.12	-1.75/-0.95	-0.05/0.82	0.04/-2.53	-4.24/-3.93	-4.28/-4.2	-4.64/-6.5	-8.29/-8.96	-8.07/-5.44	-4.27/-6.93	-7.3/-6.35	-4.28/-2.17	-1.65/-2.76	-1.05/-1.66	-1.23/-0.13	1.2/0.33	-1.58/-2.03	-2.43/-2.88	-3.47/-5.04	-6.95/-8.91
Θ(90°)	-8.56/-6.11	-5.59/-5.37	-6.53/-6.94	-5.66/-5.34	-5.47/-4.65	-3.6/-0.86	0.22/0.31	0.36/-0.09	-1.25/-1.09	-1.9/-3.64	-6.74/-8.06	-6.17/-4.82	-4.92/-3.14	-2.88/-5.27	-5.11/-3.53	-1.82/0.6	0.52/-1.32	-1.79/-2.02	-0.38/0.71	1.42/0.02	-1.1/-2.01	-3.29/-4.4	-6.28/-9.49	-12.17/-9.35
Θ(97.5°)	-7.56/-6.79	-6.24/-4.21	-3.87/-3.79	-5.17/-5.2	-4.12/-3.48	-1.58/-0.57	-0.18/-0.53	0.08/-0.66	0.18/0.32	0.01/-1.27	-2.47/-2.29	-5.67/-5.71	-4.7/-2.49	-4.79/-7.06	-8.1/-7.62	-2.63/0.51	-0.33/-0.08	0.77/-0.87	-0.62/0.12	0.11/-0.31	-1.22/-3.62	-5.98/-8.25	-8.83/-8.79	-7.27/-7.04
Θ(105°)	-5.43/-5.79	-4.98/-5.47	-4.85/-3.27	-2.38/-1.05	-0.41/-1.62	-2.71/-1.93	-2.04/-1.98	-1.59/-0.68	-0.74/-1.87	-2.01/-2.18	-3.14/-4.18	-5.15/-5.64	-6.23/-5.07	-4.82/-7.49	-8.13/-5.8	-2.73/-2.45	-1.96/-0.93	-0.4/-1.55	-0.36/-0.76	-0.79/-0.56	-1.37/-1.78	-4.56/-8.03	-6.69/-4.94	-4.6/-3.84
Θ(112.5°)	-8.05/-7.54	-7.78/-6.87	-6.02/-4.7	-3.38/-2.61	-1.07/-0.54	-0.8/-0.92	-0.76/-1.12	-0.42/-0.58	-2.02/-3.43	-4.95/-6.07	-8.74/-7.93	-7.82/-8.11	-8.83/-5.77	-4.43/-8.88	-8.15/-8.95	-6.39/-2.67	-1.74/-2.33	-1.6/-2.07	0.24/0.14	-4.16/-2.61	-3.51/-4.97	-4.96/-8.67	-6.36/-4.9	-5.74/-6.42
Θ(120°)	-7.55/-6.93	-7.95/-8.05	-8.1/-6.53	-3.56/-2.81	-1.69/-0.99	-1.24/0.08	0.28/-0.52	-0.38/-0.24	-1.78/-3.15	-5.66/-7.47	-8.07/-5.39	-5.73/-9.98	-10.53/-8.34	-7.03/-8.55	-6.84/-9.88	-9/-4.13	-5.55/-2.43	-2.73/-4.31	-2.19/-1.01	-2.95/-2.43	-1.03/-3.76	-5.77/-7.01	-5.43/-3.66	-3.59/-4.5
Θ(127.5°)	-9.1/-8.39	-8.25/-6.92	-3.52/-3.7	-1.6/-1.11	-1.24/-0.25	0.46/1.03	0.81/0.24	-1.28/-2.29	-2.9/-4.33	-4.86/-6.2	-5.86/-5.67	-5.66/-6.39	-6.25/-4.18	-4.22/-6.19	-7.76/-4.49	-4.96/-2.81	-2.82/-2.17	-4.61/-4.92	-1.99/-2.87	-2.65/-1.63	-0.95/-3.61	-5.42/-6.71	-7.43/-8.58	-5.12/-4.29
Θ(135°)	-3.43/-4.38	-4.2/-5.46	-4.52/-3.45	-2.52/-0.32	0.3/-0.35	-0.51/-0.37	-0.82/-1.88	-3.11/-4.11	-4.67/-4.57	-5.08/-6	-5.62/-4.19	-4.75/-6.25	-5.24/-1.47	-3.84/-9.22	-6.44/-5.44	-3.72/-2.82	-2.8/-3.87	-3.02/-3.18	-1.03/-0.05	-1.96/-5.04	-4.41/-3.92	-3.69/-5.38	-6.71/-8.25	-6.47/-3.97
Θ(142.5°)	-4.12/-4.69	-4.01/-3.7	-2.27/-1.46	-2.04/-2.18	-1.86/-1.86	-1.86/-1.9	-2.71/-3.24	-3.97/-4.25	-4.53/-3.32	-2.95/-3.84	-4.22/-3.3	-3.16/-4.09	-2.47/-2.64	-4.87/-5.89	-6.35/-3.27	-3.92/-5.21	-2.87/-2.86	-3.93/-3.87	-2.63/-1.32	-1.52/-2.98	-4.04/-3.65	-4.52/-3.32	-4.84/-5.14	-3.94/-3.49
Θ(150°)	-0.92/-0.98	-2.05/-2.44	-3.21/-3.63	-3.83/-3.88	-3.04/-2.59	-2.19/-2.23	-2.6/-2.7	-3.06/-3.69	-4.59/-4.01	-3.76/-1.47	-3.97/-3.91	-4.31/-5.62	-6.45/-5.68	-5.27/-6.64	-7.93/-5.16	-3.83/-4.57	-3.86/-3.88	-5.77/-6.3	-5.34/-4.44	-6.56/-9.53	-7.24/-6.2	-7.19/-6.55	-4.96/-4.02	-3.16/-1.9
Θ(157.5°)	-1.07/-1.17	-1.4/-1.34	-1.49/-2.2	-2.89/-3.49	-3.82/-3.76	-3.69/-3.78	-4.27/-5.04	-6.4/-7.82	-8.91/-9.67	-8.9/-5.92	-3.94/-2.69	-2.08/-1.84	-1.72/-1.73	-1.85/-2.55	-4.06/-5.63	-7.5/-8.59	-9.09/-3.82	-7.2/-6.19	-5.81/-5.98	-7.16/-7.27	-6.9/-6.87	-4.85/-3.04	-1.8/-0.88	-0.44/-0.27
Θ(165°)	-4.29/-3.15	-2.92/-3.9	-4.59/-4.4	-4.24/-4.1	-3.91/-3.93	-4.01/-4.96	-6.53/-7.89	-9.69/-10	-9.63/-8.58	-7.6/-6.69	-5.94/-4.44	-3.07/-2.11	-1.79/-2.05	-2.91/-3.67	-4.17/-4.06	-3.69/-3.37	-3.59/-4.09	-4.95/-5.58	-5.88/-6.21	-6.05/-5.95	-5.31/-4.27	-4.42/-5.38	-6.72/-7.17	-7.81/-6.92
Θ(172.5°)	-6.55/-6.3	-5.37/-4.45	-3.9/-4.17	-4.27/-4.79	-5.28/-6.28	-7.41/-8.3	-9.21/-9.7	-9.23/-9.35	-8.91/-8.2	-7.88/-8.24	-8.77/-7.84	-6.3/-4.71	-3.81/-3.51	-3.46/-3.36	-2.97/-2.65	-2.52/-2.63	-3.03/-3.45	-3.73/-3.88	-4.13/-4.49	-5.34/-6.19	-6.25/-6.68	-8.37/-8.29	-7.54/-7.28	-6.78/-6.46
Θ(180°)	-6.81/-7.28	-6.23/-5.55	-4.23/-4.22	-4.27/-4.59	-4.72/-4.75	-4.78/-4.47	-4.41/-4.56	-4.83/-4.91	-5.26/-5.29	-5.53/-5.72	-6.33/-6.87	-7.75/-9.04	-9.97/-9.83	-9.7/-9.53	-8.91/-8.26	-7.38/-6.83	-6.23/-6.37	-6.78/-6.89	-6.94/-7.11	-7.27/-6.98	-6.78/-7.19	-6.79/-5.7	-5.57/-5.8	-6.16/-6
Freq(Hz)	5.785G/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°)	1.69/1.7	1.64/1.52	1.07/0.32	-0.57/-1.56	-3.01/-4.1	-6.93/-9.68	-10.27/-9.27	-7.13/-5	-3.17/-1.54	-0.37/0.41	0.95/1.35	1.75/1.97	2.04/0.21	1.81/-38	0.87/0	-1.09/-2.52	-4.25/-6.5	-8.76/-10.09	-9.24/-7.03	-4.88/-3.65	-2.5/-1.3	-0.24/0.7	0.97/1.24	1.41/1.56
Θ(7.5°)	0.460.43	0.37/0.51	0.33/-0.1	-1.03/-1.77	-2.7/-3.79	-5.83/-7.02	-8.5/-8.69	-7.55/-5.76	-3.9/-2.44	-1.25/-0.46	0.16/0.8	1.33/1.76	1.94/1.99	1.76/1.32	0.79/-0.17	-1.29/-2.88	-4.94/-7.36	-9/-9.34	-8.1/-5.7	-3.63/-2.37	-1.32/-0.23	0.29/0.82	1.08/1.02	0.58/0.24
Θ(15°)	0.43/-0.32	-0.86/-0.94	-0.77/0.58	-0.84/-1.05	-1.92/-2.82	-3.79/-4.78	-5.46/-6.28	-5.64/-4.43	-3.16/-2.7	-1.99/-1.57	-1.18/-0.71	-0.22/0.12	0.44/0.7	0.68/0.54	0.06/-0.72	-1.96/-3.43	-5.23/-6.5	-6.51/-6.68	-5.6/-4.3	-3.21/-2.44	-1.78/-1.17	-0.87/0.26	0.49/1.1	0.90/7.6
Θ(22.5°)	1.96/1.9	1.65/1.03	0.67/0.93	0.51/-2.8	-1.64/-2.64	-3.12/-3.2	-3.61/-3.93	-4.48/-4.09	-2.95/-2.31	-2.2/-2.38	-2.73/-2.8	-2.54/-2.32	-1.99/-1.86	-1.8/-2.05	-2.27/-2.8	-3.52/-4.51	-5.62/-6.33	-6.82/-6.96	-5.64/-4.08	-2.36/-1.66	-1.26/-1.1	-1/-0.41	0.45/0.71	1.15/1.73
Θ(30°)	2.792.87	2.42/2.34	2.36/0.25	1.48/0.47	-0.65/-1.42	-1.73/-2.5	-3.38/-3.61	-4.47/-5.46	-5.35/-4.35	-3.44/-3.46	-3.99/-4.65	-4.36/-4.01	-3.72/-3.2	-2.68/-2.6	-2.76/-2.68	-2.79/-3.67	-4.53/-5.24	-5.6/-4.22	-3.14/-2.64	-1.88/-1.62	-1.52/-1.14	-0.96/-0.52	0.3/1	2.05/2.73
Θ(37.5°)	2.792.74	2.69/2.65	2.71/1.78	0.46/-0.96	-1.66/-1.58	-1.03/-0.83	-1.4/-2.21	-3.75/-5.1	-5.95/-5.62	-4.12/-4.06	-4.49/-4.54	-5.15/-4.98	-3.85/-3.47	-3.37/-3.38	-2.82/-2.53	-2.62/-3.09	-3.82/-4.17	-3.26/-1.81	-1.8/-1.94	-2.34/-2.77	-2.63/-2.16	-1.25/-0.44	1.84/1.83	1.75/1.83
Θ(45°)	3.02/3.25	2.85/2.37	2.28/1.87	0.74/-0.34	-0.79/-1.21	-1.43/-1.84	-2.32/-2.69	-3.14/-4.09	-4.45/-4.2	-3.28/-2.78	-3.62/-4.33	-4.71/-4.14	-2.62/-2.11	-1.19/-0.03	0.06/0.18	-0.45/-1.94	-3.29/-3.56	-4.46/-4.29	-1.3/-0.88	-1.74/-1.99	-1.23/0.15	1.03/1.99	2.66/2.46	1.94/2.35
Θ(52.5°)	3.29/2.99	2.67/2.67	2.57/1.84	0.41																				



Radiated Composite Gain Data <2.4GHz and 5GHz U-NII 1~U-NII 4>

Appendix A

Θ(180°)	-7.36/-8.55	-9.9/-9.6	-10.01/-9.39	-9.23/-9.26	-8.72/-8.39	-7.88/-8.11	-8.18/-8.29	-9.35/-9.08	-8.39/-7.89	-7.47/-7.21	-6.96/-6.54	-6.06/-5.69	-5.65/-6.21	-6.74/-7.22	-7.41/-7.45	-8.06/-8.18	-8.09/-8.13	-8.08/-7.23	-6.87/-5.92	-5.13/-5.09	-5.13/-5.79	-6.5/-7.75	-8.71/-7.76	-6.88/-6.87
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5G option15

Freq(Hz)	5.2G/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°)	-5.1/-4.4	-3.61/-3.06	-2.4/-2.13	-2.02/-1.98	-1.87/-1.74	-1.63/-1.87	-1.95/-1.89	-1.82/-1.79	-1.86/-2.01	-2.38/-2.58	-3.04/-3.67	-4.62/-4.77	-4.54/-3.6	-2.81/-2.32	-2.15/-2.19	-2.42/-2.38	-2.29/-2.39	-2.23/-2.07	-1.91/-1.78	-1.7/-1.85	-2.19/-2.14	-1.95/-1.84	-1.97/-2.6	-3.73/-4.94
Θ(7.5°)	-4.11/-3.4	-2.84/-2.53	-2.05/-1.74	-1.5/-1.33	-1.45/-1.36	-1.4/-1.63	-1.49/-1.28	-1.22/-1.11	-0.99/-0.73	-0.44/-0.78	-1.33/-2.16	-2.95/-3.88	-4.25/-4.02	-3.37/-3.14	-2.86/-2.75	-2.71/-2.61	-2.47/-2.13	-2.03/-2.03	-1.89/-1.96	-2.28/-2.72	-3.15/-3.58	-3.91/-4.02	-3.75/-4.01	-4.41/-4.3
Θ(15°)	-3.48/-3.15	-3.19/-2.65	-2.02/-1.36	-0.85/-0.8	-1.05/-1.38	-1.76/-2.06	-2.29/-2.11	-1.35/-0.63	-0.19/-0.03	-0.04/-0.11	-0.26/-0.67	-1.22/-2.13	-3.08/-3.87	-4.14/-3.87	-3.51/-3.28	-3.09/-3.1	-2.85/-2.51	-2.3/-2.31	-2.44/-2.75	-3.44/-3.96	-4.42/-4.55	-4.58/-4.71	-4.97/-4.41	-3.59/-3.68
Θ(22.5°)	-5.38/-4.97	-4.68/-3.63	-2.81/-2.25	-2.21/-2.42	-2.39/-2.02	-1.62/-0.96	-0.74/-0.39	-0.24/-0.1	0.18/0.07	0.17/0.19	-0.26/-0.79	-1.74/-3.24	-4.41/-5.04	-5.09/-4.76	-4.34/-3.75	-3.21/-2.97	-3.23/-4.15	-4.27/-4.14	-4/-4.03	-4.29/-4.57	-4.61/-4.94	-4.99/-5.11	-5.34/-5.04	-4.93/-5.44
Θ(30°)	-4.82/-4.09	-3.25/-2.55	-2.53/-2.54	-2.02/-1.03	0.040/-79	1.23/-1.49	1.29/-0.92	0.91/-1.08	1.15/0.98	0.640/-41	-0.060/-69	-1.55/-3.21	-5.43/-7.58	-8.99/-9.3	-8.62/-6.81	-4.67/-3.36	-3.49/-4.81	-5.25/-4.03	-3.5/-3.51	-4.3/-3.57	-3.67/-4.19	-5.03/-6.07	-7.1/-8.32	-9.25/-7.4
Θ(37.5°)	-3.55/-2.57	-1.86/-1.64	-1.47/-1.07	-0.08/1.05	1.772/-1.3	2.42/-2.38	2.232/-0.8	1.79/-1.58	1.41/-1.18	0.98/0.53	-0.58/-1.72	-2.36/-3.57	-6.08/-9.16	-11.96/-11.1	-10.1/-8.87	-8.13/-6.97	-6.05/-5.9	-5.6/-5.31	-3.1/-1.45	-1.12/-1.73	-2.81/-4.15	-5.15/-6.07	-7.16/-7.51	-6.14/-4.75
Θ(45°)	-4.7/-3.99	-2.64/-1.6	-1.16/-0.24	0.81/2	2.93/-4.5	3.92/-4.06	3.98/-8.3	3.72/-6.31	3.39/-0.3	2.44/-1.92	1.03/-0.88	-2.43/-3.72	-5.05/-6.25	-6.75/-8.21	-8.84/-9.83	-9.71/-8.49	-8.61/-8.14	-7.31/-5.8	-5.49/-6.65	-3.79/-3.51	-3.49/-4.39	-4.85/-4.57	-4.24/-3.84	-3.43/-3.45
Θ(52.5°)	-5.2/-2.64	-2.24/-1.66	-1.59/-1.2	-0.03/5.12	2.74/-3.5	3.72/-3.56	3.44/-3.65	3.87/-3.43	2.56/-1.53	0.17/-0.27	-0.27/-2.22	-3.78/-4.49	-4.98/-5.66	-6.27/-8	-7.56/-7.21	-6.46/-6.77	-6.52/-5.52	-5.13/-5.91	-6.21/-5.95	-5.3/-4.48	-4.11/-3.94	-4.82/-6.46	-7.56/-8.9	-9.03/-6.4
Θ(60°)	-8.51/-5	-3.45/-1.41	-1.02/-0.54	0.25/1.09	1.98/-2.45	2.42/-1.78	1.632/-2.44	3.28/-3.38	2.61/1.04	-0.6/-1.63	-1.66/-2.26	-3.64/-5.32	-7.79/-7.51	-6.95/-6.34	-6.49/-7.54	-5.56/-4.32	-4.67/-5.31	-6.26/-7.24	-6.99/-6.98	-5.89/-4.91	-4.93/-5.2	-5.76/-5.9	-7.98/-10.08	-11.89/-10.69
Θ(67.5°)	-8.07/-7.15	-6.44/-5.27	-4.35/-2.57	-0.84/0.69	0.92/-1.75	2.55/-2.75	2.72/-2.6	2.39/-1.9	1.01/-0.1	-1.26/-1.23	-1.59/-3.03	-4.2/-6	-7/-5.4	-5.6/-5.46	-6.98/-8.49	-7.14/-5.56	-5.33/-6.72	-8.13/-8.96	-8.87/-8.07	-6.83/-5.14	-5.55/-5.51	-5.53/-5.62	-6.26/-7.11	-6.8/-6.51
Θ(75°)	-6.86/-5.61	-6.14/-5.38	-4.56/-2.25	0.332/-1.4	3.03/-3.3	2.91/-2.16	1.31/0.74	0.15/0.47	0.76/0.42	-0.78/-2.15	-3.56/-4.33	-4.79/-5.78	-6.02/-6.15	-5.81/-6.5	-6.66/-7.24	-7.12/-6.89	-9.19/-11.72	-10.35/-9.58	-10.1/-8.16	-6.52/-7.61	-7.35/-6.99	-7.09/-7.49	-7.44/-7.29	
Θ(82.5°)	-5.4/-7.1	-7.09/-5.52	-4.35/-2.08	-0.51/0.77	2.2/-2.82	2.66/-1.77	0.76/0.01	-0.03/0.76	1.85/-1.59	-0.25/-2.09	-4.16/-6.65	-6.76/-5.22	-3.84/-2.68	-4.24/-6.53	-8.02/-7.63	-3.39/-3.12	-4.37/-6.29	-5.97/-5.2	-5.81/-8.56	-7.04/-7.53	-5.85/-5.27	-5.43/-5.85	-5.11/-4.94	-9.03/-6.4
Θ(90°)	-4.68/-3.57	-3.93/-2.49	-1.61/-0.65	0.33/1.53	2.372/-7.3	2.672/-4.1	2.042/-0.5	2.09/-2.48	2.732/-1.8	0.58/-2.18	-9.58/-9.68	-9.25/-7.69	-9.77/-12.23	-11.69/-11.28	-6.1/-4.05	-4.85/-5.44	-4.88/-6.21	-9.76/-11.87	-7.9/-5.73	-6.38/-3.57	-2.68/-1.7	-1.74/-2.38	-2.96/-3.91	
Θ(97.5°)	-4.99/-4.26	-4.1/-2.07	-1.35/0.21	0.97/1.55	1.26/0.82	1.07/1.52	1.782/-3.1	2.792/-2.5	1.820/-8.9	-1.32/-3.57	-3.73/-4.05	-4.72/-5.1	-8.55/-6.45	-10.57/-8.68	-9.79/-8.77	-5.96/-6.03	-6.88/-3.16	-2.75/-6.18	-5.83/-5.49	-5.9/-4.93	-5.25/-6.08	-7.09/-4.78	-3.51/-3.79	-4.62/-5.59
Θ(105°)	-5.01/-1.47	-5.1/-4	-3.26/-1.91	-0.31/-1.2	2.232/-3.7	1.91/-1.93	2.232/-4.2	2.272/-5.2	2.962/-7.8	1.82/0.66	-1.332/-3.33	-3.82/-6.19	-7.01/-5.06	-6.06/-7.53	-10.44/-9.24	-3.62/-3.05	-6.11/-6.28	-2.93/-4.52	-6.9/-5.89	-6.47/-3.74	-4.29/-6.32	-10.47/-9.5	-8.46/-10.07	-6.36/-6.4
Θ(112.5°)	-3.53/-3.09	-4.69/-3.58	-2.82/-0.31	0.95/1.5	1.65/-1.83	1.75/-1.28	1.06/-1.21	1.692/-5	2.15/0.72	-1.34/-2.88	-3.66/-4.14	-8.39/-8.67	-7.48/-5.35	-6.75/-6.48	-7.76/-9.2	-6.37/-3.05	-3.72/-5.67	-2.97/-5.36	-6.18/-5.22	-6.43/-6.51	-10.4/-8.59	-5.4/-8.2	-10.03/-7.87	-4.42/-4.57
Θ(120°)	-7.28/-3.65	-2.79/-1.73	-0.61/-0.27	0.31/0.05	0.73/-1.2	2.02/-2.61	2.612/-5.5	2.63/-2.49	1.85/0.82	-0.88/-4.25	-6.39/-5.11	-4.89/-3.78	-4.39/-3.19	-6.66/-4.86	-6.7/-7.83	-7.29/-4.54	-8.88/-5.64	-3.26/-6.32	-8.63/-5.57	-4.51/-4.29	-7.28/-7.87	-5.02/-3.38	-5.04/-7.86	-5.01/-4.93
Θ(127.5°)	-3.24/-3.43	-5.04/-4.31	-2.74/-1.26	-0.9/0.65	1.22/1.58	2.412/-9.6	3.03/-3.17	3.052/-2	1.12/0.39	-0.85/-2.68	-4.89/-8.28	-11.13/-7.87	-6.74/-6.61	-6.32/-6.5	-7.48/-7.49	-6.05/-8.81	-6.15/-6.24	-3.32/-6.72	-10.53/-7.97	-4.33/-2.86	-3.15/-4.17	-3.65/-2.57	-3.98/-2.76	-2.96/-3.94
Θ(135°)	-4.66/-2.36	-1.89/-3.46	-2.63/-2.45	-2.08/-1.12	0.38/1.56	2.29/-3.41	4.564/-9.8	4.52/-3.82	2.81/1.92	0.54/-2.18	-4.95/-6.37	-7.02/-6.13	-4.46/-2.99	-2.7/-2.94	-2.46/-1.9	-5.86/-4.23	-5.37/-4.81	-3.72/-7.64	-8.25/-6.38	-5.23/-2.69	-2.51/-5.11	-6.5/-6.18	-9.28/-6.33	-3.55/-3.78
Θ(142.5°)	-5.98/-5.23	-4.25/-5.1	-5.55/-4.95	-4.49/-3.33	-2.03/-0.11	1.72/-6.9	3.3/-3.6	3.372/-1.9	0.3/-2.05	-4.27/-3.79	-2.42/-2.65	-3.59/-4.81	-4.06/-4	-3.49/-2.06	-2.6/-4.24	-4.74/-4.88	-3.88/-4.46	-6.34/-10.2	-12.22/-10.57	-9.62/-8.32	-5.69/-5.02	-4.4/-6.09	-4.82/-3.4	-4.51/-5.12
Θ(150°)	-2.69/-2.28	-1.71/-1.56	-1.29/-1.45	-0.98/-0.38	0.37/0.99	1.58/-1.98	1.86/-1.98	1.83/-1.56	0.68/-0.55	-2.08/-3.74	-5.3/-6.84	-6.12/-6.24	-9.12/-8.34	-6.92/-8.75	-11.56/-8.31	-5.05/-5.64								



Radiated Composite Gain Data <2.4GHz and 5GHz U-NII 1~U-NII 4>

Appendix A

Θ(142.5°)	-3.69/-3.12	-2.56/-1.34	-0.76/-1.21	-2.61/-4.22	-5.64/-6.06	-5.67/-4.14	-3.21/-2.82	-2.5/-1.81	-1.63/-1.34	-1.48/-2.61	-3.87/-5.5	-6.96/-4.8	-5.83/-5.92	-3.56/-3.87	-5.52/-6.68	-6.47/-4.56	-2.55/-1.88	-2.63/-6.89	-8.19/-7.32	-4/-5.11	-5.7/-2.36	-3.22/-2.06	-0.45/-1.1	-2.28/-3.81
Θ(150°)	-6.3/-4.22	-3.07/-2.53	-2.35/-1.95	-1.69/-1.29	-1.31/-1.81	-2.41/-2.98	-3.39/-2.9	-2.69/-2.9	-2.85/-2.29	-1.8/-1.06	-0.71/-1.57	-1.52/-0.74	-1.6/-2.53	-1.97/-2.53	-4.68/-7.36	-7.01/-6.56	-5.2/-4.28	-5.8/-9.16	-8.69/-7.83	-4.31/-4.55	-8.9/-10.85	-7.29/-7.3	-5.55/-3.76	-4.43/-6.16
Θ(157.5°)	-4.83/-3.97	-3.88/-3.56	-2.98/-2.03	-1.73/-1.75	-1.86/-2.53	-3.23/-3.67	-3.19/-2.93	-3.34/-4.75	-6.07/-6.21	-6/-6.03	-5.89/-4.63	-2.82/-2.51	-2.81/-2.35	-0.43/-0.77	1.07/0.5	-1.28/-4.07	-5.39/-5.81	-6.84/-6.22	-5.16/-6.35	-7.45/-7.18	-6.58/-7.48	-9.58/-10.67	-10.01/-7.49	-5.82/-4.8
Θ(165°)	-3.04/-2.4	-1.59/-0.95	-0.30/-1.2	-0/-0.75	-1.93/-3.37	-5.45/-7.17	-8.89/-8.81	-8.35/-6.63	-5.13/-4.01	-3.37/-3.31	-3.62/-3.9	-3.81/-3.66	-3.77/-3.84	-3.68/-2.33	-3.48/-4.55	-5.24/-5.53	-4.92/-4.92	-5.79/-6.66	-7.06/-7.28	-6.63/-5.75	-5.2/-5.45	-6.32/-6.46	-7.05/-6.15	-5.43/-4.19
Θ(172.5°)	-5.67/-5.22	-4.95/-4.76	-4.42/-4.6	-5.03/-7.5	-6.58/-7.37	-8.17/-9.37	-10.87/-10.91	-10.45/-9.03	-8.12/-7.45	-7.53/-8.03	-8.57/-9.14	-9.62/-10.23	-9.49/-8.18	-7.25/-6.49	-5.37/-4.75	-4.08/-3.46	-5.17/-6.53	-7.78/-8.8	-8.64/-8.7	-8.76/-7.99	-7.69/-7.18	-6.92/-6.7	-6.56/-5.99	
Θ(180°)	-7.1/-6.31	-5.67/-5.34	-5.31/-5.81	-6.28/-6.98	-7.95/-8.6	-9.01/-10.19	-9.84/-9.35	-8.71/-7.92	-7.57/-7.32	-6.96/-6.93	-6.61/-6.24	-6.06/-6.06	-6.22/-6.48	-7.15/-7.58	-8.06/-8.64	-8.82/-8.51	-8.58/-9.1	-9.58/-9.09	-8.79/-8.02	-7.44/-7.09	-6.87/-6.63	-6.56/-6.74	-7.01/-7.35	-7.63/-7.34
Freq(Hz)	5.6G/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°)	-10.25/-12.02	-10.77/-8.99	-7/-5.17	-3.59/-2.62	-1.63/-0.54	0.04/0.49	0.79/0.99	0.75/0.33	-0.36/-1	-1.71/-2.6	-3.78/-5.29	-7.16/-9.38	-11.13/-12.16	-10.78/-8.5	-7.34/-5.42	-3.77/-2.39	-1.33/-0.55	-0.08/0.14	0.26/0.29	0.53/0.57	0.51/0.07	-0.69/-1.99	-2.83/-3.88	-4.91/-7.35
Θ(7.5°)	-11.17/-11.9	-9.43/-8.35	-7.08/-5.54	-4.02/-3.13	-2.08/-0.67	0.06/0.52	1.21/1.6	1.75/1.63	1.24/0.78	0.16/-0.67	-1.55/-2.66	-4.16/-6.11	-8.3/-9.88	-10.41/-9.5	-8.29/-6.52	-4.86/-3.25	-2.22/-1.43	-1.07/-0.79	-0.62/-0.66	-0.56/-0.7	-0.92/-1.53	-2.19/-3.21	-4.07/-5.46	-6.8/-9.62
Θ(15°)	-10.8/-10.1	-8.62/-7.33	-5.51/-4.2	-3.27/-2.58	-1.79/-0.78	-0.24/0.46	1.15/1.67	1.99/1.96	1.86/1.5	1.26/0.75	0.09/-0.86	-1.99/-3.39	-5.14/-7.47	-9.3/-9.05	-7.25/-6.26	-5.27/-4.04	-2.92/-2.02	-1.41/-1.18	-1.27/-1.53	-2.06/-3.09	-3.99/-5.05	-5.81/-6.94	-7.82/-8.55	-8.98/-9.85
Θ(22.5°)	-7.15/-4.93	-5.04/-4.5	-4.34/-4.07	-3.09/-2.38	-0.98/-0.48	0.13/0.8	1.35/1.72	1.93/1.95	1.65/1.42	0.93/0.23	-0.46/-1.61	-3.09/-4.69	-6.95/-8.54	-9.66/-9.71	-8.54/-6.94	-5.45/-3.84	-2.7/-1.87	-1.34/-1.24	-1.47/-1.69	-2.08/-2.49	-3.55/-4.55	-6.19/-7.28	-8.59/-8.69	-7.26/-6.54
Θ(30°)	-4.85/-4.25	-3.65/-3.79	-3.33/-2.44	-1.09/0.24	0.71/-1.2	1.72/2	2.04/2.18	2.23/2.36	2.21/57	0.89/-0.19	-1.37/-3	-5.02/-7.02	-8.56/-10.17	-10.94/-11.59	-11.9/-9.6	-7.09/-4.84	-3.42/-2.25	-1.68/-1.61	-2.03/-2.96	-3.53/-3.15	-3.14/-2.49	-6.27/-6.91	-5.52/-4.9	-5.01/-4.15
Θ(37.5°)	-5.8/-6.08	-6.7/-5.09	-3.51/-2.01	-0.95/0.54	1.35/2.16	2.73/2.69	2.38/2.22	2.13/2.25	2.13/1.62	0.3/-1.59	-2.92/-4.91	-6.35/-7.94	-9.87/-9.37	-9.84/-10.64	-10.14/-7.27	-4.77/-3.68	-3.75/-4.84	-5.99/-4.82	-3.29/-2.36	-2.84/-3.72	-4.54/-5.54	-7.15/-8.17	-6.82/-6.01	-5.22/-4.77
Θ(45°)	-3.92/-3.67	-2.82/-2.96	-2.72/-1.87	-1.19/-0.08	1.06/1.68	2.28/2.59	2.51/2.29	2.23/2.33	2.24/1.48	-0.04/-1.92	-3.22/-4.04	-4.17/-4.52	-5.58/-6.29	-7.61/-8.86	-9.6/-9.37	-7.04/-4.81	-3.79/-3.57	-3.35/-3.75	-4.01/-3.97	-3.63/-2.98	-3.18/-4.01	-5.37/-5.88	-6.21/-5.78	-4.57/-3.87
Θ(52.5°)	-3.42/-3.34	-3.21/-3.14	-2.46/-1.46	-0.31/-1.2	1.63/2.17	2.49/2.42	2.13/1.87	1.75/1.73	1.64/1.3	0.26/-1.13	-2.6/-4.03	-5.24/-6.68	-7.51/-9.6	-8.22/-8.46	-8.37/-10.84	-10.27/-9.1	-8.82/-8.41	-7.66/-6.64	-5.98/-5.52	-4.68/-4.21	-5.18/-5.18	-5.08/-5.3	-3.72/-5.29	-2.75/-3.11
Θ(60°)	-6.61/-5.27	-4.23/-3.96	-2.47/-1.73	-0.12/0.99	1.26/1.51	1.81/2.26	2.943.36	3.27/2.97	2.48/2.21	1.35/-0.15	-2.14/-5.33	-7.18/-9.09	-10.16/-10.95	-10.54/-10.02	-8.49/-8.66	-6.13/-11.91	-9.55/-6.38	-3.49/-4.06	-3.52/-3.51	-4.31/-5.02	-5.15/-5.68	-5.83/-5.53	-6.34/-6.3	-6.69/-5.59
Θ(67.5°)	-7.5/-8.02	-6.64/-5.04	-3.16/-1.93	-0.68/-0.29	0.85/1.68	1.33/1.36	2.29/2.61	1.96/1.53	2.23/2.26	1.39/-0.14	-2.61/-5.35	-5.87/-6.18	-7.58/-7.75	-9.11/-9.47	-9.51/-8.35	-5.92/-4.21	-4.02/-3.98	-3.18/-3.24	-3.71/-4.13	-4.3/-3.77	-4.16/-4.85	-5.66/-6.01	-6.9/-7.22	-8.1/-7.42
Θ(75°)	-6.3/-7.26	-6.25/-5.54	-3.91/-1.58	-0.48/0.4	-0.14/0.08	0.48/1.09	1.63/1.29	0.53/0.02	0.38/1.1	1.41/0.24	-1.98/-3.93	-3.96/-3.62	-5.7/-6.12	-5.86/-7.33	-8.3/-9.46	-6.94/-4.15	-6.71/-7.17	-3.92/-6.33	-5.73/-4.08	-2.5/-2.81	-1.91/-2.35	-3.62/-5.76	-7.19/-8.15	-9.3/-7.76
Θ(82.5°)	-3.87/-3.47	-3.4/-3.5	-2.62/-2.14	-1.58/-0.17	1.39/2.05	2.26/1.77	1.05/1.2	0.55/-0.64	-0.14/1.54	1.5/0.34	-2.67/-6.66	-10.78/-10.64	-11.77/-9.23	-9.9/-9.4	-9.12/-10.84	-7.94/-5.61	-6.23/-8.1	-6.56/-8.12	-6.63/-3.05	-1.19/-2.42	-4.81/-6.83	-6.39/-5.87	-6.25/-6.38	-5.77/-4.08
Θ(90°)	-7.84/-7.48	-4.22/-2.38	-3.14/-1.67	-2.1/-2.42	-1.36/0.1	1.38/2.08	1.75/1.53	1.63/1.35	1.08/1.4	1.14/-0.08	-2.32/-4.73	-7.58/-7.58	-8.12/-5.11	-4.77/-5.9	-7.17/-7.41	-8.56/-9.64	-6.6/-8.76	-7.93/-8.87	-10.13/-9.01	-9.73/-9.14	-8.32/-6	-4.88/-4.73	-4.94/-6.51	-8.57/-9.18
Θ(97.5°)	-10.08/-9.1	-5.33/-3.59	-3.3/-3.45	-2.68/-1.36	-0.48/0.61	1.44/1.82	1.82/2.02	1.67/3.01	3.18/2.71	1.93/-0.19	-1.57/-3.56	-5.75/-5.46	-7.92/-5.15	-7.7/-8.85	-8.1/-12.41	-9.79/-6	-7.43/-7.46	-7.08/-9.65	-10.29/-10.92	-7.28/-7.04	-7.31/-8.1	-8.8/-9.25	-8.79/-9.22	-9.91/-9.69
Θ(105°)	-4.69/-4.65	-3.56/-1.95	-0.98/0.42	0.81/0.81	0.75/0.78	1.1/1.4	1.34/2.02	2.74/2.2	1.8/2.44	2.93/1.55	-1.14/-3.49	-4.36/-5.06	-6.68/-5.87	-7.63/-11.05	-10.31/-9.23	-7.14/-9.06	-8.68/-8.12	-6.65/-6.97	-6.95/-6.65	-9.72/-8.72	-8.18/-6.66	-8.1/-9.12	-8.95/-5.39	-4.63/-4.5
Θ(112.5°)	-8.09/-5.82	-4.45/-2.41	-0.03/0.74	1.71/1.82	2.48/2.17	2.06/1.59	1.25/1.96	2.65/2.4	1.71/1.53	0.08/1.22	-3.07/-4.25	-7.08/-7.15	-7.85/-10.02	-11.07/-11.24	-8.2/-7.1	-7.55/-6.17	-7.13/-6	-6/-8.26	-8.3/-6.27	-7.23/-8.59	-7.27/-8.11	-7.61/-8.59	-7.26/-7.02	-7.01/-7.74
Θ(120°)	-11.17/-7.54	-6.64/-4.22	-3.34/-2.53	-0.61/0.16	0.49/1.18	1.37/1.73	2.24/2.62	3.17/3.34	2.39/0.87	-1.15/-2.18	-3.71/-5.18	-7.12/-9.74	-9.7/-6.74	-6.97/-8.39	-5.93/-9	-11.6/-6.48	9.4/-10.64	-7.36/-9.72	-11.92/-9.63	-7.24/-6.62	-8.77/-10.79	-9.79/-8.01	-8.16/-9.56	-8.67/-9.27
Θ(127.5°)	-6.66/-5.34	-4.77/-4.77	-2.9/-2.26	-1.38/-0.75	-0.5/0.75	1.61/1.66	1.76/1.77	1.47/1	0.33/-1.93	-3.83/-6.18	-6.11/-8.86	-7.81/-8.84	-8.68/-6.52	-8.36/-7.4	-6.55/-10.88	-10.45/-5.3	-6.44/-6.6	-5.89/-7.64	-9.97/-10.87	-6.79/-6.69	-7.76/-7.6	-5.61/-5.8	-9.01/-9.16	-7.47/-5.07
Θ(135°)	-6.63/-4.25	-3.57/-4.53	-3.34/-2.62	-1.62/0.34	0.81/1.09	1.41/1.48	1.39/1.78	1.43/0.5	-0.71/-2.35	-4.2/-7.69	-7.12/-7.55	-8.36/-4.86	-7.59/-6.59	-7.33/-7.97	-10.11/-8.8	-8.46/-4.76	-7.54/-5.29	-4.77/-5.81	-9.4/-9.14	-7.77/-7.26	-7.73/-8.62	-0.9/-6.7	-8.08/-7.7	-6.12/-6.8
Θ(142.5°)	-4.92/-4.62	-2.41/-1.69	-0.62/0.11	-0.6/-0.72	0.01/0.54	0.92/1.44	1.83/1.62	1.42/1.04	-0.16/-2.25	-4.59/-6.09	-6.64/-7.06	-7.81/-7.38	-8.29/-6.51	-8.48/-7.9	-6.59/-6.75	-7.82/-6.37	-7.82/-5.96	-6.83/-8.6	-8.89/-7.71	-7.79/-7.68	-6.41/-6.52	-7.79/-8.22	-5.55/-6.24	-5.92/-4.59
Θ(150°)	-2.69/-1.8	-1.36/-0.71	-0.25/-0.44	-0.84/-1.29	-1.08/-0.51	0.44/0.84	1.24/1.72	1.45/0.31	-1.22/-2.44	-3.6/-4.56	-5.83/-6.92	-6.92/-6.14	-6.24/-6.23	-5.83/-7.11	-8.72/-9.47	-8/-8.27	-9.59/-8.2	-8.49/-9.85	-9.34/-8.38	-7.63/-7.95	-8.79/-9.97	-9.34/-9.03	-6.86/-6.41	-5.46/-3.77
Θ(157.5°)	-1.34/-1	-1.05/-1.21	-1.45/-1.92	-2.1/-2.32	-2.06/-1.84	-1.42/-1.17	-1.06/-1.49	-2.35/-3.18	-4.1/-5.13	-5.88/-6.27	-6.79/-7.25	-7.01/-5.77	-4.13/-2.7	-1.92/-1.83	-2.55/-4.13	-6.15/-7.41	-6.92/-6.34	-6.25/-6.46	-6.21/-6.75	-7.96/-9.57	-10.1/-8.82	-7.86/-6.7	-5.02/-4.83	-3.94/-2.66
Θ(165°)	-5.16/-4.78	-3.87/-3.16	-2.55/-2.42	-2.72/-2.77	-2.46/-2.13	-2.23/-2.39	-2.98/-3.97	-5.01/-5.73	-6.21/-6.07	-5.54/-5.66	-5.85/-4.89	-3.95/-2.73	-1.99/-1.61	-1.66/-2.55	-3.51/-4.68	-4.97/-4.9	-5.26/-6.72	-8.85/-9.47	-9.72/-9.63	-9.31/-9.05	-7.56/-6.86	-6.06/-5.58	-5.41/-5.95	-6.23/-5.54
Θ(172.5°)	-5.14/-5.06	-4.58/-4.06	-3.9/-4.34	-5.13/-5.83	-5.87/-6.11	-6.31/-6.88	-8.23/-9.05	-9.67/-9.43	-8.94/-8.34	-8.69/-9.23	-9.74/-9.67	-9.21/-9.32	-9.55/-8.95	-8.4/-8.17	-7.73/-7.62	-7.83/-7.51	-7.81/-8.34	-9.22/-8.74	-8.59/-8.84	-9.63/-10.12	-9.68/-9.26	-8.97/-8.65	-7.78/-6.86	-5.87/-5.87
Θ(180°)	-9.77/-9.42	-9.2/-9.05	-9.2/-9.72	-9.53/-10.37	-11.19/-11.57	-11.62/-10.6	-10.2/-9.98	-9.43/-8.69	-8.02/-8.35	-8.63/-9.07	-9.57/-9.37	-10.01/-10.13	-10.44/-11	-10.05/-9.53	-9.39/-9.24	-8.82/-9.06	-9.11/-9.03	-8.72/-8.62	-8.97/-9.62	-9.57/-10.52	-10.77/-11.01	-11.35/-11.12	-10.05/-9.37	-10/-9.56
Freq(Hz)	5.6G/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°)	0.67/0.8	0.92/0.72	0.39/0.02	-0.66/-1.65	-2.49/-3.93	-5.48/-7.34	-9.37/-11.76	-11.96/-9.98	-8.23/-6.73	-5.44/-4.16	-2.88/-1.84	-1.07/-0.56	-0.11/0.15	0.28/0.16	0.18/-0.18									



Radiated Composite Gain Data <2.4GHz and 5GHz U-NII 1~U-NII 4>

Appendix A

Θ(112.5°)	-2.14/-1.5	-2.37/-1.86	-2.69/-1.43	-0.68/-0.57	-2.22/-3.17	-2.56/-0.94	0.16/-0.06	-1.12/-2.39	-3.18/-2.36	-1.73/-1.23	0.01/0.52	2.3/-0.33	-0.22/-1.66	-0.25/-1.83	-1.13/-2.24	0.33/0.27	-2.53/-1.73	-0.28/-5.67	-3.69/-0.64	0.45/0.24	-0.96/-1.6	-2.2/-1.21	-0.42/-2.01	-1.64/-2.34
Θ(120°)	-4.3/-2.1	-2.32/-1.29	-1.32/-1.9	-1.96/-1.24	-0.44/0.2	-0.83/-1.66	-1.03/-1.09	-0.65/0.42	1.05/1.72	0.65/0.92	-0.31/0.16	0.59/-2.49	-1.02/-4.97	-2.3/-2.04	-1.2/-4.4	-1.08/-0.84	-5.58/-2.32	0.85/-4.14	-2.72/-0.91	-1.33/-1.07	-4.69/-3.06	-5.12/-2.94	-0.88/-2.15	-3.19/-2.91
Θ(127.5°)	-3.09/-2.36	-2.21/-2.75	-1.8/-1.58	-1.26/-0.42	-0.21/-0.07	0.72/1.01	0.95/0.99	0.80/82	1.02/1.35	0.66/0.5	-0.79/-0.8	-3.21/-2.67	-3.95/-5.76	-4.99/-1.53	-2.71/-2.67	-1.99/-2.38	-2.7/-1.2	-0.26/-5.75	-6.06/-4.65	-3.09/-2.85	-3.77/-5.07	-5.52/-3.48	-1.9/-2.75	-4.67/-2.46
Θ(135°)	-3.18/-4.65	-4.27/-4.45	-4.2/-2.97	-1.89/-0.79	-0.12/-0.39	0.96/1.14	0.88/0.64	0.78/0.82	1.13/0.91	-0.01/-0.81	-1.65/-2.72	-2.59/-0.42	-3.89/-3.23	-2.63/-1.59	-2.98/-3.67	-5.3/-7.09	-3.71/-4.34	-3.06/-6.5	-8.88/-8.52	-7.86/-9.3	-5.11/-5.82	-4.02/-2.85	-2.8/-2.69	-3.71/-3.92
Θ(142.5°)	-1.42/-4.71	-5.23/-4.44	-3.22/-2.52	-2.55/-2.55	-2.2/-1.35	-0.96/-0.7	-0.50/-0.83	-1.39/-0.85	-0.03/-0.51	-1.01/-1.29	-1.72/-2.21	-3.74/-5.75	-6.66/-6.98	-5.72/-6.4	-8.88/-7.68	-7.89/-4.36	-2.34/-4.28	-3.8/-7.97	-8.02/-6.6	-5.45/-4.9	-7.11/-3.88	-2.29/-2.03	-1.67/-3.29	
Θ(150°)	-2.2/-1.89	-2.05/-2.05	-1.89/-2.22	-3.19/-4.51	-5.17/-4.92	-3.94/-2.95	-2.71/-3.35	-3.77/-3.05	-2.81/-3.2	-3.17/-2.64	-1.96/-2.24	-2.06/-1.74	-2.2/-1.92	-0.95/-1.55	-3.26/-4.82	-5.8/-5.41	-6.68/-5.84	-6.27/-9.23	-10.08/-9.94	-5.81/-4.64	-6.45/-7.97	-5.62/-3.68	-2.09/-1.32	-1.29/-2.16
Θ(157.5°)	-3.2/-3.07	-3.71/-3.74	-3.32/-3.82	-4.82/-4.99	-4.65/-4.03	-3.15/-2.34	-2.41/-3.68	-5.1/-5.74	-6/-5.64	-5.01/-3.85	-3.2/-3.76	-3.25/-1.64	-1.24/-1.6	-2.26/-2.94	-2.82/-1.75	-1.47/-1.99	-3.1/-5.12	-6.93/-7.76	-8.46/-11.02	-10.52/-9.3	-7.71/-8.01	-6.18/-2.69	-1.27/-1.86	-2.99/-3.96
Θ(165°)	-4.66/-4.42	-4.69/-4.77	-4.4/-4.12	-4.64/-5.31	-5.6/-5.5	-5/-4.9	-4.19/-3.86	-4.36/-4.95	-5.23/-5.33	-5.45/-5.23	-4.79/-4.24	-2.87/-1.92	-1.52/-1.84	-3.19/-5.41	-7.03/-6.32	-5.49/-5.12	-5.72/-7.89	-9.1/-8.84	-7.44/-6.82	-6.47/-6.15	-5.26/-5.09	-6.9/-8.7	-7.61/-6.04	-4.87/-4.77
Θ(172.5°)	-7.3/-6.83	-6.84/-6.56	-6.39/-6.24	-6.67/-6.91	-7.14/-7.6	-7.59/-7.23	-6.72/-5.96	-5.81/-6.12	-6.34/-6.67	-7.17/-6.63	-5.57/-4.79	-4.66/-5.31	-6.72/-8.38	-9.48/-10.82	-10.83/-10.02	-8.86/-8.65	-9.38/-10.07	-10.2/-9.67	-9.14/-9.95	-10.32/-10.16	-10.13/-9.68	-9.03/-9.86	-9.45/-9.29	-8.42/-7.89
Θ(180°)	-9.6/-10.4	-10.56/-10.81	-10.11/-9.82	-9.98/-9.81	-10.04/-9.68	-9.91/-9.87	-9.34/-9.52	-10.05/-10.3	-9.99/-10.01	-10.69/-10.82	-10.74/-10.84	-11.14/-10.75	-10.78/-11.86	-11.85/-12.73	-12.45/-12.83	-12.34/-12.4	-11.75/-10.48	-8.94/-8.51	-8.02/-7.88	-7.73/-7.95	-8.94/-10.04	-10.94/-10.31	-10.04/-9.99	-10.22/-9.25
Freq(Hz)	5.885G/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°)	-7.64/-7.95	-7.7/-7.22	-7.46/-5.83	-4.42/-2.75	-1.64/-1	-0.7/-0.21	-0.37/-0.3	-0.42/-0.44	-0.6/-1.02	-1.83/-2.94	-4.26/-5.31	-6.7/-8.49	-9.62/-9.93	-8.82/-6.78	-5.16/-3.95	-2.84/-1.87	-0.95/-0.49	-0.2/-0	0.05/0.18	0.06/-0.38	-0.89/-1.54	-2/-2.64	-3.85/-5.93	-7.78/-7.91
Θ(7.5°)	-8.25/-7.96	-6.54/-5.32	-5.79/-5.61	-4.69/-3.75	-2.59/-1.77	-1.23/-0.73	-0.40/-0.46	-0.58/-0.75	-0.94/-0.94	-1.44/-2.24	-3.2/-4.18	-5.48/-6.6	-8.17/-8.97	-9.22/-7.98	-6.19/-4.68	-3.22/-2.09	-1.13/-0.54	-0.2/-0.02	0.01/-0.05	-0.21/-0.69	-1.29/-2.19	-3.4/-4.24	-5.12/-6.25	-7.49/-8.01
Θ(15°)	-4.47/-4.65	-4.46/-4.05	-4.34/-4.06	-4.13/-3.65	-3/-2.45	-1.73/-1.14	-0.53/-0.12	0.37/0.6	0.65/0.53	-0.29/-1.03	-2.23/-3.33	-4.72/-5.72	-6.08/-6.49	-6.93/-7.21	-6.66/-5.47	-4.17/-2.95	-1.99/-1.35	-0.82/-0.61	-0.5/-0.85	-1.22/-1.78	-2.39/-3.21	-4.13/-5.29	-6.05/-5.98	-5.24/-4.77
Θ(22.5°)	-5.17/-4.78	-3.89/-3.7	-3.14/-2.76	-2.82/-2.51	-2.14/-1.55	-0.67/0.33	0.91/1.51	1.87/1.99	1.86/1.58	0.85/-0.45	-2.4/-4.26	-6.45/-7.61	-8.56/-9.17	-9.51/-8.51	-6.87/-5.13	-3.65/-2.59	-1.81/-1.37	-1.03/-0.93	-1.09/-1.45	-2.29/-3.83	-5.62/-7.15	-7.65/-8.2	-7.33/-6.72	-6.35/-5.44
Θ(30°)	-2.83/-1.77	-1.24/-1.23	-0.97/-0.84	-0.9/-1.01	-0.32/0.18	0.67/1.28	2.22/2.97	3.33/3.38	3.11/2.49	1.43/-0.02	-2.01/-4.08	-6.21/-7.63	-8.91/-9.29	-9.19/-9.28	-7.67/-6.19	-4.52/-3.08	-1.86/-1.4	-1.58/-2.23	-3.43/-4.96	-6.11/-7.9	-8.32/-8.3	-6.32/-4.73	-3.44/-3.56	-8.83/-5.56
Θ(37.5°)	-2.25/-1.27	-0.63/-0.66	-0.22/0.32	0.74/0.99	1.16/1	1.17/1.32	1.78/2.25	2.69/3	2.64/1.59	0.18/-1.5	-3.67/-5.74	-6.79/-7.73	-8.57/-8.56	-8.24/-6.57	-8.22/-2.89	-2.91/-4.25	-5.38/-6.69	-7.47/-7.47	-8.31/-8.78	-6.09/-3.91	-2.77/-2.56	-7.66/-2.95		
Θ(45°)	-2.62/-1.99	-0.9/-0.27	0.38/1.35	1.89/1.85	1.67/1.74	1.94/1.81	1.68/1.75	1.89/2.03	1.97/1.14	-0.4/-2.43	-4.28/-6.51	-6.26/-6.4	-6.93/-6.83	-7.15/-8.8	-9.67/-9.33	-6.29/-4.5	-3.78/-4.55	-5.89/-6.37	-5.33/-3.61	-4.58/-7.62	-7.56/-6.37	-4.44/-3.42	-2.86/-2.46	-2.42/-2.77
Θ(52.5°)	-0.81/-1.34	-1.62/-0.69	0.59/1.54	2.12/2.29	2.41/2.24	2.15/2.44	2.36/1.59	0.89/0.71	0.82/0.51	-1.2/-3.47	-4.88/-5.57	-5.56/-5.77	-5.32/-6.03	-7.81/-11.17	-12.02/-11.91	-10.18/-7	-6.56/-8.26	-8/-5.77	-5.03/-4.85	-4.87/-5.15	-6.06/-6.11	-5.16/-3.77	-3.06/-2.85	-2.17/-1.37
Θ(60°)	-4.1/-2.7	-1.73/-0.17	1.05/1.14	2.32/2.8	2.82/3.01	3.24/3.09	2.52/1.62	1.05/1.09	1.02/0.81	0.17/-1.54	-2.63/-3.58	-4.51/-6.11	-6.38/-7.25	-9.97/-11.52	-11.75/-9.99	-6.68/-6.27	-6.99/-7.92	-6.68/-6.53	-5.16/-4.59	-4.39/-5.36	-6.56/-5.92	-4.99/-4.47	-5.15/-5.58	
Θ(67.5°)	-8.77/-5.48	-3.56/-1.3	0.45/1.48	2.09/2.32	2.42/2.65	2.84/2.8	2.66/1.96	0.91/0.77	1.06/0.92	-0.06/-1.7	-2.8/-3.38	-4.32/-5.6	-6.19/-6.6	-8.29/-9.56	-10.25/-9.63	-8.31/-6.95	-9.25/-7.3	-5.18/-4.1	-3.3/-2.22	-3.2/-4.21	-6.16/-7.02	-8.17/-8.61	-9.72/-9.39	-10.29/-9.11
Θ(75°)	-5.5/-4.07	-2.21/-1.14	-0.55/0.28	0.52/0.5	0.81/44	1.58/2.28	2.10/98	0.08/0.51	1.57/1.94	1.78/0.24	-1.57/-2.15	-3.04/-3.76	-5.84/-5.8	-6.63/-9.33	-10.34/-10.95	-7/-7.51	-8.23/-8.21	-4.49/-5.22	-5.39/-3.62	-4.37/-5.39	-6.01/-5.78	-5.16/-6.44	-8.54/-10.22	-10.15/-7.27
Θ(82.5°)	-7.03/-5	-3.4/-2.44	-1.7/-0.85	-1.23/-2.23	-2.18/-0.93	0.08/0.98	1.76/2.08	1.74/1.33	1.45/1.45	0.34/-1.6	-4.64/-4.8	-4.24/-4.84	-6.19/-6.45	-6.7/-8.71	-10.27/-11.67	-9.19/-6.58	-7.79/-9.12	-5.04/-5.33	-4.02/-4.86	-4.71/-5.65	-6.01/-5.33	-6.38/-7.57	-9.28/-8.68	
Θ(90°)	-6.54/-4.5	-2.62/-1.84	-1.61/-2.04	-1.92/-0.97	0.29/1.21	0.85/-0.14	0.18/0.53	1.09/1.35	1.27/1.62	0.2/-2.04	-3.32/-3.39	-3.28/-3.98	-6.09/-6.88	-7.34/-8.54	-8.69/-8.58	-7.67/-6.13	-8.78/-8.4	-5.54/-7.14	-7.1/-5.23	-4.85/-8.01	-6.35/-5.52	-6.39/-6.91	-7.61/-9.16	-9.78/-8.88
Θ(97.5°)	-5.92/-5.24	-3.09/-2.53	-1.6/-1.33	-1.66/-1.34	-0.03/0.28	2.23/1.98	0.57/-0.29	0.22/1.09	2.38/2.25	0.75/-0.95	-2.29/-2.48	-3.95/-3.89	-6.71/-4.24	-6.15/-8.78	-8.83/-9.01	-5.81/-4.03	-3.32/-3.62	-4.07/-7.99	-7.28/-6.81	-5.08/-6.67	-6.26/-5.73	-5.29/-6.72	-7.71/-6.84	-7.17/-6.88
Θ(105°)	-10.24/-9.78	-9.16/-5.37	-2.99/-1.38	-0.68/0.1	0.71/1.23	2.01/2.1	1.04/0.63	1.03/1.17	1.56/1.41	0.81/-1.62	-4.46/-4.55	-5.22/-6.65	-10.78/-10.05	-8.04/-8.66	-9.5/-8.22	-6.56/-10.5	-9.16/-3.76	-2.96/-5.91	-5.8/-5.67	-6.13/-9.35	-8.06/-9.27	-9.86/-10.06	-7.94/-6.76	-6.4/-8.58
Θ(112.5°)	-8.88/-9.27	-10.17/-7.12	-4.02/-1.74	-1.1/-0.59	0.42/1.91	3.02/2.94	2.66/2.77	2.72/14	1.66/0.33	-1.01/-3.82	-5.74/-5.67	-4.63/-5.81	-7.03/-8.73	-7.5/-9.44	-8.34/-10.75	-11.4/-9.39	-6.55/-5.08	-6.64/-6.91	-5.9/-5.58	-8.9/-9.37	-10.72/-11.6	-8.34/-8.1	-6.39/-6.74	-6.6/-9.18
Θ(120°)	-4.73/-4.52	-3.72/-3.46	-2.82/-1.78	0.13/0.6	1.42/1.42	1.87/2.98	3.32/3.11	3.14/2.89	1.31/-0.61	-3.75/-4.52	-5.15/-4.82	-5.21/-6.66	-6.49/-7.97	-6.75/-8.78	-7.18/-7.78	-9.41/-7.55	-9.24/-6.82	-9.21/-10.9	-10.13/-8.64	-9.04/-9.43	-8.9/-11.61	-12.65/-8.49	-6.68/-4.57	-4.59/-4.62
Θ(127.5°)	-5.76/-4.87	-4.99/-4.56	-1.61/-0.86	0.33/0.68	0.37/0.54	0.67/1.32	1.78/1.99	2.07/1.84	1.22/-0.63	-3.02/-4.35	-4.36/-4.55	-5.48/-6.62	-7.52/-7.82	-7.64/-8.1	-6.57/-8.38	-10.56/-7.26	-8/-7.26	-6.86/-10.82	-9.47/-9.53	-6.04/-6.69	-9.2/-11.51	-8.04/-6.58	-6.09/-7.17	-4.85/-2.49
Θ(135°)	-3.8/-1.98	-1.74/-3.49	-2.92/-2.47	-1.20/7.8	1.35/-1.33	1.5/-1.97	2.04/1.83	1.13/0.34	-0.86/-2.22	-4.22/-1.63	-6.45/-6.91	-6.05/-5.86	-6.67/-5.43	-6.91/-7.84	-9.66/-9.64	-7.18/-5.33	-6.19/-4.94	-5.88/-8.22	-10.49/-11.26	-10.62/-6.91	-7.46/-11.51	-7.59/-6.27	-7.41/-9.25	-7.01/-4.13
Θ(142.5°)	-5.18/-3.9	-1.82/-1.08	-0.24/0.69	-480/71	0.73/0.64	2.16/2.1	2.78/3.01	2.45/1.32	0.16/-1.68	-3.19/-3.61	-6.54/-5.04	-5.69/-5.64	-6.17/-5.41	-7.34/-8.94	-7.62/-7.8	-6.94/-9.17	-6.94/-5.96	-5.81/-7.85	-9.24/-8.93	-9.58/-8.74	-9.58/-8.18	-5.92/-6.77	-5.91/-4.4	
Θ(150°)	-1.7/-1.62	-1.99/-2.06	-2.41/-2.61	-2.78/-1.98	-1.38/-1.19	-0.62/0.02	0.39/0.62	0.3/-0.57	-2.2/-4.24	-6.05/-6.6	-6.32/-6.65	-7.15/-6.88	-6.92/-6.06	-6.03/-8.24	-8.64/-8.88	-9.84/-8.67	-7.3/-7.22	-8.85/-10.76	-11.97/-12.02	-11.4/-10.27	-9.62/-9.21	-10.53/-10.63	-7.38/-5.68	-3.89/-2.3
Θ(157.5°)	-0.46/-0.4	0.27/0.2	-0.66/-1.48	-2.29/-3.01	-3.3/-2.74	-1.73/-0.82	-0.19/0.04	-0.62/-1.85	-3.43/-5.57	-7.06/-7.98	-6.84/-6.22	-5.61/-4.88	-4/-3.17	-2.81/-2.83	-3.69/-5.63	-7.67/-8.82	-8.53/-8.13	-6.82/-6.51	-6.63/-6.64	-7.13/-9.27	-12.12/-11.9	-8.96/-5.91	-4.34/-3.12	-1.02/-0.16
Θ(165°)	-5.68/-4.13	-3.32/-3.48	-4.09/-4.14	-3.8/-3.45	-2.97/-2.37	-1.97/-1.78	-2.06/-2.94	-4/-5.55	-7.6/-8.73	-9.67/-10.85	-10.13/-8.51	-6.18/-4.64	-4.05/-3.58	-3.26/-3.18	-3.38/-3.99	-4.8/-5.47	-6.45/-7.97	-9.16/-9.35	-9.26/-9.22	-10.18/-11.93	-11.89/-10.36	-8.76/-7.83	-7.21/-7.34	-7.49/-7.07
Θ(172.5°)	-6.13/-6.53	-6.66/-6.42	-5.2/-4.96	-5/-5.08	-5/-5.07	-5.23/-5.48	-6.37/-7.49	-8.95/-9.65	-10.59/-12.17	-12.59/-11.71	-12.2/-12.03	-10.7/-8.31	-7.05/-5.97	-5.26/-										



Radiated Composite Gain Data <2.4GHz and 5GHz U-NII 1~U-NII 4>

Appendix A

Θ(52.5°)	-0.45/-1.13	-1.29/-1.3	-0.83/-1.02	-1.46/-1.26	-2.1/-3.25	-3.01/-3.72	-4.1/-4.31	-3.58/-1.67	-0.35/0.21	0.71/0.48	-0.22/-0.1	-0.78/-1.1	-0.04/0.74	0.54/-0.18	-0.83/-1.84	-3.11/-3.93	-3.58/-3.11	-3.3/-3.62	-4.02/-3.52	-2.27/-0.85	-0.79/-0.27	0.9/1.52	2.28/2.56	1.53/0.11
Θ(60°)	-1.21/-2.09	-3.56/-4.38	-2.93/-2.28	-2.11/-1.95	-3.08/-4.86	-6.82/-8.9	-8.41/-8.23	-5.67/-3.3	-1.86/-0.9	0.34/0.64	0.14/0.27	-1.19/-2.47	-1.16/-0.09	-0.11/-0.82	-1.07/-1.76	-2.74/-3.38	-3.3/-2.04	-0.71/-0.3	-0.78/-1.08	-0.31/0.85	1.57/0.68	0.33/0.27	1.62/2.17	0.88/-0.63
Θ(67.5°)	-0.87/-1.79	-2.69/-2.72	-3.11/-4.01	-2.61/-2.63	-4.91/-6.94	-7.97/-7.34	-6.69/-5.92	-4.67/-3.16	-2.06/-0.8	-0.94/-0.93	-1.51/-2.07	-2.27/-2.86	-1.7/-2.04	-3.09/-3.78	-4.24/-3.56	-2.37/-1.87	-2.14/-2.57	-2.54/-2.77	-1.33/-0.13	1.27/2.22	2.23/1.65	1/0.49	1.32/0.1	0.86/-1.1
Θ(75°)	-0.53/-0.97	-2.5/-2.2	-3.77/-5.68	-3.82/-3.81	-6.26/-0.65	-5.25/-5.01	-5.02/-5.5	-5.01/-3.24	-1.79/-0.1	-0.47/-0.74	-0.43/-2	-1.14/-2.43	-1.21/-1.16	-1.81/-3.64	-4.26/-3.01	-1.91/-0.73	-2.38/-2.9	-1.49/-0.37	-0.56/-0.28	2.17/3.28	3.66/3.23	1.85/1.13	0.63/-2.1	0.46/-1.16
Θ(82.5°)	-2.01/-0.71	-1.79/-1.85	-2.67/-3.71	-3.1/-6.17	-9.53/-7.95	-4.19/-3.34	-3.47/-4.71	-6.69/-6.41	-3.44/-2.04	-2.34/-2.54	-2.56/-3.29	-4.33/-5.66	-2.94/-2.43	-3.99/-4.35	-2.72/-1.89	0.40/-7.7	-1.83/-1.7	0.57/-0.59	-0.19/0.96	2.99/2.86	2.04/-29	0.1/-0.2	0.33/-0.13	-1.3/-2.11
Θ(90°)	-0.47/-1.83	-3.66/-3.94	-3.1/-2.54	-1.21/-4.04	-5.95/-5.1	-4.39/-5.09	-4.84/-5.49	-6.03/-5.65	-5.23/-5.77	-5.53/-3.54	-4.42/-4.8	-8/-9.28	-9.05/-4.86	-5.39/-6.96	-4.58/-4.95	-3.82/-2.44	-3.28/-2.54	-0.04/-1.38	-1.52/0.15	1.26/1.95	1.51/1	0.2/-0.18	0.26/0.99	0.17/-0.56
Θ(97.5°)	-0.77/-2.04	-3.48/-2.36	-2.45/-2.72	-1.51/-4.55	-5.85/-5.03	-5.26/-6.46	-4.66/-6.42	-6.03/-4.54	-4.03/-4.18	-4.83/-3.1	-4.19/-3.97	-7.22/-8.23	-7/-6.11	-6.25/-5.7	-3.43/-4.64	-2.01/-1.81	-3.27/-0.76	0.79/-2.69	-3.07/-0.64	2.01/2.26	2.05/0.27	-1.96/-1.77	0.06/-0.41	1.29/-2.5
Θ(105°)	-3.69/-3.97	-5.01/-3.32	-0.76/-0.13	-0.21/-3.57	-4.88/-5.79	-4.91/-3.55	-3.84/-3.91	-4.17/-5.43	-6.04/-5.31	-3.71/-2.75	-6.34/-2.88	-6.17/-5.5	-4.75/-4.49	-6.75/-9.07	-6.98/-4.48	-3.3/-1.95	-2.36/0.19	1.42/-2.15	-2.96/1.03	1.89/2.66	0.13/-0.96	-2.14/-0.12	1.15/-0.16	-2.89/-0.37
Θ(112.5°)	-4.4/-5.2	-3.15/-1.52	0.04/0.16	0.41/-1.13	-4.02/-2.27	-1.17/-0.72	-0.82/-1.02	-1.37/-4.05	-6.38/-6.73	-8.37/-7.14	-6.26/-4.62	-6.21/-5.68	-5.07/-7.06	-7.38/-10.8	-8.72/-7.09	-3.6/-4.31	-6.05/-2.36	0.1/-2.6	-1.91/0.74	0.47/0.7	-1.22/-1.85	-3.53/-1.36	-0.04/-0.61	-3.22/-3.21
Θ(120°)	-0.12/-1.66	-0.46/-0.82	-1.3/-1.97	-4.11/-4.97	-3.97/-3.52	-2.97/-2.25	-1.85/-1.88	-2.21/-3.16	-3.5/-3.65	-4.68/-5.28	-5.84/-5.83	-5.37/-5.28	-2.8/-3.96	-4.62/-4.49	-6.64/-3.93	-2.15/-6.07	-1.9/-0.35	-0.04/-2.52	-4.66/-3.07	-1.94/-0.26	-2.32/-4.76	-5.69/-2.04	0.43/0.33	-1.85/-1.5
Θ(127.5°)	-0.07/-1.88	-1.4/-1.18	-3.69/-4.98	-5.86/-6.18	-3.45/-2.69	-2.8/-4.71	-5.9/5.11	-4.06/-3.57	-2.3/-2.44	-3.17/-3.7	-4.62/-5.9	-7.14/-6.07	-4.46/-6.52	-5.92/-5.37	-9.47/-3.96	-3.21/-7.44	-2.81/-0.9	-1.77/-5.97	-5.64/-1.61	-0.76/0.79	0.02/-3.95	-6.89/-4.94	-2.83/-2.35	-2.55/-1.6
Θ(135°)	-5.17/-6.18	-7.57/-6.67	-5.3/-5.41	-4.82/-3.85	-3.29/-3.88	-6.87/-9.88	-9.5/-9.49	-5.99/-3.17	-2.75/-3.23	-2.77/-2.45	-2.99/-2.48	-3/-6.25	-6.74/-4.02	-5.05/-9.1	-8.07/-6.9	-3.57/-3.65	-2.58/0.25	-0.17/-4.06	-4.15/-1.43	-1.42/-2.47	-0.99/-2.44	-4.97/-3.59	-2.42/-4.86	-3.52/-2.89
Θ(142.5°)	-1.36/-4.53	-2.48/-0.99	-1.64/-2.37	-2.82/-3.39	-4.09/-5.04	-4.36/-4.12	-5.08/-5.54	-4.23/-4.04	-5.67/-6.67	-6.41/-5.76	-6.13/-7.23	-6.51/-5.06	-3.65/-4.22	-4.83/-5.8	-5.49/-5.9	-6.99/-8.17	-4.58/-1.61	-1.52/-3.37	-3.86/-2.48	-1.69/-3.27	-5.18/-1.95	-0.82/-0.98	-0.68/-0.7	-1.21/-1.15
Θ(150°)	-3.73/-2.78	-2.57/-2.84	-2.03/-1.44	-1.42/-1.88	-2.51/-4.36	-6.09/-6.13	-5.12/-3.96	-3.48/-4.94	-5.78/-4.94	-3.49/-2.42	-2.01/-2.05	-2.5/-1.57	-1.73/-3.43	-4.92/-5.54	-6.78/-7.06	-7.41/-10.48	-8.05/-5.75	-6.02/-7.17	-7.08/-6.78	-4.84/-3.43	-4.44/-7.47	-6.15/-6.02	-6.53/-7.23	-5.17/-4.68
Θ(157.5°)	-0.12/-0.71	-1.48/-1.95	-1.59/-0.68	-0.26/-0.54	-1.5/-2.7	-3.91/-4.68	-4.41/-4.25	-4.47/-5.28	-6.43/-6.9	-6.24/-4.86	-3.81/-1.96	-0.79/-0.48	-0.78/-0.72	-0.48/-0.52	-0.92/-1.56	-2.99/-5.27	-6.23/-6.35	-6.46/-4.99	-3.82/-4.06	-5.35/-4.55	-3.42/-3.44	-3.98/-4.5	-5.33/-3.94	-1.63/-0.28
Θ(165°)	-1.57/-1.45	-0.98/-0.59	0.06/0.62	0.71/0.13	-0.84/-2.14	-3.8/-5.81	-7.81/-9.54	-12.09/-11.61	-9.15/-7.05	-5.3/-4.07	-3.16/-2.68	-2.51/-2.44	-2.42/-2.81	-3.37/-4.08	-4.71/-4.99	-4.93/-5.48	-5.31/-5.39	-5.71/-6.13	-6.22/-5.62	-4.92/-3.72	-2.33/-1.44	-0.98/-1.09	-1.12/-1.29	-1.41/-1.66
Θ(172.5°)	-1.8/-1.19	-0.97/-1.24	-1.94/-2.92	-3.75/-4.75	-6.04/-7.07	-8.55/-10.91	-12.13/-12.1	-11.33/-9.05	-7.47/-6.67	-5.82/-4.9	-4.18/-3.97	-4.12/-4.56	-4.74/-4.62	-4.21/-3.81	-3.71/-4.03	-4.58/-4.74	-4.88/-5.4	-5.65/-5.94	-5.86/-5.59	-6.17/-6.68	-6.71/-5.87	-5.61/-5.27	-5.68/-5.37	-4.24/-3.11
Θ(180°)	-3.7/-3.74	-4.04/-4.83	-5.84/-6.83	-7.33/-8.61	-9.36/-9.71	-9.63/-8.35	-7.17/-6.05	-5.18/-4.48	-3.82/-3.27	-2.93/-2.58	-2.55/-2.28	-2.02/-2.02	-2.14/-2.2	-2.83/-3.37	-4.08/-5	-5.98/-6.57	-7.39/-7.9	-7.83/-7.55	-7.07/-6.33	-5.89/-5.65	-5.36/-5.23	-5.33/-6.05	-5.64/-4.75	-3.81/-3.66
Freq(Hz)	5.3G/Pol.	Phi/-	Phi/-	Phi/-	Phi/-	Phi/-	Phi/-	Phi/-	Phi/-	Phi/-	Phi/-	Phi/-	Phi/-	Phi/-	Phi/-	Phi/-	Phi/-	Phi/-	Phi/-	Phi/-	Phi/-	Phi/-	Phi/-	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°)	-4.91/-3.42	-2.01/-0.94	-0.18/0.4	1/1.58	2.17/2.54	2.76/2.68	2.48/2.31	2.11/1.85	1.36/0.85	0.03/-0.89	-2.06/-3.47	-4.8/-5.41	-4.95/-3.85	-2.61/-1.39	-0.58/0.09	0.74/1.25	1.71/2.16	2.42/3.3	2.16/2.02	1.81/45	0.93/0.4	-0.56/-1.61	-2.73/-3.68	-4.2/-4.97
Θ(7.5°)	-5.17/-3.99	-2.36/-1.43	-0.69/-0.09	0.41/0.74	1.18/1.62	2.02/2.17	2.15/1.86	1.5/1.13	0.63/0.29	-0.3/-0.99	-1.8/-2.73	-3.71/-4.4	-4.28/-3.75	-2.67/-1.6	-0.63/0.2	0.94/1.52	2.07/2.43	2.65/2.68	2.54/2.32	1.89/1.31	0.73/-0.05	-1.07/-1.9	-3.22/-4.9	-6.1/-6.37
Θ(15°)	-7.43/-5.2	-3.33/-1.33	-0.14/0.99	1.41/1.69	2.01/2.33	2.48/2.5	2.48/2.15	1.71/1.25	0.89/0.5	0.01/-0.67	-1.52/-2.73	-3.81/-4.19	-3.56/-2.33	-1.2/-0.37	0.26/1.26	2/2.71	3.12/2.32	3.03/2.64	2.36/1.52	0.62/-0.33	-1.44/-2.64	-4.23/-6.17	-7.06/-7.74	
Θ(22.5°)	-6.75/-5.41	-4/-2.41	-1.16/-0.55	-0.34/0.18	0.98/1.38	1.99/2.4	2.45/2.68	2.63/2.47	2.22/1.83	1.31/0.86	0.11/-0.86	-2.21/-3.78	-4.84/-4.66	-3.57/-2.27	-0.98/-0.13	0.78/1.61	2.4/2.86	3.01/2.87	2.46/2.04	1.52/0.75	-0.05/-0.83	-1.74/-2.56	-3.43/-4.56	-5.53/-6.93
Θ(30°)	-4.51/-3.26	-2.04/-1	-0.18/0.2	0.71/1.6	2.06/2.36	3.06/3.29	3.04/3.07	2.87/2.64	2.31/1.71	0.9/-0.08	-1.13/-2.11	-3.12/-4.72	-5.68/-8.22	-9.36/-8.38	-6.1/-3.11	-0.45/-1.6	1.87/2.11	2.49/2.79	2.9/2.67	1.91/0.76	-0.57/-2.08	-3.4/-4.6	-5.86/-6.87	-6.22/-6.42
Θ(37.5°)	-1.9/-1.41	-0.78/-0.44	-0.40/0.22	1.26/1.85	2.56/3.05	3.35/3.51	3.84/3.97	3.51/3.03	2.45/1.7	1.17/0.36	-0.78/-2.17	-3.22/-4.83	-5.26/-2.55	-0.71/0.21	0.59/1.39	2.36/3.18	3.35/2.85	1.97/0.47	-1.42/-2.79	-3.82/-4.58	-5.77/-6.05	-4.58/-3.4		
Θ(45°)	-4.34/-3.29	-2.36/-1.54	-0.21/1.05	2.12/7.4	3.49/4.02	3.9/3.73	3.65/3.85	3.99/3.77	3.43/2.45	1.49/0.57	-0.24/-1.66	-3.19/-5.14	-6.62/-7.12	-6.69/-6.87	-7.01/-5.99	-4.7/-3.26	-2.42/-1.44	-0.26/0.59	0.83/0.52	-0.85/-2.84	-3.48/-4.01	-3.43/-2.94	-3.11/-4.08	-4.44/-4.64
Θ(52.5°)	-5.52/-4.07	-3.1/-2.07	-0.85/-0.21	0.24/1.1	2.76/3.65	3.93/4.06	3.8/3.54	3.55/3.71	3.41/1.98	0.26/-1.3	-1.07/-2.29	-3.7/-4.57	-5.01/-5.12	-4.49/-4.45	-4.01/-3.15	-2.91/-2.77	-2.98/-1.68	-1.15/-0.68	-1.16/-2.29	-2.62/-2.08	-2.37/-2.47	-2.84/-3.81	-4/-5.09	-5.96/-7.39
Θ(60°)	-8.22/-6.88	-3.91/-2.42	-1.13/-0.05	1.46/2.42	3.06/3.8	4.17/4.04	3.35/2.57	2.49/2.16	2.49/2.16	0.17/-0.65	-0.41/-1.02	-2.01/-4.09	-6.63/-5.15	-3.24/-3.19	-3.79/-3.46	-2.43/-1.61	-1.03/-0.7	-0.69/-0.98	-1.1/-1.45	-2.23/-2.39	-3.42/-3.6	-4.85/-5.98	-6.31/-7.25	-9.01/-11.16
Θ(67.5°)	-7.76/-5.95	-4.17/-2.02	-0.51/0.55	1.53/2	1.57/2.47	3.64/3.91	3.44/2.77	2.61/2.37	1.24/0.15	-0.47/-1.03	-0.49/-1	-2.94/-0.9	-6.15/-4.64	-3.66/-3.65	-3.29/-4.32	-4.33/-2.05	-1.32/-1.08	-0.68/-1.21	-1.48/-1.28	-1.37/-2	-2.81/-3.75	-4.98/-6.17	-6.61/-6.75	-7.39/-7.9
Θ(75°)	-7.13/-6	-3.87/-3.55	-2.67/-1.36	0.27/1.42	2.72/2.23	2.94/2.43	1.7/0.5	-0.11/-0.82	-0.31/0.39	0.53/-0.19	-1.51/-2.54	-3.78/-5.01	-5.63/-4.9	-3.17/-3.66	-3.78/-6.03	-5.56/-3.25	-2.25/-1.64	-0.46/-0.69	-0.87/-0.52	-1.17/-3.61	-5.31/-5.01	-5.28/-7.13	-9.25/-9.51	-10.42/-9.5
Θ(82.5°)	-6.11/-6.88	-5.77/-3.15	-1.63/-0.23	0.72/1.4	1.83/2.04	1.88/1.66	0.95/0.06	-0.17/1.04	1.96/1.87	0.94/-1.33	-3.73/-5.34	-6.47/-6.23	-4.92/-2.72	-4.17/-5.67	-5.74/-5.63	-2.15/-0.15	-1.11/-1.8	-0.83/-0.78	-0.31/0.38	-0.71/-1.99	-3.33/-3.92	-3.95/-5.88	-7.97/-9.18	-8.83/-6.93
Θ(90°)	-3.34/-3.28	-3.57/-2.43	-1.45/-0.72	-0.04/0.37	0.91/1.1	1.17/0.56	-0.13/-0.63	-0.05/0.89	1.87/1.96	0.93/-1.59	-4.29/-5.54	-8.17/-8.53	-4.66/-6.24	-7.68/-9.44	-7.29/-5.22	-2.72/-1.44	-1.45/-2.53	-1.87/-1.72	-1.53/-1.33	-1.42/-1.36	-1.21/-1.34	-2.44/-3.51	-3.61/-3.69	-3.34/-3.02
Θ(97.5°)	-4.26/-5.05	-6.54/-4.13	-3.54/-1.77	-0.92/-0.26	-0.22/0	0.34/0.8	0.61/0.04	0.51/-0.56	0.14/-0.54	-0.51/-3.62	-2.4/-3.08	-2.02/-2.86	-4.01/-3.37	-5.32/-6.7	-5.31/-5.23	-3.72/-2.42	-1.38/-3.1	-3.72/-2.42	-0.26/0.33	-1.38/-3.1	-3.72/-2.42	-2.3/-2.82	-5.04/-5.41	
Θ(105°)	-3.93/-3.5	-3.05/-1.39	-1.59/-0.71	-0.14/0.77	1.16/1.16	1.28/0.93	0.95/0.79	0.46/0.58	1.27/2.12	1.97/0.08	-2.91/3.68	-3.45/-4.22	-4.4/-2.68	-3.67/-6.46	-7.89/-6.45	-2.52/-1.49	-2.07/-2.08	-0.23/-1.46	-0.51/-0.79	-1.34/-2.47	-3.17/-3.99	-4.54/-4.13	-5.25/-5.11	-4.57/-5.34
Θ(112.5°)	-1.73/-0.25	-1.46/-0.74	0.01/1.3	2.12/2.1	1.95/1.48	0.93/-0.01	-0.76/-0.23	0.35/0.41	0.36/-0.01	-1.12/-2.47	-3.07/-2.49	-6.11/-7.82	-6.52/-4.81	-6.77/-7										



Radiated Composite Gain Data <2.4GHz and 5GHz U-NII 1~U-NII 4>

Appendix A

Θ(37.5°)	1.16/1.44	0.83/0.24	0.04/0.23	-0.42/-2.54	-3.8/-4.62	-3.94/-5.51	-6.48/-6.93	-7.07/-6.48	-4.61/-2.99	-1.64/-0.97	-0.63/-0.42	-0.01/0.67	0.97/0.55	-0.19/-0.55	-0.96/-0.8	-1.14/-1.76	-2.17/-3.15	-5.66/-8.34	-7.53/-5.71	-4.06/-2.05	0.06/1.17	1.58/1.19	1.48/1.89	1.21/0.27
Θ(45°)	0.71/1.12	0.6/-0.55	-0.78/-0.52	-1.27/-3.1	-5.29/-6.45	-7.4/-7.94	-8.14/-8.64	-7.69/-6.48	-4.27/-2.68	-1.47/-1.3	-1.83/-1.73	-1.21/-0.49	-0.34/-0.89	-0.89/-1.09	-1.48/-0.99	-0.79/-1.66	-2.46/-4.06	-4.53/-4.57	-5.79/-8.13	-6.39/-3.84	-2.45/-0.85	-0.19/-0.85	-0.61/-0.07	-0.37/-0.05
Θ(52.5°)	0.96/0.74	0.83/1.09	0.58/-0.53	-1.12/-2.51	-3.22/-4.84	-6.3/-6.68	-5.5/-5.08	-6.22/-7.1	-6.1/-4.46	-3.16/-2.39	-2.49/-2.06	-2.05/-2.11	-2.51/-1.88	-0.87/-0.68	-0.87/-1.49	-2.89/-4.17	-4.99/-4.34	-2.84/-2.97	-3.83/-3.89	-4.17/-2.97	-2.1/-0.79	-0.25/-0.75	0.37/1.11	0.87/0.8
Θ(60°)	-0.12/-1.12	-2.65/-2.47	-2.29/-2.34	-2.12/-3.17	-3.42/-3.79	-5.41/-6.57	-5.97/-6.55	-5.13/-3.21	-1.65/-1.78	-2.36/-2.61	-1.72/-2.09	-2.28/-2.48	-2.38/-2.21	-1.86/-2.27	-2.27/-3.1	-4.13/-3.42	-2.6/-2.7	-3.93/-3.25	-1.34/-0.2	-0.24/-0.67	-0.4/-0.21	0.71/0.89	0.81/-0.04	0.81/-0.04
Θ(67.5°)	-2.27/-0.47	-2.39/-1.61	-2.5/-2.3	-2.07/-3.63	-4.68/-6.21	-9.07/-8.76	-7.28/-5.18	-4.59/-4.59	-3.44/-1.99	-1.92/-2.43	-3.36/-3.07	-3.38/-2.89	-4.14/-4.46	-2.39/-1.85	-2.92/-3.65	-2.74/-2.72	-3.68/-5.29	-0.59/1.92	1.42/0.54	-0.43/-0.54	0.61/1.22	0.28/-1.27	0.28/-1.27	0.28/-1.27
Θ(75°)	1.0/1.9	-1.49/-1.3	-2.83/-1.53	-1.89/-5.01	-5.29/-5.18	-4.28/-3.24	-2.93/-2.51	-3.41/-3.87	-3.28/-2.74	-3/-3.69	-4.17/-4.1	-5.39/-4.68	-4.04/-3.06	-3.19/-3.49	-2.84/-1.27	-1.26/-0.44	-1.95/-3.3	-2.46/-3.34	-2.51/-1.12	0.45/0.35	0.61/-0.24	-0.83/-1.23	-0.29/0.54	0.21/-0.97
Θ(82.5°)	0.22/-1.49	-2.5/-2.94	-4.67/-2.24	-3.9/-6.02	-6.21/-4.87	-4.04/-3.12	-3.95/-5.07	-5.66/-4.45	-5.4/-5.09	-3.51/-5.23	-5.54/-7.8	-7.38/-8.72	-6.31/-5.42	-5.15/-5.95	-4.01/-1.9	-1.16/-0.25	-0.99/-1.68	0.41/0.63	-0.29/-0.39	0.49/0.19	0.56/0.03	0.06/-0.47	-0.26/-0.63	-0.78/-2.6
Θ(90°)	-0.64/-2.13	-2.23/-2.37	-4.36/-3.54	-4.74/-5.2	-7.57/-7.4	-4.25/-1.61	-2.41/-4.67	-6.57/-7.5	-6.51/-4.75	-4.45/-5.25	-6.02/-6.44	-6.56/-8.43	-9.35/-7.87	-5.48/-6.43	-4.76/-3.33	0.17/-0.36	1.4/-0.01	-1.56/-1.63	0.54/0.3	-0.6/0.55	-0.35/-0.8	1.91/1.53	-0.2/-2.51	-0.2/-2.51
Θ(97.5°)	-2.03/-4.2	-4.1/-5.49	-7.29/-5.59	-4.54/-5.16	-6.76/-7.26	-6.06/-3.19	-1.71/-1.55	-4.79/-7.61	-7.45/-7.19	-6.97/-4.92	-6.52/-6.73	-9.42/-10.39	-9.38/-6.19	-5.76/-6.79	-5.34/-2.74	-2.49/-0.3	-2.44/-1.58	0.51/-1.49	-3.15/-3.08	-0.2/0.1	0.27/-1.75	-2.74/0.45	1.96/0.84	-0.38/-2.1
Θ(105°)	-3.38/-3.68	-4.11/-4.32	-6.41/-6.62	-4.65/-3.78	-4.23/-5.31	-5.37/-3.43	-2.78/-2.51	-2.81/-4.99	-9.19/-9.48	-6.35/-5.4	-7.73/-7.44	-7.08/-8.99	-5.21/-5.59	-4.14/-6.79	-5.51/-3.15	-0.64/-0.12	-2.25/-0.77	1.31/-2.91	-4.26/-2.13	0.21/0.93	-0.08/-2.07	-2.45/-1.93	-0.23/-1.25	-2.04/-2.57
Θ(112.5°)	-8.01/-6.81	-7.06/-5.32	-5/-4.12	-2.45/-3.44	-5.9/-5.82	-4.96/-2.95	-2.18/-2.69	-2.77/-3.33	-5.74/-7.21	-6.39/-7.2	-6.11/-5.64	-3.9/-6.69	-5.21/-6.99	-4.78/-7.71	-5.83/-6.54	-3.33/-2.76	-5.01/-0.8	0.8/-2.56	-1.03/1.08	0.15/-0.24	-3.61/-4.08	-4.57/-3.02	-0.41/-3.84	-4.32/-4.16
Θ(120°)	-6.33/-5.47	-3.28/-5.46	-4.19/-5	-5.9/-4.7	-3.92/-3.57	-3.23/-4.13	-3.67/-4.19	-4.24/-2.29	-2.4/-2.03	-2.62/-4.59	-5.16/-5.26	-3.78/-5.96	-3.46/-4.63	-8.26/-7.33	-6.15/-8.89	-3.17/-2.46	-4.53/-1.87	1.08/-1.29	-3.29/-1.78	-2.58/-0.26	-3.9/-2.72	-5.87/-2.42	-1.64/-3.21	-7.47/-4.47
Θ(127.5°)	-5.39/-6.59	-4.39/-4.54	-6.07/-5.56	-5.46/-4.45	-3.14/-2.38	-1.96/-2.59	-2.83/-2.62	-3.14/-2.55	-1.62/-0.58	-1.68/-2.56	-4.25/-4.3	-5.81/-5.86	-4.19/-7.7	-8.72/-5.57	-6.84/-5.59	-1.78/-2.68	-3.74/-0.5	0.91/-3.75	-7.05/-2.14	-2.53/-2.17	-1.99/-4.75	-6.41/-3.6	-1.93/-1.84	-5.89/-5.39
Θ(135°)	-5.13/-4.12	-4.61/-4.46	-3/-3.11	-2.3/-1.69	-0.92/-1.12	-1.84/-2.4	-3.33/-3.35	-2.64/-1.92	-1.46/-1.61	-2.06/-3.1	-3.33/-3.29	-4.41/-4.38	-4.42/-6.54	-3.49/-2.23	-5.3/-5.14	-3.6/-4.77	-2.46/-3.33	-4.5/-7.05	-8.11/-4.92	-2.69/-4.89	-2.22/-3.69	-7.76/-3.83	-3.05/-3.14	-1.82/-2.14
Θ(142.5°)	-4.13/-6.03	-2.01/-1.37	-2.12/-1.77	-2.4/-4.6	-6.09/-6.14	-6.39/-6.08	-5.46/-6.87	-6.48/-3.97	-3/-3.31	-3.59/-4.4	-4.09/-3.99	-5.58/-6.5	-7.47/-5.39	-3.58/-4.27	-5.47/-6.81	-6.08/-5.33	-3.94/-3.09	-3.32/-5.23	-4.99/-4.91	-4.27/-6.07	-3.47/-3.09	-5.96/-5.87	-5.67/-5.24	-4.66/-4.16
Θ(150°)	-1.17/-0.3	-0.46/-1.24	-1.99/-2.32	-0.02/-4.43	-6.24/-6.26	-4.56/-3.44	-3.97/-5.08	-6.17/-6.27	-6.51/-6.81	-5.82/-3.52	-2.43/-2.95	-3.22/-1.71	-2.14/-2.4	-1.71/-1.86	-3.55/-4.67	-5.09/-6.23	-5.93/-4.55	-3.86/-4.59	-4.85/-3.99	-2.84/-3.89	-4.91/-4.41	-2.85/-0.85	-0.63/-0.26	-0.97/-1.71
Θ(157.5°)	1.18/0.15	-0.95/-2.59	-4.34/-5.36	-5.27/-4.72	-4.46/-4.25	-4.33/-4.77	-5.66/-5.85	-5.79/-6.8	-7.87/-8.04	-7.1/-6.01	-5.48/-5.38	-5.12/-4.34	-4.53/-4.99	-4.3/-4.18	-4.21/-4.24	-4.47/-4.03	-3.49/-3.42	-3.45/-3.91	-4.49/-4.85	-4.54/-4.39	-4.26/-4.4	-4.56/-1.9	0.09/0.71	1.02/1.41
Θ(165°)	-0.85/-1.41	-2/-3	-3.4/-3.18	-3.27/-4.11	-4.86/-5.29	-5.58/-5.55	-5.03/-4.6	-4.54/-4.86	-4.7/-4.56	-4.11/-3.84	-3.88/-4.01	-3.55/-2.92	-2.74/-2.64	-3.55/-5.11	-6.31/-6.41	-5.6/-4.68	-4.19/-4.34	-5.33/-6.04	-6.27/-6.46	-5.98/-3.94	-1.69/-0.36	-0.16/-0.57	-0.69/-0.74	-0.87/-0.73
Θ(172.5°)	-3.44/-2.85	-3.51/-4.41	-5.22/-5.89	-6.79/-7.71	-8.01/-8.32	-7.69/-7.05	-6.76/-6.55	-6.7/-6.81	-6.73/-6.94	-7.34/-7.05	-6.4/-5.72	-5.53/-5.93	-6.65/-7.28	-8.09/-9.03	-9.75/-9.6	-9.67/-9.32	-9.12/-9.36	-10.12/-9.57	-9.04/-7.49	-6.75/-5.8	-5.15/-3.72	-3.18/-4.41	-6.04/-6.81	-5.89/-4.68
Θ(180°)	-5.65/-5.6	-7.39/-8.85	-9.29/-9.74	-9.69/-9.25	-9.35/-9.3	-9.41/-9.44	-8.61/-8.67	-7.64/-6.23	-5.19/-4.78	-4.31/-4.1	-3.91/-3.98	-4/-3.98	-4.16/-4.72	-5.3/-6.02	-6.66/-7.39	-7.81/-8.84	-9.67/-11.04	-11.34/-11.11	-9.91/-8.95	-8.83/-8.6	-7.55/-7.22	-7.37/-8.14	-8.32/-7.61	-6.8/-6.2
Freq(Hz)	5.7855G/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°)	-8.32/-8.65	-5.92/-4.13	-1.79/-0.25	0.55/1.23	1.75/2.2	2.52/2.76	2.88/2.85	2.75/2.52	1.98/1.28	0.34/-0.94	-2.54/-66	-7.65/-9.35	-10.34/-8.39	-5.82/-3.67	-2.26/-1.02	0.01/0.76	1.62/2.21	2.71/2.88	2.96/2.74	2.57/2.2	1.75/1	0.24/-1.2	-2.8/-4.61	-5.57/-6.92
Θ(7.5°)	-7.38/-5.7	-3.81/-2.57	-1.61/-0.44	-0.02/0.52	1.21/1.75	2.2/2.52	2.75/2.94	3.05/3.02	2.67/1.88	1.0/0.7	-1.03/-2.65	-4.77/-5.3	-9.64/-9.03	-7.8/-5.41	-3.45/-1.86	-0.48/0.74	1.61/2.26	2.7/2.84	2.91/2.63	2.24/1.59	0.88/0.07	-0.78/-2.38	-4.69/-7.42	-8.62/-8.2
Θ(15°)	-5/-3.4	-2.47/-1.86	-1.29/-0.67	0.05/0.54	1.4/2.06	2.53/2.95	3.32/3.6	3.54/3.39	2.96/2.36	1.53/0.66	-0.48/-1.88	-3.32/-4.76	-6.04/-6.59	-6.47/-5.11	-3.33/-1.75	-0.38/0.76	1.54/2.12	2.45/2.62	2.49/2.12	1.50/0.77	-0.05/-0.89	-1.93/-3.03	-4.73/-6.57	-6.84/-8.5
Θ(22.5°)	-4.47/-4.93	-4.35/-2.92	-1.71/-0.45	0.48/1.04	1.68/2.39	2.89/3.36	3.85/4.11	4.38/4.29	3.84/2.94	1.77/0.25	-1.4/-3.15	-4.81/-6.1	-6.85/-6.67	-6.08/-4.82	-3.12/-1.61	-0.39/0.81	1.78/2.42	2.64/2.62	2.26/1.56	0.59/-0.29	-1.22/-1.83	-2.47/-3.19	-3.71/-3.92	-3.98/-4.34
Θ(30°)	-4.17/-3.4	-2.3/-1.37	-0.42/0.07	0.43/0.94	1.75/2.51	2.8/3.34	4.05/4.37	4.56/4.36	3.93/3.16	1.89/0.31	-1.69/-4.01	-6.13/-7.46	-8.22/-7.92	-7.3/-6.92	-5.7/-3.71	-1.7/0.18	1.64/2.65	3.05/3.01	2.62/2	1.37/0.21	-1.11/-1.84	-2.24/-2.3	-2.36/-2.69	-3.29/-3.77
Θ(37.5°)	-3.43/-4.18	-3.48/-1.79	-0.87/0.06	1.05/1.82	2.27/2.52	2.79/3.34	3.62/3.89	4.11/3.98	3.34/2.33	0.89/-1.25	-3.8/-5.65	-7.9/-9.37	-7.4/-6.94	-6.31/-6.53	-4.71/-2.58	-0.6/0.62	1.34/1.73	1.97/2.17	2.31/1.79	0.7/0.08	-0.16/-1.17	-2.22/-2.95	-3.36/-3.05	-2.25/-2.67
Θ(45°)	-3.15/-2.93	-2.09/-1.89	-0.80/-0.85	1.61/1.88	2.18/2.22	2.16/2.5	2.69/2.81	3/3.05	2.76/2.02	0.52/-1.26	-3.86/-5.18	-5.08/-5.99	-6.02/-6.35	-5.87/-4.77	-4.41/-3.42	-1.74/-0.5	0.01/0.17	0.02/0.33	0.95/1.28	1.17/-0.13	-1.8/-2.24	-2.33/-2.41	-2.7/-2.86	-3.04/-2.74
Θ(52.5°)	-1.08/-0.39	-0.45/-0.62	0.17/0.96	1.8/2.58	2.9/2.9	2.87/2.92	2.52/-1.7	1.19/1.44	1.76/1.7	0.73/-0.48	-1.57/-3.59	-5.41/-5.81	-3.96/-3.73	-3.08/-2.69	-3.3/-3.49	-2.52/-1.19	-0.8/-0.96	-1.27/-1.08	-0.23/-0.08	-0.32/-1.33	-2.27/-2.83	-2.35/-1.52	-1.22/-1.04	-1.65/-1.85
Θ(60°)	-5.91/-4.92	-4.32/-2.57	-0.25/-1.32	2.22/2.69	3.06/3.01	3.13/3.08	2.67/2.56	2.49/2.55	2.18/1.73	0.85/-0.53	-1.88/-3.53	-5.59/-7.02	-8.16/-9.61	-7.68/-6.78	-5.58/-4.25	-2.33/-2.64	-3.93/-4.23	-2.92/-1.96	-1.92/-1.67	-2.2/-2.72	-3.37/-3.3	-3.88/-3.63	-2.39/-2.53	-3.26/-4.64
Θ(67.5°)	-7.82/-5.99	-4.86/-2.7	-0.98/0.3	1.23/1.63	2.26/2.82	3.43/3.85	3.82/2.95	1.12/0.87	1.77/1.71	0.49/-1.35	-2.45/-3.95	-5.32/-6.86	-7.41/-6.42	-5.64/-5.35	-5.26/-4.89	-3.89/-3.77	-3.35/-3.18	-2.69/-1.4	-0.19/-0.22	-1.13/-2.38	-2.91/-3.93	-4.48/-5.72	-5.41/-5.51	-6.78/-7.13
Θ(75°)	-5.22/-4.34	-4.17/-2.98	-1.34/0.15	0.63/0.59	0.38/0.98	2.45/3.06	2.32/1.47	0.93/1.25	2.05/1.19	0.47/0.65	0.36/-0.15	-1.03/-1.73	-3.18/-3.21	-3.37/-3.15	-6.21/-6.58	-4.74/-3.31	-3.19/-1.85	-0.48/-0.54	-1.06/-0.39	-0.71/-0.61	-2.59/-4.9	-6.38/-7.13	-7.71/-7.27	-7.56/-6.79
Θ(82.5°)	-8.39/-7.22	-5.23/-2.89	-1.71/-0.58	-0.18/0.55	1.57/2.17	2.4/2.6	1.21/0.86	0.49/0.63	-0.4/-1.16	-2.24/-7.17	-9.54/-10.61	-9.52/-5.32	-4.24/-7.17	-8.53/-5.7	-4.99/-2.04	-1.52/-3.51	-1.47/-1.36	-1.29/-2.99	0.42/-1.44	-2.55/-3.67	-3.75/-4.03	-4.27/-4.98	-6.45/-7.71	-6.45/-7.71
Θ(90°)	-6.17/-6.62	-5.28/-4.19	-3.98/-3.17	-1.6/-0.85	-0.31/0.71	1.09/2.17	2.26/2.02	2.24/2.51	1.89/1.62	0.26/-1.82	-4.71/-5.82	-5.15/-5.33	-6.7/-4.5	-3.74/-6.3	-6.12/-5.02	-3.56/-0.08	0.23/-0.88	-1.39/-1.71	-0.49/0.91	0.76/-1.52	-2.38/-2.6	-3.53/-4.74	-7.33/-9.71	-12.4/-10.72
Θ(97.5°)	-7.84/-7.01	-6.08/-3.63	-2.43/-1.84	-2.36/-1.24	0.38/1.08	2.38/2.87	2.23/1.32	2.1/2.13	3.15/2.93	1.86/-0.19	-1.94/-1.99	-5.46/-6.29	-6.24/-3.38											



Radiated Composite Gain Data <2.4GHz and 5GHz U-NII 1~U-NII 4>

Appendix A

Θ(22.5°)	0.52/-0.02	-0.53/-0.22	0.02/0.19	-0.84/-1.85	-2.65/-4.15	-5.57/-5.98	-6.28/-7.44	-8.35/-7.32	-4.16/-1.92	-0.44/0.58	1.19/1.5	1.65/1.74	1.88/1.83	1.63/1.38	0.96/0.51	-0.34/-1.46	-3.24/-5.93	-7.75/-8.91	-7.06/-3.86	-2.08/-0.75	0.08/0.37	0.35/0.52	0.82/1.47	1.93/1.37
Θ(30°)	1.48/1.11	0.82/0.91	1.03/0.6	-0.6/-1.52	-2.57/-3.44	-4.29/-4.97	-5.78/-6.89	-6.67/-5.93	-3.94/-1.3	0.44/0.86	0.64/-0.12	-0.7/-0.51	0.1/0.62	0.98/0.8	0.52/0.27	-0.09/-1.16	-2.45/-3.64	-4.83/-5.42	-4.02/-1.98	-0.9/0.07	0.57/0.6	0.72/0.73	0.95/1.26	1.39/1.25
Θ(37.5°)	2.05/2.67	2.16/1.43	1/0.73	-0.1/-1.06	-2.25/-3.67	-4.67/-5.22	-6.55/-6.6	-5.98/-4.99	-4.48/-2.54	-0.76/-0.22	-0.41/-0.82	-0.99/-0.64	-0.01/0.67	0.8/0.43	-0.06/-0.42	-0.91/-1.19	-1.62/-2.07	-2.3/-1.91	-1.91/-3.09	-2.53/-1.96	-1.18/0.05	0.45/1.03	0.68/-0.05	-0.56/0.73
Θ(45°)	2.88/3.07	2.11/1.73	1.63/0.73	-0.51/-1.41	-2.01/-2.8	-3.52/-4.23	-4.75/-5.84	-6.14/-6.05	-5.38/-4.11	-1.93/-0.43	-0.82/-1.46	-1.58/-0.82	-0.49/0.05	1.28/1.63	0.92/-0.15	-0.04/0.07	-0.41/-1.17	-2.78/-4.41	-4.08/-2.93	-3.02/-2.56	-0.97/0.36	0.79/1.32	2.26/2.61	2.6/2.36
Θ(52.5°)	2.47/2.46	1.74/1.15	0.85/0.76	0.02/-1.2	-2.17/-3.89	-4.81/-4.6	-3.91/-3.93	-5.22/-5.54	-3.99/-1.91	-0.59/-0.1	-0.89/-2.12	-2.02/-1.21	0.03/1.36	1.98/1.98	0.99/-0.13	-0.73/-1.18	-1.22/-1.48	-2.99/-4.04	-4.4/-3.82	-1.85/-0.7	0.21/0.9	0.7/1.12	1.75/1.93	1.56/1.92
Θ(60°)	1.09/0.98	1.22/1.44	0.8/1.17	-0.02/-1.14	-2.01/-3.44	-4.72/-4.92	-2.78/-2.09	-3.94/-5.99	-5.78/-4.5	-3.38/-2.29	-1.99/-3.02	-2.63/-2.7	-1.61/-1.39	-1.09/-0.54	-0.69/-1.28	-1/0.75	-1.06/-1.51	-1.88/-3.86	-2.91/-2.01	-0.46/0.14	-1.44/-1.29	-0.9/0.19	0.88/0.89	-0.63/-0.12
Θ(67.5°)	-0.88/-1.84	-0.09/0	-1.56/-1.01	-2.01/-2.65	-3.45/-5.34	-7.99/-8.8	-6.03/-3.51	-2.99/-4.86	-6.22/-5.27	-4.19/-2.68	-1.66/-2.29	-2.52/-3.06	-2.46/-2.64	-2.94/-2.47	-2.48/-1.59	-1.05/-1.87	-1.53/-0.65	-0.13/-0.82	-2.18/-0.22	1.49/1.76	0.38/0.29	-0.59/-0.1	1.22/1.47	-0.26/-1.97
Θ(75°)	0.3/-1.82	-1.18/-0.96	-1.88/-2.16	-4.34/-4.41	-5.51/-7.5	-9.67/-9.1	-5.48/-3.42	-2.05/-2.31	-3.68/-6.1	-6.17/-4.41	-3.62/-5.06	-5.47/-6.73	-4.52/-3	-2.92/-3.27	-3.31/-1.62	-0.94/-0.83	-0.06/-0.75	-0.24/-0.26	-0.55/1.28	2.42/3.23	2.7/2.65	1.49/0.36	1.34/2.06	1.2/-0.43
Θ(82.5°)	0.57/-2.17	-0.87/-0.17	-1.17/-1.31	-5.8/-5.56	-6.76/-6.4	-4.84/-5.92	-6.22/-4.39	-2.34/-1.76	-3.69/-5.73	-6.48/-5.15	-5/-5.36	-7.38/-7.68	-5.35/-4.2	-3.44/-4.26	-3.55/-0.92	-0.66/0.17	1.21/0.14	-0.09/-0.29	-0.04/0.32	1.39/1.06	1.96/1.71	0.8/-0.73	-0.24/1.28	0.12/-0.93
Θ(90°)	0.87/-2.33	-1.13/-0.68	-2.12/-3.09	-7.61/-7.22	-7.08/-6.13	-5.92/-5.85	-5.52/-4.79	-3.92/-3.51	-5.09/-6.29	-7.86/-6.68	-5.69/-6.61	-8.34/-8.81	-7.89/-5.12	-2.99/-3.91	-4.31/-1.83	-0.92/0.95	0.52/0.07	1.88/1.04	-0.67/-0.77	1.04/1.84	1.38/0.47	0.46/0.99	1.28/1.48	1.01/-0.25
Θ(97.5°)	0.07/-2.12	-1.43/-1.03	-1.94/-3.61	-6.63/-7.89	-5.42/-3.25	-2.43/-3.41	-4.95/-5.29	-4.46/-4.71	-4.76/-4.91	-6.26/-6.43	-8/-7.8	-6.87/-8.16	-6.22/-4.69	-3.53/-5.11	-5.55/-2.94	-1.61/0.68	-0.29/-0.51	2.31/1.66	-0.42/-0.34	1.53/1.68	0.9/-0.85	-1.06/1.61	2.05/1.16	0.88/-0.21
Θ(105°)	-2.9/-3.32	-4.12/-2.75	-1.38/-1.61	-3.07/-4.59	-4.68/-4.69	-3.14/-1.26	-2.57/-3.9	-5.65/-7.8	-9.62/-6.39	-4.76/-5.66	-5.25/-5.68	-5.04/-7.39	-4.24/-4.13	-1.31/-3.76	-3.47/-3.82	-1.36/0.92	-1.32/0.82	3.15/-1.45	-4.01/-2.36	1.49/0.32	0.45/0.19	-0.27/1.46	1.47/0.35	-1.67/-1.78
Θ(112.5°)	-4.94/-4.46	-4.74/-3.14	-2.82/-2.93	-3.69/-4.62	-6.96/-6.04	-3.86/-2.2	-2.41/-2.54	-3.01/-5.94	-6.1/-5.87	-4.32/-6.12	-4.62/-4.18	-2.07/-4.18	-4.58/-3.41	-2.53/-5.72	-3.9/-5.71	-1.41/-0.26	-1.66/0.18	2.08/-3.52	-2.38/-0.39	0.64/0.08	-1.22/-3.13	-4.34/-3.04	-1.26/-2.96	-3.06/-4.32
Θ(120°)	-7.2/-3.68	-3.9/-3.09	-2.03/-2.28	-1.68/-3.54	-3.61/-2.8	-3.04/-2.53	-0.91/-1.78	-2.01/-2.16	-2.14/-1.59	-2.53/-2.65	-3.89/-4.55	-2.75/-5.86	-4.9/-4.65	-5.24/-5.71	-3.66/-11.85	-2.65/-2.51	-5.98/-1.52	1.22/-1.85	-1.89/-0.96	-1/-0.94	-4.13/-4.7	-5.94/-2.97	-0.94/-3.54	-4.45/-3.77
Θ(127.5°)	-6.2/-5.4	-5.39/-6.3	-3.75/-2.8	-2.07/-1.14	-1.27/-1.05	-1.16/-1.47	-2.46/-2.4	-2.99/-3.06	-2.06/-1.09	-2.68/-3.72	-5.08/-5.15	-5.95/-7.97	-5.54/-5.55	-10.36/-3.27	-3.42/-5.33	-1.97/-2.85	-3.01/-1.9	1.16/-1.82	-3.36/-3.91	-3.87/-0.35	-3.25/-4.73	-8.49/-6.18	-3.76/-4.04	-3.76/-2.36
Θ(135°)	-9.43/-8.96	-6.69/-8.41	-6.8/-5.34	-2.97/-1.01	0.01/0.09	-0.21/-0.83	-0.98/-1.7	-2.46/-2.15	-1.31/-1.26	-3.07/-5.55	-7.15/-8.41	-7.66/-6.64	-3.37/-3.93	-2.54/-0.84	-3.34/-4.05	-5.18/-3.83	-3.63/-1.81	-2.09/-5.82	-4.76/-5.56	-8.24/-4.79	-1.95/-5.17	-5.8/-3.67	-3.8/-4.13	-4.53/-6.44
Θ(142.5°)	-4.65/-6.14	-2.96/-1.69	-1.68/-1.4	-1/-0.91	-1.2/-1.67	-1.79/-3.23	-4.58/-5.37	-5.97/-5.97	-5.11/-4.58	-5.24/-5.47	-4.49/-3.55	-4.87/-4.61	-5.76/-7.48	-6.2/-5.94	-6.69/-8.04	-6.58/-4.58	-2.35/-1.94	-2.32/-5.98	-5.81/-2.05	-1.31/-5.5	-4.06/-4.67	-6.76/-4.48	-2.49/-3.23	-4.39/-3.83
Θ(150°)	-1.88/-0.35	-0.13/-0.14	-0.11/0.06	-0.6/-2.33	-4.49/-6.07	-5.45/-4.6	-4.25/-5.03	-5.93/-4.96	-4.46/-5.56	-7.02/-6.07	-4.13/-3.68	-3.8/-2.46	-2.19/-2.79	-3.7/-3.62	-3.33/-3.6	-5.1/-5.83	-4.85/-3.91	-4.72/-6.72	-6.65/-5.95	-5.45/-6.85	-9.08/-7.27	-3.81/-2.18	-1.76/-1.65	-2.7/-3.39
Θ(157.5°)	1.85/1.56	0.63/-0.8	-2.48/-3.24	-4.69/-5.66	-5.42/-4.22	-3.27/-2.74	-2.82/-3.72	-5.24/-6.8	-7.45/-8.04	-8.11/-7.09	-5.26/-4.97	-4.03/-2.4	-1.65/-1.9	-3.64/-4.34	-4.62/-4.73	-4.06/-3.43	-3.78/-5.94	-7.58/-6.57	-6.28/-5.99	-6.46/-6.57	-7.28/-7.67	-4.55/-1.48	-0.12/0.63	1.25/1.73
Θ(165°)	-1.97/-2.26	-1.95/-2.32	-2.96/-3.73	-3.93/-4.14	-4.63/-5.25	-5.14/-4.24	-3.15/-2.94	-3.24/-4.36	-5.21/-5.25	-5.38/-5.78	-5.77/-4.75	-3.4/-2.29	-1.58/-1.35	-1.89/-3.03	-3.76/-4.19	-3.79/-3.91	-4.86/-6.47	-7.04/-6.73	-5.68/-5.16	-4.98/-4.45	-3.51/-3.25	-3.24/-2.72	-2.06/-1.81	-1.92/-1.93
Θ(172.5°)	-2.97/-2.77	-3.37/-3.81	-4.71/-5.22	-5.47/-5.99	-6.94/-7.37	-6.35/-5.87	-5.09/-4.55	-4.94/-5.67	-6.23/-6.56	-6.8/-6.94	-6.76/-5.93	-5.6/-5.81	-6.19/-6.98	-8.12/-9.26	-10.17/-11.66	-11.55/-10.98	-10.16/-8.63	-7.45/-6.47	-5.71/-5.28	-4.81/-4.07	-3.73/-4.42	-4.62/-4.63	-4.48/-4.37	-4.21/-3.68
Θ(180°)	-7.66/-8.56	-9.6/-9.59	-9.94/-9.67	-9.16/-9.41	-8.81/-8.52	-8.3/-8.9	-9.62/-9.82	-11.47/-11.37	-10.49/-9.59	-9.19/-8.72	-8.37/-7.47	-6.77/-6.08	-5.89/-6.37	-6.77/-7.05	-7.29/-7.46	-7.83/-8.08	-8.41/-8.67	-8.63/-8.15	-7.59/-6.78	-6.24/-6.4	-6.43/-6.98	-7.71/-8.65	-9.32/-8.6	-7.55/-7.51



Radiated Composite Gain Data <2.4GHz and 5GHz U-NII 1~U-NII 4>

Appendix A

Gain Result

Freq(Hz)	2.45G/Pol.	Phi/Ant. 1	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	
Gain	Φ(0°)/Φ(7.5°)	Φ(15°)/Φ(22.5°)	Φ(30°)/Φ(37.5°)	Φ(45°)/Φ(52.5°)	Φ(60°)/Φ(67.5°)	Φ(75°)/Φ(82.5°)	Φ(90°)/Φ(97.5°)	Φ(105°)/Φ(112.5°)	Φ(120°)/Φ(127.5°)	Φ(135°)/Φ(142.5°)	Φ(150°)/Φ(157.5°)	Φ(165°)/Φ(172.5°)	Φ(180°)/Φ(187.5°)	Φ(195°)/Φ(202.5°)	Φ(210°)/Φ(217.5°)	Φ(225°)/Φ(232.5°)	Φ(240°)/Φ(247.5°)	Φ(255°)/Φ(262.5°)	Φ(270°)/Φ(277.5°)	Φ(285°)/Φ(292.5°)	Φ(300°)/Φ(307.5°)	Φ(315°)/Φ(322.5°)	Φ(330°)/Φ(337.5°)	Φ(345°)/Φ(352.5°)
Θ(0°)	-11.59/-11.78	-11.92/-12.2	-12.89/-13.32	-13.22/-12.76	-12.22/-11.53	-10.71/-9.75	-8.96/-8.53	-8.49/-8.61	-8.69/-8.78	-9.16/-9.62	-10.1/-10.38	-10.71/-11.25	-11.91/-12.59	-13.29/-13.93	-14.43/-15.02	-16.01/-16.77	-16.81/-16.5	-15.67/-14.3	-12.96/-11.97	-11.55/-11.41	-11.49/-11.49	-11.52/-11.58	-11.64/-11.57	-11.6/-11.69
Θ(7.5°)	-12.33/-12.4	-12.61/-13.13	-14.02/-14.57	-14.36/-13.57	-12.69/-11.66	-10.65/-9.7	-8.95/-8.61	-8.63/-8.85	-8.95/-9.09	-9.39/-9.71	-9.97/-10.14	-10.33/-10.67	-11.09/-11.5	-11.9/-12.18	-12.58/-13.37	-14.8/-16.38	-17.63/-17.99	-17.27/-15.64	-14.29/-13.41	-13.06/-12.88	-12.53/-12.08	-11.69/-11.86	-11.98/-11.92	-11.99/-12.12
Θ(15°)	-11.61/-12.09	-12.92/-14.21	-15.85/-17.04	-16.96/-15.72	-13.99/-12.35	-11.05/-10.08	-9.38/-9.02	-8.89/-9	-9.16/-9.34	-9.76/-10.33	-10.79/-11.1	-11.24/-11.42	-11.56/-11.7	-11.79/-11.9	-12.33/-13.26	-14.93/-17.26	-19.5/-18.85	-18.93/-16.76	-15.17/-14.03	-13.19/-12.25	-11.15/-10.37	-10.18/-10.44	-10.73/-10.86	-11.04/-11.31
Θ(22.5°)	-10.64/-11.62	-13.25/-15.32	-17.88/-19.08	-18.44/-18.28	-15.88/-13.78	-12.47/-11.53	-10.79/-10.36	-10.2/-10.34	-10.59/-11.08	-11.86/-12.89	-13.97/-14.55	-14.68/-14.48	-14.2/-13.94	-13.73/-13.9	-14.51/-15.74	-17.86/-17.88	-19.04/-19.49	-16.9/-14.83	-13.19/-11.85	-10.6/-9.39	-8.44/-8.03	-8.12/-8.56	-9.09/-9.41	-9.74/-10.11
Θ(30°)	-10.8/-12.17	-14.36/-17.01	-18.37/-18.36	-18.71/-18.47	-17.7/-15.86	-14.89/-14.13	-13.33/-12.62	-12.3/-12.45	-13/-14	-15.58/-17.62	-19.39/-17.73	-18.01/-18.53	-17.52/-16.99	-16.57/-16.37	-16.45/-16.83	-17.69/-18.84	-18.81/-17.7	-15.6/-13.61	-11.9/-10.29	-8.91/-7.89	-7.26/-7.07	-7.34/-7.98	-8.8/-9.43	-9.79/-10.12
Θ(37.5°)	-12.45/-13.79	-15.24/-16.39	-17.74/-18.92	-18.78/-17.92	-16.67/-15.27	-13.77/-12.13	-10.52/-9.18	-8.28/-7.99	-8.3/-9.19	-10.69/-12.49	-13.99/-14.64	-14.62/-14.37	-14.2/-13.91	-13.83/-13.78	-13.64/-13.5	-13.79/-15	-17.03/-18.25	-17.26/-15.15	-12.91/-10.96	-9.59/-8.86	-8.64/-8.66	-8.86/-9.32	-10.22/-11.23	-11.76/-12.02
Θ(45°)	-13.11/-12.91	-12.22/-11.52	-11.64/-12.48	-13.22/-13.74	-14.28/-13.92	-11.75/-9.14	-7.1/-5.61	-4.69/-4.36	-4.55/-5.26	-6.61/-8.34	-10.23/-11.69	-12.6/-13.24	-13.63/-13.63	-13.49/-13.37	-13.18/-13.22	-13.62/-14.81	-17.14/-18.11	-18.7/-18.95	-15.71/-12.97	-11.79/-11.96	-12.64/-13.15	-12.79/-12.14	-11.82/-12.3	-12.93/-13.4
Θ(52.5°)	-13.62/-13.1	-10.34/-9.07	-8.99/-9.59	-10.3/-11.25	-12.88/-13.69	-11.2/-8.09	-5.79/-4.26	-3.35/-3.06	-3.28/-4.09	-5.54/-7.46	-9.53/-11.44	-12.98/-13.99	-14.26/-13.99	-13.73/-13.84	-14.78/-17.09	-17.75/-17.41	-18.36/-18.23	-19.41/-18.95	-15.48/-12.93	-12.33/-13.67	-17.12/-17.94	-19.07/-18.15	-13.91/-12.52	-12.71/-13.43
Θ(60°)	-13.04/-13.3	-9.05/-7.36	-6.73/-6.69	-6.85/-7.4	-8.96/-11.58	-12.76/-10.26	-7.39/-5.24	-3.74/-2.9	-2.71/-3.24	-4.44/-6.11	-7.93/-9.61	-10.95/-11.78	-11.72/-11.11	-10.54/-10.43	-11.13/-13.47	-17.89/-19.21	-18.85/-16.57	-15.61/-15.96	-15.34/-12.87	-11.15/-10.82	-11.19/-11.24	-11.35/-12	-12.21/-11.57	-11.35/-12.27
Θ(67.5°)	-13.5/-11.45	-8.41/-6.37	-5.47/-5.25	-5.27/-5.85	-7.63/-11.46	-19.35/-18.43	-11.19/-7.06	-4.29/-2.68	-2.02/-2.32	-3.36/-4.8	-6.32/-7.94	-9.38/-10.07	-9.91/-9.79	-9.92/-10.54	-11.92/-14.85	-19.06/-17.68	-15.16/-11.21	-9.54/-9.8	-12.01/-14.07	-11.77/-9.12	-7.6/-6.81	-6.73/-7.78	-9.94/-12.09	-13.08/-13.48
Θ(75°)	-18.5/-14.9	-10.83/-8.23	-7.16/-7.27	-7.87/-9.06	-11.62/-17.79	-18.65/-14.52	-8.94/-5.57	-3.18/-1.62	0.83/-0.86	-1.56/-2.62	-3.81/-5.1	-6.14/-6.68	-6.92/-7.52	-8.91/-11.26	-14.64/-18.53	-18.36/-14.05	-10.31/-7.86	-6.39/-6.25	-7.85/-10.76	-11.18/-8.5	-6.77/-6.29	-6.56/-7.47	-9.54/-13.23	-19.43/-17.74
Θ(82.5°)	-17.25/-12.08	-9.01/-6.98	-5.76/-5.4	-5.53/-6.41	-8.52/-13.04	-17.94/-16.1	-9.65/-6.16	-3.81/-2.34	-1.65/-1.75	-2.56/-3.65	-4.72/-5.63	-6.19/-6.33	-6.41/-6.91	-7.69/-8.41	-9.22/-10.75	-12.58/-12.71	-11.65/-10.94	-10.63/-11.03	-12.25/-12.75	-10.96/-8.5	-6.96/-6.6	-7.07/-7.89	-9.14/-11.52	-16.44/-18.98
Θ(90°)	-16.32/-11.58	-8.9/-7.32	-6.04/-5.08	-4.65/-5.13	-7.05/-11.28	-19.45/-17.22	-10.56/-7.1	-4.83/-3.34	-2.62/-2.82	-3.8/-5.19	-6.32/-7.21	-7.73/-7.96	-7.98/-7.84	-7.17/-6.44	-6.43/-7.52	-8.78/-9.06	-9.58/-11.18	-13.91/-18.77	-18.88/-17.67	-17.32/-13.73	-10.93/-9	-8.54/-9.58	-11.76/-14.79	-18.84/-17.74
Θ(97.5°)	-16.13/-12.46	-9.25/-7.22	-6.02/-5.14	-4.68/-5.08	-6.62/-9.62	-14.1/-18.43	-17.5/-14.68	-9.77/-7.17	-6.01/-6.15	-7.32/-9.04	-10.78/-12.23	-12.86/-12.65	-11.72/-10.13	-8.61/-7.72	-7.87/-8.87	-9.7/-10.31	-11.71/-13.6	-13.75/-13.82	-16.42/-18.27	-18.58/-14.72	-11.51/-9.74	-9.43/-10.72	-13.35/-16.81	-18.67/-18.06
Θ(105°)	-13.02/-15.87	-15.06/-13.26	-12.18/-11.89	-12.3/-14.2	-18.78/-18.97	-17.98/-14.51	-11.58/-9.33	-7.52/-6.29	-5.81/-6.25	-7.47/-9.24	-11.18/-13.14	-14.38/-14.46	-13.77/-13.32	-13.41/-14.25	-15.24/-15.24	-14.62/-14.21	-13.79/-13.06	-11.81/-11.65	-14.34/-18.98	-18.37/-14.94	-12.42/-10.42	-8.65/-7.53	-7.23/-7.71	-8.8/-10.59
Θ(112.5°)	-17.27/-15.87	-12.24/-9.84	-8.07/-6.76	-5.77/-5.45	-6.15/-8.19	-11.7/-15.49	-14.85/-11.91	-9.61/-8.44	-8.39/-9.62	-12.24/-16.2	-19.49/-19.24	-17.12/-15.98	-16.84/-18.05	-18.82/-15.9	-14.52/-15.21	-17.21/-18.25	-17.85/-17.85	-17.99/-17.01	-14.74/-13.37	-12.91/-12.6	-11.63/-9.83	-8.28/-7.82	-8.31/-9.52	-11.58/-14.74
Θ(120°)	-14.68/-12.86	-11.17/-10.08	-8.97/-7.47	-6.13/-5.6	-6.42/-8.91	-13.65/-18.73	-17.38/-12.36	-9.05/-7.85	-8.81/-12.32	-17.91/-17.07	-15.77/-16.78	-16.41/-14.63	-14.36/-14.44	-12.72/-10.74	-9.7/-8.95	-8.08/-7.82	-8.22/-7.95	-6.61/-5.7	-5.81/-7.06	-9.05/-10.87	-13.21/-16.18	-14.14/-11.67	-11.44/-12.54	-13.84/-14.72
Θ(127.5°)	-11.7/-18.33	-18.47/-16.1	-13.97/-13.14	-11.51/-10.26	-10.42/-12.1	-15.07/-17.13	-13.49/-9.69	-7.59/-7.31	-9.12/-12.94	-13.52/-11.45	-11.65/-13.21	-13.46/-12.89	-13.06/-12.85	-11.34/-10.21	-9.73/-8.83	-7.75/-7.83	-9.27/-10.04	-8.65/-7.81	-8.76/-10.81	-10.88/-9.16	-8.62/-8.8	-7.76/-6.43	-5.96/-6.38	-7.35/-8.97
Θ(135°)	-17.79/-17.49	-14.76/-11.47	-10.88/-11.98	-12.92/-12.56	-11.92/-11.86	-12.37/-12.26	-10.53/-8.79	-8.2/-9.28	-12.15/-12.71	-9.35/-7.59	-7.69/-8.64	-8.85/-8.87	-10.02/-13.14	-18.66/-18.43	-19.23/-18.93	-18.69/-18.22	-16.06/-11.16	-7.93/-6.91	-8.09/-11.7	-18.71/-18.31	-19.64/-19.01	-15.6/-11.75	-10.02/-9.97	-11.21/-13.79
Θ(142.5°)	-14.25/-17.83	-19.29/-15.73	-12.01/-10.42	-10.21/-10.44	-10.01/-9.02	-8.21/-7.84	-7.72/-8.12	-9.62/-12.68	-15.31/-11.38	-7.94/-6.59	-6.63/-7.31	-7.64/-7.58	-7.74/-8.08	-8.28/-8.13	-8.36/-9.25	-10.34/-10.27	-8.47/-6.34	-4.94/-4.54	-5.24/-6.98	-9.65/-12.39	-14.13/-15.74	-17.19/-17.63	-17.54/-13.71	-12.19/-12.31
Θ(150°)	-12.1/-13.09	-12.14/-9.35	-6.8/-5.4	-5.17/-5.72	-6.49/-7.1	-7.56/-8.3	-9.79/-12.45	-18.01/-17.87	-16.31/-10.9	-8.39/-7.38	-7.29/-7.39	-7.02/-6.05	-4.95/-4.11	-3.62/-3.54	-3.91/-4.6	-5.21/-5.11	-4.27/-3.29	-2.62/-2.4	-2.7/-3.48	-4.63/-5.82	-6.9/-8.31	-10.84/-16.19	-18.7/-17.17	-12.59/-11.32
Θ(157.5°)	-16.57/-16.25	-13.53/-10.33	-7.98/-6.88	-6.93/-8.16	-10.21/-12.9	-16.22/-17.9	-18.47/-17.76	-12.89/-9.91	-7.88/-6.64	-6.02/-5.92	-6/-5.97	-5.48/-4.64	-3.73/-3.03	-2.74/-2.85	-3.26/-3.73	-4.02/-3.9	-3.46/-2.98	-2.6/-2.47	-2.62/-3.08	-3.67/-4.33	-5.15/-6.36	-8.33/-11.34	-16.49/-18.09	-18.09/-16.48
Θ(165°)	-17.79/-19.08	-18.71/-17.62	-15.07/-14.08	-14.54/-16.12	-17.07/-15.29	-12.64/-10.25	-8.26/-6.66	-5.47/-4.69	-4.19/-4.01	-4.16/-4.56	-5.08/-5.55	-5.84/-5.87	-5.77/-5.66	-5.78/-6.19	-6.69/-7.01	-7.01/-6.85	-6.66/-6.44	-6.19/-6.09	-6.19/-6.45	-6.7/-7.04	-7.57/-8.39	-9.53/-11.08	-13.13/-15.12	-16.69/-17.49
Θ(172.5°)	-14.33/-14.05	-14.26/-14.35	-13.92/-12.69	-10.99/-9.25	-7.85/-6.78	-5.9/-5.16	-4.49/-3.93	-3.58/-3.4	-3.39/-3.62	-4.13/-4.85	-5.76/-6.94	-8.28/-9.89	-11.52/-13.05	-13.98/-14.17	-13.2/-11.91	-10.91/-10.42	-10.28/-10.23	-10.26/-10.48	-10.84/-11.25	-11.7/-12.22	-12.75/-13.44	-14.01/-14.61	-15.51/-16.33	-16.33/-15.36
Θ(180°)	-13.86/-11.86	-10.81/-10.12	-9.36/-8.29	-7.11/-6.02	-5.28/-4.85	-4.67/-4.57	-4.56/-4.6	-4.73/-4.95	-5.25/-5.75	-6.42/-7.28	-8.38/-9.92	-12.04/-15.14	-19.05/-19.03	-19.13/-18.04	-14.45/-12.43	-11.24/-10.7	-10.45/-10.45	-10.64/-11.12	-11.74/-12.51	-13.73/-15.4	-16.97/-18.05	-18.72/-19.65	-17.97/-18.72	-18.45/-16.93
Freq(Hz)	2.45G/Pol.	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°)	-13.01/-13.04	-13.12/-13.12	-12.89/-12.53	-12.25/-11.99	-11.67/-11.56	-11.56/-11.77	-12.05/-12.33	-12.75/-13.48	-14.42/-15.1	-15.55/-16.05	-16.61/-16.8	-16.56/-16.05	-15.45/-14.98	-14.59/-14.25	-13.99/-13.68	-13.16/-12.57	-12.08/-12	-12.11/-12.34	-12.61/-12.83	-13.1/-13.59	-14.22/-14.6	-14.73/-14.64	-14.44/-14.01	-13.53/-13.09
Θ(7.5°)	-11.43/-11.4	-11.21/-11.13	-10.84/-10.43	-10.15/-9.81	-9.56/-9.36	-9.33/-9.45	-9.62/-9.91	-10.37/-11	-11.69/-12.44	-13.27/-14.42	-15.65/-16.73	-17.54/-18.21	-19/-18.22	-19.06/-17.29	-18/-18.89	-18.72/-17.19	-15.93/-15.1	-14.77/-14.61	-14.27/-13.68	-13.47/-13.71	-14.09/-14.26	-14.13/-13.85	-13.41/-12.77	-12.19/-11.73
Θ(15°)	-12.01/-11.84	-11.12/-10.76	-10.29/-9.81	-9.4/-9.08	-8.72/-8.42	-8.25/-8.17	-8.11/-8.14	-8.33/-8.66	-9.02/-9.35	-9.69/-10.07	-10.42/-10.74	-11.09/-11.59	-12.27/-13.2	-14.61/-16.69	-18.52/-19.37	-17.92/-17.49	-19.38/-17.42	-16.36/-15.52	-14.41/-13.6	-13.39/-13.65	-14.19/-14.73	-15.19/-15.41	-15.16/-14.54	-13.67/-12.83
Θ(22.5°)	-11.8/-11.1	-10.71/-10.41	-10.04/-9.73	-9.56/-9.33	-8.92/-8.52	-8.17/-7.83	-7.51/-7.34	-7.33/-7.41	-7.56/-7.66	-7.68/-7.63	-7.47/-7.34	-7.25/-7.33	-7.56/-7.95	-8.65/-9.66	-11.21/-13.22	-16.02/-19.16	-18.69/-17.52	-18.81/-17.63	-16.31/-15.51	-15.59/-16.51	-17.92/-17.89	-18.56/-18.56	-18.23/-16.02	-14.29/-12.86



Radiated Composite Gain Data <2.4GHz and 5GHz U-NII 1~U-NII 4>

Appendix A

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°)	-13.56/-12.62	-11.5/-9.56	-8.47/-8.1	-8.09/-8.06	-7.93/-8.1	-8.3/-8.25	-8.35/-8.68	-9.4/-10.22	-10.98/-11.77	-12.87/-14.52	-16.78/-19.31	-18.18/-18.54	-19.09/-16.75	-13.95/-12.15	-10.9/-10.04	-9.57/-9.18	-8.71/-8.62	-8.7/-9	-9.19/-9.92	-11.04/-11.85	-13.2/-14.93	-17.27/-18.9	-18.76/-18.07	-17.22/-15.2	
Θ(7.5°)	-17.67/-18.84	-19.19/-16.1	-14.05/-12.54	-11.98/-11.87	-11.61/-11.62	-11.09/-10.97	-10.67/-11.42	-12.14/-12.81	-13.35/-14.32	-14.79/-15.41	-15/-14.31	-13.7/-12.57	-11.54/-10.14	-9.39/-8.87	-8.75/-8.91	-9.05/-9.28	-9.12/-9.16	-9.23/-9.65	-10.12/-11.06	-11.58/-12.02	-12.66/-14.2	-15.97/-17.35	-18.5/-18.02	-17.7/-17.41	
Θ(15°)	-17.34/-18.8	-18.98/-17.61	-18.82/-18	-17.82/-19.07	-17.22/-14.69	-13.6/-12.18	-11.11/-10.73	-10.58/-10.65	-10.91/-10.4	-9.91/-9.38	-8.79/-8.18	-7.51/-6.91	-6.48/-6.14	-6.04/-6.17	-6.41/-6.79	-6.99/-7.31	-7.92/-8.99	-10.05/-11.66	-12.81/-13.42	-14/-13.47	-14.61/-15.48	-16.36/-16.31	-16.28/-17.26	-18.22/-17.8	
Θ(22.5°)	-18.99/-18.95	-17.73/-18.68	-18.41/-17.76	-17.13/-14.33	-12.41/-10.62	-9.35/-8.7	-8.19/-7.96	-8.04/-7.78	-7.48/-6.82	-6.21/-5.69	-5.29/-4.89	-4.61/-4.19	-3.83/-3.69	-3.99/-4.63	-5.32/-5.76	-6.01/-6.36	-7.1/-7.62	-7.43/-6.65	-6.16/-6.27	-7.07/-7.82	-8.23/-9.03	-10.27/-11.81	-12.79/-14.51	-18.03/-18.24	
Θ(30°)	-10.74/-11.51	-12.28/-11.71	-8.99/-8.28	-8.26/-8.31	-8.16/-7.78	-8/-8.01	-7.43/-7.25	-6.48/-5.77	-5.37/-5.07	-4.49/-3.88	-3.72/-3.86	-3.75/-3.25	-2.88/-2.91	-3.18/-3.34	-3.4/-3.46	-4.02/-4.72	-5.19/-4.82	-4.3/-3.86	-3.59/-3.97	-4.76/-6.6	-8.56/-10.07	-10.68/-12.23	-12.54/-11.9	-11.62/-10.76	
Θ(37.5°)	-8.2/-7.31	-7.34/-6.98	-5.55/-4.94	-5.38/-5.6	-5.59/-5.68	-6.1/-6.54	-6.59/-6.35	-5.6/-4.61	-4.07/-4.27	-4.23/-3.62	-3.66/-3.69	-2.95/-2.56	-3.03/-3.63	-3.41/-3.17	-3.02/-3.39	-3.52/-3.21	-2.52/-2.06	-2.24/-2.44	-2.96/-3.27	-3.35/-3.32	-3.98/-5.72	-7.83/-9.23	-9.9/-10.47	-10.64/-9.74	
Θ(45°)	-6.35/-5.38	-5.72/-6.51	-5.19/-3.98	-3.75/-3.42	-3.03/-3.35	-3.63/-4.01	-4.4/-4.78	-5.14/-4.83	-4.53/-4.64	-4.04/-3.3	-3.88/-4.31	-3.94/-3.92	-4.05/-3.91	-3.43/-3.29	-3.73/-4.44	-4.45/-4.44	-4.64/-4.51	-3.89/-3.43	-3.07/-2.59	-2.74/-4.22	-5.51/-5.76	-6.11/-6.94	-6.49/-5.37	-5.09/-5.72	
Θ(52.5°)	-4.48/-4.1	-4.22/-5.52	-5.77/-8.48	-4.27/-2.76	-1.47/-0.98	-1.04/-1.48	-2.51/-3.12	-3.41/-3.52	-3.33/-3.12	-2.96/-2.34	-2/-1.86	-1.45/-1.23	-1.14/-1.05	-1.28/-2.19	-3.51/-4.45	-4.99/-4.85	-4.13/-3.59	-2.8/-1.72	-1.07/-1.73	-2.9/-3.62	-4.74/-6.83	-7.79/-7.85	-7.52/-6.15	-5.14/-7.2	
Θ(60°)	-2.15/-2.21	-2/-2.44	-2.89/-3.19	-3.75/-3.19	-2.11/-1.18	-0.53/-0.24	-0.39/-1.3	-2.41/-3.54	-3.67/-3.1	-3.02/-2.49	-1.4/-0.95	-0.28/-0.35	-0.37/-0.53	-1.25/-1.96	-2.72/-3.02	-2.4/-2.13	-1.51/-0.8	-0.34/-0.07	-0.11/-0.62	-1.95/-4.08	-7.24/-9.36	-7.74/-6.83	-6.41/-4.8	-3.14/-2.61	
Θ(67.5°)	-2.07/-1.78	-1.56/-1.6	-1.64/-1.25	-1.2/-0.59	-0.41/-0.22	-0.02/-0.27	-0.63/-1.2	-1.95/-2.96	-3.55/-2.69	-2.61/-1.17	0.12/0.86	1.76/1.63	2.03/2.06	1.36/1.04	0.11/-1.07	-2.55/-3.94	-4.12/-3.72	-2.59/-2.38	-2.9/-3.23	-5.66/-10.67	-11.86/-11.88	-12.84/-8.82	-7.22/-5.8	-3.78/-2.57	
Θ(75°)	-2.06/-2.34	-2.62/-3.19	-3.3/-3.13	-1.73/-0.19	0.47/0.57	0.36/-0.22	-0.67/-1.61	-2.28/-3.37	-3.36/-2.52	-2.23/-0.58	0.69/1.72	2.42/2.46	2.95/2.59	2.15/1.96	0.96/0.16	-0.37/-1.05	-1.12/-1.61	-2.04/-1.67	-1.93/-4.01	-7.47/-12.06	-15.08/-18.09	-17.21/-12.93	-9.72/-7.49	-4.37/-2.82	
Θ(82.5°)	-1.24/-1.56	-1.62/-2.21	-2.67/-3.86	-4.2/-2.76	-1.78/-0.4	0.67/0.77	0.62/0.09	-0.6/-2.01	-2.54/-1.87	-1.98/-1.11	-0.07/0.72	1.35/1.76	2.01/2.29	2.09/1.52	0.66/-0.22	-2.17/-3.27	-4.31/-6.07	-5.53/-5.9	-6.73/-7.76	-9.97/-13.02	-14.98/-10.43	-8.77/-6.85	-4.86/-4.33	-3.8/-2.52	
Θ(90°)	-3.05/-3.72	-2.55/-2.31	-2.57/-1.96	-2.33/-1.06	-1.22/-1.12	-1.17/-0.88	-0.9/-0.89	-1.34/-1.64	-1.67/-1.44	-1.78/-0.88	-1.90/0.07	1.09/0.66	2.1/36	1.05/1.56	0.13/-1.14	-0.92/0.56	-0.43/-2.88	-6.42/-5.86	-5.42/-6.84	-6.18/-7.5	-9.01/-8.04	-9.18/-15.36	-8.82/-7.99	-7.25/-6.91	
Θ(97.5°)	-8.03/-5.72	-6.48/-3.47	-3.3/-1.02	-1.59/0.32	-0.07/-0.73	-1.82/-2.87	-3.33/-3.27	-2.88/-2.32	-1.19/0.34	-0.18/1.27	0.58/1.45	1.12/1.65	1.91/0.54	1.87/1.08	-0.46/-0.41	1.12/1.42	0.38/-3.03	-8.38/-9.78	-7.1/-6.15	-7.63/-10.73	-8.46/-5.92	-5.03/-6.66	-8.78/-7.91	-7.82/-10.95	
Θ(105°)	-4.27/-3.18	-5.97/-3.92	-5.89/-2.7	-2.68/-0.81	-0.55/-0.96	-1.55/-2.99	-4.23/-5.37	-4.58/-4.42	-2.48/-0.38	-0.65/1.04	0.22/1.59	0.67/1.51	1.36/0.56	1.54/0.48	0.01/0.38	1/1.07	0.24/-2	-5.03/-8.51	-7.01/-6.83	-8.78/-11.21	-7.66/-3.94	-4.01/-4.44	-6.09/-4.04	-3.88/-5	
Θ(112.5°)	-8.79/-5.58	-8.33/-6.53	-9.05/-5.49	-4.77/-3.19	-1.42/-2.31	-3.09/-4.99	-6.86/-6.47	-5.29/-3.05	-0.29/-1.1	-1.02/-0.02	-0.89/0.56	-0.26/1.42	0.48/0.11	1.05/0.73	-1.25/-2.1	-1.58/0.4	-1.33/-2.99	-10.9/-18.95	-11.99/-13.74	-11.52/-10.27	-7.46/-3.28	-2.88/-6.32	-5.89/-7.04	-6.07/-9.01	
Θ(120°)	-11.09/-7.42	-9.28/-6.7	-6.04/-5.84	-4.01/-4.9	-3.3/-3.62	-4.35/-4.01	-3.49/-3.23	-3.48/-2.24	-1.34/-2.02	-0.12/-0.45	-0.27/0.55	-0.76/-0.18	-0.86/-2	-1.21/-0.22	-1.28/-2.8	-1.94/-0.65	-0.37/-1.37	-6.7/-12.16	-9.25/-14.67	-13.02/-12.38	-4.71/-5.51	-3.8/-5.77	-7.33/-4.91	-5.09/-9.18	
Θ(127.5°)	-13.97/-11.9	-15.14/-12.9	-10.07/-8.16	-5/-4.64	-3.92/-2.97	-3.15/-3.43	-3.73/-3.02	-1.27/-0.18	-0.25/0.68	0.97/0.16	0.05/-0.85	-1.3/-1.37	-1.58/-3.23	-1.29/0.36	-0.42/-4.02	-4.51/-3.45	-2.06/-3.63	-6.48/-11.53	-8.45/-15.35	-18.23/-18.37	-9.83/-9.61	-7.55/-9.73	-9.46/-5.79	-6.72/-9.77	
Θ(135°)	-18.48/-14.52	-13.72/-10.23	-8.42/-7.42	-5.63/-4.73	-5.15/-5.24	-4.15/-2.88	-1.87/-1.26	-1.03/-0.87	-0.56/-0.58	-0.55/-1.19	-1.52/-1.33	-3.29/-1.58	-1.52/-4.78	-0.55/1.14	-2.35/-7.19	-7.21/-2.57	-1.27/-3.15	-5.17/-15.22	-10.95/-19.17	-11.19/-17.71	-10.17/-6.88	-11.01/-7.77	-11.36/-13.6	-8.86/-12.12	
Θ(142.5°)	-15.81/-11.54	-11.73/-10.5	-10.05/-10.65	-10.58/-11.03	-10.73/-10.47	-10.76/-10.62	-8.63/-6.88	-5.36/-4.74	-4.04/-3.78	-4.95/-6.33	-5.92/-8.24	-7.1/-5.15	-9.87/-7.11	-3.66/-5.45	-9.59/-13	-4.16/-0.87	-2.08/-3.13	-4.96/-18.1	-17.21/-18.1	-9.43/-10.51	-17.46/-8.3	-11.55/-14.63	-9.2/-11.19	-11.64/-15.22	
Θ(150°)	-18.81/-18.79	-18.75/-17.57	-13.56/-10.74	-9.44/-8.1	-7.06/-6.26	-5.87/-6.15	-5.81/-4.88	-3.79/-3.17	-3.35/-4.15	-4.56/-4.44	-5.34/-6.36	-4.59/-4.22	-6.6/-8.65	-6.43/-5.69	-8.42/-14.29	-9.47/-8.91	-7.96/-5.57	-6.36/-12.46	-14.36/-9.56	-6.09/-5.96	-11.97/-12.98	-8.2/-10.81	-14.26/-10.8	-11.14/-15.17	
Θ(157.5°)	-13.24/-12.47	-14.49/-18.29	-19.69/-17.93	-18.89/-18.77	-17.81/-17.93	-15.27/-12.64	-11.86/-11.2	-10.83/-10.61	-10.5/-9.85	-9.61/-10.35	-10.53/-8.48	-7.53/-9.92	-18.73/-14.43	-7.51/-5.34	-5.09/-5.88	-7.28/-8.15	-7.32/-7.24	-9.84/-14.22	-15.56/-17.82	-17.89/-18.24	-14.6/-13.14	-13.76/-15.66	-17.7/-17.08	-18.48/-16.85	
Θ(165°)	-17.6/-19.2	-18.71/-17.69	-18.25/-18.82	-16.63/-15.41	-15.08/-16.14	-18.73/-17.63	-15.49/-14.72	-13.9/-13.78	-14.01/-14.75	-16.4/-17.75	-16.78/-15.11	-14.66/-17.31	-19.02/-17.54	-11.28/-7.93	-5.99/-4.74	-4/-3.58	-3.77/-4.44	-6.01/-8.1	-10.32/-11.84	-13.49/-14	-15.16/-16.85	-17.6/-19.23	-18.92/-18.78	-19.38/-18.05	
Θ(172.5°)	-16.13/-15.34	-14.68/-13.87	-11.95/-11.47	-11.6/-12.15	-13.22/-14.51	-14.89/-16.08	-18.39/-19.26	-18.47/-17.76	-18.78/-18.52	-16.87/-16.72	-17.94/-17.99	-19.29/-18.24	-14.36/-11.39	-9.18/-7.64	-6.66/-6.2	-6.38/-6.69	-7.6/-8.77	-10.18/-12.07	-14.01/-15.01	-15.66/-15.86	-16.36/-17	-16.02/-14.38	-14.97/-17.83	-18.78/-17.55	
Θ(180°)	-14.53/-13.97	-12.96/-12.26	-10.95/-9.44	-9.06/-9.09	-9.24/-9.89	-10/-10.38	-11.51/-11.86	-11.81/-11.84	-12.13/-12.19	-12.37/-12.63	-12.97/-13.2	-13.04/-12.93	-12.77/-12.65	-12.69/-12.64	-12.49/-12.72	-13.06/-13.37	-13.77/-13.96	-14.28/-14.91	-14.87/-14.38	-14.43/-14.27	-15.27/-16.56	-15.59/-15.64	-16.98/-17.73	-17.2/-15.23	
Freq(Hz)	5.3G/Pol.	Phi/Ant. 1	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	
Gain	Φ(0°)/Φ(7.5°)	Φ(15°)/Φ(22.5°)	Φ(30°)/Φ(37.5°)	Φ(45°)/Φ(52.5°)	Φ(60°)/Φ(67.5°)	Φ(75°)/Φ(82.5°)	Φ(90°)/Φ(97.5°)	Φ(105°)/Φ(112.5°)	Φ(120°)/Φ(127.5°)	Φ(135°)/Φ(142.5°)	Φ(150°)/Φ(157.5°)	Φ(165°)/Φ(172.5°)	Φ(180°)/Φ(187.5°)	Φ(195°)/Φ(202.5°)	Φ(210°)/Φ(217.5°)	Φ(225°)/Φ(232.5°)	Φ(240°)/Φ(247.5°)	Φ(255°)/Φ(262.5°)	Φ(270°)/Φ(277.5°)	Φ(285°)/Φ(292.5°)	Φ(300°)/Φ(307.5°)	Φ(315°)/Φ(322.5°)	Φ(330°)/Φ(337.5°)	Φ(345°)/Φ(352.5°)	
Θ(0°)	-11.76/-11.52	-12.98/-15.32	-18.8/-18.13	-17.54/-17.77	-19.05/-18.88	-15.58/-14.39	-13.55/-12.64	-11.79/-10.86	-10.22/-9.43	-9.06/-8.99	-8.77/-9.14	-9.48/-9.29	-9.77/-10.3	-10.99/-12.41	-14.15/-16.27	-17.67/-17.91	-17.17/-14.41	-17.47/-15.48	-13.8/-12.47	-10.7/-10	-9.67/-10.25	-8.9/-9.25	-8.9/-8.98	-8.95/-9.71	-9.96/-9.78
Θ(7.5°)	-10.96/-10.13	-10.91/-13.26	-15.65/-17.61	-17.88/-19.08	-17.99/-18.75	-18.72/-17.11	-15.06/-14.11	-13.1/-12.32	-11.25/-10.65	-9.72/-9.15	-9.14/-9.32	-9.57/-9.62	-10.11/-10.77	-12.28/-14.08	-16.15/-18.87	-18.38/-18.39	-17.96/-18.05	-17.84/-15.31	-14.01/-12.41	-10.57/-10.14	-9.81/-9.25	-8.9/-8.98	-8.95/-9.71	-9.96/-9.78	
Θ(15°)	-12.47/-12.14	-12.4/-13.46	-14.39/-16.43	-16.99/-17.63	-18.06/-18.72	-18.82/-18.13	-17.69/-19.02	-16.35/-14.57	-13.32/-12.22	-11.16/-10.48	-9.88/-9.77	-9.72/-9.68	-10.11/-10.98	-11.99/-13.17	-14.41/-15.35	-16.06/-16.05	-15.4/-14.65	-13.98/-13.1	-12.71/-11.93	-10.98/-10.94	-10.81/-10.66	-10.86/-11.23	-11.65/-12.76	-12.55/-11.84	
Θ(22.5°)	-12.74/-15.75	-17.07/-16.93	-17.69/-18.19	-17.67/-17.72	-19.19/-18.8	-18.01/-17.45	-18.62/-17.26	-15.15/-13.32	-12.12/-11.71	-11.59/-11.03	-10.74/-10.82	-10.78/-10.36	-10.34/-10.75	-11.1/-12.38	-14.1/-16.23	-17.8/-16.98	-15.12/-13.56	-12.3/-13.25	-14.48/-15.36	-16.53/-18	-16.63/-15.69	-14.62/-13.37	-11.42/-10.26	-10.82/-11.32	
Θ(30°)	-12.2/-12.54	-14.15/-14.72	-15.92/-18.72	-18.79/-17.93	-17.94/-18.37	-18.04/-18.21	-16.45/-15.39	-12.96/-10.74	-9.14/-8.88	-8.7/-8.58	-8.96/-9.49	-9.65/-9.79	-10.4/-12.15	-14.87/-18.47	-17.93/-18.32	-18.77/-17.57	-16.51/-17.42	-19.06/-18.03	-17.44/-17.46	-15.84/-13.8	-14.2/-15.88	-17.56/-17.97	-18.53/-18.65	-15.85/-13.34	
Θ(37.5°)	-18.72/-19.17	-17.82/-18.69	-18.18/-18.94	-18.21/-18.44	-18.78/-18.67	-17.8/-18.51	-18.67/-17.82	-14.02/-11.17	-9.34/-8.45	-6.97/-6.06															



Radiated Composite Gain Data <2.4GHz and 5GHz U-NII 1~U-NII 4>

Appendix A

Θ(15°)	-17.26/-18.72	-17.95/-17.55	-19.1/-17.74	-17.53/-15.39	-13.2/-11.64	-10.33/-9.33	-8.83/-8.21	-7.95/-7.84	-7.95/-8.15	-8.15/-8.3	-8.63/-9.16	-9.91/-11.12	-12.97/-15.53	-18.04/-19.27	-17.45/-17.77	-17.21/-15.24	-13.9/-12.3	-11.32/-11.16	-12.32/-13.33	-14.52/-16.81	-18.56/-19.59	-18.43/-18.18	-18.24/-17.61	-18.2/-18.74
Θ(22.5°)	-12.74/-13.77	-15.94/-16.48	-18.84/-18.15	-18.96/-18.52	-17.26/-13.98	-12.06/-11.19	-10.57/-9.45	-8.61/-7.9	-7.59/-7.6	-8.09/-8.42	-8.66/-9.42	-11.72/-14.76	-18.97/-18.03	-18.48/-17.6	-15.73/-14.66	-13.72/-13.25	-13.17/-13.75	-14.48/-15.66	-15.28/-13.1	-11.93/-12.07	-12.95/-14.46	-17.82/-17.75	-17.99/-18.59	-15.11/-13.69
Θ(30°)	-15.75/-16.8	-16.77/-16.28	-16.23/-17.01	-18.85/-18.16	-18.91/-17.17	-14.7/-12.83	-11.1/-9.83	-9.08/-8.84	-8.53/-8.99	-9.81/-10.48	-11.29/-13.06	-16.05/-18.97	-17.65/-19.32	-18.01/-17.79	-18.9/-19.47	-17.9/-15.86	-14.7/-14.95	-16.55/-15.4	-15.11/-15.91	-16.84/-13.05	-10.85/-11.54	-14.94/-17.19	-17.54/-18.66	-18.5/-16.66
Θ(37.5°)	-10.14/-11.03	-12.31/-13.61	-14.9/-16.38	-18.83/-17.84	-17.81/-16.27	-12.9/-11.54	-11.64/-12.2	-12.15/-11	-9.87/-9.35	-9.55/-10.31	-11.63/-12.77	-14.08/-16.14	-17.73/-17.97	-18.3/-17.19	-19.1/-19.44	-18.85/-19.26	-19.08/-19.32	-17.56/-18.64	-19.12/-11.86	-8.97/-9.47	-11.55/-13.27	-14.65/-19.47	-19.68/-15.25	-13.22/-11.55
Θ(45°)	-7.76/-8.51	-9.98/-10.66	-11.75/-13.98	-18.41/-18.72	-17.36/-17.54	-13.51/-11.21	-10.83/-11.17	-11.18/-10.35	-9.34/-8.6	-8.69/-9.61	-11.16/-13.27	-13.7/-13.82	-15.76/-18.13	-18.26/-18.3	-17.87/-18.28	-17.96/-18.43	-18.07/-18.92	-18.76/-14.75	-11.2/-10.15	-9.5/-7.84	-7.32/-8.8	-13.09/-17.08	-18.04/-13.78	-9.22/-8.56
Θ(52.5°)	-14.34/-12.67	-13.17/-15.79	-18.75/-17.47	-19.16/-18.75	-18.62/-18.28	-16.22/-15.8	-16.13/-14.75	-12.73/-10.72	-9.1/-7.88	-7.08/-7.51	-9.5/-11.16	-12.32/-14.35	-14.36/-13.23	-14.48/-15.65	-16.15/-16.32	-15.68/-15.57	-14.03/-13.35	-12.53/-12.74	-12.62/-9.85	-6.9/-5.66	-6.43/-8.22	-10.8/-18.08	-14.23/-12.62	-13.96/-14.74
Θ(60°)	-18.53/-18.34	-17.83/-17.77	-17.49/-18.02	-16.34/-15.78	-14.95/-15.68	-18.2/-17.47	-17.94/-16.87	-14.66/-11.84	-8.45/-6.51	-6.35/-8.24	-11.44/-17.16	-17.71/-18.05	-17.94/-18.08	-18.59/-18.46	-15.8/-14.82	-15.54/-16.5	-15.06/-14.34	-11.71/-10.31	-9.24/-7.44	-6.16/-6.1	-7.4/-10.79	-17.06/-18.42	-18.68/-19.13	-18.85/-18.61
Θ(67.5°)	-17.93/-17.39	-18.67/-15.67	-12.33/-10.3	-9.98/-10.45	-11.54/-14.29	-19.18/-19.19	-13.19/-10.97	-14.19/-18.58	-13.27/-8.71	-7.72/-9.74	-15.25/-18.76	-17.09/-13.12	-14.54/-16.54	-19.37/-17.7	-17.94/-14.78	-11.23/-8.8	-7.36/-6.78	-7.28/-9.29	-10.55/-10.28	-10.19/-12.08	-14.6/-14.14	-11.12/-9.59	-10.5/-12.9	-18.23/-18.48
Θ(75°)	-18.33/-18.6	-17.96/-17.77	-17.85/-12.58	-10.84/-9.05	-8.16/-8.26	-11.64/-18.56	-13.53/-11.08	-11.58/-17.76	-18.93/-11.48	-11.1/-15.27	-18.31/-15.86	-10.94/-9.06	-8.81/-9.91	-11.34/-13.29	-16.23/-15.31	-13.59/-11.36	-10.67/-9.87	-11.25/-14.17	-18.61/-17.35	-18.1/-14.75	-8.1/-5.85	-5.09/-5.74	-7.14/-9.27	-12.68/-18.63
Θ(82.5°)	-9.44/-9.19	-9.03/-9.81	-11.8/-17.7	-18.42/-13.85	-10.12/-9.27	-10.48/-15.28	-17.95/-10.35	-9.26/-15.27	-17.84/-10.03	-7.75/-9.26	-15.01/-19.13	-18.82/-17.18	-17.74/-18.04	-19.15/-16.65	-15.39/-14.33	-12.3/-10.24	-9.33/-10.4	-10.68/-10.5	-13.84/-18.7	-12.63/-10.76	-9.24/-8.54	-9.47/-10.63	-12.72/-13.78	-12.87/-10.76
Θ(90°)	-8.99/-8.19	-7.98/-8.13	-8.41/-9	-11.33/-16.53	-18.06/-14.45	-12.45/-14.02	-18.39/-17.95	-13.17/-14.66	-19.51/-11.79	-8.91/-10.65	-12.18/-13.5	-13.43/-11.94	-12.54/-12.51	-12.54/-13.48	-12.98/-11.41	-12.33/-12.5	-16.94/-17.66	-16.35/-17.51	-10.06/-7.37	-6.39/-7.8	-10.08/-11.59	-13.32/-13.05		
Θ(97.5°)	-15.29/-14.81	-12.24/-10.75	-12.38/-12.71	-14.05/-17.69	-17.09/-12.35	-9.48/-10.2	-15.19/-16.7	-12.56/-13.59	-12.06/-9.03	-8.66/-13.81	-18.14/-11.52	-9.04/-8.18	-10.59/-12.88	-18.44/-18.89	-18.24/-18.67	-16.27/-11.39	-9.16/-8.33	-11.33/-15.82	-18.7/-16.76	-18.11/-18.53	-11.71/-9.18	-9.2/-12.74	-17.06/-16.28	-15.33/-18.32
Θ(105°)	-16.74/-14.4	-12.2/-10.64	-11.68/-9.89	-9.95/-9.24	-11.77/-13.03	-10.42/-9.37	-13.17/-10.96	-7.91/-9.04	-11.32/-7.86	-6.03/-7.84	-13.97/-18.35	-13.7/-11.87	-12.48/-13.16	-13.86/-17.3	-14.1/-14.22	-17.56/-18.41	-13.96/-13.67	-18.28/-13.45	-11.79/-11.58	-17.14/-18.85	-14.16/-11.85	-13.65/-14.8	-17.38/-14.74	-17.9/-18.42
Θ(112.5°)	-14.64/-12.84	-11.98/-10.85	-9.13/-7.35	-6.98/-9.93	-11.95/-16.18	-12.88/-12.94	-12.21/-10.46	-9.02/-9.31	-9.93/-7.36	-6.62/-6.54	-8.7/-9.1	-12.11/-13.36	-14.41/-17.66	-15.7/-15.24	-13.34/-14.36	-17.41/-19.19	-12.96/-13.99	-18.76/-18.09	-15.45/-10.37	-11.66/-16.9	-17.84/-15.12	-14.13/-13.37	-11.77/-12.13	-10.54/-13.38
Θ(120°)	-18.36/-14.8	-14.19/-10.32	-9.12/-9.24	-7.23/-7.39	-8.86/-10.76	-12.5/-12.26	-12.22/-11.55	-7.83/-5.44	-4.57/-5.4	-7.49/-6.87	-8.9/-10.48	-13.07/-16.25	-18.52/-18.44	-19.2/-18.76	-15.1/-16.5	-18.36/-17.95	-14.07/-17.69	-11.81/-18.25	-18.48/-19.06	-16.35/-11.34	-14.37/-15.17	-18.65/-18.88	-18.49/-17.52	-12.17/-16.98
Θ(127.5°)	-12.84/-11.3	-10.54/-9.38	-7.74/-7.58	-8.11/-9.59	-11.43/-13.26	-13.61/-16.92	-18.09/-14.61	-12.05/-10.56	-9.14/-10.42	-9.65/-11.21	-12.45/-11.52	-14.46/-14.39	-12.48/-10.68	-12.65/-12.53	-11.97/-18.62	-18.87/-12.37	-9.47/-8.33	-9.94/-19.2	-18.12/-18.83	-11.02/-7.07	-12/-14.5	-11.89/-16.15	-19.11/-16.1	-12.57/-8.81
Θ(135°)	-9.23/-6.41	-5.96/-7.59	-7.81/-9.55	-12.01/-13.84	-16.98/-19.2	-17.63/-17.84	-18.68/-10.92	-8.04/-8.85	-10.94/-14.23	-17.42/-19.31	-12.95/-11.9	-14.49/-12.85	-11.55/-10.98	-9.66/-8.81	-12.94/-12.65	-18.45/-12.57	-12.87/-6.03	-4.74/-7.48	-14.58/-14.67	-14.35/-14.17	-11.45/-18.69	-16.22/-9.12	-14.33/-12.21	-7.48/-7.97
Θ(142.5°)	-14.5/-17.6	-10.07/-9.91	-9.37/-9.25	-11.94/-15.83	-17.65/-17.81	-18.81/-17.69	-12.9/-10.26	-8.3/-6.72	-7.71/-11.51	-14.89/-17.22	-18.85/-17.32	-18.82/-17.11	-19.07/-16.18	-14.75/-14.98	-9.44/-10.45	-9.45/-8.17	-8.49/-6.55	-8.49/-12.27	-17.8/-15.25	-11.58/-12.62	-11.74/-10.76	-11.79/-13.44	-8.55/-10.87	-12.11/-10.24
Θ(150°)	-11.39/-14.86	-19.32/-19.13	-18.85/-17.78	-17.94/-18.55	-18.62/-18.18	-16.51/-13.81	-9.5/-6.28	-4.98/-5.78	-7.56/-8.93	-10.53/-12.36	-14.67/-18.88	-18.61/-17.38	-17.5/-18.34	-17.83/-19.09	-17.43/-17.72	-13.67/-14.28	-14.85/-10.93	-10.71/-14.99	-18.61/-18.37	-12.8/-12.34	-13.72/-14.36	-14.65/-17.98	-13.12/-11.74	-12.32/-11.24
Θ(157.5°)	-10.73/-10.5	-12.22/-14.24	-16.99/-17.97	-18.24/-17.42	-17.43/-18.27	-17.81/-16.99	-14.11/-12.16	-11.29/-10.22	-9.3/-9.27	-10.13/-11.35	-12.62/-14.03	-14/-11.72	-8.9/-6.64	-5.68/-5.85	-7.1/-9.2	-11.19/-10.67	-8.34/-7.26	-7.34/-8.5	-10.07/-11.31	-11.12/-12.25	-12.98/-12.96	-12.96/-12	-12.87/-19.13	-15.46/-11.71
Θ(165°)	-12.79/-13.07	-13.13/-13.81	-14.74/-15.54	-18.43/-18.07	-17.62/-18.02	-18.16/-16.71	-15.27/-13.7	-12.37/-11.7	-11.62/-12.17	-12.86/-13.94	-14.43/-13.22	-10.96/-8.79	-7.58/-6.96	-7.26/-8.49	-10.09/-11.27	-10.62/-9.37	-8.73/-8.94	-9.87/-10.84	-11.18/-10.7	-11.08/-11.88	-11.11/-10.5	-10.16/-10.13	-10.31/-11.98	-13.34/-13.1
Θ(172.5°)	-13.97/-13.64	-14.2/-15.03	-15.98/-17.46	-18.6/-18.07	-18.45/-17.99	-17.77/-17.94	-19.3/-18.78	-18.63/-18.37	-19.56/-17.61	-18.89/-18.34	-17.18/-15.57	-13.94/-12.98	-12.8/-13.15	-14.23/-16.56	-18.08/-17.53	-18.99/-15.52	-13.18/-11.62	-10.58/-9.73	-9.46/-9.89	-11.3/-12.11	-12.84/-14.1	-15.8/-18.28	-19.19/-17.69	-16.63/-15.61
Θ(180°)	-18.19/-19.06	-19.15/-17.54	-19.02/-19.16	-17.65/-18.41	-18.65/-18.13	-18.58/-17.57	-17.41/-17.37	-17.22/-16.9	-17.34/-17.75	-18.18/-18.7	-18.84/-17.77	-18.86/-18.06	-17.18/-19.34	-18.65/-17.81	-15.86/-14.51	-13.78/-13.75	-13.19/-12.31	-11.69/-11.61	-12.71/-14.03	-14.51/-15.91	-16.69/-17.15	-16.68/-15.47	-14.57/-13.42	-14.21/-16.77
Freq(Hz)	5.6G/Pol.	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°)	-8.67/-8.51	-8.19/-7.98	-8.07/-8.76	-9.87/-11.3	-12.41/-13.73	-15.36/-17.9	-17.95/-18.54	-18.53/-17.8	-17.45/-15.05	-13.22/-12.18	-11.3/-10.76	-10.53/-10.12	-9.54/-9.32	-8.97/-9.14	-9.28/-9.73	-10.36/-11.58	-12.95/-14.04	-16.45/-17.86	-19.94/-18.85	-17.49/-18.05	-18.57/-15.52	-12.72/-11.46	-10.67/-9.68	-9.34/-9.21
Θ(7.5°)	-10.93/-10.57	-9.93/-9.55	-9.53/-10.15	-11.06/-11.83	-12.43/-13.89	-15.79/-18.76	-19.07/-17.93	-17.76/-19.02	-15.26/-12.83	-10.33/-8.84	-7.73/-7.03	-6.65/-6.14	-5.86/-5.61	-5.71/-6.01	-6.49/-7.17	-8.33/-9.83	-11.3/-12.78	-14.07/-14.75	-16.37/-17.27	-16.32/-15.53	-14.65/-13.51	-12.76/-12.3	-11.55/-11.34	-11.38/-11.41
Θ(15°)	-11.1/-10.6	-10.21/-9.72	-9.5/-9.89	-10.39/-10.69	-11.63/-13.46	-15.21/-16.71	-18.12/-18.63	-16.26/-14.77	-13.16/-11.22	-9.09/-7.63	-6.51/-5.69	-5.16/-4.78	-4.53/-4.34	-4.2/-4.18	-4.18/-4.42	-5.18/-5.93	-6.8/-7.67	-8.37/-9.69	-11.37/-12.26	-12.9/-13.18	-13.03/-12.98	-13.43/-13	-12.87/-12.78	-12.48/-11.32
Θ(22.5°)	-11.87/-10.58	-10.12/-9.82	-9.18/-8.26	-7.9/-8.2	-9.36/-11.21	-12.05/-12.63	-12.32/-13.01	-13.73/-14.22	-14.28/-13.08	-10.71/-8.71	-7.06/-5.88	-5.45/-5.18	-4.81/-4.05	-3.42/-3.11	-3.02/-3.37	-4.05/-5.01	-6.08/-6.61	-6.87/-6.96	-7.28/-8.21	-10.66/-13.37	-15.18/-16.6	-18.27/-19.08	-18.21/-18.94	-16.28/-13.53
Θ(30°)	-14.07/-12.17	-10.39/-9.57	-8.62/-7.39	-6.73/-6.71	-7.2/-7.51	-7.8/-8.39	-8.87/-9.29	-9.45/-9.45	-9.24/-9.09	-9.08/-8.44	-6.94/-5.76	-5.23/-5.1	-4.85/-4.24	-3.5/-3.13	-3.32/-3.87	-4.65/-5.25	-5.55/-5.91	-6.39/-6.61	-6.65/-6.52	-6.77/-8.48	-11.19/-14.09	-16.6/-18.79	-18.2/-18.52	-17.25/-15.32
Θ(37.5°)	-6.26/-6.05	-6.24/-6.34	-7.32/-7.96	-7.81/-8.7	-10.26/-9.76	-8.52/-7.91	-7.37/-6.69	-6.15/-5.96	-5.61/-5.47	-4.4/-3.68	-3.85/-3.82	-3.07/-2.25	-1.91/-1.78	-2.05/-2.91	-4.01/-5.02	-6.26/-7.32	-7.33/-6.98	-6.87/-7.39	-8.33/-8.51	-9.43/-11.28	-12.53/-12.13	-11.74/-10.89	-8.51/-6.95	
Θ(45°)	-4.31/-3.02	-2.91/-3.09	-2.98/-3.58	-3.82/-4.3	-5.69/-6.34	-6.88/-6.13	-4.79/-3.97	-3.74/-3.72	-3.66/-3.24	-3.38/-3.93	-3.72/-3.67	-3.86/-3.49	-3.19/-2.6	-1.95/-1.67	-1.77/-2.48	-3.79/-5.16	-5.9/-5.45	-4.43/-4.11	-4.09/-4.1	-4.83/-6.29	-7.52/-7.92	-7.43/-6.74	-6.03/-5.76	-5.27/-5.1
Θ(52.5°)	-5.04/-4.51	-2.52/-1.93	-2.52/-1.93	-1.43/-1.35	-2.15/-3.34	-4.46/-5.34	-4.61/-3.48	-2.73/-2.77	-3.29/-3.23	-3.38/-3.98	-3.82/-3.61	-3.36/-2.9	-2.42/-1.7	-1.24/-1.35	-1.68/-2.47	-2.93								



Radiated Composite Gain Data <2.4GHz and 5GHz U-NII 1~U-NII 4>

Appendix A

Θ(67.5°)	-0.48/-0.81	-0.71/-1.04	-1.32/-1.56	-1.42/-1.29	-0.9/-0.94	-0.97/-1.28	-0.86/0.22	1.02/1.11	0.84/0.23	-0.74/-2	-3.02/-3.28	-3.31/-2.77	-2.66/-1.62	-1.39/-1.25	-1.02/-1.43	-2.2/-2.46	-3.42/-3.84	-4.89/-4.23	-3.44/-2.87	-3.28/-4.31	-7.97/-14.45	-12.36/-7.85	-4.84/-3.07	-2.22/-1.25
Θ(75°)	-0.19/-0.36	0.12/-0.26	-0.25/-0.75	-1.23/-2.18	-2.09/-1.41	-0.55/0.05	0.47/0.57	0.93/1.09	1.06/0.15	-0.81/-2.25	-2.73/-3.19	-3.53/-3.3	-2.53/-1.68	-0.78/0.17	0.22/-1.31	-2.25/-5.53	-7.83/-8.9	-8.64/-7.65	-5.96/-4.98	-5.6/-8.62	-11/-10.17	-7.57/-4.37	-3.35/-1.34	-1.04/-0.88
Θ(82.5°)	-2.84/-3.45	-2.72/-2.1	-0.66/-0.28	-0.14/-1.05	-1.62/-2.06	-0.87/0.54	1.45/1.79	1.03/0.21	0.03/-0.79	-1.42/-2.84	-1.92/-1.6	-0.89/-0.86	-0.33/-0.57	-0.76/-1.23	-2.74/-3.71	-4.5/-7.01	-8.73/-11.9	-10.48/-6.58	-4.93/-3.33	-4.75/-9.3	-12.29/-10.69	-8.01/-4.85	-3.64/-2.66	-2.3/-2.81
Θ(90°)	-1.72/-2.33	-2.84/-3.32	-2.98/-2.48	-2.11/-2.06	-1.51/-1.27	-0.43/0.59	0.99/0.88	0.45/-0.66	-1.95/-2.62	-1.82/-1.31	0.36/0.91	1.21/-1.22	0.79/0.28	-0.38/-0.29	-0.75/-1.7	-3.21/-5.9	-9.93/-14.9	-15.44/-8.1	-4.87/-5.25	-4.75/-7.93	-9.9/-7.96	-7.14/-4.86	-3.87/-2.43	-1.45/-2.63
Θ(97.5°)	-0.43/-0.5	-1.11/-1.93	-2.79/-3.04	-2.12/-2.29	-2.7/-2.29	-1.79/-1.36	-0.5/-0.67	-1.23/-3.43	-4.54/-4.12	-2.41/-0.79	1.13/1.78	2.32/1.83	1.74/0.8	0.68/0.8	-0.73/-0.93	-2.55/-3.61	-5.93/-13.49	-5.63/-3.59	-3.62/-3.12	-6.23/-10.09	-9.27/-6.05	-5.54/-5.75	-3.05/-1.27	-0.95/-0.95
Θ(105°)	-5.67/-5.48	-3.56/-2.48	-1.15/-0.83	-0.8/-1.23	-1.76/-2.31	-2.47/-2.09	-2.58/-3.93	-5.85/-6.61	-5.42/-4.31	-2.36/-1.69	0.40/0.52	1.65/0.74	1.26/-0.46	-0.21/-0.37	-2.27/-2.22	-2.44/-2.31	-4.06/-6.23	-12.18/-11.05	-5/-4.67	-4.69/-6.77	-5.93/-6.01	-4.7/-5.28	-5.51/-4.43	-4.13/-7.41
Θ(112.5°)	-5.7/-6.04	-7.43/-6.02	-4.46/-1.84	-0.8/0.35	-0.66/-1.61	-3.16/-3.33	-3.57/-4.06	-5.14/-5.24	-4.97/-3.19	-2.03/-0.37	0.98/1.29	1.77/0.69	0.91/-1.4	-0.61/-0.22	-1.56/-1.35	-0.51/-1.18	-3.72/-8.93	-15.82/-12.55	-7.98/-7.09	-4.78/-6.83	-8.77/-4.92	-5.97/-6.56	-8.74/-5.69	-5.14/-7.15
Θ(120°)	-6.13/-5.58	-7.74/-5.78	-7.83/-4.46	-3.3/-1.29	-1.27/-1.25	-2.33/-4.67	-6.02/-5.69	-3.98/-2.18	-0.99/0.17	-0.59/-0.11	-0.78/-0.09	-0.13/-1.27	-0.31/-3.7	-2.62/-2.11	-2.97/-3.07	-2.44/-4.04	-5.19/-5.15	-6/-10.22	-4.89/-5.41	-5.9/-12.64	-13.97/-7.85	-5.77/-7.66	-5.9/-5.61	-4.63/-7.74
Θ(127.5°)	-5.81/-4.51	-5.47/-4.33	-4.63/-3.68	-3.74/-2.37	-1.77/-1.59	-1.55/-1.51	-1.46/-1.7	-1.81/-2.27	-2.06/-2.61	-2.85/-2.25	-2.78/-2.42	-4.45/-4.18	-5.61/-5.28	-4.04/-1.58	-2.68/-3.73	-6.61/-3.68	-4.3/-3.71	-11.99/-17.39	-8.59/-10.6	-7.58/-12.92	-14.29/-11.78	-7.13/-6.9	-4.72/-4.95	-6.23/-6.71
Θ(135°)	-5.43/-5.57	-4.54/-4.67	-5.46/-5.9	-5.64/-4.91	-3.71/-3.25	-2.49/-2.13	-2.22/-2.08	-1.59/-0.99	-0.72/-0.47	-0.76/-1.34	-1.89/-3.75	-3.49/-4.96	-5.13/-5.5	-5.34/-3.52	-3.06/-7.66	-9.66/-17.41	-7.72/-10.97	-12.14/-15.85	-11.12/-12.09	-16.15/-18.28	-11.08/-7.36	-7.71/-7.13	-7.44/-4.94	-6.83/-7.84
Θ(142.5°)	-7.76/-7.35	-9.17/-9.25	-9.21/-9.11	-7.91/-6.45	-5.8/-4.69	-3.88/-3.07	-2.18/-1.49	-1.1/-0.74	-0.65/-1.39	-2.07/-2.6	-3.84/-3.74	-5.33/-7.46	-6.84/-11.58	-10.4/-7.64	-10.65/-10.1	-13.49/-8.91	-8.02/-12.92	-10.12/-18.21	-9.18/-12.38	-18.7/-18.27	-14.83/-9.68	-10.92/-7.12	-5.96/-5.91	-5.35/-7.69
Θ(150°)	-16.93/-13.34	-14.54/-14.38	-13.19/-15.39	-17.88/-15.71	-11.88/-10.5	-9.02/-8.37	-7.53/-5.76	-4.04/-3.28	-3.17/-3.41	-3.99/-4.67	-4.97/-6.53	-9.56/-8.97	-11/-12.62	-6.57/-4.54	-5.71/-10.72	-12.67/-10.55	-14.28/-11.93	-11.24/-14.67	-14.23/-17.37	-13.21/-10.85	-17.59/-16.14	-13.19/-18.11	-18/-13.76	-15.72/-18.81
Θ(157.5°)	-9.5/-8.13	-9.8/-10.23	-8.58/-8.26	-9.92/-11.21	-11.03/-10.68	-10.77/-9.89	-8.86/-8.58	-7.82/-6.56	-6.07/-6.19	-6.31/-6.08	-6.85/-8.96	-8.83/-6.77	-6.74/-8.22	-8.31/-7.53	-7.69/-7.68	-8.35/-10.7	-12.65/-12.85	-12.89/-11.24	-12.27/-16.76	-17.81/-18.51	-18.16/-17.88	-13.25/-10.1	-8.67/-9.42	-12.9/-14.07
Θ(165°)	-13.46/-11.78	-10.57/-10.44	-10.2/-11.41	-14.07/-18.59	-18.43/-18.14	-17.19/-18.74	-16.7/-15.91	-16.13/-16.01	-14.49/-12.7	-10.97/-9.89	-9.5/-9.2	-8.78/-8.57	-9.25/-10.51	-13.25/-18.28	-18.02/-18.89	-17.48/-16.65	-15.28/-18.4	-18.7/-17.53	-16.11/-15.09	-14.7/-14.01	-13.62/-14.03	-15.31/-18.32	-19.03/-15.94	-14.54/-14.14
Θ(172.5°)	-18.21/-17.95	-19.25/-18.67	-18.52/-18.05	-16.15/-15.26	-14.93/-16.49	-17.22/-17.89	-18.73/-16.78	-15.18/-14.64	-13.99/-13	-11.85/-10.61	-9.66/-9.39	-9.95/-11.79	-15.1/-18.19	-18.33/-19.33	-15.19/-12.54	-11.02/-10.64	-11.08/-13	-16.31/-18.7	-18.12/-19.12	-17.79/-17.26	-16.68/-15.85	-14.68/-14.51	-16.14/-18.41	-18.04/-18.61
Θ(180°)	-16.62/-18.14	-18.29/-18.82	-18.5/-18.13	-18.58/-18.94	-18.46/-18.21	-18.85/-17.85	-18.15/-16.87	-16.15/-15.97	-16.74/-16.89	-16.92/-16.86	-16.79/-16.83	-17.82/-18.22	-18.64/-18.25	-17.3/-18.5	-17.8/-18.98	-18.43/-18.85	-17.82/-16.35	-15.27/-14.81	-14.12/-13.37	-12.67/-13.05	-13.78/-16.19	-19.01/-17.99	-19.19/-19.05	-18.59/-15.98
Freq(Hz)	5.885G/Pol.	Phi/Ant. 1	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Gain	Φ(0°)/Φ(7.5°)	Φ(15°)/Φ(22.5°)	Φ(30°)/Φ(37.5°)	Φ(45°)/Φ(52.5°)	Φ(60°)/Φ(67.5°)	Φ(75°)/Φ(82.5°)	Φ(90°)/Φ(97.5°)	Φ(105°)/Φ(112.5°)	Φ(120°)/Φ(127.5°)	Φ(135°)/Φ(142.5°)	Φ(150°)/Φ(157.5°)	Φ(165°)/Φ(172.5°)	Φ(180°)/Φ(187.5°)	Φ(195°)/Φ(202.5°)	Φ(210°)/Φ(217.5°)	Φ(225°)/Φ(232.5°)	Φ(240°)/Φ(247.5°)	Φ(255°)/Φ(262.5°)	Φ(270°)/Φ(277.5°)	Φ(285°)/Φ(292.5°)	Φ(300°)/Φ(307.5°)	Φ(315°)/Φ(322.5°)	Φ(330°)/Φ(337.5°)	Φ(345°)/Φ(352.5°)
Θ(0°)	-16.35/-15.58	-14.21/-13.78	-13.84/-14.01	-13.85/-12.98	-12.48/-11.93	-11.78/-11.1	-11.37/-11.12	-11.05/-10.75	-10.81/-10.94	-11.11/-11.87	-12.72/-13.28	-14.27/-15.22	-15.7/-15.38	-15.22/-14.61	-13.67/-12.76	-11.8/-10.82	-10.06/-9.8	-9.92/-10.18	-10.65/-11.07	-11.46/-12.36	-11.45/-13.38	-13.42/-13.75	-15.09/-15.94	-16.92/-16.93
Θ(7.5°)	-15.6/-15.45	-18.4/-17.67	-18.66/-17.95	-15.65/-13.73	-12.29/-11.44	-11.1/-10.85	-11.21/-11.84	-12.78/-13.45	-13.73/-14	-14.07/-14.64	-15.22/-15.94	-15.94/-15.67	-15.04/-13.96	-13.25/-12.67	-12.17/-11.38	-10.73/-10.33	-10.42/-11.13	-11.73/-11.79	-11.82/-11.89	-12.29/-12.6	-12.45/-12.14	-12.18/-11.8	-11.77/-11.42	-12.24/-13.4
Θ(15°)	-9.56/-10.4	-12.32/-14.36	-17.18/-19.03	-18.96/-17	-14.86/-13.6	-12.44/-11.71	-11.41/-11.12	-10.85/-10.35	-10.43/-10.5	-10.76/-11.23	-12.23/-13.59	-14.16/-16.19	-15.72/-14.78	-13.88/-13.34	-12.43/-11.25	-10.22/-9.59	-9.24/-9.64	-9.63/-9.66	-9.56/-9.86	-10.05/-10.39	-10.32/-9.88	-9.13/-8.56	-8.18/-7.87	-8.06/-9.13
Θ(22.5°)	-6.37/-7.02	-8.37/-9.34	-10.61/-13.16	-17.72/-18.1	-19.04/-17.34	-14.41/-12.33	-10.85/-9.66	-8.76/-8.12	-7.69/-7.63	-8.29/-9.59	-11.65/-13.7	-15.65/-18.15	-18.25/-17.35	-18.17/-15.52	-13.58/-12.07	-10.95/-10.43	-9.99/-9.69	-9.6/-10.25	-11.34/-11.97	-12.06/-12.74	-13/-11.79	-9.8/-8.61	-7.87/-6.82	-6.52/-6.43
Θ(30°)	-2.58/2.37	-2.87/-3.96	-5.57/-7.88	-11.18/-17.34	-17.18/-19.62	-16.16/-14.26	-11.42/-8.91	-7.02/-5.7	-5.13/-5.17	-5.88/-7.59	-10.1/-12.17	-13.45/-14.84	-16.34/-16.5	-16.11/-15.9	-14.55/-13.32	-12.28/-11.97	-12.76/-14.17	-16.27/-15.69	-16.15/-18.29	-18.48/-19.1	-15.14/-11.27	-8.34/-6.19	-4.74/-4.2	-3.69/-3.25
Θ(37.5°)	-3.29/-3.46	-3.85/-4.91	-6.21/-7.82	-9.93/-12.28	-15.45/-17.39	-17.14/-18.67	-14.71/-10.91	-7.89/-5.89	-5.53/-6.29	-7.82/-10.27	-13.64/-16.88	-18.43/-18.94	-19.36/-18.64	-17.82/-14.9	-12.68/-11.45	-11.25/-10.88	-10.31/-11.04	-12.89/-15.7	-18.09/-18.87	-19.18/-17.97	-17.58/-14.36	-9.26/-6.11	-3.84/-6.23	-2.42/-3.2
Θ(45°)	-5.37/-5.87	-5.78/-6.38	-7.2/-7.87	-8.8/-10.68	-12.25/-12.18	-12.7/-15.28	-17.33/-14.71	-11.47/-9.19	-8.63/-9.51	-11.15/-14.78	-17.86/-19.45	-16.89/-13.22	-13.98/-17.34	-17.27/-18.81	-16.08/-14.09	-15.46/-15.84	-15.95/-17.5	-18.07/-15.73	-9.29/-6.63	-4.76/-3.9	-3.71/-4.45			
Θ(52.5°)	-5.07/-6.19	-7.54/-8.45	-9.56/-10.5	-11.59/-11.73	-12.91/-14.15	-13.8/-11.19	-9.96/-10.2	-10.32/-9.66	-9.48/-10.84	-13.03/-17.96	-19.25/-17.16	-11.29/-9.46	-9.81/-10.96	-13.83/-18.4	-17.79/-17.32	-14.37/-15.11	-18.15/-17.9	-18.03/-17.95	-17/-13.3	-10.39/-8.09	-9.22/-13.47	-17.67/-15.03	-10.66/-8.91	-7.62/-5.58
Θ(60°)	-8.39/-8.45	-10.12/-11.17	-13.22/-12.64	-13.86/-15.03	-15.82/-11.05	-8.52/-9	-9.33/-10.54	-10.02/-8.55	-9.01/-10	-12.1/-17.99	-19.38/-13.16	-9.38/-5.97	-9.15/-10.65	-15.4/-17.61	-16.79/-11.52	-9.06/-8.82	-10.44/-11.53	-10.87/-10.75	-12.29/-13.38	-9.91/-7.31	-6.98/-9.28	-16.4/-19.04	-16.94/-11.51	-10.18/-9.26
Θ(67.5°)	-19.28/-17.36	-19.1/-17.38	-11.96/-9.61	-11.12/-15.78	-17.96/-13.91	-9.66/-7.65	-7.02/-7.28	-8.04/-8.87	-9.64/-10.58	-13.39/-15.54	-14.21/-10.29	-8.49/-7.56	-7.77/-9.93	-12.07/-17.82	-18.53/-18.26	-14.66/-14.77	-17.09/-18.71	-14.72/-8.87	-7.73/-6.99	-6.72/-7.66	-10.92/-16.39	-17.74/-18.58	-19.08/-14.7	-12.92/-13.92
Θ(75°)	-17.33/-17.85	-14.17/-13.36	-11.9/-10.93	-11.63/-13.31	-17.67/-18.99	-17.71/-12.86	-12.04/-15.01	-16.07/-12.92	-10.63/-8.64	-8.91/-14.81	-18.18/-10.97	-7.95/-7.17	-8.03/-8.23	-10.45/-13.76	-15.71/-16.71	-14.14/-16.73	-13.96/-12.97	-10.3/-11.06	-14.52/-10.58	-12.13/-17.78	-18.93/-11.18	-7.2/-8.31	-10.37/-14.57	-18.48/-18.68
Θ(82.5°)	-16.62/-14.73	-15.46/-16.19	-17.3/-18.48	-18.37/-18.5	-18.13/-15.41	-12.82/-10.61	-12.76/-16.84	-18.24/-18.48	-11.78/-8.4	-10.04/-17.17	-18.03/-11.07	-8.95/-9.46	-12.05/-16.56	-18.98/-18.4	-19.12/-17.12	-13.62/-14.04	-15.02/-15.44	-11.34/-11.8	-11.59/-13.92	-18.88/-13.61	-9.3/-8.14	-6.86/-7.55	-8.18/-9.38	-12.26/-15.46
Θ(90°)	-8.33/-7.08	-6.05/-6.55	-8.09/-9.91	-12.79/-17.88	-18.13/-18.08	-17.81/-18.85	-18.62/-18.33	-16.6/-17.75	-12.15/-9.25	-10.86/-17.35	-17.43/-10.65	-7.5/-6.8	-7.85/-9.49	-11.5/-14.63	-18.49/-16.5	-16.43/-17.22	-18.08/-11.07	-9.14/-11.92	-13.38/-13.17	-14.66/-18.4	-10.42/-6.86	-6.14/-7.27	-8.75/-10.15	-11.45/-9.97
Θ(97.5°)	-9.02/-7.51	-5.91/-6.48	-6.74/-8.49	-11.42/-15.97	-18.93/-15.98	-9.89/-9.08	-13.37/-19.36	-18.09/-15.05	-9.65/-8.74	-11.62/-17.23	-14.75/-9.37	-8.48/-8.28	-11.35/-12.63	-10.95/-10.55	-11.41/-11.06	-11.85/-9.88	-6.26/-4.13	-6.24/-9.45	-13.79/-17.04	-16.89/-11.68	-6.39/-5.5	-6.08/-9.48	-11.18/-12.18	-15.14/-12.67
Θ(105°)	-18.47/-16.56	-18.34/-15.07	-11.36/-8.71	-9.25/-10.16	-14.34/-11.47	-8.12/-6.14	-9.67/-18.28	-18.43/-19.28	-11.03/-6.81	-5.74/-11.69	-19.11/-10.79	-9.24/-9.43	-16.8/-18.67	-14.03/-10.99	-10.36/-10.34	-11.36/-18.47	-11.33/-6.94	-8.6/-17.08	-17.07/-12.28	-10.47/-15.47	-11.92/-16.03	-17.93/-17.81	-14.5/-16.17	-19.68/-18.6
Θ(112.5°)	-16.68/-19.06	-16.33/-11.74	-9.97/-9.41	-10.43/-13.12	-14.27/-9.15	-6.74/-6.57	-8.54/-10.29	-11.53/-14.81	-															



Radiated Composite Gain Data <2.4GHz and 5GHz U-NII 1~U-NII 4>

Appendix A

Θ(157.5°)	-5.23/-6.48	-8.15/-9.57	-10/-9.73	-9.5/-9.47	-9.48/-9.61	-9.87/-10.45	-11.09/-11.97	-12.46/-12.31	-11.58/-11.14	-11.25/-11.6	-11.76/-11.61	-11.25/-10.7	-10.08/-9.55	-9.32/-9.31	-9.49/-9.55	-9.31/-8.59	-7.7/-6.95	-6.33/-5.65	-4.79/-3.81	-2.87/-2.02	-1.42/-1.18	-1.39/-1.96	-2.74/-3.5	-4.17/-4.73
Θ(165°)	-8.89/-10.72	-12.96/-14.19	-14.21/-14.22	-14.44/-15.01	-15.93/-17.38	-17.46/-18.8	-18.76/-18.72	-16.27/-12.63	-10.09/8.46	-7.4/-6.8	-6.44/-6.26	-6.27/-6.49	-6.87/-7.32	-7.85/-8.28	-8.68/8.88	-8.81/-8.44	-7.88/-7.62	-7.59/-7.44	-7.01/-6.34	-5.63/-4.99	-4.59/-4.56	-4.95/-5.57	-6.29/-6.93	-7.55/-8.22
Θ(172.5°)	-17.85/-17.49	-18.77/-17.05	-16.38/-16.17	-16.17/-16.31	-16.69/-17.39	-17.34/-16.59	-14.91/-13.15	-11.55/-10.15	-8.87/-7.84	-7.11/-6.63	-6.3/-6.09	-6.05/-6.16	-6.43/-6.79	-7.14/-7.51	-7.97/8.24	-8.37/-8.21	-8.14/-8.43	-8.82/-8.93	-8.83/-8.64	-8.43/-8.4	-8.66/-9.31	-10.31/-11.34	-12.37/-13.35	-14.6/-16.14
Θ(180°)	-16.45/-14.65	-13.41/-13.23	-13.59/-14.13	-14.65/-15.25	-16.12/-16.97	-17.4/-16.76	-15.8/-14.77	-14.06/-13.46	-12.83/-12.35	-12.02/-11.64	-11.18/-10.54	-9.96/-9.44	-9/8.61	-8.28/-8.1	-8.11/-8.18	-8.1/-7.92	-8.02/-8.34	-8.67/-8.69	-8.75/-8.89	-9.28/-9.86	-10.79/-12.07	-13.07/-13.46	-13.93/-14.87	-16.17/-17.03
Freq(Hz)	2.45G/Pol.	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°)	-7.04/-8.23	-9.56/-10.81	-11.78/-11.91	-10.86/-9.24	-7.66/-6.27	-5.18/-4.33	-3.65/-3.16	-2.82/-2.85	-2.62/-2.59	-2.65/-2.85	-3.19/-3.66	-4.19/-4.91	-5.95/-7.36	-9.21/-11.37	-13.21/-13.22	-11.36/-9.38	-7.54/-6.01	-4.79/-3.94	-3.34/-2.89	-2.67/-2.71	-2.9/-3.15	-3.43/-3.81	-4.27/-4.71	-5.34/-6.22
Θ(7.5°)	-5.42/-6.34	-7.32/-8.34	-9.54/-10.57	-10.92/-10.3	-9.16/-7.89	-6.71/-5.76	-4.97/-4.38	-3.94/-3.69	-3.59/-3.56	-3.62/-3.84	-4.21/-4.75	-5.45/-6.52	-8.08/-10.32	-13.33/-17.29	-18.21/-14.26	-10.58/-8.01	-6.06/-4.66	-3.61/-2.8	-2.24/-1.89	-1.76/-1.81	-1.97/-2.19	-2.45/-2.79	-3.18/-3.6	-4.1/-4.76
Θ(15°)	-4.1/-4.96	-5.92/-6.97	-8.29/-9.75	-11/-11.55	-12.13/-10.26	-9.01/-7.77	-6.65/-5.72	-5.01/-4.58	-4.32/-4.21	-4.27/-4.46	-4.82/-5.32	-6/-7.09	-8.65/-11.07	-15.02/-17.8	-18.58/-14.89	-10.42/-7.15	-4.99/-3.65	-2.52/-1.79	-1.31/-1.03	-0.92/-0.97	-1.08/-1.23	-1.42/-1.64	-1.93/-2.3	-2.8/-3.46
Θ(22.5°)	-3.47/-4.37	-5.35/-6.41	-7.71/-9.1	-10.3/-11.18	-11.6/-11.42	-10.58/-9.36	-8.07/-6.93	-6.03/-5.46	-5.15/-5.09	-5.16/-5.33	-5.54/-5.88	-6.32/-7.09	-8.2/-9.7	-11.39/-12.77	-12.64/-10.67	-8.02/-5.67	-3.84/-2.52	-1.56/-0.93	-0.54/-0.29	-0.21/-0.26	-0.41/-0.56	-0.74/-0.92	-1.19/-1.58	-2.15/-2.83
Θ(30°)	-3.29/-4	-4.83/-5.73	-6.7/-7.47	-8.04/-8.45	-8.93/-9.4	-9.56/-9.11	-8.26/-7.35	-6.59/-6.12	-5.94/-5.92	-6.07/-6.29	-6.52/-6.64	-6.73/-6.93	-7.33/-7.69	-8.03/-8.3	-8.3/-7.74	-6.52/-5.01	-3.47/-2.19	-1.18/-0.46	0.01/0.27	0.07/0.28	0.09/0.18	-0.49/-0.8	-1.15/-1.56	-2.09/-2.72
Θ(37.5°)	-2.81/-3.24	-3.71/-4.21	-4.61/-4.82	-4.98/-5.27	-5.83/-6.68	-7.48/-7.85	-7.71/-7.29	-6.77/-6.42	-6.27/-6.17	-6.1/-6.08	-6.08/-6.09	-6.19/-6.55	-6.92/-7.11	-7.16/-7.09	-6.9/-6.41	-5.63/-4.54	-3.29/-2.13	-1.14/-0.35	0.2/0.52	1.63/0.57	0.36/0.04	-0.38/-0.85	-1.28/-1.7	-2.09/-2.47
Θ(45°)	-1.89/-2.04	-2.29/-2.52	-2.64/-2.79	-3.01/-3.55	-4.45/-5.75	-7.04/-7.97	-8.31/-8.12	-7.57/-7.03	-6.5/-6.07	-5.64/-5.13	-4.49/-3.97	-3.8/-4.12	-4.82/-5.65	-6.47/-7.05	-7.21/-6.8	-5.88/-4.68	-3.39/-2.25	-1.29/-0.56	-0.07/0.18	0.32/0.33	0.18/-0.13	-0.62/-1.16	-1.6/-1.81	-1.81/-1.76
Θ(52.5°)	-1.58/-1.87	-2.27/-2.56	-2.68/-2.78	-3.1/-3.78	-4.78/-6.08	-7.33/-8.19	-8.5/-8.22	-7.49/-6.65	-5.86/-5.38	-5.1/-4.61	-3.71/-2.76	-2.23/-2.24	-2.65/-3.39	-4.3/-5.25	-5.92/-5.91	-5.13/-3.86	-2.57/-1.51	-0.78/-0.31	-0.11/-0.08	-0.11/-0.2	-0.36/-0.64	-1.11/-1.64	-1.95/-1.93	-1.68/-1.46
Θ(60°)	-3.4/-4	-4.74/-5.16	-4.97/-4.38	-3.88/-3.85	-4.4/-5.47	-6.9/-8.21	-8.84/-8.24	-6.89/-5.63	-4.75/-4.48	-4.69/-4.73	-4.35/-3.65	-3.03/-2.74	-2.76/-2.93	-3.18/-3.43	-3.65/-3.73	-3.34/-2.54	-1.48/-0.55	0.05/0.28	0.27/0.05	-0.43/-1.09	-1.79/-2.42	-3.02/-3.45	-3.66/-3.64	-3.38/-3.22
Θ(67.5°)	-5.84/-5.56	-5.53/-5.71	-5.39/-4.37	-3.59/-3.7	-4.89/-6.83	-9.1/-10.51	-9.61/-7.34	-5.11/-3.52	-2.58/-2.38	-2.55/-2.61	-2.56/-2.69	-3.03/-3.45	-3.82/-3.99	-3.99/-3.85	-3.65/-3.44	-3.09/-2.44	-1.44/-0.45	0.21/0.45	0.32/-0.16	-0.94/-1.94	-3.24/-4.68	-5.6/-5.88	-6.13/-6.58	-6.7/-6.29
Θ(75°)	-5.25/-4.78	-4.6/-4.86	-5.17/-4.93	-4.53/-5	-6.45/-8.32	-9.54/-9.64	-8.53/-6.96	-5.39/-3.96	-2.82/-2.37	-2.33/-2.33	-2.2/-2	-1.99/-2.25	-2.71/-3.36	-4.18/-4.96	-5.46/-5.67	-5.54/-5.04	-3.86/-2.5	-1.32/-0.61	-0.44/-0.68	-1.11/-1.47	-2.1/-3.17	-4.25/-4.95	-5.43/-5.9	-6.15/-5.83
Θ(82.5°)	-4.88/-4.56	-4.28/-4.33	-4.55/-4.58	-4.41/-4.66	-5.63/-6.94	-8.11/-8.99	-9.29/-8.8	-7.91/-6.54	-5.11/-4.45	-4.81/-5.66	-5.94/-5.16	-4.2/-3.69	-3.69/-3.94	-4.17/-4.27	-4.54/-4.83	-4.84/-4.45	-3.98/-3.47	-2.78/-2.08	-1.5/-1.38	-1.71/-2.14	-2.61/-3.32	-4.47/-5.64	-6.2/-6	-5.66/-5.25
Θ(90°)	-3.91/-2.99	-2.92/-3.43	-4.1/-4.3	-4.14/-3.83	-3.85/-4.48	-5.61/-7	-8.25/-8.79	-8.42/-7.15	-5.64/-5.07	-6/-7.97	-8.2/-7.04	-6.49/-6.74	-7.06/-6.77	-5.7/-4.61	-4/-3.51	-2.8/-1.95	-1.25/-0.75	-0.53/-0.47	-0.33/-0.4	-1.04/-2.15	-3.28/-3.95	-4.69/-5.86	-6.84/-6.82	-6.09/-5.07
Θ(97.5°)	-3.5/-2.39	-2.3/-3.09	-4.02/-4.14	-3.4/-2.58	-2.33/-3.04	-4.49/-6.18	-7.66/-8.18	-7.58/-6.46	-5.47/-5.43	-6.75/-7.53	-5.89/-4.67	-4.74/-5.48	-6.03/-5.99	-5.7/-5.6	-5.44/-4.9	-3.85/-2.66	-1.5/-0.51	0.06/0.33	0.45/0.26	-0.42/-1.54	-3/-4.5	-5.95/-7.03	-7.07/-6.37	-5.59/-4.67
Θ(105°)	-2.95/-2.43	-2.03/-2.29	-2.83/-2.92	-2.22/-1.49	-1.37/-2.07	-3.5/-5.16	-6.66/-7.39	-6.86/-6.05	-5.84/-6.57	-8.28/-8.68	-6.55/-5.08	-5.08/-6.02	-6.93/-7.06	-6.42/-5.67	-5/-4.43	-4.03/-3.83	-3.57/-3.11	-2.59/-2	-1.69/-1.98	-2.77/-3.76	-4.86/-5.74	-5.91/-5.39	-4.4/-3.55	-3.15/-3.11
Θ(112.5°)	-2.87/-2.6	-2.27/-2.24	-2.6/-2.96	-2.8/-2.44	-2.41/-2.95	-4.05/-5.39	-6.67/-7.25	-6.81/-6.26	-6.6/-6.23	-10.98/-10.85	-7.55/-5.78	-6/-7.73	-9.31/-9.15	-7.97/-7.03	-6.5/-6.33	-6.22/-6.11	-6.13/-3.68	-6.39/-5.76	-5.27/-5.58	-6.59/-7.43	-7.05/-5.71	-4.67/-4.41	-4.36/-3.94	-3.4/-3.11
Θ(120°)	-5.01/-4.27	-3.63/-3.35	-3.73/-4.56	-5.16/-5	-4.64/-6.4	-5.33/-6.64	-8.19/-9	-9.01/-9.36	-11.26/-15.49	-19.18/-15.48	-10.49/-8.72	-8.52/-9.09	-9.36/8.25	-6.79/5.68	-4.76/-3.82	-3/-2.82	-3.45/-4.85	-6.71/-8	-7.83/-6.84	-6.34/-6.93	-7.78/-7.38	-6.43/-6.36	-7.23/-7.81	-7.13/-5.89
Θ(127.5°)	-9.93/-7.84	-6.5/-5.89	-5.87/-6.34	-7.05/-7.46	-7.43/-7.57	-8.41/-10.03	-11.45/-11.6	-11.81/-13.75	-17.98/-14.89	-9.6/-6.49	-5.21/-5.65	-7.57/-10.36	-12.82/-14.44	-14.38/-11.7	-7.97/-4.71	-2.52/-1.56	-1.64/-2.42	-3.37/-3.9	-4.82/-2.99	-6.82/-3.49	-4.9/-6.51	-7.51/-8.1	-9.22/-10.93	-12.37/-11.83
Θ(135°)	-7.01/-6.4	-5.78/-5.44	-5.24/-5.44	-6.22/-7.72	-9.73/-12.23	-15.11/-18.1	-18.76/-17.17	-15.56/-13.86	-11/-8.18	-6.21/-5.01	-4.36/-4.42	-5.33/-6.91	-8.35/-8.89	-8.48/-7.93	-7.51/-6.8	-5.86/-5.33	-5.46/-5.91	-6.16/-5.84	-4.93/-4.01	-3.5/-3.58	-4.27/-5.37	-6.41/-7.05	-7.17/-7.11	-7.25/-7.4
Θ(142.5°)	-6.61/-5.97	-5.46/-5.19	-5.27/-5.6	-6.21/-7.12	-8.19/-9.19	-9.75/-9.66	-9.11/-8.3	-7.22/-5.9	-4.55/-3.57	-3.19/-3.56	-4.67/-6.27	-8.08/-9.78	-10.56/-10.06	-8.93/-7.84	-7.2/-7.1	-7.63/-8.7	-9.94/-10.54	-10.4/-9.75	-8.59/-7.23	-6.15/-5.52	-5.44/-6.02	-7.1/-8.13	-8.54/-8.3	-7.73/-7.13
Θ(150°)	-3.56/-2.45	-1.72/-1.47	-1.6/-2.02	-2.57/-3.27	-4.03/-4.76	-5.4/-5.77	-5.77/-5.38	-4.63/-3.7	-2.77/-2.02	-1.65/-1.77	-2.43/-3.63	-5.17/-6.67	-7.97/-9.14	-10.69/-12.43	-13.47/-13.39	-13.48/-14.01	-13.9/-12.93	-11.82/-11	-10.17/-9.36	-8.51/-7.99	-7.94/-8.5	-9.36/-9.65	-8.84/-7.49	-6.01/-4.54
Θ(157.5°)	-1.54/-0.91	-0.68/-0.81	-1.25/-1.94	-2.81/-3.87	-5.02/-6.3	-7.44/-8.26	-8.54/8.21	-7.37/-6.29	-5.14/-4.11	-3.36/-2.97	-2.97/-3.35	-4.01/-4.82	-5.67/-6.14	-8.36/-10.65	-14.02/-18.23	-18.09/-18.9	-17.84/-16.2	-15.19/-14.23	-13.23/-12.44	-11.65/-10.77	-9.78/-8.65	-7.47/-6.3	-5.08/-4.02	-3.06/-2.2
Θ(165°)	-4.07/-4.1	-4.21/-4.67	-5.35/-6.27	-7.56/-9.33	-11.43/-14.09	-17.11/-18.58	-17.67/-19.92	-17.46/-14.92	-12.79/-10.96	-9.24/-7.89	-6.98/-6.45	-6.26/-6.29	-6.54/-6.99	-7.7/-7.83	-10.1/-11.57	-12.39/-12.29	-12/-12.11	-12.64/-12.95	-13.01/-12.85	-12.33/-11.16	-9.8/-8.48	-7.45/-6.6	-5.83/-5.22	-4.78/-4.41
Θ(172.5°)	-10.62/-11.33	-11.91/-12.33	-12.82/-13.68	-15.49/-17.21	-17.82/-17.08	-15.71/-14.54	-13.93/-13.96	-14.38/-15.04	-16.22/-18.15	-18.91/-17.37	-18.91/-16.93	-15.33/-14.07	-13.21/-12.56	-12.14/-12.03	-12.15/-12.38	-14.42/-12.13	-11.81/-11.87	-11.98/-11.97	-11.87/-11.69	-11.48/-11.01	-10.44/-10.03	-9.86/-9.81	-9.76/-9.8	-10/-10.4
Θ(180°)	-15.85/-16.04	-15.2/-14.23	-13.56/-13.17	-12.61/-11.85	-11.19/-10.68	-10.38/-10.7	-9.9/-9.91	-10.09/-10.43	-10.91/-11.43	-12.11/-12.96	-13.93/-15.06	-16.14/-16.97	-17.36/-17.25	-16.82/-16.13	-15.49/-14.87	-14.47/-14.03	-13.79/-13.62	-13.44/-13.2	-13.11/-13.11	-13.19/-13.39	-13.58/-13.76	-13.95/-14.1	-14.1/-14.16	-14.5/-15.44
Freq(Hz)	5.2G/Pol.	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°)	-13.8/-14.96	-18.25/-19.37	-18.86/-18.41	-19.35/-17.27	-14.13/-12.41	-10.17/-7.81	-6.93/-6.96	-2.67/-7.74	-8.12/-8.07	-7.76/-7.62	-8.42/-10.12	-16.34/-19.52	-18.31/-17.98	-19.12/-17.98	-14.57/-12.01	-10.54/-9.55	-9/8.76	-8.5/-8.09	-7.44/-6.68	-6.59/-7.15	-8.34/-9.16	-9.8/-10.4	-10.78/-12.73	
Θ(7.5°)	-11.68/-13.2	-16.58/-18.52	-18.28/-18.09	-15.33/-12.12	-11.58/-10.55	-9.14/-8.03	-7.33/-6.98	-7.28/-7.83	-9.27/-10.53	-10.92/-10.82	-12.01/-13.81	-16.24/-18.2	-18.77/-18.38	-19.06/-17.64	-16.76/-15.34	-14.23/-13	-11.97/-10.68	-9.67/-8.7	-8.2/-7.74	-7.24/-6.5				



Radiated Composite Gain Data <2.4GHz and 5GHz U-NII 1~U-NII 4>

Appendix A

Θ(30°)	-14.99/14.44	-16.4/18.53	-18.1/-17.63	-12.46/9.98	-7.4/-5.19	-4.52/-4.89	-6.26/-7.97	-9.32/-8.84	-8.31/-7.88	-8.05/-8.67	-10.77/-13.92	-16.83/-17.08	-15.34/-13.1	-10.5/-8.82	-8.28/9.06	-11.46/-14.01	-15.97/-16.24	-14.75/-13.05	-12.69/-13.3	-15.34/-15.93	-16.75/-18.53	-18.34/-17.25	-16.1/-15.55	-15.59/-15.78
Θ(37.5°)	-14.98/-13.63	-15.02/-15.74	-18.36/-18.25	-18.38/-13.83	-11.4/-10.2	-10.19/-9.43	-11.34/-12.79	-11.86/-10.15	-9.14/9.4	-10.14/-10.92	-12.85/-18.69	-19.16/-14.57	-10.88/-8.67	-7.35/-6.9	-7.18/-8.32	-9.63/-11.82	-15.87/-17.18	-18.77/-16.85	-16.52/-14.68	-13.02/-11.8	-11.13/-10.71	-11.1/-10.93	-11.86/-15.36	-19.03/-18.17
Θ(45°)	-16.57/-12.77	-12.54/-13.96	-14.37/-14.44	-17.62/-15.74	-13.01/-10.8	-11.66/-14.89	-17.9/-17.75	-12.47/-10.06	-10.71/-13.87	-16.27/-14.71	-15.03/-19.14	-18.9/-16.02	-11.84/-9.68	-7.36/-5.69	-4.74/5.02	-6.47/-9.14	-13.36/-18.04	-18.01/-18.46	-18.26/-17.73	-15.8/-14.14	-12.28/-10.62	-11.63/-13.07	-12.94/-16.03	-18.88/-19
Θ(52.5°)	-14.67/-14.21	-17.5/-17.32	-18.99/-18.1	-18.19/-17.6	-16.19/-18.67	-18.96/-13.08	-9.1/8.58	-10.05/-14.03	-18.94/-18.71	-17.65/-19.38	-16.93/-12.37	-13.13/-14.64	-16.1/-18.09	-15.84/-12.39	-10.76/-10.26	-10.25/-12.71	-18.77/-17.76	-18.7/-18.22	-15.97/-13.67	-12.46/-12.17	-12.69/-12.25	-12.63/-16.13	-19.28/-19.14	-18.08/-16.19
Θ(60°)	-17.71/-15.85	-17.3/-17.78	-18.68/-18.07	-18.99/-18.87	-18.26/-14.92	-15.34/-15.81	-18.43/-17.75	-18.36/-14.84	-13.21/-13.29	-14.78/-14.47	-11.49/-11.11	-11.2/-11.87	-13.3/-14.19	-19.15/-18.18	-19.08/-13.79	-12.23/-12.16	-12.05/-18.67	-18.62/-18.54	-13.93/-12.61	-14.28/-16.74	-16.95/-15.33	-13.98/-12.1	-12.72/-15.1	-17.53/-17.52
Θ(67.5°)	-18.04/-17.64	-16.52/-14.11	-13.87/-14.06	-13.14/-12.94	-13.09/-13.4	-13.57/-12.67	-12.25/-12.32	-13.74/-18.67	-18.22/-17.92	-13.05/-11.22	-9.69/-9.7	-11.47/-15.92	-19.01/-19.04	-19.22/-18.5	-18.04/-17.55	-17.49/-14.88	-13.76/-13.78	-13.16/-14.46	-15.61/-18.88	-18.5/-15.5	-15.3/-14.53	-14.51/-12.65	-12.27/-12.55	-16.66/-18.1
Θ(75°)	-19.26/-18.27	-18.41/-17.97	-16.38/-13.43	-12.54/-12.31	-11.53/-11.16	-12.85/-16.45	-14.45/-12.78	-11.79/-13.67	-18.11/-14.61	-9.7/-9.32	-10.68/-11.32	-10.05/-10.42	-10.62/-14.41	-18.58/-18.45	-18.17/-18.78	-18.8/-17.88	-17.92/-17.3	-17.6/-18.83	-18.33/-17.69	-18.16/-16.27	-12.62/-10.46	-9.62/-8.91	-9.82/-10.86	-12.53/-18.34
Θ(82.5°)	-19.1/-17.25	-19.39/-18.1	-17.54/-17.84	-18.79/-18.43	-18.61/-19.09	-18.08/-18.74	-14.51/-11.72	-11.51/-12.69	-14.67/-11.98	-9.75/-9.11	-10.89/-12.84	-14.41/-13.98	-14/-15.9	-13.6/-15.62	-17.07/-18.35	-19.23/-18.79	-15.67/-17.15	-18.13/-17.45	-17.61/-17.2	-12.6/-10.39	-11.27/-13.13	-14.93/-12.74	-13.04/-14.76	-18.41/-19.04
Θ(90°)	-18.89/-19.49	-17.27/-19.07	-18.2/-18.24	-17.47/-17.47	-18.86/-18.33	-18.37/-12.1	-8.7/-9.63	-13.4/-15.44	-10.36/-9.43	-10.51/-14.53	-19.01/-18.88	-17.01/-12.87	-10.25/-10.41	-8.92/-11.43	-12.61/-13.72	-11.74/-14.62	-16.01/-18.47	-19.02/-19.37	-18.68/-18	-17.57/-12.6	-10.78/-11.63	-11.6/-12.85	-13.41/-13.43	-12.03/-15.23
Θ(97.5°)	-17.74/-18.42	-17.68/-18.98	-18.86/-17.91	-19.04/-18.45	-18.35/-17.82	-16.79/-16.76	-13.67/-12.32	-12.9/-15.07	-18.06/-17.82	-15.23/-13.94	-13.41/-13.97	-12.45/-13.32	-16.92/-13.59	-19.57/-18	-18.13/-18.21	-14.21/-17.04	-17.82/-19.17	-18.59/-18.51	-18.74/-14.38	-11.52/-11.03	-10.66/-8.79	-9.12/-9.08	-11.46/-10.29	-11.4/-16.52
Θ(105°)	-17.66/-19.66	-17.8/-15.48	-18.95/-13.56	-15.27/-14.65	-17.17/-17.81	-14.83/-12.97	-13.29/-15.56	-18.54/-17.32	-12.51/-14.08	-14.66/-18.62	-18.06/-14	-10.28/-12.29	-13.25/-14.8	-16.69/-17.67	-18.93/-16.82	-18.9/-16.06	-17.68/-15.64	-18.91/-17.35	-16.31/-13.97	-11.23/-8.05	-7.95/-8.78	-10.54/-10.18	-8.68/-7.82	-9.89/-13.81
Θ(112.5°)	-14.62/-19.07	-18.76/-18.41	-19.03/-18.83	-18.91/-18.71	-18.46/-18.24	-18.74/-15.97	-16/-16.21	-15.27/-17.72	-17.92/-14.55	-16.9/-19.24	-18.15/-18.6	-17.62/-16.9	-14.15/-12.92	-11.5/-10.93	-11.39/-12.19	-16.42/-13.62	-16.74/-11.23	-14.89/-12.9	-16.65/-14.14	-12.23/-10.25	-7.44/-6.38	-7.21/-9.98	-9.95/-9.68	-11.6/-17.51
Θ(120°)	-17.43/-17.41	-18.41/-17.68	-14.34/-12.82	-18.45/-18.42	-18.35/-19.04	-19.06/-18.23	-16.43/-16.34	-16.42/-14.08	-15.78/-18.54	-18.16/-17.01	-18.68/-18.82	-17.84/-18.32	-18.56/-18.87	-19.04/-15.2	-16.8/-13.47	-19.46/-18.65	-17.3/-15.52	-15.07/-10.19	-16.57/-9.45	-5.39/-7.16	-7.85/-7.48	-6.16/-5.19	-5.96/-7.34	-8.69/-13.09
Θ(127.5°)	-10.89/-12.82	-15.22/-17.13	-17.73/-18.78	-16.41/-15.9	-13.78/-16.35	-19.01/-18.25	-17.8/-17.62	-17.44/-18.06	-14.62/-14.57	-14.86/-14.74	-16.73/-18.24	-17.55/-18.58	-12.48/-12.32	-16.8/-18.99	-14.62/-18.4	-12.01/-17.36	-12.75/-18.99	-13.98/-16.85	-17.97/-11.3	-6.09/-5.48	-4.48/-6.69	-9.36/-12.31	-7.07/-5.61	-7.55/-10.23
Θ(135°)	-11.77/-9.12	-11.35/-11.62	-13.71/-18.55	-18.48/-19.06	-16.14/-16.59	-16.3/-12.92	-12.6/-15.33	-14.4/-13.05	-14.03/-14.88	-16.36/-17.83	-17.25/-14.91	-13.95/-15.79	-18.11/-18.66	-17.61/-13.07	-13.56/-18.46	-11.49/-17.29	-11.78/-12.69	-8.29/-12.52	-12.68/-6.81	-3.13/-3.82	-4.49/-4.93	-8.64/-7.15	-7.41/-6.86	-8.68/-12.71
Θ(142.5°)	-11.27/-14.05	-18.09/-13.3	-15.14/-18.2	-15.17/-13.35	-14.27/-13	-12.77/-14.72	-18.31/-18.27	-19.32/-17.65	-19.36/-18.64	-18/-18.09	-18.44/-10.23	-7.43/-8.66	-12.83/-12.6	-9.26/-11.11	-18.54/-12.34	-16.2/-16.17	-9.8/-7.53	-8.09/-15.32	-13.33/-7.4	-3.25/-2.38	-3.51/-3.75	-6.9/-9.62	-7.21/-8.43	-11.26/-12.68
Θ(150°)	-10.79/-11.3	-17.37/-19.04	-17.21/-13.28	-9.23/-8.79	-9.91/-12.9	-18.66/-18.46	-17.92/-18.34	-15.42/-12.25	-9.01/-6.94	-7.47/-11.34	-17.39/-17.65	-12.28/-13.31	-16.71/-15.7	-12.36/-14.77	-18.14/-18.26	-17.03/-9.97	-9.84/-9.88	-9.8/-14.09	-13.48/-10.72	-7.66/-6.5	-7.76/-7.23	-6.43/-6.65	-6.17/-6.21	-9.18/-12.61
Θ(157.5°)	-10.25/-10.3	-11.33/-12.79	-12.43/-10.8	-10.03/-10.97	-12.46/-13.77	-13.99/-14.43	-14.74/-15.74	-16.5/-13.59	-10.71/-9.08	-9.1/-9.93	-11.53/-14.17	-16.46/-15.95	-14.87/-14.02	-14.45/-18.28	-18.56/-17.86	-16.69/-10.34	-7.74/-6.84	-7.4/-8.59	-8.56/-7.62	-7.01/-7.32	-8.84/-10.87	-11.12/-11.01	-11.27/-12	-12.26/-11.43
Θ(165°)	-14.88/-14.88	-15.8/-17.83	-17.32/-15.77	-14.5/-13.46	-12.82/-12.73	-13.97/-18.17	-18.71/-17.48	-18.05/-19.17	-16.73/-13.01	-11.21/-10.59	-11.45/-12.43	-12.29/-11.04	-9.38/-8.38	-8.4/-9.28	-10.85/-12.07	-11.79/-10.48	-9/-7.88	-7.01/-6.28	-5.65/-5.35	-5.21/-5.1	-5.46/-6.26	-7.15/-8.63	-9.63/-10.64	-11.54/-13.43
Θ(172.5°)	-18.38/-17.82	-18.51/-14.5	-12.1/-10.76	-9.66/-9.4	-9.68/-10.63	-12.22/-16	-18.73/-19.1	-18.64/-19.39	-18.87/-17.89	-14.37/-12.37	-11.81/-12.1	-12.6/-12.36	-12.04/-12.4	-12.92/-12.76	-11.51/-9.86	-8.37/-7.24	-6.75/-6.52	-6.32/-6.41	-6.49/-6.89	-7.31/-8.34	-9.68/-11.49	-13.03/-14.94	-18.6/-17.67	-18.48/-18.81
Θ(180°)	-12.67/-14.12	-15.6/-16.62	-17.05/-18.54	-18.05/-17.79	-18.96/-18.51	-19/-18.47	-17.76/-13.55	-11.39/-10.17	-10/-10.08	-10.19/-10.46	-10.58/-10.83	-11.15/-11.99	-13.06/-14.2	-15.52/-15.78	-15.38/-14.12	-13.2/-12.18	-12.31/-12.62	-12.93/-12.82	-11.94/-11.01	-10.54/-10.54	-10.72/-11.07	-10.69/-10.35	-10.42/-10.11	-10.38/-11.46
Freq(Hz)	5.3G/Pol.	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°)	-13.27/-12.83	-13.61/-14.19	-15.52/-15.66	-15.12/-15.83	-17.17/-16.99	-17.19/-18.88	-18.01/-18.32	-18.67/-19.07	-18.02/-19.08	-18.8/-17.26	-14.98/-13.39	-12.85/-12.78	-12.76/-12.66	-12.4/-11.77	-11.71/-11.96	-12.6/-13.49	-14.68/-15.95	-17.1/-18.19	-17.89/-17.55	-17.66/-18.59	-17.68/-17.96	-17.93/-16.35	-14.97/-14.66	-14.74/-14.73
Θ(7.5°)	-8.9/-8.81	-8.44/-7.87	-7.9/-7.85	-7.47/-8.34	-9.57/-9.56	-9.4/-10.14	-11.24/-13.1	-16.87/-18.12	-18.43/-17.59	-18.93/-17.97	-18.78/-19	-17.74/-18.44	-19.17/-18.67	-18.98/-18.07	-17.75/-18.95	-17.11/-18.87	-18.63/-17.28	-18.93/-18.97	-18.21/-19.22	-18.07/-18.97	-19.1/-18.79	-15.09/-12.87	-11.44/-10.52	-10.13/-9.56
Θ(15°)	-5.43/-4.94	-4.02/-3.69	-3.44/-3.07	-2.57/-3.12	-3.56/-3.77	-4.61/-5.4	-6.79/-8.19	-9.77/-11.47	-17.4/-17.81	-19.07/-18.85	-18.3/-17.96	-18.77/-18.2	-18.06/-18.2	-19.08/-17.85	-17.25/-16.12	-15.65/-16.02	-16.55/-17.63	-17.19/-18.76	-19.02/-17.77	-18.44/-19.4	-18.82/-15.36	-11.71/-9.64	-8.21/-7.14	-6.56/-5.87
Θ(22.5°)	-2.68/-2.28	-2.25/-2.32	-2.19/-1.82	-1/-0.64	-0.78/-1.4	-2.35/-3.53	-5.06/-6.57	-8.37/-10.11	-12.48/-15.62	-19.07/-18.62	-18.34/-17.29	-18.15/-17.99	-18.19/-17.99	-14.49/-11.68	-9.93/-8.38	-7.57/-7.42	-8.37/-10.4	-13.08/-14.59	-16.47/-18.65	-18.18/-15.64	-12.87/-11.21	-9.21/-7.49	-5.75/-4.65	-3.96/-3.14
Θ(30°)	-2.93/-2.88	-2.46/-1.92	-1.2/-0.32	0.62/-0.96	0.760/-2.8	-0.76/-2.41	-4.65/-7.16	-9.37/-9.87	-8.8/-8.74	-10.32/-14.11	-18.25/-18.37	-17.6/-18.26	-17.59/-16.38	-14.88/-11.33	-8/-5.4	-4.25/-4.15	-5.18/-6.15	-6.35/-7.18	-9.69/-13.34	-14.16/-11.33	-9.62/-8.4	-7.1/-6.01	-4.66/-3.87	-3.22/-2.87
Θ(37.5°)	-1.14/-1.17	-1.64/-1.97	-1.32/-0.62	-0.130/-12	-0.18/-0.81	-1.96/-3	-3.88/-4.84	-6.01/-6.97	-8.22/-9.56	-11.31/-13.44	-14.96/-13.79	-11.17/-10.02	-10.2/-10.72	-9.8/-7.78	-5.9/-4.39	-3.33/-2.92	-3.03/-3.59	-5.32/-7.95	-9.7/-9.51	-8.77/-7.08	-5.04/-3.51	-3.02/-3.06	-3.08/-2.78	-1.78/-1.13
Θ(45°)	-0.84/-1.64	-2.63/-2.55	-1.88/-0.86	-0.050/-29	0.01/-0.5	-1.74/-3.43	-5.1/-6.45	-7.58/-8.92	-11.76/-15.39	-19.21/-17.35	-13.79/-10.31	-7.23/-6.91	-9.06/-11.72	-12/-7.85	-4.78/-2.73	-1.71/-1.78	-2.85/-4.39	-6.62/-7.94	-7.72/-6.59	-5.09/-4.48	-3.84/-2.95	-2.23/-1.95	-1.39/-1.25	-1.22/-1.1
Θ(52.5°)	0.950/-63	-0.5/-1.3	-1.23/-1.12	-0.84/-0.06	0.23/-0.56	-2.11/-3.72	-5.52/-8.12	-10.15/-11.36	-12.86/-14.42	-15.39/-11.79	-9.86/-7.38	-5.47/-6.76	-9.01/-8.77	-8.35/-9.04	-7.71/-5.26	-4.34/-4.87	-5.48/-7.3	-9.88/-8.79	-6.34/-4.8	-3.62/-2.95	-2.48/-1.29	-0.490/-0.4	0.690/-84	0.81/-02
Θ(60°)	1.640/-55	-1.09/-2.34	-2.52/-1.6	-0.860/-11	0.09/-0.76	-2.04/-3.96	-5.61/-8.85	-12.71/-17.08	-18.06/-18.81	-19/-11.41	-5.34/-8.6	-6.17/-5.31	-5.34/-5.22	-5.52/-6.74	-6.36/-5.15	-4.89/-6.32	-9.87/-15.6	-11.73/-8.23	-6.56/-6.94	-8.77/-7.72	-5.86/-6.94	-1.73/-3.04	1.98/-2.87	2.65/-2.02
Θ(67.5°)	1.180/-64	-1.06/-2.43	-1.57/-1.06	-1.33/-0.38	0.12/-0.14	-0.61/-2.61	-6.19/-10.03	-13.12/-14.54	-13.74/-12.24	-9.8/-7.97	-7.52/-4.83	-2.04/-1.98	-2.88/-3.67	-4.12/-6.17	-8.89/-7	-3.93/-4.01								



Radiated Composite Gain Data <2.4GHz and 5GHz U-NII 1~U-NII 4>

Appendix A

Θ(75°)	1.24/1.23	0.17/0.18	0.09/0.87	-1.34/-0.95	-0.94/-0.99	-0.65/-1.09	-3.01/-5.41	-7.84/-9.82	-12.17/13.01	-14.95/-10.04	-6.72/-5.07	-3.56/-3.1	-2.06/-2.52	-3.69/-6.82	-8.46/-5.22	-3.57/-4.61	-5.94/-4.77	-2.41/-1.35	-1.76/-3.57	-6.08/-5.32	-4.21/-1.04	0.84/0.83	1.75/2.28	2.36/1.64
Θ(82.5°)	1.85/1.5	0.33/0.29	0.29/0.89	-0.54/-0.14	-0.6/-0.81	-0.7/-1.02	-2.72/-5.37	-9.65/-13.61	-18.52/-14.37	-13.87/-8.72	-6.93/-3.56	-1.84/-0.59	-0.05/-1.61	-2.19/-5.34	-6.81/-3.98	-3.99/-5.21	-4.13/-2.27	-2.08/-1.73	-1.58/-2.72	-3.08/-1.11	-0.74/-0.45	10.62	1.39/2.34	2.42/1.64
Θ(90°)	-0.56/0.74	-1.03/-1.91	-1.03/-1.87	-1.56/-2.81	-3.19/-1.21	-0.33/-1.06	-3.53/-7.41	-10.34/-12.61	-16.87/-17.29	-17.76/-9.1	-6.84/-5.56	-3.49/-2.58	-0.3/-1.43	-3.32/-6.26	-5.29/-3.64	-3.66/-3.01	-3.48/-1.39	0.03/0.72	0.21/-2.36	-2.82/-0.67	1.28/1.5	2.22/1.69	0.76/1.83	2.34/0.57
Θ(97.5°)	-1.6/0.53	-0.34/-1.65	-1.45/-4.61	-5.57/-4.15	-3.41/-0.9	0.15/-1.07	-4.26/-8.2	-11.13/-11.29	-13.83/-12.71	-16.85/-7.44	-9.38/-6.22	-3.82/-1.55	0.12/-1	-2.77/-5.29	-5.68/-6.4	-5.8/-4.34	-3.36/-1.32	-0.66/0.82	-0.19/-2.47	-0.03/2	3.39/2.84	2.56/1.31	0.65/1.49	1.76/-0.46
Θ(105°)	-1.54/-0.04	-0.83/-3.23	-1.74/-3.24	-3.81/-2.6	-1.49/0.08	0.82/-1.06	-5.37/-7.09	-5.69/-5.44	-8.47/-10.61	-15.38/-6.24	-6.83/-3.61	-4.9/-5.11	-0.73/-1.06	-3.84/-5.55	-5.73/-6.78	-4.63/-5.28	-5.15/-1.4	-0.5/-0.53	-1.13/-1.42	-1.86/0.63	0.48/0.85	0.88/0.31	-0.77/-0.36	0.72/0.51
Θ(112.5°)	-3.16/-2.5	-2.16/-2.81	-2.29/-5.83	-12.07/-7.76	-3.06/-1.63	-1/-2.93	-7.2/-9.27	-9.19/-9.51	-11.43/-12.27	-11.51/-7.28	-11.19/-4.71	-4.03/-2.74	-3.31/-7.47	-9.11/-8.09	-8.85/-8	-7.77/-8.76	-3.92/-2.13	-0.79/2.07	0.3/-1.92	-0.72/0.64	1.24/-0.48	-0.33/-1.3	0.04/1.41	1.09/-1.82
Θ(120°)	-6.02/-4.48	-4.58/-6.32	-5.79/-5.95	-8.68/-8.52	-6.22/-4.38	-4.46/-6.86	-12.04/-15.96	-11.13/-11.12	-13.01/-18.25	-19.17/-13.27	-10.74/-5.72	-5.41/-3.8	-3.07/-5.78	-9.16/-10.13	-9.66/-18.19	-18.2/-12.66	-9.08/-10.9	-6.89/-3.07	-6.05/-8.84	-4.87/-2.89	-1.7/-2.23	-2.35/-3.53	-3.05/-0.96	-1.56/-4.31
Θ(127.5°)	-3.92/-3.41	-4.17/-5.54	-7.04/-9.61	-14.32/-11.57	-6.85/-4.77	-5.68/-8.5	-8.9/-5.95	-5.18/-7.97	-17.95/-17.95	-18.76/-18.77	-9.68/-6.53	-5.59/-3.95	-5.02/-8.23	-12.18/-11.56	-10.83/-17.52	-19.13/-7.58	-7.3/-8.56	-3.53/-2.37	-8.56/-11.39	-5.43/-3.71	-3.56/-2.07	-1.87/-2.25	-1.25/0.64	0.21/-2.46
Θ(135°)	-6.92/-6.52	-6.15/-6.28	-6.63/-10.09	-16.25/-15.69	-9.71/-7.81	-7.39/-7.82	-8.2/-8.83	-9.39/-10.09	-12.48/-17.15	-18.5/-16.75	-8.73/-7.34	-5.66/-5.19	-10.3/-12.91	-8.56/-11.39	-19.81/-16.69	-10.41/-9.06	-15.68/-10.18	-4.21/-4.12	-10.43/-8.97	-6.51/-3.42	-4.71/-5.15	-8.45/-11.64	-5.21/-1.63	-0.71/-3.59
Θ(142.5°)	-11.34/-9.34	-7.97/-10.13	-12.95/-17.52	-17.41/-12.21	-9.88/-8.36	-8.7/-10.28	-11.81/-10.02	-8.12/-8.86	-11.16/-13.17	-15.18/-11.26	-11.35/-12.85	-8.99/-7.47	-8.19/-10.22	-12.3/-11.25	-10.58/-8.28	-5.35/-6.15	-13.92/-11.87	-7.26/-3.58	-4.21/-7.2	-7.77/-14.73	-11.42/-5.93	-5.52/-7.47		
Θ(150°)	-10.73/-13.24	-10.7/-13.46	-19.18/-16.03	-13.31/-10.76	-9.8/-10.12	-10.8/-12.28	-12.51/-11.63	-10.6/-10.79	-12.34/-15.78	-18.6/-17.17	-16.94/-14.6	-12.26/-10.86	-12.62/-16.27	-17.66/-18.72	-13.07/-7.91	-9.18/-12.15	-13.45/-11.52	-5.87/-5.33	-7.27/-8.24	-7.84/-5.09	-3.77/-5.5	-8.14/-6.87	-5.08/-3.87	-3.5/-5.31
Θ(157.5°)	-8.45/-10.36	-11.73/-11.76	-12.54/-16.21	-18.52/-16.04	-14.35/-14.86	-15.11/-15.01	-13.74/-12.69	-12.54/-12.89	-15.2/-17.31	-17.41/-17.72	-18.31/-17.52	-15.52/-14.63	-15.34/-15.87	-15.32/-12.62	-10.37/-9.78	-13.33/-17.9	-13.05/-12.48	-9.79/-8.33	-9.79/-13.25	-16.25/-18.21	-14.01/-10.64	-9.03/-8.08	-6.7/-5.06	-5.13/-6.13
Θ(165°)	-6.84/-8.2	-10.4/-11.91	-14.47/-16.18	-15.06/-16.93	-19.01/-18.59	-18.7/-18.56	-18.62/-19.11	-18.95/-18.83	-19.33/-15.18	-12.57/-10.95	-10.33/-10.55	-10.76/-11.04	-11.94/-14.86	-18.65/-18.69	-18.18/-18.11	-18.74/-18.3	-17.93/-17.48	-12.89/-10.14	-8.68/-8.77	-9.32/-10.35	-10.42/-9.19	-8.12/-7.2	-6.67/-6.53	-5.97/-6.04
Θ(172.5°)	-12.59/-15.14	-18.58/-18.97	-18.48/-18	-18.29/-18.05	-17.32/-18.95	-17.62/-18.18	-17.51/-18.38	-19.01/-18.13	-17.62/-18.48	-19.14/-17.91	-19.21/-18.01	-18.65/-19.15	-18.9/-17.11	-15.53/-14.82	-15.51/-18.13	-19.05/-17.44	-17.25/-14.68	-13.4/-13.18	-12.29/-11.84	-11.42/-11.23	-11/-10.2	-10.28/-9.57	-8.56/-8.81	-9.15/-10.59
Θ(180°)	-14.57/-13.9	-13.32/-10.86	-11.17/-13.22	-15.52/-15.49	-14.77/-13.94	-14.31/-14.7	-14.68/-14.17	-13.59/-13.64	-13.64/-13.32	-13.29/-13.07	-12.95/-13.21	-13.36/-13.9	-14.53/-15.33	-16.14/-16.24	-16.17/-15.76	-14.81/-14.22	-13.99/-14.41	-14.08/-13.81	-13.28/-12.95	-12.68/-11.58	-11.53/-11.34	-12.55/-14.06	-14.99/-16.06	-18.59/-18.2
Freq(Hz)	5.785G/Pol.	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°)	-14.79/-13.92	-10.93/-9.01	-7.72/-6.56	-5.43/-4.34	-3.88/-3.52	-3.48/-4.07	-4.55/-5.29	-5.29/-5.22	-5.13/-5.89	-6.99/-9.01	-10.92/-12.46	-13.8/-15.1	-14.87/-12.86	-10.92/-9.05	-7.93/-6.82	-5.71/-5.11	-4.84/-4.61	-4.37/-4.06	-3.37/-3.13	-3.44/-4.27	-5.63/-6.98	-7.47/-7.68	-8.67/-11.42	-15.42/-17.42
Θ(7.5°)	-12.87/-12.35	-11.19/-9.56	-8.87/-7.43	-6.24/-5.22	-4.5/-4.09	-3.89/-4.17	-4.44/-4.65	-4.54/-4.09	-3.82/-4.34	-5.34/-7.07	-8.65/-10.11	-12.44/-16.54	-17.71/-18.18	-15.38/-12.4	-10.33/-8.4	-7.01/-6.27	-5.89/-5.6	-5.2/-4.84	-4.68/-4.94	-6.04/-7.15	-8.51/-9.22	-9.5/-10.84	-13.42/-17	-17.7/-14.01
Θ(15°)	-17.93/-17.55	-15.91/-14.96	-13.04/-10.86	-9.8/-8.18	-7.39/-6.84	-5.91/-5.2	-5.24/-5.14	-5.6/-5.9	-6.06/-6.23	-6.51/-7.37	-9.48/-12.77	-16.37/-18.77	-18.22/-18.3	-15.46/-12.8	-10.56/-8.68	-7.41/-6.63	-6.29/-6.26	-6.51/-6.67	-7.24/-7.59	-8.5/-10.12	-11.67/-13.46	-15.5/-16.35	-19.07/-18.42	-18.77/-19.45
Θ(22.5°)	-18.12/-17.96	-18.82/-17.93	-14.94/-11.97	-11.04/-9.56	-8.54/-7.89	-6.84/-5.7	-5.14/-5.12	-5.8/-6.84	-7.3/-7.2	-6.88/-7.95	-10.6/-13.48	-15.17/-16.17	-15.62/-13.37	-10.9/-9.33	-8.95/-8.91	-8.97/-8.63	-8.32/-8.07	-7.91/-7.97	-8.67/-9.98	-11.19/-11.71	-11.76/-12.1	-13.47/-14.47	-14.51/-15.34	-16.93/-18.89
Θ(30°)	-14.54/-18.18	-18.31/-18.07	-15.75/-13.74	-12.06/-10.3	-7.71/-5.73	-4.24/-3.32	-2.94/-3.2	-4.11/-5.73	-7.66/-8.34	-8.19/-9.46	-13.65/-16.56	-13/-10.88	-10.04/-9.56	-7.81/-6.28	-6.04/-6.95	-8.54/-9.7	-10.55/-11.21	-11.77/-13.11	-13.82/-13.44	-13.41/-13	-11.59/-10.13	-9.15/-8.68	-8.37/-8.91	-8.79/-10.48
Θ(37.5°)	-17.97/-18.2	-18.75/-18.55	-19.26/-14.91	-11.6/-10.46	-8.68/-7.58	-6.5/-5.81	-5.65/-6.36	-7.11/-7.7	-8.64/-9.22	-9.14/-9.07	-10.48/-12.93	-12.61/-11.23	-10.4/-9.34	-7.28/-5.66	-5.23/-5.82	-7.13/-9.54	-13.62/-17.62	-18.99/-17.69	-17.16/-15.76	-11.64/-9.77	-9.92/-10.65	-10.23/-9.3	-9.04/-9.28	-11.78/-16.3
Θ(45°)	-15.59/-17.37	-17.95/-18.27	-17.21/-15.36	-14.26/-14.17	-11.72/-9.38	-8.52/-9.71	-11.12/-10.06	-7.79/-6.86	-6.65/-7.18	-8.32/-8.71	-7.89/-7.46	-8.03/-9.76	-12.26/-12.48	-10.52/-8.09	-6.17/-5.26	-5.42/-6.51	-8.16/-10.65	-16.02/-18.79	-16.46/-12.46	-10.47/-8.89	-8.05/-8.92	-9.62/-9.14	-9.4/-11.19	-13.13/-12.81
Θ(52.5°)	-18.08/-15.68	-14.06/-14.07	-14.43/-13.9	-15.72/-16.9	-15.46/-14.49	-13.35/-11.39	-9.32/-8.01	-7.03/-7.45	-9.66/-12.77	-12.91/-10.48	-8.77/-7.8	-6.84/-6.86	-9.55/-13.54	-14.75/-11.21	-8.07/-6.02	-7.03/-9.29	-10.58/-11.99	-16.47/-19.2	-19.04/-17.12	-12.79/-11.3	-11.37/-11.92	-13.09/-12.77	-12.52/-13.35	-17.75/-17.79
Θ(60°)	-18.82/-16.43	-13.76/-15.52	-18.05/-19	-18.31/-17.48	-18.06/-16.91	-14.54/-11.66	-8.42/-6.64	-6.95/-8.95	-12.27/-15.87	-15.08/-10.38	-7.44/-5.55	-4.12/-5.02	-6.46/-9.03	-14.05/-16.24	-13.1/-10.45	-9.11/-8.87	-10.27/-11.65	-13.27/-17.53	-17.46/-17.93	-18.88/-14.54	-10.61/-11.17	-12.2/-12.14	-13.55/-18.67	-18.47/-18.37
Θ(67.5°)	-18.33/-12.62	-11.6/-12.93	-16.06/-18.91	-17.59/-18.19	-18.5/-15.75	-11.71/-10.24	-11.23/-12.41	-13.14/-12.63	-13.08/-16.33	-13.35/-9.98	-6.73/-4.44	-4.51/-5.28	-7.02/-7.72	-9.83/-17.93	-19.2/-12.74	-9.54/-11.06	-12.31/-14.21	-17.68/-18.08	-18.26/-19.48	-16.63/-13.52	-12.44/-12.54	-13.62/-15.02	-16.55/-16	-19.1/-18.85
Θ(75°)	-13.89/-12.59	-10.47/-10.95	-12.41/-18.52	-18.27/-18.85	-18.2/-17.95	-13.27/-11.24	-12.01/-13.42	-13.85/-12.97	-16.44/-18.57	-15.57/-11.14	-8.45/-7.8	-7.64/-9.19	-11.07/-12.16	-13.66/-16.11	-17.31/-18.19	-16.37/-12.32	-11.4/-14.76	-18.42/-18.61	-18.44/-18.47	-17.72/-12.22	-11.02/-8.75	-10.19/-12.9	-16.17/-18.67	-18.63/-17.52
Θ(82.5°)	-13.32/-13.1	-11.09/-9.97	-12.01/-16.63	-18.88/-18.32	-11.66/-9.37	-10.96/-14.89	-17.38/-13.12	-11.6/-13.62	-17.79/-16.75	-11.57/-10.38	-8.91/-8.79	-8.28/-9.57	-12.16/-18.14	-18.35/-16.64	-12.69/-11.55	-12.62/-18.82	-14.18/-10.38	-9.89/-12.76	-15.09/-15.81	-10.23/-9.31	-10.48/-8.24	-8.88/-9.55	-11.38/-17.65	-18.14/-18.65
Θ(90°)	-14.42/-14.71	-17.23/-15.52	-16.63/-19.18	-18.86/-18.89	-17.89/-18.83	-17.15/-15.29	-13.79/-13.67	-12.64/-14.64	-18.33/-18.66	-18.33/-18.3	-18.35/-18.92	-16.5/-10.88	-8.74/-9.72	-11.73/-12.36	-12.01/-9.96	-7.39/-9.16	-14.88/-18.44	-14.94/-17.49	-17.61/-17.55	-8.61/-7.03	-8.88/-13.95	-15.96/-14.99	-12.79/-17.56	-17.3/-13.74
Θ(97.5°)	-15.74/-17.62	-18.66/-18.9	-18.71/-17.55	-16.45/-18.01	-18.54/-18.21	-17.74/-17.27	-14.98/-12.91	-13.42/-15.79	-18.67/-18.07	-19.09/-16.19	-13.69/-12.85	-14.64/-14.11	-9.88/-11.69	-9.72/-11.11	-16.6/-13.06	-8.39/-7.54	-9.73/-17.51	-13.98/-11.69	-12.39/-14.89	-19.23/-14.78	-13.41/-18.17	-18.38/-18.52	-18.44/-15.85	-14.82/-12.55
Θ(105°)	-15.97/-17.13	-17.12/-17.3	-18.18/-15.71	-16.07/-14.03	-17.62/-19.1	-14.58/-11.44	-12.01/-13.99	-19.12/-18.32	-19.08/-18.23	-17.91/-19.17	-13.14/-11.69	-10.85/-11.72	-12.51/-11.87	-13.89/-15.39	-17.67/-17.96	-14.09/-9.6	-11.59/-14.01	-19.01/-18.01	-15.15/-11.58	-11.33/-10.05	-9.33/-9.11	-12.78/-17.2	-16.8/-17.71	-17.13/-14.07
Θ(112.5°)	-18.47/-16.66	-18.23/-18.39	-19.21/-18.5	-18.82/-18.78	-14.66/-12.72	-13.03/-13.58	-13.42/-15.57	-15.45/-16.08	-18.54/-19.22	-18.49/-16.83	-16.73/-14.32	-15.87/-13.5	-13.41/-16.48	-12.78/-11.51	-13.58/-14.16	-18.44/-11.53	-14.2/-16.37	-17.99/-17.01	-16.22/-12.67	-17.96/-16.06	-16.45/-15.34	-17.59/-18.94	-16.56/-18.61	-17.97/-14.52
Θ(120°)	-14.29/-16.71	-18.28/-17.83	-18.36/-17.1	-19.08/-1																				



Radiated Composite Gain Data <2.4GHz and 5GHz U-NII 1~U-NII 4>

Appendix A

	66																							
Θ(112.5°)	-17.89/-18.01	-17.5/-18.82	-17.82/-15.17	-18.4/-19.34	-12.83/-10.64	-11.57/-12.23	-13.41/-17.68	-17.5/-16.91	-15.49/-15.3	-14.59/-12.38	-11.43/-11.37	-15.36/-10.86	-8.28/-12.3	-10.72/-9.3	-13.51/-14.09	-11.38/-6.72	-9.36/-14.87	-16.61/-17.96	-17.91/-15.09	-15.07/-10.16	-11.72/-14.44	-17.57/-18.2	-17.84/-17.39	-19.6/-14.54
Θ(120°)	-13.5/-17.95	-18.88/-17.96	-17.36/-13.57	-14.17/-18.81	-19.11/-13.15	-11.27/-11.22	-14.15/-15.74	-10.86/-10.75	-14.62/-15.4	-11.65/-11.27	-10.84/-10.29	-11.55/-12.92	-12.03/-9.69	-12.53/-15.74	-15.31/-17.44	-18.89/-18.56	-15.29/-18.42	-13.45/-14.81	-14.46/-12.46	-15.82/-15.06	-16.07/-18.79	-14.15/-13.77	-16.66/-10.86	-10.7/-17.33
Θ(127.5°)	-14.92/-10.21	-12.89/-13.47	-18.92/-18.81	-17.2/-18.72	-17.85/-18.09	-16.08/-17.92	-18.11/-17.55	-12.66/-13.42	-13.75/-15.72	-18.95/-17.19	-16.72/-17.75	-18.47/-18.98	-18.37/-19.13	-18.37/-17.56	-13.74/-17.84	-12.64/-19.22	-10.31/-16.31	-10.3/-18.47	-18.19/-18.7	-15.59/-10.35	-14.64/-17.35	-19.27/-14.03	-18.71/-13.67	-13.31/-15.89
Θ(135°)	-17.83/-17.25	-18.51/-18.81	-15.34/-15.78	-18.09/-17.68	-17.61/-16.42	-18.53/-17.57	-14.19/-12.76	-10.94/-11.78	-17.06/-18.17	-18.44/-14.63	-11.24/-11.71	-18.2/-17.98	-16.66/-10.38	-13.24/-6.4	-7.54/-19.01	-14.83/-11.03	-8.1/-17.12	-9.13/-17.76	-17.45/-11.58	-13.15/-19.39	-12.41/-18.11	-18.68/-16.88	-17.25/-16.38	-15.41/-18.47
Θ(142.5°)	-18.5/-18.12	-13.97/-17.79	-18.13/-18.06	-13.89/-14.41	-13.97/-15.28	-16.65/-17.81	-17.87/-16.36	-15.15/-12.63	-11.06/-11.28	-11.42/-13.36	-18.6/-18.2	-18.07/-18.37	-11.76/-11.7	-14.95/-12.79	-19.17/-9.73	-18.85/-9.98	-16.95/-10.76	-11.59/-18.94	-18.54/-10.93	-10.63/-18.5	-17.57/-18.02	-18.92/-11.68	-15.47/-18.34	-18.97/-18.3
Θ(150°)	-13.7/-13.02	-19.14/-12.52	-13.72/-17.49	-17.74/-18.76	-17.39/-16.68	-18.5/-18.22	-18.27/-19.11	-14.98/-11.61	-11.15/-12.24	-14.9/-18.24	-17.28/-17.06	-15.5/-15.23	-13.5/-16.42	-18.25/-17.63	-17.97/-18.74	-18.82/-18.06	-14.76/-8.17	-10.73/-17.78	-17.98/-18.08	-15.43/-15.91	-10/-9.58	-12.34/-10.88	-14.29/-17.65	-19.2/-19.27
Θ(157.5°)	-12.68/-12.48	-11.92/-12.26	-13.09/-13.02	-11.82/-11.22	-13.13/-17.8	-17.81/-17.36	-18.14/-18.95	-19.32/-18.99	-18.26/-16.94	-16.95/-17.56	-18.87/-13.93	-10.48/-9.77	-12.46/-19.3	-14.49/-13.84	-18.32/-18.62	-17.73/-18.08	-13.86/-9.53	-8.45/-9.61	-11.56/-13.45	-15.07/-18.44	-19.17/-17.47	-15.67/-13.64	-14.16/-14.67	-12.13/-11.88
Θ(165°)	-11.27/-10.47	-11.81/-13.05	-14.68/-16.42	-17.79/-18.13	-18.96/-18.63	-18.15/-17.39	-17.56/-17.34	-17.17/-18.38	-15.95/-14.58	-14.34/-13.65	-12.17/-11.02	-10.42/-10.55	-11.33/-12.39	-15.46/-17.32	-15.48/-10.52	-9.03/-9.37	-10.26/-9.86	-9.1/-8.87	-9.24/-10.37	-11.47/-13.13	-15.05/-15.75	-17.7/-18.46	-17.38/-19.01	-18.75/-15.4
Θ(172.5°)	-16.12/-18.28	-17.87/-18.35	-17.36/-16.61	-15.8/-14.02	-12.59/-11.35	-11.76/-11.85	-12.19/-13.64	-15.09/-14.22	-13.9/-15.22	-17.13/-15.51	-13.56/-13.05	-13.72/-15.18	-16.52/-17.38	-15.12/-12.15	-10/-8.69	-8.22/-8.1	-8.41/-9.09	-10.42/-11.41	-11.39/-10.99	-10.4/-10.11	-11.38/-13.98	-16.92/-19.21	-19/-18.47	-17.35/-15.22
Θ(180°)	-17.74/-17.77	-19.11/-14.54	-12.91/-12.06	-11.77/-11.7	-12.28/-13.31	-14.88/-15.1	-13.04/-12.58	-12.65/-13.38	-15.68/-18.08	-17.85/-17.57	-18.48/-18.32	-15.68/-13.89	-13.52/-13.38	-13.12/-12.75	-12.2/-11.99	-12.47/-13.01	-13.91/-13.87	-14.12/-13.7	-15.1/-18.88	-17.8/-17.65	-19.09/-18.42	-17.48/-13.84	-12.43/-13.1	-14.56/-16.54
Freq(Hz)	5.885G/Pol.	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°)	-5.13/-5.2	-5.01/-5.62	-6.2/-7.19	-8.54/-9.44	-10.76/-12.78	-15.15/-17.99	-18.15/-15.89	-13.58/-11.95	-9.92/-8.24	-6.83/-5.87	-5.54/-5.33	-5.42/-5.41	-5.55/-5.65	-5.84/-6.08	-6.48/-7.48	-8.6/-10.03	-11.75/-14.63	-18.32/-18.31	-18.71/-15.89	-13.42/-10.76	-8.87/-7.78	-7.14/-6.29	-5.6/-5.09	-4.82/-4.93
Θ(7.5°)	-4.85/-4.28	-4.28/-4.55	-4.7/-5.32	-6.12/-6.4	-6.91/-7.79	-8.98/-10.74	-13.35/-16.12	-17.08/-15.43	-13.45/-11.47	-9.17/-7.48	-6.33/-5.98	-5.85/-5.97	-6.11/-6.27	-6.69/-7.05	-8.03/-9.91	-12.46/-15.85	-17.83/-19	-18.43/-14.11	-11.62/-9.5	-8.17/-7.11	-6.48/-6.09	-5.94/-5.62	-5.32/-4.87	-4.73/-4.83
Θ(15°)	-5.05/-4.11	-3.85/-3.41	-3.33/-3.17	-3.17/-3.03	-3.41/-4.3	-5.32/-6.41	-7.99/-9.71	-12.54/-16.01	-18.43/-18.97	-16.08/-12.39	-10.83/-9.47	-8.38/-7.79	-7.71/-8.46	-9.55/-10.81	-12.94/-17.06	-17.69/-17.36	-15.62/-11.64	-8.78/-7.17	-6.15/-5.79	-5.57/-5.48	-5.44/-5.32	-5.11/-5.06	-5.44/-5.49	-5.66/-5.45
Θ(22.5°)	-4.78/-3.74	-2.72/-2.31	-1.64/-0.98	-1.07/-1.53	-2.48/-3.04	-3.41/-3.81	-4.24/-5.24	-7.12/-10.31	-14.18/-18.22	-18.8/-18.71	-18.32/-14.58	-12.04/-11.29	-11.92/-14.08	-19.11/-19.26	-18.23/-18.98	-15.49/-12.87	-11.1/-9.38	-7.85/-6.51	-5.68/-5.09	-5.61/-6.1	-6.54/-6.86	-6.6/-6.21	-5.84/-5.82	-5.87/-5.65
Θ(30°)	-2.8/-1.79	-0.880/0.31	1.121/0.25	0.690/1.2	-0.23/-0.63	-0.94/-1.87	-3.12/-4.54	-5.97/-7.72	-10.33/-12.52	-14.77/-18.41	-19.08/-19.07	-17.97/-14.98	-14.17/-16.54	-18.45/-18.91	-16.68/-14.96	-13.4/-11.55	-10.84/-10.1	-9.36/-8.37	-7.89/-7.06	-7.13/-8.87	-9.83/-7.16	-4.72/-4.39	-3.35/-3.01	
Θ(37.5°)	0.04/0.03	0.58/1.37	1.27/0.96	0.55/0.51	0.18/-0.36	-0.96/-1.6	-2.21/-2.64	-3.62/-5.07	-8.19/-13.08	-18.23/-19.23	-18.04/-18.99	-13.74/-13.36	-16.42/-18.1	-18.04/-14.05	-13.08/-13.21	-12.44/-11.66	-11.4/-10.15	-8.29/-6.96	-7.19/-8.86	-9.86/-10.03	-11.74/-10.31	-6.36/-4.43	-3.4/-2.73	-1.41/-0.11
Θ(45°)	0.76/-0.42	-1.62/0.01	1.32/1.12	1.29/1.86	1.82/-1.46	1.04/0.71	-0.02/-1.33	-3.44/-5.89	-8.43/-11.58	-15.42/-18.39	-16.99/-12.94	-10.28/-11.16	-13.78/-14.53	-18.53/-17.92	-13.07/-8.58	-7.23/-8.86	-11.44/-12	-10.03/-8.34	-8.79/-8.11	-8.15/-6.22	-3.9/-3.47	-2.96/-2.52	-2.1/-1.17	-0.19/0.93
Θ(52.5°)	0.91/1.13	0.95/0.73	0.63/0.85	1.71/2.13	1.99/1.62	1.2/0.45	-1.04/-3.28	-4.95/-5.79	-6.35/-7.21	-10.23/-14.1	-14.16/-11.24	-8.08/-7.79	-9.59/-13.1	-17.5/-11.04	-5.82/-4.51	-4.61/-6.66	-11.19/-11.61	-8.71/-8	-4.79/-3.62	-2.33/-2.22	-1.48/0.3	0.22/-0.43	-0.39/0.07	
Θ(60°)	2.332/0.27	1.85/1.92	1.27/0.9	1.51/1.48	1.22/0.88	0.39/1.15	-2.81/-4.27	-4.35/-4.64	-5.65/-6.83	-8.72/-10.67	-9.06/-8.23	-5.98/-4.23	-5.22/-7.94	-14.32/-8.17	-4.39/-3.37	-2.65/-4.89	-8.66/-8.6	-5.29/-4.16	-4.51/-3.82	-3.42/-1.59	-0.06/0.58	1.15/2.34	3.25/2.68	2.32/1.5
Θ(67.5°)	3.56/3.16	2.18/1.73	1.41/1.38	1.11/1.8	-0.19/-0.4	-1.26/-2.75	-4.01/-4.71	-4.42/-5.1	-5.68/-6.38	-9.93/-15.04	-8.26/-7.52	-4.81/-4.3	-4.64/-6.61	-9.42/-6.09	-4.38/-4.32	-5.35/-6.83	-9.37/-6.41	-4.38/-3.29	-2.7/-3.94	-4.37/-5.01	-2.67/-0.7	0.09/1.1	2.33/0.38	3.13/1.19
Θ(75°)	2.472/5.56	1.69/1.28	-0.05/-1.23	-0.48/-0.61	-0.81/-0.9	-2.03/-3.15	-4.78/-5.83	-5.19/-5.14	-6.83/-9.97	-10.34/-12.95	-6.71/-4.83	-2.39/-2.21	-1.99/-3.56	-5/-5.68	-6.06/-3.14	-2.87/-5.02	-6.24/-4.46	-2.81/-1.98	-2.04/-1.49	-1.33/0.83	0.52/1.08	1.83/2.55	2.15/1.59	
Θ(82.5°)	2.913/4.43	2.88/2.33	0.53/-1.51	-1.23/-0.14	-0.62/-0.79	-1.34/-3.37	-5.21/-6.38	-5.37/-4.88	-6.63/-11.31	-15.79/-19.27	-6.76/-3.2	-1.4/-1.46	-0.33/-2.42	-3.86/-4.62	-5.09/-1.82	-3.02/-6.38	-5.33/-2.47	-2.83/-1.88	-1.31/-1.84	-0.76/0.69	0.27/1.52	1.31/-2.6	2.32/1.32	2.93/2.22
Θ(90°)	2.172/55	2.24/2.53	-0.14/-2.45	-1.91/-0.99	-0.55/-1.07	-1.63/-2.87	-4.88/-7.36	-8.26/-9.03	-10.98/-15.93	-18.98/-15.23	-6.57/-5.73	-2.16/-1.86	-0.08/-0.76	-2.81/-4.01	-2.97/-0.11	-2.19/-0.54	0.90/0.81	0.33/-0.91	1.21/0.58	0.45/-0.13	0.24/0.38	1.08/2.68	2.24/1.28	
Θ(97.5°)	0.88/0.77	-0.24/0.43	-0.27/-2.97	-3.1/-4.05	-2.64/-2.21	-3.19/-3.81	-6.63/-10.98	-10.41/-10.2	-11.84/-18.82	-18.44/-10.25	-8.47/-5.15	-1.99/-2.24	-0.05/-2.2	-4.36/-5.39	-2.7/-1.25	-2.86/-1.98	-1.18/0.35	0.92/1.52	1.26/-0.28	0.41/1.86	2.66/2.08	2.08/1.03	-0.02/2.29	3.45/1.59
Θ(105°)	-1.72/-0.08	-0.87/-1.09	-2.18/-4.94	-3.57/-3.86	-3.63/-0.89	-0.86/-1.93	-4.95/-10.48	-8.53/-8.98	-14.33/-18.97	-17.9/-15.96	-9.43/-6.49	-2.66/-4.7	-0.74/-1.08	-3.31/-5.62	-4.33/-3.71	-4.67/-3.52	-1.58/0.97	0/-1.04	-1.03/-2.25	-1.02/-1.38	1.33/1.96	1.66/1.08	-0.02/-0.98	1.98/0.14
Θ(112.5°)	-3.23/-2.32	-2.82/-3.39	-2.27/-4.73	-5.45/-6.93	-6.84/-3.09	-1.44/-3.63	-8.24/-13.62	-11.09/-14.2	-15.83/-18.21	-15.59/-8.99	-12.25/-4.59	-2.88/-4.61	-1.65/-3.22	-7.94/-9.93	-7.42/-7.06	-5.07/-6.26	-2.62/-0.27	-1.13/0.8	-1.67/-3.41	-1.58/1.04	1.32/0.56	-0.24/-1.83	-0.72/0.96	0.58/-1.56
Θ(120°)	-3/-3.32	-3.41/-5.51	-4.65/-5.05	-6.77/-6.43	-6.41/-4.65	-2.51/-3.11	-8.29/-14.01	-16.44/-14.91	-16.99/-18.79	-16.65/-12.82	-13.79/-6.14	-5.36/-6.58	-4.25/-5.55	-10.97/-18.1	-16.4/-14.73	-11.97/-6.98	-3.9/-8.88	-6.25/-2.73	-7.68/-8.63	-3.54/-1.66	-1.62/-1.62	-2.02/-2.67	-0.70/39	0.51/-1.61
Θ(127.5°)	-6.25/-7.79	-6.78/-5.43	-7.3/-7.85	-10.17/-12.48	-9.7/-5.4	-4.07/-5.31	-9.75/-12.81	-8.64/-9.93	-17.9/-19.13	-15.47/-11.67	-9.33/-7.52	-8.55/-6.55	-6.51/-14.18	-18.08/-16.35	-10.49/-13.24	-12.4/-5.93	-4.55/-9.07	-6.34/-3.64	-11.61/-11.96	-2.09/-4.39	-2.76/-4.45	-4.48/-4.95	-0.82/-0.73	-4.81/-7.12
Θ(135°)	-6.24/-7.45	-11/-10	-7.38/-8.52	-9.67/-14.81	-19.45/-12.07	-7.17/-6.98	-9.74/-11.54	-9.09/-8.13	-9.5/-13.43	-14.85/-15.78	-9.11/-8.67	-9.68/-6.18	-9.79/-18.96	-11.82/-7.26	-10.66/-15.15	-9.57/-6.45	-10.31/-10.38	-4.64/-2.91	-12.16/-16.5	-5.3/-0.46	-2.52/-1.19	-5.93/-7.69	-3.49/-0.3	-0.46/-4.95
Θ(142.5°)	-12.95/-11.65	-11.11/-12.6	-12.67/-14.78	-18.96/-14.52	-8.63/-6.43	-7.87/-11.17	-12.85/-12.59	-11.22/-9.44	-10.92/-14.19	-15.53/-10.19	-6.62/-9.52	-8.92/-6.62	-8.75/-15.66	-18.57/-18.61	-12.3/-13.02	-11.81/-18.93	-11.36/-4.6	-2.44/-4.47	-13.37/-9.53	-7.47/-3.5	-4.6/-5.71	-7.77/-11.79	-3.21/-2.32	-4.56/-9.29
Θ(150°)	-10.18/-8.42	-7.94/-11.33	-17.09/-19.22	-18.05/-17.63	-12.93/-10.81	-9.94/-11.15	-14.02/-13.59	-10.69/-9.58	-11.54/-12.93	-13.15/-11.79	-9.29/-9.09	-8.59/-8.93	-14.19/-18.78	-12.92/-14.7	-11.18/-9.46	-15.37/-17.74	-11.05/-6.07	-4.89/-7.97	-11.15/-9.08	-7.18/-4.52	-4.9/-9.64	-9.44/-8.04	-6.55/-4.18	-3.62/-6.27
Θ(157.5°)	-15.8/-17.58	-16.38/-15.73	-15.53/-18.06	-17.51/-18.27	-14.88/-13.3	-13																		



Radiated Composite Gain Data <2.4GHz and 5GHz U-NII 1~U-NII 4>

Appendix A

°)	2																							
Θ(180°)	-17.75/-17.49	-18.29/-19.31	-17.96/-17.95	-18.85/-16.45	-14.98/-14.31	-14.33/-14.96	-15.82/-16.82	-18.13/-18.85	-17.86/-19.22	-17.91/-17.46	-17.75/-18.72	-18.44/-17.73	-18.15/-17.44	-18.88/-17.96	-18.11/-19.26	-18.01/-17.94	-18.86/-18.71	-18.31/-17.55	-17.95/-19.37	-19.34/-19.07	-18.32/-18.93	-18.18/-19.23	-19.03/-18.65	-19.1/-18.98
Freq(Hz)	5.2G/Pol.	Phi/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°)	-6.76/-6.5	-4.49/-3.11	-1.71/-0.45	0.52/1.25	1.66/2.12	2.54/2.61	2.56/2.48	2.42/0.3	1.46/0.71	-0.27/-1.39	-2.55/-3.93	-5.24/-6.28	-6.42/-5.47	-4.26/-2.91	-1.48/-0.17	0.76/1.36	1.66/1.94	2.07/2.3	2.44/2.46	1.99/1.33	0.8/0.01	-1.01/-2.1	-3.28/-4.95	-7.23/-7.96
Θ(7.5°)	-8.81/-8.97	-6.94/-4.9	-3.22/-1.76	-0.69/0.1	0.52/1.13	1.51/1.56	1.65/1.58	1.51/1.37	0.81/0.02	-0.98/-2.28	-3.98/-5.76	-8.17/-10.12	-9.6/-7.24	-4.74/-2.66	-1.04/0.3	1.26/1.99	2.63/0.1	3.12/3.24	3.27/3.12	2.78/2.12	1.4/0.53	-0.64/-2.14	-3.76/-5.7	-8.44/-8.51
Θ(15°)	-11.07/-9.51	-7.23/-5.64	-4.38/-3.18	-2.26/-1.51	-0.69/0.21	0.47/0.83	1.25/0.06	0.34/-0.28	-1.07/-1.99	-3.41/-4.97	-7.91/-12.79	-17.33/-18.83	-11.46/-7.18	-4.25/-2.39	-1/0.29	1.14/1.87	2.33/2.73	2.94/2.94	2.94/2.77	2.42/1.65	0.81/-0.17	-1.11/-2.43	-4.22/-6.67	-10.86/-11.41
Θ(22.5°)	-16.35/-13.08	-8.67/-6.2	-4.98/-3.92	-3.14/-2.47	-1.03/0.48	1.07/1.64	1.66/1.16	0.11/-1.35	-3.01/-4.92	-7.24/-10.34	-16.9/-18.19	-13.86/-9.7	-7.56/-5.74	-4.43/-3.13	-1.64/0.25	1.01/2.08	2.82/2.34	3.3/3.11	2.97/2.62	2.12/1.42	0.56/-0.59	-1.77/-3.19	-5.02/-8.07	-12.26/-14.61
Θ(30°)	-8.21/-5.44	-3.25/-2.33	-2.24/-2.65	-2.86/-3.06	-2.71/-1.59	-1.19/-0.41	-0.59/-1.1	-1.79/-2.84	-4.36/-6.08	-8.33/-10.48	-13.34/-17.28	-17.1/-14.92	-14.35/-13.19	-10.44/-7.35	-4.96/-2.92	-0.92/0.69	2.12/2.25	4.19/4.77	4.86/4.36	3.36/2.23	0.72/-1.25	-3.86/-8.26	-16.48/-17.98	-12.93/-9.13
Θ(37.5°)	-6.11/-5.97	-6.46/-5.55	-5.1/-4.78	-3.94/-2.89	-2.47/-2.39	-3.43/-3.58	-2.85/-3.02	-2.85/-3.87	-6.12/-9.11	-11.66/-12.55	-12.68/-15.64	-18.56/-15.89	-10.9/-7.6	-5.77/-4.6	-3.29/-1.77	-0.40/8.1	2.07/2.93	3.58/3.69	3.62/2.91	1.6/0.23	-0.95/-2.09	-3.45/-5.41	-8.56/-11.32	-10.01/-7.91
Θ(45°)	-7.22/-3.17	-1.72/-1.47	-2.4/-3.44	-4.47/-6.02	-8.12/-9.58	-9.97/-8.6	-6.89/-5.15	-3.89/-3.35	-4.06/-6.55	-12.19/-15.71	-12.41/-11.54	-12.79/-14.94	-17.84/-15.29	-7.1/-3.82	-2.62/-2.2	-1.76/-1.02	-0.05/0.78	1.31/1.23	0.24/-1.29	-2.04/-1.69	-1.09/-0.52	-1.06/-2.72	-5.73/-10.17	-11.45/-8.29
Θ(52.5°)	-18.72/-13.82	-7.16/-5.62	-5.52/-6.06	-7.87/-8.33	-5.95/-4.26	-3.37/-4.21	-5.33/-7.12	-8.57/-8.7	-7.98/-8.44	-14.91/-18.2	-19.08/-9.81	-7.93/-5.49	-3.88/-3.26	-2.14/-0.65	-0.02/0.19	0.50/0.38	0.12/-0.17	-0.12/-0.05	-0.11/0.01	-0.03/-1.02	-2.04/-2.91	-4.21/-7.39	-14.87/-18.06	
Θ(60°)	-8.73/-9.68	-4.72/-5.34	-7.32/-8.72	-8.87/-9.31	-10.43/-11.03	-11.82/-13.3	-11.11/-8.53	-7.8/-9.16	-11.06/-9.73	-8.4/-9.6	-11.75/-15.22	-16.4/-15.96	-18.71/-10.11	-5.6/-3.84	-2.47/-1.8	-1.39/-0.27	0.69/1.07	1.05/0.54	0.11/0.23	-0.32/-0.92	-2.56/-3.12	-3.03/-3.54	-5.06/-9.82	-17.99/-13.39
Θ(67.5°)	-8.42/-5.95	-5.69/-6.64	-7.93/-8.68	-9.02/-12.79	-18.85/-12.2	-7.37/-4.17	-3.72/-6.67	-15.05/-9.77	-5.86/-4.64	-5.48/-8.52	-9.35/-7.65	-8.74/-13.64	-18.34/-12.18	-9.49/-7.19	-4.19/-3.81	-4.09/-2.17	-0.26/0.43	0.41/0.51	0.35/0.05	-0.38/-0.91	-2.88/-5.47	-5.96/-7.87	-11.98/-18.11	-11.9/-8.5
Θ(75°)	-16.05/-13.92	-13.42/-11.16	-11.58/-13.46	-17.96/-18.1	-14.82/-10.56	-8.46/-8.98	-12.04/-10.71	-9.41/-11.87	-16.16/-14.22	-14.6/-13.92	-10.49/-8.57	-7.96/-8.07	-7.43/-6.51	-4.63/-2.86	-2.22/-4.83	-5.99/-3.47	-1.89/-1.21	0.24/0.19	-0.57/-0.54	-1.66/-3.68	-3.9/-3.18	-4.49/-8.46	-11.33/-9.39	-11.77/-15.7
Θ(82.5°)	-12.34/-10.24	-10.36/-9.64	-10.47/-10.49	-15.22/-18.83	-15.93/-9.05	-6.2/-5.13	-5.53/-8.26	-14.92/-16.92	-12.33/-14.13	-18.02/-17.45	-17.55/-13.53	-12.3/-14.31	-11.59/-6.99	-6.37/-5.1	-3.82/-4.85	-2.62/-0.5	0.13/0.78	1/1.33	2.15/-1.65	0.26/-0.33	-0.08/-0.33	-0.91/-4.18	-11.71/-14.91	-15.7/-18.41
Θ(90°)	-9.36/-12.17	-19.16/-16.58	-13.03/-14.19	-16.49/-18.24	-13.67/-8.79	-6.97/-6.94	-9.04/-14.36	-16.77/-16.85	-19.07/-17.2	-13.39/-12.82	-10.65/-8.7	-17.74/-19.09	-6.49/-5.38	-8.44/-7.05	-5.44/-4.01	-1.02/0.34	0.43/0.43	1.25/2.27	3.64/3.82	3.12/2.44	1.47/0.12	-2.29/-6.25	-14.73/-17.91	-15.52/-12.38
Θ(97.5°)	-8.81/-11.96	-16.45/-16.83	-18.86/-18.04	-13.77/-12.95	-11.03/-12.46	-10.86/-13.99	-17.43/-18.71	-15.4/-17.63	-17.65/-12.5	-9.44/-12.75	-18.05/-11.62	-6.43/-6.48	-7.77/-6.77	-5.17/-3.74	-3.88/-4.16	-2.21/-0.75	1.12/2.56	3.59/3.76	3.14/2.55	0.94/-0.4	-1.98/-4.7	-11.34/-19.24	-19.23/-15.59	
Θ(105°)	-12.03/-13.37	-16.38/-14.28	-17.5/-19.06	-17.19/-15.42	-17.05/-18.23	-16.13/-12.73	-14.81/-19.37	-16.38/-15.9	-18/-17.01	-10.1/-11.75	-14.83/-12.09	-10.48/-9.39	-6.78/-5.3	-5.1/-6.18	-5.17/-5.76	-6.77/-2.5	-0.7/-0.28	0.56/0.51	2.28/2.2	0.88/1.65	1.29/-0.05	-1.71/-5.55	-8.5/-9.36	-12.91/-13.18
Θ(112.5°)	-18.41/-11.31	-14.29/-17.63	-17.66/-16.37	-16.69/-12.13	-8.63/-8.42	-8.7/-13.73	-18.99/-17.35	-18.32/-17.63	-15.47/-14.77	-16.91/-19.05	-13.84/-7.47	-10/-14.52	-9.62/-6.64	-10.29/-14.81	-12.46/-8.19	-4.21/-3.12	-3.02/-1.6	-1.2/1.02	4.15/4.32	2.89/2.2	1.64/0.48	-0.85/-3.86	-12.14/-18.57	-12.1/-14.83
Θ(120°)	-17.64/-14.37	-17.3/-15.76	-11.87/-11.32	-10.61/-12.6	-12.58/-13.17	-17/-18.18	-17.93/-17.92	-16.85/-14.78	-16.42/-18	-15.17/-10.29	-11.71/-15.81	-14.26/-10.21	-5.34/-4.83	-7.82/-10.8	-7.47/-4.02	-3.11/-2.59	-3.2/-4.22	-5.34/-2.11	1.71/1.98	0.52/0.34	0.61/0.13	-1.39/-4.6	-10.5/-13.86	-9.07/-9.57
Θ(127.5°)	-7.4/-12.06	-17.41/-17.13	-14.77/-13.09	-12/-13.05	-17.93/-18.2	-15.62/-17.05	-18.56/-18.31	-12.75/-13.02	-14.22/-12.34	-11.7/-12.9	-11.19/-8.44	-7.72/-6.66	-3.8/-3.22	-6.36/-12.55	-14.47/-8.48	-4.78/-4.72	-3.55/-2.93	-4.96/-2.97	-0.06/-1.56	-5.67/-5.41	-2.3/-0.84	-1.54/-4.06	-8.02/-14.48	-13.01/-11.88
Θ(135°)	-16.64/-16.23	-14.89/-18.84	-14.78/-10.88	-12.19/-13.02	-9.75/-8.17	-9.19/-12.27	-15.96/-19.04	-18.45/-18.74	-14.53/-14.81	-17.93/-18.36	-18.1/-12.58	-12.51/-6.83	-4.14/-7.9	-19.01/-14.85	-7.55/-4.61	-3.15/-0.85	0.54/-0.92	-1.77/-0.59	-0.17/-1.16	-1.24/-0.26	0/-0.46	-1.36/-3.05	-6.86/-18.36	-9.91/-9.31
Θ(142.5°)	-6.96/-16.14	-16.29/-14.61	-9.23/-7.77	-11.19/-14.64	-13.8/-15.47	-18.65/-17.95	-16.7/-10.01	-6.35/-5.34	-7.23/-11.39	-17.22/-15.42	-8.22/-7.73	-9.29/-6.73	-3.95/-3.42	-5.19/-7.6	-6.23/-3.55	-1.98/-1.54	-2.93/-4.28	-3.1/-2.59	-2.32/-2.8	-2.65/-2.08	-2.15/-2.63	-4.46/-5.99	-7.11/-11.34	-14.33/-7.57
Θ(150°)	-8.64/-9.47	-11.82/-12.01	-12.55/-17.56	-17.64/-17.11	-12.09/-10.53	-10.47/-10.65	-10.4/-11.01	-11.49/-12.06	-11.67/-9.44	-8.06/-9.16	-12.11/-13.56	-10.2/-5.81	-3.61/-3.25	-4.45/-5.54	-5.17/-4.2	-3.55/-3.9	-5.75/-6.33	-4.61/-2.77	-1.75/-2.95	-7.19/-10.39	-9.6/-8.51	-7.72/-8.06	-7.47/-6.39	-6.44/-7.69
Θ(157.5°)	-11.97/-12.73	-13.12/-14.84	-15.06/-14.3	-15.84/-17.31	-16.18/-13.45	-11.95/-10.67	-10.88/-12.24	-16.12/-18.23	-14.77/-10.14	-7.55/-6.61	-6.11/-5.58	-4.7/-3.31	-2.13/-1.59	-1.63/-2.32	-3.25/-3.46	-3.09/-3.36	-4.49/-5.39	-5.35/-4.61	-3.56/-2.85	-2.41/-2.75	-2.93/-2.57	-2.45/-3.04	-3.93/-4.35	-6.18/-9.86
Θ(165°)	-8.1/-7.93	-8.06/-10.05	-13.17/-15.41	-15.44/-13.84	-13.09/-13.38	-13.88/-14.12	-14.76/-15.69	-14.78/-13.64	-11.15/-9.69	-8.86/-8.9	-9.2/-8.76	-7.82/-6.95	-5.6/-4.57	-3.96/-3.88	-3.72/-3.11	-2.53/-2.34	-2.59/-2.97	-2.88/-1.94	-1.13/-1	-1.66/-2.64	-3.24/-3.48	-3.98/-4.74	-6.09/-7.64	-8.83/-8.67
Θ(172.5°)	-17.74/-12.48	-8.58/-6.77	-5.6/-4.35	-3.56/-2.9	-2.73/-3.07	-3.68/-4.31	-4.94/-5	-5.54/-6.49	-8.31/-10.82	-14.2/-17.15	-18.24/-16.39	-13.84/-11.44	-9.29/-7.09	-5.34/-4.06	-3.13/-2.27	-1.71/-1.44	-1.5/-1.72	-2.22/-2.5	-3.07/-3.84	-4.7/-5.12	-5.44/-5.7	-5.89/-6.83	-9.44/-13.97	-18.21/-18.98
Θ(180°)	-18.4/-19.02	-19.28/-16.14	-12.63/-8.96	-6.45/-5.4	-4.73/-3.96	-3.16/-2.71	-2.55/-2.51	-2.7/-3.4	-4.29/-5.21	-6.5/-8.18	-10.46/-13.29	-17.14/-18.79	-18.45/-14.33	-10.99/-8.64	-7.14/-5.92	-5.03/-4.47	-3.97/-3.42	-3.11/-2.98	-3.33/-3.65	-3.95/-4.26	-4.62/-5.12	-5.67/-7.05	-8.96/-11.58	-13.77/-16.64
Freq(Hz)	5.2G/Pol.	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°)	1.74/1.56	1.22/0.97	0.35/-0.5	-1.44/-2.29	-3.84/-5.52	-7.45/-10.17	-11.36/-9.37	-6.91/-4.92	-3.36/-1.97	-0.8/0.18	0.98/1.47	1.74/1.84	1.73/1.6	1.39/0.98	0.38/-0.46	-1.55/-2.44	-3.71/-5.82	-9.2/-11.94	-9.78/-6.7	-5.14/-4.17	-2.99/-1.71	-0.78/0.32	1.02/1.53	1.81/86
Θ(7.5°)	1.51/1.36	0.90/0.35	-0.39/-1.31	-2.16/-3.04	-4.55/-6.42	-8.96/-11.66	-12.83/-10.84	-8.28/-6.12	-4.12/-2.49	-1.07/0.08	0.94/1.52	1.92/0.4	2.08/1.99	1.71/1.37	0.85/0.15	-0.78/-2.08	-3.94/-6.04	-9.43/-15.25	-14.83/-8	-4.95/-3.33	-2.09/-1.1	-0.51/0.26	1.07/1.33	1.42/1.43
Θ(15°)	1.88/1.38	0.32/-0.73	-1.77/-3	-4.04/-4.58	-5.51/-6.79	-9.38/-13.36	-19.3/-18.66	-11.51/-7.3	-4.29/-2.34	-0.96/0.07	1.01/1.66	2.12/2.26	2.18/1.99	1.71/1.3	0.7/-0.05	-1.02/-2.38	-4.09/-6.42	-9.94/-18.41	-18.96/-8.21	-4.58/-2.89	-1.64/-1.02	-0.61/-0.11	0.56/1.12	1.66/1.89
Θ(22.5°)	1.73/1.4	0.91/0.1	-1.14/-2.28	-3.3/-3.25	-3.74/-4.71	-7.19/-11.76	-17.96/-14.87	-8.71/-5.77	-3.81/-2.47	-1.64/-0.9	-0.13/0.69	1.21/2.5	0.94/0.48	0.07/-0.31	-0.67/-1.2	-1.9/-2.87	-4.28/-6.19	-8.78/-14.17	-16.9/-9.57	-5.95/-3.71	-2.58/-2.11	-2.08/-1.72	-0.75/0.13	1.24/1.83
Θ(30°)	-2.25/-2.41	-3.																						



Radiated Composite Gain Data <2.4GHz and 5GHz U-NII 1~U-NII 4>

Appendix A

Θ(45°)	-3.6/-3.54	-2.89/-3.56	-5.6/-7.52	-7.85/-8.06	-9.62/-12.07	-15.69/-18.13	-18.22/-16.18	-14.41/-11.82	-7.7/-4.93	-4.82/-5.82	-5.74/-4.43	-4.05/-4.17	-3.66/-2.49	-1.86/-1.59	-1.17/-1.37	-2.19/-3.09	-4.97/-6.92	-8.3/-11.92	-16.87/-14.53	-7.44/-3.99	-2.64/-2.27	-2.02/-2.11	-2.1/-2.11	-2.58/-3.26
Θ(52.5°)	-3.07/-4.12	-5.98/-8.05	-9.54/-10.66	-10.24/-9.25	-10.84/-14.16	-19.05/-17.9	-18.91/-14.39	-11.96/-10.33	-8.42/-5.65	-3.96/-3.91	-4.32/-4.09	-3.68/-3.67	-3.1/-1.98	-1.82/-2.33	-2.88/-3.49	-4.52/-6.36	-7.25/-7.59	-10.16/-18.63	-19.21/-9.54	-5.17/-2.57	-1.49/-1.98	-2.95/-3.47	-3.79/-3.2	-2.88/-3.08
Θ(60°)	-5.27/-5.6	-8.08/-12.2	-14.84/-15.5	-15.13/-17.8	-17.74/-18.78	-17.74/-19.15	-18.67/-12.77	-10.54/-9.84	-10.19/-9.08	-6.13/-5.25	-6.42/-5.53	-4.6/-5.51	-4.93/-2.46	-2.07/-3.17	-3.3/-3.13	-4.65/-5.76	-7.19/-9.3	-10.24/-12.91	-15.52/-12.28	-8.76/-6.3	-5.25/-5.12	-5.43/-6.11	-6.15/-5.25	-5.03/-6.09
Θ(67.5°)	-14.83/-11.84	-9.28/-10.03	-12.54/-10.77	-10.2/-12.45	-16.59/-18.33	-18.12/-14.76	-13.98/-14.41	-11.6/-9.24	-10.22/-9.94	-6.3/-5.16	-6.2/-5.54	-5.17/-6.15	-6.12/-5.15	-4.37/-4.28	-3.29/-2.17	-2.99/-5.25	-7.68/-11.89	-17.48/-17.9	-17.34/-11.83	-8.1/-8.22	-7.76/-6.38	-6.45/-6.47	-6.54/-8.14	-11.34/-13.75
Θ(75°)	-13.61/-13.34	-11.09/-8.4	-8.89/-9.46	-10.53/-15.27	-19.62/-16.87	-16.04/-14.53	-13.4/-12.39	-12.17/-12.34	-14.57/-15.93	-11.95/-9.24	-8.9/-6.97	-6.1/-8.77	-9.05/-5.52	-4.42/-5.45	-4.71/-4.35	-6.65/-5.86	-6.64/-6.95	-8.65/-14.59	-17.75/-15.74	-12.79/-9.47	-7.4/-6.58	-6.48/-7.53	-6.21/-5.74	-8.15/-11.9
Θ(82.5°)	-12.98/-15.73	-18.49/-14.17	-12.77/-12.61	-14.23/-18.57	-16.71/-18.66	-18.74/-14.47	-11.36/-11.74	-15.36/-14.26	-12.19/-12.41	-10.96/-9.06	-10.55/-10.31	-10.71/-11.68	-11.37/-10.06	-8.9/-7.89	-5.65/-5.36	-4.03/-3.83	-5.13/-8.59	-11.59/-10.92	-12.53/-16.14	-11.98/-11.79	-8.98/-10.52	-13.82/-14.49	-12.94/-9.84	-9.63/-11.37
Θ(90°)	-15.35/-17.82	-13.6/-10.51	-8.86/-8.34	-8.84/-11.02	-14.34/-13.48	-13.06/-13.65	-15.33/-17.92	-17.91/-17.3	-17.87/-18.66	-14.2/-9.09	-10.61/-10.84	-12.9/-14.78	-10.36/-6.32	-9.51/-13.35	-10.41/-8.24	-5.19/-4.96	-6.12/-7.56	-10.2/-13.93	-10.11/-10.98	-11.31/-9.79	-11.72/-9.17	-8.93/-12.25	-9.72/-11.2	-10.75/-11.44
Θ(97.5°)	-14.98/-18.04	-18.71/-15.59	-15.12/-15.12	-11.31/-12.12	-16.96/-18.18	-17.8/-15.64	-14.46/-13.8	-13.84/-16.82	-18.06/-13.6	-12.45/-12.54	-17.34/-16.35	-19.04/-18.03	-15.01/-11.51	-10.71/-7.95	-6.77/-6.15	-5.37/-5.86	-6.78/-8.63	-12.73/-11.37	-13.35/-13.03	-8.03/-9.74	-6.3/-10.73	-10.62/-17.35	-19/-18.53	-17.44/-18.3
Θ(105°)	-12.44/-15.32	-18.23/-17.8	-11.13/-9.26	-9.1/-11.7	-11.52/-11.77	-13.54/-15.97	-16.23/-16.72	-18.48/-18.66	-17.82/-17.7	-18.72/-15.55	-16.62/-14.43	-17.31/-18.03	-18.5/-18.84	-16.42/-18.83	-18.07/-12.75	-6.62/-3.62	-3.04/-4.78	-9.17/-11.37	-7.46/-8.15	-10.76/-7.1	-11.28/-12.26	-18.5/-13.68	-8.18/-8.4	-7.1/-8.27
Θ(112.5°)	-13.59/-19.14	-18.71/-18.25	-16.11/-13.33	-6.28/-7.02	-11.67/-14.17	-18.1/-18.05	-15.58/-13.64	-13.6/-18.16	-19.13/-17.29	-19.27/-15.87	-14.61/-16.69	-18.54/-17.25	-18.99/-17.16	-17.43/-18.38	-15.81/-16.94	-11.69/-14.28	-14.02/-12.37	-12.07/-9.07	-6.87/-6.55	-7.22/-9.66	-12.03/-11.49	-10.39/-11.6	-12.97/-10.88	-9.8/-8.41
Θ(120°)	-10.62/-17.87	-13.62/-18.01	-16.38/-18.57	-18.17/-17.05	-19.11/-19.02	-18.03/-17.95	-12.6/-11.01	-13.53/-17.14	-17.94/-18.51	-15.54/-13.32	-18.13/-16.51	-15.1/-18.97	-14.51/-16.18	-18.61/-15.69	-13.92/-14.83	-13.63/-8.38	-7.38/-8.99	-10.58/-9.47	-8.61/-14.41	-15.61/-11.12	-16.3/-19.37	-18.32/-17.86	-18.03/-17.92	-13.34/-7.74
Θ(127.5°)	-9.23/-11.87	-12.06/-10.17	-15.57/-17.75	-16.33/-16.41	-14.36/-15.67	-17.61/-17.28	-16.18/-14.77	-18.06/-17.53	-12.02/-12.31	-17.48/-18.12	-15.88/-11.18	-14.24/-11.99	-12.92/-17.81	-18.75/-14.11	-14.12/-17.83	-11.5/-9.62	-8.44/-10.16	-14.36/-12.14	-8.14/-7.7	-15.66/-15.74	-11.77/-12.5	-12.56/-12.25	-17.68/-15.22	-14.51/-12.32
Θ(135°)	-17.42/-11.06	-13.09/-12.73	-7.92/-11.26	-14.55/-10.89	-8.12/-9.65	-16.6/-13.84	-12.99/-15.51	-12.22/-10.27	-15.35/-17.88	-18.17/-17.52	-13.9/-9.86	-9.84/-13.86	-18.98/-16.4	-13.02/-17.34	-18.95/-17.7	-15.01/-9.49	-10.95/-7.69	-6.93/-9.97	-8.3/-6.7	-11.22/-14.72	-7.27/-8.9	-17.91/-12.6	-12.07/-14.22	-5.04/-6.2
Θ(142.5°)	-6.32/-18.7	-5.77/-3.39	-7.05/-6.77	-6.17/-8.44	-11.98/-18.26	-17.32/-17.93	-18.72/-18.38	-15.72/-15.94	-19.36/-18.95	-16.15/-15.61	-18.36/-13.55	-13.92/-18.15	-11.09/-7.66	-8.88/-10.27	-10.61/-16.2	-18.42/-17.83	-11.52/-6.02	-6.9/-9.71	-7.61/-3.78	-3.58/-9.78	-18.67/-8.51	-5.99/-8.82	-12.05/-7.7	-6.92/-4.86
Θ(150°)	-7.78/-5.06	-4.69/-6.88	-8.68/-7.56	-7.49/-9.22	-12.76/-18.53	-18.33/-14.03	-12.17/-9	-6.28/-6.14	-8.27/-10.31	-12.41/-16.65	-18.69/-17.95	-17.43/-10.86	-8.81/-10.11	-12.51/-12.79	-14.1/-12.96	-13.1/-17.73	-16.57/-11.25	-9.11/-8.15	-8.82/-8.06	-8.06/-9.61	-12.97/-16.04	-7.51/-7.45	-14.38/-18.66	-15.74/-10.35
Θ(157.5°)	0.73/-1.06	-3.92/-8.69	-14.14/-15.16	-17.52/-18.46	-18.8/-17.67	-18.58/-17.05	-15.11/-14.82	-11.63/-11.44	-13.38/-14.54	-14.59/-14.35	-12.23/-10.17	-9.04/-8.39	-8.08/-8.3	-8.73/-9.86	-12.63/-16.83	-18.09/-17.76	-14.96/-13.29	-11.6/-10.45	-8.62/-7.67	-7.89/-9.44	-11.7/-15.07	-11.29/-7.05	-4.3/-2.45	-0.70/-62
Θ(165°)	-9.37/-9.66	-10.11/-10.82	-11.26/-11.92	-13.95/-15.03	-17.34/-17.8	-17.27/-17.9	-17.22/-17.63	-17.7/-19.22	-18.44/-14.91	-10.64/-7.54	-5.62/-5.01	-5.09/-5.46	-6.15/-7.95	-11.03/-14.94	-17.48/-17.73	-17.28/-18.66	-16.02/-13.38	-12.64/-13.75	-18.4/-15.66	-8.7/-6.02	-5.01/-4.49	-3.77/-3.09	-2.86/-3.62	-5.82/-8.65
Θ(172.5°)	-3.24/-1.97	-1.8/-2.43	-3.84/-5.4	-7.18/-9.02	-10.85/-12.96	-15.94/-18.83	-19.21/-18.38	-16.17/-12.96	-11.05/-8.86	-6.8/-5.29	-4.4/-3.96	-4/-3.95	-3.89/-4.13	-4.62/-5.47	-6.38/-7.52	-8.9/-10.34	-11.87/-12.98	-13.48/-11.81	-9.5/-7.25	-5.48/-4.69	-4.57/-4.71	-5.58/-7.05	-12.34/-14.47	-8.71/-6.3
Θ(180°)	-5.26/-5.81	-7.41/-9.56	-13.31/-15.29	-15.1/-17.1	-18.97/-18.42	-17.8/-19.13	-18.88/-13.95	-10.07/-7.92	-6.46/-5.08	-3.66/-2.83	-2.26/-1.98	-1.96/-1.96	-2.07/-2.16	-2.38/-2.97	-3.94/-5.27	-6.94/-8.7	-11.01/-14.15	-16.97/-14.32	-11.06/-10.21	-10.47/-10.16	-9.6/-9.4	-10.01/-10.67	-8.73/-6.74	-5.64/-5.37
Freq(Hz)	5.6G/Pol.	Phi/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°)	-13.6/-11.56	-9.23/-7.48	-6.07/-4.78	-3.33/-2.13	-1.38/-0.84	-0.86/-1.23	-1.44/-1.5	-1.85/-2.58	-3.44/-4.4	-5.38/-6.56	-8.71/-12.13	-18.08/-18.76	-18.41/-12.81	-9.35/-7.02	-5.29/-4.09	-3.36/-2.79	-2.28/-1.84	-1.52/-1.48	-1.67/-1.95	-2.59/-3.74	-4.61/-5.57	-8.23/-10.14	-12.68/-15.4	-18.76/-18.34
Θ(7.5°)	-12.99/-11.38	-8.61/-6.81	-6.01/-5.25	-4.36/-3.4	-2.59/-2.03	-1.76/-1.94	-2.53/-2.84	-3.29/-3.88	-4.9/-5.8	-7.34/-8.89	-11.65/-17.04	-17.55/-17.05	-11.14/-7.77	-5.53/-3.86	-2.73/-1.89	-1.16/-0.56	0/0.22	0.47/0.4	0.27/-0.03	-0.33/-1.27	-2.46/-3.7	-5.74/-7.42	-9.86/-15.34	-17.92/-15.68
Θ(15°)	-15.7/-10.7	-6.46/-4.64	-3.29/-2.68	-2.26/-1.86	-1.48/-1.78	-1.71/-1.42	-1.53/-2.06	-2.57/-3.21	-4.05/-4.93	-6.85/-9.41	-13.08/-19.39	-17.34/-13.44	-8.96/-5.87	-3.77/-2.36	-1.25/-0.51	0.07/0.56	0.84/1.09	1.12/0.96	0.85/0.62	0.22/-0.28	-0.92/-1.7	-2.62/-3.94	-6.32/-10.9	-16.65/-17.83
Θ(22.5°)	-13.25/-10.64	-9.81/-7.83	-6.28/-6.37	-5.87/-4.73	-3.42/-3.49	-3.35/-3.29	-3.09/-3.15	-3.3/-3.61	-4.28/-5.09	-6.46/-8.89	-12.92/-18.07	-18.87/-18.12	-13.26/-9.36	-6.76/-4.6	-2.95/-1.7	-0.7/0.05	0.66/1.15	1.42/1.57	1.6/1.55	1.23/0.67	0.09/-1.07	-2.61/-3.87	-5.48/-9.35	-15.67/-15.45
Θ(30°)	-13.55/-18.32	-12.56/-7.98	-5.88/-3.99	-3.36/-3.44	-3.47/-4.21	-4.69/-4.99	-5.55/-5.16	-4.66/-4.6	-4.99/-5.63	-6.65/-8.16	-10.52/-13.69	-16.87/-17.76	-15.07/-11.33	-8.58/-6.56	-4.57/-2.59	-0.93/0.19	1.04/1.73	2.14/2.5	2.55/2.38	1.57/0.86	0.15/-0.84	-1.88/-2.96	-4.31/-5.37	-6.49/-9.08
Θ(37.5°)	-17.18/-14.4	-9.48/-8	-7.18/-6.39	-6.53/-6.44	-6.47/-6.19	-6.46/-6.54	-7/-6.19	-5.67/-5.3	-5.59/-6.38	-8.29/-11.99	-14.95/-14.68	-15.48/-17.41	-17.55/-18.83	-13.1/-9.21	-5.73/-2.58	-0.39/1.12	2.15/2.88	3.15/3.1	3.02/3.2	3.23/2.99	1.8/0.63	-0.92/-3.01	-5.9/-10.46	-18.23/-18.96
Θ(45°)	-18.23/-12.26	-6.41/-5.4	-5.3/-5.62	-7.46/-11.41	-15.23/-12.6	-11.27/-10.33	-11.53/-12	-10.64/-9.02	-7.59/-6.36	-5.9/-6.72	-8.45/-13.39	-19.1/-19.18	-19.07/-19.13	-9.76/-5.59	-3.88/-2.07	-0.66/0.02	0.82/0.94	0.87/1.49	2.25/2.72	2.15/0.9	-0.1/-1.48	-2.89/-3.99	-5.35/-7.43	-13.31/-18.14
Θ(52.5°)	-10.74/-15.03	-17.93/-10.4	-8.23/-7.23	-7.71/-9.63	-10.23/-9.08	-9.22/-8.85	-6.34/-4.33	-4.32/-5.72	-7.03/-8.08	-8.35/-7.42	-6.89/-8.92	-10.78/-11.33	-16.01/-18.68	-18.55/-13.33	-7.16/-3.29	-2.53/-2.61	-2.36/-1.87	-0.1/0.9	1.05/0.9	0.61/-0.96	-3.84/-5.44	-7.1/-8.71	-7.87/-7.25	-6.51/-8.6
Θ(60°)	-16.14/-16.42	-16.36/-11.43	-10.34/-11.16	-12.11/-14.39	-13.49/-10.11	-7.25/-6.62	-8.24/-14.47	-14.63/-10.22	-8.82/-10.64	-14.37/-13.92	-11.92/-13.06	-15.34/-16.08	-17.92/-18.03	-11.55/-7.84	-6.89/-6.25	-5.33/-5.45	-4.76/-3.61	-3.28/-2.91	-1.99/-1.54	-1.85/-3.51	-5.56/-7.21	-7.45/-5.91	-4.52/-5.25	-7.32/-9.89
Θ(67.5°)	-12.93/-15.69	-18.3/-17.6	-18.54/-15.11	-13.94/-13.92	-12.37/-11.5	-14.08/-13.31	-8.93/-8.23	-9.84/-13.23	-13.25/-12.29	-11.73/-13.48	-17.16/-15.08	-16.33/-18.25	-17.57/-10.73	-8.28/-8.81	-8.17/-3.98	-2.95/-3	-1.63/-1.24	-1.45/-0.95	-0.76/-1.25	-1.4/-1.91	-4.24/-6.31	-6.02/-6.61	-4.78/-6.08	-12.09/-14.45
Θ(75°)	-18.16/-17.94	-18.3/-18.25	-15.3/-16.7	-16.53/-18.26	-14.22/-10.37	-8.08/-5.84	-5.64/-9.58	-15.92/-11.55	-8.53/-7.39	-8.76/-18.81	-14.91/-8.47	-9.83/-11.97	-14.94/-18.34	-14.91/-12.36	-8.35/-4.91	-6.21/-6.2	-2.79/-2.23	-1.2/-0.31	0.17/0.9	1.37/0.36	-2.1/-4.89	-6.1/-8.15	-8.2/-8.08	-13.49/-18.41
Θ(82.5°)	-15.29/-17.92	-19.24/-19.28	-16.09/-16.95	-17.41/-18.26	-19.27/-12.92	-10.12/-10.45	-15.51/-17.17	-8.65/-8.44	-11.66/-14.19	-17.24/-18.81	-13.16/-10.4	-15.7/-18.46	-16.37/-7.75	-6.64/-9.3	-7.72/-6.08	-6.85/-2.21	-1.1/-1.95	-2.33/-0.9	0.25/0.53	-0.18/-2.18	-3.41/-3.02	-2.93/-7.75	-13.85/-10.8	-11.47/-16.96
Θ(90°)	-12.84/-18.88	-17.11/-14.65	-16.21/-13.47	-17.3/-17.49	-17.27/-18.5	-16.21/-11.43	-10.3/-9.31	-9.6/-12.06	-13.86/-18.66	-17.05/-18.55	-18.83/-16.88	-1												



Radiated Composite Gain Data <2.4GHz and 5GHz U-NII 1~U-NII 4>

Appendix A

Θ(75°)	-10.06/-12.57	-16.66/-19	-19.17/-14.81	-13.53/-15.4	-18.13/-14.07	-8.89/-8.3	-11.86/-12.99	-13.91/-13.14	-10.69/-12.18	-18.66/-10.04	-5.93/-4.2	-5.38/-6.66	-8.33/-9.2	-8.4/-8.93	-8.11/-5	-3.51/-3.03	0.27/0.02	-0.38/-0.41	-0.38/-0.74	-3.47/-5.28	-5.7/-8.97	-7.58/-6.89	-8.13/-9.42	
Θ(82.5°)	-15.23/-17.08	-17.12/-18.4	-17.56/-18.13	-15.63/-12.6	-10.86/-8.59	-6.94/-7.24	-7.98/-6.77	-7.51/-15.09	-17.8/-13.79	-16.47/-18.25	-13.85/-11.76	-16.67/-18.36	-12.35/-7.57	-6.78/-10.84	-12.48/-6.99	-5.56/-2.58	-0.45/-1.88	-1.91/-1.86	-1.18/-0.39	-0.14/-1.36	-3.53/-4.93	-3.57/-5.07	-5.15/-5.16	-8.96/-11.57
Θ(90°)	-8.6/-12.25	-12.95/-12.32	-16.51/-16.41	-18.02/-19.03	-18.7/-14.37	-8.66/-5.99	-5.89/-7.29	-10.4/-13.41	-18.92/-15.29	-11.54/-15.72	-18.54/-11.28	-9.57/-11.39	-16.67/-11.79	-8.61/-13.32	-9.83/-3.97	-2.46/-1.51	2.69/-1.84	-0.68/-0.6	1.42/-1.87	0.76/-0.97	-2.59/-1.86	-1.11/-3.48	-7.41/-10.33	-18.94/-14.19
Θ(97.5°)	-18.71/-18.38	-18.09/-13.41	-16.17/-14.38	-16.81/-18.32	-18.61/-18.78	-9.91/-7.94	-8.51/-15.25	-11.53/-18.93	-11.86/-9.74	-8.22/-12.63	-18.5/-10.55	-16.23/-18.71	-10.21/-9.39	-15.69/-11.13	-11.82/-11.08	-3.86/0.53	1.71/-1.81	1.36/-1.46	1.83/-2.12	0.48/0.2	0.55/-0.78	-4.5/-10.03	-12.56/-16.04	-13.36/-16.67
Θ(105°)	-8.88/-13.04	-11.46/-18.92	-17.47/-18.46	-17.98/-13.11	-7.05/-7.47	-13.55/-11.53	-13.09/-18.7	-18.27/-12.32	-13.84/-19	-18.13/-9.27	-10.33/-11.22	-18.31/-15.62	-9.73/-8.3	-5.68/-7.28	-10.01/-7.68	-4.12/-1.92	-0.33/-1.56	-1.96/-1.48	-0.03/-0.92	-1.46/0.21	0.25/-1.01	-5.85/-12.96	-13.43/-12.17	-9.88/-6.56
Θ(112.5°)	-11.01/-11.36	-10.46/-14.53	-18.29/-18.9	-18.52/-15.26	-17.07/-16.89	-18.88/-15.89	-15.15/-17.68	-12.34/-12.98	-18.52/-18.33	-12.18/-11.06	-15.92/-15.08	-17.06/-17.96	-14.51/-4.6	-5.45/-17.3	-17.63/-15.38	-6.19/-2.71	0.28/-1.36	-1.41/-1.5	1.78/-1.1	-3.39/-1.28	-1.69/-4.23	-5.44/-11.97	-11.17/-8.85	-9.3/-11.18
Θ(120°)	-18.29/-18.16	-18.26/-18.06	-18.3/-18.47	-18.13/-18.71	-18.93/-16.51	-16.05/-13.19	-12.28/-15.72	-14.14/-14.28	-13.05/-12.11	-14.07/-18.72	-18.37/-9.33	-9.51/-13.62	-14.8/-13.01	-10.56/-11.01	-11.83/-14.51	-9.56/-3.82	-3.25/-1.12	-0.3/-2.25	0.63/0.08	-3.48/-0.77	0.89/-1.01	-4.05/-7.14	-7.57/-8.41	-5.77/-9.39
Θ(127.5°)	-10.71/-14.82	-18.54/-15.81	-10.75/-10.52	-9.75/-11.32	-11.67/-13.2	-14.07/-11.84	-11.11/-13.64	-14.74/-16.04	-17.78/-18.17	-18.43/-18.93	-13.07/-10.74	-10.3/-10.83	-7.84/-4.8	-5.32/-10.11	-11.26/-5.2	-3.33/-2.04	-0.97/-0.38	-4.6/-3.87	0.36/-0.6	-1.58/-0.11	1.46/-1.03	-4.88/-8.59	-15.87/-16.11	-3.81/-3.22
Θ(135°)	-5.89/-9.54	-8.55/-10.87	-15.09/-19.07	-18.39/-15.9	-13.79/-14.74	-15.25/-17.14	-19.16/-19.15	-15.7/-15.84	-17.32/-15.26	-16.12/-16.64	-13.79/-10.01	-11.13/-16.74	-9.57/-3.68	-5.02/-17.8	-9.19/-5.54	-3.81/-4.08	-1.96/-1.03	-2.58/-1.17	0.88/0.85	-0.75/-3.11	-2.91/-1.22	-3.81/-10.71	-12.38/-18.26	-10.35/-5.62
Θ(142.5°)	-11.72/-18.69	-19.36/-18.79	-14.84/-12.72	-14.41/-16.49	-14.85/-14.11	-13.16/-13.49	-16.67/-14.16	-11.77/-13.86	-17.06/-10.78	-10.7/-18.52	-17.83/-10.46	-8.51/-10.24	-5.23/-4.11	-6.89/-10.28	-7.4/-5.42	-5.37/-2.86	-0.58/-2.31	-3.91/-2.48	-1.16/-1.05	-1.9/-2.8	-6/-5.18	-2.73/-16.63	-9.88/-9.93	-8.64/-9.8
Θ(150°)	-5.03/-7.63	-10.23/-11.64	-18.11/-18.12	-17.88/-17.8	-14.68/-11.18	-9.67/-9.05	-8.57/-7.47	-8.09/-12.3	-18.88/-14.33	-11.93/-12.66	-9.94/-8.61	-9.94/-12.75	-12.88/-9.29	-7.2/-6.85	-7.1/-5.31	-3.48/-3.03	-3.87/-6.19	-7.82/-5.36	-3.28/-3.27	-7.25/-11.01	-8.55/-8.39	-8.18/-6.96	-6.73/-7.33	-6.63/-4.4
Θ(157.5°)	-9.84/-17.4	-18.61/-16.84	-13.16/-12.15	-13.95/-17.59	-18.91/-18.02	-16.02/-14.58	-15.07/-15.87	-17.81/-17.95	-18.26/-18.98	-17.57/-11.61	-8.13/-6.69	-5.59/-4.24	-3.46/-3.53	-4.43/-5.44	-6.36/-7.14	-9.3/-12.51	-14.61/-13.42	-9.89/-6.55	-5.59/-6.81	-7.66/-6.22	-5.33/-5.04	-4.41/-4.05	-3.96/-4.2	-4.87/-6.5
Θ(165°)	-7.15/-6.22	-7/-10.97	-15.48/-17.32	-18.39/-18.42	-18.07/-18.39	-15.82/-16.16	-16.44/-15.84	-15.13/-13.69	-12.28/-11.15	-11.61/-13.56	-14.32/-11.66	-8/-5.15	-3.62/-3.17	-3.6/-4.47	-5.76/-7.05	-7.59/-7.02	-6.24/-5.7	-5.99/-6.66	-6.99/-6.59	-6.06/-5.81	-5.58/-5.2	-5.78/-7.66	-8.77/-8.53	-9.61/-9.39
Θ(172.5°)	-16.81/-17.51	-14.82/-12.71	-11.15/-10.84	-11.39/-12.67	-15.44/-17.43	-17.92/-18.76	-17.69/-16.12	-15.1/-14.54	-14.97/-16.01	-16.68/-15.19	-12.45/-9.79	-7.17/-5.35	-4.28/-3.83	-3.78/-4.11	-4.4/-4.34	-4.28/-3.88	-3.51/-3.1	-2.81/-2.47	-2.27/-2.65	-4.16/-5.8	-6.87/-8.66	-12.85/-16.68	-16.62/-16.51	-15.24/-13.49
Θ(180°)	-13.74/-17.79	-18.28/-15.32	-10.35/-8.37	-7.21/-5.8	-4.75/-4.02	-3.51/-3.02	-3.04/-3.72	-4.42/-4.7	-5.33/-6.02	-6.83/-7.56	-8.4/-9.59	-11.42/-14.52	-18.42/-17.58	-17.33/-15.98	-12.53/-10.23	-8.76/-7.48	-6.82/-6.58	-6.22/-5.55	-5.29/-5.43	-5.89/-5.66	-5.67/-6.62	-7.44/-7.48	-8.05/-8.91	-10.08/-11.13
Freq(Hz)	5.785G/Pol.	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°)	-0.18/0.03	-0.11/0.04	-0.52/-1.62	-2.88/-4.22	-6.25/-8.33	-12.49/-18.58	-18.99/-14.46	-9.49/-6.64	-4.65/-2.94	-1.94/-1.01	-0.49/-0.11	0.20/0.21	0.12/-0.03	-0.35/-0.75	-1.44/-2.61	-3.96/-5.94	-8.4/-11.81	-17.15/-19.12	-16.91/-11.48	-8.14/-5.9	-4.45/-2.87	-1.57/-0.27	-0.11/-0.1	-0.01/-0.06
Θ(7.5°)	-1.59/-1.4	-1.41/-1.43	-1.56/-2.61	-4.86/-6.53	-8.9/-10.61	-16.2/-17.31	-18.57/-11.85	-8.28/-6.07	-4.64/-3.34	-2.18/-1.29	-0.74/-0.26	0.15/0.52	0.80/0.88	0.70/4.2	0.07/-0.78	-1.93/-3.59	-5.97/-8.87	-11.6/-14.9	-13.87/-10.85	-7.89/-5.63	-4.22/-2.98	-2.07/-1.41	-1.12/-1.41	-1.71/-2.06
Θ(15°)	-1.86/-2.65	-3.93/-4.33	-3.82/-3.84	-4.58/-4.69	-6.97/-8.66	-11.93/-17.01	-14.72/-10.29	-6.98/-5.01	-3.56/-2.79	-2.28/-2.03	-1.97/-1.7	-1.17/-0.46	0.37/0.93	1.29/-1.41	-2.30/-5.9	-0.41/-1.81	-3.78/-6.1	-8.16/-9.97	-11.17/-10.06	-8.13/-5.94	-4.79/-3.6	-3.36/-2.85	-2.01/-1.56	-1.71/-1.52
Θ(22.5°)	0.750/95	0.5/-0.79	-1.96/-1.73	-2.48/-3.58	-6.7/-9.63	-15.56/-18.69	-16.91/-11.02	-8.29/-6.15	-4.34/-3.13	-3.57/-4.27	-2.61/-2.83	-3.57/-4.27	-2.04/-0.99	-0.28/-0.01	-0.27/-0.94	-2.08/-3.49	-4.74/-5.91	-8.07/-12.15	-13.7/-11.58	-8.07/-5.95	-4.75/-4.21	-3.94/-2.81	-1.61/-1.6	-0.72/-0.32
Θ(30°)	1.290/97	0.3/-0.36	-1.01/-1.98	-3.12/-4.92	-6.86/-8.63	-11.54/-15.91	-18.4/-15.95	-13.57/-10.91	-8.14/-5.1	-3.02/-2.49	-3.86/-4.21	-4.23/-3.83	-3.18/-2.17	-1.56/-1.72	-2.09/-2.49	-2.87/-3.09	-3.93/-6.27	-10.98/-12.76	-12.4/-13	-11.34/-9.06	-7.41/-6	-5.17/-3.47	-1.21/-0.06	0.95/-1.29
Θ(37.5°)	1.430/68	-0.47/-1.88	-3.25/-4.92	-6.31/-9.21	-11.42/-12.85	-14.33/-16.03	-19.43/-19.12	-18.05/-12.28	-8.1/-5.56	-3.76/-3.47	-4.59/-5.89	-5.53/-3.52	-1.76/-0.63	-0.23/-0.4	-0.46/-0.35	-0.56/-1.21	-2.98/-5.01	-5.68/-7.06	-11.47/-9.24	-6.75/-6.11	-5.47/-4.33	-2.65/-0.87	-0.47/-0.83	-0.030/0.72
Θ(45°)	-3.57/-3.52	-4.53/-5.56	-5.44/-6.05	-8.04/-10.44	-11.42/-13.16	-14.31/-19.06	-19.01/-16.09	-12/-9.81	-7.19/-4.97	-3.01/-2.08	-2.65/-4.44	-5.74/-3.9	-0.91/-1.03	2.17/-2.47	1.93/-1.19	0.34/-1.84	-4.1/-5.62	-12.01/-15.71	-8.34/-6.45	-5.2/-4.06	-3.69/-3.48	-2.54/-1.7	-1.09/-1.61	-3.15/-4.34
Θ(52.5°)	-11.23/-8.56	-7.55/-8.45	-7.18/-5.59	-8.79/-13.84	-15.87/-17.7	-17.68/-15.74	-13.36/-13.71	-19.19/-17.48	-8.27/-4.91	-3.22/-3.07	-5.38/-6.94	-5.37/-2.94	-1.38/-0.15	1.68/-4.3	1.65/-1.13	0.3/-1.69	-4.09/-9.01	-9.75/-8.71	-7.26/-5.54	-4.73/-5.89	-6.45/-7.1	-7.84/-6.47	-4.92/-5.54	-7.29/-10.33
Θ(60°)	-4.14/-4.72	-3.7/-5.78	-8.96/-9.6	-10.16/-11.29	-9.39/-10.96	-14.57/-15.32	-11.51/-9.65	-10.58/-15.91	-11.7/-6.7	-4.54/-3.03	-3.49/-5.41	-5.88/-5.22	-3.99/-2.11	-0.07/-0.03	-1.28/-1.33	-2.4/-4.4	-7.28/-7.96	-12.11/-8.23	-5.54/-5.41	-6.31/-11.14	-19.24/-12.44	-10.67/-10.26	-10.71/-7.93	-4.79/-3.1
Θ(67.5°)	-5.6/-9.11	-6.89/-7.15	-10.49/-4.6	-12.71/-16.26	-15.88/-18.81	-17.54/-14.89	-9.22/-7.72	-8.93/-13.03	-15.58/-9.61	-7.07/-4.27	-4.44/-7.16	-7.13/-5.53	-4.31/-2.19	-0.97/-0.94	-0.96/-1.17	-1.82/-3.61	-5.62/-7.86	-12.85/-13.52	-15.48/-13.5	-17.56/-13.25	-8.56/-4.95	-5.88/-8.71	-7.57/-7.42	-7.77/-5.14
Θ(75°)	-16.93/-16.83	-15.29/-9.19	-9.59/-9.94	-10.79/-16.19	-16.32/-18.16	-14.4/-10.45	-10.57/-10.95	-10.56/-9.62	-9.89/-10.08	-9.8/-6.15	-4.72/-6.69	-3.7/-9.86	-10.34/-5.44	-2.74/-2.52	-2.34/-1.67	-0.35/-1.65	-2.01/-6.86	-15.86/-18.62	-10.67/-8.27	-11.11/-8.59	-7.13/-7.61	-9.19/-13.5	-12.14/-11.02	-13.21/-14.65
Θ(82.5°)	-12.51/-11.6	-13.27/-9.84	-10.16/-11.99	-17.28/-18.82	-18.12/-18.65	-18.84/-13.47	-11.88/-13.45	-12.97/-11.96	-12.97/-11.4	-9.79/-7.31	-5.21/-6.44	-8.51/-11.46	-9.18/-4.58	-3.32/-3.87	-3.52/-2.07	-3.05/-2.51	-4.08/-6.32	-10.74/-8.89	-9.82/-14.45	-14.44/-17.52	-18.27/-18.88	-18.51/-13.11	-15.47/-14.02	-15.87/-16.96
Θ(90°)	-10.34/-16.81	-14.19/-14.32	-18.13/-19.11	-17.24/-18.12	-18.92/-17.65	-14.64/-13.13	-11.75/-11.37	-11.57/-10.87	-11.6/-11.86	-17.35/-13.44	-9.39/-12.47	-14.54/-16.48	-14.56/-9.38	-4.38/-3.92	-4.41/-4.32	-2.39/-0.81	-0.54/-1.93	-4.67/-6.17	-7.42/-9.07	-11.73/-14.21	-10.47/-11.86	-11.03/-16.13	-13.26/-14.83	-16.3/-10.81
Θ(97.5°)	-10.63/-17.85	-18.2/-13.8	-13.45/-13.62	-10.56/-13.43	-14.57/-15.76	-18.4/-14.63	-15.71/-17.89	-15.12/-11.04	-15.95/-18.6	-13.94/-13.13	-13.68/-18.88	-17.7/-12.92	-14.95/-10.4	-8.21/-13.56	-9.32/-6.6	-1.71/-1.4	-0.6/-2	-4.59/-5.33	-5.45/-8.98	-13.25/-18.07	-15.48/-13.83	-14.53/-17	-15.13/-12.3	-8.89/-9.11
Θ(105°)	-17.08/-12.42	-11.76/-11.45	-13.03/-18.6	-18.65/-15.18	-18.12/-17.77	-17.71/-13.82	-18.15/-16.68	-14.17/-19.16	-18.5/-15.75	-16.66/-18.63	-12.84/-17.46	-17.99/-12.34	-11.35/-7.16	-6.13/-6.65	-8.68/-7.73	-4.09/-1.43	0.46/0.36	-2.66/-3.73	-7.9/-18.7	-13.25/-18.14	-15.31/-11.19	-11.49/-17.21	-16.6/-17.86	-15.24/-12.74
Θ(112.5°)	-19/-13.82	-13.54/-11.54	-10/-11.53	-14.67/-13.87	-18.64/-17.2	-18.68/-14.57	-17.71/-18.41	-16.72/-18.05	-12.48/-14.19	-10.19/-14.19	-14.85/-14.91	-12.04/-10.38	-9.56/-11.87	-10.38/-9.2	-12.02/-13.87	-9.23/-3.78	-3.05/-4.25	-7.6/-7.05	-3.72/-4.95	-8.36/-10.6	-17.98/-13.72	-8.5/-15.47	-14.57/-17.4	-17.87/-17.9
Θ(120°)	-14.33/-18.75	-10.44/-10.59	-16.02/-13.23	-10.67/-15.92	-15.14/-18.62	-18.01/-15.56	-13.51/-13.01	-15.91/-16.83	-14.48/-8.64	-8.2/-13.09	-16/-18.51	-12.57/-12.03	-7.54/-6.44	-10.34/-12.12	-									



Radiated Composite Gain Data <2.4GHz and 5GHz U-NII 1~U-NII 4>

Appendix A

Θ(127.5°)	-12.46/-10.69	-14.4/-14.44	-14.28/-13.75	-15.88/-15.31	-18.4/-18.08	-18.24/-16.45	-18.93/-16.47	-18.79/-17.17	-11.01/-10.22	-11.68/-13.63	-13.6/-15.47	-10.46/-16.13	-8.61/-9.74	-19.76/-6.48	-6.14/-10.52	-7.83/-4.46	-3.89/-6.49	-6.04/-3.95	-3.94/-7.16	-9.4/-5.76	-14.86/-18.19	-15.08/-18.64	-13.5/-12.15	-6.1/-6.44
Θ(135°)	-18.92/-12.62	-10.26/-17.63	-11.26/-13.06	-10.63/-8.62	-7.01/-8.8	-12.24/-18.77	-12.66/-10.06	-11.44/-10.16	-9.18/-8.98	-9.56/-11.62	-13.6/-18.17	-14.5/-13.69	-6.17/-12.83	-7.03/-2.94	-5.24/-12.23	-12.97/-6.34	-7.48/-7.33	-14.11/-11.77	-4.15/-4.36	-15.05/-9.33	-6.11/-8.92	-13.81/-8.13	-11.94/-12.4	-7.28/-9.89
Θ(142.5°)	-8.57/-18.9	-7.49/-6.17	-8.21/-7.61	-5.97/-4.75	-6.03/-9.88	-11.32/-14.05	-16.24/-13.2	-10.92/-12.5	-12.22/-10.39	-11.83/-14.53	-18.79/-11.4	-11.16/-6.88	-6.27/-13.27	-12.56/-8.47	-8.04/-15.01	-10.11/-7.97	-5.97/-4.5	-8.37/-9.91	-5.06/-3.61	-7.62/-17.82	-7.7/-5.78	-10.35/-14.33	-9.57/-10.88	-9.63/-5.25
Θ(150°)	-8.2/-3.59	-2.94/-4.56	-5.99/-5.49	-5.3/-6.34	-10.59/-18.62	-18.7/-17.69	-14.18/-12.01	-9.96/-7.78	-7.4/-10.33	-18.42/-17.24	-9.66/-9.43	-11.48/-6.37	-5.87/-11.44	-18.4/-9.89	-8.43/-7.15	-7.38/-8.6	-6.08/-4.95	-5.38/-6.15	-5.67/-5.46	-8.04/-15.21	-17.74/-9.92	-10.72/-15.28	-17.99/-16.23	-17.33/-15.43
Θ(157.5°)	0.77/-0.99	-4.45/-9.49	-16.34/-16.35	-17.76/-18.69	-14.16/-9.99	-9.58/-10.89	-9.84/-7.69	-6.94/-7.2	-8.66/-12.98	-17.44/-18.55	-18.35/-18.83	-11.35/-7.33	-6.84/-9.74	-18.84/-18.57	-17.92/-17.98	-13.72/-11.03	-10.98/-12.42	-10.55/-7.67	-7.86/-8.21	-8.8/-11.51	-16.45/-16.75	-11.84/-7.58	-4.45/-1.74	0.65/1.51
Θ(165°)	-5.01/-6.22	-5.66/-5.72	-6.89/-9.17	-10.82/-11.34	-12.9/-18.76	-18.22/-14.83	-11.2/-9.27	-8.72/-10.36	-12.6/-14.32	-15.54/-18.73	-16.92/-11	-7.84/-6.78	-6.73/-6.74	-6.33/-6.29	-6.65/-7.48	-8.1/-8.74	-9.72/-10.56	-10.7/-9.62	-8.24/-8	-7.85/-7.1	-5.97/-5.1	-4.73/-3.6	-2.18/-2.23	-3.16/-3.94
Θ(172.5°)	-5.69/-5.34	-6.83/-8.53	-10.81/-12.37	-11.95/-12.48	-14.48/-16.1	-12.15/-10.9	-10.55/-10.1	-10.44/-11.48	-12.17/-11.94	-11.87/-11.5	-10.74/-9.57	-9.25/-9.3	-9.66/-10.57	-12.29/-15.26	-15.76/-14.83	-13.24/-12.23	-11.8/-10.76	-9.12/-7.44	-5.35/-3.68	-3.04/-3.57	-4.41/-5.01	-5.86/-7.14	-7.64/-6.98	
Θ(180°)	-7.42/-8.44	-10.79/-12.41	-14.55/-15.28	-14.04/-14.35	-13.94/-13.09	-12.49/-14.89	-18.57/-18.5	-18.88/-17.24	-14.78/-12.88	-11.43/-9.7	-8.06/-6.74	-5.72/-5.19	-5.29/-5.53	-5.86/-6.24	-6.23/-6.58	-7.14/-8.03	-9.55/-12.64	-17.36/-17.79	-15.46/-11.1	-8.8/-8.24	-7.02/-6.73	-7.65/-10.38	-13.37/-10.18	-7.76/-7.18
Freq(Hz)	2.45G/Pol.	Phi/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°)	-18.42/-18.14	-16.05/-14.4	-13.1/-11.94	-10.78/-9.79	-8.99/-8.26	-7.66/-7.26	-7.1/-7.11	-7.22/-7.57	-8.17/-8.96	-9.87/-11.05	-12.44/-14.13	-15.83/-17.07	-17.13/-16.03	-14.24/-12.45	-10.84/-9.5	-8.53/-7.82	-7.34/-7.03	-6.89/-6.92	-7.12/-7.49	-7.95/-8.59	-9.51/-10.59	-11.86/-13.13	-14.39/-15.83	-17.67/-19.43
Θ(7.5°)	-17.02/-14.68	-12.77/-11.37	-10.24/-9.18	-8.22/-7.38	-6.63/-5.96	-5.44/-5.09	-4.89/-4.79	-4.78/-4.92	-5.26/-5.74	-6.31/-7.01	-7.87/-8.95	-10.13/-11.62	-13.24/-15.12	-16.57/-16.31	-15.06/-13.58	-12.23/-11.22	-10.4/-9.93	-9.69/-9.75	-10.11/-10.7	-11.51/-12.72	-14.43/-16.51	-17.69/-18.4	-17.88/-18.46	-18.64/-19.3
Θ(15°)	-12.22/-10.72	-9.3/-8.35	-7.52/-6.7	-5.84/-5.09	-4.42/-3.83	-3.35/-2.94	-2.64/-2.46	-2.35/-2.33	-2.46/-2.71	-3.07/-3.51	-4.03/-4.71	-5.56/-6.56	-7.79/-9.3	-11.33/-13.49	-15.56/-16.66	-16.58/-15.65	-14.56/-13.81	-13.62/-13.84	-14.38/-15.24	-16.51/-18.47	-18.84/-18.78	-17.75/-18.27	-18.09/-18.15	-15.68/-13.6
Θ(22.5°)	-8.65/-7.36	-6.49/-5.83	-5.25/-4.57	-3.85/-3.15	-2.53/-2	-1.56/-1.15	-0.8/-0.58	-0.42/-0.35	-0.38/-0.54	-0.79/-1.15	-1.59/-2.17	-2.9/-3.82	-4.9/-6.29	-7.87/-9.6	-11.49/-13.4	-15.44/-17.27	-18.34/-18.83	-19.08/-19.34	-19.42/-19.17	-18.22/-18.46	-18.32/-18.23	-17.55/-16.18	-14.59/-12.94	-11.28/-9.81
Θ(30°)	-6.08/-5.19	-4.61/-4.22	-3.8/-3.26	-2.62/-1.91	-1.25/-0.73	-0.30/-0.13	0.48/0.72	0.94/1.05	1.05/0.96	0.19/-0.31	-0.9/-1.62	-2.5/-3.52	-4.77/-6.12	-7.59/-9.25	-11.1/-13.19	-15.5/-17.41	-18.54/-18.47	-17.78/-16.78	-15.81/-15.32	-15.29/-15.3	-14.61/-13.03	-11.2/-9.59	-8.18/-6.94	
Θ(37.5°)	-4.7/-4.21	-3.96/-3.72	-3.39/-2.9	-2.22/-1.42	-0.66/-0.03	0.46/0.93	1.31/1.61	1.84/1.97	1.97/1.87	1.71/1.45	1.09/0.6	0.01/-0.69	-1.49/-2.4	-3.43/-4.58	-5.82/-7.19	-8.71/-10.34	-12.1/-13.66	-16.14/-16.23	-16.33/-16.81	-17.74/-17.66	-14.89/-11.66	-9.13/-7.35	-6.07/-5.22	
Θ(45°)	-4.39/-4.23	-4.08/-3.81	-3.35/-2.76	-1.99/-1.06	-0.10/-0.72	1.39/1.95	2.37/2.66	2.88/2.94	2.87/2.68	2.42/2.08	1.66/1.16	0.56/-0.07	-0.78/-1.57	-2.6/-3.78	-5.15/-6.8	-8.64/-10.8	-13.35/-15.95	-18.33/-18.1	-18.24/-18.25	-18.08/-18.36	-19.24/-18.43	-14.27/-10.55	-7.95/-6.28	-5.19/-4.61
Θ(52.5°)	-4.53/-4.43	-4.29/-3.87	-3.14/-2.3	-1.38/-0.35	0.62/1.5	2.21/2.8	3.23/3.52	3.73/7.1	3.59/3.31	2.94/2.49	1.94/1.33	0.67/-0.04	-0.8/-1.77	-2.91/-4.31	-5.96/-7.89	-10.37/-13.29	-16.42/-18.36	-18.52/-17.44	-19.01/-16.79	-15.04/-13.63	-12.37/-10.92	-9.44/-8.11	-6.84/-5.84	-5.05/-4.61
Θ(60°)	-5.97/-5.82	-5.56/-4.95	-3.85/-2.61	-1.42/-0.27	0.73/1.54	2.2/2.8	3.27/3.65	3.89/4.02	4/3.81	3.48/3.07	1.36/0.68	-0.1/-1	-2.06/-3.23	-4.46/-5.97	-7.83/-9.96	-11.76/-13.17	-14.61/-15.28	-14.66/-13.49	-12.15/-10.95	-9.78/-8.67	-7.76/-7.24	-7.04/-6.91	-6.51/-6.17	
Θ(67.5°)	-7.06/-6.76	-6.33/-5.48	-4.18/-2.77	-1.4/-0.14	0.87/1.66	2.25/2.8	3.27/3.66	3.95/4.11	4.13/3.94	3.61/3.13	2.56/1.93	1.24/0.47	-0.39/-1.36	-2.35/-3.44	-4.72/-6.42	-8.93/-11.98	-14.53/-15.48	-14.81/-13.17	-12.01/-11.54	-11.48/-11.28	-10.64/-9.66	-8.58/-7.79	-7.44/-7.4	-7.37/-7.24
Θ(75°)	-6.67/-6.46	-5.95/-5.04	-3.7/-2.34	-1.08/0.1	1.13/2.01	2.68/3.22	3.88/4.02	4.21/4.26	4.19/3.95	3.52/2.93	2.16/1.3	0.39/-0.61	-1.66/-2.75	-3.87/-5.11	-6.82/-9.5	-12.94/-14.14	-12.2/-10.59	-9.46/-8.76	-8.75/-9.48	-10.85/-11.92	-11.87/-10.96	-9.78/-8.49	-7.43/-6.91	-6.73/-6.68
Θ(82.5°)	-8.25/-7.67	-6.88/-5.57	-3.77/-2.04	-0.60/-0.4	1.68/2.6	3.34/3.94	4.38/4.66	4.78/4.75	4.63/4.41	3.99/3.3	2.34/1.15	-0.22/-1.82	-3.45/-4.94	-6.24/-7.77	-9.99/-11.95	-11.83/-10.35	-9.57/-9.55	-9.96/-11.15	-13.3/-16.79	-18.46/-17.83	-17.96/-18.34	-16.13/-13.86	-11.89/-10.53	-9.56/-8.88
Θ(90°)	-7.24/-6.2	-5.16/-3.96	-2.37/-0.75	0.55/1.57	2.36/2.99	3.49/3.86	4.14/4.31	4.37/4.38	4.42/4.43	4.23/3.73	2.91/1.93	0.66/-0.92	-2.5/-3.88	-5.18/-6.67	-8.05/-8.45	-7.78/-7.1	-7.22/-8.17	-17.77/-18.43	-17.07/-17.03	-18.7/-17.17	-13/-10.86	-9.73/-9.05	-8.56/-8.04	
Θ(97.5°)	-7.02/-5.8	-4.41/-3.1	-1.66/-0.26	0.93/1.84	2.55/3.09	3.49/3.54	3.48/3.36	3.28/3.34	3.53/3.64	3.44/2.92	2.16/1.17	-0.16/-1.72	-3.13/-4.37	-5.71/-7.25	-8.07/-7.69	-6.8/-6.57	-7.36/-9.01	-11.53/-13.66	-13.39/-12.6	-12.61/-13.62	-16.61/-18.77	-15.78/-11.6	-9.31/-8.01	-7.53/-7.43
Θ(105°)	-5.85/-5.48	-4.39/-3.02	-1.44/0.08	1.32/2.25	2.97/3.54	3.91/3.96	3.74/3.36	3.02/2.92	3/3	2.73/2.23	1.54/0.6	-0.64/-2.03	-3.19/-4.28	-5.63/-6.85	-7.27/-6.78	-6.27/-6.8	-8.46/-10.69	-13.61/-14.9	-12.77/-11.31	-11.13/-11.52	-12.48/-13.5	-11.68/-9.01	-7.08/-5.87	-5.37/-5.52
Θ(112.5°)	-5.8/-5.65	-4.81/-3.38	-1.57/0.16	1.53/2.51	3.14/3.65	4/4.1	3.9/3.5	3.01/2.63	2.37/2.1	1.74/1.28	0.61/0.4	-1.54/-2.58	-3.51/-4.63	-6.02/-7.47	-8.41/-8.52	-9.13/-11.5	-16.65/-18.94	-17.95/-11.87	-8.74/-7.94	-8.8/-10.96	-14.62/-16.94	-12.46/-9.51	-7.96/-6.87	-6.02/-5.71
Θ(120°)	-5.57/-5.12	-4.64/-3.54	-1.79/0.08	1.61/2.65	3.28/3.68	3.95/4	3.79/3.36	2.75/2.13	1.58/1.1	0.62/0.01	-0.92/-2.12	-3.26/-4.15	-5.15/-6.66	-8.75/-10.64	-10.73/-10.32	-11.98/-17.76	-18.62/-17.61	-11.19/-7.57	-5.65/-5.24	-6.1/-7.98	-11.11/-14.72	-12.45/-9.56	-8.43/-9.7	-7.01/-6.13
Θ(127.5°)	-6.37/-6.11	-5.45/-5.84	-2.42/-2.31	0.43/0.94	1.75/2.23	2.53/2.62	2.51/2.16	1.61/0.99	0.42/-0.16	-0.92/-1.98	-3.42/-4.76	-5.67/-6.12	-6.98/-8.24	-9.14/-8.61	-7.56/-7.55	-9.23/-13.08	-18.29/-19.69	-12.89/-9.17	-7.77/-9.42	-9.45/-11.74	-12.47/-14.51	-10.86/-8.09	-6.91/-6.87	-7.06/-6.83
Θ(135°)	-6.37/-6.18	-6.17/-6.37	-6.28/-5.05	-3.12/-1.36	-0.16/0.54	0.88/1.01	0.96/0.79	0.48/0.07	-0.45/-1.2	-2.4/-4	-5.74/-6.87	-7.36/-7.89	-8.85/-9.87	-9.96/-9.2	-8.62/-9.11	-10.86/-13.38	-14.45/-12.47	-9.79/-8.07	-7.66/-8.62	-10.91/-14.27	-18.14/-18.67	-13.5/-9.41	-7.07/-6.19	-6.17/-6.42
Θ(142.5°)	-5.7/-5.53	-5.23/-5.08	-4.98/-4.48	-3.29/-1.86	-0.72/0.01	0.31/0.34	0.21/0.07	-0.46/-1	-1.82/-3.08	-4.92/-7.1	-9.01/-9.91	-10.37/-11.2	-12.25/-12.85	-12.81/-13.09	-14.61/-18.07	-17.36/-18.03	-15.84/-12.94	-10.75/-9.41	-9.2/-9.95	-11.54/-13.42	-14.94/-15.94	-14.48/-10.96	-7.93/-6.23	-5.58/-5.57
Θ(150°)	-6.36/-6.38	-6.28/-6.12	-5.91/-5.47	-4.63/-3.49	-2.42/-1.67	-1.3/-1.26	-1.53/-2.02	-2.72/-3.73	-5.2/-7.25	-10.07/-13	-14.27/-13.59	-12.85/-12.56	-12.29/-11.94	-11.85/-12.4	-13.67/-15.31	-17.11/-19.29	-18.2/-18.53	-17.96/-15.17	-14.1/-14.19	-14.87/-15.06	-14.22/-13.27	-12.5/-11.29	-9.38/-7.71	-6.69/-6.35
Θ(157.5°)	-8.09/-8.31	-8.48/-8.51	-8.47/-8.27	-7.79/-6.94	-6.02/-5.33	-5.04/-5.14	-5.6/-6.44	-7.75/-9.64	-12.4/-15.71	-17.12/-14.56	-11.97/-10.39	-9.47/-9.1	-9.05/-9.31	-9.85/-10.76	-12.14/-13.89	-16.51/-17.38	-17.77/-17.19	-14.33/-12.81	-12.46/-13.19	-14.85/-16.36	-15.73/-13.93	-12.54/-11.67	-10.72/-9.65	-8.69/-8.23
Θ(165°)	-10.32/-10.39	-10.61/-10.67	-10.64/-10.69	-10.81/-10.91	-10.76/-10.56	-10.65/-11.04	-11.9/-12.96	-14.28/-15.22	-15.08/-13.92	-12.38/-11.06	-10.2/-9.75	-9.7/-10.03	-10.71/-11.76	-13.21/-14.99	-16.65/-16.98	-15.37/-13.29	-11.4/-10.05	-9.14/-8.83	-9.07/-9.95	-11.37/-13.08	-14.37/-14.68	-14.16/-13.71	-13.26/-12.48	-11.5/-10.69
Θ(172.5°)	-13.44/-12.84	-12.53/-12.26	-11.94/-11.62	-11.63/-11.8	-11.84/-11.63	-11.32/-10.88	-10.49/-10.17	-9.89/-9.68	-9.55/-9.53	-9.48/-9.64	-10.12/-10.91	-12.25/-14.25	-17.05/-18.48	-18.95/-17.96	-14.68/-12.15	-10.4/-9.21	-8.44/-7.99	-7.74/-7.8	-8.16/-8.83	-9.79/-10.92	-11.98/-12.96	-13.7/-14.36	-15.1/-15.46	-15.03/-14.03



Radiated Composite Gain Data <2.4GHz and 5GHz U-NII 1~U-NII 4>

Appendix A

Θ(172.5°)	-16.86/18.83	-18.03/-19.01	-18.34/-18.95	-18.45/-18.16	-18.74/-18.65	-18.65/-17.95	-17.87/-17.54	-17.15/-17.09	-16.95/-16.34	-16.45/-16.43	-16.99/-18.5	-18.78/-18.17	-18.52/-18.78	-17.99/-18.85	-16.1/-13.33	-11.14/-9.59	-8.25/-7.62	-7.4/-7.53	-7.73/-7.86	-8.2/-8.83	-9.36/-10.18	-11.37/-12.34	-12.57/-12.82	-13.91/-14.88
Θ(180°)	-12.05/-11.42	-10.73/-10.01	-9.22/-8.73	-8.4/-8.28	-8.25/-8.2	-8.42/-8.97	-9.51/-10.2	-10.74/-11.46	-12.32/-13.31	-14.19/-15.03	-16.03/-16.76	-17.39/-18.21	-18.38/-16.92	-13.88/-11.38	-9.49/-8.29	-7.42/-6.82	-6.41/-6.35	-6.81/-7.37	-7.95/-8.35	-9.08/-9.92	-11.37/-13.02	-14.55/-14.93	-14.05/-13.4	-12.93/-12.41
Freq(Hz)	5.2G/Pol.	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°)	0.250/2	0.09/-0.22	-1.03/-1.93	-2.98/-4.11	-5.49/-7.46	-9.84/-13.1	-14.68/-12.87	-9.93/-7.63	-5.86/-4.39	-3.15/-2.1	-1.38/-0.93	-0.73/-0.76	-0.86/-0.86	-1.03/-1.54	-2.35/-3.33	-4.7/-5.94	-7.51/-9.62	-12.01/-13.75	-13.47/-11.16	-8.62/-6.48	-4.72/-3.33	-2.3/-1.49	-0.93/-0.37	0.06/0.18
Θ(7.5°)	-0.41/-0.47	-0.56/-0.82	-1.46/-2.36	-3.64/-5.03	-6.44/-8.66	-11.4/-13.64	-14.52/-12.57	-9.91/-7.6	-5.75/-4.25	-2.94/-1.81	-0.97/-0.56	-0.38/-0.22	0.11/0.3	0.12/-0.32	-1.06/-2.17	-3.63/-5.31	-7.39/-9.66	-12.16/-13.94	-13.79/-11.42	-8.84/-6.78	-4.97/-3.59	-2.63/-2.04	-1.42/-0.71	-0.32/-0.35
Θ(15°)	-1.7/-1.62	-1.7/-2.03	-2.82/-3.99	-5.59/-7.36	-9.25/-11.79	-14.07/-15.41	-15.54/-13.35	-11.51/-9.37	-7.59/-5.98	-4.43/-2.95	-1.94/-1.25	-0.8/-0.26	0.30/0.8	-0.58/-1.55	-2.88/-4.71	-7.02/-10.3	-14.56/-16.79	-13.9/-11.2	-8.97/-7.48	-6/-4.75	-3.89/-3.22	-2.57/-1.89	-1.71/-1.78	
Θ(22.5°)	-2.58/-2.32	-2.33/-2.62	-3.21/-4.31	-5.85/-7.33	-8.94/-11	-13.47/-16.13	-15.25/-12.26	-10.2/-8.46	-6.7/-5.24	-3.81/-2.71	-1.93/-1.27	-0.67/-0.15	0.10/0.7	0.02/-0.23	-0.52/-1.09	-1.94/-3.28	-5.47/-9.09	-15.24/-18.69	-19.82/-13.82	-10.21/-7.91	-6.43/-5.46	-4.72/-4.11	-3.52/-2.94	-2.81/-2.69
Θ(30°)	-2.73/-2.67	-2.99/-3.14	-3.12/-3.63	-4.69/-6.02	-7.44/-9.41	-11.96/-14.1	-12.29/-10.17	-8.49/-7.34	-6.3/-5.21	-4.15/-3.09	-2.16/-1.47	-1.08/-0.93	-1.03/-0.99	-0.82/-0.77	-0.93/-1.11	-1.64/-2.89	-5.02/-7.5	-11.07/-18.45	-18.55/-12.51	-9.36/-7.96	-7.4/-6.84	-6.05/-5.81	-5.22/-4.18	-3.47/-2.88
Θ(37.5°)	-4.96/-3.81	-3.52/-3.45	-3.11/-3.11	-3.95/-5.16	-6.42/-8.19	-11.11/-14.35	-16.08/-14.67	-11.45/-8.57	-6.3/-4.68	-3.34/-2.44	-1.79/-1.24	-1.02/-1.04	-0.98/-1.12	-1.57/-2.28	-2.75/-3.27	-3.96/-4.75	-5.33/-7.36	-13.13/-18.34	-15.56/-12.2	-11.05/-11.08	-11.81/-11.3	-9.65/-8.31	-7.57/-7.04	-6.93/-6.35
Θ(45°)	-7.43/-6	-4.93/-4.52	-3.92/-3.6	-4.17/-4.65	-5.25/-6.5	-8.39/-10.74	-13.63/-16.55	-12.73/-7.72	-4.51/-2.61	-1.42/-0.69	-0.21/0.16	0.02/-0.39	-0.52/-0.67	-1.08/-1.91	-3.08/-4.56	-4.8/-4.69	-5.88/-9.13	-13.3/-18.32	-17.98/-18.9	-18.87/-18.15	-17.53/-16.97	-14.76/-12.56	-10.3/-8.89	-7.84/-7.62
Θ(52.5°)	-9.73/-10.06	-9.03/-7.86	-6.79/-5.87	-5.78/-5.79	-6.3/-8.31	-10.88/-14.43	-17.4/-17.94	-13.47/-7.87	-4.3/-2.37	-1.19/-0.8	-1.03/-1.05	-1.68/-2.52	-2.44/-2.48	-2.97/-3.19	-4.3/-5.86	-6.24/-6.48	-7.04/-10.28	-18.3/-15.05	-13.76/-15.75	-18.74/-18.22	-16.42/-17.54	-16.93/-14.16	-12.16/-11.32	-11.76/-10.29
Θ(60°)	-16.39/-14.17	-11.28/-9.83	-8.23/-6.74	-5.95/-5.86	-6.88/-8.74	-11.71/-16.61	-17.86/-18.53	-12.2/-7.7	-4.38/-2.33	-0.96/-0.06	-0.04/-0.38	-1.17/-1.92	-2.19/-2.76	-2.59/-2.62	-2.92/-4.27	-6.43/-7.09	-8.26/-10.46	-12.43/-10.46	-10.65/-17.05	-18.89/-14.5	-11.2/-10.94	-12.68/-15.23	-13.55/-14.01	-15.61/-16.1
Θ(67.5°)	-19.28/-16.39	-11.97/-10.99	-9.51/-8.79	-8.19/-9.39	-12.88/-18	-18.76/-14.23	-12.1/-9.7	-7.02/-4.99	-3.17/-1.97	-1.72/-1.55	-2.26/-3.15	-3.92/-5.56	-5.99/-7.36	-7.52/-6.25	-6.75/-9.37	-11.21/-10.58	-9.77/-12.8	-12.18/-11.32	-11.72/-16.42	-18.41/-13.79	-13.65/-16.18	-16.89/-16.61	-15.42/-13.93	-16.91/-19.16
Θ(75°)	-14.86/-12.54	-10.11/-10.67	-9.97/-10.05	-9.99/-13	-18.1/-18.05	-10.98/-8.87	-8.43/-7.62	-6.3/-5.03	-3.5/-2.15	-1.38/-0.91	-1.33/-2.09	-2.99/-5.58	-6.81/-11.46	-10.12/-8.83	-8.72/-8.24	-10.29/-12.01	-16.38/-17.38	-18.3/-11.32	-14.83/-18.91	-14.61/-11.31	-11.04/-13.22	-18.34/-15.07	-15.46/-16.57	-18.07/-18.77
Θ(82.5°)	-11.45/-10.07	-8.67/-9.54	-8.88/-8.91	-8.29/-10.06	-16.21/-14.43	-8.93/-7.49	-8/-9.59	-9.59/-7.19	-5.14/-4	-2.91/-2.66	-3.14/-4.04	-5.88/-8.11	-11.08/-14.61	-12.05/-9.17	-7.47/-8.47	-13.57/-14.8	-14.29/-14.84	-13.77/-16.64	-15.37/-18.66	-9.62/-10.03	-10.7/-16.01	-12.37/-13.93	-13.9/-18.33	-17.52/-14.75
Θ(90°)	-18.81/-17.21	-12.97/-14.27	-10.84/-9.69	-9.47/-13.4	-17.06/-10.95	-7.2/-6.36	-6.9/-7.99	-9.23/-9.72	-9.7/-7.84	-7.03/-7.01	-7.84/-9.16	-10.79/-12.25	-18.76/-18.48	-17.94/-15.2	-15.86/-14.86	-13.32/-12.36	-13.62/-16.81	-16.17/-16.05	-17.95/-12.13	-10.8/-9.75	-17.78/-16.31	-15.96/-14.35	-17.02/-17.56	-18.46/-18.51
Θ(97.5°)	-17.46/-18.78	-17.29/-18.25	-15.36/-14.63	-15.66/-18.41	-12.67/-7.48	-6.27/-6.67	-7.71/-9.68	-9.72/-8.47	-8.29/-8.61	-11.08/-12.29	-14.08/-16.05	-16.01/-14.51	-14.65/-12	-13.44/-16.05	-13.18/-13.97	-18.22/-14.58	-13.01/-15.62	-18.78/-19.22	-18.59/-14.47	-12.01/-15.09	-18.58/-17.2	-18.98/-17.29	-18.7/-17.22	-18.55/-18.99
Θ(105°)	-17.12/-17.9	-17.63/-14.87	-14.24/-13.54	-16.91/-19.86	-12.21/-8.06	-5.85/-6.17	-7.88/-8.27	-7.61/-8.52	-10.47/-12.05	-11.3/-9.4	-9.37/-11.91	-16.75/-19.05	-18.05/-17.03	-14.77/-11.43	-12.27/-13.47	-15.23/-13.05	-12.96/-16.77	-18.52/-17.62	-18.68/-19.35	-18.91/-17.78	-18.34/-18.99	-17.46/-18.56	-17.65/-17.49	-18.11/-18.16
Θ(112.5°)	-17.67/-16.49	-12.01/-10.14	-9.61/-9.59	-11.37/-10.49	-6.02/-4.16	-4.28/-6.14	-8.74/-9.05	-7.44/-7.1	-7.56/-10.13	-12.52/-9.39	-7.08/-6.87	-8.17/-10.64	-12.7/-13.39	-15.08/-18.21	-17.48/-18.29	-14.27/-10.11	-12.99/-18.49	-17.81/-17.38	-17.57/-16.91	-17.73/-17.76	-18.22/-18.49	-15.98/-17.39	-15.02/-16.81	-17.48/-18.58
Θ(120°)	-10.15/-10.4	-7.91/-6.2	-6.03/-6.85	-7.96/-7.91	-6.07/-5.8	-6.68/-8.81	-13.49/-15.58	-11.15/-8	-6.65/-7.15	-8.26/-7.95	-7.82/-8.13	-6.89/-6.04	-7.84/-7.13	-10.42/-11.85	-13.99/-18.1	-18.09/-17.68	-17.33/-18.28	-11.85/-12	-19.24/-15.69	-18.46/-16.08	-15.13/-18.54	-14.17/-18.64	-13.25/-11.39	-12.32/-13.67
Θ(127.5°)	-18.2/-18.53	-15.76/-15.44	-15.99/-13.37	-11.66/-8.46	-6.02/-4.61	-5.37/-8.47	-13.47/-19.28	-12.41/-8.98	-7.8/-7.47	-7.62/-7.49	-7.15/-7.45	-7.04/-8.5	-9.93/-9.47	-9.88/-11.07	-14.87/-17.26	-18.14/-17.39	-14.24/-19	-14.34/-17.64	-18.23/-16.82	-18.12/-19.33	-15.57/-14.84	-18.57/-17.6	-19.34/-18.29	-18.21/-18.99
Θ(135°)	-12.9/-16.17	-15.27/-15.45	-18.89/-14.97	-11.97/-9.36	-8.02/-8.21	-9.66/-13.27	-19.07/-17.94	-13.42/-10.03	-7.51/-5.76	-4.82/-4.63	-5.57/-6.79	-7.67/-10.02	-14.3/-13.29	-11.08/-12.65	-11.35/-10.19	-18.77/-18.64	-15.87/-16.83	-15.47/-18.9	-18.64/-13.65	-11.47/-16.92	-17.19/-18.53	-18.41/-17.5	-17.01/-18.88	-18.4/-12.72
Θ(142.5°)	-7.37/-7.08	-7.83/-7.24	-7.74/-8.53	-8.34/-7.59	-7.09/-7.49	-8.27/-8.67	-8.82/-8.03	-7.64/-8.05	-8.9/-9.06	-8.57/-7.63	-6.88/-6.97	-7.43/-7.07	-5.81/-6.58	-8.39/-10.24	-14.77/-12.97	-13.66/-15.6	-9.8/-8.2	-12.03/-17.77	-17.1/-12.39	-9.97/-9.72	-10.15/-11.59	-13.49/-12.26	-9.97/-8.19	-8.29/-9.09
Θ(150°)	-10.44/-11.14	-10.79/-9.59	-9.31/-9.59	-9.87/-10.78	-11.79/-14.02	-16.12/-14.22	-11.95/-10.55	-9.99/-10.15	-10.26/-9.42	-7.54/-5.61	-4.48/-4.29	-3.94/-3.35	-3.76/-5.13	-6.95/-9.52	-13.32/-15.83	-18.61/-16.89	-12.58/-12.27	-14.78/-16.24	-15.84/-16.22	-17.92/-19.19	-18.32/-18.92	-18.29/-17.15	-13.23/-12.55	-13.24/-12.6
Θ(157.5°)	-16.63/-16.15	-14.37/-12.61	-11.82/-11.27	-10.74/-10.28	-10.62/-11.59	-13.71/-16.97	-18.41/-16.65	-14.13/-12.5	-11.44/-10.73	-9.46/-8.07	-7.07/-5.95	-4.57/-3.78	-3.79/-3.77	-3.83/-4.13	-5.05/-7.02	-10.02/-11.29	-11.36/-11.98	-13.81/-15.39	-16.93/-18.39	-19.73/-17.27	-13.71/-11.56	-11.58/-13.96	-17.8/-17.96	-16.93/-16.74
Θ(165°)	-17.97/-17.22	-15.08/-13.42	-12.33/-10.92	-10.17/-10.26	-10.47/-10.75	-11.66/-13.45	-15.16/-16.6	-15.79/-14.82	-13.42/-12.3	-11.19/-10.19	-9.09/-7.79	-6.64/-5.75	-5.81/-6.65	-8.67/-13.14	-17.72/-18.53	-13.42/-11.65	-11.74/-12.93	-15.1/-16.83	-17.4/-17.4	-17.36/-19.04	-17.17/-18.29	-19.37/-19.19	-17.54/-19.12	-17.82/-17.79
Θ(172.5°)	-15.26/-15.36	-16.06/-16.64	-16.97/-17.78	-17.6/-16.55	-15.85/-15.41	-15.16/-15.64	-17.53/-18.68	-18.94/-17.75	-18.6/-18.29	-17.16/-16.91	-17.06/-17.92	-18.48/-18.64	-17.12/-14.5	-12.27/-9.82	-8.23/-7.54	-7.33/-7.75	-8.68/-10.44	-12.66/-14.78	-15.96/-15.7	-16.11/-17.38	-18.85/-17.79	-17.89/-17.86	-18.17/-17.48	-16.32/-15.51
Θ(180°)	-9.2/-9.39	-10.1/-11.03	-12.52/-14.57	-15.81/-17.3	-17.83/-18.28	-17.83/-16.47	-15.54/-14.54	-13.14/-11.87	-10.67/-9.66	-8.94/-8.35	-8.13/-8.19	-8.21/-8.27	-8.36/-8.56	-8.87/-9.49	-10.34/-11.54	-13.14/-15.02	-17.49/-19.22	-18.55/-18.99	-18.02/-16.52	-15.26/-13.7	-12.07/-10.73	-10.01/-9.87	-9.64/-9.52	-8.34/-9.22
Freq(Hz)	5.3G/Pol.	Phi/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°)	-11.42/-9.8	-7.89/-6.34	-4.72/-3.52	-2.5/-1.58	-0.92/-0.48	-0.18/-0.02	0.0/-0.3	-0.41/-0.83	-1.42/-2.15	-3.2/-4.51	-6.07/-7.93	-10.03/-12.14	-12.58/-11.03	-8.57/-6.38	-4.61/-3.36	-2.37/-1.6	-1.03/-0.61	-0.27/-0.13	-0.17/-0.34	-0.64/-1.06	-1.65/-2.38	-3.38/-4.57	-6.05/-7.76	-9.59/-11.1
Θ(7.5°)	-14.71/-11.71	-8.78/-6.42	-4.57/-3.29	-2.3/-1.57	-1.06/-0.63	-0.3/-0.19	-0.21/-0.34	-0.55/-0.87	-1.31/-1.95	-2.84/-3.82	-5.06/-6.61	-8.31/-10.27	-11.58/-11.48	-9.48/-7.27	-5.36/-3.82	-2.71/-1.91	-1.2/-0.74	-0.42/-0.27	-0.29/-0.52	-0.99/-1.58	-2.3/-3.29	-4.63/-6.22	-8.3/-10.61	
Θ(15°)	-13.8/-10.43	-7.69/-5.75	-4.27/-3.03	-2.1/-1.37	-0.77/-0.22	0.09/0.33	0.54/0.59	0.48/0.2	-0.26/-0.75	-1.35/-2.07	-3.09/-4.36	-5.9/-7.97	-10.66/-13.75	-14.36/-11.53	-8.37/-5.89	-4.								



Radiated Composite Gain Data <2.4GHz and 5GHz U-NII 1~U-NII 4>

Appendix A

Freq(Hz))	5.6G/Pol.	Phi/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°)	-16.23/-17.26	-13.87/-10.04	-7.05/-5.12	-3.64/-2.56	-1.72/-1.02	-0.53/-0.19	-0.04/0.03	-0.02/-0.22	-0.61/-1.21	-2/-3.13	-4.68/-6.92	-10.21/-14.98	-17.37/-18.35	-13.05/-9.34	-6.64/-4.65	-3.14/-2.03	-1.14/-0.44	0/0.29	0.38/0.34	0.16/-0.19	-0.6/-1.21	-1.98/-3.04	-4.52/-6.43	-8.6/-11.57
Θ(7.5°)	-19.56/-16.71	-12.82/-9.52	-6.53/-4.47	-2.91/-1.85	-1.05/-0.3	0.21/0.56	0.82/0.97	1.01/0.89	0.53/0.05	-0.66/-1.66	-2.89/-4.49	-6.6/-9.53	-13.63/-17.95	-15.81/-11.45	-7.91/-5.55	-3.78/-2.54	-1.61/-1.05	-0.77/-0.65	-0.54/-0.61	-0.87/-1.36	-1.98/-2.81	-3.81/-5.13	-6.97/-9.56	-12.76/-16.88
Θ(15°)	-18.75/-15.02	-10.93/-7.81	-5.52/-3.7	-2.46/-1.58	-0.69/0.14	0.71/1.16	1.56/1.84	1.88/1.71	1.34/0.86	0.16/-0.74	-1.85/-3.27	-4.9/-7.07	-9.96/-13.84	-17.64/-15.43	-11.39/-8.24	-6.09/-4.27	-2.88/-2.01	-1.4/-1.16	-1.09/-1.33	-1.9/-2.84	-3.89/-5.12	-6.61/-8.7	-11.5/-15.5	-18.11/-17.3
Θ(22.5°)	-15.89/-11.6	-9.03/-7.18	-5.65/-4.21	-3.07/-1.9	-0.71/0.1	0.86/1.57	1.98/2.2	2.16/1.98	1.57/0.92	0.01/-1.17	-2.67/-4.5	-6.75/-9.94	-13.79/-17.59	-17.48/-14.98	-12.59/-10.43	-8.29/-6.13	-4.52/-3.16	-2.2/-1.78	-1.76/-1.98	-2.58/-3.74	-5.26/-6.86	-9.11/-12.5	-17.71/-19.44	-18.08/-18.17
Θ(30°)	-15.01/-11.6	-9.94/-8.4	-6.52/-4.39	-2.52/-1.05	0/0.59	1.32/1.72	1.83/1.91	2.01/1.94	1.5/0.88	0.01/-1.08	-2.28/-3.53	-5.27/-7.71	-10.78/-14.78	-19.26/-18.94	-16.64/-12.85	-9.51/-6.85	-4.92/-3.32	-2.53/-2.45	-2.94/-3.52	-3.82/-4.36	-5.62/-7.99	-11.04/-15.2	-17.6/-18.9	-18.24/-17.48
Θ(37.5°)	-17.68/-19.1	-14.43/-10.43	-7.02/-4.27	-2.4/-1.01	-0.02/0.71	1.37/1.54	1.66/1.7	1.62/1.48	1.21/0.76	0.1/-0.87	-2.14/-3.83	-5.68/-8.42	-12.16/-16.28	-17.57/-16.42	-14.15/-11.45	-8.89/-7.67	-6.96/-7.08	-6.87/-5.97	-5.25/-5.43	-6.74/-8.41	-9.81/-11.85	-14.67/-18.07	-17.58/-18.5	-17.73/-18.74
Θ(45°)	-17.95/-18.92	-18.06/-14.79	-8.57/-4.81	-2.23/-0.57	0.65/1.43	2.08/2.09	2/1.83	1.52/1.25	1.07/0.8	0.24/-0.51	-1.71/-3.36	-4.93/-7.01	-9.61/-11.81	-15.27/-17.31	-18.53/-16.8	-13.81/-10.81	-8.5/-6.38	-4.81/-4.41	-4.97/-6.31	-7.69/-9.4	-12.41/-17.37	-18.77/-17.97	-18.31/-18.63	-18.83/-17.42
Θ(52.5°)	-17.4/-18.14	-19.32/-12.71	-8.07/-5.05	-2.62/-0.76	0.71/1.66	2.23/2.4	2.36/2.06	1.77/1.43	1.15/0.71	-0.23/-1.35	-3.07/-5.18	-7.12/-9.72	-11.23/-14.19	-17.62/-18.3	-17.76/-17.31	-13.75/-12.31	-12.28/-13.61	-13.56/-10.24	-8.02/-7.56	-8.43/-11.53	-18.05/-17.94	-18.04/-18.15	-18.67/-15.18	-13.89/-14.98
Θ(60°)	-19.47/-18.8	-18.52/-13.32	-9.07/-5.83	-3.23/-1.3	0.26/1.38	2.14/2.47	2.54/2.48	2.33/2.17	1.86/1.29	0.22/-1.22	-3.41/-6.25	-9.27/-11.59	-12.65/-14.1	-16.28/-18.81	-18.24/-19.07	-17.99/-18.44	-18.46/-17.34	-10.29/-7.96	-7.18/-8.18	-13.6/-18.27	-18.96/-19.15	-18.54/-17.41	-18.66/-19.29	-17.81/-18.23
Θ(67.5°)	-17.6/-17.4	-13.22/-11.03	-8.79/-6.66	-4.1/-2.07	-0.47/0.85	1.49/1.44	1.18/1.14	1.47/1.85	2.17/1.97	1.04/-0.51	-2.72/-5.28	-7.8/-9.95	-11.84/-13.98	-17.25/-18.64	-17.48/-19.02	-18.67/-18.52	-18.02/-18.96	-17.74/-12.95	-12.01/-16.53	-19.03/-18.56	-18.09/-18.1	-18.56/-18.68	-18.7/-17.59	-18.16/-19.2
Θ(75°)	-16.09/-14.26	-11.39/-8.47	-5.59/-3.62	-2.65/-1.85	-0.88/-0.23	-0.04/0.13	0.02/-0.58	-1.12/-1.13	-0.67/-0.18	-0.03/-0.7	-2.05/-4.29	-6.9/-9.32	-11.38/-12.89	-14.33/-17.56	-17.97/-17.8	-17.86/-18.8	-18.97/-17.93	-18.22/-18.86	-15.72/-16.2	-17.7/-18.53	-18.99/-18.95	-18.48/-17.94	-19.12/-17.27	-18.23/-18.97
Θ(82.5°)	-14.21/-12.44	-9.48/-7.31	-5.35/-3.73	-1.94/-0.26	0.72/1.04	0.81/-0.18	-1.48/-2.2	-2.18/-1.8	-1.64/-1.89	-2.86/-4.5	-6.95/-10.68	-15.04/-18.22	-17.91/-18.89	-18.32/-18.99	-18.83/-17.82	-18.29/-19.11	-19.09/-18.38	-18.51/-18.19	-17.81/-17.38	-18.08/-18.79	-17.77/-19.05	-17.9/-17.58	-19.01/-17.49	-18.86/-15.59
Θ(90°)	-18.12/-17.64	-14.43/-10.76	-7.25/-4.48	-2.48/-1.15	0.13/1	0.92/0.54	0.13/-0.37	-0.41/-0.4	-0.74/-1.64	-3.12/-5.2	-7.38/-8.91	-10.92/-12.71	-16.01/-15.69	-15.74/-15.91	-17.77/-18.78	-18.98/-18.54	-18.27/-15.77	-11.97/-17.38	-19.08/-18.47	-19.2/-17.96	-18.89/-18.6	-18.74/-18.75	-18.69/-18.66	-17.65/-18.85
Θ(97.5°)	-17.69/-18.85	-14.8/-10.53	-8.25/-6.99	-5.11/-2.74	-0.83/0.4	1.17/1.06	0.35/-0.04	0.11/0.36	0.3/-0.59	-2.66/-5.05	-7.7/-10.3	-13.25/-16.03	-18.73/-19.29	-18.61/-18.3	-17.38/-18.72	-17.52/-19.24	-16.48/-12.73	-13.53/-15.09	-19.22/-18.75	-17.25/-18.66	-18.89/-16.85	-16.86/-17.81	-18.55/-17.91	-18.34/-18.92
Θ(105°)	-15.87/-15.59	-13.19/-9.69	-6.48/-4.49	-3.54/-3.02	-2.37/-1.26	-0.61/0.03	0.41/-0.05	-0.6/-0.78	-1.23/-1.7	-2.77/-4.8	-8.45/-12.46	-17.42/-19.14	-18.56/-18.38	-17.94/-17.87	-18.39/-17.39	-18.26/-18.07	-18.89/-14.71	-15.7/-18.43	-18.54/-15.77	-18.54/-17.32	-16.42/-17.43	-17.68/-18.91	-17.59/-15.19	-15.36/-14.48
Θ(112.5°)	-18.21/-14.24	-10.45/-7.6	-6.4/-5.72	-5.07/-3.62	-2.44/-1.69	-1.14/-1.11	-1.52/-1.26	-0.83/-1.04	-1.2/-1.86	-3.81/-6.4	-9.95/-15.81	-18.06/-18.28	-19.09/-17.4	-18.55/-17.73	-17.61/-18.65	-17.77/-15	-13.75/-12.92	-18.25/-18.23	-18.89/-18.88	-16.87/-14.59	-15.09/-18.68	-17.77/-14.08	-13.98/-13.7	-14.97/-18.08
Θ(120°)	-14.54/-12.16	-10.54/-9.45	-9.07/-8.66	-8.65/-8.37	-6.63/-4.62	-3.56/-2.48	-1.28/-0.83	-0.97/-1.49	-2.75/-4.92	-6.96/-9.82	-13.79/-18.07	-19.07/-18.04	-18.64/-17.53	-15.68/-13.6	-15.03/-14.11	-15.5/-18.16	-19.27/-17.41	-15.42/-18.55	-17.12/-18.86	-19.3/-17.59	-17.62/-18.88	-16.78/-18.78	-18.9/-18.99	-18.54/-17.72
Θ(127.5°)	-13.44/-14.76	-13.84/-13.57	-11.86/-10.78	-9.08/-7.82	-6.92/-5.64	-4.32/-3.17	-2.18/-1.23	-0.91/-1.27	-2.14/-3.64	-6.24/-9.75	-13.81/-18.99	-18.73/-17.92	-18.64/-18.12	-19.04/-18.15	-15.99/-16.13	-13.82/-17.46	-17.82/-17.96	-17.03/-17.91	-18.49/-18.77	-17.67/-18.23	-17.77/-19.03	-17.94/-17.53	-18.23/-18.26	-15.92/-12.86
Θ(135°)	-16.92/-15.38	-14.24/-14.15	-12.28/-9.41	-6.75/-4.21	-2.73/-1.78	-1.12/-0.68	-0.3/0.06	0.36/0.18	-0.84/-2.58	-5.28/-8.86	-13.28/-17.51	-18.28/-18.78	-18.27/-18.44	-19.24/-19.12	-18.6/-13.89	-12.22/-9.35	-9.98/-11.18	-14.81/-17.79	-18.23/-19.29	-17.23/-17.56	-18.28/-18.72	-18.3/-19.36	-17.82/-18.39	-18.29/-17.36
Θ(142.5°)	-18.4/-18.9	-16.42/-12.34	-8.9/-6.57	-5.09/-3.66	-2.2/-1.06	-0.15/0.46	0.81/0.78	0.51/-0.07	-1.1/-2.84	-5.31/-8.34	-12.81/-18.33	-18.5/-17.62	-18.2/-18.86	-17.63/-19.08	-18.2/-15.21	-13.25/-11.11	-15/-12.95	-14.36/-18.95	-18.42/-18.71	-18.53/-15.48	-12.59/-16.69	-18.1/-13.89	-13.41/-17.4	-18.4/-18.27
Θ(150°)	-17.73/-12.52	-11.93/-11.38	-10.26/-8.9	-7.19/-5.65	-4.03/-2.68	-1.66/-0.93	-0.37/-0.15	-0.52/-1.68	-3.56/-6.03	-9.08/-13.12	-17.71/-18.43	-17.99/-14.97	-13.07/-11.42	-10.27/-9.85	-9.85/-10.76	-12.06/-14.35	-16.08/-14.46	-15.86/-17.31	-16.8/-16.72	-15.01/-12.65	-13.18/-17.63	-17.6/-14.47	-14.32/-18.5	-17.81/-16.19
Θ(157.5°)	-12.69/-10.8	-9.2/-8.33	-7.62/-7.24	-6.85/-6.46	-5.88/-4.8	-3.6/-2.55	-2.02/-2.14	-2.92/-4.19	-5.67/-7.36	-9.23/-11.89	-15.63/-18.74	-18.31/-15.05	-11.69/-9.29	-7.51/-6.6	-7.05/-8.96	-12.21/-15.51	-14.62/-12.31	-11.1/-10.95	-11.64/-13.07	-14.31/-15.53	-19.11/-18.83	-19.09/-17.69	-17.55/-18.32	-17.74/-15.33
Θ(165°)	-18.39/-18.1	-18.59/-15.48	-13.41/-11.74	-10.08/-8.32	-6.81/-5.33	-4.18/-3.49	-3.48/-3.97	-4.94/-6.05	-7.58/-9.27	-11.6/-14.95	-19.25/-18.44	-18.48/-14.06	-11.38/-9.63	-8.92/-9.59	-12.01/-16.88	-19.01/-18.47	-18.34/-19.23	-18.38/-17.79	-17.85/-17.67	-17.9/-18.28	-17.35/-18.86	-19.08/-18.22	-17.77/-19.39	-18.19/-18.95
Θ(172.5°)	-16.59/-15.53	-14.75/-14.36	-14.26/-13.75	-13.26/-12.22	-10.92/-9.62	-8.7/-8.35	-8.7/-9.33	-10.52/-12.04	-14.01/-15.63	-16.84/-17.88	-19.03/-19.1	-17.69/-17.34	-18.44/-18.53	-18.26/-18.93	-17.9/-19.08	-16.39/-15.24	-14.87/-14.91	-15.44/-15.77	-15.56/-15.3	-16/-18.08	-18.86/-18.56	-18.69/-19.13	-17.84/-19.95	-18.95/-17.38
Θ(180°)	-18.8/-18.9	-17.88/-17.9	-17.23/-18.98	-18.15/-18.33	-17.95/-18.85	-18.85/-17.1	-17.79/-17.57	-18.37/-19.11	-17.77/-18.82	-18.77/-18.9	-19.24/-17.82	-18.03/-17.48	-17.94/-18.72	-17.99/-17.84	-18.06/-17.1	-16.47/-16.6	-17.8/-19.19	-17.25/-18.24	-17.73/-18.79	-17.58/-18.18	-18.47/-18.88	-18.37/-18.79	-18.61/-18.03	-18.9/-17.56
Freq(Hz))	5.6G/Pol.	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°)	0.59/0.62	0.63/0.51	0.1/-0.41	-1.13/-2.18	-3.39/-4.96	-6.96/-9.88	-14.42/-18.71	-16.05/-11.32	-8.14/-6.04	-4.59/-3.5	-2.7/-2.09	-1.59/-1.16	-0.85/-0.82	-0.97/-1.27	-1.63/-2.03	-2.59/-3.4	-4.77/-6.63	-9.06/-12.72	-19.32/-19.02	-13.83/-9.5	-6.69/-4.43	-2.8/-1.63	-0.79/-0.3	-0.04/0.29
Θ(7.5°)	-0.68/-0.59	-0.44/-0.49	-0.81/-1.21	-1.83/-2.78	-3.75/-4.96	-6.81/-9.52	-13.15/-17.26	-15.37/-10.89	-7.68/-5.55	-4.02/-3.02	-2.25/-1.6	-1.0/-0.45	-0.18/-0.09	-0.1/-0.34	-0.74/-1.29	-2.01/-3.05	-4.5/-6.34	-8.73/-12.42	-18.97/-19.05	-13.86/-9.62	-6.94/-4.91	-3.46/-2.27	-1.48/-1.06	-0.95/-0.75
Θ(15°)	-2.24/-2.07	-1.89/-1.95	-2.34/-2.86	-3.52/-4.37	-5.06/-6.34	-8.48/-11.11	-14.73/-19.08	-17.26/-12.08	-8.7/-6.29	-4.56/-3.39	-2.51/-1.81	-1.33/-0.82	-0.59/-0.37	-0.34/-0.49	-0.75/-1.12	-1.66/-2.38	-3.59/-5.1	-7.36/-10.97	-17.83/-18.38	-13.86/-9.76	-7.39/-5.79	-4.69/-3.94	-3.27/-2.79	-2.75/-2.47
Θ(22.5°)	-4.16/-3.77	-3.89/-4.25	-4.64/-4.82	-4.97/-5.24	-5.78/-7.24	-9.04/-10.86	-14.38/-18.8	-17.68/-14.38	-10.47/-7.7	-5.48/-4.08	-3.21/-2.84	-1.86/-1.89	-1.98/-2.01	-1.88/-1.84	-1.92/-2.25	-2.92/-4.33	-6.79/-11.04	-18.73/-18.51	-11.98/-8.64	-6.79/-5.51	-4.68/-4.52	-4.77/-4.87	-5.1/-4.62	
Θ(30°)	-5.98/-5.5	-5.41/-5.5	-5.67/-5.64	-5.65/-5.99	-6.56/-7.91	-9.36/-11.49	-15.04/-18.94	-18.66/-13.25	-9.26/-6.73	-4.64/-3.3	-2.74/-2.16	-1.41/-1.21	-1.54/-2.09	-2.34/-2.35	-2.63/-3	-3.03/-3.17	-3.73/-5.2							



Radiated Composite Gain Data <2.4GHz and 5GHz U-NII 1~U-NII 4>

Appendix A

°)	35																							
Θ(180°)	-18.71/-18.25	-18.66/-18.68	-18.38/-18.29	-18.12/-18	-17.81/-17.28	-17.41/-17.84	-18.21/-19	-18.32/-18.59	-18.62/-18.46	-18.02/-18.54	-19.11/-18.87	-19.05/-18.47	-17.79/-18.52	-17.36/-17.19	-18.01/-17.99	-18.58/-17.55	-18.1/-19.27	-18.09/-18.35	-17.77/-18.43	-18.38/-19.05	-18.71/-18.16	-18.02/-19.11	-18.14/-18.21	-18.79/-17.62
Freq(Hz)	5.785G/Pol.	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°)	0.25/0.2	0.04/-0.3	-0.73/-1.16	-1.67/-2.38	-3.44/-4.95	-6.89/-9.12	-11.91/-14.24	-12.98/-9.89	-7.25/-5.29	-3.7/-2.64	-1.85/-1.31	-0.83/-0.35	-0.08/-0.07	-0.26/-0.46	-0.74/-1.14	-1.79/-2.77	-3.99/-5.43	-7.33/-9.36	-11.07/-11.81	-11.21/-9.02	-6.73/-5.29	-4.01/-2.84	-1.9/-1.15	-0.44/-0.06
Θ(7.5°)	-0.22/-0.29	-0.45/-0.9	-1.49/-2.2	-2.71/-3.42	-4.52/-5.84	-7.04/-8.77	-10.83/-12.94	-13.53/-12.18	-9.7/-7.26	-5.34/-3.81	-2.67/-1.8	-0.99/-0.4	0.01/-0.28	-0.75/-1.34	-2.2/-3.29	-4.75/-6.74	-9.38/-13.37	-17.19/-16.03	-11.71/-8.01	-5.63/-4.19	-2.96/-1.99	-1.26/-0.74	-0.31/-0.1	
Θ(15°)	-1.97/-2.46	-2.94/-3.6	-4.06/-4.46	-4.57/-4.96	-5.63/-5.86	-6.52/-8.07	-9.85/-12.16	-14.7/-16.07	-13.45/-10.19	-7.48/-5.52	-3.93/-2.61	-1.64/-0.99	-0.78/-0.64	-0.72/-0.88	-1.19/-1.7	-2.42/-3.55	-5.08/-7.21	-10.46/-15.9	-18.17/-19.37	-12.18/-8.21	-5.94/-4.45	-3.3/-2.51	-1.95/-1.72	-1.48/-1.69
Θ(22.5°)	-4.98/-5.99	-6.56/-6.8	-6.57/-6.32	-6.18/-6.44	-6.19/-6	-6.91/-8.33	-10.82/-14.71	-16.44/-12.16	-8.48/-6.11	-4.66/-3.45	-2.33/-1.58	-1.26/-1.33	-1.44/-1.4	-1.18/-0.95	-1.04/-1.3	-1.95/-2.87	-4.12/-5.81	-8.15/-12.1	-18.91/-17.93	-14.77/-10.28	-7.59/-6.39	-5.71/-5.36	-4.71/-4.28	-4.04/-4.5
Θ(30°)	-7.3/-7.89	-8.08/-7.71	-6.7/-6.48	-6.69/-6.91	-6.64/-6.93	-8.1/-10.23	-14.5/-19.03	-15.26/-9.87	-6.18/-4.13	-2.94/-2	-1.03/-0.65	-0.63/-0.64	-0.86/-1.46	-2.28/-3	-3.36/-3.48	-3.65/-3.72	-4.06/-5.12	-7.76/-12.43	-17.7/-18.27	-13.24/-11.27	-9.77/-8.21	-7.78/-7.67	-7.25/-7.4	-7.8/-7.4
Θ(37.5°)	-8.32/-8.7	-7.49/-6.59	-5.8/-4.55	-5.04/-4.56	-4.63/-5.7	-7.66/-10.36	-14.18/-15.83	-11.34/-7.7	-4.8/-3.21	-2.63/-1.99	-1.59/-1.79	-1.74/-1.56	-2.01/-3.03	-3.73/-4.06	-4.46/-4.59	-3.99/-3.22	-3.55/-5.18	-7.9/-12.75	-18.73/-18.27	-16.01/-10.57	-9.1/-8.44	-8.43/-9.94	-9.39/-8.67	-9.06/-8.6
Θ(45°)	-5.13/-4.51	-3.79/-3.87	-3.95/-4.06	-3.03/-3.97	-4.56/-5.9	-8.23/-11.94	-13.89/-12.69	-10.55/-9.04	-7.25/-5.46	-4.21/-2.93	-1.88/-1.51	-1.2/-1.25	-1.79/-2.12	-2.98/-3.73	-4.97/-5.64	-6.24/-5.58	-4.97/-6.35	-9.1/-13.76	-19.02/-14.42	-10.17/-9.86	-10.4/-11.57	-10.92/-10.73	-10.07/-8.05	-6.56/-5.5
Θ(52.5°)	-7.09/-5.6	-4.6/-4.28	-3.37/-2.36	-1.53/-1.29	-2.2/-4.58	-8.63/-12.85	-10.77/-7.82	-6.41/-6.45	-6.48/-5.11	-3.95/-3.06	-2.46/-2.3	-2.21/-2.65	-3.12/-3.61	-3.69/-3.89	-4.4/-5.59	-6.44/-7.11	-7.35/-8.53	-10.81/-15.82	-17.69/-19.07	-13.87/-10.84	-10.87/-11.64	-13.8/-11.72	-12.91/-11.1	-8.23/-7.03
Θ(60°)	-8.91/-7.95	-7.5/-6.66	-5.35/-3.7	-2.23/-1.6	-2.15/-4.02	-8.28/-15.84	-9.12/-5.99	-4.82/-4.66	-5.33/-5.67	-5.31/-4.35	-3.17/-2.7	-2.7/-3.52	-4.07/-4.96	-5.39/-5.23	-4.61/-5.43	-7.22/-8.67	-8.92/-10.3	-13.2/-17.18	-17.33/-18.68	-14.43/-12.71	-13.4/-14.6	-13.57/-13.46	-13.58/-15.94	-12.73/-10.08
Θ(67.5°)	-14.47/-12.22	-10.41/-9.12	-8.19/-6.76	-5.42/-4.3	-3.88/-5.5	-9.36/-17.98	-14.51/-8.69	-6.77/-6.88	-7.11/-6.81	-6.44/-6.45	-6.05/-5.82	-5.92/-6.63	-7.34/-9.2	-10.66/-8.6	-7.43/-7.98	-8.49/-8.5	-8.51/-8.93	-15.15/-15.27	-18.43/-14.37	-14.7/-10.71	-15.39/-19.01	-17.09/-15.28	-14.77/-17.29	-17.31/-15.74
Θ(75°)	-18.52/-15.91	-15.91/-14.51	-12.85/-10.13	-8.26/-7.76	-8.38/-10.1	-12.09/-15.45	-13.83/-10.08	-7.63/-6.62	-6.92/-7.75	-8.36/-9.16	-9.32/-8.94	-7.87/-8.87	-8.73/-10.72	-12.13/-14.38	-14.21/-11.09	-11.84/-15.23	-16.62/-15.49	-12.33/-12.3	-17.43/-15.35	-13.44/-12.34	-17.2/-17.21	-15.98/-13.88	-16.64/-18.93	-19.55/-18.14
Θ(82.5°)	-18.04/-18.05	-17.78/-18.34	-17.58/-15.71	-17.87/-19.06	-18.25/-17.52	-14.87/-12.96	-10.68/-7.89	-6.41/-6.59	-7.41/-8.7	-10.02/-11.69	-11.91/-12.83	-12.55/-13.32	-11.08/-11.25	-13.14/-17.54	-18.53/-16.55	-14.96/-13.87	-11.13/-14.43	-16.23/-15.99	-17.85/-18.66	-12.27/-16.43	-18.3/-16.05	-16.4/-19.1	-17.76/-18.44	-18.23/-18.62
Θ(90°)	-17.17/-17.86	-18.13/-18.66	-17.99/-18.82	-18.64/-18.02	-17.33/-14.22	-11.44/-8.85	-7.79/-7.86	-7/-5.92	-5.31/-5.22	-6.06/-8.25	-11.14/-13.84	-15.6/-17.3	-16.88/-17.77	-18.22/-17.55	-18.4/-18.9	-17.8/-18.11	-17.35/-18.39	-12.77/-11.79	-16.07/-19.07	-16.05/-19.15	-18.39/-17.09	-19.13/-19.21	-18.7/-18.3	-17.71/-18.84
Θ(97.5°)	-12.49/-15.66	-13.65/-13.93	-12.26/-14.31	-18.63/-18.38	-15/-10.77	-8.46/-6.95	-5.48/-5.4	-7.36/-8.36	-7.26/-6.97	-7.51/-8.64	-10.83/-13.32	-13.52/-14.23	-14.22/-14.59	-15.73/-17.43	-18.49/-19.32	-18.81/-18.96	-19.32/-18.13	-15.21/-15.19	-18.47/-15.96	-11.89/-14.98	-17.89/-17.95	-18.89/-17.36	-15.99/-13.61	-12.34/-14.14
Θ(105°)	-13.44/-15.43	-16.63/-17.78	-15.54/-13.97	-11.32/-10.69	-11.02/-12.22	-11.99/-8.36	-6.12/-5.77	-6.32/-9.29	-11.65/-8.39	-5.81/-5.31	-5.41/-6.45	-8.31/-10.59	-13.43/-16.43	-16.03/-16.26	-17.2/-18.32	-18.87/-18.6	-18.42/-16.93	-14.04/-17.43	-18.18/-18.05	-15.71/-18.88	-18.16/-13.15	-12.03/-12.7	-14.63/-14.67	-14.4/-14.57
Θ(112.5°)	-18.99/-19.05	-16.71/-18.88	-18.98/-18.24	-12.43/-10.23	-9.03/-10.95	-16.21/-14.04	-9.08/-6.28	-6.36/-7.62	-9.89/-10.96	-7.92/-5.86	-4.93/-5.3	-6.14/-8.31	-10.81/-14.55	-15.84/-18.03	-19.1/-18.37	-17.95/-18.5	-17.66/-19.13	-16.95/-18.36	-18.89/-18.37	-18.83/-18.39	-16.02/-13.73	-16.82/-18.03	-18.29/-19.03	-18.98/-18.31
Θ(120°)	-17.8/-19.5	-18.98/-18.99	-16.72/-13.98	-9.52/-8.44	-8.72/-10.8	-14.4/-14.74	-11.52/-9.62	-7.87/-6.81	-6.63/-6.64	-5.55/-4.65	-4.51/-4.99	-6.36/-8.2	-9.93/-14.27	-12.73/-13.49	-11.55/-13.19	-16.68/-15.11	-17.11/-16.6	-17.46/-18.85	-17.92/-16.8	-16.33/-18.68	-18.79/-16.83	-18.71/-15.86	-16.95/-17.15	-17.54/-18.46
Θ(127.5°)	-18.58/-16.22	-13.74/-14.13	-13.13/-12	-10.11/-9.9	-11.51/-14.19	-12.55/-9.68	-8.06/-7.26	-6.4/-4.94	-3.23/-2.29	-2.36/-3.36	-4.3/-5.25	-6.75/-8.12	-10.57/-14.83	-13.44/-13.62	-17.07/-15.67	-18.01/-18.77	-17.5/-18.22	-14.25/-17.53	-17.83/-18.92	-16.82/-17.62	-14.37/-18.34	-19.19/-19.29	-18.62/-18.88	-18.45/-18.65
Θ(135°)	-18.8/-19.1	-17.91/-17.38	-17.31/-12.67	-10.55/-9.96	-10.59/-11.03	-9.58/-7.5	-5.91/-5.32	-4.92/-3.71	-2.41/-2.21	-3.51/-5.02	-6.96/-8.61	-9.87/-11.33	-10.74/-11.56	-12.21/-9.57	-10.02/-10.65	-14.95/-14.37	-18.99/-16.87	-18.58/-18.87	-18.25/-18.37	-18.06/-14.74	-14.21/-19.05	-17.97/-18.87	-18.26/-17.97	-18.31/-17.67
Θ(142.5°)	-18.63/-17.21	-14.26/-10.92	-10.49/-10.8	-11.11/-12.94	-13.57/-11.46	-8.22/-6.62	-6.6/-7.14	-7.39/-6.39	-4.77/-4.68	-4.12/-3.83	-4.06/-4.74	-6.18/-8.41	-12.58/-14.89	-14.59/-18.94	-18.31/-17.88	-17.91/-14.63	-9.63/-10.72	-17.6/-18.55	-18.04/-16.08	-13.41/-17.91	-14.66/-16.6	-18.18/-13.55	-13.11/-14.83	-15.33/-18.01
Θ(150°)	-6.71/-6.11	-7.25/-7.78	-7.67/-9.03	-10.84/-13.12	-14.34/-12.22	-10.21/-8.52	-7.79/-8.19	-8.54/-7.92	-7.25/-6.69	-5.77/-3.46	-3.02/-2.52	-2.97/-3.4	-3.91/-5.28	-7.54/-9.71	-13.1/-18.14	-18.92/-17.82	-18.95/-17.64	-17.79/-18.81	-19.12/-19.23	-16.52/-18.09	-18.9/-18.78	-13.47/-9.51	-7.45/-6.34	-6.59/-7.89
Θ(157.5°)	-11.64/-10.59	-11.58/-12.73	-11.64/-11.61	-11.58/-12.73	-14.68/-15.73	-15.52/-12.9	-10.41/-8.87	-8.37/-9.19	-11.59/-13.94	-13.88/-11.79	-9.06/-6.62	-5.14/-4.26	-3.61/-3.03	-2.95/-3.85	-5.47/-7.9	-10.6/-10.21	-9.51/-10.54	-12.28/-15.37	-18.04/-18.44	-11.61/-14.25	-19.14/-13.22	-10.68/-11.12	-11.62/-11.31	
Θ(165°)	-11.61/-13.2	-11.84/-12.9	-13.43/-12.91	-12.73/-12.29	-12.25/-12.43	-11.77/-11.18	-10.36/-9.54	-9.2/-9.04	-8.52/-7.67	-6.85/-6.08	-5.53/-5.02	-4.46/-4.24	-4.29/-5.06	-6.84/-9.92	-16.13/-17.68	-18.63/-17.54	-17.7/-17.37	-19.16/-19.06	-18.81/-17.34	-17.99/-18	-14.42/-13.58	-16.23/-18.03	-18.4/-18.1	-15.54/-13.06
Θ(172.5°)	-17.65/-18.01	-18.62/-19.27	-18.99/-16.17	-14.32/-13.28	-13.56/-15.62	-17.72/-17.91	-17.47/-14.97	-13.4/-12.8	-12.88/-13.72	-15.72/-17.29	-16.02/-14.13	-13.29/-13.56	-15.16/-18.04	-17.79/-18.04	-19.23/-17.3	-15.56/-15.96	-17.56/-19.17	-17.93/-18.24	-18.88/-19.06	-18.15/-18.28	-17.66/-16.33	-15.63/-17.01	-17.29/-16.87	-17.24/-17.08
Θ(180°)	-15.09/-15.36	-15.76/-16.58	-17.87/-18.36	-18.87/-17.63	-19.11/-17.88	-17.6/-18.42	-19.1/-18.75	-17.89/-19.09	-17.68/-17.53	-18.93/-19.2	-17.96/-19.1	-19/-17.73	-18.41/-18.66	-18.23/-19.25	-19.07/-18.93	-18.06/-17.75	-18.39/-19.2	-18.52/-18.62	-18.54/-17.94	-18.52/-18.01	-19/-18.27	-17.92/-18.03	-18.55/-18.93	-17.92/-15.71
Freq(Hz)	5.885G/Pol.	Phi/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°)	-11.19/-13.4	-15.01/-15.03	-13.31/-10.92	-8.61/-6.83	-5.53/-4.43	-3.49/-2.85	-2.28/-1.98	-1.95/-2.27	-2.69/-3.27	-3.99/-4.82	-5.55/-6.49	-7.55/-9.33	-11.4/-12.91	-12.35/-10.7	-9.11/-7.59	-6.14/-4.96	-3.93/-3.23	-2.61/-2.13	-1.92/-1.85	-1.93/-2.09	-2.32/-2.7	-3.12/-3.68	-4.65/-6.04	-7.34/-8.89
Θ(7.5°)	-13.02/-11.7	-10.39/-9.09	-8.32/-7.64	-6.77/-5.89	-5.03/-4.23	-3.56/-2.96	-2.33/-1.95	-1.72/-1.66	-1.76/-1.91	-2.21/-2.7	-3.43/-4.34	-5.59/-7.18	-9.08/-11.82	-14.35/-14.32	-11.76/-9.03	-6.76/-4.9	-3.57/-2.58	-1.97/-1.59	-1.42/-1.51	-1.77/-2.32	-3.06/-3.99	-5.06/-6.22	-8.21/-10.55	-12.53/-13.45
Θ(15°)	-9.78/-8.26	-7.13/-6.42	-6.17/-5.83	-5.44/-5.1	-4.57/-4.03	-3.44/-2.65	-1.89/-1.33	-0.93/-0.83	-0.95/-1.22	-1.74/-2.37	-3.19/-4.33	-5.84/-7.77	-9.76/-12	-13.75/-14.28	-12.95/-10.36	-7.72/-5.63	-4.14/-3.06	-2.35/-2.01	-1.97/-2.27	-2.8/-3.61	-4.69/-6	-7.73/-10.16	-14.3/-18.17	-15.96/-11.88
Θ(22.5°)	-19.49/-9.25	-7.4/-6.49	-5.63/-4.88	-4.47/-4.2	-3.65/-3.05	-2.13/-1.26	-0.68/-0.38	-0.15/-0.01	-0.07/-0.56</															



Radiated Composite Gain Data <2.4GHz and 5GHz U-NII 1~U-NII 4>

Appendix A

Θ(0°)	-12.59/-9.3 7	-8.31/-8.87	-8.65/-8.36	-7.7/-7.31	-7.32/-7.41	-7.52/-7.99	-8.09/-8.05	-8.87/-9.68	-10.32/-10.89	-11.27/-11.21	-10.71/-10.64	-11.24/-11.53	-10.76/-9.89	-9.01/-8.38	-8.03/-7.98	-7.79/-7.98	-8.35/-8.85	-9.14/-9.45	-10.05/-10.51	-10.46/-10.56	-11.03/-11.99	-12.35/-12.14	-12.01/-11.51	-11.45/-12.93
Θ(7.5°)	-12.02/-10.13	-10.62/-10.84	-9.64/-9.59	-9.17/-9.12	-9.57/-11.03	-12.26/-13.72	-14.24/-14.95	-16.58/-16.97	-16.12/-15.38	-14.15/-13.03	-12.57/-12.53	-12.25/-11.69	-11.19/-9.93	-8.47/-7.25	-6.4/-5.92	-5.99/-6.16	-6.59/-6.96	-6.44/-6.24	-7.1/-8.06	-7.93/-8.02	-7.96/-7.73	-7.7/-7.86	-7.79/-7.64	-8.55/-11.31
Θ(15°)	-18.44/-16.74	-14.46/-12.34	-10.72/-9.89	-8.98/-8.63	-9.38/-11.49	-13.98/-15.39	-15.64/-16.56	-17.3/-18.48	-17.72/-15.57	-12.44/-10.45	-8.71/-7.62	-7.34/-7.07	-6.73/-6.07	-5.17/-4.39	-3.86/-3.77	-4.06/-4.49	-5.74/-6.95	-8.26/-9.1	-9.74/-10.63	-10.17/-9.31	-7.87/-7.09	-6.77/-7.2	-7.7/-8.25	-10.52/-16.12
Θ(22.5°)	-11.23/-13.36	-13.78/-11.87	-10/-7.29	-5.92/-5.36	-5.53/-6.98	-8.54/-9.81	-11.19/-11.59	-11.22/-10.6	-10.8/-11.49	-11.8/-10.83	-9.5/-8.56	-7.88/-7.07	-5.98/-5	-4.21/-3.9	-3.64/-3.47	-3.48/-4.02	-5.03/-6.62	-8.95/-10.66	-12.26/-11.41	-9.17/-7.91	-7.79/-7.89	-8.52/-9.82	-12.43/-13.17	-12.83/-12.81
Θ(30°)	-7.93/-11.62	-13.88/-18.87	-18.42/-14.23	-9.22/-7.02	-6.92/-8.07	-9.22/-10.15	-12.39/-16.8	-17.11/-16.03	-10.83/-9.72	-9.93/-10.88	-11.77/-12.97	-12.17/-8.9	-6.67/-5.96	-5.59/-4.68	-3.75/-3.33	-3.14/-3.48	-4.01/-4.89	-5.76/-6.77	-8/-8.99	-10.96/-14.23	-14.66/-10.87	-8.06/-7.15	-7.57/-6.82	-6.75/-6.99
Θ(37.5°)	-10.16/-13.86	-12.17/-10.56	-10.07/-13.3	-16.36/-13.7	-13.03/-14.59	-17.62/-18.91	-18.08/-17.59	-17.5/-16.18	-17.82/-18.91	-14.21/-10.83	-10.68/-10.14	-8.99/-6.59	-4.42/-2.79	-2.05/-1.51	-1.47/-2.2	-3.68/-5.13	-6.13/-6.1	-6.16/-7.76	-10.71/-12.6	-9.31/-7.29	-7.74/-8.92	-8.79/-8.15	-8.33/-9.35	-10.48/-9.7
Θ(45°)	-18.35/-18.6	-18.06/-14.27	-15.51/-17.84	-18.1/-18.08	-17.69/-17.2	-18.27/-17.59	-17.45/-18.1	-17.57/-15.22	-16.09/-17.08	-18.11/-17.85	-8.67/-5	-4.38/-4.19	-2.44/-0.72	-0.08/0.16	0.71/1.19	1.39/1.2	0.34/-1.01	-3.98/-10.12	-18.06/-12.71	-7.38/-5.45	-6.45/-12.17	-17.81/-14.71	-9.75/-8.71	-10.91/-17.8
Θ(52.5°)	-9.66/-9.5	-14.4/-19.16	-18.7/-18.19	-18.22/-17.76	-13.91/-13.31	-16.46/-17.95	-17.78/-11.95	-11.82/-18.19	-15.69/-14.03	-14.93/-15.51	-13.68/-9.25	-6.14/-5.31	-4.99/-3.24	-2.34/-2.69	-2.64/-1.72	-0.30/-7.8	0.01/1.09	-4.75/-11.28	-6.67/-4.84	-5.71/-7.74	-9.58/-9.52	-10.45/-16.43	-18.65/-18.45	-13.66/-10.75
Θ(60°)	-11.8/-15.2	-14.61/-12.44	-13.55/-13.69	-18.12/-19.26	-10/-7.16	-7.13/-8.83	-13.12/-18.87	-16.21/-13.55	-16.98/-19.03	-12.37/-10.34	-18.19/-7.23	-6.42/-4.53	-3.17/-3.06	-2.92/-2.31	-1.16/-4.23	-5.31/-2.61	-1.01/-2.26	-4.39/-5.72	-5.46/-6.12	-5.73/-3.41	-9.69/-13.3	-9.04/-11.69	-8.71/-6.66	-6.19/-7.86
Θ(67.5°)	-13.34/-12.48	-11.79/-10.49	-8.65/-7.93	-9.25/-10.9	-9.88/-9.98	-14.38/-18.9	-12.55/-11.59	-14.04/-17.18	-16.46/-14.45	-15.32/-16.34	-18.45/-17.75	-14.86/-9.17	-5.01/-3.38	-1.94/-1.13	-1.3/-2.32	-2.93/-4.11	-2.36/0.06	-0.45/-2.91	-6/-3.78	-2.44/-3.33	-5.42/-6.44	-8.22/-12.64	-15.56/-13.06	-13.5/-12.86
Θ(75°)	-6.91/-10.2	-13.26/-18.46	-17.89/-12.89	-12.39/-16.89	-18.58/-15.09	-15.28/-16.93	-18.96/-16.02	-18.21/-18.67	-18.96/-17.42	-18.65/-17.29	-18.51/-19.43	-16.16/-11.42	-9.59/-7.02	-4.41/-3.53	-3.46/-4.63	-4.85/-7.01	-5.86/-3.51	-3.68/-2.74	-3.88/-3.35	-2.28/-4.63	-5.87/-4.09	-3.98/-6.9	-8.95/-12	-11.8/-8.14
Θ(82.5°)	-5.55/-8.91	-14.86/-15.81	-17.7/-18.01	-16.87/-18.98	-19.15/-18.13	-14.75/-13.38	-16.08/-14.36	-14.49/-15.89	-13.49/-9.33	-8.57/-8.9	-9.15/-8.64	-5.15/-2.86	-2.23/-0.74	0.02/-0.29	-0.18/-2.79	-5.34/-6.09	-2.64/-3.57	-6.73/-7.35	-6.24/-1.94	-0.92/-5.69	-9.52/-7.64	-7.14/-7.83	-10.63/-16.7	-13.65/-8.13
Θ(90°)	-8.32/-11.26	-12.75/-12.9	-12.8/-10.75	-11.54/-13.37	-15.15/-19.36	-18.17/-13.84	-14.91/-19	-18.4/-13.8	-8.81/-8.55	-11.64/-13.88	-9.04/-5.03	-2.44/-1.77	-0.67/-0.07	0.47/1.84	1.64/-0.91	-2.68/-3.02	-0.41/1.51	1.45/-2.1	-6.85/-3.33	-0.14/-5.09	-10.3/-6.37	-4.74/-3.59	-4.4/-7.04	-6.76/-6.13
Θ(97.5°)	-3.47/-8.84	-9.31/-9.23	-13.06/-18.61	-18.19/-15.29	-13.75/-18.16	-18.98/-18.43	-19.92/-17.38	-15.17/-18.65	-18.67/-18.24	-19.08/-11.18	-7.64/-5.51	-4.26/-5.07	-2.48/-1.12	0.13/1.52	1.4/-0.36	-1.77/-0.78	-1.42/1.6	2.27/1.72	-1.7/-0.45	-0.79/-5.54	-4.91/-2.31	-3.63/-9.07	-13.1/-17.39	-8.91/-4.72
Θ(105°)	-5.79/-12.14	-15.11/-15.74	-11.57/-9.09	-9.28/-15.6	-18.05/-12.67	-8.76/-9.69	-12.28/-17.74	-12.11/-11.81	-11.49/-11.59	-10.27/-5.58	-4.67/-4.76	-3.77/-2.01	0.74/1.3	1.92/3.41	3.91/0.6	-2.84/-0.96	0.07/1.55	0.95/0.38	-5.11/-0.74	1.61/-3.74	-6.08/-1.14	-1.21/-4.94	-5.73/-9.2	-17.62/-7.7
Θ(112.5°)	-5.01/-6.31	-7.83/-8.3	-13.51/-12.09	-7.36/-8.78	-11.63/-17.72	-12.94/-10	-10.2/-9.85	-10.18/-9.63	-7.78/-8.82	-6.82/-4.28	-3.85/-2.16	-0.6/0.33	1.81/1.77	2.95/4.89	3.7/-1.76	-3.06/-0.32	2.76/3.34	3.24/-1.18	-8.04/-0.91	2.15/-0.78	-5.03/-2.09	-2.78/-4.43	-5.07/-6.82	-9.71/-7.11
Θ(120°)	-9.42/-9.89	-9.4/-9.61	-17.46/-18.53	-14.15/-10.47	-10.07/-12.64	-17.57/-17.99	-18.25/-18.96	-11.51/-11.43	-16.83/-16.15	-9.64/-10.45	-11.51/-7.35	-4.78/-2.34	-1/-0.27	2.47/2.78	-0.64/-1.72	-1.01/0.56	2.82/3.58	3.53/-0.93	-4.94/-0.96	2.04/-0.23	-6.21/-4.82	-3.86/-5.99	-5.21/-7.61	-11.28/-9.78
Θ(127.5°)	-18.93/-11.9	-15.2/-17.72	-15.45/-15.02	-18.79/-19.13	-18.94/-19.02	-13.78/-12.69	-14.55/-13.39	-9.1/-12.11	-18.89/-11.08	-13.56/-17.75	-11.55/-8.53	-7.18/-5.89	-5.76/-3.82	-2.08/-1.5	-1.29/-1.62	-1.36/1.49	2.54/2.51	1.47/-2.34	-3.64/-0.38	1.39/0.34	-2.82/-3.35	-2.89/-3.82	-4.91/-5.84	-9.04/-15.37
Θ(135°)	-14.61/-14.1	-9.97/-10.05	-10.19/-10.52	-12.78/-18.11	-18.88/-12.92	-11.08/-11.96	-18.86/-18.69	-13.34/-15.37	-10.94/-9.88	-11.72/-14.89	-18.72/-15.95	-9.57/-5.6	-4.37/-2.47	-0.56/-0.09	-1.59/-2.4	-0.42/0.28	-0.37/-1.21	-3.77/-10.7	-10.21/-5.21	-1.89/-2.12	-3.9/-3.93	-2.17/-3.03	-6.03/-8.01	-11.1/-12.93
Θ(142.5°)	-13.66/-15.44	-14.17/-15.67	-18.28/-16.92	-16.04/-8.99	-5.78/-5.2	-6.2/-7.91	-10.93/-15.51	-17.25/-14.75	-11.87/-11.99	-12.44/-13.57	-14.35/-11.43	-6.99/-4.96	-5.47/-5.6	-4.34/-3.43	-2.33/-0.73	-1.1/-2.38	-2.59/-3.16	-6.38/-14.56	-17.22/-9.7	-6.33/-8.17	-13.54/-14.3	-10.74/-8.29	-8.29/-8.76	-10.38/-12.66
Θ(150°)	-5.94/-7	-8.32/-7.71	-7.95/-10.12	-11.64/-9.01	-7.47/-7.64	-8.52/-9.31	-10.62/-12.52	-14.24/-12.73	-11.36/-10.02	-8.94/-8.44	-8.27/-8.27	-7.88/-9.4	-11.44/-11.43	-9.36/-7.09	-5.88/-6.2	-8.49/-9.48	-3.78/-11.48	-17.15/-18.51	-18.05/-14.88	-10.82/-9.23	-9.46/-10.21	-11.08/-11.63	-10.35/-8.64	-7.2/-5.93
Θ(157.5°)	-13.68/-14.52	-13.77/-13.92	-14.99/-14.74	-13.19/-12.94	-13.63/-14.14	-18.92/-19.21	-16.68/-14.02	-11.77/-11.68	-10.64/-9.58	-2.66/-8.4	-7.89/-7.2	-6.51/-6.26	-6.53/-7.23	-6.87/-5.38	-3.93/-3.34	-9.34/-4.48	-5.46/-5.8	-7.54/-6.12	-5.67/-6.88	-7.57/-6.12	-9.69/-13.31	-17.92/-17.98	-12.72/-11.74	
Θ(165°)	-13.07/-12.72	-13.64/-15.52	-19.29/-18.3	-19.47/-18.56	-17.45/-17.87	-18.77/-18	-14.43/-13.29	-11.61/-10.97	-10.48/-10.51	-11.63/-12.98	-14.66/-15.3	-15.45/-15.69	-15.53/-14.51	-12.52/-10.67	-9.24/-3.87	-7.59/-6.8	-6.15/-5.77	-5.42/-5.86	-7.11/-9.46	-10.73/-10.72	-13/-18.09	-18.76/-17.89	-15.07/-12.23	-11.52/-13.44
Θ(172.5°)	-13.51/-13.9	-13.86/-12.36	-12.65/-12.76	-13.75/-15.94	-17.57/-16.08	-13.31/-11.36	-10.45/-10.53	-11.69/-13.14	-13.62/-13.79	-14.81/-16.37	-18.07/-19.09	-17.55/-18.7	-18.26/-19.15	-17.72/-18.78	-17.86/-18.76	-17.86/-18.29	-14.57/-12.06	-10.96/-10.65	-10.96/-11.15	-12.25/-15.84	-18.44/-15.03	-13.35/-13.56	-13.84/-13.18	-12.38/-14.16
Θ(180°)	-15.12/-17.75	-18.48/-18.34	-17.63/-18.62	-18.62/-17.61	-15.75/-13.53	-13.17/-14.49	-15.32/-16.3	-16.36/-14.94	-13.46/-12.8	-12.81/-12.66	-12.46/-12.22	-11.43/-10.86	-10.54/-10.98	-11.84/-12.7	-13.51/-14.86	-16.23/-18.11	-17.09/-19.3	-17.42/-16.32	-16.58/-16.73	-16.57/-17.76	-17.81/-17.48	-16.52/-14.16	-13.11/-12.22	-12.19/-12.55
Freq(Hz)	5.2G/Pol.	Theta/Ant. 5	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Gain	Φ(0°)/Φ(7.5°)	Φ(15°)/Φ(22.5°)	Φ(30°)/Φ(37.5°)	Φ(45°)/Φ(52.5°)	Φ(60°)/Φ(67.5°)	Φ(75°)/Φ(82.5°)	Φ(90°)/Φ(97.5°)	Φ(105°)/Φ(112.5°)	Φ(120°)/Φ(127.5°)	Φ(135°)/Φ(142.5°)	Φ(150°)/Φ(157.5°)	Φ(165°)/Φ(172.5°)	Φ(180°)/Φ(187.5°)	Φ(195°)/Φ(202.5°)	Φ(210°)/Φ(217.5°)	Φ(225°)/Φ(232.5°)	Φ(240°)/Φ(247.5°)	Φ(255°)/Φ(262.5°)	Φ(270°)/Φ(277.5°)	Φ(285°)/Φ(292.5°)	Φ(300°)/Φ(307.5°)	Φ(315°)/Φ(322.5°)	Φ(330°)/Φ(337.5°)	Φ(345°)/Φ(352.5°)
Θ(0°)	-10.76/-12.6	-13.31/-12.3	-11.64/-12.22	-13.37/-14.25	-15.33/-18.41	-18.94/-17.18	-14.62/-12.38	-10.6/-9.66	-9.63/-9.25	-8.93/-8.57	-8.21/-8.24	-8.38/-8.75	-9.42/-10.39	-11.1/-11.68	-12.12/-12.57	-13.75/-15.53	-15.64/-15.93	-15.61/-13.81	-11.76/-10.16	-9.29/-8.58	-8.34/-7.77	-7.17/-7.09	-7.43/-7.44	-7.96/-9.65
Θ(7.5°)	-9.25/-8.73	-10.97/-12.44	-13.96/-14.07	-14.81/-15.19	-14.53/-14.14	-13.32/-14.27	-14.33/-12.19	-10.58/-9.73	-9.65/-9.04	-8.39/-7.58	-6.97/-6.36	-6.24/-6.06	-6.18/-6.37	-6.79/-7.61	-8.56/-9.42	-11.05/-14.07	-17.55/-19.29	-18.03/-14.14	-12.13/-11.42	-10.59/-10.29	-10.52/-10.71	-9.2/-9.35	-9.13/-7.94	-8.17/-9.7
Θ(22.5°)	-7.47/-6.33	-7.7/-8.67	-10.33/-11.97	-12.42/-14.13	-13.46/-14.06	-13.55/-12.46	-11.9/-10.26	-9.26/-8.05	-7.49/-7.01	-6.79/-7	-6.74/-6.5	-5.66/-5	-4.55/-4.76	-5.73/-7.42	-9.76/-11.78	-12.86/-13.57	-16.68/-18.2	-18.32/-13.62	-11.12/-9.85	-9.88/-11.26	-14.4/-17.02	-17.08/-17.53	-15.43/-11.42	-8.95/-8.06
Θ(30°)	-10.08/-11.8	-12.04/-11.6	-11.22/-9.54	-7.7/-7.14	-6.93/-7.2	-8.05/-9.5	-9.59/-10.31	-10.65/-9.63	-8.3/-6.95	-6.04/-5.86	-6.48/-6.61	-6.69/-6.7	-6.79/-7.25	-7.68/-8.38	-9.45/-10.02	-10.39/-11.5	-15.39/-18.36	-19.03/-15.46	-14.68/-12.78	-11.65/-11.34	-13.71/-18.67	-16.37/-14.58	-13.09/-12.49	-10.42/-9.55
Θ(37.5°)	-17.18/-18.52	-17.99/-18.45	-17.8/-18.39	-12.7/-9.33	-7.11/-5.75	-5.42/-6.45	-8.5/-13.57	-18.48/-17.13	-13.54/-11.8	-9.93/-8.24	-7.68/-7.26	-8.23/-9.8	-9.73/-7.14	-6.17/-6.69	-7.65/-9.36	-11.21/-11.52	-12.67/-13.41	-10.54/-9.19	-10.14/-14.46	-19.07/-17.28	-12.74/-10.49	-8.88/-8.86	-8.91/-9.66	-10.29/-14.28
Θ(45°)	-14.39/-10.99	-10.54/-12.41	-14.89/-17.87	-17.38/-12.91	-10.9/-10.01	-9.37/-10.82	-13.61/-17.42	-18.59/-14.29	-11.52/-13.09	-16.43/-16.28	-11.05/-8.4	-8.17/-10.77	-13.47/-10.04	-8.03/-8.56	-12.7/-15.92	-13.49/-10.94	-11.13/-12.31	-8.49/-6.92	-8.13/-9.92	-12.48/-18.29	-17.58/-13.03	-9.29/-8.74	-10.24/-12.49	-16.2/-18.18
Θ(52.5°)	-11.07/-10.5	-10.6/-13.73	-16.83/-16.41	-17.46/-18.79	-17.12/-14.03	-11.8/-13.29	-18.98/-19.08																	



Radiated Composite Gain Data <2.4GHz and 5GHz U-NII 1~U-NII 4>

Appendix A

Θ(30°)	-16.63/-19.48	-19.29/-15.94	-15.07/-13.97	-11.61/-9.45	-7.31/-5.93	-6.24/-7.11	-9.88/-14.64	-14.57/-9.63	-7/-6.17	-5.89/-5.11	-4.2/-4.03	-4.75/-6.62	-7.72/-6.82	-5.54/-5.2	-5.77/-6.77	-7.95/-8.4	-8.29/-10.77	-13.54/-9.28	-8.13/-10.03	-10.76/-11.26	-13.59/-11.23	-8.45/-8.33	-9.25/-9.01	-9.47/-12.53
Θ(37.5°)	-13.84/-14.83	-15.79/-15.91	-15.87/-16.93	-14.45/-11.55	-10/-9.57	-11.38/-12.67	-16.8/-19.01	-15.15/-9.25	-7.22/-7.43	-7.65/-6.67	-5.62/-4.89	-5.58/-7.48	-10.09/-9.6	-7.28/-6.71	-9.27/-13.26	-12.12/-9.54	-7.9/-8.9	-6.97/-3.69	-4/-6.85	-12.14/-15.09	-13.42/-9.12	-6.78/-5.96	-6.22/-7.63	-12.68/-16.64
Θ(45°)	-16/-13.13	-13.81/-16.57	-18.5/-18.46	-18.2/-18.81	-18.8/-15.03	-14.98/-18.23	-19.22/-15.45	-12.95/-12.05	-11.91/-11.67	-9.1/-7.08	-5.76/-5.13	-6.38/-7.59	-5.65/-4.1	-5.05/-7.48	-9.91/-11.62	-10.04/-7.82	-7.65/-11.09	-14.43/-14.84	-11.59/-7.23	-6.78/-10.55	-15.66/-14.33	-11.17/-10.46	-11.77/-15.27	-18.07/-18.88
Θ(52.5°)	-17.84/-19.23	-18.71/-17.84	-18.88/-19.05	-17.74/-16.01	-14.22/-14.41	-18.3/-19.08	-18.93/-10.62	-8.99/-11.1	-12.1/-11.86	-9.09/-5.25	-4.61/-3.49	-3.87/-5.79	-5.63/-3.65	-3.59/-5.36	-7.1/-8.05	-8.61/-6.74	-6.27/-6.56	-9.59/-18.78	-17.82/-18.04	-12.68/-11.05	-15.74/-17.87	-19.03/-18.14	-15.89/-17.92	-18.2/-18.57
Θ(60°)	-8.76/-9.8	-10.86/-10.37	-12.57/-17.55	-18.5/-17.64	-19.13/-19.02	-18.96/-16.96	-14.73/-13.38	-10.07/-9.71	-10.99/-11.86	-10.46/-7.57	-6.29/-4.59	-3.22/-3.92	-3.76/-2.92	-3.34/-4.56	-6.13/-8.02	-7.19/-7.99	-8.12/-5.2	-5.83/-8.35	-14.51/-17.82	-16/-13.31	-17.46/-19.23	-17.23/-18.28	-17.91/-15.72	-12.76/-9.36
Θ(67.5°)	-8.23/-8.22	-7.21/-7.21	-10.13/-12.2	-11.17/-13.26	-18.12/-17.57	-12.15/-11.67	-16.5/-18.4	-16.11/-11.54	-11/-13.2	-12.37/-8.29	-6.41/-6.33	-6.01/-6.11	-4.27/-2.56	-2.46/-3.06	-4.29/-9.28	-9.9/-12.83	-9.82/-10.09	-10.43/-13.8	-18.24/-17.9	-14.78/-18.05	-11.15/-9.44	-8.69/-11.81	-12.73/-9.11	
Θ(75°)	-12.44/-18.9	-17.97/-18.1	-12.46/-16.48	-18.63/-18.57	-15.76/-14.08	-17.6/-17.71	-14.06/-10.59	-12.44/-14.75	-10.89/-8.18	-7.16/-7.86	-9.75/-9.48	-6.44/-5.56	-5.17/-3.62	-2.93/-3.44	-5.18/-7.92	-11.22/-15.19	-9.27/-9.8	-10.41/-16.11	-18.59/-18.67	-17.85/-18.61	-14.78/-12.75	-13.42/-14.74	-12.43/-11.28	-10.19/-8.52
Θ(82.5°)	-17.9/-18.03	-18.09/-18.11	-18/-17.86	-19.01/-18.03	-15/-16.99	-18.49/-13.71	-13.81/-14.27	-13.31/-17.9	-15.12/-12.14	-11.78/-9.98	-7.18/-6.68	-6.55/-6.37	-6.38/-5.63	-4.76/-3.77	-5.1/-6.09	-10.46/-14.87	-9.39/-6.19	-6.03/-7.61	-6.9/-9.82	-17.82/-13.73	-9.13/-10.98	-12.13/-18.81	-18.89/-18.81	-18.6/-17.6
Θ(90°)	-17.67/-19.19	-13.23/-9.5	-8.54/-10.34	-13.05/-12.63	-18/-17.97	-18.81/-17.46	-19.26/-16.72	-19.01/-18.46	-17.21/-17.74	-19/-12.85	-9/-9.36	-7.38/-6.71	-5.56/-4.71	-4.58/-3.68	-4.27/-9.29	-12.38/-8.39	-6.38/-7.77	-8.72/-14.46	-11.15/-7.78	-18.89/-16.58	-16.14/-17.96	-10.43/-17.45	-12.72/-14.86	-16.27/-17.81
Θ(97.5°)	-18.1/-18.906	-18.74/-17.28	-17.68/-16.29	-17.86/-15.78	-17.46/-15.82	-19.16/-16.68	-15.9/-18.08	-19.22/-17.73	-18.49/-18.24	-12.82/-11.62	-14.85/-16.24	-9.93/-11.49	-10.83/-8.11	-7.51/-5.3	-3.71/-7.45	-9.74/-7.09	-3.89/-3.81	-7.47/-18.82	-17.66/-15.07	-9.1/-13.47	-15.21/-14.11	-18.42/-19.25	-16.99/-18.84	-17.25/-18.25
Θ(105°)	-14.75/-19.08	-18.71/-16.95	-18.42/-17.04	-15.74/-17.6	-17.44/-17.74	-18.81/-17.95	-18.27/-18.38	-16.55/-17	-18.7/-18.46	-13.92/-12.82	-11.09/-13.69	-13.34/-11.28	-10.8/-10.25	-14.51/-10.18	-9.71/-9.98	-9.01/-7.8	-8.34/-4.64	-4.54/-6.3	-9.27/-4.27	-3.91/-16.02	-14.43/-4.13	-7.16/-8.83	-6.5/-17.47	-10.75/-11.52
Θ(112.5°)	-13.08/-18.78	-18.09/-13.82	-15.26/-15.99	-16.05/-13.74	-14.39/-17.67	-18.75/-15.36	-12.63/-15.51	-16.79/-15.73	-17.75/-18.1	-18.76/-14.52	-14.23/-12.73	-15.14/-18.07	-14.52/-12.75	-16.5/-11.84	-10.12/-14.13	-9.3/-8.84	-7.6/-7.5	-6.69/-9.69	-7.64/-0.62	-0.35/-10.86	-8.65/-5.22	-5.73/-16.82	-7.36/-10.25	-13.56/-10.68
Θ(120°)	-8.63/-8.78	-10.6/-12.86	-10.93/-7.51	-8.06/-11.72	-13.29/-15.09	-18.39/-18.82	-18.18/-17.94	-15.44/-18.02	-15.85/-13.49	-17.64/-18.27	-19.22/-16.28	-16.62/-18.3	-19.06/-18.66	-11.51/-9.33	-10.01/-16.47	-12.47/-19.29	-10.21/-10.31	-6.71/-11.67	-8.2/-0.15	0.56/-6.23	-7.81/-3.07	-9.56/-11.39	-11.85/-5.13	-5.27/-7.44
Θ(125°)	-13.33/-11.02	-13.47/-11.8	-7.8/-9.28	-15.74/-18.45	-17.82/-19.26	-17.67/-15.82	-17.06/-17.93	-18.63/-15.39	-12.22/-13.82	-18.75/-18.3	-18.39/-18.02	-18.66/-19.19	-18.17/-17.85	-16.18/-11.64	-15.55/-15.5	-17.29/-9.95	-6.55/-6.8	-6.92/-11.14	-10.25/-2.28	-0.85/-8.71	-19.33/-12.33	-5.26/-6.69	-10.74/-10.75	-15.13/-16.52
Θ(135°)	-5.07/-7.39	-8.9/-8.64	-9.01/-14.17	-18.93/-14.43	-13.81/-15.11	-18.19/-17.28	-13.84/-11.66	-9.91/-8.99	-8.94/-10.24	-15.24/-18.98	-15.48/-12.73	-12.68/-15.3	-17.24/-18.02	-12.98/-12.35	-8.47/-9.71	-18.67/-9.64	-8.56/-5.55	-5.84/-9.31	-8.39/-3.56	-1.34/-3.05	-11.92/-14.59	-11.11/-17.65	-11.72/-7.82	-3.51/-2.89
Θ(142.5°)	-13.82/-16.56	-18.18/-19.18	-18.44/-12.67	-15.38/-14.41	-18.18/-16.94	-15.45/-13.95	-11.92/-11.63	-10.4/-9	-8.6/-6.97	-9.93/-9.29	-10.27/-14.17	-18.19/-18.45	-18.77/-18	-16.15/-19.34	-14.61/-15.54	-12.79/-4.82	-17.31/-13.26	-17.42/-17.16	-10.63/-0.87	-7.02/-17.13	-18.03/-10.94	-17.18/-6.38	-5.61/-8.36	
Θ(150°)	-18.81/-13.55	-13.23/-13.83	-12.77/-12.56	-13.79/-19.15	-18.66/-14.67	-11.91/-9.14	-8.24/-8.62	-10.52/-13.31	-11.45/-9.06	-7.92/-6.98	-5.92/-5.88	-6.8/-8.12	-10.24/-14.27	-19.58/-18.93	-16.28/-14	-15.14/-19.45	-12.45/-12.85	-14.71/-10.67	-9.14/-4.96	-2.48/-1.42	-1.91/-2.93	-4.01/-5.29	-6.72/-7.71	-9.19/-15.57
Θ(157.5°)	-11.54/-11.4	-12.22/-15.17	-18.13/-18.96	-15.8/-15.22	-14.8/-15.06	-15.49/-13.78	-12.17/-11.76	-12.63/-12.62	-11.84/-10.26	-8.34/-6.49	-5.55/-6.32	-8.2/-10.52	-12.86/-13.51	-11.78/-10.42	-9.43/-10.15	-14.55/-17.29	-12.44/-10.6	-7.97/-7.75	-11.35/-8.52	-3.05/-0.1	0.19/-0.48	-2.04/-5.86	-10.88/-13.11	-11.09/-10.46
Θ(165°)	-9.84/-11.79	-14.03/-14.48	-12.58/-10.91	-11.29/-12.41	-14.08/-15.26	-19.3/-18.77	-17.86/-17.56	-18.05/-18.46	-14.2/-9.98	-7.42/-5.61	-5.05/-5.84	-7.78/-10.3	-12.74/-13.8	-13.33/-12.38	-11.65/-12.38	-14.58/-15.23	-11.09/-8.36	-7.43/-8.2	-9.34/-7.5	-4.92/-3.19	-13.32/-4.49	-5.15/-6.3	-7.22/-8.31	-9.86/-10.52
Θ(172.5°)	-12.51/-12.97	-14.21/-14.17	-15.38/-14.31	-11.22/-11.01	-18.17/-13.57	-18.85/-18.61	-18.1/-17.24	-18.27/-17.68	-15.06/-14.24	-14.39/-15.21	-16.6/-17.33	-18.15/-17.81	-17.31/-18.6	-16.96/-16.07	-13.97/-11.42	-9/-7.74	-8.06/-9.13	-10.06/-10.27	-10.34/-10.42	-13.28/-18.26	-11.74/-8.44	-8.76/-11.4	-15.16/-15.8	
Θ(180°)	-17.01/-18.33	-18.65/-18.35	-17.35/-17.2	-18.32/-14.31	-11.86/-11.55	-12.5/-13.36	-15.02/-14.67	-13.27/-12.64	-12.66/-14.25	-16.03/-17.71	-17.87/-17.75	-18.55/-17.47	-17.62/-16.79	-15.02/-14.21	-13.67/-13.07	-12.06/-10.5	-9.26/-8.65	-8.91/-9.46	-9.91/-10.85	-12.19/-13.76	-16.78/-18.56	-10.41/-6.75	-7.53/-10.36	-13.87/-17.31
Freq(Hz)	5.6G/Pol.	Phi/Ant. 5	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Gain	Φ(0°)/Φ(7.5°)	Φ(15°)/Φ(22.5°)	Φ(30°)/Φ(37.5°)	Φ(45°)/Φ(52.5°)	Φ(60°)/Φ(67.5°)	Φ(75°)/Φ(82.5°)	Φ(90°)/Φ(97.5°)	Φ(105°)/Φ(112.5°)	Φ(120°)/Φ(127.5°)	Φ(135°)/Φ(142.5°)	Φ(150°)/Φ(157.5°)	Φ(165°)/Φ(172.5°)	Φ(180°)/Φ(187.5°)	Φ(195°)/Φ(202.5°)	Φ(210°)/Φ(217.5°)	Φ(225°)/Φ(232.5°)	Φ(240°)/Φ(247.5°)	Φ(255°)/Φ(262.5°)	Φ(270°)/Φ(277.5°)	Φ(285°)/Φ(292.5°)	Φ(300°)/Φ(307.5°)	Φ(315°)/Φ(322.5°)	Φ(330°)/Φ(337.5°)	Φ(345°)/Φ(352.5°)
Θ(0°)	-13.31/-10.85	-9.85/-9.86	-10.42/-9.85	-8.85/-9.94	-7.09/-6.1	-5.91/-5.95	-5.64/-6.14	-6.69/-7.3	-7.65/-8.18	-8.73/-9.79	-11.13/-13.06	-14.82/-16.19	-16.84/-16.81	-16.56/-14.92	-14.32/-13.76	-13.18/-12.04	-11.7/-10.6	-10.21/-10.06	-9.62/-9.14	-9.18/-9.81	-10.16/-10.69	-12.32/-13.93	-14.53/-14.94	-14.59/-15.73
Θ(7.5°)	-18.87/-18.93	-16.85/-15.81	-14.95/-14.95	-12.92/-12.08	-11.1/-9.76	-10.18/-10.33	-10.62/-11.65	-12.33/-13.07	-12.82/-12.98	-13.41/-14.18	-15.75/-16.57	-15.49/-14.23	-12.46/-10.48	-8.88/-7.18	-5.99/-5.3	-4.73/-4.43	-3.9/-3.4	-3.48/-3.46	-3.92/-4.47	-5.3/-5.99	-6.96/-7.26	-9.01/-11.16	-12.58/-14.61	-17.97/-17.4
Θ(15°)	-17.39/-17.16	-18.41/-13.42	-10.05/-8.85	-7.67/-7.05	-6.8/-6.22	-5.74/-5.69	-5.34/-5.82	-6.45/-7.37	-8.78/-10.89	-13.47/-15.82	-17.59/-17.83	-17.74/-16.97	-16.28/-13.69	-10.73/-8.09	-6.17/-4.63	-3.63/-2.99	-2.58/-2.24	-2.19/-2.06	-2.5/-3.73	-5.05/-6.17	-6.61/-6.85	-7.81/-8.01	-8.37/-9.28	-12.23/-17.33
Θ(22.5°)	-10.29/-14.3	-8.38/-8.49	-7.46/-6.62	-5.81/-5.51	-5.91/-7.13	-9.56/-9.81	-8.68/-7.83	-7.37/-7.3	-7.69/-9.44	-12.19/-14.96	-17.37/-17.24	-15.75/-13.77	-11.79/-10.07	-7.94/-5.9	-4.72/-4.18	-4.05/-4.59	-4.75/-4.45	-4.16/-3.83	-4.13/-4.77	-4.92/-5.43	-6.11/-6.33	-6.92/-6.53	-6.82/-8.08	-9.66/-12.02
Θ(30°)	-14.22/-14.3	-10.28/-12.6	-14.91/-12.16	-10.15/-10.18	-11.72/-12.63	-14.76/-14.19	-14.71/-15.69	-14.11/-12.47	-11.39/-11.43	-10.42/-8.96	-9.46/-9.72	-8.2/-6.52	-5.41/-4.54	-3.33/-2.35	-1.9/-1.69	-1.93/-1.91	-1.87/-2.4	-3.32/-4.83	-6.84/-8.47	-8.5/-9.01	-7.81/-7.24	-6.68/-6.02	-6.42/-8.65	-11.02/-13.74
Θ(37.5°)	-18.91/-12.78	-9.33/-9.1	-11.5/-13.32	-13.05/-15.16	-18.84/-18.63	-13.52/-12.61	-12.57/-10.61	-9.08/-10.05	-14.06/-16.6	-12.89/-9.18	-7.26/-5.38	-4.04/-3.74	-3.59/-2.94	-2.19/-1.29	-1.05/-1.55	-1.95/-1.75	-0.78/-0.26	0.8/0.09	-2.1/-4.93	-6.64/-7.94	-9.79/-9.81	-9.65/-10.29	-10.59/-12.27	-12.37/-17.68
Θ(45°)	-10.89/-18.03	-9.66/-8.64	-10.78/-11.17	-12.86/-18.71	-18.02/-19.18	-16.19/-18.41	-18.52/-18.11	-17.93/-14.21	-8.42/-7.52	-7.1/-6.94	-6.66/-5.09	-3.88/-3.89	-3.05/-1.54	-0.89/-0.86	-1.03/-1.59	-1.92/-1.12	0.05/0.39	-0.48/-1.8	-2.3/-1.9	-1.71/-2.52	-5.37/-8.16	-12.04/-18.05	-17.47/-18.24	-13.23/-8.63
Θ(52.5°)	-8.19/-10.03	-13.38/-12.43	-14.85/-18.44	-19.16/-18.49	-16.32/-12.72	-12.23/-14.26	-17.32/-19.36	-15.97/-12.76	-10.15/-8.65	-7.08/-5.51	-5.44/-4.06	-2.36/-1.54	0.21/1.67	2.1/2.1	2.04/1.97	1.92/2.05	2.14/1.38	0.87/0.14	-2.57/-4.18	-3.18/-3.61	-4.79/-6.21	-8.04/-9.87	-11.75/-12.49	-12.31/-8.55
Θ(60°)	-10.71/-12.22	-18.55/-15.07	-9.48/-9.58	-10.9/-15.89	-18.17/-12.18	-9.49/-9.85	-14.61/-17.59	-15.86/-11.6	-12.08/-11.53	-14.26/-13.67	-9.48/-6.28	-3.03/-4.95	-3.11/0.05	1.42/1.24	0.10/3.2	1.56/1.86	0.95/0.93	1.18/-0.9	-2.4/-1.72	-3.23/-2.15	-3.56/-4.2	-5.64/-6.5	-7.75/-12.31	-16.12/-12.35
Θ(67.5°)	-9.16/-13.02	-17.95/-14.46	-8.5/-6.44	-5.81/-6.28	-10.2/-18.17	-14.65/-11.05	-13.21/-18.01	-19.13/-18.09	-18.82/-16.35	-12.87/-9.27	-6.9/-6.5	-4.29/-4.25	-4.78/-1.52	0.35/0.83	1.07/1.17	1.97/1.61	-0.21/0.97	0.55/-1.25	-4.18/-3.6	-1.35/-2.98	-4.84/-5.56	-8.5/-8.88	-6.34/-7.41	-9.14/-8.15
Θ(75°)	-11.66/-15.21	-14.75/-12.23	-11.78/-15.04	-																				



Radiated Composite Gain Data <2.4GHz and 5GHz U-NII 1~U-NII 4>

Appendix A

Θ(45°)	-13.03/-10.65	-10.36/-14.75	-18.34/-16.66	-18.36/-18.78	-18.73/-18.69	-18.35/-17.73	-15.65/-11.91	-15.48/-18.84	-14.47/-12.82	-12.16/-13.08	-14.45/-10.85	-7.79/-7.42	-6.26/-3.11	-0.67/-0.22	-1.18/-1.47	-1.52/-0.4	1.04/0.88	1.09/0.75	0.15/0.21	-1.02/-2.81	-3.5/-4.49	-6.63/-11.04	-13.17/-11.83	-9.46/-10.71
Θ(52.5°)	-11.83/-14.76	-15.16/-12.46	-14.46/-18.71	-18.64/-18.48	-14.88/-12.56	-13.35/-12.38	-13.22/-13.81	-16.45/-17.78	-15.27/-17.17	-18.17/-15.23	-14.95/-9.24	-6.63/-9.46	-7.72/-3.59	-1.38/-0.98	-0.74/0.75	1.93/2.79	3.22/3.4	1.34/-1.09	-2.64/-3.19	-4.14/-3.8	-3.48/-4.49	-6.29/-8.33	-11.36/-11.62	-8.61/-8.79
Θ(60°)	-7.25/-11.15	-16.58/-16.75	-10.92/-11.58	-12.61/-16.7	-11.79/-11.26	-14.79/-18.02	-16.01/-12.29	-15.32/-15.27	-18.58/-15.91	-13.83/-7.38	-6.34/-6.91	-4.63/-4.8	-4.62/-1.97	-1.66/-2.05	-1.57/0.69	0.72/1.33	0.49/0.42	1.04/-0.6	-4.35/-5.6	-3.29/-4.76	-6.46/-5.37	-6.04/-6.57	-7.2/-8.04	-7.87/-7.01
Θ(67.5°)	-9.02/-16.27	-17.83/-13.82	-7.13/-6.74	-9.46/-13.05	-13.31/-14.12	-16.7/-15.48	-17.34/-18.22	-17.34/-18.48	-17/-11.65	-8.76/-6.63	-5.31/-6.04	-4.21/-2.3	-2.28/0.63	1.59/0.96	0.71/1.84	2.92/3.5	0.62/-1.14	-1.29/-2.76	-5.72/-3.85	-2.87/-4.84	-5.58/-7.64	-10.91/-11.27	-8.46/-8.65	-8.09/-6.61
Θ(75°)	-10.38/-14.59	-15.2/-13.1	-13.32/-16.42	-18.38/-18.62	-19.17/-17.83	-12.26/-7.24	-8.71/-17.18	-12.03/-14.26	-16.2/-17.71	-10.45/-11.92	-11.17/-8.27	-3.47/-0.29	-0.12/1.33	2.93/3.99	2.89/2.04	1.69/2.08	-0.34/-1.29	-1.67/-2	-3.98/-2.21	-0.02/-2.49	-5.48/-5.6	-7.52/-5.59	-5.16/-5.83	-5.46/-6.03
Θ(82.5°)	-13.85/-9.77	-11.89/-10.37	-19.6/-18.77	-10.91/-7.25	-8.43/-13.62	-17.91/-14.49	-17.36/-19.12	-11.52/-14.7	-19.21/-14.17	-8.51/-7.1	-7.21/-6.06	-4.87/-2.11	-1.13/-0.33	2.04/2.53	1.1/0.3	0.44/-0.46	-2.05/-4.9	-3.44/-0.96	-0.91/-1.29	-0.99/-5.24	-4.41/-2.81	-1.85/-2.29	-4.64/-6.55	-8.09/-13.06
Θ(90°)	-8.13/-17.76	-11.77/-7.35	-7.26/-8.58	-8.96/-8.36	-9.21/-12.07	-19.41/-18.19	-15.7/-11.45	-14.4/-6.84	-7.42/-8.17	-5.2/-3.98	-5.61/-4.14	-3.73/-2.05	-0.99/-0.42	1.71/1.86	-0.01/-1.86	-2.01/-2.88	-3.61/-3.09	-0.49/-0.25	-0.52/0.29	0.24/-5.73	-8.41/-5.04	-3.6/-5.8	-7.53/-6.76	-6.25/-5.09
Θ(97.5°)	-11.9/-13.17	-10.7/-12.96	-9.9/-11.35	-10.04/-18.34	-18.39/-18.89	-17.44/-17.9	-17.89/-18.91	-11.59/-6.97	-12.64/-14.78	-9.29/-6.83	-4.03/-2.52	-2.27/-0.21	-1.06/-1.3	-1.64/-1.05	-1.39/-3.9	-5.5/-1.57	-2.14/0.59	1.36/2.6	0.56/0.58	-1.05/-6.77	-2.28/0.26	-1.97/-2.08	-5.32/-13.81	-5.41/-6.18
Θ(105°)	-6.92/-12.47	-8.06/-17.33	-18.55/-14.19	-15.45/-18.42	-18.75/-15.87	-14.01/-11.32	-14.65/-15.92	-19.44/-11.12	-18.16/-17.58	-9.12/-8.75	-6.27/-4.48	-1.81/-2.08	-3.59/-1.3	-0.32/-0.66	0.87/-2.39	-12.02/-2.8	-1.69/1.1	0.11/1.77	-1.58/1.12	0.28/-8.19	0.13/2.96	-0.8/-0.92	-7.32/-18.17	-12.22/-6.01
Θ(112.5°)	-7.39/-137	-11.08/-7.98	-8.41/-10.64	-18.23/-19.51	-14.59/-17.61	-15.42/-11.05	-9.98/-9.57	-13.52/-17.8	-16.1/-9.62	-9.92/-8.26	-5.06/-6.51	-4/-3.02	-2.28/-1.15	-2.37/0.22	1.06/-4.69	-12.36/-2.85	-0.27/1.43	-0.91/-2.1	-3.65/1.93	0.75/-11.53	-2.2/1.49	-3.31/-7.06	-10.39/-19.38	-15.15/-8.18
Θ(120°)	-7.26/-12.93	-16.21/-12.85	-12.26/-13.73	-16.63/-13.27	-12.01/-17.2	-19.11/-18.92	-18.12/-18.98	-18.9/-17.6	-15.99/-16.16	-14.95/-12.32	-16.2/-15.06	-9.38/-8.5	-5.3/-4.2	-6.2/-4.62	-6.95/-16.68	-9.27/-2.94	0.6/0.97	-0.32/-1.97	-2.52/2.41	3.05/-1.79	-1.67/-1.51	-4.72/-6.7	-10.55/-12.3	-11.06/-7
Θ(127.5°)	-5.43/-10.61	-9.77/-13.94	-14.46/-14.89	-18.36/-17.65	-16.03/-11.73	-9.54/-6.18	-5.73/-9.22	-14.27/-11.52	-10.4/-12.97	-17.39/-19.25	-17.22/-19.13	-17.65/-15.6	-11.31/-9.93	-4.09/-2.41	-3.5/-2.59	-0.51/-0.1	1.74/1.5	1.25/-2.2	-2.8/0.67	-0.01/-5.05	-9.68/-7.57	-6.98/-6.85	-9.64/-10.7	-8.49/-5.12
Θ(135°)	-17.81/-18.74	-18.37/-18.61	-18.89/-16.68	-15.95/-15.94	-16.19/-18.01	-18.49/-19.24	-17.12/-15.39	-18.78/-14.36	-11.5/-13.96	-16.98/-14.66	-10.05/-8.06	-8.54/-8.05	-8.78/-8.09	-4.5/-2.88	-3.15/-1.25	-0.84/-2.86	-1.17/0.46	0.5/-1.67	-2.7/0.37	-0.2/-2.28	-5.32/-7.41	-11.95/-17.64	-15.77/-8.81	-7.29/-10.32
Θ(142.5°)	-17.18/-18.96	-19.3/-16.75	-15.48/-14.74	-13.66/-12.46	-14.15/-19.08	-18.1/-17.64	-16.23/-18.09	-18.01/-17.22	-17.11/-13.43	-11.69/-12.09	-10.61/-9.27	-8.66/-8.01	-10.42/-11.48	-7.35/-3.67	-2.5/-1.79	-2.73/-4.37	-4.61/-5.17	-4.69/-5.33	-4.19/-1.42	-1.58/-5.16	-9.02/-7.53	-7.42/-9.17	-10.32/-15.07	-18.12/-18.85
Θ(150°)	-18.27/-17.75	-17.52/-15.76	-17.85/-18.2	-17.72/-18.95	-18.17/-13.8	-10.71/-9.92	-10.65/-12.06	-12.2/-11.5	-12.6/-14.21	-17.37/-17.41	-16.74/-13.06	-10.34/-8.93	-9.09/-9.83	-9.98/-10.18	-8.7/-6.04	-5.65/-6.95	-7.95/-6.66	-5.44/-5.3	-5.35/-3.54	-2.72/-3.97	-5.84/-4.03	-2.77/-4.05	-7.13/-11.95	-17.1/-18.55
Θ(157.5°)	-9.11/-8.81	-8.35/-9.13	-10.83/-14.73	-17.68/-17.77	-17.22/-16.58	-14.27/-15.63	-17.07/-18.87	-13.33/-11.6	-12.15/-14.27	-15.88/-18.31	-19.04/-17.58	-17.85/-16.13	-12.61/-11.88	-12.63/-11.82	-10.13/-9.24	-9.62/-10.02	-8.44/-6.44	-4.88/-4.51	-4.44/-3.25	-2.92/-4.23	-6.49/-8.52	-8.98/-7.97	-7.48/-7.92	-8.72/-8.53
Θ(165°)	-14.18/-17.15	-18.93/-18.67	-18.49/-18.65	-19.2/-18.87	-15.49/-13.91	-12.84/-12.85	-13.78/-14.71	-16.27/-18.68	-18.48/-17.71	-18.69/-18.34	-17.49/-18.71	-17.43/-13.65	-11.37/-10.23	-10.39/-11.26	-11.37/-10.3	-9.1/-7.87	-6.9/-6.04	-5.43/-4.91	-4.46/-5.03	-6.8/-10.07	-14.29/-19.23	-13.24/-10.83	-10.5/-11.02	-11.13/-11.37
Θ(172.5°)	-10.6/-10.5	-9.44/-9.57	-9.42/-9.43	-10.67/-12.75	-14.77/-16.79	-19.01/-18.42	-17.86/-18	-18.58/-18.4	-19.28/-18.45	-17.21/-16.43	-16.98/-18.63	-19.1/-19.3	-17.64/-17.98	-17.52/-16.59	-14.85/-13.73	-13.17/-12.74	-12.1/-10.77	-9.21/-8.57	-8.68/-10.38	-12.09/-14.32	-18.11/-17.91	-19.43/-18.07	-15.62/-13.92	-13.1/-11.31
Θ(180°)	-14.02/-12.09	-10.79/-10.98	-10.25/-10.31	-11.8/-12.34	-12.38/-12.44	-12.21/-12.62	-13.47/-13.66	-14.59/-15.72	-16.51/-16.99	-17.12/-17.42	-17.16/-16.43	-14.94/-13.86	-13.33/-13.04	-12.75/-12.35	-12.52/-12.49	-12.34/-12.21	-12.75/-12.92	-12.8/-12.32	-12.45/-13.65	-16.1/-17.35	-18.25/-17.8	-17.81/-18.45	-17.2/-17.86	-15.37/-14.1
Freq(Hz)	5.785G/Pol.	Theta/Ant. 5	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Gain	Φ(0°)/Φ(7.5°)	Φ(15°)/Φ(22.5°)	Φ(30°)/Φ(37.5°)	Φ(45°)/Φ(52.5°)	Φ(60°)/Φ(67.5°)	Φ(75°)/Φ(82.5°)	Φ(90°)/Φ(97.5°)	Φ(105°)/Φ(112.5°)	Φ(120°)/Φ(127.5°)	Φ(135°)/Φ(142.5°)	Φ(150°)/Φ(157.5°)	Φ(165°)/Φ(172.5°)	Φ(180°)/Φ(187.5°)	Φ(195°)/Φ(202.5°)	Φ(210°)/Φ(217.5°)	Φ(225°)/Φ(232.5°)	Φ(240°)/Φ(247.5°)	Φ(255°)/Φ(262.5°)	Φ(270°)/Φ(277.5°)	Φ(285°)/Φ(292.5°)	Φ(300°)/Φ(307.5°)	Φ(315°)/Φ(322.5°)	Φ(330°)/Φ(337.5°)	Φ(345°)/Φ(352.5°)
Θ(0°)	-4.51/-4.78	-5.48/-6.9	-8.41/9.05	-9.26/-8.28	-7.64/-6.63	-6.19/-6.1	-5.2/-4.78	-4.18/-4.26	-4.32/-4.48	-4.76/-4.79	-5.13/-5.17	-5.36/-5.74	-6.38/-7.01	-7.95/-9.05	-8.93/-7.92	-7.7/-7.74	-7.75/-7.77	-5.95/-5.28	-5.35/-5.49	-5.41/-5.63	-5.19/-4.79	-4.37/-4.97	-5.16/-4.27	-3.84/-4.15
Θ(7.5°)	-7.24/-7.51	-7.52/-9.06	-10.74/-12.32	-12.75/-13.37	-12.13/-10.57	-9.26/-7.8	-7.25/-6.95	-6.81/-6.87	-7.06/-7.45	-7.94/-8.02	-7.53/-6.58	-5.91/-5.34	-4.97/-4.92	-4.89/-5.08	-5.7/-6.27	-6.51/-6.13	-5.94/-6.08	-5.82/-4.28	-3.38/-2.83	-2.77/-3.11	-3.95/-4.26	-4.92/-5.97	-6.95/-6.85	-6.25/-6.64
Θ(15°)	-13.69/-12.51	-10.26/-9.05	-9/-9.75	-10.98/-12.85	-11.81/-9.92	-8.63/-7.48	-5.74/-4.45	-3.48/-3.1	-3.33/-4.18	-5.47/-7.6	-10.18/-11.87	-11.4/-9.01	-6.66/-5.06	-3.84/-3.22	-2.97/-3.31	-3.56/-4.06	-4.44/-4.81	-5.52/-5.43	-4.81/-3.72	-3.42/-3.13	-3.61/-4.2	-5.53/-7.94	-13.41/-15.71	-14.27/-14.07
Θ(22.5°)	-5.27/-6.98	-10.85/-11.27	-9.72/-7.62	-6.63/-6.41	-6.5/-5.69	-4.94/-4.71	-4.35/-4.6	-4.92/-5.2	-5.46/-5.27	-5.21/-5.43	-5.28/-5.57	-6.34/-6.58	-5.75/-4.57	-4/-3.93	-4.19/-4.76	-5.45/-5.94	-5.19/-3.99	-4.28/-5.29	-5.68/-5.09	-5.01/-6.21	-6.41/-7.03	-9.46/-14.82	-17.37/-10.99	-5.71/-4.91
Θ(30°)	-7.97/-7.67	-10.49/-12.14	-11.06/-8.9	-6.9/-7.02	-8.41/-10.08	-9.62/-7.43	-7.74/-10.33	-11.13/-10.33	-8.75/-7.17	-5.52/-4.54	-3.68/-3.27	-3.37/-3.84	-3.89/-3.05	-2.17/-1.93	-2.9/-5.15	-8.13/-9.42	-6.72/-5.12	-5.09/-5.26	-3.73/-3.33	-4.06/-5.91	-9.98/-12.67	-14.75/-18.7	-10.56/-7.62	-6.32/-8.43
Θ(37.5°)	-12.8/-17.17	-16.46/-15.56	-12.81/-10.84	-9.12/-7.76	-7.97/-7.83	-8.43/-11.25	-17.77/-11.92	-9.71/-10.31	-9.48/-8.42	-9.55/-12.1	-11.71/-10.58	-10.17/-8.03	-4.33/-2.95	-2.87/-2	-1.24/-2.81	-6.02/-6.51	-6.59/-7.95	-6.99/-5.21	-5.16/-7.72	-14.55/-12.92	-10.59/-7.9	-6.71/-6.33	-8.1/-10.37	
Θ(45°)	-16.41/-10.1	-9.51/-14.15	-15.29/-11.93	-14/-16.05	-16.59/-18.35	-18.19/-18.92	-19.05/-18.71	-18.82/-18.87	-17.33/-15.03	-13.91/-15.98	-16/-11.68	-7.97/-12.06	-17.45/-6.44	-4.62/-5.06	-4.53/-4.76	-6.23/-5.31	-5.98/-4.22	-3.46/-6.04	-8.14/-8.03	-8.96/-11.76	-13.72/-8.81	-6.39/-6.23	-7.45/-8.3	-9.67/-14.8
Θ(52.5°)	-18.02/-13.76	-17.09/-17.21	-14.45/-17.06	-18.06/-16.47	-14.32/-12.94	-10.41/-9.14	-10.26/-15.1	-15.66/-10.12	-8.06/-9.03	-9.02/-6.04	-5.98/-10.01	-8.25/-8.18	-12.88/-16.68	-9.72/-11.41	-13.41/-7.19	-5.46/-3.85	-6.08/-6.8	-7.78/-8.79	-8.03/-10.3	-14.3/-18.52	-19.38/-12.87	-12.7/-16.21	-13.3/-16.59	-18.56/-17.13
Θ(60°)	-9/-8.25	-11.47/-11.44	-11.05/-17.52	-11.1/-12.81	-18.75/-13.95	-10.13/-9.1	-14.08/-14	-13.98/-12.16	-6.79/-5.84	-8.13/-6.76	-6.57/-7.56	-5.26/-4.76	-7.24/-7.9	-8.11/-9.76	-13.58/-9.01	-5.61/-3.73	-5.68/-6.81	-13/-15.26	-19.15/-19.07	-7.93/-4.18	-4.57/-5.45	-8.87/-12.42	-11.2/-14.08	-16.17/-13.84
Θ(67.5°)	-3.25/-4.24	-5.46/-5.94	-9.04/-11.39	-7.34/-8.96	-13.32/-12.18	-14.05/-16.35	-17.67/-15.55	-11.29/-13.8	-10.64/-8.59	-12.15/-12.91	-9.21/-10.34	-8.17/-7.43	-9.01/-7.89	-7.06/-7.78	-8.18/-11.7	-10.68/-9.73	-11.32/-9.7	-14.56/-11.61	-10.86/-6.79	-5.83/-6.1	-4.46/-3.19	-4.09/-4.49	-9.06/-11.81	-6.22/-2.96
Θ(75°)	-5.47/-6.64	-6.05/-6.85	-12.61/-13.02	-17.47/-19.11	-18.08/-14.2	-16.01/-15.4	-11.07/-10.97	-17.67/-19.3	-18.84/-16.37	-17.75/-11.98	-10.8/-13.65	-17.69/-13.4	-13.25/-14.7	-8.25/-9.16	-7.26/-10.8	-8.8/-11.61	-17.25/-18.39	-8.88/-8.59	-7.43/-5.53	-5.58/-10.69	-5.17/-4.15	-5.37/-6.12	-7.84/-6.03	
Θ(82.5°)	-18.26/-18.79	-18.49/-19.23	-16.81/-18.97	-17.36/-17.88	-16.9/-18.01	-14.81/-10.76	-10.66/-12.4	-13.93/-15.55	-16/-17.37	-10.35/-8.87	-9.34/-11.28	-13.07/-10.84	-8.04/-8.68	-8.48/-10.15	-11.45/-18.11	-18.59/-11.18	-8.93/-10.53	-18.22/-16.54	-7.46/-4.97	-5.17/-4.42	-4.71/-8.85	-16.74/-13.76	-10.62/-8.8	-11.85/-15.8
Θ(90°)	-12.03/-11.5	-10.92/-9.76	-10.89/-10.77	-9.38/-10.88	-14.01/-17.77	-18.19/-16.58	-15.63/-17.7	-16.76/-14.04	-15.75/-18.88	-15.92/-13.89	-16.84/-17.78	-18.06/-16.37	-13.13/-11.92	-12.3/-15.28	-11.4/-1									



Radiated Composite Gain Data <2.4GHz and 5GHz U-NII 1~U-NII 4>

Appendix A

Θ(60°)	-15.59/-12.05	-18.08/-17.57	-14.16/-18.86	-15.03/-18.76	-15.01/-10.44	-7.5/-8.46	-17.62/-13.24	-12.84/-12.85	-9.28/-8.72	-11.2/-9.92	-6.05/-7.45	-4.75/-6.06	-8.25/-5.96	-6.31/-7.93	-9.07/-11.23	-9.78/-6.91	-8.24/-5.02	-4.91/-8.26	-7.72/-12.94	-14.16/-8.67	-6.73/-5.38	-7.59/-8.96	-6.86/-9.22	-14.87/-18.8	
Θ(67.5°)	-4.07/-4.71	-5.54/-4.26	-6.74/-11.83	-8.88/-11.06	-13.12/-13.79	-16.61/-15.88	-18.13/-17.33	-10.95/-12.35	-11.61/-9.43	-9.98/-13.42	-14.61/-14.65	-11.29/-6.88	-9.71/-7.84	-7.53/-9.58	-8.9/-10.17	-11.31/-9.06	-12.39/-8.29	-18.97/-13.19	-15.1/-8.44	-7.01/-5.09	-3.09/-3.54	-3.85/-4.67	-8.6/-15.68	-10.73/-5.03	
Θ(75°)	-4.39/-5.82	-4.66/-4.64	-7.77/-8.46	-11.4/-15.09	-18.25/-11.21	-13.08/-13.52	-10.84/-16.6	-16.18/-12.41	-14.79/-12.04	-16.93/-18.38	-15.4/-10.5	-8.8/-7.62	-6.22/-9.61	-7.79/-12.63	-14.47/-17.97	-13.41/-15.42	-12.91/-11.08	-14.27/-10.93	-7.49/-4.87	-4.41/-7.54	-8.74/-18.45	-11.67/-5.97	-6.24/-7.71	-6.9/-4.92	
Θ(82.5°)	-16.02/-18.76	-18.94/-14.05	-18.13/-18.5	-17.51/-18.72	-18.05/-17.86	-13.85/-10.5	-9.9/-9.68	-15.18/-16.99	-18.61/-13.99	-7.73/-6.4	-8.03/-10.6	-12.53/-13.94	-9.42/-8.82	-7.44/-8.7	-12.09/-18.77	-14.7/-18.28	-11.13/-8.82	-10.73/-14.31	-15.09/-5.92	-5.49/-4.87	-4.41/-10.6	-16.82/-18.14	-13.39/-9.54	-12.34/-14.27	
Θ(90°)	-16.25/-13.44	-8.43/-9.17	-11.36/-9.28	-7.29/-6.31	-7.11/-12.29	-17.94/-18.76	-16.13/-15.03	-12.62/-11.81	-14.2/-15.01	-16.54/-18.06	-17.63/-15.75	-11.41/-10.09	-9.01/-13.57	-10.82/-12.99	-11.1/-13.56	-14.74/-17.24	-15.83/-9.32	-10.11/-12.46	-16.48/-4.44	-4.39/-7.42	-5.62/-12.18	-14.95/-8.66	-9.95/-10.42	-12.6/-16.84	
Θ(97.5°)	-16.72/-17.16	-18.99/-14.34	-12.91/-12.03	-11.73/-9.21	-9.72/-8.16	-13.67/-17.45	-17.28/-15.32	-8.87/-8.58	-9.43/-15.22	-17.58/-17.97	-19.28/-17.98	-17.96/-14.59	-14.53/-17.22	-17.96/-16.95	-18.44/-12.36	-18.57/-8.25	-7.14/-5.02	-8.18/-6.12	-12.28/-7.71	-5.68/-7.06	-7.8/-17.74	-13.15/-7.47	-9.95/-11.18	-8.63/-11.86	
Θ(105°)	-10.62/-7.18	-11.76/-15.59	-13.34/-17.31	-18.25/-14.29	-15.08/-15.37	-12.78/-16.44	-14.54/-12.49	-13.75/-14.09	-13.68/-14.99	-18.89/-10.67	-8.89/-11.15	-15.22/-13.53	-12.2/-13.92	-13.79/-14.55	-18.07/-12.09	-15.26/-18.1	-11.66/-7.97	-10.52/-7.76	-12.97/-8.9	-7.37/-8.41	-4.44/-9.36	-11.52/-3.56	-6.81/-7.75	-4.05/-4.27	
Θ(112.5°)	-9.96/-11.37	-10.97/-17.53	-18.22/-19.03	-17.94/-18.66	-18.41/-15.15	-14.46/-16.93	-8.72/-10.04	-13.07/-19.33	-13.89/-13.86	-17.39/-11.93	-7.28/-6.96	-9.37/-18.41	-16.92/-10.67	-8.73/-9.36	-11.81/-8.89	-16.02/-18.73	-10.2/-8.23	-9.49/-12.32	-13.41/-5.01	-5.81/-9.12	-9.51/-6.02	-10.95/-4.49	-7.57/-10.76	-4.52/-3.57	
Θ(120°)	-4.05/-13.12	-10.83/-16.54	-15.29/-18.43	-18.47/-17.86	-15.15/-13.88	-17.25/-18.43	-19.27/-12.4	-15.85/-14.22	-12.9/-18.42	-18.89/-13.57	-12.64/-13.78	-13.48/-11.01	-8.95/-9.66	-11.65/-9.15	-13.16/-12.4	-12.17/-15.36	-9.21/-18.03	-16.86/-12.82	-8.84/-2.68	-3.61/-9.65	-6.51/-7.11	-10.52/-6.26	-8.38/-11.53	-17.86/-6.11	
Θ(127.5°)	-4.59/-10.58	-7	-11.9/-6.63	-6.88/-8.85	-10.27/-14.89	-18.47/-15.39	-16.32/-17.35	-17.76/-12.26	-13.52/-15.26	-11.69/-13.25	-15.95/-18.64	-16.36/-9.37	-8.31/-9.87	-8.68/-11.3	-10.08/-7.88	-11.24/-12.05	-16.51/-13.03	-17.86/-7.34	-11.52/-12.55	-3.1/-1.84	-6.6/-17.8	-6.78/-7.67	-9.75/-18.74	-15.06/-18.19	-14.46/-6.36
Θ(135°)	-4.46/-7.8	-10.54/-7.8	-8.59/-9.5	-9.51/-11.72	-13.83/-15.47	-17.13/-14.06	-15.81/-19.37	-15.47/-13.71	-15.6/-13.03	-10.04/-10.56	-11.72/-18.04	-17.9/-19.06	-13.66/-18.66	-17.95/-19.04	-19.24/-19.48	-16.96/-13.66	-8.82/-9.83	-15.56/-8.8	-1.55/-0.69	-8.23/-12.78	-8.01/-18.82	-7.2/-8.72	-9/-17.6	-9.85/-5.48	
Θ(142.5°)	-18.24/-14.64	-15.35/-12.58	-9.17/-11.39	-14.59/-13.34	-12.97/-11.88	-9.96/-10.92	-13.02/-18.57	-15.13/-9.67	-7.67/-7.45	-8.3/-10.76	-14.4/-14.27	-11.79/-11.73	-14.49/-12.49	-10.33/-13	-14.54/-13.88	-12.35/-8.66	-9.63/-15.56	-17.96/-11.45	-2.07/-2.18	-8.52/-10.85	-18.65/-10.78	-18.61/-13.17	-7.23/-4.33	-5.38/-14.78	
Θ(150°)	-11.21/-10.6	-11.06/-15.63	-16.09/-15.62	-15.63/-16.84	-15.23/-13.97	-12.68/-15.89	-19.08/-18.47	-17.09/-10.24	-6.96/-6.21	-7.66/-9.03	-8.8/-7.93	-7.62/-8.41	-9.1/-8.89	-8.94/-10.25	-10.54/-11.86	-14.06/-17.51	-13.31/-6.88	-5.33/-5.04	-1.78/-1.35	-3.73/-5.23	-8.49/-17.87	-18.22/-9.55	-6.12/-6.15	-11.45/-14.9	
Θ(157.5°)	-12.41/-8.9	-8.69/-9.97	-14.35/-17.71	-18.67/-13.15	-10.68/-11.46	-14.43/-14.24	-14.05/-15.79	-15.71/-12.79	-9.33/-7.89	-8.89/-9.29	-6.76/-4.35	-3.16/-3.63	-5.51/-8.59	-12.11/-16.87	-17.49/-18.07	-16.11/-13.25	-11.16/-9.11	-6.68/-3.77	-1.91/-2.14	-3.06/-3.1	-3.52/-6.38	-10.78/-10.53	-11.21/-18.19	-19.1/-12.45	
Θ(165°)	-18.5/-17.9	-18.05/-15.46	-13.05/-12.15	-12.19/-13.68	-18.22/-18.19	-17.47/-15.85	-14.9/-14.85	-16.76/-19.01	-18.82/-18.38	-18.55/-18.36	-13.47/-7.93	-4.91/-3.94	-4.58/-6.32	-7.84/-9.25	-10.16/-11.69	-13.66/-16.71	-18.11/-15.15	-8.86/-6.4	-5.76/-7.19	-7.5/-5.98	-4.7/-4.68	-5.65/-7.96	-9.29/-10.24	-12.68/-18.48	
Θ(172.5°)	-9.45/-11.03	-12.17/-14.24	-14.11/-16.52	-18.22/-18.77	-17.11/-12.45	-11.64/-12.29	-12.63/-13.71	-17.32/-18.66	-17.58/-18.72	-19.26/-18.39	-17.61/-13.33	-9.75/-8.03	-7.44/-7.78	-8.98/-11.1	-14.59/-19.01	-17.45/-12.43	-8.67/-6.58	-5.9/-6.66	-7.73/-9.78	-11.33/-11.36	-9.8/-7.76	-7.07/-8.35	-7.92/-6.86	-7.65/-9.27	
Θ(180°)	-18.11/-17.4	-18.55/-18.6	-19.81/-18.43	-18.55/-19	-16.24/-13.42	-12.87/-12.22	-11.47/-11.52	-11.79/-12.33	-12.87/-14.24	-15.75/-16.1	-15.22/-13.71	-12.49/-12	-11.99/-13.25	-15.81/-17.58	-17.26/-14.22	-12.16/-10.73	-10.3/-10.02	-10.49/-11.1	-11.62/-12.2	-12.61/-13.55	-13/-12.99	-15.63/-17.85	-17.27/-18.48	-17.84/-18.48	
Freq(Hz)	5.2G/Pol.	Phi/Ant. 6	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	
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/-6.67	-7.04/-7.07	-6.81/-6.7	-6.49/-6.52	-6.69/-7.12	-7.61/-8.65	-9.88/-10.55	-10.73/-10.47	-10.09/-9.66	-9.07/-8.56	-7.92/-7.37	-6.75/-6.06	-5.33/-4.94	-4.61/-4.39	-5.01/-5.69	-6.67/-7.74	-8.84/-9.67	-10.19/-10.68	-10.81/-11.03	-10.91/-10.14	-9.5/-8.48	-7.42/-6.23	-5.62/-5.15	-5.11/-5.53	
Θ(7.5°)	-3/-3.03	-3.41/-4.09	-4.75/-5.44	-5.96/-6.54	-6.84/-7.25	-8.15/-8.95	-9.11/-9.26	-9.38/-9.01	-8.16/-7.34	-6.69/-6.88	-7.077/-7.13	-6.75/-6.23	-5.67/-5.29	-5.29/-5.6	-6.15/-6.96	-7.86/-8.53	-8.66/-8.45	-8.03/-7.82	-7.76/-8.19	-9.03/-9.65	-10.05/-10.1	-9.42/-7.96	-6.44/-5.15	-4.25/-3.81	
Θ(15°)	-2.39/-2.61	-3.71/-4.17	-4.83/-5.37	-5.4/-5.36	-5.81/-6.9	-8.29/-9.23	-10.58/-10.28	-8.54/-6.71	-5.57/-4.95	-4.48/-4.28	-4.4/-4.42	-4.56/-4.78	-4.99/-5.04	-5.27/-5.81	-6.78/-8.03	-9.65/-11.46	-12.27/-11.26	-9.17/-7.6	-6.62/-6.57	-7.4/-8.16	-9.06/-9.71	-9.16/-9.71	-6.27/-4.84	-3.3/-2.78	
Θ(22.5°)	-8.68/-7.72	-8.48/-8.57	-8.79/-9.11	-9.07/-10.08	-10.33/-9.47	-8.28/-7.41	-5.69/-4.66	-3.9/-3.42	-3.26/-3.5	-3.64/-3.69	-4.28/-4.62	-5.06/-5.95	-6.82/-7.49	-8.13/-8.33	-8.28/-8.05	-8.33/-9.71	-12.95/-18.53	-13.57/-9.33	-7.5/-7.64	-8.71/-9.34	-10.11/-11.16	-11.25/-10.85	-9.85/-8.76	-7.83/-8.16	
Θ(30°)	-6.17/-5.02	-3.91/-3.23	-3.57/-4.24	-4.66/-4.31	-3.36/-2.69	-2.51/-2.17	-2.28/-2.35	-1.87/-1.67	-1.94/-2.64	-3.78/-4.46	-4.82/-5.21	-5.56/-6.57	-8.66/-12	-17.57/-18.49	-16.94/-13.88	-10.9/-9.44	-10.39/-15.09	-18.91/-13.76	-10.43/-9.23	-10.36/-12.89	-13.82/-14.8	-16.43/-18.44	-18.04/-18.37	-17.37/-10.77	
Θ(37.5°)	-4.62/-3.08	-2.57/-2.36	-2.23/-1.54	-0.45/0.4	0.17/-0.29	-0.14/0.11	0.15/0.17	-0.33/-1.46	-3.3/-1.46	-6.79/-8.06	-9.04/-9.13	-7.83/-7.15	-8.26/-12.08	-18.7/-18.04	-18.91/-16.86	-14.89/-12.68	-13.02/-18.9	-9.29/-5.92	-5.7/-8.5	-13.41/-18.97	-18.47/-18.38	-17.87/-14.92	-9.6/-6.42		
Θ(45°)	-5.37/-3.89	-3.33/-2.5	-1.19/-0.02	0.99/1.15	1.22/1.18	1.02/0.58	0.53/0.93	0.94/0.33	-1.1/-3.05	-5.03/-5.18	-5.51/-7.39	-9.02/-9.79	-8.11/-6.99	-6.72/-7.34	-9.3/-12.59	-13.71/-13.28	-18.64/-17.89	-14.89/-10.62	-10.41/-13.26	-16.37/-13.71	-10.26/-9.92	-9.3/-8.25	-6.17/-4.72	-4.66/-4.01	
Θ(52.5°)	-8.71/-6.9	-5.98/-4.72	-4.12/-2.89	-1.6/-0.01	1.49/2.04	1.76/0.95	0.73/1.06	1.12/0.31	-1.29/-4.13	-7.97/-8.69	-6.29/-6.82	-8.54/-10.26	-6.99/-9.77	-7.21/-7.31	-8.82/-11.92	-11.63/-12.05	-14.14/-13.1	-12.23/-13.43	-19.02/-17.21	-10.44/-7.87	-7.31/-8.14	-8.33/-10.3	-10.09/-10.28	-11.28/-10.08	
Θ(60°)	-13.58/-7.4	-6.61/-3.69	-2.33/-1.28	-0.80/1.1	0.57/0.28	-0.35/-1.27	-1.77/-1.44	-0.74/-0.85	-2.17/-5.72	-12.77/-15.22	-9.65/-7.91	-9.13/-13.02	-18.77/-11.56	-9.13/-8.77	-13.38/-18.71	-19.13/-10.95	-9.26/-9.79	-13.3/-18.53	-16.54/-13.07	-10.01/-9.92	-11.13/-13.41	-14.75/-11.37	-17.13/-13.96	-17/-15.38	
Θ(67.5°)	-10.73/-8.5	-7.65/-5.89	-4.24/-3.48	-3.4/-2.85	-3.65/-1.74	-0.3/-0.06	-0.19/-0.34	-0.38/-0.85	-3.23/-7.57	-16.54/-9.18	-5.15/-4.53	-6.15/-8.81	-8.69/-5.29	-5.16/-5.95	-9.15/-14.89	-12.94/-9.05	-8.38/-11.93	-18.81/-17.86	-18.98/-18.78	-12.54/-11.32	-18.71/-18.43	-14.08/-9.84	-9.91/-11.92	-10.55/-9.37	
Θ(75°)	-12.84/-10.81	-15.19/-11.57	-9.71/-7.77	-5.89/-3.94	-2.8/-1.72	-0.58/-0.23	-1.23/-3.46	-6.05/-6.55	-5.65/-5.93	-8.04/-9.69	-10.4/-12.06	-12.71/-13.27	-9.76/-6.93	-8.77/-10.95	-13.7/-18.47	-17.81/-13.44	-14.92/-17.48	-18.52/-14.65	-19.02/-18.39	-19.07/-16.29	-17.32/-18.33	-17.46/-18.41	-19.1/-18.59	-15.68/-12.23	
Θ(82.5°)	-10.94/-13.18	-18.58/-17.04	-10.65/-5.7	-3.38/-2.55	-1.85/-0.71	0.24/-0.05	-1.68/-3.95	-4.94/-3.42	-1.23/-1.16	-2.82/-6.29	-9.63/-13.24	-11.24/-7.52	-4.49/-2.14	-3.56/-7.18	-12.55/-17.01	-7.3/-5.08	-6.07/-12.58	-11.09/-7	-8.94/-10.39	-8.97/-15.87	-18.37/-17.17	-17/-19.89	-18.54/-17.27	-11.89/-10.76	
Θ(90°)	-5.31/-3.51	-3.49/-1.76	-1.04/-0.92	-1.08/-0.76	0.03/0.72	1.3/1.76	1.79/1.61	1.79/1.76	1.01/-0.57	-2.66/-6.34	-13/-19.28	-18.32/-17.92	-13.11/-9.8	-13.44/-18.27	-15.16/-18.32	-6.93/-3.99	-5.93/-15.03	-15.09/-14.1	-16.24/-18.66	-15.45/-11.74	-14.49/-16.99	-12.29/-10.85	-8.36/-7.74	-6.78/-5.64	
Θ(97.5°)	-5.53/-3.58	-3.63/-0.79	0.48/1.07	0.87/0.35	0.19/-0.74	-0.63/-0.14	0.10/1.7	0.24/-0.9	-2.23/-5.44	-13.68/-16.17	-8.42/-5.91	-7.27/-8.24	-11.27/-8.44	-16.53/-15.47	-17.73/-17.45	-10.78/-14.18	-16.68/-6.37	-4.7/-9.03	-8.72/-12.58	-14.99/-9.93	-7.06/-9.32	-11.74/-10.14	-7.74/-7.42	-7.36/-6.67	
Θ(105°)	-6.01/-5.95	-5.86/-5.43	-4.68/-3.64	-2.16/-0.52	0.51/3.9	-1.51/-0.36	0.53/-0.49	-2.13/-3.22																	



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Radiated Composite Gain Data <2.4GHz and 5GHz U-NII 1~U-NII 4>

Appendix A

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°)	-18.05/-18.46	-13.93/-11.32	-8.18/-6.45	-5.67/-4.86	-4.49/-4.6	-4.78/-4.77	-4.93/-4.93	-4.94/-5.03	-5.7/-6.6	-7.8/-8.97	-10.82/-13.68	-18.16/-17.63	-18.48/-16.49	-12.76/-9.84	-8.89/-7.85	-7.16/-6.58	-5.72/-4.96	-4.43/-4.2	-4.14/-4.3	-4.35/-4.86	-5.73/-6.9	-8.12/-9.98	-12.97/-17.09	-18.1/-17.35
Θ(7.5°)	-13.4/-12.27	-9.89/-10.67	-9.68/-8.28	-7.17/-6.01	-5.44/-5.05	-4.71/-4.62	-4.63/-4.53	-4.35/-4.31	-4.9/-6.06	-7.08/-7.96	-9.21/-11.08	-12.96/-15.25	-18.95/-18.37	-19.11/-15.38	-12.29/-10.38	-8.76/-7.48	-6.44/-5.57	-4.89/-4.6	-4.64/-4.83	-5.14/-5.99	-7.09/-8.47	-10.16/-13.28	-16.54/-17.48	-16.08/-14.28
Θ(15°)	-8.69/-8.31	-8.21/-8.97	-8.71/-7.96	-6.93/-6.06	-5.37/-4.85	-4.2/-3.61	-3.01/-2.35	-2.09/-1.99	-2.27/-2.8	-4.13/-5.03	-6.53/-8.27	-10.18/-11.89	-13.47/-13.53	-13.04/-11.88	-10.42/-9.92	-9.53/-8.79	-8.14/-7.82	-7.69/-7.67	-7.93/-8.4	-9.11/-10.14	-11.37/-12.89	-15.2/-17.36	-17.29/-13.52	-11.56/-10.18
Θ(22.5°)	-8.5/-8.81	-8.76/-7.82	-6.42/-5.04	-3.75/-3.23	-2.82/-2.35	-2.09/-1.88	-1.37/-0.75	-0.28/-0.03	-0.34/-1.07	-2.2/-3.85	-5.8/-8.51	-10.55/-13	-15.74/-17.95	-17.55/-14.74	-11.86/-10.41	-9.16/-7.78	-6.89/-6.94	-7.85/-9.44	-11.09/-12.27	-12.98/-14.16	-15.81/-16.75	-17.53/-17.11	-14.56/-12.9	-10.94/-10.11
Θ(30°)	-6.37/-5.32	-3.84/-2.83	-2.23/-1.73	-1.17/-0.72	-0.20	-0.33/-0.52	-0.21/0.04	0.34/0.05	-0.77/-2.05	-4.5/-6.59	-9.06/-10.88	-14.67/-15.6	-16.34/-17.07	-14.31/-12.2	-9.92/-8.23	-7.97/-8.14	-8.9/-10.6	-13.64/-18.64	-17.83/-18.77	-15.09/-11.11	-8.54/-7.13	-6.62/-6.22		
Θ(37.5°)	-8.54/-5.69	-4.07/-3.14	-2.31/-1.26	-0.63/-0.1	0/-0.4	-0.69/-0.55	-0.29/-0.05	0.17/0.19	-0.47/-2.21	-5.2/-10.64	-19.12/-17.61	-17.42/-12.9	-12.1/-12.06	-12.16/-13.38	-16.15/-14.2	-10.93/-9.66	-8.83/-9.32	-12.58/-18.7	-18.03/-18.1	-18.96/-19.12	-18.55/-19.11	-17.52/-13.27	-11.21/-10.45	-9.61/-8.96
Θ(45°)	-6.8/-4.34	-3.47/-2.36	-0.6/-0.07	-0.02/-0.36	-0.93/-0.99	-0.47/-0.38	-1.17/-2.02	-1.9/-1.42	-1.34/-2.96	-6.36/-9.66	-12.78/-15.38	-13.69/-10.36	-8.67/-8.74	-8.05/-10.14	-13.91/-12.71	-11.31/-8.44	-6.88/-8.42	-12.84/-15.29	-14.61/-13.03	-12.33/-13.85	-17.58/-18.59	-18.95/-17.38	-17.35/-15.05	-10.85/-9.22
Θ(52.5°)	-3.12/-1.65	-1.23/-0.38	-0.4/-1.17	-1.28/-1.59	-1.78/-1.4	-0.83/-0.75	-1.71/-2.9	-3.06/-2.68	-2.3/-3.27	-6.68/-10.12	-13/-16.9	-17.88/-17.41	-12.93/-11.84	-10.39/-10.82	-11.76/-13.51	-14.69/-11.91	-14.8/-17.62	-14.03/-13.08	-13.59/-15.76	-15.13/-15.84	-17.25/-17.45	-15.2/-10.53	-8.02/-7.2	-5.57/-4.4
Θ(60°)	-9.76/-7.06	-5.36/-2.92	-1.54/-0.7	-0.13/0.1	0.04/-0.32	-0.01/-0.38	0.29/-0.14	-0.55/-0.37	-0.38/-0.67	-2.4/-6.19	-10.42/-14.31	-17.29/-18.85	-17.3/-17.41	-18.77/-18.53	-15.82/-14.79	-12.66/-12.8	-17.95/-14.51	-11.51/-12.7	-15.16/-15.72	-18.45/-19.16	-14.51/-12.5	-11.55/-11.69	-10.16/-11.41	-10.79/-10.73
Θ(67.5°)	-9.12/-7.31	-6.1/-5.23	-4.25/-2.57	-1.08/-0.13	0.47/0.92	1.13/1.04	0.56/0.04	-0.19/0.1	0.02/-0.81	-3.12/-7.67	-12.61/-11.77	-8.87/-8.79	-8.52/-10.91	-10.99/-12.64	-14.68/-19.37	-18.73/-18.4	-14.06/-12.77	-16.86/-19.51	-18.68/-17.47	-17.2/-18.11	-17.57/-17.71	-18.36/-14.41		
Θ(75°)	-12.21/-10.34	-10.41/-8.51	-7.06/-6.95	-6.04/-4.36	-3.07/-1.79	-0.95/-0.59	-0.74/-0.82	-1.05/-1.05	-0.67/-1.89	-3.82/-7.1	-10.02/-9.59	-7.19/-6.09	-5.86/-5.83	-5.76/-10.03	-11.84/-17.35	-17.83/-18.5	-16.26/-17.98	-17.12/-18.7	-18.41/-18.33	-19.5/-18.1	-19.16/-17.93	-19.29/-18.14	-19.2/-17.83	-18.05/-16.43
Θ(82.5°)	-17.89/-18.45	-16.71/-11.03	-10.2/-11.53	-12.71/-12.3	-10.02/-7.29	-4.1/-1.09	1.21/2	1.39/-0.13	-1.82/-3.11	-3.71/-4.86	-8.01/-14.18	-18.71/-17.06	-14.22/-10.34	-7.64/-10.29	-12.54/-17.87	-12.21/-10.15	-10.58/-18.8	-18.79/-17.05	-19.21/-13.94	-12.25/-19.33	-19.07/-13.9	-14.38/-13.53	-15.34/-16.77	-15.65/-16.16
Θ(90°)	-13/-10.55	-11.5/-11.48	-11/-8.71	-5.85/-4.28	-4.2/-4.25	-3.54/-0.53	1.74/2.43	2.87/2.47	1.64/0.98	-0.7/-2.63	-5.79/-11.1	-11.15/-7.49	-6.03/-4.46	-4.6/-6.8	-8.25/-11.28	-18.39/-18.35	-15.08/-15.48	-15.93/-11.12	-15.28/-10.9	-12.24/-18.54	-14.56/-12.7	-15.18/-14.52	-15.42/-18.39	-17.79/-16.42
Θ(97.5°)	-10.16/-8.45	-7.24/-4.71	-3.89/-3.6	-3.84/-2.58	-1.01/-0.18	0.76/1.43	1.68/1.85	1.93/1.52	1.29/0.99	0.73/0.06	-1.25/-4.15	-7.99/-8.41	-7.66/-4.79	-6.94/-13.73	-19.33/-18.53	-15.01/-11.72	-18.35/-11.98	-8.87/-18.95	-14.11/-16.26	-11.53/-14.57	-18.27/-19.86	-15.19/-13.06	-13.27/-13.89	-11.42/-11.68
Θ(105°)	-13.45/-10.95	-8.31/-4.94	-2.65/-1.02	0.09/0.57	0.22/-0.39	-0.54/-0.79	-0.42/0.3	0.6/0.72	0.58/0.28	0.48/-0.36	-2.53/-4.72	-7.03/-8.23	-12.85/-12.17	-13.32/-18.25	-18.01/-11.69	-11.18/-16.87	-17.33/-9.5	-7.88/-13.43	-12.53/-13.42	-14.25/-19.04	-18.81/-13.69	-14.35/-13.21	-9.68/-9.72	-11.12/-12.17
Θ(112.5°)	-14.17/-14.58	-12.53/-9.02	-5.32/-2.89	-1.03/0.08	1.04/1.58	1.65/1.64	1.87/2.02	1.95/1.33	0.07/-1.25	-3.66/-10.07	-17.34/-10.19	-9.76/-11.41	-14.09/-15.66	-12.44/-14.38	-17.97/-17.49	-17.21/-19.04	-18.7/-19.15	-13.55/-13.08	-12.31/-15.37	-19/-18.25	-17.95/-18.78	-15.59/-19.02	-12.91/-12.01	-11.21/-11.43
Θ(120°)	-9.13/-9.49	-11.82/-12.73	-9.35/-5.93	-2.78/-1.32	-0.04/0.84	1.97/3.22	3.28/2.73	2.16/1.13	-0.22/-2.28	-6.73/-15.91	-18.65/-17.57	-17.63/-16.8	-18.32/-18.31	-19.04/-18.57	-17.45/-13.95	-17.96/-14.59	-17.97/-14.02	-15.21/-17.34	-17.32/-18.31	-18.71/-15.57	-13.68/-18.59	-18.12/-17.38	-14.95/-11.41	-8.58/-7.61
Θ(127.5°)	-10.42/-11.9	-11.64/-9.47	-6.41/5	-2.82/-1.15	0.57/2.41	3.74/-4.31	4.01/3.16	1.91/0.69	-0.04/-1.46	-3.84/-6.95	-7.95/-6.67	-6.1/-7.51	-10.07/-12.16	-10.52/-10.03	-10.59/-18.22	-13.88/-17.43	-17.96/-11.22	-13.24/-17.38	-13.3/-16.05	-10.73/-13.33	-15.42/-17.92	-14.87/-18.24	-13.93/-19.29	-17.86/-18.41
Θ(135°)	-7.43/-7.2	-7.48/-7.87	-0.98/-3.51	-0.77/1.54	2.73/3.34	3.36/2.79	2.0/82	-0.95/-2.56	-3.31/-3.86	-4.56/-4.42	-4.48/-5.07	-6.87/-6.59	-7.17/-7.33	-9.31/-14.56	-18.11/-12.84	-11.61/-11.2	-11.05/-19.18	-18.53/-18.8	-17.99/-17.72	-18.53/-17.01	-16.98/-18.11	-9.23/-7.52	-9.18/-11.38	-10.83/-8.77
Θ(142.5°)	-2.81/-1.98	-1.11/-0.68	-0.19/-0.29	-0.56/-0.37	-0.03/0.08	-0.67/-0.7	-1.32/-2.28	-3.46/-3.97	-4.33/-5.37	-6.11/-6.27	-5.59/-4.53	-3.95/-4.1	-4.93/-7.53	-13.54/-18.03	-14.21/-12.12	-11.47/-16.36	-18.4/-17.52	-15.87/-12.6	-19.19/-18.03	-15.87/-12.6	-10.45/-10.78	-14.09/-11.67	-8.3/-5.5	-3.89/-3.11
Θ(150°)	-2.37/-1.39	-0.52/-0.08	-0.26/-0.68	-1.1/-1.31	-1.17/-1.07	-0.79/-0.87	-1.28/-1.92	-2.61/-3.27	-4.67/-5.81	-6.47/-6.03	-5.05/-4.88	-5.65/-6.2	-7.36/-9.33	-12/-18.16	-19.14/-17.89	-15.22/-12.71	-12.73/-14.01	-14.08/-14.92	-17.94/-17.31	-17.02/-18.8	-16.83/-14.62	-13.78/-11.78	-8.69/-6.16	-4.06/-2.84
Θ(157.5°)	0.74/0.9	0.68/0.37	0.19/-0.15	-0.71/-1.21	-1.43/-1.24	-1.03/-1.12	-1.71/-2.91	-4.73/-7.13	-10.35/-14.77	-16.8/-11.9	-8.43/-6.8	-6.2/-5.81	-5.46/-4.96	-4.78/-5.4	-6.96/-9.83	-12.21/-12.58	-13.31/-15.11	-18.13/-17.25	-17.75/-16.28	-17.97/-18.73	-18.67/-19.1	-13.37/-8.41	-5.13/-2.77	-0.83/0.13
Θ(165°)	-7.14/-5.65	-4.33/-2.98	-2.19/-1.27	-2.49/-2.69	-2.73/-7.27	-3.18/-4.1	-5.87/-8.37	-11.8/-17.37	-19/-17.88	-15.34/-11.78	-9.25/-7.01	-5.74/-5.14	-5.33/-6.19	-7.55/-9.7	-8.73/-8.29	-7.9/-8.53	-10.83/-15.03	-17.62/-18.5	-18.2/-19.05	-18.58/-19.17	-15.53/-11.13	-9.87/-9.91	-11.43/-12.96	-12.68/-10.12
Θ(172.5°)	-5.9/-4.78	-4.42/-4.11	-4.36/-5.06	-5.46/-5.95	-6.18/-6.79	-7.67/-9.44	-12.56/-17.72	-18.87/-18.14	-14.15/-11.49	-11.39/-13.55	-18.09/-18.84	-18.77/-14.29	-11.39/-9.56	-8.37/-7.69	-7.43/-7.7	-8.75/-10.66	-13.55/-17.39	-17.93/-18.85	-18.67/-17.36	-16.51/-15.88	-14.28/-11.91	-10.35/-8.51	-7.4/-6.81	-6.43/-5.88
Θ(180°)	-7.59/-6.95	-6.01/-6.12	-6.87/-8.56	-10.77/-15.07	-18.7/-19.03	-18.41/-19.16	-17.54/-14.85	-12.76/-11.21	-10.28/-9.58	-8.9/-8.66	-8.84/-9.68	-10.97/-12.23	-13.69/-14.85	-15.87/-17.11	-18.72/-19.33	-18.48/-17.18	-15.73/-15.11	-15.89/-18.68	-18.41/-18.04	-18.19/-18.77	-19.11/-18.82	-16.59/-13.58	-11.59/-10.18	-9.21/-8.02
Freq(Hz)	5.785G/Pol.	Theta/Ant. 6	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
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°)	-4.31/-4.12	-3.9/-4.23	-4.93/-5.83	-6.82/-8.04	-9.59/-11.3	-15.4/-19.31	-18.18/-17.61	-16.6/-13.25	-10.49/-8.46	-6.98/-5.95	-5.49/-5.31	-4.86/-4.1	-4.18/-4.37	-4.6/-5.42	-6.03/-6.88	-8.18/-9.82	-12.35/-15.14	-16.57/-17.4	-15.17/-12.18	-10.23/-9.08	-8.23/-7.31	-6.61/-6.21	-5.54/-5.11	-4.95/-4.52
Θ(7.5°)	-7.83/-8.06	-8.21/-8.04	-8.09/-8.48	-9.56/-10.66	-11.39/-13.13	-15.02/-14.49	-14.73/-17.09	-16.29/-13.03	-10.11/-8.46	-7.3/-6.38	-5.64/-5.23	-4.73/-4.11	-3.73/-3.5	-3.61/-4.34	-5.2/-6.42	-7.87/-9.44	-11.53/-14.14	-18.87/-17.31	-18.47/-13.75	-10.75/-9.26	-7.95/-6.84	-6.7/-6.42	-6.39/-6.54	-6.58/-6.89
Θ(15°)	-12.18/-12.11	-11.81/-11.4	-11.81/-13.04	-13.86/-15.48	-14.31/-12.39	-13.92/-18.74	-17.66/-12.29	-9.47/-9.99	-7.1/-6.42	-5.71/-5.32	-5.06/-5.11	-5.35/-5.34	-5.7/-6.28	-6.94/-7.94	-9.49/-11.28	-14.2/-18.78	-17.97/-19.13	-13.57/-10.5	-9.73/-9.96	-9.71/-9.78	-9.55/-9.1	-9.11/-9.13	-9.48/-9.87	
Θ(22.5°)	-8.52/-8.93	-8.33/-7.9	-7.75/-8.52	-10.08/-11.85	-14.78/-16.03	-12.03/-9.91	-10.69/-14.21	-17.91/-16.64	-10.57/-7.69	-5.89/-5.01	-4.91/-4.72	-5.42/-6.32	-7.19/-7.96	-8.5/-8.99	-9.53/-10.3	-11/-12.23	-15.57/-18.81	-17.74/-15.34	-10.69/-8.71	-8.36/-8.71	-10.19/-12.09	-11.85/-10.55	-9.38/-9.39	-8.88/-8.57
Θ(30°)	-8.17/-7.88	-8.33/-7.54	-6.82/-7.23	-8.46/-10.19	-12.79/-14.13	-11.43/-9.9	-9.94/-10.4	-14.29/-19.26	-16.35/-11.7	-9.34/-9.1	-8.97/-9.73	-10.96/-11.62	-10.61/-8.72	-7.88/-7.43	-7.35/-7.75	-8.04/-9.94	-13.01/-13.27	-11.95/-11.68	-10.73/-9.29	-8.65/-9	-9.61/-11.17	-10.6/-8.87	-7.79/-8.92	-9.11/-8.45
Θ(37.5°)	-11.39/-9.71	-8.98/-7.86	-8.44/-10.89	-12.13/-9.6	-15.99/-16.17	-7.12/-6.82	-10.68/-8.32	-8.05/-10.66	-16.96/-11.3															



Radiated Composite Gain Data <2.4GHz and 5GHz U-NII 1~U-NII 4>

Appendix A

Θ(90°)	-7.57/-6.92	-7.78/-10.77	-15.04/-18.25	-18.19/-16.59	-18.58/-19.01	-13.57/-13.41	-11.81/-10.59	-9.88/-10.56	-14.82/-16.83	-17.6/-14.87	-10.93/-11.46	-14.24/-18.17	-19.29/-15.55	-15.09/-19.37	-15.88/-18.47	-17.64/-17.38	-17.92/-13.31	-14.19/-14.37	-12.42/-13.3	-15.64/-11.29	-13.48/-10.82	-8.6/-7.79	-9.36/-11.2	-13.51/-9.17
Θ(95°)	-9.55/-8.43	-7.87/-8.86	-10.69/-13.14	-15.13/-12.23	-9.47/-7.25	-7.81/-10.8	-11.33/-10.84	-10.4/-11.41	-10.82/-14.12	-18.06/-18.06	-18.39/-17.95	-17.27/-18.51	-18.37/-18.04	-18.34/-18.51	-17.95/-18.05	-18.18/-14.49	-18.63/-18.48	-10.15/-7.73	-8.87/-10.54	-14.57/-12.96	-11.97/-19.27	-15.74/-11.96	-15.74/-17.51	-12.65/-12.38
Θ(105°)	-13.19/-19.14	-14.69/-10.87	-6.36/-5.24	-6.49/-4.68	-8.82/-8.55	-8.11/-7.48	-7.61/-8.26	-12.91/-11.72	-19.29/-16.53	-18.19/-17.92	-18.49/-17.92	-18.42/-16.84	-12.91/-17.49	-18.98/-18.64	-16.49/-16.41	-18.07/-16.34	-13.49/-19.1	-10.81/-18.87	-18.94/-18.97	-18.69/-18.59	-17.32/-18.09	-11.39/-8.01	-9.49/-8.45	-10.39/-13.55
Θ(112.5°)	-12.14/-14.73	-12.05/-10.96	-9.09/-8.15	-8.6/-11.94	-18.77/-15.86	-8.28/-4.76	-4.33/-4.86	-6.1/-9.36	-12.83/-13.89	-15.45/-15.75	-14.4/-12.62	-10.94/-9.41	-9.62/-11.03	-11.07/-18.34	-15.64/-11.9	-12.68/-15.21	-10.22/-18.43	-13.01/-12.35	-16.34/-17.5	-17.33/-11.52	-14.35/-16.99	-17.94/-18.54	-16.22/-12.86	-11.42/-13.05
Θ(120°)	-13.53/-8.78	-6.4/-5.27	-5.65/-7.56	-9.97/-7.08	-4.87/-3.79	-3.57/-3.67	-3.61/-4.09	-4.34/-4.32	-4.66/-5.15	-6.57/-7.96	-9.81/-11.73	-13/-18.42	-19.46/-16.85	-14.71/-16.51	-18.15/-17.08	-16.8/-16.86	-13.57/-18.24	-18.19/-17.79	-13.56/-18.01	-16.86/-17.86	-19.8/-16.57	-16.2/-18.14	-17.63/-17.23	-18.22/-13.85
Θ(127.5°)	-12.06/-12.4	-12.8/-12.43	-10.49/-7.63	-4.75/-2.63	-1.05/-0.27	-0.69/-1.27	-1.92/-3.58	-6.25/-7.74	-8.03/-9.44	-11.82/-12.81	-12.05/-14.31	-17.36/-17.35	-15.24/-17.72	-16.16/-11.5	-10.31/-12.59	-17.82/-10.89	-8.42/-14.91	-15.3/-19.45	-14.83/-18.7	-16.81/-17.8	-18.64/-12.97	-12.42/-16.48	-17.56/-17.28	-13/-10.62
Θ(135°)	-17.58/-18.65	-15.99/-13.41	-10.58/-8.73	-6.58/-3.87	-1.16/0.71	1.05/0.12	-1.82/-4.3	-6.58/-8.84	-10.33/-10.83	-12.96/-14.08	-13.6/-13.43	-13.46/-10.12	-8.07/-5.04	-6.41/-8.81	-10.26/-10.93	-14.1/-7.41	-4.54/-9.29	-13.6/-19.09	-15.71/-18.34	-18.64/-16.85	-10.45/-15.61	-14.08/-19.33	-18.1/-13.54	-10.87/-13.65
Θ(142.5°)	-12.56/-10.96	-8.36/-5.88	-3.71/-2.5	-2.09/-2.36	-2.99/-3.47	-4.58/-7.28	-9.8/-11.7	-16.4/-18.12	-18.85/-17.35	-19.22/-18.37	-15.82/-13.52	-12.01/-12.23	-15.21/-14.32	-14.02/-14.98	-18.75/-18.25	-13.76/-8.26	-9.07/-14.13	-7.86/-13.36	-18.97/-10.53	-6.6/-13.57	-14.66/-15.04	-16.32/-11.6	-7.61/-7.96	-10.34/-12.22
Θ(150°)	-6.31/-9.06	-5.77/-3.82	-2.19/-1.42	-1.6/-2.81	-4.56/-5.9	-5.69/-4.77	-5.34/-8.48	-14.26/-18.21	-17.23/-16.56	-18.12/-17.74	-18.85/-18.12	-15.75/-12.5	-10.3/-8.06	-5.85/-5.18	-4.83/-5.04	-7.26/-11.95	-15.63/-16.33	-17.47/-16.35	-14.88/-18.12	-19.01/-15.24	-18.87/-15.78	-7.31/-5	-4.39/-4.14	-4.04/-4.69
Θ(157.5°)	-2.47/-2.23	-1.99/-1.89	-2.04/-2.64	-3.4/-4.14	-4.88/-5.39	-5.4/-5	-5.6/-8.02	-12.45/-17.67	-18.05/-16.69	-16.18/-15.49	-12.27/-10.29	-10.15/-8.66	-7.3/-6.48	-6.23/-5.96	-6.26/-7.29	-9.78/-11.58	-12.32/-14.35	-16.62/-16.18	-14.55/-15.32	-18.4/-19	-18.84/-18.75	-9.16/-5.66	-4.23/-3.24	-2.55/-2.45
Θ(165°)	-5.94/-6.29	-6.15/-5.57	-4.97/-4.33	-4.16/-4.49	-5/-5.05	-4.79/-4.27	-4.03/-4.79	-6.47/-8.51	-10.06/-11.36	-13.33/-14.25	-15.09/-16.12	-14.45/-12.16	-10.08/-8.6	-8.59/-8.78	-9.06/-9.27	-8.9/-9.29	-10.95/-15.45	-18.08/-18.16	-15.14/-14.37	-14.09/-12.73	-11.38/-11.02	-11.2/-10.56	-9.06/-7.43	-6.54/-5.86
Θ(172.5°)	-5.21/-4.5	-4.28/-4.15	-4.68/-5.76	-7.47/-8.84	-9.17/-8.46	-7.62/-6.77	-6.32/-6.75	-8.61/-10.36	-11.91/-13.31	-13.53/-12.92	-12.1/-11.12	-10.73/-11.05	-12.52/-14.91	-17.65/-19.27	-19.15/-18.72	-17.66/-17.96	-18.55/-17.56	-15.09/-13.07	-12.64/-14.4	-17.63/-18.69	-18.87/-19.26	-17.44/-15.93	-13.6/-10.72	-8.44/-6.41
Θ(180°)	-16.27/-17.69	-17.96/-15.6	-13.48/-12.17	-12.16/-12.07	-10.97/-10.61	-11.01/-10.68	-10.18/-11.41	-14.37/-15.98	-14.55/-14.3	-14.49/-15.55	-16.82/-18.09	-16.99/-15.93	-14.96/-15.47	-16.25/-16.33	-16.86/-17.61	-17.88/-17.03	-14.2/-11.59	-9.37/-7.97	-7.42/-7.82	-8.73/-9.79	-11.45/-14.15	-15.1/-14.32	-13.65/-14.03	-15.08/-16.3
Freq(Hz)	5.2G/Pol.	Phi/Ant. 7	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
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°)	-8.58/-9.59	-10.73/-11.46	-12.8/-15.96	-18.81/-18.64	-18.96/-17.85	-17.55/-17.72	-14.81/-12.63	-10.98/-9.88	-8.88/-8.24	-7.93/-7.31	-6.65/-5.97	-5.64/-5.76	-6.33/-6.98	-8.23/-9.86	-11.76/-12.84	-13.57/-14.93	-17.2/-19.59	-18.67/-16.01	-13.82/-11.88	-10.72/-9.91	-9.51/-9.08	-8.69/-8.37	-7.92/-7.69	-7.83/-7.75
Θ(7.5°)	-6.41/-6.66	-7.48/-9.02	-10.93/-12.9	-15.28/-17.4	-17.62/-18.46	-18.55/-19.32	-16.24/-13.02	-10.81/-9.52	-8.75/-8.43	-8.05/-8.03	-8.01/-8.25	-8.48/-8.64	-8.24/-8.12	-8.52/-9.5	-11.26/-13.51	-16.1/-18.97	-18.81/-18.44	-17.64/-16.75	-17.15/-14.75	-12.74/-11.34	-10.18/-9.08	-8.21/-7.62	-7.07/-6.78	-6.68/-6.43
Θ(15°)	-6.2/-6.57	-7.49/-8.93	-9.9/-10.77	-11.83/-12.69	-13.78/-16.25	-19.41/-19.29	-15.5/-12.89	-10.94/-9.58	-8.34/-7.26	-6.63/-6.67	-7.36/-8.44	-9.34/-9.6	-9.15/-8.52	-7.88/-7.76	-8.13/-8.9	-10.42/-12.84	-15.86/-18.62	-17.35/-18.38	-18.75/-17.86	-18.44/-16.33	-14.42/-12.65	-10.95/-9.78	-8.47/-7.5	-6.83/-6.47
Θ(22.5°)	-6.83/-7.44	-7.67/-7.89	-8.89/-9.11	-10.05/-11.11	-12.87/-16.23	-17.42/-17.17	-16.68/-13.62	-11.61/-10.21	-9.32/-8.85	-8.78/-8.92	-9.11/-8.97	-8.92/-8.88	-8.47/-8.87	-9.34/-9.63	-9.91/-10.12	-10.72/-11.63	-12.98/-14.56	-16.54/-17.79	-17.89/-18.32	-18.98/-17.62	-17.23/-14.26	-11.36/-9.21	-7.69/-6.65	-6.2/-6.4
Θ(30°)	-7.18/-8.16	-9.39/-11.06	-13.21/-14.68	-15.51/-16.42	-18.2/-19.77	-18.27/-18.34	-14.74/-11.03	-8.43/-7.13	-6.81/-7.23	-8.15/-9.09	-9.29/-9.08	-9.98/-9.76	-11.64/-14.24	-15.55/-15.19	-13.95/-12.96	-12.43/-12.8	-14.22/-15.68	-14.53/-14.81	-17.49/-17.98	-18.93/-14.27	-11.9/-10.39	-8.81/-7.74	-7.13/-7.05	-14.53/-14.53
Θ(37.5°)	-5.93/-6.69	-7.66/-9.56	-12.37/-16.07	-17.66/-19.03	-18.89/-18.6	-19.32/-18.58	-12.02/-8.31	-6.41/-5.57	-5.63/-6.22	-7.77/-8.75	-9.56/-10.4	-10.48/-12.94	-16.05/-16.86	-13.86/-11.47	-10.36/-10.01	-10.37/-12.3	-14.65/-13.92	-11.71/-11.43	-12.66/-15.12	-17.51/-18.98	-18.12/-17.57	-15.68/-11.03	-8.27/-6.3	-5.4/-5.26
Θ(45°)	-6.29/-6.75	-7.51/-8.66	-10.28/-12.25	-13.61/-13.91	-13.92/-13.37	-13.68/-15.09	-12.17/-8.74	-6.52/-5.71	-6/-7.11	-8.67/-9.83	-10.16/-10.08	-10.37/-10.96	-12.82/-15.48	-19.35/-18	-18.8/-11.86	-9.82/-10.17	-11.1/-12.34	-13.22/-13.32	-14.79/-16.55	-15.95/-15.65	-15.8/-16.06	-12.89/-8.54	-6.32/-5.31	-5.01/-5.36
Θ(52.5°)	-13.25/-13.3	-13.23/-13.72	-13.71/-14	-14.48/-14.24	-12.29/-10.54	-9.97/-10.57	-8.88/-7.01	-5.69/-5.35	-6.64/-8.39	-11.44/-14.12	-14.91/-14.17	-12.14/-11.55	-13.34/-16.2	-19.78/-19.09	-17.07/-15.53	-13.14/-11.96	-14.43/-17.33	-19.59/-14.81	-11.67/-13.08	-12.67/-9.74	-8.25/-7.95	-8.93/-11.57		
Θ(60°)	-7.62/-7.41	-5.98/-5.71	-6.64/-8.56	-12.27/-18.17	-19.43/-14.75	-12.82/-12.09	-9.22/-6.8	-5.55/-5.19	-6.16/-8.4	-11.56/-15.37	-18.55/-15.98	-12.41/-10.35	-9.84/-10.44	-10.63/-12.12	-13.55/-13.78	-12.81/-13.9	-16.12/-14.67	-12.29/-14.68	-19.39/-13.57	-10.5/-11.17	-16.54/-17.38	-18.5/-17.64	-18.82/-18.7	-17.62/-10.39
Θ(67.5°)	-5.38/-4.05	-3.15/-3.41	-3.8/-4.89	-6.62/-9.41	-13.5/-18.38	-17.83/-14.69	-9.16/-5.41	-3.77/-3.65	-4.42/-5.99	-8.99/-13.82	-17.25/-14.24	-12.32/-10.69	-11.76/-12.4	-11.38/-12.06	-12.29/-13.02	-15.12/-18.44	-17.89/-12.48	-13.86/-17.43	-17.42/-17.18	-13.13/-15.32	-19.25/-16.08	-16.22/-18.28	-18.99/-13.61	-9.59/-6.73
Θ(75°)	-7.43/-6.72	-5.71/-5.69	-5.75/-6.09	-7.28/-8.69	-10.35/-14.3	-17.42/-13.84	-8.13/-6.17	-5.2/-4.73	-4.95/-5.39	-6.63/-9.04	-12.88/-17.56	-17.88/-15.11	-14.72/-14.08	-11.46/-11.22	-11.13/-12.05	-17.69/-17.97	-17.35/-15.99	-18.88/-18.68	-16.3/-13.81	-15.3/-17.29	-15.79/-12.35	-10.29/-8.38		
Θ(82.5°)	-12.36/-11.3	-9.33/-8.47	-8.09/-9.34	-12.69/-18.05	-18.49/-16.76	-18.42/-17.25	-9.53/-6.88	-6.57/-5.36	-3.72/-3.38	-4.39/-7.49	-13.96/-17.88	-18.17/-18.75	-17.93/-19.15	-17.37/-18.47	-18.8/-18.64	-17.89/-18.95	-18.46/-19.55	-18.37/-17.69	-17.25/-17.72	-15/-15.58	-16.36/-18.2	-18.46/-17.6	-18.84/-17.31	-15.72/-13.91
Θ(90°)	-15.68/-14.02	-11.2/-9.81	-9.66/-10.26	-12/-14.36	-12.81/-11.8	-13.86/-14.22	-13.8/-11.82	-9.97/-7.6	-4.19/-3.59	-4.96/-7.48	-12.9/-17.3	-18.35/-18.95	-18.79/-18.48	-18.54/-17.84	-18.73/-18.52	-19.27/-19.05	-19.06/-17.38	-18.02/-18.95	-16.18/-15.45	-18.62/-17.48	-18.46/-18.4	-18.49/-18.48	-17.87/-16.86	-15.45/-16.18
Θ(97.5°)	-13.38/-10.87	-9.32/-8.31	-7.22/-8.07	-10.46/-11.38	-9.21/-8.15	-9.38/-16.81	-17.71/-12.63	-9.08/-6.62	-5.2/-5.06	-7.82/-15.01	-17.94/-15.7	-14.72/-15.67	-19.31/-18.5	-18.53/-19.4	-17.53/-18.08	-18.93/-17.81	-18.53/-18.96	-14.75/-16.57	-16.3/-16.81	-17.28/-17.97	-19.39/-19.19	-18.68/-18.2	-16.36/-16.05	-13.65/-14.26
Θ(105°)	-18.06/-15.51	-13.23/-10.9	-10.57/-10.65	-10.48/-9.59	-7.78/-6.45	-7.04/-11.32	-17.64/-10.64	-7.49/-5	-3.95/-4.67	-7.04/-12.87	-17.98/-18.51	-13.58/-10.72	-9.49/-7.57	-9.18/-10.7	-11.68/-17.76	-17.55/-12.77	-10.76/-15.35	-13.23/-12.64	-16.54/-17.11	-16.28/-18.72	-17.66/-17.95	-18/-18.44	-16.86/-18.62	-17.85/-18.52
Θ(112.5°)	-18.65/-13.48	-11.95/-11.12	-11.03/-11.14	-9.32/-8	-6.9/-7.79	-10.63/-15.06	-18.29/-12.93	-7.82/-4.92	-3.43/-3.16	-5.72/-10.21	-18.46/-18.15	-12.44/-12.04	-11.95/-12.43	-15.42/-13.47	-11.77/-14.59	-12.7/-10.34	-11.48/-9.76	-11.98/-17.59	-16.49/-14.86	-12.26/-16.84	-18.15/-17.1	-17.87/-19.08	-18.24/-18.74	-18.13/-17.83
Θ(120°)	-17.04/-13.67	-8.92/-6.74	-5.01/-4.65	-4.69/-5.21	-6.16/-6.6	-7.87/-12.37	-19.39/-18.94	-18.5/-12.14	-6.78/-4.23	-3.66/-4.75	-9.14/-14.03	-18.78/-18.89	-16.99/-18.07	-18.11/-18.77	-19/-18.85	-17.11/-13.4	-8.46/-9.56	-17.07/-18.38	-18.08/-15.13	-11.89/-17.37	-18.89/-16.45	-17.73/-19.82	-16.98/-16.03	-18.92/-19.07
Θ(127.5°)	-18.52/-18.49	-14.08/-12.86	-10.52/-8.81	-7.38/-5.82	-4.95/-4.86	-5.9/-8.77	-15.42/-17.42	-16.76/-9.7	-5.24/-3.65	-3.08/-4.33	-6.43/-9.17	-13.47/-18.25	-18.97/-17.92	-18.33/-17.16	-19.51/-18.4	-13.87/-15.46	-14.53/-13.39	-12.76/-18.53	-18.44/-17.45	-16.				



Radiated Composite Gain Data <2.4GHz and 5GHz U-NII 1~U-NII 4>

Appendix A

Θ(150°)	-17.06/-18.51	-18/-17.79	-19.33/-18.55	-18.07/-18.45	-18.68/-18.82	-18.72/-18.25	-17.82/-17.92	-18.67/-17.19	-13.8/-11.87	-10.36/-8.65	-7.13/-6.09	-5.91/-6.15	-6.69/-8.2	-11.5/-13.24	-10.51/-9.79	-10.76/-12.21	-15.27/-17.75	-18.42/-17.76	-17.28/-17.57	-16.11/-13.84	-13.57/-15.17	-18.55/-18.65	-18.81/-19.27	-18.47/-17.34
Θ(157.5°)	-17.17/-16.52	-17.04/-17.29	-18.39/-18.31	-17.16/-18.23	-19.02/-18.03	-17.34/-17.95	-18.11/-17.38	-17.52/-19.39	-17.9/-16.98	-15.46/-12.7	-10.53/-9.46	-9.71/-10.09	-10.08/-9.88	-9.8/-9.45	-9.92/-11.95	-15.74/-18.54	-19.04/-17.79	-16.73/-17.61	-17.71/-18.05	-18.29/-19.06	-18.5/-19.07	-18.48/-17.32	-18.75/-18.47	-18.85/-18.72
Θ(165°)	-10.63/-11.36	-12.59/-13.03	-13.85/-15.14	-16.86/-18.55	-19.2/-18.52	-18.34/-18.34	-18.25/-18.25	-18.95/-18.26	-17.74/-18.92	-19.19/-18.39	-17.24/-16.32	-15.89/-15.49	-16.04/-17.18	-18.48/-18.38	-16.12/-13.77	-12.69/-12.83	-13.97/-16	-18.59/-18.28	-18.06/-18.49	-18.38/-18.63	-17.95/-18.26	-14.47/-12.2	-10.83/-10.43	-10.45/-10.8
Θ(172.5°)	-13.08/-14.33	-15.44/-15.83	-16.07/-16.8	-17.65/-17.85	-17.84/-17.75	-17.92/-18.17	-18.38/-17.82	-17.28/-16.47	-15.89/-15.64	-15.99/-16.12	-16.14/-16.09	-16.03/-15.86	-15.86/-15.57	-14.94/-13.56	-12.3/-11.76	-12.27/-13.32	-15.52/-17.41	-19.17/-18.42	-18.13/-19.1	-19.2/-17.82	-17.38/-17.96	-16.19/-14.72	-13.55/-12.85	-12.69/-13.08
Θ(180°)	-18.09/-18.35	-17.73/-18.79	-18.87/-18.5	-17.8/-19.11	-18.62/-18.62	-18.92/-17.7	-16.97/-15.55	-14.25/-13.13	-12.44/-12.19	-12.5/-13.18	-14.3/-15.27	-16.21/-17.02	-17.25/-16.99	-17.32/-17.86	-18.01/-17.98	-19.04/-18.17	-19.42/-17.69	-19.17/-19.18	-18.41/-18.71	-17.98/-18.8	-19.09/-18.06	-17.59/-17.9	-19.03/-19.12	-19.36/-18.86
Freq(Hz)	5.3G/Pol.	Theta/Ant. 7	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
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°)	-15.22/-14.65	-14.11/-11.49	-17.32/-12.16	-11.74/-11.63	-11.29/-10.89	-10.48/-10.13	-10.07/-10.27	-10.96/-11.86	-12.61/-13.65	-14.42/-15.1	-15.75/-16.49	-17.65/-18.04	-17.9/-16.95	-14.92/-13.12	-12.13/-10.89	-9.77/-9.17	-8.78/-8.93	-9.06/-9.53	-9.69/-9.81	-10.14/-10.46	-11.01/-11.61	-12.83/-13.81	-14.75/-15.21	-15.31/-15.12
Θ(7.5°)	-18.21/-17.34	-15.34/-12.76	-10.95/-9.74	-8.86/-8.42	-7.92/-7.24	-6.82/-6.66	-6.74/-7.09	-7.71/-8.33	-9.18/-10.07	-10.71/-10.82	-10.65/-10.78	-11.24/-12.11	-13.28/-13.79	-14.3/-14.3	-14.33/-13.68	-13.18/-12.62	-11.94/-11.14	-10.94/-10.79	-10.6/-10.88	-11.23/-11.97	-12.29/-12.89	-14.05/-15.84	-18.28/-18.25	-17.89/-18.23
Θ(15°)	-17.14/-16.96	-13.37/-11.22	-9.99/-8.77	-7.58/-6.73	-5.84/-5.15	-4.87/-4.93	-5.11/-5.29	-5.36/-5.63	-5.83/-5.8	-5.85/-5.71	-5.75/-6.13	-7.23/-8.68	-9.63/-10.36	-11.12/-11.66	-12.25/-12.67	-13.15/-13.33	-12.9/-12.25	-12.09/-11.99	-11.77/-11.5	-11.38/-11.17	-11.44/-11.88	-12.58/-13.67	-15.08/-17.37	-18.32/-19.07
Θ(22.5°)	-13.49/-11.6	-9.21/-7.78	-7.22/-6.74	-6.2/-5.82	-5.01/-4.37	-3.98/-3.52	-3.07/-2.52	-2.22/-2.04	-1.93/-2.14	-2.49/-3.01	-3.51/-4.01	-4.86/-5.75	-6.4/-7.5	-8.75/-10.36	-12.22/-14.04	-14.81/-13.84	-12.02/-11.42	-11.08/-11.33	-11.11/-10.56	-10.2/-11.18	-11.9/-13.69	-15.48/-18.54	-18.22/-19.15	-18.17/-15.75
Θ(30°)	-9.42/-7.65	-6.35/-5.35	-4.51/-4.16	-3.81/-3.86	-3.65/-3.45	-2.84/-1.96	-1.32/-0.98	-0.72/-0.41	-0.21/-0.31	-0.56/-1.28	-2.2/-3.19	-4.33/-5.47	-6.91/-8.5	-10.16/-10.97	-11.08/-11.79	-12.66/-12.9	-12.97/-13.67	-14.3/-15.63	-15.69/-16	-16.99/-17.98	-17.77/-17.93	-17.79/-17.72	-17.6/-19.61	-14.95/-11.46
Θ(37.5°)	-5.17/-3.91	-3.11/-2.42	-2.09/-2.21	-2.25/-2.57	-2.4/-1.99	-1.15/-0.45	0.01/0.09	-0.1/-0.23	-0.01/0.05	-0.18/-0.73	-1.61/-2.8	-3.81/-4.93	-6.47/-8.05	-8.67/-8.26	-7.91/-8.91	-9.71/-10.85	-14.57/-18.33	-18.1/-17.56	-18.35/-18.16	-18.65/-17.2	-17.86/-18.77	-18.56/-18.37	-18.81/-14.4	-9.97/-6.86
Θ(45°)	-2.52/-1.32	-0.21/0.6	0.97/0.66	0.05/1	-2.08/-2.13	-0.66/0.83	1.71/1.73	1.2/0.74	0.77/0.89	0.86/0.59	-0.08/-1.21	-2.39/-3.59	-4.7/-6.18	-7.54/-7.96	-7.73/-8.42	-8.57/-9.41	-12.23/-16.34	-18.59/-17.17	-14.73/-15.97	-17.93/-18.75	-18.35/-17.64	-18.49/-18.32	-11.92/-8.69	-6.53/-4.04
Θ(52.5°)	-1.95/-0.48	1.03/2.08	2.69/2.69	2.281/35	0.18/-0.68	-0.081/5	2.49/2.4	1.61/1.28	1.74/2.12	1.89/1.09	0.19/0.8	-1.93/-3.06	-4.29/-5.94	-7.22/-7.5	-7.79/-7.95	-8.58/-9.72	-11.43/-13.25	-15.11/-17.52	-18.88/-17.82	-17.73/-18.52	-19.2/-18.83	-15.95/-11.84	-9.03/-6.79	-4.97/-3.02
Θ(60°)	-3.49/-2.07	-0.071/5.4	2.83/3.49	3.53/2.92	1.74/0.47	0.721/7.5	2.66/2.63	1.53/0.36	0.671/5.7	1.88/1.43	0.58/-0.51	-2.17/-3.88	-5.75/-7.7	-8.7/-9.08	-8.05/-8.45	-11.03/-13.25	-15.09/-13.49	-14.8/-17.37	-17.86/-17.77	-18.42/-17.62	-18.6/-19.26	-13.38/-9.37	-6.67/-5.68	-4.83/-4.12
Θ(67.5°)	-3.97/-2.84	-1/0.4	2.01/2.86	3.22/3.06	2.481/3.5	1.29/2.05	2.72/3.35	1.34/0.76	0.91/3.2	1.48/1.06	0.5/0.1	-1.51/-3.79	-6.77/-10.17	-11.68/-11.95	-10.32/-11.07	-10.55/-10.45	-10.76/-12.94	-16.9/-17.31	-14.71/-13.66	-15.29/-18.12	-18.9/-15.62	-12.37/-9.3	-6.96/-5.85	-5.55/-4.43
Θ(75°)	-4.22/-2.57	-1.06/-0.07	0.91/4.4	1.91/1.91	1.43/1.08	1.48/1.95	2.28/2.3	1.64/0.91	0.61/0.13	0.06/0.77	0.8/-0.07	-1.81/-4.34	-6.29/-8.3	-8.31/-7.09	-7.58/-8.28	-10.21/-12.28	-18.84/-12.71	-9.15/-11.77	-18.6/-19.2	-13.7/-18.42	-18.16/-12.26	-8.29/-8.36	-8.25/-8.44	-7.84/-6.1
Θ(82.5°)	-4.89/-2.56	-0.29/0.99	1.821/1.72	0.79/-1.1	-1.9/-0.4	1.86/3	2.78/1.7	1.18/0.73	-0.26/-1.07	-0.81/0.86	1.78/1.11	-0.49/-3.24	-0.05/-5.7	-8.07/-7.78	-8.79/-10.17	-10.92/-13.24	-14.84/-13.75	-10.81/-12.62	-16.85/-19.12	-14.45/-17.11	-18.84/-12.28	-9.39/-8.43	-9.22/-10.73	-10.96/-7.82
Θ(90°)	-3.45/-1.83	0.171/2.1	1.931/1.72	0.71/-2.45	-7.18/-2.27	1.98/3.28	2.94/1.51	0.02/-0.18	-0.32/-0.82	-0.87/0.37	1.79/1.95	1.36/-0.9	-2.76/-6.12	-7.84/-8.18	-9.39/-10.11	-12.27/-10.22	-12.97/-13.99	-13.58/-16.72	-18.59/-16.32	-11.87/-14.21	-18.59/-16.31	-11.39/-11.41	-13.46/-11.51	-9.97/-6.01
Θ(97.5°)	-4.45/-2.54	-0.39/-1.1	2.03/1.9	0.33/-4.42	-10.75/-3.05	1.29/2.53	1.2/-0.92	-0.53/0.63	0.90/3.1	-0.74/-0.35	0.61/0.41	-0.23/-2.36	-3.7/-6.3	-8.82/-9.84	-12.2/-17.27	-14.44/-10.84	-8.65/-11.15	-14.3/-19.02	-18.21/-18.83	-12/-14.83	-19.3/-17.86	-17.04/-17.92	-15.85/-11.42	-8.76/-5.93
Θ(105°)	-6.34/-3.66	-1.99/-0.69	0.12/-0.3	-2.22/-8.44	-8.12/-9.7	1.571/1.5	0.07/-2.45	-1.11/2.2	1.741/4.5	-0.08/-1.31	-1.33/-0.98	-0.8/-1.49	-2.03/-3.89	-5.89/-7.12	-9.73/-15.11	-19.14/-12.72	-10.84/-10.8	-15.81/-18.74	-18.06/-16.67	-18.46/-18.83	-18.75/-18.57	-17.81/-17.92	-17.17/-13.53	-10.41/-7.55
Θ(112.5°)	-8.27/-5.62	-3.8/-2.34	-1.84/-2.37	-4.11/-5.93	-3.26/0.23	1.89/1.75	-0.44/-2.9	-2.28/0.01	1.39/1.14	-0.07/-1.25	-2.19/-1.97	-2.21/-2.58	-3.55/-5.63	-7.76/-10.57	-9.56/-9.42	-10.08/-17.58	-14.55/-14.73	-13.57/-17.96	-18.91/-18.22	-18.67/-19.45	-18.43/-18.63	-18.62/-15.85	-15.78/-14.53	-13.39/-11.34
Θ(120°)	-10.59/-8.3	-6.52/-5.28	-4.26/-3.68	-3.31/-2.97	-2.11/-0.84	-0.33/-0.51	-1.72/-2.37	-1.47/-0.28	0.3/0.26	0.07/-0.53	-1.03/-1.7	-2.65/-2.77	-6.3/-3.95	-6.14/-7.99	-8.12/-10.81	-17.52/-15.91	-18.88/-13.22	-16.79/-16.51	-15.79/-15.21	-15.29/-19.36	-16.19/-17.68	-17.66/-18.22	-15.92/-14.57	-14.26/-13.22
Θ(127.5°)	-11.74/-10.52	-9.7/-7.62	-5.95/-4.56	-2.96/-2.13	-2.14/-2.93	-4.79/-5.84	-4.1/-2.44	-1.22/-0.77	-0.97/-1.14	-1.63/-2.19	-2.47/-3.47	-3.8/-4.98	-7/-8.24	-11.78/-11.71	-9.15/-10.49	-11.98/-17.15	-14.22/-18.41	-16.42/-14.82	-18.44/-16.86	-13.1/-17.57	-13.83/-18.14	-16.39/-19.36	-16.28/-14.86	-12.55/-12.54
Θ(135°)	-7.23/-6.28	-6.39/-5.79	-5.36/-5.05	-4.41/-4.12	-4.32/-5.39	-7.5/-9.48	-6.46/-3.52	-2.19/-1.97	-2.41/-3.53	-4.65/-4.86	-5.27/-5.95	-6.26/-8.76	-11.09/-12.52	-14.54/-12.64	-11.35/-13.4	-16.66/-16.27	-13.41/-19.29	-15.8/-18.18	-15.78/-18.91	-18.02/-18.18	-12.18/-11.26	-13.79/-16.13	-13.47/-11.41	-10.47/-8.74
Θ(142.5°)	-11.41/-11.6	-11.34/-9.93	-9.32/-9.28	-10.03/-12.22	-14.09/-16.1	-18.06/-13.49	-8.5/-5.13	-3.48/-3.38	-4.7/-6.75	-7.89/-8.3	-9.04/-9.83	-11.48/-12.34	-10.53/-10.52	-11.75/-13.02	-13/-13.47	-15.68/-16.82	-18.66/-17.87	-16.19/-18.77	-19.33/-18.2	-17.62/-18.7	-18.32/-15.39	-12.2/-10.69	-9.48/-8.81	-9.98/-11.55
Θ(150°)	-8.24/-8.24	-8.16/-8.04	-8.25/-8.99	-10.04/-11.33	-12.54/-14.23	-15.92/-15.94	-12.77/-10.55	-9.86/-10.3	-11.72/-13.6	-15.84/-16.39	-14.77/-13.31	-12.91/-12.23	-11.86/-12.74	-14.81/-14.2	-12.1/-12.62	-15.88/-18.39	-18.27/-18.22	-18.53/-18.52	-19.17/-18.3	-19.01/-18.05	-18.08/-18.69	-19.11/-12.85	-10.55/-9.64	-8.78/-8.15
Θ(157.5°)	-9.57/-10.9	-11.92/-12.93	-11.58/-12.58	-13.58/-14.91	-16.18/-19	-17.42/-19.04	-19.09/-16.37	-14.76/-13.46	-12.02/-11.17	-11.02/-11.2	-11.31/-11.54	-11.4/-11.1	-10.96/-12.3	-13.85/-14.4	-14.6/-15.6	-17.51/-19.44	-18.82/-18.81	-17.08/-16.12	-17.89/-17.53	-15.9/-18.25	-17.61/-14.71	-10.84/-9.45	-8.8/-8.53	
Θ(165°)	-9.79/-9.96	-9.92/-9.86	-9.53/-9.57	-10.65/-11.73	-12.95/-14.68	-17.07/-18.03	-19.17/-19.3	-18.1/-18.62	-18.68/-18.37	-18.08/-18.27	-18.19/-18.2	-18.42/-18.99	-18.18/-18.54	-17.87/-18.68	-18.18/-17.93	-19.09/-19.05	-18.93/-15.73	-12.59/-11.12	-11.1/-12.35	-13.76/-14.9	-16.7/-19.06	-18.81/-18.77	-16.03/-12.84	-11.08/-10.01
Θ(172.5°)	-15.46/-16.74	-18.03/-18.33	-18.79/-19.17	-18.43/-18.26	-17.88/-18.46	-19.44/-17.94	-18.94/-18.74	-18.77/-17.94	-16.45/-15.43	-14.02/-13.41	-12.91/-12.9	-12.54/-12.38	-12.91/-13.89	-15.19/-16.56	-17.83/-18.15	-18.45/-18.72	-17.47/-16.2	-14.33/-13.06	-13.11/-14.08	-15.56/-17.03	-18.89/-18.25	-18.12/-17.73	-17.78/-15.76	-15.28/-15.07
Θ(180°)	-18.96/-18.67	-18.46/-18.71	-16.57/-16.27	-16.42/-16.72	-16.44/-16.33	-16.31/-16.24	-16.09/-16.36	-17.47/-18.29	-18.48/-19.48	-18.75/-18.19	-18.9/-17.44	-18.09/-17	-15.65/-14.84	-15.08/-15.55	-16.92/-17.83	-18.89/-18.87	-17.79/-18.72	-17.85/-18.57	-19.26/-18.01	-17.68/-18.69	-17.94/-18.94	-18.81/-18.67	-18.67/-19.13	-18.59/-17.78
Freq(Hz)	5.6G/Pol.	Phi/Ant. 7	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
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.													



Radiated Composite Gain Data <2.4GHz and 5GHz U-NII 1~U-NII 4>

Appendix A

Θ(15°)	-8.87/-8.48	-8.44/-9.05	-9.08/-8.49	-8.42/-8.78	-9.19/-9.56	-10.26/-10.99	-12.04/-12.88	-13.4/-13.18	-12.24/-10.51	-9.2/-8.25	-7.87/-7.45	-6.87/-6.39	-6.22/-6.33	-6.72/-7.12	-7.92/-8.75	-9.15/-9.74	-10.69/-11.83	-13.4/-16.14	-18.99/-19.07	-18.02/-17.76	-18.54/-19.11	-18.2/-15.68	-14.3/-12.9	-11.26/-9.58
Θ(22.5°)	-7.28/-7.63	-8.12/-8.84	-10.37/-11.51	-11.68/-12.18	-13.04/-12.76	-12.45/-11.89	-11.27/-11.36	-11.77/-12.21	-11.99/-11.53	-10.96/-11.15	-11.63/-11.92	-12.06/-12.46	-12.89/-13.22	-12.11/-10.5	-9.6/-9.17	-8.89/-9.29	-10.99/-13.38	-15.87/-17.68	-19.14/-18.6	-19.09/-19.1	-18.67/-15.62	-12.24/-9.86	-8.43/-7.75	-7.65/-7.38
Θ(30°)	-4.75/-5.03	-5.43/-5.32	-5.89/-7.09	-8.69/-11.1	-15.36/-17.64	-19.1/-17.56	-14.12/-11.36	-9.93/-9.39	-9.57/-9.99	-10.93/-12.27	-13.96/-15.04	-15.8/-15.7	-15.91/-16.9	-16.77/-16.03	-15.14/-14.15	-11.1/-9.45	-10.58/-13.91	-19.19/-18.1	-14.95/-13.73	-13.23/-14.21	-16.98/-16.94	-13.82/-10.82	-8.52/-6.79	-5.71/-4.81
Θ(37.5°)	-9.97/-10.0	-10.38/-8.81	-7.49/-7.86	-8.8/-9.98	-13.28/-18.35	-19/-18.73	-13.16/-9.82	-7.97/-7.6	-8.63/-10.31	-12.06/-14.22	-17.89/-17.81	-17.67/-17.38	-13.76/-12.42	-12.62/-13.41	-15.29/-16.65	-11.69/-9.61	-9.69/-11.2	-14.2/-19.39	-14.03/-10.96	-11.19/-12.93	-13.87/-13.19	-11.79/-10.3	-8.89/-8.19	-9.37/-10.34
Θ(45°)	-19.31/-18.93	-19.33/-14.62	-10.77/-9.97	-10.3/-11	-12.38/-15.44	-17.32/-14.11	-10.9/-9.3	-8.56/-8.22	-8.76/-11.08	-14.17/-16.67	-18.58/-18.04	-19.11/-19.1	-17.37/-15.31	-15.2/-14.99	-16.57/-19.23	-16.66/-15.39	-13.16/-13.58	-18.58/-19.13	-15.11/-12.09	-10.44/-10.8	-14.74/-15.41	-14.1/-15.02	-15.12/-13.6	-12.13/-14.55
Θ(52.5°)	-7.95/-10.7	-15.25/-18.61	-18.85/-17.21	-15.88/-17.16	-18.04/-18.21	-18.15/-18.32	-12.61/-10.29	-10.18/-10.93	-11.84/-14.17	-18.97/-19	-18.54/-18.66	-16.26/-14.48	-15.38/-14.69	-14.35/-16.66	-18.96/-17.21	-19.32/-13.09	-12/-13.79	-18.89/-18.47	-14.82/-12.32	-17.04/-18.75	-16.77/-12.71	-11.23/-10.36	-7.71/-6.01	-5.9/-6.53
Θ(60°)	-12.25/-18.04	-19.01/-18.22	-18.91/-17.93	-18.49/-18.61	-18.41/-18.74	-18.74/-19.24	-17.3/-16.21	-16.98/-18.83	-18.44/-19.22	-18.35/-17.54	-18.61/-17.84	-18.64/-16.38	-16.1/-17.72	-17.86/-19.01	-18.42/-17.7	-18.93/-19.34	-13.41/-15.7	-17.65/-18.67	-16.8/-17.62	-18.05/-13.19	-9.33/-8.87	-9.06/-8.02	-8.59/-8.55	-9.29/-10.82
Θ(67.5°)	-17.27/-16.95	-15.61/-14.35	-12.72/-12.52	-14.77/-17.52	-17.2/-18.52	-17.61/-18.52	-15.65/-15.24	-17.21/-17.59	-18.5/-18.9	-18.55/-18.41	-15.4/-12.6	-11.85/-11.78	-12.15/-12.74	-12.12/-12.77	-14.03/-18.33	-17.64/-18.59	-15.11/-14.35	-18.4/-14.64	-16.48/-17.3	-15.81/-11.23	-10.96/-11.95	-12.84/-14.27	-13.49/-16.68	-18.78/-19.34
Θ(75°)	-14.21/-13.13	-11.21/-10.33	-9.32/-9.62	-11.69/-17.31	-18.77/-18.3	-18.26/-18.61	-13.53/-12.55	-16.08/-18.17	-18.25/-18.02	-15.87/-13.8	-13.16/-12.86	-12.68/-14.65	-13.86/-14.19	-13.98/-13.69	-15.32/-18.03	-19.4/-18.38	-18.48/-19.15	-19.59/-17.76	-12.85/-12.19	-10.59/-16.95	-14.81/-15.76	-18.15/-18.57	-17.34/-17.97	-18.91/-15.67
Θ(82.5°)	-16.26/-11.46	-8.64/-7.28	-7.48/-8.33	-11.23/-19.02	-18.37/-17.99	-17.94/-19.16	-18.54/-17.78	-15.68/-10.38	-9.52/-13.19	-17.75/-11.44	-9.51/-9.99	-10.22/-11.39	-12.59/-12.87	-17.15/-17.76	-17.56/-17.56	-13.62/-14.2	-18.08/-13.93	-11.81/-13.37	-18.2/-13.05	-12.72/-14.28	-17.94/-17.71	-16.82/-14.82	-17.23/-17.55	-18.72/-17.87
Θ(90°)	-16.31/-12.46	-9.7/-7.81	-6.49/-6.76	-9.42/-15.34	-18.32/-15.86	-16.64/-17.74	-14.67/-15.02	-10.76/-6.44	-6.23/-8.03	-11.16/-11.92	-9.4/-9.71	-9.89/-10.99	-12.4/-15.11	-17.66/-14.02	-13.25/-16.02	-17.78/-16.54	-18.96/-16.78	-8.92/-10.4	-17.4/-17.89	-12.73/-11.28	-15.04/-19.07	-19.05/-16.29	-16.19/-16.9	-17.83/-18.59
Θ(97.5°)	-16.08/-12.5	-9.51/-7.93	-7.8/-8.73	-11.44/-18.27	-17.51/-14.33	-13.31/-13.85	-14.64/-12.04	-8.28/-5.31	-5.21/-7.06	-6.52/-6.08	-5.37/-6.3	-8.4/-10.44	-10.66/-10.89	-11.96/-12.87	-14.15/-17.75	-13.95/-10.84	-12.73/-17.29	-13.56/-14.83	-13.65/-17.71	-15.91/-18.29	-18.86/-17.53	-17.74/-18.23	-17.28/-17.87	-17.58/-18.21
Θ(105°)	-14.72/-13.12	-12.08/-11.09	-11.36/-14.34	-19.2/-15.36	-9.81/-7.06	-7.8/-13.12	-15/-10.99	-6.29/-3.95	-4.69/-5.33	-5.7/-4.39	-3.09/-3.48	-4.49/-5.86	-7.08/-7.72	-9.35/-9.63	-9.82/-11	-18.07/-14.14	-12.17/-14.99	-12.46/-18.79	-17.78/-19.3	-10.52/-17.7	-18.22/-17.3	-18.31/-18.99	-18.89/-18.79	-18.74/-18.32
Θ(112.5°)	-17.36/-14.1	-12.13/-13	-15.56/-14.01	-10.39/-6.79	-5.27/-6.1	-9.11/-12.49	-15.04/-17.85	-8.98/-4.23	-2.88/-4.26	-5.53/-5.29	-4.86/-4.9	-5.8/-7.29	-8.5/-8.52	-10.36/-11.92	-14.78/-18.34	-15.23/-12.33	-14.57/-12.62	-9.23/-10.5	-17.22/-19.18	-15.68/-18.52	-17.88/-14.17	-16.26/-19.47	-17.66/-19.02	-18.6/-18.83
Θ(120°)	-15.58/-15.03	-16.59/-17.71	-18.59/-17.45	-9.85/-5.91	-4.66/-5.21	-7.97/-17.99	-17.87/-17.61	-18.03/-11.91	-7.77/-5.68	-5.86/-7.72	-9.38/-12.16	-11.46/-10.67	-11.22/-11.28	-14.09/-11.29	-8.61/-7.88	-13.56/-11.97	-14.71/-14.39	-13.84/-14.29	-15.68/-16.5	-15.34/-11.48	-18.71/-14.46	-15.85/-17.94	-17.93/-16.2	-14.89/-19.05
Θ(127.5°)	-18.05/-16.68	-17.89/-18.47	-15.95/-11.01	-8.21/-7.13	-6.2/-7.13	-10.54/-15.09	-17.93/-19.13	-16.21/-12.74	-10.32/-9.73	-10.05/-10.43	-12.39/-14.18	-16.64/-18.41	-16.73/-13.45	-11.4/-13.52	-17.15/-18.95	-18.45/-18.06	-13.12/-18.71	-9.48/-13.34	-18.57/-17.04	-18.62/-15.26	-18.24/-16.92	-17.16/-15.23	-17.88/-18.4	-18.81/-18.8
Θ(135°)	-18.19/-18.12	-17.68/-18.46	-15.92/-14.28	-11.83/-11.22	-12.53/-14.91	-17.1/-18.7	-17.82/-18.23	-18.33/-18.51	-18.16/-17.03	-14.79/-13.29	-11.76/-11.35	-12.54/-16.17	-17.84/-18.33	-17.19/-18.3	-15.27/-17.51	-15.57/-14.56	-18.11/-11.64	-12.81/-18.44	-14.64/-18.05	-16.63/-10.96	-16.63/-17.93	-17.75/-13.37	-10.64/-9.46	-9.93/-13.67
Θ(142.5°)	-13.67/-11.9	-11.01/-10.68	-10.26/-9.77	-9.53/-9.7	-11.24/-13.79	-16.49/-17.02	-17.16/-17.3	-18.28/-15.33	-14.81/-16.1	-16.75/-15.35	-12.66/-11.17	-10.19/-9.65	-10.63/-13.05	-14.42/-18.6	-17.86/-14.55	-12.35/-18.52	-17.42/-13.92	-17.64/-17.12	-18.78/-17.87	-19.06/-17.96	-19.29/-19.06	-17.83/-15.18	-13.33/-11.27	-11.66/-13.68
Θ(150°)	-11.55/-12.0	-13.5/-16.69	-17.08/-19.13	-18.7/-19.6	-19.08/-17.7	-18.48/-16.69	-17.82/-17.92	-18.75/-18.13	-16.85/-16.7	-17.73/-18.53	-15.82/-12.72	-10.25/-8.37	-7.35/-7.26	-8.47/-10.73	-12.25/-12.59	-12.89/-17.02	-18.02/-17.5	-19.41/-18.82	-18.29/-18.43	-18.61/-15.68	-14.61/-16.53	-19.24/-15.56	-12.86/-11.17	-10.39/-10.88
Θ(157.5°)	-15.42/-17.31	-18.26/-17.48	-19.31/-17.6	-18.91/-17.66	-17.96/-18.33	-18.46/-18.39	-18.8/-17.7	-18.99/-14.47	-12.63/-12.02	-12.43/-12.33	-10.46/-8.51	-7.17/-6.12	-5.36/-5.29	-6.39/-7.11	-6.63/-6.74	-8.52/-12.52	-19.36/-19.01	-18.92/-14.52	-14.19/-14.56	-13.77/-12.05	-11.17/-11.83	-14.85/-15.27	-13.01/-11.5	-11.92/-13.35
Θ(165°)	-11.25/-11.4	-12.36/-13.51	-15.25/-17.15	-18.08/-18.54	-16.93/-15.73	-15.31/-15.69	-18.68/-18.15	-18.53/-16.01	-13.43/-12.6	-12.56/-13.23	-13.77/-13.56	-13.22/-11.98	-11.12/-11.04	-11.51/-10.83	-10.28/-10.79	-13.12/-17.08	-19.04/-18.54	-17.36/-15.95	-15.15/-16.09	-16.42/-15.38	-13.79/-12.4	-11.51/-10.62	-9.85/-9.86	-10.19/-10.93
Θ(172.5°)	-18.82/-17.33	-18.45/-18.63	-18.73/-18.84	-17.09/-18.04	-17.79/-18.87	-19.14/-17.32	-18.83/-18.61	-19.03/-18.64	-18.37/-17.45	-17.81/-19.42	-19.31/-16.54	-13.5/-10.76	-9.3/-8.7	-9.35/-11.72	-16.43/-17.48	-16.02/-14.6	-14.79/-16.28	-18.02/-18.4	-17.16/-17.54	-17.28/-18.99	-18.95/-19.12	-18.19/-18.15	-18.2/-17.85	-18.38/-17.57
Θ(180°)	-17.74/-16.72	-16.03/-15.53	-16.33/-18.41	-18.7/-18.25	-18.09/-18.67	-19.33/-18.43	-17.62/-18.77	-18.59/-17.3	-16.38/-16.12	-16.13/-16.46	-16.78/-17.33	-18.49/-17.2	-17.79/-17.72	-19.53/-18.31	-18.59/-18.45	-18.94/-18.42	-18.37/-19.03	-18.03/-17.58	-18.96/-18.47	-18.76/-19.08	-17.78/-16.89	-16.9/-17.69	-18.88/-18.39	-18.55/-18.1
Freq(Hz)	5.785G/Pol.	Theta/Ant. 7	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
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°)	-12.89/-14.38	-15.71/-17.39	-10.73/-9.93	-8.2/-7.16	-6.42/-5.74	-5.1/-4.75	-4.62/-4.77	-4.88/-5.01	-5.17/-5.31	-5.57/-6.1	-6.94/-8.19	-9.94/-12.46	-15.84/-18.61	-18.23/-16.33	-13.53/-11.1	-8.88/-7.27	-6.06/-5.48	-4.87/-4.32	-4.01/-3.87	-3.87/-3.81	-3.96/-4.43	-5.04/-5.95	-7.33/-9.03	-10.6/-11.95
Θ(7.5°)	-15.3/-16.9	-17.26/-17.12	-14.91/-11.98	-9.57/-8.27	-7.14/-5.61	-4.48/-3.82	-3.38/-3.14	-3.11/-3.37	-3.62/-3.8	-4.16/-4.79	-5.69/-6.9	-8.2/-9.42	-10.45/-11.64	-12.05/-11.21	-9.99/-8.47	-7.32/-6.51	-6.13/-5.9	-5.41/-5.04	-4.9/-5.05	-5.26/-5.47	-5.78/-6.32	-7/-8.24	-9.7/-11.6	-13.8/-14.73
Θ(15°)	-12.02/-11.3	-10.48/-10.15	-9.87/-9.39	-8.91/-8.24	-6.89/-5.22	-4.27/-3.45	-2.77/-2.37	-2.27/-2.15	-2.29/-2.53	-3.06/-3.66	-4.41/-5.07	-5.63/-6.04	-6.72/-7.57	-8.58/-8.99	-9.04/-8.57	-7.91/-7.23	-6.85/-6.52	-6.19/-6.04	-6.2/-6.6	-7.58/-8.56	-9.62/-10.06	-10.61/-11.55	-12.6/-13.94	-13.46/-12.68
Θ(22.5°)	-10.14/-8.2	-7.09/-6.01	-5.35/-5.05	-4.55/-4.39	-3.86/-3.38	-3.2/-2.44	-1.85/-1.48	-1.25/-1.29	-1.52/-1.97	-2.66/-3.57	-4.54/-5.38	-6.15/-7.09	-7.97/-8.72	-8.77/-8.67	-9.12/-9.48	-9.37/-8.72	-7.98/-7.67	-7.74/-8.02	-8.62/-9.57	-10.75/-11.74	-12.91/-15.19	-18.6/-18.74	-19.09/-16.83	-12.31/-10.94
Θ(30°)	-7.02/-6.44	-5.6/-4.44	-3.4/-2.82	-2.16/-1.86	-1.82/-1.78	-1.55/-1.1	-0.79/-0.76	-0.85/-1.1	-1.39/-1.89	-2.77/-3.74	-4.37/-4.58	-5.41/-6.6	-7.37/-7.28	-6.78/-7.36	-9.07/-11.28	-13.15/-14	-14.06/-12.63	-10.74/-9.62	-8.93/-8.61	-8.75/-9.57	-10.83/-12.73	-17.24/-19.04	-18.69/-14.13	-10.15/-7.97
Θ(37.5°)	-5.61/-4.18	-3.8/-3.32	-2.31/-1.59	-0.86/-0.21	-0.09/-0.11	0.020/0.4	-0.02/-0.26	-0.79/-1.23	-1.44/-1.45	-1.86/-2.55	-3.18/-3.74	-4.54/-5.93	-7.42/-8.92	-11.07/-14.34	-14.87/-12.14	-10.57/-10.06	-11.37/-12.75	-13.24/-13.37	-15.01/-15.04	-13.55/-12.97	-14.22/-16.37	-18.72/-17.85	-18.73/-12.22	-8.88/-6.88
Θ(45°)	-3.29/-2.25	-1.6/-1.41	-0.97/-0.58	-0.58/-0.15	0.46/-1.23	1.62/-1.52	0.91/-0.06	-1.01/-1.54	-1.7/-1.62	-1.73/-2.41	-3.71/-4.8	-5.6/-6.07	-6.8/-7.78	-7.49/-7.48	-7.47/-8.74	-11.67/-13.19	-14.04/-11.86	-14.39/-19.1	-19.18/-19.5	-18.3/-17.1	-18.87/-18.2	-18.81/-18.59	-15.29/-10.44	-6.49/-4.17
Θ(52.5°)	-1.20/-1.7	0.95/-1.2	1.59/-1.42	1.96/-1.01	0.31/-1.3	1.96/-1.76	0.84/-0.6	-0.93/-0.18	1.020/-95	0.28/-0.77	-2.27/-4.36	-6.48/-8.13	-9.44/-11.77	-13.15/-11.56	-9.62/-9.3									