



Antenna Pattern of 6GHz UNII 5~UNII 8

Appendix F

Total Gain Data

Freq(Hz)	6.175GPol.	TotalAnt. 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Gain	Φ(0°)Ψ(7.5°)	Φ(15°)Ψ(22.5°)	Φ(30°)Ψ(37.5°)	Φ(45°)Ψ(52.5°)	Φ(60°)Ψ(67.5°)	Φ(75°)Ψ(82.5°)	Φ(90°)Ψ(97.5°)	Φ(105°)Ψ(112.5°)	Φ(120°)Ψ(127.5°)	Φ(135°)Ψ(142.5°)	Φ(150°)Ψ(157.5°)	Φ(165°)Ψ(172.5°)	Φ(180°)Ψ(187.5°)	Φ(195°)Ψ(202.5°)	Φ(210°)Ψ(217.5°)	Φ(225°)Ψ(232.5°)	Φ(240°)Ψ(247.5°)	Φ(255°)Ψ(262.5°)	Φ(270°)Ψ(277.5°)	Φ(285°)Ψ(292.5°)	Φ(300°)Ψ(307.5°)	Φ(315°)Ψ(322.5°)	Φ(330°)Ψ(337.5°)	Φ(345°)Ψ(352.5°)
Θ(0°)	-3.04/-3.00	-2.95/-2.93	-2.74/-2.55	-2.30/-1.96	-2.18/-2.47	-2.79/-3.23	-3.33/-2.83	-2.05/-1.67	-1.74/-1.26	-0.91/-0.85	-1.05/-1.05	-0.86/-0.99	-1.18/-1.58	-2.15/-3.06	-3.92/-4.12	-3.90/-3.39	-3.16/-2.96	-2.60/-2.26	-1.78/-1.61	-1.89/-2.48	-2.63/-2.47	-2.31/-2.53	-3.04/-3.39	-2.93/-2.69
Θ(7.5°)	-2.90/-2.44	-2.43/-2.76	-2.87/-2.98	-2.80/-2.74	-2.91/-3.17	-3.23/-3.38	-2.51/-2.88	-2.61/-2.61	-2.66/-2.64	-2.17/-1.76	-1.28/-1.01	-1.00/-1.13	-1.12/-1.17	-1.43/-1.92	-2.59/-3.27	-3.88/-3.93	-3.76/-3.30	-3.06/-2.71	-2.32/-2.34	-2.72/-2.81	-2.59/-2.28	-2.56/-2.68	-3.31/-3.44	-2.82/-2.76
Θ(15°)	-2.62/-3.24	-4.13/-4.50	-4.53/-5.10	-5.75/-6.96	-7.80/-6.96	-5.61/-5.55	-6.46/-6.15	-4.83/-3.80	-3.40/-3.33	-3.27/-3.09	-2.75/-2.17	-1.68/-1.34	-1.30/-1.14	-1.01/-0.87	-0.79/-0.80	-0.61/-0.75	-0.89/-1.25	-1.40/-1.83	-2.04/-2.50	-2.82/-3.43	-3.95/-3.41	-2.38/-2.03	-2.20/-2.60	-2.48/-2.42
Θ(22.5°)	-1.56/-3.26	-4.99/-0.61	-6.87/-8.13	-8.84/-8.79	-7.23/-6.22	-6.46/-7.43	-7.29/-6.17	-4.77/-4.02	-3.48/-3.29	-3.01/-3.51	-3.85/-3.74	-3.39/-3.40	-2.85/-1.50	-0.410/-11	0.320/67	0.960/82	0.710/80	0.990/43	-0.62/-1.46	-1.87/-2.06	-2.15/-2.49	-2.72/-2.41	-2.43/-1.62	-1.21/-1.19
Θ(30°)	-1.26/-2.27	-3.49/-4.17	-5.32/-6.59	-8.03/-8.53	-8.13/-9.23	-9.96/-9.81	-9.21/-8.12	-6.55/-5.49	-4.83/-5.15	-5.87/-4.18	-2.97/-2.54	-2.80/-2.60	-0.990/60	1.612/07	2.332/41	2.442/31	2.271/90	1.691/20	0.12/-1.09	-1.49/-1.01	-0.95/-1.29	-1.50/-1.58	-2.24/-2.45	-1.89/-1.11
Θ(37.5°)	-1.19/-1.21	-1.81/-3.00	-3.90/-4.01	-4.19/-4.41	-5.04/-5.85	-7.33/-10.49	-12.36/-10.96	-10.16/-9.73	-8.88/-6.59	-5.60/-4.14	-2.64/-2.43	-3.71/-2.89	-0.70/-1.16	1.84/-1.97	2.14/2.48	2.85/2.52	1.79/0.47	-0.28/-0.23	-0.35/-0.42	-0.72/-0.73	-0.120/23	0.15/-0.11	-1.27/-1.80	-1.94/-1.95
Θ(45°)	-3.18/-2.49	-2.86/-3.25	-2.34/-1.23	-1.10/-1.76	-3.57/-5.73	-8.54/-11.34	-12.93/-12.60	-12.58/-12.41	-11.08/-11.85	-10.41/-9.72	-6.11/-4.50	-4.46/-3.32	-1.200/-18	0.781/00	1.031/38	1.110/46	0.981/79	2.031/84	1.681/79	1.320/63	0.030/57	1.801/91	1.00/-0.47	-2.20/-2.90
Θ(52.5°)	-3.04/-1.73	-2.19/-4.30	-4.16/-3.26	-2.29/-2.38	-3.58/-5.68	-9.90/-16.05	-13.53/-11.53	-12.15/-12.77	-12.35/-13.02	-11.07/-8.37	-5.96/-5.24	-5.38/-4.70	-1.68/-0.98	-0.350/09	0.660/62	-0.48/-0.21	0.320/89	1.081/01	0.681/37	0.960/02	-1.07/-0.92	0.190/56	0.16/-0.54	-2.23/-3.38
Θ(60°)	-4.74/-3.08	-2.66/-2.73	-1.51/-0.77	-0.32/-0.95	-2.05/-4.26	-6.15/-9.24	-10.19/-10.05	-13.64/-13.93	-12.46/-9.62	-7.99/-5.44	-4.29/-5.00	-4.37/-2.57	-1.83/-1.81	0.07/-0.52	-0.43/-0.42	-1.03/-0.19	0.62/103	1.020/51	0.30/-0.07	-0.280/29	-0.57/-0.50	0.18/-0.01	-0.83/-1.61	-4.01/-6.11
Θ(67.5°)	-3.63/-2.66	-2.29/-2.46	-1.75/-1.09	-0.76/-1.10	-1.30/-1.58	-4.62/-8.97	-5.35/-2.93	-3.82/-8.23	-7.39/-6.78	-5.10/-3.63	-3.99/-3.27	-1.450/50	1.44/1.86	1.070/95	-0.09/-1.82	-2.80/-2.55	-2.21/-1.38	0.80/165	1.910/72	-2.58/-2.66	-0.250/80	-0.33/-0.81	-0.80/-1.66	-2.41/-3.37
Θ(75°)	-4.21/-1.47	0.510/28	-1.59/-0.58	0.030/52	-0.41/-1.71	-4.12/-5.81	-6.16/-3.24	-4.02/-4.98	-5.49/-5.68	-4.47/-2.47	-1.24/-1.30	-0.130/14	1.00/1.31	1.42/1.79	0.40/-0.53	-2.44/-3.65	-5.86/-6.75	4.37/-0.85	0.330/11	-0.95/-2.16	-1.46/-1.16	0.24/-1.35	-2.30/-2.01	2.84/-4.74
Θ(82.5°)	-0.580/11	1.82/10	-0.27/-0.26	0.89/1.12	0.480/05	-1.38/-2.20	-1.17/-1.34	-3.94/-5.00	-4.61/-6.13	-2.25/-1.20	-2.14/-2.28	-0.41/-0.46	-0.77/22	2.32/2.73	1.080/15	-0.61/-2.35	-3.15/-4.80	-4.02/-1.65	1.240/73	-2.56/-3.09	-2.15/-4.70	-1.70/-2.24	-1.460/41	0.510/74
Θ(90°)	0.63/1.68	2.14/1.95	1.27/1.14	-1.42/-1.01	-0.91/-0.34	0.030/63	0.06/-1.34	-2.25/-2.47	-4.68/-2.79	-0.41/1.72	2.38/-0.42	-1.74/-4.23	-7.11/-0.19	0.600/43	1.10/-0.67	-0.02/-1.45	-2.95/-2.48	-2.85/-1.30	1.25/1.06	0.26/-2.44	-1.31/-0.95	-2.13/-1.02	-1.72/-1.52	-0.32/-0.26
Θ(97.5°)	-0.33/-0.15	-0.740/-37	0.33/1.42	2.12/1.23	-0.070/13	0.95/-0.31	-0.14/1.76	0.01/-0.23	-2.40/-0.99	1.34/1.08	-0.22/-0.91	-1.62/-5.74	-5.94/-1.29	-3.85/-0.27	-2.46/-7.24	-2.17/-5.33	-1.98/1.81	0.20/-0.70	1.94/2.00	-0.34/-4.29	-4.45/-6.22	-8.62/-4.39	-3.70/-0.93	-2.03/-1.41
Θ(105°)	-0.88/-1.75	-0.430/37	0.99/1.70	2.32/2.24	1.800/77	0.030/71	0.150/06	0.12/-2.86	-1.130/24	0.57/1.61	-0.90/-1.40	-0.10/-4.91	-6.67/-2.52	-6.45/-3.47	-4.67/-9.86	-2.80/-6.85	-2.15/2.37	-0.86/1.81	0.68/-3.45	-2.58/-3.01	-6.98/-4.03	-2.01/-1.62	-1.460/41	0.510/74
Θ(112.5°)	-2.31/2.55	-1.42/-3.10	-2.40/-4.14	1.67/2.05	0.86/-0.81	-1.62/-0.82	0.38/-0.05	-2.25/-2.35	1.18/1.05	-0.02/-1.98	-0.26/-0.49	-5.44/-8.40	-7.02/-3.92	-5.97/-1.61	-3.09/-4.78	-1.83/-10.08	-1.69/2.05	2.46/-2.35	-5.39/-5.01	-1.18/-4.12	-6.89/-11.12	-7.49/-4.66	-4.33/-3.23	-2.82/-0.19
Θ(120°)	-2.63/-2.84	-0.66/-0.51	-3.98/-2.36	0.32/1.01	1.90/2.00	2.09/1.05	0.23/-1.11	-2.450/91	0.790/11	-2.43/-3.03	-0.68/0.56	-2.40/-5.44	-8.12/-4.30	-6.80/-2.46	-1.87/-3.35	-1.84/-3.71	-6.12/-3.71	-0.15/-2.87	-5.45/-9.74	-5.31/-7.62	-13.28/-4.04	-2.86/-4.60	-8.53/-2.56	-3.40/-2.43
Θ(127.5°)	-5.70/-1.54	-0.420/11	0.030/56	1.072/39	2.93/2.27	1.477/70	-0.98/-1.14	0.780/33	-0.64/-4.49	-1.370/70	-1.00/-2.79	-1.02/-10.63	-7.52/-8.39	-7.96/-4.38	-3.76/-4.40	-8.17/-5.08	-8.94/-3.37	-6.91/-7.62	-7.67/-11.87	-2.79/-7.86	-10.62/-8.48	-1.76/-3.64	-4.46/-2.82	-1.15/-0.60
Θ(135°)	-0.810/0.30	-0.131/22	1.310/77	1.53/1.32	0.64/-0.15	-0.410/40	1.120/89	-0.50/-2.94	-3.44/-1.03	-0.180/65	2.63/2.77	-1.83/-7.28	-6.81/-4.89	-4.71/-3.01	-3.62/-5.70	-4.99/-6.91	-6.25/-5.74	-10.30/-9.22	-9.74/-14.30	-9.35/-7.24	-8.16/-8.37	-5.55/-6.61	-6.00/-1.56	-1.39/-0.64
Θ(142.5°)	-2.28/-2.69	-0.020/98	1.370/89	-0.250/29	0.85/1.39	1.210/10	-0.79/-1.64	-3.95/-3.98	-4.94/-0.45	-0.930/46	-1.06/-2.64	-5.16/-5.56	-7.11/-9.58	-10.11/-10.31	-7.64/-6.04	-4.56/-4.13	-5.33/-6.40	-7.29/-10.92	-9.53/-6.81	-6.50/-6.76	-9.69/-15.35	-13.96/-11.56	-8.79/-4.81	-3.16/-2.75
Θ(150°)	-3.71/-2.15	-0.760/44	1.50/1.36	0.77/-0.15	-0.400/43	1.11/1.03	-0.19/-1.68	-3.38/-3.95	-3.86/-3.26	-1.92/-1.29	-2.14/-3.10	-4.80/-8.83	-1.49/-9.35	-8.46/-5.49	-6.60/-7.51	-3.70/-2.49	-4.68/-8.68	-13.49/-15.02	-15.29/-14.39	-11.05/-5.94	-4.54/-4.75	-4.93/-5.01	-1.97/-1.19	-1.74/-2.64
Θ(157.5°)	-0.71/-1.39	-1.45/-0.96	0.04/1.01	0.92/1.36	1.02/-0.14	-1.57/-2.18	-2.07/-1.16	-0.55/-0.46	0.140/33	0.460/35	-0.79/-0.14	0.730/74	-0.62/-1.83	-2.05/-4.89	-10.42/-8.52	-6.75/-8.22	-12.65/-12.14	-13.65/-14.09	-12.31/-14.29	-13.18/-7.42	-5.13/-2.97	-1.20/-0.32	1.07/1.37	1.45/0.75
Θ(165°)	-0.60/-0.89	-1.26/-1.80	-1.09/-0.59	0.26/0.70	0.940/25	-1.14/-2.50	-3.60/-3.60	-2.80/-1.18	0.030/99	1.70/1.58	-0.69/-2.74	-4.94/-9.04	-7.96/-3.26	-7.38/-3.28	-4.73/-3.99	-11.62/-12.19	-11.89/-10.78	-9.71/-9.55	-9.13/-7.97	-7.06/-6.46	-4.83/-3.46	-2.03/-1.15	-0.95/-1.09	-0.95/-1.09
Θ(172.5°)	-3.54/-4.05	-4.21/-4.06	-3.69/-3.25	-3.11/-2.94	-3.20/-3.65	-3.79/-3.57	-2.62/-1.95	-1.94/-2.94	-2.44/-9.91	-4.05/-4.52	-3.28/-3.50	-3.87/-3.74	-3.43/-3.21	-3.34/-4.01	-5.54/-7.83	-9.13/-9.88	-10.54/-11.26	-11.25/-11.88	-10.55/-8.01	-6.27/-5.10	-3.40/-3.43	-2.90/-3.06	-3.44/-3.57	-3.50/-3.37
Θ(180°)	-9.13/-9.18	-8.52/-7.95	-7.55/-6.71	-6.80/-6.65	-6.96/-6.61	-5.92/-5.59	-6.02/-6.93	-7.74/-7.55	-6.92/-6.50	-5.89/-6.04	-6.43/-7.33	-8.16/-9.58	-11.73/-14.37	-15.22/-14.32	-8.68/-7.54	-7.11/-7.54	-7.47/-7.23	-6.76/-6.32	-6.96/-7.62	-8.22/-8.36	-8.17/-7.87	-7.87/-7.61	-6.93/-6.03	-5.54/-5.18
Freq(Hz)	6.475GPol.	TotalAnt. 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)Ψ(7.5°)	Φ(15°)Ψ(22.5°)	Φ(30°)Ψ(37.5°)	Φ(45°)Ψ(52.5°)	Φ(60°)Ψ(67.5°)	Φ(75°)Ψ(82.5°)	Φ(90°)Ψ(97.5°)	Φ(105°)Ψ(112.5°)	Φ(120°)Ψ(127.5°)	Φ(135°)Ψ(142.5°)	Φ(150°)Ψ(157.5°)	Φ(165°)Ψ(172.5°)	Φ(180°)Ψ(187.5°)	Φ(195°)Ψ(202.5°)	Φ(210°)Ψ(217.5°)	Φ(225°)Ψ(232.5°)	Φ(240°)Ψ(247.5°)	Φ(255°)Ψ(262.5°)	Φ(270°)Ψ(277.5°)	Φ(285°)Ψ(292.5°)	Φ(300°)Ψ(307.5°)	Φ(315°)Ψ(322.5°)	Φ(330°)Ψ(337.5°)	Φ(345°)Ψ(352.5°)
Θ(0°)	-5.10/-4.57	-4.77/-5.42	-6.06/-5.88	-4.84/-4.15	-4.46/-5.30	-6.01/-5.85	-4.23/-4.00	-4.62/-5.53	-6.15/-5.19	-4.34/-4.31	-4.03/-3.73	-3.02/-2.84	-2.75/-2.62	-2.56/-3.00	-3.66/-4.51	-4.99/-5.07	-5.05/-5.42	-5.18/-5.11	-4.49/-4.06	-3.50/-3.95	-4.53/-4.96	-4.26/-3.65	-4.72/-5.74	-5.28/-4.43
Θ(7.5°)	-5.27/-4.39	-4.78/-5.24	-4.92/-5.04	-4.69/-4.41	-4.19/-4.19	-4.13/-4.23	-3.85/-2.91	-2.82/-3.15	-3.87/-4.24	-4.35/-4.22	-4.00/-3.40	-3.33/-3.25	-3.26/-3.33	-3.30/-3.44	-3.65/-4.18	-4.69/-5.01	-4.87/-5.08	-5.29/-5.13	-4.33/-3.87	-3.82/-3.57	-3.19/-3.15	-3.34/-3.15	-3.49/-4.04	-4.24/-4.68
Θ(15°)	-0.92/-2.15	-3.12/-3.59	-3.61/-4.45	-5.05/-5.42	-5.79/-6.38	-7.04/-5.85	-4.83/-3.69	-3.61/-4.31	-4.20/-3.84	-3.56/-3.29	-3.26/-3.08	-3.38/-3.91	-4.24/-4.21	-4.48/-5.10	-5.50/-5.46	-5.44/-5.01	-4.42/-3.75	-3.59/-3.35	-3.30/-2.82	-1.94/-1.38	-1.11/-0.90	-0.53/-0.44	-0.46/-0.72	-1.15/-0.60
Θ(22.5°)	0.72/-0.71	-2.22/-2.78	-2.97/-3.60	-5.36/-7.72	-11.01/-10.82	-10.34/-8.87	-6.68/-8.86	-8.54/-6.17	-2.70/-2.65	-1.88/-1.60	-2.15/-2.97	-2.92/-2.78	-2.94/-2.86	-1.86/-1.19	-0.96/-0.93	-1.27/-1.60	-1.88/-1.91	-2.37/-2.73	-2.68/-2.11	-1.39/-0.68	-2.00/-2.48	0.320/69	0.470/90	
Θ(30°)	1.04/-0.51	-2.36/-3.70	-3.02/-3.70	-5.04/-6.02	-7.09/-8.75	-10.62/-15.55	-15.66/-15.50	-14.49/-12.25	-10.99/-9.17	-6.51/-4.60	-3.28/-2.80	-2.60/-2.73	-3.19/-3.14	-1.53/-0.18	0.840/99	1.020/99	0.940/60	0.03/-0.03	-0.30/-0.80	-1.22/-1.48	-1.75/-1.42	-0.520/51	1.53/2.13	2.30/1.44
Θ(37.5°)	1.490/32	-0.62/-1.12	-1.93/-3.94	-6.02/-6.91	-7.05/-7.20	-8.53/-11.47	-13.13/-15.24	-13.35/-8.66	-6.11/-5.25	-5.24/-4.78	-10.84/-7.31	-5.48/-5.48	-2.86/-3.16	-0.63/-0.36	0.010/63	0.850/72	0.19/-0.07	-0.41/-0.91	-1.38/-0.87	-0.47/-0.80	-0.92/-0.46	-0.85/-1.26	-0.60/-1.11	2.19/2.38
Θ(45°)	1.310/46	-2.02/-0.93	-1.35/-2.44	-4.28/-5.8																				



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Appendix F

Θ(15°)	-0.680.14	0.490.44	0.510.66	1.181.54	1.791.74	1.671.94	2.002.13	2.192.15	2.101.89	1.671.16	2.071.83	1.531.04	0.760.34	-0.22/-0.67	-1.34/-1.69	-1.51/-1.33	-1.31/-1.61	-1.70/-2.06	-2.54/-2.45	-2.13/-1.36	-0.79/-0.48	-0.44/-0.77	-1.04/-1.34	-0.36/-0.59	
Θ(22.5°)	-0.69/-1.00	-0.66/-0.45	-0.36/-0.20	0.610.85	0.640.20	0.320.29	0.360.46	0.630.82	0.901.22	1.621.93	2.252.08	1.790.94	-0.16/-0.16	0.240.13	-0.44/-1.01	-1.60/-2.55	-3.72/-3.88	-3.34/-2.59	-1.96/-1.31	-1.24/-1.37	-2.31/-2.36	-2.46/-2.55	-1.72/-0.54	0.73/-0.47	
Θ(35°)	-0.06/-0.75	-0.83/-0.53	-0.44/-0.31	-0.62/-1.81	-3.25/-3.18	-2.56/-1.62	-1.19/-1.16	-1.34/-1.66	-1.70/-1.13	-0.310.48	1.13/-1.31	0.850.02	-1.04/-2.18	-2.03/-1.88	-2.27/-2.50	-3.45/-4.22	-4.33/-4.14	-0.340.34	2.052.25	3.29/-1.87	1.50/-2.11	0.050.01	0.71/-1.11		
Θ(37.5°)	-2.13/-3.62	-2.78/-1.49	-0.540.09	-1.13/-2.04	-2.19/-1.89	-1.25/-1.03	-1.35/-1.57	-1.58/-1.49	-2.09/-3.23	-4.10/-4.48	-3.56/-2.27	-0.83/-1.03	-1.99/-1.76	-1.58/-2.38	-4.41/-7.21	-8.89/-8.67	-7.35/-6.04	-4.34/-2.36	-0.97/-0.11	0.902.52	2.74/-2.27	1.650.70	0.77/-0.03	-1.29/-2.25	
Θ(45°)	-2.87/-3.23	-3.16/-1.26	-1.63/-2.77	-5.94/-4.86	-4.09/-2.79	-1.59/-1.07	-0.340.10	-0.03/-0.71	-1.40/-2.16	-2.96/-4.36	-5.30/-4.75	-2.71/-2.45	-3.83/-4.13	-4.45/-4.45	-4.05/-5.95	-6.50/-5.57	-5.58/-7.82	-10.26/-8.02	-3.28/-0.98	1.603.17	3.64/-8.72	1.280.78	-0.75/-2.68		
Θ(52.5°)	-4.23/-2.75	-0.34/-2.75	0.04/-1.17	0.25/-0.38	-1.21/-2.07	-0.45/-0.41	-0.66/-0.53	-0.49/-0.26	0.030.32	0.06/-1.28	-3.46/-5.67	-7.09/-5.18	-3.33/-3.05	-3.06/-7.29	-6.98/-6.47	-5.10/-3.92	-3.06/-2.39	-1.970.28	2.070.60	3.20/-4.1	2.280.87	-0.20/-2.26			
Θ(60°)	-4.53/-2.85	-0.890.11	-1.32/-2.66	-1.950.18	1.54/-2.11	1.63/-0.25	-2.29/-4.54	-4.56/-3.71	-1.98/-0.95	-1.20/-2.87	-5.34/-4.30	-2.99/-3.87	-8.84/-15.36	-11.87/-8.06	-6.08/-2.81	-0.400.60	1.14/-1.35	1.88/-1.94	1.70/-1.78	1.84/-2.16	2.84/-0.5	2.67/-1.0	0.410.05	-1.45/-3.91	
Θ(67.5°)	-4.38/-2.84	-0.85/-0.69	-0.39/-0.72	0.270.86	1.55/-1.88	1.68/-1.04	0.05/-1.67	-2.66/-1.94	-1.34/-1.71	-2.60/-3.68	-5.18/-3.85	-2.48/-3.64	-8.03/-10.27	-6.21/-1.68	-1.120.62	1.63/-1.78	0.930.33	0.46/-1.17	1.56/-1.35	1.16/-1.68	1.56/-0.9	2.25/-1.09	-2.37/-1.77	-2.89/-5.26	
Θ(75°)	-2.49/-4.24	-2.21/-2.32	-4.23/-5.64	-2.33/-0.45	1.76/-1.89	2.08/-1.03	0.37/-0.50	-1.72/-1.99	-2.09/-1.94	-2.93/-4.78	-4.77/-5.97	-5.18/-2.78	-3.98/-5.60	-4.62/-1.37	-2.120.21	1.57/-1.93	0.83/-2.02	-2.22/-1.44	-0.35/-0.17	1.40/-0.50	1.87/-0.79	1.870.28	-3.75/-3.45	-4.52/-4.59	
Θ(82.5°)	-1.33/-2.36	-2.46/-6.13	-7.04/-6.80	-1.440.82	1.770.86	1.45/-1.38	0.73/-1.64	1.14/-0.79	-0.28/-0.04	0.12/-2.26	-5.72/-6.48	-4.88/-3.70	-3.26/-5.35	-5.96/-2.83	-0.75/-0.30	0.91/-1.02	1.04/-0.20	-1.78/-3.39	-4.34/-4.17	-1.660.41	2.202.61	3.10/-1.88	-0.15/-3.51	-4.42/-3.04	
Θ(90°)	-1.99/-3.53	-3.61/-5.52	-6.32/-5.72	-3.35/-1.11	-0.66/-2.60	-3.00/-2.28	-1.040.77	0.18/-1.51	-0.37/-1.06	-0.48/-0.75	-3.08/-3.87	-3.72/-2.56	-4.19/-5.13	-6.74/-5.06	-2.80/-2.58	-1.422.01	3.39/-3.59	2.75/-1.74	0.48/-0.58	-0.01/-2.72	2.972.90	0.33/-1.15	-0.30/-3.86	-5.60/-5.94	
Θ(97.5°)	-2.70/-3.39	-6.52/-10.56	-9.04/-2.66	-2.70/-2.62	-4.38/-3.14	-2.940.05	1.55/-1.53	-1.08/-1.22	-1.970.40	0.10/-1.54	-2.11/-2.61	-4.20/-4.31	-4.43/-6.95	-7.87/-4.40	-2.64/-6.80	-0.802.81	4.35/-3.27	1.77/-1.40	1.820.80	3.66/-3.31	1.77/-1.40	1.820.80	-5.32/-3.05	-1.43/-3.61	-5.60/-7.74
Θ(105°)	-2.04/-5.90	-7.82/-9.59	-5.29/-1.25	-0.720.10	-2.25/-4.04	-5.23/-1.89	0.32/-0.20	-0.782.49	0.792.85	1.10/-0.21	-2.19/-2.32	-2.84/-1.82	-0.96/-3.54	-3.10/-1.91	0.76/-3.54	-4.930.91	1.90/-1.63	-0.27/-1.41	1.76/-1.03	-0.73/-4.73	-1.16/-3.08	-9.00/-6.18	-5.59/-12.69	-9.20/-3.97	
Θ(112.5°)	-6.78/-7.20	-10.30/-9.06	-4.66/-0.93	-0.42/-1.75	-6.56/-10.49	-5.22/-3.60	-2.40/-2.45	-0.23/-1.70	2.512.19	0.37/-1.07	-3.16/-2.78	-1.360.39	1.00/-2.04	-1.54/-0.01	0.82/-1.43	-6.36/-3.60	-4.14/-6.24	-5.79/-4.04	-4.98/-1.72	-4.67/-7.71	-5.50/-4.61	-6.43/-9.88	-1.04/-5.87	-3.20/-1.97	
Θ(120°)	-10.80/-10.74	-8.76/-11.52	-5.12/-2.85	-4.40/-5.99	-6.77/-7.29	-4.47/-3.55	-2.67/-1.78	-0.11/-4.11	2.430.83	-1.08/-3.18	-2.82/-2.83	-1.81/-0.78	0.560.38	-0.35/-0.16	-1.830.03	-6.28/-3.60	-2.48/-6.59	-10.28/-8.63	-13.09/-4.62	-3.92/-4.27	-3.64/-4.39	-7.52/-7.54	-13.20/-9.06	-8.07/-8.88	
Θ(127.5°)	-7.09/-8.56	-6.57/-4.25	-3.02/-4.14	-4.47/-7.21	-7.90/-9.33	-5.75/-2.10	-1.90/-1.35	-0.64/-0.81	-1.00/-0.35	-0.67/-1.72	-2.85/-2.56	-0.77/-1.31	3.28/-1.50	-1.62/-2.49	-1.40/-1.97	-5.01/-2.68	-3.32/-0.89	-5.62/-2.71	-3.22/-2.39	-3.61/-1.72	-6.25/-3.93	-6.51/-8.19	-7.48/-3.01	-2.24/-5.68	
Θ(135°)	-6.37/-4.34	-3.83/-4.68	-4.75/-4.80	-7.86/-9.05	-9.97/-10.24	-6.28/-2.20	0.40/-4.7	0.58/-1.04	0.960.07	-1.30/-0.63	-0.53/-2.03	0.13/-0.23	3.032.04	1.11/-0.54	-2.02/-0.32	-2.13/-4.40	-6.84/-5.28	-1.59/-6.86	-3.26/-1.88	-1.89/-3.40	-3.08/-11.04	-12.91/-9.37	-10.86/-7.83	-8.30/-8.47	
Θ(142.5°)	-6.55/-6.76	-9.63/-6.65	-6.47/-2.78	-2.00/-2.65	-3.19/-2.97	-1.93/-0.98	-0.02/-1.33	1.77/-1.74	0.860.43	1.550.86	-0.81/-3.54	-2.30/-1.02	1.220.00	-3.20/-7.48	-5.77/-6.56	-8.71/-5.16	-1.29/-6.30	-2.73/-1.46	-2.42/-5.53	-6.55/-7.61	-6.99/-9.95	-5.72/-6.92	-7.88/-8.37		
Θ(150°)	-7.04/-4.09	-2.61/-2.51	-3.88/-4.81	-5.67/-6.33	-6.32/-5.29	-3.69/-1.99	-0.71/-0.36	-0.45/-0.32	0.88/-1.26	-0.40/-3.60	-6.84/-6.95	-3.45/-0.56	0.27/-1.00	-4.20/-2.76	-0.48/-0.80	-1.82/-4.71	-5.34/-6.53	-8.31/-9.48	-14.36/-15.00	-10.70/-5.05	-3.74/-5.47	-8.02/-7.63	-6.22/-6.00	-7.47/-10.11	
Θ(157.5°)	-5.49/-6.50	-7.00/-10.00	-11.06/-9.73	-9.86/-9.28	-6.28/-3.84	-1.98/-0.92	-0.08/-1.03	1.99/-61	-0.50/-4.77	-8.42/-9.46	-9.80/-8.13	-4.77/-1.55	-0.38/-0.96	-0.500.70	0.33/-0.59	-1.38/-2.92	-2.76/-2.44	-4.18/-6.68	-8.03/-6.85	-4.18/-2.00	-2.81/-5.92	-12.85/-11.05	-6.61/-5.24	-6.45/-5.27	
Θ(165°)	-5.28/-6.92	-9.99/-14.71	-15.43/-12.95	-11.67/-9.28	-7.00/-4.26	-2.27/-0.68	-0.08/-0.20	-1.31/-3.26	-6.45/-8.15	-6.58/-4.87	-4.14/-4.75	-5.47/-5.35	-4.48/-3.29	-2.54/-2.36	-2.72/-3.95	-3.72/-5.51	-6.80/-6.34	-6.27/-6.74	-6.14/-5.30	-4.76/-5.06	-7.46/-9.20	-5.08/-3.78	-5.08/-3.78	-3.76/-5.65	
Θ(172.5°)	-10.79/-11.10	-10.00/-8.41	-7.05/-5.75	-4.68/-4.07	-4.07/-3.89	-4.06/-4.15	-4.89/-5.49	-5.73/-5.16	-4.05/-3.38	-2.77/-2.38	-2.93/-3.80	-4.88/-6.19	-7.20/-8.15	-9.14/-9.60	-8.90/-9.81	-10.13/-11.28	-13.10/-15.14	-15.56/-15.44	-14.83/-13.73	-13.33/-13.17	-13.55/-13.00	-11.16/-11.21	-12.55/-11.87	-11.27/-10.58	
Θ(180°)	-14.28/-13.93	-13.91/-14.55	-14.98/-15.38	-15.74/-15.19	-14.95/-15.50	-15.08/-14.86	-15.58/-15.29	-14.31/-12.31	-10.96/-10.23	-9.68/-9.22	-9.58/-9.35	-8.90/-8.02	-7.47/-7.44	-7.64/-7.85	-7.75/-7.56	-7.13/-6.68	-6.76/-7.23	-7.72/-9.54	-11.02/-10.99	-11.42/-11.22	-9.79/-9.09	-9.98/-10.91	-10.50/-11.21	-12.74/-13.18	
Freq(Hz)	6.475GPol.	Total/Ant.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Gain	Θ(0°)°(7.5°)	Θ(15°)°(22.5°)	Θ(30°)°(37.5°)	Θ(45°)°(52.5°)	Θ(60°)°(67.5°)	Θ(75°)°(82.5°)	Θ(90°)°(97.5°)	Θ(105°)°(112.5°)	Θ(120°)°(127.5°)	Θ(135°)°(142.5°)	Θ(150°)°(157.5°)	Θ(165°)°(172.5°)	Θ(180°)°(187.5°)	Θ(195°)°(202.5°)	Θ(210°)°(217.5°)	Θ(225°)°(232.5°)	Θ(240°)°(247.5°)	Θ(255°)°(262.5°)	Θ(270°)°(277.5°)	Θ(285°)°(292.5°)	Θ(300°)°(307.5°)	Θ(315°)°(322.5°)	Θ(330°)°(337.5°)	Θ(345°)°(352.5°)	
Θ(0°)	-6.69/-6.36	-6.14/-6.05	-6.44/-6.46	-6.55/-6.68	-6.50/-6.46	-6.83/-6.55	-6.28/-6.12	-6.35/-6.52	-7.05/-7.31	-7.60/-7.68	-8.88/-6.25	-6.30/-6.41	-5.75/-5.63	-5.64/-5.63	-5.68/-5.53	-5.32/-5.04	-5.03/-4.92	-4.96/-5.01	-4.81/-5.22	-5.00/-4.41	-4.63/-5.29	-5.54/-6.80	-9.78/-9.81	-9.50/-8.67	
Θ(7.5°)	-4.29/-4.50	-4.44/-3.53	-3.16/-2.84	-2.75/-2.74	-2.53/-2.54	-2.21/-2.20	-2.50/-3.86	-3.58/-2.52	-3.36/-4.06	-4.58/-5.22	-5.59/-5.45	-5.46/-5.65	-5.50/-6.11	-6.28/-6.77	-7.05/-7.22	-7.63/-8.26	-8.46/-10.47	-10.19/-8.86	-7.10/-6.80	-7.10/-6.80	-7.10/-6.80	-7.10/-6.80	-7.10/-6.80	-7.10/-6.80	
Θ(15°)	-3.25/-2.75	-1.43/-0.90	-0.44/-0.11	0.100.49	0.720.58	0.66/-1.11	1.28/-1.04	0.840.45	-0.09/-1.00	-2.59/-5.17	-2.31/-2.57	-3.07/-3.09	-3.39/-3.98	-4.55/-5.24	-5.30/-5.28	-5.14/-5.59	-6.34/-6.79	-6.25/-5.99	-6.00/-6.05	-6.81/-7.39	-7.66/-6.27	-6.52/-7.57	-6.76/-6.16	-4.83/-3.57	
Θ(22.5°)	-3.68/-2.82	-1.97/-0.64	0.06/-0.34	-0.590.69	0.980.77	0.880.99	1.22/-1.45	1.67/-1.70	1.54/-1.46	1.55/-2.13	0.68/-0.55	-1.37/-1.79	-2.20/-2.86	-4.18/-5.09	-4.97/-5.02	-5.24/-5.53	-5.40/-4.79	-4.78/-5.32	-5.20/-4.69	-7.07/-8.63	-9.65/-9.36	-8.24/-6.46	-6.30/-6.57	-5.59/-4.47	
Θ(30°)	-4.02/-2.06	-0.980.07	0.870.86	0.24/-0.32	-2.69/-1.92	-2.01/-1.46	-0.87/-0.16	0.68/-1.58	1.89/-1.79	1.75/-1.57	0.75/-0.25	-1.20/-2.49	-3.14/-3.90	-4.99/-5.30	-5.35/-5.15	-4.67/-3.58	-2.13/-1.17	-0.75/-1.40	-1.82/-2.07	-2.00/-2.16	-2.69/-2.70	-3.69/-4.76	-5.50/-5.84	-4.79/-3.62	
Θ(37.5°)	-4.05/-1.73	-0.38/-0.31	-0.060.68	0.04/-0.63	-1.48/-1.70	-3.10/-0.82	-0.470.13	0.760.97	0.98/-1.36	1.310.85	-0.78/-2.22	-2.40/-3.39	-4.70/-7.47	-9.66/-7.48	-5.65/-6.00	-6.07/-5.75	-5.22/-5.17	-4.72/-3.70	-2.38/-0.38	0.04/-0.25	-0.82/-1.64	-2.21/-1.56	-0.52/-0.71	-2.90/-3.07	
Θ(45°)	-4.53/-2.56	-1.08/-0.98	-0.93/-2.35	-5.32/-1.00	-1.09/-0.77	-0.28/-0.12	-0.16/-0.75	-1.34/-1.09	-0.400.03	-0.79/-1.35	-2.81/-4.31	-5.17/-4.63	-6.05/-9.37	-11.10/-9.46	-9.08/-8.17	-7.75/-7.67	-8.65/-10.49	-8.72/-5.58	-2.88/-1.90	-0.74/-1.39	1.95/-1.22	0.89/-0.18	-0.51/-0.79	-2.57/-4.77	
Θ(52.5°)	-8.19/-8.54	-4.79/-3.56	-2.63/-1.94	-0.380.32	0.71/-1.08	1.190.07	-2.75/-3.73	-3.73/-2.11	-0.98/-0.70	-3.47/-6.36	-5.74/-4.52	-6.38/-10.84	-15.23/-11.54	-11.44/-7.21	-6.31/-3.92	-5.61/-6.86	-6.74/-4.77	-3.84/-4.25	-3.20/-1.64	0.380.84	0.690.11	0.07/-0.47	-1.73/-6.32		
Θ(60°)	-5.53/-4.29	-2.98/-2.01	-1.05/-0.54	0.030.05	0.57/-1.10	1.05/-1.05	0.67/-0.59	-2.73/-3.92	-4.35/-5.50	-4.30/-3.07	-3.43/-6.70	-4.62/-3.52	-3.86/-7.12	-10.61/-10.92	-6.14/-2.47	-6.20/-2.78	-2.58/-2.95	-1.87/-0.64	-0.080.83	0.86/-1.79	2.122.61	0.39/-0.38	1.67/-1.32	-1.10/-3.61	
Θ(67.5°)	-7.01/-4.16	-2.95/-0.99	-1.33/-1.51	0.08/-1.38	1.90/-1.96	1.12/-0.74	-2.96/-4.21	-6.23/-5.85	-3.67/-2.22	-1.47/-1.54	-2.15/-6.56	-6.60/-4.76	-4.18/-5.67	-12.31/-8.32	-3.36/-0.75	-1.21/-1.20	-2.82/-2.62	-0.69/-1.31	2.422.42	1.912.21	2.06/-1.78	-0.33/-1.49	-0.21/-1.00	-0.08/-4.41	
Θ(75°)	-5.36/-2.31	-1.72/-0.76	-0.340.19	-0.29/-0.87	0.61/-1.85	1.800.81	-0.53/-3.18																		



Antenna Pattern of 6GHz UNII 5~UNII 8

Appendix F

Θ(67.5°)	-1.44/-1.61	-4.92/-6.12	-0.48/-1.03	1.38/1.58	1.00/0.37	-0.33/-0.95	-0.51/-0.31	-1.78/-1.54	0.41/1.01	2.29/1.66	-0.96/-1.33	-0.48/-0.45	-1.40/-1.97	-0.12/-0.05	-0.77/-0.65	-2.63/-8.0	0.90/0.52	-1.04/-1.91	-1.76/-2.89	-6.00/-3.07	-0.07/2.97	3.69/4.16	4.19/4.41	3.50/1.78
Θ(75°)	0.66/-1.41	-3.46/-2.59	-2.24/-0.48	1.61/2.14	1.55/1.24	0.95/1.30	1.60/-1.84	1.63/0.66	1.69/2.39	3.13/2.80	1.31/0.44	0.69/0.01	-0.02/0.52	1.45/0.26	-1.77/-1.38	-1.49/-1.32	-0.61/-2.07	-6.09/-9.68	-7.26/-4.47	-3.96/-6.31	-3.14/-1.11	2.49/3.48	4.89/5.74	4.48/2.33
Θ(82.5°)	2.17/0.97	-1.41/-4.90	-2.87/1.23	0.21/-0.37	0.39/-1.42	-0.68/0.23	0.98/0.67	0.41/0.59	2.02/2.06	2.39/2.03	0.19/-0.57	-0.02/-0.74	-1.44/0.39	2.10/-1.40	-4.57/-2.51	-1.52/-3.91	-12.92/-9.23	-7.17/-10.99	-5.53/-5.36	-3.59/-2.63	-4.30/-2.12	1.46/2.86	4.95/5.02	4.11/3.63
Θ(90°)	2.59/1.40	0.52/-1.47	-3.61/-0.65	0.19/0.03	-2.19/-4.11	-2.48/-1.49	-0.02/0.24	-0.38/-1.06	-0.26/-1.42	1.82/1.50	2.19/1.99	-0.12/-0.43	0.02/-1.19	0.44/-1.10	-2.21/0.27	-2.27/-3.15	-3.19/-1.95	-0.50/-2.09	-5.20/-3.52	-0.28/0.40	-2.32/-5.78	-3.13/-0.44	2.17/3.54	3.28/3.48
Θ(97.5°)	3.07/1.24	0.65/-1.17	-3.62/-0.29	0.21/-4.80	-5.85/-7.85	-7.91/-4.30	-1.03/-1.14	-2.94/-2.08	-0.57/-1.42	2.83/3.39	2.57/0.81	-2.27/-1.42	0.14/-0.78	-1.51/-2.25	-2.59/-1.40	-0.05/-0.97	-0.62/0.70	2.25/1.04	-0.59/0.67	1.85/1.04	-6.48/-4.65	-1.42/-3.45	-1.08/-1.44	1.29/1.25
Θ(105°)	2.72/1.37	-1.72/-1.82	-4.92/-3.69	-1.86/-3.16	-5.46/-9.44	-8.77/-4.55	-2.60/-1.25	-2.26/-0.46	0.73/2.67	3.96/3.42	2.48/-1.52	-1.60/-4.37	-3.83/-0.90	-0.29/-1.61	-0.11/0.01	-0.25/-2.33	0.47/1.46	1.73/-1.25	-5.04/0.61	2.08/-3.19	-0.20/-0.92	-0.21/-12.72	-2.69/-1.38	-0.22/-1.28
Θ(112.5°)	-3.73/-0.89	-3.84/-3.16	-2.67/-5.28	-5.14/-2.54	-4.92/-5.47	-5.87/-4.63	-4.68/-3.59	-2.88/-3.87	-1.68/0.67	0.08/1.56	0.42/-1.98	-2.14/-1.50	-0.87/0.40	0.89/2.18	-0.75/0.62	0.55/-1.61	-0.07/1.65	-0.14/-4.96	-11.97/-6.86	-4.28/-7.29	-2.20/-2.19	-0.45/-3.15	-3.49/-6.90	-2.96/-6.96
Θ(120°)	-1.60/-1.29	-4.00/-2.59	-2.70/-2.83	-2.45/-4.61	-5.66/-9.16	-7.47/-6.10	-4.63/-4.89	-7.02/-3.77	-5.68/-3.61	-0.82/-0.52	-0.20/-0.14	0.09/0.47	2.76/1.78	1.14/0.06	-0.84/-5.51	1.03/-1.49	0.07/0.24	-1.29/-12.00	-13.20/-4.25	-3.97/-4.92	-9.66/-5.11	-4.67/-4.11	-3.77/-5.04	-9.23/-5.79
Θ(127.5°)	-7.46/-5.79	-4.36/-8.56	-3.15/-1.18	-3.44/-7.62	-12.18/-10.64	-9.99/-8.15	-9.49/-9.36	-8.00/-7.20	-4.94/-3.28	-1.60/0.51	-0.77/-0.58	2.33/2.98	2.70/0.84	1.02/2.84	0.80/1.56	0.61/-7.44	-7.78/-2.37	-3.42/-4.03	-14.26/-9.48	1.00/-5.40	-7.97/-0.51	-1.82/-4.96	-12.25/-5.72	-2.02/-3.91
Θ(135°)	-3.62/-6.99	-11.02/-6.03	-6.81/-6.48	-6.86/-7.12	-7.17/-9.82	-9.31/-10.46	-9.31/-8.04	-9.01/-11.91	-11.32/-4.40	-1.84/-1.47	-0.95/0.77	2.94/1.77	0.03/1.60	2.16/1.28	-1.87/-1.57	-0.67/-3.99	-5.34/-0.54	-1.24/-3.07	-5.93/-3.06	2.62/0.50	-8.65/-11.49	-5.44/-2.84	-6.83/-5.70	-5.11/-2.74
Θ(142.5°)	-14.04/-10.28	-8.00/-7.16	-7.59/-8.03	-8.54/-10.63	-10.49/-8.76	-8.35/-7.74	-7.85/-9.48	-11.00/-9.13	-5.51/-2.85	-1.89/-2.48	-0.69/0.51	0.41/-0.65	0.66/1.23	0.04/-5.94	-5.97/-4.98	-2.67/-5.39	-3.40/-2.80	-7.48/-9.13	-7.23/-8.46	-1.06/0.86	-3.05/-10.55	-15.39/-9.44	-0.06/-4.37	-3.29/-7.38
Θ(150°)	-3.91/-5.88	-7.79/-7.12	-10.33/-14.14	-1.34/-12.81	-11.11/-8.74	-7.32/-5.94	-5.63/-5.82	-5.22/-5.40	-4.94/-8.47	-5.59/-4.41	-3.03/-3.04	-5.24/-8.20	-11.79/-9.27	-3.39/-0.30	0.31/-0.87	-0.49/-2.67	-5.64/-8.28	-4.85/-1.80	-0.31/0.92	-0.54/-4.16	-5.20/-4.43	-6.27/-10.50	-6.76/-3.95	
Θ(157.5°)	-10.60/-12.55	-14.48/-9.95	-7.59/-8.96	-9.48/-10.29	-10.22/-7.83	-6.48/-6.06	-6.59/-8.00	-7.44/-6.01	-5.29/-3.26	-1.76/-1.78	-2.20/-2.63	-4.78/-6.97	-5.33/-3.95	-1.40/0.95	1.79/1.36	0.99/0.71	-0.18/-2.86	-7.52/-9.65	-7.59/-4.67	-2.53/-1.81	-2.87/-4.44	-4.71/-3.97	-3.82/-6.85	-11.30/-12.63
Θ(165°)	-12.23/-12.98	-10.60/-6.93	-4.90/-3.67	-4.56/-5.31	-5.21/-4.53	-4.34/-5.18	-6.55/-7.19	-6.91/-7.38	-7.08/-6.84	-6.62/-7.25	-7.71/-7.76	-6.38/-4.33	-2.99/-2.14	-1.29/-0.42	0.01/0.09	-0.08/-0.56	-5.33/-7.49	-9.77/-9.68	-8.29/-8.01	-7.71/-8.99	-7.31/-5.89	-5.30/-6.23	-8.60/-10.49	
Θ(172.5°)	-9.50/-8.50	-8.51/-12.27	-7.99/-8.45	-8.58/-8.77	-9.69/-10.71	-11.21/-10.98	-10.68/-9.36	-7.51/-7.28	-7.40/-7.58	-7.74/-8.63	-9.39/-9.18	-7.52/-5.40	-4.01/-3.16	-2.83/-2.75	-2.89/-3.19	-3.44/-4.11	-11.68/-15.35	-15.51/-13.67	-12.92/-12.04	-11.03/-11.47	-13.62/-12.80	-12.68/-12.12	-12.29/-12.70	
Θ(180°)	-10.39/-10.10	-10.62/-11.80	-11.07/-9.99	-10.38/-10.28	-9.47/-8.78	-7.87/-7.88	-7.97/-7.84	-8.16/-8.39	-9.55/-10.75	-12.21/-11.90	-11.42/-10.95	-10.80/-11.14	-11.52/-12.32	-11.88/-11.23	-10.54/-9.98	-9.59/-9.59	-10.96/-13.89	-15.56/-15.74	-14.19/-14.11	-15.62/-14.97	-13.87/-12.83	-13.18/-14.45	-15.07/-12.86	-11.46/-11.50
Freq(Hz)	6.175GPol.	TotalAnt.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)Φ(7.5°)	Φ(15°)Φ(22.5°)	Φ(30°)Φ(37.5°)	Φ(45°)Φ(52.5°)	Φ(60°)Φ(67.5°)	Φ(75°)Φ(82.5°)	Φ(90°)Φ(97.5°)	Φ(105°)Φ(112.5°)	Φ(120°)Φ(127.5°)	Φ(135°)Φ(142.5°)	Φ(150°)Φ(157.5°)	Φ(165°)Φ(172.5°)	Φ(180°)Φ(187.5°)	Φ(195°)Φ(202.5°)	Φ(210°)Φ(217.5°)	Φ(225°)Φ(232.5°)	Φ(240°)Φ(247.5°)	Φ(255°)Φ(262.5°)	Φ(270°)Φ(277.5°)	Φ(285°)Φ(292.5°)	Φ(300°)Φ(307.5°)	Φ(315°)Φ(322.5°)	Φ(330°)Φ(337.5°)	Φ(345°)Φ(352.5°)
Θ(0°)	-2.25/-2.51	-2.94/-3.39	-3.35/-3.97	-4.30/-4.46	-4.00/-3.95	-4.01/-4.51	-5.07/-5.35	-5.27/-4.90	-4.38/-4.35	-5.03/-4.32	-4.03/-3.94	-3.59/-3.19	-2.94/-2.78	-2.90/-3.03	-2.93/-2.99	-3.06/-2.90	-3.16/-3.32	-3.63/-4.11	-4.86/-3.77	-3.27/-2.97	-3.15/-2.89	-2.38/-2.81	-3.37/-2.27	-1.80/-2.18
Θ(7.5°)	-3.36/-2.74	-2.75/-3.06	-3.55/-4.57	-4.67/-4.76	-4.85/-4.49	-4.54/-5.39	-5.75/-5.75	-5.30/-3.50	-5.46/-5.84	-5.93/-5.71	-5.28/-4.70	-4.72/-4.80	-4.45/-4.49	-3.81/-3.70	-3.89/-4.04	-4.23/-3.43	-4.51/-3.43	-4.60/-5.74	-6.74/-6.22	-4.99/-0.43	-3.93/-4.75	-5.08/-0.58	-4.74/-3.59	-3.22/-3.80
Θ(15°)	-7.50/-6.38	-5.50/-4.52	-4.47/-4.92	-4.87/-4.05	-3.65/-3.81	-5.02/-5.39	-3.73/-3.31	-2.67/-2.58	-3.93/-4.54	-3.96/-3.64	-3.51/-3.85	-3.53/-3.22	-3.46/-3.43	-3.41/-3.74	-5.08/-5.04	-4.74/-4.56	-4.57/-4.24	-3.61/-3.18	-3.33/-3.75	-3.63/-4.12	-4.34/-4.12	-4.31/-4.49	-4.32/-4.62	
Θ(22.5°)	-4.33/-3.78	-4.08/-3.51	-3.06/-2.51	-2.41/-1.90	-1.60/-2.22	-3.56/-3.93	-1.95/-1.68	-1.93/-1.81	-1.47/-1.24	-1.11/-1.10	-1.17/-1.05	-1.33/-1.99	-2.90/-3.76	-3.63/-3.38	-3.74/-4.21	-4.83/-5.62	-6.64/-7.58	-9.34/-9.73	-7.88/-6.27	-4.78/-3.41	-2.47/-2.03	-1.94/-2.53	-3.19/-4.23	-5.26/-4.79
Θ(30°)	-6.94/-4.45	-4.88/-2.56	-1.10/-0.77	-0.68/-0.89	-1.42/-1.53	-1.46/-1.87	-3.17/-3.42	-0.77/-0.92	-0.89/-0.64	-0.07/0.36	-0.16/-0.94	-1.01/-1.40	-1.19/-2.14	-3.08/-0.43	-5.26/-5.98	-7.49/-9.22	-9.89/-11.52	-10.33/-8.57	-8.93/-9.42	-7.99/-7.04	-7.44/-5.90	-4.09/-3.42	-3.27/-3.36	-3.22/-3.94
Θ(37.5°)	-6.22/-3.76	-2.91/-2.95	-2.23/-2.01	-1.25/-1.60	-1.97/-1.88	-0.52/-0.87	-0.37/-0.70	-0.99/-1.30	-0.40/-0.53	-0.55/-1.11	-1.86/-1.37	-0.69/-0.43	-0.81/-1.52	-2.52/-3.98	-4.66/-4.37	-10.43/-9.87	-12.61/-13.11	-10.14/-6.89	-5.48/-6.97	-12.97/-5.85	-4.95/-5.22	-5.79/-6.21		
Θ(45°)	-6.48/-4.60	-2.81/-1.75	0.19/0.36	0.25/0.04	-0.55/-2.77	-3.58/-1.59	-0.46/0.17	-0.83/-1.10	-1.76/-1.10	-0.33/-0.17	-0.87/-0.95	-0.08/0.61	0.01/-1.75	-4.45/-4.15	-3.58/-4.74	-7.33/-11.53	-10.66/-11.72	-12.62/-13.70	-10.19/-8.50	-8.39/-7.70	-8.20/-13.12	-13.03/-14.05	-10.97/-8.10	-6.98/-7.20
Θ(52.5°)	-8.17/-7.88	-5.23/-4.19	1.00/0.45	-0.91/-0.44	0.04/0.15	-0.46/-2.18	-4.28/-2.90	-3.17/-3.62	-4.00/-2.96	-1.59/0.02	0.38/0.72	1.05/0.93	-0.28/-0.26	-1.40/-0.05	-0.99/-4.62	-10.37/-8.62	-5.64/-9.47	-6.58/-6.91	-9.93/-10.74	-11.72/-9.85	-7.84/-9.83	-7.11/-8.40	-8.15/-8.21	-13.97/-14.22
Θ(60°)	-15.66/-9.43	-3.74/-1.33	0.15/0.79	-0.09/-2.19	-2.04/-1.67	-1.23/-2.35	-8.00/-12.34	-10.06/-8.84	-5.27/-2.21	-0.07/0.62	0.30/-0.11	-0.48/-0.40	-1.26/-2.06	-0.29/0.11	-0.83/-3.31	-4.06/-4.30	-3.34/-3.72	-3.24/-4.20	-5.29/-10.07	-14.44/-5.60	-4.82/0.90	-1.54/-3.64	-5.23/-9.26	
Θ(67.5°)	-9.97/-6.47	-5.73/-1.84	-0.70/-1.60	-1.62/-0.65	-1.43/-2.46	-3.91/-7.72	-9.02/-4.66	-4.28/-4.43	-3.87/-3.22	-3.20/-2.54	-1.93/-1.93	-1.95/0.87	2.01/-1.16	2.15/-1.66	-2.42/-5.72	-5.86/-4.82	-5.67/-3.78	-3.48/-3.96	-4.56/-4.74	-8.22/-6.65	-1.83/0.60	1.62/2.56	1.50/2.40	1.87/-4.44
Θ(75°)	-3.10/-2.89	-2.79/-3.83	-0.81/0.81	-0.55/-2.42	-4.25/-5.11	-4.83/-4.44	-6.53/-6.09	-4.33/-0.95	-0.37/-0.35	-1.68/-3.75	-4.35/-3.20	-0.64/-1.66	3.20/2.71	1.78/0.67	-4.79/-6.29	-2.43/-4.07	-11.18/-15.08	-12.36/-7.07	-9.46/-6.69	-4.94/-0.43	-1.95/-1.66	2.33/3.37	4.17/3.16	2.04/1.03
Θ(82.5°)	0.53/-1.63	-3.34/-3.36	-1.65/-2.88	-2.51/-1.21	-2.93/-2.18	-1.09/-1.90	-4.77/-3.15	-2.44/-2.05	-0.10/-1.27	-4.80/-5.82	-4.36/-1.24	0.58/1.16	3.90/2.00	-1.30/-3.65	-7.28/-1.47	-0.69/-2.55	-3.25/-4.04	-4.82/-7.25	-12.15/-11.21	-4.88/-2.83	-2.67/-3.62	-2.20/-1.64	3.71/4.35	3.94/3.69
Θ(90°)	1.46/-1.19	-1.91/-2.05	-3.10/-1.04	-2.54/-4.42	-3.02/-2.09	-2.27/-1.82	-5.37/-7.54	-4.53/-0.34	-2.39/-5.30	-3.17/-2.04	-1.77/-0.45	1.96/2.75	2.46/0.19	-2.77/-4.14	-4.05/2.23	2.01/-0.66	0.93/-0.91	-1.11/-0.66	-3.11/-7.62	-3.95/-4.60	-8.61/-5.98	-5.86/-4.73	2.43/3.16	2.16/-0.48
Θ(97.5°)	1.50/-0.64	-0.76/-3.65	-1.83/-1.32	-7.11/-6.11	-6.89/-6.51	-5.32/-4.55	-7.60/-5.91	-8.01/-5.00	-6.65/-4.57	-0.61/-1.20	1.88/1.75	2.69/2.72	0.93/-0.87	-0.03/-1.12	0.06/-1.51	-0.66/-4.33	-0.16/-1.06	1.83/3.48	1.01/-3.23	-2.88/-2.22	-9.01/-4.96	-3.76/-7.14	-0.23/2.24	1.02/3.33
Θ(105°)	0.86/-2.51	0.23/-3.21	-3.71/-6.15	-3.81/-6.36	-13.81/-11.92	-10.33/-7.71	-5.40/-4.52	-5.37/-4.14	-2.08/0.59	1.87/2.10	1.99/1.74	1.55/-0.09	-3.95/-3.85	0.40/-1.08	0.94/-1.83	1.42/-6.40	-2.56/-3.12	-3.29/-2.82	-2.13/-4.09	-2.98/-4.92	-6.82/-3.50	-1.49/-4.10	0.40/0.21	-1.83/2.80
Θ(112.5°)	-1.76/-1.15	-1.24/-3.66	-5.39/-4.10	-3.64/-6.73	-7.62/-15.59	-9.93/-4.66	-3.25/-4.51	-6.96/-6.60	-2.11/-0.88	-0.22/-0.19	0.59/0.03	-3.13/-4.02	-2.41/-2.05	2.15/2.20	2.67/0.46	-3.40/-5.22	-2.25/-1.24	-2.58/-3.82	-14.97/-8.72	-9.38/-7.71	-4.04/-4.77	-3.53/-2.85	-5.06/-0.31	-0.68/-0.08
Θ(120°)	-0.14/-7.90	-3.18/-1.92	-7.50/-7.69	-7.54/-10.02	-9.57/-7.63	-6.33/-4.91	-4.34/-5.47	-5.01/-2.51	-2.15/-1.58	-1.11/0.15	-1.77/-2.68	-1.19/-0.88	-0.99/-1.45	1.90/0.02	-0.65/-1.73	1.71/-3.74	-3.28/-1.79	-3.21/-5.22	-15.46/-3.75	-3.71/-7.04	-7.02/-1.80	-8.97/-8.2		



Antenna Pattern of 6GHz UNII 5~UNII 8

Appendix F

Θ(120°)	-4.33/-0.78	-0.17/-0.47	-1.29/-0.99	-0.25/-0.37	0.07/-0.49	-2.26/-2.68	-2.90/-1.85	-1.06/-0.46	0.13/-1.64	-4.10/-6.29	-4.32/-1.89	-1.28/-2.72	-5.83/-8.72	-3.37/-4.24	-4.16/-6.56	-9.87/-8.62	-14.64/-2.20	0.35/-2.09	-7.14/-5.27	-10.19/-6.40	-10.51/-6.33	-0.58/-0.06	-1.15/-2.31	-2.83/-5.27
Θ(127.5°)	0.82/-0.14	0.83/-0.02	1.15/-0.11	-1.36/-1.06	-1.40/-1.30	-1.51/-2.28	-1.40/-0.71	-0.86/-1.41	-2.38/-3.84	-5.22/-3.93	-2.79/-4.04	-2.63/-5.50	-8.93/-10.49	-6.80/-4.46	-5.77/-15.48	-9.37/-13.62	-9.13/-6.48	-10.20/-4.94	-8.45/-2.51	-0.90/-4.24	-6.52/-4.82	-1.34/-0.75	0.73/-1.96	2.12/-0.16
Θ(135°)	0.67/-0.82	0.87/-0.72	-0.04/-0.73	-1.53/-3.95	-4.62/-4.68	-4.56/-4.47	-5.48/-6.54	-7.32/-6.87	-6.13/-4.57	-5.14/-8.11	-2.24/-2.30	-5.25/-10.52	-6.93/-6.79	-8.70/-9.11	-12.25/-7.39	-6.87/-5.24	-4.37/-6.15	-9.05/-6.58	-6.37/-5.18	-7.16/-10.32	-3.24/-2.88	-1.98/-0.17	1.35/-0.59	
Θ(142.5°)	-1.22/-1.26	1.56/-0.90	-0.67/-1.68	-2.77/-3.24	-4.03/-3.22	-2.41/-2.28	-2.85/-2.95	-2.50/-2.03	-2.12/-2.32	-3.08/-5.93	-7.50/-6.38	-6.45/-6.33	-10.18/-14.80	-11.99/-7.22	-7.23/-9.34	-7.35/-12.07	-7.06/-9.41	-11.40/-7.49	-9.39/-11.08	-5.95/-2.78	-3.04/-2.88	-3.99/-3.75	-2.32/-3.15	-2.72/-1.97
Θ(150°)	-0.75/-0.33	0.37/-0.25	-1.85/-4.04	-5.43/-5.29	-5.66/-7.44	-8.73/-6.50	-4.36/-3.10	-2.85/-2.35	-2.51/-2.74	-2.84/-3.41	-4.47/-8.42	-11.12/-10.00	-7.09/-8.07	-7.08/-6.39	-4.82/-3.81	-6.25/-8.35	-4.99/-7.64	-10.79/-12.82	-10.04/-6.49	-5.16/-2.76	-0.48/-1.12	1.74/-0.30	-0.30/-1.38	-1.91/-1.57
Θ(157.5°)	-3.67/-3.88	-1.90/-1.66	-2.28/-2.95	-4.36/-5.93	-5.05/-3.71	-3.79/-5.39	-6.50/-5.73	-3.66/-2.79	-2.89/-4.20	-5.22/-5.34	-4.67/-2.46	-5.52/-5.41	-4.81/-5.12	-4.68/-4.14	-4.88/-8.07	-8.61/-5.51	-5.48/-8.71	-11.07/-7.89	-6.11/-5.85	-6.12/-4.28	-2.62/-0.83	0.38/-0.12	-0.40/-0.77	-1.10/-2.55
Θ(165°)	-3.87/-2.19	-0.44/-0.44	1.15/-1.35	1.25/-1.12	0.47/-0.09	-0.56/-0.57	-0.50/-0.56	-1.25/-2.73	-4.71/-5.53	-5.28/-4.85	-5.26/-5.44	-5.67/-4.67	-4.27/-4.69	-6.00/-8.07	-10.33/-8.54	-5.41/-4.12	-4.06/-4.46	-4.53/-4.40	-4.58/-4.17	-3.42/-3.75	-3.99/-3.06	-2.77/-3.77	-3.43/-2.63	-3.04/-3.82
Θ(172.5°)	-6.08/-4.47	-2.26/-0.56	0.37/-0.86	1.24/-1.44	1.15/-0.38	-0.36/-0.48	-0.54/-0.85	-1.37/-1.85	-1.69/-1.69	-2.41/-3.96	-6.01/-9.77	-8.91/-9.24	-9.19/-9.51	-10.61/-12.03	-11.14/-10.14	-9.81/-9.26	-8.26/-7.94	-8.30/-8.29	-7.25/-6.65	-6.86/-6.24	-5.28/-5.56	-7.08/-8.55	-7.61/-6.48	-7.16/-6.62
Θ(180°)	-3.41/-3.60	-3.97/-3.91	-3.13/-2.63	-2.14/-2.18	-2.49/-2.44	-2.13/-1.53	-1.01/-0.69	-0.72/-1.20	-1.73/-2.85	-4.45/-5.99	-6.75/-6.76	-6.01/-5.33	-5.05/-5.06	-4.76/-4.47	-4.17/-4.16	-4.31/-4.69	-4.61/-4.01	-2.94/-2.37	-2.46/-2.93	-2.63/-2.77	-2.83/-3.20	-3.39/-3.28	-3.51/-3.99	-3.96/-3.87
Freq(Hz)	6.475GPol.	TotalAnt.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)Ψ(7.5°)	Φ(15°)Ψ(22.5°)	Φ(30°)Ψ(37.5°)	Φ(45°)Ψ(52.5°)	Φ(60°)Ψ(67.5°)	Φ(75°)Ψ(82.5°)	Φ(90°)Ψ(97.5°)	Φ(105°)Ψ(112.5°)	Φ(120°)Ψ(127.5°)	Φ(135°)Ψ(142.5°)	Φ(150°)Ψ(157.5°)	Φ(165°)Ψ(172.5°)	Φ(180°)Ψ(187.5°)	Φ(195°)Ψ(202.5°)	Φ(210°)Ψ(217.5°)	Φ(225°)Ψ(232.5°)	Φ(240°)Ψ(247.5°)	Φ(255°)Ψ(262.5°)	Φ(270°)Ψ(277.5°)	Φ(285°)Ψ(292.5°)	Φ(300°)Ψ(307.5°)	Φ(315°)Ψ(322.5°)	Φ(330°)Ψ(337.5°)	Φ(345°)Ψ(352.5°)
Θ(0°)	-2.34/-2.07	-1.69/-1.41	-0.84/-0.92	-1.22/-2.05	-2.18/-1.79	-1.30/-1.86	-2.65/-3.09	-2.90/-3.46	-3.83/-1.05	-0.79/-0.85	-1.30/-1.71	-1.59/-1.55	-1.52/-1.66	-2.06/-2.09	-1.79/-1.40	-1.43/-1.04	-1.43/-1.72	-1.98/-2.00	-1.75/-1.41	-1.17/-1.28	-1.24/-0.92	-0.76/-3.79	-2.99/-2.09	-1.73/-2.13
Θ(7.5°)	-2.86/-2.56	-3.01/-2.80	-2.83/-2.93	-3.12/-3.59	-3.42/-3.21	-2.70/-2.41	-2.16/-2.51	-3.22/-4.12	-4.22/-3.16	-1.35/-0.89	-0.92/-0.89	-0.87/-0.79	-1.02/-1.36	-1.59/-1.71	-1.41/-1.14	-1.14/-1.26	-1.42/-1.96	-2.71/-2.99	-2.50/-2.19	-2.12/-2.12	-2.61/-3.36	-2.23/-2.41	-2.83/-2.74	-2.81/-2.38
Θ(15°)	-5.98/-6.56	-7.12/-6.82	-6.73/-6.73	-4.45/-3.47	-2.79/-2.17	-2.04/-2.09	-2.00/-2.04	-1.96/-2.05	-3.51/-4.23	-5.25/-2.81	-0.90/-0.63	-0.61/-0.90	-1.35/-1.76	-2.12/-2.28	-2.26/-2.44	-2.84/-3.12	-3.44/-4.13	-5.22/-5.10	-4.48/-3.86	-3.75/-3.85	-3.09/-2.19	-2.56/-3.17	-3.15/-3.57	-4.03/-4.47
Θ(22.5°)	-7.31/-8.85	-10.14/-10.20	-8.64/-7.16	-6.12/-5.64	-5.52/-5.52	-6.12/-6.59	-5.34/-3.21	-1.73/-1.35	-1.84/-3.96	-1.98/-1.57	-0.76/-0.83	-0.96/-0.83	-1.17/-1.07	-1.13/-1.28	-2.11/-3.19	-4.72/-6.41	-8.57/-8.93	-8.69/-7.97	-7.62/-7.40	-6.57/-8.32	-6.63/-6.15	-5.08/-4.92	-5.13/-6.17	
Θ(30°)	-7.63/-6.39	-6.51/-7.64	-9.94/-9.03	-8.07/-8.61	-9.14/-10.61	-10.58/-11.38	-9.87/-7.51	-4.82/-2.65	-1.22/-1.17	-1.04/-0.82	-2.17/-3.34	-2.39/-0.60	0.66/-1.09	1.23/-0.05	1.26/-0.89	-3.28/-4.49	-4.65/-4.56	-4.95/-7.16	-9.26/-10.04	-9.36/-8.37	-7.02/-6.64	-7.26/-7.32	-7.45/-8.14	-7.82/-7.90
Θ(37.5°)	-7.84/-7.47	-7.12/-7.06	-6.29/-5.95	-5.12/-4.78	-5.51/-6.33	-8.33/-11.43	-9.87/-6.38	-3.52/-1.56	-1.07/-0.78	-0.07/-0.46	1.02/-0.41	0.11/-1.25	0.73/-0.05	0.34/-0.45	-2.09/-3.24	-4.51/-9.40	-5.74/-6.91	-6.71/-5.21	-4.88/-5.78	-6.01/-6.76	-7.88/-10.09	-11.78/-11.67	-13.20/-12.81	-9.78/-8.48
Θ(45°)	-7.05/-7.38	-7.65/-9.32	-10.87/-8.61	-6.19/-4.82	-4.30/-4.27	-4.99/-6.98	-7.65/-5.97	-3.18/-0.90	0.18/-0.37	0.39/-0.21	-1.62/-4.71	-3.47/-1.29	2.46/-1.68	0.71/-1.01	-4.27/-4.74	-5.31/-5.89	-3.50/-2.43	-4.42/-6.41	-4.64/-3.34	-3.37/-4.36	-6.92/-7.00	-8.03/-6.41	-6.83/-8.50	-12.92/-10.14
Θ(52.5°)	-9.73/-7.68	-6.89/-4.78	-3.62/-4.73	-4.45/-2.50	-2.08/-3.55	-6.13/-8.07	-6.62/-4.10	-2.95/-1.20	0.95/-1.52	1.34/-1.51	1.13/-0.46	0.67/-0.97	1.04/-0.86	-0.69/-3.47	-5.88/-2.96	-2.67/-1.19	-2.74/-1.78	-1.69/-1.70	-2.40/-2.56	-0.97/-1.98	-3.38/-5.47	-5.61/-8.27	-7.23/-7.00	-9.62/-11.22
Θ(60°)	-7.62/-7.99	-7.64/-6.46	-3.47/-3.94	-2.23/-0.59	-1.51/-2.76	-4.72/-6.66	-7.57/-7.95	-4.37/-1.46	1.49/-2.57	2.56/-1.60	0.31/-0.75	-0.27/-0.00	1.18/-1.02	-3.30/-3.73	-1.59/-1.00	-0.56/-2.96	-3.82/-3.45	-1.78/-0.33	-0.44/-2.75	-1.84/-6.76	-1.19/-1.69	-2.99/-2.92	-4.37/-3.95	-7.15/-8.47
Θ(67.5°)	-12.76/-8.36	-12.48/-4.92	-1.02/-2.12	-2.11/-0.06	-0.10/-2.29	-6.43/-7.40	-7.62/-5.90	-3.03/-0.01	1.26/-2.70	0.07/-0.34	0.60/-1.74	1.30/-1.17	0.91/-0.44	-1.57/-1.32	-0.98/-3.87	-2.90/-2.89	-0.89/-0.10	-4.78/-11.30	-4.26/-4.76	-6.19/-5.14	-2.84/-2.66	-5.59/-6.09	-4.63/-7.49	
Θ(75°)	-6.68/-4.89	-4.96/-4.70	-1.30/-0.58	0.24/-0.61	1.50/-0.01	-1.69/-4.14	-4.48/-3.21	-2.05/-1.20	1.01/-2.56	2.35/-0.65	-0.31/-0.43	-0.38/-1.43	-0.06/-0.81	-1.79/-0.00	2.54/-1.55	1.35/-2.36	-3.75/-4.38	-3.01/-3.05	-3.66/-7.69	-6.96/-4.88	-6.39/-12.12	-5.54/-5.30	-5.68/-7.72	-6.94/-8.38
Θ(82.5°)	-5.06/-1.90	-4.03/-2.96	-0.60/-0.43	-0.88/-0.10	0.40/-0.82	-3.53/-4.23	-1.23/-0.10	-0.58/-0.05	-1.34/-1.03	-0.30/-1.12	-1.14/-0.66	0.55/-1.40	-2.70/-0.52	1.18/-2.04	-0.14/-0.96	-1.89/-3.86	-1.61/-1.44	-1.56/-0.56	-4.47/-0.95	-2.67/-10.19	-7.38/-12.64	-10.40/-7.10	-5.78/-6.59	
Θ(90°)	-2.65/-0.76	-1.70/-1.92	-1.16/-0.63	-0.90/-0.24	1.13/-1.60	-1.16/-0.33	-0.23/-2.42	-1.98/-0.54	-1.92/-2.40	-0.30/-0.31	-0.45/-1.90	-4.94/-4.99	-3.93/-3.66	-4.23/-0.82	-0.52/-6.63	0.28/-0.42	1.86/-0.04	0.71/-2.41	2.24/-1.88	-3.15/-3.99	-4.78/-11.30	-6.45/-6.57	-8.94/-5.70	-5.35/-5.30
Θ(97.5°)	-1.40/-0.04	-2.32/-1.65	-0.49/-0.97	0.66/-0.86	0.49/-0.51	-0.36/-1.17	-0.57/-0.52	-1.01/-1.32	-2.13/-1.82	0.86/-2.33	-2.10/-0.95	-1.27/-0.59	-2.83/-4.38	-5.06/-1.09	-2.23/-1.12	-0.49/-0.50	0.93/-1.50	0.84/-2.57	1.69/-0.36	-4.21/-7.68	-8.13/-7.36	-3.21/-2.75	-5.22/-8.84	-4.42/-3.34
Θ(105°)	-2.60/-0.88	0.56/-2.21	-0.74/-0.78	2.12/-1.37	0.55/-0.46	-0.16/-2.15	-1.21/-2.89	-0.78/-4.41	-4.12/-2.22	0.45/-1.12	-3.11/-10.4	-4.56/-1.58	0.66/-4.58	-3.33/-3.20	-4.04/-4.74	-3.65/-1.60	-2.66/-5.27	-5.40/-5.44	-7.50/-4.60	-15.22/-13.67	-12.33/-11.83	-5.31/-3.09	-3.22/-3.29	-4.54/-3.41
Θ(112.5°)	-2.68/-0.70	1.73/-0.71	0.48/-0.93	0.86/-1.37	0.29/-0.82	0.48/-0.77	-0.38/-1.99	-4.93/-7.39	-6.39/-2.92	-0.62/-2.82	-3.88/-5.55	-3.49/-1.80	-4.83/-5.55	-9.02/-3.48	-6.66/-5.41	-1.59/-1.12	-5.51/-0.27	-0.65/-5.61	-1.93/-4.94	-9.25/-6.59	-7.90/-8.47	-4.61/-4.64	-3.69/-2.44	-1.08/-4.02
Θ(120°)	-1.23/-0.86	1.00/-1.17	1.45/-1.63	0.58/-0.32	0.38/-0.81	0.01/-0.82	-2.95/-4.39	-2.85/-4.18	-2.72/-2.40	-3.08/-4.90	-7.11/-6.58	-2.82/-0.94	-0.15/-5.13	-8.19/-4.12	-2.81/-3.19	-10.37/-5.71	-15.44/-6.31	0.94/-0.86	-4.78/-2.63	-11.31/-9.87	-12.30/-6.75	-3.09/-3.67	-5.80/-3.14	-2.23/-2.98
Θ(127.5°)	-1.51/-0.02	0.82/-0.20	0.18/-0.63	-1.15/-0.14	-0.27/-1.00	-2.55/-2.55	-1.74/-2.09	-3.09/-1.97	-1.17/-3.05	-5.42/-4.83	-5.61/-8.41	-2.16/-4.77	-6.82/-8.20	-11.30/-5.77	-2.89/-8.18	-7.40/-11.69	-6.19/-12.67	-12.18/-2.65	-4.98/-3.64	-2.86/-11.98	-6.84/-3.23	-2.70/-4.14	-0.65/-1.00	-0.43/-0.41
Θ(135°)	1.54/-1.07	-1.70/-2.34	-1.17/-0.48	-0.47/-0.93	-1.19/-1.48	-1.87/-2.46	-3.00/-2.72	-2.93/-3.73	-5.39/-4.23	-3.37/-7.67	-14.76/-5.21	-2.45/-2.38	-2.66/-7.60	-8.54/-8.22	-13.28/-5.93	-10.70/-12.36	-7.88/-5.73	-5.19/-5.14	-5.88/-6.74	-6.09/-11.21	-8.25/-9.04	-4.29/-4.96	-4.06/-1.95	-1.07/-0.86
Θ(142.5°)	1.29/-1.87	1.62/-0.27	-1.23/-1.37	-1.02/-1.25	-1.07/-0.78	-0.78/-1.57	-2.85/-4.47	-5.07/-3.27	-0.73/-0.13	-0.76/-2.07	-6.03/-12.54	-9.33/-7.05	-10.54/-12.05	-11.38/-8.41	-9.51/-11.05	-6.66/-11.56	-5.79/-10.29	-9.12/-7.71	-9.64/-10.26	-7.76/-7.25	-7.21/-6.72	-4.74/-3.73	-6.13/-5.12	-1.15/-0.74
Θ(150°)	-1.20/-1.51	-1.98/-1.34	-3.75/-4.45	-5.57/-7.08	-6.81/-6.97	-7.07/-6.31	-6.28/-6.02	-4.59/-5.30	-2.82/-2.33	-2.42/-2.78	-3.75/-8.21	-11.31/-15.28	-13.30/-9.10	-6.25/-4.62	-2.90/-2.84	-4.93/-5.83	-3.02/-6.09	-14.47/-12.01	-10.32/-7.62	-3.79/-1.30	0.43/-0.99	0.08/-1.00	-1.53/-2.48	-0.33/-0.71
Θ(157.5°)	-6.33/-4.51	-4.88/-4.06	-2.95/-3.16	-4.11/-4.65	-4.62/-4.45	-4.73/-5.23	-4.10/-2.92	-1.98/-1.32	-1.61/-3.42	-5.84/-7.74	-5.18/-2.35	-5.02/-7.04	-6.36/-4.64	-3.09/-2.08	-3.02/-4.87	-5.25/-3.81	-3.88/-6.17	-7.84/-7.27	-7.67/-7.59	-7.61/-6.06	-2.65/-0.57	-0.60/-0.00	0.47/-0.79	-3.34/-9.31
Θ(165°)	-3.87/-3.07	-3.06/-2.95	-1.91/-0.98	-0.43/-0.06	-0.16/-0.56	-1.17/-1.66	-1.87/-2.01	-2.01/-1.83	-2.06/-3.02	-4.49/-5.44	-6.13/-6.41	-7.20/-7.24	-6.60/-5.53	-6.72/-9.45	-10.73/-7.59	-5.71/-5.90	-6.90/-8.52	-9.87/-9.06	-7.21/-6.26	-6.43/-5.93	-4.41/-4.02	-3.27/-2.05	-1.69/-2.80	-7.47/-8.83
Θ(172.5°)	-5.28/-2.98	-0.93/-0.20	0.51/-0.33	0.34/-0.29	-0.01/-0.71	-1.28/-1.55	-1.73/-2.27	-2.70/-2.81	-2.84/-2.38	-2.21/-2.65	-3.45/-5.56	-6.41/-10.38	-15.40/-15.68	-13.73/-10.78	-9.24/-8.57	-8.12/-7.43	-7.31/-7.41	-7.15/-6.77	-6.67/-7.19	-6.68/-5.82	-5.37/-			

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



