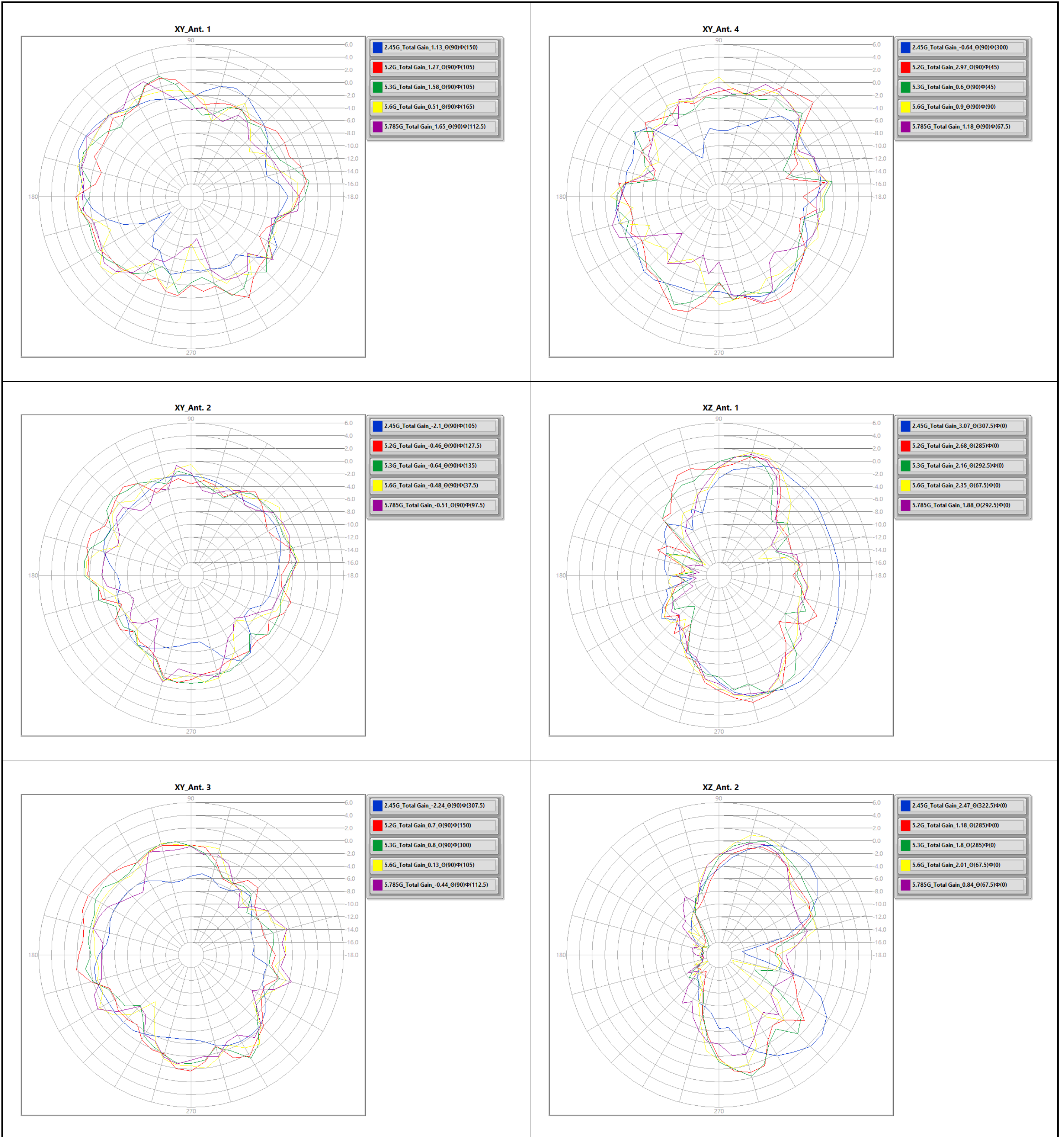
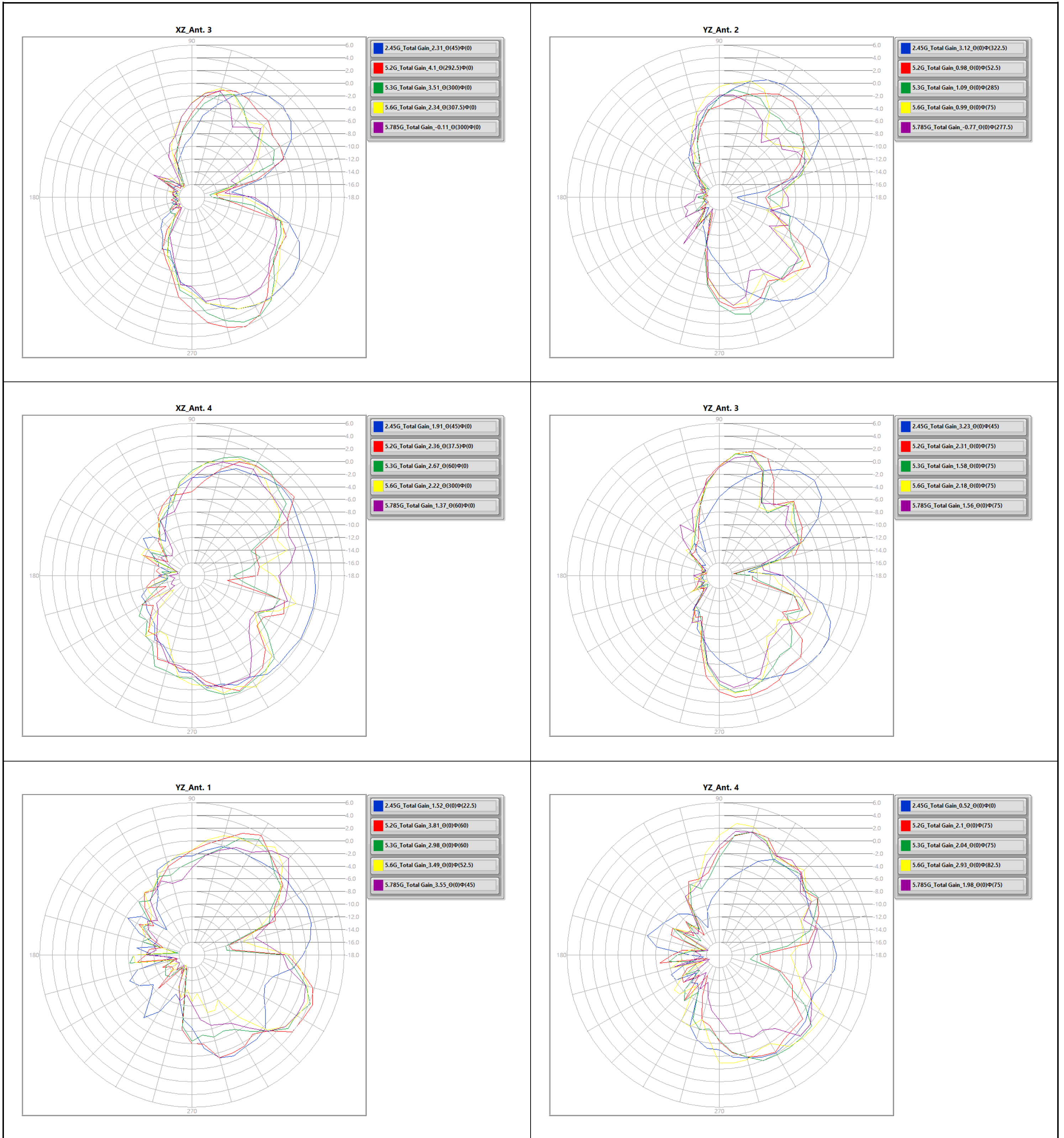


E1(XY plane) – $\Theta(90)\Phi(0-360)$
 E2(XZ plane) – $\Theta(0-180)\Phi(0)$ and $\Theta(0-180)\Phi(180)$
 E3(YZ plane) – $\Theta(0-180)\Phi(90)$ and $\Theta(0-180)\Phi(270)$





Total Gain Summary

XZ_5.2G_Ant. 1_Total Gain_1.29_0(315)0(0)	XZ_5.3G_Ant. 1_Total Gain_1.28_0(45)0(0)	XZ_5.6G_Ant. 1_Total Gain_1.89_0(37.5)0(0)	XZ_5.785G_Ant. 1_Total Gain_2_0(30)0(0)
YZ_5.2G_Ant. 1_Total Gain_0.32_0(0)0(322.5)	YZ_5.3G_Ant. 1_Total Gain_-0.12_0(0)0(330)	YZ_5.6G_Ant. 1_Total Gain_1.28_0(0)0(45)	YZ_5.785G_Ant. 1_Total Gain_0.66_0(0)0(292.5)
XY_5.2G_Ant. 1_Total Gain_1.09_0(90)0(277.5)	XY_5.3G_Ant. 1_Total Gain_1.59_0(90)0(285)	XY_5.6G_Ant. 1_Total Gain_1.25_0(90)0(142.5)	XY_5.785G_Ant. 1_Total Gain_1.57_0(90)0(142.5)
XZ_5.2G_Ant. 2_Total Gain_1.92_0(315)0(0)	XZ_5.3G_Ant. 2_Total Gain_2.71_0(315)0(0)	XZ_5.6G_Ant. 2_Total Gain_2.61_0(315)0(0)	XZ_5.785G_Ant. 2_Total Gain_2.38_0(67.5)0(0)
YZ_5.2G_Ant. 2_Total Gain_1.19_0(0)0(307.5)	YZ_5.3G_Ant. 2_Total Gain_0.43_0(0)0(285)	YZ_5.6G_Ant. 2_Total Gain_1.75_0(0)0(315)	YZ_5.785G_Ant. 2_Total Gain_0.66_0(0)0(292.5)
XY_5.2G_Ant. 2_Total Gain_-0.07_0(90)0(285)	XY_5.3G_Ant. 2_Total Gain_-0.33_0(90)0(255)	XY_5.6G_Ant. 2_Total Gain_0.07_0(90)0(277.5)	XY_5.785G_Ant. 2_Total Gain_0.47_0(90)0(225)
XZ_5.2G_Ant. 3_Total Gain_2.26_0(67.5)0(0)	XZ_5.3G_Ant. 3_Total Gain_1.15_0(292.5)0(0)	XZ_5.6G_Ant. 3_Total Gain_2.94_0(292.5)0(0)	XZ_5.785G_Ant. 3_Total Gain_1.77_0(292.5)0(0)
YZ_5.2G_Ant. 3_Total Gain_2.81_0(0)0(45)	YZ_5.3G_Ant. 3_Total Gain_3.27_0(0)0(45)	YZ_5.6G_Ant. 3_Total Gain_1.99_0(0)0(45)	YZ_5.785G_Ant. 3_Total Gain_1.04_0(0)0(52.5)
XY_5.2G_Ant. 3_Total Gain_1.1_0(90)0(307.5)	XY_5.3G_Ant. 3_Total Gain_0.32_0(90)0(307.5)	XY_5.6G_Ant. 3_Total Gain_1.55_0(90)0(307.5)	XY_5.785G_Ant. 3_Total Gain_0.31_0(90)0(255)
XZ_5.2G_Ant. 4_Total Gain_1.78_0(322.5)0(0)	XZ_5.3G_Ant. 4_Total Gain_0.4_0(45)0(0)	XZ_5.6G_Ant. 4_Total Gain_1.54_0(322.5)0(0)	XZ_5.785G_Ant. 4_Total Gain_3.19_0(300)0(0)
YZ_5.2G_Ant. 4_Total Gain_2.8_0(0)0(330)	YZ_5.3G_Ant. 4_Total Gain_1.9_0(0)0(277.5)	YZ_5.6G_Ant. 4_Total Gain_3.38_0(0)0(330)	YZ_5.785G_Ant. 4_Total Gain_1.95_0(0)0(300)
XY_5.2G_Ant. 4_Total Gain_0.92_0(90)0(270)	XY_5.3G_Ant. 4_Total Gain_0.87_0(90)0(270)	XY_5.6G_Ant. 4_Total Gain_0.89_0(90)0(322.5)	XY_5.785G_Ant. 4_Total Gain_1.73_0(90)0(307.5)



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Table with columns for Azimuth (Az), Elevation (El), and Gain (dBS). Rows represent various frequency bands and antenna configurations, including 5.85GHz, 5.785GHz, and 5.65GHz. Each cell contains a numerical value representing the antenna gain in dBS.



Antenna Pattern_Radio 3_5GHz UNII 1~3

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Freq(Hz)	5.6GPoL		TotalAnt.3																																																
Gain	Phi(7.5°)	Phi(15°)	Phi(30°)	Phi(45°)	Phi(60°)	Phi(75°)	Phi(90°)	Phi(105°)	Phi(120°)	Phi(135°)	Phi(150°)	Phi(165°)	Phi(180°)	Phi(195°)	Phi(210°)	Phi(225°)	Phi(240°)	Phi(255°)	Phi(270°)	Phi(285°)	Phi(300°)	Phi(315°)	Phi(330°)	Phi(345°)	Phi(7.5°)	Phi(15°)	Phi(30°)	Phi(45°)	Phi(60°)	Phi(75°)	Phi(90°)	Phi(105°)	Phi(120°)	Phi(135°)	Phi(150°)	Phi(165°)	Phi(180°)	Phi(195°)	Phi(210°)	Phi(225°)	Phi(240°)	Phi(255°)	Phi(270°)	Phi(285°)	Phi(300°)	Phi(315°)	Phi(330°)	Phi(345°)			
Theta(75°)	1.75/1.74	1.48/1.00	0.53/1.41	1.34/0.03	-2.04/-2.02	-1.96/-0.21	0.18/-0.08	0.73/1.84	1.72/0.99	-0.55/-3.34	-2.61/-4.04	1.69/0.98	-1.43/1.88	3.68/2.28	1.06/1.20	2.57/2.88	2.04/1.46	0.87/0.72	0.43/-0.47	-0.55/1.28	3.03/3.58	2.63/1.85	1.29/0.47	-0.65/-3.00	1.75/1.74	-0.11/-0.77	-0.57/0.28	-0.18/-1.93	-3.47/-4.02	-3.65/-2.06	-1.05/-0.84	-0.41/1.15	0.84/0.66	-2.10/-5.06	-3.68/-1.09	0.94/-1.47	-2.94/0.69	2.28/-0.66	-1.30/-0.10	1.58/1.91	1.02/0.53	-0.37/-0.68	-0.83/-1.79	-1.44/0.44	2.16/2.72	1.53/0.00	-1.41/-2.13	-2.74/-1.71			
Theta(82.5°)	0.18/-0.16	-0.11/-0.77	-0.57/0.28	-0.18/-1.93	-3.47/-4.02	-3.65/-2.06	-1.05/-0.84	-0.41/1.15	0.84/0.66	-2.10/-5.06	-3.68/-1.09	0.94/-1.47	-2.94/0.69	2.28/-0.66	-1.30/-0.10	1.58/1.91	1.02/0.53	-0.37/-0.68	-0.83/-1.79	-1.44/0.44	2.16/2.72	1.53/0.00	-1.41/-2.13	-2.74/-1.71	-0.11/-0.77	-0.57/0.28	-0.18/-1.93	-3.47/-4.02	-3.65/-2.06	-1.05/-0.84	-0.41/1.15	0.84/0.66	-2.10/-5.06	-3.68/-1.09	0.94/-1.47	-2.94/0.69	2.28/-0.66	-1.30/-0.10	1.58/1.91	1.02/0.53	-0.37/-0.68	-0.83/-1.79	-1.44/0.44	2.16/2.72	1.53/0.00	-1.41/-2.13	-2.74/-1.71				
Theta(90°)	-2.18/-2.29	-1.94/-3.12	-2.17/-2.01	-3.30/-4.80	-5.40/-5.04	-5.10/-4.46	-3.13/-2.61	-4.18/-6.16	-9.45/-9.21	-11.97/-12.12	-14.36/-9.96	-9.00/-9.52	-12.09/-8.19	-6.44/-7.82	-10.56/-8.96	-7.43/-7.21	-9.43/-9.78	-7.50/-8.55	-6.82/-11.29	-13.54/-7.67	-7.21/-6.61	-8.89/-3.61	-1.92/-1.59	-3.09/-4.13	-5.40/-5.32	-6.87/-6.83	-8.13/-7.76	-9.35/-8.04	-8.19/-10.27	-12.20/-11.87	-14.31/-14.70	-16.60/-12.29	-10.40/-10.19	-9.45/-9.21	-11.97/-12.12	-14.36/-9.96	-9.00/-9.52	-12.09/-8.19	-6.44/-7.82	-10.56/-8.96	-7.43/-7.21	-9.43/-9.78	-7.50/-8.55	-6.82/-11.29	-13.54/-7.67	-7.21/-6.61	-8.89/-3.61	-1.92/-1.59	-3.09/-4.13	-5.40/-5.32	-6.87/-6.83

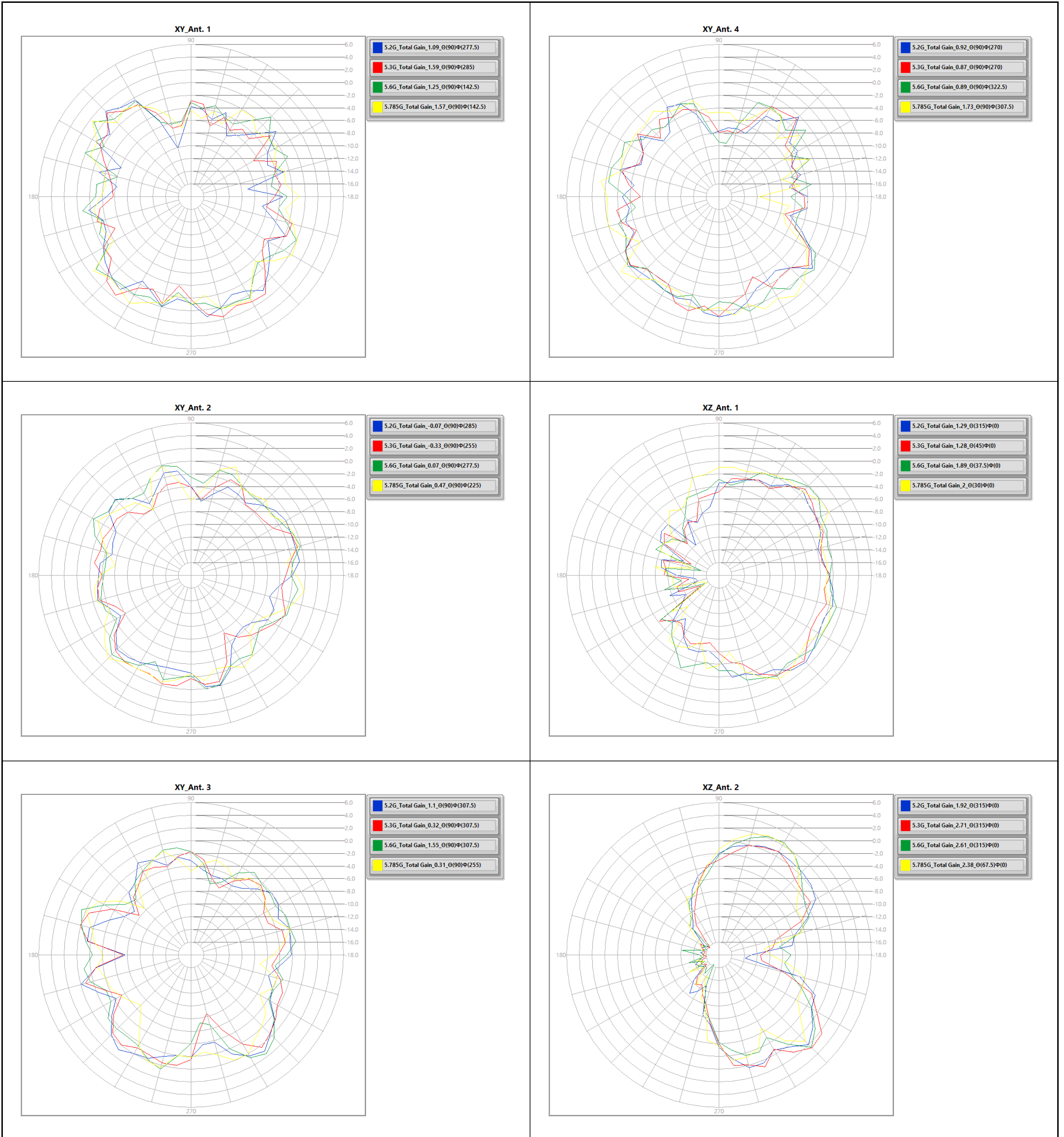


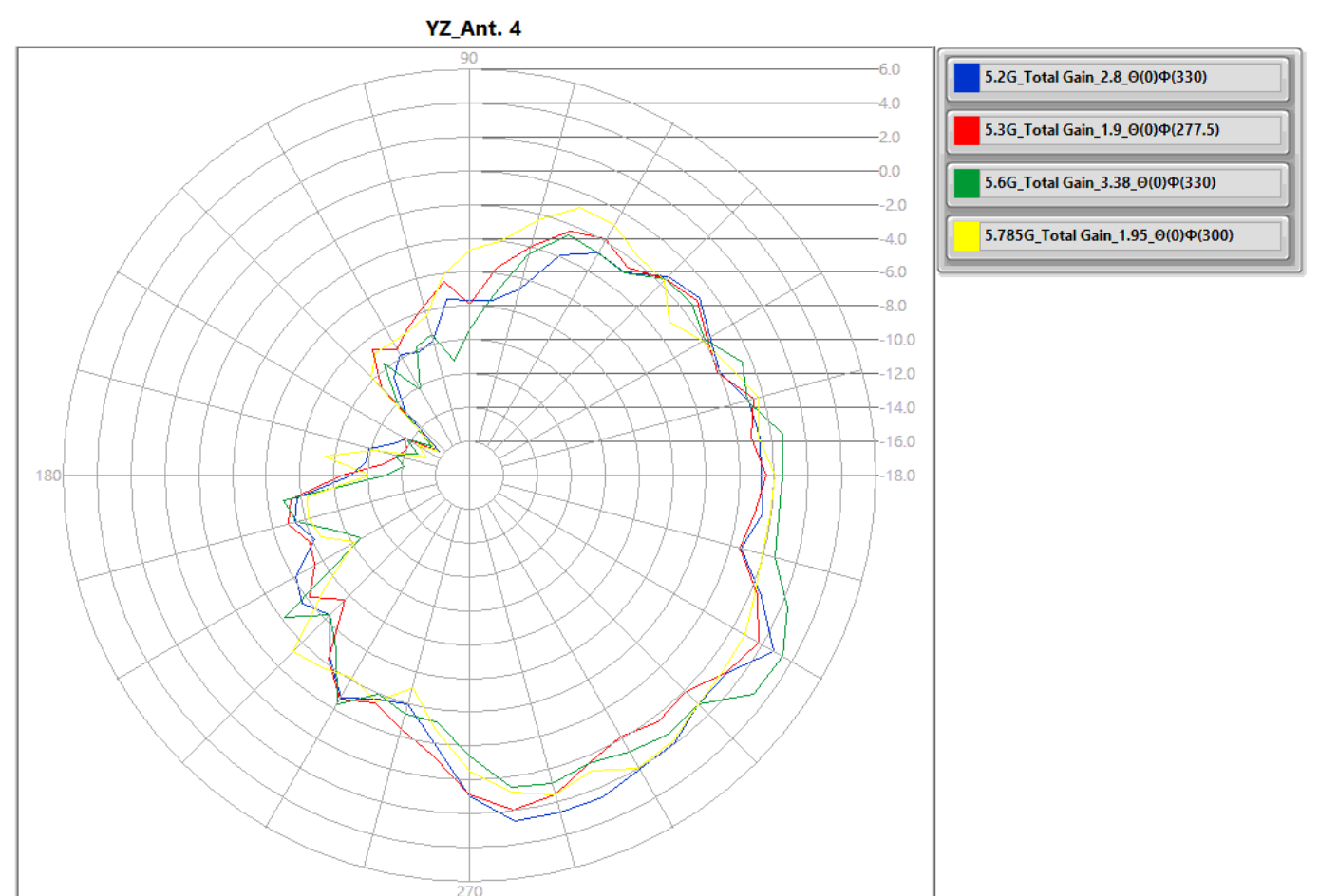
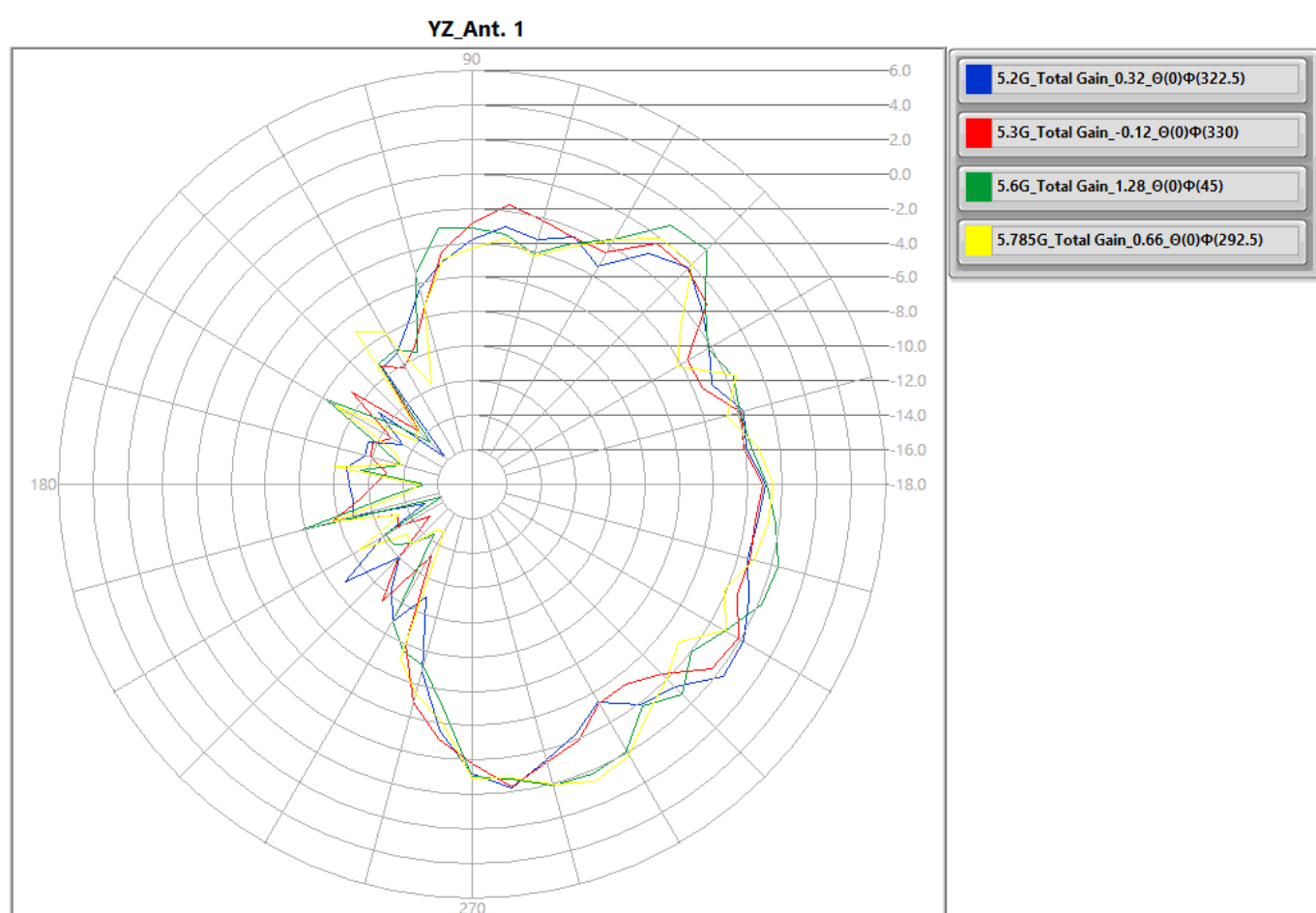
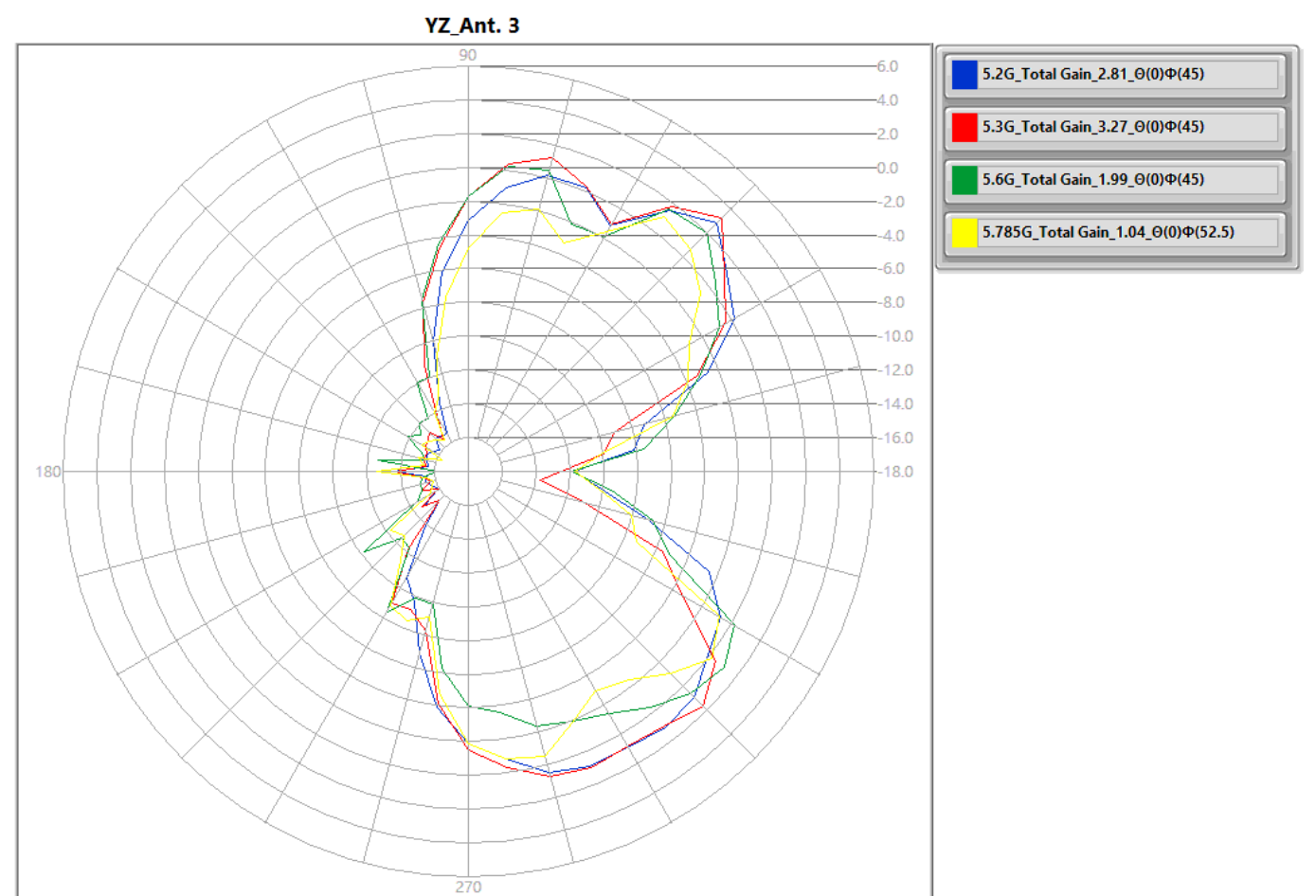
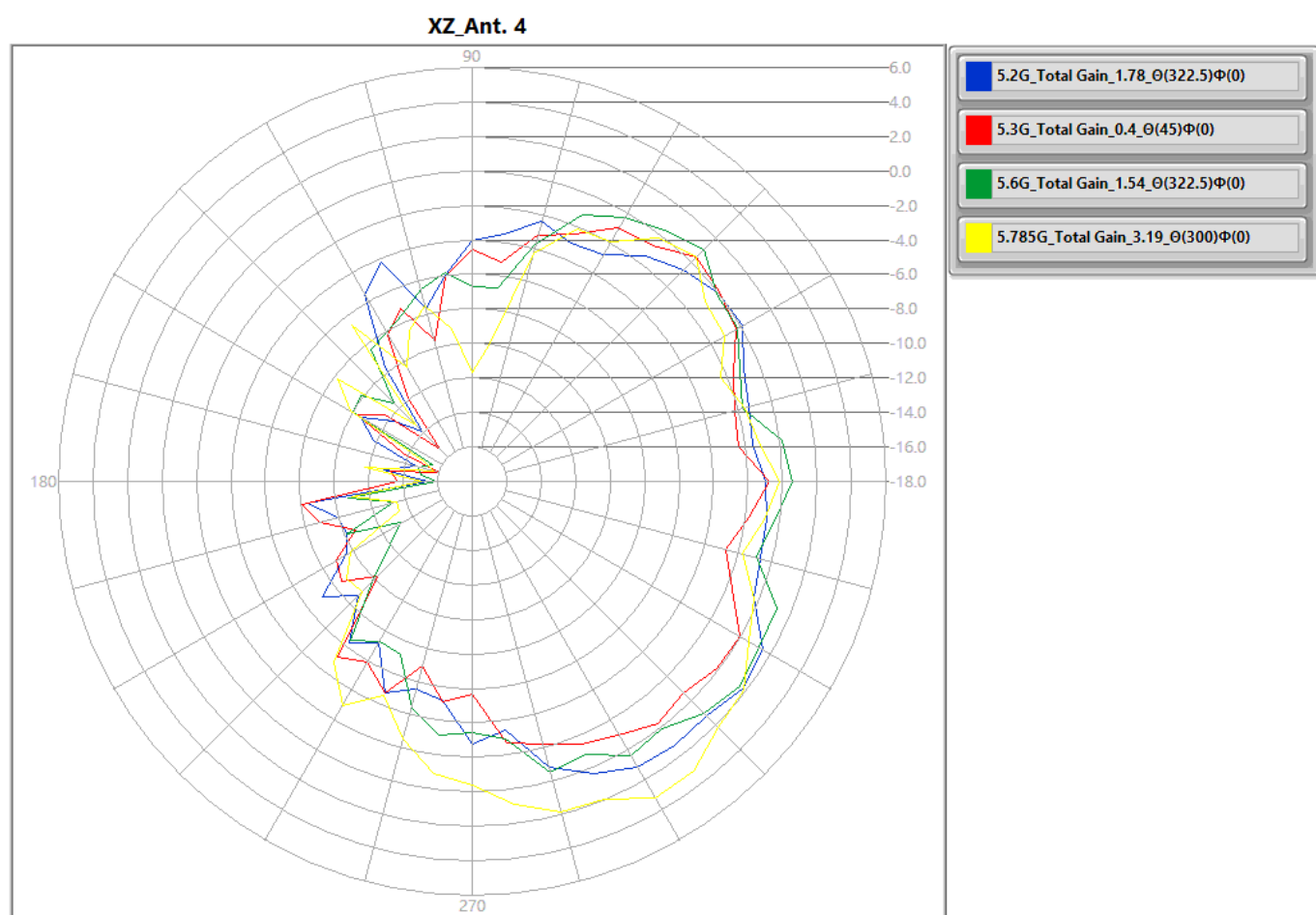
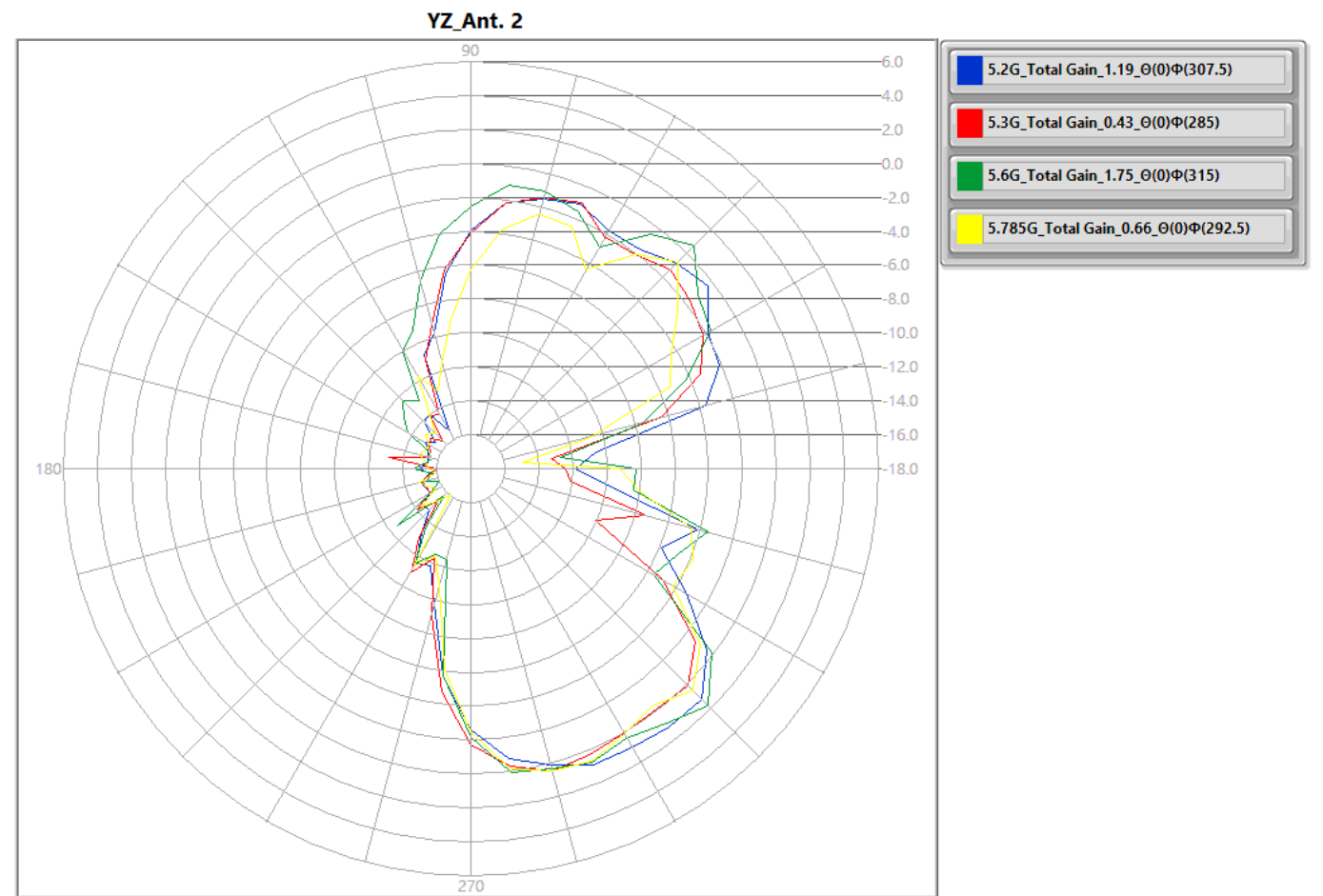
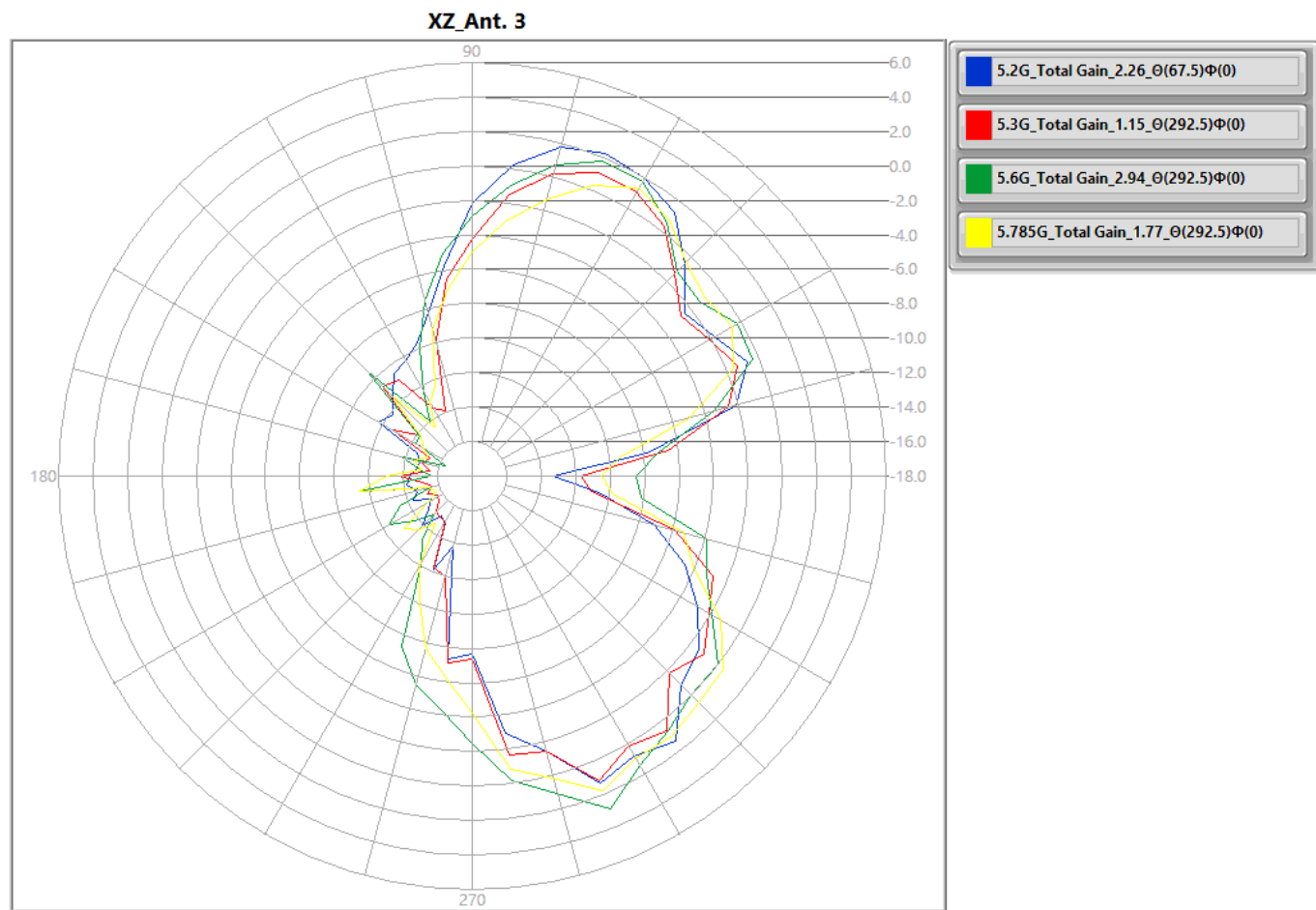
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θ (120°)	-5.51:8.23	-15.63:14.39	-10.43:7.63	-7.89:9.58	-12.65:15.65	-13.50:10.86	-9.77:10.00	-6.69:7.97	-8.72:10.06	-6.62:7.53	-7.10:6.75	-7.95:6.20	-7.17:8.59	-7.29:7.03	-5.72:3.65	-3.34:4.22	-4.12:6.41	-4.26:5.19	-2.78:4.64	-5.50:11.51	-14.39:9.20	-8.54:10.06	-6.62:7.44	-10.53:11.01	
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°)	
Gain	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
φ (7.5°)	-2.42:2.42	-2.47:2.87	-3.08:2.63	-2.59:4.29	-2.38:2.24	-2.09:1.63	-1.18:0.75	-0.51:0.33	-0.02:0.14	-0.26:0.29	-0.38:0.88	-1.17:1.30	-1.83:1.32	-0.97:1.34	-1.77:1.50	-1.55:1.55	-0.94:0.69	-0.81:0.98	-0.96:0.66	-0.47:0.82	-1.13:1.08	-1.24:1.51	-1.79:1.88	-2.19:2.26	
φ (15°)	-2.23:2.68	-3.07:3.38	-3.17:3.30	-3.34:3.21	-2.77:2.39	-1.84:1.31	-0.63:0.12	0.03:0.17	0.40:0.33	0.19:0.24	-0.07:0.51	-1.07:1.92	-2.80:2.86	-2.62:2.42	-2.38:2.47	-2.49:2.36	-2.05:1.54	-1.28:1.33	-1.43:1.15	-0.94:1.11	-1.32:1.36	-1.53:1.71	-1.99:2.00	-1.76:2.58	
φ (22.5°)	-1.62:1.33	-0.88:0.70	-0.78:1.37	-2.12:2.65	-2.85:3.25	-3.09:2.81	-2.13:1.37	-0.31:0.80	1.10:1.11	0.87:0.36	-0.19:0.64	-1.51:2.10	-1.68:1.29	-0.76:0.16	-0.36:0.88	-1.18:1.32	-1.20:0.58	-0.04:0.24	0.38:0.35	0.31:0.36	-0.62:0.76	-0.92:1.90	-0.62:0.73	-0.59:0.57	
φ (30°)	-0.32:0.03	-0.31:0.95	-1.27:1.04	-1.38:2.92	-4.30:4.98	-3.81:2.34	-1.80:1.66	-0.80:0.47	0.87:0.96	0.56:0.68	-1.72:1.52	-0.93:0.56	-0.05:0.14	-0.01:0.25	0.72:1.14	0.96:0.72	0.43:0.20	0.42:1.04	1.70:2.08	2.05:1.56	1.30:1.32	0.66:0.12	0.34:0.10	-0.66:0.43	
φ (37.5°)	0.06:0.26	-1.06:0.98	-1.16:1.87	-2.32:2.53	-2.60:2.80	-2.80:1.80	-1.09:1.14	-0.07:1.29	1.20:0.79	-0.13:2.08	-2.62:1.33	-0.50:0.13	-0.12:0.01	0.82:1.48	1.77:0.74	1.77:0.74	1.06:0.43	1.06:0.43	1.41:1.55	1.59:1.22	1.82:2.97	2.50:1.51	0.93:0.46	-1.16:0.07	
φ (45°)	0.40:0.32	-0.54:0.23	-0.08:1.23	-1.78:1.27	-1.39:2.51	-1.39:2.51	-1.63:1.43	-0.66:1.02	1.54:1.01	0.18:0.96	-0.65:0.15	-0.10:0.90	-0.88:0.61	-0.41:0.33	0.11:0.31	1.29:0.55	-0.36:0.81	-0.70:0.08	0.40:0.35	0.11:0.31	1.14:1.38	1.02:0.03	2.35:2.00	1.40:0.29	-0.43:0.27
φ (52.5°)	-0.79:0.30	-0.10:0.44	-0.14:0.58	-0.29:0.56	-0.33:2.31	-3.33:2.05	-2.57:1.81	-1.06:0.15	1.50:1.19	0.81:0.41	-0.03:0.69	-0.37:0.10	-0.32:0.50	-1.14:0.86	0.74:1.53	2.24:2.25	1.36:1.03	0.26:0.36	0.35:1.25	1.49:1.19	0.46:0.62	0.85:0.83	0.86:0.18	0.27:0.24	
φ (60°)	-1.05:0.55	0.38:0.19	0.38:0.14	-0.14:0.06	-0.64:0.80	-2.37:0.89	-1.89:2.26	-1.72:1.50	0.29:0.74	0.75:0.57	-0.54:1.75	-0.11:0.34	-1.04:1.78	-1.68:1.28	0.52:1.95	2.52:2.70	1.17:1.18	0.24:0.58	-0.19:0.09	-0.15:0.44	0.95:1.03	-1.98:0.09	1.15:0.02	-0.49:0.63	
φ (67.5°)	-2.50:0.37	-0.29:0.87	0.79:0.06	1.27:1.17	0.03:0.10	-1.45:1.13	-1.19:1.60	-0.86:0.62	0.01:0.16	-0.91:1.11	-1.45:1.35	-1.52:1.42	-2.47:2.58	-0.44:1.74	2.29:2.02	1.05:0.97	0.71:0.21	0.45:0.05	-0.66:0.92	-1.41:1.41	-1.76:0.87	0.91:1.67	-2.26:1.87	-2.51:1.87	
φ (75°)	-3.24:2.28	-1.82:0.12	-0.10:0.18	2.05:1.60	0.22:0.46	-2.09:3.02	-4.00:3.00	-1.83:1.79	-1.72:1.73	-1.95:0.35	-2.14:2.27	-0.97:2.25	-2.22:2.02	-2.85:3.10	-0.83:1.03	0.74:1.14	0.86:0.58	1.13:0.53	1.57:0.77	-1.06:2.79	-0.14:0.72	-0.58:1.40	0.41:2.76	-3.47:3.66	
φ (82.5°)	-5.19:4.31	-4.02:3.48	-2.87:3.14	0.18:0.28	-0.47:2.71	-4.59:4.62	-6.63:4.19	-3.01:2.22	-2.76:1.68	-3.25:2.52	-4.81:4.52	-2.99:2.48	-2.31:2.52	-1.41:3.51	-1.31:0.07	-0.47:0.50	0.37:1.25	0.64:0.97	1.90:0.31	-1.53:4.19	-0.28:0.47	-0.22:1.48	-0.05:3.17	-3.91:2.48	
φ (90°)	-4.57:4.40	-5.05:4.52	-4.74:4.85	-6.62:1.33	-1.52:6.05	-7.70:7.48	-7.86:5.34	-3.86:3.12	-3.46:2.84	-4.92:1.80	-2.29:3.71	-5.63:1.74	-2.14:3.93	-4.97:0.36	-1.12:0.20	-2.08:1.12	0.59:0.61	0.87:1.16	-2.09:4.30	-1.40:2.18	-2.14:0.22	-1.65:4.92	-7.27:4.38	-7.27:4.38	
φ (97.5°)	-6.00:5.66	-5.82:6.88	-5.51:5.89	-1.65:2.79	-2.32:6.60	-9.67:8.98	-6.44:6.00	-5.19:4.07	-5.20:3.48	-5.03:3.14	-4.54:5.69	-5.71:3.27	-5.08:2.86	-2.02:3.35	-2.46:0.93	-1.45:2.92	-3.82:2.16	-1.48:0.61	-1.32:3.57	-4.62:6.22	-3.51:4.31	-4.36:3.42	-4.02:6.76	-6.32:4.38	
φ (105°)	-9.56:9.29	-7.10:7.41	-6.18:7.91	-2.92:3.99	-4.39:7.63	-10.26:9.77	-7.65:6.63	-7.07:5.24	-5.01:5.20	-4.96:3.13	-5.57:4.77	-4.83:6.79	-6.93:4.88	-3.36:4.52	-3.11:3.19	-1.70:2.14	-4.32:3.49	-1.63:2.31	-2.45:5.95	-6.83:5.30	-7.17:7.64	-7.24:5.30	-5.78:10.32	-8.06:5.44	
φ (112.5°)	-7.15:12.29	-9.75:10.05	-9.46:8.32	-8.32:9.86	-8.22:10.61	-10.92:10.24	-8.58:8.60	-7.15:5.06	-6.22:7.24	-5.20:5.14	-6.52:6.82	-6.99:7.42	-4.76:4.98	-4.06:4.71	-5.11:5.20	-2.42:4.12	-5.35:5.75	-2.59:3.73	-3.48:6.24	-7.41:5.92	-6.77:9.34	-9.09:7.21	-5.92:11.11	-11.33:10.47	
φ (120°)	-8.22:9.82	-15.16:12.86	-12.14:7.34	-5.63:7.01	-13.55:14.83	-15.23:11.55	-9.40:8.47	-7.40:7.18	-6.69:8.36	-6.19:6.46	-7.72:7.16	-7.69:7.77	-5.87:7.70	-6.00:4.80	-7.24:4.64	-4.72:6.13	-5.63:6.44	-3.96:3.93	-2.74:6.94	-6.46:8.32	-10.95:7.53	-9.32:10.34	-7.99:9.84	-11.29:11.66	
φ (127.5°)	-11.91:14.18	-15.57:13.08	-14.68:9.86	-6.95:8.42	-11.39:11.83	-12.97:10.48	-8.62:9.19	-9.24:9.54	-7.51:8.88	-10.50:8.08	-7.54:9.20	-9.19:6.57	-5.20:7.50	-5.94:5.81	-7.97:4.47	-2.38:6.70	-6.90:6.87	-6.44:6.84	-4.35:6.28	-9.86:12.69	-12.03:10.48	-10.09:13.02	-7.64:9.16	-10.32:10.08	
φ (135°)	-15.42:11.24	-14.89:12.00	-11.94:13.53	-13.79:12.94	-15.64:14.34	-17.11:11.26	-10.69:10.84	-10.16:11.06	-11.95:9.56	-9.68:7.80	-9.35:8.84	-10.19:8.17	-6.09:11.10	-7.77:2.69	-2.38:6.88	-8.66:7.76	-5.74:5.25	-7.63:8.98	-11.78:14.81	-7.31:8.85	-7.52:13.27	-12.98:10.97	-12.24:10.47	-12.24:10.47	
φ (142.5°)	-11.61:10.65	-8.55:14.72	-12.46:8.62	-7.76:9.82	-13.05:14.48	-15.47:15.42	-16.69:16.00	-14.82:13.26	-12.48:8.43	-9.98:12.51	-9.94:8.46	-9.06:8.62	-8.42:7.48	-7.77:7.54	-5.08:4.09	-4.89:8.12	-13.46:10.47	-6.87:6.17	-6.10:6.97	-9.06:13.61	-8.73:11.28	-7.12:8.04	-8.87:11.74	-10.26:10.14	
φ (150°)	-10.24:13.88	-14.23:11.11	-12.84:14.63	-15.02:15.83	-14.05:15.56	-14.12:13.88	-13.50:13.27	-12.58:12.26	-13.26:15.26	-14.21:10.52	-14.19:12.32	-11.17:10.31	-8.89:8.65	-10.51:11.82	-9.96:6.64	-7.44:12.04	-11.70:9.75	-8.80:9.62	-7.42:7.05	-9.47:12.48	-12.73:12.78	-11.51:10.36	-10.99:14.26	-15.82:10.22	
φ (157.5°)	-13.67:15.03	-15.37:14.35	-14.09:13.82	-15.15:14.92	-14.83:15.06	-14.74:12.83	-14.01:13.65	-13.54:12.11	-11.86:13.79	-13.31:13.72	-13.29:12.55	-11.88:11.08	-10.65:10.36	-12.14:11.64	-8.17:9.66	-9.47:8.12	-10.09:9.07	-7.71:6.70	-7.78:9.86	-10.09:10.22	-10.24:10.80	-10.64:9.86	-9.96:11.19	-13.75:15.01	
φ (165°)	-15.98:15.79	-14.72:15.12	-15.17:15.63	-15.86:14.79	-13.50:12.35	-12.76:13.04	-13.59:11.40	-13.59:11.40	-9.16:8.59	-9.08:11.02	-12.82:12.31	-11.56:11.30	-10.63:9.56	-8.66:9.58	-10.14:8.94	-8.79:8.68	-10.13:11.28	-9.28:7.57	-6.93:7.60	-8.83:9.42	-11.39:14.15	-14.61:12.40	-12.43:14.87	-14.84:11.95	
φ (172.5°)	-13.21:13.64	-14.54:14.64	-15.55:14.90	-15.63:14.10	-14.37:14.59	-15.59:13.80	-12.87:12.30	-11.05:10.91	-11.23:12.32	-12.01:10.66	-9.35:7.77	-8.84:8.73	-8.02:8.16	-8.39:8.61	-9.22:8.75	-9.11:9.16	-7.39:5.86	-5.48:5.83	-7.36:9.45	-11.78:12.57	-13.08:12.19	-12.38:12.41	-11.13:9.68	-9.15:10.27	
φ (180°)	-13.68:13.89	-12.83:11.87	-10.24:9.90	-9.74:9.97	-10.94:10.63	-10.38:10.71	-10.51:11.08	-11.13:10.66	-10.32:10.27	-10.62:10.65	-9.40:9.03	-8.70:7.67	-7.35:8.09	-8.27:8.05	-8.10:8.42	-8.54:8.50	-9.46:11.11	-12.77:13.69	-14.97:12.90	-11.29:10.59	-10.13:10.39	-11.19:12.41	-12.13:11.53	-10.35:9.69	
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°)	
Gain	0.560:0.08	0.280:1.8	0.04:0.01	0.07:0.05	0.10:0.24	0.09:0.48	0.52:0.31	0.41:0.58	0.59:0.53	0.82:0.90	0.93:0.74	0.03:0.25	0.18:0.02	0.20:0.33	0.21:0.23	0.13:0.12	0.49:0.51	0.64:0.80	0.90:0.92	0.89:0.91	1.21:1.36	1.19:0.75	0.01:0.19	0.71:0.60	
φ (7.5°)	0.13:0.59	-0.77:0.70	-0.82:0.85	-0.60:0.22	-0.19:0.22	-0.18:0.32	0.68:0.69	0.72:0.98	0.76:0.83	0.82:0.70	0.40:0.16	0.05:0.25	-0.34:0.64	-0.61:0.05	0.01:0.57	-0.28:0.33	-0.23:0.19	0.37:0.40	0.45:0.58	0.73:0.81	1.17:1.21	1.15:0.87	-0.03:0.14	0.64:0.29	
φ (15°)	-1.77:2.69	-3.17:2.98	-3.10:3.43	-2.92:3.28	-2.12:1.93	-1.68:1.49	-1.03:0.56	0.06:0.40	0.52:0.67	0.68:0.50	-0.16:0.84	-1.27:1.38	-0.93:0.34	-0.15:0.02	0.30:0.11	0.07:0.33	0.38:0.49	0.71:0.89	0.72:0.64	0.78:0.69	0.70:0.55	0.82:0.73	0.62:0.37	-0.03:1.22	

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_Radio 4_6GHz

Appendix J

Theta (°)	Phi (°)	Gain (dBi)	Phi(15°)	Phi(30°)	Phi(45°)	Phi(60°)	Phi(75°)	Phi(90°)	Phi(105°)	Phi(120°)	Phi(135°)	Phi(150°)	Phi(165°)	Phi(180°)	Phi(195°)	Phi(210°)	Phi(225°)	Phi(240°)	Phi(255°)	Phi(270°)	Phi(285°)	Phi(300°)	Phi(315°)	Phi(330°)	Phi(345°)																								
0	0	0.330/15	0.330/15	0.330/15	0.330/15	0.330/15	0.330/15	0.330/15	0.330/15	0.330/15	0.330/15	0.330/15	0.330/15	0.330/15	0.330/15	0.330/15	0.330/15	0.330/15	0.330/15	0.330/15	0.330/15	0.330/15	0.330/15	0.330/15	0.330/15																								
0	30	-1.50/1.21	-0.330/31	0.101/90	-0.75/34	-3.67/84	-6.61/99	-9.55/114	-12.49/129	-15.43/144	-18.37/159	-21.31/174	-24.25/189	-27.19/204	-30.13/219	-33.07/234	-36.01/249	-38.95/264	-41.89/279	-44.83/294	-47.77/309	-50.71/324	-53.65/339	-56.59/354	-59.53/369																								
0	45	-0.41/0.32	0.22/69	-1.44/92	-0.65/258	-4.57/243	-1.81/372	-6.35/474	-3.46/316	-5.51/1040	-11.30/624	-3.58/113	0.93/105	0.24/49	-1.82/105	-1.06/100	0.71/27	-1.40/166	-1.79/126	-0.95/132	-0.46/31	-0.60/18	1.07/62	1.79/19	0.39/54	0.39/54																							
0	60	3.48/1.23	0.81/08	-1.03/169	-1.70/197	-2.01/210	-0.12/126	-0.05/174	2.05/51	-1.75/86	-0.63/114	-0.96/12	1.68/231	2.71/204	0.36/41	1.12/87	0.62/250	0.74/139	0.95/35	-0.19/424	1.28/20	1.45/97	-1.72/81	-0.62/181	-0.62/181	3.81/34																							
0	75	3.14/1.62	-0.17/040	0.38/878	-0.20/005	0.18/206	1.52/72	2.99/379	2.80/111	2.08/380	4.24/228	1.01/134	1.55/178	1.01/86	0.83/19	1.90/79	2.00/72	0.15/68	2.00/72	-0.51/69	1.07/19	0.79/04	0.34/81	1.81/50	4.69/19	4.69/19																							
0	90	-2.00/4.57	-1.08/115	2.18/120	1.16/236	2.13/196	2.13/247	3.95/383	1.34/227	1.05/455	5.15/374	1.85/855	-0.46/91	0.20/020	0.79/047	1.39/203	0.50/191	0.66/094	1.52/132	-2.11/170	-0.84/035	-1.75/236	-1.46/011	1.68/222	1.13/141	1.13/141																							
0	105	0.03/0.71	-0.27/212	4.01/234	0.52/302	2.92/181	2.82/255	3.43/360	1.33/41	2.84/389	4.23/296	2.00/71	-0.98/24	2.38/94	1.32/40	1.55/141	-1.29/048	1.46/174	1.36/263	-1.05/155	-2.76/630	-0.46/16	0.70/111	-1.49/084	-1.49/084	-1.49/084																							
0	120	2.75/1.14	0.14/186	4.13/246	-1.23/232	2.39/159	2.00/21	3.09/364	1.21/187	3.43/297	1.94/183	3.35/227	0.44/104	3.24/141	0.24/54	1.04/188	-2.90/196	0.15/088	1.21/244	0.92/526	-9.14/018	1.33/227	0.38/248	0.66/214	0.66/214	0.66/214																							
0	135	2.84/0.20	-0.31/056	2.77/177	-3.55/64	1.52/027	1.42/194	2.91/362	0.61/194	3.44/114	-0.27/091	3.49/350	0.87/126	2.44/039	-0.03/086	0.03/053	-5.77/130	-1.69/154	-1.70/039	2.21/373	2.10/246	-4.62/113	1.59/062	-0.81/407	1.50/199	1.50/199																							
0	150	1.14/4.04	-2.86/119	0.83/036	-4.98/086	0.07/378	0.29/115	-0.03/21	-0.46/83	2.65/102	-3.26/156	1.26/202	0.70/401	1.87/099	-0.98/316	-0.05/095	-7.73/344	-3.81/216	-3.66/242	0.89/201	0.45/264	-2.77/058	0.62/203	-3.44/529	-0.80/70	-0.80/70																							
0	165	-1.20/2.59	-5.30/306	-0.97/339	-2.76/199	-2.76/199	-2.76/199	-2.76/199	-2.76/199	-2.76/199	-2.76/199	-2.76/199	-2.76/199	-2.76/199	-2.76/199	-2.76/199	-2.76/199	-2.76/199	-2.76/199	-2.76/199	-2.76/199	-2.76/199	-2.76/199	-2.76/199	-2.76/199	-2.76/199	-2.76/199																						
0	180	-2.70/4.07	-8.58/424	-3.75/739	-8.98/384	-4.87/800	-3.41/539	-2.71/107	-3.73/309	-0.39/374	-7.55/607	-2.23/067	-2.41/373	-1.77/349	-4.43/705	-3.80/439	-9.52/673	-5.37/598	-8.64/795	-5.95/479	-7.03/566	-5.11/843	-6.67/971	-6.72/1044	-5.83/310	-5.83/310																							
0	195	-3.65/9.83	-8.15/472	-6.54/1060	-9.16/558	-9.01/957	-6.92/750	-3.77/393	-6.28/345	-2.19/472	-3.21/588	-6.44/714	-7.54/553	-9.77/593	-6.71/678	-11.92/1066	-5.78/774	-11.71/856	-8.97/735	-9.88/826	-9.24/1413	-9.88/826	-9.24/1413	-5.36/486	-5.36/486																								
0	210	-8.33/12.20	-13.12/913	-11.51/1221	-8.62/1070	-12.74/1236	-7.86/801	-6.52/333	-7.00/644	-3.54/486	-9.75/882	-5.16/490	-5.83/811	-4.33/534	-9.21/645	-12.14/736	-9.20/639	-10.34/1249	-7.05/571	-11.80/1201	-7.10/814	-10.03/857	-14.17/1368	-6.03/830	-6.03/830																								
0	225	-10.56/15.21	-15.06/1357	-13.69/1354	-11.08/1087	-13.24/1093	-14.69/952	-7.77/657	-6.80/723	-7.59/802	-9.61/1024	-7.84/622	-8.92/856	-6.38/734	-9.13/1118	-8.19/922	-11.26/1024	-7.56/1176	-12.34/1427	-14.44/634	-8.16/1551	-11.06/912	-11.84/1093	-12.73/1173	-8.61/890																								
0	240	-15.68/13.84	-15.07/1285	-14.75/1555	-11.62/1060	-13.05/993	-9.00/879	-8.19/826	-10.57/1422	-11.82/1125	-10.29/1158	-10.88/154	-10.29/1158	-9.57/120	-9.79/105	-12.30/114	-10.72/1250	-15.15/1470	-11.70/1303	-9.51/1513	-14.55/1248	-15.64/1551	-9.89/820	-7.80/262	-7.80/262																								
0	255	-18.11/13.40	-15.01/1264	-14.34/1298	-12.62/1461	-12.57/1240	-11.07/953	-10.43/1296	-12.11/1525	-10.77/1129	-8.57/920	-12.56/1202	-10.17/1129	-9.63/1185	-8.27/1128	-9.80/1161	-11.77/1407	-12.20/919	-13.84/1296	-12.59/1736	-11.26/1434	-11.82/1182	-15.00/1489	-15.17/1311	-12.35/1481																								
0	270	-15.08/14.19	-10.34/1384	-15.34/1518	-14.89/1565	-14.07/1271	-13.02/1241	-11.77/1167	-12.26/1192	-12.87/1296	-12.98/1250	-11.90/1187	-14.09/1417	-10.93/1020	-10.28/1298	-12.18/1103	-14.87/1202	-12.91/1234	-12.75/1419	-15.01/1500	-14.63/1473	-15.03/1514	-15.27/1511	-12.92/1057	-9.72/942																								
0	285	-14.13/15.75	-16.28/1382	-14.93/1538	-14.28/1409	-15.24/1375	-11.48/1135	-12.56/1349	-14.28/1468	-13.79/1353	-14.83/1489	-14.30/1363	-13.51/1155	-12.21/1323	-12.71/1456	-13.16/1437	-15.36/1470	-13.80/1490	-14.79/1509	-15.58/1427	-11.40/935	-15.71/1612	-14.91/1517	-13.95/1500	-13.40/1254																								
0	300	-14.97/15.70	-12.57/1251	-15.71/1510	-15.41/1570	-15.72/1516	-15.29/1585	-15.48/1371	-12.89/1265	-12.58/1473	-14.30/1521	-15.60/1447	-14.67/1543	-15.26/1471	-13.43/1558	-15.17/1500	-15.53/1492	-15.17/1507	-15.68/1611	-14.41/1342	-12.26/1080	-10.32/1151	-13.85/1573	-15.78/1519	-15.78/1519																								
0	315	-15.13/15.28	-14.72/1457	-15.10/1481	-15.15/1598	-15.90/1473	-15.44/1611	-14.60/1370	-13.84/1334	-13.23/1408	-14.11/1369	-14.98/1388	-14.26/1516	-13.56/1364	-13.83/1307	-13.53/1516	-15.56/1542	-15.77/1491	-15.05/1515	-15.14/1519	-16.32/1505	-10.36/1510	-16.32/1505	-15.27/1578	-15.27/1578																								
0	330	-13.68/14.29	-14.57/1484	-14.58/1522	-12.51/1304	-12.57/1210	-12.30/1452	-13.69/1306	-14.24/1328	-12.36/1275	-13.92/1441	-14.16/1373	-13.92/1504	-14.97/1507	-15.54/1426	-14.20/1434	-14.80/1424	-15.73/1531	-13.52/1279	-14.03/1492	-14.28/1570	-13.49/1477	-15.63/1380	-12.89/1185	-11.40/1208																								
0	345	6.475/6.01	Total/2																																														
0	360	Gain	Phi(7.5°)	Phi(15°)	Phi(22.5°)	Phi(30°)	Phi(37.5°)	Phi(45°)	Phi(52.5°)	Phi(60°)	Phi(67.5°)	Phi(75°)	Phi(82.5°)	Phi(90°)	Phi(97.5°)	Phi(105°)	Phi(112.5°)	Phi(120°)	Phi(127.5°)	Phi(135°)	Phi(142.5°)	Phi(150°)	Phi(157.5°)	Phi(165°)	Phi(172.5°)	Phi(180°)	Phi(187.5°)	Phi(195°)	Phi(202.5°)	Phi(210°)	Phi(217.5°)	Phi(225°)	Phi(232.5°)	Phi(240°)	Phi(247.5°)	Phi(255°)	Phi(262.5°)	Phi(270°)	Phi(277.5°)	Phi(285°)	Phi(292.5°)	Phi(300°)	Phi(307.5°)	Phi(315°)	Phi(322.5°)	Phi(330°)	Phi(337.5°)	Phi(345°)	Phi(352.5°)
0	30	-4.79/4.87	-4.70/4.72	-5.07/640	-4.15/428	-3.85/323	-2.72/224	-2.46/230	-1.09/109	-1.23/043	-0.33/66	-0.63/78	-0.87/90	-1.42/191	-2.20/205	-2.06/237	-2.78/311	-3.41/352	-3.54/356	-3.48/319	-4.15/357	-3.86/448	-3.43/454	-3.96/344	-4.97/443	-4.97/443																							
0	45	-1.12/1.65	-2.24/265	-3.03/322	-3.07/334	-3.68/397	-4.47/450	-5.14/521	-5.18/483	-6.25/666	-6.42/653	-6.38/653	-6.76/717	-6.60/539	-4.70/455	-4.42/417	-3.60/231	-1.32/089	-0.67/032	0.04/003	0.14/006	-0.37/029	-0.67/035	-0.97/040	-1.20/125	-1.20/125																							
0	60	-2.79/3.50	-3.64/414	-4.86/540	-5.79/624	-5.94/502	-4.71/417	-4.25/516	-5.25/672	-6.42/867	-9.02/879	-7.52/682	-6.62/564	-5.39/568	-5.59/576	-6.03/587	-4.77/374	-2.79/144	-0.12/051	1.06/149	1.36/091	0.20/020	-1.19/155	-2.07/328	-3.88/439	-3.88/439																							
0	75	1.08/0.43	-0.12/026	-2.40/350	-5.07/513	-4.00/296	-2.38/181	-2.01/223	-2.93/653	-8.25/887	-8.89/644	-3.77/274	-1.95/134	-1.95/822	-3.03/359	-3.69/322	-1.65/108	-0.46/016	0.34/050	1.06/084	0.16/001	0.24/088	1.15/119	1.53/189	1.90/222	1.90/222																							
0	90	0.72/0.79	0.56/666	-0.04/165	-4.55/356	-1.58/079	-1.76/296	-2.99/319	-4.02/703	-10.72/1134	-12.22/1035	-5.25/336	-2.13/090	-1.43/124	-1.76/448	-3.18/185	0.23/140	1.18/038	-0.47/033	0.08/028	-0.19/036	0.11/080	-0.46/036	0.54/004	-0.53/025	-0.53/025																							
0	105	-0.40/0.34	-0.74/005	-0.10/080	-2.69/316	-1.20/055	-2.50/306	-0.58/012	-2.80/649	-5.84/535	-3.67/468	-4.20/074	-0.58/115	-0.62/102	-0.52/227	-2.13/160	-0.76/107	1.35/033	-0.88/200	-0.43/069	-1.00/083	1.40/083	3.11/293	2.07/109	-0.01/062	-0.01/062																							
0	120	0.60/0.74	-0.20/143	-2.29/288	-3.02/287	-2.09/133	-2.22/098	1.34/162	-0.53/203	-0.69/662	1.68/103	-0.38/088	-0.60/162	-1.18/135	-0.12/042	-0.37/043	-1.60/062	1.89/080	-3.96/115	-0.54/031	1.85/278	2.38/264	1.64/181	2.33/272	1.96/075	1.96/075																							
0	135	2.99/1.42	0.48/029	0.92/098	-2.47/300	-0.61/059	-0.99/092	2.33/186	-0.57/029																																								

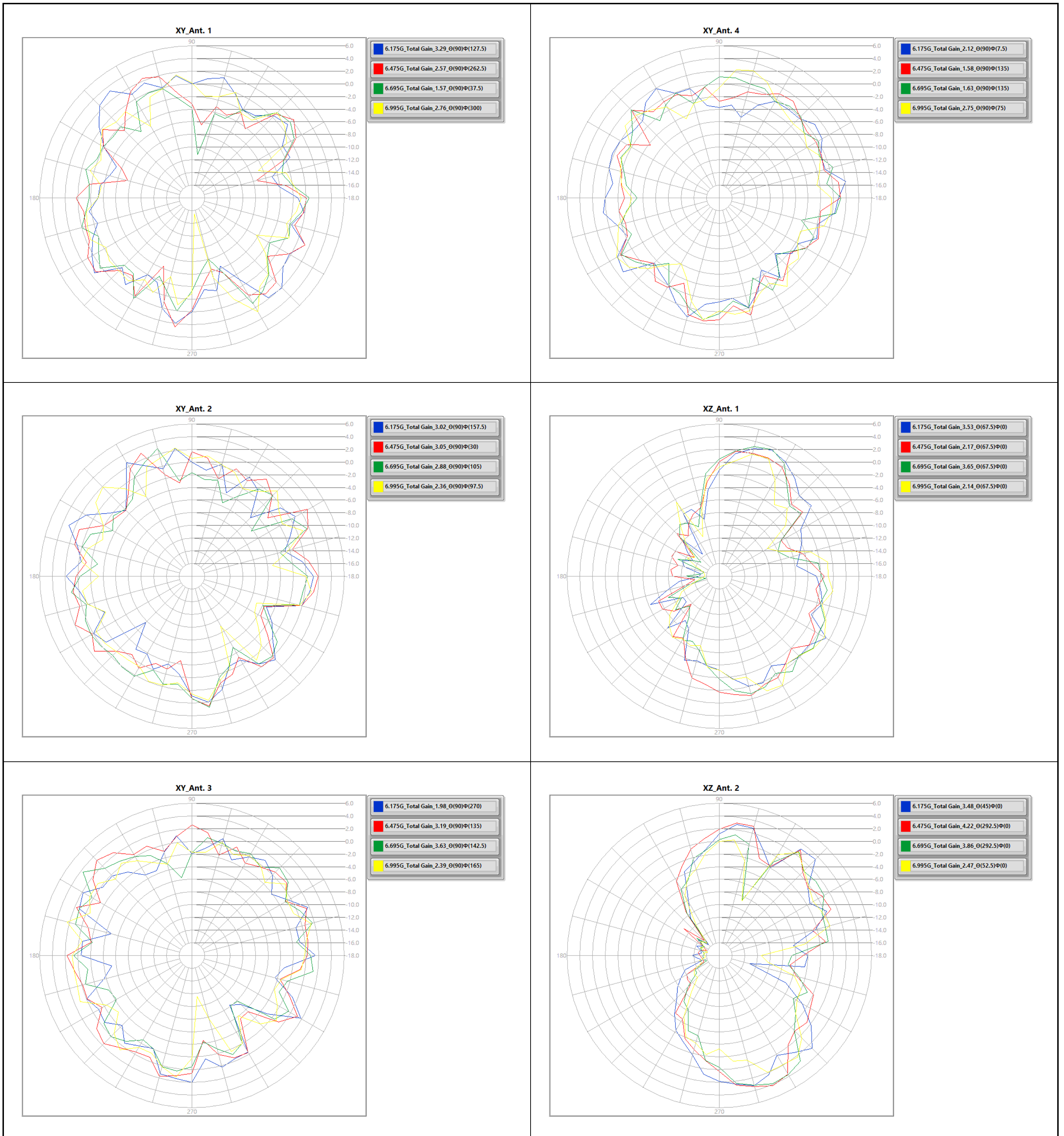


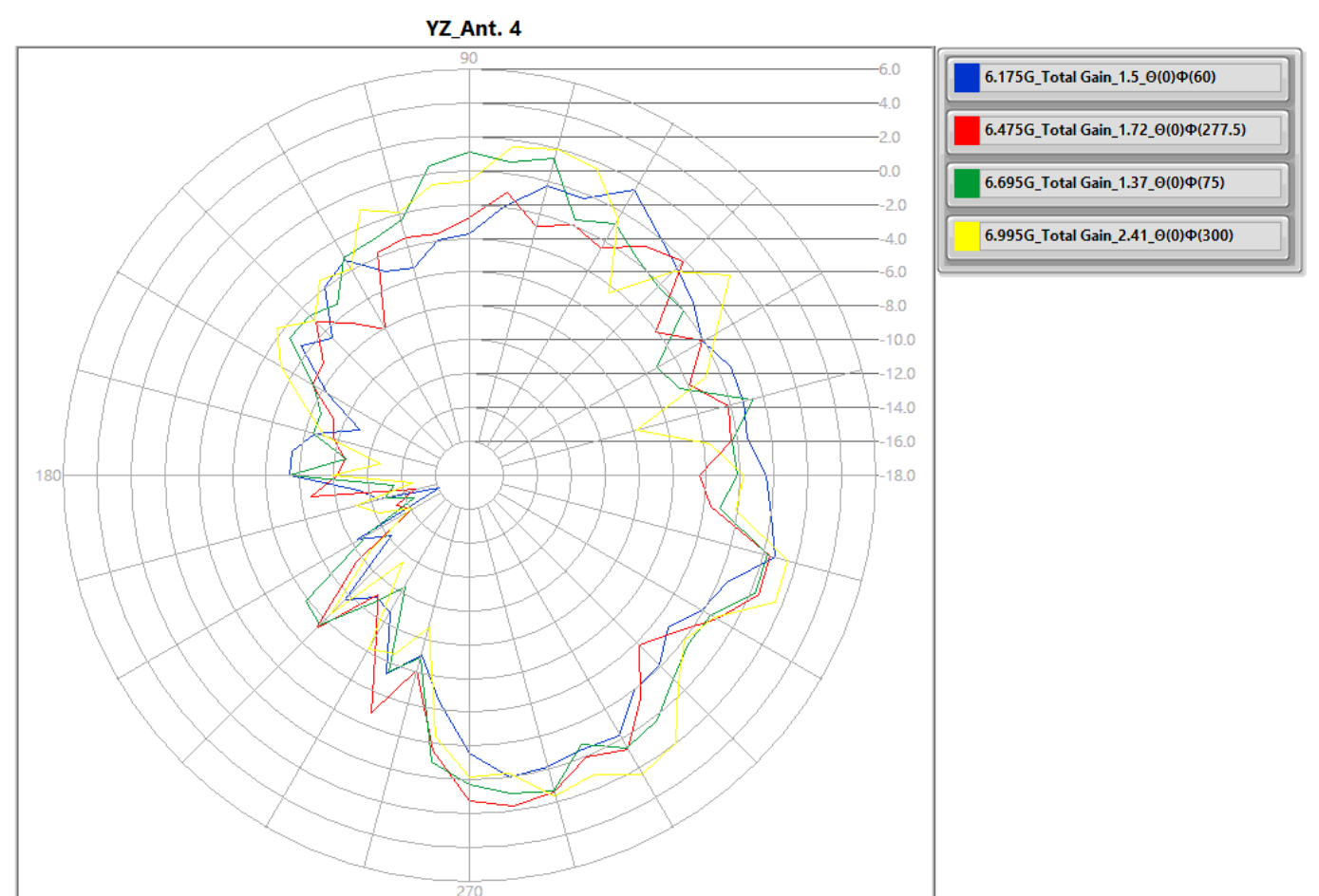
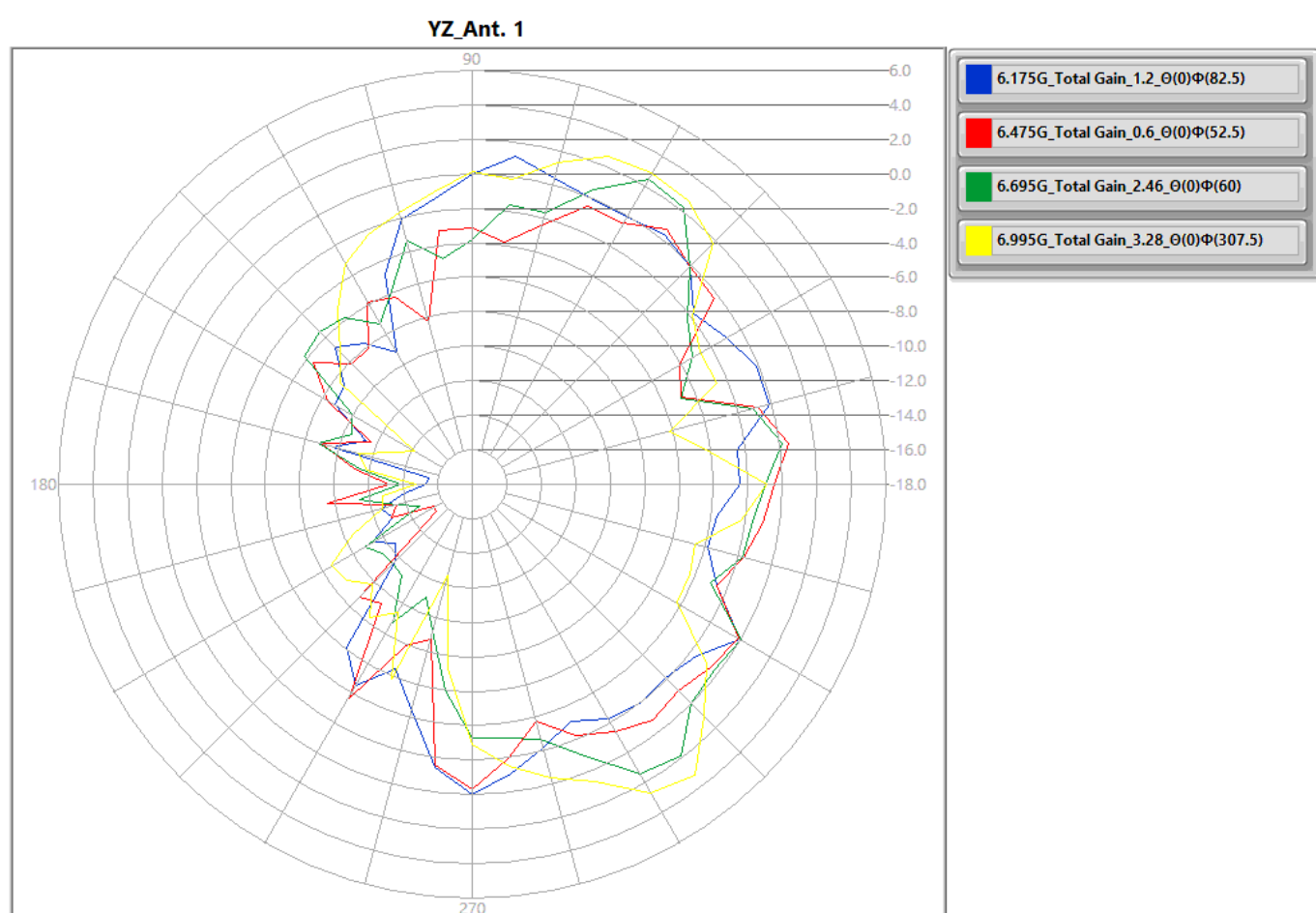
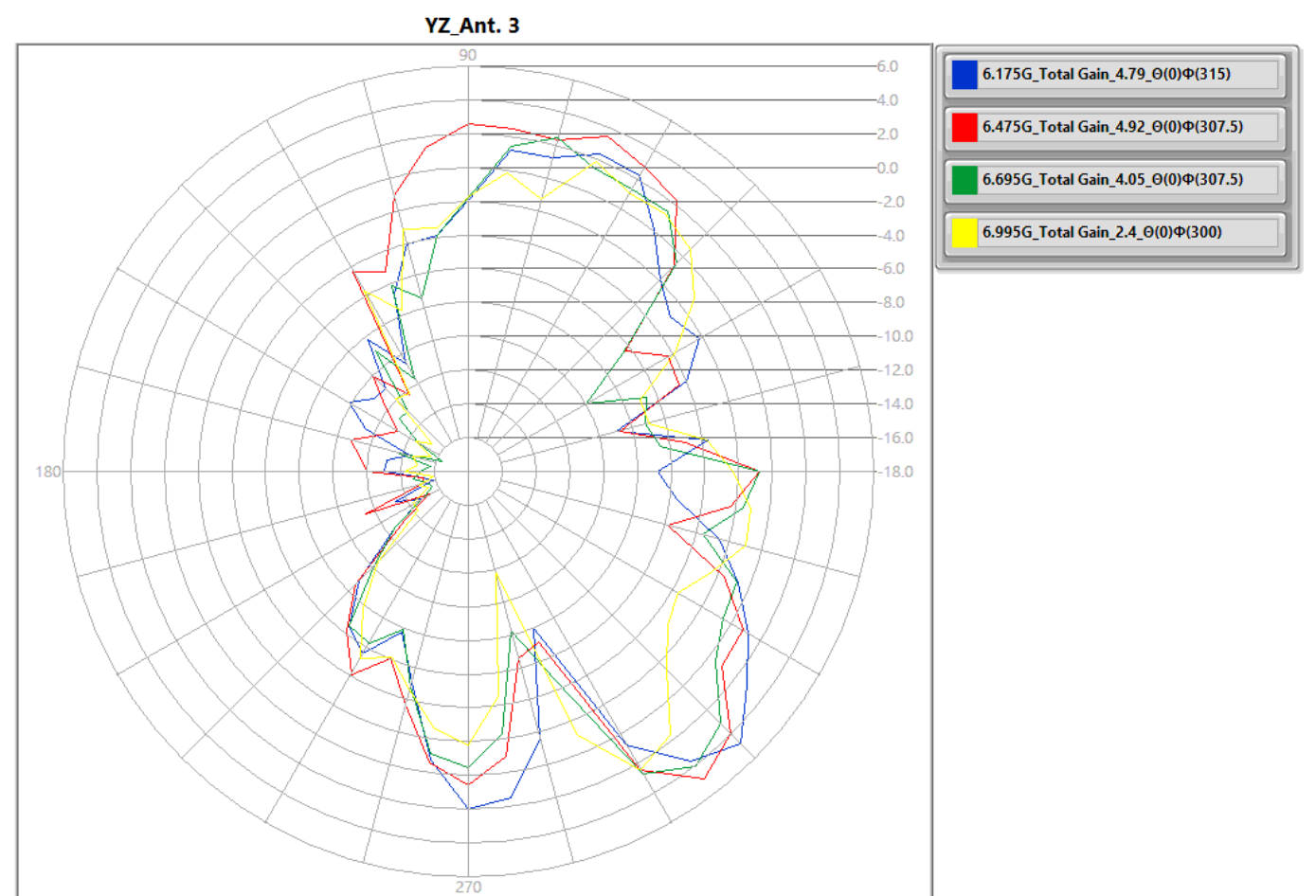
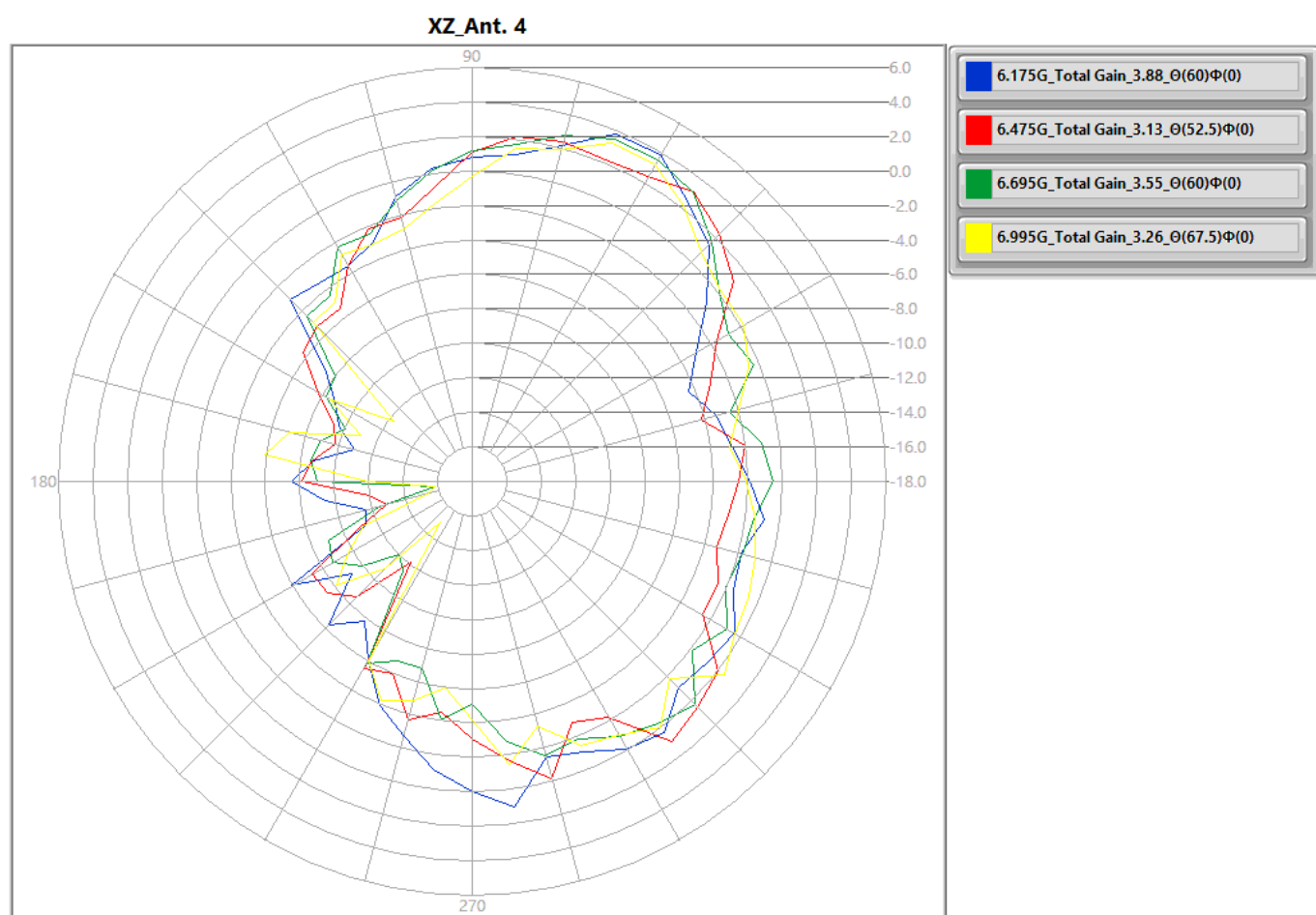
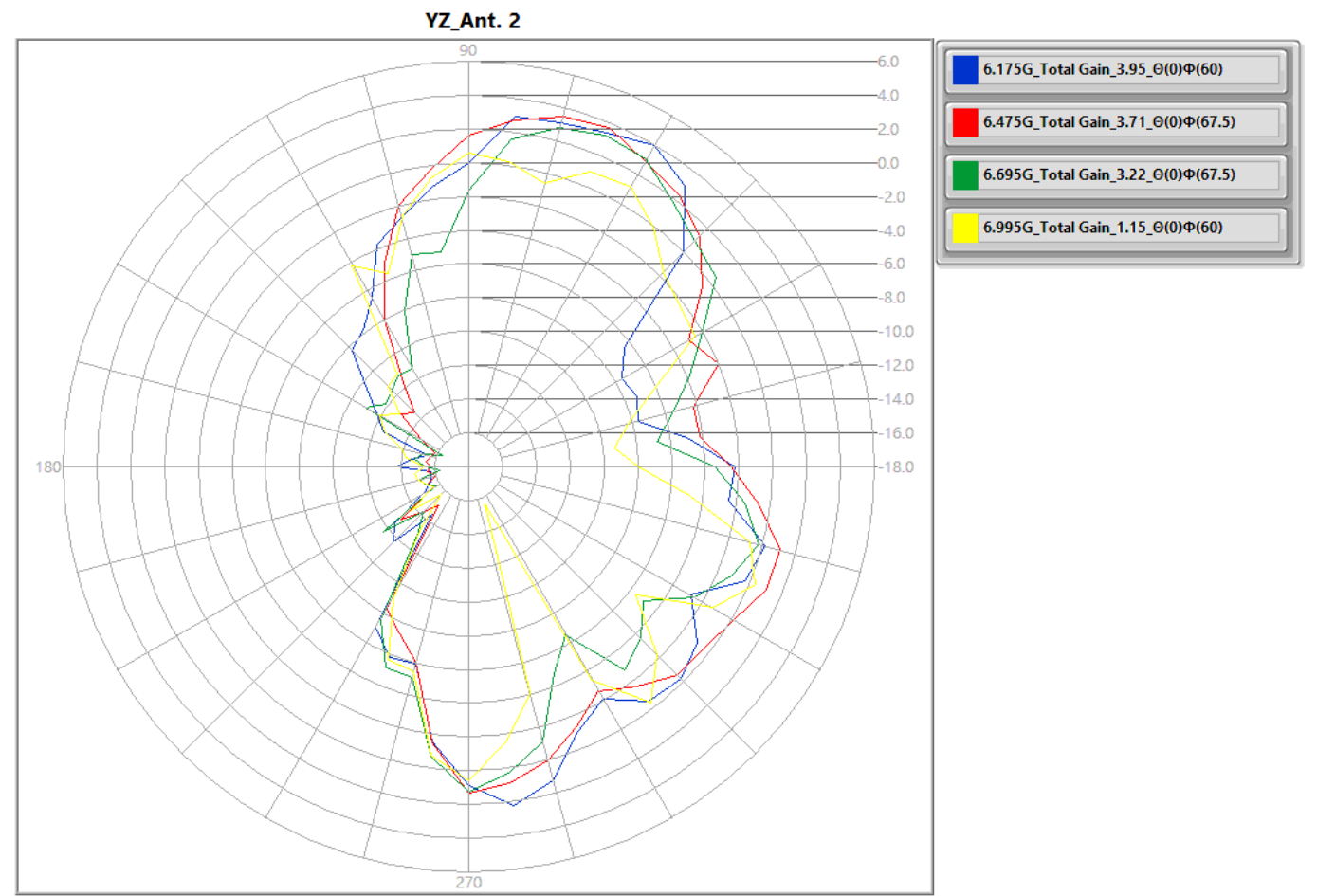
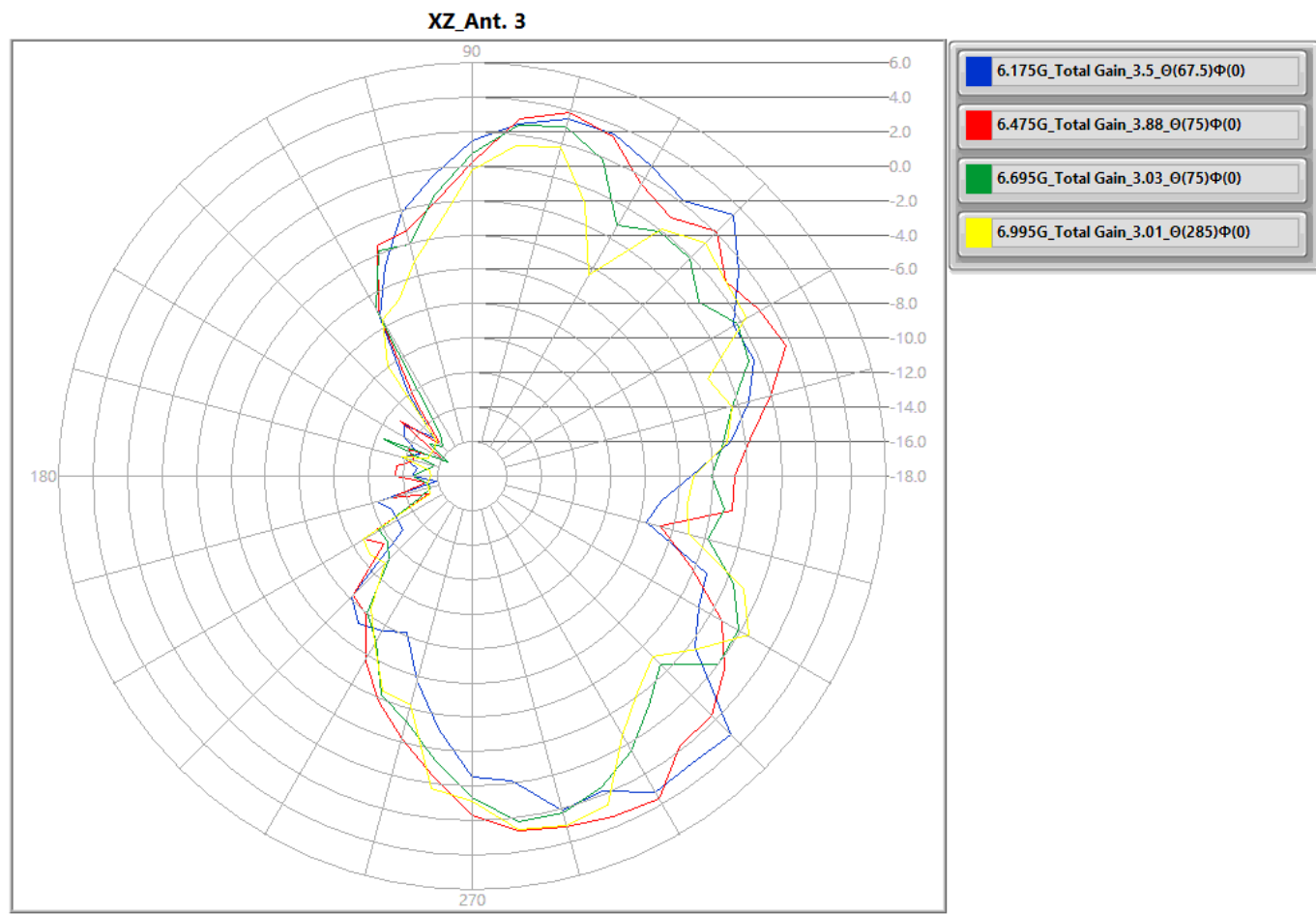
Antenna Pattern_Radio 4_6GHz

Appendix J

θ (60°)	2.75/1.65	-0.06/1.44	1.05/3.22	3.54/1.22	-0.03/1.13	1.69/1.99	2.22/2.62	3.08/3.35	2.54/0.85	0.70/2.62	2.92/0.09	1.98/3.59	3.18/1.75	2.35/3.88	2.59/0.20	0.22/1.20	1.81/1.11	0.67/0.03	0.69/1.26	1.74/1.04	-2.03/0.87	-0.36/1.24	-4.64/-11.92	-9.74/-0.96
θ (67.5°)	3.50/3.15	0.44/2.63	1.69/2.59	2.87/1.67	2.15/1.80	2.68/2.44	2.34/3.42	3.50/3.93	3.17/0.74	0.35/2.12	3.34/0.07	0.33/3.88	1.82/0.28	2.70/4.41	2.03/0.11	1.44/3.87	3.26/1.01	0.27/-3.17	-7.92/-4.45	-2.86/-2.60	-6.08/-4.20	-2.13/-2.79	-0.97/-2.16	-5.02/0.48
θ (75°)	3.46/2.84	0.71/3.13	1.63/1.21	2.07/2.23	2.56/1.59	2.08/2.82	1.21/2.19	2.26/2.20	1.24/0.68	0.71/1.24	3.75/1.84	-1.19/1.48	2.10/-0.63	-0.33/3.37	1.67/0.35	0.35/3.37	3.23/0.72	1.42/0.23	-1.61/-4.60	-3.23/-1.13	-2.48/-3.95	-2.35/-0.45	2.55/0.84	-1.92/0.42
θ (82.5°)	2.62/0.83	0.19/2.58	0.63/0.50	1.52/1.87	1.75/0.54	1.39/1.29	1.15/1.85	0.15/0.08	-1.31/-0.08	0.22/1.36	3.75/0.40	-1.86/1.16	-0.13/-3.70	0.25/0.05	-0.01/0.75	-1.01/1.92	1.02/0.01	1.90/1.97	1.52/-1.82	-0.74/0.55	-0.79/4.08	-3.94/0.09	3.10/0.81	-3.25/-0.78
θ (90°)	1.48/-0.94	-0.99/1.79	-0.53/-2.19	-0.01/0.88	-0.07/-1.65	1.08/-0.92	-1.93/1.01	-1.13/-3.49	-3.31/-1.38	-0.29/-0.27	1.83/1.19	-4.81/-0.64	-0.53/-5.23	-3.62/-0.10	-1.00/-0.69	-2.43/-0.59	1.31/1.59	1.98/-1.62	0.26/-0.35	-0.37/-8.18	-7.05/-2.89	1.83/-0.86	-4.48/-3.32	
θ (97.5°)	-0.43/-1.87	-2.26/0.54	-2.73/-4.03	-1.29/-1.26	-2.30/-3.12	-0.29/-3.14	-3.90/-0.60	-2.34/-5.93	-6.83/-2.44	-1.83/-0.92	0.59/0.34	-6.83/-2.63	-3.19/-8.26	-4.14/-2.40	-2.17/-2.11	-3.24/-1.48	-3.92/-6.69	-1.59/-0.47	-0.78/-4.35	-1.04/-4.19	-0.73/-13.12	-9.33/-4.69	-0.03/-2.87	-6.15/-5.30
θ (105°)	-2.15/-2.81	-3.78/-1.34	-4.64/-4.70	-3.52/-3.52	-6.02/-6.21	-2.99/-4.83	-4.04/-1.93	-5.55/-6.09	-3.95/-3.55	-2.88/-3.97	-0.60/-1.98	-6.45/-4.18	-5.68/-8.75	-9.52/-5.85	-4.07/-2.93	-5.49/-3.11	-3.77/-9.59	-5.25/-2.85	-5.04/-8.70	-5.38/-6.25	-8.84/-15.66	-13.91/-6.74	-3.51/-4.31	-8.10/-4.04
θ (112.5°)	-4.84/-5.18	-5.09/-5.80	-8.39/-5.65	-6.07/-5.56	-7.94/-5.67	-6.01/-7.20	-6.57/-5.50	-7.32/-3.88	-5.83/-5.13	-5.04/-4.37	-0.77/-5.02	-8.19/-9.95	-13.60/-7.41	-9.15/-5.35	-5.81/-6.05	-7.40/-8.56	-7.04/-6.88	-7.72/-13.51	-7.95/-10.08	-13.75/-14.13	-12.49/-7.35	-7.15/-6.08	-9.38/-4.76	
θ (120°)	-7.37/-9.91	-10.18/-12.06	-11.78/-8.74	-7.89/-8.77	-7.14/-7.38	-7.57/-8.77	-10.58/-8.22	-6.37/-10.04	-7.48/-5.89	-8.01/-5.98	-3.92/-3.65	-8.04/-7.03	-7.59/-11.36	-14.45/-9.12	-11.07/-9.24	-7.40/-8.44	-8.70/-4.53	-5.54/-11.29	-14.90/-10.92	-8.91/-12.60	-7.86/-9.77	-7.65/-9.14	-8.46/-7.23	
θ (127.5°)	-11.89/-12.08	-13.68/-14.90	-13.42/-11.87	-11.84/-9.60	-9.87/-8.10	-11.47/-11.15	-8.21/-9.49	-12.46/-11.80	-9.67/-8.59	-8.58/-7.22	-4.68/-5.87	-10.75/-6.45	-7.19/-11.53	-13.17/-10.97	-10.64/-12.19	-12.59/-10.69	-7.23/-14.84	-14.58/-14.55	-6.39/-10.76	-14.13/-8.46	-13.84/-11.83	-8.70/-9.05	-8.31/-8.60	-10.19/-12.33
θ (135°)	-14.87/-14.70	-15.07/-13.61	-14.00/-16.68	-12.84/-11.92	-10.86/-12.36	-9.54/-11.72	-11.06/-9.13	-9.81/-10.86	-11.83/-9.80	-10.61/-7.54	-6.80/-9.32	-10.59/-9.20	-8.13/-8.62	-15.33/-14.71	-11.45/-13.02	-14.96/-15.24	-12.57/-9.23	-14.95/-13.30	-8.84/-13.30	-11.11/-14.72	-15.47/-13.68	-10.08/-9.31	-11.42/-13.75	-11.04/-14.02
θ (142.5°)	-13.08/-14.74	-13.05/-10.85	-13.01/-13.91	-11.57/-11.31	-9.71/-13.23	-13.05/-11.34	-10.94/-12.99	-13.92/-12.42	-11.82/-14.79	-11.62/-11.18	-10.86/-10.55	-12.25/-12.93	-12.93/-13.31	-11.57/-14.47	-15.24/-14.08	-13.88/-13.00	-11.87/-12.33	-11.73/-15.73	-12.61/-12.37	-14.15/-15.56	-12.07/-11.42	-13.79/-14.88	-14.06/-15.47	
θ (150°)	-13.48/-10.96	-11.97/-12.87	-15.31/-13.00	-11.80/-11.31	-11.50/-13.63	-13.36/-11.84	-9.85/-10.44	-11.50/-10.86	-10.87/-12.37	-12.62/-13.86	-13.74/-14.84	-15.31/-15.64	-12.99/-12.47	-13.89/-14.81	-14.54/-13.68	-13.48/-15.20	-14.13/-13.75	-15.20/-15.65	-14.80/-15.71	-14.69/-12.58	-15.17/-15.80	-15.32/-15.24	-13.67/-12.19	-11.81/-13.36
θ (157.5°)	-14.73/-14.70	-12.26/-11.80	-12.75/-13.19	-11.20/-13.03	-14.55/-14.05	-11.44/-10.66	-11.84/-11.79	-13.81/-13.47	-11.66/-10.90	-12.85/-15.41	-15.80/-13.40	-12.97/-10.70	-11.64/-12.44	-12.49/-15.66	-15.12/-14.25	-13.43/-12.48	-13.97/-14.25	-14.37/-15.48	-15.03/-15.27	-15.31/-14.78	-15.03/-15.20	-15.81/-12.46	-14.51/-15.32	
θ (165°)	-13.79/-12.91	-13.77/-14.80	-14.89/-14.53	-14.05/-12.85	-14.89/-15.57	-12.84/-15.35	-14.40/-14.65	-15.05/-15.81	-14.97/-15.90	-15.71/-14.89	-15.27/-15.90	-12.63/-10.68	-12.31/-13.31	-12.58/-14.04	-15.61/-14.53	-11.31/-11.91	-13.90/-14.80	-15.45/-14.30	-15.86/-13.93	-11.82/-11.61	-12.71/-12.91	-12.93/-14.80	-14.53/-14.56	-13.69/-15.15
θ (172.5°)	-14.74/-12.60	-13.90/-13.26	-12.35/-11.78	-12.06/-13.85	-14.14/-13.79	-14.28/-14.11	-13.14/-12.24	-12.97/-15.02	-14.51/-15.62	-13.68/-15.69	-15.58/-14.23	-13.56/-13.64	-15.91/-15.08	-15.72/-16.09	-13.50/-13.37	-12.34/-12.60	-14.14/-15.40	-15.90/-14.98	-15.24/-15.21	-15.59/-13.78	-13.23/-14.54	-14.65/-16.03	-15.58/-14.51	-14.89/-15.20
θ (180°)	-14.53/-12.88	-14.48/-15.78	-15.60/-15.78	-15.32/-15.08	-15.15/-14.44	-14.13/-13.39	-13.03/-15.66	-15.66/-14.66	-13.57/-12.40	-13.63/-14.99	-14.40/-13.93	-13.13/-13.44	-14.40/-14.72	-14.63/-14.14	-14.95/-14.94	-13.89/-13.95	-15.66/-16.00	-14.67/-15.13	-13.91/-13.90	-15.39/-12.72	-12.64/-13.98	-13.93/-14.24	-15.71/-15.72	-14.64/-14.95
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°)	-2.74/-2.64	-2.39/-2.17	-2.02/-2.10	-2.25/-1.82	-1.51/-0.92	-1.04/-1.43	-0.79/-0.77	-1.30/-0.84	-0.92/-1.06	-1.02/-1.27	-1.08/-0.99	-1.14/-1.51	-1.92/-2.06	-2.08/-2.18	-2.42/-2.24	-2.31/-2.18	-2.45/-2.48	-2.36/-2.60	-2.57/-2.60	-3.05/-2.30	-2.56/-2.28	-2.09/-3.04	-1.91/-1.88	-2.74/-2.42
θ (7.5°)	-1.74/-1.95	-1.88/-2.22	-2.73/-2.32	-3.34/-3.81	-4.53/-4.55	-4.27/-5.29	-5.05/-4.12	-4.87/-4.09	-3.39/-3.66	-2.99/-2.58	-2.62/-2.03	-2.82/-2.84	-2.49/-2.11	-2.42/-2.00	-2.42/-2.00	-1.82/-1.50	-1.46/-2.23	-2.32/-1.79	-2.32/-2.39	-1.76/-1.83	-1.38/-1.41	-1.41/-0.91	-1.23/-1.07	-0.75/-1.51
θ (15°)	-0.04/0.88	-1.67/-2.79	-3.79/-4.42	-5.00/-4.80	-4.25/-4.58	-5.30/-6.23	-6.99/-10.51	-11.82/-11.22	-10.78/-8.85	-7.62/-7.99	-6.91/-5.62	-5.99/-6.44	-6.69/-6.21	-5.64/-4.77	-3.78/-3.50	-3.88/-4.13	-4.37/-5.47	-6.21/-5.69	-5.75/-5.25	-3.65/-4.44	-1.62/-0.41	-0.32/0.12	0.58/0.23	0.62/-0.16
θ (22.5°)	1.73/0.60	-0.91/-3.09	-4.97/-4.34	-3.01/-2.08	-1.32/-2.18	-1.55/-2.31	-4.52/-8.26	-11.69/-11.03	-9.43/-6.17	-4.41/-3.77	-2.79/-2.56	-2.91/-3.00	-4.28/-4.91	-5.04/-3.75	-3.20/-1.96	-1.73/-1.60	-1.12/-1.30	-1.21/-1.57	-1.61/-1.50	0.44/0.29	-0.68/-1.43	-1.83/-1.18	0.17/1.25	1.94/1.65
θ (30°)	1.25/0.28	-1.85/-5.03	-4.20/-2.28	-1.76/-2.66	-2.98/-1.96	-4.34/-4.64	-6.06/-2.55	-2.48/-2.00	-0.68/-1.30	-0.88/-1.62	-0.64/0.03	-1.26/-3.47	-5.31/-2.59	0.10/1.31	0.92/0.75	1.25/1.09	0.92/0.75	0.20/0.60	0.75/2.09	1.47/0.57	-0.12/0.26	-3.49/-3.76	-2.26/-1.07	0.86/2.14
θ (37.5°)	0.53/-1.54	-2.88/-4.72	-3.25/-0.36	-0.55/-3.12	-3.62/-2.23	-2.22/-4.46	-6.32/-3.01	-1.49/0.38	2.06/1.21	1.78/0.94	0.17/0.59	-0.00/0.17	0.43/-1.50	-4.41/-3.17	0.16/1.99	1.95/1.82	0.95/-1.51	-3.20/-1.50	0.91/3.04	4.17/3.79	3.25/3.10	2.85/1.17	-1.40/-0.88	0.28/1.27
θ (45°)	2.10/0.68	-1.79/-2.47	-0.44/0.25	0.98/-3.36	-6.34/-2.11	-3.40/-2.36	-0.78/0.11	0.83/1.26	1.80/1.32	1.73/1.52	0.75/0.99	0.83/1.94	1.60/0.17	-1.23/-1.24	1.28/1.97	-0.24/-1.80	-2.78/-3.61	-1.07/2.55	3.94/3.53	2.73/2.34	1.64/1.33	1.28/0.43	0.56/0.48	2.38/2.85
θ (52.5°)	0.92/-1.82	-1.99/-0.07	2.10/5.55	0.37/-3.95	-2.53/-1.28	-0.36/-1.57	2.72/2.22	2.89/2.83	1.95/1.51	-0.91/1.17	1.24/0.15	2.92/3.17	1.79/1.05	0.62/1.77	2.29/0.99	-2.04/3.55	-2.55/-1.58	1.41/4.09	4.92/2.86	0.24/0.16	1.23/3.00	3.38/2.79	1.25/-0.38	0.44/1.96
θ (60°)	1.59/-0.41	-0.98/2.00	3.06/3.63	1.03/1.03	0.93/1.44	1.86/1.99	2.86/3.32	3.53/3.32	3.43/2.66	1.69/1.36	2.91/2.58	-0.16/1.98	3.63/1.43	1.04/2.55	2.35/1.78	0.06/0.04	1.14/0.70	-1.29/0.52	2.39/1.51	0.82/0.41	1.30/1.78	1.58/0.50	-3.02/-5.16	-4.59/0.04
θ (67.5°)	3.31/1.25	1.73/3.25	2.55/3.75	1.88/2.86	1.44/1.55	1.31/1.96	3.47/2.93	2.82/2.19	2.27/4.31	3.55/2.01	3.88/3.51	0.87/2.89	3.63/1.63	1.44/2.84	2.41/2.50	1.40/2.46	3.14/1.38	-1.80/-3.62	-7.05/-2.71	-1.91/-3.73	-1.08/-1.05	-1.11/-3.43	-5.16/1.23	
θ (75°)	3.88/1.75	3.04/3.44	1.35/3.24	2.84/2.98	1.41/1.67	1.49/0.69	2.32/2.47	2.17/2.21	0.89/0.69	4.02/3.17	2.40/4.63	0.98/2.02	3.10/2.04	1.42/1.55	2.04/2.61	2.93/3.34	3.67/1.98	0.64/-1.08	-6.52/9.02	-6.61/-1.99	-2.58/-2.42	-0.62/1.16	1.11/-0.51	-2.58/1.22
θ (82.5°)	2.92/1.46	2.43/2.85	0.46/2.50	1.93/1.49	0.12/0.82	-0.17/0.62	2.49/1.07	0.78/0.26	0.59/3.46	4.04/1.90	1.68/2.26	-0.14/1.73	2.74/1.75	-0.09/1.88	0.34/1.41	0.26/3.19	2.61/0.82	1.50/1.03	-1.00/-4.68	-3.58/-0.59	0.15/-3.54	-1.30/0.72	1.97/-0.66	-2.12/1.61
θ (90°)	0.18/0.40	0.48/1.51	-0.93/0.84	0.62/0.39	-1.15/0.46	-1.61/1.49	2.59/0.86	-0.97/0.66	0.40/2.43	3.19/1.63	-1.35/1.73	-1.07/-1.97	1.72/0.64	-0.19/0.16	-1.59/0.91	1.70/0.39	-0.41/-0.63	1.73/1.13	0.54/4.48	-1.88/-0.57	-0.36/-5.41	-5.49/-0.77	1.19/-1.37	-3.59/0.84
θ (97.5°)	-1.88/-2.21	-0.82/-1.12	-2.05/-0.35	-1.85/-2.63	-2.38/-1.38	-3.33/-0.29	1.31/-0.45	-3.44/0.48	-0.36/0.86	1.88/-0.42	-1.93/-0.78	-3.27/1.97	-0.45/-1.09	-2.58/-2.16	-3.54/-0.69	-1.11/-1.63	-2.56/-3.29	-0.47/0.11	-0.58/-6.05	-3.53/-3.40	-1.98/-9.29	-6.74/-2.55	-0.78/-4.46	-6.64/2.83
θ (105°)	-3.23/3.51	-2.03/-3.86	-4.02/-3.08	-4.07/-3.44	-3.37/-3.21	-5.56/-1.68	-1.05/-3.13	-4.31/-0.93	-2.04/-0.76	0.83/-0.73	-3.82/-1.67	-3.98/-5.30	-2.22/-3.99	-2.67/-6.71	-5.79/-2.32	-4.49/-5.90	-4.10/-5.84	-3.91/-1.90	-3.66/-5.56	-6.17/-7.35	-4.72/-12.12	-10.44/-5.58	-5.46/-6.46	-6.64/-5.98
θ (112.5°)	-3.54/5.91	-4.08/-6.6																						

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







Antenna Pattern Scanning Radio 5_2.4GHz, 5GHz UNII 1~4, 6GHz and Radio 6 Bluetooth Appendix K

θ (125°)	-7.95/-14.72	-13.82/-10.20	-7.32/-7.12	-4.06/-4.34	-7.17/-7.32	-5.63/-5.09	-4.92/-6.14	-5.78/-4.67	-1.05/-1.59	-1.95/-3.79	-6.51/-5.44	-5.44/-5.67	-4.94/-5.29	-5.42/-6.75	-6.87/-9.12	-8.34/-8.04	-8.34/-12.47	-6.78/-7.16	-6.25/-6.25	-8.20/-9.48	-10.83/-13.05	-10.41/-9.21	-13.65/-9.50	-14.85/-8.10
Gain	Φ(0°)Φ(7.5°)	Φ(15°)Φ(22.5°)	Φ(30°)Φ(37.5°)	Φ(45°)Φ(52.5°)	Φ(60°)Φ(67.5°)	Φ(75°)Φ(82.5°)	Φ(90°)Φ(97.5°)	Φ(105°)Φ(112.5°)	Φ(120°)Φ(127.5°)	Φ(135°)Φ(142.5°)	Φ(150°)Φ(157.5°)	Φ(165°)Φ(172.5°)	Φ(180°)Φ(187.5°)	Φ(195°)Φ(202.5°)	Φ(210°)Φ(217.5°)	Φ(225°)Φ(232.5°)	Φ(240°)Φ(247.5°)	Φ(255°)Φ(262.5°)	Φ(270°)Φ(277.5°)	Φ(285°)Φ(292.5°)	Φ(300°)Φ(307.5°)	Φ(315°)Φ(322.5°)	Φ(330°)Φ(337.5°)	Φ(345°)Φ(352.5°)
Θ(0°)	-2.09/-1.63	-1.64/-1.99	-2.05/-2.32	-2.46/-2.49	-2.13/-1.82	-1.58/-1.47	-1.21/-1.27	-1.10/-1.21	-1.22/-0.66	-0.96/-0.29	-0.04/-0.48	-0.72/-0.54	-0.08/-0.19	-0.83/-0.77	-0.54/-0.59	-0.80/-1.22	-1.89/-2.22	-2.65/-2.95	-2.89/-2.66	-2.60/-2.30	-2.51/-2.60	-2.42/-2.42	-2.74/-2.27	-2.45/-2.81
Θ(7.5°)	-0.28/-0.18	-0.14/-0.42	-0.57/-0.90	-1.16/-1.46	-1.45/-1.70	-1.55/-1.79	-2.07/-2.55	-2.42/-2.63	-2.87/-2.97	-3.13/-2.67	-2.64/-2.88	-2.70/-2.55	-1.94/-1.61	-2.61/-1.98	-0.84/-1.08	-1.69/-1.39	-0.86/-0.64	-1.00/-1.06	-0.83/-0.49	-0.09/-0.30	0.31/-0.28	0.22/-0.10	0.28/-0.18	0.50/-0.16
Θ(15°)	0.77/0.76	0.66/0.47	0.33/0.07	0.11/-0.22	-0.82/-1.08	-1.51/-2.24	-2.68/-3.30	-3.72/-4.33	-5.15/-5.66	-6.78/-6.88	-8.08/-8.12	-6.51/-5.07	-3.61/-2.85	-2.62/-2.64	-2.22/-1.88	-1.97/-1.41	-0.84/-0.36	0.08/0.40	0.84/0.98	1.14/-1.32	1.40/-1.60	1.69/-1.57	1.69/-1.57	1.47/-1.02
Θ(22.5°)	-0.37/-0.06	0.13/0.26	0.37/0.21	0.34/-1.05	-1.63/-1.79	-2.29/-2.75	-3.29/-3.48	-3.59/-3.74	-4.41/-4.90	-6.10/-6.68	-11.63/-11.08	-10.38/-9.25	-7.09/-6.11	-5.52/-4.40	-3.77/-4.78	-6.29/-5.16	-2.69/-0.76	0.34/0.64	0.69/0.57	0.70/-1.21	1.30/-1.26	1.30/-1.26	1.29/0.60	0.23/-0.08
Θ(30°)	0.03/1.13	1.58/1.16	0.74/-0.09	-0.88/-1.75	-2.86/-3.59	-4.02/-3.72	-3.91/-3.75	-2.47/-0.85	0.26/0.28	-0.87/-3.55	-7.19/-9.95	-11.20/-10.52	-8.09/-7.21	-6.32/-4.60	-4.20/-3.84	-2.60/-3.01	-5.51/-5.34	-3.80/-2.21	-1.00/-0.48	-0.51/-0.40	0.11/0.48	0.48/0.57	1.08/0.51	-0.97/-0.65
Θ(37.5°)	0.94/1.64	2.00/2.06	-0.61/-1.20	-0.60/0.64	0.13/-1.10	-2.41/-1.95	-1.65/-1.04	0.17/1.26	2.14/2.01	0.27/-2.16	-3.69/-4.70	-5.28/-6.15	-5.82/-3.63	-3.69/-3.76	-3.36/-4.24	-2.82/-2.85	-7.05/-3.76	-0.70/-0.57	0.08/0.40	1.14/-1.32	1.00/-1.07	-0.70/-2.08	-0.74/0.07	-1.20/-2.02
Θ(45°)	0.84/0.61	0.43/1.30	2.10/2.11	2.66/2.26	3.06/2.43	0.76/-1.56	-2.91/0.12	2.49/2.79	2.40/2.58	1.98/0.12	-1.36/-0.69	-0.21/-1.20	-3.28/-3.83	-3.18/-2.20	-0.54/0.14	-0.61/0.14	-0.91/-3.41	-0.35/-1.50	1.38/1.13	1.71/1.99	1.35/1.65	-0.15/-2.06	-0.84/-1.09	-0.70/-0.65
Θ(52.5°)	0.73/-0.46	-0.38/0.90	2.36/2.59	3.39/3.35	4.30/3.27	1.41/-1.33	-0.60/-1.93	2.18/1.34	2.91/3.60	3.49/1.06	-1.25/0.92	-1.51/-0.31	-1.47/-1.28	-1.53/0.68	1.39/1.21	1.44/2.18	1.14/-0.28	-0.06/-1.52	2.10/2.10	2.53/2.52	0.68/1.34	0.95/0.21	0.90/-1.08	-0.07/-1.25
Θ(60°)	-0.04/-1.11	-0.11/0.35	1.83/2.78	3.83/6.66	5.18/2.66	0.53/-0.90	-3.53/-4.17	-0.42/2.53	3.46/4.05	4.10/1.79	-1.19/0.50	1.71/1.14	0.44/0.03	0.15/0.76	1.10/2.09	1.50/1.90	1.50/0.88	0.44/1.51	2.38/2.31	2.22/2.16	-0.33/0.12	0.20/0.39	1.31/0.14	0.45/0.58
Θ(67.5°)	-1.56/-1.17	0.32/1.19	2.34/3.82	5.65/6.88	4.86/1.92	0.70/-0.28	-2.74/2.14	3.59/4.12	4.21/1.01	0.47/2.04	2.93/2.22	0.07/1.13	0.23/0.71	0.72/1.85	0.82/2.28	1.39/0.47	0.53/1.75	2.22/1.62	1.89/1.98	0.16/1.04	1.02/0.71	1.20/0.71	0.58/-0.58	-0.26/-0.41
Θ(75°)	-3.54/-2.93	-0.56/-1.40	2.09/3.51	6.01/7.63	4.15/0.85	-0.50/-2.22	0.20/0.06	-4.22/1.11	3.59/4.04	4.24/1.64	1.18/1.89	2.84/2.50	1.56/0.21	-0.08/0.50	1.11/0.54	1.12/1.12	0.07/1.40	0.54/1.54	1.84/1.01	1.01/1.42	1.48/1.79	2.30/0.95	-1.45/-1.80	-2.12/-3.31
Θ(82.5°)	-6.27/-5.43	-1.91/0.17	0.58/2.19	6.00/5.59	1.94/-1.20	-0.32/0.64	0.26/-1.07	-6.03/0.25	2.91/3.06	3.21/1.11	1.44/2.38	2.45/2.03	-0.53/-1.39	-0.53/0.68	-0.73/-1.05	0.88/0.62	-1.61/-1.68	0.09/1.22	1.44/1.03	1.09/1.47	1.85/2.72	3.32/4.00	-4.18/-3.44	-4.14/-6.71
Θ(90°)	-8.21/-9.11	-2.53/-2.02	-1.96/0.72	4.45/3.12	-0.60/-4.15	-2.46/-1.99	-0.98/-1.48	-7.11/-2.11	1.38/1.82	2.42/1.18	0.27/1.46	1.64/1.45	-0.46/-2.90	-1.95/-1.55	-2.87/-2.09	-0.38/-1.60	-2.36/4.73	-1.38/0.18	-0.10/-0.66	-1.06/-0.03	0.33/1.68	2.50/2.01	-5.53/-6.60	-6.89/-8.36
Θ(97.5°)	-10.33/-10.17	-4.52/-4.56	-3.11/0.55	2.00/0.03	-4.16/-6.51	-4.05/-3.72	-4.28/-3.99	-7.97/-1.96	-0.00/0.29	-5.05/0.89	-1.29/0.46	-2.71/-0.29	-3.33/-2.98	-2.31/-3.26	-3.70/-4.10	-2.25/-3.58	-3.48/-5.95	-3.57/-2.77	-2.61/-2.93	-2.87/-2.11	0.26/-1.92	-8.17/-8.56	-7.67/-8.22	-6.81/-14.43
Θ(105°)	-11.39/-11.53	-5.82/-5.95	-5.48/-2.73	-0.91/-3.34	-5.73/-8.22	-5.09/-4.84	-3.81/-5.41	-8.73/-3.12	-2.05/-3.22	-1.47/-2.17	-2.06/-2.16	-0.28/-2.03	-1.86/-4.26	-4.94/-3.91	-6.07/-5.26	-3.59/-3.83	-3.91/-8.13	-7.88/-5.90	-4.31/-7.31	-8.01/-10.29	-8.04/7.03	-5.16/-6.40	-3.88/-7.01	-8.29/-13.04
Θ(112.5°)	-14.92/-15.54	-12.85/-8.66	-7.01/-5.15	-4.77/-8.18	-8.24/-9.06	-7.29/-5.22	-4.40/-6.73	-6.60/-3.39	-3.07/-3.65	-2.47/-4.38	-3.35/-2.61	-1.10/-2.81	-5.00/-2.66	-5.89/-6.31	-8.55/-6.52	-7.42/-6.00	-5.40/-9.77	-6.02/-7.35	-5.42/-10.71	-10.16/-8.29	-7.78/-8.27	-7.51/-6.25	-12.26/-8.32	-8.87/-14.43
Θ(120°)	-13.37/-11.89	-12.88/-8.74	-6.19/-6.77	-4.16/-6.61	-7.70/-8.98	-10.07/-9.34	-6.58/-9.78	-8.76/-5.59	-4.23/-5.00	-3.12/-4.29	-3.86/-5.33	-2.72/-5.63	-5.82/-6.04	-5.66/-6.61	-9.36/-6.55	-8.37/-5.99	-7.43/-8.76	-6.82/-7.15	-4.90/-7.57	-10.34/-8.64	-6.52/-7.83	-5.55/-5.47	-9.69/-12.93	-9.49/-14.98
Θ(127.5°)	-9.78/-13.86	-11.80/-9.06	-6.53/-6.70	-5.83/-6.63	-9.99/-10.74	-8.76/-9.16	-9.47/-13.88	-8.70/-5.41	-4.85/-7.05	-4.74/-4.64	-6.23/-5.69	-4.33/-7.11	-6.61/-6.25	-5.50/-6.46	-10.02/-12.56	-11.75/-6.11	-9.18/-12.40	-14.12/9.53	-10.06/-7.48	-8.18/-12.95	-11.71/9.37	-9.81/-9.39	-8.87/-12.22	-8.74/-11.46
Θ(135°)	-11.91/-14.95	-9.95/-8.24	-10.09/-9.19	-14.25/-11.84	-13.00/-13.36	-10.99/-12.62	-10.03/-12.44	-9.42/-8.72	-10.31/-10.62	-9.62/-7.83	-9.83/-9.96	-7.08/-6.84	-9.21/-6.95	-5.97/-8.41	-10.25/-8.12	-13.46/-9.37	-7.65/-13.44	-15.60/-10.16	-8.62/-13.61	-10.33/-12.25	-15.57/-12.14	-11.45/-14.69	-11.69/-8.32	-10.71/-11.18
Θ(142.5°)	-8.62/-7.53	-7.96/-8.06	-15.38/-11.01	-9.90/-12.33	-14.11/-10.94	-12.82/-12.29	-10.40/-12.52	-9.26/-8.75	-11.79/-9.80	-10.60/-12.07	-9.35/-9.41	-13.42/-11.72	-7.28/-8.37	-9.12/-10.19	-10.60/-12.48	-12.90/-9.07	-11.19/-15.21	-12.59/-9.67	-11.46/-11.78	-14.65/-12.74	-10.26/-12.09	-11.22/-12.22	-11.39/-8.63	-10.21/-12.14
Θ(150°)	-11.11/-10.69	-14.86/-12.82	-12.67/-14.88	-15.70/-15.19	-13.10/-11.45	-11.18/-10.29	-9.17/-9.32	-8.17/-9.53	-12.66/-10.94	-9.57/-10.14	-10.56/-9.61	-8.66/-7.87	-7.56/-6.60	-6.77/-9.28	-10.92/-10.19	-10.61/-12.25	-14.85/-14.99	-12.74/-14.24	-14.71/-11.70	-15.53/-14.75	-13.43/-14.10	-10.43/-14.29	-15.96/-12.15	-11.54/-17.41
Θ(157.5°)	-13.50/-12.62	-15.43/-13.88	-14.95/-15.09	-15.92/-15.04	-14.10/-11.89	-12.43/-14.13	-14.21/-13.65	-14.73/-15.88	-12.90/-9.40	-8.32/-9.86	-9.72/-9.17	-8.22/-10.18	-8.43/-8.35	-10.04/-10.69	-10.57/-13.09	-14.06/-14.44	-12.70/-11.58	-12.00/-13.44	-13.77/-13.84	-15.51/-14.60	-15.46/-13.33	-14.46/-14.13	-14.59/-12.49	-13.78/-13.01
Θ(165°)	-15.16/-15.09	-15.53/-15.59	-14.94/-14.70	-13.94/-14.77	-15.84/-14.25	-15.48/-14.72	-15.39/-14.82	-14.31/-14.73	-14.89/-13.30	-12.42/-14.54	-14.25/-14.61	-14.64/-14.57	-13.52/-12.14	-13.55/-13.67	-13.13/-14.82	-13.68/-12.62	-10.71/-10.08	-11.17/-14.33	-14.92/-15.33	-14.72/-14.66	-15.06/-15.13	-14.77/-14.82	-15.22/-15.89	-15.17/-17.74
Θ(172.5°)	-14.76/-14.82	-14.33/-13.15	-13.54/-13.88	-14.08/-15.14	-15.24/-15.55	-14.76/-13.83	-12.77/-11.96	-11.65/-11.62	-11.92/-11.99	-12.01/-12.06	-11.32/-10.85	-11.18/-10.32	-11.20/-12.09	-11.42/-10.60	-10.91/-10.95	-11.74/-11.85	-11.97/-12.73	-14.68/-14.53	-14.91/-14.90	-14.67/-13.79	-12.65/-13.64	-14.34/-13.09	-13.01/-12.91	-12.65/-12.54
Θ(180°)	-9.31/-9.19	-9.78/-11.88	-12.48/-11.88	-11.27/-11.05	-10.94/-10.85	-10.08/-9.69	-9.88/-10.52	-11.74/-12.23	-13.20/-12.86	-11.99/-11.23	-10.80/-10.77	-10.49/-10.33	-11.05/-11.47	-11.45/-10.28	-10.86/-11.25	-11.74/-11.73	-12.76/-14.34	-16.16/-14.88	-14.45/-14.78	-14.21/-12.75	-11.35/-10.02	-9.69/-9.81	-9.44/-9.65	-9.42/-9.64
Freq(Hz)	5.785GPa	TotalAnt																						
Gain	Φ(0°)Φ(7.5°)	Φ(15°)Φ(22.5°)	Φ(30°)Φ(37.5°)	Φ(45°)Φ(52.5°)	Φ(60°)Φ(67.5°)	Φ(75°)Φ(82.5°)	Φ(90°)Φ(97.5°)	Φ(105°)Φ(112.5°)	Φ(120°)Φ(127.5°)	Φ(135°)Φ(142.5°)	Φ(150°)Φ(157.5°)	Φ(165°)Φ(172.5°)	Φ(180°)Φ(187.5°)	Φ(195°)Φ(202.5°)	Φ(210°)Φ(217.5°)	Φ(225°)Φ(232.5°)	Φ(240°)Φ(247.5°)	Φ(255°)Φ(262.5°)	Φ(270°)Φ(277.5°)	Φ(285°)Φ(292.5°)	Φ(300°)Φ(307.5°)	Φ(315°)Φ(322.5°)	Φ(330°)Φ(337.5°)	Φ(345°)Φ(352.5°)
Θ(0°)	-2.10/-2.23	-2.29/-2.17	-1.70/-1.85	-2.21/-2.22	-2.29/-2.22	-2.14/-1.96	-1.55/-1.54	-1.28/-1.18	-1.16/-0.90	-0.85/-0.47	-0.65/-0.83	-0.97/-0.79	-0.51/-0.69	-0.59/-0.46	-0.56/-0.87	-1.20/-1.82	-2.22/-3.22	-2.45/-2.68	-2.62/-2.68	-2.66/-1.99	-1.68/-1.83	-2.14/-2.44	-2.53/-2.20	-1.98/-2.62
Θ(7.5°)	-0.30/0.37	-0.42/0.54	-0.51/0.94	-1.47/-1.42	-1.51/-1.93	-2.02/-2.23	-2.18/-2.52	-2.59/-2.65	-3.00/-3.06	-2.55/-2.24	-2.22/-2.73	-2.57/-2.19	-2.03/-2.10	-1.97/-1.95	-1.83/-1.97	-2.09/-2.22	-1.40/-1.29	-1.10/-0.43	-0.60/-1.03	-1.00/-1.29	-1.10/-0.24	-0.13/-0.40	0.00/0.03	
Θ(15°)	0.43/0.49	0.64/0.55	0.16/0.20	0.02/0.17	-0.75/-1.46	-1.80/-2.49	-2.87/-3.28	-3.89/-4.13	-4.31/-4.79	-5.57/-6.57	-6.38/-5.37	-5.37/-5.84	-5.14/-4.10	-3.45/-2.96	-2.49/-2.33	-2.72/-3.02	-2.75/-2.60	-2.27/-1.57	-1.18/-1.25	-0.75/-0.39	-0.19/0.00	0.33/0.57	0.60/0.42	0.51/0.75
Θ(22.5°)	-0.72/-1.18	-0.96/-0.59	-0.75/-0.77	-0.92/-0.99	-1.13/-1.56	-1.76/-1.81	-1.92/-2.08	-2.75/-3.42	-4.30/-5.65	-7.86/-9.71	-8.70/-7.06	-6.62/-7.13	-8.11/-7.02	-4.89/-4.28	-4.85/-4.32	-4.06/-4.81	-5.69/-4.97	-4.09/-3.02	-1.65/-0.50	0.42/0.67	0.21/-0.09	-0.41/-0.62	-0.51/0.14	-0.04/-0.43
Θ(30°)	-1.69/0.60	0.61/0.71	-1.13/-0.23	-2.96/-3.35	-4.05/-4.14	-3.71/-3.23	-2.50/-1.95	-1.42/-1.41	-1.42/-1.71	-3.66/-6.67	-8.98/-9.73	-5.85/-5.43	-4.75/-3.31	-2.90/-2.95	-3.29/-4.64	-6.57/-6.24	-5.29/-4.64	-3.27/-1.06	-0.60/0.72	0.37/0.80</				



Antenna Pattern Scanning Radio 5_2.4GHz, 5GHz UNII 1~4, 6GHz and Radio 6 Bluetooth Appendix K

Theta (157.5°)	-15.01~15.60	-9.68~13.52	-15.43~15.90	-13.49~9.82	-9.29~11.01	-15.25~15.95	-12.40~13.06	-15.33~13.48	-11.78~13.49	-12.86~9.92	-10.41~12.15	-12.22~10.24	-9.17~17.57	-6.61~7.75	-12.53~10.74	-9.28~13.63	-10.91~10.66	-11.30~10.34	-11.53~12.71	-10.77~12.36	-16.00~14.56	-15.28~12.64	-11.24~10.70	-11.41~10.59																						
Theta (165°)	-15.18~15.79	-15.36~15.51	-12.40~13.60	-14.00~14.43	-14.44~13.88	-11.43~9.65	-10.82~14.26	-15.27~12.85	-10.57~10.25	-10.99~11.06	-11.42~11.89	-11.00~12.92	-14.22~13.45	-15.66~12.77	-10.55~10.69	-11.54~10.37	-10.32~11.21	-11.41~12.54	-14.39~12.99	-12.58~13.35	-14.66~15.30	-14.88~14.80	-13.86~13.75	-15.01~13.24																						
Theta (172.5°)	-15.29~15.19	-15.45~15.26	-15.13~15.82	-14.20~14.43	-14.42~14.88	-14.55~15.27	-10.55~14.26	-15.07~13.38	-12.94~12.71	-10.77~11.58	-11.12~12.20	-14.26~15.46	-14.73~12.81	-14.19~13.04	-14.19~12.75	-12.47~10.70	-12.63~11.26	-11.02~11.41	-11.82~11.71	-12.77~14.61	-15.81~15.02	-14.52~14.82	-14.21~13.43	-14.09~13.58																						
Theta (180°)	-11.30~10.56	-11.17~11.82	-12.88~11.95	-11.11~11.77	-12.76~12.70	-13.40~14.49	-14.78~14.83	-13.91~13.59	-12.96~12.46	-13.01~13.66	-14.60~14.01	-14.78~12.92	-11.18~10.60	-11.69~13.13	-13.42~13.85	-13.70~12.55	-11.95~11.34	-11.04~11.32	-12.27~13.42	-13.18~13.01	-11.74~9.92	-8.60~8.83	-9.27~8.79	-8.23~9.15																						
Freq(Hz)	6.475GPol.	TotalAnt.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																						
Gain	Phi(7.5°)	Phi(15°)	Phi(22.5°)	Phi(30°)	Phi(37.5°)	Phi(45°)	Phi(52.5°)	Phi(60°)	Phi(67.5°)	Phi(75°)	Phi(82.5°)	Phi(90°)	Phi(97.5°)	Phi(105°)	Phi(112.5°)	Phi(120°)	Phi(127.5°)	Phi(135°)	Phi(142.5°)	Phi(150°)	Phi(157.5°)	Phi(165°)	Phi(172.5°)	Phi(180°)	Phi(195°)	Phi(202.5°)	Phi(210°)	Phi(217.5°)	Phi(225°)	Phi(232.5°)	Phi(240°)	Phi(247.5°)	Phi(255°)	Phi(262.5°)	Phi(270°)	Phi(277.5°)	Phi(285°)	Phi(292.5°)	Phi(300°)	Phi(307.5°)	Phi(315°)	Phi(322.5°)	Phi(330°)	Phi(337.5°)	Phi(345°)	Phi(352.5°)
Theta(0°)	-0.83~0.70	-0.27~0.21	-0.48~0.71	-0.71~0.88	-1.11~1.02	-0.95~1.11	-1.09~0.97	-0.89~0.88	-0.95~0.97	-1.35~1.45	-1.24~0.74	-0.71~0.73	-0.61~0.12	0.36~0.40	0.44~0.40	0.68~0.11	1.21~1.23	1.25~1.04	0.72~0.53	0.19~0.30	-0.45~0.27	-0.49~0.43	-0.34~0.44	-0.27~0.35																						
Theta(7.5°)	-0.38~0.33	0.80~1.14	1.47~1.25	1.21~1.18	1.16~0.95	1.05~0.75	0.63~0.53	0.27~0.07	-0.08~0.26	-0.86~1.22	-1.30~1.06	-0.83~1.07	-1.50~0.78	-0.49~0.54	-1.13~1.43	-0.82~0.44	-0.40~0.58	-0.73~0.76	-1.04~1.08	-1.27~1.66	-2.13~1.90	-1.26~1.19	-1.35~0.64	-0.46~0.83																						
Theta(15°)	-0.54~0.44	0.25~1.09	1.66~1.57	1.61~1.50	1.39~1.45	1.43~1.23	1.05~0.71	0.37~0.39	0.43~0.34	0.29~0.17	-0.23~0.46	-0.17~0.23	-0.22~0.76	-0.25~0.29	-0.24~0.91	-0.97~0.49	-0.42~0.23	-0.20~0.53	-1.41~2.84	-4.08~5.13	-5.29~4.33	-3.33~1.11	-2.31~1.31	-1.08~0.84																						
Theta(22.5°)	-5.79~5.40	-3.34~1.48	-0.37~0.27	0.87~1.06	1.17~1.31	1.40~1.30	1.21~1.15	0.89~0.68	0.37~0.23	-0.49~1.14	-2.47~2.85	-2.71~2.69	-1.77~1.25	-1.28~0.35	-1.11~2.31	-3.22~3.42	-3.38~3.42	-2.88~2.82	-3.63~4.82	-5.86~4.96	-3.88~3.18	-2.62~3.54	-3.62~4.68	-4.78~5.42																						
Theta(30°)	-7.18~7.38	-6.54~7.06	-5.09~2.70	-1.24~0.36	0.37~0.92	1.09~0.74	0.51~0.94	1.65~2.50	2.66~1.71	0.44~1.26	-3.29~2.48	-3.80~4.47	-5.35~5.70	-4.39~3.56	-2.95~2.36	-2.66~3.77	-3.91~4.15	-4.39~4.72	-5.17~3.87	-2.65~4.29	-3.34~3.29	-2.66~3.20	-5.21~6.64	-5.62~5.24																						
Theta(37.5°)	-5.08~3.14	-4.85~8.49	-4.84~1.83	-0.59~0.60	-1.22~1.66	-0.65~0.57	-0.36~0.40	0.96~2.59	3.47~3.01	1.77~0.16	-1.13~2.96	-0.59~5.82	-5.04~3.58	-2.37~1.36	-1.54~1.45	-1.54~2.63	-4.73~1.89	-1.93~0.80	0.44~0.99	-3.33~3.65	-2.16~2.32	-5.24~3.76	-2.83~5.48																							
Theta(45°)	-1.99~1.59	-4.95~7.85	-5.57~0.52	1.34~1.33	1.15~0.03	-2.14~2.54	0.06~1.34	1.56~1.86	2.11~2.19	1.24~1.27	2.19~1.04	-0.51~2.45	-5.15~3.80	-3.96~2.24	-1.49~3.12	-1.80~1.17	-1.21~0.39	-3.10~2.64	-1.17~0.59	1.23~1.58	1.19~0.01	-0.96~1.51	-4.47~3.29	-2.09~3.92																						
Theta(52.5°)	-1.89~4.72	-5.69~6.66	-0.98~0.38	3.96~2.63	1.69~2.29	0.58~4.36	-1.71~0.89	2.59~1.91	-1.10~0.94	1.51~1.99	3.13~3.43	0.83~2.57	-4.26~3.47	-2.40~1.54	0.64~1.29	-0.90~0.31	-0.19~0.64	-2.49~1.55	-1.44~2.25	-0.14~1.66	2.27~1.95	0.98~0.84	-1.88~1.70	-4.01~0.87																						
Theta(60°)	-1.27~6.65	-4.94~3.43	1.19~3.79	4.10~2.43	1.61~2.22	1.69~2.70	-0.44~1.66	2.58~2.24	-1.32~0.77	1.18~0.49	1.91~0.88	-3.64~1.44	-3.54~3.82	-2.25~2.26	-0.49~0.96	-1.01~0.04	-0.27~1.33	-0.42~2.52	-2.02~0.50	1.32~0.65	-0.84~1.53	0.65~0.88	1.28~2.23																							
Theta(67.5°)	0.85~4.34	-6.30~2.23	2.53~4.29	3.81~2.17	1.87~1.40	1.57~0.38	-3.47~2.71	2.51~2.97	-0.65~0.31	-0.61~1.61	3.01~0.59	1.94~2.02	-2.21~3.66	-0.55~0.49	-0.11~1.72	-1.95~0.02	0.50~2.17	0.35~0.12	0.49~0.99	-0.88~0.39	0.13~0.42	-2.09~0.86	1.36~1.25	1.41~1.80																						
Theta(75°)	0.65~2.78	-6.91~1.33	2.78~5.55	3.66~2.53	1.63~1.10	-0.25~0.97	-3.37~3.96	1.45~3.63	-0.11~2.23	-2.39~2.29	2.05~3.49	2.74~0.45	-2.96~3.84	-1.78~0.16	1.18~2.46	-2.34~0.71	1.20~1.46	-0.04~0.53	1.45~0.23	-1.21~0.54	-0.21~0.60	-1.59~0.17	0.65~0.81	0.87~1.39																						
Theta(82.5°)	-5.03~3.12	-6.25~1.72	1.61~3.30	2.69~2.43	0.62~0.25	-2.85~2.18	-2.02~2.86	0.46~0.03	-0.29~0.40	-4.62~3.45	1.48~3.00	1.67~1.90	-0.01~4.20	-0.38~0.44	5.31~2.28	-2.51~1.82	0.13~0.03	1.51~2.02	0.13~0.03	1.48~0.21	-1.21~0.54	0.18~0.15	-0.34~1.22	-0.86~0.72	-0.46~0.53																					
Theta(90°)	-2.64~4.07	-5.23~3.91	-0.73~1.71	1.34~0.85	-0.75~0.51	-4.88~1.77	-0.17~2.29	-0.36~1.58	-1.47~1.06	-7.08~3.60	-0.36~1.00	0.95~2.06	-4.26~6.45	-2.33~1.52	0.00~2.99	-3.75~4.99	-1.20~2.72	-0.80~0.34	0.20~0.33	-2.57~1.32	-1.47~1.23	-0.91~2.84	-3.51~2.56	-2.26~3.11																						
Theta(97.5°)	-5.88~7.04	-5.60~6.37	-2.39~0.52	-0.18~2.19	-2.30~2.23	-5.93~2.61	-1.27~2.90	-2.17~0.91	-1.49~9.45	-8.82~5.03	-1.17~0.20	-1.40~2.52	-6.15~7.03	-1.95~2.23	-2.01~3.75	-6.45~6.94	-3.16~4.63	-2.92~2.26	-2.59~3.34	-6.80~5.92	-5.40~5.56	-2.88~5.57	-7.10~5.01	-4.87~6.36																						
Theta(105°)	-9.13~9.97	-3.94~8.45	-3.40~0.73	-4.67~4.20	-6.66~4.94	-7.37~2.22	-6.31~0.71	-6.34~3.21	-6.28~1.16	-6.15~5.26	-3.18~1.54	-3.90~1.07	-5.80~3.94	-4.66~9.83	-4.86~5.39	-4.79~7.76	-5.66~5.53	-13.22~11.35	-9.10~13.10	-4.87~7.78	-5.18~5.66	-11.00~5.38																								
Theta(112.5°)	-11.52~9.28	-14.28~11.69	4.71~4.31	-7.01~9.84	-8.60~9.35	-7.91~6.98	-5.88~6.17	-5.76~4.40	-10.75~11.74	-8.47~7.12	-4.22~4.00	-4.88~8.01	-7.59~11.08	-4.90~5.96	-3.64~7.51	-9.38~9.39	-5.20~6.53	-7.79~3.96	-5.81~6.69	-9.44~7.36	-10.97~14.94	-9.17~7.36	-8.73~9.58	-8.65~6.10																						
Theta(120°)	-13.27~12.60	-15.30~10.59	-7.38~5.04	-8.24~11.98	-8.75~8.24	-8.86~6.63	-6.16~6.59	-6.88~8.07	-11.80~12.51	-10.26~8.46	-5.38~6.89	-5.71~6.64	-10.98~7.80	-5.81~5.85	-5.32~6.96	-7.91~12.39	-6.79~8.51	-11.92~3.33	-6.68~9.64	-8.85~11.32	-9.11~9.47	-8.53~10.03	-15.39~9.69	-10.80~12.03																						
Theta(127.5°)	-11.15~13.42	-10.74~10.00	-6.59~6.39	-11.10~10.65	-12.59~13.92	-11.64~10.15	-12.60~11.18	-14.36~11.72	-14.50~11.28	-12.01~11.20	-7.99~8.52	-8.61~6.84	-12.68~10.45	-8.21~4.86	-7.57~7.04	-8.63~9.68	-7.38~12.24	-11.91~9.36	-11.51~10.97	-10.65~12.12	-11.17~14.79	-16.03~11.34	-10.27~11.67	-11.02~10.39																						
Theta(135°)	-11.58~11.60	-13.34~12.30	-8.72~11.23	-15.82~15.72	-14.35~13.81	-12.85~12.69	-15.29~12.67	-15.00~12.10	-12.45~10.83	-10.60~9.90	-9.08~9.07	-8.72~10.46	-11.30~11.60	-11.27~8.82	-9.03~6.20	-8.25~7.63	-8.84~10.74	-10.86~9.78	-7.92~10.20	-15.19~12.04	-9.91~9.01	-13.72~15.82	-8.05~14.29	-8.85~14.19																						
Theta(142.5°)	-11.02~12.91	-9.80~12.32	-11.52~11.30	-14.97~14.88	-14.13~11.40	-11.50~10.04	-15.26~13.33	-15.92~12.85	-13.36~10.00	-11.01~10.14	-7.66~7.73	-7.79~9.83	-10.98~10.34	-11.49~8.48	-8.33~7.57	-7.79~8.65	-11.49~12.70	-12.94~10.44	-10.72~11.61	-14.43~12.42	-12.55~9.79	-15.04~11.26	-14.56~13.20	-12.77~10.58																						
Theta(150°)	-13.31~14.72	-13.91~14.11	-13.19~14.70	-13.27~11.92	-13.66~10.70	-10.13~13.73	-15.86~13.47	-15.14~9.56	-13.30~10.82	-8.45~11.47	-11.10~9.38	-10.71~11.70	-12.98~13.63	-10.52~9.17	-9.48~7.61	-9.39~11.67	-12.49~14.60	-13.99~11.88	-11.73~13.93	-13.75~12.55	-12.15~15.59	-11.18~14.26	-16.32~13.24	-10.96~14.99																						
Theta(157.5°)	-15.55~12.68	-10.93~15.28	-15.88~13.73	-11.75~12.15	-10.54~12.14	-15.43~12.33	-10.96~12.73	-14.45~11.50	-14.89~14.90	-11.89~9.22	-9.87~10.72	-11.30~10.08	-11.94~11.17	-9.98~10.29	-10.42~12.23	-13.84~14.77	-12.94~10.45	-14.70~14.25	-12.35~15.97	-15.62~14.44	-15.28~15.59	-14.34~12.24	-12.45~11.93	-10.73~14.21																						
Theta(165°)	-15.83~15.87	-14.40~13.83	-14.10~15.88	-15.90~14.67	-15.26~13.22	-10.66~9.96	-12.41~15.66	-12.84~10.44	-9.29~10.84	-11.88~11.65	-13.76~14.85	-13.08~12.82	-14.42~15.09	-13.80~12.94	-12.95~12.34	-12.23~12.70	-13.48~13.10	-13.27~13.41	-13.58~13.85	-15.72~14.97	-16.01~14.65	-15.72~15.73	-14.10~15.51	-14.83~16.01																						
Theta(172.5°)	-15.68~15.32	-15.65~15.88	-14.95~13.98	-14.08~14.07	-13.53~14.22	-14.21~15.46	-15.18~15.09	-14.08~13.44	-13.27~16.20	-15.42~15.66	-15.36~14.78	-14.67~14.53	-14.21~14.07	-13.17~12.34	-11.77~12.94	-13.67~12.07	-10.35~9.62	-9.78~9.31	-10.34~12.65	-15.00~15.15	-14.94~15.75	-15.19~16.08	-15.28~16.02																							
Theta(180°)	-13.41~13.78	-14.28~14.70	-13.17~13.60	-13.43~12.74	-11.46~11.97	-13.44~14.42	-15.11~14.82	-14.82~14.06	-13.71~13.02	-13.46~13.37	-13.08~13.82	-13.33~13.32	-15.29~14.07	-14.92~15.85	-15.40~15.04	-15.45~15.13	-14.27~14.59	-13.85~12.97	-13.44~14.45	-15.78~14.00	-12.52~12.43	-11.97~11.08	-10.97~10.69	-10.42~12.03																						
Gain	Phi(7.5°)	Phi(15°)	Phi(22.5°)	Phi(30°)	Phi(37.5°)	Phi(45°)	Phi(52.5°)	Phi(60°)	Phi(67.5°)	Phi(75°)	Phi(82.5°)	Phi(90°)	Phi(97.5°)	Phi(105°)	Phi(112.5°)	Phi(120°)	Phi(127.5°)	Phi(135°)	Phi(142.5°)	Phi(150°)	Phi(157.5°)	Phi(165°)	Phi(172.5°)	Phi(180°)	Phi(195°)	Phi(202.5°)	Phi(210°)	Phi(217.5°)	Phi(225°)	Phi(232.5°)	Phi(240°)	Phi(247.5°)	Phi(255°)	Phi(262.5°)	Phi(270°)	Phi(277.5°)	Phi(285°)	Phi(292.5°)	Phi(300°)	Phi(307.5°)	Phi(315°)	Phi(322.5°)	Phi(330°)	Phi(337.5°)	Phi(345°)	Phi(352.5°)
Theta(0°)	0.51~0.59	0.32~0.01	0.36~0.55	0.43~0.07	0.09~0.25	0.05~0.27	0.20~0.20	0.26~0.16	0.15~0.37	0.48~0.53	0.33~0.35	0.88~0.77	0.60~0.78	1.46~1.09	0.5																															

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

