



Radiated Composite Gain_Radio 3 5GHz U-NII1~U-NII 3 and 6GHz U-NII 5~U-NII 8

Appendix E

Table with columns for Frequency (5.3G, 5.6G, 5.785G, 6.175G), Polarization (Pol.), Phi angle, Antenna (Ant. 3), and Gain for various Phi angles (0 to 345 degrees) across multiple Theta angles (0 to 120 degrees).



Radiated Composite Gain_Radio 3 5GHz U-NII1~U-NII 3 and 6GHz U-NII 5~U-NII 8

Appendix E

Table with columns for frequency (6.175G, 6.475G, 6.695G, 6.995G), gain, and various angles (Theta, Phi) from 0 to 180 degrees. The table contains numerical data for each combination of frequency and angle.



Radiated Composite Gain_Radio 3 5GHz U-NII1~U-NII 3 and 6GHz U-NII 5~U-NII 8

Appendix E

Table with columns for frequency (5.2G, 5.3G, 5.6G, 5.785G), polarization (Pol.), phase (Phi), and gain values for various angles (Theta) and frequencies (Phi). Includes numerical data and some highlighted values like 1.58, 3.41, 3.65, 0.95, 1.81, 1.4.



Radiated Composite Gain_Radio 3 5GHz U-NII1~U-NII 3 and 6GHz U-NII 5~U-NII 8

Appendix E

Table with columns for Frequency (5.785G, 6.175G, 6.475G, 6.695G), Polarization (Pol., Theta, Phi), and Gain (Phi(0) to Phi(345)). Rows list gain values for various angles (Theta) and frequencies.



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Appendix E

Theta (°)	-3.91	-3.99	-3.92	-4.61	-6.64	-7.25	-8.53	-9.7	-10.07	-8.28	-7.16	-4.81	-3.57	-3.23	-2.57	-2.94	-4.3	-5.19	-6.42	-7.86	-6.85	-6.33	-5.3	-4.69
Theta (15°)	1.72	-0.82	2.35	0.93	-1.5	-1.69	-3.83	-4.92	-4.5	-2.89	-1.21	-0.88	0.14	-0.51	-1.25	-5.36	-11.67	-14.89	-14.48	-17.87	-13.39	-10.39	-4.26	1.16
Theta (30°)	-0.99	-5.53	0.52	-4.1	-7.57	-9.83	-10.55	-9.3	-6.17	-1.48	0.32	0.85	-0.68	-1.61	-1.62	-5.41	-2.78	-2.63	-6.16	-17.02	-16.26	-4.55	-9.54	-1.58
Theta (45°)	-7.43	-7.03	-4.09	0.4	-3.38	-6.4	-6.82	-4.34	-6.42	-5.32	-0.51	-0.59	0.32	-0.97	-5.71	-2.48	-2.41	-1.03	-2.84	-5.99	-13.14	-2.91	-12.88	-8.43
Theta (60°)	-11.47	-8.92	-7.06	-3.44	-8.65	-10.88	-11.63	-4.77	-5.17	-4.44	-6.8	-1.14	-0.19	-1.5	-5.86	-12.9	-1.68	-1.54	-2.43	-6.13	-11.54	-10.92	-4.14	-5.12
Theta (75°)	-5.53	-5.15	-1.5	-3.31	-3.95	-4.13	-4.61	-9.62	-4.67	-7.09	-5.43	-2.35	-4.12	-5.42	-9.02	-10.48	-4.57	-2.75	-2.38	-7.05	-3.8	-1.56	-3.93	-5.59
Theta (90°)	-4.62	-1.87	-4.26	-6.06	-10.58	-4.85	-2.95	-8.34	-8.54	-9.26	-9.39	-9.37	-7.45	-9.21	-11.96	-14.83	-8.07	-8.03	-3.32	-19.96	-2.31	-7.37	-7.29	-10
Theta (105°)	-13.34	-10.52	-9.79	-8.85	-19.08	-8.74	-3.52	-10.84	-9.83	-15.8	-11.32	-13.97	-19.52	-11.43	-8.61	-15.39	-11.75	-10.4	-13.4	-12.5	-10.82	-11.71	-11.96	-16.41
Theta (120°)	-13.22	-11.07	-13.73	-13.53	-19.78	-10.42	-8.42	-13.65	-15.27	-11.76	-19.46	-14.41	-18.62	-9.74	-16.45	-19.43	-16.65	-18.99	-15.16	-18.48	-15.66	-9.99	-19.87	-18.83
Theta (135°)	-17.05	-20.12	-19.85	-14.97	-18.34	-10.09	-11.19	-10.54	-18.29	-13.35	-12.87	-9.79	-17.74	-11.71	-11.24	-18.43	-10.29	-18.64	-19.93	-19.77	-19.36	-14.4	-15.04	-17.88
Theta (150°)	-11.9	-17.21	-18.38	-10.97	-18.98	-14.49	-19.95	-12.28	-13.62	-18.94	-19.97	-11.67	-11.6	-13.46	-19.69	-19.35	-18.73	-19.76	-19.65	-19.03	-17.48	-15.15	-19.28	-19.49
Theta (165°)	-17.47	-19.44	-17.1	-19.46	-18.74	-18.61	-18.95	-15.68	-13.56	-19.65	-17.07	-19.53	-20.26	-13.7	-17.46	-16.74	-18.84	-19.44	-16.54	-16.62	-19.45	-17.68	-19.75	-18.99
Theta (180°)	-15.85	-18.07	-19.49	-19.57	-20.23	-19.16	-19.96	-14.43	-15.14	-16.14	-15.01	-14.59	-17.61	-17.33	-19.03	-19.96	-18.64	-19.83	-18.58	-15.52	-15.05	-16	-18.49	-16.01
Freq(Hz)	6.995G	Pol.	Phi	Ant. 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Phi(0°)	Phi(15°)	Phi(30°)	Phi(45°)	Phi(60°)	Phi(75°)	Phi(90°)	Phi(105°)	Phi(120°)	Phi(135°)	Phi(150°)	Phi(165°)	Phi(180°)	Phi(195°)	Phi(210°)	Phi(225°)	Phi(240°)	Phi(255°)	Phi(270°)	Phi(285°)	Phi(300°)	Phi(315°)	Phi(330°)	Phi(345°)
Theta (0°)	-11.53	-19.01	-19.43	-14.99	-11.31	-9.35	-7.67	-10.21	-9.61	-11.03	-13.42	-18.53	-18.52	-19.74	-19.47	-13.89	-9.93	-8.84	-7.62	-6.36	-6.37	-6.76	-8.67	-9.17
Theta (15°)	-5.24	-10.52	-15.38	-12.16	-8.66	-14.02	-8.96	-4.89	-1.47	-0.85	-1.56	-1.09	-2.51	-13.01	-10.65	-19.66	-14.25	-6.37	-4.47	-6.44	-7.21	-3.26	-1.07	-1.66
Theta (30°)	-8.02	-9.08	-19.98	-2.54	-2.92	-4.53	-3	1.5	1.93	0.47	-2.73	-6.25	-3.1	-7.01	-14.9	-5.3	-18.6	-5.41	-2.78	-1.97	-2.45	-2.84	-2.89	-6.8
Theta (45°)	-13.95	-13.57	-8.69	-12.07	-9.85	-4.27	-2.87	1.01	0.62	1.43	-4.11	-6.22	-4.5	-8.37	-17.44	-6.5	-9.48	-8.29	-3.22	-2.6	-3.01	-3.42	-4.01	-12.56
Theta (60°)	-12.17	-12.47	-13.24	-17.47	-8.89	-1.56	-0.4	-0.24	-7.3	-4.8	-10.5	-8.22	-20.07	-12.05	-17.84	-16.54	-15.24	-11.11	-11	-5.36	-4.74	-7.59	-11.03	-8.52
Theta (75°)	-19.56	-14.74	-9.02	-5.22	-4.62	-4.37	-3.25	-0.66	-14.6	-14.7	-14.08	-14.54	-17.38	-11.39	-20.49	-10.83	-14.96	-14.79	-6.72	-4.04	-10.64	-11.07	-15.79	-17.03
Theta (90°)	-6.3	-8.62	-13.49	-3.23	-6.26	-9.78	-5.98	-5.61	-17.42	-17.76	-11	-18.83	-15.31	-9.37	-16.32	-11.35	-15.42	-17.82	-13.22	-3.96	-6.17	-12.2	-18.36	-13.59
Theta (105°)	-16.87	-13.88	-5.78	-3.46	-8.99	-8.81	-4.17	-19.53	-15.37	-17.61	-20.07	-20.1	-14.52	-11.4	-11.3	-12.16	-19.26	-19.61	-8.48	-20.75	-12.38	-18.78	-14.53	-18.73
Theta (120°)	-7.88	-9.03	-13	-19.41	-11.64	-7.42	-6.28	-6.04	-17.31	-15.12	-15.8	-16.44	-14.75	-12.44	-13.39	-18.94	-12.31	-19.03	-12.88	-15.22	-9.52	-19.65	-17.49	-8.81
Theta (135°)	-10.97	-10.12	-14.98	-19.21	-20.6	-8.16	-9.56	-7.45	-12.8	-15.5	-14.64	-12.91	-16.63	-16.27	-14.39	-19.6	-14.49	-16.69	-15.38	-17.63	-18.77	-19.65	-15.06	-13
Theta (150°)	-19.47	-20.38	-17.19	-11.76	-19.55	-12.26	-14.34	-4.41	-15.96	-12.35	-18.64	-16.17	-19	-15.76	-14.52	-18.64	-12.97	-14.5	-18.27	-17.11	-20.07	-19.37	-16.15	-15.22
Theta (165°)	-19.31	-17.69	-19.3	-19.26	-13.29	-18.85	-15.34	-18.81	-14.86	-13.07	-19.04	-19.01	-19.66	-18.88	-14.17	-19.37	-19	-15.43	-17.29	-19.41	-19.9	-20.43	-18.85	-19.93
Theta (180°)	-20.39	-18.25	-20.58	-18.97	-20.05	-20.17	-20.29	-18.21	-18.3	-15.07	-18.6	-18.65	-19.95	-19.75	-18.65	-20.09	-18.97	-18.1	-19.39	-19.03	-19.17	-19.75	-18.22	-19.59
Freq(Hz)	6.995G	Pol.	Theta	Ant. 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain	Phi(0°)	Phi(15°)	Phi(30°)	Phi(45°)	Phi(60°)	Phi(75°)	Phi(90°)	Phi(105°)	Phi(120°)	Phi(135°)	Phi(150°)	Phi(165°)	Phi(180°)	Phi(195°)	Phi(210°)	Phi(225°)	Phi(240°)	Phi(255°)	Phi(270°)	Phi(285°)	Phi(300°)	Phi(315°)	Phi(330°)	Phi(345°)
Theta (0°)	-5.89	-5.93	-5.26	-6.17	-8.75	-10.72	-15.29	-18.58	-19.42	-17.49	-13.66	-11.41	-9.52	-8.13	-8.29	-9.65	-10.8	-12.49	-19.44	-19.44	-19.8	-12.02	-10.06	-6.65
Theta (15°)	-1.1	1.07	0.25	-1.09	-2.81	-4.82	-5.83	-8.24	-5.35	-1.15	0.31	0.87	-0.25	0.11	-2.37	-1.63	-2.81	-8.91	-14.24	-12.07	-11.53	-13.9	-6.58	-1.52
Theta (30°)	-0.91	-2.95	-4	-4.77	-11.93	-4.66	-5.22	-9.52	-13.88	-11.27	-0.54	0.58	-1.53	-1.12	-0.9	-9.86	-1.92	-2.44	-4.04	-18.34	-12.72	-8.92	-9.47	-4.15
Theta (45°)	-4.49	-6.5	-9.04	-1.96	-8.64	-9.18	-2.44	-5.59	-4.37	-4.39	-0.87	0.46	1.22	1.28	-4.86	-3.41	-1.21	0.04	-3.28	-8.32	-16.46	-5.23	-12.74	-7.65
Theta (60°)	-4.98	-6.45	-1.57	-1.42	-0.87	-3.95	-3.67	-2.39	-7.4	-1.03	-5.06	-0.07	-4.63	-4	-6	-7.71	-1.25	-2.25	-6.71	-6.77	-11.92	-7.49	-5.3	-5.98
Theta (75°)	-2.31	-7.33	-3.55	-1.68	-7.03	-1.97	-9.2	-3.06	-12.65	-4.03	-10.27	-1.21	-7.96	-8.24	-5.41	-14.98	-8.78	-8.17	-3.39	-13.37	-5.36	-2.44	-7.28	-0.81
Theta (90°)	-2.45	-4.7	-6.92	-6.56	-6.78	-2.89	-5.04	-3	-10.78	-8.51	-12.3	-5.09	-15.46	-6.9	-6.83	-19.89	-13.35	-12.26	-3.18	-15.72	-9.81	-4.43	-7.21	-3.95
Theta (105°)	-8.2	-11.64	-11.08	-8.41	-7.41	-3.72	-3.35	-7.49	-12.79	-11.21	-15.2	-12.55	-11.92	-14.31	-6.92	-11.41	-15.2	-19.45	-14.63	-11.85	-18.08	-3.54	-10.18	-10.86
Theta (120°)	-19.67	-16.41	-13.82	-19.04	-18.85	-8.05	-3.93	-10.67	-18.16	-18.23	-10.99	-11.19	-18.26	-15.5	-10.16	-18.4	-19.21	-10.77	-18.83	-13.97	-16.3	-11.81	-16.22	-12.98
Theta (135°)	-19.32	-13.08	-12.97	-15.66	-10.54	-12	-5.34	-11.04	-18.67	-9.9	-19.19	-13.19	-15.92	-17.03	-16.78	-15.94	-17.33	-19.89	-19.44	-19.07	-18.5	-12.48	-19.99	-15.28
Theta (150°)	-19.46	-11.61	-16.18	-10.68	-18.13	-16.03	-11.8	-11.77	-16.23	-13.34	-8.75	-10.03	-18.1	-17.51	-16.14	-17.13	-19.07	-19.25	-19.55	-18.57	-15.69	-14.32	-15.99	-18.09
Theta (165°)	-18.78	-17.89	-13.24	-16.02	-19.65	-18.79	-9.67	-15.96	-19.49	-19.55	-18.67	-18.87	-19.91	-17.59	-18.14	-19.07	-18.39	-18.18	-19.62	-19.01	-14.58	-18.94	-17.88	-17.64
Theta (180°)	-19.26	-20.28	-19.44	-20.06	-18.7	-19.25	-19.13	-18.89	-19.87	-20.57	-19.31	-16.96	-16.61	-15.14	-19.82	-20.18	-18.49	-17.98	-19.2	-17.84	-17.83	-20.1	-20.11	-19.64



Total Gain Data

Table with columns: Freq(Hz), Pol., Total, Ant. 1, and 24 directional gain columns (Phi(0) to Phi(345)). Rows are grouped by frequency (2.45G, 5.2G, 5.3G, 5.6G, 5.785G, 2.45G) and antenna (Ant. 1, Ant. 2).



Antenna Pattern_Radio 1 2.4GHz and 5GHz U-NII 1~U-NII 3

Appendix F

Table with columns for Frequency (5.3G, 5.6G, 2.45G, 5.2G, 5.3G, 5.6G), Polarization (Pol.), Total, Antenna (Ant. 2, Ant. 3), and Gain (Phi(0) to Phi(345)). Rows list gain values for various angles (0, 15, 30, 45, 60, 75, 90, 105, 120, 135, 150, 165, 180 degrees).



Antenna Pattern_Radio 1 2.4GHz and 5GHz U-NII 1~U-NII 3

Appendix F

Table with columns for Frequency (5.785G, 2.45G, 5.2G, 5.3G, 5.6G, 5.785G), Gain, and various Phi angles (0 to 345 degrees). It contains numerical data for antenna patterns across multiple frequency bands.



Antenna Pattern_Radio 1 2.4GHz and 5GHz U-NII 1~U-NII 3

Appendix F

Table with columns for Azimuth (Theta) and Elevation (Phi) angles, and rows for Gain and various frequency bands (5.2G, 5.3G, 5.6G, 5.785G, 2.45G, 5.2G, 5.3G). Each cell contains a numerical value representing the antenna pattern gain.



Antenna Pattern_Radio 1 2.4GHz and 5GHz U-NII 1~U-NII 3

Appendix F

Table with columns for Azimuth (Theta) and Elevation (Phi) angles, and rows for various frequency bands (5.6G, 5.785G, 2.45G, 5.2G, 5.3G, 5.6G) and gain values. Includes numerical data and some highlighted values in red.

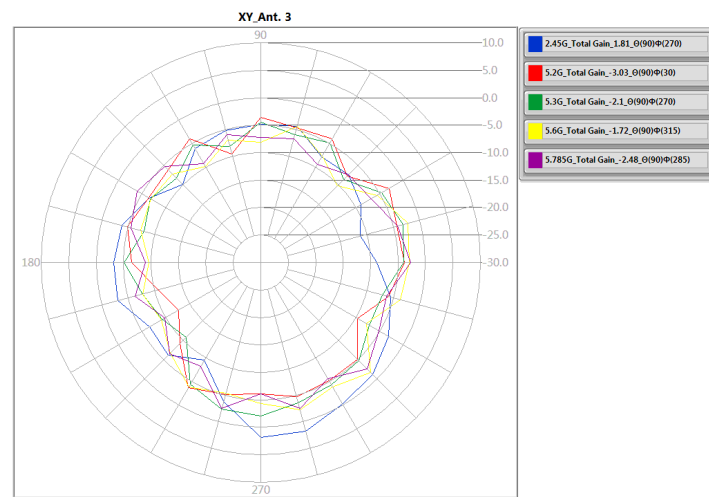
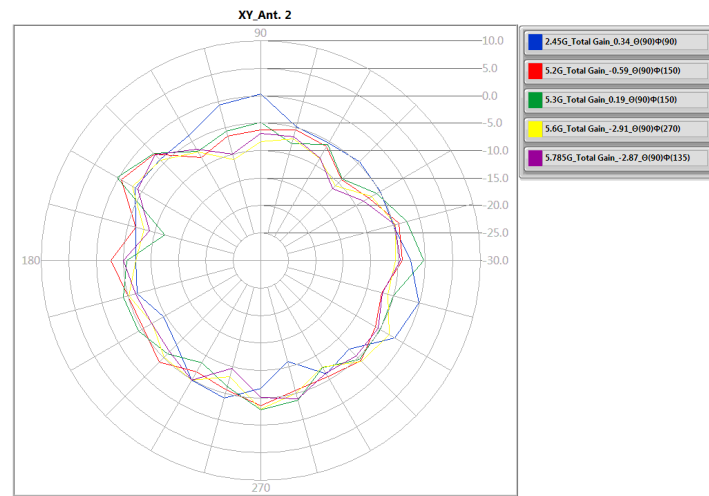
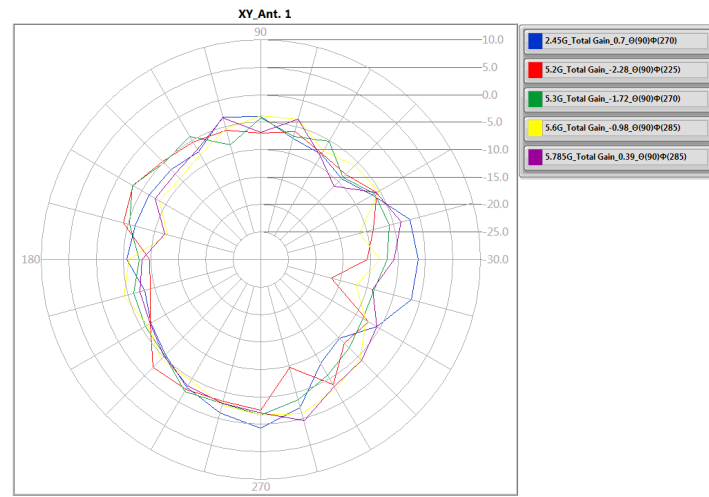


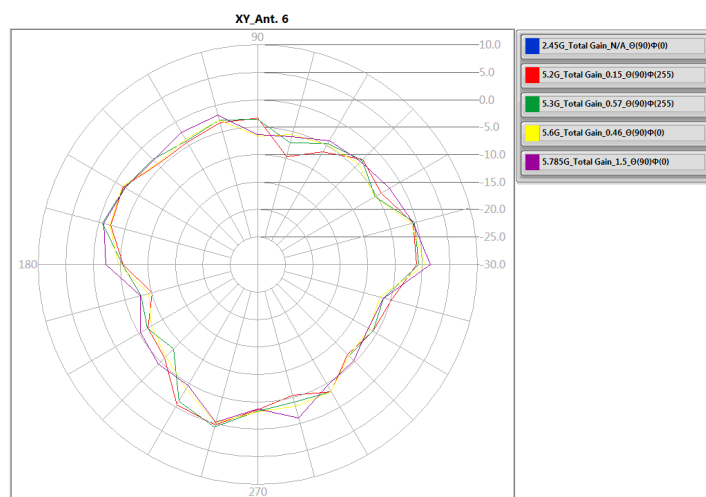
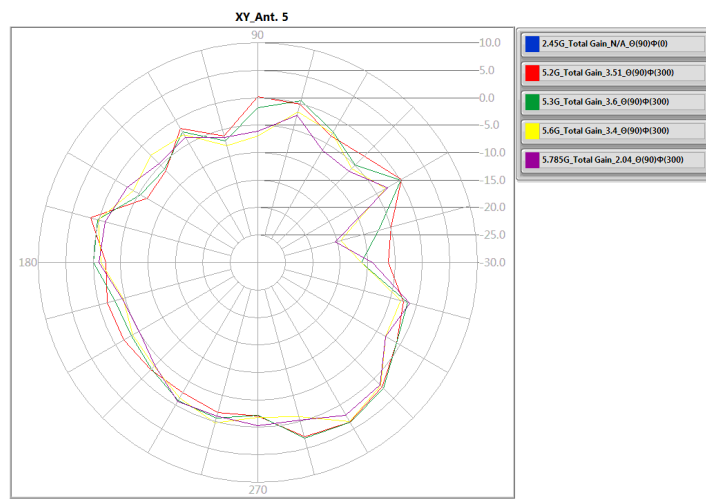
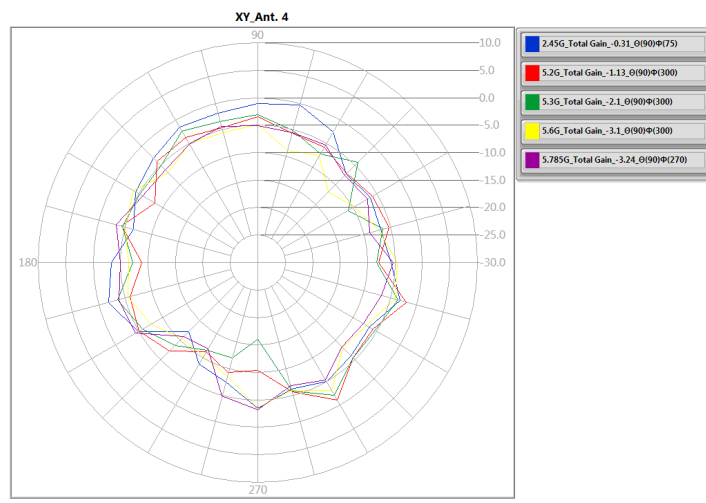
Antenna Pattern_Radio 1 2.4GHz and 5GHz U-NII 1~U-NII 3

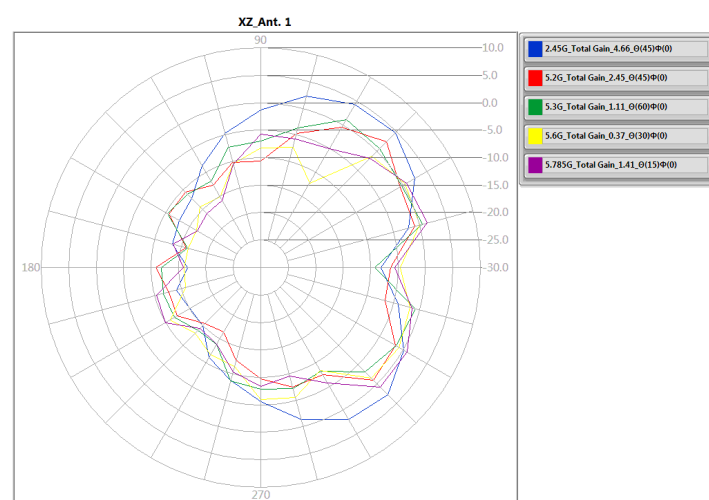
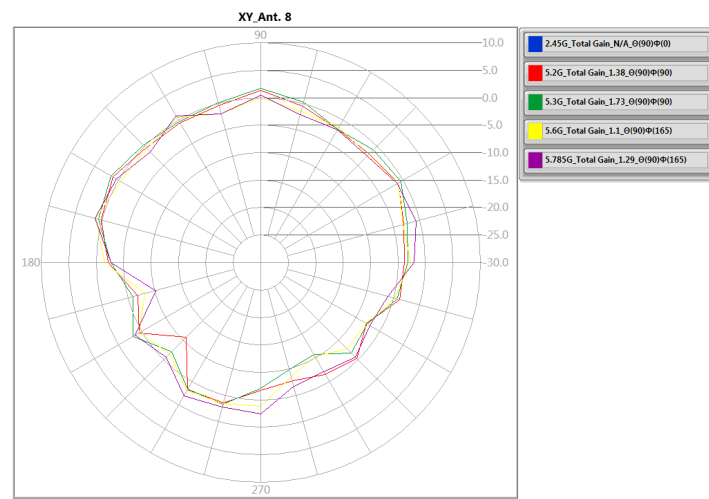
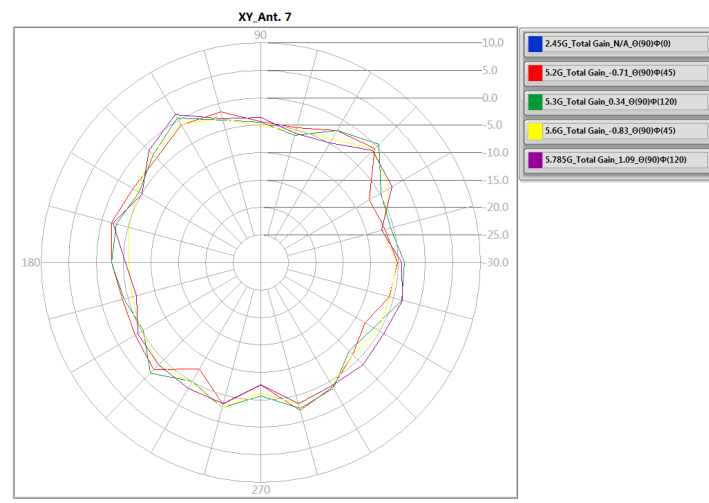
Appendix F

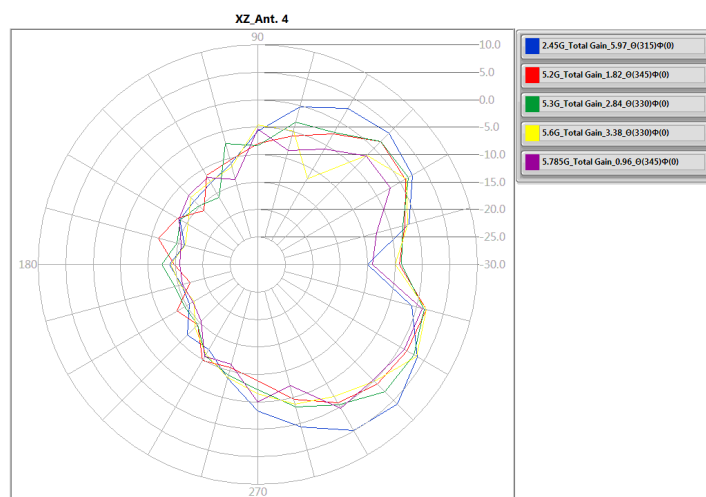
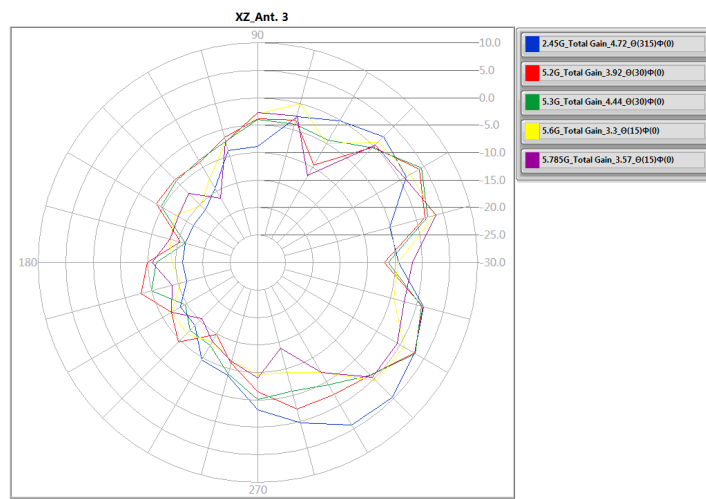
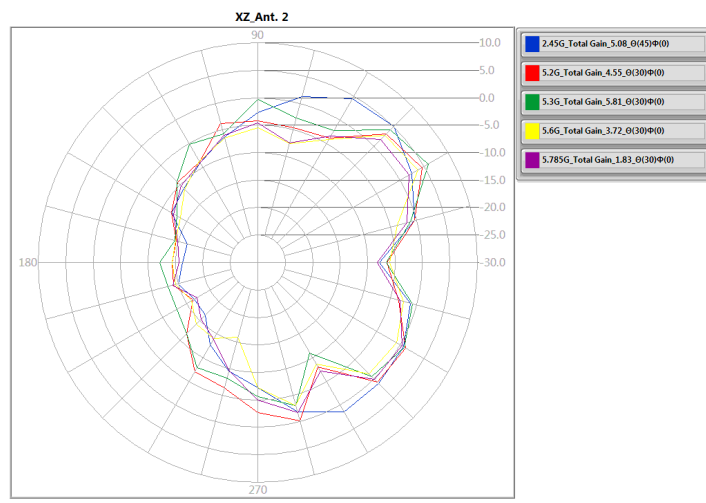
Table with columns for frequency (5.785G, 2.45G, 5.2G, 5.3G, 5.6G, 5.785G), gain, and various azimuth angles (0 to 345 degrees) for antenna patterns.

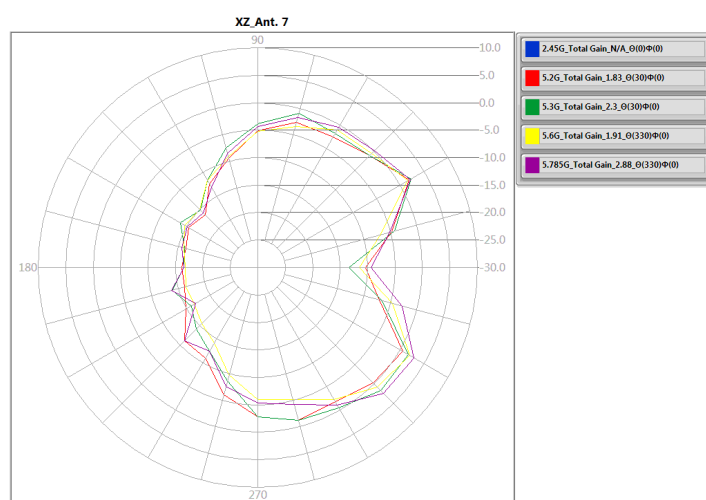
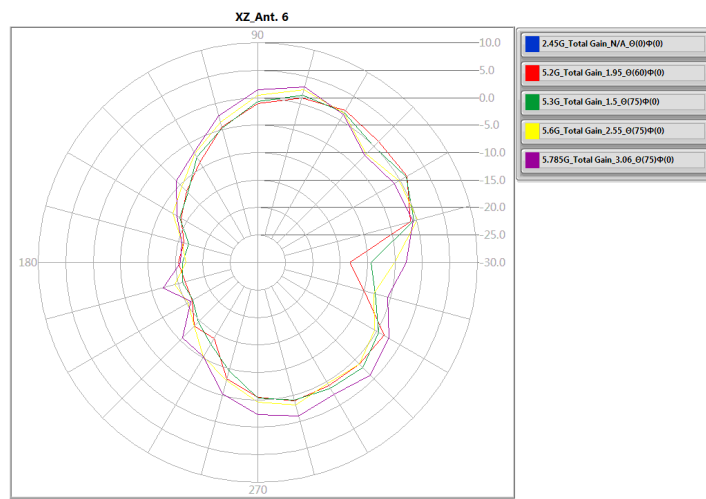
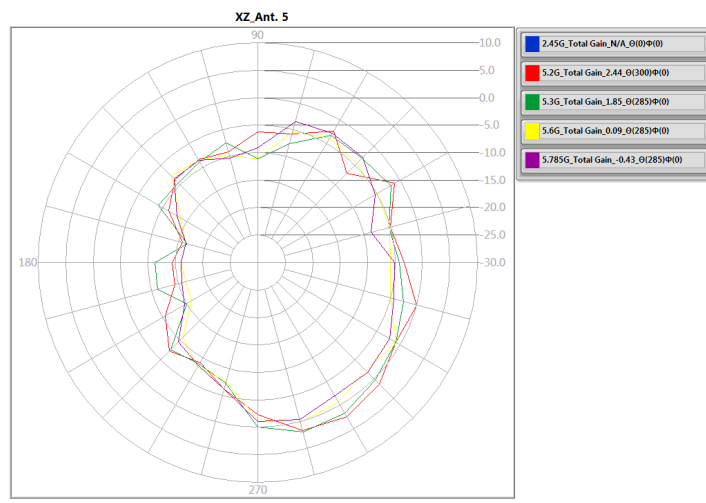
E1(XY plane) – $\Theta(90)\Phi(0-360)$
 E2(XZ plane) – $\Theta(0-180)\Phi(0)$ and $\Theta(0-180)\Phi(180)$
 E3(YZ plane) – $\Theta(0-180)\Phi(90)$ and $\Theta(0-180)\Phi(270)$

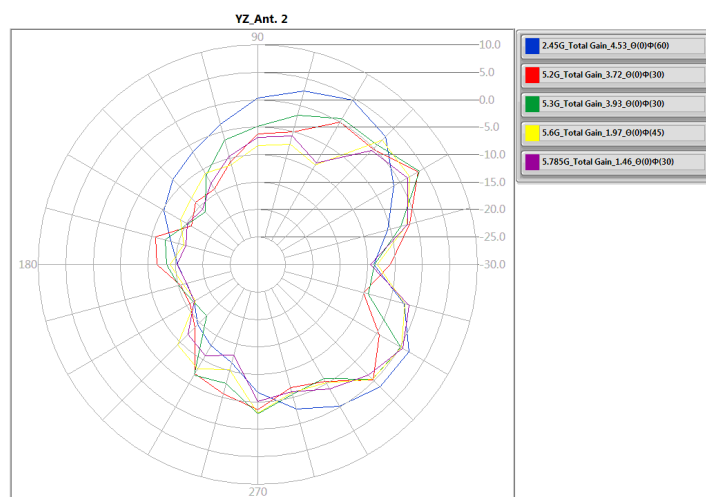
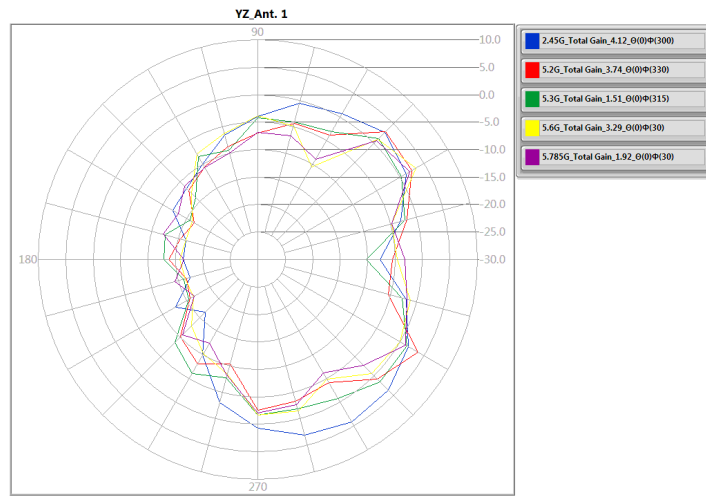
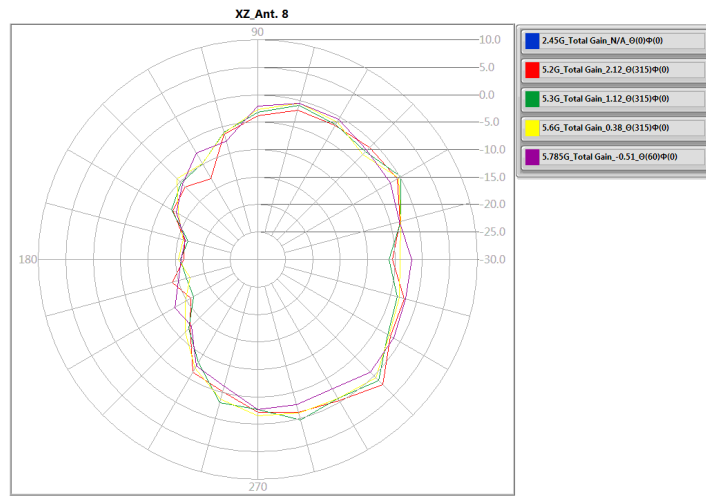


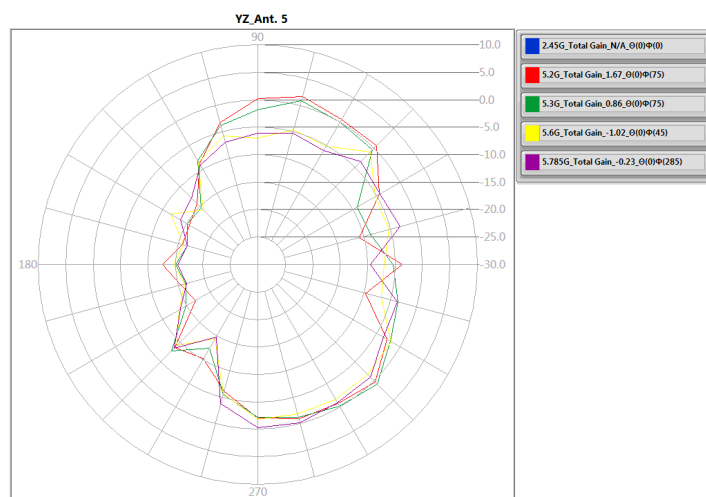
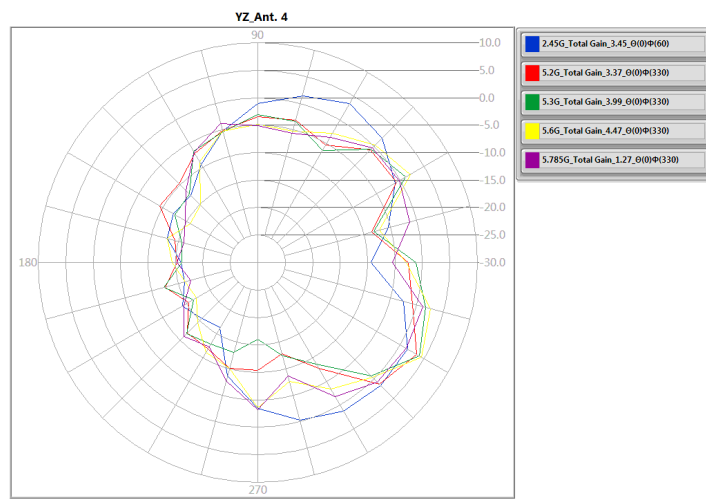
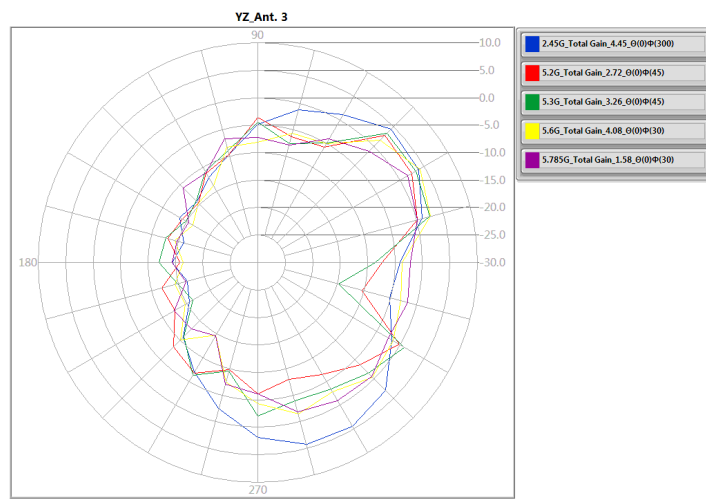


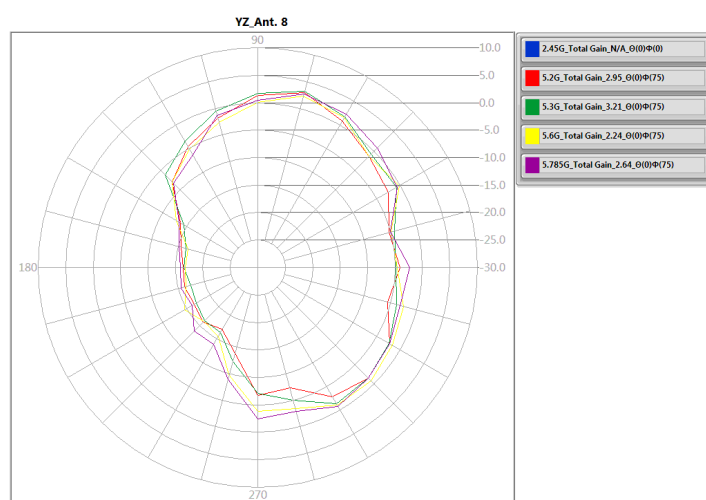
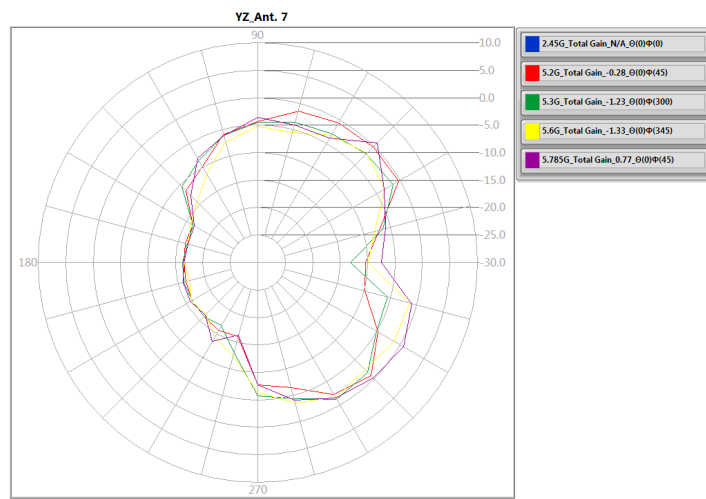
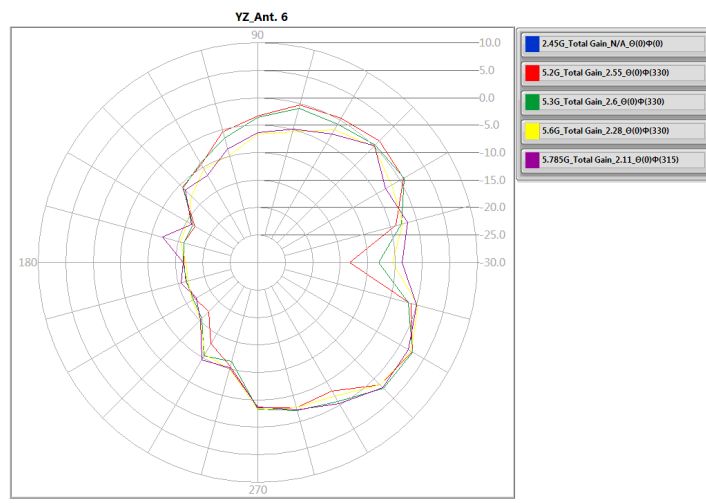














Antenna Pattern_Radio 2 5GHz U-NII1~U-NII 3 and 6GHz U-NII 5~U-NII 8

Appendix G

Total Gain Data

Table with columns for Freq(Hz), Pol., Total, and Ant. 1-20. Rows are grouped by frequency (5.2G, 5.3G, 5.6G, 5.785G, 6.175G, 6.475G, 6.695G) and elevation angle (Theta). Each cell contains a numerical gain value.



Antenna Pattern_Radio 2 5GHz U-NII1~U-NII 3 and 6GHz U-NII 5~U-NII 8

Appendix G

Table with columns for frequency (6.995G, 5.2G, 5.3G, 5.6G, 5.785G, 6.175G, 6.475G), gain, and various azimuth/elevation angles (0 to 180 degrees).



Antenna Pattern_Radio 2 5GHz U-NII1~U-NII 3 and 6GHz U-NII 5~U-NII 8

Appendix G

Table with columns for Azimuth (Theta) and Elevation (Phi) angles, and rows for various frequencies (6.995G, 5.2G, 5.3G, 5.6G, 5.785G, 6.175G) and gain values. Includes sub-headers for Gain, Pol., Total, and Ant. 2/3.



Antenna Pattern_Radio 2 5GHz U-NII1~U-NII 3 and 6GHz U-NII 5~U-NII 8

Appendix G

Table with columns for Azimuth (Theta) and Elevation (Phi) angles, and rows for various frequency bands (6.475G, 6.895G, 6.995G, 5.2G, 5.6G, 5.785G) and antenna configurations (Ant. 3, Ant. 4). Each cell contains a numerical value representing the antenna pattern gain.

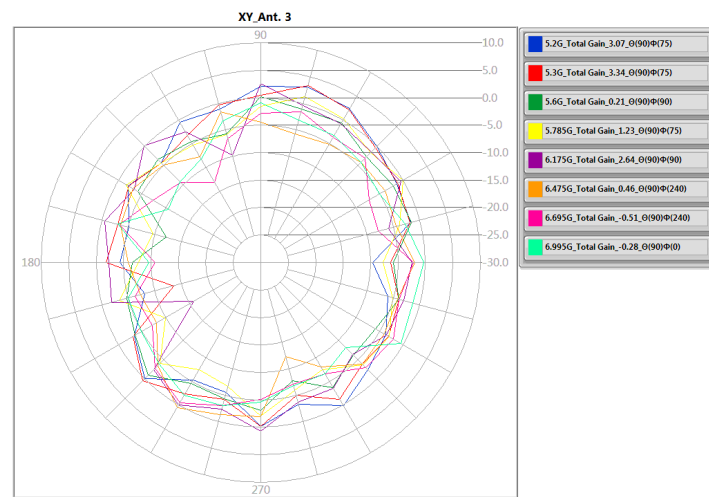
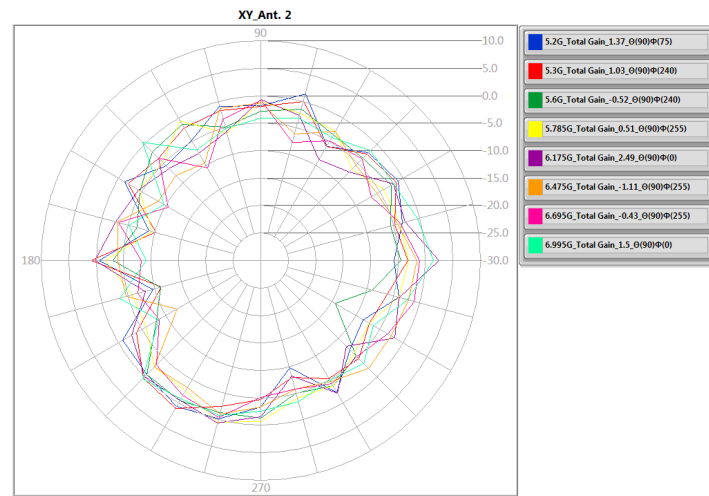
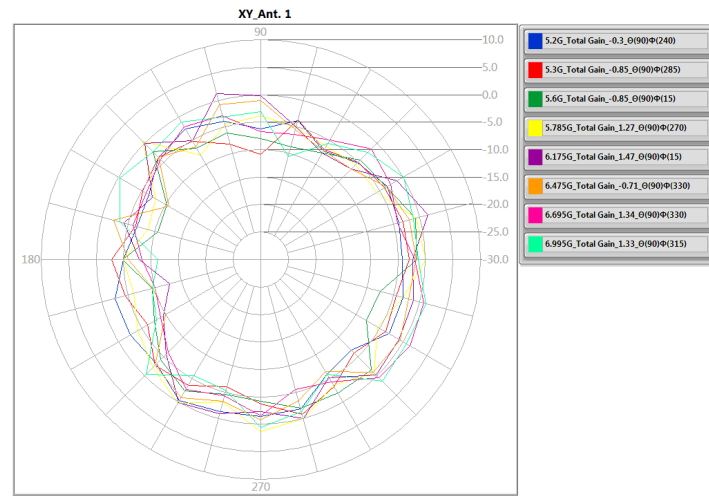


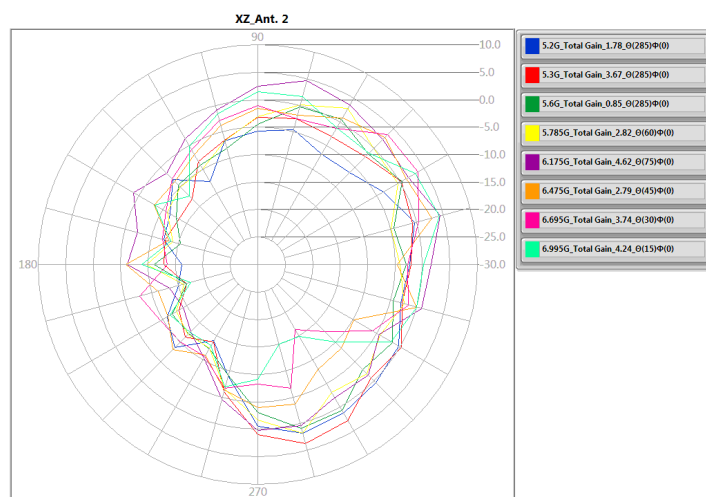
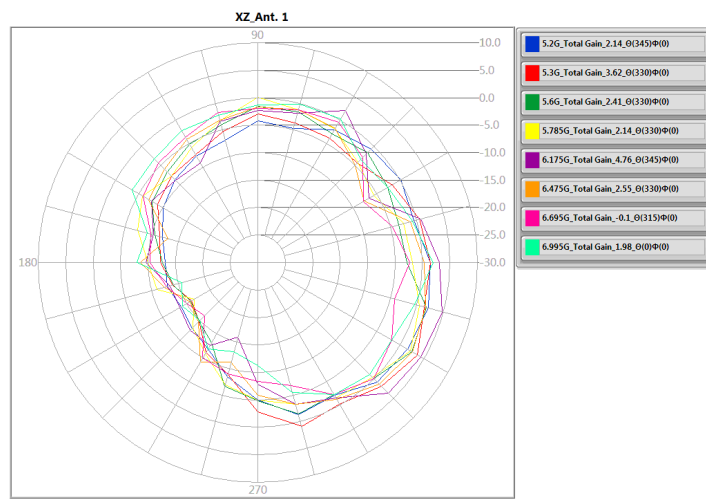
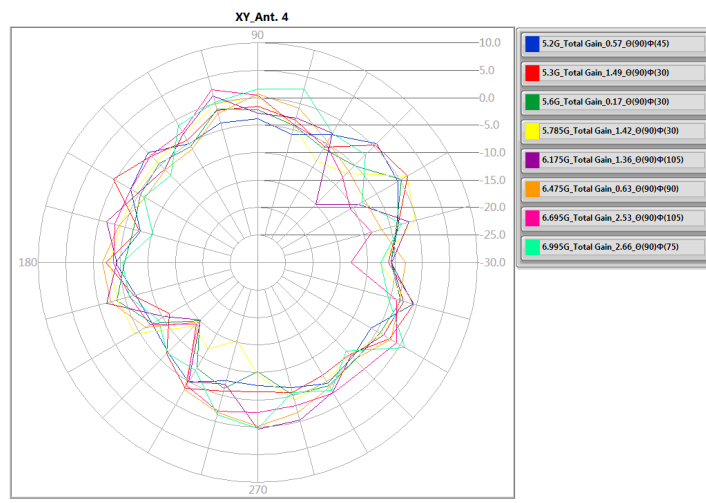
Antenna Pattern_Radio 2 5GHz U-NII1~U-NII 3 and 6GHz U-NII 5~U-NII 8

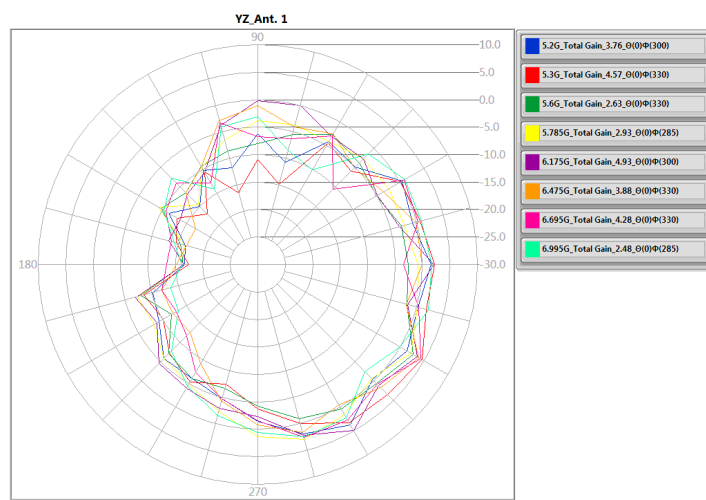
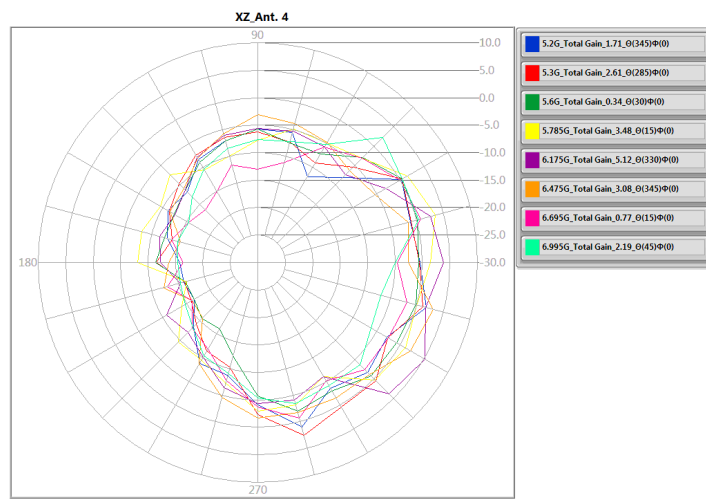
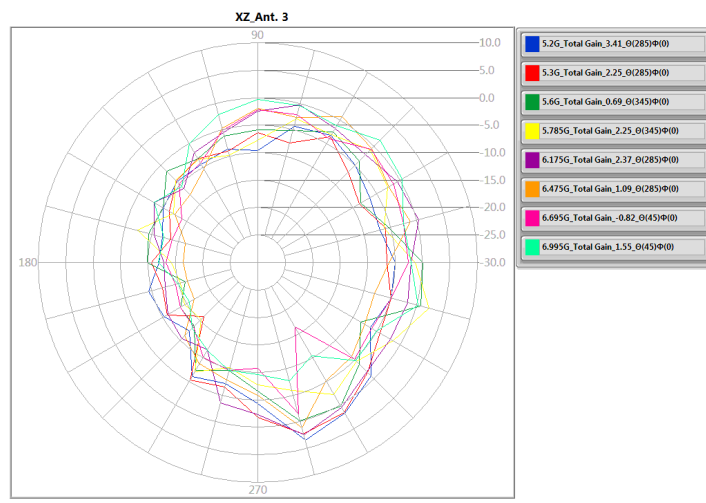
Appendix G

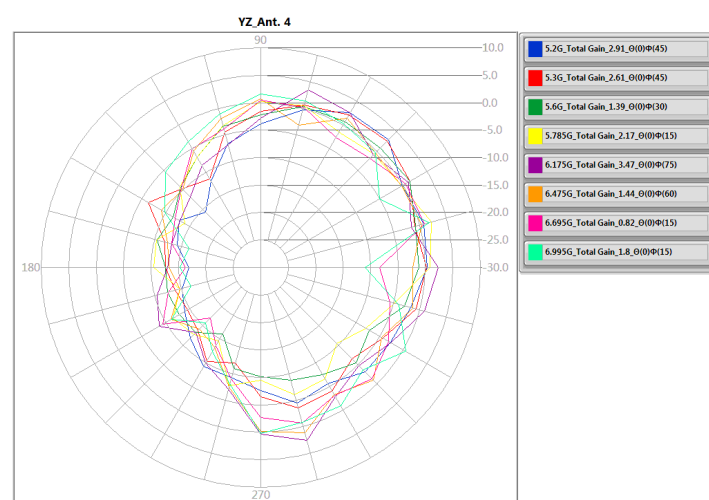
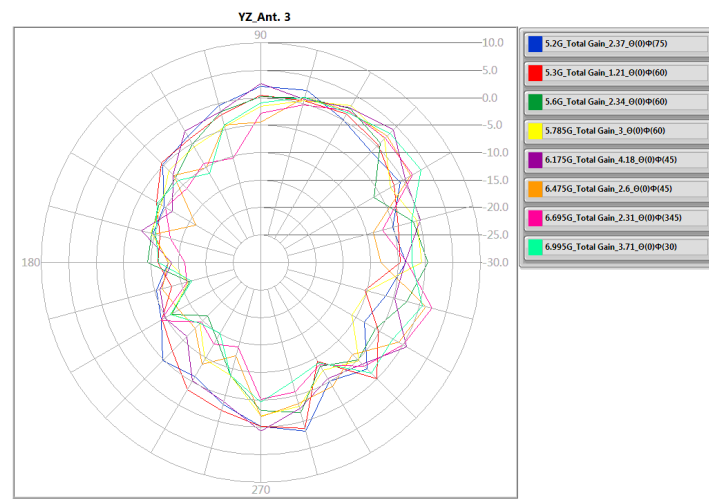
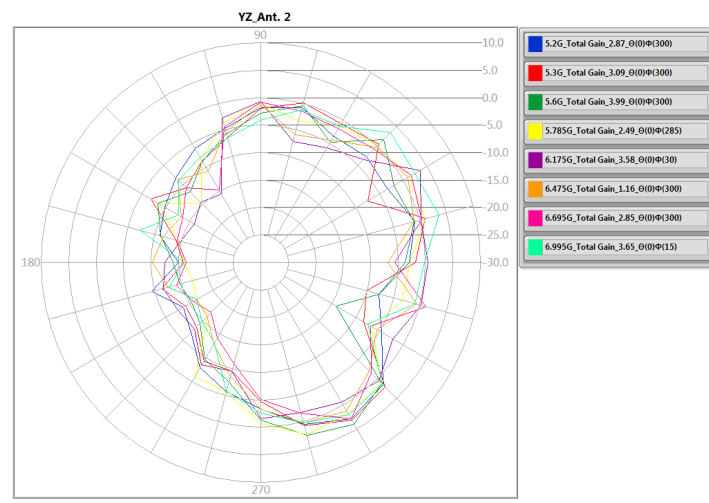
Table with columns for Azimuth (Theta) and Elevation (Phi) angles, and rows for Gain values at various frequencies (6.175G, 6.475G, 6.695G, 6.995G). Includes sub-headers for Pol., Total, and Ant. 4.

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 Data

Table with columns for Freq(Hz), Pol., Total, Ant. 1, and various Phi angles (0 to 345 degrees) for frequencies 5.2G, 5.3G, 5.6G, 5.785G, 6.175G, 6.475G, and 6.695G.



Antenna Pattern_Radio 3 5GHz U-NII1~U-NII 3 and 6GHz U-NII 5~U-NII 8

Appendix H

Table with columns for Frequency (Hz), Gain, and various Azimuth (Phi) angles from 0 to 345 degrees. It contains multiple data blocks for different frequencies (6.995G, 5.2G, 5.3G, 5.6G, 5.785G, 6.175G, 6.475G) and antenna configurations (Ant. 1, Ant. 2).



Antenna Pattern_Radio 3 5GHz U-NII1~U-NII 3 and 6GHz U-NII 5~U-NII 8

Appendix H

Table with columns for Azimuth (Theta), Elevation (Phi), and Gain. It contains multiple sections for different frequencies (6.695G, 6.995G, 5.2G, 5.3G, 5.6G, 5.785G, 6.175G) and antenna configurations (Ant. 2, Ant. 3). Each section lists gain values for various elevation angles (0 to 180 degrees) across different azimuth angles (0 to 345 degrees).



Antenna Pattern_Radio 3 5GHz U-NII1~U-NII 3 and 6GHz U-NII 5~U-NII 8

Appendix H

Table with columns for frequency (6.475G, 6.695G, 6.995G, 5.2G, 5.3G, 5.6G, 5.785G), polarization (Pol.), total gain, and azimuthal angles (0 to 180 degrees) for various elevation angles (0 to 165 degrees).



Antenna Pattern_Radio 3 5GHz U-NII1~U-NII 3 and 6GHz U-NII 5~U-NII 8

Appendix H

Table with columns for Azimuth (Theta) and Elevation (Phi) angles, and rows for Frequency (6.175G, 6.475G, 6.695G, 6.995G) and Gain values. Includes numerical data for various antenna configurations.

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

