



Antenna Pattern_2.4GHz and 5GHz

Appendix C

Θ(112.5°)	1.05/2.09	3.59/9.91	4.16/4.28	3.63/2.29	0.95/0.86	1.72/1.78	0.88/-0.56	-1.68/-2.69	-4.03/-6.23	-6.46/4.59	-3.46/-3.30	-1.76/-0.29	-1.29/-2.98	-5.98/-6.97	-7.49/-8.95	-7.77/-9.57	-15.00/-8.39	-6.30/-10.28	-9.24/-5.51	-4.07/-5.89	-6.06/-3.67	-2.11/-3.92	-2.66/-1.49	-0.23/-1.13
Θ(120°)	1.07/0.61	1.64/-1.97	1.16/-1.30	1.07/0.57	0.88/-1.89	2.81/3.26	2.53/-0.14	-0.77/-2.15	-3.34/-4.63	-6.58/-5.08	-4.37/-4.54	-3.67/-3.85	-4.21/-6.46	-7.65/-9.39	-8.43/-9.39	-8.54/-8.57	-10.64/-12.80	-8.52/-13.45	-13.28/-8.63	-4.18/-2.86	-5.48/-3.67	-1.43/-2.01	-0.51/-1.14	0.44/-0.13
Θ(127.5°)	-1.47/-2.45	-1.78/-1.24	-0.30/-0.22	0.89/2.05	3.16/3.94	4.52/4.74	4.49/3.51	-1.38/-1.32	-2.27/-2.31	-5.05/-5.69	-3.47/-5.22	-3.92/-3.76	-5.54/-7.12	-8.15/-9.96	-9.29/-9.72	-10.88/-10.59	-11.24/-7.99	-6.59/-8.80	-7.95/-5.87	-7.13/-4.75	-6.37/-4.00	-6.46/-4.50	-2.33/-0.04	0.45/-0.66
Θ(135°)	-5.22/-2.98	-2.61/-1.37	0.54/-1.98	2.75/3.30	4.03/4.83	5.31/5.33	4.51/2.91	1.20/-0.30	-2.66/-7.19	-8.53/-6.03	-4.87/-5.15	-5.57/-5.63	-6.00/-7.74	-6.88/-8.54	-8.62/-10.72	-15.43/-13.55	-12.32/-7.92	-8.09/-11.81	-13.36/-12.34	-14.67/-9.35	-8.51/-8.43	-8.76/-8.41	-6.22/-4.95	-4.37/-4.93
Θ(142.5°)	-4.09/-1.23	0.28/0.64	0.63/-1.15	1.62/-1.98	2.47/2.99	3.32/2.84	2.01/-1.00	-0.00/-2.16	-5.56/-6.25	-5.14/-4.61	-4.43/-4.51	-5.69/-7.34	-9.93/-9.89	-10.49/-12.24	-15.52/-13.15	-12.38/-12.31	-12.98/-12.98	-15.10/-14.01	-13.72/-12.71	-12.89/-8.81	-5.24/-5.20	-6.77/-8.35	-8.61/-6.61	-4.34/-5.58
Θ(150°)	-3.21/-1.83	-0.50/-0.44	0.52/0.58	0.91/-1.13	1.14/-1.23	1.31/-1.15	0.64/-0.54	-2.41/-3.94	-1.46/-4.93	-6.50/-5.69	-4.25/-3.41	-2.44/-2.62	-3.94/-5.11	-7.26/-9.03	-10.34/-10.53	-10.40/-10.49	-9.32/-9.38	-12.85/-15.62	-13.72/-14.26	-12.27/-8.12	-6.55/-5.18	-3.68/-3.17	-3.24/-3.63	
Θ(157.5°)	-3.85/-2.92	-1.74/-0.21	1.11/-1.62	1.93/2.28	2.43/2.70	3.05/3.09	2.69/-1.57	0.11/-1.15	-2.12/-3.33	-4.53/-4.84	-5.55/-6.17	-6.80/-7.81	-7.33/-7.60	-8.91/-8.77	-8.61/-8.40	-8.25/-8.94	-10.25/-11.23	-12.03/-12.79	-11.44/-9.73	-9.02/-9.64	-11.27/-11.28	-10.14/-8.03	-6.29/-5.43	-5.26/-4.91
Θ(165°)	-4.62/-3.60	-2.88/-2.21	-1.22/-0.24	0.45/0.79	1.13/-1.53	1.79/-1.82	1.45/0.74	0.02/-1.02	-2.60/-5.08	-7.69/-9.60	-12.21/-13.01	-12.82/-10.70	-9.58/-10.11	-11.67/-12.06	-11.08/-11.19	-12.99/-14.80	-14.93/-14.07	-11.78/-10.65	-10.18/-10.76	-11.65/-9.94	-7.46/-6.16	-5.82/-5.94	-5.87/-5.51	
Θ(172.5°)	-8.05/-6.80	-5.85/-5.01	-4.39/-3.90	-3.51/-3.09	-2.42/-1.82	-1.85/-2.55	-3.56/-4.24	-5.00/-5.90	-7.05/-8.50	-8.92/-9.26	-10.19/-11.60	-12.07/-13.05	-13.52/-14.20	-14.55/-14.47	-13.80/-12.47	-11.21/-11.01	-10.42/-10.31	-10.79/-12.11	-13.52/-14.75	-15.16/-15.27	-14.62/-13.28	-11.68/-10.69	-10.28/-10.41	-9.86/-8.95
Θ(180°)	-8.54/-7.73	-7.00/-6.37	-6.24/-6.49	-6.61/-6.77	-6.64/-6.72	-7.27/-7.92	-7.97/-7.04	-6.54/-6.30	-6.30/-6.77	-6.88/-7.00	-7.52/-8.54	-9.67/-10.70	-10.87/-9.62	-8.63/-8.14	-8.00/-7.44	-6.51/-5.76	-5.61/-6.46	-8.19/-9.51	-9.14/-8.87	-8.37/-7.98	-8.16/-8.21	-8.09/-7.75	-7.69/-7.88	-8.42/-8.49
Freq(Hz)	5.6GPol.	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°)	-4.05/-4.19	-3.92/-3.60	-3.51/-3.53	-3.77/-4.29	-4.46/-3.97	-3.54/-3.71	-3.84/-3.37	-2.81/-2.56	-2.71/-2.82	-2.78/-2.99	-3.07/-3.07	-2.78/-2.38	-1.92/-1.65	-1.69/-2.03	-2.08/-2.15	-2.75/-3.13	-2.52/-2.48	-3.04/-3.07	-3.16/-3.27	-3.08/-3.19	-3.41/-3.44	-3.61/-3.76	-3.84/-3.88	-3.82/-3.95
Θ(7.5°)	-2.20/-2.69	-2.88/-3.03	-3.10/-2.99	-3.21/-0.96	-5.05/-5.33	-5.28/-5.26	-5.60/-5.69	-5.89/-5.64	-5.50/-5.74	-5.87/-5.80	-5.92/-5.65	-5.03/-4.62	-4.22/-4.14	-4.33/-4.47	-4.31/-3.80	-3.86/-4.00	-3.54/-2.85	-3.03/-3.07	-2.38/-2.02	-1.73/-1.51	-1.62/-1.83	-1.63/-1.45	-1.25/-1.15	-1.42/-1.76
Θ(15°)	-0.59/-1.11	-1.69/-2.25	-2.77/-3.20	-4.09/-5.06	-6.23/-7.71	-9.73/-9.57	-10.50/-11.60	-9.56/-9.09	-8.79/-8.46	-9.36/-9.40	-8.30/-7.25	-7.02/-7.65	-8.18/-8.80	-9.48/-9.83	-9.25/-8.05	-7.54/-7.53	-6.60/-4.69	-3.26/-2.22	-1.43/-0.94	-0.79/-0.44	-0.15/0.01	0.09/0.20	0.24/-0.12	
Θ(22.5°)	0.82/0.20	-0.74/-1.58	-2.44/-3.65	-5.15/-6.74	-8.39/-9.87	-11.31/-12.35	-13.52/-10.07	-9.06/-8.51	-7.94/-6.71	-6.44/-7.39	-8.12/-7.73	-7.88/-9.85	-12.51/-12.21	-11.70/-10.89	-8.52/-7.06	-6.15/-5.00	-3.89/-2.16	-0.66/0.15	0.81/-1.20	1.11/-1.05	1.19/-1.37	1.59/-1.78	1.75/-1.62	1.64/-1.28
Θ(30°)	1.42/0.35	-0.91/-2.12	-3.20/-3.90	-4.48/-5.41	-7.13/-9.54	-11.64/-12.47	-11.78/-11.31	-11.62/-10.19	-8.30/-6.75	-6.61/-6.73	-5.88/-5.05	-5.56/-7.49	-8.32/-7.60	-6.75/-6.70	-7.24/-7.56	-6.83/-5.28	-2.60/-0.08	1.06/-1.23	2.68/-4.36	3.67/-3.34	2.57/-1.90	1.79/-2.07	2.41/-2.33	2.37/-2.17
Θ(37.5°)	1.46/0.34	-0.96/-2.09	-2.47/-2.81	-3.24/-3.72	-4.92/-6.11	-6.90/-12.45	-7.36/-8.91	-11.97/-11.18	-7.40/-6.56	-7.38/-9.49	-7.75/-5.80	-5.67/-7.55	-7.32/-6.47	-5.99/-6.29	-6.21/-6.23	-5.16/-3.58	-2.66/-0.73	1.07/-1.63	2.81/-3.25	3.53/-4.41	3.34/-2.58	1.96/-1.83	2.27/-2.73	2.70/-2.26
Θ(45°)	1.39/0.19	-2.06/-3.03	-2.28/-2.03	-2.29/-2.53	-3.43/-4.47	-6.00/-6.36	-5.84/-5.35	-6.57/-8.40	-6.86/-5.27	-5.71/-6.69	-5.58/-4.40	-4.19/-3.52	-2.76/-2.55	-3.56/-5.34	-6.13/-8.28	-7.58/-6.17	-3.36/-2.34	-0.71/-1.14	2.14/-2.75	3.17/-3.14	2.89/-3.22	2.89/-1.73	1.07/-1.28	1.72/-1.95
Θ(52.5°)	-0.82/-0.47	-1.20/-0.22	-2.75/-3.17	-3.26/-2.92	-2.84/-3.77	-5.96/-7.75	-6.97/-4.83	-3.52/-4.06	-5.07/-3.01	-1.10/-1.92	-2.74/-2.13	-1.68/-1.08	-1.21/-1.99	-2.80/-2.74	-4.87/-5.98	-6.44/-6.04	-4.16/-2.57	-1.88/-0.05	1.93/-2.88	3.36/-2.92	2.56/-2.70	3.62/-6.63	2.24/-9.68	-0.08/-0.91
Θ(60°)	-2.06/-1.03	-0.98/-1.63	-2.18/-3.16	-3.61/-1.48	-1.27/-1.71	-5.54/-5.80	-5.82/-4.32	-2.61/-3.03	-3.60/-1.36	-0.06/-1.57	-1.95/-1.01	-0.79/-0.20	-0.02/-0.88	-1.88/-2.33	-3.96/-5.17	-5.44/-7.06	-6.26/-3.28	-1.36/0.04	1.26/-2.20	2.04/-3.66	3.06/-3.18	1.98/0.61	-0.74/-2.70	
Θ(67.5°)	-3.95/-1.69	-0.17/-1.23	-3.41/-3.53	-2.21/-0.76	0.07/0.42	-0.27/-2.54	-4.35/-3.92	-3.28/-4.67	-4.97/-2.39	-1.01/-0.55	-0.87/-0.65	-0.27/-0.23	-0.79/-1.37	-1.11/-1.37	-2.46/-4.84	-7.55/-6.65	-5.60/-2.39	-0.32/0.32	0.93/0.90	0.59/0.40	0.34/0.77	2.64/-3.20	1.93/0.53	-1.42/-4.09
Θ(75°)	-3.27/-2.41	-0.72/-1.26	-1.84/-0.80	-0.18/-1.00	0.09/-0.15	-0.79/-1.90	-4.03/-5.71	-8.64/-8.17	-4.72/-1.71	-0.94/0.06	0.66/-0.43	-2.48/-3.86	-3.06/-1.22	-1.83/-4.43	-6.80/-6.53	-6.92/-4.57	-0.93/-0.48	-0.36/-0.20	-0.20/-0.30	-0.34/-1.41	3.21/-0.34	2.63/-1.96	0.76/-1.78	
Θ(82.5°)	-0.23/-1.93	-1.93/-1.72	-1.12/0.45	-1.40/0.91	-0.11/-1.71	-1.71/-0.96	-2.77/-6.69	-12.15/-10.43	-6.62/-1.05	-0.36/0.50	1.47/-1.83	2.59/0.79	-2.79/-5.07	-4.59/-1.12	-1.47/-4.87	-8.48/-6.50	-5.63/-5.87	-3.46/-2.01	-2.44/-1.76	-2.81/-3.18	-2.00/-1.01	1.14/-1.34	2.08/2.94	2.09/2.21
Θ(90°)	1.53/-0.67	-0.97/-1.70	-0.15/0.00	3.25/3.32	2.04/-0.29	-1.30/-1.63	-2.68/-4.85	-9.14/-8.70	-3.35/-0.65	-0.51/-0.29	1.43/-1.52	1.70/0.28	-2.74/-5.09	-8.18/-3.05	-2.48/-3.13	-7.99/-11.58	-3.21/-3.01	-2.53/-2.45	-2.31/-1.30	-1.03/-1.51	-0.82/-0.62	-0.44/-1.14	0.38/-3.17	3.17/2.84
Θ(97.5°)	2.71/0.71	1.63/-1.38	1.73/-1.5	4.19/3.74	2.39/-0.38	-1.18/0.16	-0.00/-2.08	-4.85/-4.94	-3.18/-2.88	-2.54/-1.06	1.00/0.86	1.99/0.30	-2.83/-5.46	-8.13/-4.11	-3.33/-5.00	-6.54/-12.84	-6.04/-3.80	-3.31/-5.04	-3.77/-2.68	-3.51/-2.40	-1.48/-0.89	-0.27/-1.35	-0.84/-5.51	1.99/3.50
Θ(105°)	3.93/-1.5	0.50/-2.48	1.98/-2.77	2.42/-1.83	1.11/-1.19	2.24/-3.40	3.31/-5.5	-1.87/-3.42	-3.79/-3.48	-4.02/-1.85	0.32/0.71	0.39/-0.05	-2.94/-6.92	-11.54/-10.37	-8.35/-12.80	-8.60/-6.08	-3.35/-6.97	-7.10/-5.53	-3.68/-4.82	-3.29/-4.00	-3.09/-0.58	-0.27/-3.54		
Θ(112.5°)	1.96/3.85	4.54/4.03	4.03/3.94	3.35/2.40	1.42/-1.70	3.55/5.03	4.75/-4.28	-0.99/-2.03	-3.68/-6.13	-7.23/-4.29	-1.09/-0.99	-2.01/-1.89	-2.60/-4.37	-9.29/-9.71	-8.81/-5.24	-4.97/-13.57	-15.29/-8.16	-11.55/-9.70	-9.41/-6.88	-5.74/-7.21	-5.14/-3.32	-1.43/-3.29	-2.83/-2.71	-2.56/-0.16
Θ(120°)	-1.32/-1.28	3.24/3.53	3.65/3.33	2.57/-1.41	0.12/-0.19	1.27/0.35	3.48/2.46	-0.60/-3.75	-4.88/-5.64	-6.07/-6.37	-5.52/-3.81	-2.28/-2.95	-4.21/-5.79	-7.69/-11.71	-15.01/-13.15	-15.79/-8.13	-14.26/-12.46	-6.55/-10.49	-10.35/-5.55	-3.96/-3.04	-6.28/-3.59	-0.54/-1.28	-1.57/-1.37	-2.00/-2.34
Θ(127.5°)	-2.60/-2.10	-0.07/0.88	1.16/-1.23	-0.02/-1.10	-0.57/-1.02	2.18/2.44	1.65/0.91	0.23/-0.27	-4.67/-3.43	-2.87/-4.33	-4.35/-2.64	-2.84/-3.24	-5.31/-9.54	-7.00/-6.51	-11.94/-12.43	-11.27/-10.30	-8.74/-8.58	-7.14/-11.82	-7.31/-5.04	-7.54/-4.38	-4.88/-3.28	-4.11/-3.66	-2.14/-0.72	-0.94/-2.44
Θ(135°)	-2.21/3.22	-4.44/-3.62	-0.76/-1.35	2.80/3.53	3.93/2.44	4.44/4.48	4.04/2.77	-0.66/-1.48	-2.88/-3.94	-7.41/-8.66	-7.76/-7.86	-6.50/-4.16	-4.07/-6.28	-9.06/-10.23	-11.84/-12.69	-12.81/-13.94	-15.05/-10.29	-7.72/-11.30	-12.10/-11.50	-12.16/-10.27	-8.87/-7.72	-9.18/-11.71	-8.06/-4.09	-1.54/-1.52
Θ(142.5°)	-3.43/-3.25	-4.04/-4.25	-2.23/0.12	2.22/3.58	4.53/5.12	5.32/5.07	4.19/2.44	0.39/-1.75	-3.85/-4.16	-3.35/-2.70	-4.70/-5.79	-4.57/-6.39	-9.17/-9.24	-7.42/-9.52	-12.70/-14.73	-15.01/-13.81	-15.03/-12.88	-13.73/-14.69	-13.57/-12.00	-8.74/-6.33	-5.00/-5.41	-7.70/-7.72	-9.05/-6.22	-4.21/-4.18
Θ(15°)	-5.40/-4.28	-2.47/-1.33	-0.50/0.99	2.21/3.30	4.06/-4.31	4.36/4.17	3.54/2.50	1.20/-0.33	-2.74/-5.43	-5.67/-5.53	-5.82/-5.75	-6.70/-7.26	-7.61/-8.26	-10.35/-11.85	-11.31/-10.22	-9.48/-11.09	-10.05/-6.93	-7.74/-12.26	-14.44/-12.99	-9.86/-7.79	-7.42/-7.13	-5.79/-5.55	-7.15/-7.37	
Θ(157.5°)	-3.31/-2.34	-1.03/-0.08	0.11/0.03	0.03/-0.14	0.69/-1.60	2.21/-2.14	1.62/0.79	-0.54/-1.85	-3.04/-2.43	-5.25/-6.25	-7.51/-9.91	-1.02/-12.10	-12.44/-10.68	-9.88/-9.84	-9.73/-9.61	-10.13/-11.20	-10.65/-10.35	-10.81/-11.43	-11.42/-11.48	-11.67/-13.10	-14.30/-12.76	-9.70/-7.44	-5.64/-5.83	-6.56/-5.06
Θ(165°)	-6.32/-6.17	-5.72/-4.56	-3.78/-3.50	-3.22/-4.00	-1.39/-0.52	-0.44/-0.68	-0.71/-0.43	-0.37/-0.95	-1.87/-3.18	-4.80/-6.13	-7.38/-10.13	-12.68/-12.34	-10.69/-15.07	-12.63/-15.79	-14.11/-12.63	-11.95/-13.78	-14.62/-15							

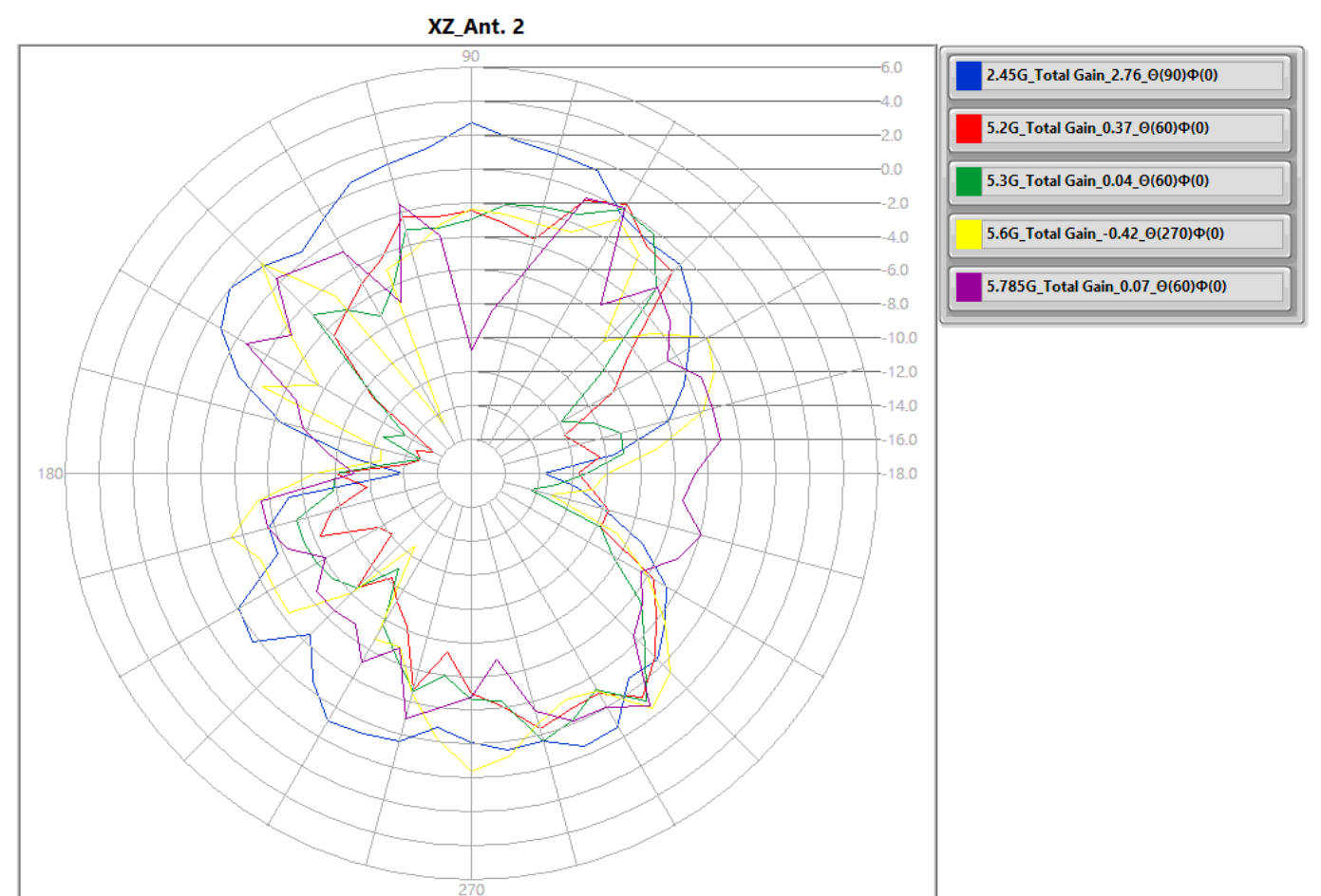
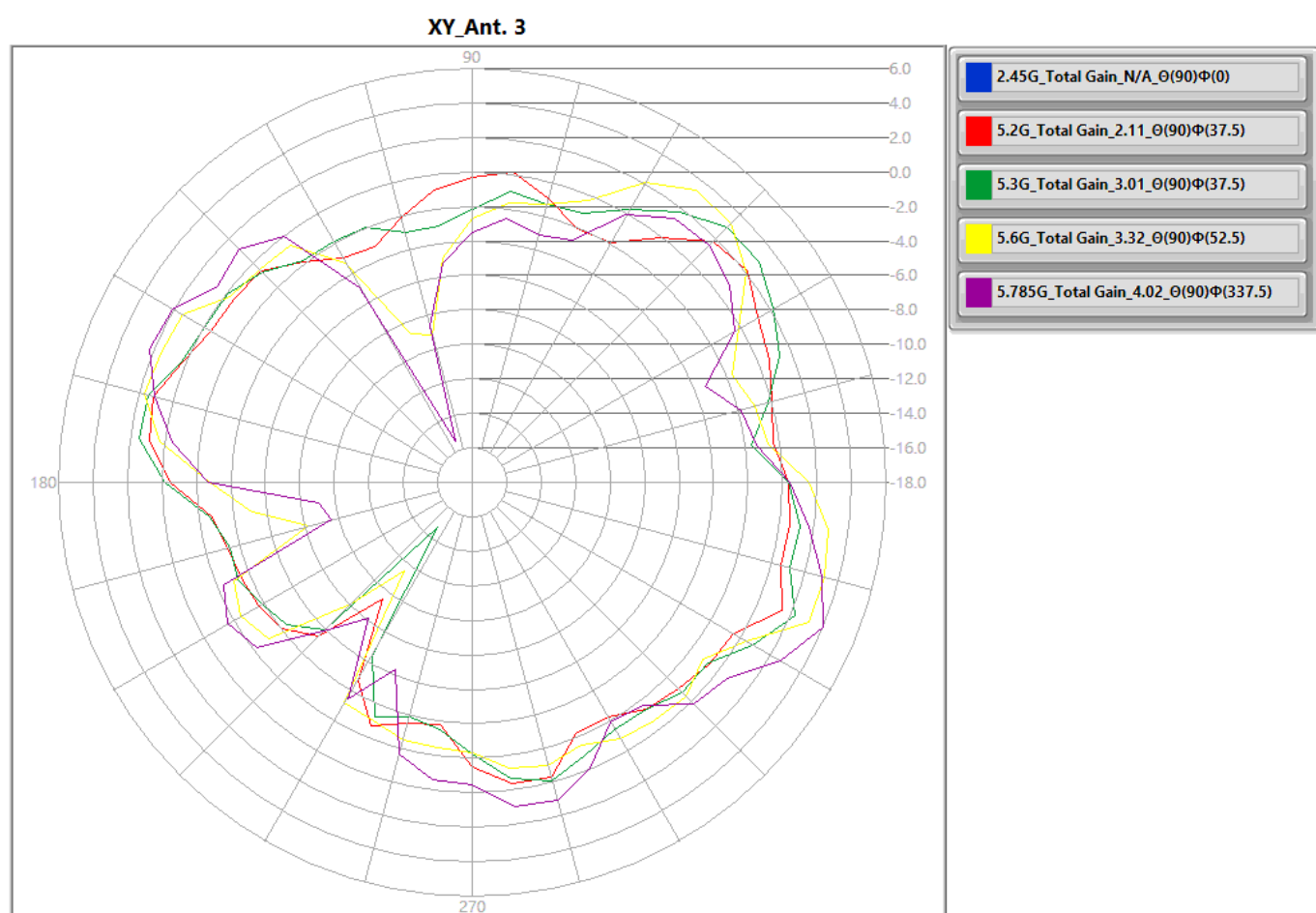
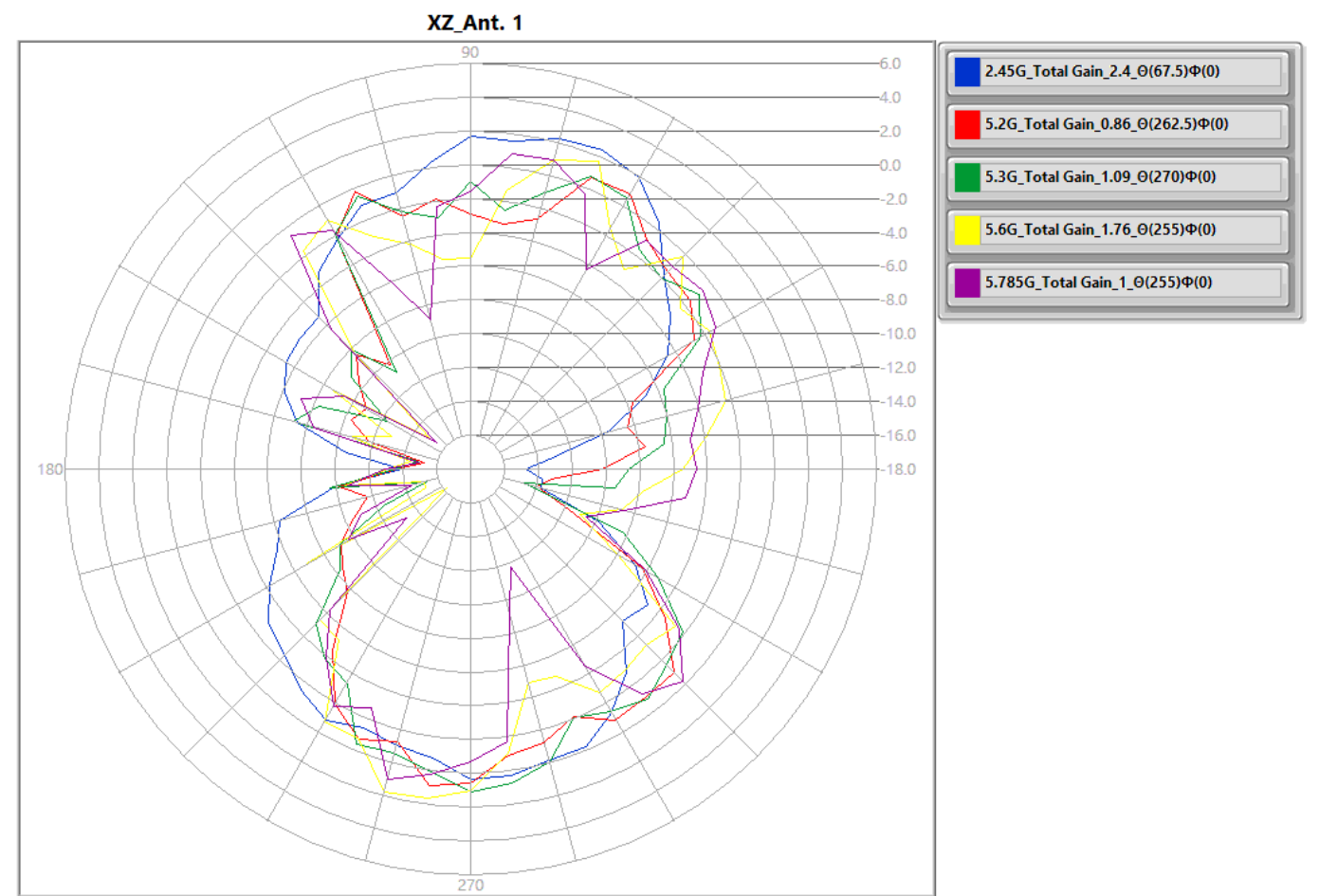
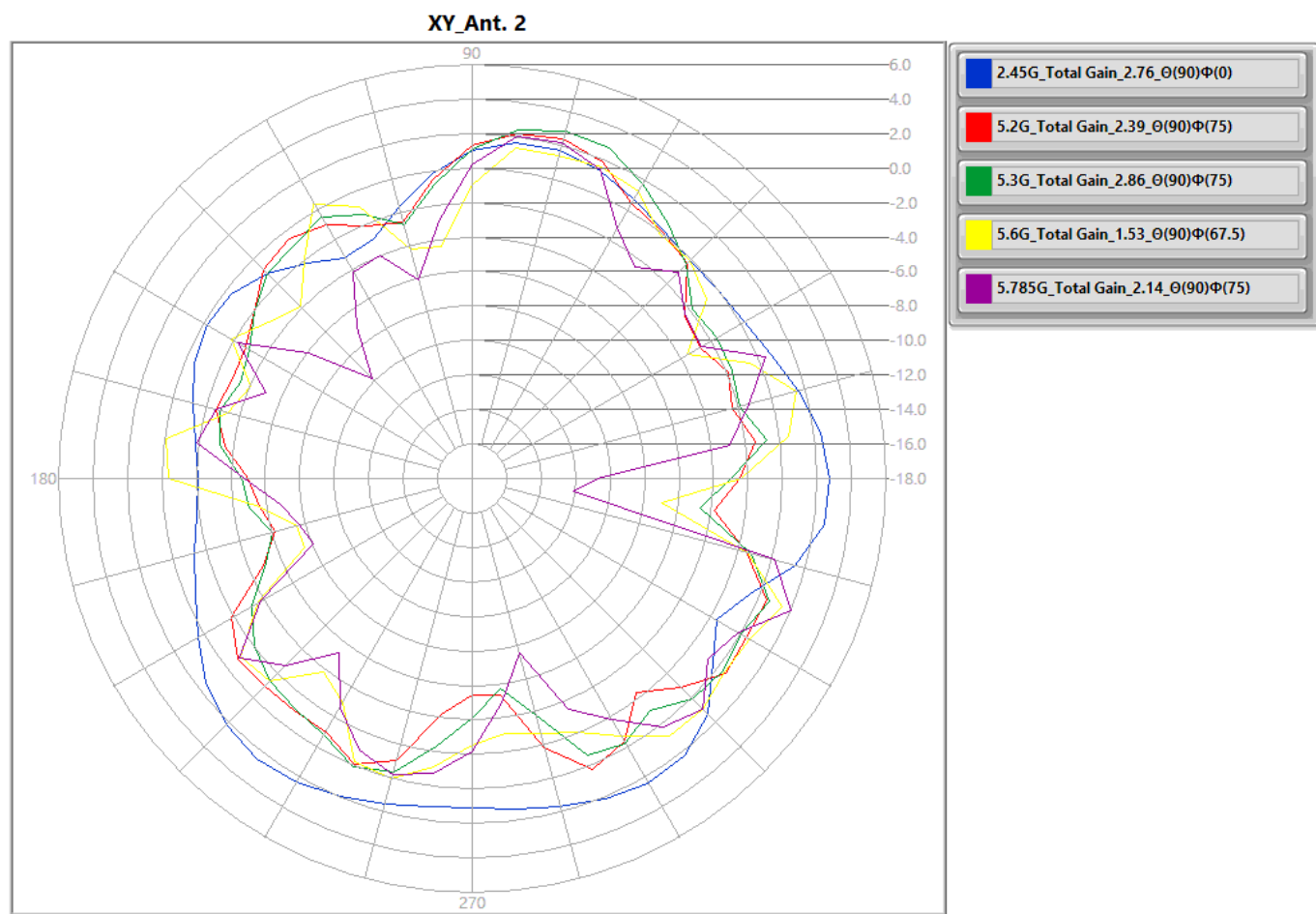
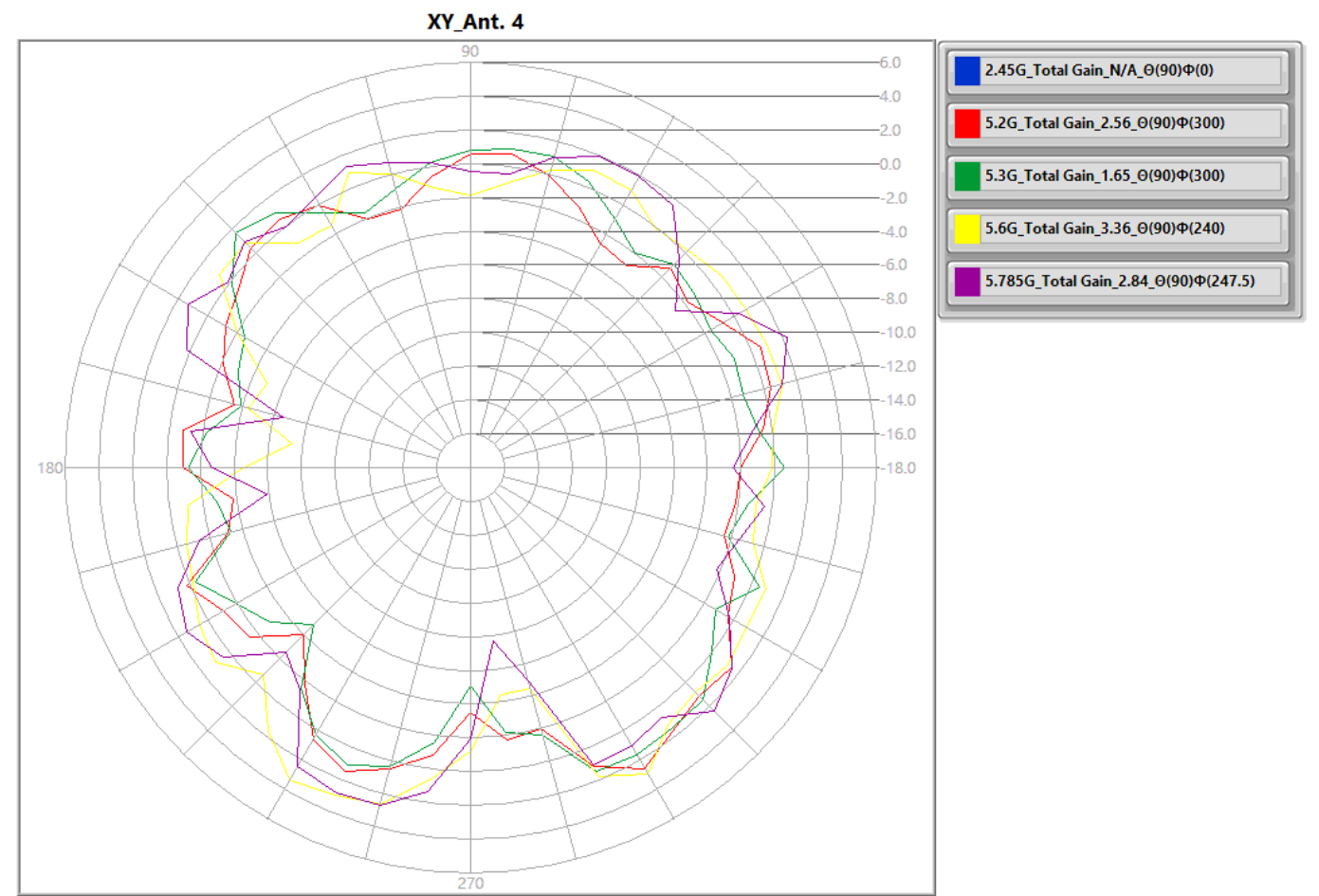
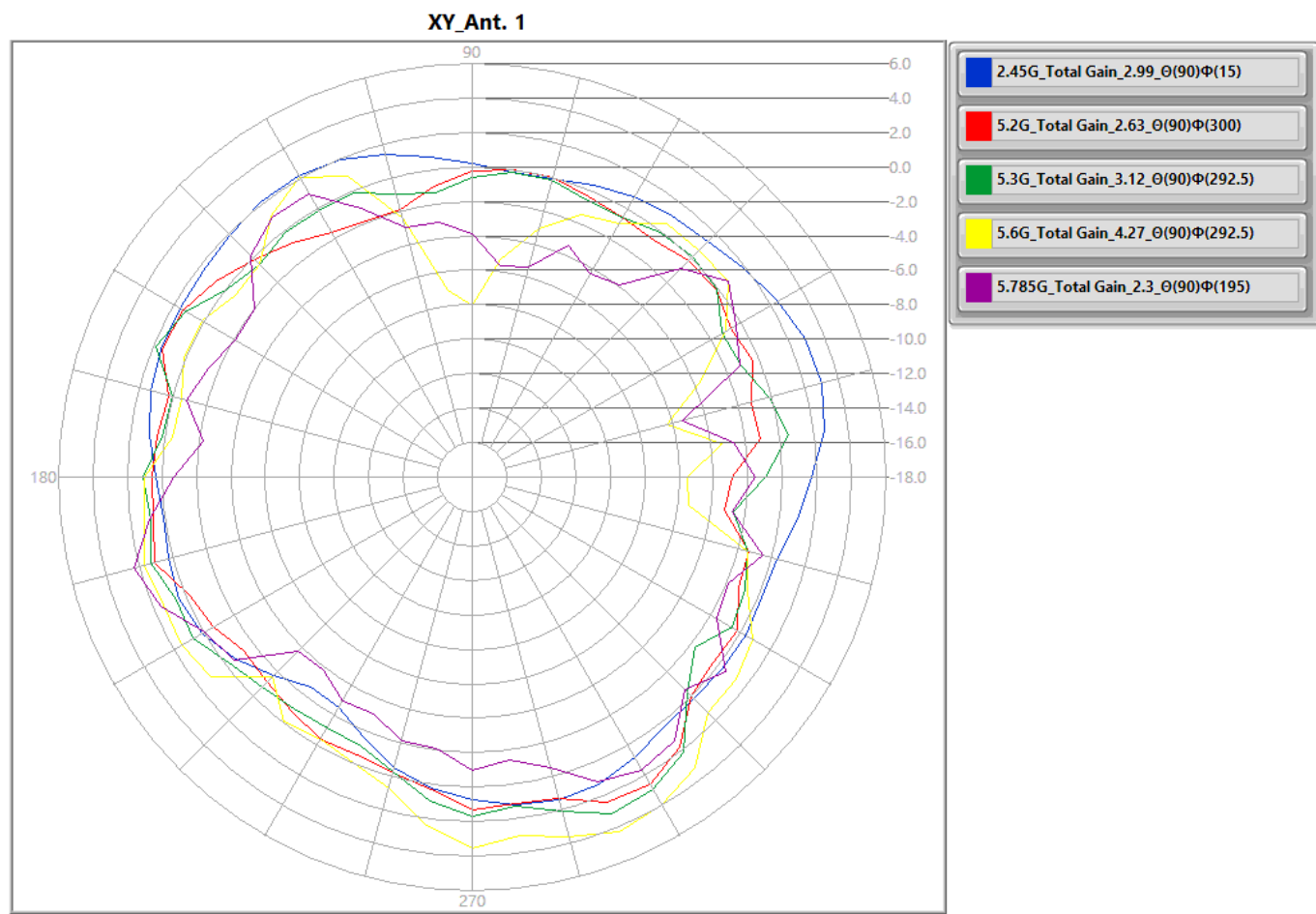


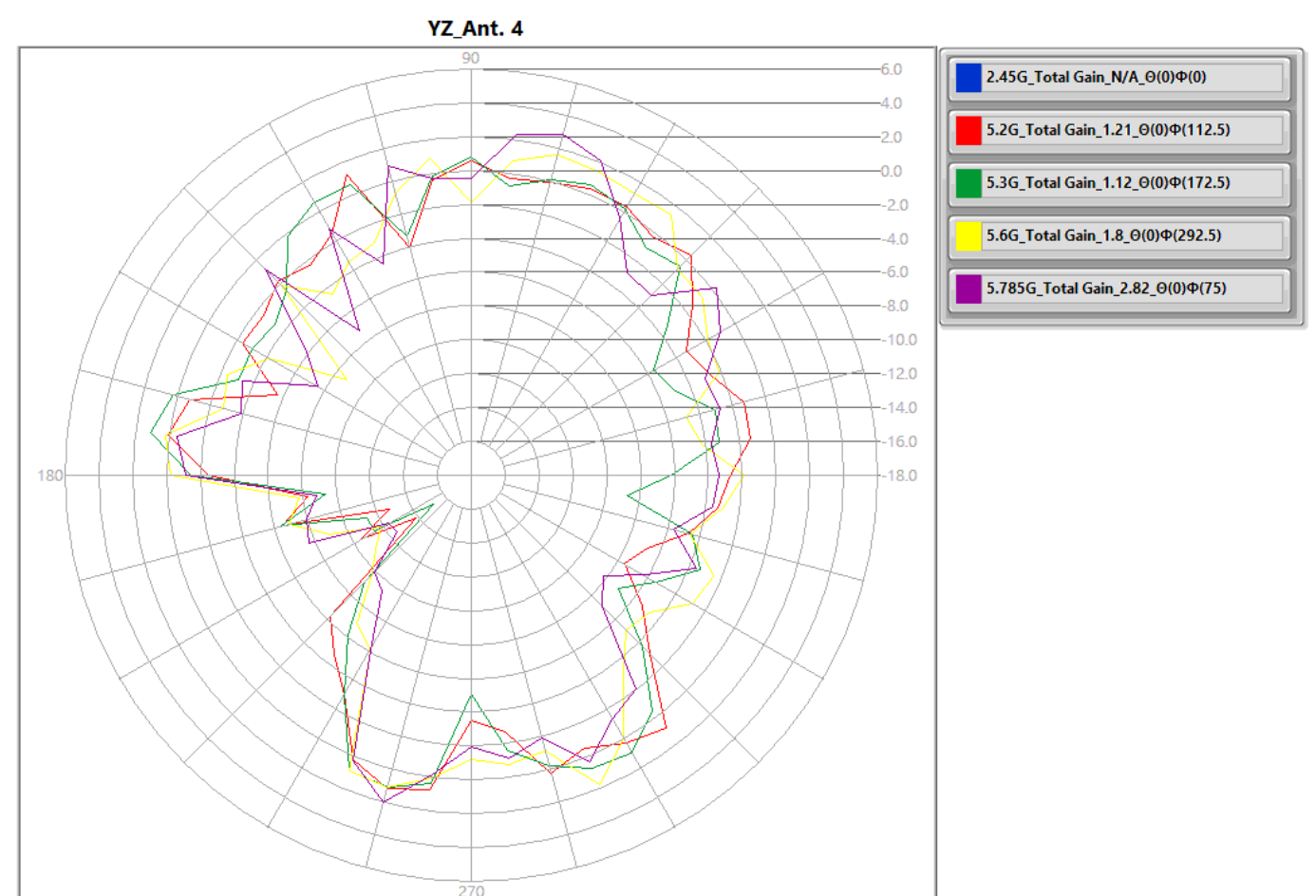
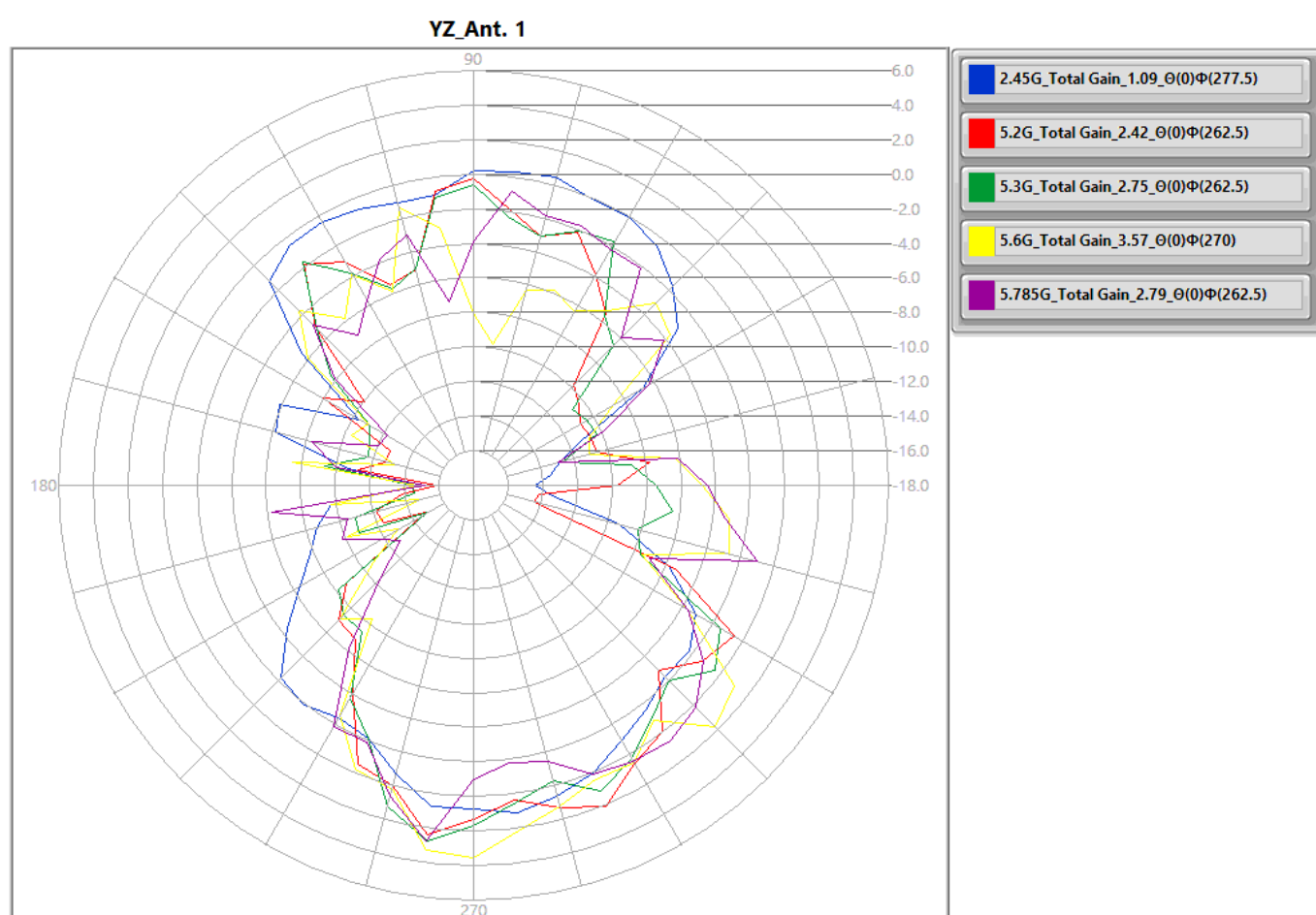
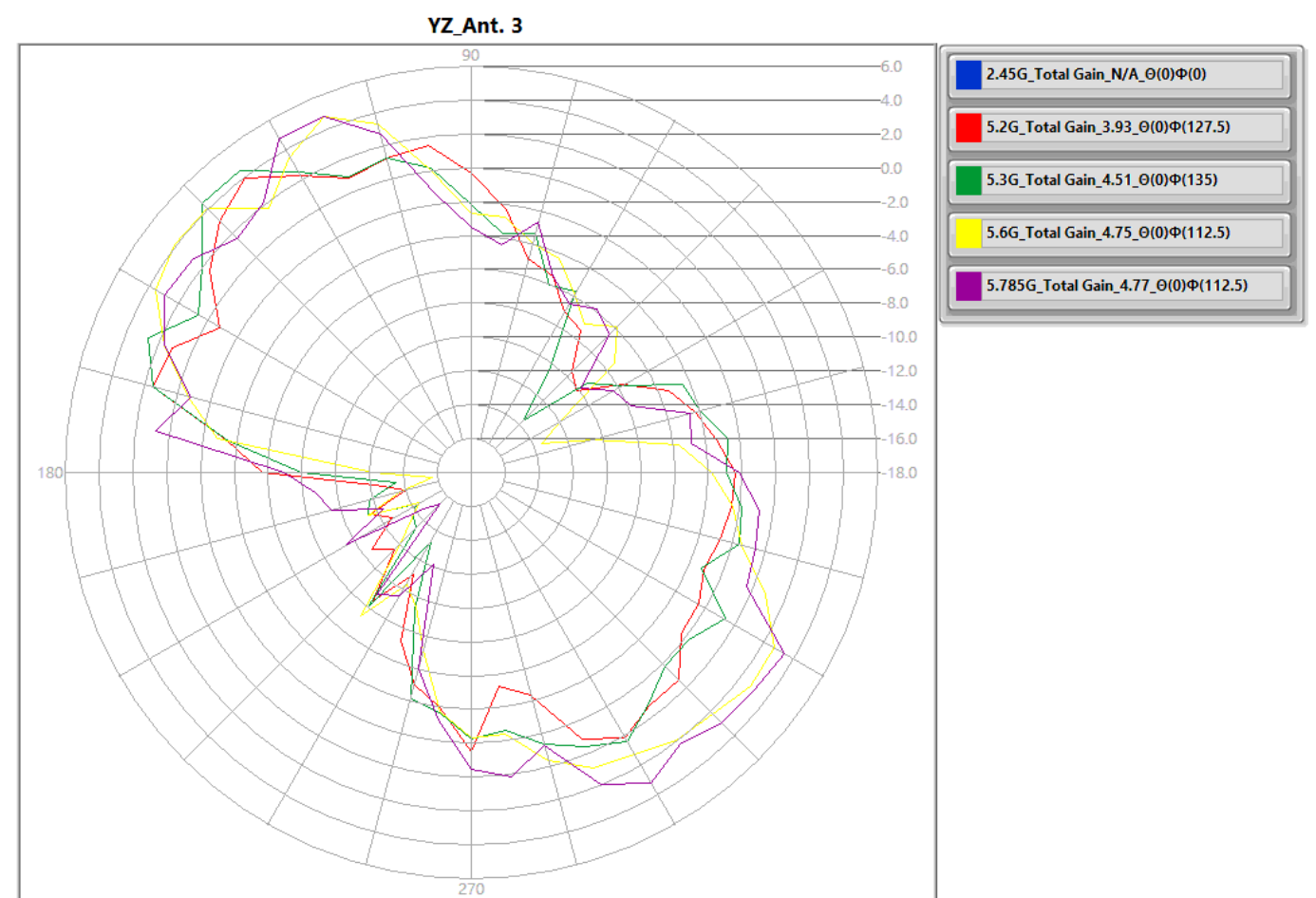
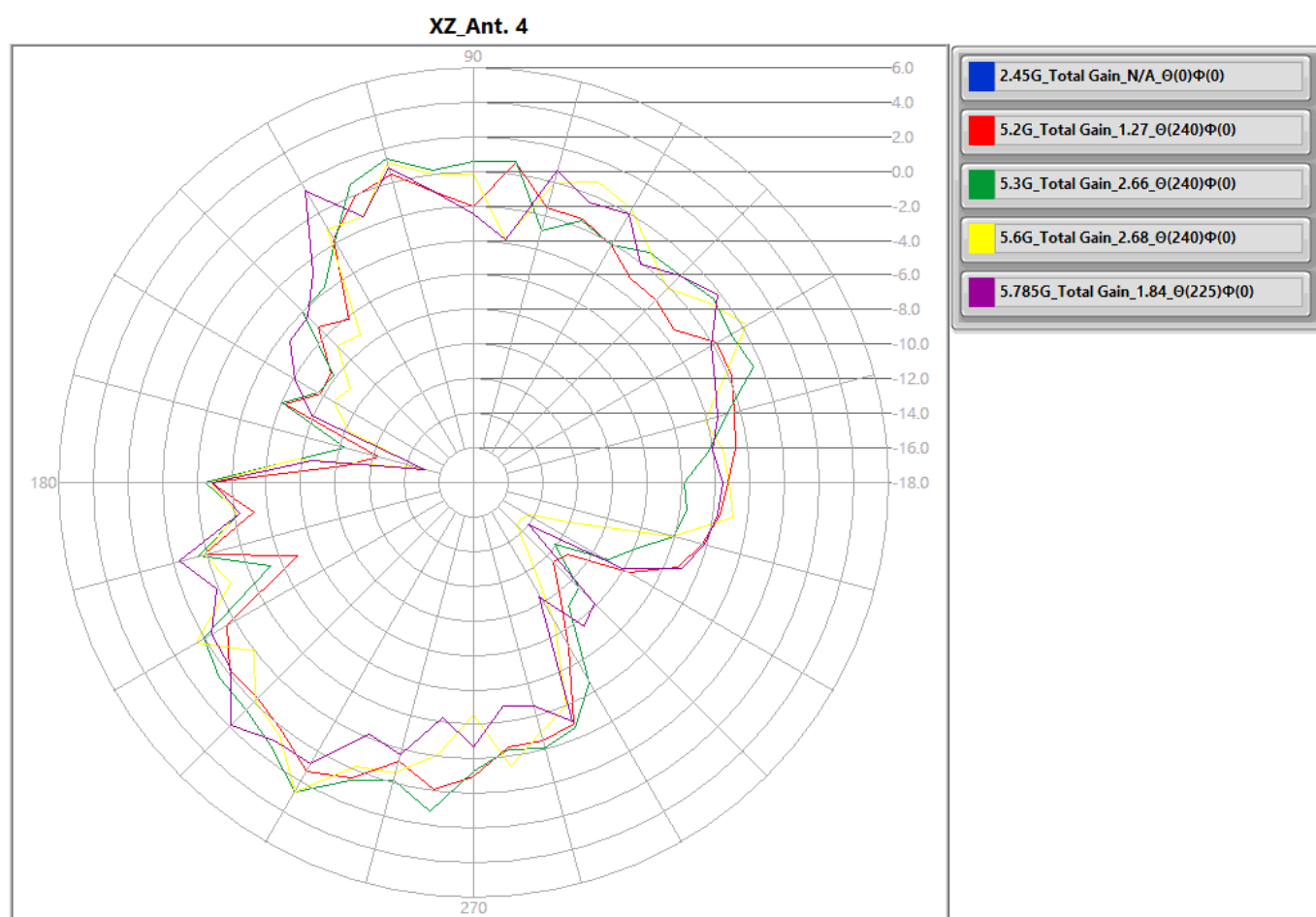
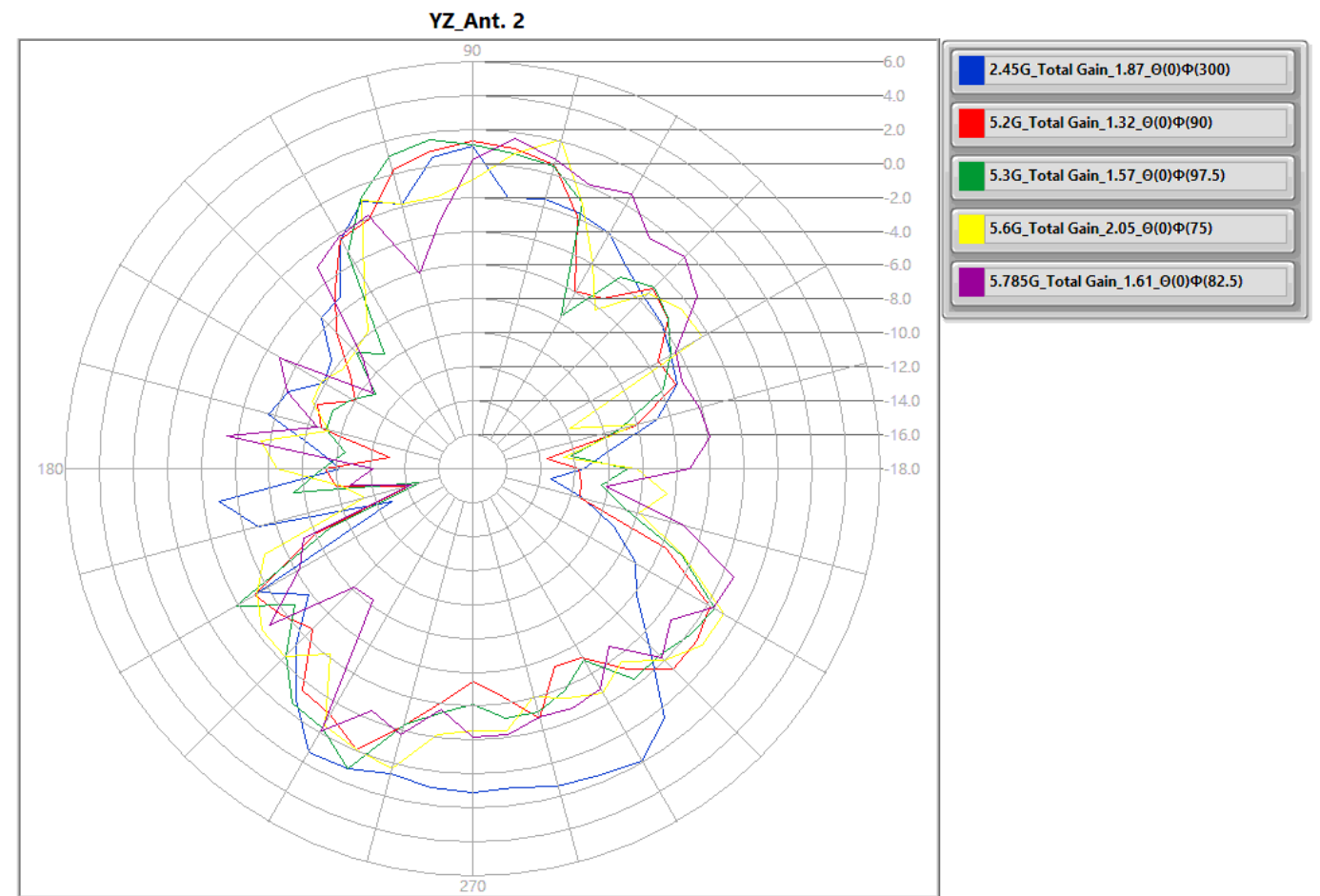
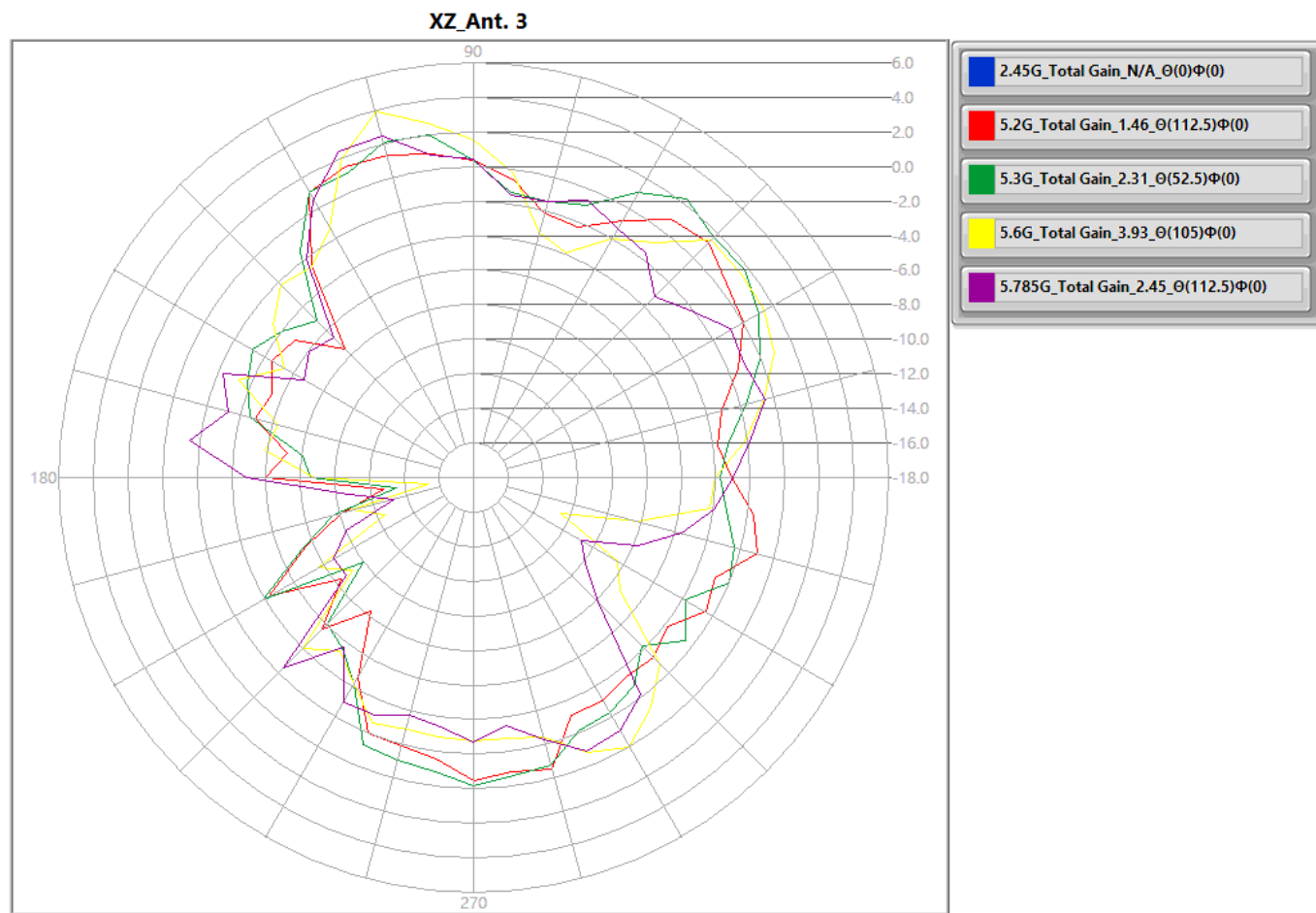
Antenna Pattern_2.4GHz and 5GHz

Appendix C

Θ(165°)	-12.29/-12.02	-11.92/-11.51	-11.28/-10.73	-9.97/-7.77	-5.40/-3.91	-2.92/-1.82	-0.75/-0.32	-0.14/-0.49	1.13/-1.46	1.24/-0.37	-0.60/-1.02	-0.96/-1.08	-1.88/-3.12	-4.36/-5.59	-7.21/-8.41	-8.30/-8.14	-7.74/-6.98	-6.33/-6.43	-6.44/-6.36	-6.23/-6.49	-6.74/-7.11	-7.71/-8.86	-10.29/-11.25	-11.90/-13.22
Θ(172.5°)	-10.48/-9.72	-8.13/-7.40	-5.78/-4.80	-3.88/-2.83	-1.80/-0.92	-0.35/-0.1	0.08/-0.22	0.54/-0.77	0.75/-0.55	0.19/-0.29	-0.77/-1.23	-2.02/-3.48	-5.17/-5.92	-5.82/-5.65	-5.95/-6.24	-6.42/-6.48	-6.64/-7.98	-9.87/-9.61	-8.22/-7.16	-7.22/-7.56	-7.95/-8.67	-9.50/-9.47	-8.46/-8.05	-9.17/-10.92
Θ(180°)	-2.75/-2.69	-3.13/-3.49	-3.60/-3.28	-3.03/-2.68	-2.22/-1.79	-1.85/-2.22	-2.50/-2.14	-1.11/-0.97	-1.84/-2.64	-2.39/-2.17	-2.62/-3.52	-4.58/-5.62	-6.23/-5.98	-5.52/-5.62	-6.29/-7.14	-7.65/-7.59	-7.19/-6.55	-4.95/-3.49	-3.04/-2.80	-2.63/-2.61	-2.58/-2.72	-2.72/-2.65	-2.42/-2.53	-2.76/-2.89
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°)	-5.83/-5.44	-5.14/-5.58	-5.68/-5.43	-5.66/-6.21	-6.53/-6.75	-6.79/-6.55	-6.19/-6.52	-6.34/-6.66	-5.65/-6.24	-7.22/-7.63	-7.11/-6.19	-5.62/-5.18	-4.76/-4.44	-4.38/-4.31	-4.11/-3.89	-4.36/-4.90	-4.64/-3.64	-3.38/-4.06	-4.47/-4.19	-3.57/-3.37	-3.65/-4.20	-4.23/-4.24	-4.57/-5.15	-5.64/-5.78
Θ(7.5°)	4.27/-3.22	-2.76/-2.69	-2.61/-2.15	-1.78/-1.88	-2.13/-2.64	-3.35/-3.60	-3.26/-3.02	-3.10/-3.41	-4.21/-4.56	-4.58/-5.45	-6.77/-7.32	-6.74/-6.00	-5.57/-5.48	-5.83/-5.98	-6.19/-6.53	-6.97/-7.49	-7.44/-6.88	-6.78/-7.54	-8.74/-8.93	-7.77/-7.17	-7.37/-8.42	-8.28/-7.20	-6.13/-5.88	-5.78/-4.98
Θ(15°)	-2.84/-1.69	-0.62/-0.12	-0.04/-0.04	0.09/-0.12	-0.12/-0.85	-1.85/-2.52	-3.04/-3.88	-4.43/-4.58	-5.09/-5.78	-5.77/-5.45	-5.83/-6.59	-6.44/-5.98	-5.97/-6.69	-7.41/-7.18	-6.11/-4.98	-4.35/-3.99	-3.74/-3.82	-4.63/-5.09	-4.43/-3.69	-3.62/-3.54	-3.13/-2.51	-2.74/-3.76	-4.49/-4.71	-4.65/-3.62
Θ(22.5°)	-0.47/-0.33	0.80/-1.05	0.91/-0.71	0.52/-0.22	-0.60/-1.48	-2.37/-3.68	-4.96/-7.18	-8.69/-8.89	-9.13/-9.60	-9.49/-8.25	-8.22/-8.53	-7.74/-7.33	-7.97/-8.77	-7.41/-7.23	-7.11/-6.61	-6.04/-5.55	-4.74/-3.83	-3.35/-2.91	-1.90/-1.09	-0.43/-0.04	0.21/-0.27	-0.15/-0.81	-1.77/-1.27	
Θ(30°)	-0.81/-0.73	-0.19/-0.04	-0.45/-0.51	-0.38/-0.31	-0.66/-1.08	-2.55/-4.00	-5.57/-7.48	-9.21/-10.31	-11.71/-12.57	-12.49/-11.73	-10.44/-10.16	-10.30/-9.99	-9.02/-6.66	-4.56/-4.36	-5.44/-6.85	-6.96/-6.60	-7.35/-8.44	-8.46/-7.38	-5.36/-4.11	-3.54/-2.85	-1.57/-0.12	1.18/-1.55	1.04/-0.33	-1.50/-1.56
Θ(37.5°)	-0.53/-0.05	-0.20/-0.01	-0.93/-1.07	-0.73/-0.29	-0.56/-1.35	-1.84/-2.01	-3.42/-4.74	-5.51/-5.25	-6.82/-8.32	-9.77/-11.11	-10.93/-9.65	-12.96/-14.30	-12.13/-10.61	-7.00/-5.92	-5.84/-7.61	-10.86/-13.64	-15.16/-13.54	-9.92/-8.23	-7.03/-6.30	-4.34/-2.09	-1.49/-0.60	0.51/-0.69	1.45/-1.22	-0.83/-2.41
Θ(45°)	-1.07/-0.84	0.47/-0.76	0.30/-0.34	0.61/-0.97	0.66/-0.66	0.29/-0.26	-0.57/-0.64	-1.22/-1.85	-3.03/-5.18	-9.47/-8.81	-6.14/-5.77	-8.09/-8.65	-9.40/-10.68	-8.24/-7.35	-8.19/-8.42	-7.97/-7.18	-5.67/-4.15	-4.17/-4.22	-3.73/-2.79	-1.87/-2.31	-2.40/-1.29	-0.93/-0.73	-1.27/-1.15	-1.48/-1.88
Θ(52.5°)	-1.23/-1.27	0.94/-1.03	1.03/-1.39	0.99/-0.53	0.47/-0.29	-0.74/-1.28	-1.04/-0.28	0.08/-0.50	-2.42/-5.15	-7.44/-10.31	-11.49/-10.32	-7.70/-7.23	-9.01/-6.86	-3.60/-4.13	-4.06/-3.38	-2.71/-1.71	-1.65/-1.93	-2.46/-1.78	-0.43/-0.24	0.68/-0.43	-0.55/-0.27	0.28/-0.77	-1.51/-1.58	-3.26/-2.99
Θ(60°)	-2.13/-0.22	0.24/-0.32	0.27/-0.91	0.90/-0.22	-0.21/-0.03	-0.10/-0.05	0.16/-0.36	0.07/-0.80	-3.23/-7.98	-10.08/-9.77	-7.37/-6.58	-6.65/-5.19	-4.60/-4.35	-4.28/-5.01	-3.38/-3.25	-2.73/-2.64	-2.51/-2.34	-0.20/-0.92	0.93/-1.18	1.58/-1.33	0.20/-2.92	-2.39/-0.54	-1.47/-2.36	-1.54/-3.12
Θ(67.5°)	-1.61/-0.81	0.94/-0.63	0.85/-2.31	2.86/-1.52	1.42/-1.56	1.80/-1.16	0.54/-0.63	0.34/-1.01	-3.78/-7.44	-5.93/-5.14	-6.28/-4.51	-3.68/-4.49	-2.61/-2.42	-2.38/-2.99	-2.71/-2.24	-1.32/-0.84	-0.95/-0.49	0.17/-0.60	0.73/-0.48	0.44/-1.1	1.10/-1.76	-3.84/-2.53	-1.28/-2.17	-1.41/-1.68
Θ(75°)	-2.92/-0.17	0.78/-0.45	-0.01/-1.42	1.72/-1.01	1.54/-1.54	1.32/-0.68	0.07/-0.54	-1.14/-2.93	-5.00/-4.16	-1.93/-1.94	-3.81/-4.00	-2.42/-2.85	-2.11/-1.79	-1.75/-0.98	-0.92/-0.71	-2.02/-1.04	0.57/-0.26	-2.23/-1.55	-0.25/-0.52	0.46/-1.47	2.58/-1.93	0.39/-0.28	-0.06/-0.25	-1.25/-2.58
Θ(82.5°)	0.77/-1.59	-0.32/-0.43	0.88/-1.10	2.08/-1.40	1.79/-1.79	1.31/-0.39	-0.75/-1.90	-2.81/-3.15	-1.38/-0.46	1.00/-1.49	-2.04/-4.47	-2.54/-1.74	-2.40/-1.80	-0.77/-0.38	-1.12/-3.20	-2.79/-1.06	-1.44/-1.19	-1.59/-2.38	-1.90/-5.66	1.90/-2.35	0.74/-0.07	0.17/-0.16	-0.90/-0.24	
Θ(90°)	0.57/-0.85	-1.34/-1.11	-1.62/-1.25	-0.94/-2.00	-0.98/-0.33	1.09/-1.01	0.78/-0.22	-0.90/-1.67	-0.59/-0.98	1.64/-0.23	-2.59/-3.10	-3.92/-2.23	-1.30/-2.85	-3.32/-0.42	-1.99/-3.02	-4.87/-1.47	0.24/-1.09	-2.81/-1.62	-5.08/-2.20	-1.60/-1.48	1.65/-1.52	1.45/-0.01	-1.26/-0.47	-2.20/-1.47
Θ(97.5°)	0.19/-1.93	1.34/-0.82	0.74/-0.61	-0.18/-3.14	-2.70/-1.76	-0.21/-0.10	-0.20/-0.04	0.51/-1.17	1.68/-2.30	2.80/-0.13	-2.01/-0.54	-0.65/-0.48	1.15/-0.75	-0.46/-0.46	-0.76/-2.54	-2.02/-0.46	2.08/-2.49	1.91/-1.75	0.36/-2.45	-2.99/-1.97	2.32/-0.68	2.12/-1.44	-1.30/-0.39	0.14/-1.38
Θ(105°)	1.40/-1.45	1.51/-1.55	0.21/-0.22	-0.83/-2.82	-4.59/-4.75	-4.16/-3.73	-3.36/-2.36	-0.44/-0.28	0.68/-0.32	-0.69/-1.47	-1.49/-1.59	-0.60/-0.41	-0.17/-0.14	-1.30/-0.57	-1.89/-0.51	-3.22/-3.00	0.93/-1.92	2.03/-2.55	1.07/-0.96	-6.52/-0.06	-0.90/-5.88	-0.46/-0.55	-2.56/-1.63	-0.69/-0.03
Θ(112.5°)	0.63/-0.21	-0.69/-1.27	-1.38/-1.46	-0.46/-5.92	-4.98/-2.50	-1.17/-0.48	0.61/-1.76	1.87/-1.31	-1.27/-1.84	-1.00/-1.06	0.70/-1.00	1.35/-1.89	0.67/-0.95	0.11/-0.72	-2.51/-3.02	-5.18/-5.92	-2.45/-0.15	-0.00/-1.14	0.92/-0.32	-4.85/-4.47	-5.34/-8.90	-1.51/-4.81	-5.34/-4.39	-3.79/-0.89
Θ(120°)	-1.89/-0.91	0.84/-0.06	-1.27/-2.93	-1.93/-2.09	-3.02/-2.27	-0.79/-0.45	0.58/-0.41	-0.66/-1.87	-1.33/-0.16	0.42/-1.10	-0.88/-1.21	1.82/-2.00	2.66/-1.15	-2.25/-0.28	-3.20/-0.05	-0.80/-8.40	-1.27/-0.41	-1.80/-6.11	-3.00/-5.38	-3.47/-0.27	-6.83/-6.34	-3.40/-1.75	-8.77/-7.58	-2.74/-2.30
Θ(127.5°)	-3.80/-1.54	-0.20/-1.37	-2.31/-3.96	-4.48/-4.56	-6.20/-4.42	-1.86/-11.28	-9.28/-6.60	-3.03/-8.00	0.51/-0.75	0.44/-0.40	0.34/-0.22	-0.10/-0.26	1.24/-1.13	0.03/-2.76	-14.50/-8.13	-3.24/-1.18	-0.97/-1.02	-2.40/-6.00	-5.82/-6.54	-11.41/-13.64	-10.82/-9.82	-9.84/-8.44	-7.10/-6.96	-3.78/-2.02
Θ(135°)	-4.06/-4.37	-5.02/-4.11	-4.14/-4.49	-5.88/-6.86	-5.51/-4.63	-4.03/-4.47	-2.54/-1.18	-0.15/-0.01	0.41/-0.40	1.80/-2.35	1.51/-0.50	-0.18/-1.45	0.58/-0.72	-2.24/-2.95	-8.95/-4.31	-3.01/-6.34	-8.48/-6.92	-5.13/-4.86	-9.09/-12.39	-6.54/-5.42	-13.52/-15.54	-13.52/-8.16	-5.73/-5.06	-6.38/-4.07
Θ(142.5°)	-7.81/-13.39	-14.54/-15.70	-14.91/-15.48	-14.97/-13.42	-9.57/-7.40	-5.93/-4.88	-3.35/-1.61	-0.88/-0.12	1.74/-2.84	2.70/-1.53	0.48/-0.09	0.99/-1.32	0.51/-0.56	-2.24/-2.94	-6.44/-6.41	-5.52/-5.33	-6.03/-13.20	-9.62/-10.08	-15.19/-14.50	-13.44/-12.72	-9.96/-8.93	-9.08/-11.69	-9.63/-9.53	-7.64/-8.22
Θ(150°)	-7.60/-8.73	-6.70/-5.31	-4.24/-4.56	-6.20/-4.97	-11.86/-11.28	-9.28/-6.60	-3.03/-8.00	0.51/-0.75	0.44/-0.40	0.34/-0.22	-0.10/-0.26	1.24/-1.13	0.03/-2.76	-14.50/-8.13	-3.24/-1.18	-0.97/-1.02	-2.40/-6.00	-5.82/-6.54	-11.41/-13.64	-10.82/-9.82	-9.84/-8.44	-7.10/-6.96	-3.78/-2.02	
Θ(157.5°)	-6.03/-6.35	-6.96/-8.56	-8.40/-7.69	-8.18/-8.47	-7.60/-5.63	-4.69/-3.85	-3.16/-2.61	-2.39/-1.86	-1.76/-2.05	-1.42/-0.35	-0.12/-0.21	-1.81/-1.84	-5.31/-6.47	-2.31/-1.59	-1.46/-1.94	-2.73/-3.58	-5.70/-9.04	-10.16/-10.94	-11.35/-10.97	-9.87/-9.70	-9.57/-8.99	-8.01/-7.00	-5.43/-3.86	-3.22/-4.47
Θ(165°)	-10.29/-10.28	-10.18/-9.62	-9.26/-9.86	-8.63/-6.85	-5.17/-3.45	-1.99/-0.56	0.26/-0.74	1.04/-1.39	1.68/-1.91	1.53/-0.66	-0.04/-0.26	-0.42/-0.84	-1.50/-2.54	-3.62/-4.23	-5.11/-7.07	-8.86/-10.59	-9.11/-7.72	-7.11/-6.98	-6.42/-6.16	-6.84/-7.68	-7.49/-6.95	-6.66/-7.44	-9.05/-10.05	-9.86/-9.83
Θ(172.5°)	-7.72/-7.49	-7.18/-5.51	-4.58/-3.99	-3.27/-1.96	-1.04/-0.45	0.04/-0.68	1.12/-1.24	0.77/-0.59	0.76/-0.62	0.06/-0.02	0.05/-0.14	-0.99/-2.60	-4.34/-5.19	-4.62/-3.93	-3.70/-3.94	-4.73/-5.99	-7.91/-9.19	-8.95/-9.12	-9.29/-8.75	-7.75/-6.90	-6.90/-8.29	-9.21/-8.04	-6.95/-7.18	-8.28/-8.29
Θ(180°)	-2.48/-2.72	-2.84/-2.91	-2.66/-2.99	-3.03/-2.79	-2.31/-2.09	-2.02/-1.77	-1.41/-1.32	-1.85/-1.61	-1.06/-0.93	-1.13/-1.46	-1.95/-2.58	-3.31/-4.13	-4.61/-4.65	-4.47/-4.39	-4.54/-4.98	-6.05/-7.24	-6.72/-4.97	-3.68/-3.06	-2.57/-1.94	-1.63/-1.78	-2.01/-2.21	-2.20/-2.20	-2.01/-1.80	-2.05/-2.27
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°)	-3.19/-3.17	-3.24/-3.33	-3.32/-3.74	-3.59/-3.16	-2.30/-1.49	-1.45/-1.78	-1.90/-2.33	-2.60/-2.13	-2.00/-2.46	-2.71/-2.35	-1.96/-1.93	-2.71/-2.38	-2.30/-2.26	-2.17/-2.29	-2.17/-2.29	-2.74/-2.92	-2.45/-2.16	-2.47/-3.28	-3.81/-3.31	-2.85/-2.71	-3.43/-3.91	-3.62/-3.08	-3.25/-3.73	-3.51/-3.19
Θ(7.5°)	-3.47/-3.43	-3.85/-4.17	-4.46/-4.80	-4.43/-4.18	-3.92/-4.28	-4.98/-4.65	-4.21/-4.18	-5.13/-5.42	-3.76/-2.87	-4.09/-4.97	-4.23/-3.31	-2.92/-2.80	-2.85/-2.84	-2.81/-2.96	-3.03/-2.91	-3.06/-3.47	-3.47/-3.23	-2.63/-2.64	-3.00/-3.36	-3.09/-2.39	-2.19/-2.72	-2.96/-2.57	-2.45/-3.40	-3.85/-3.54
Θ(15°)	-4.19/-3.23	-2.92/-3.09	-3.53/-4.68	-4.75/-4.45	-4.60/-5.27	-5.19/-4.91	-4.84/-4.47	-3.74/-3.56	-3.80/-3.36	-3.26/-4.62	-5.95/-6.62	-5.08/-5.46	-6.06/-6.18	-6.25/-6.48	-6.53/-6.37	-6.51/-6.74	-6.51/-5.87	-4.62/-5.01	-4.60/-4.15	-4.59/-4.46	-4.62/-5.67	-6.51/-6.03	-5.35/-5.71	-5.82/-6.47
Θ(22.5°)	-2.35/-0.57	-0.02/-0.08	-0.37/-1.03	-1.64/-2.08	-3.07/-																			

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







Appendix D

Freq(Hz)	6.175GPol.	TotalAnt.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°)	-7.68/-7.36	-6.90/-6.56	-7.11/-6.98	-7.16/-7.16	-6.83/-6.03	-5.48/-5.38	-4.80/-4.47	-4.85/-4.60	-4.34/-4.23	-4.53/-5.01	-5.21/-5.29	-5.83/-6.64	-7.06/-7.05	-7.12/-7.08	-7.42/-7.24	-7.58/-7.58	-7.04/-6.87	-6.12/-5.66	-5.95/-6.51	-7.20/-7.33	-8.11/-7.74	-7.61/-8.85	-9.92/-10.10	-9.16/-7.67
θ(7.5°)	-1.13/-21.197	-12.39/-11.75	-11.99/-9.84	-9.48/-9.56	-8.13/-6.72	-7.36/-7.45	-6.65/-6.10	-5.53/-5.09	-5.08/-4.74	-5.26/-5.71	-5.55/-5.91	-6.17/-6.06	-7.45/-6.29	-7.14/-6.61	-4.39/-4.32	-4.34/-4.31	-3.70/-2.87	-2.29/-1.85	-1.95/-2.31	-2.61/-3.01	-3.63/-3.83	-4.24/-5.74	-7.29/-8.55	-10.67/-10.66
θ(15°)	-13.58/-14.77	-12.23/-10.74	-7.76/-6.67	-5.80/-4.54	-3.87/-3.95	-4.08/-3.27	-2.51/-2.00	-1.68/-1.38	-0.85/-0.48	-0.55/-0.72	-1.36/-2.24	-2.97/-4.15	-5.22/-5.85	-5.47/-4.46	-3.65/-3.56	-3.77/-3.56	-3.32/-2.91	-2.49/-2.32	-2.60/-3.53	-4.28/-4.74	-4.56/-4.81	-4.71/-4.72	-4.94/-6.34	-10.34/-12.91
θ(22.5°)	-8.07/-9.38	-6.99/-7.77	-4.33/-5.12	1.30/0.81	0.43/-0.69	-1.80/-3.15	-4.41/-5.27	-4.94/-3.69	-2.55/-1.77	-0.55/-0.12	0.12/-0.51	-1.02/-1.70	-2.02/-2.25	-2.61/-3.05	-2.92/-2.16	-2.03/-2.40	-2.62/-2.79	-2.87/-2.98	-3.43/-3.98	-3.87/-4.41	-4.30/-3.51	-3.40/-4.14	-6.61/-8.43	-9.81/-8.47
θ(30°)	-7.27/-8.83	-6.17/-4.15	-0.76/-1.18	0.42/0.62	-0.90/-2.84	-2.86/-2.69	-2.68/-3.01	-3.29/-3.00	-2.63/-2.24	-1.36/-0.39	-0.02/-0.14	-0.14/-0.49	-0.27/-0.64	-0.63/-0.75	-0.86/-0.94	-1.93/-2.99	-2.67/-2.16	-2.33/-2.66	-2.79/-2.79	-2.65/-2.28	-2.69/-3.83	-4.33/-3.50	-4.18/-6.51	-8.11/-6.93
θ(37.5°)	-12.35/-9.36	-2.99/-3.06	-2.39/-1.42	-0.46/-0.50	-0.37/-0.94	-1.69/-1.68	-1.98/-2.89	-4.13/-5.12	-4.41/-3.47	-2.37/-0.57	0.91/1.30	1.19/0.75	0.28/0.28	1.42/2.15	1.25/-0.50	-1.96/-2.94	-4.41/-6.09	-6.68/-8.24	-8.12/-5.76	-3.70/-2.51	-2.12/-2.94	-4.59/-5.01	-4.50/-5.64	-7.30/-11.42
θ(45°)	-4.66/-4.03	-3.39/-2.10	-0.43/0.40	0.77/-0.21	-0.12/0.14	-0.90/-1.46	-9.26/-12.73	-13.39/-11.17	-6.54/-2.02	-0.58/-0.24	1.45/1.94	2.25/-1.89	0.16/-0.22	-0.14/-0.37	-1.31/-0.73	-1.77/-4.25	-5.86/-10.42	-13.48/-10.29	-7.79/-7.79	-7.44/-1.19	-5.79/-6.34	-6.23/-6.64	-6.14/-6.96	-8.43/-7.01
θ(62.5°)	-4.50/-6.43	-2.05/-0.51	-0.08/0.21	-0.59/-1.97	-0.52/0.03	-0.51/-2.69	-1.54/-1.63	-6.15/-9.41	-11.10/-10.76	-3.57/-1.43	1.94/-1.92	1.57/2.19	1.51/-4.32	1.39/-4.48	-0.20/-1.07	-3.71/-3.86	-6.90/-9.11	-7.89/-9.46	-8.20/-1.38	-0.20/-3.56	-4.50/-5.66	-8.45/-7.74	-6.47/-6.54	
θ(60°)	-4.86/-1.00	0.84/1.50	0.02/0.46	-1.86/-2.07	0.49/0.92	-0.58/-3.33	-6.05/-7.03	-4.59/-2.65	-1.65/-0.43	0.94/1.56	1.76/0.81	1.43/3.44	2.00/1.22	2.27/1.61	-0.40/-2.87	-3.56/-4.10	-5.69/-6.09	-8.52/-5.39	-5.32/-4.96	-2.93/-3.86	-5.68/-4.69	-3.38/-3.46	-4.60/-5.89	-5.07/-5.33
θ(67.5°)	-0.69/1.71	2.43/2.51	1.04/1.03	-2.10/0.16	1.67/0.41	-3.56/-7.56	-8.68/-1.53	-2.54/-1.19	2.21/1.78	2.73/2.50	-0.59/-0.52	1.32/2.04	1.22/-0.22	0.38/-0.25	0.59/-2.53	-5.60/-5.45	-6.46/-7.69	-8.72/-6.66	-3.99/-3.19	-2.99/-0.97	-2.55/-4.10	-2.65/-0.79	-0.65	



Antenna Pattern_6GHz

Appendix D

Θ(22.5°)	-6.81/6.78	-7.55/6.89	-3.69/-2.01	-1.35/-1.29	-1.47/-0.83	-0.83/-0.87	-0.96/-1.37	-1.70/-2.29	-2.65/2.90	-3.43/-3.09	-3.99/-3.94	-3.20/-2.41	-2.00/-2.62	-3.36/-2.82	-2.27/-2.12	-2.30/-2.52	-2.91/-3.56	-4.07/-4.46	-4.85/-5.88	-7.01/-8.19	-8.90/-9.68	-11.09/-11.75	-10.36/-9.43	-7.36/-7.15
Θ(30°)	-6.21/-5.64	-5.98/-4.99	-3.59/-2.04	-0.95/-0.56	0.020/-9.1	0.920/4.3	-0.39/-1.05	-1.76/-3.36	-4.52/-3.93	-3.02/-3.79	-3.09/-2.47	-2.37/-3.62	-3.31/-2.68	-2.17/-2.09	-1.34/-0.91	-0.60/-1.03	-1.51/-1.89	-2.61/-4.14	-6.51/-8.90	-11.13/-12.83	-13.02/-10.90	-8.60/-7.17	-6.25/-7.39	-8.47/-7.88
Θ(142.5°)	-6.12/-5.28	-5.63/-3.39	-0.57/-0.67	0.790/58	0.23/-0.08	-0.62/-1.46	-0.137/-1.09	-1.00/-0.88	-0.68/-0.45	0.230/16	-1.73/-2.12	-0.123/-1.26	-0.462/-3.36	-1.41/-1.72	-0.28/-1.74	-0.84/-0.09	-0.46/-1.30	-1.73/-2.24	-4.64/-9.13	-11.62/-10.13	-10.36/-10.72	-10.54/-8.26	-6.16/-6.21	-7.09/-6.62
Θ(45°)	-2.55/-3.40	-3.35/-1.54	-0.200/8.2	0.880/0.9	-1.03/-0.25	0.990/38	-0.46/-1.37	-1.40/-0.59	0.100/25	-0.010/95	1.03/-0.02	-1.52/-2.45	-3.49/-2.93	-2.78/-2.18	-2.63/-3.47	-2.57/-1.83	-1.65/-1.51	-2.39/-4.90	-6.98/-6.65	-8.94/-11.10	-9.89/-11.37	-8.04/-6.07	-6.43/-6.03	-4.64/-4.20
Θ(52.5°)	-3.40/-2.46	-2.80/-0.62	1.08/-36	0.35/-0.81	-0.640/23	0.41/-0.19	-0.62/-0.99	-1.12/-0.86	-0.020/28	0.261/35	0.22/-0.94	-1.41/-0.80	-2.54/-1.20	-1.68/-3.05	0.101/13	0.23/-1.96	-3.22/-3.87	-5.81/-7.87	-6.63/-6.43	-3.39/-3.36	-4.81/-4.90	-5.16/-6.72	-2.55/-3.44	
Θ(60°)	-2.09/-2.70	-1.81/-0.14	2.49/-1.83	0.52/-0.59	-1.520/35	1.821/59	0.021/-1.26	-1.06/-0.53	0.040/05	1.341/37	1.291/07	-0.212/83	0.56/-0.24	0.171/-1.71	-0.160/08	0.440/15	-1.40/-1.82	-3.46/-3.49	-3.74/-4.97	-4.18/-4.10	-2.24/-3.57	-4.28/-2.68	-2.26/-3.13	-2.18/-2.25
Θ(67.5°)	-0.61/-0.60	-0.970/7.4	1.210/93	0.61/-1.74	-0.471/-1.71	2.441/83	0.980/0.9	-0.730/0.2	1.110/33	-0.31/-1.08	0.112/35	0.761/75	1.900/19	0.890/53	-0.940/45	0.55/-1.04	-0.77/-3.26	-4.68/-5.50	-5.80/-3.63	-3.59/-4.15	-3.19/-1.21	-2.38/-1.55	-1.04/-1.26	-0.43/-0.48
Θ(75°)	1.101/05	0.410/-28	-0.190/78	-0.06/-1.54	0.182/28	3.092/79	0.82/-1.19	-2.44/-1.81	-0.510/83	1.630/55	-1.830/27	1.291/29	1.101/83	0.841/30	-1.07/-0.14	0.98/-3.24	-1.84/-2.25	-2.60/-4.47	-3.86/-3.10	-5.02/-6.40	-4.20/-1.41	-0.54/-0.95	-0.871/0.06	0.64/-0.04
Θ(82.5°)	0.961/08	0.03/-1.35	-2.370/67	-0.37/-1.92	-0.282/89	3.381/78	0.31/-1.13	-3.45/-4.18	-2.58/-1.31	0.21/-1.56	-2.53/-2.42	0.040/01	1.402/84	1.45/-0.23	-1.46/-1.61	-1.49/-1.21	-2.88/-1.60	-1.66/-3.57	-4.10/-4.28	-4.21/-2.47	-0.85/-1.66	0.620/96	0.550/42	0.730/82
Θ(90°)	0.11/-0.63	0.29/-2.41	-2.810/11	0.87/-3.13	-0.942/51	1.71/-0.38	0.460/48	-2.47/-2.75	-0.29/-2.39	-1.05/-4.01	-4.00/-2.23	-3.48/0.01	-0.03/-1.70	3.060/67	0.190/38	-1.440/85	-2.06/-3.18	-0.17/-0.77	-0.97/-0.97	-2.59/-0.84	0.74/-1.65	0.180/58	-0.040/62	2.352/0.4
Θ(97.5°)	0.181/-16	0.45/-2.66	-3.34/-0.44	1.44/-3.18	-1.312/-21	1.082/33	3.160/70	-6.68/-5.75	-0.46/-2.14	-2.28/-8.48	-9.75/-3.43	-2.37/-2.05	0.56/-1.25	2.892/52	1.860/-16	0.45/-0.78	-2.38/-3.32	-1.55/-0.19	-0.23/-0.81	-1.98/-0.52	1.38/-0.25	-0.89/-0.22	-1.54/-1.38	3.300/36
Θ(105°)	-1.721/03	-2.06/-1.77	-4.19/-0.08	-0.98/-4.56	-3.26/-0.59	1.871/77	1.360/90	-1.89/-6.12	-2.63/-6.51	-3.79/-3.45	-6.17/-8.68	-14.57/-11.40	-13.43/-10.42	-9.93/-9.59	-5.94/-6.60	-1.67/-3.32	-5.40/-4.61	-12.09/-1.74	-1.16/-13.24	-5.020/-41	-0.471/0.07	1.704/7.9	2.672/0.4	
Θ(112.5°)	0.001/53	-2.36/-1.12	-3.21/-2.62	-1.81/-1.36	-1.11/-2.95	-1.53/-4.05	-2.830/08	-0.57/-6.38	-4.38/-9.09	-4.75/-7.47	-10.22/-8.01	-6.00/-4.50	-2.10/-0.07	-2.89/-2.00	-0.61/-0.07	0.500/31	-1.13/-4.45	-0.820/-90	0.751/25	0.142/20	1.392/60	2.770/16	-2.25/-1.81	2.23/-0.40
Θ(120°)	-1.39/-0.16	-2.73/-3.18	-3.29/-6.63	-1.37/-1.24	-0.33/-2.94	-4.64/-5.95	-6.98/-4.41	-5.10/-9.45	-4.60/-9.72	-10.14/-9.00	-14.94/-7.66	-5.97/-8.48	-5.52/-1.60	-2.40/-4.97	-4.04/-3.84	-0.830/61	-3.35/-2.68	-3.11/-1.44	1.560/-0.54	-1.75/-0.56	2.682/76	0.70/-0.30	-1.38/-1.53	1.10/-2.99
Θ(127.5°)	-1.54/-1.79	-2.70/-4.16	-0.45/-1.66	-3.29/-0.77	-1.91/-2.85	-4.25/-3.06	-3.15/-7.52	-15.49/-8.87	-6.17/-8.68	-14.57/-11.40	-13.43/-10.42	-9.93/-9.59	-5.94/-6.60	-1.67/-3.32	-5.40/-4.61	-1.29/-3.28	-1.14/-2.95	0.49/-3.29	0.520/22	1.570/50	-0.851/0.22	-1.050/65	0.95/-1.79	
Θ(135°)	-1.52/-1.26	-4.17/-3.87	-3.22/-2.74	-3.57/-4.11	-3.03/-4.98	-5.48/-4.25	-3.58/-3.44	-6.60/-6.71	-4.57/-4.32	-7.83/-10.32	-6.71/-8.37	-15.29/-10.67	-6.74/-5.33	-9.91/-4.12	-5.02/-9.61	-4.40/-10.27	-1.75/-5.64	-9.58/-0.12	0.78/-6.22	-5.860/15	0.971/61	-0.41/-6.66	-2.410.80	2.02/-0.34
Θ(142.5°)	-6.55/-0.38	-3.69/-3.81	-2.35/-3.58	-3.56/-2.47	-4.95/-5.68	-4.64/-3.85	-4.12/-5.41	-7.60/-12.83	-8.00/-8.22	-10.31/-13.24	-13.24/-12.17	-12.53/-11.23	-9.38/-6.03	-6.52/-6.93	-6.58/-4.14	-12.41/-10.1	-4.90/-6.26	-1.48/-1.31	0.03/-4.54	-8.540/83	3.01/-1.65	-1.59/-1.96	-1.192/-22	-0.12/-5.18
Θ(150°)	-13.83/-6.37	-5.47/-8.94	-7.07/-6.28	-9.62/-13.22	-15.51/-11.10	-9.68/-9.95	-4.73/-8.52	-12.24/-14.74	-14.82/-10.54	-8.58/-8.20	-9.01/-10.12	-9.69/-8.80	-5.94/-6.34	-6.49/-11.80	-11.71/-14.36	-3.60/-3.66	-11.98/-6.07	-1.860/11	0.01/-3.39	-6.16/-7.12	-2.291/-1.39	-0.204/-0.98	-1.20/-4.88	
Θ(157.5°)	-1.68/-2.14	-1.11/-0.93	-3.39/-4.94	-4.28/-5.55	-8.86/-7.76	-8.34/-7.93	-8.90/-12.03	-13.40/-12.31	-10.33/-11.15	-10.85/-7.02	-5.11/-7.48	-11.97/-9.39	-4.74/-1.33	-1.25/-3.93	-9.03/-10.79	-8.07/-7.59	-5.77/-3.77	-3.23/-3.35	-4.84/-6.93	-7.66/-6.93	-3.53/-1.86	-2.82/-2.19	-2.60/-2.75	-6.60/-1.50
Θ(165°)	0.32/-0.13	-2.21/-6.21	-10.11/-12.49	-13.18/-13.60	-13.23/-11.28	-10.32/-12.31	-13.72/-11.27	-8.19/-6.45	-6.26/-6.99	-6.88/-6.09	-5.90/-6.15	-5.16/-3.94	-3.38/-3.61	-4.46/-4.13	-2.11/-1.06	-0.45/-0.28	-1.20/-2.79	-5.02/-7.30	-7.77/-6.81	-6.59/-5.94	-5.82/-5.75	-5.78/-4.99	-2.86/-0.75	0.890/81
Θ(172.5°)	-9.44/-10.92	-11.26/-11.10	-10.61/-8.85	-7.88/-9.56	-9.39/-11.03	-11.55/-11.01	-10.92/-9.72	-9.10/-9.15	-8.96/-8.32	-6.92/-6.05	-5.10/-3.93	-2.85/-1.75	-0.69/-0.00	0.440/92	1.231/31	1.261/11	1.070/64	-0.07/-0.95	-1.50/-1.69	-2.28/-2.65	-2.70/-2.81	-3.41/-4.32	-4.68/-4.99	-5.74/-6.29
Θ(180°)	-11.52/-10.60	-11.68/-10.83	-8.68/-6.93	-5.91/-5.67	-5.29/-4.59	-4.23/-4.49	-4.60/-4.43	-4.64/-4.70	-5.24/-5.77	-5.88/-5.67	-4.98/-4.07	-3.29/-3.06	-3.16/-3.24	-3.10/-2.95	-2.57/-2.24	-2.50/-2.82	-2.87/-2.93	-2.57/-2.72	-2.43/-2.42	-3.05/-3.45	-4.37/-6.32	-8.07/-10.27	-10.37/-9.60	-9.25/-11.04
Freq(Hz)	6.4750GPol.	TotalAnt.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°)	-1.53/-1.37	-1.56/-1.79	-1.83/-1.72	-1.60/-1.14	-0.24/-0.09	-0.62/-1.18	-1.34/-1.32	-1.05/-1.18	-1.45/-1.66	-1.65/-1.80	-1.75/-2.09	-1.23/-2.27	-2.04/-1.69	-1.54/-2.09	-1.99/-1.35	-1.06/-1.34	-1.74/-1.94	-1.96/-1.84	-1.67/-1.86	-2.14/-2.76	-2.73/-2.50	-1.94/-1.44	-1.68/-1.85	-1.45/-1.41
Θ(7.5°)	-3.13/-3.30	-3.63/-3.53	-2.37/-2.39	-3.15/-3.96	-3.96/-3.66	-3.40/-3.77	-4.39/-4.19	-3.67/-3.35	-3.40/-3.62	-3.44/-2.77	-2.06/-1.81	-1.63/-1.27	-0.91/-0.68	-0.43/-0.11	-0.28/-0.49	-0.65/-1.09	-1.24/-1.21	-1.28/-1.66	-2.67/-3.54	-3.12/-3.35	-2.98/-3.34	-3.97/-3.64	-3.71/-2.14	-2.61/-2.95
Θ(15°)	-7.48/-5.05	-5.60/-5.13	-6.75/-7.56	-6.09/-4.73	-3.80/-1.80	-1.20/-2.05	-1.90/-1.35	-0.82/-0.67	-1.31/-1.66	-1.53/-1.86	-2.64/-3.76	-4.01/-2.40	-0.650/54	0.670/43	-0.12/-0.83	-1.59/-2.45	-3.09/-3.64	-3.73/-4.27	-5.38/-6.28	-6.23/-7.27	-7.32/-7.37	-7.82/-8.57	-9.48/-8.85	
Θ(22.5°)	-5.79/-4.08	-2.76/-3.13	-3.88/-3.49	-2.28/-0.79	-0.32/-0.00	-1.71/-0.20	-0.84/-1.67	-2.41/-2.94	-3.53/-3.77	-3.17/-2.71	-2.52/-3.85	-4.51/-4.52	-2.60/-0.89	-0.00/-0.61	-1.64/-1.65	-2.39/-2.61	-2.55/-2.26	-2.27/-3.70	-6.52/-9.54	-11.88/-12.67	-11.96/-10.26	-10.20/-13.23	-11.99/-13.03	-10.92/-8.62
Θ(30°)	-6.68/-3.67	-2.10/-3.13	-5.70/-2.31	-0.130/-41	0.110/50	0.431/06	0.65/-0.50	-1.45/-2.00	-2.85/-4.61	-5.90/-5.69	-4.52/-4.10	-3.48/-2.60	-2.21/-1.58	-1.00/-0.72	-1.14/-1.23	-1.09/-0.85	-0.81/-1.56	-2.15/-3.04	-4.42/-0.55	-5.60/-8.49	-11.92/-13.03	-12.19/-10.97	-10.22/-8.72	-8.91/-9.07
Θ(37.5°)	-6.88/-3.06	-2.96/-4.33	-2.59/-0.05	0.771/-11	1.401/-14	0.31/-0.47	-1.38/-2.06	-3.51/-5.22	-5.53/-4.37	-3.32/-3.87	-4.48/-4.60	-4.80/-2.45	-2.03/-2.40	-0.771/-17	1.721/59	0.760/44	-0.47/-0.26	-3.10/-3.57	-4.55/-5.69	-6.58/-8.02	-8.71/-8.64	-7.45/-7.18	-8.44/-9.81	-8.02/-7.69
Θ(45°)	-3.55/-3.96	-1.46/-4.95	-0.012/08	2.062/-11	0.62/-1.1	1.110/-19	-1.51/-0.62	-0.88/-0.98	-1.54/-2.16	-1.050/-61	0.22/-1.25	-1.72/-1.90	-1.88/-2.46	-1.36/-1.86	2.300/79	0.631/38	0.34/-1.50	-4.91/-5.96	-5.37/-6.53	-8.83/-12.35	-10.65/-8.81	-12.07/-11.69	-7.11/-6.06	-3.65/-2.47
Θ(52.5°)	-1.93/-3.05	-1.16/-1.18	1.812/87	2.360/52	-1.91/-1.24	0.06/-0.47	-1.88/-3.45	-4.06/-3.04	-1.72/-0.73	-0.270/-21	-1.12/-1.11	-0.79/-4.44	-3.71/-2.48	-1.83/-3.37	-0.340/58	-0.220/-19	-0.97/-3.12	-3.78/-4.52	-4.41/-3.03	-4.87/-7.65	-7.87/-7.91	-9.57/-9.76	-5.46/-5.20	-2.66/-0.78
Θ(60°)	-0.17/-0.59	-0.480/-55	1.841/83	1.64/-0.72	-1.580/40	0.04/-0.91	-0.310/-16	-0.46/-1.80	-3.28/-1.75	-0.62/-0.68	-1.21/-1.79	0.40/-1.00	-2.33/-2.42	-3.17/-1.96	0.670/95	-0.14/-2.13	-2.11/-3.53	-5.33/-4.85	-5.94/-5.38	-6.31/-6.25	-4.17/-2.18	-4.18/-3.71	-4.76/-3.97	-1.82/-0.26
Θ(67.5°)	0.371/58	1.552/-65	1.041/93	-0.96/-1.70	-0.860/62	1.481/56	-0.26/-1.14	-1.03/-0.78	-2.55/-2.50	-0.13/-0.48	-0.16/-0.48	-2.160/-18	-1.46/-4.16	-2.08/-3.41	0.420/-46	-0.22/-3.75	-4.41/-3.27	-4.51/-4.48	-4.56/-6.14	-4.15/-4.48	-4.15/-3.44	-2.43/-3.53	-1.88/-1.81	-0.91/-0.28
Θ(75°)	1.021/80	1.612/-15	-0.310/-62	0.21/-1.89	-0.052/-77	3.141/93	0.26/-2.31	-3.90/-3.77	-2.73/-3.36	-1.290/-15	-1.24/-0.37	-1.220/-56	1.26/-1.16	1.18/-1.70	-0.101/-39	-1.83/-3.41	-6.66/-6.71	-6.56/-6.58	-4.95/-4.43	-5.17/-7.18	-5.66/-1.84	-2.17/-1.54	0.15/-0.79	0.330/-27
Θ(82.5°)	3.03/-1.90	1.871/-87	0.22/-0.54	-1.02/-1.62	1.133/-0.4	1.651/-37	-0.11/-1.																	



Antenna Pattern_6GHz

Appendix D

Θ(67.5°)	0.60/1.77	2.37/1.16	1.62/-1.02	-1.42/-3.60	-6.28/-2.99	-0.69/-1.15	-3.61/-3.77	-1.60/-1.57	-1.36/-1.11	-3.00/-4.35	-6.53/-5.95	-6.29/-4.38	-4.29/-8.66	-2.47/-3.51	-3.12/0.28	-0.83/-1.10	-1.52/-3.15	-4.47/-4.38	-2.35/-1.78	-2.25/-2.68	-2.24/-2.16	-2.14/-1.64	0.94/2.92	2.64/2.63
Θ(75°)	0.71/2.50	3.28/2.50	-0.54/-3.85	-4.55/-8.65	-4.74/-3.23	-5.49/-6.30	-7.38/-9.05	-3.71/-1.78	-3.10/-1.36	-0.61/-1.51	-5.13/-4.42	-2.67/-2.97	-0.96/-3.75	-1.09/-2.15	-3.08/0.78	1.42/1.79	0.43/-0.60	-4.16/-4.91	-0.78/0.04	-0.48/-1.39	-2.06/-1.20	-0.41/-0.69	0.32/2.27	2.50/2.17
Θ(82.5°)	-0.96/0.35	-0.46/-1.65	-3.81/-3.81	-4.85/-3.94	-4.16/-10.98	-1.77/-5.68	-5.31/-4.70	-2.09/-2.40	-2.83/-1.87	-1.05/0.43	-3.37/-3.93	-1.60/-1.85	-0.43/-2.69	-1.83/-3.25	-3.98/-1.48	-0.27/1.61	0.40/0.09	-3.39/-2.31	-0.45/-0.03	-0.83/-2.44	-0.68/-1.10	0.12/-1.10	-2.74/0.96	1.53/0.96
Θ(90°)	-1.18/-1.16	0.50/-2.40	-0.38/-1.28	-5.51/-2.09	-2.57/-15.45	-6.21/-5.41	-6.68/-3.93	-1.92/-4.20	-6.11/-2.11	-1.68/-0.49	-0.05/-3.26	-2.17/-1.37	0.11/-1.09	-0.11/-2.05	-3.57/-1.56	0.96/0.66	0.76/0.69	-1.78/-2.83	-1.71/-1.45	0.22/-1.44	0.47/-0.09	-0.57/-0.39	0.79/1.33	-0.72/0.31
Θ(97.5°)	-4.09/-3.58	-1.08/-5.44	-0.91/-2.87	-9.68/-2.11	-0.84/-7.67	-4.95/-2.53	-5.25/-10.95	-5.16/-2.91	-3.00/-1.07	-2.18/-0.54	1.90/-2.37	-0.31/-2.70	0.74/-1.25	0.83/-1.76	-4.21/-0.68	3.34/4.55	3.40/2.05	-1.64/-1.54	-0.34/-0.13	0.12/0.29	2.41/-1.33	-0.06/-1.38	0.31/-1.91	-2.36/0.83
Θ(105°)	-3.96/-6.86	-2.01/-4.92	-5.78/-6.16	-14.60/-3.72	-0.12/-5.70	-1.16/-4.79	-4.58/-2.69	-8.98/-7.11	-5.36/-2.38	-2.50/-0.03	2.51/0.03	2.48/-0.71	0.24/-1.47	0.93/0.18	-0.18/-0.64	0.95/0.04	3.15/0.79	-2.12/-3.25	-1.52/-3.35	-5.12/-1.77	-1.65/-1.61	-6.21/-6.77	-4.45/-1.98	
Θ(112.5°)	-4.22/-4.14	-1.98/-9.33	-8.66/-7.06	-14.33/-7.38	-2.47/-9.37	-10.21/-5.74	-5.94/-5.93	-4.70/-6.30	-5.52/-4.62	-3.89/0.56	1.32/0.01	2.41/-2.57	0.03/2.03	-0.19/0.95	0.66/0.81	-0.72/0.54	0.05/-0.41	-4.07/-3.52	-2.54/-6.80	-0.77/-1.98	-5.48/0.48	0.78/-3.57	-3.05/-4.15	-0.13/0.22
Θ(120°)	-3.50/-4.22	-2.16/-6.35	-11.00/-15.10	-10.49/-5.62	-6.56/-7.52	-6.29/-3.46	-2.85/-4.75	-6.18/-7.50	-6.10/-5.62	-7.99/-0.22	1.53/-1.41	2.01/-0.93	0.25/-0.06	0.19/-1.25	-2.44/-0.91	1.84/0.06	2.49/0.59	-2.36/-2.89	0.10/-0.42	-3.02/-1.77	-4.79/-9.24	-5.82/-9.26	-5.12/-0.73	0.51/-0.58
Θ(127.5°)	-1.41/-4.77	-2.51/-3.40	-11.50/-10.11	-6.87/-11.37	-14.92/-8.03	-4.80/-4.89	-9.24/-9.44	-5.41/-4.36	-7.13/-0.75	-3.39/0.66	1.44/-2.70	2.07/-142	0.85/-68	3.45/-202	-0.29/-2.20	-0.43/-1.73	0.54/-1.79	-6.12/-11.80	-1.27/-0.01	-9.35/-5.25	-4.81/-6.65	-0.50/-9.65	-1.52/-1.49	0.18/0.39
Θ(135°)	-4.75/-7.48	-3.77/-2.74	-4.28/-3.11	-3.35/-4.47	-8.04/-10.80	-10.52/-9.96	-9.25/-5.34	-4.33/-5.56	-6.01/-7.12	-4.25/0.17	2.44/-3.15	3.80/-2.57	2.50/-4.71	4.77/-1.89	-2.72/-1.26	1.24/-2.73	1.55/-2.28	-1.25/-7.70	0.20/-1.34	-3.12/-9.03	-2.42/-2.29	-6.36/-6.45	-12.92/-4.48	-1.39/-1.19
Θ(142.5°)	-4.89/-8.69	-7.91/-11.96	-13.25/-12.23	-12.30/-12.31	-6.83/-4.85	-5.19/-7.51	-8.23/-0.84	-8.58/-6.65	-5.51/-5.89	-6.13/-4.57	-3.84/-0.69	0.97/-2.81	-0.83/-0.70	2.58/-4.13	-11.21/-9.55	-1.78/-0.41	-1.19/-2.54	-9.26/-12.02	-2.59/-1.52	-1.95/-10.36	-8.41/-5.52	-4.21/-9.44	-10.20/-8.37	-3.97/-2.64
Θ(150°)	-9.97/-8.66	-6.71/-3.77	-2.47/-2.80	-3.84/-5.05	-8.04/-5.17	-3.46/-3.89	-5.60/-9.14	-12.31/-8.61	-3.65/-0.56	-0.54/-3.84	-5.95/-1.72	-0.10/-1.06	-0.80/-1.70	2.59/0.89	-0.69/-0.19	-0.63/-1.09	-1.35/-2.37	-6.48/-14.06	-10.23/-4.05	-2.22/-4.16	-13.21/-13.16	-11.50/-7.48	-4.50/-3.00	-4.48/-9.91
Θ(157.5°)	-1.29/-1.68	-2.60/-2.91	-3.49/-5.85	-8.98/-9.27	-8.30/-7.44	-6.83/-6.28	-5.96/-5.31	-4.22/-2.06	0.59/0.00	2.24/-1.81	1.59/-2.05	2.31/-1.37	-0.02/-1.07	2.44/-2.57	1.73/0.72	-0.65/-2.87	-4.81/-5.58	-6.63/-7.35	-6.20/-3.70	-3.39/-4.87	-5.88/-7.96	-11.17/-11.98	-8.45/-7.00	-4.90/-2.25
Θ(165°)	-13.60/-11.29	-9.79/-8.36	-8.04/-8.52	-5.17/-7.58	-10.88/-12.40	-9.41/-6.02	-4.75/-2.88	-1.37/-0.21	0.25/0.38	0.92/-1.79	2.51/-2.20	3.76/-3.81	3.44/-2.99	2.58/-2.83	2.94/-2.15	0.42/-1.10	-2.05/-2.64	-3.71/-4.71	-5.66/-6.97	-8.18/-8.09	-7.93/-6.74	-5.12/-5.42	-7.75/-10.95	-13.79/-15.34
Θ(172.5°)	-7.71/-6.81	-7.89/-8.59	-9.22/-7.53	-6.75/-6.49	-6.01/-5.33	-4.46/-3.93	-2.70/-1.71	-1.20/-0.77	-0.06/-0.32	0.14/-0.28	-0.37/-0.07	0.38/0.65	0.92/0.87	0.58/-0.03	-0.65/-1.16	-1.04/-1.13	-2.06/-3.08	-3.69/-6.64	-5.34/-3.76	-1.69/-0.61	-0.52/-0.93	-0.30/-2.86	-5.93/-7.20	-4.79/-4.72
Θ(180°)	-9.36/-8.48	-6.99/-6.12	-6.17/-6.74	-7.15/-7.47	-8.14/-8.75	-9.73/-9.41	-8.53/-8.10	-8.00/-7.70	-7.01/-6.49	-6.03/-6.27	-6.23/-5.94	-5.81/-5.70	-5.31/-4.90	-5.26/-5.14	-4.58/-4.14	-4.22/-4.06	-2.92/-2.06	-2.04/-2.03	-1.15/-0.34	-0.35/-1.76	-3.97/-5.63	-6.89/-9.49	-14.09/-14.01	-13.71/-11.67
Freq(Hz)	6.475GPol.	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°)	-5.65/-4.36	-3.62/-3.76	-3.75/-2.93	-2.81/-3.29	-3.34/-2.48	-1.98/-2.41	-2.86/-2.33	-1.67/-1.52	-1.75/-2.13	-2.17/-2.64	-2.89/-2.70	-2.75/-2.92	-2.94/-2.97	-3.60/-3.68	-3.64/-3.48	-3.52/-3.54	-3.50/-3.29	-3.06/-2.69	-2.55/-3.27	-4.06/-3.90	-3.66/-3.90	-6.45/-7.14	-8.29/-8.89	-7.33/-9.58
Θ(7.5°)	-5.56/-5.31	-3.88/-2.70	-3.07/-3.92	-4.22/-4.20	-5.04/-4.88	-5.10/-5.03	-5.87/-6.42	-6.19/-5.54	-5.25/-5.24	-4.76/-4.73	-6.32/-6.38	-6.02/-5.20	-3.99/-3.59	-3.08/-2.40	-1.88/-1.04	-0.70/-0.67	-1.19/-1.45	-1.24/-1.69	-1.66/-1.29	-0.66/-0.29	-1.11/-2.52	-4.40/-4.92	-5.96/-6.43	-5.94/-5.23
Θ(15°)	-2.46/-2.52	-3.67/-5.75	-7.14/-9.22	-10.66/-10.16	-10.21/-10.40	-9.37/-8.44	-9.41/-11.77	-12.11/-11.90	-13.96/-15.58	-13.44/-10.64	-7.83/-6.23	-5.06/-5.17	-4.99/-4.31	-3.28/-2.40	-2.38/-2.47	-2.42/-2.47	-2.82/-2.66	-2.53/-2.59	-2.22/-1.49	-1.17/-0.68	-0.81/-1.70	-3.06/-3.08	-3.28/-2.60	-2.04/-1.67
Θ(22.5°)	-1.74/-2.84	-5.08/-8.62	-7.87/-6.35	-5.34/-6.48	-3.76/-4.05	-4.08/-3.96	-3.64/-4.21	-5.40/-6.06	-6.88/-7.62	-9.17/-10.24	-15.13/-10.05	-8.17/-6.92	-6.28/-5.32	-4.47/-4.83	-6.53/-7.96	-7.68/-6.03	-4.83/-4.51	-3.50/-1.99	-1.33/-1.39	-1.28/-0.61	-1.72/-2.98	-2.09/-0.85	-0.50/-1.03	-1.15/-1.34
Θ(30°)	-2.46/-4.53	-7.10/-5.68	-3.44/-2.33	-2.14/-3.47	-3.21/-2.73	-2.32/-2.89	-0.50/-5.43	-6.57/-7.88	-7.36/-7.84	-8.45/-8.39	-10.70/-11.84	-1.29/-10.30	-9.47/-9.81	-9.87/-8.76	-9.82/-11.09	-1.74/-9.03	-6.16/-2.53	-0.66/-0.20	0.61/-0.07	0.87/-0.70	-1.96/-2.58	-1.97/-1.55	-2.10/-2.55	-2.17/-1.54
Θ(37.5°)	-0.46/-2.12	-3.18/-1.61	-0.81/-0.83	-1.57/-1.83	-2.26/-2.66	-3.03/-3.07	-2.95/-2.42	-2.70/-5.24	-6.67/-8.38	-7.42/-7.29	-7.97/-7.80	-6.44/-7.20	-7.72/-9.44	-9.60/-9.09	-11.15/-10.61	-5.90/-2.83	-1.24/-0.42	-0.73/0.60	2.11/-1.78	0.40/0.19	-0.29/-2.23	-3.57/-3.62	-2.40/-0.61	-0.81/-0.57
Θ(45°)	0.40/-2.63	-3.58/0.69	0.16/-0.95	-0.74/-0.04	0.41/-0.91	-1.36/-3.23	-4.81/-4.55	-3.61/-4.00	-5.40/-5.03	-4.58/-4.56	-6.02/-5.83	-7.20/-10.10	-9.79/-8.64	-10.62/-14.04	-9.12/-5.78	-3.58/-1.67	-1.04/-1.33	-1.31/-0.12	1.15/0.59	-0.98/0.40	1.70/-1.59	-2.03/-3.65	-1.00/-1.74	1.82/-1.00
Θ(52.5°)	2.42/0.39	-0.33/-2.62	0.54/-0.13	0.90/0.11	-1.72/-2.75	-2.91/-2.29	-3.11/-5.04	-0.55/-3.02	-3.25/-4.57	-1.71/-2.79	-5.52/-3.93	-1.12/-2.79	-5.21/-2.15	-1.04/-2.09	-3.31/-3.06	-1.20/0.78	0.01/0.15	0.66/-1.04	0.10/-0.52	-1.01/-1.62	-0.92/-2.51	-1.01/0.08		
Θ(60°)	2.63/-1.78	2.67/0.95	-0.18/0.09	-1.53/-4.10	-4.40/-2.38	-0.70/-0.66	-1.85/-4.71	-6.19/-3.02	-2.17/-1.89	-2.62/-4.67	-5.01/-4.98	-7.90/-3.80	-5.81/-5.23	-2.90/-2.92	-2.60/-0.62	-0.95/-2.59	-2.98/-3.26	-1.57/-0.42	1.12/-1.59	0.66/-2.73	-2.05/0.96	-0.27/-2.01	-0.54/-1.54	1.57/-1.60
Θ(67.5°)	2.31/-0.44	2.23/-1.21	0.81/-1.08	-2.61/-5.24	-3.57/-0.86	-0.45/-1.92	-4.74/-3.94	-3.39/-2.99	-2.49/-1.78	-1.71/-2.96	-7.14/-3.31	-3.49/-5.06	-5.81/-7.66	-5.53/-3.02	-3.07/-2.31	-1.89/-2.95	-3.02/-2.95	-0.88/-0.57	0.32/0.55	-0.36/-2.24	-6.39/-1.84	0.22/-1.67	-0.90/-1.91	2.21/-2.65
Θ(75°)	0.68/0.52	1.70/-0.56	-0.34/-1.99	-2.69/-3.44	-4.16/-1.63	-1.72/-4.79	-4.74/-3.94	-9.00/-9.40	-5.08/-0.73	-1.30/-2.73	-3.64/-5.81	-3.21/-2.09	-4.50/-5.42	-7.82/-2.24	-2.73/-2.94	-1.04/-0.41	-1.23/-1.26	0.08/0.20	-0.46/-0.95	0.41/-3.18	-4.49/-0.01	0.53/-2.82	-2.31/0.91	1.87/-2.57
Θ(82.5°)	0.58/-1.06	1.62/0.56	-2.63/-3.72	-4.74/-5.46	-5.31/-7.95	-8.13/-8.75	-5.69/-4.44	-3.63/-7.96	-10.12/-1.82	-0.89/-1.58	-2.64/-2.77	-1.35/0.71	-1.58/-4.96	-4.40/-1.65	-2.09/-1.68	-0.01/-1.12	0.62/0.62	-0.85/-0.23	0.29/0.36	0.58/-2.10	-1.50/-0.36	0.59/-1.66	-3.87/-0.77	0.28/-1.78
Θ(90°)	-1.17/-3.98	-0.48/-3.25	-7.89/-0.45	-4.68/-7.29	-5.66/-11.42	-6.78/-2.76	-3.41/-2.92	-4.75/-9.41	-4.82/-1.62	-4.49/-1.10	-1.52/-2.77	-1.49/-1.14	0.17/-1.87	-1.97/-0.97	-3.14/-0.90	0.17/1.55	1.98/-1.52	-1.69/-1.82	-1.05/-1.83	-2.05/-3.01	0.51/-1.89	-1.13/-0.65	-2.38/-1.01	-0.98/0.70
Θ(97.5°)	-2.73/-4.94	-0.53/-3.71	-3.65/-3.46	-9.11/-1.84	-1.54/-8.08	-6.40/-2.65	-3.60/-5.41	-6.14/-9.18	-4.27/-2.02	-4.79/-1.11	0.46/-1.31	-0.79/-2.34	0.31/-1.78	-1.47/-1.65	-0.80/-0.28	1.72/-2.26	3.29/-2.59	0.85/0.12	0.56/-1.65	0.05/-0.75	1.50/-1.05	-1.40/-2.07	-2.39/-2.16	0.59/0.88
Θ(105°)	-2.53/-3.43	-2.57/-3.60	-7.74/-3.90	-8.93/-2.39	-0.29/-8.37	-12.51/-5.60	-3.33/-5.23	-7.93/-11.32	-4.00/-1.54	-2.33/-0.96	1.30/0.50	0.65/0.39	0.07/1.84	2.73/-0.84	-3.50/-0.69	0.30/-1.95	2.31/3.20	2.49/-1.36	0.51/-1.39	-0.11/-1.58	-3.94/-2.54	-1.36/-3.33	-10.36/-8.07	-3.01/-0.36
Θ(112.5°)	-1.47/-3.33	-4.51/-4.11	-9.96/-2.22	-12.31/-6.86	-2.97/-5.32	-11.20/-5.47	-4.58/-5.53	-6.12/-3.68	-3.90/-8.53	-1.83/-0.61	0.87/0.09	0.37/0.50	0.39/-1.85	2.19/-1.21	-1.11/-0.62	1.77/0.18	-2.18/-2.43	-2.53/-2.39	-2.22/-2.58	-0.84/-0.95	-7.96/-4.94	-4.77/-5.50	-5.98/-6.42	-2.67/-0.74
Θ(120°)	-1.81/-7.17	-7.99/-5.97	-11.43/-6.99	-15.35/-8.48	-11.21/-10.59	-7.87/-3.38	-4.91/-7.80	-5.68/-3.98	-6.92/-6.24	-2.65/-0.32	1.42/-0.17	0.54/-0.09	2.00/-1.66	2.44/-2.08	-1.39/-1.52	-2.81/-0.22	-0.16/-3.63	-1.73/-2.55	-0.35/-3.33	-2.07/-3.18	-7.23/-5.55	-6.66/-7.21	-1.40/-13.07	0.22/



Antenna Pattern_6GHz

Appendix D

Θ(112.5°)	2.11/1.14	3.67/0.34	-5.00/-1.60	-1.77/-7.12	-7.58/-3.05	-3.73/-4.79	-2.43/-1.81	-1.45/0.21	1.57/1.38	0.13/0.26	1.19/3.21	1.10/0.70	0.49/0.91	-2.19/-3.19	-4.01/-2.20	-2.36/-2.14	-2.70/-1.12	-0.87/-1.57	-4.57/-3.98	-6.79/-11.23	-4.63/-3.05	-5.02/-10.84	-6.42/0.03	-2.16/0.55
Θ(120°)	1.73/0.76	1.90/-2.08	-7.00/-2.67	-2.39/-8.05	-7.56/-4.42	-4.65/-9.63	-8.44/-2.11	-1.46/-2.45	0.40/1.91	0.90/-0.38	0.61/1.85	0.75/-1.05	-2.55/-4.30	-3.30/-3.33	-5.03/-8.79	-11.58/-11.03	-5.13/-2.16	-3.76/-5.81	-8.69/-6.13	-8.94/-7.20	-6.43/-5.07	-6.20/-6.96	-0.85/-1.66	-1.53/0.64
Θ(127.5°)	1.38/0.90	1.50/-1.45	-3.37/-1.97	-3.00/-4.12	-6.55/-6.51	-4.53/-6.77	-13.59/-4.64	-1.59/-2.18	-1.11/1.06	0.46/0.26	0.71/-0.37	-2.56/-2.39	-2.88/-3.87	-9.72/-10.77	-11.32/-6.41	-7.72/-7.80	-8.70/-11.51	-8.89/-10.21	-11.73/-8.21	-8.25/-6.61	-7.39/-9.60	-3.07/0.45	0.50/0.85	
Θ(135°)	-2.60/-0.12	-0.80/-4.85	-6.23/-5.03	-6.69/-13.63	-11.67/-8.25	-7.20/-6.98	-8.36/-9.66	-7.78/-4.67	-1.89/0.20	0.50/0.48	1.11/0.24	-2.44/-1.23	-1.35/-0.92	-6.05/-7.27	-8.85/-7.27	-13.64/-6.88	-4.41/-6.81	-4.71/-6.99	-8.23/-6.93	-6.08/-7.64	-6.00/-8.58	-4.50/-5.62	-5.07/-2.39	-2.37/-3.81
Θ(142.5°)	-3.39/-1.90	-5.21/-6.68	-5.71/-4.62	-5.91/-7.47	-11.29/-15.71	-9.01/-4.22	-3.26/-4.41	-8.91/-5.89	-0.45/1.38	1.59/1.50	0.78/-2.23	-7.01/-8.02	-5.11/-2.89	-5.42/-9.21	-12.80/-15.19	-5.21/-6.89	-7.14/-7.62	-8.98/-11.01	-10.64/-14.06	-12.64/-15.37	-10.82/-8.68	-9.83/-9.75	-10.71/-10.96	-12.49/-6.59
Θ(150°)	-2.90/-3.03	-4.50/-6.11	-7.37/-9.54	-15.10/-10.89	-8.61/-8.42	-7.72/-6.55	-6.34/-9.19	-10.79/-7.39	-3.49/-0.88	-0.32/-0.91	-1.93/-2.96	-6.41/-10.95	-8.17/-6.98	-5.98/-7.22	-6.79/-8.56	-8.91/-9.99	-14.88/-12.03	-15.11/-13.27	-9.92/-7.91	-10.47/-15.11	-11.37/-8.29	-7.00/-5.28	-4.54/-4.47	-3.23/-2.65
Θ(157.5°)	-3.57/-3.59	-3.55/-4.44	-6.05/-7.96	-10.37/-10.70	-9.54/-9.40	-8.65/-8.14	-8.32/-9.57	-11.72/-9.87	-6.20/-3.23	-1.54/-0.80	-0.89/-2.22	-5.04/-7.24	-6.28/-4.94	-5.19/-6.45	-8.39/-6.74	-6.26/-8.61	-8.86/-9.20	-12.73/-11.30	-11.07/-13.55	-14.63/-13.09	-12.80/-12.74	-11.31/-11.30	-12.39/-13.28	-9.86/-6.05
Θ(165°)	-3.72/-4.57	-5.75/-6.56	-8.14/-9.83	-10.80/-11.14	-9.76/-8.26	-8.48/-9.14	-9.04/-7.27	-6.63/-6.58	-6.48/-6.48	-5.98/-4.99	-4.13/-3.93	-4.57/-5.33	-5.15/-4.86	-5.37/-6.54	-7.28/-7.14	-8.23/-11.60	-12.13/-11.56	-12.66/-15.28	-15.37/-13.66	-11.78/-11.52	-10.41/-9.65	-10.63/-15.11	-11.80/-8.35	-5.79/-3.80
Θ(172.5°)	-13.90/-14.25	-14.87/-15.46	-14.51/-11.47	-9.98/-9.98	-10.12/-10.71	-10.33/-10.45	-9.80/-9.14	-7.95/-6.63	-5.36/-4.49	-3.80/-3.14	-2.94/-3.31	-3.57/-3.52	-3.49/-4.00	-5.02/-6.16	-7.73/-9.69	-11.57/-12.02	-11.21/-9.25	-7.22/-6.38	-7.16/-9.04	-11.70/-12.39	-13.25/-14.09	-13.06/-12.30	-11.81/-11.49	-11.98/-13.82
Θ(180°)	-14.11/-14.14	-15.32/-15.29	-15.71/-14.66	-13.54/-14.26	-13.87/-13.37	-14.26/-15.18	-15.72/-15.01	-15.14/-14.69	-15.66/-15.30	-15.19/-14.97	-14.49/-15.35	-14.96/-15.12	-15.39/-14.74	-12.52/-12.60	-12.82/-13.51	-12.11/-11.25	-11.38/-10.66	-10.16/-9.91	-10.81/-11.73	-11.88/-12.81	-13.44/-12.42	-11.97/-12.69	-12.07/-12.45	-12.75/-13.86
Freq(Hz)	6.475GHz	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°)	-4.80/-3.92	-2.99/-3.18	-3.51/-4.31	-4.91/-5.47	-5.88/-5.43	-4.97/-5.05	-5.76/-5.62	-5.73/-5.65	-5.59/-5.58	-5.75/-5.66	-5.16/-4.33	-3.92/-3.94	-3.73/-4.04	-5.24/-5.49	-4.39/-3.79	-3.37/-3.68	-4.31/-4.60	-4.58/-4.32	-4.23/-4.17	-4.49/-5.33	-5.60/-5.52	-4.71/-4.19	-3.96/-3.97	-4.66/-4.93
Θ(7.5°)	-3.82/-2.93	-2.70/-2.96	-3.71/-3.61	-3.53/-3.61	-3.70/-4.03	-4.40/-5.95	-6.34/-6.29	-6.03/-6.11	-6.28/-6.46	-6.99/-6.89	-5.77/-5.16	-4.86/-5.00	-4.67/-4.91	-4.64/-4.79	-5.06/-5.10	-4.89/-4.76	-4.85/-6.36	-5.93/-7.46	-7.49/-6.94	-6.74/-6.33	-6.52/-6.66	-6.09/-5.88	-4.73/-4.14	-3.80/-3.15
Θ(15°)	-5.78/-4.76	-4.78/-6.02	-5.94/-6.03	-6.78/-6.53	-5.91/-5.96	-6.39/-6.21	-6.17/-6.76	-7.22/-7.32	-7.06/-6.31	-5.91/-5.64	-5.50/-5.39	-5.59/-6.07	-6.00/-6.14	-5.96/-5.14	-4.79/-4.22	-4.12/-4.89	-6.00/-6.17	-6.01/-6.42	-7.66/-6.85	-5.99/-6.27	-6.61/-8.55	-7.49/-7.69	-7.85/-7.00	
Θ(22.5°)	-6.58/-5.27	-5.27/-5.50	-5.95/-6.00	-5.57/-5.23	-6.47/-6.84	-8.41/-9.17	-9.13/-8.88	-8.96/-9.12	-9.03/-7.89	-6.15/-4.85	-3.63/-3.63	-4.83/-5.66	-6.25/-7.40	-8.25/-6.24	-6.36/-6.78	-6.79/-6.03	-4.98/-4.00	-3.36/-3.30	-3.59/-3.66	-3.53/-3.45	-4.61/-6.30	-8.08/-10.77	-13.47/-11.72	-10.80/-8.39
Θ(30°)	-4.33/-2.92	-3.19/-3.89	-4.23/-4.46	-4.55/-5.37	-7.02/-10.43	-10.77/-10.56	-9.96/-7.84	-7.79/-9.22	-11.93/-14.02	-14.40/-12.63	-8.31/-5.19	-2.80/-1.46	-2.17/-4.80	-6.67/-5.83	-5.10/-4.51	-4.27/-4.34	-3.36/-2.49	-2.12/-2.11	-1.92/-2.21	-3.28/-6.08	-7.58/-7.27	-6.22/-7.58	-6.39/-6.88	-8.80/-9.17
Θ(37.5°)	-3.04/-1.86	-2.79/-3.39	-2.09/-1.54	-2.59/-4.94	-6.99/-7.09	-6.78/-7.28	-4.91/-8.99	-7.31/-5.70	-4.97/-5.24	-4.68/-3.71	-2.95/-3.73	-4.87/-5.64	-5.61/-3.09	-2.35/-1.01	-0.38/-0.58	-0.17/-1.55	-3.40/-5.89	-6.97/-5.96	-4.51/-3.46	-2.77/-4.05	-5.64/-6.83	-7.48/-5.06		
Θ(45°)	-0.49/-0.57	-1.66/-0.84	0.35/0.44	-1.43/-3.82	-4.69/-5.18	-7.19/-8.52	-7.21/-6.36	-7.59/-8.67	-6.92/-5.61	-5.08/-4.46	-4.54/-5.06	-4.96/-4.19	-3.95/-2.46	-2.43/-2.93	-2.06/-0.27	0.69/1.00	0.44/-0.72	-3.14/-3.50	-2.97/-0.92	-0.63/-2.02	-3.53/-5.25	-5.38/-3.76	-3.04/-5.12	-6.21/-5.95
Θ(52.5°)	-1.05/-2.19	-1.98/0.44	0.63/-1.59	-4.43/-4.91	-6.10/-7.33	-7.14/-8.93	-3.47/-3.21	-3.79/-5.73	-5.92/-3.82	-2.51/-1.99	-2.76/-4.05	-3.35/-3.56	-3.68/-2.93	-1.84/-1.06	-0.76/0.44	1.51/1.88	1.01/0.68	-0.38/-0.97	-2.18/-2.40	-1.27/-0.63	-2.15/-3.46	-3.12/-3.69	-2.79/-3.70	-5.56/-4.54
Θ(60°)	-0.04/-1.29	0.42/-1.93	-0.56/-1.74	-2.92/-4.18	-5.39/-6.41	-4.54/-3.71	-3.85/-3.91	-3.93/-4.65	-5.45/-3.98	-1.86/0.17	1.01/-0.36	-1.01/-1.46	-1.28/-2.01	-0.76/-0.89	-0.85/-0.18	2.21/1.83	1.05/1.11	1.07/0.86	-1.72/-2.40	-0.78/-1.98	-4.05/-5.55	-4.12/-2.56	-2.73/-2.45	-3.85/-1.36
Θ(67.5°)	0.49/0.67	2.04/1.72	-0.81/-2.20	-1.76/-1.82	-3.50/-6.62	-4.72/-2.04	-1.73/-1.74	-1.47/-0.89	-0.83/-1.26	-2.57/-1.83	1.81/2.31	1.29/0.05	-1.31/-0.72	0.73/1.25	0.68/1.22	1.14/0.98	0.65/0.65	0.29/-0.21	-2.02/-2.84	-2.67/-3.01	-7.06/-8.03	-5.34/-3.06	-2.30/-3.41	-4.94/-1.48
Θ(75°)	0.29/0.94	1.33/0.24	-1.45/-1.91	-2.05/-2.61	-3.65/-4.37	-2.36/-2.42	-2.96/-0.45	-0.45/-0.77	1.18/0.41	-0.32/-1.56	0.69/3.29	2.95/1.28	-1.59/-2.00	0.02/0.69	0.78/1.02	1.73/0.57	0.24/0.45	-0.03/-2.25	-4.93/-4.09	-4.11/-5.07	-8.09/-8.00	-4.63/-1.83	-1.25/-1.36	-1.44/-0.00
Θ(82.5°)	-0.22/0.75	-0.37/-0.44	-1.26/-2.10	-3.24/-3.82	-4.68/-4.47	-0.25/-0.07	-2.78/-1.38	0.08/-1.08	0.57/1.32	0.74/-0.38	1.91/3.31	1.34/1.03	1.28/1.42	0.15/1.73	0.64/-0.72	-0.70/-0.31	0.92/0.47	-1.23/-3.18	-2.84/-2.02	-5.84/-9.60	-15.32/-11.83	-6.24/-3.24	0.51/0.11	0.25/1.27
Θ(90°)	-0.25/0.58	-0.85/-0.33	-1.06/-1.91	-4.37/-5.69	-4.77/-5.03	0.04/0.84	0.58/1.24	1.21/-1.42	-0.87/0.43	1.01/0.88	1.48/3.04	1.22/1.00	1.06/1.74	1.57/1.32	1.99/-1.47	-2.32/0.49	1.46/0.45	0.33/-0.16	-2.43/-2.75	-4.95/-7.31	-11.98/-8.04	-2.06/-0.01	2.04/0.52	-0.62/-0.24
Θ(97.5°)	-0.00/-0.03	-0.72/-0.98	-3.12/-2.86	-5.03/-6.50	-4.45/-1.54	1.47/0.03	0.15/2.87	3.11/-0.12	-0.87/-0.94	-0.37/-0.63	0.87/2.58	0.78/-1.35	-3.27/-0.68	-0.67/-1.18	0.40/-3.47	-2.62/0.23	1.46/2.42	-3.21/-3.74	-2.38/0.62	-3.21/-3.74	-1.60/0.72	-2.21/-4.23	-1.22/-1.44	
Θ(105°)	-0.36/-0.19	0.82/0.03	-3.87/-1.65	-2.54/-8.48	-5.12/-3.13	1.87/0.93	-2.50/0.72	1.23/-1.96	0.31/-0.08	-1.03/-0.62	-1.28/-0.67	0.44/-1.13	-2.37/-2.17	-2.41/-2.07	-2.42/-4.71	-4.07/-2.12	-1.86/-0.31	0.77/0.52	-2.30/-0.79	-1.93/-5.84	-10.20/-9.99	-0.17/0.74	-5.96/-2.53	-1.59/-6.95
Θ(112.5°)	0.12/-0.19	0.81/-0.80	-7.42/-4.01	-2.68/-3.40	-4.35/-3.19	-2.36/-1.70	-2.26/-1.10	-1.26/-1.74	1.26/0.63	-0.58/0.67	-0.42/0.62	-1.29/0.64	-0.96/-2.15	-2.84/-1.51	-3.44/-5.93	-5.41/-3.90	-6.83/-7.16	-4.82/-2.16	-7.28/-4.31	-10.00/-7.91	-3.55/-1.98	-3.79/-12.60	-9.42/-2.04	-3.70/-4.04
Θ(120°)	0.34/-0.51	0.07/-4.34	-13.44/-7.88	-4.74/-5.60	-5.95/-6.03	-8.45/-8.82	-5.03/-3.72	-1.62/-1.31	1.09/1.36	0.00/1.68	1.20/0.23	0.24/1.05	1.04/-2.14	-3.27/-2.17	-3.78/-0.97	-8.74/-6.80	-5.76/-9.41	-8.22/-4.82	-8.93/-4.38	-3.56/-6.12	-6.06/-6.66	-0.56/2.41	-0.23/-0.57	
Θ(127.5°)	-0.12/-1.16	0.12/-4.05	-7.13/-4.11	-3.91/-3.59	-6.57/-6.68	-5.55/-5.46	-8.23/-4.71	-2.10/-1.37	-0.58/0.51	0.76/1.47	1.83/-0.12	0.56/0.64	0.68/-1.73	-5.35/-6.56	-2.68/-2.48	-6.30/-8.11	-3.79/-2.49	-8.86/-7.03	-7.43/-6.21	-7.38/-5.24	-5.81/-0.82	-5.37/-3.45	-0.45/3.26	1.30/0.93
Θ(135°)	-1.78/-0.44	-0.69/-3.37	-6.28/-8.19	-10.67/-10.89	-10.36/-5.48	-4.93/-4.93	-7.34/-11.35	-5.99/-3.56	-2.20/-1.03	-0.96/0.38	0.90/0.98	-0.30/1.09	2.53/2.24	0.46/-4.69	-4.82/-3.36	-6.33/-13.12	-10.01/-3.72	-8.93/-2.62	-6.09/-5.69	-5.43/-8.22	-3.94/-7.91	-0.30/-4.21	-1.86/-0.70	-1.02/-2.39
Θ(142.5°)	-6.11/-3.39	-3.75/-3.13	-6.85/-7.34	-7.21/-5.85	-6.53/-7.16	-4.28/-3.39	-4.51/-5.81	-6.81/-3.69	-0.08/0.83	1.28/1.87	1.88/0.35	-0.84/0.01	0.23/-1.56	-0.56/-5.04	-7.93/-10.66	-4.92/-1.56	-8.79/-10.01	-6.48/-9.56	-12.39/-13.54	-6.88/-9.92	-7.20/-4.15	-4.85/-4.02	-5.74/-4.61	-8.73/-11.09
Θ(150°)	-5.47/-4.39	-3.01/-3.10	-3.88/-6.19	-11.84/-8.01	-7.81/-8.25	-7.82/-6.07	-5.97/-6.95	-6.34/-4.18	-2.48/-1.71	-1.25/-1.12	-1.68/-4.25	-4.63/-3.13	-1.49/-1.01	-1.27/-4.29	-12.02/-13.92	-12.46/-10.93	-11.83/-10.67	-10.94/-11.42	-11.78/-7.41	-8.55/-7.02	-5.07/-4.47	-2.99/-1.55	-1.67/-4.78	
Θ(157.5°)	-2.41/-3.63	-3.90/-3.65	-4.08/-6.55	-7.59/-6.89	-6.72/-5.91	-5.10/-5.08	-5.66/-7.04	-7.87/-7.38	-6.16/-4.36	-2.55/-1.55	-0.99/-0.79	-1.64/-2.89	-2.75/-1.89	-1.67/-2.07	-3.71/-3.72	-3.33/-5.79	-12.93/-8.95	-6.89/-9.73	-10.99/-14.69	-11.90/-7.20	-7.25/-11.32	-12.84/-8.41	-5.82/-4.48	-3.52/-2.89
Θ(165°)	-5.82/-6.71	-7.02/-6.28	-7.63/-9.21	-10.58/-9.61	-8.25/-8.65	-9.39/-9.69	-8.70/-6.68	-5.80/-5.08	-4.29/-3.24	-1.99/-0.73	0.16/0.75	1.08/0.79	-0.00/-1.23	-2.96/-4.94	-6.62/-6.99	-7.52/-5.59	-10.67/-8.92	-6.59/-9.02	-9.72/-4.92	-				

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

