

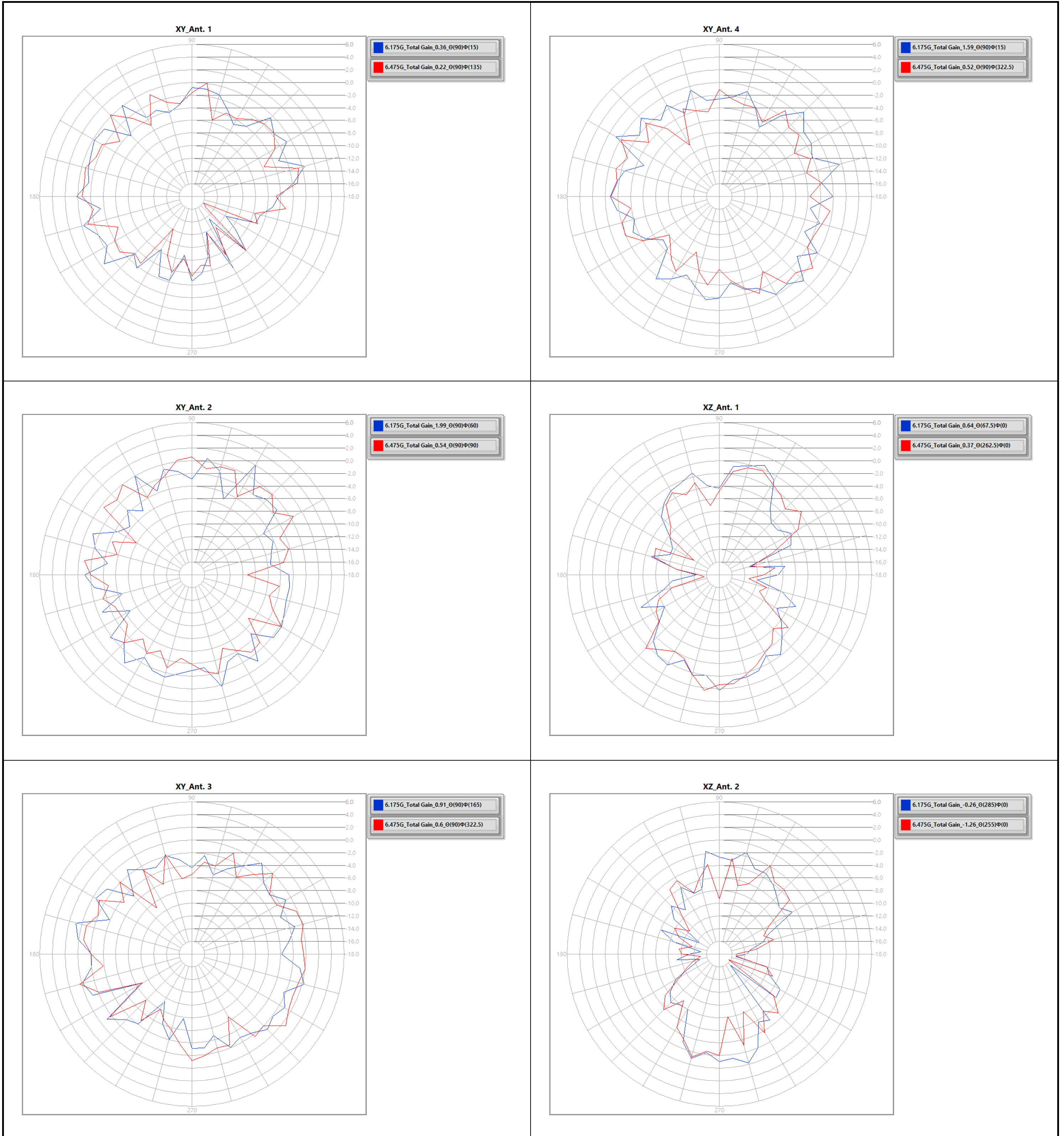


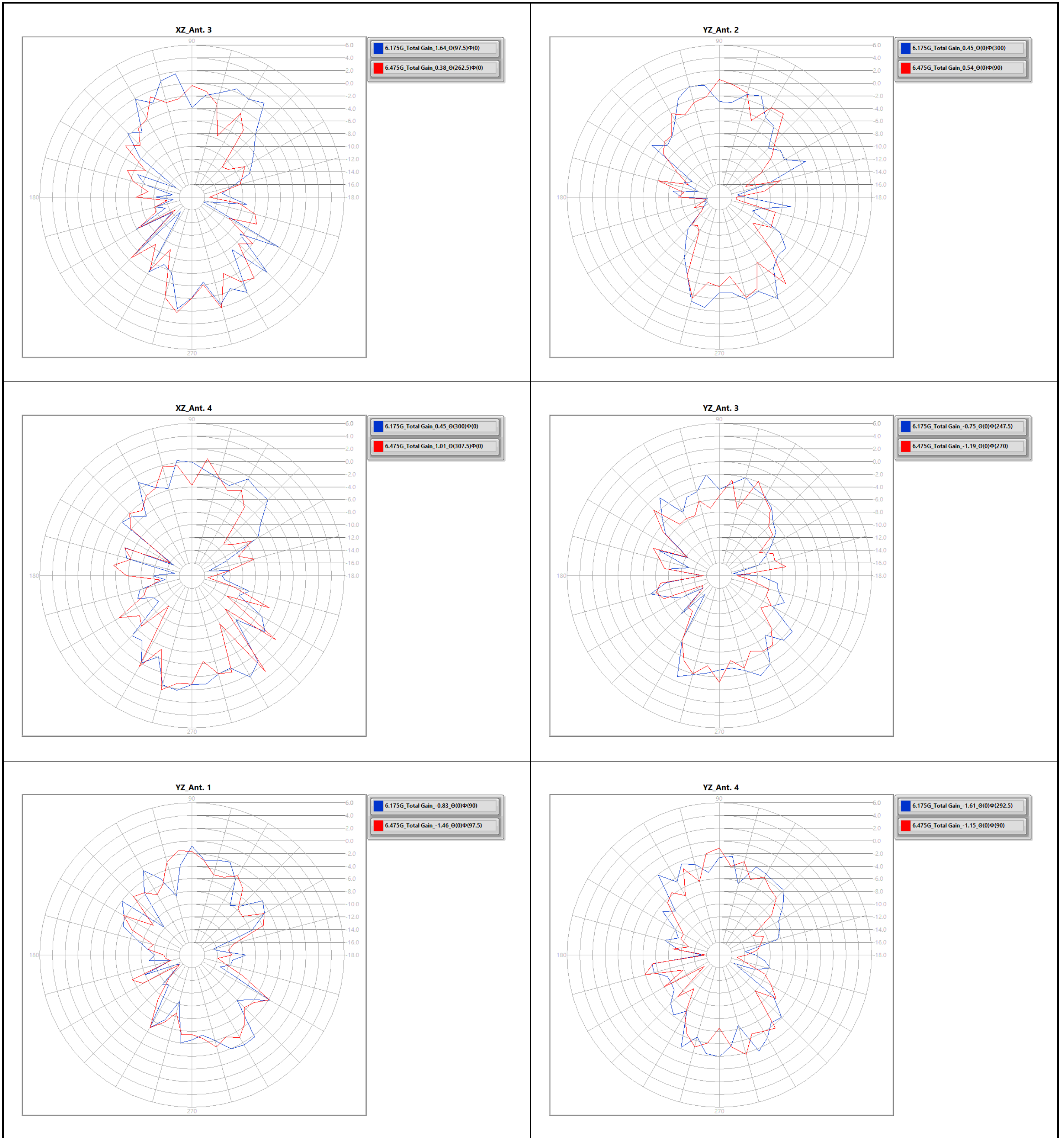
# Antenna Pattern of 6GHz UNII 5 and UNII 6

# Appendix E

Theta (°)	Phi (°)	Gain (dBi)	Phi(0°)/Phi(7.5°)	Phi(15°)/Phi(22.5°)	Phi(30°)/Phi(37.5°)	Phi(45°)/Phi(52.5°)	Phi(60°)/Phi(67.5°)	Phi(75°)/Phi(82.5°)	Phi(90°)/Phi(97.5°)	Phi(105°)/Phi(112.5°)	Phi(120°)/Phi(127.5°)	Phi(135°)/Phi(142.5°)	Phi(150°)/Phi(157.5°)	Phi(165°)/Phi(172.5°)	Phi(180°)/Phi(187.5°)	Phi(195°)/Phi(202.5°)	Phi(210°)/Phi(217.5°)	Phi(225°)/Phi(232.5°)	Phi(240°)/Phi(247.5°)	Phi(255°)/Phi(262.5°)	Phi(270°)/Phi(277.5°)	Phi(285°)/Phi(292.5°)	Phi(300°)/Phi(307.5°)	Phi(315°)/Phi(322.5°)	Phi(330°)/Phi(337.5°)	Phi(345°)/Phi(352.5°)
Theta (22.5°)	Phi(0°)	-8.20/-8.85	-11.39/-10.71	-11.97/-8.99	-9.60/-8.45	-10.75/-9.62	-9.43/-8.97	-10.10/-11.04	-12.90/-12.09	-12.03/-11.61	-8.42/-9.42	-12.11/-12.82	-14.12/-15.74	-15.99/-14.99	-13.59/-15.18	-13.47/-8.85	-7.95/-11.94	-12.90/-11.46	-11.57/-9.63	-6.90/-7.21	-10.81/-11.34	-9.22/-8.35	-8.33/-7.06	-7.33/-7.28	-6.28/-6.65	
Theta (30°)	Phi(7.5°)	-7.04/-9.52	-8.09/-7.94	-7.18/-8.33	-9.57/-12.08	-10.16/-12.01	-13.70/-10.00	-8.57/-14.97	-10.08/-8.09	-13.14/-12.32	-7.89/-8.02	-2.66/-2.49	-2.33/-4.21	-6.34/-5.94	-5.19/-4.99	-5.17/-6.32	-6.64/-6.38	-7.25/-6.82	-8.33/-7.21	-10.64/-8.26	-6.65/-6.65	-5.42/-6.50	-5.09/-3.79	-5.10/-5.91	-4.22/-3.59	
Theta (45°)	Phi(15°)	-5.60/-4.86	-2.77/-3.54	-3.23/-4.18	-6.31/-7.41	-11.21/-8.93	-8.24/-6.40	-6.78/-6.94	-6.26/-6.10	-5.31/-4.24	-3.27/-5.23	-5.01/-3.07	-6.09/-7.95	-8.42/-6.11	-6.30/-5.86	-5.57/-4.07	-4.10/-4.10	-6.22/-5.88	-8.00/-4.05	-3.50/-6.52	-7.24/-5.58	-8.05/-6.65	-5.44/-3.86	-1.12/-2.33	-4.22/-3.59	
Theta (60°)	Phi(30°)	-3.83/-3.12	-3.27/-2.94	-4.41/-3.07	-4.50/-7.56	-9.92/-3.76	-4.84/-5.17	-6.00/-6.08	-3.47/-5.28	-6.80/-11.27	-4.95/-3.56	-3.04/-4.18	-2.07/-1.52	-1.22/-1.63	-1.29/-2.69	-6.06/-7.08	-6.90/-3.54	-6.93/-6.68	-3.89/-5.68	-3.63/-4.20	-6.51/-4.04	-6.28/-4.34	-3.37/-7.14	-2.90/-1.01	-3.01/-4.45	
Theta (75°)	Phi(45°)	0.71/-1.82	-3.84/-3.50	-1.17/-2.64	-5.39/-4.29	-3.31/-0.96	-4.71/-4.40	-4.48/-3.15	-2.54/-6.63	-3.58/-2.53	-2.34/-3.62	-3.82/-5.95	-9.68/-10.13	-7.57/-3.62	-1.94/-1.62	-1.95/-2.07	-3.51/-2.04	-1.97/-0.68	-4.03/-4.49	-6.16/-0.79	-5.90/-0.32	-3.55/-3.67	-0.60/-6.94	-7.88/-5.85	-6.69/-7.01	
Theta (90°)	Phi(60°)	-0.17/-2.15	-1.38/-2.84	-4.57/-2.93	-2.93/-1.93	-2.59/-1.43	-5.47/-0.80	-3.56/-1.92	-4.78/-2.75	-0.24/-2.74	-4.48/-4.57	-1.68/-0.10	-0.740/0.80	-0.63/-0.50	1.87/0.33	-2.05/-1.71	-3.68/-2.20	-5.53/-3.72	-4.40/-5.00	-1.88/-5.36	-6.32/-4.11	-0.03/-3.29	1.91/-4.60	-0.82/-1.61	-4.57/-0.76	
Theta (105°)	Phi(75°)	0.49/-1.55	-1.97/-1.99	-3.07/-4.37	-3.96/-0.45	-4.04/-1.87	-3.96/-1.51	-3.22/-4.26	-2.64/-2.34	-3.47/-2.22	-1.59/-2.20	-6.03/-3.39	-4.23/-5.34	-2.36/-2.91	-3.71/-4.06	-4.62/-1.83	-1.28/-0.67	-2.87/-3.54	-3.87/-3.00	-0.97/-2.07	-6.22/-5.04	-1.07/-2.39	-0.43/-2.58	-1.28/-0.39	-2.58/0.80	
Theta (120°)	Phi(90°)	-0.90/-0.54	-0.10/-0.62	-0.65/-0.73	-1.82/-0.49	-2.73/-1.83	-3.66/-2.34	-1.97/-1.57	-0.76/-1.80	-2.24/-1.80	-5.70/-1.23	-0.59/-0.10	-0.31/0.33	-0.46/-0.93	0.95/-1.35	-0.17/-0.35	-1.77/-1.34	-4.71/-4.41	-5.01/-6.03	-2.56/-2.49	-3.05/-2.30	-1.99/-0.77	-0.42/0.39	-0.70/0.06	-0.58/0.11	-1.30/0.55
Theta (135°)	Phi(105°)	-1.78/-0.46	-0.22/0.90	0.46/1.18	-3.40/-0.53	-1.48/-3.13	-3.20/-1.21	-3.42/-1.24	-2.61/-1.84	-2.25/-3.96	-1.02/-2.65	-2.24/-5.20	-1.79/-3.45	-4.50/-4.59	-2.13/-3.44	-1.37/-1.58	-6.93/-3.27	-6.32/-4.26	-3.15/-1.43	-3.28/-5.17	-1.81/-1.91	-5.33/-2.25	-0.55/0.20	0.01/-1.89	0.94/-1.03	
Theta (150°)	Phi(120°)	-3.88/-2.56	-1.23/-2.84	-0.93/-2.57	-2.06/0.08	-1.93/-3.42	-5.08/-2.36	-4.42/-3.01	-1.89/-3.22	-2.65/-1.23	-5.08/-1.11	-0.49/-3.92	0.91/0.17	-2.19/-2.06	-0.14/-1.12	-8.72/-1.17	-3.39/-4.11	-9.36/-6.04	-4.11/-7.76	-3.15/-3.10	-4.67/-2.07	-2.78/-2.39	-1.15/-1.92	-1.14/-2.35	0.27/-0.82	
Theta (165°)	Phi(135°)	1.64/0.29	0.06/0.25	0.83/-1.48	-0.29/0.49	-0.66/-1.93	-4.31/-0.19	-1.99/-1.73	-1.68/-3.76	-1.58/-0.10	-1.28/0.44	0.86/-3.71	-2.62/-1.40	-0.24/-2.06	1.60/-2.30	-2.98/-1.00	0.73/-3.22	-4.43/-1.99	0.32/-5.41	-2.45/-4.12	-3.40/-1.58	-4.87/-1.23	-0.73/0.06	0.58/0.01	-1.61/0.38	
Theta (180°)	Phi(150°)	0.97/-0.96	-0.31/-2.05	-1.82/-1.54	-4.47/-1.89	-1.89/-1.61	-7.78/-3.80	-4.31/-2.94	-2.35/-4.75	-2.63/-1.22	-2.71/-1.30	-0.27/-4.55	-1.94/-5.86	-5.61/-2.50	-1.53/-2.07	-0.00/-6.61	-0.00/-6.61	-0.00/-6.61	-0.00/-6.61	-0.00/-6.61	-0.00/-6.61	-0.00/-6.61	-0.00/-6.61	-0.00/-6.61	-0.00/-6.61	-0.00/-6.61
Theta (22.5°)	Phi(165°)	-1.88/-1.51	-0.32/-0.31	-1.16/-0.81	-1.20/-3.19	-3.33/-6.35	-3.87/-3.66	-4.62/-7.22	-0.01/-6.43	-5.34/-3.32	-5.89/-3.91	-9.04/-6.43	-2.72/-2.60	-6.46/-4.57	-4.10/-5.42	-9.13/-6.16	-1.51/-3.52	-10.78/-5.79	-4.97/-8.88	-0.75/-5.48	-4.01/-4.19	-7.37/-4.78	-0.89/-1.61	-1.33/-4.41	-0.85/-2.03	
Theta (30°)	Phi(180°)	-0.18/-1.82	-0.67/-3.46	-2.77/-7.13	-2.36/-3.70	-2.44/-2.54	-2.84/-5.46	-6.50/-6.00	-1.52/-3.73	-1.33/0.49	-1.28/0.44	-7.43/-4.60	-3.62/-3.90	-4.44/-5.15	-4.75/-6.88	-11.26/-1.69	-5.85/-7.79	-4.34/-1.74	-5.83/-3.46	-6.28/-9.00	-6.79/-4.87	-4.00/-0.61	-3.44/-3.33	-3.11/-1.17	0.34/0.00	
Theta (45°)	Phi(195°)	-5.06/-4.76	-4.67/-3.26	-5.67/-3.14	-3.54/-4.29	-2.77/-3.47	-4.12/-5.45	-2.59/-1.88	-2.00/-3.98	-2.93/-2.26	-2.81/-7.95	-7.54/-12.82	-15.10/-12.13	-9.15/-7.81	-2.68/-14.45	-11.56/-7.24	-5.03/-4.82	-14.31/-11.44	-5.95/-4.23	-3.65/-3.43	-2.47/-4.33	-5.83/-7.68	-9.63/-5.26			
Theta (60°)	Phi(210°)	-3.68/-4.41	-1.12/-1.82	-3.35/-4.86	-10.39/-7.95	-3.70/-4.09	-5.92/-5.80	-5.26/-4.72	-4.01/-7.80	-9.74/-6.17	-9.02/-8.12	-10.52/-9.28	-6.48/-7.06	-4.67/-6.75	-8.27/-6.67	-6.77/-5.50	-4.90/-11.93	-7.38/-4.46	-7.60/-4.91	-9.30/-9.05	-8.07/-4.11	-4.72/-8.66	-4.74/-5.80	-3.13/-3.00	0.02/-4.64	
Theta (75°)	Phi(225°)	-5.71/-5.34	-5.65/-5.84	-2.84/-5.99	-6.75/-6.53	-10.73/-10.96	-8.07/-8.42	-7.29/-8.33	-10.69/-10.53	-7.55/-7.97	-9.78/-7.04	-4.15/-7.30	-9.33/-7.71	-14.09/-7.24	-15.99/-13.70	-9.35/-9.84	-12.15/-14.68	-10.66/-12.63	-14.78/-13.09	-8.46/-8.35	-5.94/-5.14	-12.45/-8.97	-5.04/-1.46	-6.19/-5.65		
Theta (90°)	Phi(240°)	-15.08/-14.71	-15.17/-10.84	-10.91/-9.82	-9.73/-9.59	-11.08/-15.17	-15.57/-12.58	-12.90/-8.60	-12.29/-11.57	-7.30/-8.21	-9.78/-9.88	-11.87/-7.87	-8.80/-10.59	-14.52/-10.34	-13.91/-10.84	-10.86/-13.12	-14.86/-13.40	-11.06/-14.80	-11.95/-11.89	-9.16/-7.45	-8.11/-10.94	-10.85/-9.94	-9.98/-15.49			
Theta (105°)	Phi(255°)	-8.74/-11.14	-13.30/-14.33	-10.61/-9.76	-11.96/-13.23	-10.52/-10.69	-9.79/-8.23	-7.80/-9.31	-11.16/-11.23	-11.15/-16.01	-13.26/-11.42	-14.39/-14.21	-14.26/-13.57	-13.49/-15.05	-14.89/-15.60	-14.67/-15.39	-15.19/-13.40	-13.52/-9.83	-8.23/-9.67	-9.20/-11.75	-14.75/-14.25	-10.19/-8.36	-8.08/-8.48	-7.72/-7.18	-6.16/-5.31	
Theta (120°)	Phi(270°)	-10.32/-6.81	-9.53/-9.03	-10.52/-10.03	-9.40/-10.37	-9.40/-12.43	-10.01/-10.27	-13.08/-12.24	-9.98/-7.87	-8.59/-9.35	-8.87/-11.14	-13.72/-14.79	-15.44/-11.60	-12.08/-11.40	-11.20/-10.93	-13.25/-11.23	-13.04/-12.02	-11.41/-9.73	-7.88/-8.67	-6.80/-8.19	-10.33/-12.57	-11.69/-6.91	-7.95/-6.57	-4.76/-6.18	-9.16/-6.19	
Theta (135°)	Phi(285°)	-14.92/-14.21	-15.13/-14.00	-14.70/-13.57	-13.45/-10.72	-11.36/-12.34	-12.31/-12.06	-9.84/-8.80	-10.83/-11.98	-14.13/-15.54	-11.88/-9.04	-10.49/-11.48	-14.99/-15.21	-14.89/-13.31	-14.75/-13.79	-11.14/-12.02	-10.66/-8.35	-9.25/-9.54	-9.54/-9.66	-9.34/-9.17	-8.93/-8.68	-8.62/-8.58	-9.50/-10.41	-10.29/-12.58		
Theta (150°)	Phi(300°)	-12.13/-10.49	-10.24/-10.89	-11.39/-11.46	-11.11/-13.38	-13.20/-13.99	-15.27/-15.20	-15.12/-14.43	-14.06/-13.11	-13.19/-14.33	-14.91/-16.08	-14.82/-15.36	-15.54/-15.46	-15.40/-15.49	-15.73/-14.98	-14.13/-13.67	-14.13/-12.84	-12.12/-12.06	-11.73/-11.56	-11.73/-11.56	-12.72/-12.63	-12.19/-12.10	-13.26/-10.80			
Theta (165°)	Phi(315°)	6.475GPol	TotalAnt. 3	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Theta (180°)	Phi(330°)	Gain	Phi(0°)/Phi(7.5°)	Phi(15°)/Phi(22.5°)	Phi(30°)/Phi(37.5°)	Phi(45°)/Phi(52.5°)	Phi(60°)/Phi(67.5°)	Phi(75°)/Phi(82.5°)	Phi(90°)/Phi(97.5°)	Phi(105°)/Phi(112.5°)	Phi(120°)/Phi(127.5°)	Phi(135°)/Phi(142.5°)	Phi(150°)/Phi(157.5°)	Phi(165°)/Phi(172.5°)	Phi(180°)/Phi(187.5°)	Phi(195°)/Phi(202.5°)	Phi(210°)/Phi(217.5°)	Phi(225°)/Phi(232.5°)	Phi(240°)/Phi(247.5°)	Phi(255°)/Phi(262.5°)	Phi(270°)/Phi(277.5°)	Phi(285°)/Phi(292.5°)	Phi(300°)/Phi(307.5°)	Phi(315°)/Phi(322.5°)	Phi(330°)/Phi(337.5°)	Phi(345°)/Phi(352.5°)
Theta (22.5°)	Phi(0°)	-15.25/-14.97	-15.98/-15.01	-15.02/-12.82	-15.67/-14.79	-12.89/-15.07	-16.11/-15.66	-15.20/-15.53	-15.67/-15.39	-13.92/-12.86	-14.62/-15.56	-15.03/-14.78	-14.00/-13.72	-15.06/-13.89	-14.14/-14.88	-13.61/-14.92	-11.49/-12.68	-13.58/-10.22	-9.60/-9.81	-11.40/-12.27	-12.99/-14.33	-12.39/-13.17	-15.87/-16.01	-15.77/-14.81	-16.23/-14.35	
Theta (30°)	Phi(7.5°)	-13.99/-12.99	-15.63/-15.88	-15.44/-13.83	-12.52/-12.98	-9.91/-11.52	-11.58/-1.17	-7.42/-8.67	-8.49/-9.00	-11.14/-12.09	-12.78/-15.51	-14.82/-13.42	-14.44/-11.09	-10.53/-10.73	-9.36/-9.82	-9.81/-9.91	-9.60/-10.96	-10.76/-10.97	-13.31/-15.20	-15.80/-14.80	-15.94/-15.43	-13.25/-12.53	-11.60/-11.28	-12.98/-12.18		
Theta (45°)	Phi(15°)	-10.12/-8.46	-8.47/-8.76	-4.77/-3.57	-8.34/-9.37	-11.23/-11.32	-12.98/-9.92	-8.90/-9.97	-7.51/-8.07	-6.67/-6.09	-5.35/-5.10	-6.84/-6.60	-8.45/-8.47	-8.45/-8.48	-7.58/-7.97	-8.61/-8.14	-6.71/-7.82	-6.61/-7.14	-11.51/-11.50	-12.18/-11.40	-12.91/-15.23	-12.18/-11.40	-9.53/-9.85	-9.53/-9.85	-10.16/-10.71	
Theta (60°)	Phi(30°)	-9.43/-8.36	-8.68/-8.88	-7.85/-9.52	-10.75/-10.24	-8.98/-10.91	-13.70/-11.77	-8.81/-8.03	-6.30/-8.30	-7.83/-5.51	-4.46/-5.02	-5.88/-6.00	-6.56/-7.62	-7.02/-6.98	-7.44/-9.82	-8.54/-7.41	-5.41/-5.85	-6.69/-7.64	-8.33/-8.76	-9.94/-7.85	-7.16/-6.54	-7.62/-12.47	-13.32/-10.74	-10.82/-11.62	-8.83/-10.49	
Theta (75°)	Phi(45°)	-8.36/-9.25	-10.96/-11.86	-8.92/-10.55	-12.16/-9.36	-5.97/-6.00	-5.91/-6.64	-10.69/-10.35	-6.74/-12.76	-10.61/-10.77	-10.01/-9.05	-10.00/-9.26	-14.39/-15.19	-11.24/-11.09	-12.62/-11.01	-13.85/-10.61	-9.68/-10.45	-8.03/-8.07	-12.82/-8.95	-8.58/-10.73	-9.81/-12.72	-7.10/-10.50	-7.95/-7.47	-8.84/-7.80	-9.55/-9.97	
Theta (90°)	Phi(60°)	-10.79/-11.96	-9.19/-7.26	-8.43/-10.56	-13.12/-10.17	-7.26/-5.80	-5.18/-12.76	-7.43/-4.79	-13.72/-10.16	-1																

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









# Antenna Pattern of 5GHz UNII 7 and UNII 8

# Appendix F

Theta (°)	Phi (°)	Gain (dBi)	Phi(15°)	Phi(22.5°)	Phi(30°)	Phi(37.5°)	Phi(45°)	Phi(52.5°)	Phi(60°)	Phi(67.5°)	Phi(75°)	Phi(82.5°)	Phi(90°)	Phi(105°)	Phi(120°)	Phi(135°)	Phi(150°)	Phi(165°)	Phi(180°)	Phi(195°)	Phi(210°)	Phi(225°)	Phi(240°)	Phi(255°)	Phi(270°)	Phi(285°)	Phi(300°)	Phi(315°)	Phi(330°)	Phi(345°)			
0	0	-5.00/-4.71	-5.69/-5.67	-5.81/-6.41	-5.88/-7.76	-5.93/-7.63	-5.91/-6.39	-7.33/-7.58	-6.72/-6.26	-5.94/-5.24	-5.28/-11.16	-15.36/-14.83	-13.80/-12.53	-10.00/-11.15	-7.61/-9.79	-9.03/-8.63	-8.94/-11.86	-11.14/-12.39	-7.39/-5.14	-6.58/-12.51	-10.39/-7.04	-6.47/-6.45	-6.74/-9.36	-10.91/-10.12	-6.68/-5.04								
0	30	-4.75/-5.32	-4.09/-4.19	-4.98/-6.46	-6.89/-4.46	-3.87/-5.75	-7.06/-5.44	-8.71/-10.17	-8.06/-4.11	-4.64/-6.89	-5.24/-6.06	-8.50/-7.43	-5.04/-7.24	-5.96/-6.73	-6.43/-6.79	-5.92/-6.50	-7.01/-5.66	-10.32/-8.05	-8.82/-11.86	-7.39/-8.07	-8.76/-8.04	-7.63/-7.53	-4.47/-2.47	-3.01/-4.75	-3.91/-3.96								
0	45	-5.29/-5.30	-3.80/-3.50	-1.91/-2.03	-6.89/-6.21	-5.63/-3.86	-2.71/-5.34	-6.05/-3.59	-3.88/-3.17	-4.04/-5.15	-5.62/-4.91	-3.31/-2.76	-2.25/-3.26	-1.71/-1.52	-3.08/-2.68	-1.33/-0.66	-1.85/-3.22	-8.88/-8.53	-6.56/-3.13	-4.33/-3.89	-2.26/-3.51	-6.96/-7.63	-8.00/-1.51	-6.99/-3.79	-3.61/-4.28								
0	60	-5.02/-5.07	-4.54/-0.29	-2.34/-1.84	-2.68/-3.66	-0.68/-0.98	-1.43/-4.45	-0.37/-0.78	-1.14/-2.70	-5.25/-6.36	-4.75/-3.37	-2.09/-2.97	-3.14/-2.16	-2.11/-1.77	-2.65/-2.54	-4.66/-4.18	-4.57/-3.60	-3.98/-2.44	-3.04/-2.04	-6.31/-0.29	-1.20/-1.60	-5.19/-5.66	-5.96/-2.08	-2.51/-1.70	-2.74/-4.61								
0	75	0.790/-3.9	-2.01/-1.29	0.61/-0.38	-0.66/-4.94	0.43/-0.13	-3.09/-1.88	-0.94/-0.25	-1.88/-1.23	-2.29/-2.53	-3.91/-5.30	-4.15/-3.95	-1.83/-3.27	-6.05/-5.57	-1.92/-3.85	-5.33/-5.31	-8.62/-4.07	-3.54/-0.63	-1.27/-2.51	-3.54/-0.66	0.55/-2.01	-5.15/-4.42	-1.94/-2.89	0.040/0.3	-0.04/-0.45								
0	90	-5.000/-1.0	0.02/-0.54	-1.060/0.9	-0.07/-3.79	-2.45/-0.09	-3.160/0.5	-1.06/-3.45	-0.42/-4.42	-1.270/0.5	-1.46/-2.40	-1.180/2.2	-3.59/-1.96	-2.75/-1.31	0.67/-4.4	-12.40/-13.79	-5.27/-10.78	-3.31/-0.69	-4.220/0.9	-0.58/-2.35	-2.89/-1.29	-2.31/-1.65	0.14/0.30	-2.09/-0.46									
0	105	-6.22/-1.48	-0.81/-3.66	0.020/0.72	-3.42/-3.48	-1.71/-3.60	-0.67/-0.26	-0.85/-0.78	-3.21/-3.49	-2.240/0.9	-0.872/2.8	-0.61/-3.90	-0.31/-1.93	-0.13/-1.85	2.20/-1.08	-0.90/-1.60	-3.83/-4.68	-3.34/-4.75	-8.83/-2.07	-1.94/-0.35	-1.48/-1.40	-3.41/-2.25	0.75/-3.65	-2.990/0.9	-0.96/-7.51								
0	120	-3.880/1.1	-3.660/0.7	-4.71/-1.04	-3.14/-1.72	-3.41/-0.94	0.49/-0.28	0.64/-1.59	1.63/-7.7	-1.88/-3.30	0.71/-1.79	-1.81/-6.93	-1.79/-8.07	-3.32/-0.83	3.16/-0.85	-7.860/1.4	-4.22/-1.77	-4.29/-1.76	-1.83/-2.95	-5.53/-0.98	-5.46/-3.39	-1.57/-0.50	0.96/-3.31	-6.14/-0.88	-1.90/-2.27								
0	135	-4.14/-4.35	-1.32/-0.47	1.530/3.7	-0.90/-0.19	-1.84/-2.42	-2.04/-1.28	-1.88/-3.60	1.72/-5.62	-2.49/-9.24	-1.41/-2.75	-3.28/-5.00	-7.91/-5.26	0.48/-4.90	-6.24/-4.62	-5.760/4.3	0.280/4.6	-0.130/2.6	-4.52/-3.58	-2.040/7.9	0.60/-3.54	-1.91/-0.62	-2.76/-2.50										
0	150	-0.69/-1.85	-0.820/0.45	-0.53/-1.45	-0.23/-0.37	-1.91/-1.37	-2.48/-1.95	-3.13/-2.19	0.60/-0.69	-4.94/-3.48	-2.73/-6.04	-5.61/-12.54	-4.03/-3.83	-9.01/-15.42	-7.12/-6.31	-7.74/-9.63	-0.10/-1.60	-8.73/-1.48	-1.49/-0.07	-0.08/-0.55	0.97/-2.17	-3.53/-2.54	2.29/4.76	0.73/-0.36	-2.91/-2.05								
0	165	-4.640/0.5	-1.94/-3.59	0.06/-0.65	-2.17/-0.24	0.490/3.4	-2.380/5.1	-1.680/2.5	0.992/7.5	-3.73/-2.89	-3.34/-0.94	-4.38/-4.11	-5.74/-3.04	-6.05/-15.04	-7.99/-7.42	-10.97/-6.83	-2.62/-10.42	-11.100/0.0	-2.49/-3.13	-7.14/-2.79	0.01/-1.6	-3.07/-1.91	2.30/-1.07	-6.74/-1.87	0.18/-2.46								
0	180	-4.660/0.25	-2.71/-4.25	-2.84/-2.47	-2.44/-5.71	-0.80/-0.73	-2.26/-1.18	-0.440/1.5	2.781/6.1	-4.42/-4.99	-0.86/-1.56	-2.59/-3.79	-8.28/-3.77	-10.41/-14.1	-11.97/-9.76	-8.71/-4.06	-13.91/-7.59	-8.97/-1.46	-1.17/-3.65	-13.80/-6.04	-3.58/-0.02	-3.93/-3.50	1.14/-1.59	-9.07/-4.55	-0.77/-0.11								
0	225	-6.31/-1.31	-1.72/-0.70	-3.26/-1.77	-4.27/-4.18	-6.29/-4.88	-1.98/-1.06	-3.000/0.8	-0.05/-1.76	-4.37/-3.74	-0.76/-7.30	-8.50/-8.59	-6.11/-8.75	-7.47/-9.40	-11.24/-14.54	-6.93/-9.19	-2.27/-3.50	-6.92/-2.13	-0.66/-3.37	-11.74/-8.93	-2.70/-0.96	-5.33/-2.23	-1.01/-2.98	-1.55/-5.87	-1.410/9.6								
0	240	-4.03/-2.92	-0.98/-0.06	-1.93/-2.77	-5.18/-4.74	-7.65/-4.23	-6.01/-1.89	-4.64/-4.95	-2.66/-2.59	-11.08/-3.92	-3.69/-12.11	-9.49/-4.13	-4.77/-4.95	-4.22/-6.61	-5.98/-7.40	-7.03/-3.60	-0.26/-6.62	-4.89/-6.34	-0.69/-1.49	-12.70/-13.24	-0.21/-0.43	-4.880/7.6	-5.54/-2.03	-3.63/-4.37	-0.07/-5.6								
0	270	-2.68/-1.77	-3.31/-3.29	-4.04/-4.78	-6.19/-0.21	-8.51/-1.05	-4.33/-0.54	-7.63/-3.95	-3.90/-1.75	-8.80/-8.75	-7.96/-11.77	-11.08/-9.0	-8.28/-12.76	-11.08/-9.95	-9.95/-9.71	-7.99/-8.05	-7.99/-9.26	-4.98/-11.35	-4.75/-6.89	-10.44/-9.61	-0.840/5.8	-4.21/7.8	-1.74/-2.22	-7.82/-2.22	-4.31/-1.61								
0	300	-4.27/-3.55	-4.60/-8.66	-8.91/-5.42	-2.98/-3.00	-4.02/-3.55	-2.46/-5.50	-5.09/-4.37	-4.98/-5.15	-8.35/-11.93	-11.95/-5.42	-5.75/-8.83	-9.07/-8.06	-3.03/-3.08	-4.56/-6.31	-12.36/-14.02	-8.85/-7.52	-8.06/-11.22	-11.20/-4.01	-6.13/-10.50	-2.33/-0.95	-4.22/-1.28	-2.40/-1.34	-4.07/-2.67	-4.97/-5.36								
0	315	-5.44/-8.01	-9.18/-4.74	-4.03/-3.45	-3.65/-5.56	-3.92/-1.67	-5.45/-3.00	-5.37/-3.23	-5.65/-7.58	-1.76/-2.89	-7.32/-7.68	-6.96/-11.79	-15.02/-13.43	-10.23/-11.67	-10.98/-11.02	-14.36/-12.58	-10.08/-14.87	-8.49/-10.36	-9.42/-7.25	-8.31/-12.07	-6.64/-3.25	-1.56/-7.37	-1.87/-1.68	-3.54/-2.99	-4.74/-4.03	-3.71/-2.78							
0	330	-4.56/-6.07	-5.42/-8.57	-5.39/-2.27	-3.33/-3.04	-3.62/-2.10	-3.13/-3.03	-6.47/-8.66	-5.07/-2.17	-5.55/-7.21	-7.71/-9.08	-10.61/-11.01	-6.28/-10.39	-10.98/-11.02	-14.65/-10.87	-12.33/-13.68	-6.44/-8.44	-8.75/-5.26	-6.51/-6.49	-9.39/-5.99	-3.20/-4.45	-3.00/-2.99	-4.74/-4.03	-3.71/-2.78									
0	345	-2.54/-2.93	-3.46/-3.31	-3.31/-3.60	-4.89/-5.25	-7.37/-5.66	-6.94/-8.98	-4.64/-5.01	-9.42/-9.92	-12.98/-7.24	-5.89/-8.77	-16.01/-9.69	-7.03/-9.08	-7.45/-9.15	-7.98/-9.28	-6.50/-7.36	-9.23/-8.25	-5.39/-4.04	-4.38/-6.67	-12.49/-12.94	-9.43/-5.84	-4.40/-4.13	-2.79/-4.02	-5.82/-9.24	-6.67/-4.35								
0	360	-6.16/-3.47	-5.25/-4.71	-4.88/-6.21	-8.83/-9.33	-11.08/-8.53	-7.86/-9.57	-15.16/-13.87	-9.21/-6.98	-4.79/-5.12	-8.67/-11.42	-10.81/-15.17	-16.07/-14.97	-11.66/-10.58	-11.82/-11.47	-12.24/-7.51	-5.87/-4.85	-5.09/-4.36	-4.76/-2.65	-7.77/-8.79	-6.68/-6.35	-5.43/-4.12	-3.61/-4.22	-6.64/-9.13	-14.20/-9.80								
0	120	-12.86/-12.15	-12.33/-13.64	-15.14/-14.84	-14.90/-12.15	-13.83/-16.18	-15.18/-12.69	-10.38/-9.20	-8.47/-9.19	-9.57/-11.02	-15.10/-14.21	-13.87/-12.85	-9.66/-10.95	-11.16/-10.00	-10.78/-9.75	-10.13/-9.41	-7.36/-6.41	-6.19/-7.27	-8.02/-8.31	-8.65/-8.15	-8.94/-8.33	-7.77/-6.63	-6.89/-7.24	-7.39/-9.02	-10.34/-10.05								
0	135	-13.12/-13.56	-10.74/-12.30	-12.78/-16.15	-13.64/-12.85	-13.38/-10.19	-10.13/-11.49	-13.32/-13.89	-11.26/-9.74	-7.42/-7.01	-7.90/-9.99	-12.21/-12.10	-14.45/-13.58	-14.29/-14.05	-15.71/-15.25	-13.78/-12.25	-12.47/-11.28	-11.50/-12.85	-12.99/-11.16	-10.56/-10.98	-10.71/-10.62	-10.87/-10.92	-11.22/-11.66	-12.65/-13.33	-11.60/-13.27								
0	150	6.995GPol.	TotalAnt. 4	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
0	165	Phi(0°)	Phi(15°)	Phi(30°)	Phi(45°)	Phi(60°)	Phi(75°)	Phi(90°)	Phi(105°)	Phi(120°)	Phi(135°)	Phi(150°)	Phi(165°)	Phi(180°)	Phi(195°)	Phi(210°)	Phi(225°)	Phi(240°)	Phi(255°)	Phi(270°)	Phi(285°)	Phi(300°)	Phi(315°)	Phi(330°)	Phi(345°)								
0	180	-15.97/-15.60	-15.33/-15.64	-15.09/-12.96	-15.09/-11.09	-12.75/-13.01	-8.59/-9.51	-10.88/-14.34	-11.87/-12.20	-9.61/-9.14	-9.32/-9.99	-11.18/-11.36	-11.91/-11.49	-12.31/-11.89	-14.83/-13.21	-15.56/-13.53	-14.66/-15.32	-16.00/-14.90	-15.45/-15.48	-13.18/-13.67	-14.26/-15.89	-15.34/-15.18	-13.38/-15.33	-14.45/-15.43									
0	225	-15.61/-15.83	-15.74/-15.44	-15.21/-13.10	-11.99/-11.22	-10.68/-10.64	-11.36/-11.50	-11.80/-11.48	-11.89/-11.16	-13.41/-14.14	-13.66/-13.68	-15.65/-14.76	-15.16/-12.49	-15.57/-13.67	-15.46/-14.88	-14.86/-11.21	-9.99/-7.67	-7.91/-8.03	-8.42/-8.23	-8.39/-8.87	-8.91/-9.02	-9.18/-9.18	-9.96/-11.49	-13.20/-15.31									
0	240	-4.68/-5.95	-6.84/-8.31	-8.98/-4.41	-9.31/-8.16	-6.66/-6.50	-6.58/-6.46	-7.09/-7.29	-6.71/-7.63	-11.34/-11.04	-8.68/-4.94	-9.98/-10.07	-10.00/-10.08	-11.37/-13.23	-14.31/-12.43	-11.74/-10.96	-13.85/-9.41	-6.35/-4.80	-5.77/-7.43	-9.69/-10.31	-6.99/-6.14	-6.39/-6.25	-5.16/-3.61	-3.65/-4.32									
0	270	-5.79/-6.64	-5.25/-5.01	-4.76/-3.98	-3.65/-4.65	-4.93/-4.29	-7.64/-6.09	-3.38/-4.21	-5.83/-5.26	-7.27/-12.40	-10.80/-6.39	-4.90/-8.25	-9.98/-8.42	-11.74/-15.08	-15.49/-10.36	-6.35/-4.20	-5.82/-7.10	-6.75/-6.94	-10.44/-12.33	-12.73/-14.40	-13.77/-9.89	-8.49/-8.16	-7.43/-5.35	-4.17/-3.66	-5.39/-5.04								
0	300	-9.22/-7.75	-7.14/-5.54	-4.63/-4.85	-6.14/-6.01	-12.77/-5.94	-5.73/-6.23	-4.23/-6.89	-5.60/-12.62	-8.33/-11.93	-7.98/-3.81	-5.81/-7.21	-9.32/-11.09	-8.6																			

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

