



Antenna Pattern of 2.4GHz/5GHz

Appendix B.1

Θ(22.5°)	-2.08/-1.81	-1.48/-1.10	-0.50/-0.02	0.75/-1.42	2.19/2.51	2.02/1.00	1.01/0.24	-0.33/-0.64	-0.58/0.61	1.24/0.96	0.18/0.16	1.01/1.96	2.52/2.16	1.69/1.50	0.97/0.18	-0.69/-2.27	-4.01/-4.53	-4.58/-4.68	-4.44/-4.37	-5.08/-4.86	-4.32/-3.79	-3.12/-1.94	-0.50/-0.46	-0.93/-1.56
Θ(30°)	-2.38/-3.28	-3.59/-3.03	-3.21/-4.12	-4.60/-4.00	-2.01/-0.21	0.22/0.59	0.36/-0.96	-1.77/-3.50	-2.63/-1.08	-0.28/-0.64	-1.16/-0.41	2.47/3.26	2.69/1.35	0.03/-0.29	0.09/-0.31	-2.63/-5.69	-6.97/-6.76	-8.48/-8.67	-7.16/-6.59	-5.67/-5.54	-5.09/-4.07	-2.69/-1.58	-1.77/-2.54	-2.27/-2.09
Θ(142.5°)	-10.44/-10.16	-6.81/-4.03	-3.70/-3.50	-2.13/-1.43	-2.51/-1.89	-0.66/0.36	0.92/0.07	-0.18/-1.54	-3.44/-2.20	-1.16/-1.33	-1.74/-0.80	1.00/1.44	0.30/-0.55	-0.13/-0.70	-1.38/-0.80	-1.91/-1.76	-4.70/-3.10	-5.80/-8.36	-5.81/-6.23	-8.41/-7.20	0.79/-2.55	-4.84/-1.49	-1.85/-1.86	
Θ(45°)	-2.96/-3.50	-0.60/-1.25	2.34/-1.72	0.54/-1.29	0.91/-0.64	0.23/-1.26	1.21/0.97	1.41/-1.27	-1.21/-0.60	-1.60/-3.38	-6.12/-3.38	-0.35/0.09	-0.50/-0.44	0.75/-1.96	1.28/0.26	-1.11/-2.22	-4.88/-3.10	-2.23/-6.59	-5.21/-4.35	-8.16/-7.27	-5.14/-0.77	1.38/-4.03	-1.92/-0.72	-1.74/-2.10
Θ(52.5°)	-0.47/-2.04	0.91/2.35	3.67/2.94	2.01/0.82	0.75/-0.08	-0.05/-1.49	1.93/2.57	2.66/2.66	-0.58/0.91	-1.56/-4.75	-5.20/-3.1	2.39/-1.05	0.42/0.35	2.16/2.68	1.64/0.98	-0.43/-0.20	-5.17/-2.79	-1.32/-5.40	-4.79/-4.15	-9.45/-9.17	-5.55/-1.57	1.25/-1.20	1.14/-0.93	1.45/0.95
Θ(60°)	-0.45/-2.09	-1.14/-1.00	3.53/2.38	2.25/2.42	1.24/0.98	0.88/3.26	3.43/3.49	-0.90/-0.19	-0.02/-1.85	-6.69/-0.09	2.08/0.38	1.36/-1.17	2.86/3.44	2.27/0.37	-0.49/-0.92	-4.24/-1.47	-2.68/-0.39	-2.54/-3.32	-10.73/-5.83	-8.35/-0.24	-0.54/-0.92	0.59/-1.55	2.61/-3.99	
Θ(67.5°)	1.09/0.54	0.42/2.34	5.09/3.96	3.05/4.09	2.00/-1.12	-2.33/-1.24	-0.30/2.44	2.73/2.48	-2.52/-0.54	-0.62/-2.21	-7.66/-2.14	0.09/-0.83	1.51/-1.61	3.33/3.07	1.77/-0.81	-1.10/-0.86	-1.96/-3.00	-1.58/0.95	0.18/-0.78	-6.96/-2.25	-12.62/-1.67	0.50/-0.99	1.58/-1.72	3.03/2.07
Θ(75°)	1.41/2.81	2.82/3.52	5.33/3.90	3.42/4.72	3.60/-1.38	0.80/-1.88	-2.46/-0.80	1.39/-1.87	-2.19/-3.04	0.06/-0.79	-6.94/-5.93	-2.70/-2.25	-0.69/0.82	1.99/-1.85	0.54/-1.30	-0.47/-1.89	-1.10/-0.45	-0.34/2.78	3.31/0.82	-4.14/-0.25	-6.72/-0.60	0.37/-1.91	1.24/-1.87	3.79/2.61
Θ(82.5°)	1.21/4.25	2.43/2.08	4.52/2.95	2.34/-4.82	4.69/2.32	2.34/-0.33	-2.84/-1.48	0.15/-0.54	-5.45/-3.36	0.16/-1.66	-8.95/-5.79	-4.05/-3.74	-1.43/-0.16	0.92/-0.08	-3.80/-3.49	-1.27/-4.16	-0.31/0.39	1.71/-3.19	4.26/2.12	-0.99/-0.08	-3.61/-0.79	-1.50/-0.76	1.49/2.93	3.49/-1.47
Θ(90°)	0.31/4.05	1.61/-0.64	3.37/2.46	1.07/3.81	4.13/2.85	1.98/-0.73	-3.41/-2.26	-1.16/-1.78	-7.15/-4.64	-2.52/-3.52	-10.34/-4.93	-5.14/-4.53	-3.69/-1.61	-1.76/-1.49	-5.13/-5.24	-2.96/-5.49	-2.73/-0.18	1.93/0.97	3.64/2.14	-1.14/-0.46	-3.16/-0.88	-5.67/-1.48	0.84/-1.68	2.05/-0.11
Θ(97.5°)	-1.91/-1.76	-0.09/-0.23	2.77/-1.90	0.25/2.41	1.69/0.42	-0.40/-3.36	-6.43/-4.11	-1.65/-2.99	-5.56/-4.27	-1.45/-4.81	-9.94/-2.82	-4.57/-6.19	-4.11/-3.34	-3.96/-3.50	-7.44/-6.57	-3.87/-7.76	-5.16/-1.71	0.87/-1.51	1.84/-0.30	-1.71/-1.93	-2.84/-2.93	-7.61/-6.01	-0.97/-0.51	0.13/-0.29
Θ(105°)	-4.99/-1.82	-0.16/0.18	1.13/0.57	-1.18/-1.10	-1.57/-5.71	-4.46/-5.18	-5.59/-5.84	-4.79/-5.02	-4.56/-4.47	-5.43/-6.78	-8.26/-4.11	-3.20/-7.66	-4.53/-3.84	-6.06/-7.49	-6.68/-9.53	-5.93/-6.73	-6.37/-5.78	-1.49/-4.84	-1.03/-2.98	-5.67/-4.84	-6.18/-8.11	-12.04/-4.73	-2.94/-1.21	-0.11/-4.78
Θ(112.5°)	-6.58/-5.37	-2.49/-2.31	-1.10/-0.84	-2.49/-4.60	-7.15/-8.44	-1.82/-2.41	-3.68/-6.37	-4.47/-4.52	-4.70/-4.95	-5.71/-8.33	-7.23/-4.83	-3.92/-7.47	-4.15/-4.72	-6.60/-10.63	-12.35/-8.34	-8.98/-7.99	-6.14/-8.71	-3.55/-5.41	-1.72/-4.43	-8.00/-4.18	-6.15/-12.61	-13.77/-9.33	-4.55/-4.78	-2.10/-7.48
Θ(120°)	-15.11/-9.77	-4.38/-4.17	-2.69/-0.04	-1.30/-5.87	-5.09/-5.95	-1.54/-3.14	-5.06/-7.62	-5.17/-5.99	-9.65/-13.97	-6.93/-4.82	-4.69/-6.08	-6.58/-8.28	-8.80/-13.96	-11.08/-8.92	-9.46/-9.12	-9.67/-9.23	-5.52/-3.94	-2.99/-6.63	-5.58/-7.99	-7.79/-7.97	-9.88/-15.45	-5.93/-6.96	-2.39/-6.23	
Θ(127.5°)	-14.86/-11.99	-5.94/-4.64	-2.00/-1.38	-3.63/-8.54	-7.83/-9.05	-6.09/-9.55	-13.82/-10.53	-5.32/-7.71	-4.33/-7.77	-10.90/-11.58	-7.19/-4.87	-5.87/-6.18	-8.36/-8.90	-15.08/-13.96	-10.23/-11.82	-7.38/-5.32	-7.43/-9.59	-7.57/-6.47	-10.03/-8.93	-9.32/-6.61	-8.08/-8.59	-9.90/-7.62	-13.16/-9.34	-3.11/-10.14
Θ(135°)	-8.77/-14.33	-9.38/-4.32	-3.43/-5.78	-7.40/-14.33	-13.26/-10.36	-10.79/-5.47	-7.04/-6.55	-7.63/-9.91	-4.82/-6.15	-13.10/-14.99	-9.74/-6.17	-6.68/-7.41	-9.90/-14.15	-15.78/-11.00	-8.90/-6.39	-3.29/-5.45	-8.22/-13.01	-9.82/-8.66	-7.41/-11.32	-8.07/-9.26	-9.49/-8.79	-7.80/-9.66	-15.26/-10.48	-8.28/-8.38
Θ(142.5°)	-7.64/-11.74	-0.96/-4.76	-3.97/-4.68	-8.01/-5.53	-6.81/-7.71	-5.51/-4.09	-6.12/-0.90	-11.86/-5.35	-4.95/-7.40	-12.78/-11.17	-8.99/-10.45	-10.70/-9.44	-10.70/-10.88	-13.44/-12.23	-9.27/-7.42	-5.11/-5.62	-10.14/-12.27	-8.74/-8.20	-10.56/-7.04	-10.21/-15.41	-14.78/-12.45	-9.88/-15.41	-9.28/-11.43	-9.25/-3.67
Θ(150°)	-14.77/-9.93	-6.02/-5.32	-5.52/-9.35	-1.46/-10.98	-11.13/-8.03	-7.51/-13.72	-12.21/-9.94	-9.23/-8.32	-9.91/-10.10	-9.31/-9.90	-7.28/-6.20	-6.93/-6.55	-9.68/-10.23	-12.45/-12.36	-10.30/-10.32	-9.23/-10.86	-12.47/-9.88	-8.40/-8.71	-8.13/-6.10	-11.63/-13.09	-12.94/-15.01	-11.42/-8.02	-9.01/-8.10	
Θ(157.5°)	-11.20/-12.05	-10.46/-11.96	-15.22/-13.55	-7.46/-6.27	-8.32/-11.20	-12.96/-9.70	-8.68/-13.16	-15.88/-11.32	-9.30/-8.58	-8.55/-7.90	-6.51/-7.42	-10.70/-15.31	-14.72/-14.01	-13.89/-12.78	-12.21/-11.13	-11.82/-13.25	-12.64/-9.85	-7.81/-8.64	-9.85/-8.76	-8.06/-11.90	-14.29/-10.92	-14.60/-15.51	-14.42/-13.80	-10.43/-10.47
Θ(165°)	-14.52/-13.11	-13.58/-14.64	-13.35/-13.99	-15.19/-15.03	-15.77/-13.50	-10.98/-8.87	-9.42/-11.17	-11.18/-14.21	-11.07/-11.97	-14.08/-14.58	-14.14/-12.41	-10.88/-12.81	-15.92/-15.29	-14.97/-13.65	-13.52/-14.22	-12.22/-10.22	-10.19/-11.15	-14.55/-15.65	-10.28/-8.37	-9.47/-13.23	-13.60/-10.11	-9.73/-11.46	-11.76/-12.03	-13.30/-13.55
Θ(172.5°)	-11.09/-9.50	-7.42/-7.40	-7.07/-6.81	-7.67/-8.29	-9.41/-10.73	-12.99/-15.29	-14.58/-11.58	-9.58/-8.82	-8.61/-10.29	-12.15/-11.57	-11.71/-12.02	-12.97/-13.56	-14.86/-14.22	-13.36/-12.27	-12.21/-11.98	-12.99/-13.78	-15.68/-15.09	-15.89/-14.37	-13.85/-12.05	-11.93/-12.61	-13.09/-15.49	-15.29/-15.49	-15.43/-15.22	-15.06/-13.54
Θ(180°)	-10.48/-11.67	-12.17/-11.63	-10.52/-10.47	-10.77/-9.69	-9.12/-9.98	-10.97/-10.37	-10.07/-9.69	-8.91/-9.25	-10.02/-11.49	-12.81/-11.49	-9.70/-9.45	-8.08/-8.87	-8.09/-8.92	-6.96/-7.97	-8.40/-8.71	-9.81/-10.36	-10.55/-12.35	-11.69/-11.12	-11.75/-11.50	-12.97/-13.21	-13.76/-12.29	-10.89/-11.65	-12.01/-10.37	
Freq(Hz)	2.45GPol	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°)	-7.17/-6.95	-6.61/-6.31	-6.09/-6.15	-6.42/-6.78	-6.99/-7.09	-7.12/-6.96	-6.79/-6.97	-7.54/-7.81	-8.64/-9.05	-9.12/-8.81	-8.48/-8.18	-7.90/-7.77	-7.80/-7.81	-7.68/-7.94	-8.11/-8.33	-8.68/-9.09	-9.39/-9.39	-9.29/-9.40	-9.20/-8.64	-7.94/-7.31	-6.68/-6.17	-5.88/-5.86	-6.15/-6.62	-6.98/-7.17
Θ(7.5°)	-7.28/-7.25	-6.84/-6.60	-6.69/-6.92	-7.38/-7.71	-7.59/-7.08	-6.38/-6.51	-4.84/-4.36	-4.12/-4.00	-4.01/-4.14	-4.34/-1.30	-4.30/-4.36	-4.47/-4.88	-5.56/-6.37	-7.20/-7.87	-8.42/-9.05	-9.83/-10.69	-11.71/-12.07	-11.76/-11.52	-11.53/-11.36	-10.93/-10.15	-9.25/-8.60	-7.78/-7.17	-6.73/-6.73	-6.92/-7.15
Θ(15°)	-3.86/-3.78	-3.57/-3.53	-3.86/-4.68	-6.10/-8.05	-9.84/-9.92	-8.72/-6.67	-4.71/-3.33	-2.32/-1.74	-1.55/-1.61	-1.84/-2.07	-2.31/-2.46	-3.55/-4.24	-5.00/-5.75	-7.72/-8.57	-9.27/-8.85	-9.71/-9.67	-9.27/-8.85	-8.23/-7.73	-7.13/-6.54	-5.98/-5.39	-4.86/-4.36	-3.92/-3.71	-3.67/-3.90	
Θ(22.5°)	-1.85/-1.58	-1.16/-0.81	-0.80/-1.29	-2.41/-4.35	-7.11/-10.33	-10.57/-7.90	-4.91/-2.80	-1.41/-0.71	-0.47/-0.68	-1.12/-1.70	-2.21/-2.49	-2.58/-2.72	-2.94/-3.34	-3.81/-4.13	-4.37/-4.55	-4.83/-4.95	-4.91/-4.61	-4.33/-4.37	-4.06/-3.59	-3.08/-2.66	-2.34/-2.09	-1.98/-1.95	-1.90/-1.90	-1.88/-1.92
Θ(30°)	-0.75/-0.33	0.28/0.83	1.12/0.98	0.28/-0.95	-2.62/-4.78	-7.01/-7.39	-5.26/-2.97	-1.42/-0.57	-0.26/-0.41	-0.87/-1.46	-2.08/-2.49	-2.52/-2.26	-2.14/-2.38	-2.82/-3.11	-3.08/-2.98	-2.79/-2.49	-2.13/-1.93	-1.88/-1.90	-1.70/-1.27	-0.82/-0.54	-0.50/-0.66	-0.92/-1.08	-1.11/-1.08	-0.98/-0.92
Θ(37.5°)	0.09/0.66	1.34/-1.86	2.13/2.05	1.60/0.91	-0.06/-1.60	-3.74/-5.40	-4.13/-2.08	-0.90/-5.52	-0.70/-1.16	-1.50/-1.53	-1.40/-1.23	-0.94/-0.63	-0.71/-1.30	-2.08/-2.58	-2.60/-2.31	-1.79/-1.30	-0.92/-0.73	-0.73/-0.80	-0.06/-0.40	-0.33/-0.80	-1.13/-1.08	-0.83/-0.62	-0.45/-0.27	
Θ(45°)	0.73/-1.70	2.48/2.87	2.95/2.73	2.31/-1.91	1.41/0.23	-1.90/-3.39	-2.10/-0.24	0.57/0.40	-0.48/-1.56	-2.01/-1.39	-0.46/-0.12	0.38/0.42	0.16/-0.49	-1.34/-2.03	-2.23/-1.87	-1.30/-0.85	-0.71/-0.64	-0.62/-0.61	-0.40/-0.00	0.25/0.11	-0.42/-1.06	-1.22/-0.89	-0.50/-0.38	-0.50/-0.06
Θ(52.5°)	1.05/2.44	3.29/3.55	3.44/3.05	2.56/2.29	1.91/0.63	-1.62/-2.36	-0.44/-1.21	1.71/-1.38	0.49/-0.69	-1.28/-0.49	0.62/-1.28	1.43/-1.17	0.56/-0.31	-1.18/-1.63	-1.53/-1.08	-0.57/-0.39	-0.51/-0.66	-0.77/-0.78	-0.47/0.04	0.28/0.04	-0.53/-1.04	-1.10/-1.02	-0.38/-0.41	-0.66/-0.28
Θ(60°)	0.84/2.47	3.35/3.54	3.89/2.94	2.43/2.22	1.89/0.59	-1.47/-1.91	-0.21/-1.14	1.52/-1.38	0.96/0.18	-0.72/-0.56	0.52/-1.41	1.81/-1.76	1.20/0.24	-0.83/-1.25	-0.98/-0.47	-0.02/0.19	-0.05/-0.44	-0.82/-1.04	-0.76/-0.42	-0.25/-0.44	-0.77/-1.05	-1.00/-0.61	-0.23/-0.30	-0.83/-0.71
Θ(67.5°)	0.07/1.81	2.75/2.92	2.87/2.65	2.26/2.01	1.51/0.10	-1.54/-1.74	-0.57/0.41	0.79/0.79	0.63/-0.07	-1.09/-1.18	-0.17/0.78	1.38/-1.65	1.47/0.71	-0.93/-1.15	-1.20/-0.87	-0.30/-0.05	-0.30/-0.73	-0.95/-0.96	-0.83/-0.76	-0.64/-0.52	-0.54/-0.76	-0.89/-0.85	-0.40/-0.24	-0.87/-1.25
Θ(75°)	-1.08/0.70	1.37/-1.29	1.58/2.00	1.94/-1.47	0.62/-0.90	-2.39/-2.86	-2.00/-0.61	0.26/0.38	0.12/-0.63	-2.15/-3.16	-2.14/-0.79	-0.06/0.54	1.03/-1.15	0.68/-0.10	-0.72/-1.12	-0.8								

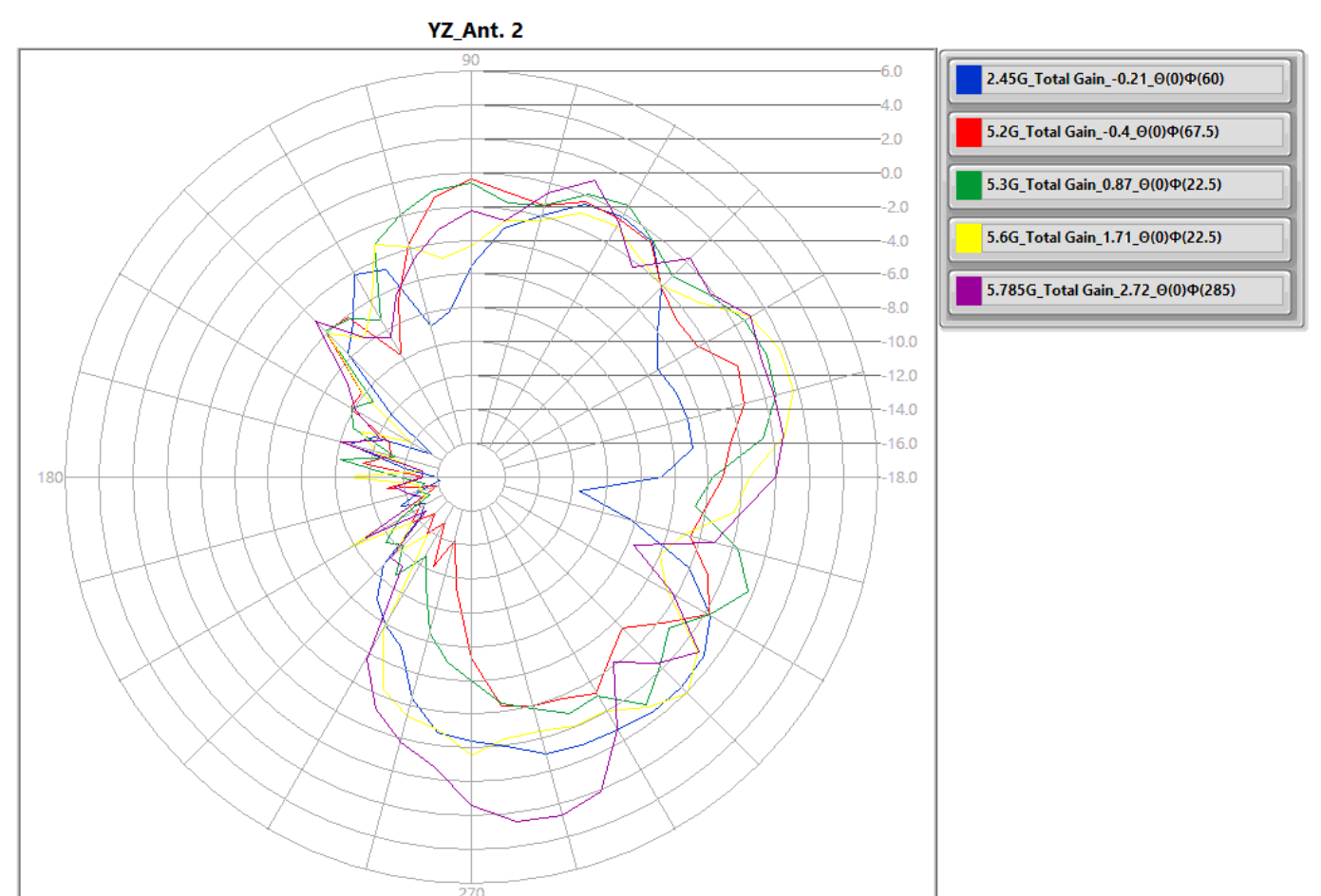
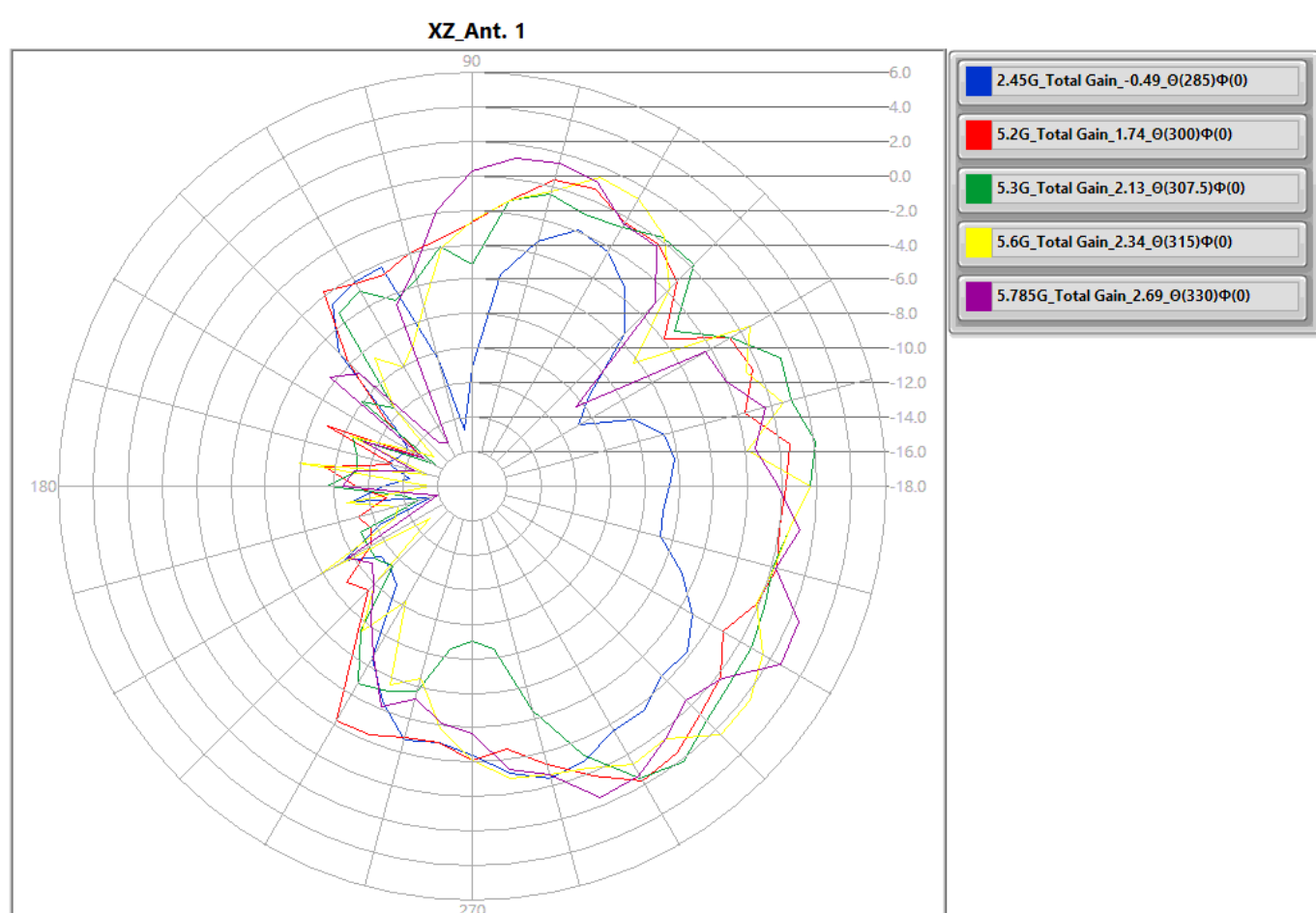
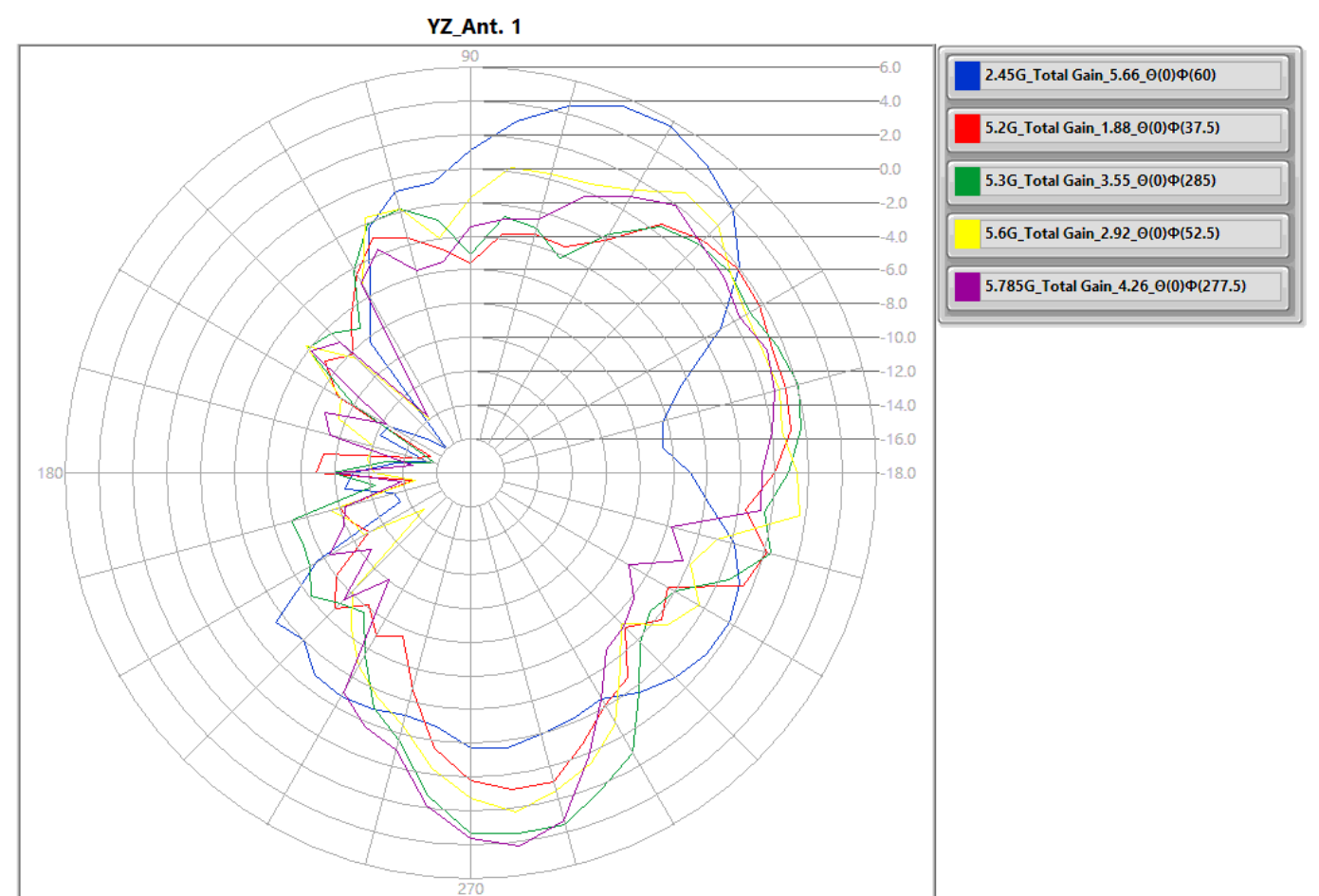
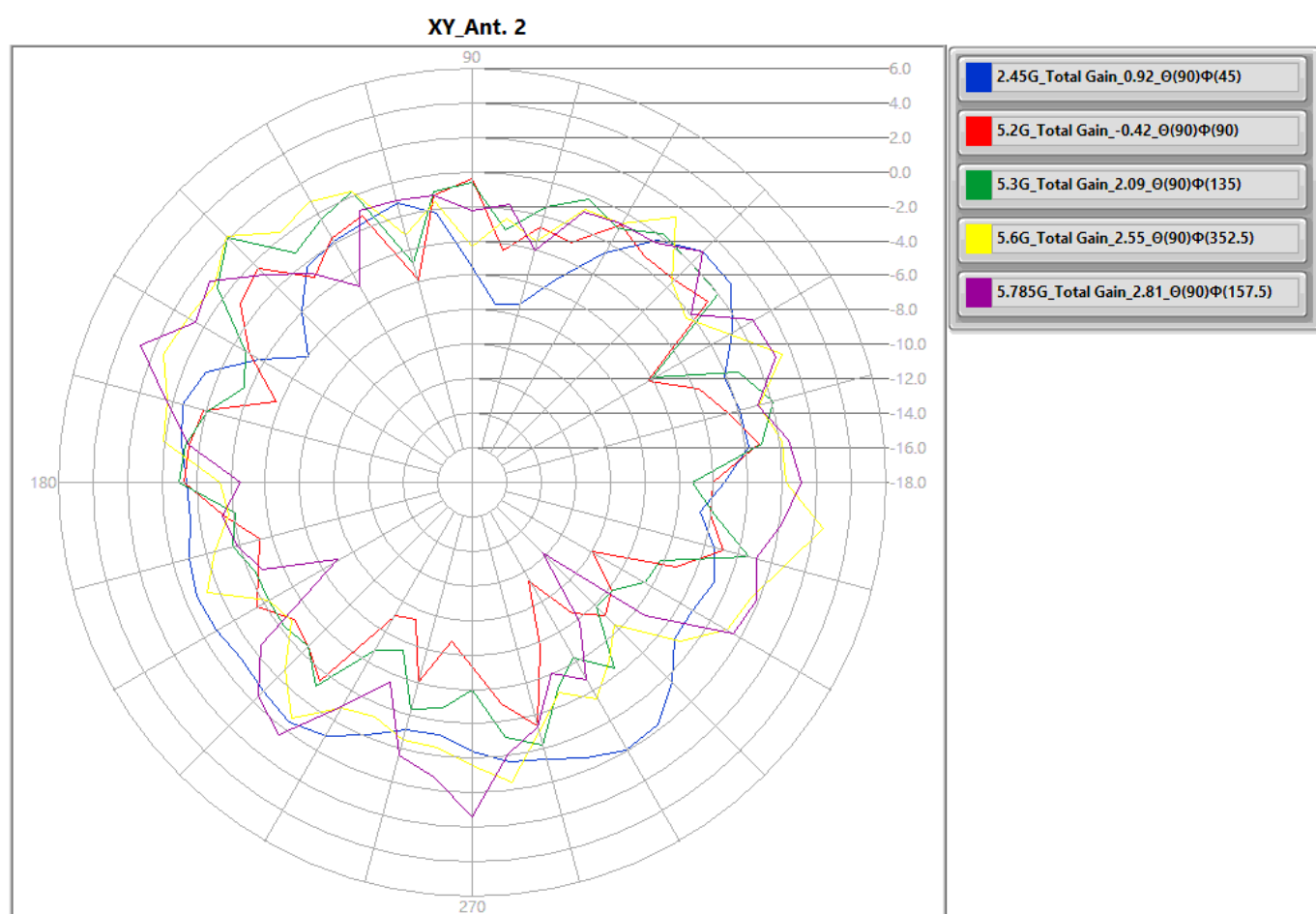
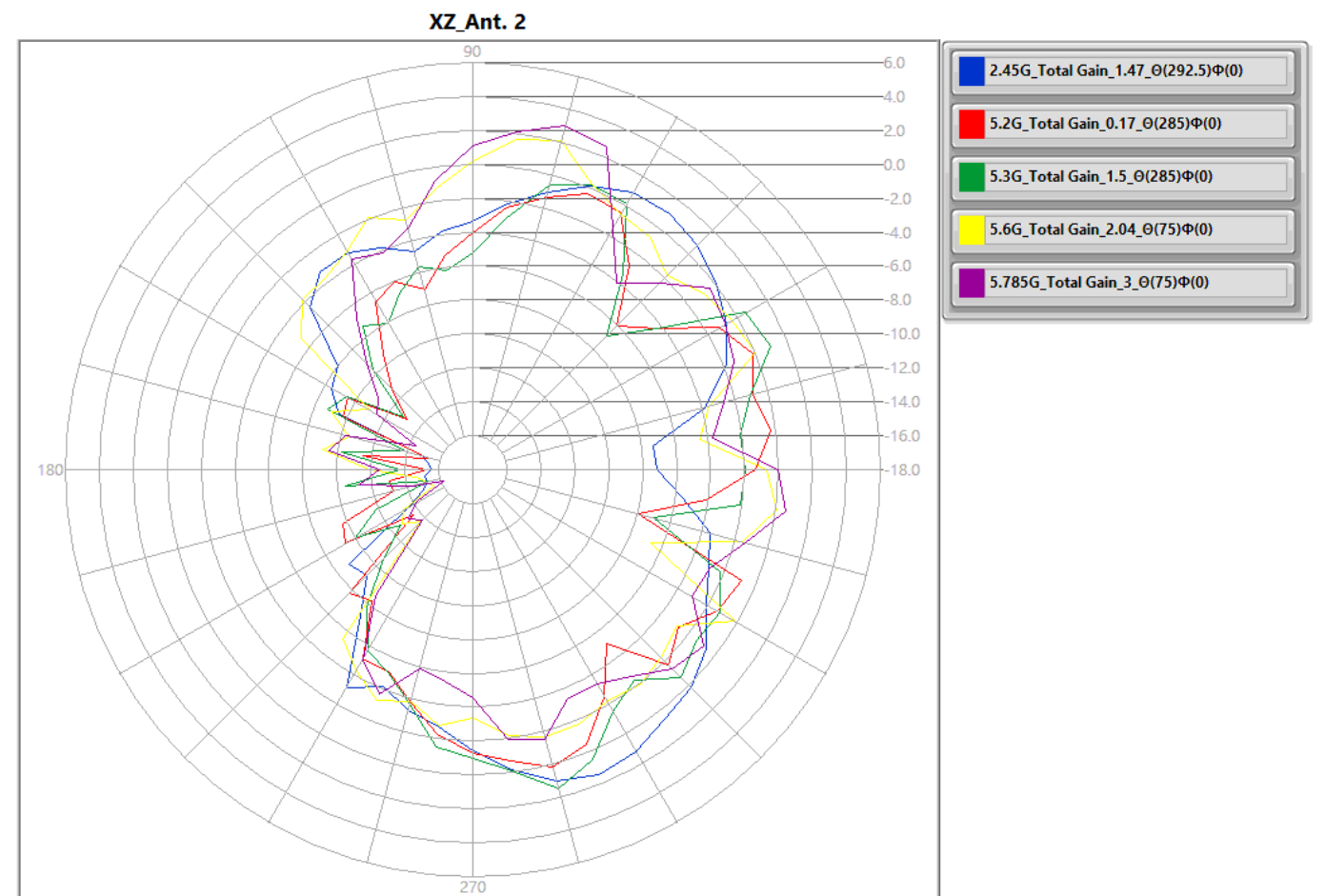
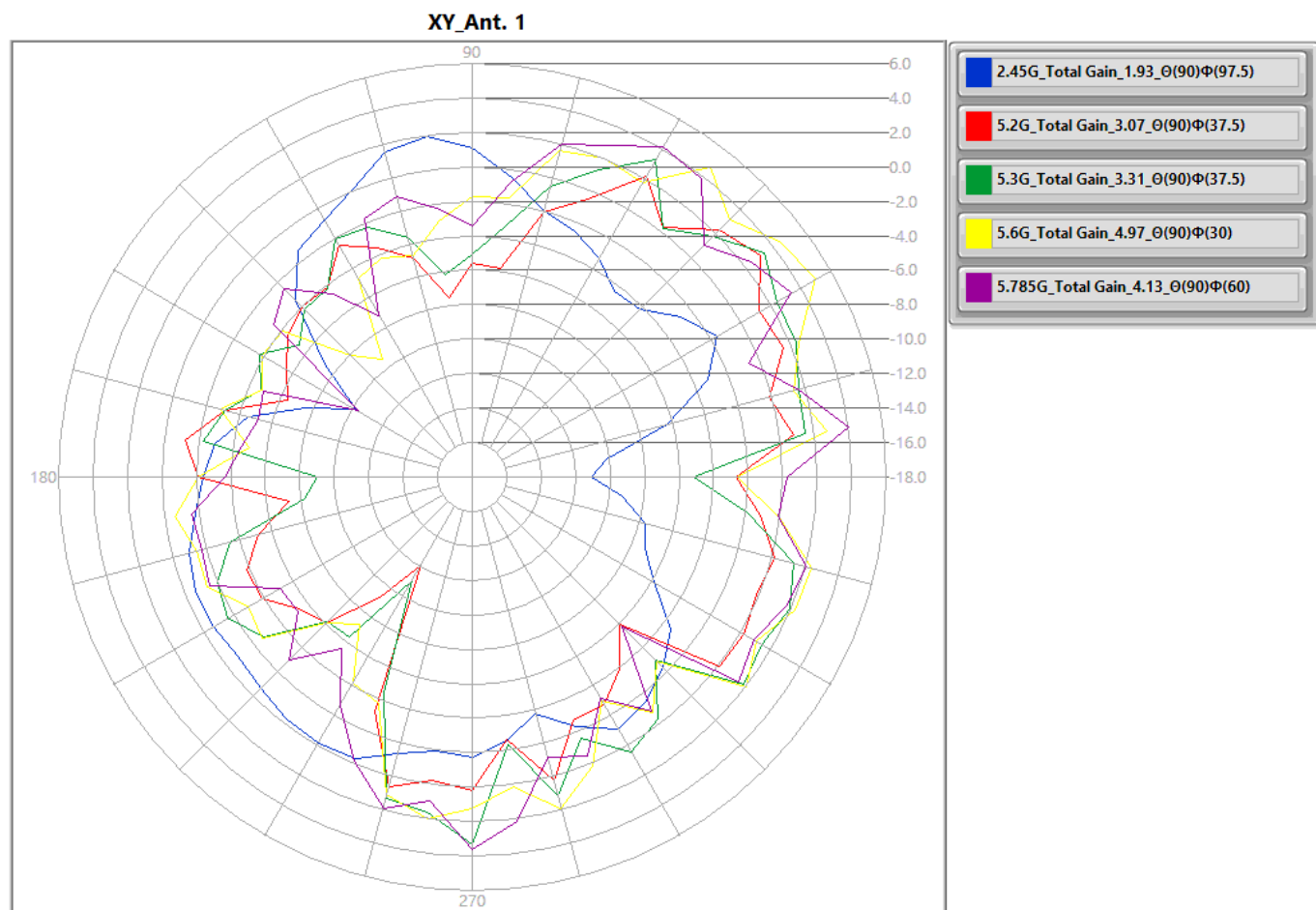


Antenna Pattern of 2.4GHz/5GHz

Appendix B.1

Θ(67.5°)	0.26/-0.53	0.73/-1.82	2.85/2.83	3.70/3.62	3.47/1.06	1.82/-0.09	-1.12/1.54	1.25/-0.29	-0.33/2.52	3.21/3.57	2.29/3.58	2.01/1.01	-1.74/0.99	2.20/-4.20	-1.88/-3.70	-6.21/-3.57	-3.68/-1.29	-1.13/-1.90	-2.06/0.19	-1.11/-1.18	-1.28/-2.34	-4.11/-3.15	-0.33/0.79	0.78/1.34
Θ(75°)	2.04/-0.32	0.49/2.86	3.10/2.22	3.22/3.93	3.33/-0.74	1.45/-0.75	-2.32/2.27	1.94/-1.34	0.30/2.79	3.97/3.84	3.11/4.50	3.02/0.94	-1.66/-1.77	2.37/-2.69	-3.83/-2.54	-3.89/-2.29	-1.63/-1.15	-0.97/-0.24	-2.45/1.02	-0.20/-0.98	-1.31/-2.68	-3.55/-1.39	1.23/1.63	1.65/3.58
Θ(82.5°)	1.66/0.07	0.29/2.86	1.69/0.13	0.89/3.38	1.90/-1.26	-0.54/-1.85	-2.71/0.99	-0.02/0.03	1.25/2.22	3.78/2.53	2.56/3.50	2.37/0.12	-2.17/-2.30	0.75/-1.91	-3.93/-4.06	-3.06/-0.02	-1.42/-1.47	-1.69/-0.36	-2.44/1.05	-1.65/-2.22	-1.95/-3.59	-4.67/-1.56	0.66/1.27	1.76/3.89
Θ(90°)	0.22/0.13	-0.78/1.50	-0.82/-2.35	-1.62/1.36	-0.69/-0.90	-3.52/2.54	-4.31/-1.56	-3.13/0.23	0.83/0.27	2.15/0.85	1.03/1.35	0.30/0.08	-3.34/-3.76	-2.56/-1.34	-4.32/-4.79	-2.63/-0.76	-2.89/-3.30	-2.57/-2.52	-1.55/-0.48	-2.97/-4.80	-3.52/-4.97	-6.36/-2.83	-0.90/-0.48	0.80/2.55
Θ(97.5°)	-1.27/-0.61	-1.94/-0.56	-3.38/-3.11	-3.45/-0.02	-1.78/0.36	-2.96/-3.42	-4.93/-1.25	-6.76/-1.86	-0.49/-2.60	0.31/-2.23	-1.28/-2.06	-1.70/-2.77	-2.75/-5.50	-4.77/-4.10	-5.56/-5.15	-3.43/-1.93	-6.04/-5.87	-2.79/-3.74	-2.92/-3.02	-6.21/-6.67	-6.68/-5.88	-4.52/-4.52	-2.76/-2.57	0.06/1.40
Θ(105°)	-2.74/-1.37	-3.03/-1.67	-6.46/-3.78	-3.68/-0.51	-1.33/-0.09	-1.65/-7.90	-3.95/-3.33	-6.46/-4.71	-3.20/-2.86	-1.27/-3.14	-4.47/-5.17	-3.30/-4.85	-3.82/-5.59	-6.64/-5.11	-8.39/-10.11	-4.40/-5.94	-7.93/-7.49	-2.57/-4.01	-3.37/-7.14	-7.26/-6.60	-9.97/-8.05	-5.07/-6.35	-4.99/-3.10	-1.38/-0.99
Θ(112.5°)	-1.94/-1.86	-4.47/-0.91	-6.36/-3.04	-6.09/-2.49	-2.07/0.61	0.57/-6.77	-3.12/-6.67	-4.76/-4.52	-7.79/-4.75	-3.51/-6.57	-7.20/-8.63	-4.22/-6.71	-3.31/-7.83	-8.63/-7.17	-8.55/-12.84	-6.31/-9.07	-9.12/-9.98	-4.66/-4.28	-4.43/-9.89	-7.77/-7.97	-9.36/-6.05	-4.60/-5.28	-5.53/-6.61	-1.71/-2.58
Θ(120°)	-3.14/-2.45	-4.18/-3.18	-6.36/-2.33	-6.99/-5.19	-4.97/-1.29	-1.59/-4.53	-6.23/-14.04	-5.41/-6.23	-6.41/-6.52	-4.36/-12.02	-11.73/-10.01	-7.14/-9.30	-4.26/-9.31	-8.24/-10.79	-11.07/-15.80	-5.78/-7.60	-8.43/-7.62	-5.39/-6.25	-7.53/-7.68	-8.75/-8.56	-6.02/-6.00	-7.44/-6.46	-6.23/-6.18	-2.96/-4.65
Θ(127.5°)	-3.77/-3.04	-5.16/-5.32	-5.10/-4.44	-7.63/-6.72	-3.83/-4.01	-4.50/-4.75	-7.64/-8.05	-10.93/-10.05	-4.58/-4.01	-10.21/-15.10	-14.82/-7.19	-9.13/-8.91	-5.43/-14.71	-11.02/-11.15	-14.65/-11.48	-6.24/-6.56	-9.13/-8.46	-7.52/-7.68	-13.73/-7.39	-8.35/-6.91	-6.71/-10.34	-8.87/-5.22	-5.73/-2.41	-2.83/-6.65
Θ(135°)	-3.83/-5.11	-7.28/-5.77	-8.35/-5.77	-4.56/-6.59	-6.93/-11.97	-4.84/-4.08	-5.98/-4.16	-8.98/-15.64	-9.71/-6.28	-7.12/-8.54	-13.61/-8.84	-9.02/-10.02	-13.64/-15.45	-11.16/-11.31	-10.45/-11.75	-8.92/-7.28	-13.95/-8.61	-7.29/-6.75	-11.60/-10.43	-9.42/-8.41	-7.33/-6.44	-9.14/-8.05	-6.28/-2.01	-2.82/-7.20
Θ(142.5°)	-5.27/-7.31	-5.69/-4.12	-8.53/-6.78	-6.63/-11.81	-9.35/-11.61	-10.25/-11.67	-9.97/-6.76	-6.29/-9.55	-14.31/-11.94	-8.59/-12.04	-7.76/-4.86	-9.49/-15.35	-12.72/-10.51	-15.20/-15.39	-11.12/-7.56	-10.75/-14.00	-9.77/-9.62	-9.07/-9.56	-13.63/-11.89	-10.24/-11.83	-10.70/-8.92	-9.09/-10.68	-6.66/-4.46	-6.29/-6.52
Θ(150°)	-10.93/-11.18	-7.32/-8.58	-13.81/-8.62	-8.96/-13.46	-9.48/-9.20	-15.35/-14.87	-13.90/-13.16	-11.68/-13.12	-15.61/-13.72	-13.07/-12.41	-12.94/-10.58	-13.82/-13.58	-13.30/-13.48	-8.28/-11.35	-11.65/-11.93	-14.90/-15.87	-11.46/-11.96	-13.77/-11.65	-9.71/-10.25	-12.55/-12.87	-11.70/-12.10	-12.08/-9.33	-5.46/-4.40	-4.94/-7.14
Θ(157.5°)	-9.01/-9.58	-11.06/-12.09	-12.26/-11.03	-13.27/-14.48	-10.85/-10.26	-11.43/-12.41	-11.02/-12.13	-14.37/-13.95	-10.27/-10.33	-14.28/-12.83	-12.84/-13.20	-11.87/-12.50	-15.48/-12.67	-8.69/-10.33	-14.12/-13.00	-12.45/-13.79	-13.90/-14.84	-14.12/-15.29	-15.12/-15.20	-13.62/-13.06	-12.81/-11.67	-9.27/-7.73	-6.61/-6.43	-8.04/-9.41
Θ(165°)	-10.46/-10.97	-14.13/-15.27	-13.45/-11.52	-10.56/-11.75	-11.94/-11.48	-11.77/-11.21	-12.12/-11.95	-11.40/-9.30	-8.83/-10.83	-15.45/-15.29	-13.66/-13.59	-14.09/-15.48	-15.16/-14.23	-11.89/-12.79	-15.74/-14.23	-10.62/-9.03	-8.01/-8.35	-9.39/-11.83	-14.94/-14.53	-13.23/-12.21	-12.81/-13.16	-10.20/-8.12	-7.97/-8.45	-9.17/-10.62
Θ(172.5°)	-9.07/-8.60	-8.80/-9.25	-10.13/-11.26	-12.42/-13.62	-13.14/-14.18	-15.19/-14.91	-15.03/-15.69	-15.06/-13.21	-12.02/-10.47	-10.00/-11.62	-13.06/-14.34	-13.83/-14.06	-14.63/-16.15	-15.93/-14.68	-14.35/-13.20	-12.52/-12.30	-12.00/-11.77	-13.00/-14.89	-14.82/-13.78	-12.18/-11.17	-10.79/-9.72	-8.44/-7.85	-7.90/-8.64	-9.92/-10.59
Θ(180°)	-11.89/-12.30	-12.45/-11.91	-11.23/-11.50	-11.37/-10.51	-10.63/-10.29	-10.61/-10.61	-10.72/-12.31	-14.02/-12.36	-9.98/-8.45	-8.83/-9.10	-10.25/-10.05	-10.57/-11.13	-10.32/-10.36	-9.51/-9.65	-10.44/-10.08	-10.62/-11.15	-11.49/-11.48	-11.24/-11.12	-10.48/-10.01	-9.53/-9.77	-9.86/-9.98	-11.04/-11.49	-11.45/-11.70	-11.17/-10.42
Freq(Hz)	5.785GPol.	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°)	-0.00/-0.04	0.04/-0.00	-0.05/-0.00	0.17/0.34	0.39/0.47	0.27/0.08	-0.05/-0.02	0.05/0.12	0.24/-0.02	-0.44/-0.59	-0.62/-0.69	-0.52/-0.77	-0.89/-1.00	-1.40/-1.16	-0.92/-1.15	-1.21/-0.74	-0.80/-0.73	-0.52/-0.73	-1.02/-0.82	-0.72/-0.45	-0.23/-0.17	0.02/-0.09	-0.28/-0.03	0.22/0.02
Θ(7.5°)	-3.73/-2.99	-2.31/-2.07	-1.67/-1.19	-0.79/-0.44	0.00/0.13	0.22/0.36	0.55/0.75	0.75/0.94	1.24/1.37	0.95/0.68	0.88/0.93	1.13/0.98	0.61/0.54	0.21/0.27	0.24/0.04	-0.19/-0.23	-0.59/-0.83	-1.07/-1.41	-1.85/-2.12	-2.40/-2.73	-2.77/-2.74	-2.68/-2.80	-3.36/-3.90	-4.36/-4.57
Θ(15°)	-2.70/-3.27	-3.32/-2.61	-1.58/-0.52	0.11/0.54	0.50/-0.08	-0.24/-0.08	0.51/1.39	2.03/2.31	1.02/1.82	1.02/-0.06	-0.53/-0.79	-0.97/-1.02	-1.39/-1.70	-1.96/-1.92	-1.88/-1.44	-0.88/-0.97	-1.02/-1.43	-2.20/-2.99	-3.17/-3.24	-2.33/-1.74	-1.23/-1.01	-0.95/-1.13	-1.75/-2.20	
Θ(22.5°)	-1.34/-0.64	-0.36/-0.40	-0.99/-1.29	-1.38/-1.26	-1.90/-3.02	-2.93/-1.31	0.51/1.34	1.37/0.96	0.42/-0.24	-0.94/-1.17	-1.24/-1.87	-2.52/-3.08	-2.85/-2.28	-2.92/-4.79	-7.35/-5.97	-4.32/-3.78	-3.80/-4.61	-7.00/-8.14	-7.61/-6.65	-5.40/-4.82	-3.93/-3.50	-3.70/-4.32	-4.37/-3.63	-2.64/-1.84
Θ(30°)	-0.81/-0.36	0.13/-0.07	-0.84/-1.00	-1.17/-0.95	-0.72/-1.01	-1.14/-0.00	1.07/0.79	-0.79/-1.92	-2.44/-2.19	-2.07/-2.09	-1.63/-0.86	-0.54/-1.53	-3.10/-3.70	-3.17/-4.23	-7.73/-10.23	-11.35/-9.85	-7.21/-6.38	-7.40/-6.58	-4.31/-3.67	-4.37/-4.64	-4.22/-4.64	-6.13/-8.21	-9.61/-8.17	-4.64/-2.11
Θ(37.5°)	-0.40/-0.33	-0.87/-0.90	0.48/1.91	1.53/-0.18	-0.95/-2.30	-5.55/-3.00	-0.18/-0.08	-0.16/-0.28	-1.18/-1.53	-1.98/-2.91	-3.95/-2.75	-0.36/0.21	-0.86/-2.13	-2.99/-4.06	-5.56/-4.39	-4.27/-6.56	-6.84/-4.94	-4.03/-2.50	-1.04/-1.61	-3.55/-4.85	-3.38/-2.44	-3.45/-4.33	-5.66/-5.02	-3.19/-1.57
Θ(45°)	-2.50/-0.41	-0.61/-0.34	1.07/2.02	1.65/-0.35	-0.63/-2.76	-5.40/-1.62	0.33/1.19	1.66/1.48	-0.51/-1.79	-2.95/-1.59	-0.81/-0.22	1.13/0.88	-1.38/-2.88	-2.10/-1.96	-3.41/-2.59	-2.60/-6.38	-8.27/-4.34	-3.06/-2.22	-2.46/-2.98	-3.41/-4.26	-3.70/-3.52	-5.33/-6.70	-5.02/-2.39	-1.50/-2.70
Θ(52.5°)	-4.13/-0.11	0.82/0.61	1.68/1.46	1.33/0.38	0.59/-1.72	-2.37/-1.31	-2.39/-1.02	0.58/1.32	-1.28/-2.80	-1.89/-0.68	0.12/1.13	1.85/0.27	-2.67/-1.76	-0.74/-1.85	-5.32/-3.91	-5.54/-11.30	-11.70/-4.71	-2.79/-4.11	-4.19/-2.91	-3.74/-4.59	-4.19/-4.71	-7.73/-8.89	-4.51/-3.00	-2.25/-2.46
Θ(60°)	-1.49/0.28	1.60/0.40	1.10/1.77	2.87/1.75	1.80/-0.79	-1.42/-0.48	-0.56/-0.88	0.50/1.85	-0.28/-2.48	-2.17/0.55	1.84/3.54	2.88/1.59	-3.45/-1.23	-0.12/-2.22	-3.80/-3.85	-3.66/-6.37	-7.75/-5.02	-2.73/-4.17	-0.76/-0.46	-2.74/-3.15	-2.66/-2.22	-4.81/-6.07	-2.31/-0.79	-0.43/-0.21
Θ(67.5°)	2.58/0.36	1.94/1.61	1.51/2.16	3.45/1.97	2.67/0.26	-1.15/1.09	1.00/0.33	1.53/0.75	-1.80/-0.52	-0.04/2.80	4.61/5.79	3.81/1.65	-3.35/-0.81	-0.01/-3.38	-1.88/-2.03	-1.22/-1.86	-4.75/-5.33	-1.11/-1.54	2.09/0.52	-2.55/-1.14	-0.95/-1.70	-2.05/-2.97	0.40/1.59	-0.03/2.52
Θ(75°)	3.00/0.26	1.84/2.47	1.79/1.67	3.08/2.12	2.74/0.50	-1.08/1.26	-0.63/0.97	3.09/0.35	-3.31/-0.47	0.41/3.27	4.22/6.20	3.79/1.76	-1.57/-2.80	0.50/-3.54	-2.36/-1.90	-0.75/1.03	-1.52/-4.21	-0.09/0.63	2.72/1.01	-2.46/-1.09	-1.92/-2.53	-2.56/-3.15	0.74/2.51	0.66/2.99
Θ(82.5°)	2.06/0.78	1.00/2.22	1.71/0.43	2.12/1.56	1.63/-0.05	-0.84/-0.02	-2.69/0.82	2.15/0.09	-3.88/-0.97	0.54/2.69	3.46/5.14	2.10/-0.16	-1.93/-2.42	-1.42/-7.85	-2.79/-1.15	0.59/1.42	-1.09/-3.74	0.19/0.04	2.51/-0.32	-2.53/-2.32	-3.07/-4.56	-6.05/-5.12	0.48/1.69	0.24/1.71
Θ(90°)	1.06/0.54	-0.86/1.07	0.81/-1.96	0.92/-0.51	-0.71/-1.02	-4.06/-1.75	-2.25/-1.19	-1.07/-0.92	-4.91/-2.70	-0.93/1.22	0.57/2.81	0.39/-1.41	-4.54/-3.40	-3.84/-4.85	-9.03/-2.55	-0.47/0.41	-3.08/-5.49	-1.65/-0.75	1.38/-2.14	-3.34/-6.01	-4.78/-7.79	-12.21/-5.32	-0.53/-0.14	-0.96/0.11
Θ(97.5°)	-0.87/-0.42	-3.81/-0.68	-0.51/-5.52	-0.34/-1.46	-1.42/-1.22	-8.35/-2.87	-3.24/-2.37	-5.10/-2.41	-5.76/-4.05	-0.28/0.08	-1.50/-0.14	-1.11/-4.62	-5.42/-3.82	-6.38/-6.87	-11.81/-4.12	-1.15/-2.40	-9.57/-7.99	-3.87/-3.35	-0.75/-4.77	-5.53/-8.73	-5.96/-10.25	-12.09/-4.68	-1.94/-2.37	-1.83/-1.27
Θ(105°)	-3.23/-2.14	-4.79/-2.40	-3.27/-7.29	-2.50/-1.80	-1.47/-0.70	-4.90/-4.10	-4.73/-2.51	-7.36/-5.32	-10.56/-2.53	-2.35/-1.11	-3.55/-3.32	-2.52/-4.74	-5.86/-6.80	-5.02/-7.30	-11.38/-9.07	-4.71/-4.89	-15.07/-12.79	-4.79/-4.00	-1.80/-5.45	-7.80/-11.26	-7.54/-8.25	-8.60/-6.32	-1.92/-4.41	-3.56/-2.51
Θ(112.5°)	-4.20/-2.11	-3.08/-3.56	-5.82/-5.67	-5.13/-1.75	-1.94/-0.26	-0.94/-7.06	-6.43/-4.21	-4.46/-6.37	-12.51/-4.14	-4.30/-4.64	-2.86/-7.89	-2.96/-8.00	-3.72/-7.27	-6.21/-7.32	-13.96/-9.34	-4.99/-6.43	-12.83/-10.13	-5.43/-3.71	-3.20/-6.68	-9.75/-11.50	-8.01/-6.57	-7.66/-6.86	-3.89/-4.76	-2.98/-2.86
Θ(120°)	-3.71/-2.86	-4.18/-3.31	-4.83/-8.02	-7.46/-3.77	-5.63/-2.22	-1.15/-4.37	-8.50/-11.35	-																

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/6GHz

Appendix B.2

Total Gain Data

Freq(Hz)	5.2G/Pol.	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°)	9.64/58	9.57/57	9.53/59	9.66/70	9.71/80	9.89/90	10.02/10.14	10.19/10.10	10.07/10.03	9.93/90	9.68/82	9.59/54	9.37/9	9.08/9	8.69/8	9.12/9.1	9.38/49	9.58/9.1	9.70/8.1	9.86/9.2	9.89/8.4	9.81/8.7	9.73/9.6	
Θ(7.5°)	8.72/66	8.62/64	8.69/8.81	9.00/9.17	9.34/9.60	9.81/9.90	10.02/10.26	10.49/10.54	10.48/10.48	10.47/10.41	10.38/10.28	10.19/10.13	9.98/9.79	9.64/9.53	9.43/9.36	9.32/9.30	9.39/9.41	9.35/9.30	9.34/9.38	9.40/9.32	9.24/9.21	9.12/9.06	9.03/8.99	8.94/8.79
Θ(15°)	8.24/7.94	7.67/7.56	7.47/7.52	7.69/7.92	8.20/8.55	8.79/8.90	9.07/9.33	9.52/9.65	9.74/8.79	9.73/9.75	9.76/9.65	9.50/9.35	9.18/9.02	8.84/8.71	8.59/8.41	8.30/8.37	8.47/8.54	8.52/8.53	8.62/8.75	8.87/8.88	8.79/8.72	8.67/8.57	8.51/8.47	8.54/8.43
Θ(22.5°)	7.09/6.86	6.41/5.97	5.39/5.10	5.18/5.63	6.03/6.44	6.71/6.96	7.28/7.64	7.95/8.33	8.68/8.91	8.98/9.00	8.97/8.72	7.29/6.89	6.57/6.46	6.36/6.16	6.00/6.00	6.14/6.45	6.80/7.12	7.34/7.52	7.60/7.71	7.77/7.66	7.43/7.07	6.76/6.68	6.91/7.09	
Θ(30°)	4.09/3.71	3.25/2.42	0.88/0.38	-0.70/-0.45	-0.08/0.85	2.06/3.10	4.07/4.97	5.89/6.83	7.65/8.10	8.25/8.30	8.12/7.82	7.28/6.34	5.33/4.33	3.42/2.74	2.57/2.22	1.75/1.49	2.05/3.29	4.47/5.34	5.82/5.96	5.95/5.85	5.63/5.41	5.15/4.91	4.76/4.50	4.33/4.23
Θ(37.5°)	1.09/-0.49	-1.53/-2.89	-6.05/-9.98	-11.32/-10.88	-10.21/-7.29	-4.02/-1.81	0.18/2.06	3.82/5.32	6.43/6.82	6.58/6.20	5.84/5.50	5.02/4.02	2.74/1.06	-1.39/-3.60	-4.42/-6.63	-3.79/-1.07	1.51/3.25	3.91/3.66	3.31/3.40	3.36/3.23	3.32/3.35	3.18/2.42		
Θ(45°)	-1.80/-4.47	-5.33/-4.00	-3.68/-2.95	-1.89/-1.26	-2.17/-4.30	-5.39/-5.01	-4.27/-2.42	0.14/2.17	3.40/3.49	2.61/2.04	2.23/2.28	1.97/1.23	-0.03/-2.14	-5.10/-8.90	-1.41/-9.49	-7.18/-5.94	-7.26/-10.05	-4.15/0.02	1.75/2.13	1.94/1.68	1.58/1.48	1.21/0.76	0.66/0.92	0.97/0.23
Θ(52.5°)	-2.80/-5.85	-6.36/-3.08	-0.96/-0.37	-0.25/0.39	0.21/-1.59	-2.61/-2.78	-4.36/-6.23	-5.26/-2.02	0.20/0.57	-0.94/-1.93	-0.92/-0.62	-1.15/-2.21	-3.39/-4.64	-4.97/-4.38	-4.81/-5.19	-3.91/-2.83	-3.95/-7.32	-9.46/-4.05	-1.45/-0.69	-0.91/-1.66	-2.22/-2.76	-3.59/-4.52	-3.88/-1.63	-0.05/-0.33
Θ(60°)	-3.72/-6.25	-6.97/-3.80	-1.18/-1.26	-1.47/-0.99	-0.84/-0.95	-1.17/-1.38	-3.16/-6.45	-8.42/-5.97	-2.92/-1.67	-3.84/-5.53	-2.37/-1.61	-2.76/-3.89	-5.30/-8.15	-7.18/-4.05	-3.61/-3.78	-3.94/-2.58	-2.12/-4.41	-0.97/-1.50	-3.77/-2.45	-2.94/-5.29	-7.22/-7.77	-7.86/-11.08	-8.97/-3.80	-1.42/-1.21
Θ(67.5°)	-5.61/-6.48	-8.08/-6.72	-3.10/-1.35	-3.56/-2.81	-2.45/-1.49	-1.61/-1.61	-2.97/-6.08	-7.40/-6.07	-4.32/-4.50	-8.11/-8.77	-3.87/-3.15	-7.36/-11.11	-9.95/-4.59	-5.63/-4.96	-5.75/-4.65	-3.47/-5.03	-9.64/-10.24	-6.93/-4.58	-4.54/-5.99	-12.58/-11.30	-11.77/-11.91	-9.48/-4.73	-4.12/-4.24	
Θ(75°)	-6.26/-6.47	-9.31/-8.53	-5.85/-5.81	-6.54/-4.72	-4.74/-3.70	-4.31/-4.75	-4.88/-6.99	-7.76/-7.06	-6.57/-7.85	-11.12/-15.25	-7.06/-5.11	-7.66/-6.84	-7.43/-11.58	-14.04/-9.29	-6.15/-7.38	-8.98/-7.34	-5.58/-7.50	-8.75/-11.38	-8.14/-6.35	-7.65/-11.48	-11.51/-11.79	-11.86/-12.82	-8.42/-6.43	-7.73/-7.11
Θ(82.5°)	-8.31/-6.98	-8.63/-7.94	-8.04/-10.96	-10.59/-5.70	-5.32/-4.85	-5.57/-7.68	-8.08/-9.31	-8.96/-8.10	-7.54/-8.27	-9.56/-15.45	-9.03/-8.15	-9.84/-8.95	-8.85/-9.37	-11.22/-12.71	-10.56/-11.39	-11.94/-9.96	-7.80/-9.81	-11.84/-14.14	-8.79/-7.15	-10.13/-11.66	-9.14/-11.19	-10.37/-12.67	-8.40/-7.76	-9.24/-8.69
Θ(90°)	-9.84/-7.22	-7.87/-7.55	-8.83/-14.88	-12.81/-6.03	-5.39/-6.19	-7.02/-10.39	-13.21/-12.28	-9.46/-7.36	-7.43/-7.62	-8.44/-12.41	-10.81/-10.03	-11.05/-9.90	-10.28/-15.16	-15.36/-14.67	-15.49/-13.24	-10.09/-10.32	-13.69/-15.14	-9.42/-6.91	-10.58/-13.07	-9.43/-13.94	-11.89/-13.76	-8.12/-7.56	-11.03/-10.64	
Θ(97.5°)	-8.80/-6.73	-6.74/-7.01	-9.48/-15.26	-12.42/-6.07	-6.98/-8.57	-8.52/-9.82	-13.64/-12.39	-10.75/-8.58	-7.22/-6.06	-7.38/-11.71	-11.35/-11.13	-11.01/-9.76	-10.53/-8.83	-8.13/-13.25	-15.31/-14.71	-15.18/-14.69	-9.19/-10.96	-14.85/-15.36	-12.07/-8.67	-11.92/-13.18	-10.05/-12.63	-10.62/-13.06	-8.69/-8.72	-13.88/-11.96
Θ(105°)	-8.96/-6.65	-7.55/-6.42	-9.48/-14.19	-11.75/-6.76	-8.27/-10.04	-9.59/-8.88	-15.18/-14.81	-14.23/-8.61	-8.68/-7.33	-8.00/-12.66	-11.17/-10.29	-12.88/-9.30	-10.75/-11.01	-9.70/-11.18	-13.58/-14.75	-15.47/-15.41	-9.54/-11.31	-14.77/-15.70	-12.83/-13.64	-13.09/-14.69	-11.58/-13.00	-15.75/-10.85	-11.38/-13.55	-13.01/-11.43
Θ(112.5°)	-9.18/-7.20	-8.31/-9.11	-10.94/-10.30	-11.14/-9.24	-9.90/-9.28	-8.98/-9.18	-13.95/-12.51	-15.49/-9.91	-9.17/-8.52	-8.94/-12.85	-9.82/-10.98	-11.80/-9.21	-10.83/-13.48	-13.80/-11.13	-11.57/-13.36	-14.77/-14.33	-11.88/-12.90	-14.80/-15.53	-13.02/-12.47	-10.48/-14.85	-12.13/-12.96	-15.08/-10.70	-12.78/-15.21	-13.12/-11.29
Θ(120°)	-8.74/-7.39	-10.36/-10.74	-10.48/-8.58	-10.93/-12.51	-11.85/-10.11	-10.13/-11.01	-15.24/-11.35	-11.88/-11.66	-10.35/-8.55	-8.03/-10.73	-13.32/-12.87	-10.51/-10.11	-12.07/-12.98	-14.58/-13.79	-14.70/-14.91	-14.11/-13.38	-14.91/-12.80	-14.84/-11.46	-12.07/-14.71	-11.13/-12.04	-14.84/-11.46	-10.02/-15.62	-14.02/-15.19	-13.70/-10.94
Θ(127.5°)	-10.02/-9.76	-12.25/-13.13	-10.95/-9.83	-10.50/-13.14	-11.37/-11.36	-11.01/-11.48	-12.07/-10.89	-11.81/-14.52	-11.27/-10.06	-8.85/-13.10	-12.44/-9.70	-9.92/-13.16	-15.12/-13.08	-13.05/-11.59	-15.22/-15.70	-13.83/-14.71	-15.51/-15.97	-14.90/-14.73	-12.93/-15.77	-13.39/-9.57	-13.15/-13.10	-15.29/-14.77	-14.78/-15.05	-12.02/-9.19
Θ(135°)	-11.34/-13.13	-12.25/-11.28	-13.12/-15.52	-13.32/-11.41	-10.48/-10.72	-11.32/-11.53	-11.34/-11.65	-13.13/-15.04	-12.31/-10.47	-12.21/-12.97	-13.00/-11.59	-10.36/-11.49	-14.51/-15.28	-15.66/-15.28	-15.45/-14.85	-12.99/-14.80	-14.88/-15.26	-14.92/-15.22	-15.53/-13.91	-14.95/-12.22	-12.39/-15.47	-13.97/-15.33	-12.57/-13.50	-9.40/-8.74
Θ(142.5°)	-11.89/-10.34	-10.53/-11.43	-12.16/-10.96	-10.88/-12.32	-11.55/-12.54	-14.56/-15.13	-14.22/-13.60	-11.87/-14.88	-14.45/-11.40	-13.26/-15.74	-15.42/-12.80	-10.93/-12.14	-13.69/-15.49	-15.11/-15.61	-15.32/-15.46	-15.79/-14.63	-13.74/-12.74	-15.50/-14.70	-14.67/-15.41	-12.57/-14.68	-14.86/-15.61	-12.95/-14.09	-15.00/-14.88	-12.88/-13.94
Θ(150°)	-12.99/-15.54	-14.32/-13.00	-11.57/-11.90	-14.51/-15.58	-14.84/-14.40	-11.75/-11.28	-11.76/-9.37	-6.99/-7.34	-10.50/-11.94	-14.29/-14.61	-11.30/-9.64	-9.86/-11.26	-12.82/-15.21	-15.16/-15.20	-14.86/-15.51	-15.02/-15.40	-14.86/-15.11	-14.47/-12.68	-13.34/-14.94	-13.55/-12.35	-13.79/-14.68	-15.22/-14.49	-15.48/-15.19	-12.97/-11.80
Θ(157.5°)	-10.92/-10.80	-11.03/-11.97	-13.15/-13.73	-15.12/-15.17	-15.02/-13.15	-11.05/-13.03	-11.39/-11.64	-11.81/-14.30	-14.65/-14.18	-13.89/-14.68	-12.69/-10.90	-10.20/-11.91	-14.75/-14.37	-14.77/-15.43	-15.75/-15.33	-13.72/-11.89	-11.03/-11.95	-14.64/-14.81	-14.66/-15.16	-15.85/-15.02	-11.97/-10.63	-11.35/-14.14	-14.79/-14.59	-10.52/-10.12
Θ(165°)	-14.43/-15.13	-10.47/-15.09	-15.40/-14.47	-14.42/-14.68	-13.48/-13.54	-15.43/-13.42	-12.88/-13.01	-14.46/-15.33	-15.27/-15.66	-14.77/-14.98	-15.38/-15.24	-15.01/-14.94	-14.92/-15.61	-15.04/-13.81	-12.06/-12.14	-13.45/-15.25	-15.22/-15.64	-15.15/-15.29	-15.22/-15.64	-15.12/-15.29	-12.60/-13.21	-12.92/-12.68	-13.08/-12.10	-12.88/-13.94
Θ(172.5°)	-15.10/-15.57	-15.26/-15.55	-15.23/-15.24	-15.45/-15.48	-14.73/-14.02	-13.72/-13.38	-12.35/-11.78	-12.21/-13.00	-13.21/-13.98	-14.15/-13.20	-12.75/-12.21	-12.48/-13.03	-13.98/-14.86	-15.36/-15.57	-15.20/-15.71	-15.76/-14.92	-14.30/-12.87	-11.78/-11.69	-11.94/-12.25	-12.51/-13.19	-13.79/-14.63	-14.80/-14.71	-14.32/-13.67	-13.65/-14.47
Θ(180°)	-11.26/-11.86	-12.14/-12.44	-12.34/-13.37	-12.32/-11.87	-11.60/-11.88	-12.00/-12.19	-12.54/-12.59	-13.71/-14.30	-12.66/-11.39	-10.96/-10.93	-11.08/-11.44	-11.94/-12.25	-12.03/-12.79	-12.98/-12.52	-11.97/-12.04	-11.77/-12.08	-12.38/-12.62	-13.04/-13.23	-12.93/-12.94	-13.44/-12.95	-11.47/-11.02	-10.88/-10.93	-11.26/-11.54	-12.05/-11.46
Freq(Hz)	5.3G/Pol.	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°)	8.69/58	8.55/57	8.63/8.74	8.84/8.00	9.20/9.38	9.53/9.66	9.65/9.50	9.42/9.38	9.33/9.20	9.10/9.00	8.86/8.71	8.62/8.48	8.40/8.41	8.37/8.48	8.61/8.78	8.86/8.88	8.91/8.99	9.09/9.13	9.20/9.25	9.28/9.33	9.31/9.26	9.20/9.08	9.02/8.97	8.84/8.77
Θ(7.5°)	8.16/8.12	8.14/8.24	8.36/8.50	8.70/8.91	9.14/9.36	9.51/9.67	9.85/9.75	9.66/9.70	9.74/8.66	9.55/9.38	9.21/9.13	9.06/8.89	8.74/8.68	8.57/8.59	8.68/8.60	8.62/8.62	8.70/8.73	8.79/8.83	8.82/8.86	8.71/8.62	8.49/8.40	8.16/8.62	8.49/8.40	
Θ(15°)	7.82/7.62	7.49/7.49	7.53/7.58	7.75/7.99	8.22/8.40	8.52/8.66	8.82/8.90	8.95/9.02	9.12/9.21	9.16/9.09	8.87/8.69	8.58/8.37	8.14/7.96	7.89/7.91	7.85/7.82	7.81/7.72	7.66/7.78	8.01/8.19	8.25/8.29	8.29/8.25	8.26/8.21	8.19/8.23	8.29/8.21	8.22/8.11
Θ(22.5°)	6.85/6.51	6.11/5.72	5.45/5.43	5.74/6.09	6.37/6.70	6.92/7.08	7.32/7.54	7.85/8.16	8.49/8.79	8.94/8.90	8.54/8.13	7.72/7.13	6.52/5.99	5.73/5.58	5.47/5.40	5.33/5.36	5.58/5.98	6.34/6.59	6.78/6.93	7.09/7.16	7.17/7.10	6.99/6.95	6.96/6.93	6.98/7.10
Θ(30°)	3.69/3.60	3.23/2.53	1.52/0.84	1.04/1.41	2.26/3.29	4.05/4.54	4.81/5.19	5.94/6.79	7.52/8.03	8.18/7.92	7.49/6.85	6.19/5.49	4.48/3.30	2.21/1.61	1.38/1.00	0.71/0.53	1.13/2.35	3.64/4.27	4.64/4.69	4.70/4.86	5.08/5.04	4.84/4.73	4.65/4.36	4.04/3.91



Antenna Pattern of 5GHz/6GHz

Appendix B.2

Θ(22.5°)	7.487/07	6.536/11	6.196/59	7.197/64	7.727/96	8.458/99	9.219/05	8.678/23	7.647/39	7.377/30	7.277/27	7.116/94	6.706/05	5.024/44	4.184/11	4.174/17	4.194/09	3.974/04	4.515/24	6.137/09	7.868/29	8.348/19	7.987/70	7.577/50	
Θ(30°)	4.864/38	3.422/50	1.912/09	3.423/86	3.463/69	4.645/77	6.556/97	7.267/27	6.936/65	6.526/45	6.386/05	5.404/69	3.982/84	0.661/197	-3.23/-3.55	-3.15/-2.49	-1.49/-1.07	-0.750/49	1.672/40	3.143/89	4.354/46	4.233/96	4.053/77	4.054/64	
Θ(37.5°)	1.450/75	-0.703/-1.26	-2.02/-1.74	0.220/79	0.510/67	1.022/20	3.775/10	5.866/13	5.644/82	4.634/88	5.194/85	3.360/79	-2.56/-5.47	-9.94/-15.36	-1.23/-14.03	-10.83/-9.14	-8.21/-7.10	-1.46/-2.24	-1.46/-1.61	-1.85/-1.12	0.220/68	0.82/-0.81	-2.05/-2.78	-1.240/51	
Θ(45°)	-3.21/-2.72	-5.31/-6.10	-6.48/-6.76	-3.52/-2.30	-1.34/-0.74	-1.59/-1.94	0.542/57	3.162/55	1.230/33	0.201/22	2.011/61	-0.01/-3.08	-12.53/-12.14	-8.34/-8.74	-5.42/-6.23	-6.05/-5.42	-9.39/-11.57	-7.48/-5.17	-4.93/-5.30	-5.31/-3.79	-1.45/-0.64	-1.64/-3.33	-6.05/-5.89	-4.86/-3.93	
Θ(52.5°)	-7.87/-3.66	-3.22/-4.43	-4.84/-3.93	-3.84/-5.47	-1.77/-1.51	-3.35/-5.34	-1.750/50	-0.35/-3.88	-6.84/-5.90	-4.84/-2.86	-1.61/-2.89	-6.80/-10.59	-12.64/-5.18	-4.80/-5.95	-2.32/-9.24	-1.92/-8.58	-3.54/-7.75	-10.01/-7.20	-5.97/-7.03	-5.95/-3.73	-2.00/-3.20	-5.09/-9.44	-6.55/-4.40	-3.71/-5.91	
Θ(60°)	-7.80/-4.17	-2.57/-3.52	-5.32/-3.58	-4.55/-7.02	-4.12/-1.97	-2.45/-5.57	-5.15/-2.18	-2.83/-4.74	-5.90/-7.36	-5.87/-6.09	-4.33/-5.11	-10.60/-10.41	-6.84/-8.72	-5.69/-6.33	-3.46/-2.75	-1.400/21	-1.46/-4.73	-9.57/-9.98	-7.23/-10.30	-11.10/-5.12	-9.55/-5.88	-6.30/-4.33	-5.43/-7.44		
Θ(67.5°)	-7.60/-5.53	-2.94/-3.44	-5.50/-5.16	-6.21/-9.06	-6.85/-1.94	-1.53/-3.63	-4.82/-4.12	-4.71/-6.60	-8.37/-5.29	-4.39/-6.67	-7.71/-8.41	-12.83/-9.40	-8.64/-11.02	-7.54/-7.47	-5.65/-5.09	-3.98/-2.07	-3.43/-6.89	-8.62/-11.41	-8.98/-10.34	-9.65/-6.26	-5.08/-9.50	-11.99/-11.23	-7.33/-5.85	-8.21/-7.52	
Θ(75°)	-3.89/-5.15	-4.31/-3.36	-4.27/-7.84	-8.85/-12.87	-9.42/-3.52	-3.84/-3.79	-5.70/-5.31	-4.56/-6.41	-5.66/-4.21	-3.13/-4.57	-9.73/-10.49	-12.92/-9.43	-11.03/-12.62	-10.54/-10.69	-13.24/-8.64	-7.67/-5.32	-6.64/-9.28	-9.51/-11.45	-10.61/-9.92	-7.32/-8.80	-6.48/-9.56	-5.88/-8.30	-8.51/-7.42	-7.47/-6.60	
Θ(82.5°)	-2.90/-5.67	-7.76/-5.21	-5.44/-9.05	-8.91/-13.60	-12.38/-5.83	-7.76/-5.13	-7.56/-6.99	-5.95/-5.90	-4.60/-4.28	-2.38/-3.77	-12.19/-14.79	-12.19/-12.88	-12.51/-12.26	-10.39/-15.43	-11.12/-9.88	-10.26/-7.27	-9.40/-8.70	-10.48/-8.88	-8.26/-12.49	-6.05/-8.56	-6.05/-6.59	-3.91/-4.99	-7.78/-8.83	-7.54/-3.26	
Θ(90°)	-3.08/-6.13	-12.64/-8.83	-6.59/-13.17	-11.52/-14.60	-14.68/-9.36	-10.02/-8.63	-9.16/-9.10	-7.10/-5.71	-4.92/-4.09	-2.40/-2.79	-9.64/-14.93	-12.78/-15.16	-11.48/-13.38	-10.65/-12.00	-10.75/-10.37	-13.25/-12.14	-10.72/-7.24	-11.81/-9.00	-7.06/-12.31	-7.48/-6.87	-6.27/-5.70	-4.24/-4.77	-8.35/-11.53	-7.53/-3.15	
Θ(97.5°)	-4.49/-6.99	-13.69/-9.77	-7.83/-9.58	-11.47/-12.55	-15.04/-11.72	-7.89/-11.72	-11.95/-11.92	-7.56/-5.53	-6.14/-5.66	-2.45/-4.14	-13.55/-12.23	-10.87/-14.45	-9.88/-11.73	-8.90/-9.72	-10.25/-12.61	-12.71/-10.95	-9.28/-7.35	-12.71/-10.95	-7.64/-11.88	-12.94/-7.74	-6.78/-5.57	-6.15/-5.84	-10.77/-12.92	-7.56/-4.35	
Θ(105°)	-5.39/-7.79	-13.72/-7.48	-7.61/-7.22	-11.57/-13.44	-13.70/-10.06	-6.96/-12.28	-14.44/-11.40	-8.28/-14.20	-13.15/-7.43	-8.12/-7.87	-7.30/-6.79	-9.05/-7.08	-9.71/-10.98	-11.30/-12.46	-14.94/-13.74	-14.20/-14.44	-15.45/-14.33	-15.09/-14.40	-13.91/-13.48	-13.26/-13.80	-15.36/-16.06	-10.83/-9.71	-8.46/-10.32	-14.99/-13.70	-8.58/-5.01
Θ(112.5°)	-8.36/-7.04	-10.01/-8.63	-9.49/-8.78	-13.59/-15.26	-14.04/-12.37	-9.76/-14.76	-12.32/-11.12	-7.21/-8.62	-11.76/-8.26	-3.60/-5.23	-8.36/-9.75	-12.04/-14.14	-10.90/-12.58	-10.90/-11.06	-11.71/-12.54	-12.39/-12.68	-11.29/-11.00	-11.36/-15.18	-11.71/-13.49	-15.46/-12.52	-12.07/-6.37	-9.04/-9.78	-12.59/-15.47	-12.12/-6.85	
Θ(120°)	-7.19/-7.79	-8.92/-8.54	-7.89/-8.72	-14.00/-14.68	-13.57/-15.28	-11.81/-14.59	-11.93/-13.18	-9.53/-11.04	-10.76/-7.99	-6.77/-6.20	-7.71/-7.41	-8.37/-11.26	-10.01/-11.96	-15.51/-13.77	-11.76/-14.00	-14.66/-15.24	-12.64/-13.60	-11.05/-15.35	-13.25/-16.86	-15.19/-14.97	-10.46/-9.95	-7.05/-11.19	-13.37/-15.73	-9.44/-7.19	
Θ(127.5°)	-8.23/-12.78	-10.11/-8.97	-11.57/-11.99	-14.76/-14.81	-9.06/-10.28	-14.44/-11.40	-8.28/-14.20	-13.15/-7.43	-8.12/-7.87	-7.30/-6.79	-9.05/-7.08	-9.71/-10.98	-11.30/-12.46	-14.94/-13.74	-14.20/-14.44	-15.45/-14.33	-15.09/-14.40	-13.91/-13.48	-13.26/-13.80	-15.36/-16.06	-10.83/-9.71	-8.46/-10.32	-14.99/-13.70	-8.58/-5.01	
Θ(135°)	-10.30/-9.17	-9.93/-11.10	-13.75/-14.23	-13.78/-14.70	-13.08/-13.96	-15.16/-13.58	-9.35/-12.30	-13.63/-9.70	-8.62/-12.33	-8.59/-8.21	-8.57/-9.01	-7.04/-9.85	-14.74/-9.93	-11.18/-14.66	-13.25/-14.76	-13.80/-13.33	-14.98/-15.69	-15.41/-11.83	-14.18/-15.36	-14.70/-12.18	-13.94/-12.10	-9.30/-9.99	-10.72/-11.82	-7.43/-7.56	
Θ(142.5°)	-12.80/-14.82	-11.78/-13.02	-15.08/-16.43	-14.72/-15.17	-15.65/-15.83	-13.80/-11.55	-9.42/-10.14	-11.47/-9.05	-5.77/-6.82	-7.09/-9.80	-13.29/-8.76	-7.79/-9.66	-12.45/-11.65	-11.15/-13.36	-12.53/-14.24	-15.35/-14.17	-12.63/-12.55	-15.07/-13.24	-15.64/-12.05	-14.59/-14.86	-12.31/-11.31	-15.16/-15.41	-12.65/-13.07	-10.65/-10.16	
Θ(150°)	-8.68/-13.32	-12.25/-11.48	-10.99/-14.14	-10.12/-12.59	-12.92/-13.05	-12.54/-11.49	-10.49/-9.13	-8.34/-7.79	-5.40/-5.99	-8.06/-9.56	-10.78/-11.43	-9.08/-7.20	-9.41/-13.02	-12.58/-13.55	-15.48/-15.29	-15.29/-12.10	-11.77/-14.78	-12.19/-11.67	-14.90/-15.26	-15.33/-12.31	-11.77/-14.78	-12.19/-11.67	-14.90/-15.26	-15.33/-12.31	-11.77/-14.78
Θ(157.5°)	-15.69/-15.28	-15.46/-14.95	-14.51/-13.51	-12.73/-14.71	-14.13/-13.94	-14.79/-14.75	-10.76/-8.07	-8.55/-11.17	-12.03/-10.45	-10.60/-10.12	-8.31/-7.44	-6.40/-6.99	-7.02/-7.37	-8.64/-9.03	-9.50/-12.54	-13.99/-15.42	-16.01/-14.11	-13.15/-11.94	-14.10/-15.26	-15.23/-14.86	-13.74/-13.25	-14.80/-13.36	-12.73/-10.26	-14.80/-11.89	
Θ(165°)	-11.16/-11.53	-11.63/-14.15	-15.80/-14.73	-14.22/-13.72	-13.43/-13.30	-12.13/-12.12	-12.31/-11.33	-11.76/-13.54	-15.03/-14.43	-12.69/-12.77	-12.87/-11.02	-9.55/-9.65	-11.52/-13.15	-14.81/-15.56	-15.44/-14.31	-13.52/-13.83	-12.34/-11.73	-13.41/-14.72	-14.78/-14.59	-15.91/-15.18	-15.63/-14.46	-15.15/-14.75	-14.70/-15.31	-14.05/-12.28	
Θ(172.5°)	-13.91/-13.85	-14.27/-14.75	-15.32/-15.13	-15.09/-14.38	-13.78/-12.78	-12.03/-12.51	-14.29/-15.73	-14.70/-15.43	-15.60/-15.48	-15.54/-14.98	-14.94/-14.27	-13.10/-14.72	-12.55/-13.15	-13.42/-14.56	-15.42/-14.99	-15.11/-14.13	-13.40/-12.95	-12.94/-12.32	-12.52/-11.81	-11.50/-12.62	-14.41/-15.55	-15.05/-15.75	-13.88/-13.36	-14.77/-14.16	
Θ(180°)	-11.52/-11.66	-11.37/-11.45	-11.88/-11.49	-11.08/-11.21	-11.60/-12.44	-13.27/-12.79	-13.01/-13.25	-11.77/-12.23	-12.23/-11.25	-10.51/-10.26	-10.53/-10.58	-11.14/-11.73	-11.56/-10.78	-10.56/-10.16	-9.59/-9.27	-9.96/-11.37	-12.86/-14.18	-13.96/-13.45	-13.69/-13.50	-12.35/-10.46	-9.31/-9.19	-9.39/-9.70	-10.18/-10.57	-10.96/-11.05	
Freq(Hz)	6.475GPol.	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°)	11.531/140	11.177/192	10.69/1056	10.44/1043	10.381/040	10.472/1052	10.64/1089	11.031/121	10.961/109	11.141/109	11.06/1098	11.001/139	11.271/114	10.96/1092	10.90/1090	10.81/1081	10.92/1104	11.231/146	11.671/182	11.591/128	11.411/131	11.21/117	11.21/118	11.43/1176	
Θ(7.5°)	11.671/160	11.501/142	11.241/114	11.131/108	11.081/114	11.211/129	11.391/146	11.431/147	11.471/142	11.361/112	10.90/1058	10.29/887	9.559/24	8.948/86	8.738/76	8.848/91	9.069/32	9.659/99	10.35/1070	11.01/1090	11.03/115	11.17/121	11.39/1156	11.59/1180	
Θ(15°)	9.249/07	9.099/10	9.048/99	9.009/18	9.651/10	10.55/1086	10.95/1089	10.75/1046	10.139/99	9.699/48	9.21/97	8.888/34	7.807/17	6.455/77	5.195/00	4.998/46	4.995/46	6.016/69	7.538/39	9.179/88	10.43/1066	10.79/1072	10.55/1027	9.879/52	
Θ(22.5°)	5.424/46	4.074/49	5.175/41	5.405/66	6.377/44	8.278/82	9.019/03	8.958/62	8.187/85	7.827/82	7.26/65	6.275/63	5.465/24	4.833/86	2.642/02	1.591/38	1.632/21	3.013/62	4.134/84	5.796/85	8.028/62	8.618/26	7.486/90	6.505/95	
Θ(30°)	4.213/46	1.580/95	2.192/92	2.371/50	1.712/17	2.713/54	4.996/44	7.156/69	5.815/67	6.256/82	6.816/42	5.374/04	2.872/23	1.680/54	-1.98/-3.46	-3.48/-2.32	-0.99/-0.07	-0.21/-0.76	-0.22/-1.44	3.555/52	6.806/81	6.014/74	3.29/26	4.004/68	
Θ(37.5°)	0.38/-0.45	-1.75/-3.90	-3.90/-2.38	-1.96/-0.83	-0.11/-0.62	-3.15/-2.95	1.304/59	6.165/66	3.883/28	4.755/87	5.745/16	3.902/67	0.30/-4.28	-7.36/-9.45	-12.91/-12.47	-8.85/-5.81	-4.27/-3.22	-3.46/-2.41	-1.63/-1.43	0.65/1.33	2.69/1.86	-0.90/-3.13	-5.18/-1.81	-0.46/0.53	
Θ(45°)	-8.37/-7.33	-4.78/-3.89	-4.64/-7.12	-9.24/-7.23	-5.17/-4.32	-4.24/-5.77	-2.35/1.11	3.081/92	-1.38/-2.78	-0.11/1.55	1.72/1.25	0.72/-0.42	-3.20/-9.96	-7.30/-4.57	-5.71/-3.58	-8.07/-4.24	-8.01/-8.89	-5.33/-4.56	-4.84/-5.91	-4.36/-1.14	-0.11/-1.14	-4.77/-12.25	-7.33/-6.94	-8.62/-9.22	
Θ(52.5°)	-3.88/-0.77	0.43/-0.27	-0.72/-1.76	-3.18/-4.25	-4.96/-5.57	-3.84/-3.75	-3.89/-3.50	-1.86/-1.78	-3.72/-6.87	-2.23/-0.61	-2.27/-4.22	-5.60/-9.42	-15.25/-9.10	-3.23/-1.44	-2.41/-1.37	-1.62/-2.70	-9.06/-13.79	-11.43/-5.63	-4.21/-4.24	-5.14/-2.70	-0.90/-1.29	-6.28/-0.68	-4.76/-5.76	-8.53/-9.95	
Θ(60°)	-1.17/-0.49	0.76/-0.85	-0.41/-0.15	-0.73/-2.53	-3.57/-4.23	-3.88/-3.55	-4.79/-9.76	-3.54/-1.69	-4.39/-9.75	-6.32/-9.29	-6.82/-9.95	-7.96/-10.53	-6.34/-3.57	-5.08/-1.59	-1.65/-2.03	-1.77/-2.69	-4.98/-9.95	-14.18/-7.51	-4.62/-5.50	-5.64/-3.91	-0.98/-3.12	-6.44/-5.23	-4.57/-6.46	-7.32/-5.00	
Θ(67.5°)	-2.71/-2.29	-1.69/-2.98	-3.49/-1.60	-0.40/-2.85	-4.19/-8.20	-3.99/-3.36	-5.21/-5.42	-3.31/-3.57	-6.42/-11.64	-7.56/-6.28	-14.20/-11.05	-6.48/-4.83	-5.41/-3.11	-3.42/-3.57	-5.19/-12.47	-12.16/-8.79	-6.39/-7.24	-11.46/-6.97	-2.81/-6.38	-8.21/-6.33	-1.22/-6.05				



Antenna Pattern of 5GHz/6GHz

Appendix B.2

Θ (75°)	-15.42/-12.96	-9.58/-6.59	-4.49/-8.07	-5.85/-6.35	-4.72/-4.48	-10.48/-6.20	-8.50/-4.03	-6.81/-3.86	-4.03/-7.00	-6.98/-6.42	-9.82/-13.53	-8.62/-4.40	-5.01/-12.80	-6.99/-5.12	-6.33/-9.94	-15.10/-8.17	-7.56/-8.34	-7.82/-10.56	-8.81/-3.49	-15.16/-11.32	-14.70/-14.80	-9.90/-7.92	-9.82/-9.44	-10.62/-13.41
Θ (82.5°)	-15.06/-14.38	-9.73/-6.71	-6.00/-8.83	-7.26/-7.06	-5.55/-5.69	-9.79/-6.45	-7.27/-5.06	-7.61/-5.81	-5.60/-6.17	-5.30/-7.42	-10.77/-17.26	-10.37/-7.33	-10.71/-12.57	-9.34/-6.74	-9.62/-8.15	-15.52/-9.70	-9.66/-9.72	-10.73/-9.82	-8.79/-4.68	-15.59/-9.78	-13.70/-13.80	-8.23/-6.91	-11.80/-8.49	-8.21/-13.49
Θ (90°)	-15.65/-15.30	-10.49/-9.39	-7.67/-6.92	-7.26/-7.06	-5.30/-4.72	-9.28/-7.24	-6.67/-7.02	-8.86/-8.71	-7.60/-6.22	-5.48/-7.42	-12.83/-15.16	-12.35/-9.41	-15.38/-14.96	-11.35/-7.78	-10.50/-7.78	-15.12/-9.25	-12.64/-11.53	-15.08/-9.83	-11.41/-11.14	-15.08/-8.93	-11.78/-7.52	-9.68/-7.68	-11.78/-7.52	-9.39/-14.70
Θ (97.5°)	-15.02/-12.72	-12.57/-10.82	-9.40/-6.00	-6.85/-7.77	-5.74/-5.56	-6.77/-7.01	-7.97/-8.67	-9.35/-10.12	-7.94/-6.05	-7.02/-7.75	-11.56/-15.57	-13.43/-11.90	-11.45/-10.65	-11.53/-6.81	-13.90/-8.20	-11.85/-11.30	-15.27/-13.37	-12.39/-11.47	-10.55/-7.30	-13.33/-8.15	-11.37/-9.37	-8.08/-7.89	-10.84/-7.92	-10.30/-14.65
Θ (105°)	-14.72/-14.02	-15.37/-10.91	-9.05/-6.05	-6.09/-7.76	-7.36/-5.19	-5.71/-6.85	-7.82/-10.42	-9.37/-12.11	-9.74/-7.40	-10.13/-9.15	-11.42/-15.36	-14.68/-13.86	-12.18/-9.16	-11.52/-8.40	-11.97/-10.22	-11.77/-15.01	-15.99/-15.36	-13.17/-15.20	-11.92/-9.46	-12.52/-8.01	-13.98/-7.62	-8.02/-9.02	-12.32/-11.25	-14.03/-13.79
Θ (112.5°)	-15.09/-11.24	-14.61/-10.27	-8.15/-6.15	-5.37/-6.73	-7.41/-5.54	-5.54/-6.99	-7.50/-9.78	-8.70/-15.17	-12.30/-10.27	-10.71/-10.66	-14.56/-14.62	-15.87/-13.09	-9.55/-9.39	-12.41/-8.85	-15.41/-13.27	-13.93/-14.95	-14.74/-13.20	-14.80/-15.25	-11.39/-10.79	-14.56/-7.80	-15.30/-6.48	-8.77/-8.69	-11.38/-15.92	-15.13/-13.94
Θ (120°)	-14.24/-11.72	-13.85/-9.98	-6.14/-7.06	-7.39/-8.93	-8.37/-7.32	-5.26/-6.42	-7.28/-10.03	-7.82/-14.58	-14.80/-14.37	-11.91/-9.98	-10.19/-15.05	-14.83/-13.48	-10.23/-12.38	-12.71/-12.37	-13.92/-13.99	-14.72/-15.83	-14.49/-14.47	-14.78/-13.10	-10.12/-8.41	-15.65/-10.02	-14.14/-5.88	-6.79/-11.13	-12.71/-15.85	-15.66/-14.33
Θ (127.5°)	-14.92/-14.34	-14.62/-10.85	-6.15/-9.27	-11.29/-9.10	-8.91/-9.91	-6.68/-7.97	-7.37/-9.67	-8.60/-13.54	-14.85/-14.90	-15.11/-12.45	-11.61/-15.33	-15.78/-13.92	-15.45/-15.68	-13.98/-15.32	-13.14/-15.07	-15.14/-14.40	-15.26/-14.86	-7.91/-10.74	-14.54/-14.27	-14.95/-9.67	-6.71/-11.55	-15.08/-13.26	-13.08/-13.78	
Θ (135°)	-14.41/-14.78	-15.04/-11.00	-8.38/-9.01	-8.41/-6.97	-9.84/-10.45	-8.14/-12.06	-10.11/-10.29	-10.03/-11.91	-15.06/-13.83	-12.34/-11.83	-11.38/-14.62	-15.52/-14.89	-11.47/-11.91	-14.59/-15.56	-12.03/-15.08	-14.76/-14.57	-14.63/-14.87	-15.66/-15.24	-8.28/-12.66	-13.96/-13.91	-15.27/-13.40	-7.57/-11.19	-14.53/-13.46	-14.08/-11.67
Θ (142.5°)	-13.41/-15.34	-15.26/-14.36	-10.76/-10.45	-8.95/-8.76	-11.82/-10.00	-11.04/-12.84	-11.08/-13.34	-14.97/-13.79	-13.07/-13.37	-14.58/-14.17	-12.73/-13.48	-15.60/-14.26	-16.03/-15.02	-14.97/-14.95	-14.89/-14.68	-14.81/-14.66	-15.44/-15.12	-14.32/-15.25	-11.17/-11.82	-14.17/-12.66	-12.15/-14.38	-15.29/-13.15	-13.28/-14.49	-14.47/-15.01
Θ (150°)	-14.90/-15.58	-15.46/-15.90	-13.89/-12.05	-11.16/-11.41	-11.99/-12.14	-13.31/-13.18	-11.59/-13.02	-15.23/-15.76	-15.57/-13.43	-9.98/-9.91	-11.14/-15.28	-15.54/-13.40	-13.15/-12.45	-12.54/-13.15	-15.33/-14.77	-15.53/-14.44	-15.61/-14.23	-11.84/-13.28	-15.87/-14.92	-16.09/-15.23	-15.52/-14.78	-14.76/-13.89	-13.48/-14.67	-14.65/-15.60
Θ (157.5°)	-13.89/-15.07	-15.03/-15.51	-14.86/-14.09	-12.88/-12.54	-13.32/-14.11	-13.35/-13.42	-12.88/-13.57	-11.23/-10.18	-12.53/-15.13	-14.70/-11.55	-14.97/-15.30	-15.31/-11.25	-15.19/-14.50	-14.25/-14.70	-15.07/-15.40	-14.93/-15.01	-14.76/-15.13	-15.78/-15.62	-15.22/-14.57	-15.02/-15.22	-15.07/-15.48	-13.90/-13.15		
Θ (165°)	-16.00/-15.37	-15.20/-15.55	-15.66/-15.25	-14.74/-14.68	-13.65/-13.37	-13.49/-13.83	-14.83/-15.81	-13.84/-13.02	-13.74/-14.47	-15.69/-15.36	-14.73/-12.89	-12.71/-14.10	-14.98/-14.77	-15.38/-15.45	-14.93/-15.40	-14.09/-14.02	-14.68/-14.76	-14.80/-14.25	-13.02/-13.32	-14.55/-14.59	-15.11/-14.68	-15.48/-15.15	-15.63/-15.12	-14.92/-15.43
Θ (172.5°)	-13.86/-14.77	-15.57/-15.15	-15.51/-15.81	-15.00/-14.58	-15.31/-15.64	-16.01/-15.42	-15.04/-16.01	-15.57/-15.44	-15.46/-14.94	-14.93/-15.23	-16.12/-12.57	-15.36/-15.33	-14.73/-13.90	-14.41/-14.75	-14.20/-13.46	-14.03/-14.36	-15.34/-14.77	-14.07/-13.14	-12.59/-12.87	-13.48/-13.88	-14.83/-14.21	-13.46/-14.63	-15.11/-15.35	-15.30/-14.50
Θ (180°)	-15.06/-15.55	-15.16/-15.25	-15.60/-14.84	-15.17/-14.59	-15.32/-14.77	-15.14/-14.84	-15.40/-15.21	-14.82/-15.22	-15.88/-14.82	-14.71/-14.94	-14.39/-14.89	-15.29/-15.61	-15.05/-14.28	-15.17/-15.04	-15.94/-14.86	-15.74/-14.76	-15.10/-15.00	-15.08/-15.58	-15.52/-15.60	-15.10/-15.38	-15.28/-14.95	-13.86/-14.46	-14.22/-14.91	-14.98/-15.82
Freq(Hz)	5.3GPol.	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°)	9.03/9.02	9.04/9.03	9.04/9.02	9.02/9.09	9.18/9.28	9.43/9.54	9.60/9.69	9.74/9.76	9.75/9.71	9.65/9.56	9.44/9.27	9.21/9.12	9.12/9.08	9.01/9.06	9.10/9.17	9.31/9.19	9.67/9.82	9.94/9.97	10.09/10.17	10.21/10.16	10.11/10.06	9.315/9.322.5	Φ(330°)/Φ(337.5°)	9.345/9.350
Θ (7.5°)	9.04/9.13	9.23/9.29	9.32/9.28	9.21/9.21	9.32/9.40	9.48/9.53	9.58/9.67	9.74/9.78	9.77/9.63	9.64/9.47	9.26/9.09	8.96/8.79	8.67/8.53	8.41/8.46	8.44/8.47	8.60/8.82	9.02/9.14	9.27/9.32	9.45/9.57	9.59/9.51	9.52/9.51	9.36/9.28	9.28/9.20	9.12/9.02
Θ (15°)	6.73/6.74	6.86/6.98	7.17/7.44	7.65/7.94	8.10/8.13	8.18/8.21	8.43/8.84	9.30/9.65	9.85/9.91	9.78/9.54	9.31/9.06	8.70/8.29	7.94/7.63	7.46/7.31	7.16/7.20	7.34/7.56	7.75/7.85	7.93/8.02	8.26/8.54	8.65/8.64	8.58/8.52	8.35/8.12	7.84/7.48	7.22/6.94
Θ (22.5°)	5.87/5.52	5.50/4.52	4.16/4.03	4.02/4.51	5.26/5.81	6.18/6.46	6.96/7.53	7.98/8.17	8.09/7.83	7.54/7.21	7.01/6.64	6.16/5.67	5.22/4.90	4.86/4.93	5.96/5.23	5.63/5.69	5.63/5.69	5.65/5.90	7.38/7.81	7.94/7.99	7.99/7.85	7.64/7.25	6.78/6.34	
Θ (30°)	3.47/2.49	1.78/1.83	1.77/0.93	-1.13/-3.27	-0.98/2.04	3.48/3.99	4.58/5.44	5.88/5.46	4.55/4.03	3.96/4.46	4.82/4.80	4.24/3.38	2.48/1.56	1.17/1.00	1.06/1.73	2.35/2.19	1.49/1.53	2.57/3.67	4.43/5.03	5.76/6.47	6.59/6.46	6.61/6.58	6.48/6.07	5.18/4.26
Θ (37.5°)	0.63/-1.13	-3.24/-5.51	-6.80/-4.97	-3.58/-6.04	-15.68/-5.27	-0.88/0.19	1.11/2.78	3.56/2.98	2.64/3.22	3.57/3.63	3.26/2.47	1.52/0.48	-0.72/-1.25	-1.32/-2.40	-3.99/-2.82	-1.21/-2.00	1.33/3.06	4.30/4.33	3.89/3.77	3.85/3.61	3.31/2.94	3.31/2.94	2.29/1.63	
Θ (45°)	-2.11/-2.83	-3.70/-5.01	-6.54/-12.29	-10.75/-5.21	-5.02/-12.53	-0.56/-1.24	0.36/-0.13	1.12/2.63	2.40/1.49	1.01/0.38	-0.62/-2.53	-4.19/-1.90	-0.89/-2.95	-0.96/-2.87	-2.93/-3.80	-7.86/-6.85	-7.51/-4.29	-2.33/-0.02	1.55/0.90	0.51/0.46	-0.74/-1.86	-2.34/-2.06	-2.17/-2.34	
Θ (52.5°)	-7.40/-9.16	-8.33/-5.68	-3.88/-4.76	-6.96/-6.37	-2.45/-3.87	-15.44/-10.10	-9.80/-3.01	-2.44/-3.77	-0.53/0.25	-2.23/-4.09	-2.60/-1.56	-0.76/-2.07	-2.70/-0.41	-0.10/-2.51	-9.66/-5.81	-1.50/-4.14	-7.90/-6.31	-9.75/-4.75	-3.91/-1.73	-1.44/-3.82	-1.51/-1.59	-4.19/-4.02	-3.96/-3.57	-4.80/-6.51
Θ (60°)	-6.80/-10.03	-8.52/-5.45	-4.89/-5.46	-4.20/-6.11	-3.20/-1.85	-10.93/-10.66	-11.40/-2.39	-3.33/-3.62	-1.75/-3.16	-6.81/-6.66	-4.59/-3.80	-2.34/-1.87	-2.10/-1.18	-0.33/-1.83	-7.46/-9.98	-2.56/-3.46	-7.25/-5.66	-10.78/-5.85	-3.65/-4.12	-3.49/-6.02	-4.43/-5.86	-6.38/-3.91	-3.75/-4.22	-4.92/-6.21
Θ (67.5°)	-8.42/-11.90	-9.69/-5.45	-5.78/-7.23	-5.37/-6.88	-5.11/-1.93	-8.99/-10.67	-10.76/-2.59	-3.35/-2.22	-2.68/-3.36	-9.91/-6.43	-6.82/-6.01	-7.23/-3.48	-3.84/-3.19	-1.97/-3.40	-8.71/-13.22	-3.51/-4.55	-6.59/-6.53	-4.91/-6.79	-4.07/-2.09	-5.71/-7.37	-9.85/-14.84	-10.22/-7.43	-7.97/-7.19	-6.54/-9.05
Θ (75°)	-10.34/-11.57	-6.39/-8.10	-7.24/-7.62	-8.12/-10.07	-6.76/-3.58	-10.18/-10.26	-9.40/-4.23	-4.70/-2.45	-3.68/-6.49	-7.47/-6.38	-8.64/-9.33	-8.73/-5.98	-7.36/-7.97	-4.63/-4.20	-7.61/-13.34	-7.14/-4.97	-5.89/-6.24	-10.98/-12.35	-5.30/-3.28	-8.97/-9.77	-14.84/-12.69	-10.14/-8.80	-11.27/-9.02	-6.85/-9.39
Θ (82.5°)	-11.40/-10.00	-6.00/-10.12	-9.52/-9.25	-9.48/-8.95	-6.64/-4.38	-11.84/-11.22	-6.90/-6.32	-5.69/-3.76	-6.52/-6.41	-5.99/-7.65	-9.19/-10.71	-8.89/-6.89	-13.37/-13.18	-7.08/-8.51	-8.63/-10.82	-10.15/-6.67	-6.56/-7.36	-13.50/-15.39	-5.90/-4.03	-8.55/-10.74	-8.95/-8.90	-10.22/-10.12	-6.62/-8.24	-8.34/-10.42
Θ (90°)	-10.92/-10.18	-7.76/-12.54	-10.72/-7.98	-8.55/-9.16	-6.67/-4.37	-8.84/-11.29	-7.24/-8.88	-6.36/-5.25	-8.59/-7.19	-5.95/-6.02	-8.81/-14.84	-11.43/-7.32	-12.77/-13.09	-9.19/-7.08	-8.60/-7.93	-15.34/-7.78	-10.40/-9.33	-15.38/-15.80	-7.63/-4.67	-11.45/-10.75	-8.70/-9.50	-10.57/-10.03	-8.22/-8.71	-9.23/-11.81
Θ (97.5°)	-9.73/-9.74	-8.31/-11.83	-10.29/-7.34	-8.93/-9.07	-5.67/-4.91	-6.89/-10.32	-5.71/-11.15	-7.05/-8.49	-10.45/-7.10	-6.81/-8.03	-9.32/-14.92	-11.31/-8.65	-11.21/-10.09	-7.65/-6.15	-12.74/-6.71	-14.64/-9.49	-15.02/-12.59	-15.37/-14.53	-7.06/-8.23	-11.83/-10.78	-10.36/-9.85	-10.08/-8.73	-8.32/-10.26	-10.60/-15.13
Θ (105°)	-10.69/-8.13	-9.92/-11.89	-9.38/-5.94	-7.64/-7.98	-4.87/-5.71	-5.81/-8.04	-5.55/-11.55	-6.96/-12.72	-13.95/-8.37	-8.48/-9.96	-10.96/-15.57	-12.77/-11.01	-12.38/-10.96	-8.46/-6.14	-11.16/-6.98	-12.75/-12.31	-12.78/-14.34	-13.18/-13.97	-10.06/-12.13	-10.41/-11.88	-10.80/-8.16	-8.11/-10.36	-11.45/-13.54	-13.23/-13.95
Θ (112.5°)	-11.87/-8.23	-9.73/-10.30	-9.15/-5.60	-7.33/-7.19	-6.10/-7.04	-5.58/-8.99	-6.01/-10.81	-6.50/-15.13	-15.49/-9.89	-8.96/-12.00	-15.41/-14.74	-15.46/-12.67	-10.66/-13.95	-9.49/-6.34	-14.31/-8.65	-13.28/-12.06	-15.24/-13.85	-14.04/-15.12	-11.00/-11.72	-9.57/-13.67	-10.34/-9.56	-9.47/-9.12	-12.82/-14.27	-11.94/-12.54
Θ (120°)	-11.94/-8.42	-8.59/-10.17	-9.16/-6.76	-6.83/-7.24	-8.31/-8.88	-5.56/-7.07	-5.98/-11.14	-6.99/-14.74																

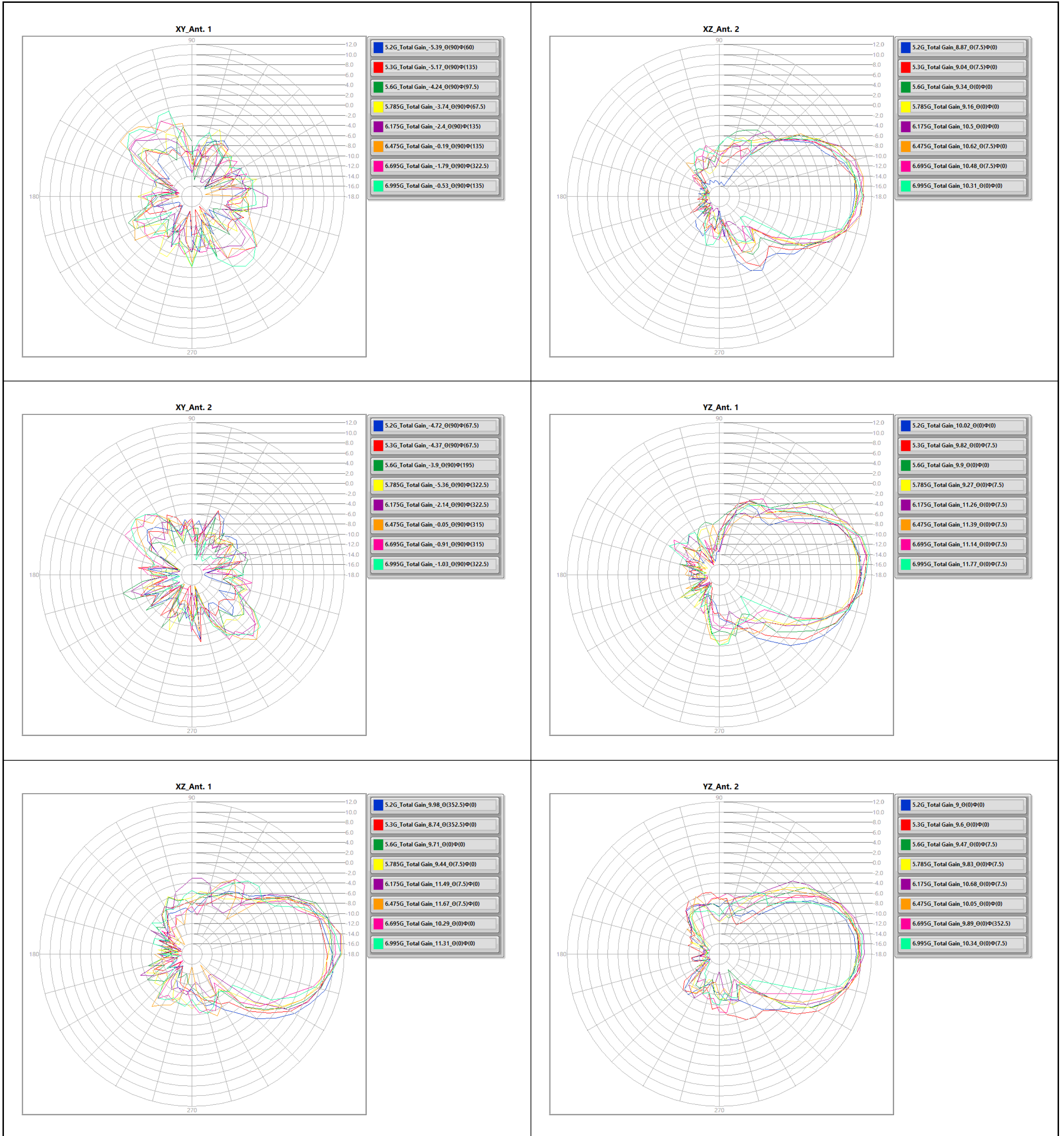


Antenna Pattern of 5GHz/6GHz

Appendix B.2

Θ(120°)	-11.78/-12.73	-12.48/-11.78	-10.81/-8.10	-13.69/-8.54	-10.76/-9.87	-10.56/-10.31	-7.00/-14.03	-7.77/-12.13	-13.17/-7.70	-9.66/-8.76	-12.58/-16.08	-14.85/-14.94	-15.42/-14.80	-12.39/-13.14	-12.96/-15.69	-12.76/-9.36	-13.30/-14.57	-14.81/-10.40	-8.07/-10.98	-12.26/-8.24	-6.54/-4.30	-7.95/-10.10	-10.90/-14.23	-15.91/-13.58
Θ(127.5°)	-11.87/-11.99	-12.86/-11.72	-11.63/-10.44	-10.96/-8.09	-9.49/-9.27	-11.10/-11.32	-7.11/-12.57	-7.31/-11.88	-12.46/-11.27	-11.22/-8.74	-12.02/-12.66	-14.43/-14.86	-13.03/-14.91	-14.91/-12.88	-15.23/-13.51	-8.45/-15.53	-15.20/-14.94	-14.57/-7.29	-8.82/-8.89	-12.77/-8.37	-5.98/-5.64	-8.30/-11.73	-13.53/-15.15	-14.95/-12.23
Θ(135°)	-11.72/-11.72	-12.00/-11.89	-10.22/-10.30	-9.06/-9.22	-12.28/-10.73	-12.48/-10.68	-10.40/-11.79	-7.54/-11.38	-11.96/-15.34	-13.88/-12.94	-9.61/-10.61	-13.37/-12.42	-15.06/-15.69	-15.19/-14.05	-15.06/-15.46	-11.83/-15.93	-15.34/-15.38	-13.30/-10.08	-9.47/-11.11	-12.81/-13.12	-9.60/-10.43	-9.10/-10.16	-14.90/-15.74	-15.34/-13.57
Θ(142.5°)	-14.75/-15.58	-14.58/-14.29	-14.36/-14.87	-13.93/-15.63	-12.06/-13.12	-14.47/-8.86	-10.77/-14.33	-10.17/-14.84	-13.16/-13.80	-13.43/-15.33	-10.85/-11.73	-15.67/-15.87	-15.84/-12.43	-11.56/-14.06	-13.05/-15.33	-15.48/-13.09	-15.06/-15.88	-15.06/-14.54	-13.86/-14.57	-15.00/-14.84	-14.05/-14.93	-12.39/-14.08	-14.35/-11.07	-11.50/-13.22
Θ(150°)	-15.42/-15.81	-14.76/-14.35	-12.28/-11.39	-12.16/-11.95	-11.84/-15.00	-14.52/-12.53	-14.62/-11.69	-12.04/-15.17	-9.67/-10.99	-14.82/-11.33	-10.56/-11.54	-13.70/-15.23	-15.31/-14.67	-11.33/-13.90	-15.08/-15.00	-15.30/-14.79	-15.02/-15.28	-16.10/-15.21	-14.78/-14.71	-15.31/-15.34	-15.11/-13.99	-15.17/-15.77	-15.28/-14.11	-12.16/-13.92
Θ(157.5°)	-15.30/-15.71	-15.19/-14.65	-13.13/-11.61	-13.19/-14.75	-14.55/-14.49	-15.01/-14.84	-14.42/-14.47	-15.76/-12.59	-8.54/-9.33	-14.14/-15.42	-11.38/-9.51	-15.01/-15.01	-14.36/-14.12	-15.38/-15.11	-15.01/-14.85	-14.94/-15.65	-15.11/-14.87	-15.34/-15.21	-14.98/-15.52	-15.93/-15.35	-15.20/-12.96	-11.21/-11.24	-12.14/-13.54	
Θ(165°)	-15.86/-14.76	-15.02/-15.51	-15.50/-15.69	-14.71/-14.95	-15.17/-14.51	-14.17/-14.93	-15.26/-14.59	-15.39/-15.09	-14.38/-12.16	-11.94/-13.39	-15.16/-15.35	-14.94/-15.21	-15.64/-15.23	-15.44/-15.04	-15.18/-15.05	-15.35/-14.28	-13.58/-15.05	-15.71/-14.76	-15.77/-15.29	-15.07/-16.04	-14.27/-13.23	-13.35/-13.36	-13.82/-15.72	-16.46/-14.60
Θ(172.5°)	-15.17/-15.11	-14.62/-15.68	-15.17/-15.28	-15.72/-15.54	-15.25/-15.55	-15.19/-15.21	-14.73/-15.24	-14.75/-15.02	-15.30/-14.97	-15.26/-14.21	-15.29/-15.81	-15.79/-14.81	-15.42/-15.91	-14.88/-15.31	-15.47/-15.27	-14.32/-14.51	-14.75/-15.76	-15.27/-14.56	-14.19/-13.41	-13.51/-13.83	-13.91/-13.97	-14.99/-15.11	-15.52/-14.67	-14.78/-15.47
Θ(180°)	-15.49/-15.18	-15.29/-15.68	-15.19/-15.00	-15.71/-15.13	-15.75/-15.63	-15.60/-14.86	-15.03/-15.15	-15.89/-15.56	-15.51/-15.07	-15.19/-15.42	-15.41/-15.17	-15.66/-14.98	-15.57/-15.63	-15.79/-15.34	-15.79/-15.34	-14.62/-15.37	-15.40/-14.35	-15.26/-15.60	-15.37/-15.25	-15.42/-14.80	-15.43/-15.59	-15.19/-14.42	-14.93/-15.48	
Freq(Hz)	6.475GPdL	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°)	10.36/10.25	10.09/10.02	9.90/9.83	9.78/9.81	9.81/9.84	9.89/9.96	10.05/10.14	10.24/10.37	10.48/10.57	10.70/10.75	10.78/10.80	10.82/10.75	10.59/10.36	10.13/9.99	9.80/9.75	9.68/9.62	9.64/9.73	9.84/9.99	10.16/10.30	10.41/10.56	10.63/10.72	10.76/10.75	10.68/10.61	10.53/10.46
Θ(7.5°)	10.62/10.54	10.34/10.16	10.02/9.90	9.80/9.78	9.76/9.74	9.75/9.74	9.77/9.86	9.99/10.15	10.31/10.45	10.64/10.71	10.74/10.72	10.61/10.44	10.21/9.90	9.51/9.26	8.99/8.86	8.81/8.76	8.83/8.97	9.21/9.53	9.86/10.14	10.49/10.53	10.46/10.61	10.70/10.69	10.66/10.66	10.95/10.76
Θ(15°)	9.91/9.65	9.20/8.74	8.48/8.22	8.27/8.58	8.81/8.82	8.73/8.63	8.57/8.64	8.87/9.17	9.43/9.46	9.37/9.17	8.94/8.75	8.51/8.33	8.11/7.91	7.84/7.72	7.46/6.96	6.47/6.14	6.10/6.41	6.98/7.63	8.16/8.61	9.00/9.31	9.52/9.75	9.87/9.95	9.92/9.94	10.06/10.04
Θ(22.5°)	7.76/7.92	7.81/7.37	6.67/6.71	5.34/6.01	6.84/7.32	7.54/7.54	7.61/7.92	8.32/8.49	8.30/7.84	7.49/7.41	7.50/7.44	7.01/6.01	4.60/3.23	2.31/2.20	2.36/2.16	2.20/1.87	1.43/1.56	2.50/3.60	4.32/4.90	5.57/6.13	6.59/7.09	7.46/7.44	7.47/7.44	7.45/7.60
Θ(30°)	4.10/3.38	2.96/2.76	2.57/2.22	1.26/0.93	2.88/4.52	4.73/4.53	5.00/5.83	6.18/6.93	5.25/4.65	4.32/4.21	4.48/4.59	4.25/3.33	1.90/0.39	-1.52/-3.67	-6.18/-8.55	-7.79/-5.04	-4.25/-5.19	-3.10/0.07	0.97/1.32	2.78/4.14	4.86/5.49	6.27/6.47	6.35/6.13	5.70/5.09
Θ(37.5°)	2.30/0.67	-1.43/-3.84	-5.74/-4.68	-3.78/-4.82	-2.67/0.81	0.59/-0.10	2.11/3.17	2.93/1.58	0.11/-0.49	-2.18/-5.02	-4.78/-3.44	-3.41/-4.11	-4.41/-5.15	-5.83/-8.11	-9.39/-8.38	-10.51/-15.27	-8.48/-8.08	-9.30/-4.61	-3.07/-0.75	1.53/2.30	2.93/2.65	2.58/2.81	3.28/3.25	
Θ(45°)	-2.16/-2.84	-5.10/-10.78	-8.71/-8.83	-8.30/-6.86	-8.93/-5.29	-3.08/-3.48	1.00/0.08	-2.11/-6.25	-6.61/-4.57	-4.24/-4.56	-3.84/-4.48	-7.49/-10.24	-9.11/-9.71	-7.93/-4.10	-4.12/-6.80	-4.44/-4.04	-4.54/-5.80	-9.12/-9.83	-6.48/-3.67	-0.81/-1.02	-1.76/-2.54	-3.50/-2.75	-1.52/-1.61	-2.25/-2.26
Θ(52.5°)	-3.55/-3.77	-4.77/-7.87	-13.75/-6.21	-3.74/-6.16	-4.87/-8.44	-3.91/-5.69	-2.49/-4.13	-4.41/-6.18	-7.21/-6.00	-7.15/-7.89	-5.92/-5.45	-6.75/-7.18	-6.24/-5.48	-7.72/-3.57	-0.74/-2.58	-3.41/-2.90	-2.47/-5.67	-8.54/-9.20	-10.01/-6.97	-4.06/-3.84	-5.01/-5.26	-4.33/-3.04	-2.73/-2.64	-2.86/-3.07
Θ(60°)	-5.32/-4.45	-4.11/-3.22	-5.83/-7.07	-2.71/-5.04	-4.31/-8.74	-3.10/-8.21	-5.43/-6.08	-3.52/-5.90	-8.92/-7.33	-7.77/-11.59	-6.09/-3.93	-4.98/-6.15	-5.45/-4.32	-4.13/-5.43	-1.96/-2.03	-4.25/-4.39	-3.14/-5.52	-7.24/-7.38	-9.93/-9.38	-5.45/-6.40	-8.02/-5.00	-6.72/-3.47	-2.95/-3.83	
Θ(67.5°)	-6.12/-6.20	-7.78/-4.15	-3.19/-6.01	-4.42/-4.62	-5.39/-7.62	-2.56/-10.33	-5.67/-7.01	-5.42/-6.29	-6.50/-7.33	-10.26/-9.96	-8.06/-7.50	-4.94/-10.15	-6.17/-4.84	-5.18/-6.73	-5.06/-4.79	-6.61/-6.25	-4.76/-7.25	-8.67/-8.01	-7.77/-8.10	-11.28/-8.24	-4.97/-6.24	-3.74/-4.15	-4.97/-6.27	-4.31/-5.26
Θ(75°)	-7.19/-6.67	-11.09/-7.71	-4.04/-5.62	-7.10/-6.56	-7.04/-7.88	-3.54/-10.45	-6.79/-8.31	-6.57/-7.29	-3.15/-6.67	-11.40/-7.66	-9.95/-10.40	-12.24/-12.22	-10.51/-7.26	-6.97/-8.49	-11.71/-8.70	-10.07/-8.90	-8.44/-9.04	-9.30/-6.90	-9.22/-7.03	-12.35/-10.23	-5.22/-3.77	-0.83/-1.29	-4.02/-7.38	-5.37/-5.94
Θ(82.5°)	-8.95/-8.77	-12.67/-11.22	-6.63/-6.84	-8.44/-9.45	-8.08/-7.99	-6.02/-10.14	-7.61/-6.52	-6.69/-6.84	-3.04/-6.47	-5.13/-5.24	-8.31/-9.60	-12.69/-8.19	-12.57/-12.02	-15.79/-12.02	-16.39/-11.40	-11.75/-11.33	-11.31/-8.09	-11.12/-6.41	-13.71/-8.64	-5.00/-2.27	0.84/-0.60	-3.56/-7.68	-5.99/-5.38	
Θ(90°)	-9.09/-9.96	-13.84/-10.95	-10.63/-8.41	-9.23/-10.38	-9.19/-10.03	-9.38/-10.22	-6.87/-8.12	-7.64/-6.24	-5.35/-5.23	-2.38/-4.68	-7.09/-8.34	-10.36/-9.19	-10.94/-12.75	-9.20/-12.10	-13.13/-12.38	-15.33/-15.63	-9.96/-12.37	-12.82/-12.04	-9.91/-6.82	-15.77/-8.18	-5.00/-2.43	-0.05/-1.47	-4.05/-8.30	-7.24/-9.99
Θ(97.5°)	-8.75/-12.50	-12.77/-9.43	-13.85/-9.97	-10.78/-9.87	-11.75/-11.74	-11.22/-8.36	-7.12/-7.76	-12.26/-8.43	-8.05/-5.52	-1.72/-6.60	-9.37/-9.13	-13.02/-11.54	-11.09/-13.13	-9.06/-12.55	-15.47/-14.39	-15.51/-14.97	-9.44/-14.34	-14.51/-14.69	-12.42/-9.69	-14.81/-8.98	-4.95/-2.10	-0.49/-2.42	-5.46/-10.57	-7.58/-9.83
Θ(105°)	-9.46/-13.28	-11.05/-8.74	-9.76/-11.82	-13.46/-9.88	-14.40/-11.73	-10.70/-11.68	-8.08/-7.61	-12.56/-12.74	-9.62/-5.64	-2.34/-4.04	-13.24/-11.66	-11.75/-15.16	-12.33/-15.12	-8.28/-15.07	-14.68/-14.23	-15.90/-14.98	-9.48/-15.19	-15.39/-12.80	-12.02/-12.76	-13.86/-8.34	-4.52/-2.34	-2.69/-4.49	-8.35/-10.79	-10.35/-15.53
Θ(112.5°)	-10.67/-11.73	-11.15/-10.77	-8.29/-11.82	-12.63/-11.98	-11.68/-11.39	-13.12/-11.81	-5.76/-5.76	-9.95/-12.02	-11.96/-3.75	-4.37/-7.30	-12.10/-14.85	-11.22/-15.13	-9.82/-11.72	-11.15/-13.87	-15.26/-10.66	-13.50/-15.23	-15.26/-10.66	-9.66/-11.40	-11.28/-8.24	-5.02/-2.98	-3.55/-6.53	-11.15/-13.05	-13.12/-12.11	
Θ(120°)	-9.47/-11.75	-12.18/-13.62	-8.78/-11.53	-11.40/-10.62	-11.97/-12.50	-12.71/-13.51	-7.57/-9.21	-9.69/-11.64	-10.87/-4.44	-6.38/-8.15	-12.59/-15.44	-15.10/-15.14	-14.11/-15.80	-12.26/-13.91	-10.42/-15.49	-15.46/-9.47	-12.55/-15.14	-10.80/-8.86	-9.80/-11.57	-5.38/-5.17	-5.63/-6.50	-11.97/-14.95	-15.01/-12.44	
Θ(127.5°)	-9.76/-10.50	-12.63/-14.44	-10.56/-11.11	-11.78/-12.55	-11.77/-10.37	-13.50/-12.87	-9.36/-9.94	-6.81/-10.15	-10.13/-8.36	-7.20/-9.99	-11.27/-12.13	-14.37/-14.99	-14.92/-13.97	-14.16/-14.19	-15.46/-14.71	-9.88/-11.28	-15.29/-15.22	-15.36/-6.68	-9.70/-12.69	-9.87/-8.60	-6.51/-4.63	-6.70/-11.92	-15.79/-14.29	-15.26/-10.99
Θ(135°)	-8.69/-11.37	-12.19/-14.80	-14.21/-12.97	-10.15/-10.16	-12.78/-12.59	-13.72/-12.20	-12.99/-12.08	-9.88/-10.12	-13.82/-11.78	-10.04/-11.95	-8.14/-8.92	-12.06/-14.07	-14.81/-15.18	-14.54/-15.13	-14.64/-15.66	-10.78/-15.11	-14.82/-14.70	-12.05/-8.65	-9.41/-10.33	-11.39/-9.48	-6.88/-6.40	-8.82/-11.43	-14.91/-15.29	-14.58/-12.48
Θ(142.5°)	-13.53/-14.07	-13.97/-13.18	-12.59/-15.20	-13.38/-11.86	-14.07/-11.84	-13.33/-10.76	-9.94/-10.25	-10.11/-13.84	-14.03/-11.77	-13.65/-11.98	-7.83/-11.12	-14.36/-14.66	-14.61/-15.15	-16.19/-15.91	-13.99/-13.20	-15.62/-15.76	-15.09/-14.91	-15.08/-14.63	-15.25/-13.02	-14.66/-12.95	-16.04/-11.06	-8.88/-9.93	-13.66/-13.21	-10.75/-12.96
Θ(150°)	-14.15/-12.62	-13.94/-13.92	-14.09/-14.76	-15.11/-15.22	-12.88/-12.86	-15.39/-15.16	-14.61/-12.94	-9.23/-12.16	-9.31/-9.33	-12.92/-12.88	-10.67/-12.23	-13.38/-13.14	-14.68/-15.60	-12.21/-15.23	-15.01/-15.09	-15.25/-15.74	-14.56/-15.26	-15.65/-15.79	-15.25/-13.59	-12.37/-14.45	-13.41/-15.03	-14.97/-15.44	-14.88/-14.23	-13.43/-15.78
Θ(157.5°)	-15.95/-14.93	-15.18/-15.81	-16.37/-12.33	-12.39/-13.95	-13.32/-13.68	-14.61/-15.35	-15.94/-15.32	-14.84/-14.66	-10.52/-11.56	-15.02/-14.97	-12.37/-11.65	-11.14/-12.43	-14.98/-15.89	-15.54/-13.95	-15.46/-15.19	-15.86/-15.04	-15.34/-15.64	-14.62/-15.29	-14.77/-15.80	-13.83/-14.58	-15.12/-15.25	-15.71/-14.84	-13.65/-12.54	-13

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 Scan/BT LE

Appendix B.3

Θ(30°)	-6.67/-7.70	-11.36/-12.39	-10.17/-12.58	-3.68/-5.04	-5.74/-3.60	-1.73/-0.84	-0.73/-0.53	-0.14/-0.40	-1.49/-3.25	-2.98/-1.51	-0.70/-0.01	0.04/-0.47	-0.16/-1.01	1.45/0.36	-1.32/-2.77	-3.62/-2.68	-1.52/-0.96	-0.40/-0.70	-1.35/-1.76	-2.01/-2.45	-3.40/-5.53	-8.54/-12.69	-11.13/-5.68	-4.03/-5.50
Θ(37.5°)	-6.50/-10.50	-12.99/-11.61	-10.04/-8.87	-7.19/-5.20	-4.85/-4.91	-3.68/-1.83	-0.09/-0.92	1.40/-1.23	-0.00/-2.05	-2.62/-1.53	-0.83/-1.24	-2.70/-4.14	-4.17/-2.20	-0.62/-0.26	-0.56/-1.93	-4.37/-5.04	-4.55/-3.87	-3.27/-2.01	-2.04/-2.85	-3.12/-4.71	-4.96/-5.72	-7.91/-9.36	-7.62/-4.38	-3.11/-4.03
Θ(45°)	-5.80/-5.63	-3.16/-3.72	-5.49/-8.55	-1.10/-5.74	-3.80/-2.94	-2.14/-1.85	-2.09/-2.01	-1.54/-0.93	-1.79/-2.41	-2.50/-1.26	-1.02/-1.96	-2.57/-2.53	-2.49/-1.52	-0.03/-0.80	-0.45/-1.14	-2.12/-2.94	-4.27/-3.68	-3.47/-2.10	-1.97/-1.88	-0.34/-1.83	-3.05/-3.07	-3.52/-5.09	-4.84/-4.27	-6.22/-6.69
Θ(52.5°)	-2.95/-2.36	0.19/-0.33	-2.52/-8.24	-7.77/-5.00	-2.29/-1.45	-1.57/-1.96	-2.33/-2.61	-1.60/-0.13	-0.50/-0.75	0.61/0.77	-0.62/-1.21	-0.01/-1.38	1.39/-0.55	-0.01/0.56	0.93/0.70	0.03/-1.88	-4.24/-4.26	-2.82/-2.98	-3.63/-4.01	-1.51/-1.83	-3.39/-1.23	-0.32/-1.60	-2.69/-2.99	-4.86/-4.47
Θ(60°)	-4.14/-1.98	0.61/-1.48	0.92/-5.10	-6.52/-2.40	1.16/-1.72	-0.87/-4.13	-1.90/-1.16	-0.79/-1.49	2.10/0.87	1.53/-1.15	0.30/-0.65	0.77/-2.48	3.66/-1.72	0.23/-0.47	0.98/-1.82	2.02/-0.73	-2.70/-3.75	-1.46/-1.68	-2.92/-4.90	-3.64/-2.33	-2.09/-0.02	0.95/-0.67	-1.43/-1.75	-4.93/-5.66
Θ(67.5°)	-4.26/-0.66	0.12/-1.70	1.66/-2.62	-5.37/-1.69	0.57/-1.06	-0.13/-1.96	-0.63/-1.42	2.72/-2.28	0.30/-1.17	0.56/-0.33	0.64/-1.00	3.10/-0.15	0.98/-1.16	1.95/-0.39	3.83/0.91	-0.17/-1.76	-0.05/-0.82	0.79/-2.46	-2.68/-0.48	0.05/-1.04	0.87/-1.23	-1.84/-4.24	-7.11/-10.80	
Θ(75°)	-5.93/-1.35	-0.97/-0.48	0.59/-2.92	-5.38/-1.33	1.21/-1.31	-0.07/-0.49	0.45/-0.40	0.79/-2.10	3.56/-3.32	1.88/-1.00	0.42/-0.90	-1.77/-0.51	2.57/0.48	-0.87/-1.89	1.36/-3.28	4.312/-19	1.05/0.24	-0.17/-0.34	3.59/-1.10	-1.57/-1.11	1.14/-1.54	-0.81/-2.49	-2.35/-3.72	-6.89/-14.02
Θ(82.5°)	-7.21/-2.26	-2.91/-1.27	-1.09/-3.06	-3.75/-0.51	0.77/0.62	-1.68/-0.81	-0.34/-0.53	1.55/-2.85	3.18/-2.98	-0.02/-0.06	0.80/-2.3	-3.12/-2.06	0.17/-3.97	-3.59/-2.71	1.25/-2.70	2.83/-1.49	1.59/-1.70	0.35/-1.31	3.68/-1.91	-0.74/-1.95	1.85/-1.42	-2.86/-5.87	-3.51/-6.99	-7.41/-13.27
Θ(90°)	-6.90/-4.31	-4.19/-2.18	-1.74/-2.38	-3.03/-2.05	-0.05/-1.35	-4.13/-1.84	-2.12/-2.74	0.98/-2.05	2.63/-1.57	-0.44/-1.02	-0.89/-0.47	-5.68/-5.92	-0.44/-4.03	-7.46/-5.43	-1.22/-1.08	0.94/-0.47	0.49/-1.29	-1.74/-5.82	-4.40/-8.64	-9.40/-8.64	-7.28/-7.50	-7.55/-10.09	-4.82/-8.93	-14.08/-14.24
Θ(97.5°)	-6.38/-7.87	-6.83/-3.96	-3.15/-3.88	-2.18/-0.34	-2.25/-6.37	-4.34/-2.73	-5.69/-4.27	-0.12/-0.1	1.18/-0.91	-4.03/-2.51	-2.92/-3.11	-10.05/-5.13	-4.06/-7.98	-10.89/-6.55	-3.89/-0.42	-0.98/-1.95	-1.65/-1.44	-1.36/-3.68	-0.83/-0.76	-2.36/-1.84	-2.27/-1.21	-8.65/-10.70	-5.31/-7.94	-13.34/-13.64
Θ(105°)	-7.19/-5.83	-6.65/-4.61	-4.88/-3.57	-2.69/-1.71	-5.63/-8.75	-4.21/-4.69	-8.42/-6.75	-1.32/-1.10	0.33/-1.96	-4.22/-3.60	-5.09/-4.22	-11.74/-13.02	-3.64/-8.00	-11.73/-8.79	-9.91/-2.13	-1.48/-2.42	-3.58/-4.96	-5.60/-6.14	-5.73/-5.04	-6.23/-6.94	-7.13/-4.85	-10.87/-8.62	-5.65/-6.90	-14.00/-15.67
Θ(112.5°)	-11.93/-12.19	-7.55/-8.70	-7.38/-5.04	-2.49/-6.43	-9.16/-4.29	-6.38/-9.76	-9.48/-6.46	-4.68/-2.41	-0.14/-2.34	-3.96/-6.17	-5.94/-10.87	-14.01/-11.04	-7.28/-9.38	-10.28/-7.93	-8.83/-4.42	-3.16/-3.40	-1.74/-5.82	-11.16/-11.90	-5.48/-6.01	-9.40/-8.64	-7.28/-7.50	-7.55/-10.09	-4.82/-8.93	-14.08/-14.24
Θ(120°)	-15.85/-9.53	-8.72/-11.59	-9.64/-5.13	-4.41/-8.09	-12.89/-8.93	-6.08/-7.51	-7.59/-8.18	-9.08/-4.62	-0.42/-2.32	-3.59/-8.98	-7.43/-12.64	-12.63/-15.63	-8.17/-8.55	-8.26/-10.51	-8.53/-11.47	-6.09/-4.50	-1.02/-3.42	-9.60/-9.33	-4.69/-7.43	-7.44/-10.16	-8.51/-4.79	-8.78/-12.58	-10.66/-14.18	-10.36/-15.40
Θ(127.5°)	-13.93/-7.44	-12.22/-10.06	-8.90/-4.67	-7.45/-13.49	-12.85/-8.44	-5.94/-7.46	-7.96/-10.99	-11.23/-6.50	-4.37/-4.83	-5.39/-7.47	-13.35/-15.35	-11.00/-12.00	-8.16/-10.79	-12.00/-7.38	-9.21/-7.18	-7.34/-12.95	-3.48/-15.91	-7.47/-8.95	-8.00/-6.88	-5.51/-6.94	-6.84/-15.91	-4.94/-12.42	-7.18/-15.97	-15.36/-12.97
Θ(135°)	-15.36/-14.77	-13.56/-8.79	-7.90/-7.79	-10.67/-12.83	-13.84/-8.64	-7.05/-11.40	-15.81/-14.86	-9.64/-6.70	-6.79/-5.29	-5.18/-10.46	-10.88/-14.40	-13.77/-16.20	-12.01/-13.20	-10.00/-11.65	-7.92/-6.99	-8.91/-14.96	-14.82/-8.46	-10.08/-8.32	-11.07/-5.11	-7.73/-8.64	-12.29/-11.38	-10.82/-7.46	-13.23/-11.40	-14.47/-12.93
Θ(142.5°)	-15.75/-10.29	-8.04/-9.17	-13.19/-12.90	-13.30/-12.93	-13.73/-8.78	-9.29/-12.49	-12.53/-14.71	-8.86/-8.56	-6.75/-4.22	-8.65/-12.61	-11.87/-12.92	-15.25/-14.95	-11.74/-15.52	-9.31/-10.38	-9.85/-6.51	-10.50/-8.78	-11.03/-10.05	-11.59/-11.54	-11.33/-7.19	-11.75/-7.62	-8.42/-8.48	-12.50/-15.60	-11.23/-13.18	-14.53/-13.08
Θ(150°)	-14.73/-10.69	-12.36/-10.36	-10.61/-10.75	-11.57/-15.57	-13.44/-9.74	-9.64/-9.96	-12.66/-15.59	-11.61/-8.85	-7.79/-8.40	-11.97/-11.54	-10.44/-15.17	-15.18/-16.06	-15.03/-15.81	-10.21/-13.90	-14.38/-13.51	-13.29/-11.98	-13.77/-12.90	-13.48/-11.72	-14.93/-13.54	-12.40/-15.05	-15.62/-13.76	-10.50/-12.69	-13.67/-10.26	-15.07/-14.52
Θ(157.5°)	-12.23/-10.89	-11.41/-11.93	-13.41/-14.36	-13.45/-12.98	-14.01/-15.29	-15.48/-15.34	-12.91/-10.87	-11.32/-10.99	-10.75/-12.20	-11.70/-9.52	-11.27/-14.77	-15.26/-13.44	-12.20/-9.89	-9.85/-13.47	-16.09/-12.81	-12.96/-13.41	-14.06/-14.86	-13.54/-12.47	-14.09/-15.69	-15.47/-15.38	-15.81/-12.98	-12.76/-15.18	-15.89/-11.16	-10.64/-15.02
Θ(165°)	-13.19/-13.52	-14.40/-15.04	-15.12/-15.69	-13.08/-11.06	-10.52/-10.46	-10.58/-11.01	-12.40/-13.11	-13.49/-13.52	-14.89/-14.81	-14.76/-12.30	-11.80/-11.90	-14.85/-15.22	-12.95/-11.26	-10.86/-11.51	-13.54/-15.01	-14.95/-15.88	-15.08/-14.51	-13.33/-11.73	-13.46/-14.97	-15.06/-15.17	-14.14/-13.09	-15.20/-14.21	-13.10/-11.55	-12.01/-13.61
Θ(172.5°)	-14.80/-15.57	-15.12/-15.55	-15.04/-14.48	-15.10/-14.99	-15.47/-15.03	-14.49/-12.84	-11.48/-10.59	-10.87/-11.63	-12.48/-13.42	-13.64/-13.27	-13.86/-14.01	-14.94/-15.67	-14.98/-15.54	-15.04/-16.14	-14.88/-13.54	-12.41/-12.32	-13.78/-14.70	-14.83/-14.02	-14.50/-15.42	-15.17/-15.01	-15.16/-14.85	-14.90/-13.54	-14.01/-14.67	-14.02/-14.66
Θ(180°)	-14.00/-13.99	-13.41/-13.04	-12.80/-11.92	-12.30/-13.53	-13.80/-15.23	-15.49/-14.92	-15.70/-15.22	-15.46/-14.43	-14.12/-14.25	-14.46/-14.89	-15.95/-15.72	-15.06/-15.66	-15.46/-15.65	-15.22/-15.85	-14.00/-13.50	-14.11/-13.15	-12.91/-13.40	-14.05/-14.02	-13.37/-12.85	-13.75/-13.71	-14.55/-14.74	-15.72/-14.40	-13.56/-13.54	-14.82/-14.90
Freq(Hz)	6.1750Pol.	TotalAnt.1	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Gain	Φ(0°)Ψ(7.5°)	Φ(15°)Ψ(22.5°)	Φ(30°)Ψ(37.5°)	Φ(45°)Ψ(52.5°)	Φ(60°)Ψ(67.5°)	Φ(75°)Ψ(82.5°)	Φ(90°)Ψ(97.5°)	Φ(105°)Ψ(112.5°)	Φ(120°)Ψ(127.5°)	Φ(135°)Ψ(142.5°)	Φ(150°)Ψ(157.5°)	Φ(165°)Ψ(172.5°)	Φ(180°)Ψ(187.5°)	Φ(195°)Ψ(202.5°)	Φ(210°)Ψ(217.5°)	Φ(225°)Ψ(232.5°)	Φ(240°)Ψ(247.5°)	Φ(255°)Ψ(262.5°)	Φ(270°)Ψ(277.5°)	Φ(285°)Ψ(292.5°)	Φ(300°)Ψ(307.5°)	Φ(315°)Ψ(322.5°)	Φ(330°)Ψ(337.5°)	Φ(345°)Ψ(352.5°)
Θ(0°)	0.46/0.86	0.74/0.87	1.02/0.86	0.93/0.84	0.67/0.63	0.80/0.98	1.04/1.09	1.07/1.00	0.76/0.48	0.31/0.26	0.47/0.66	0.86/1.13	1.22/1.23	1.13/0.97	1.14/0.96	0.80/0.60	0.74/0.50	0.36/0.68	0.62/0.92	0.61/0.55	0.31/0.29	0.42/0.63	0.86/0.79	0.81/0.61
Θ(7.5°)	-3.24/-2.71	-2.28/-1.74	-1.32/-1.22	-0.77/-0.43	-0.03/0.45	0.92/1.16	1.24/-1.22	0.90/0.52	0.10/-0.17	-0.54/-0.72	-0.79/-0.67	-0.32/-0.18	-0.06/0.07	0.15/0.52	0.83/0.82	1.01/-1.22	1.40/-1.37	1.26/-1.43	1.46/-1.24	0.72/0.03	-0.50/-1.01	-1.12/-1.34	-1.67/-1.98	-2.40/-2.91
Θ(15°)	-9.69/-9.87	-10.38/-10.89	-10.70/-9.58	-6.97/-5.13	-3.68/-2.00	-1.02/-0.05	0.73/1.08	1.11/1.14	1.15/0.97	0.50/0.26	-0.18/-0.40	-0.25/-0.45	-0.29/-0.22	-0.35/-0.14	0.22/0.88	1.28/-1.57	1.68/-1.68	1.50/-1.27	1.19/0.61	-0.15/-1.25	-2.18/-3.07	-3.96/-4.62	-5.54/-5.96	-6.47/-7.85
Θ(22.5°)	-5.12/-7.06	-8.93/-10.36	-8.73/-6.91	-5.88/-5.77	-5.22/-3.26	-1.54/-0.76	-0.10/0.58	0.98/1.03	0.71/0.22	0.13/0.02	0.07/0.55	1.37/-2.31	2.35/-2.14	1.53/0.16	1.25/-1.09	0.88/0.62	0.12/-0.18	-0.69/-0.85	-1.29/-2.38	-4.06/-5.94	-8.40/-9.59	-5.71/-5.15	-6.17/-6.55	-6.13/-5.02
Θ(30°)	-2.72/-3.41	-4.29/-4.44	-5.35/-4.44	-3.89/-5.12	-5.35/-1.88	0.74/0.67	-0.84/-1.60	-1.01/-0.43	-0.78/-1.92	-2.90/-2.87	0.53/-1.32	1.99/-1.53	-0.06/-1.17	-1.33/-0.99	0.14/0.31	-0.89/-1.68	-1.82/-1.65	-2.33/-2.78	-2.62/-3.10	-5.13/-7.68	-5.77/-4.75	-5.16/-4.74	-3.79/-4.46	
Θ(37.5°)	-6.15/-4.14	-5.00/-5.64	-6.39/-7.13	-8.82/-9.99	-7.62/-9.40	-0.47/-0.37	-1.42/-1.79	-0.94/-0.74	-1.48/-1.72	-1.72/-1.49	-1.49/-1.34	-1.14/-0.91	-0.82/-1.05	-2.69/-0.47	-0.12/-0.70	-4.41/-3.33	-4.00/-3.88	-3.89/-4.78	-4.98/-3.34	-2.77/-2.60	-1.82/-1.47	-2.32/-4.13	-4.70/-5.29	
Θ(45°)	-7.68/-4.48	-4.41/-5.04	-4.40/-5.51	-10.51/-10.41	-4.04/-2.12	-1.83/-2.83	-3.26/-2.90	-2.24/-2.86	-3.86/-3.09	-1.56/-1.28	-0.74/-1.40	-0.23/-0.15	0.94/-1.13	0.55/-0.95	-2.66/-1.42	-0.41/-1.53	-4.29/-1.52	-0.51/-1.17	-1.58/-3.50	-3.04/-1.85	-0.37/-2.88	-4.25/-3.53	-2.59/-4.79	-8.33/-9.77
Θ(52.5°)	-5.73/-4.81	-5.10/-4.74	-3.02/-4.62	-13.42/-8.66	-0.84/-0.34	-2.29/-3.02	-2.03/-2.22	-2.34/-3.53	1.13/0.57	-2.17/-0.54	1.13/0.57	-1.11/0.62	2.27/-2.92	2.09/-0.25	-1.67/-0.27	0.24/-0.02	-1.15/0.25	1.74/0.89	-0.42/-2.26	-3.09/-2.42	-0.53/-2.71	-3.69/-3.25	-3.53/-4.51	-4.33/-5.23
Θ(60°)	-4.17/-4.88	-4.71/-1.16	0.56/0.22	-5.68/-6.67	-1.20/-0.65	-1.43/-0.90	0.56/-1.17	0.04/-2.07	0.26/-1.77	2.50/2.68	1.43/0.73	-0.62/-1.23	0.65/-1.27	2.06/0.62	-0.45/-1.48	1.19/0.43	-0.46/-1.63	2.72/-2.72	-1.08/-2.43	-3.95/-2.56	-1.73/-2.36	-1.60/-0.91	-2.68/-3.75	-2.43/-3.19
Θ(67.5°)	-0.86/-3.08	-2.20/0.83	2.60/1.08	-2.44/-2.89	-0.35/-0.64	-0.81/0.08	1.20/2.71	2.41/1.61	3.31/0.43	2.88/2.35	2.38/-0.38	-1.46/-0.93	-0.32/-0.59	0.28/0.11	0.65/2.94	2.13/0.20	1.13/4.13	4.26/-1.15	-0.25/-2.08	-2.26/-1.12	-1.07/-1.28	0.40/0.20	-0.08/-3.01	-1.32/-0.96
Θ(75°)	0.69/-1.32	-2.04/-0.00	1.66/-0.38	-2.41/-2.94	0.94/-0.51	-0.01/-1.06	1.88/0.54	3.93/-2.45	3.92/-3.97	2.63/-1.53	2.97/-1.11	-2.79/-2.05	0.78/-0.48	-0.02/-0.30	-0.06/2.64	2.08/0.28	1.21/4.82	4.83/-1.38	2.15/-0.84	-2.11/0.87	0.26/-1.03	0.32/-1.24	1.11/-2.66	-1.80/-0.24
Θ(82.5°)	0.30/-1.20	-2.22/-1.18																						



Antenna Pattern of Scan/BT LE

Appendix B.3

θ(75°)	-2.44/-1.66	0.420/2.27	0.79/-0.41	-3.14/-0.30	2.310/62	-2.932/11	3.573/96	4.74/0.12	1.952/19	3.882/31	1.46/-1.51	1.56/-1.29	-0.89/1.21	1.570/64	1.101/23	-0.120/35	-2.22/-1.45	1.872/77	0.55/-3.22	-6.31/-4.21	0.010/73	0.27/-3.17	-0.830/23	1.170/-66
θ(82.5°)	-4.89/-3.21	-1.84/-0.77	-0.67/-0.95	-6.22/-3.38	1.82/-0.27	-5.09/-0.16	1.99/2.76	4.710/47	1.23/1.24	1.55/2.16	1.78/-1.12	2.04/1.39	-1.25/-0.13	-1.62/-1.05	0.290/67	-0.780/73	-1.29/-0.13	2.30/0.32	0.87/-3.55	-7.08/-3.71	0.66/-0.19	-2.50/-6.88	-1.80/-0.79	0.08/-2.80
θ(90°)	-9.79/-5.44	-3.84/-1.96	-1.35/-0.92	-6.86/-8.41	1.10/-1.03	-10.41/-1.28	1.550/61	2.020/91	0.070/22	0.240/28	1.09/-1.92	-2.96/-1.20	-2.72/-0.23	-3.42/-2.06	0.772/07	-1.04/-0.90	-1.54/-0.23	0.772/07	0.25/-3.48	-8.41/-4.75	0.49/-2.00	-5.32/-12.75	-1.39/-2.06	-5.42/-5.11
θ(97.5°)	-13.08/-3.98	-5.39/-2.73	-2.04/-2.30	-7.86/-4.35	-0.72/-4.28	-9.75/-1.37	0.05/-1.00	-1.060/13	-1.960/02	-2.72/-1.38	-0.42/-4.04	-2.76/-1.48	-3.32/-0.49	-7.79/-2.46	-2.53/-2.31	-0.96/-2.88	-3.45/-1.45	-2.71/-1.65	-2.57/-5.65	-12.46/-5.80	-1.15/-4.68	-8.93/-11.19	-2.33/-2.30	-6.02/-7.77
θ(105°)	-15.06/-4.66	-5.94/-2.77	-2.82/-4.10	-7.10/-6.47	-3.88/-8.72	-8.04/-4.05	-2.86/-4.20	-2.86/-1.44	-1.81/-0.99	-4.01/-4.68	-2.58/-5.05	-7.00/-3.85	-5.99/-1.92	-6.04/-5.80	-3.28/-4.50	-3.52/-6.44	-6.29/-5.03	-9.58/-7.90	-7.42/-4.64	-9.34/-11.31	-6.70/-9.54	-14.46/-7.38	-4.26/-4.86	-6.87/-6.60
θ(112.5°)	-13.58/-9.84	-7.75/-3.26	-3.43/-3.24	-5.68/-6.82	-5.25/-8.05	-12.36/-4.65	-4.56/-5.78	-4.82/-3.07	-3.99/-1.47	-4.18/-4.98	-2.47/-8.64	-7.78/-7.05	-7.72/-4.95	-8.10/-9.56	-7.82/-4.59	-9.93/-4.23	-6.90/-5.97	-8.62/-6.68	-8.17/-6.92	-8.90/-11.91	-8.27/-7.65	-11.47/-8.07	-7.17/-9.62	-8.44/-8.53
θ(120°)	-12.49/-7.94	-4.93/-6.30	-6.31/-7.20	-8.73/-9.85	-5.92/-8.52	-9.19/-6.56	-8.14/-8.62	-4.85/-5.74	-3.02/-4.62	-3.24/-4.93	-6.60/-7.66	-11.93/-8.64	-8.73/-12.95	-9.76/-8.92	-13.55/-6.74	-10.86/-7.90	-6.90/-6.25	-10.05/-12.17	-9.07/-6.33	-10.90/-14.93	-8.13/-10.61	-12.83/-11.85	-7.57/-11.04	-13.88/-11.97
θ(127.5°)	-13.70/-9.84	-11.43/-9.65	-5.83/-7.88	-10.06/-15.91	-14.08/-12.40	-15.40/-14.45	-13.75/-8.36	-5.84/-6.23	-4.97/-3.63	-4.63/-6.56	-9.59/-14.83	-14.36/-9.25	-11.46/-11.29	-12.57/-8.44	-10.09/-10.58	-5.71/-8.91	-8.85/-11.94	-15.01/-15.11	-11.98/-9.42	-14.69/-14.73	-10.35/-10.69	-12.09/-7.90	-11.09/-14.86	-10.47/-15.22
θ(135°)	-14.40/-12.07	-8.09/-14.30	-9.55/-8.26	-8.19/-10.50	-15.67/-11.59	-9.62/-8.34	-7.48/-9.20	-7.18/-7.70	-4.63/-4.01	-3.91/-7.64	-10.11/-12.52	-13.03/-14.99	-10.75/-14.03	-10.25/-14.27	-11.54/-9.79	-6.96/-9.94	-10.66/-13.86	-13.11/-15.60	-13.84/-7.43	-15.33/-15.24	-11.79/-14.39	-4.30/-11.54	-10.45/-13.75	-11.44/-12.86
θ(142.5°)	-11.41/-10.19	-11.85/-9.38	-10.56/-7.95	-13.81/-15.08	-11.52/-9.54	-13.02/-9.25	-8.32/-11.28	-13.21/-8.61	-2.54/-6.83	-8.02/-7.51	-14.94/-10.77	-15.65/-11.65	-13.48/-13.25	-12.69/-15.74	-15.78/-11.31	-9.89/-14.06	-13.19/-13.65	-14.66/-13.23	-15.13/-15.19	-11.61/-15.22	-12.25/-9.60	-9.96/-9.24	-11.28/-11.33	-12.64/-11.97
θ(150°)	-14.92/-14.62	-12.04/-11.76	-14.77/-14.30	-10.59/-9.40	-12.31/-11.60	-11.73/-13.45	-11.67/-15.89	-10.50/-8.81	-7.32/-8.23	-6.95/-7.47	-14.64/-10.93	-10.57/-15.34	-12.57/-11.41	-12.95/-15.84	-15.61/-15.44	-13.22/-12.44	-10.55/-11.17	-13.94/-15.33	-13.46/-15.93	-16.14/-15.74	-15.56/-15.59	-12.82/-14.00	-15.00/-15.38	-14.48/-13.87
θ(157.5°)	-13.86/-10.53	-10.57/-10.14	-9.88/-10.58	-14.36/-15.67	-12.25/-15.61	-15.74/-15.05	-13.13/-11.54	-12.08/-13.62	-10.36/-8.62	-11.82/-15.25	-15.17/-10.98	-15.13/-12.82	-10.70/-13.30	-14.55/-14.21	-15.22/-12.41	-12.40/-12.29	-11.47/-12.10	-12.89/-11.76	-13.14/-12.46	-13.30/-14.86	-14.93/-15.71	-15.47/-13.61	-14.16/-14.32	-13.44/-15.57
θ(165°)	-15.94/-12.92	-14.13/-15.75	-15.09/-15.50	-14.39/-14.07	-14.06/-12.89	-13.89/-15.24	-15.27/-9.22	-7.04/-6.45	-7.74/-10.77	-13.83/-14.98	-11.95/-10.05	-9.94/-10.23	-11.50/-15.52	-13.53/-9.26	-10.24/-12.53	-14.74/-15.35	-15.78/-15.62	-15.78/-15.59	-15.08/-14.70	-15.71/-15.20	-15.18/-14.65	-15.59/-13.77	-11.09/-8.20	-8.85/-12.02
θ(172.5°)	-15.85/-13.52	-13.31/-12.14	-11.31/-11.82	-11.19/-11.14	-11.03/-13.00	-14.55/-15.06	-14.33/-13.21	-12.96/-13.38	-12.94/-12.92	-13.17/-12.79	-13.57/-15.39	-15.21/-14.80	-15.35/-14.49	-15.57/-15.40	-15.64/-15.55	-15.03/-14.58	-13.67/-11.59	-10.41/-9.82	-10.04/-11.95	-14.69/-15.36	-15.02/-15.33	-14.79/-15.27	-14.76/-13.74	-13.76/-14.81
θ(180°)	-8.95/-8.77	-8.80/-8.25	-7.97/-7.67	-7.41/-8.14	-9.39/-9.24	-9.56/-9.12	-10.05/-9.80	-10.23/-9.80	-9.36/-9.11	-9.21/-9.10	-8.65/-9.43	-9.34/-9.00	-8.66/-8.06	-9.44/-11.14	-12.31/-13.33	-13.65/-14.58	-13.12/-14.07	-14.96/-13.23	-13.08/-12.91	-13.68/-13.28	-12.92/-13.99	-14.62/-14.80	-15.49/-15.88	-14.39/-13.93
Freq(Hz)	2.45GPol.	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°)	-1.48/-1.74	-2.08/-2.27	-2.62/-2.72	-2.59/-2.23	-1.92/-1.78	-1.83/-1.93	-1.94/-1.84	-1.64/-1.39	-1.15/-0.96	-0.86/-0.80	-0.84/-1.02	-1.20/-1.24	-1.16/-1.14	-1.26/-1.41	-1.16/-1.14	-1.65/-1.44	-1.29/-1.19	-1.04/-0.76	-0.76/-0.61	-0.73/-0.78	-0.61/-0.56	-0.67/-1.20	-0.45/-1.20	-0.35/-1.20
θ(7.5°)	0.13/-0.16	-0.52/-0.87	-1.21/-1.52	-1.69/-1.70	-1.73/-1.87	-2.15/-2.52	-2.82/-2.95	-2.87/-2.73	-2.86/-2.60	-2.45/-2.21	-2.08/-2.13	-2.10/-2.25	-2.42/-2.59	-2.74/-2.90	-3.00/-2.91	-2.63/-2.34	-2.07/-1.85	-1.53/-1.02	-0.55/-0.35	-0.38/-0.41	-0.29/-0.02	0.260/41	0.510/50	0.470/38
θ(15°)	0.650/40	0.07/-0.29	-0.69/-1.04	-1.38/-1.73	-2.18/-2.80	-3.50/-4.27	-4.90/-5.10	-5.02/-4.75	-4.34/-3.81	-3.24/-2.70	-2.29/-2.02	-1.97/-2.02	-2.02/-1.99	-2.07/-2.13	-2.36/-2.57	-2.75/-2.81	-2.83/-2.85	-2.64/-2.09	-1.32/-0.76	-0.57/-0.57	-0.420/0.4	0.500/81	0.930/95	1.000/99
θ(22.5°)	0.20/-0.17	-0.66/-1.08	-1.43/-1.63	-1.86/-2.20	-3.63/-3.69	-4.73/-5.66	-6.52/-6.16	-5.11/-4.10	-3.29/-2.76	-2.36/-1.99	-1.68/-1.48	-1.00/-0.58	-0.29/-0.12	0.15/-0.04	-0.40/-0.92	-1.92/-2.38	-3.22/-2.69	-1.92/-2.69	0.230/39	0.440/75	1.061/16	1.040/78	0.580/43	0.580/43
θ(30°)	-0.61/-1.33	-2.09/-2.54	-2.66/-2.68	-2.79/-3.17	-3.81/-4.68	-5.84/-7.02	-6.95/-5.09	-3.01/-1.68	-0.95/-0.71	-0.75/-1.05	-1.55/-2.05	-2.07/-1.33	-0.260/68	1.19/1.14	0.880/08	-1.21/-2.71	-3.96/-4.26	-3.97/-3.14	-1.550/14	1.28/1.71	1.78/1.83	1.901/78	1.360/83	0.38/-0.04
θ(37.5°)	-0.52/-1.64	-2.66/-3.16	-3.22/-3.14	-3.26/-3.73	-4.27/-4.73	-5.30/-5.65	-6.03/-3.39	-0.960/37	0.96/1.03	0.66/-0.18	-1.30/-2.32	-2.86/-2.27	-0.840/80	1.79/1.99	1.560/53	-1.17/-3.44	-5.12/-4.63	-3.26/-1.96	-0.35/-1.15	2.08/2.42	2.57/2.71	2.762/54	2.204/147	1.090/73
θ(45°)	0.33/-0.90	-2.29/-3.30	-3.66/-3.33	-3.07/-3.26	-3.43/-3.14	-3.27/-4.32	-4.36/-1.86	0.61/1.90	2.39/2.45	2.20/1.63	0.970/47	-0.24/-1.70	-2.95/-1.70	0.74/1.81	1.850/90	-1.01/-3.92	-7.03/-5.62	-2.96/-1.00	0.68/1.90	2.44/2.49	2.65/2.96	3.010/274	2.321/199	1.94/1.79
θ(52.5°)	0.78/-0.64	-2.22/-3.58	-4.04/-3.18	-2.35/-2.17	-2.08/-1.59	-1.54/-2.39	-2.53/-0.30	1.97/3.05	3.27/3.24	3.20/3.03	2.85/2.71	2.160/52	-1.30/-0.93	0.78/1.52	1.150/18	-1.49/-4.72	-8.23/-5.32	-2.45/-0.59	1.09/2.22	2.53/2.44	2.62/2.84	2.602/03	1.591/59	1.960/28
θ(60°)	0.57/-0.99	-2.69/-4.02	-4.40/-3.27	-2.11/-1.64	-1.30/-0.86	-0.97/-1.88	-1.970/27	2.49/3.43	3.44/3.23	3.36/3.54	3.45/3.60	4.05/3.84	2.540/95	0.530/75	0.11/-0.72	-1.37/-3.77	-8.42/-5.38	-2.33/-0.85	0.67/1.85	2.19/2.14	2.34/2.40	1.810/94	0.580/92	1.48/1.76
θ(67.5°)	0.01/-2.10	-4.05/-5.09	-5.06/-3.54	-2.22/-1.44	-0.90/-0.79	-1.34/-2.31	-2.080/29	2.43/3.11	2.73/3.27	2.85/3.18	2.95/3.11	3.84/3.79	2.640/97	0.520/23	-1.40/-2.48	-1.93/-3.68	-7.86/-5.11	-2.20/-0.99	0.39/1.56	1.80/1.52	1.48/1.37	0.61/-0.29	-0.260/47	0.99/1.07
θ(75°)	-1.20/-3.34	-5.39/-5.67	-4.55/-2.81	-1.58/-0.92	-0.80/-1.23	-2.02/-2.72	-2.35/-0.27	1.50/1.81	1.19/1.08	2.06/2.74	2.23/1.55	2.40/3.16	2.330/37	-1.55/-1.70	-3.11/-5.29	-3.54/-3.84	-7.13/-5.50	-2.79/-2.28	-1.000/76	1.220/36	-0.47/-0.65	-0.89/-1.42	-1.26/-0.34	0.01/-0.44
θ(82.5°)	-3.26/-4.51	-5.16/-4.84	-3.64/-2.24	-1.59/-1.41	-1.56/-2.23	-2.94/-3.37	-2.54/-0.57	0.720/65	-0.010/23	1.24/1.37	0.02/-0.91	0.39/1.05	-0.21/-2.53	-3.61/-3.50	-4.73/-6.15	-4.79/-4.80	-6.64/-5.02	-2.98/-3.59	-3.09/-0.54	0.47/-0.51	-2.37/-3.38	-2.79/-2.27	-1.85/-8.88	-0.57/-1.49
θ(90°)	-4.26/-4.69	-3.96/-3.81	-3.90/-3.14	-2.36/-1.82	-1.89/-2.76	-3.99/-4.11	-2.48/-0.87	-0.29/-0.84	-1.84/-1.89	-0.77/-0.19	-1.16/-2.33	-1.73/-1.20	-1.46/-2.81	-5.49/-5.30	-5.37/-7.75	-7.53/-6.00	-7.51/-6.91	-3.85/-3.95	-5.31/-2.74	-0.54/-0.79	-2.87/-5.23	-4.64/-3.32	-2.96/-2.15	-1.57/-2.18
θ(97.5°)	-5.10/-5.97	-4.24/-3.62	-3.32/-3.98	-2.62/-1.78	-2.52/-4.50	-6.33/-4.43	-1.77/-0.99	-1.77/-3.01	-1.83/-1.41	-2.44/-4.16	-4.27/-4.37	-5.73/-7.36	-1.77/-6.02	-6.92/-6.76	-7.55/-6.64	-8.03/-8.06	-5.00/-4.18	-6.14/-4.89	-1.81/-1.40	-3.19/-8.84	-5.32/-3.85	-3.47/-3.48	-3.24/-3.25	-3.24/-3.25
θ(105°)	-3.97/-4.65	-3.47/-2.81	-4.09/-0.57	-3.45/-2.33	-3.69/-7.63	-10.71/-5.33	-2.13/-2.02	-4.34/-5.66	-4.48/-3.92	-3.07/-1.95	-2.07/-4.75	-4.95/-2.30	-3.08/-7.66	-0.84/-6.12	-7.58/-7.75	-6.97/-8.08	-10.22/-12.13	-7.83/-4.89	-6.24/-8.37	-4.45/-2.43	-2.96/-5.30	-7.46/-6.36	-5.26/-5.14	-4.99/-3.96
θ(112.5°)	-4.67/-5.21	-4.11/-3.12	-3.88/-5.22	-3.97/-3.24	-5.53/-11.73	-10.10/-4.41	-2.57/-4.27	-9.80/-7.51	-4.59/-4.36	-3.64/-1.93	-2.64/-7.52	-6.78/-4.62	-6.94/-9.99	-6.10/-5.09	-5.94/-4.90	-4.85/-7.05	-10.49/-11.99	-8.29/-4.63	-4.61/-8.06	-9.83/-6.18	-4.95/-6.03	-8.19/-8.07	-7.04/-6.53	-5.98/-4.52
θ(120°)	-4.70/-5.90	-6.05/-5.02	-4.51/-5.16	-5.65/-5.51	-8.31/-12.84	-7.86/-4.36	-3.91/-7.26	-1.15/-3.80	-4.79/-5.01	-5.77/-4.19	-4.34/-9.55	-1.73/-4.20	-5.61/-9.25	-8.31/-6.61	-5.95/-4.77	-5.22/-7.61	-11.36/-13.48	-12.73/-7.66	-5.37/-6.05	-7.99/-7.37	-6.10/-6.60	-9.04/-10.19	-8.14/-7.94	-6.45/-5.33
θ(127.5°)	-5.57/-7.07	-7.51/-6.09	-4.40/-4.32	-6.25/-8.80	-13.05/-13.14	-7.07/-5.02	-5.91/-10.67	-1.56																

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

