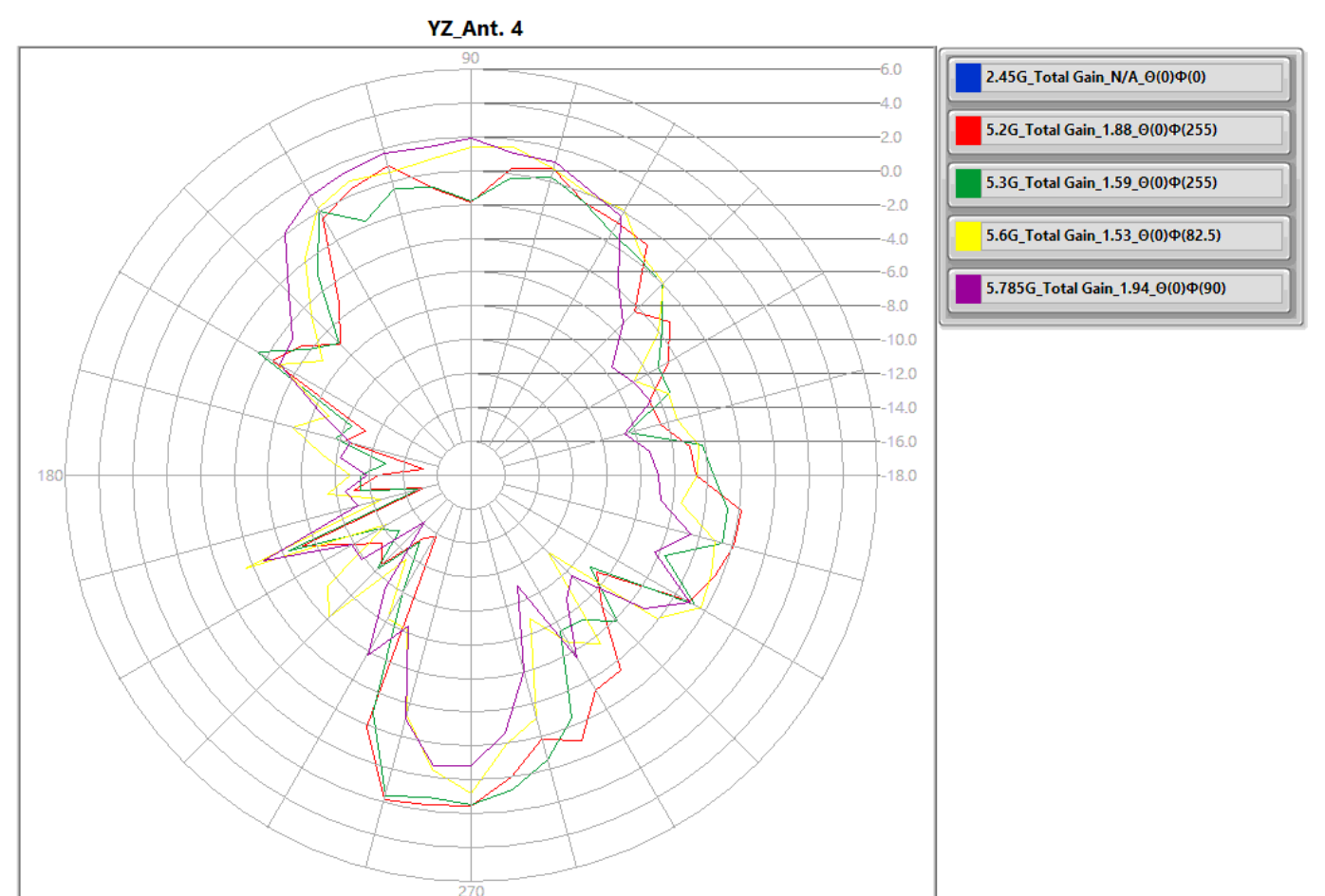
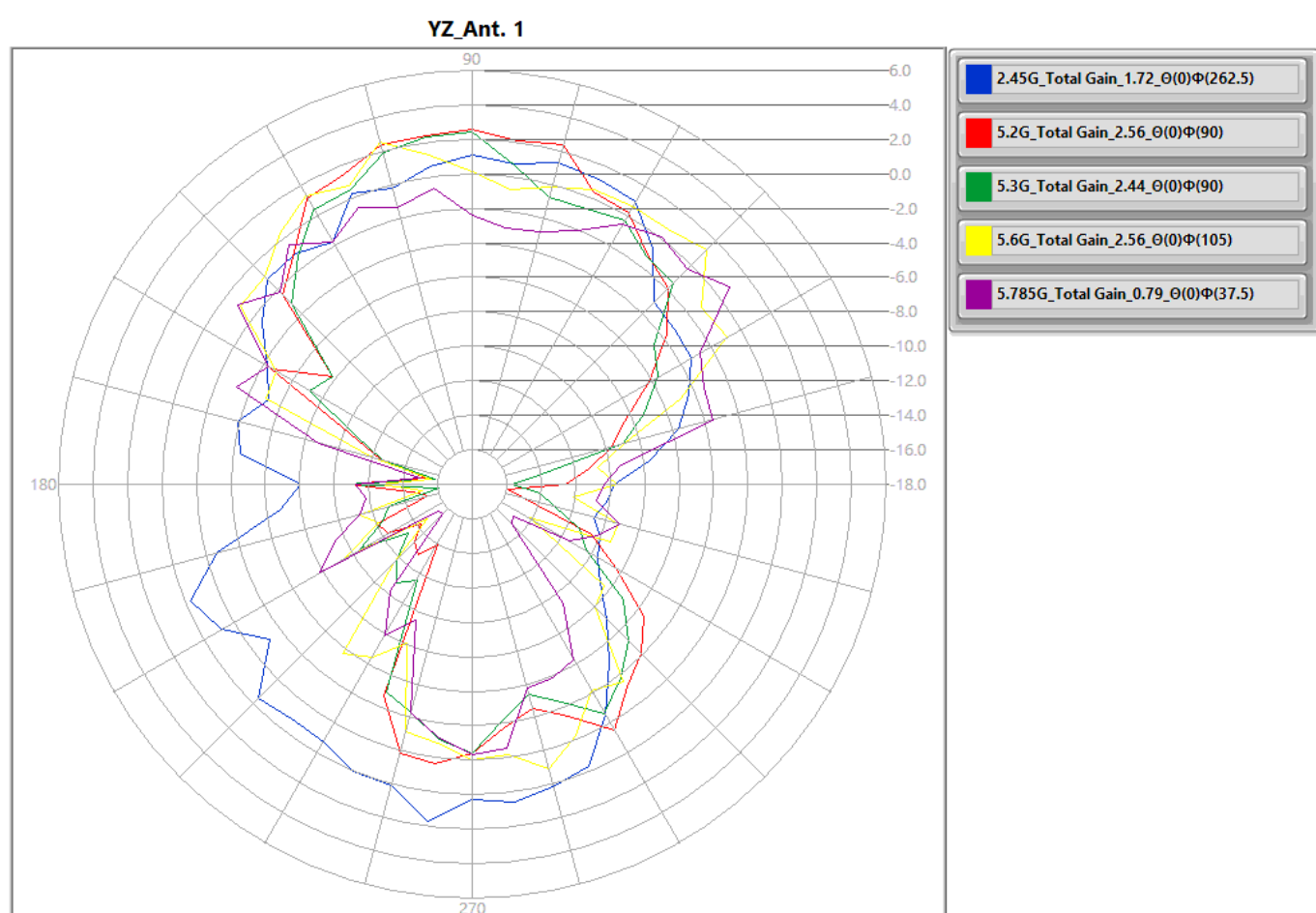
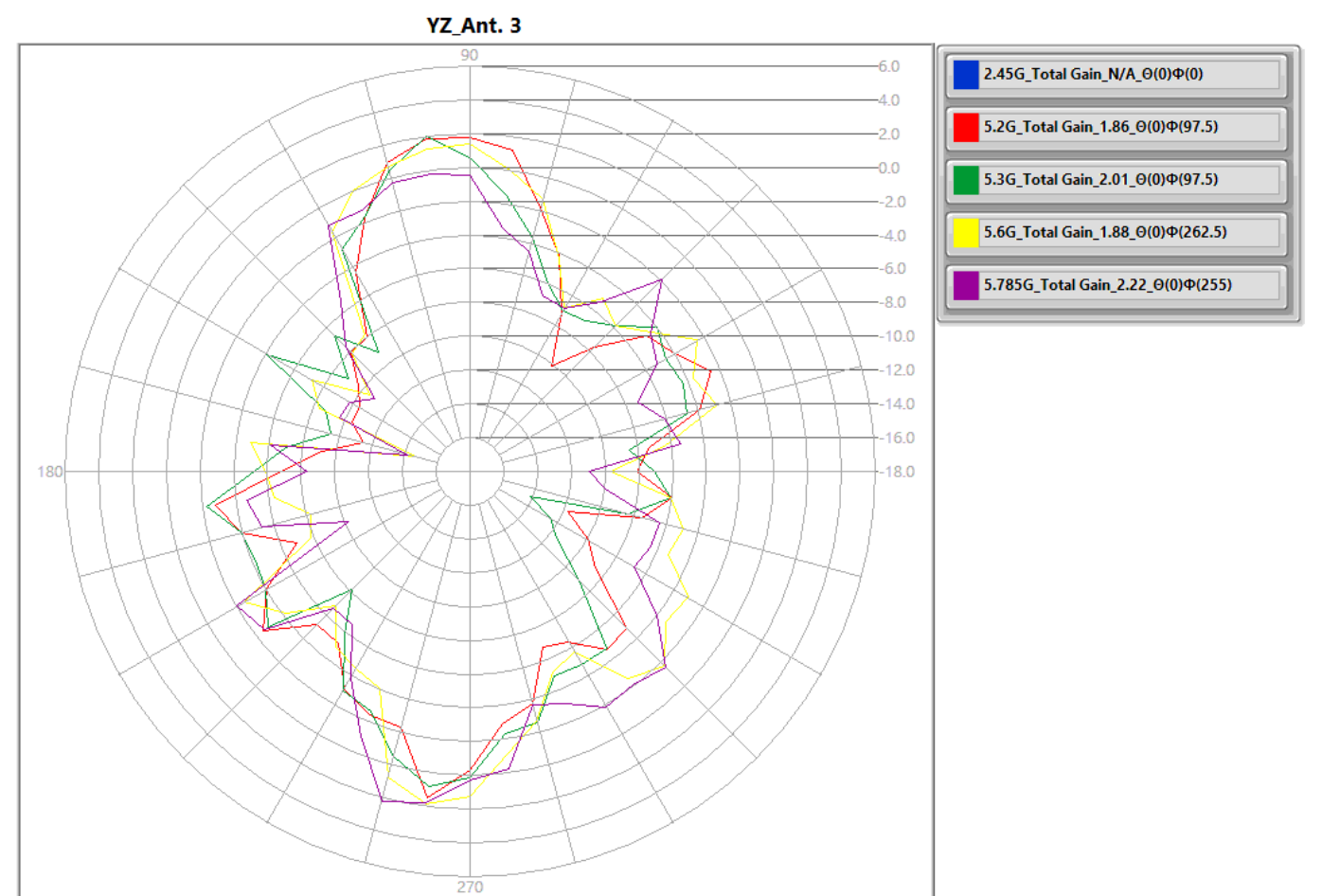
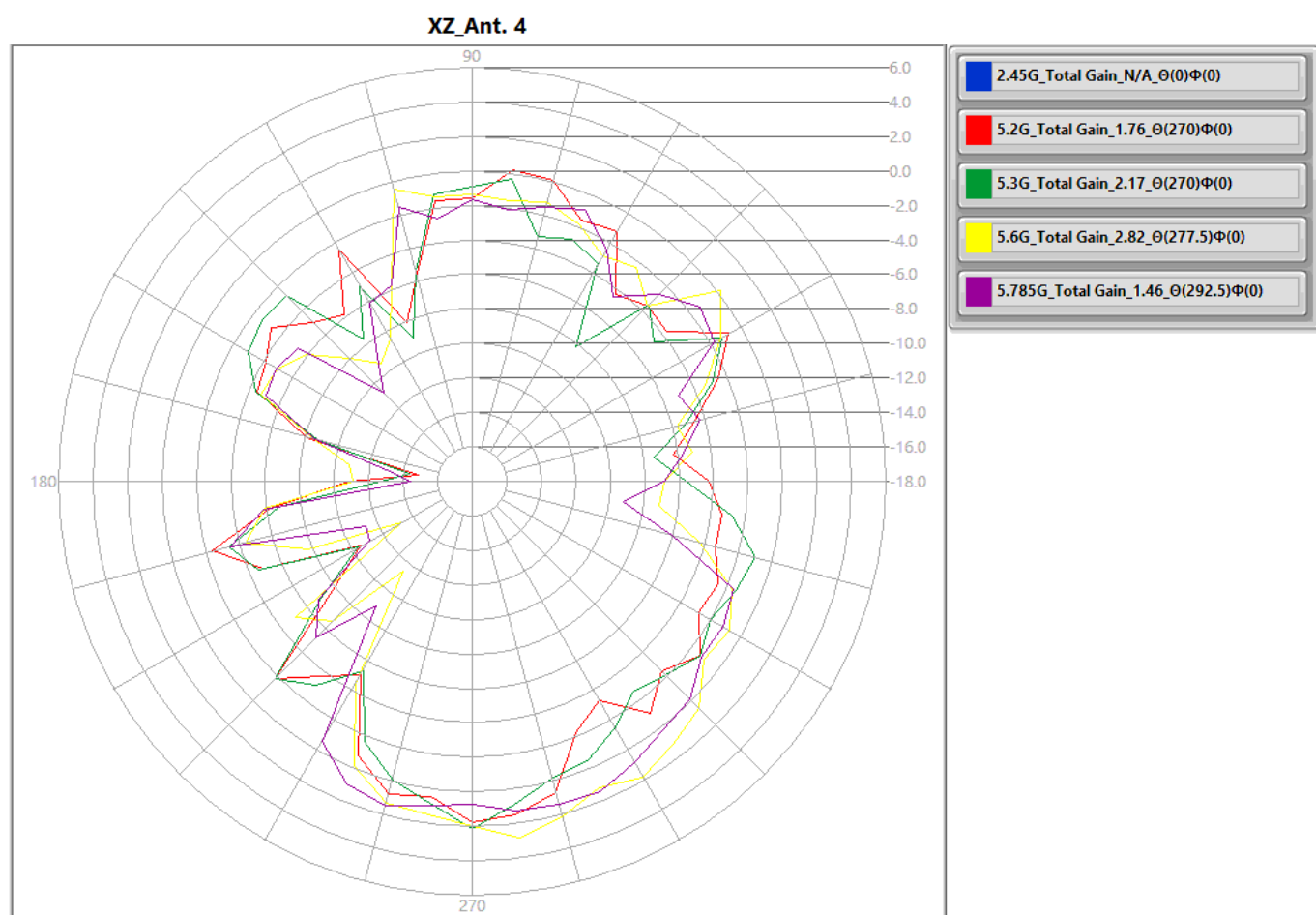
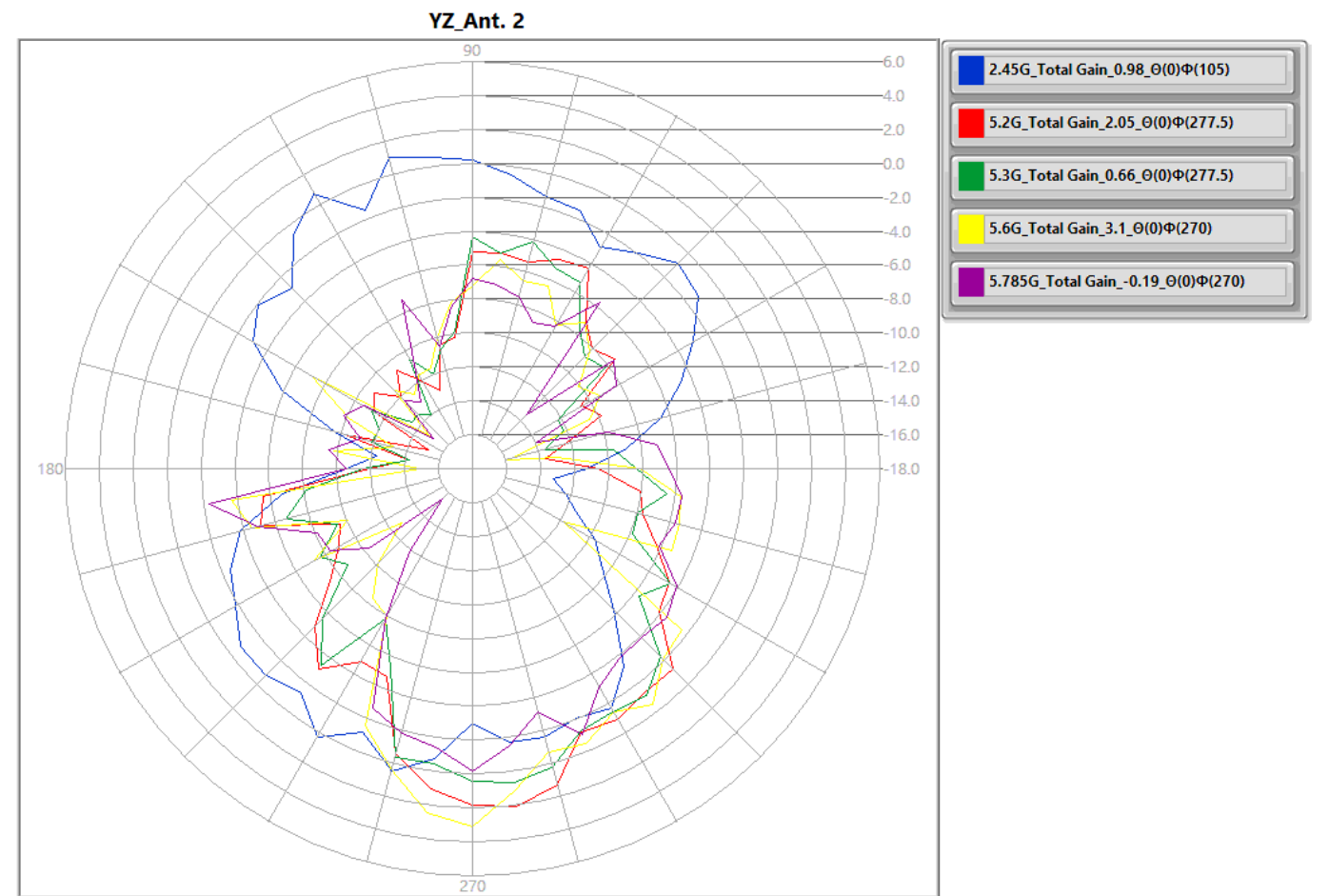
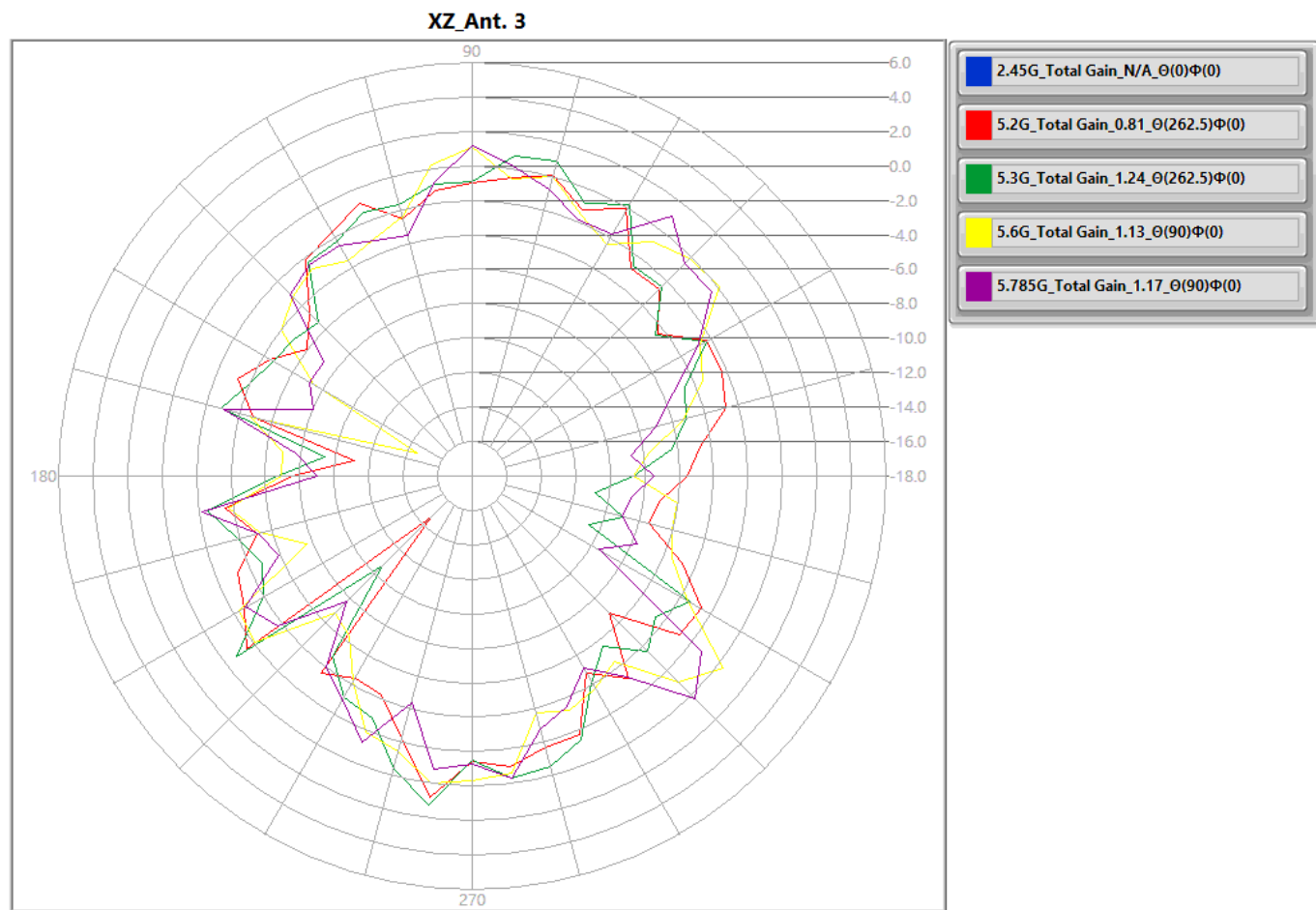






# Antenna Pattern 6GHz

# Appendix D

## Total Gain Data

| Freq(Hz)  | 6.175GPol.    | TotalAnt.1     | +              | -              | +              | -              | +              | -                | +                | -                | +                | -                | +                | -                | +                | -                | +                | -                | +                | -                | +                | -                |                  |                  |
|-----------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Gain      | Φ(0°)Φ(7.5°)  | Φ(15°)Φ(22.5°) | Φ(30°)Φ(37.5°) | Φ(45°)Φ(52.5°) | Φ(60°)Φ(67.5°) | Φ(75°)Φ(82.5°) | Φ(90°)Φ(97.5°) | Φ(105°)Φ(112.5°) | Φ(120°)Φ(127.5°) | Φ(135°)Φ(142.5°) | Φ(150°)Φ(157.5°) | Φ(165°)Φ(172.5°) | Φ(180°)Φ(187.5°) | Φ(195°)Φ(202.5°) | Φ(210°)Φ(217.5°) | Φ(225°)Φ(232.5°) | Φ(240°)Φ(247.5°) | Φ(255°)Φ(262.5°) | Φ(270°)Φ(277.5°) | Φ(285°)Φ(292.5°) | Φ(300°)Φ(307.5°) | Φ(315°)Φ(322.5°) | Φ(330°)Φ(337.5°) | Φ(345°)Φ(352.5°) |
| Θ(0°)     | -15.57/-15.38 | -14.89/-15.08  | -14.90/-14.64  | -15.33/-15.35  | -15.31/-15.35  | -15.72/-15.04  | -15.75/-14.82  | -15.26/-13.93    | -13.04/-13.82    | -13.53/-14.88    | -15.49/-15.30    | -15.96/-15.83    | -15.77/-13.36    | -13.77/-15.45    | -15.78/-15.70    | -14.06/-13.92    | -13.85/-14.01    | -14.30/-14.59    | -15.66/-14.61    | -13.29/-13.54    | -14.79/-15.58    | -13.88/-12.45    | -12.70/-13.42    | -15.02/-15.03    |
| Θ(7.5°)   | -13.19/-12.79 | -14.34/-13.61  | -13.48/-15.01  | -15.47/-16.10  | -14.91/-15.22  | -15.99/-16.11  | -14.84/-15.71  | -14.73/-14.65    | -14.83/-14.61    | -14.99/-13.65    | -15.50/-15.65    | -15.57/-15.65    | -13.73/-15.35    | -13.31/-15.28    | -15.55/-15.14    | -15.10/-15.98    | -12.75/-10.54    | -9.19/-9.28      | -8.70/-8.64      | -9.30/-10.13     | -10.87/-10.75    | -10.50/-10.78    | -10.23/-11.80    | -12.63/-10.51    |
| Θ(15°)    | -12.25/-14.18 | -11.11/-7.94   | -6.72/-6.58    | -6.66/-6.80    | -6.35/-6.54    | -8.07/-9.52    | -12.10/-15.04  | -14.45/-13.18    | -12.87/-12.42    | -11.58/-10.71    | -10.78/-11.34    | -11.97/-13.51    | -14.10/-14.20    | -14.00/-13.92    | -13.73/-13.69    | -14.36/-15.01    | -15.46/-15.18    | -15.54/-15.59    | -15.90/-14.40    | -13.13/-13.19    | -10.78/-9.04     | -8.06/-8.16      | -9.37/-9.03      | -10.67/-10.45    |
| Θ(22.5°)  | -11.22/-9.00  | -5.71/-3.22    | -2.16/-2.12    | -1.18/-0.50    | -0.30/-0.52    | -0.90/-1.06    | -1.93/-3.36    | -4.45/-6.07      | -7.88/-9.04      | -10.63/-11.07    | -14.99/-14.49    | -12.84/-11.90    | -11.01/-13.60    | -15.48/-15.47    | -9.57/-10.45     | -13.70/-14.68    | -10.32/-7.24     | -5.75/-5.99      | -9.21/-14.88     | -11.04/-7.35     | -5.33/-5.64      | -7.44/-10.76     |                  |                  |
| Θ(30°)    | -9.67/-6.42   | -5.77/-4.27    | -3.69/-3.30    | -1.79/-1.26    | -1.01/-0.41    | 0.400/-1.7     | -0.34/-0.65    | -1.23/-1.80      | -2.82/-3.74      | -4.51/-5.96      | -6.03/-5.65      | -5.37/-5.00      | -5.41/-6.23      | -9.45/-7.35      | -8.16/-7.29      | -6.74/-7.29      | -5.55/-3.00      | -2.30/-4.56      | -8.73/-9.68      | -6.59/-4.44      | -3.22/-3.66      | -6.84/-11.86     |                  |                  |
| Θ(37.5°)  | -9.50/-7.04   | -7.70/-6.65    | -6.22/-7.80    | -4.94/-2.80    | -1.17/-0.72    | -0.43/-0.88    | -1.98/-2.06    | -0.95/-0.12      | -0.34/-0.20      | -0.06/-0.12      | 0.170/-44        | 0.04/-1.33       | -3.51/-5.06      | -6.58/-7.63      | -6.07/-5.82      | -6.82/-6.70      | -8.82/-10.19     | -10.46/-12.56    | -10.33/-4.43     | -4.37/-4.69      | -6.38/-10.07     | -10.16/-7.11     | -6.02/-5.36      | -6.66/-9.59      |
| Θ(45°)    | -5.12/-3.84   | -3.72/-4.75    | -6.95/-4.78    | -2.52/-0.89    | 0.320/-81      | 0.960/-41      | -1.37/-1.55    | 0.101/-38        | 0.95/-9.00       | -1.79/-1.74      | -1.34/-1.60      | -2.02/-3.67      | -4.64/-5.68      | -7.34/-8.25      | -8.37/-10.59     | -10.77/-8.62     | -11.43/-8.41     | -6.37/-4.05      | -2.00/-0.53      | -6.65/-4.89      | -5.39/-7.04      | -9.46/-8.57      | -5.96/-5.11      | -6.22/-6.00      |
| Θ(52.5°)  | -4.32/-4.74   | -5.05/-5.07    | -2.74/-0.45    | 0.220/-84      | 1.832/-21      | 1.720/-96      | 0.501/-08      | 2.412/-47        | 0.95/-0.31       | -0.010/-87       | 1.120/-71        | -0.75/-2.26      | -3.42/-4.94      | -7.18/-9.31      | -10.33/-12.19    | -7.86/-7.35      | -6.57/-6.28      | -5.63/-6.39      | -6.11/-3.01      | -1.62/-3.53      | -1.25/-6.02      | -14.27/-8.55     | -4.79/-8.13      | -8.42/-6.12      |
| Θ(60°)    | -4.07/-5.00   | -3.29/-1.41    | -0.66/-0.74    | 0.161/-23      | 1.872/-70      | 2.742/-22      | 0.880/-92      | 2.013/-05        | 2.170/-39        | 0.390/-88        | 1.541/-41        | 1.721/-65        | 0.84/-0.72       | -2.75/-4.85      | -1.01/-7.99      | -9.80/-15.53     | -8.19/-8.53      | -6.32/-3.32      | -4.35/-8.36      | -6.98/-7.84      | -11.59/-8.58     | -4.16/-3.77      | -2.43/-3.51      | -3.84/-4.41      |
| Θ(67.5°)  | -6.75/-5.46   | -2.89/-2.55    | -2.71/-0.69    | 0.091/-03      | 0.931/-72      | 2.862/-31      | 1.022/-31      | 3.523/-90        | 3.021/-09        | 1.811/-98        | 1.241/-38        | 0.631/-37        | 1.581/-43        | 0.09/-0.81       | -4.88/-2.71      | -3.92/-13.56     | -9.57/-3.55      | -4.53/-5.68      | -2.20/-4.07      | -2.59/-2.36      | -5.36/-6.01      | -8.25/-7.42      | -3.81/-4.42      | -3.36/-3.82      |
| Θ(75°)    | -1.57/-0.28   | 0.61/-0.40     | -0.650/-23     | 0.180/-45      | 0.943/-20      | 3.592/-34      | 0.983/-12      | 3.880/-68        | -0.330/-63       | 2.014/-00        | 2.961/-34        | -1.37/-1.76      | -1.10/-0.37      | 0.592/-04        | -2.71/-1.75      | -4.37/-8.24      | -4.30/-0.20      | -1.690/-48       | 1.293/-61        | 0.53/-3.06       | -4.98/-3.68      | -7.32/-15.42     | -1.59/-1.23      | 0.82/-0.46       |
| Θ(82.5°)  | -1.78/-0.28   | 1.331/-56      | 1.341/-39      | 1.481/-36      | 2.454/-09      | 4.032/-33      | 1.293/-76      | 5.452/-75        | 0.431/-85        | 2.204/-43        | 3.843/-60        | -0.310/-64       | -2.150/-39       | -1.290/-14       | -6.73/-0.77      | -1.85/-4.45      | -0.443/-37       | 2.150/-82        | 2.183/-33        | 1.14/-4.21       | -9.95/-7.17      | -8.88/-8.31      | -0.140/-65       | -0.35/-1.31      |
| Θ(90°)    | -3.72/-2.04   | 1.081/-47      | 1.610/-67      | 2.263/-75      | 4.054/-25      | 2.640/-82      | -0.260/-06     | 2.622/-83        | 1.443/-05        | 3.473/-98        | 3.232/-66        | 2.873/-41        | 2.140/-66        | -3.17/-1.93      | -8.96/-1.18      | -3.31/-8.37      | 0.882/-61        | -1.92/-1.67      | 2.644/-02        | -2.28/-11.81     | -3.51/-11.29     | -9.03/-9.06      | -3.13/-1.42      | -5.77/-7.94      |
| Θ(97.5°)  | -3.08/-3.91   | -2.170/-08     | 1.841/-66      | 2.823/-90      | 3.282/-96      | 1.990/-78      | 1.141/-56      | 2.451/-22        | -0.152/-33       | 2.893/-15        | 1.730/-21        | -4.26/-2.57      | -2.580/-09       | -2.68/-1.32      | -7.28/-6.94      | -6.51/-6.67      | -2.160/-15       | -5.46/-3.39      | 1.001/-59        | -8.42/-6.91      | -7.23/-3.47      | -7.42/-12.73     | -6.61/-2.35      | -1.56/-5.03      |
| Θ(105°)   | -5.67/-3.51   | -2.34/-1.13    | 0.010/-03      | 1.182/-46      | 1.801/-13      | 0.12/-1.19     | -0.620/-10     | 1.090/-15        | -0.671/-17       | 1.360/-55        | -1.71/-2.44      | -4.96/-1.08      | -2.690/-18       | -1.03/-2.52      | -2.24/-4.16      | -7.93/-5.29      | -2.50/-1.16      | -5.77/-3.64      | 0.090/-40        | -10.03/-6.52     | -2.87/-6.33      | -10.47/-8.93     | -6.97/-11.28     | -4.43/-10.79     |
| Θ(112.5°) | -2.57/-1.58   | -2.17/-3.40    | -3.00/-1.49    | 0.271/-43      | 0.46/-0.86     | -0.96/-2.17    | -2.02/-0.49    | 1.320/-33        | -1.66/-1.87      | -2.26/-1.33      | -1.48/-0.72      | -2.94/-3.06      | -6.91/-8.26      | -10.49/-6.62     | -7.08/-3.65      | -5.76/-6.64      | -5.25/-7.51      | -9.63/-6.80      | -4.080/-66       | -9.22/-6.63      | -6.54/-3.57      | -13.26/-8.92     | -13.04/-9.68     | -1.20/-1.31      |
| Θ(120°)   | -2.07/-1.93   | -3.02/-3.70    | -1.35/-0.76    | -0.27/-0.45    | -1.54/-2.84    | -3.41/-3.22    | -1.530/-50     | 1.19/-0.17       | -3.31/-4.32      | -2.320/-55       | 1.511/-05        | -0.28/-1.83      | -3.55/-2.93      | -3.86/-3.45      | -5.13/-6.64      | -10.10/-6.15     | -7.51/-11.18     | -7.35/-7.09      | -1.37/-1.96      | -11.80/-4.68     | -9.05/-6.92      | -12.67/-10.98    | -7.39/-8.19      | -2.88/-0.68      |
| Θ(127.5°) | -3.63/-5.07   | -6.40/-6.24    | -6.48/-4.89    | -4.79/-4.79    | -3.78/-3.20    | -2.77/-2.62    | -2.57/-1.63    | -1.02/-0.78      | -1.22/-2.21      | -0.372/-08       | 3.923/-70        | 2.010/-89        | 0.51/-0.03       | -0.56/-2.65      | -2.39/-3.24      | -8.47/-10.08     | -7.21/-9.34      | -6.57/-6.63      | -3.65/-4.15      | -3.59/-6.73      | -8.22/-8.56      | -7.45/-3.34      | -3.48/-6.22      | -5.68/-2.94      |
| Θ(135°)   | -10.26/-10.85 | -8.84/-6.58    | -4.76/-4.37    | -4.97/-5.42    | -5.05/-6.05    | -7.41/-6.76    | -4.46/-1.69    | -0.050/-88       | 0.580/-12        | 0.301/-75        | 3.634/-37        | 4.322/-35        | 0.191/-190       | -2.60/-2.83      | -3.01/-4.52      | -4.48/-5.34      | -8.95/-11.99     | -3.66/-3.44      | -5.48/-5.89      | -8.36/-9.09      | -11.36/-8.88     | -13.97/-15.49    | -16.14/-14.30    | -15.94/-13.00    |
| Θ(142.5°) | -8.20/-8.29   | -8.41/-7.57    | -6.80/-8.01    | -9.55/-8.26    | -5.84/-4.73    | -4.42/-4.59    | -5.04/-4.37    | -2.04/-0.60      | -0.96/-3.37      | -3.61/-1.25      | 1.363/-84        | 5.274/-38        | 3.111/-25        | -2.72/-2.55      | -1.96/-4.62      | -6.04/-1.47      | -2.67/-5.06      | -7.24/-6.12      | -6.26/-7.95      | -8.18/-5.08      | -4.91/-5.47      | -5.10/-4.57      | -6.66/-7.55      |                  |
| Θ(150°)   | -2.32/-1.16   | -0.48/-0.51    | -1.23/-2.53    | -5.27/-7.99    | -7.68/-5.71    | -6.66/-5.71    | -2.68/-5.04    | -1.01/-1.14      | -2.04/-1.2       | -3.88/-0.93      | -1.69/-1.99      | -1.27/-0.19      | -1.47/-2.38      | -3.91/-4.79      | -6.07/-3.37      | -8.02/-1.13      | -5.31/-3.65      | -2.56/-2.36      | -3.38/-5.24      | -7.86/-9.16      | -10.82/-12.20    | -13.29/-9.39     | -7.94/-9.80      | -6.23/-5.65      |
| Θ(157.5°) | -5.62/-3.53   | -2.84/-3.99    | -5.92/-7.78    | -10.14/-11.04  | -10.12/-8.04   | -6.71/-5.56    | -4.70/-3.75    | -3.20/-2.88      | -2.67/-2.52      | -2.55/-3.07      | -3.12/-3.37      | -3.23/-2.51      | -2.15/-2.76      | -3.48/-4.03      | -3.87/-4.12      | -5.63/-7.16      | -7.80/-6.41      | -5.27/-5.87      | -9.10/-13.01     | -13.91/-15.59    | -12.92/-5.63     | -3.92/-5.58      | -8.25/-10.38     | -11.88/-7.80     |
| Θ(165°)   | -4.34/-3.73   | -3.33/-3.52    | -3.95/-4.72    | -4.70/-4.24    | -3.65/-4.36    | -3.30/-3.10    | -3.33/-4.44    | -6.59/-9.63      | -11.66/-10.77    | -7.95/-6.21      | -5.21/-6.46      | -4.03/-2.98      | -1.55/-0.78      | -0.62/-1.57      | -2.09/-2.95      | -4.74/-6.57      | -7.66/-6.62      | -6.28/-6.51      | -8.08/-10.65     | -11.98/-11.80    | -8.36/-9.58      | -4.49/-4.07      | -4.20/-4.70      |                  |
| Θ(172.5°) | -4.69/-4.20   | -3.40/-3.40    | -4.05/-4.41    | -4.46/-4.13    | -3.85/-3.64    | -3.67/-4.17    | -5.16/-6.04    | -7.21/-7.68      | -6.75/-5.07      | -3.43/-2.57      | -1.73/-1.41      | -3.36/-0.94      | -0.89/-1.53      | -1.73/-1.99      | -2.47/-2.65      | -2.89/-3.43      | -4.25/-5.15      | -5.99/-3.70      | -9.34/-11.71     | -12.98/-11.35    | -10.60/-9.20     | -7.86/-7.30      | -6.64/-9.95      |                  |
| Θ(180°)   | -4.53/-3.90   | -2.77/-2.79    | -2.87/-2.99    | -2.93/-2.99    | -3.57/-4.27    | -4.50/-5.35    | -6.10/-6.67    | -6.71/-6.79      | -6.42/-5.55      | -4.84/-3.74      | -2.97/-2.16      | -1.99/-2.16      | -1.86/-1.76      | -1.96/-1.97      | -1.85/-2.24      | -3.11/-4.07      | -4.58/-5.59      | -7.25/-9.18      | -12.05/-13.60    | -13.95/-13.71    | -10.91/-9.18     | -7.68/-6.38      | -5.30/-4.49      | -4.01/-3.68      |
| Freq(Hz)  | 6.475GPol.    | TotalAnt.1     | +              | -              | +              | -              | +              | -                | +                | -                | +                | -                | +                | -                | +                | -                | +                | -                | +                | -                | +                | -                | +                | -                |
| Gain      | Φ(0°)Φ(7.5°)  | Φ(15°)Φ(22.5°) | Φ(30°)Φ(37.5°) | Φ(45°)Φ(52.5°) | Φ(60°)Φ(67.5°) | Φ(75°)Φ(82.5°) | Φ(90°)Φ(97.5°) | Φ(105°)Φ(112.5°) | Φ(120°)Φ(127.5°) | Φ(135°)Φ(142.5°) | Φ(150°)Φ(157.5°) | Φ(165°)Φ(172.5°) | Φ(180°)Φ(187.5°) | Φ(195°)Φ(202.5°) | Φ(210°)Φ(217.5°) | Φ(225°)Φ(232.5°) | Φ(240°)Φ(247.5°) | Φ(255°)Φ(262.5°) | Φ(270°)Φ(277.5°) | Φ(285°)Φ(292.5°) | Φ(300°)Φ(307.5°) | Φ(315°)Φ(322.5°) | Φ(330°)Φ(337.5°) | Φ(345°)Φ(352.5°) |
| Θ(0°)     | -11.34/-10.76 | -10.78/-11.13  | -12.49/-13.53  | -14.25/-13.82  | -13.26/-12.88  | -12.95/-12.81  | -12.95/-13.04  | -13.98/-14.57    | -15.65/-15.51    | -15.26/-15.00    | -14.89/-14.70    | -14.80/-14.55    | -13.96/-13.50    | -14.18/-15.25    | -15.14/-13.56    | -11.99/-12.15    | -12.69/-12.51    | -11.55/-13.15    | -13.86/-13.88    | -13.51/-13.33    | -14.24/-14.15    | -15.23/-15.21    | -14.47/-14.99    | -13.44/-12.51    |
| Θ(7.5°)   | -15.00/-14.01 | -12.13/-12.53  | -12.14/-11.34  | -10.97/-10.22  | -9.97/-11.01   | -12.01/-12.20  | -12.71/-13.02  | -13.43/-14.55    | -14.40/-14.63    | -14.51/-13.72    | -11.33/-9.84     | -8.38/-7.17      | -7.33/-7.25      | -8.58/-9.38      | -9.38/-9.61      | -8.74/-9.16      | -10.10/-10.47    | -10.89/-11.45    | -11.91/-12.66    | -13.52/-15.49    | -15.87/-15.10    | -15.44/-15.15    | -14.95/-15.01    | -15.67/-15.25    |
| Θ(15°)    | -15.10/-11.03 | -10.06/-9.05   | -8.13/-7.54    | -7.66/-7.57    | -7.23/-6.15    | -4.90/-4.22    | -4.13/-4.39    | -5.65/-6.74      | -7.52/-8.39      | -8.60/-10.45     | -11.11/-10.43    | -9.83/-9.01      | -7.38/-5.48      | -4.72/-4.30      | -4.47/-6.50      | -6.21/-5.79      | -6.48/-6.55      | -6.53/-6.99      | -8.52/-9.45      | -8.43/-7.59      | -6.93/-10.93     | -10.90/-10.55    | -14.09/-15.15    |                  |
| Θ(22.5°)  | -7.97/-5.22   | -5.26/-7.13    | -6.69/-5.71    | -5.71/-6.04    | -6.33/-5.00    | -4.15/-4.32    | -4.48/-3.80    | -3.78/-4.22      | -4.57/-4.60      | -4.85/-5.42      | -5.71/-6.10      | -6.81/-8.17      | -10.41/-11.84    | -10.48/-8.28     | -8.14/-8.31      | -9.34/-10.56     | -9.95/-8.58      | -5.64/-5.29      | -5.64/-5.55      | -6.80/-7.61      | -9.69/-12.17     | -11.02/-7.76     | -6.61/-7.85      | -9.06/-7.79      |
| Θ(30°)    | -8.90/-8.96   | -6.82/-4.33    | -2.97/-3.88    | -5.38/-5.46    | -5.38/-5.14    | -5.74/-5.88    | -3.79/-2.46    | -1.99/-1.79      | -1.56/-1.38      | -1.63/-1.22      | -0.82/-0.94      | -2.14/-3.96      | -4.04/-5.38      | -3.93/-4.15      | -9.45/-11.37     | -7.08/-8.56      | -5.19/-6.40      | -6.50/-7.93      | -7.45/-9.57      | -5.95/-7.70      | -10.27/-9.01     | -4.93/-3.59      | -3.37/-4.42      | -8.10/-10.41     |
| Θ(37.5°)  | -5.86/-5.14   | -5.93/-4.95    | -6.29/-5.58    | -4.07/-2.95    | -2.79/-3.26    | -2.76/-3.26    | -3.25/-1.68    | -1.38/-1.38      | -1.16/-0.88      | -0.84/-0.40      | -0.15/-0.35      | -1.10/-0.65      | -1.05/-2.33      | -3.63/-4.40      | -5.11/-5.62      | -5.69/-9.26      | -8.95/-5.53      | -3.54/-5.42      | -7.97/-3.86      | -2.16/-2.97      | -5.57/-7.84      | -8.33/-3.68      | -1.46/-1.        |                  |



# Antenna Pattern 6GHz

# Appendix D

|            |               |                 |                 |                 |                 |                 |                 |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |
|------------|---------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Θ (15°)    | -7.58/-6.42   | -7.05/-6.59     | -6.77/-6.88     | -6.67/-8.51     | -10.45/-11.83   | -14.15/-15.89   | -13.80/-12.98   | -11.02/-9.36      | -8.33/-8.03       | -6.87/-6.75       | -7.22/-8.06       | -9.24/-9.81       | -9.71/-8.58       | -7.30/-5.67       | -3.74/-3.08       | -2.45/-5.73       | -3.65/-4.55       | -5.48/-5.80       | -6.02/-6.17       | -6.28/-6.81       | -7.98/-9.55       | -10.75/-12.11     | -13.91/-15.37     | -13.59/-12.52     |
| Θ (22.5°)  | -12.02/-8.13  | -6.14/-6.75     | -4.80/-3.78     | -3.75/-4.33     | -5.66/-7.08     | -7.59/-6.82     | -5.43/-4.46     | -5.26/-6.57       | -6.26/-8.42       | -7.72/-6.68       | -6.50/-7.51       | -9.79/-13.06      | -14.74/-14.82     | -6.36/-1.38       | -2.83/-4.22       | -4.94/-5.54       | -4.99/-4.09       | -3.59/-3.38       | -3.36/-4.23       | -5.60/-7.01       | -7.99/-8.89       | -8.93/-8.15       | -9.81/-11.55      | -13.18/-11.99     |
| Θ (30°)    | -6.99/-5.99   | -5.72/-7.62     | -6.52/-4.75     | -5.10/-5.76     | -5.50/-6.21     | -5.74/-4.48     | -3.94/-5.44     | -5.53/-5.05       | -5.08/-6.22       | -8.93/-10.88      | -8.51/-6.68       | -6.44/-6.35       | -6.17/-7.60       | -14.45/-9.40      | -5.20/-4.04       | -3.93/-5.16       | -6.41/-6.92       | -7.29/-7.01       | -6.94/-7.00       | -6.64/-8.92       | -14.20/-13.11     | -11.10/-10.86     | -10.30/-9.84      | -6.66/-5.85       |
| Θ (37.5°)  | -7.20/-7.72   | -8.41/-9.77     | -6.33/-5.20     | -3.91/-1.26     | -1.26/-1.56     | -0.94/-0.05     | 0.12/-0.27      | -1.26/-2.88       | -3.73/-3.49       | -5.04/-10.87      | -15.18/-12.94     | -6.14/-3.51       | -4.87/-9.23       | -11.60/-8.02      | -9.25/-6.84       | -6.04/-7.29       | -6.93/-6.58       | -6.76/-4.26       | -3.47/-4.99       | -4.72/-4.24       | -6.81/-6.55       | -6.33/-6.64       | -7.97/-7.13       | -6.23/-7.88       |
| Θ (45°)    | -15.26/-14.72 | -9.25/-6.58     | -4.66/-2.78     | -0.27/-0.96     | 0.85/-0.07      | -0.47/-0.87     | -0.15/-0.73     | 1.19/-0.83        | 0.45/-0.22        | -0.83/-2.54       | -6.28/-8.46       | -7.67/-5.36       | -4.30/-6.09       | -10.58/-5.62      | -5.94/-6.62       | -12.29/-10.17     | -9.06/-4.47       | -5.59/-9.58       | -5.90/-4.25       | -3.16/-3.01       | -4.50/-7.33       | -8.05/-7.20       | -9.63/-10.90      | -14.87/-15.41     |
| Θ (52.5°)  | -4.15/-4.21   | -2.31/-1.09     | -1.10/-1.13     | 0.46/-1.54      | 2.12/-1.61      | 0.90/-0.45      | 0.18/-0.00      | -0.65/-0.14       | 1.89/-3.33        | 3.24/-1.28        | -3.10/-7.14       | -5.41/-2.37       | -2.27/-4.74       | -2.82/-3.02       | -2.22/-4.89       | -10.17/-12.89     | -15.50/-12.81     | -6.72/-2.74       | -1.99/-3.15       | -5.75/-7.29       | -4.85/-5.04       | -6.26/-4.82       | -5.92/-6.53       | -6.96/-8.01       |
| Θ (60°)    | 0.67/0.53     | 1.70/2.68       | 4.04/4.15       | 3.52/2.54       | 1.77/0.71       | 0.67/1.81       | 3.11/3.59       | 2.25/-0.03        | -0.31/1.50        | 1.96/0.26         | -2.46/-1.65       | -1.89/-1.83       | -3.82/-2.51       | -3.85/-1.64       | -1.24/-2.83       | -6.43/-8.28       | -5.92/-6.18       | -7.49/-7.77       | -7.84/-5.99       | -5.57/-10.55      | -4.46/-1.57       | -1.32/-0.68       | -0.53/-0.26       | -0.80/0.06        |
| Θ (67.5°)  | 2.13/1.95     | 1.39/1.66       | 1.49/2.54       | 2.42/2.46       | 0.89/-2.17      | -0.13/1.83      | 2.71/3.37       | 3.53/3.09         | 2.92/3.43         | 3.26/2.09         | -1.76/-4.72       | -3.29/-4.56       | -4.68/-1.42       | -2.28/-6.33       | -12.08/-8.59      | -6.85/-4.42       | -8.44/-8.45       | -7.52/-10.51      | -13.88/-4.49      | -3.41/-3.97       | -1.76/-0.63       | -1.70/-1.76       | -0.48/-1.47       | 1.13/2.68         |
| Θ (75°)    | 1.85/2.37     | 3.26/2.46       | 1.56/1.97       | 1.66/2.31       | 1.45/0.16       | -0.26/0.53      | 0.77/-0.37      | -0.68/0.34        | 2.92/4.39         | 4.34/3.48         | 0.40/-1.55        | -0.75/-0.08       | -2.17/-2.05       | -1.42/-1.73       | -3.09/-0.87       | -2.89/-7.20       | -7.36/-2.90       | -0.92/-7.64       | -11.08/-5.89      | -1.36/-0.75       | -1.48/-3.85       | -2.44/0.71        | 1.58/1.90         | 2.07/1.95         |
| Θ (82.5°)  | 4.29/5.57     | 5.47/5.19       | 3.49/1.96       | -1.18/0.29      | 0.26/1.97       | 0.27/-0.63      | 0.61/1.26       | 0.67/0.64         | 2.54/4.84         | 4.81/3.32         | 0.62/-1.05        | -1.08/-2.84       | -7.90/-5.94       | -4.92/-6.18       | -8.56/-3.40       | -3.97/0.80        | 0.85/-2.70        | 1.69/0.27         | -2.36/-0.11       | -1.57/-7.63       | -11.13/-3.79      | -1.72/-0.96       | 1.32/2.19         | 2.67/4.08         |
| Θ (90°)    | 4.31/4.64     | 5.14/4.76       | 4.02/1.75       | -1.79/-2.27     | -1.71/0.85      | -0.37/-2.71     | -2.05/-1.56     | -2.86/-0.98       | 1.59/3.25         | 2.78/1.05         | -0.79/-1.38       | -0.45/-0.71       | -1.72/-5.54       | -6.75/-3.03       | -5.61/-3.82       | -3.72/-1.31       | -1.02/-7.77       | 1.01/-1.65        | -9.55/-3.45       | -3.12/-5.82       | -4.20/-4.17       | -2.38/0.40        | 1.03/2.25         | 3.16/4.51         |
| Θ (97.5°)  | 1.93/2.23     | 3.37/3.22       | 3.61/3.02       | 1.63/-1.23      | 1.05/1.60       | 0.45/-1.54      | -1.39/0.99      | -0.42/-1.12       | 2.40/-4.25        | 3.20/-1.67        | 0.68/-2.05        | -3.12/-3.27       | -5.37/-7.31       | -4.94/-2.69       | -5.67/-8.33       | -8.85/-2.93       | -2.20/-5.96       | 3.51/-0.90        | -4.62/-3.71       | -1.31/-4.19       | -2.20/-4.29       | -3.71/-1.34       | -0.61/0.38        | 0.43/2.05         |
| Θ (105°)   | 0.98/2.69     | 2.98/3.20       | 2.55/1.51       | 0.10/-0.15      | 0.98/1.33       | -0.16/-2.36     | -2.77/-3.90     | -2.15/-2.04       | -1.80/-0.42       | 1.23/1.81         | 0.94/-3.68        | -6.06/-5.62       | -3.48/-7.87       | -7.60/-6.23       | -8.24/-10.29      | -8.53/-2.64       | -10.41/-3.17      | 0.18/-3.58        | -6.29/-7.98       | -4.29/-4.18       | -0.27/-1.50       | 1.13/1.74         | 1.39/0.51         | -1.40/2.40        |
| Θ (112.5°) | -0.09/2.27    | 2.00/1.78       | 0.24/-0.75      | -0.82/0.39      | 1.14/-0.32      | -4.38/-7.78     | -3.32/-1.09     | -0.50/-1.50       | -2.56/-4.57       | -6.41/-5.23       | -4.38/-5.98       | -5.57/-3.47       | -1.23/-3.36       | -6.54/-10.17      | -6.30/-8.91       | -3.96/-3.15       | -8.57/-8.96       | -0.63/-1.20       | -7.33/-9.26       | -3.45/-0.95       | 0.02/-2.39        | 1.19/2.79         | 0.92/-0.02        | -1.10/0.85        |
| Θ (120°)   | 0.04/1.98     | 2.14/2.17       | 0.80/-1.07      | -3.28/-3.26     | -2.48/-0.90     | -1.27/-4.50     | -8.72/-6.00     | -5.22/-5.69       | -5.01/-4.78       | -6.77/5.96        | -4.81/-4.30       | -3.78/-5.19       | -7.72/-13.92      | -14.81/-11.82     | -8.50/-4.56       | -4.88/-1.94       | -15.52/-7.60      | -3.02/-6.40       | -6.63/-10.54      | -8.22/-5.51       | -0.43/0.49        | -0.20/0.59        | -1.28/0.99        |                   |
| Θ (127.5°) | 1.75/2.84     | 2.94/2.73       | 0.95/-1.34      | -5.01/-8.14     | -4.68/-1.97     | -1.91/-3.18     | -6.29/-12.69    | -12.49/-8.92      | -6.84/-6.33       | -10.61/-14.59     | -7.24/-5.32       | -5.48/-6.98       | -5.97/-6.85       | -5.00/-9.13       | -8.85/-4.03       | -3.76/-5.95       | -7.08/-5.63       | -2.62/-1.52       | -9.07/-7.49       | -8.41/-12.04      | -5.27/-2.13       | -1.48/0.70        | 0.91/-0.28        | -0.85/-1.13       |
| Θ (135°)   | 4.70/4.96     | 4.92/4.22       | 2.68/0.01       | -2.55/-1.55     | -7.50/-4.48     | -2.74/-3.72     | -5.52/-7.84     | -10.32/-10.26     | -9.24/-8.48       | -7.70/-8.85       | -13.71/-15.05     | -14.68/-14.56     | -12.82/-7.36      | -5.97/-8.09       | -10.27/-9.66      | -8.10/-12.45      | -8.58/-6.62       | -5.44/-3.28       | -2.83/-5.17       | -15.41/-8.01      | -4.09/-1.63       | -1.26/-0.65       | 0.37/1.06         | 2.98/4.07         |
| Θ (142.5°) | 4.21/4.14     | 4.24/4.09       | 3.13/1.94       | -0.18/-2.39     | -6.80/-7.76     | -8.12/-7.20     | -5.57/-4.49     | -3.43/-3.23       | -1.95/-1.11       | -7.75/-9.82       | -11.03/-12.18     | -10.64/-7.35      | -6.86/-9.24       | -9.07/-5.71       | -1.94/-8.74       | -7.07/-3.45       | -2.97/-2.53       | -2.22/-4.72       | -15.18/-9.75      | -4.56/-4.92       | -1.23/-13.83      | -6.26/-6.14       | -3.01/-0.13       | 1.87/3.57         |
| Θ (150°)   | 1.66/1.97     | 2.51/2.53       | 1.88/0.63       | -1.52/-3.95     | -5.96/-5.61     | -3.65/-1.85     | -1.96/-3.54     | -5.19/-7.26       | -9.39/-10.82      | -8.42/-5.41       | -3.49/-3.70       | -5.49/-7.29       | -9.99/-11.64      | -7.68/-5.98       | -6.37/-6.83       | -5.57/-3.29       | -3.09/-5.09       | -5.58/-8.27       | -9.93/-9.00       | -6.37/-6.55       | -8.13/-8.29       | -7.59/-7.64       | -5.16/-2.96       | -1.73/-0.38       |
| Θ (157.5°) | -0.08/0.27    | 0.70/0.55       | -0.46/-1.78     | -3.44/-5.88     | -8.83/-8.91     | -7.02/-6.21     | -6.76/-7.74     | -8.32/-10.82      | -13.83/-15.21     | -12.26/-7.34      | -3.94/-2.13       | -1.61/-2.95       | -6.87/-8.91       | -8.79/-9.11       | -10.46/-8.26      | -6.18/-5.56       | -6.54/-7.80       | -8.36/-6.93       | -8.66/-6.54       | -3.57/-3.32       | -2.70/-2.86       | -4.58/-6.36       | -6.95/-6.08       | -4.89/-2.86       |
| Θ (165°)   | -9.59/-9.16   | -7.87/-7.38     | -8.55/-10.30    | -11.92/-14.34   | -15.06/-14.52   | -12.09/-11.33   | -10.55/-10.44   | -10.26/-9.32      | -9.23/-9.58       | -9.93/-6.18       | -5.29/-3.50       | -2.87/-3.24       | -4.31/-4.65       | -5.35/-8.22       | -13.98/-14.15     | -8.97/-6.26       | -5.49/-5.19       | -4.78/-4.21       | -3.38/-2.54       | -2.56/-2.55       | -2.49/-3.23       | -5.33/-7.47       | -9.97/-9.97       | -11.51/-12.03     |
| Θ (172.5°) | -7.09/-7.52   | -8.45/-9.64     | -10.01/-10.51   | -13.46/-14.83   | -15.73/-14.86   | -14.67/-15.04   | -16.02/-15.10   | -15.94/-15.43     | -13.93/-11.01     | -9.94/-10.41      | -11.14/-14.57     | -15.27/-15.72     | -13.58/-12.03     | -7.71/-5.05       | -3.55/-2.68       | -2.38/-2.23       | -2.49/-2.93       | -3.23/-3.39       | -3.48/-3.60       | -3.47/-3.23       | -3.55/-3.74       | -3.90/-4.64       | -5.55/-5.55       |                   |
| Θ (180°)   | -4.61/-4.17   | -3.46/-3.89     | -4.33/-5.72     | -8.04/-7.74     | -6.72/-6.45     | -7.29/-7.42     | -6.87/-1.09     | -7.33/-6.83       | -5.97/-4.31       | -3.20/-2.76       | -2.77/-3.13       | -4.25/-4.46       | -4.80/-5.04       | -5.25/-5.61       | -5.63/-5.27       | -4.98/-4.90       | -4.45/-4.37       | -4.57/-5.21       | -5.76/-5.98       | -6.02/-5.77       | -4.97/-4.25       | -4.18/-4.04       | -4.03/-4.58       | -4.67/-4.53       |
| Freq(Hz)   | 6.475GPol.    | TotalAnt.2      | -               | -               | -               | -               | -               | -                 | -                 | -                 | -                 | -                 | -                 | -                 | -                 | -                 | -                 | -                 | -                 | -                 | -                 | -                 | -                 | -                 |
| Gain       | Φ(0°)/Φ(7.5°) | Φ(15°)/Φ(22.5°) | Φ(30°)/Φ(37.5°) | Φ(45°)/Φ(52.5°) | Φ(60°)/Φ(67.5°) | Φ(75°)/Φ(82.5°) | Φ(90°)/Φ(97.5°) | Φ(105°)/Φ(112.5°) | Φ(120°)/Φ(127.5°) | Φ(135°)/Φ(142.5°) | Φ(150°)/Φ(157.5°) | Φ(165°)/Φ(172.5°) | Φ(180°)/Φ(187.5°) | Φ(195°)/Φ(202.5°) | Φ(210°)/Φ(217.5°) | Φ(225°)/Φ(232.5°) | Φ(240°)/Φ(247.5°) | Φ(255°)/Φ(262.5°) | Φ(270°)/Φ(277.5°) | Φ(285°)/Φ(292.5°) | Φ(300°)/Φ(307.5°) | Φ(315°)/Φ(322.5°) | Φ(330°)/Φ(337.5°) | Φ(345°)/Φ(352.5°) |
| Θ (0°)     | -15.63/-15.59 | -15.04/-15.79   | -15.50/-16.19   | -15.22/-13.94   | -14.75/-14.15   | -14.31/-14.05   | -15.80/-15.08   | -15.97/-15.54     | -15.72/-15.71     | -15.04/-14.97     | -15.49/-15.26     | -15.23/-14.81     | -15.48/-15.45     | -15.60/-15.54     | -15.76/-16.25     | -15.29/-14.55     | -15.37/-14.57     | -15.70/-15.51     | -15.25/-15.58     | -15.80/-14.90     | -14.91/-15.28     | -16.02/-15.03     | -15.03/-16.07     | -15.22/-14.71     |
| Θ (7.5°)   | -11.92/-12.77 | -13.12/-13.64   | -13.15/-11.28   | -11.45/-11.28   | -13.94/-13.35   | -14.13/-14.05   | -14.20/-15.40   | -14.34/-13.11     | -13.76/-14.44     | -13.61/-14.25     | -13.90/-12.24     | -13.46/-15.55     | -14.96/-14.36     | -13.29/-11.73     | -11.26/-10.97     | -10.79/-10.95     | -10.58/-10.27     | -10.10/-10.60     | -11.23/-12.13     | -12.55/-13.15     | -14.04/-16.63     | -13.87/-14.21     | -12.30/-11.66     |                   |
| Θ (15°)    | -9.12/-7.18   | -5.94/-6.00     | -6.04/-6.19     | -6.15/-6.04     | -5.96/-6.70     | -7.06/-7.49     | -8.57/-9.08     | -8.91/-8.04       | -8.53/-11.09      | -12.66/-12.55     | -12.67/-14.36     | -13.98/-11.98     | -11.07/-11.62     | -13.25/-12.22     | -9.67/-7.17       | -6.00/-5.54       | -5.58/-5.77       | -5.98/-6.87       | -8.75/-10.44      | -12.21/-12.46     | -12.16/-13.04     | -12.72/-12.06     | -13.24/-11.68     | -11.60/-9.38      |
| Θ (22.5°)  | -6.42/-6.56   | -5.82/-6.38     | -7.07/-8.26     | -7.29/-6.03     | -6.24/-5.47     | -4.85/-6.20     | -8.05/-9.27     | -9.43/-9.17       | -10.34/-13.83     | -13.73/-10.79     | -9.51/-7.64       | -4.72/-6.47       | -6.57/-8.46       | -8.72/-7.50       | -5.12/-2.32       | -0.91/-1.70       | -3.99/-5.98       | -6.62/-5.55       | -5.78/-6.45       | -7.28/-7.88       | -10.10/-9.36      | -7.80/-7.11       | -6.26/-6.49       | -7.14/-6.88       |
| Θ (30°)    | -11.92/-12.40 | -11.37/-13.14   | -12.67/-12.09   | -8.68/-6.08     | -4.13/-2.95     | -3.33/-5.37     | -7.60/-8.56     | -8.75/-6.94       | -3.96/-3.24       | -4.90/-6.89       | -9.98/-7.65       | -3.65/-1.79       | -1.68/-3.92       | -10.44/-11.82     | -4.62/-1.75       | -1.52/-2.94       | -6.42/-9.21       | -4.97/-2.89       | -3.96/-7.47       | -10.65/-12.19     | -10.03/-7.32      | -4.31/-3.44       | -4.72/-7.81       | -10.02/-11.15     |
| Θ (37.5°)  | -8.99/-11.83  | -11.73/-8.25    | -6.18/-3.34     | -0.82/0.84      | 1.55/-1.22      | 0.33/-0.80      | -0.54/-0.46     | -1.10/-1.41       | -0.89/-2.30       | -6.67/-9.82       | -5.86/-3.68       | -6.54/-14.57      | -13.86/-7.24      | -5.28/-4.77       | -4.51/-6.75       | -8.67/-6.69       | -3.64/-2.81       | -6.48/-10.38      | -10.74/-5.56      | -2.28/-2.28       | -3.04/-5.44       | -9.64/-9.41       | -12.25/-11.59     |                   |
| Θ (45°)    | -5.22/-5.17   | -3.88/-2.40     | -1.76/0.33      | 1.97/2.80       | 3.12/2.83       | 1.82/0.89       | 0.65/1.11       | 2.11/2.38         | 1.15/0.16         | -0.49/-3.22       | -6.18/-10.84      | -9.99/-2.22       | -2.77/-6.12       | -4.48/-2.50       | -3.99/-6.15       | -11.93/-11.45     | -8.68/-4.23       | -2.40/-3.12       | -5.35/-6.27       | -3.57/-2.65       | -2.56/-5.86       | -9.17/-8.25       | -6.46/-5.11       | -7.03/-7.88       |
| Θ (52.5°)  | -1.70/-0.76   | 0.16/0.18       | 0.74/1.65       | 2.04/2.09       | 1.96/1.82       | 1.85/2.09       | 1.54/-1.22      | 1.34/-1.92        | 2.49/1.43         | 0.23/-0.21        | -6.31/-7.08       | -5.10/-5.22       | -2.60/-3.21       | -5.13/-9.13       | -8.65/-8.76       | -10.34/-5.38      | -5.04/-5.43       | -7.25/-9.01       | -4.43/-4.85       | -6.22/-8.13       | -5.34/-3.84       | -1.36/-1.14       | 2.39/-1.54        |                   |
| Θ (60°)    | 1.97/1.31     | 0.72/0.11       | -0.27/0.52      | 1.39/1.67       | 0.91/-1.27      | -0.25/2.39      | 3.07/2.29       | 1.92/3.06         | 2.64/0.60         | -0.35/-1.39       | -4.88/-6.20       | -3.58/-4.63       | -6.21/-4.78       | -5.50/-3.72       | -4.56/-11.19      | -6.73/-6.21       | -7.37/-9.90       | -7.10/-5.40       | -8.24/-8.18       | -9.21/-9.29       | -6.75/-1.71       | -2.16/-2.07       | -1.29/0.05        | 0.45/1.51         |
| Θ (67.5°)  | 1.88/-1.19    | 1.59/0.81       | 0.10/0.39       | -0.22/0.61      | -0.81/-2.02     | -0.38/1.88      | 1.57/0.22       | -0.85/-3.44       | 2.65/3.70         | 2.45/0.67         | -2.65/-4.58       | -3.36/-9          |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |



# Antenna Pattern 6GHz

# Appendix D

|           |               |                |                |                |                |                |                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
|-----------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Θ(67.5°)  | -3.28/-3.46   | -1.99/-0.74    | -0.24/-1.03    | -1.34/-0.64    | -0.05/-0.53    | -1.72/-2.78    | -3.71/-5.13    | -6.33/-6.37      | -5.58/-3.64      | -3.95/-2.37      | -0.29/-0.05      | -0.76/-1.91      | -3.27/-4.26      | -6.76/-8.12      | -4.42/-3.78      | -6.68/-10.48     | -5.02/-2.91      | -2.11/-6.43      | -5.12/-2.87      | -1.91/-3.04      | -6.36/-9.58      | -9.90/-4.81      | -3.07/-2.18      | -1.81/-2.60      |
| Θ(75°)    | -5.16/-4.65   | -4.97/-4.74    | -4.98/-4.50    | -4.53/-4.54    | -4.53/-4.54    | -5.01/-4.05    | -2.23/-2.46    | -3.32/-4.78      | -6.21/-9.00      | -7.74/-5.39      | -4.74/-4.93      | -5.51/-6.20      | -9.92/-10.43     | -8.43/-7.90      | -15.03/-10.18    | -10.23/-10.48    | -4.97/-1.72      | -3.97/-4.87      | -11.49/-10.15    | -8.97/-6.19      | -6.62/-7.31      | -11.05/-9.40     | -6.74/-5.41      | -5.90/-5.04      |
| Θ(82.5°)  | -8.34/-4.71   | -2.23/-1.25    | -1.49/-2.81    | -3.88/-3.68    | -2.76/-4.13    | -6.32/-11.19   | -10.07/-3.33   | -0.34/-1.04      | -5.57/-9.90      | -9.47/-5.33      | -3.60/-2.69      | -11.72/-11.18    | -14.72/-11.18    | -10.64/-13.66    | -8.35/-4.53      | -3.29/-10.22     | -6.30/-4.40      | -5.75/-7.36      | -8.18/-10.64     | -9.70/-6.83      | -5.47/-6.62      | -12.71/-8.64     | -5.20/-3.90      | -7.51/-6.49      |
| Θ(90°)    | -10.22/-12.50 | -8.58/-3.48    | -0.07/-0.62    | 0.90/-3.00     | -0.05/-0.35    | -1.27/-2.05    | -1.47/-1.83    | -2.01/-3.70      | -5.26/-5.54      | -4.87/-4.02      | -2.83/-1.36      | -0.76/-1.27      | -4.19/-3.77      | -9.39/-13.70     | -10.68/-11.11    | -10.17/-11.66    | -6.87/-4.37      | -8.04/-7.08      | -12.86/-10.47    | -11.80/-11.52    | -8.01/-8.04      | -7.52/-4.42      | -4.15/-7.43      | -10.42/-13.30    |
| Θ(97.5°)  | -7.08/-9.09   | -9.78/-9.22    | -7.43/-2.93    | 0.73/-2.58     | 3.01/-1.28     | -0.65/-1.80    | -3.54/-6.64    | -7.98/-7.76      | -5.40/-3.92      | -1.87/-0.20      | 0.78/-1.19       | -3.41/-4.42      | -7.95/-12.41     | -10.03/-9.18     | -4.65/-7.09      | -7.74/-9.55      | -10.97/-12.24    | -5.00/-12.93     | -10.64/-7.67     | -7.44/-8.01      | -4.86/-6.33      | -6.74/-7.91      | -9.74/-8.77      | -6.36/-6.00      |
| Θ(105°)   | -6.43/-7.05   | -8.76/-9.56    | -9.21/-5.72    | -3.12/-2.56    | -2.70/-1.87    | -1.29/-1.50    | -2.60/-7.58    | -8.80/-6.26      | -2.17/-0.10      | 1.77/-1.33       | -1.22/-5.56      | -5.96/-3.48      | -6.21/-2.79      | -6.21/-9.10      | -11.78/-10.05    | -8.90/-10.50     | -9.76/-2.95      | 0.34/-1.41       | -4.87/-6.15      | -10.71/-6.62     | -5.61/-6.25      | -5.47/-6.62      | -12.71/-7.84     | -5.70/-4.52      |
| Θ(112.5°) | -5.44/-5.47   | -7.72/-8.95    | -11.16/-13.63  | -7.65/-3.98    | -2.17/-3.89    | -5.29/-6.29    | -5.90/-3.88    | -2.55/-0.45      | 0.74/-1.58       | 0.15/-2.25       | -4.10/-4.63      | -5.37/-4.26      | -6.25/-7.11      | -7.08/-7.75      | -6.99/-5.28      | -9.67/-4.51      | -2.72/-2.81      | -5.48/-7.01      | -10.29/-7.72     | -7.71/-5.38      | -3.77/-4.02      | -1.45/-1.58      | -4.50/-6.16      | -5.69/-5.29      |
| Θ(120°)   | -1.74/-2.05   | -1.93/-2.66    | -3.70/-4.24    | -4.45/-4.30    | -3.24/-1.68    | -1.43/-0.56    | 0.39/-1.15     | 1.65/-0.33       | 0.39/-0.92       | 0.03/-0.47       | -0.27/-2.69      | -3.77/-4.55      | -4.09/-4.33      | -5.64/-9.55      | -10.71/-6.10     | -9.46/-13.40     | -15.02/-8.84     | -6.21/-4.09      | -7.74/-8.19      | -9.31/-4.76      | -6.46/-10.43     | -2.81/-0.31      | -1.88/-1.79      | -0.57/-1.44      |
| Θ(127.5°) | 0.23/-1.14    | -0.51/-1.31    | -0.25/-0.09    | -0.20/-1.35    | -3.03/-2.67    | -1.68/-0.74    | 1.66/-2.41     | 2.27/-1.48       | 0.55/-0.20       | -0.75/-1.83      | -2.14/-1.55      | -1.52/-0.84      | -5.32/-6.82      | -11.41/-7.65     | -10.76/-10.83    | -4.43/-9.08      | -2.54/-5.32      | -4.24/-5.32      | -4.93/-7.02      | -6.05/-8.96      | -13.23/-10.72    | -5.34/-5.61      | -5.16/-2.49      | -0.69/-1.41      |
| Θ(135°)   | -4.81/-3.66   | -2.57/-1.79    | -1.59/-0.67    | 0.18/-0.84     | 0.90/-0.65     | 0.49/-1.06     | 1.90/-2.16     | 2.13/-1.86       | 1.43/-1.71       | 1.74/-0.51       | -1.17/-1.17      | -1.24/-1.32      | -2.18/-3.38      | -6.50/-11.33     | -8.55/-8.59      | -7.46/-5.92      | -4.69/-2.07      | -1.81/-10.57     | -6.76/-9.21      | -15.38/-8.35     | -10.64/-11.49    | -6.49/-4.17      | -5.82/-6.81      | -5.25/-6.51      |
| Θ(142.5°) | -2.93/-1.69   | -2.06/-2.48    | -2.07/-0.57    | 0.45/-1.40     | 1.96/-2.67     | 3.31/-3.26     | 2.99/-0.02     | 3.00/-2.23       | 1.77/-2.16       | 1.89/-0.38       | -2.42/-5.68      | -4.90/-2.81      | -1.48/-1.44      | -4.06/-4.48      | -2.57/-3.31      | -1.35/-0.81      | -4.42/-12.69     | -7.37/-5.78      | -4.96/-3.62      | -1.25/-1.70      | -2.86/-5.31      | -8.71/-6.14      | -4.16/-2.64      |                  |
| Θ(150°)   | -1.70/-0.84   | 0.08/-0.14     | -0.01/-0.56    | -0.35/-0.44    | 1.51/-2.10     | 1.97/-1.21     | 0.04/-0.06     | -0.76/-0.97      | -0.11/-0.26      | -0.43/-2.49      | -5.75/-8.87      | -7.65/-4.45      | -3.20/-2.95      | -3.71/-6.28      | -4.74/-4.46      | -3.76/-4.82      | -2.62/-1.43      | -3.20/-5.85      | -6.07/-4.63      | -5.03/-8.45      | -11.25/-12.94    | -13.28/-11.35    | -12.60/-7.86     | -3.77/-2.37      |
| Θ(157.5°) | 3.26/-3.42    | 3.40/-3.15     | 2.76/-2.74     | 2.16/-0.86     | -0.55/-1.61    | -1.66/-1.06    | -0.52/-0.68    | -1.37/-1.90      | -2.23/-2.84      | -4.68/-7.99      | -13.36/-13.46    | -9.32/-6.14      | -4.71/-3.76      | -2.16/-1.26      | -0.61/-0.58      | -1.56/-2.57      | -2.58/-3.08      | -4.85/-6.05      | -5.49/-5.22      | -6.20/-6.08      | -4.20/-2.51      | -0.42/-1.41      | 2.56/-3.30       | 3.80/-3.97       |
| Θ(165°)   | 0.86/-0.64    | 0.91/-0.85     | 0.36/-0.28     | -1.15/-1.64    | -1.79/-1.51    | -1.15/-1.16    | -1.10/-1.24    | -1.39/-2.23      | -3.40/-5.51      | -8.57/-12.92     | -15.60/-14.11    | -10.91/-8.65     | -5.84/-4.18      | -2.84/-2.42      | -2.72/-3.87      | -5.92/-7.50      | -8.57/-10.66     | -13.97/-14.27    | -14.38/-15.39    | -13.40/-7.71     | -4.15/-1.89      | -0.61/-0.43      | 1.01/-0.77       | 0.78/-0.83       |
| Θ(172.5°) | 0.57/-1.17    | 1.39/-3.36     | 0.79/-0.10     | -0.43/-1.08    | -1.52/-1.69    | -1.81/-1.97    | -2.43/-3.50    | -5.18/-7.41      | -9.00/-10.15     | -11.67/-12.54    | -13.12/-11.80    | -10.34/-9.15     | -8.60/-9.15      | -7.79/-7.67      | -7.61/-7.75      | -8.27/-9.40      | -10.88/-11.64    | -11.03/-10.47    | -10.11/-10.25    | -10.84/-9.95     | -8.37/-6.99      | -5.46/-4.21      | -2.57/-1.19      | -0.27/-0.33      |
| Θ(180°)   | -7.71/-8.06   | -8.18/-8.99    | -11.27/-11.79  | -14.12/-15.53  | -15.17/-12.85  | -11.20/-9.77   | -9.78/-11.52   | -13.54/-13.38    | -11.30/-9.72     | -8.69/-8.32      | -8.33/-9.01      | -9.34/-9.41      | -9.41/-9.96      | -11.20/-11.95    | -12.20/-12.90    | -13.38/-13.90    | -13.77/-13.74    | -13.85/-13.47    | -13.59/-13.06    | -12.94/-13.58    | -13.27/-12.68    | -11.81/-11.47    | -11.52/-11.42    | -11.37/-12.10    |
| Freq(Hz)  | 6.1750GPol.   | TotalAnt.3     | -              | -              | -              | -              | -              | -                | -                | -                | -                | -                | -                | -                | -                | -                | -                | -                | -                | -                | -                | -                | -                | -                |
| Gain      | Φ(0°)Φ(7.5°)  | Φ(15°)Φ(22.5°) | Φ(30°)Φ(37.5°) | Φ(45°)Φ(52.5°) | Φ(60°)Φ(67.5°) | Φ(75°)Φ(82.5°) | Φ(90°)Φ(97.5°) | Φ(105°)Φ(112.5°) | Φ(120°)Φ(127.5°) | Φ(135°)Φ(142.5°) | Φ(150°)Φ(157.5°) | Φ(165°)Φ(172.5°) | Φ(180°)Φ(187.5°) | Φ(195°)Φ(202.5°) | Φ(210°)Φ(217.5°) | Φ(225°)Φ(232.5°) | Φ(240°)Φ(247.5°) | Φ(255°)Φ(262.5°) | Φ(270°)Φ(277.5°) | Φ(285°)Φ(292.5°) | Φ(300°)Φ(307.5°) | Φ(315°)Φ(322.5°) | Φ(330°)Φ(337.5°) | Φ(345°)Φ(352.5°) |
| Θ(0°)     | 4.694/4.43    | 4.324/2.29     | 4.634/9.0      | 5.095/1.7      | 5.125/2.6      | 5.265/1.0      | 5.024/9.3      | 5.005/1.2        | 5.074/9.3        | 4.804/5.5        | 4.474/3.5        | 4.264/5.1        | 4.634/7.3        | 4.895/2.0        | 5.515/7.1        | <b>5.976/1.0</b> | 5.936/0.3        | 5.705/7.1        | 5.465/2.9        | 5.044/9.3        | 4.874/8.2        | 4.774/7.1        | 4.884/7.4        |                  |
| Θ(7.5°)   | 4.344/3.46    | 4.304/1.8      | 4.304/5.8      | 4.895/0.5      | 5.255/3.2      | 5.094/7.5      | 4.644/7.2      | 4.754/8.0        | 4.684/6.3        | 4.374/0.2        | 4.003/5.8        | 3.663/8.0        | 3.813/9.4        | 4.064/1.7        | 4.054/4.1        | 4.544/4.8        | 4.935/1.3        | 5.275/2.3        | 5.044/7.7        | 4.754/5.9        | 4.274/6.4        | 4.664/6.4        | 4.614/7.0        | 4.774/4.8        |
| Θ(15°)    | 3.203/3.2     | 3.093/0.4      | 3.203/3.4      | 3.253/4.0      | 3.643/4.0      | 3.334/0.6      | 4.294/1.4      | 4.184/1.6        | 3.903/7.0        | 3.593/3.6        | 3.232/9.0        | 2.712/4.7        | 2.432/4.6        | 2.612/8.6        | 3.003/3.6        | 3.804/0.4        | 4.504/8.1        | 4.864/9.0        | 4.894/9.2        | 4.433/8.6        | 3.473/2.0        | 3.002/9.6        | 2.912/9.5        | 2.952/9.4        |
| Θ(22.5°)  | 1.500/8.4     | 0.620/7.5      | 1.131/5.6      | 1.982/3.2      | 2.222/2.1      | 2.592/5.2      | 2.111/7.9      | 1.631/5.6        | 1.401/2.6        | 1.241/8.0        | 2.602/7.3        | 2.952/6.5        | 2.532/1.1        | 1.640/9.1        | 0.270/0.7        | 0.751/4.3        | 2.533/2.2        | 3.914/3.9        | 4.353/8.1        | 2.902/1.7        | 1.871/7.9        | 1.841/7.8        | 1.821/5.7        | 1.441/7.4        |
| Θ(30°)    | -0.94/-1.57   | -1.45/-0.90    | -0.71/-0.91    | -1.02/-1.28    | -1.36/-0.93    | -0.72/-0.70    | 3.302/9.2      | 1.040/9.2        | 1.271/6.3        | 2.132/8.6        | 3.653/9.5        | 4.063/6.7        | 3.242/4.6        | 1.150/0.1        | -0.53/-0.61      | -0.66/-1.14      | -1.22/-0.49      | 0.51/-2.28       | 1.642/0.3        | 1.420/4.1        | -0.240/4.1       | 0.600/6.3        | 0.14/-0.73       | -1.50/-0.83      |
| Θ(37.5°)  | -2.77/-1.85   | -1.77/-1.96    | -2.84/-3.69    | -2.77/-1.90    | -1.20/-0.01    | 0.260/0.3      | -0.98/-1.43    | -1.46/-1.46      | -0.790/0.1       | 0.60/-1.41       | 1.57/-1.96       | 1.41/-1.24       | 1.79/-1.55       | 0.63/-0.24       | -1.24/-2.01      | -2.09/-3.44      | -5.49/-4.89      | -3.22/-2.63      | -1.82/-0.01      | 0.70/-0.36       | -1.94/-3.18      | -2.38/-1.97      | -2.70/-1.92      | -3.03/-2.80      |
| Θ(45°)    | -1.86/-1.05   | -1.63/-1.62    | -1.27/-0.75    | 0.180/2.7      | 1.200/7.8      | -0.66/-1.84    | 4.28/-9.23     | -8.25/-5.61      | -6.99/-10.41     | -6.69/-1.87      | -0.260/5.7       | 0.271/0.1        | 1.621/8.1        | 0.04/-1.91       | -3.15/-2.41      | -4.13/-9.22      | -9.95/-5.07      | -4.06/-3.48      | -1.72/-2.37      | -3.73/-3.30      | -4.46/-3.56      | -2.39/-1.97      | -2.84/-3.46      | -3.72/-2.49      |
| Θ(52.5°)  | -1.41/-0.59   | 0.51/-3.4      | 1.93/-1.90     | 1.63/-1.63     | 1.781/2.7      | 0.22/-2.35     | -0.56/-1.74    | -6.04/-6.82      | -11.94/-13.16    | -5.60/-1.22      | 0.230/3.9        | -0.90/-2.20      | -3.62/-3.64      | -2.70/-4.12      | -6.00/-8.04      | -5.04/-3.85      | -2.81/-3.44      | -3.78/-1.49      | -2.36/-6.00      | -6.31/-3.62      | -4.92/-4.58      | -8.64/-5.83      | -2.96/-1.61      |                  |
| Θ(60°)    | -0.040/6.4    | 1.31/-1.68     | 1.99/-2.09     | 2.132/7.6      | 2.320/7.9      | -0.94/-3.88    | -4.75/-2.63    | -2.71/-2.85      | -5.50/-4.83      | -2.17/-0.48      | 0.020/3.9        | -0.22/-1.26      | -3.14/-5.76      | -3.45/-3.02      | -2.41/-3.73      | -5.98/-10.18     | -8.31/-8.40      | -6.00/-13.53     | -11.72/-11.43    | -11.73/-8.42     | -3.62/-1.31      | -1.73/-4.48      | -4.60/-3.38      | -0.67/-0.70      |
| Θ(67.5°)  | -1.15/-1.28   | -1.96/-2.59    | -2.09/-1.30    | -0.30/-1.11    | -3.85/-4.51    | -6.13/-4.19    | -0.87/-0.35    | -0.77/-2.76      | -4.11/-3.16      | -2.21/-1.74      | -2.93/-4.08      | -4.35/-6.50      | -6.66/-10.32     | -10.46/-5.86     | -5.73/-5.30      | -5.01/-2.35      | -3.30/-6.27      | -7.16/-4.70      | -3.46/-3.36      | -2.27/-3.35      | -6.10/-4.12      | -2.05/-1.25      | -1.36/-0.90      |                  |
| Θ(75°)    | -6.14/-5.16   | -3.93/-4.02    | -4.37/-4.44    | -7.18/-7.62    | -8.38/-13.90   | -3.18/-0.50    | 0.060/3.6      | -3.26/-5.43      | -7.39/-6.54      | -6.41/-6.70      | -7.88/-6.20      | -9.02/-13.56     | -10.52/-9.26     | -10.71/-12.96    | -5.05/-6.41      | -5.73/-2.97      | -5.40/-6.33      | -4.88/-4.93      | -3.48/-3.65      | -4.92/-8.80      | -5.91/-1.45      | -1.53/-2.82      | -5.08/-6.09      |                  |
| Θ(82.5°)  | -4.91/-0.47   | -4.18/-3.42    | -2.59/-2.96    | -3.02/-5.78    | -7.94/-7.43    | -3.67/-0.49    | -0.82/-1.98    | -0.300/-6.68     | 0.41/-1.22       | -4.03/-6.52      | -5.58/-4.91      | -5.03/-6.13      | -6.56/-5.14      | -6.40/-8.17      | -11.29/-12.60    | -15.81/-12.65    | -4.64/-3.43      | -3.07/-7.07      | -11.53/-6.40     | -6.54/-4.49      | -9.86/-11.39     | -7.49/-6.62      | -5.28/-6.45      | -5.69/-4.47      |
| Θ(90°)    | 4.09/-1.99    | -0.35/-1.11    | -0.84/-1.71    | -1.23/-1.78    | -1.240/-3.9    | 1.822/3.3      | 1.41/-0.83     | -1.88/-1.46      | -1.96/-1.48      | -3.49/-1.98      | -1.27/-0.89      | -1.47/-2.65      | -5.69/-9.97      | -15.11/-11.78    | -10.88/-10.92    | -12.13/-9.78     | 4.42/-2.19       | -4.25/-11.33     | -5.66/-14.52     | -8.98/-7.26      | -9.01/-13.25     | -4.69/-3.77      | -4.60/-6.51      | -7.51/-6.17      |
| Θ(97.5°)  | -9.05/-7.35   | -4.44/-3.58    | -2.55/-2.98    | 0.280/0.3      | -0.43/-2.51    | -1.11/-1.38    | -0.97/-0.37    | -1.06/-3.06      | -4.02/-4.66      | -3.21/-0.81      | -0.03/-1.08      | -2.41/-4.13      | -5.36/-8.93      | -14.92/-12.59    | -7.04/-6.81      | -10.00/-10.72    | -13.92/-8.65     | -4.00/-5.44      | -6.10/-3.52      | -5.85/-9.99      | -6.02/-8.61      | -5.32/-5.61      | -6.95/-8.81      |                  |
| Θ(105°)   | -7.47/-9.63   | -10.06/-10.31  | -5.73/-4.09    | -3.32/-3.57    | -2.65/-2.52    | -1.86/-2.06    | -3.21/-12.54   | -11.24/-6.90     | -5.64/-2.79      | -0.930/2.3       | -0.82/-3.18      | -9.72/-10.83     | -5.99/-4.04      | -8.86/-9.48      | -10.68/-8.97     | -10.23/-10.82    | -6.76/-4.58      | -1.63/-2.41      | -5.95/-9.75      | -14.09/-11.69    | -11.01/-6.83     | -5.29/-8.90      | -12.66/-10.73    | -7.00/-6.65      |
| Θ(112.5°) | -5.75/-7.47   | -9.81/-13.04   | -11.49/-6.87   | -6.65/-3.92    | -3.17/-1.57    | -4.13/-2.56    | -6.49/-4.50    | -3.35/-1.31      | 0.85/-1.67       | 2.050/3.3        | -2.07/-3.64      | -3.12/-4.14      | -6.24/-9.30      | -3.96/-6.30      | -8.71/-8.28      | -5.87/-1.77      | -1.94/-3.49      | -5.41/-7.02      | -15.16/-9.94     | -9.79/-5.67      | -4.73/-6.35      | -5.16/-5.90      | -10.41/-5.59     | -5.66/-5.92      |
| Θ(120°)   | -1.76/-2.12   | -3.91/-4.75    | -6.63/-7.37    | -5.41/-3.21    | 0.251/2.3      | 2.261/9.0      | 1.271/0.6      | 1.22/-0.29       | -0.87/-1.22      | 0.090/3.5        | 0.190/-4.8       | -0.68/-1.53      | -4.31/-5.20      | -5.68/-9.66      | -6.77/-1.52      | -13.24/-12.37    | -9.21/-8.70      | -5.43/-2.6       |                  |                  |                  |                  |                  |                  |



# Antenna Pattern\_6GHz

# Appendix D

|           |               |                 |                 |                 |                 |                 |                 |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |
|-----------|---------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Θ(112.5°) | -7.84/-7.18   | -6.44/-4.29     | -2.82/-3.65     | -4.13/-2.53     | -2.33/-5.12     | -9.21/-5.78     | -5.17/-4.27     | -6.65/-8.15       | -6.45/-6.20       | -9.41/-14.59      | -9.55/-10.64      | -6.58/-5.52       | -1.94/-1.21       | -2.27/-5.44       | -6.70/-9.90       | -7.93/-11.64      | -5.67/-6.91       | -7.79/-3.41       | -2.64/-3.46       | -10.97/-10.52     | 0.15/0.79         | 0.36/-1.08        | -3.94/-4.50       | -2.47/-4.21       |
| Θ(120°)   | -0.28/-2.00   | -5.25/-7.29     | -6.88/-4.78     | -4.72/-4.23     | -3.53/-5.83     | -7.25/-9.02     | -9.62/-10.12    | -15.74/-8.76      | -5.36/-5.74       | -15.82/-13.20     | -13.17/-10.89     | -6.95/-8.19       | -8.00/-2.53       | -5.35/-4.56       | -2.77/-1.47       | -3.46/-6.19       | -10.40/-7.14      | -7.45/-11.45      | -3.35/-7.13       | -9.26/-5.92       | -3.30/-1.02       | -4.92/-4.69       | -0.91/-2.03       | 2.76/-0.92        |
| Θ(127.5°) | -0.01/-0.09   | -2.86/-5.63     | -12.48/-11.29   | -8.45/-5.70     | -4.62/-5.45     | -7.42/-4.99     | -4.32/-5.56     | -4.98/-5.97       | -5.91/-12.38      | -10.50/-5.61      | -4.95/-9.09       | -8.45/-7.32       | -7.10/-4.32       | -3.85/-3.56       | 0.71/2.79         | -1.46/0.72        | -4.20/-13.52      | -2.33/1.82        | -1.19/-3.94       | -3.68/0.09        | 3.04/1.42         | 2.04/-1.51        | -3.70/-1.38       | 1.30/-2.35        |
| Θ(135°)   | -3.27/-1.35   | -3.36/-4.72     | -9.24/-7.70     | -8.15/-6.62     | -4.95/-6.47     | -6.36/-5.65     | -10.61/-14.59   | -12.61/-7.80      | -10.36/-13.20     | -8.18/-4.67       | -3.45/-4.38       | -5.34/-4.43       | -1.77/-1.61       | 0.53/-2.34        | -1.10/-0.42       | 0.98/4.49         | 1.11/-1.80        | 5.056.70          | 2.32/-0.40        | 2.95/3.48         | 3.71/3.99         | 0.88/-0.44        | -3.82/-0.91       | 1.31/-0.23        |
| Θ(142.5°) | -3.69/-2.50   | -1.15/-1.01     | -1.82/-4.06     | -5.20/-4.06     | -3.58/-2.90     | -3.90/-6.60     | -8.58/-10.02    | -8.14/-5.99       | -6.49/-7.67       | -5.74/-5.84       | -5.29/-4.91       | -3.26/-4.02       | -1.47/0.20        | -0.41/-2.57       | -3.12/-0.49       | 2.95/2.54         | -1.21/2.07        | 6.03/6.25         | 2.26/-0.06        | 3.00/4.30         | 3.10/3.30         | 2.02/-0.60        | 0.79/2.68         | 3.78/2.79         |
| Θ(150°)   | 1.31/0.60     | 1.05/0.67       | 0.22/1.04       | 1.16/0.22       | 0.42/-0.19      | -1.51/-3.73     | -5.80/-8.46     | -10.95/-9.58      | -7.42/-6.99       | -6.53/-9.31       | -12.09/-8.29      | -8.14/-6.83       | -1.67/1.09        | 1.85/0.59         | -2.10/-2.53       | -1.77/-3.56       | -3.22/1.84        | 4.82/4.22         | 0.39/-3.80        | -1.81/2.22        | 2.96/2.72         | 2.76/2.93         | 3.48/4.32         | 4.14/2.87         |
| Θ(157.5°) | -0.70/-1.45   | 0.98/3.22       | 3.80/2.40       | 0.61/-0.02      | -0.77/-1.76     | -4.37/-9.51     | -14.32/-11.06   | -8.63/-8.30       | -7.93/-6.03       | -4.59/-5.31       | -7.80/-8.27       | -7.44/-8.05       | -5.18/-1.07       | -0.12/-1.01       | -3.34/-5.16       | -5.04/-2.92       | -0.12/2.20        | 3.18/2.45         | 0.48/-1.90        | -2.75/-0.75       | 0.50/1.68         | 2.20/3.39         | 4.53/4.82         | 4.35/3.11         |
| Θ(165°)   | 1.78/1.31     | 1.24/0.49       | -1.95/-3.10     | -2.03/-2.50     | -3.85/-5.47     | -5.50/-6.82     | -9.88/-12.18    | -8.62/-6.84       | -5.51/-3.54       | -3.26/-4.43       | -6.06/-7.50       | -8.77/-8.30       | -6.76/-4.56       | -1.92/0.11        | 2.02/3.37         | 4.67/5.27         | 5.49/5.35         | 4.72/3.60         | 1.83/-0.37        | -1.81/-1.80       | -1.25/0.16        | 1.70/2.48         | 2.52/2.34         | 1.96/1.13         |
| Θ(172.5°) | -6.48/-11.09  | -10.71/-7.58    | -3.61/-0.94     | -1.36/-2.95     | -4.82/-5.99     | -7.43/-9.77     | -12.96/-12.01   | -11.72/-10.97     | -9.00/-7.43       | -6.77/-7.53       | -7.83/-7.98       | -6.23/-4.48       | -0.24/-1.22       | 2.35/3.43         | 4.27/5.17         | 5.68/5.66         | 5.28/4.83         | 3.99/3.39         | 2.90/2.21         | 1.29/0.56         | 0.88/1.18         | 1.76/1.75         | 0.48/-0.37        | -1.93/-4.22       |
| Θ(180°)   | -11.04/-12.53 | -11.48/-8.78    | -7.02/-6.77     | -9.75/-12.10    | -11.45/-8.85    | -8.63/-8.92     | -7.23/-6.36     | -6.98/-8.49       | -10.07/-10.58     | -10.00/-10.46     | -10.54/-10.53     | -10.64/-11.11     | -8.93/-7.20       | -6.15/-5.36       | 4.53/-4.13        | -3.68/-3.10       | -2.79/-2.63       | -2.71/-2.61       | -2.47/-2.45       | -2.39/-2.21       | -2.00/-2.42       | -2.40/-2.76       | -3.45/-4.29       | -6.20/-9.59       |
| Freq(Hz)  | 6.475/GPol.   | Total/Ant.4     | -               | -               | -               | -               | -               | -                 | -                 | -                 | -                 | -                 | -                 | -                 | -                 | -                 | -                 | -                 | -                 | -                 | -                 | -                 | -                 | -                 |
| Gain      | Φ(0°)/Φ(7.5°) | Φ(15°)/Φ(22.5°) | Φ(30°)/Φ(37.5°) | Φ(45°)/Φ(52.5°) | Φ(60°)/Φ(67.5°) | Φ(75°)/Φ(82.5°) | Φ(90°)/Φ(97.5°) | Φ(105°)/Φ(112.5°) | Φ(120°)/Φ(127.5°) | Φ(135°)/Φ(142.5°) | Φ(150°)/Φ(157.5°) | Φ(165°)/Φ(172.5°) | Φ(180°)/Φ(187.5°) | Φ(195°)/Φ(202.5°) | Φ(210°)/Φ(217.5°) | Φ(225°)/Φ(232.5°) | Φ(240°)/Φ(247.5°) | Φ(255°)/Φ(262.5°) | Φ(270°)/Φ(277.5°) | Φ(285°)/Φ(292.5°) | Φ(300°)/Φ(307.5°) | Φ(315°)/Φ(322.5°) | Φ(330°)/Φ(337.5°) | Φ(345°)/Φ(352.5°) |
| Θ(0°)     | 4.81/4.90     | 5.21/4.77       | 4.25/4.62       | 4.84/4.57       | 4.46/4.21       | 4.46/4.71       | 4.82/4.77       | 4.94/5.12         | 4.85/4.42         | 4.45/4.67         | 4.46/4.48         | 4.54/4.36         | 4.13/4.05         | 4.09/4.09         | 4.00/4.07         | 4.20/4.33         | 4.27/4.40         | 4.59/4.70         | 4.65/4.73         | 4.59/4.60         | 4.63/4.43         | 4.38/4.51         | 4.74/4.97         | 4.79/4.98         |
| Θ(7.5°)   | 4.64/4.51     | 4.70/4.07       | 4.02/4.06       | 3.91/3.81       | 3.50/3.32       | 3.48/3.35       | 3.09/3.39       | 3.63/4.06         | 4.18/4.18         | 4.04/4.10         | 4.18/4.08         | 4.26/4.33         | 4.44/4.34         | 4.40/4.60         | 4.23/4.40         | 4.89/4.94         | 5.16/5.07         | 5.56/5.84         | 5.51/5.91         | 5.75/5.51         | 5.63/5.23         | 4.97/4.73         | 4.75/4.76         | 4.79/4.78         |
| Θ(15°)    | 4.49/4.27     | 4.01/3.06       | 2.93/1.69       | 1.69/1.85       | 1.41/1.94       | 2.18/2.25       | 2.81/3.42       | 3.75/3.82         | 3.66/3.09         | 3.04/2.96         | 3.01/3.18         | 3.37/3.37         | 3.69/3.98         | 4.51/4.63         | 4.93/5.34         | 5.71/5.85         | 5.91/6.06         | 5.92/6.14         | 5.84/5.45         | 5.15/5.12         | 4.54/5.43         | 4.96/4.51         | 4.41/4.50         | 4.30/4.06         |
| Θ(22.5°)  | 3.00/2.25     | 1.68/1.67       | 1.04/1.14       | 1.59/1.47       | 0.66/1.26       | 1.68/2.48       | 2.63/2.21       | 1.83/1.84         | 2.06/2.09         | 1.97/1.66         | 1.56/1.19         | 1.43/2.05         | 3.25/3.68         | 3.72/3.51         | 3.45/3.68         | 3.99/4.14         | 4.38/4.06         | 3.78/4.39         | 5.12/5.43         | 5.23/4.85         | 5.21/5.20         | 4.73/4.07         | 3.98/4.01         | 3.38/2.39         |
| Θ(30°)    | 0.39/-1.10    | -1.96/-2.40     | -1.18/-0.47     | -1.56/-1.48     | -5.74/-4.15     | -2.58/-1.68     | -1.71/-2.18     | -9.87/-2.63       | -0.44/0.97        | 2.05/4.42         | 1.93/0.66         | -0.78/-0.71       | -0.60/0.18        | 1.29/1.82         | 1.84/1.53         | 1.29/1.42         | 1.94/2.63         | 3.18/3.35         | 2.74/2.41         | 2.22/2.34         | 2.58/3.11         | 3.29/3.33         | 2.53/1.94         | 1.14/0.82         |
| Θ(37.5°)  | -4.88/-4.26   | -4.54/-4.16     | -4.74/-6.72     | -6.04/-7.08     | -9.77/-15.00    | -9.91/-8.29     | -10.71/-11.76   | -8.23/-6.93       | -7.16/-7.22       | -5.82/-2.85       | -0.55/-1.12       | -2.96/-3.46       | -2.39/-0.80       | -0.27/-0.17       | 0.17/0.07         | -0.52/-0.05       | 1.09/0.52         | -1.21/-0.76       | 0.60/1.07         | 0.73/1.63         | 1.83/1.84         | 1.31/-0.04        | -2.12/-3.82       | -3.57/-2.46       |
| Θ(45°)    | -3.45/-3.85   | -4.27/-6.06     | -13.96/-8.63    | -8.75/-15.27    | -15.11/-10.11   | -7.88/-7.22     | -7.58/-8.05     | -6.00/-3.37       | -3.74/-5.62       | -4.53/-3.62       | -3.40/-4.17       | -4.70/-5.84       | -4.79/-0.90       | 0.45/0.59         | 1.31/1.15         | 0.34/-0.41        | -2.03/-3.05       | -1.96/-1.78       | -3.28/-1.82       | 0.53/0.85         | -0.61/-1.46       | -0.95/-3.71       | -6.38/-5.56       | -3.37/-2.40       |
| Θ(52.5°)  | -3.11/-3.06   | -4.83/-8.71     | -12.44/-12.44   | -9.08/-9.20     | -8.78/-13.52    | -6.67/-3.98     | -5.97/-10.75    | -7.12/-8.36       | -3.21/-4.67       | -5.26/-1.95       | -4.17/-6.48       | -4.89/-5.56       | -4.00/-0.49       | 0.86/0.45         | 2.09/1.85         | -0.22/-1.30       | -1.40/-2.86       | -5.40/-5.31       | -1.98/0.07        | 1.60/0.82         | -1.34/-4.99       | -4.45/-4.53       | -5.86/-3.65       | -3.02/-2.57       |
| Θ(60°)    | -7.04/-8.89   | -9.27/-7.92     | -3.88/-4.53     | -5.19/-4.34     | -6.20/-10.55    | -4.19/-4.34     | -16.01/-13.03   | -8.70/-7.39       | -2.97/-3.89       | -4.35/-7.08       | -9.12/-11.44      | -1.34/-4.37       | -4.28/-2.20       | 0.81/0.17         | -0.20/-1.22       | -1.29/-2.31       | -2.04/-3.72       | -5.88/-5.02       | -1.57/-0.49       | -1.40/-0.17       | -0.60/-1.72       | -1.49/0.16        | 0.02/-1.81        | -3.33/-7.65       |
| Θ(67.5°)  | -6.58/-3.60   | -2.73/-2.56     | -5.04/-7.20     | -9.97/-5.87     | -3.37/-6.93     | -10.36/-7.60    | -8.47/-13.88    | -8.14/-2.99       | -1.87/-3.13       | -8.93/-6.45       | -10.88/-15.15     | -7.03/-9.63       | -7.18/-4.16       | -1.96/-3.68       | -1.42/-1.55       | -6.36/-5.64       | -3.17/-4.00       | -4.31/-1.41       | 0.00/-0.89        | -1.19/0.63        | 2.28/1.82         | 0.75/-2.31        | -4.53/-8.85       | -8.17/-3.04       |
| Θ(75°)    | -9.23/-11.30  | -7.39/-5.13     | -6.40/-6.04     | -7.24/-6.65     | -6.22/-12.63    | -6.50/-3.00     | -3.05/-5.36     | -12.26/-6.43      | -0.88/-4.30       | -8.13/-8.15       | -15.32/-13.58     | -6.09/-5.58       | -4.18/-2.16       | -4.05/-3.16       | -3.99/-5.47       | -7.97/-6.96       | -1.74/-3.78       | -2.28/1.85        | 2.41/1.98         | -0.16/0.77        | 0.66/-0.51        | -3.39/-5.39       | -6.42/-7.31       | -2.52/-4.55       |
| Θ(82.5°)  | -9.07/-11.51  | -7.85/-7.01     | -4.45/-3.77     | -5.30/-6.57     | -4.73/-12.40    | -11.56/-9.45    | -11.56/-14.76   | -13.25/-7.02      | -4.35/-10.41      | -15.03/-14.41     | -7.62/-11.47      | -8.87/-8.20       | -10.46/-5.38      | -6.22/-4.25       | -0.28/-7.49       | -1.51/-5.70       | -2.08/-3.60       | 4.40/3.41         | 1.40/-0.02        | 0.08/-0.16        | -0.63/-1.94       | -4.45/-5.11       | -5.69/-10.09      |                   |
| Θ(90°)    | -8.66/-5.94   | -9.11/-6.14     | -7.93/-6.38     | -7.13/-5.14     | -11.89/-10.22   | -4.00/-2.57     | -2.95/-1.17     | -3.53/-7.87       | -4.81/-2.26       | -5.77/-11.34      | -5.82/-8.73       | -13.81/-10.59     | -12.15/-5.00      | -6.76/-4.93       | -4.86/-4.25       | -5.34/-6.66       | -3.78/0.56        | 0.31/0.87         | 1.59/1.64         | 1.67/0.52         | -0.11/-0.77       | -1.20/-4.23       | -6.24/-2.04       | -3.80/-7.14       |
| Θ(97.5°)  | -6.96/-6.83   | -7.48/-6.40     | -8.35/-8.10     | -7.46/-6.99     | -11.17/-14.00   | -8.93/-9.26     | -13.79/-8.42    | -6.78/-8.82       | -12.38/-13.77     | -15.75/-15.81     | -12.12/-13.95     | -15.23/-13.61     | -8.47/-7.11       | -9.44/-8.97       | -5.24/-7.15       | -4.81/-1.82       | -0.18/1.82        | -3.60/2.18        | 3.60/2.18         | -0.14/-0.93       | -3.00/-3.63       | -3.91/-4.27       | -5.40/-4.07       | -5.10/-8.10       |
| Θ(105°)   | -4.68/-4.01   | -7.47/-3.38     | -1.79/-3.77     | -3.31/-1.27     | -6.87/-15.00    | -10.97/-7.71    | -7.87/-5.77     | -5.40/-4.74       | -9.87/-8.20       | -13.79/-8.97      | -10.46/-5.38      | -6.22/-4.25       | -0.28/-7.49       | -1.51/-5.70       | -2.08/-3.60       | -1.51/-5.70       | -0.30/0.77        | -0.49/1.66        | -1.21/-4.88       | -2.33/-1.53       | -3.80/-6.38       | -5.56/-1.79       | -3.88/-9.05       |                   |
| Θ(112.5°) | -12.33/-5.94  | -4.80/-2.92     | -0.61/-0.67     | -1.54/-1.40     | -1.81/-6.32     | -9.63/-12.17    | -11.49/-14.97   | -12.74/-9.77      | -6.85/-6.65       | -10.00/-13.59     | -12.58/-9.68      | -5.51/-7.63       | -3.86/-4.28       | -4.85/-4.51       | -3.90/-10.49      | -6.49/-3.48       | -0.98/-3.16       | -0.87/0.21        | 1.57/1.77         | -2.46/-0.65       | -1.18/-2.02       | -3.32/-2.00       | -4.10/-6.48       | -9.07/-8.78       |
| Θ(120°)   | -5.13/-7.27   | -3.07/-3.66     | -4.53/-7.16     | -4.34/-5.82     | -7.22/-5.00     | -6.10/-11.92    | -14.54/-7.60    | -9.47/-9.49       | -10.37/-9.21      | -14.51/-15.51     | -9.91/-6.02       | -7.98/-9.92       | -7.50/-7.11       | -5.46/-5.04       | -6.08/-9.07       | -11.05/-4.95      | -2.38/-0.08       | -0.82/-1.21       | -0.71/-0.54       | -6.86/-8.29       | -2.50/-2.66       | -1.23/-2.66       | 0.66/2.28         | 0.59/-5.31        |
| Θ(127.5°) | -2.72/-3.74   | -1.78/-2.48     | -6.23/-10.43    | -13.58/-6.41    | -7.14/-6.09     | -4.46/-7.45     | -4.27/-1.40     | -3.60/-5.85       | -7.24/-6.39       | -8.95/-8.81       | -6.81/-10.21      | -6.26/-6.52       | -6.05/-3.34       | -4.27/-4.06       | -2.15/0.05        | -1.49/-2.83       | -2.30/-5.07       | 0.87/3.63         | 0.47/-2.85        | -0.77/2.72        | 2.81/1.68         | 0.10/-9.38        | -0.06/3.35        | 0.33/-9.89        |
| Θ(135°)   | -5.43/-3.76   | -6.88/-4.57     | -7.29/-13.40    | -12.67/-15.15   | -14.38/-13.29   | -10.88/-6.27    | -6.99/-13.70    | -13.87/-13.62     | -14.66/-10.64     | -10.21/-10.07     | -9.96/-6.00       | -5.82/-10.72      | -5.19/-1.55       | -0.18/-1.33       | 0.77/2.40         | 1.05/4.85         | 2.08/1.12         | 6.206.77          | 3.17/-0.82        | 2.56/3.02         | 4.18/0.93         | -1.22/-3.29       | -8.55/-4.84       | -1.82/-2.49       |
| Θ(142.5°) | -1.42/-1.44   | -3.95/-4.92     | -3.64/-4.27     | -10.34/-8.95    | -7.16/-4.68     | -6.24/-6.75     | -7.16/-9.13     | -15.57/-7.94      | -5.48/-7.32       | -13.88/-14.85     | -7.13/-4.78       | -12.08/-12.51     | -3.45/-0.40       | -2.58/-4.59       | -2.68/-2.56       | 0.11/1.01         | -1.72/-1.10       | 5.23/5.75         | 1.41/0.84         | 2.68/2.40         | 2.15/3.20         | 1.34/-0.45        | 0.57/2.50         | 3.57/1.50         |
| Θ(150°)   | -0.63/-0.39   | 0.67/0.55       | 0.49/1.47       | 1.80/0.65       | -1.27/-2.30     | -2.78/-4.98     | -8.06/-9.47     | -9.86/-11.87      | -9.46/-8.10       | -9.24/-13.81      | -13.09/-5.74      | -5.51/-9.34       | -8.62/-3.02       | -1.29/-2.63       | -1.87/-1.20       | -2.46/-4.10       | -5.05/-1.54       | 2.53/2.77         | -0.44/-2.04       | 0.29/2.70         | 2.22/1.09         | 1.57/2.49         | 3.68/4.57         | 4.06/2.53         |
| Θ(157.5°) | -2.38/-2.17   | 0.12/1.99       | 2.38/1.05       | -0.25/-0.49     | -1.13/-2.60     | -5.35/-9.27     | -12.84/-12.29   | -11.07/-11.93     | -10.13/-8.59      | -8.86/-11.78      | -12.01/-6.82      | -5.56/-7.05       | -6.89/-4.45       | -4.30/-3.42       | -2.41/-2.65       | -4.55/-4.29       | -1.88/0.55        | -0.94/-1.04       | -4.00/-4.05       | -1.94/-0.15       | 0.52/-0.05        | 0.92/2.48         | 3.36/3.23         | 2.50/-6.19        |
| Θ(165°)   | -1.96/-1.19   | -1.21/-1.03     | -1.57/-1.07     | -0.37/-0.87     | -2.73/-5.26     | -6.58/-7.70     | -8.19/-11.31    | -10.25/-9.24      | -7.94/-6.20       | -5.54/-5.99       | -6.94/-8.69       | -8.98/-8.34       | -8.39/-6.66       | -5.30/-4.09       | -2.21/-0.00       | 2.19/3.94         | 5.13/5.48         |                   |                   |                   |                   |                   |                   |                   |

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

