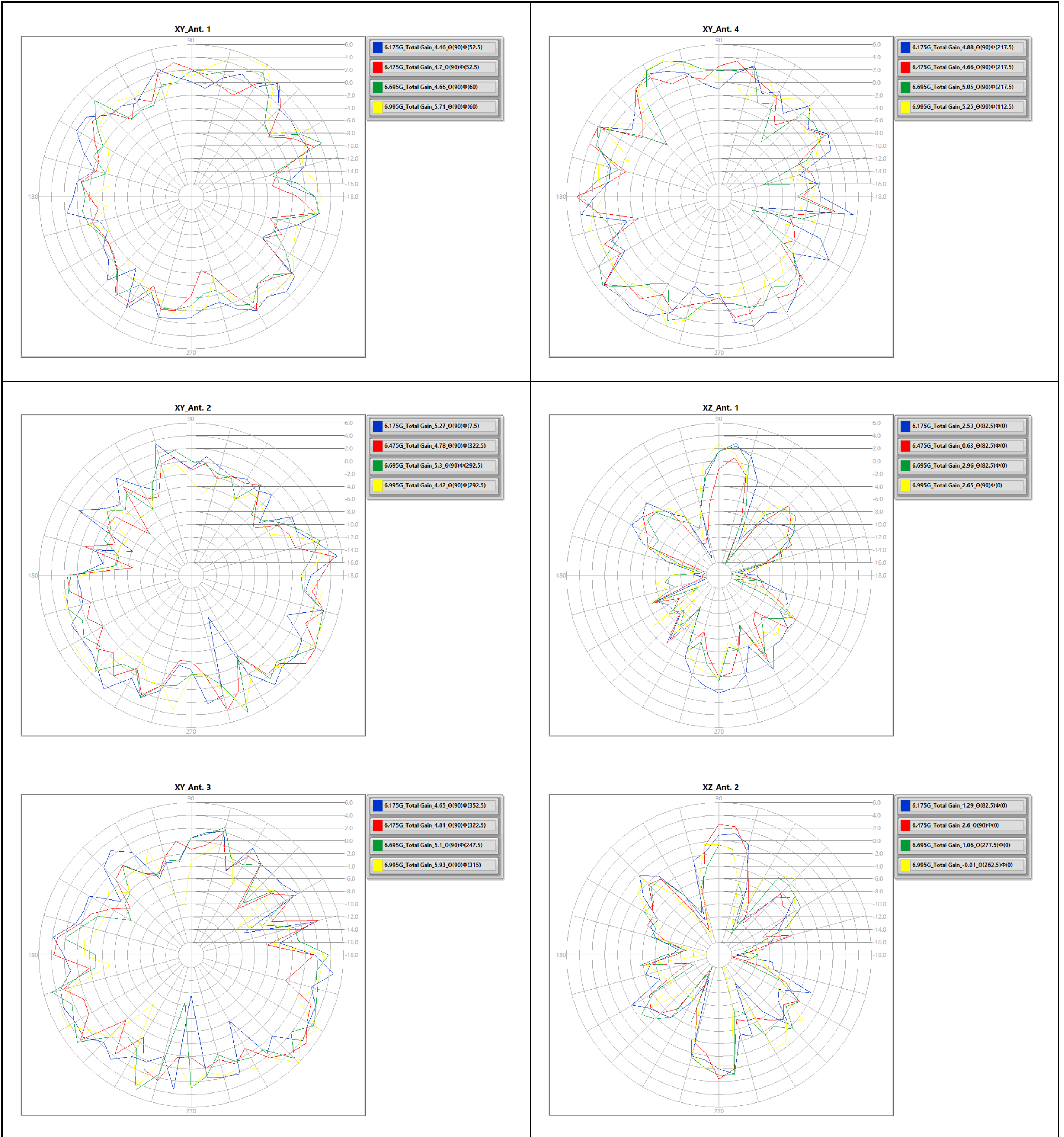
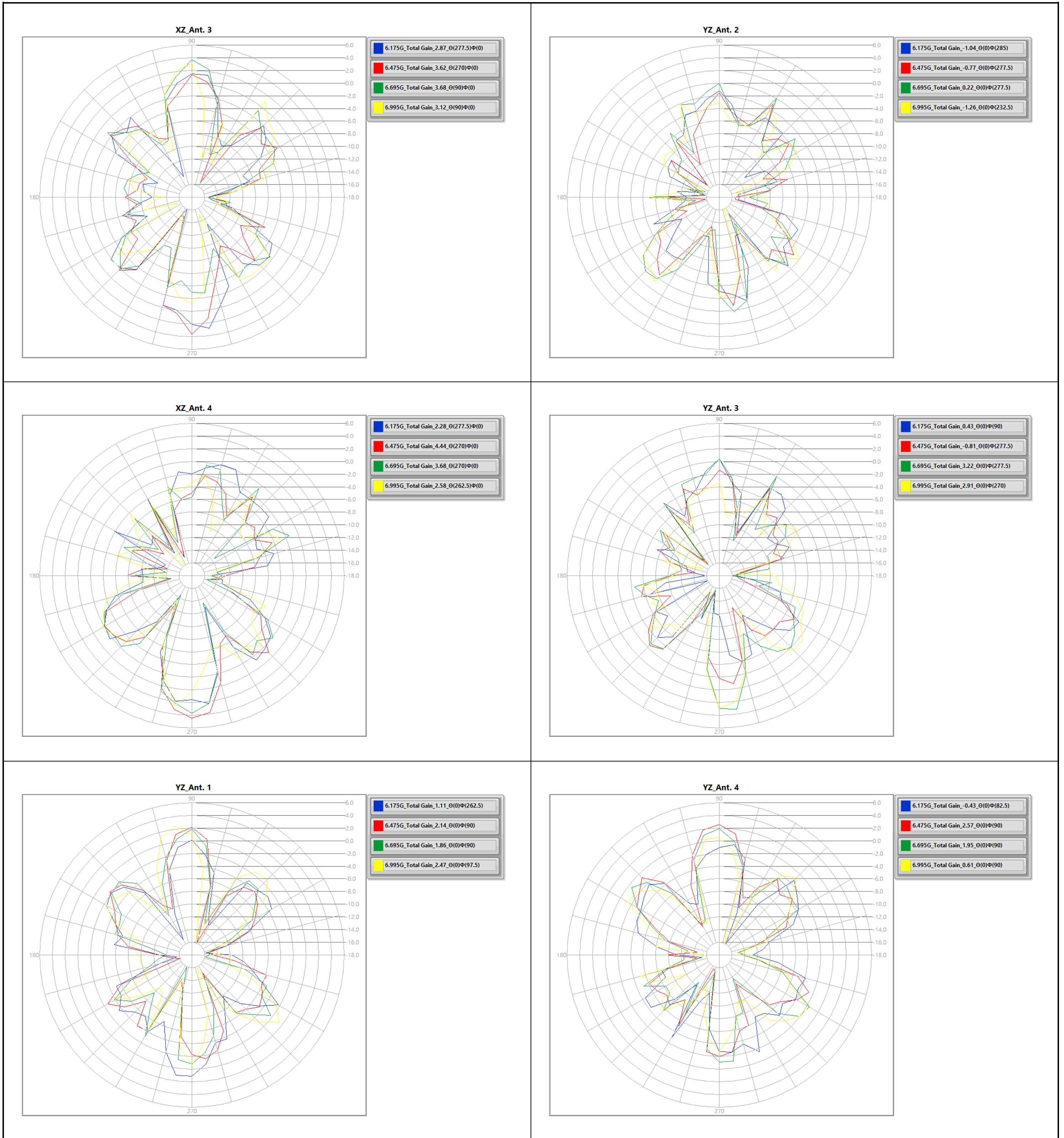


E1 (XY plane) – $\Theta(90)\Phi(0-360)$
 E2 (XZ plane) – $\Theta(0-180)\Phi(0)$ and $\Theta(0-180)\Phi(180)$
 E3 (YZ plane) – $\Theta(0-180)\Phi(90)$ and $\Theta(0-180)\Phi(270)$







Total Gain Data

Table with columns for Freq(Hz), Pol, TotalAnt, and various antenna gain patterns (Theta and Phi) for frequencies from 15.000 to 15.125 GHz. The table contains multiple rows of numerical data representing gain values in different directions.



Antenna Pattern of scan

Appendix F

| θ(75°) | -9.84/-5.55 | -10.82/-4.67 | -9.65/-6.72 | -5.88/-5.74 | -7.10/-9.30 | -8.46/-4.34 | -4.98/-8.08 | -4.67/-3.80 | -5.72/-3.60 | -0.31/-1.30 | -2.20/-5.03 | -2.25/-1.73 | -4.72/-5.81 | -7.15/-4.24 | -1.53/-3.79 | -3.68/-10.49 | -7.05/-8.57 | -7.10/-4.27 | -4.57/-3.04 | -5.52/-1.45 | -1.49/-3.76 | -4.14/-4.75 | -4.95/-1.06 | -3.20/-7.40 |
|-----------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| 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°) | -11.31/-10.67 | -11.68/-10.76 | -11.81/-12.67 | -10.79/-11.45 | -11.75/-11.65 | -11.52/-11.27 | -11.52/-13.22 | -14.57/-15.70 | -14.12/-13.28 | -15.50/-14.88 | -15.78/-15.64 | -15.43/-15.08 | -14.06/-15.08 | -14.07/-14.73 | -14.80/-13.00 | -14.45/-14.30 | -14.25/-12.79 | -11.63/-12.34 | -11.99/-11.91 | -11.53/-11.80 | -11.37/-13.41 | -11.99/-11.74 | -12.44/-11.06 | |
| θ(7.5°) | -13.14/-13.67 | -14.33/-15.12 | -13.42/-14.25 | -15.14/-15.05 | -15.51/-14.45 | -14.93/-13.67 | -13.02/-11.71 | -11.97/-11.63 | -12.41/-12.30 | -11.85/-11.90 | -12.28/-12.91 | -13.03/-12.04 | -11.60/-11.25 | -11.51/-11.79 | -10.45/-11.42 | -11.02/-11.02 | -12.31/-11.16 | -11.61/-12.63 | -13.50/-14.58 | -13.97/-15.01 | -15.83/-15.92 | -14.97/-15.23 | -14.32/-14.69 | -14.87/-14.54 |
| θ(15°) | -14.22/-13.17 | -13.50/-12.31 | -11.70/-13.12 | -14.05/-14.85 | -15.27/-15.21 | -15.20/-15.28 | -14.70/-11.24 | -9.70/-9.58 | -11.53/-12.99 | -14.27/-12.00 | -8.86/-8.16 | -7.82/-7.89 | -9.53/-9.63 | -10.29/-9.46 | -8.92/-7.57 | -7.13/-7.70 | -8.99/-9.47 | -9.60/-8.20 | -8.32/-10.06 | -13.52/-15.46 | -13.57/-12.67 | -11.71/-13.51 | -12.79/-11.81 | -10.37/-10.20 |
| θ(22.5°) | -14.31/-15.46 | -13.25/-14.84 | -12.60/-15.67 | -14.42/-15.66 | -15.31/-15.47 | -14.85/-14.76 | -11.91/-10.10 | -12.28/-11.50 | -11.06/-9.55 | -7.54/-5.00 | -6.69/-6.30 | -5.05/-5.85 | -5.15/-5.06 | -6.22/-7.82 | -9.82/-9.31 | -7.22/-8.82 | -9.82/-9.31 | -7.88/-6.66 | -8.13/-10.53 | -11.86/-11.21 | -11.57/-11.53 | -9.98/-9.51 | -9.32/-9.10 | |
| θ(30°) | -10.23/-12.10 | -12.61/-15.23 | -10.86/-10.28 | -12.54/-9.44 | -9.88/-12.20 | -13.51/-9.54 | -11.44/-13.31 | -8.04/-10.69 | -11.64/-9.33 | -5.71/-4.96 | -5.52/-6.51 | -7.70/-6.75 | -6.11/-6.26 | -6.66/-6.65 | -6.55/-6.40 | -5.28/-5.70 | -9.68/-5.05 | -6.14/-7.87 | -8.09/-8.73 | -7.62/-7.57 | -5.58/-7.15 | -11.96/-13.15 | -6.11/-7.76 | -9.91/-12.84 |
| θ(37.5°) | -13.89/-12.39 | -11.43/-7.59 | -8.14/-7.97 | -11.52/-9.36 | -9.24/-12.74 | -11.56/-11.10 | -8.60/-10.03 | -9.82/-7.11 | -6.95/-7.52 | -4.77/-3.50 | -3.02/-4.36 | -7.66/-6.23 | -14.55/-11.11 | -5.64/-6.12 | -6.80/-4.27 | -5.30/-8.30 | -7.94/-5.44 | -4.58/-5.85 | -4.73/-6.95 | -5.54/-5.76 | -7.42/-6.85 | -6.34/-6.46 | -6.38/-10.14 | -10.19/-11.31 |
| θ(45°) | -4.88/-4.72 | -7.29/-6.15 | -3.27/-6.44 | -8.85/-9.73 | -9.23/-6.89 | -9.74/-7.56 | -5.24/-8.38 | -6.17/-5.19 | -5.02/-6.06 | -10.28/-7.52 | -5.47/-3.35 | -5.79/-7.84 | -13.59/-9.43 | -9.14/-6.89 | -6.48/-4.57 | -7.29/-6.57 | -6.06/-5.75 | -7.14/-4.39 | -4.31/-2.49 | -5.04/-7.71 | -4.35/-2.55 | -4.34/-6.17 | -2.91/-3.61 | -5.11/-5.69 |
| θ(52.5°) | -5.74/-3.26 | -1.37/-1.59 | -5.41/-4.75 | -6.28/-5.38 | -7.55/-3.20 | -4.50/-3.95 | -4.64/-5.76 | -6.74/-8.47 | -8.37/-8.36 | -6.04/-5.35 | -5.00/-3.81 | -3.00/-3.89 | -4.88/-3.68 | -5.67/-2.30 | -0.86/-4.57 | -3.94/-4.32 | -3.82/-3.46 | -6.47/-9.01 | -4.78/-2.79 | -2.09/-3.77 | -5.08/-2.70 | -4.43/-6.55 | -2.02/-4.24 | -1.79/-2.24 |
| θ(60°) | -6.68/-8.81 | -3.60/-3.19 | -9.86/-3.71 | -6.25/-6.00 | -5.62/-3.59 | -4.73/-6.26 | -4.17/-7.10 | -1.99/-1.14 | -4.44/-1.89 | -5.91/-7.90 | -7.77/-3.68 | -8.79/-7.48 | -5.26/-7.09 | -4.23/-3.64 | -6.98/-5.80 | -13.58/-14.67 | -9.73/-10.07 | -8.20/-5.34 | -12.34/-9.01 | -8.47/-7.36 | -9.84/-7.59 | -8.72/-11.75 | -5.09/-11.57 | -5.64/-5.75 |
| θ(67.5°) | -13.73/-8.65 | -13.92/-10.08 | -12.12/-13.77 | -15.30/-8.79 | -11.54/-9.45 | -15.44/-7.21 | -7.03/-15.74 | -10.44/-8.40 | -8.89/-8.04 | -6.41/-7.37 | -6.75/-9.44 | -12.12/-5.64 | -7.64/-8.85 | -14.61/-14.09 | -11.44/-5.99 | -16.02/-13.33 | -12.55/-11.98 | -10.97/-12.76 | -6.18/-7.15 | -9.54/-8.31 | -11.72/-13.69 | -11.45/-6.86 | -15.73/-10.48 | |
| θ(75°) | -3.16/-2.96 | -2.78/-8.51 | -3.40/-10.66 | -4.36/-12.19 | -7.24/-11.82 | -12.93/-13.48 | -5.10/-2.34 | -4.65/-4.99 | -1.27/-2.14 | -4.54/-2.19 | -3.16/-3.02 | -5.09/-6.32 | -4.52/-4.39 | -4.15/-6.61 | -4.81/-6.89 | -8.48/-15.02 | -8.80/-12.02 | -13.26/-6.07 | -7.03/-2.75 | -2.37/-2.19 | 0.95/-2.52 | -2.37/-6.33 | -3.05/-0.53 | -3.34/-7.33 |
| θ(82.5°) | 0.67/-1.56 | 0.87/-1.85 | -0.12/-1.23 | 0.53/-2.71 | -1.01/-3.22 | -0.65/-6.57 | -3.69/-6.50 | -6.19/-3.75 | -2.60/-7.65 | -8.05/-10.54 | -9.16/-11.21 | -9.34/-6.97 | -5.24/-2.11 | -5.64/-3.37 | -6.37/-3.92 | -4.19/-1.85 | -1.57/-5.01 | -1.54/-0.05 | 0.83/-1.12 | -0.58/-2.68 | 3.63/-2.23 | -0.42/-5.76 | 2.01/-0.11 | 1.21/-3.68 |
| θ(90°) | 2.46/-2.02 | 0.56/-1.00 | 1.16/-1.58 | 2.43/-0.55 | 0.74/-2.11 | 0.61/-3.29 | -3.89/-4.86 | -3.12/-5.19 | -0.57/-1.88 | -5.30/-0.76 | -3.22/-1.93 | -0.78/-2.75 | -5.64/-3.00 | -2.14/-2.22 | -7.71/-1.31 | 0.06/-1.16 | 1.60/-1.76 | 0.13/-2.26 | 4.17/-2.58 | 0.19/-2.27 | 1.49/-2.08 | -2.69/-7.77 | 1.24/-0.66 | 1.32/-1.13 |
| θ(97.5°) | 1.68/-2.00 | -1.43/-3.43 | 2.64/-0.40 | 2.83/-0.15 | 0.70/-2.33 | 1.41/-1.15 | -2.70/-1.67 | -1.95/-1.31 | 1.42/-0.17 | -2.19/-2.08 | -3.62/-1.77 | -1.23/-2.62 | -4.47/-7.46 | -6.74/-1.56 | -5.74/-2.50 | 0.95/-1.75 | 0.62/-3.49 | -3.81/-2.00 | 2.30/-1.05 | -1.74/-2.25 | 2.53/-1.55 | -11.87/-8.71 | 1.34/-1.78 | -1.05/-2.33 |
| θ(105°) | -0.43/-2.36 | -3.26/-7.42 | 0.24/-0.89 | 0.66/-1.55 | -0.130/0.53 | 0.42/-0.23 | -2.84/-0.52 | -2.96/-1.05 | 0.60/-0.60 | -1.14/-2.00 | -3.06/-1.34 | -2.41/-2.14 | -3.55/-2.37 | -3.25/-1.57 | -10.42/-3.76 | -4.63/-7.64 | -8.65/-4.19 | -6.89/-4.79 | -1.59/-2.72 | -3.53/-0.77 | -2.34/-2.48 | -7.12/-5.99 | -1.74/-3.45 | -3.20/-5.04 |
| θ(112.5°) | -3.46/-10.19 | -8.34/-7.47 | -3.04/-0.40 | -2.67/-2.86 | -2.67/-2.87 | -1.71/-2.69 | -5.60/-3.68 | -2.44/-1.46 | -1.32/-0.14 | -2.00/-1.98 | -3.67/-2.16 | -2.90/-6.59 | -7.05/-3.76 | -3.76/-0.88 | -14.10/-0.56 | -7.83/-4.00 | -11.67/-4.53 | -15.26/-6.69 | -10.33/-10.77 | -13.38/-10.87 | -12.06/-12.86 | -9.92/-9.11 | -7.84/-11.63 | -9.98/-6.38 |
| θ(120°) | -8.24/-11.82 | -9.73/-9.91 | -5.59/-5.56 | -6.28/-6.27 | -7.21/-5.98 | -5.44/-5.57 | -12.57/-13.33 | -10.13/-7.35 | -4.59/-4.87 | -13.01/-9.24 | -12.77/-16.05 | -12.27/-10.77 | -9.32/-14.27 | -12.90/-12.74 | -9.39/-8.51 | -11.51/-12.17 | -10.48/-14.25 | -15.29/-12.02 | -9.56/-10.66 | -6.83/-7.85 | -6.77/-15.82 | -9.81/-8.48 | -15.10/-9.57 | -12.45/-9.89 |
| θ(127.5°) | -9.03/-7.55 | -8.57/-10.79 | -8.26/-5.65 | -5.52/-4.92 | -6.37/-7.14 | -5.72/-5.93 | -5.02/-7.30 | -5.49/-8.22 | -7.37/-11.95 | -5.15/-3.10 | -3.15/-2.56 | -6.13/-4.93 | -5.54/-5.36 | -6.37/-7.75 | -10.07/-8.27 | -6.73/-7.36 | -6.24/-13.62 | -12.18/-13.49 | -12.07/-14.13 | -8.05/-6.16 | -3.68/-6.54 | -9.21/-8.52 | -1.77/-6.84 | -8.93/-10.81 |
| θ(135°) | -10.54/-7.94 | -5.68/-5.69 | -6.60/-4.66 | -5.11/-4.13 | -3.31/-1.98 | -4.95/-6.40 | -4.05/-5.05 | -3.74/-3.81 | -3.65/-3.96 | -3.61/-7.82 | -10.20/-7.41 | -6.78/-12.84 | -10.66/-11.32 | -8.57/-9.86 | -13.48/-7.55 | -5.77/-9.36 | -7.38/-14.32 | -11.52/-9.09 | -11.47/-11.11 | -15.03/-5.11 | -2.25/-5.34 | -5.19/-6.79 | -8.42/-6.49 | -8.30/-9.87 |
| θ(142.5°) | -7.70/-8.77 | -6.58/-6.07 | -3.54/-4.14 | -4.77/-6.32 | -4.71/-5.47 | -4.71/-5.82 | -8.05/-6.67 | -3.35/-8.57 | -4.77/-3.60 | -2.43/-3.82 | -6.51/-10.69 | -3.91/-3.92 | -3.64/-9.99 | -3.95/-7.72 | -5.12/-9.74 | -7.94/-5.54 | -4.88/-8.74 | -7.44/-7.81 | -9.33/-11.71 | -8.70/-9.19 | -5.19/-6.14 | -6.75/-5.17 | -2.54/-3.50 | -5.35/-6.28 |
| θ(150°) | -5.60/-5.03 | -4.33/-4.54 | -3.32/-1.80 | -4.00/-4.98 | -5.92/-7.74 | -3.94/-1.74 | -5.40/-4.49 | -5.25/-2.86 | -5.26/-7.39 | -4.25/-5.04 | -8.72/-14.88 | -8.40/-7.15 | -8.91/-11.33 | -15.41/-11.20 | -9.47/-3.33 | -9.21/-10.80 | -8.41/-7.81 | -6.50/-8.65 | -13.10/-12.70 | -10.92/-9.79 | -9.62/-7.65 | -4.34/-3.44 | -3.74/-6.39 | -7.07/-7.67 |
| θ(157.5°) | -9.64/-7.84 | -6.04/-4.64 | -3.61/-4.87 | -4.34/-3.91 | -6.08/-5.51 | -3.79/-5.49 | -9.46/-6.86 | -7.84/-8.88 | -6.30/-10.30 | -15.70/-14.66 | -11.70/-12.68 | -12.93/-9.30 | -9.77/-8.21 | -12.46/-11.41 | -12.34/-15.72 | -10.03/-10.59 | -9.93/-9.75 | -8.95/-6.80 | -8.05/-12.75 | -12.33/-9.81 | -5.43/-4.62 | -4.15/-5.95 | -9.24/-12.07 | |
| θ(165°) | -11.25/-12.09 | -11.20/-9.52 | -8.60/-6.60 | -5.94/-5.33 | -6.85/-7.03 | -5.71/-4.81 | -6.28/-6.80 | -5.89/-5.47 | -6.78/-10.35 | -14.96/-9.58 | -6.74/-5.25 | -6.39/-10.52 | -11.60/-11.49 | -10.60/-10.80 | -9.59/-11.93 | -11.61/-11.07 | -9.33/-10.72 | -12.21/-10.94 | -11.54/-12.96 | -14.47/-12.06 | -9.59/-8.07 | -8.01/-9.00 | -11.22/-10.43 | -9.90/-8.14 |
| θ(172.5°) | -11.06/-12.60 | -13.15/-12.86 | -12.02/-11.70 | -10.87/-9.38 | -7.63/-8.80 | -10.21/-9.33 | -9.75/-12.45 | -12.47/-8.08 | -6.26/-7.51 | -6.33/-7.92 | -12.59/-11.88 | -13.21/-11.68 | -10.14/-10.06 | -9.21/-8.50 | -11.42/-10.93 | -14.35/-14.37 | -14.50/-15.31 | -14.98/-14.41 | -13.81/-15.65 | -14.91/-13.36 | -14.41/-13.69 | -12.02/-11.49 | -12.46/-10.41 | -10.44/-10.43 |
| θ(180°) | -10.64/-10.64 | -9.17/-9.64 | -8.60/-9.30 | -8.85/-9.51 | -10.75/-10.84 | -10.25/-9.49 | -9.42/-8.98 | -9.69/-8.68 | -9.73/-12.09 | -13.01/-10.49 | -7.84/-7.16 | -8.84/-11.16 | -10.88/-10.44 | -7.98/-9.76 | -9.44/-8.77 | -10.39/-9.38 | -9.87/-11.10 | -10.59/-9.39 | -8.90/-9.13 | -9.15/-9.78 | -8.85/-8.34 | -9.03/-9.10 | -9.23/-10.50 | -10.28/-10.83 |
| 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°) | -9.37/-9.28 | -10.12/-9.33 | -11.02/-10.41 | -10.00/-9.77 | -9.67/-9.84 | -9.94/-9.74 | -9.75/-10.04 | -10.00/-9.88 | -10.20/-10.65 | -10.03/-9.44 | -9.53/-10.16 | -10.68/-10.68 | -9.64/-8.60 | -8.43/-9.43 | -10.93/-10.82 | -9.56/-8.65 | -8.17/-7.98 | -8.04/-8.29 | -8.45/-8.50 | -8.36/-8.21 | -8.30/-8.72 | -9.05/-9.33 | -9.78/-10.52 | -10.90/-10.12 |
| θ(7.5°) | -9.00/-8.85 | -9.07/-9.21 | -9.01/-9.79 | -8.90/-9.84 | -8.85/-8.77 | -8.71/-8.56 | -8.61/-8.84 | -8.91/-9.05 | -9.69/-10.61 | -10.67/-10.53 | -10.74/-11.04 | -11.31/-11.01 | -10.70/-10.87 | -10.33/-11.12 | -12.04/-12.15 | -11.60/-11.43 | -9.89/-9.48 | -9.43/-9.27 | -8.89/-8.48 | -8.40/-8.75 | -9.20/-9.39 | -9.44/-9.58 | -9.69/-9.84 | |
| θ(15°) | -11.10/-10.12 | -9.85/-9.88 | -9.88/-9.78 | -9.71/-9.66 | -9.42/-9.05 | -8.87/-8.83 | -8.59/-8.61 | -8.87/-9.36 | -10.42/-11.74 | -12.50/-13.58 | -15.56/-15.14 | -15.33/-15.47 | -14.80/-14.74 | -14.86/-13.47 | -12.43/-10.55 | -9.86/-9.98 | -9.98/-9.80 | -9.88/-10.23 | -10.24/-9.83 | -9.41/-9.03 | -8.82/-8.95 | -9.28/-9.54 | -10.02/-10.71 | -11.52/-11.42 |
| θ(22.5°) | -12.44/-10.63 | -10.28/-10.57 | -10.73/-10.48 | -10.30/-10.16 | -9.99/-9.53 | -9.36/-9.42 | -9.16/-8.69 | -8.45/-8.80 | -8.99/-11.10 | -12.95/-15.63 | -15.77/-13.73 | -12.75/-12.07 | -10.62/-9.64 | -9.03/-9.19 | -8.69/-7.55 | -7.11/-7.32 | -7.62/-8.24 | -9.30/-10.42 | -10.64/-10.51 | -10.52/-10.61 | -10.77/-11.30 | -12.56/-14.46 | -15.96/-15.78 | -15.53/-14.85 |
| θ(30°) | -4.41/-3.66 | -3.34/-3.48 | -6.84/-8.89 | -5.45/-6.06 | -6.41/-6.46 | -6.88/-6.91 | -6.29/-6.58 | -5.66/-6.88 | -8.18/-10.14 | -9.90/-6.66 | -5.60/-6.52 | -7.16/-6.85 | -6.06/-6.49 | -8.01/-8.71 | -8.07/-7.20 | - | | | | | | | | |



Antenna Pattern of scan

Appendix F

| θ (127.5°) | -9.30/-8.58 | -8.49/-2.48 | -7.95/-5.32 | -4.43/-7.13 | -8.17/-8.73 | -12.48/-12.95 | -9.21/-10.36 | -8.86/-8.19 | -6.51/-4.77 | -4.07/-5.23 | -10.57/-9.24 | -11.43/-7.22 | -9.04/-4.73 | -8.16/-8.21 | -7.08/-10.21 | -6.74/-3.58 | -13.41/-7.94 | -5.47/-14.86 | -9.24/-9.53 | -9.77/-14.17 | -11.47/-13.55 | -11.11/-6.79 | -7.75/-9.83 | -6.94/-5.40 | |
|------------|---------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|---------------|
| 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°) | -11.79/-11.27 | -11.29/-11.05 | -11.23/-11.17 | -12.03/-12.82 | -13.56/-14.42 | -13.45/-12.99 | -14.01/-13.45 | -13.18/-13.31 | -13.64/-13.43 | -13.77/-15.60 | -13.76/-15.83 | -14.91/-14.47 | -15.22/-14.75 | -13.79/-14.26 | -12.71/-13.99 | -14.61/-12.36 | -12.62/-12.33 | -11.18/-9.93 | -10.53/-11.50 | -13.12/-13.32 | -9.89/-12.79 | -13.86/-14.06 | -12.71/-11.08 | -11.13/-10.91 | |
| θ(7.5°) | -11.85/-11.32 | -12.27/-11.17 | -12.33/-15.42 | -13.68/-12.07 | -13.69/-13.95 | -15.00/-12.94 | -14.20/-10.66 | -10.48/-9.43 | -12.38/-12.53 | -10.93/-9.43 | -11.56/-13.71 | -12.62/-13.44 | -13.87/-12.56 | -11.46/-13.11 | -11.80/-11.47 | -12.62/-13.33 | -13.94/-12.73 | -13.89/-14.35 | -15.17/-14.84 | -14.66/-12.32 | -15.43/-14.62 | -12.04/-13.75 | -11.44/-12.74 | - | |
| θ(15°) | -7.27/-6.37 | -7.75/-6.75 | -5.49/-5.90 | -6.53/-6.79 | -9.16/-10.97 | -13.09/-10.51 | -9.97/-9.73 | -10.99/-12.13 | -10.87/-11.87 | -14.45/-12.79 | -12.68/-14.65 | -13.47/-12.74 | -14.54/-13.22 | -13.13/-11.89 | -12.65/-15.01 | -14.64/-14.91 | -13.02/-13.23 | -14.24/-14.94 | -15.48/-14.86 | -14.19/-13.20 | -12.19/-9.29 | -8.85/-10.54 | -8.70/-8.91 | -8.17/-7.47 | |
| θ(22.5°) | -3.76/-2.91 | -3.06/-5.43 | -8.90/-10.82 | -8.14/-5.50 | -5.41/-5.90 | -8.07/-10.48 | -10.70/-11.20 | -12.79/-13.70 | -12.99/-10.93 | -10.89/-12.15 | -14.53/-15.18 | -15.13/-13.25 | -11.35/-15.75 | -14.37/-15.10 | -14.49/-15.82 | -12.41/-12.84 | -11.96/-10.74 | -10.41/-13.03 | -13.30/-11.14 | -10.91/-13.27 | -15.02/-11.14 | -9.83/-9.19 | -7.03/-5.70 | -5.84/-4.58 | |
| θ(30°) | -6.65/-7.09 | -9.28/-8.41 | -5.65/-7.59 | -5.68/-4.94 | -7.48/-7.42 | -6.20/-5.95 | -7.75/-8.47 | -3.77/-8.63 | -8.23/-9.47 | -9.02/-8.05 | -11.71/-11.35 | -11.23/-11.26 | -9.07/-13.09 | -12.34/-15.88 | -10.44/-15.28 | -9.76/-9.14 | -11.67/-12.60 | -9.55/-8.53 | -11.80/-9.68 | -9.51/-10.87 | -6.35/-6.80 | -7.73/-9.58 | -8.73/-8.64 | -8.13/-14.14 | |
| θ(37.5°) | -5.36/-6.18 | -2.58/-2.75 | -3.62/-5.99 | -11.12/-11.43 | -11.27/-7.13 | -7.32/-5.86 | -5.05/-5.78 | -4.63/-5.24 | -6.19/-8.78 | -7.71/-10.03 | -9.32/-8.43 | -8.26/-7.40 | -7.04/-7.59 | -10.10/-10.85 | -9.47/-8.72 | -6.64/-8.63 | -9.77/-7.99 | -8.20/-8.07 | -8.05/-8.21 | -8.67/-6.63 | -6.62/-7.42 | -5.38/-4.96 | -7.46/-7.88 | -6.03/-5.50 | |
| θ(45°) | -4.78/-1.82 | -6.41/-9.51 | -9.26/-5.24 | -2.42/-2.70 | -3.89/-5.79 | -4.79/-2.92 | -4.50/-2.60 | -6.05/-1.79 | -7.49/-6.81 | -5.80/-9.01 | -8.27/-8.05 | -10.34/-3.78 | -6.64/-9.67 | -8.45/-2.40 | -5.55/-4.77 | -11.61/-1.48 | -9.73/-6.43 | -8.69/-6.14 | -6.81/-3.77 | -6.54/-5.90 | -11.05/-11.64 | -11.88/-11.40 | -9.25/-7.38 | -6.27/-3.73 | |
| θ(52.5°) | -7.93/-5.06 | -5.47/-14.35 | -7.42/-3.78 | -7.71/-8.11 | -15.28/-7.57 | -8.99/-4.74 | -7.09/-4.21 | -5.67/-5.79 | -6.57/-4.72 | -6.47/-5.88 | -8.94/-9.82 | -6.58/-8.71 | -7.63/-5.73 | -3.88/-6.68 | -4.38/-5.21 | -9.27/-6.28 | -6.80/-7.22 | -5.88/-7.84 | -14.13/-10.30 | -12.41/-7.63 | -10.64/-9.58 | -4.42/-5.85 | -9.77/-5.06 | -8.21/-6.42 | |
| θ(60°) | -0.16/-1.67 | 0.22/-0.20 | 0.00/-3.28 | 0.45/-1.16 | -1.72/-3.33 | -1.17/-7.52 | -1.91/-9.43 | -8.34/-6.57 | -6.38/-4.66 | -6.93/-6.91 | -10.39/-6.99 | -6.96/-11.54 | -8.06/-11.61 | -4.17/-7.65 | -6.56/-5.78 | -6.24/-6.72 | -8.48/-13.20 | -9.45/-9.09 | -13.10/-8.49 | -10.55/-9.96 | -4.76/-4.81 | -3.05/-0.83 | -3.64/-3.39 | -4.10/-3.37 | |
| θ(67.5°) | -2.65/-1.30 | -1.95/-0.60 | 1.22/-1.74 | 2.48/-2.04 | 0.56/-0.02 | -1.90/-3.52 | -3.66/-2.81 | -4.49/-9.79 | -8.69/-5.79 | -6.00/-7.20 | -12.69/-11.64 | -12.83/-11.21 | -10.15/-15.15 | -6.45/-5.33 | -2.88/-1.76 | -7.76/-7.60 | -12.12/-7.87 | -6.45/-6.66 | -6.65/-9.27 | -9.52/-5.07 | -3.89/-5.20 | -5.26/-1.91 | 0.08/-0.59 | -3.47/-1.34 | |
| θ(75°) | -1.05/-1.94 | -4.85/-3.25 | -2.49/-5.46 | -1.69/-2.08 | -6.44/-1.84 | -0.61/-3.77 | -1.57/-1.85 | -0.61/-1.36 | -3.49/-6.18 | -4.40/-3.61 | -4.97/-1.36 | -1.27/-3.86 | -6.51/-11.48 | -4.70/-3.40 | -3.05/-2.59 | -4.20/-4.67 | -1.25/-5.92 | -4.09/-6.24 | -2.17/-1.64 | -4.29/-5.69 | -3.06/-5.71 | -4.95/-6.75 | -4.00/-4.45 | - | |
| θ(82.5°) | 2.12/-0.05 | -1.96/-1.68 | -2.30/-2.22 | 0.91/-0.60 | 0.03/-1.25 | -1.58/-0.44 | -0.75/-1.24 | 1.75/-1.75 | 0.15/-2.06 | -0.31/-1.08 | -2.42/-3.21 | -3.27/-4.08 | 0.35/-5.56 | -0.40/-2.28 | 0.87/-1.11 | 1.47/-2.23 | 0.71/-1.17 | 1.29/-2.92 | 2.98/-1.84 | 0.37/-0.30 | -0.85/-0.32 | 0.57/-0.87 | -0.98/-5.62 | -5.10/-0.40 | |
| θ(90°) | 1.21/-0.22 | -3.36/-0.54 | -13.63/-0.34 | 1.83/-1.21 | -0.74/-1.02 | -1.31/-1.52 | 1.90/-0.39 | 1.41/-0.69 | 2.37/-1.07 | 2.45/-2.67 | 1.06/-0.51 | 5.72/-3.74 | 2.61/-1.61 | 2.15/-1.36 | 0.37/-3.88 | 4.66/-2.38 | 3.40/-2.25 | 2.29/-0.76 | 4.29/-0.64 | 1.46/-2.43 | 2.97/-1.69 | 1.34/-3.06 | 0.96/-3.87 | -0.70/-3.22 | |
| θ(97.5°) | 0.23/-1.49 | -2.38/-0.90 | -2.20/-0.01 | 2.34/-0.21 | -4.22/-2.63 | -1.76/-1.07 | 2.12/-0.42 | 3.36/-2.29 | 3.21/-2.57 | 4.17/-2.42 | 2.66/-0.74 | 0.77/-2.58 | 1.96/-0.44 | 3.19/-0.23 | 4.95/-0.44 | 4.96/-0.44 | 1.39/-0.23 | 1.39/-0.23 | 3.21/-0.44 | 1.01/-0.11 | -1.03/-0.48 | 4.99/-0.30 | -0.11/-5.69 | -0.84/-2.72 | |
| θ(105°) | -5.97/-5.68 | -7.25/-1.46 | -3.26/-2.57 | 2.54/-2.49 | -0.25/-5.39 | -4.05/-2.38 | -1.67/-2.29 | -0.61/-1.10 | 2.34/-0.28 | 2.84/-4.11 | 1.48/-1.26 | 0.71/-3.47 | 2.86/-1.45 | -1.09/-2.95 | -0.70/-3.64 | 4.59/-4.81 | 2.78/-6.36 | 0.69/-3.02 | -0.96/-0.27 | -0.34/-0.22 | -7.99/-3.48 | 3.20/-4.45 | -3.73/-7.46 | -8.61/-5.17 | |
| θ(112.5°) | -8.17/-7.42 | -9.04/-9.19 | -4.80/-8.67 | -3.93/-1.60 | -4.75/-6.76 | -8.80/-6.44 | -6.14/-11.32 | -3.61/-1.17 | -4.40/-3.67 | 0.40/-0.90 | -1.90/-1.22 | -3.30/-4.22 | -0.77/-3.94 | -1.48/-1.53 | 3.53/-1.98 | 1.07/-1.40 | -1.91/-3.73 | -6.81/-1.85 | -4.06/-7.48 | -11.40/-10.30 | -0.99/-6.42 | -8.46/-8.19 | -10.62/-8.91 | -10.28/-9.10 | |
| θ(120°) | -7.90/-3.61 | -5.89/-4.19 | -5.11/-6.06 | -2.46/-13.11 | -8.74/-10.15 | -12.31/-10.14 | -9.44/-15.74 | -7.84/-5.74 | -5.26/-9.31 | -4.43/-5.33 | -4.78/-2.44 | -3.84/-2.45 | -4.46/-6.21 | -3.36/-5.64 | -4.09/-8.87 | -4.09/-2.95 | -14.00/-14.83 | -12.43/-11.37 | -10.58/-7.63 | -9.39/-9.34 | -7.47/-4.53 | -11.31/-14.88 | -11.28/-1.90 | - | |
| θ(127.5°) | -11.01/-4.90 | -8.09/-4.41 | -12.88/-3.04 | -6.07/-6.43 | -7.00/-9.38 | -10.99/-9.70 | -11.60/-10.19 | -12.01/-14.82 | -15.09/-15.94 | -14.63/-13.27 | -10.14/-8.05 | -8.70/-11.10 | -9.66/-12.93 | -7.58/-12.79 | -9.64/-9.14 | -11.76/-11.91 | -8.44/-10.65 | -10.17/-9.19 | -12.81/-14.46 | -7.41/-10.15 | -9.92/-9.81 | -6.72/-4.39 | -12.86/-7.70 | -8.13/-3.52 | |
| θ(135°) | -6.74/-6.60 | -9.43/-5.08 | -3.20/-7.69 | -9.87/-9.61 | -6.28/-6.04 | -5.59/-4.40 | -10.78/-6.61 | -12.73/-10.23 | -10.13/-14.12 | -12.99/-14.25 | -12.01/-11.42 | -14.81/-14.98 | -10.57/-11.44 | -13.32/-14.88 | -15.38/-9.06 | -8.03/-5.94 | -2.60/-6.39 | -11.09/-7.22 | -7.87/-9.41 | -6.97/-2.25 | -11.41/-9.40 | -9.15/-8.35 | -13.42/-6.49 | -8.03/-5.77 | |
| θ(142.5°) | -10.66/-10.38 | -13.58/-9.88 | -7.62/-9.64 | -8.00/-7.69 | -6.37/-4.54 | -5.64/-4.43 | -9.63/-11.61 | -9.23/-7.85 | -5.47/-5.95 | -6.51/-7.81 | -7.94/-7.85 | -10.40/-14.05 | -8.69/-6.54 | -4.21/-6.17 | -9.88/-5.79 | -8.41/-5.80 | -3.52/-4.37 | -15.25/-7.17 | -5.23/-4.02 | -9.10/-11.19 | -11.76/-8.09 | -9.23/-13.65 | -10.58/-8.73 | -14.28/-12.21 | |
| θ(150°) | -12.72/-13.32 | -10.33/-9.71 | -6.66/-6.82 | -9.91/-9.06 | -9.49/-9.96 | -6.63/-10.49 | -6.66/-4.85 | -9.34/-9.17 | -6.81/-7.78 | -5.71/-8.04 | -12.87/-10.72 | -9.61/-11.37 | -12.00/-8.86 | -6.38/-3.76 | -3.08/-4.72 | -4.92/-5.34 | -5.14/-5.10 | -9.36/-10.92 | -14.51/-8.31 | -9.86/-5.82 | -5.46/-7.49 | -10.43/-10.03 | -15.21/-14.25 | -16.15/-13.02 | -11.94/-12.76 |
| θ(157.5°) | -10.54/-12.50 | -12.95/-11.27 | -13.02/-14.11 | -12.33/-9.38 | -9.97/-10.05 | -10.39/-9.70 | -8.03/-8.66 | -6.96/-13.18 | -14.13/-9.14 | -12.19/-10.11 | -7.96/-9.04 | -7.72/-6.98 | -4.67/-4.09 | -5.48/-5.38 | -7.10/-7.88 | -8.63/-7.85 | -7.01/-8.21 | -13.85/-13.99 | -11.23/-10.95 | -10.95/-11.03 | -13.77/-15.75 | -15.82/-13.59 | -15.73/-10.42 | -10.96/-12.17 | |
| θ(165°) | -12.81/-15.41 | -15.00/-13.87 | -11.93/-14.38 | -14.52/-12.41 | -13.03/-13.80 | -10.58/-9.89 | -8.24/-9.62 | -10.77/-10.55 | -11.90/-9.20 | -7.35/-9.35 | -8.70/-9.28 | -9.95/-8.04 | -5.70/-5.95 | -4.66/-6.87 | -7.15/-7.08 | -7.23/-7.06 | -8.64/-12.10 | -15.31/-16.20 | -14.91/-15.39 | -15.18/-13.92 | -11.34/-10.12 | -10.23/-10.59 | -8.33/-8.88 | -9.39/-10.10 | |
| θ(172.5°) | -10.58/-13.46 | -13.39/-12.93 | -13.70/-12.72 | -11.88/-11.95 | -11.82/-12.41 | -13.31/-13.17 | -13.65/-12.33 | -13.37/-11.78 | -11.60/-9.39 | -7.23/-7.24 | -7.25/-6.11 | -7.25/-6.49 | -7.17/-7.62 | -7.61/-9.03 | -8.66/-9.45 | -9.77/-6.86 | -7.80/-10.19 | -12.17/-14.10 | -12.34/-10.25 | -8.46/-9.18 | -8.93/-10.33 | -10.78/-8.03 | -10.94/-10.63 | -12.10/-12.75 | |
| θ(180°) | -13.12/-12.25 | -10.69/-11.67 | -11.79/-11.60 | -12.57/-13.73 | -14.99/-13.88 | -13.92/-12.28 | -12.22/-13.31 | -12.39/-12.64 | -13.29/-13.86 | -13.15/-13.68 | -13.69/-13.74 | -13.51/-14.16 | -12.64/-13.33 | -14.54/-13.54 | -15.28/-15.51 | -13.65/-13.09 | -14.69/-14.96 | -12.25/-12.19 | -13.33/-14.43 | -15.23/-15.46 | -15.19/-14.35 | -14.10/-12.88 | -12.15/-12.49 | -12.75/-14.27 | |
| 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°) | -13.76/-13.99 | -13.54/-12.44 | -12.37/-12.79 | -12.49/-13.60 | -14.02/-14.33 | -12.13/-12.21 | -12.44/-12.68 | -13.09/-12.96 | -13.50/-11.86 | -13.17/-14.19 | -12.27/-14.64 | -13.04/-12.79 | -13.88/-13.04 | -13.93/-13.35 | -12.84/-13.97 | -14.86/-14.54 | -14.51/-13.74 | -11.89/-11.48 | -12.28/-11.14 | -11.69/-14.22 | -13.95/-12.79 | -15.19/-13.56 | -14.47/-16.00 | -14.37/-13.61 | |
| θ(7.5°) | -14.90/-15.46 | -15.42/-15.29 | -15.13/-15.80 | -15.69/-15.36 | -15.20/-15.12 | -14.37/-14.80 | -14.44/-14.99 | -15.24/-15.24 | -15.05/-15.71 | -15.80/-15.47 | -15.06/-15.54 | -15.77/-15.19 | -14.58/-15.31 | -14.68/-14.71 | -12.69/-13.30 | -14.07/-14.16 | -12.66/-12.36 | -10.89/-10.19 | -10.39/-10.63 | -11.99/-14.29 | -15.21/-14.19 | -13.74/-15.62 | -14.68/-14.99 | -15.84/-14.13 | |
| θ(15°) | -7.22/-6.83 | -6.33/-5.80 | -6.28/-6.18 | -6.48/-8.41 | -9.98/-12.33 | -12.34/-11.84 | -10.87/-10.95 | -10.37/-10.75 | -11.78/-15.25 | -10.85/-15.13 | -15.33/-15.79 | -14.82/-13.24 | -12.66/-12.17 | -13.07/-11.58 | -13.42/-13.44 | -14.49/-15.89 | -11.73/-10.38 | -12.21/-11.98 | -12.85/-13.90 | -14.52/-13.51 | -12.08/-11.18 | -9.50/-8.17 | -8.62/-8.89 | -7.94/-7.81 | |
| θ(22.5°) | -5.81/-5.30 | -5.64/-7.27 | -8.07/-8.80 | -6.99/-6.37 | -6.00/-9.10 | -12.52/-10.21 | -8.79/-11.00 | -13.85/-11.75 | -12.95/-10.50 | -10.10/-12.78 | -15.40/-15.81 | -15.42/-13.95 | -11.40/-10.98 | -10.58/-12.34 | -11.07/-13.37 | -12.39/-14.48 | -12.10/-14.78 | -8.42/-11.22 | -15.56/-13.08 | -10.77/-11.08 | -15.13/-13.28 | -10.24/-10.21 | -10.38/-8.60 | -7.89/-6.82 | |
| θ(30°) | -10.54/-8.03 | -8.98/-7.04 | -5.20/-8.07 | -7.41/-6.66 | -5.70/-6.12 | -4.42/-9.40 | | | | | | | | | | | | | | | | | | | |



Antenna Pattern of scan

Appendix F

| Theta (180°) | -11.22/-11.59 | -13.03/-13.60 | -12.87/-12.73 | -12.09/-13.41 | -13.34/-12.71 | -12.80/-13.11 | -12.38/-12.82 | -13.40/-13.26 | -13.81/-12.84 | -12.59/-13.04 | -12.32/-12.27 | -9.98/-9.91 | -9.48/-10.17 | -13.30/-13.68 | -13.62/-11.33 | -9.32/-11.20 | -11.34/-12.25 | -12.56/-13.72 | -14.51/-14.85 | -15.98/-14.78 | -15.37/-12.39 | -11.03/-12.72 | -14.17/-14.85 | -13.36/-14.00 | |
|----------------|------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|---|
| Freq(Hz) | 6.475GPol. | TotalAnt.2 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Gain | Phi(0°)Phi(7.5°) | Phi(15°)Phi(22.5°) | Phi(30°)Phi(37.5°) | Phi(45°)Phi(52.5°) | Phi(60°)Phi(67.5°) | Phi(75°)Phi(82.5°) | Phi(90°)Phi(97.5°) | Phi(105°)Phi(112.5°) | Phi(120°)Phi(127.5°) | Phi(135°)Phi(142.5°) | Phi(150°)Phi(157.5°) | Phi(165°)Phi(172.5°) | Phi(180°)Phi(187.5°) | Phi(195°)Phi(202.5°) | Phi(210°)Phi(217.5°) | Phi(225°)Phi(232.5°) | Phi(240°)Phi(247.5°) | Phi(255°)Phi(262.5°) | Phi(270°)Phi(277.5°) | Phi(285°)Phi(292.5°) | Phi(300°)Phi(307.5°) | Phi(315°)Phi(322.5°) | Phi(330°)Phi(337.5°) | Phi(345°)Phi(352.5°) | |
| Theta (0°) | -15.58/-16.26 | -15.26/-15.58 | -15.93/-14.44 | -14.62/-15.74 | -15.53/-14.82 | -15.07/-15.51 | -15.31/-15.26 | -15.78/-15.75 | -15.20/-15.64 | -15.84/-16.09 | -15.83/-15.21 | -14.90/-14.88 | -15.37/-16.30 | -15.34/-15.02 | -15.68/-15.43 | -15.20/-14.42 | -15.37/-14.87 | -15.80/-14.31 | -15.77/-15.67 | -15.02/-16.00 | -15.96/-14.60 | -15.85/-15.48 | -15.04/-13.86 | -15.94/-15.35 | |
| Theta (7.5°) | -15.75/-14.41 | -14.89/-14.20 | -14.70/-15.06 | -15.73/-15.38 | -15.18/-15.49 | -15.29/-15.68 | -15.43/-15.07 | -14.97/-14.52 | -14.71/-15.40 | -15.53/-16.39 | -15.14/-14.75 | -15.55/-15.52 | -15.23/-14.60 | -14.82/-14.78 | -14.45/-13.63 | -14.10/-16.08 | -15.27/-15.64 | -15.29/-15.81 | -15.83/-14.80 | -15.32/-14.08 | -13.64/-14.76 | -14.63/-12.93 | -15.34/-15.56 | -15.88/-14.93 | |
| Theta (15°) | -15.07/-15.10 | -15.53/-16.04 | -13.94/-15.67 | -15.28/-15.91 | -15.29/-15.29 | -14.59/-15.08 | -14.87/-15.10 | -14.12/-13.81 | -12.57/-13.12 | -15.15/-13.06 | -14.93/-13.54 | -14.54/-12.75 | -14.65/-13.10 | -14.93/-14.80 | -14.82/-10.07 | -10.13/-10.68 | -10.42/-11.71 | -14.16/-15.06 | -15.23/-12.48 | -13.32/-12.55 | -13.23/-14.26 | -15.41/-15.70 | -15.53/-16.10 | -14.52/-15.47 | |
| Theta (22.5°) | -11.10/-15.86 | -9.98/-9.11 | -8.52/-8.96 | -10.73/-14.50 | -12.56/-13.88 | -12.68/-9.73 | -9.86/-10.00 | -10.83/-11.35 | -14.02/-13.06 | -14.77/-14.95 | -11.61/-9.81 | -11.84/-9.71 | -12.22/-10.64 | -12.03/-10.01 | -10.47/-9.65 | -9.67/-7.85 | -11.56/-13.45 | -12.64/-11.23 | -10.98/-9.46 | -10.60/-14.97 | -15.33/-12.62 | -13.95/-15.26 | -13.61/-14.99 | -11.77/-11.90 | |
| Theta (30°) | -9.34/-8.00 | -9.64/-12.65 | -14.92/-13.74 | -11.96/-13.68 | -12.32/-13.80 | -13.03/-12.91 | -12.33/-11.36 | -11.74/-10.12 | -12.39/-11.53 | -15.04/-15.52 | -15.18/-12.20 | -13.72/-10.91 | -8.68/-6.99 | -10.48/-12.10 | -12.96/-6.31 | -10.09/-11.47 | -12.29/-14.96 | -8.90/-8.87 | -11.67/-8.93 | -14.76/-12.98 | -13.90/-13.61 | -14.23/-15.29 | -14.20/-13.19 | -12.68/-9.32 | |
| Theta (37.5°) | -6.68/-5.10 | -8.71/-8.44 | -9.27/-9.79 | -11.15/-9.55 | -11.08/-7.52 | -7.48/-5.86 | -7.91/-9.00 | -15.94/-12.44 | -10.12/-11.49 | -10.94/-10.23 | -9.37/-7.40 | -11.17/-15.22 | -11.14/-11.68 | -10.56/-10.10 | -8.46/-9.86 | -10.44/-11.73 | -14.20/-13.37 | -8.00/-7.89 | -15.11/-9.08 | -6.83/-4.74 | -10.20/-5.76 | -9.76/-7.59 | -6.24/-7.08 | -5.42/-7.19 | |
| Theta (45°) | -6.41/-11.35 | -6.01/-5.15 | -6.45/-5.28 | -6.85/-7.34 | -7.45/-6.58 | -9.54/-7.64 | -10.91/-5.90 | -7.83/-7.32 | -11.55/-11.31 | -10.14/-7.40 | -9.71/-7.40 | -6.32/-9.79 | -11.35/-10.98 | -9.67/-7.41 | -8.83/-7.58 | -8.94/-14.60 | -10.34/-5.90 | -3.96/-9.90 | -4.79/-7.74 | -5.77/-5.41 | -6.73/-5.96 | -8.91/-4.67 | -7.68/-9.59 | -7.77/-15.81 | |
| Theta (52.5°) | -4.97/-7.44 | -9.34/-10.16 | -5.26/-3.83 | -5.14/-6.13 | -5.69/-7.11 | -6.86/-7.55 | -9.89/-7.43 | -6.19/-10.72 | -6.69/-9.32 | -11.09/-11.74 | -9.13/-7.60 | -6.65/-11.70 | -10.39/-13.43 | -7.65/-3.55 | -10.04/-15.55 | -12.52/-6.79 | -6.62/-4.04 | -6.98/-14.78 | -8.62/-10.82 | -11.94/-8.68 | -13.58/-11.98 | -8.10/-15.07 | -14.34/-10.63 | -7.53/-8.88 | |
| Theta (60°) | -4.79/-3.00 | -3.63/-4.57 | -5.45/-6.81 | -7.87/-10.20 | -9.71/-10.08 | -15.81/-15.31 | -10.20/-5.74 | -9.32/-7.05 | -9.43/-5.60 | -9.51/-11.62 | -9.19/-11.46 | -2.21/-7.49 | -8.68/-15.71 | -9.58/-7.43 | -8.51/-9.77 | -11.66/-4.13 | -13.08/-5.14 | -10.18/-15.64 | -13.69/-11.44 | -14.02/-11.98 | -8.75/-8.34 | -5.87/-6.32 | -2.51/-3.46 | -3.34/-4.17 | |
| Theta (67.5°) | -6.36/-3.69 | -1.55/-0.94 | -1.55/-1.63 | -2.30/-1.26 | -0.71/-5.85 | -8.37/-6.34 | -7.63/-11.18 | -10.34/-9.51 | -15.33/-7.37 | -10.59/-9.95 | -8.09/-9.45 | -7.12/-13.68 | -15.54/-12.02 | -9.31/-11.93 | -15.24/-10.91 | -8.21/-5.09 | -12.47/-9.73 | -5.98/-8.85 | -5.98/-8.08 | -7.47/-14.82 | -9.79/-8.04 | -4.97/-4.41 | -0.70/-0.96 | -2.33/-3.26 | |
| Theta (75°) | -8.88/-4.80 | -5.00/-3.40 | -7.63/-6.33 | -4.60/-6.93 | -0.17/-2.64 | -4.01/-2.48 | -3.89/-6.62 | -5.44/-7.35 | -5.71/-7.27 | -12.14/-11.73 | -9.60/-6.40 | -6.08/-9.11 | -13.37/-10.04 | -7.56/-7.91 | -10.49/-6.82 | -9.90/-2.92 | -6.59/-2.34 | -1.43/-3.72 | -1.71/-3.84 | -5.31/-10.29 | -7.19/-3.05 | -8.26/-4.83 | -2.78/-1.77 | -4.11/-1.27 | |
| Theta (82.5°) | -4.79/-3.00 | -3.63/-4.57 | -5.45/-6.81 | -2.14/-0.39 | -4.26/-2.56 | -3.17/-1.29 | -2.43/-0.60 | -0.09/-0.36 | -0.86/-2.10 | -0.98/-2.90 | -0.98/-2.50 | -0.99/-0.94 | -4.81/-8.18 | 0.950/3.28 | -2.44/-5.36 | -1.25/-2.23 | 1.06/1.61 | -0.28/-1.88 | 3.662/7.8 | 2.23/-0.16 | -3.72/-4.31 | -2.92/-3.89 | -5.67/-7.59 | -5.37/-7.37 | |
| Theta (90°) | -7.90/-0.20 | -3.75/-6.46 | -0.55/-4.09 | 0.01/-0.55 | -1.43/-1.45 | 0.05/-0.18 | -0.17/-0.39 | 1.532/9.4 | 3.050/9.2 | 3.162/7.3 | -2.83/-3.03 | 0.893/7.9 | 0.59/-5.18 | 2.88/5.1 | 2.39/-5.36 | 2.334/4.9 | 4.233/5.0 | 1.960/1.5 | 4.594/6.9 | 5.842/9.8 | 0.14/-1.17 | 1.82/-1.54 | -0.09/-2.98 | -6.35/-9.31 | |
| Theta (97.5°) | -10.10/-0.55 | -3.99/-2.42 | -0.45/-2.31 | -0.35/-0.33 | -1.19/-0.74 | 0.78/-0.51 | -0.89/-0.58 | 0.85/3.23 | 3.992/1.4 | 5.702/9.3 | 0.04/-3.17 | 3.156/1.3 | 3.29/-2.76 | 3.495/1.3 | 0.66/-3.56 | 4.764/5.0 | 3.05/-1.21 | 1.853/5.4 | 4.49/-1.92 | -2.63/-0.54 | 2.34/-2.75 | -4.860/1.2 | -10.17/-6.64 | | |
| Theta (105°) | -11.73/-5.57 | -6.33/-7.73 | -7.94/-4.85 | -4.53/-0.24 | -4.24/-6.99 | -4.68/-3.06 | -3.71/-3.20 | 2.36/1.32 | 3.601/9.5 | 4.552/2.4 | -1.04/-3.11 | 1.163/9.7 | 1.62/-6.10 | 0.863/7.3 | 2.01/-0.93 | 3.324/6.1 | 2.912/5.6 | 2.22/-0.78 | -3.20/-1.86 | -5.68/-5.25 | -1.59/-4.93 | -7.25/-2.29 | -8.09/-9.31 | | |
| Theta (112.5°) | -11.47/-7.22 | -10.18/-10.16 | -8.35/-12.81 | -8.55/-7.78 | -8.68/-6.31 | -13.37/-8.19 | -4.88/-6.28 | -3.77/-1.72 | -1.33/-1.54 | 1.48/-3.54 | -3.78/-6.59 | -2.27/-0.71 | -1.78/-8.20 | -3.49/1.07 | -1.18/-3.72 | -2.59/1.69 | -1.830/7.2 | -0.78/-10.11 | -5.27/-6.89 | -7.85/-6.20 | -9.95/-7.11 | -5.14/-8.86 | -5.34/-14.05 | -10.22/-5.89 | |
| Theta (120°) | -8.65/-6.42 | -5.54/-5.56 | -3.77/-11.36 | -6.78/-9.08 | -10.83/-6.70 | -8.80/-10.77 | -7.97/-10.36 | -8.66/-7.95 | -6.92/-10.34 | -9.98/-11.96 | -7.75/-11.68 | -10.21/-12.58 | -12.75/-15.89 | -6.01/-6.55 | -6.87/-8.39 | -4.15/-2.00 | -7.15/-13.29 | -14.10/-6.37 | -15.38/-9.58 | -8.85/-13.3 | -6.13/-9.97 | -10.14/-9.04 | -5.08/-5.56 | | |
| Theta (127.5°) | -12.73/-10.10 | -15.59/-9.69 | -10.08/-7.90 | -3.75/-8.29 | -2.58/-2.53 | -5.13/-3.12 | -6.79/-13.63 | -9.65/-9.48 | -7.84/-7.24 | -9.12/-12.95 | -14.98/-14.95 | -14.36/-14.55 | -10.94/-11.03 | -5.79/-15.51 | -6.02/-7.90 | -9.43/-9.56 | -2.44/-3.95 | -7.24/-15.53 | -12.00/-6.65 | -6.84/-10.48 | -4.76/-2.64 | -5.07/-10.56 | -9.41/-8.18 | -6.27/-10.06 | |
| Theta (135°) | -6.39/-8.26 | -6.92/-4.53 | -4.37/-8.47 | -11.29/-5.63 | -4.90/-7.11 | -3.62/-3.28 | -4.50/-4.04 | -5.54/-5.35 | -3.18/-5.51 | -7.35/-8.16 | -10.22/-12.43 | -9.41/-13.07 | -10.95/-12.03 | -13.28/-9.28 | -3.15/-2.55 | -3.24/-4.82 | -2.43/-2.81 | -8.23/-9.47 | -9.05/-7.01 | -8.85/-10.52 | -8.80/-8.87 | -8.66/-9.49 | -5.69/-7.07 | -4.70/-7.97 | |
| Theta (142.5°) | -14.48/-11.09 | -11.31/-10.47 | -12.10/-10.74 | -4.85/-9.30 | -7.51/-4.03 | -5.29/-3.63 | -4.30/-3.77 | -3.37/-2.38 | -3.68/-7.02 | -5.33/-6.16 | -6.68/-8.28 | -5.13/-5.61 | -6.73/-4.68 | -8.28/-9.28 | -5.18/-2.90 | 0.46/-1.22 | -1.65/-5.58 | -8.87/-8.73 | -5.57/-3.40 | -4.55/-3.24 | -9.52/-7.72 | -7.76/-14.00 | -11.53/-14.07 | -11.53/-14.07 | |
| Theta (150°) | -11.89/-9.36 | -12.47/-15.74 | -12.10/-10.57 | -6.97/-5.93 | -0.51/-8.05 | -5.85/-8.43 | -8.01/-5.69 | -5.12/-7.46 | -8.01/-5.49 | -3.20/-2.83 | -4.03/-3.28 | -3.89/-4.69 | -3.93/-4.92 | -2.56/-1.22 | -3.70/-1.07 | -1.39/-2.92 | -8.42/-7.45 | -8.31/-7.20 | -6.61/-7.18 | -8.99/-14.89 | -14.97/-14.19 | -13.05/-13.61 | -11.39/-14.59 | | |
| Theta (157.5°) | -15.11/-8.86 | -8.66/-6.54 | -7.24/-12.85 | -15.17/-10.07 | -7.50/-8.93 | -8.84/-12.12 | -11.78/-8.57 | -6.17/-5.01 | -4.59/-3.82 | -4.52/-6.49 | -6.09/-5.26 | -5.61/-5.93 | -7.98/-7.30 | -6.46/-5.34 | -4.31/-1.29 | -0.94/-2.07 | -4.39/-5.93 | -6.65/-6.91 | -7.39/-6.98 | -6.54/-7.15 | -6.03/-6.43 | -9.34/-10.84 | -10.97/-11.97 | -11.11/-15.25 | |
| Theta (165°) | -9.29/-12.83 | -9.38/-12.21 | -11.29/-9.29 | -7.90/-9.19 | -9.56/-8.08 | -7.19/-7.46 | -9.92/-8.24 | -5.34/-5.77 | -8.65/-11.46 | -10.18/-8.59 | -9.35/-9.04 | -7.43/-6.48 | -6.11/-6.67 | -6.10/-5.64 | -7.21/-7.28 | -5.31/-5.19 | -7.547/-9.1 | -6.59/-6.15 | -9.50/-11.82 | -11.74/-12.25 | -10.32/-11.21 | -8.55/-10.91 | -10.92/-12.67 | | |
| Theta (172.5°) | -12.34/-11.90 | -11.24/-9.49 | -9.16/-8.29 | -7.78/-7.46 | -7.46/-7.49 | -7.55/-8.24 | -8.65/-8.07 | -7.35/-9.24 | -7.35/-9.24 | -9.49/-9.49 | -8.64/-8.75 | -10.27/-10.62 | -11.07/-12.35 | -11.39/-10.14 | -7.53/-8.96 | -10.36/-12.18 | -9.64/-8.84 | -9.11/-8.60 | -11.40/-11.25 | -11.11/-11.97 | -13.30/-15.32 | -13.54/-14.24 | -13.97/-13.67 | -13.02/-14.65 | |
| Theta (180°) | -9.77/-11.94 | -11.31/-11.66 | -10.77/-10.58 | -11.01/-11.67 | -11.45/-11.65 | -10.86/-10.93 | -11.60/-11.26 | -11.52/-11.78 | -11.51/-11.51 | -10.68/-11.82 | -11.38/-10.28 | -9.30/-9.28 | -8.40/-8.80 | -9.82/-10.15 | -8.24/-8.75 | -7.57/-7.14 | -7.46/-8.05 | -10.37/-13.23 | -12.73/-10.59 | -10.29/-11.22 | -15.20/-15.71 | -11.26/-10.98 | -9.80/-10.59 | -11.22/-10.92 | |
| Freq(Hz) | 6.695GPol. | TotalAnt.2 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| Gain | Phi(0°)Phi(7.5°) | Phi(15°)Phi(22.5°) | Phi(30°)Phi(37.5°) | Phi(45°)Phi(52.5°) | Phi(60°)Phi(67.5°) | Phi(75°)Phi(82.5°) | Phi(90°)Phi(97.5°) | Phi(105°)Phi(112.5°) | Phi(120°)Phi(127.5°) | Phi(135°)Phi(142.5°) | Phi(150°)Phi(157.5°) | Phi(165°)Phi(172.5°) | Phi(180°)Phi(187.5°) | Phi(195°)Phi(202.5°) | Phi(210°)Phi(217.5°) | Phi(225°)Phi(232.5°) | Phi(240°)Phi(247.5°) | Phi(255°)Phi(262.5°) | Phi(270°)Phi(277.5°) | Phi(285°)Phi(292.5°) | Phi(300°)Phi(307.5°) | Phi(315°)Phi(322.5°) | Phi(330°)Phi(337.5°) | Phi(345°)Phi(352.5°) | |
| Theta (0°) | -15.42/-14.31 | -15.07/-13.45 | -13.65/-14.77 | -13.26/-14.91 | -15.57/-15.15 | -15.12/-15.90 | -15.32/-15.20 | -15.08/-15.59 | -15.34/-14.96 | -14.85/-14.39 | -16.16/-14.90 | -13.33/-15.23 | -15.04/-15.90 | -15.40/-15.99 | -15.33/-14.72 | -14.41/-15.76 | -15.60/-16.09 | -15.79/-15.08 | -15.37/-15.95 | -15.85/-15.39 | -15.65/-14.60 | -14.68/-15.16 | -15.51/-15.78 | -15.67/-16.11 | |
| Theta (7.5°) | -14.87/-15.12 | -15.14/-15.69 | -15.19/-15.63 | -15.58/-15.12 | -15.03/-14.93 | -15.97/-15.23 | -15.95/-15.89 | -15.30/-14.71 | -15.50/-14.82 | -15.20/-15.10 | -14.32/-14.33 | -13.97/-13.87 | -13.45/-13.95 | -10.49/-14.93 | -13.91/-14.83 | -15.19/-14.15 | -14.99/-14.94 | -15.27/-15.54 | -15.56/-15.57 | -15.59/-15.13 | -15.00/-14.60 | -14.79/-14.91 | -14.94/-14.20 | -14.94/-14.20 | |
| Theta (15°) | -14.39/-14.88 | -15.20/-14.75 | -14.55/-12.14 | -13.45/-12.26 | -12.14/-9.76 | -8.32/-9.92 | -9.61/-9.95 | -11.89/-13.25 | -15.08/-14.23 | -15.58/-13.75 | -13.08/-10.18 | -11.96/-10.84 | -11.74/-10.10 | -12.54/-14.05 | -15.53/-15.36 | -14.64/-15.50 | -14.96/-13.28 | -10.43/-9.29 | -11.45/-11.25 | -12.62/-12.63 | -11.77/-13.13 | -14.04/-12.69 | -15.42/-14.59 | | |
| Theta (22.5°) | -14.98/-11.46 | -12.04/-10.27 | -13.74/-16.20 | -12.63/-8.53 | -12.40/-13.02 | -13.50/-12.95 | -14.92/-15.90 | -13.95/-14.29 | -13.42/-10.59 | -10.00/-10.48 | -7.71/-7.26</ | | | | | | | | | | | | | | |

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

