

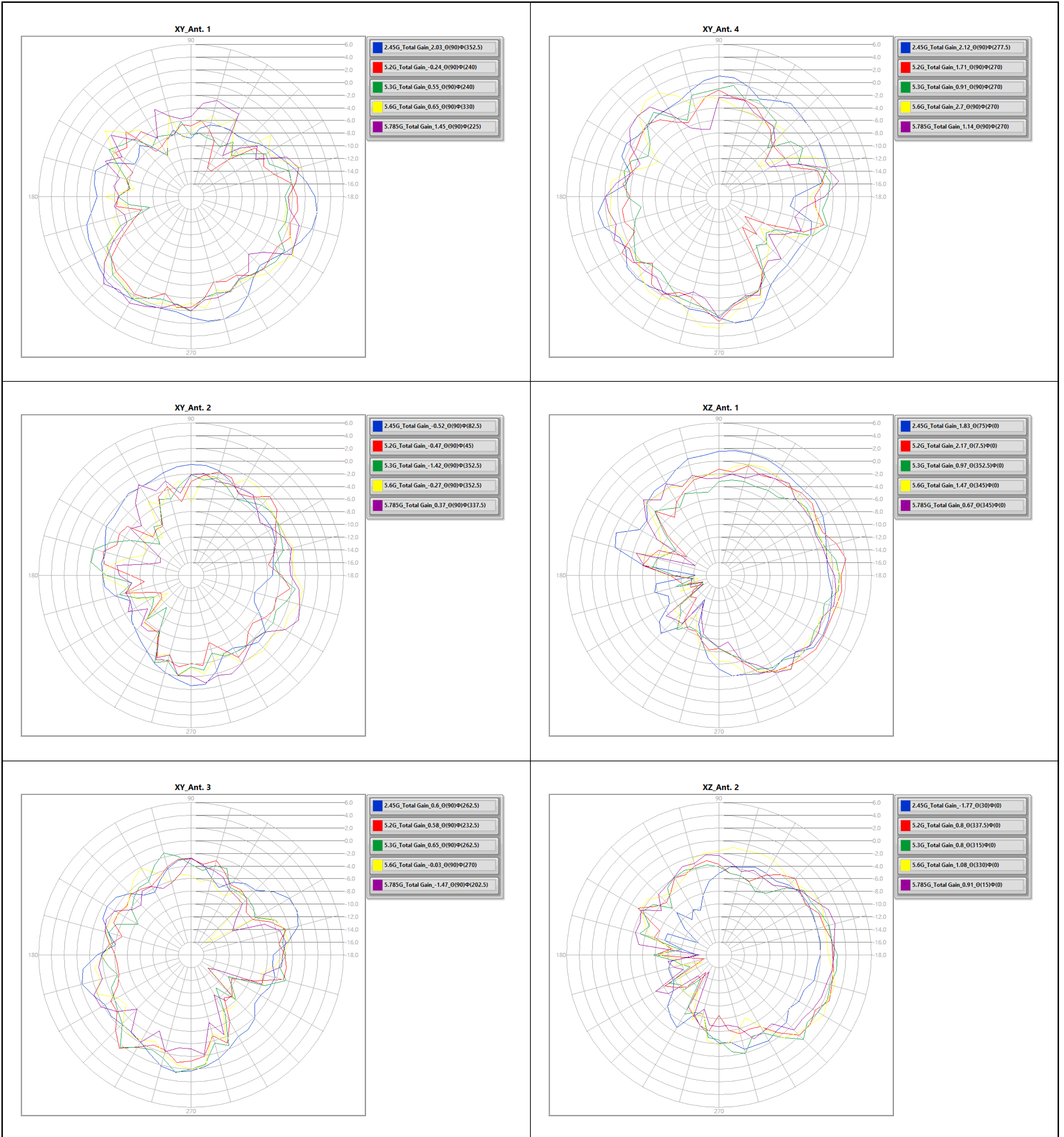


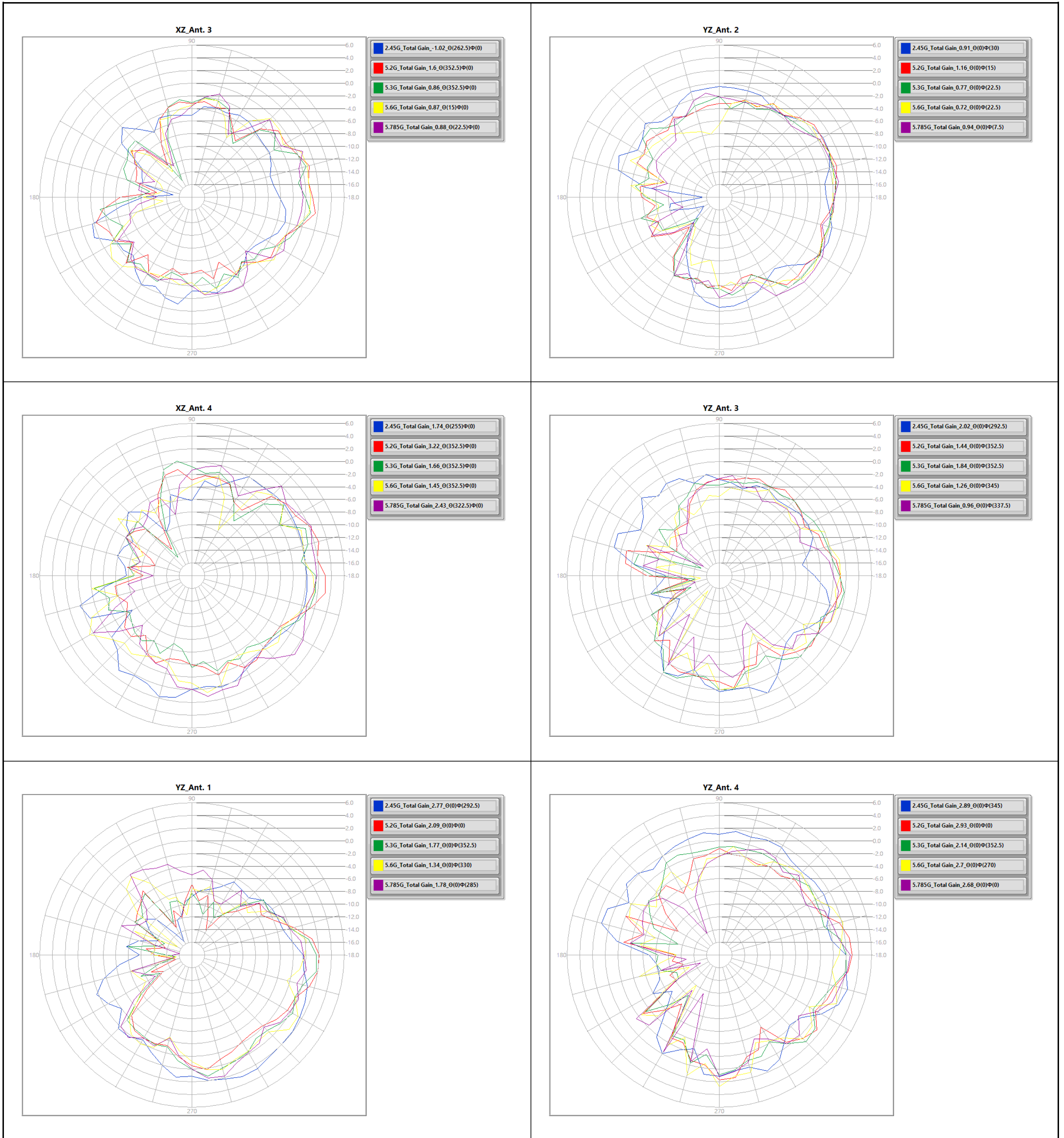
Antenna Pattern of 2.4GHz&5GHz

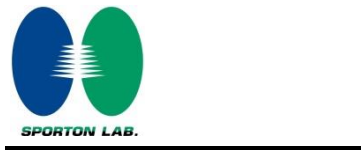
Appendix C

θ (172.5°)	-7.73/-6.87	-6.80/-6.16	-5.20/-4.71	-4.35/-3.84	-3.49/-3.14	-3.01/-2.94	-2.78/-2.85	-3.50/-3.26	-2.62/-2.82	-3.54/-3.19	-3.26/-3.96	-3.75/-4.36	-5.76/-7.28	-8.15/-9.43	-8.95/-7.00	-5.03/-3.93	-3.60/-4.10	-5.53/-8.09	-10.54/-11.29	-10.66/-9.55	-8.45/-8.18	-6.76/-5.78	-6.61/-6.14	-5.10/-6.64
θ (180°)	-10.35/-10.46	-10.07/-10.15	-9.71/-9.40	-9.24/-9.47	-9.72/-9.56	-10.07/-10.96	-11.13/-10.44	-9.89/-9.82	-10.58/-11.95	-12.04/-12.19	-12.69/-12.58	-13.12/-15.74	-15.63/-14.55	-12.60/-10.42	-8.57/-7.37	-6.94/-7.05	-8.05/-10.14	-13.07/-13.68	-10.89/-8.86	-6.97/-5.73	-5.53/-5.87	-5.73/-6.26	-7.28/-7.46	-7.87/-8.96
Freq(Hz)	5.3GPol.	TotalAnt.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)Φ(7.5°)	Φ(15°)Φ(22.5°)	Φ(30°)Φ(37.5°)	Φ(45°)Φ(52.5°)	Φ(60°)Φ(67.5°)	Φ(75°)Φ(82.5°)	Φ(90°)Φ(97.5°)	Φ(105°)Φ(112.5°)	Φ(120°)Φ(127.5°)	Φ(135°)Φ(142.5°)	Φ(150°)Φ(157.5°)	Φ(165°)Φ(172.5°)	Φ(180°)Φ(187.5°)	Φ(195°)Φ(202.5°)	Φ(210°)Φ(217.5°)	Φ(225°)Φ(232.5°)	Φ(240°)Φ(247.5°)	Φ(255°)Φ(262.5°)	Φ(270°)Φ(277.5°)	Φ(285°)Φ(292.5°)	Φ(300°)Φ(307.5°)	Φ(315°)Φ(322.5°)	Φ(330°)Φ(337.5°)	Φ(345°)Φ(352.5°)
θ(0°)	1.57/2.12	2.16/1.83	1.83/1.99	2.19/2.03	1.91/1.85	1.88/2.17	1.98/1.50	1.65/1.81	1.14/0.62	0.78/0.51	0.25/0.62	0.58/0.37	0.84/1.43	1.41/1.11	1.16/1.41	1.56/1.47	1.41/1.35	1.39/1.72	1.77/1.34	1.26/1.14	0.66/0.85	1.22/1.17	1.20/1.78	1.97/1.54
θ(7.5°)	-0.64/-0.04	0.32/0.41	0.65/0.75	0.97/0.83	0.86/0.92	0.66/0.84	1.26/1.13	0.73/1.07	1.41/1.15	1.29/1.32	1.01/1.35	1.96/1.72	1.66/2.42	2.69/2.59	2.58/2.81	2.79/2.77	2.60/2.53	2.35/2.29	2.14/1.75	1.60/1.74	1.23/0.11	0.30/0.90	0.39/0.00	0.16/-0.09
θ(15°)	0.95/0.47	0.37/0.48	0.44/-0.09	-0.57/-1.32	-1.47/-1.46	-1.77/-1.44	-0.89/-0.69	-0.76/-0.64	-0.02/0.22	-0.04/0.36	0.82/0.30	0.35/0.96	1.20/1.35	1.63/1.93	2.29/2.46	2.48/2.43	2.33/2.17	1.79/1.22	0.59/0.14	0.26/0.43	0.55/0.33	0.10/0.23	0.89/1.15	0.88/0.83
θ(22.5°)	1.42/0.99	0.78/0.61	-0.48/-2.07	-3.67/-3.59	-2.40/-1.78	-1.36/-0.76	-0.72/-0.59	-0.54/-0.72	-0.42/-0.50	-0.70/-0.25	-0.03/-0.51	-0.38/0.22	0.31/0.23	0.47/0.75	0.73/0.35	0.50/1.07	1.31/1.37	1.27/0.48	-0.41/-0.90	-0.55/0.35	1.31/1.71	1.75/1.52	1.20/0.60	0.28/1.04
θ(30°)	-2.13/-1.55	-1.40/-1.44	-2.32/-2.39	-2.01/-1.72	-1.49/-1.32	-0.52/-0.25	-0.54/-0.46	-1.00/-1.20	-0.96/-1.14	-1.35/-0.96	-0.91/-1.13	-0.65/-0.65	-1.42/-1.29	-1.12/-1.45	-0.78/-0.49	-0.48/-0.72	-1.66/-1.64	-1.27/-1.02	-0.94/-0.66	-0.37/-0.49	-0.29/0.42	-0.29/0.42	0.80/0.48	-0.73/-2.14
θ(37.5°)	0.25/-1.05	-2.42/-5.03	-4.68/-2.15	-1.35/-0.76	-0.30/-0.64	-0.36/-0.28	-0.12/-0.30	-1.18/-2.51	-3.20/-2.65	-2.23/-2.06	-1.25/-0.80	-0.14/-0.54	-2.11/-1.90	-1.60/-1.97	-2.01/-1.67	-0.94/-1.23	-2.00/-1.10	0.25/1.05	1.05/0.81	1.11/1.48	0.82/-1.62	-2.42/-1.47	-0.38/0.28	0.37/0.67
θ(45°)	-2.08/-2.24	-2.30/-3.54	-3.94/-2.65	-1.73/-1.33	-0.76/-0.85	-0.70/-1.20	-1.10/-1.33	-1.85/-2.26	-3.05/-2.92	-2.24/-2.80	-2.82/-1.95	-1.84/-2.71	-2.87/-2.18	-2.38/-2.07	-2.86/-1.08	0.25/0.53	-0.37/-1.14	-0.65/1.04	1.35/1.48	2.22/2.16	0.21/-1.25	-1.95/-2.23	-0.68/-0.21	-1.13/-1.54
θ(52.5°)	-7.17/-9.34	-5.73/-4.20	-2.49/-1.18	-2.06/-2.08	-2.09/-0.47	-0.92/-1.47	-0.97/-0.75	-1.74/-2.79	-3.09/-3.76	-3.56/-2.26	-2.43/-2.06	-2.50/-5.05	-3.75/-2.67	-2.24/-0.61	-2.05/-1.49	-1.54/-0.41	-1.89/-2.57	-1.24/-0.01	-0.40/-1.15	0.14/1.71	1.28/0.32	-1.08/-1.56	-1.52/-1.62	-5.90/-7.97
θ(60°)	-4.76/-8.18	-12.05/-8.28	-5.38/-1.67	-1.35/-2.39	-3.10/-1.08	-0.70/-0.72	-0.74/-1.27	-2.06/-2.52	-2.51/-2.71	-3.16/-1.77	-0.88/-1.64	-2.36/-3.31	-2.90/-3.04	-3.11/-1.84	-1.53/-1.30	-2.41/-1.34	-3.24/-6.71	-5.87/-1.89	-2.19/-3.78	-2.83/-1.90	-1.93/-0.77	-0.97/-2.62	-3.69/-4.17	-4.93/-8.06
θ(67.5°)	-2.28/-2.96	-4.78/-5.12	-9.14/-5.29	-3.17/-2.99	-2.62/-0.54	-1.33/-0.28	-0.61/-0.62	-0.34/-1.71	-1.86/-1.43	-2.59/-2.71	-1.08/-1.15	-1.40/-1.85	-3.42/-2.72	-3.89/-2.01	-2.07/-1.75	-3.39/-3.07	-4.92/-8.54	-5.10/-1.05	-0.73/-2.27	-3.64/-6.54	-5.92/-6.06	-1.30/-5.02	-4.98/-3.57	-1.83/-2.40
θ(75°)	-1.13/0.16	-1.69/-5.14	-6.90/-5.29	-5.20/-3.57	-1.92/-0.44	-1.76/-0.29	-0.83/-0.35	-1.06/-4.43	-3.52/-1.58	-2.93/-2.64	-1.43/-2.68	-3.29/-3.81	-2.43/-2.73	-6.09/-4.65	-2.53/-1.45	-3.13/-2.55	-3.82/-3.90	-3.39/-1.11	-0.75/-0.67	-0.38/-3.90	-7.95/-5.73	-2.20/-8.56	-4.98/-1.03	-1.66/-2.32
θ(82.5°)	-1.71/-0.06	-0.63/-4.51	-4.27/-4.30	-5.35/-2.67	-1.99/-0.87	-1.75/0.43	-0.80/-0.90	-1.49/-4.54	-3.05/-1.66	-2.91/-4.44	-3.14/-2.61	-3.02/-4.01	-4.33/-5.06	-3.79/-3.91	-3.17/0.96	-1.75/-3.91	-5.11/-3.19	-3.56/-1.33	0.26/0.88	0.25/-1.36	4.80/-5.63	-3.31/-6.51	-4.68/-0.45	-1.03/-0.48
θ(90°)	-0.87/-0.33	-1.30/-4.45	-2.71/-3.74	-7.18/-3.06	-2.57/-1.61	-1.33/-0.28	-0.98/-1.38	-1.43/-4.97	-3.58/-1.21	-2.04/-4.37	-5.16/-3.16	-2.57/-3.25	-3.48/-5.65	-4.41/-3.44	-2.82/-2.97	-2.06/-0.94	-0.73/-0.30	0.91/-0.97	-1.57/-1.94	-3.41/-8.37	-7.34/-8.60	-7.53/-1.97	-7.33/-1.55	-0.33/-1.55
θ(97.5°)	0.24/-0.92	-3.88/-5.58	-2.49/-0.77	-4.99/-2.18	-1.94/-1.02	-2.60/-2.24	-1.38/-2.39	-2.50/-5.19	-3.00/-8.01	-2.49/-4.76	-5.25/-3.76	-3.69/-5.18	-6.30/-4.73	-2.64/-2.93	-5.47/-1.20	-0.75/-3.89	-6.49/-0.89	0.45/-1.05	-2.21/-6.32	-4.08/-6.46	-4.69/-13.23	-6.54/-9.53	-8.27/-4.40	-2.68/-2.06
θ(105°)	-0.67/-3.39	-4.84/-6.72	-5.00/-5.29	-4.24/-2.40	-3.91/-2.21	-1.46/-0.84	-1.37/-2.35	-1.95/-4.54	-3.99/-2.60	-4.12/-5.78	-5.11/-2.80	-3.32/-6.95	-6.95/-5.34	-2.51/-1.94	-4.58/-4.04	-2.89/0.39	-4.62/-4.75	0.21/1.23	-0.40/-3.40	-6.33/-13.78	-10.60/-13.45	-10.17/-13.56	-8.19/-8.76	-5.19/-2.71
θ(112.5°)	-4.95/-4.59	-6.74/-8.83	-5.43/-5.88	-3.88/-3.44	-4.63/-3.22	-1.14/-0.93	-0.99/-2.91	-4.13/-5.16	-5.10/-4.53	-8.09/-6.59	-2.66/-3.02	-3.54/-6.83	-4.72/-2.78	-4.06/-4.84	-2.69/-0.04	-1.75/-5.29	-5.94/-3.96	-3.53/-7.91	-7.10/-6.01	-5.56/-1.48	-6.29/-8.47	-8.52/-9.77	-6.37/-4.47	-6.37/-4.47
θ(120°)	-8.89/-9.40	-9.06/-7.03	-5.05/-5.29	-4.66/-4.07	-4.60/-4.63	-2.10/-1.55	-1.27/-1.65	-2.72/-3.95	-6.16/-6.58	-5.74/-3.35	-3.23/-2.77	-5.09/-4.52	-1.61/-4.97	-3.99/-6.00	-7.91/-6.18	-1.61/-1.12	-6.83/-3.26	-3.38/-4.05	-3.72/-3.85	-3.70/-4.44	-3.28/-1.17	-10.88/-10.26	-15.49/-9.16	-8.97/-7.29
θ(127.5°)	-14.36/-10.75	-6.46/-6.61	-5.25/-4.98	-4.09/-3.65	-4.32/-7.61	-5.55/-3.74	-3.32/-4.62	-4.65/-4.03	-5.32/-7.49	-7.48/-5.60	-4.54/-3.42	-3.58/-4.93	-5.09/-9.18	-4.55/-1.93	-5.41/-5.00	-2.07/-2.27	-3.80/-2.74	-4.68/-9.02	-9.94/-7.71	-4.71/-5.89	-5.15/-12.24	-13.09/-10.68	-8.21/-13.25	-13.46/-11.05
θ(135°)	-8.50/-4.92	-6.25/-6.09	-5.05/-5.16	-5.83/-6.31	-4.25/-4.09	-4.43/-4.34	-4.65/-5.18	-4.41/-3.74	-5.19/-7.41	-7.98/-6.62	-5.44/-5.79	-8.06/-4.69	-5.26/-3.93	-3.79/-5.01	-6.69/-9.41	-3.52/-5.23	-3.79/-5.01	-6.69/-9.41	-3.52/-5.23	-3.79/-5.01	-6.69/-9.41	-3.52/-5.23	-3.79/-5.01	-6.69/-9.41
θ(142.5°)	-6.42/-4.92	-4.03/-4.10	-1.55/-5.95	-6.76/-6.32	-3.70/-4.28	-4.85/-4.67	-3.94/-3.04	-3.35/-3.34	-3.89/-4.35	-6.11/-6.56	-5.07/-6.81	-7.73/-6.37	-5.99/-3.30	-1.31/-3.25	-6.79/-9.26	-0.88/-4.10	-2.96/-1.58	-0.06/-1.77	-3.40/-6.37	-8.79/-5.00	-3.54/-3.86	-4.38/-7.66	-7.77/-6.90	-7.59/-9.38
θ(150°)	-5.98/-3.80	-4.06/-5.61	-10.74/-9.98	-5.75/-5.26	-6.27/-7.96	-10.57/-7.49	-5.38/-3.77	-3.70/-4.37	-4.09/-3.15	-2.22/-1.44	-1.43/-1.96	-4.22/-6.31	-6.58/-5.91	-5.27/-4.37	-3.61/-6.36	-6.28/-2.72	-1.97/-2.04	-3.75/-8.71	-10.53/-10.15	-14.42/-15.54	-13.95/-14.57	-9.88/-8.26	-7.36/-6.39	-4.97/-6.62
θ(157.5°)	-7.84/-6.73	-5.67/-4.78	-5.82/-3.63	-8.12/-8.75	-11.18/-11.73	-9.71/-7.08	-6.85/-7.89	-7.41/-6.48	-7.32/-4.73	-4.52/-2.40	-2.26/-2.27	-0.94/-1.28	-3.80/-6.72	-9.13/-7.63	-4.19/-1.99	-0.71/-1.40	-3.81/-6.25	-9.87/-15.12	-10.74/-7.38	-9.35/-14.75	-14.63/-13.16	-10.78/-9.63	-8.16/-5.71	-9.82/-9.40
θ(165°)	-9.63/-9.04	-6.87/-6.30	-3.20/-3.82	-2.59/-2.24	-2.81/-4.39	-6.26/-9.38	-11.33/-9.96	-7.80/-6.56	-6.49/-6.22	-5.02/-5.84	-7.60/-6.60	-4.56/-2.52	-1.89/-1.72	-2.55/-4.69	-5.98/-5.83	-5.22/-5.50	-6.14/-6.75	-8.52/-9.55	-9.31/-7.81	-8.52/-7.93	-7.63/-7.86	-7.63/-7.32	-8.15/-8.57	-8.15/-8.57
θ(172.5°)	-8.06/-8.13	-6.38/-5.18	-4.72/-1.11	-3.45/-3.15	-3.26/-3.33	-3.27/-3.82	-4.02/-3.25	-2.76/-3.24	-3.51/-2.32	-1.78/-2.36	-2.10/-2.25	-2.89/-2.68	-2.50/-3.73	-5.27/-4.29	-7.33/-7.99	-7.15/-5.39	-4.52/-5.77	-7.93/-10.71	-11.37/-9.24	-8.54/-7.09	-5.94/-5.93	-5.32/-4.80	-5.32/-4.80	-5.32/-4.80
θ(180°)	-8.94/-8.40	-7.49/-7.31	-7.53/-7.09	-6.82/-6.64	-6.69/-7.09	-7.47/-8.06	-8.35/-7.62	-7.95/-8.56	-8.35/-8.23	-9.13/-8.73	-8.56/-8.92	-9.82/-10.50	-11.99/-14.35	-13.82/-13.02	-10.38/-8.54	-8.02/-8.01	-8.45/-9.87	-11.85/-12.00	-10.55/-8.40	-6.38/-4.70	-4.07/-4.00	-4.21/-4.76	-5.10/-5.76	-6.51/-6.00
Freq(Hz)	5.6GPol.	TotalAnt.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Φ(0°)Φ(7.5°)	Φ(15°)Φ(22.5°)	Φ(30°)Φ(37.5°)	Φ(45°)Φ(52.5°)	Φ(60°)Φ(67.5°)	Φ(75°)Φ(82.5°)	Φ(90°)Φ(97.5°)	Φ(105°)Φ(112.5°)	Φ(120°)Φ(127.5°)	Φ(135°)Φ(142.5°)	Φ(150°)Φ(157.5°)	Φ(165°)Φ(172.5°)	Φ(180°)Φ(187.5°)	Φ(195°)Φ(202.5°)	Φ(210°)Φ(217.5°)	Φ(225°)Φ(232.5°)	Φ(240°)Φ(247.5°)	Φ(255°)Φ(262.5°)	Φ(270°)Φ(277.5°)	Φ(285°)Φ(292.5°)	Φ(300°)Φ(307.5°)	Φ(315°)Φ(322.5°)	Φ(330°)Φ(337.5°)	Φ(345°)Φ(352.5°)
θ(0°)	1.06/1.33	1.51/1.17	1.00/0.93	0.99/1.04	0.86/0.58	0.66/0.85	0.86/0.91	0.63/0.47	0.70/0.74	0.52/0.49	0.42/0.53	0.64/0.66	0.83/1.03	1.29/1.33	1.23/1.16	1.43/1.55	1.77/2.12	1.80/0.88	0.69/1.53	1.94/1.68	1.63/1.29	1.06/1.56	1.52/1.48	2.07/1.68
θ(7.5°)	-0.10/0.22	0.84/0.87	0.85/0.93	1.10/1.27	1.13/1.07	1.70/1.82	1.45/1.44	1.75/1.79	1.58/1.71	1.74/1.55	1.43/1.33	1.34/1.57	1.45/1.23	1.25/1.36	1.22/1.16	1.27/1.23	1.05/1.00	1.06/0.75	-0.06/0.12	0.91/0.92	0.39/0.77	1.00/0.94	0.93/0.35	0.59/0.75
θ(15°)	0.12/-0.33	0.30/0.48	0.88/1.14	1.56/1.62	0.98/1.16	1.32/1.48	2.02/1.76	1.43/0.98	0.89/0.97	0.64/0.34	0.48/0.60	0.55/0.65	0.50/0.53	0.42/0.35	0.43/0.66	1.14/1.50	1.55/1.28	1.05/0.78	-0.02/-1.15	-1.27/-1.61	-2.65/-2.27	-1.71/-2.03	-0.60/0.82	-0.60/0.82
θ(22.5°)	0.69/0.88	1.43/2.02	2.34/2.25	2.02/1.19	0.37/0.47	0.32/0.96	1.32/1.05	0.58/0.03	-0.45/-0.01	0.77/0.93	0.60/0.69	0.56/0.24	-0.74/-0.78	-0.58/-1.07	0.40/0.61	0.71/0.78	0.94/1.16	1.59/1.90	2.00/1.67	0.92/-0.35	-0.97/-0.52	-0.45/-1.64	-1.41/-1.03	-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 6GHz

Appendix D

Theta (°)	Phi (°)	Gain (dBi)	Phi(15°)	Phi(22.5°)	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	0	-0.92-1.68	-2.42-2.57	-3.10-3.32	-3.98-4.56	-5.47-5.00	-4.46-4.17	-4.95-6.76	-7.12-5.95	-5.32-5.15	-6.17-6.11	-5.32-4.26	-3.48-2.65	-2.61-1.80	-1.02-0.93	-0.46-0.30	0.49-0.71	1.03-0.75	-0.17-0.65	-1.55-3.89	-5.98-4.22	-1.65-2.20	1.45-1.62	1.45-0.94	0.45-0.14	0.50-1.20	0.70-0.88
0	30	-2.36-3.31	-2.12-1.76	-3.72-3.51	-5.21-6.29	-7.95-9.70	-10.66-12.43	-12.06-11.18	-8.97-8.07	-6.64-5.87	-6.31-4.74	-1.76-1.21	-2.04-2.26	-2.15-0.54	1.13-1.28	0.97-1.38	1.35-0.81	0.82-1.47	1.60-1.55	1.03-0.14	-1.72-2.20	-1.99-1.94	-1.27-0.64	0.50-1.20	0.70-0.88	-0.10-0.70	-0.40-0.88
0	45	-3.90-3.52	-2.39-2.34	-3.72-4.85	-6.70-10.76	-8.33-7.12	-10.42-11.61	-10.36-9.24	-8.49-7.47	-6.54-5.47	-2.82-2.12	-1.61-1.73	-2.29-2.71	-1.13-0.59	1.17-1.48	0.91-0.70	1.32-1.63	1.61-1.28	1.48-0.88	-0.20-0.43	-0.82-1.09	-2.46-4.33	-4.41-1.59	-0.10-0.70	-0.40-1.53	-1.11-4.84	-1.11-4.84
0	60	-1.53-3.71	-3.62-3.09	-5.22-6.76	-6.83-8.16	-6.81-5.75	-5.30-5.99	-7.05-6.68	-8.96-10.83	-8.15-6.23	-1.45-0.94	-2.37-2.50	-1.39-1.83	-0.55-1.50	3.02-3.22	1.59-0.95	0.08-0.65	-0.40-0.25	-0.30-0.84	1.46-0.56	-0.19-1.10	-2.52-3.71	-3.94-2.74	-1.55-0.08	0.50-0.03	0.50-0.03	0.50-0.03
0	75	-4.43-4.83	-5.81-7.55	-9.51-9.35	-8.53-9.23	-4.88-4.57	-3.77-3.64	-3.26-3.27	-4.92-3.97	-4.76-2.63	-2.70-3.23	-5.13-1.59	-0.12-0.58	0.66-2.23	3.19-2.75	1.41-0.94	1.16-1.14	0.58-0.75	0.55-0.93	-0.15-0.66	-3.31-1.14	-0.73-3.14	-4.64-2.57	-0.50-1.07	0.90-2.20	0.90-2.20	0.90-2.20
0	90	-5.18-6.02	-6.63-8.61	-10.23-11.59	-9.42-5.28	-1.89-2.04	-1.89-2.04	-0.86-0.98	-0.82-1.00	-0.58-0.46	-3.11-4.53	-7.04-3.66	-0.87-0.42	0.87-0.42	1.65-1.95	-2.65-1.03	0.79-0.71	0.49-0.53	-1.61-1.33	-0.85-1.06	-2.32-2.09	-0.82-2.51	-3.04-3.18	-0.68-0.40	-1.11-4.84	-1.11-4.84	-1.11-4.84
0	105	-4.41-5.43	-6.21-7.04	-6.82-7.17	-6.47-2.33	-1.48-1.28	-0.21-1.47	0.45-0.39	0.38-0.80	0.45-2.87	-3.92-7.41	-6.16-3.73	-2.76-1.82	-2.55-1.30	1.81-1.89	-4.49-2.55	-0.19-0.09	-1.34-2.68	-1.81-1.20	1.34-0.76	-1.02-1.67	0.16-0.84	-4.08-3.85	-0.99-0.75	-2.98-4.70	-2.98-4.70	-2.98-4.70
0	120	-3.91-5.67	-8.43-7.73	-5.81-4.59	-4.19-0.36	-0.94-1.60	-0.67-1.67	0.61-0.46	0.29-0.74	1.03-1.57	-4.09-5.49	-4.00-2.98	-2.09-0.59	-3.98-0.62	1.91-0.04	-2.22-2.05	0.51-0.03	-0.03-0.20	0.07-0.25	2.73-0.53	1.02-2.03	-0.78-0.61	-4.21-3.77	-1.66-2.97	-4.68-8.42	-4.68-8.42	-4.68-8.42
0	135	-4.06-4.89	-7.76-8.23	-5.52-3.81	-2.48-0.64	0.45-0.01	-1.96-4.01	-0.38-1.73	-1.35-0.26	0.50-1.49	-1.96-0.43	-3.34-3.27	-1.04-0.94	-6.35-0.14	0.54-0.16	-3.58-0.81	1.51-0.55	0.52-0.47	0.50-0.67	2.37-1.08	2.37-1.08	-0.06-0.73	-2.77-4.95	-2.17-4.20	-6.04-4.12	-6.04-4.12	-6.04-4.12
0	150	-3.79-4.54	-9.42-8.95	-6.41-4.93	-1.97-0.36	0.86-0.11	-2.32-3.04	-1.32-1.45	-2.74-2.58	-0.74-1.65	-2.06-2.29	-4.51-5.52	-2.10-3.31	-6.56-0.97	-2.71-0.92	-5.97-2.17	0.69-0.93	1.16-2.78	2.19-4.43	4.90-4.63	3.47-0.52	-2.20-1.63	-3.68-6.16	-2.38-7.05	-7.51-6.00	-7.51-6.00	-7.51-6.00
0	165	-4.87-4.88	-11.23-11.49	-9.60-3.72	-2.65-0.21	0.54-0.83	-3.56-2.85	-2.53-3.26	-4.30-4.14	-3.16-3.96	-3.01-5.30	-6.65-7.86	-3.44-5.92	-6.41-2.52	-7.14-3.88	-8.27-6.42	-3.82-0.92	0.08-1.24	0.48-2.12	3.12-2.81	1.79-3.84	-2.33-0.84	-3.76-7.02	-2.56-5.07	-6.32-6.04	-6.32-6.04	-6.32-6.04
0	180	-5.42-9.10	-12.23-13.46	-14.52-11.68	-11.07-0.81	-1.17-0.18	-1.13-0.79	-1.31-1.28	-3.00-5.10	-6.28-6.89	-6.89-5.67	-5.24-8.12	-5.25-5.62	-8.65-7.43	-6.38-7.57	-4.96-4.99	-3.62-2.39	-3.62-0.18	1.56-0.40	-0.93-0.26	-2.63-1.57	-4.79-3.54	-2.06-2.86	-6.22-4.99	-6.22-4.99	-6.22-4.99	-6.22-4.99
0	195	-3.56-8.40	-13.12-14.95	-14.93-13.57	-8.06-3.14	-1.60-1.54	-3.43-2.32	-4.26-4.55	-9.34-12.38	-8.99-10.16	-5.14-8.31	-7.19-11.45	-9.08-7.75	-7.77-5.92	-7.27-6.23	-6.12-7.61	-2.70-2.33	-5.82-6.96	-7.07-3.09	-1.17-1.96	-4.33-7.02	-2.11-1.00	-4.57-4.59	-1.84-0.79	-3.66-3.76	-3.66-3.76	-3.66-3.76
0	210	-1.53-5.96	-8.86-13.87	-8.86-13.87	-8.23-6.05	-5.67-3.30	-1.25-2.20	-5.14-7.63	-8.46-8.07	-7.56-10.79	-5.74-7.40	-11.68-7.30	-6.66-6.80	-10.94-7.65	-7.06-7.20	-0.41-0.12	-4.59-4.74	-4.61-4.54	-8.52-9.46	-6.83-6.67	-0.94-3.49	-2.56-5.07	-0.32-0.05	-0.87-2.03	-0.87-2.03	-0.87-2.03	-0.87-2.03
0	225	-1.76-3.52	-5.01-8.87	-11.93-11.27	-13.39-9.66	-8.67-7.35	-3.61-2.56	-3.70-4.87	-9.67-7.93	-7.50-9.30	-7.16-6.84	-7.70-11.64	-8.40-8.68	-10.15-4.47	-9.76-6.03	-9.95-9.92	-1.60-6.51	-1.07-2.20	-5.24-6.67	-5.96-4.07	-5.51-4.82	-2.85-4.40	-0.24-2.30	-1.22-2.30	-0.21-2.72	-0.21-2.72	-0.21-2.72
0	240	-1.47-3.39	-2.77-4.59	-7.88-11.68	-15.16-10.79	-6.37-4.76	-6.77-7.58	-5.25-4.13	-6.61-9.45	-8.58-9.18	-8.43-7.17	-5.80-11.32	-14.57-12.24	-10.77-8.68	-7.55-4.02	-2.94-4.17	-7.78-9.62	-3.81-7.07	-7.95-4.36	-4.77-2.60	-3.51-2.56	-3.79-6.83	-2.46-2.11	1.35-1.68	1.11-1.58	1.11-1.58	1.11-1.58
0	255	-2.09-1.98	-2.97-3.88	-6.17-7.44	-11.85-12.13	-11.78-8.90	-6.44-3.75	-8.88-8.71	-7.97-8.55	-7.21-7.93	-9.71-10.08	-8.95-10.58	-8.39-8.17	-11.33-14.21	-6.47-4.85	-4.72-3.84	-1.97-7.80	-4.51-3.92	-5.09-0.55	-8.74-5.66	-5.47-3.72	-3.29-2.03	-0.60-0.25	0.66-0.25	0.66-0.25	0.66-0.25	0.66-0.25
0	270	-5.62-4.58	-4.66-4.86	-5.62-4.86	-7.18-9.44	-11.01-10.08	-7.94-7.26	-7.42-8.28	-8.60-8.11	-8.21-8.68	-6.87-7.54	-10.22-15.37	-15.59-12.47	-9.02-7.09	-6.90-9.10	-9.33-7.29	-6.62-0.95	-11.61-11.57	-8.38-7.48	-11.72-7.69	-4.84-6.67	-4.84-6.35	-3.74-3.71	-5.54-6.36	-5.54-6.36	-5.54-6.36	-5.54-6.36
0	285	-6.80-7.00	-5.84-5.26	-4.62-0.03	-4.14-4.39	-4.54-6.08	-7.21-5.58	-4.87-5.71	-7.84-8.32	-7.25-6.83	-6.43-7.59	-7.34-7.99	-9.86-13.50	-15.41-14.73	-10.20-6.84	-6.51-9.72	-12.49-11.66	-10.99-12.51	-15.32-11.81	-5.76-4.29	-5.70-7.37	-6.67-6.60	-6.90-6.87	-7.45-5.92	-5.22-6.24	-5.22-6.24	-5.22-6.24
0	300	-4.01-3.47	-5.32-6.01	-6.69-7.43	-7.86-8.68	-9.03-8.10	-6.66-6.28	-6.16-6.12	-5.74-6.52	-5.61-5.67	-6.33-9.54	-13.75-14.15	-14.08-14.56	-13.20-9.74	-6.85-7.58	-4.36-8.45	-5.97-6.11	-6.63-6.89	-9.27-6.48	-4.11-3.56	-4.12-3.98	-2.43-0.69	-0.11-0.99	-2.19-2.64	-2.44-3.15	-2.44-3.15	-2.44-3.15
0	315	-5.44-6.34	-7.31-8.66	-9.04-9.63	-10.54-9.38	-8.58-8.38	-8.20-8.34	-8.18-8.06	-9.53-11.61	-13.56-14.11	-15.23-15.02	-14.44-17.17	-13.44-12.45	-11.58-11.17	-11.10-9.50	-8.42-8.06	-6.49-5.77	-4.89-4.43	-4.25-4.20	-5.95-5.96	-5.34-4.17	-3.32-3.17	-3.80-4.07	-4.37-5.30	-4.37-5.30	-4.37-5.30	-4.37-5.30
0	330	-4.49-4.15	-4.85-5.10	-5.02-4.92	-4.79-4.34	-4.37-4.85	-6.24-7.87	-9.00-9.90	-8.96-6.88	-5.45-4.68	-4.77-5.70	-5.97-6.87	-6.46-7.83	-8.61-7.53	-6.78-6.77	-6.79-6.52	-6.99-7.51	-6.97-6.76	-6.99-7.42	-7.26-7.07	-6.77-6.27	-4.73-4.93	-5.21-5.19	-4.98-5.09	-4.98-5.09	-4.98-5.09	-4.98-5.09
0	345	-1.69-2.25	-0.66-0.81	-1.59-1.00	-0.36-0.42	2.49-3.31	3.60-3.22	4.03-9.31	4.05-0.40	2.07-2.62	1.60-0.00	-0.86-3.07	-4.06-1.58	-2.10-7.09	-4.72-5.19	-4.45-3.76	-3.78-3.52	-2.45-3.48	-2.95-1.78	-1.82-3.77	-4.89-1.47	-8.13-3.58	-2.62-2.40	-4.58-5.07	-4.58-5.07	-4.58-5.07	-4.58-5.07



Antenna Pattern of 6GHz

Appendix D

Freq(Hz)	TotalAnt.3	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°)
6475GPol.	TotalAnt.3	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°)
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Φ(322.5°)																									
Φ(330°)																									
Φ(337.5°)																									
Φ(345°)																									
Φ(352.5°)																									



Antenna Pattern of 6GHz

Appendix D

Theta (°)	Phi (°)	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°)
Theta (127.5°)	-8.96/-7.79	-5.81/-2.60	-4.19/-4.21	-4.38/-5.56	-6.77/-10.05	-10.65/-9.81	-7.34/-5.32	-3.20/-2.82	-2.35/-2.84	-2.85/-3.37	-3.80/-3.57	-3.90/-2.13	-3.77/-3.88	-8.24/-9.73	-13.98/-9.56	-5.07/-5.53	-7.37/-10.17	-7.98/-6.44	-11.43/-8.25	-4.52/-7.75	-11.83/-10.52	-6.33/-5.08	-7.17/-3.99	-3.08/-13.35
Theta (135°)	-2.61/-4.22	-8.59/-7.96	-6.04/-6.12	-6.83/-6.18	-6.95/-8.38	-7.94/-7.13	-4.60/-2.66	-2.96/-5.22	-4.88/-3.74	-2.93/-3.50	-4.19/-5.24	-3.10/-2.64	-3.34/-3.23	-6.84/-10.55	-12.59/-13.22	-7.98/-9.91	-9.20/-11.33	-12.73/-14.98	-9.21/-7.57	-6.68/-6.41	-7.29/-5.53	-6.60/-5.68	-10.08/-4.93	
Theta (142.5°)	-6.41/-8.68	-11.18/-12.16	-11.70/-8.81	-8.94/-10.23	-8.42/-6.23	-4.68/-3.79	-3.31/-3.10	-4.07/-6.64	-5.53/-5.14	-4.80/-3.61	-4.39/-5.46	-6.08/-4.51	-5.59/-4.03	-5.75/-9.01	-13.33/-10.19	-7.02/-4.81	-5.50/-6.16	-10.84/-10.60	-5.10/-3.02	-2.14/-4.31	-10.70/-11.47	-6.55/-5.49	-6.37/-6.07	
Theta (150°)	-11.72/-16.08	-15.64/-15.24	-14.60/-15.42	-14.98/-10.13	-7.31/-5.55	-5.94/-6.39	-5.83/-5.62	-6.09/-7.71	-7.45/-5.56	-5.77/-6.03	-5.55/-6.07	-7.20/-8.28	-11.25/-11.50	-8.98/-8.26	-7.72/-5.87	-3.43/-3.92	-4.58/-4.83	-6.10/-4.55	-5.56/-9.41	-11.50/-9.68	-8.00/-7.99	-11.67/-15.27	-14.63/-11.62	-7.58/-7.97
Theta (157.5°)	-11.11/-13.81	-15.94/-14.03	-13.79/-14.79	-15.11/-15.87	-15.07/-12.34	-9.29/-8.21	-8.16/-10.28	-13.93/-13.30	-9.34/-7.15	-6.08/-6.12	-7.55/-8.09	-7.61/-8.60	-13.23/-15.45	-14.86/-13.87	-12.80/-12.83	-10.90/-7.80	-4.80/-4.47	-5.12/-4.65	-3.87/-4.74	-6.81/-9.16	-11.32/-13.38	-15.20/-15.64	-13.94/-12.14	-9.00/-8.91
Theta (165°)	-11.65/-11.67	-11.29/-10.90	-9.83/-10.63	-11.43/-12.26	-13.45/-14.31	-14.46/-14.58	-14.15/-14.00	-15.73/-14.37	-11.23/-8.89	-7.67/-5.67	-5.94/-5.20	-4.97/-6.29	-7.85/-7.61	-7.38/-7.04	-6.98/-6.36	-6.00/-5.61	-5.48/-6.03	-6.82/-7.05	-6.39/-6.72	-6.87/-11.77	-13.48/-12.64	-11.60/-12.72	-10.75/-9.35	-11.02/-11.43
Theta (172.5°)	-13.68/-14.53	-14.17/-14.75	-13.48/-12.44	-12.12/-12.01	-11.70/-11.02	-11.08/-10.75	-10.56/-10.43	-10.03/-9.56	-9.60/-9.05	-8.79/-8.28	-7.44/-6.06	-5.56/-5.41	-5.44/-5.48	-6.10/-6.49	-6.83/-7.37	-8.54/-9.36	-9.55/-9.62	-9.93/-10.05	-10.47/-11.02	-11.95/-12.15	-11.39/-11.52	-11.68/-10.38	-10.11/-10.21	-10.86/-12.49
Theta (180°)	-8.21/-7.71	-7.96/-8.08	-7.92/-8.01	-8.44/-8.49	-8.33/-8.14	-8.49/-8.68	-8.35/-8.35	-8.49/-8.21	-8.40/-8.51	-8.36/-8.08	-8.16/-8.71	-8.53/-9.67	-9.40/-9.11	-9.15/-9.05	-9.20/-10.00	-10.79/-10.63	-12.02/-11.22	-10.94/-11.35	-12.97/-12.79	-11.81/-10.58	-10.22/-10.06	-10.23/-10.67	-9.95/-9.15	
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 (0°)	-6.52/-7.21	-7.68/-7.74	-6.70/-6.61	-6.36/-6.84	-6.60/-6.22	-6.23/-6.35	-6.50/-6.38	-6.10/-5.76	-5.48/-4.97	-4.72/-5.01	-5.38/-5.34	-4.98/-4.86	-5.14/-5.51	-5.80/-5.50	-5.72/-6.14	-6.14/-6.33	-6.66/-6.82	-6.88/-6.66	-6.42/-7.26	-8.40/-8.50	-7.62/-7.44	-7.23/-6.91	-6.94/-7.11	-6.81/-5.87
Theta (7.5°)	-3.71/-4.51	-4.60/-4.90	-5.57/-5.83	-6.23/-7.13	-7.61/-8.38	-10.15/-11.59	-11.74/-11.81	-11.92/-11.56	-10.78/-10.34	-9.53/-8.75	-8.92/-8.34	-7.67/-7.58	-8.57/-8.01	-6.85/-7.50	-7.33/-7.37	-7.55/-7.06	-6.18/-5.56	-4.68/-3.97	-4.16/-4.32	-4.43/-4.05	-3.60/-3.50	-3.79/-4.16	-4.11/-3.55	
Theta (15°)	-5.61/-5.57	-5.86/-7.03	-7.24/-7.30	-7.88/-8.75	-9.42/-9.86	-11.46/-12.10	-12.75/-11.74	-11.61/-11.93	-11.54/-10.53	-10.34/-9.59	-9.39/-9.74	-7.16/-6.18	-6.98/-7.05	-6.19/-6.90	-8.88/-10.31	-10.74/-11.44	-11.87/-11.16	-9.59/-8.48	-8.01/-7.41	-7.10/-7.73	-8.03/-6.81	-4.92/-4.15	-3.84/-4.11	-4.67/-5.07
Theta (22.5°)	-2.29/-2.03	-1.81/-1.55	-1.60/-2.06	-2.45/-1.99	-2.13/-3.16	-3.56/-3.12	-3.21/-3.74	-5.13/-6.62	-7.48/-8.08	-9.88/-11.40	-11.72/-9.44	-8.02/-6.61	-6.33/-8.87	-8.12/-7.32	-9.92/-11.47	-11.24/-10.43	-10.49/-11.37	-12.66/-10.73	-8.35/-7.56	-6.93/-6.56	-6.72/-6.15	-5.49/-5.20	-5.19/-4.89	-3.78/-2.25
Theta (30°)	-1.33/-1.02	-0.58/-0.80	-1.20/-1.26	-2.43/-2.17	-2.04/-1.54	-1.16/-0.76	-0.51/-1.12	-1.89/-3.35	-4.23/-4.73	-6.29/-7.56	-7.43/-7.80	-10.01/-12.75	-10.12/-9.21	-9.97/-15.64	-12.60/-13.69	-10.10/-6.70	-6.62/-6.84	-7.80/-7.61	-7.40/-5.88	-4.41/-4.24	-5.50/-5.83	-5.45/-5.20	-3.43/-2.58	-2.08/-1.51
Theta (37.5°)	-1.41/-0.60	0.460/-0.37	-1.11/-2.51	-3.07/-2.74	-2.08/-1.47	-1.08/-0.63	-0.49/-0.71	-1.55/-2.61	-2.28/-2.67	-3.87/-4.43	-5.40/-8.89	-11.69/-13.84	-11.17/-11.46	-12.00/-15.37	-14.23/-9.87	-7.83/-4.31	-5.20/-7.51	-8.62/-4.65	-2.99/-1.15	-0.67/-3.39	-7.39/-7.42	-4.84/-2.49	-0.95/-1.11	-2.17/-2.23
Theta (45°)	-0.860/-62	1.080/25	-1.25/-2.58	-2.51/-2.87	-3.77/-3.17	-1.82/-3.14	-0.80/-1.18	-1.14/-1.40	-1.39/-1.93	-1.81/-0.67	-1.23/-3.50	-5.01/-3.49	-3.94/-4.31	-8.95/-15.63	-14.02/-6.59	-8.32/-9.59	-6.55/-9.19	-5.91/-9.00	-4.88/-3.53	-1.91/-2.55	-4.56/-3.86	-3.87/-3.28	-2.80/-3.59	-4.67/-3.01
Theta (52.5°)	-0.64/-0.26	-1.02/-3.11	-4.15/-3.82	-2.76/-2.21	-2.66/-2.40	-1.22/-0.54	-0.74/-0.45	-0.22/-0.64	-0.85/-1.10	0.150/58	0.35/-0.34	-2.10/-2.62	-3.43/-3.48	-6.62/-10.60	-9.33/-4.97	-7.18/-5.99	-5.64/-8.24	-10.44/-10.87	-5.68/-3.49	-3.58/-3.88	-6.29/-6.04	-4.31/-4.03	-4.58/-6.25	-4.01/-1.75
Theta (60°)	-1.54/-2.50	-3.97/-4.76	-3.80/-4.36	-3.49/-1.99	-2.54/-2.79	-1.25/-0.41	-1.10/-2.37	-2.10/-0.95	-0.220/13	0.750/25	0.901/13	-0.271/0.91	-1.01/-2.57	-5.28/-5.71	-6.16/-5.93	-5.82/-9.11	-6.84/-9.11	-6.38/-7.12	-6.65/-5.16	-4.71/-4.02	-5.18/-9.62	-8.91/-5.82	-5.66/-5.87	-3.46/-1.98
Theta (67.5°)	-2.22/-1.75	-2.49/-2.75	-2.02/-2.67	-2.72/-1.04	-1.25/-1.87	-0.490/84	0.532/-11	-2.45/-1.83	-1.42/-0.96	-0.51/-1.73	-0.94/-1.80	-1.100/07	-0.63/-3.22	-6.64/-5.12	-4.97/-4.42	-5.48/-6.30	-6.38/-6.69	-5.24/-5.32	-4.22/-5.97	-5.71/-5.26	-6.63/-6.46	-6.67/-3.23	-4.90/-5.80	-4.93/-4.11
Theta (75°)	-1.110/48	-1.94/-3.37	-2.48/-2.32	-1.89/-2.13	-1.92/-1.55	0.504/26	0.170/87	0.051/122	-3.07/-3.52	-3.09/-3.08	-1.74/-2.39	-1.10/-0.17	-1.10/-2.11	-7.67/-5.37	-3.37/-3.08	-3.15/-7.70	-6.70/-4.82	-5.36/-6.66	-3.98/-5.11	-7.18/-4.26	-5.32/-7.24	-7.75/-5.11	-6.81/-5.30	-5.15/-3.57
Theta (82.5°)	-1.63/-0.13	-3.72/-3.50	-1.49/-1.23	-2.36/-3.52	-2.13/-1.93	0.462/16	2.38/159	1.46/113	-1.93/-4.19	-6.75/-3.98	-2.80/-3.72	-2.21/-1.18	-1.55/-3.03	-6.26/-5.78	-4.83/-5.55	-2.93/-6.70	-5.34/-3.07	-2.71/-3.94	-1.38/-3.94	-6.57/-6.01	-3.45/-8.00	-7.14/-9.45	-11.36/-4.17	-4.42/-5.56
Theta (90°)	-1.52/-2.42	-6.22/-6.90	-3.16/-3.26	-4.20/-2.70	-4.00/-1.37	-0.530/13	0.25/-1.18	0.401/21	-1.27/-3.45	-6.11/-4.99	-3.07/-4.07	-3.91/-2.74	-2.41/-3.65	-3.62/-5.56	-4.17/-5.02	-3.02/-5.55	-5.08/-4.99	-3.60/-3.75	-2.55/-5.25	-2.90/-1.59	-2.28/-4.87	-8.57/-7.31	-10.32/-6.41	-5.52/-7.28
Theta (97.5°)	-4.82/-7.38	-13.41/-8.24	-5.59/-6.07	-6.47/-7.10	-3.12/-1.34	-0.19/-0.29	-1.28/-1.09	-1.20/-0.57	-2.90/-2.63	-4.85/-5.50	-4.37/-4.07	-3.88/-3.68	-4.17/-4.96	-3.70/-3.78	-4.51/-4.35	-2.23/-2.79	-3.07/-5.29	-3.41/-1.76	-6.33/-3.35	-4.67/-3.37	-2.76/-7.05	-6.74/-8.60	-10.14/-6.98	-11.27/-7.72
Theta (105°)	-9.69/-10.23	-5.60/-5.99	-4.08/-6.20	-9.02/-9.57	-4.13/-0.51	0.711/52	0.59/-0.39	-1.40/-2.72	-5.84/-4.01	-4.29/-4.27	-5.24/-8.05	-5.98/-4.77	-4.47/-6.01	-8.14/-5.78	-6.99/-3.56	-2.40/-2.61	-4.32/-8.03	-6.41/-1.37	-4.55/-8.68	-9.00/-7.48	-5.81/-7.10	-10.06/-12.84	-7.77/-6.81	-9.62/-10.47
Theta (112.5°)	-2.05/-1.65	-1.10/-4.58	-7.61/-9.89	-15.12/-13.55	-7.84/-2.52	-2.05/-0.59	-1.22/-1.72	-1.59/-3.25	-4.72/-6.59	-5.84/-5.59	-6.48/-7.56	-9.81/-8.58	-6.49/-5.89	-8.92/-3.66	-7.79/-2.17	-4.86/-1.91	-5.17/-5.72	-8.52/-7.22	-0.92/-1.96	-9.58/-10.67	-5.24/-13.94	-12.32/-12.13	-6.23/-8.97	-8.79/-6.44
Theta (120°)	-5.34/-5.67	-8.66/-12.56	-10.23/-7.49	-7.39/-9.92	-9.71/-13.4	-3.29/-3.23	-5.34/-6.66	-4.11/-3.42	-5.73/-7.11	-5.80/-6.53	-7.63/-12.39	-11.20/-9.46	-9.01/-9.24	-6.00/-4.36	-3.90/-3.03	-9.33/-9.88	-7.00/-4.77	-4.61/-5.74	-2.40/-6.66	-9.70/-3.70	-12.60/-11.33	-8.04/-11.23	-5.54/-6.47	
Theta (127.5°)	-10.11/-10.09	-6.83/-4.84	-7.25/-8.64	-7.32/-8.85	-7.24/-5.62	-6.95/-6.19	-8.97/-7.23	-4.44/-4.85	-5.10/-5.77	-5.63/-6.36	-7.00/-7.47	-6.73/-10.25	-11.03/-12.56	-13.83/-15.04	-10.78/-4.38	-9.94/-3.16	-9.47/-8.79	-3.47/-3.12	-6.48/-6.82	0.25/-2.59	-9.55/-10.26	-6.73/-12.50	-12.45/-7.48	-2.33/-7.90
Theta (135°)	-2.03/-3.24	-6.91/-8.99	-7.72/-7.60	-7.11/-11.8	-6.45/-7.34	-9.22/-8.58	-10.02/-12.21	-7.06/-5.56	-5.38/-5.99	-4.51/-4.96	-7.03/-9.70	-6.15/-5.23	-7.62/-6.44	-8.77/-9.51	-11.18/-11.45	-7.48/-10.91	-11.91/-6.41	-8.25/-10.98	-9.49/-12.61	-7.28/-6.16	-9.21/-9.66	-11.88/-13.26	-12.01/-9.95	-10.59/-6.36
Theta (142.5°)	-5.95/-7.77	-12.04/-10.27	-8.16/-5.88	-7.82/-15.46	-12.11/-9.54	-9.13/-9.59	-9.19/-8.35	-7.50/-4.42	-4.95/-4.16	-4.59/-4.93	-6.46/-7.17	-4.99/-4.23	-4.58/-4.06	-5.17/-8.22	-12.36/-11.37	-15.10/-15.21	-14.45/-9.56	-8.43/-8.48	-10.09/-11.39	-7.47/-6.33	-4.21/-5.42	-10.54/-10.68	-8.28/-9.30	-7.72/-4.99
Theta (150°)	-10.91/-10.00	-8.92/-8.85	-10.49/-11.82	-10.49/-6.80	-5.04/-5.60	-8.27/-7.19	-5.33/-6.23	-7.81/-6.66	-5.66/-5.50	-6.22/-6.89	-8.27/-12.38	-15.69/-15.91	-11.45/-9.88	-6.67/-6.25	-7.99/-7.06	-6.89/-7.40	-9.90/-6.11	-8.42/-8.84	-11.22/-14.63	-13.94/-11.03	-7.79/-8.24	-9.36/-14.82	-13.95/-12.37	-9.45/-8.93
Theta (157.5°)	-9.47/-10.01	-10.87/-13.76	-15.70/-15.60	-12.55/-8.57	-7.04/-6.80	-8.07/-10.32	-13.21/-13.49	-10.23/-9.52	-9.49/-9.05	-8.58/-8.10	-8.23/-8.88	-9.81/-11.35	-10.92/-10.77	-9.14/-7.22	-6.10/-6.72									

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

