



# Radiated Composite Gain Data\_5GHz UNII-2C~3, 6GHz-4TX(Radio 2)

# Appendix D

|           |               |                |                |                |                |                |                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
|-----------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Θ(7.5°)   | 3.271/84      | 0.02/-2.45     | -6.06/-11.65   | -13.56/-7.34   | -3.21/-0.43    | 1.54/3.01      | 4.21/5.06      | 5.72/6.12        | 6.39/6.47        | 6.43/6.27        | 5.98/5.51        | 4.89/4.04        | 2.97/1.52        | -0.31/-2.89      | -6.53/-11.78     | -12.72/-7.36     | -3.32/-0.66      | 1.32/84          | 4.06/4.99        | 5.67/6.16        | 6.43/6.56        | 6.53/6.34        | 6.08/5.74        | 5.08/4.27        |
| Θ(15°)    | 2.91/1.68     | -0.07/-2.81    | -5.88/-12.65   | -17.85/-8.53   | -3.76/-0.62    | 1.51/2.98      | 4.08/4.89      | 5.55/9.1         | 6.18/6.22        | 6.15/1.79        | 5.32/4.76        | 4.1/3.24         | 2.14/0.84        | -0.88/-2.95      | -5.67/-10.03     | -15.96/-12.66    | -6.33/-3.32      | -0.61/1.37       | 2.79/3.84        | 4.54/5.02        | 5.24/5.36        | 5.43/5.49        | 5.47/5.24        | 4.73/3.9         |
| Θ(22.5°)  | 2.57/1.28     | -0.49/-2.82    | -6.21/-11.91   | -17.88/-12.36  | -5.95/-1.94    | 0.82/6         | 3.83/4.62      | 5.15/2.27        | 5.31/5.32        | 5.28/5.06        | 4.58/3.96        | 3.21/2.27        | 1.11/-0.21       | -1.55/-3.22      | -1.61/-10.65     | -18.29/-14.87    | -8.18/-4.11      | -1.29/0.74       | 2.12/3.11        | 3.74/4.15        | 4.25/4.16        | 4.06/4.03        | 4.06/4.06        | 3.87/3.38        |
| Θ(30°)    | 1.48/0.07     | -1.81/-4.51    | -8.23/-12.25   | -17.81/-14.27  | -7.21/-3.54    | -0.81/1.33     | 2.88/3.82      | 4.27/4.38        | 4.25/4.02        | 3.93/9           | 3.72/3.35        | 2.81/9.88        | 0.87/0.35        | -1.93/-4.28      | -7.99/-13.96     | -19.18/-14.93    | -12.62/-9.24     | -4.88/-2.24      | -0.35/0.89       | 1.58/1.87        | 2.14/2.43        | 2.68/2.85        | 3.3/3.5          | 3.08/2.57        |
| Θ(37.5°)  | 0.13/-1.19    | -2.94/-5.99    | -9.6/-12.84    | -19.05/-16.66  | -9.67/-5.35    | -1.97/0.29     | 1.93/2.97      | 3.33/3.12        | 2.85/2.73        | 2.15/1.79        | 1.29/0.47        | -0.52/-1.87      | -3.73/-4.26      | -10.11/-15.77    | -17.75/-16.96    | -12.49/-9.48     | -6.39/-3.88      | -2.09/-1.02      | -0.33/0.09       | 0.37/0.68        | 0.98/1.43        | 1.79/1.76        | 1.68/1.19        |                  |
| Θ(45°)    | -2.44/-3.01   | -4.92/-8.04    | -10.44/-14.14  | -19.05/-17.06  | -10.74/-6.15   | -3.06/-1.4     | 1.67/1.7       | 1.26/1.05        | 1.13/0.8         | 1.03/-0.41       | -0.63/-0.92      | -1.51/-2.17      | -3.54/-5.58      | -9.83/-18.46     | -17.52/-12.39    | -9.58/-7.88      | -5.74/-3.89      | -1.71/-1.43      | -1.59/-1.47      | -1.45/-1.67      | -0.82/-0.27      | -0.69/-1.41      |                  |                  |
| Θ(52.5°)  | -6.29/-6.74   | -8.39/-11.34   | -11.47/-13.63  | -17.67/-18.56  | -12.3/-8.75    | -5.95/-4.02    | -2.83/-1.83    | -0.88/-0.78      | -1.36/-1.63      | -1.34/-1.22      | -1.74/-2.26      | -1.98/-2.07      | -2.28/-2.77      | -4.15/-5.53      | -10.57/-17.17    | -15.38/-9.37     | -7.8/-7.07       | -6.23/-5.33      | -4.63/-4.15      | -3.83/-3.58      | -3.97/-4.22      | -3.89/-3.63      | -3.32/-2.69      | -3.92/-5.37      |
| Θ(60°)    | -8.12/-9.61   | -11.48/-10.88  | -12.53/-18.13  | -18.14/-16.14  | -10.84/-10.62  | -10.46/-7.84   | -5.21/-4.24    | -4.11/-4.56      | -4.51/-3.6       | -3.17/-3.02      | -2.3/-1.77       | -1.63/-2         | -4.02/-5.94      | -10.19/-15.19    | -17.75/-11.51    | -9.27/-12.22     | -5.61/-5.54      | -4.93/-4.38      | -4.76/-5.34      | -6.64/-6.31      | -5.72/-5.07      | -3.72/-3.77      | -6.26/-8.05      |                  |
| Θ(67.5°)  | -10.03/-11.63 | -12.82/-11.45  | -12.87/-17.64  | -18.87/-17.07  | -11.63/-10.9   | -10.23/-7.71   | -5.34/-5.06    | -4.85/-4.81      | -6.33/-7.09      | -6.88/-5.49      | -4.13/-3.05      | -2.35/-1.62      | -1.7/-2.06       | -4.57/-7.1       | -12.57/-17.65    | -17.06/-12.54    | -8.93/-6.22      | -4.74/-4.99      | -5.24/-4.79      | -5.68/-7.18      | -9.16/-10.14     | -9.73/-7.69      | -5.9/-5.82       | -8.87/-9.05      |
| Θ(75°)    | -10.11/-10.41 | -11.52/-11.46  | -14.26/-17.25  | -17.26/-18.12  | -11.91/-9.88   | -8.94/-8.13    | -8.5/-8.58     | -6.91/-5.77      | -8.37/9.53       | -8.17/-7.22      | -5.69/-3.83      | -2.76/-1.78      | -1.97/-2.55      | -5.03/-6.96      | -12.53/-18.25    | -18.64/-14.55    | -9.73/-6.4       | -4.18/-4.13      | -4.84/-4.98      | -5.22/-6.87      | -9.76/-10.95     | -11.73/-11.23    | -8.58/-9.23      | -12.05/-9.82     |
| Θ(82.5°)  | -11.17/-10.37 | -13.37/-13.11  | -16.47/-17.61  | -18.71/-17.61  | -13.67/-11.37  | -9.41/-9.99    | -11.18/-12.12  | -9.45/-6.9       | -10.46/-12.01    | -9.77/-8.67      | -7.32/-5.54      | -4.09/-3.56      | -3.48/-4.19      | -6.32/-8.88      | -15.51/-19.59    | -18.57/-15.12    | -9.41/-6.68      | -4.37/-3.8       | -5.1/-5.9        | -6.59/-7.74      | -10.11/-18.5     | -14.05/-14.51    | -12.25/-12.36    | -16.6/-13.21     |
| Θ(90°)    | -12.53/-12.67 | -15.88/-14.85  | -18/-19.06     | -18.49/-17.74  | -16.88/-13.21  | -12.08/-12.65  | -14.21/-15.06  | -12.42/-9.32     | -12.14/-14.49    | -12.28/-11.46    | -9.76/-7.4       | -5.81/-5.41      | -5.24/-6.81      | -7.8/-10.11      | -13.13/-17.3     | -18.52/-15.6     | -12.03/-8.52     | -6.06/-5.57      | -5.98/-7.79      | -13.98/-9.98     | -14.49/-16.83    | -17.59/-15.53    | -13.98/-16.34    | -17.16/-17.08    |
| Θ(97.5°)  | -15.36/-16.5  | -19.32/-16.62  | -18.71/-17.76  | -17.71/-18.57  | -17.82/-14.76  | -15.35/-13.32  | -15.84/-16.02  | -15.57/-12.82    | -14.07/-17.51    | -15.26/-13.73    | -12.62/-10.26    | -8.57/-8.38      | -7.84/-9.24      | -9.93/-12.54     | -15.12/-17.37    | -18.79/-19.42    | -16.05/-12.73    | -9.89/-10.23     | -10.42/-10.72    | -12.44/-13.68    | -16.21/-19.35    | -18.99/-16.85    | -15.42/-18.55    | -17.83/-17.41    |
| Θ(105°)   | -15.2/-18.05  | -14.28/-16.89  | -18.41/-18.41  | -18.04/-14.83  | -17.75/-16.83  | -15.62/-15.67  | -18.52/-17.6   | -17.99/-16.05    | -16.65/-19.18    | -19.02/-18.78    | -17.64/-12.75    | -12.12/-11.33    | -10.94/-11.7     | -17.66/-15.35    | -14.71/-18.77    | -19/-18.41       | -17.66/-15.35    | -14.14/-16.77    | -14.65/-16.32    | -17.93/-18.36    | -19.04/-18.5     | -17.95/-18.67    | -18.77/-16.65    | -18.61/-18.78    |
| Θ(112.5°) | -17.34/-17.37 | -16.45/-16.69  | -18.65/-18.15  | -18.06/-19.06  | -18.95/-18.29  | -18.74/-17.58  | -19.21/-17.91  | -17.89/-15.91    | -17.65/-17.72    | -18.79/-18.3     | -17.99/-16.91    | -14.6/-16.07     | -13.41/-14       | -13.16/-16.56    | -18.45/-18.03    | -17.81/-18.79    | -16.21/-16.86    | -14.61/-15.96    | -15.3/-14.22     | -17.08/-17.93    | -19.67/-19.54    | -18.87/-18.46    | -17.68/-17.47    | -17.35/-18.34    |
| Θ(120°)   | -18.49/-18.76 | -18.1/-19.19   | -17.99/-17.14  | -17.6/-18.77   | -18.99/-19.27  | -18.02/-17.44  | -18.27/-18.38  | -17.26/-18.62    | -17.87/-18.21    | -17.73/-17.77    | -19.16/-18.8     | -18.18/-16.63    | -15.3/-13.2      | -13.98/-14.71    | -17.43/-18.06    | -19.07/-19.24    | -18.02/-18.2     | -16.32/-16.86    | -15.17/-14.78    | -17.25/-18.23    | -19.4/-18.43     | -17.58/-17.61    | -18.82/-17.67    | -19.33/-18.88    |
| Θ(127.5°) | -18.59/-16.67 | -18.26/-18.07  | -17.71/-19     | -18.76/-18.39  | -17.94/-18.51  | -17.58/-17.25  | -16.13/-17.25  | -17.87/-16.62    | -17.5/-19.28     | -17.89/-18.37    | -17.73/-16.12    | -16.4/-15.21     | -15.96/-13.65    | -18.24/-18.09    | -18.46/-19       | -18.77/-17.8     | -18.48/-17.46    | -18.91/-18.77    | -17.89/-18.76    | -17.11/-18.62    | -19.11/-18.24    | -17.82/-18.02    | -18.17/-18.26    |                  |
| Θ(135°)   | -18.97/-17.63 | -17.46/-17.54  | -17.99/-18.22  | -18.52/-18.58  | -18.77/-18.4   | -19.39/-18.65  | -17.9/-18.21   | -18.92/-17.46    | -19.47/-19.08    | -18.75/-17.84    | -18.14/-17.87    | -19.74/-14.92    | -14.61/-17.75    | -18.67/-18.01    | -18.16/-19.2     | -18.97/-17.28    | -18.81/-17.9     | -17.44/-17.1     | -18.76/-17.47    | -18.71/-17.89    | -18.49/-19       | -18.67/-19       | -18.01/-17.93    |                  |
| Θ(142.5°) | -18.89/-18.15 | -18.03/-15.06  | -16.16/-18.01  | -18.92/-17.91  | -18.99/-18.23  | -18.23/-17.82  | -18.71/-18.97  | -18.42/-18.33    | -17.17/-18.46    | -17.94/-19.91    | -19.11/-17.46    | -17.84/-18.3     | -18.66/-17.93    | -14.58/-15.21    | -19.22/-17.81    | -18.42/-18.77    | -17.76/-13.26    | -12.4/-13.7      | -17.88/-18.35    | -19.06/-17.82    | -18.72/-18.57    | -17.98/-19.06    | -18.81/-17.81    | -17.62/-18.35    |
| Θ(150°)   | -18.27/-18.18 | -18.15/-17.82  | -18.47/-18.98  | -19.3/-18.3    | -18.34/-18.53  | -18.17/-17.64  | -18.08/-15.94  | -15.89/-16.69    | -18.58/-16.65    | -18.76/-18.21    | -19.21/-18.64    | -18.08/-19.21    | -19.58/-17.85    | -17.01/-15.78    | -17.39/-18.06    | -17.86/-18.09    | -17.64/-17.87    | -17.93/-18.5     | -16.54/-13.87    | -15.51/-16.92    | -17.58/-18.82    | -18.68/-18.09    | -19.1/-15.82     | -15.13/-16.47    |
| Θ(157.5°) | -17.56/-19.31 | -18.17/-18.29  | -17.99/-19.35  | -17.91/-17.86  | -16.62/-14.37  | -15.49/-18.83  | -19.06/-17.45  | -18.69/-17.5     | -18.14/-17.59    | -18.23/-18.25    | -19.31/-19       | -18.84/-18.57    | -18.17/-17.71    | -16.49/-16.19    | -15.79/-16.81    | -17.29/-18.73    | -17.56/-15.64    | -15.32/-16.66    | -15.56/-14.76    | -16.26/-17.92    | -17.79/-18.46    | -17.57/-18.25    | -18.01/-16.46    | -17.33/-17.63    |
| Θ(165°)   | -16.65/-17.96 | -17.88/-18.74  | -18.74/-18.81  | -18.18/-18.84  | -18.68/-18.23  | -18.34/-16.81  | -16.65/-18.5   | -18.01/-17.51    | -18.72/-17.12    | -18.74/-19.13    | -17.77/-17.98    | -19.45/-18.55    | -18.51/-19.18    | -18.24/-17.46    | -18.83/-18.86    | -15.96/-14.52    | -15.24/-17.16    | -19.42/-17.85    | -19.11/-17.85    | -17.81/-19.39    | -18.45/-17.7     | -17.81/-17.98    | -17.49/-18.97    |                  |
| Θ(172.5°) | -19.01/-19.27 | -18.36/-18.61  | -18.31/-18.67  | -17.64/-16.16  | -15.58/-15.84  | -16.96/-17.96  | -18.31/-18.37  | -17.25/-19.33    | -19.11/-19.87    | -18.27/-17.84    | -17.73/-18.02    | -18.96/-17.98    | -17.28/-17.68    | -18.45/-17.58    | -16.12/-15.08    | -14.52/-14.64    | -15.77/-17.89    | -19.2/-17.77     | -19.09/-18.92    | -18.4/-18.41     | -18.4/-18.97     | -19.63/-19.12    | -18.99/-18.66    | -17.71/-17.63    |
| Θ(180°)   | -17.75/-18.85 | -17.94/-18.14  | -18.42/-18.48  | -18.92/-18.74  | -18.66/-18.06  | -18.77/-18.06  | -18.68/-18.14  | -18.68/-18.18    | -19.14/-17.87    | -18.47/-18.24    | -18.22/-17.19    | -18.66/-18.86    | -18.41/-18.31    | -17.88/-17.45    | -17.98/-18.13    | -17.34/-18.54    | -17.86/-17.68    | -17.91/-17.73    | -18.84/-18.21    | -17.57/-18.27    | -19.39/-17.38    | -18.39/-18.69    | -18.09/-17.99    | -16.8/-16.63     |
| Freq(Hz)  | 5.785GPol.    | ThetaAnt. 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°)     | 3.62/4.59     | 5.35/5.8       | 6.21/6.42      | 6.52/6.45      | 6.24/5.86      | 5.32/4.58      | 3.61/2.27      | 0.52/-1.82       | -0.28/-1.06      | -1.48/-1.46      | 1.13/2.76        | 6.25/5.81        | 5.64/6.16        | 6.25/5.81        | 5.22/4.4         | 3.3/2            | 0.24/-2.1        | -5.4/-10.96      | -18.11/-9.58     | -4.44/-1.4       | 0.75/2.4         |                  |                  |                  |
| Θ(7.5°)   | 4.335/2.4     | 5.826/3        | 6.69/6.84      | 6.926/7.8      | 6.51/6.06      | 5.45/4.66      | 3.65/2.31      | 0.51/-1.79       | -5.29/-11.77     | -18.77/-11.72    | -5.56/-2.22      | 0.09/1.85        | 3.234/3.4        | 5.09/5.65        | 6.02/6.19        | 6.236/12         | 5.87/5.48        | 4.87/4           | 2.89/1.47        | -0.45/-3.19      | -6.9/-12.64      | -12.26/-6.59     | -2.74/-0.17      | 1.79/3.16        |
| Θ(15°)    | 4.02/4.84     | 5.66/2.5       | 6.83/7.11      | 7.307/2.4      | 7.016/63       | 6.025/2.22     | 4.22/2.94      | 1.28/-0.87       | -3.94/-7.99      | -11.3/-3.92      | -5.76/-3.13      | -0.97/0.91       | 2.38/3.47        | 4.234/6.9        | 4.965/1          | 5.135/0.4        | 4.84/4.1         | 3.83/3.08        | 2.02/0.6         | -1.2/-3.48       | -6.33/-5.55      | -10.71/-0.74     | -3.07/-3.07      | 1.63/0.4         |
| Θ(22.5°)  | 3.46/3.37     | 5.17/5.82      | 6.32/6.52      | 6.61/6.59      | 6.53/6.29      | 5.77/4.98      | 3.98/2.74      | 1.18/-0.63       | -2.77/-5.66      | -8.21/-8.62      | -9.35/-4.77      | -2.37/0.09       | 1.772/3.93       | 3.734/3.1        | 4.694/9.3        | 5.04/9.3         | 4.84/0.08        | 3.42/4.29        | 1.21/-0.4        | -2.39/-4.66      | -6.73/-7.8       | -7.61/-6.39      | -4.08/-1.49      | 0.77/2.38        |
| Θ(30°)    | 2.42/3.41     | 4.2/5          | 5.55/5.67      | 5.79/5.86      | 5.73/5.3       | 4.78/4.15      | 3.24/1.9       | 0.08/-2.09       | -4.48/-6.39      | -8.58/-11.1      | -9.09/-5.84      | -2.88/-0.4       | 1.83/3.13        | 4.184/99         | 5.435/59         | 5.515/21         | 4.84/5.1         | 4.02/3.05        | 1.74/0           | -2.17/-4.91      | -8.19/-12.75     | -7.51/-7.25      | -4.37/-2.49      | -0.86/-1.03      |
| Θ(37.5°)  | 0.96/2.3      | 3.19/3.85      | 4.24/4.6       | 4.724/5.9      | 4.21/3.88      | 3.572/3.97     | 2.05/0.62      | -1.47/-4.3       | -7.87/-11.54     | -13.26/-12.94    | -8.28/-4.68      | -2.03/0.59       | 2.12/3.38        | 4.525/1          | 5.336/3.9        | 5.154/82         | 4.453/83         | 2.921/77         | 0.29/-1.4        | -3.01/-4.77      | -7.16/-10.94     | -1.763/-6        | -7.67/-4.25      | -2.36/-0.78      |
| Θ(45°)    | -1.59/0.2     | 1.4/2.16       | 2.67/3.32      | 3.653/3.4      | 3.23/3.03      | 2.38/1.46      | 0.38/-1.07     | -3.58/-7.24      | -12.02/-18.56    | -18.21/-11.3     | -8.14/-5.51      | -3.94/-1.46      | 0.58/1.71        | 3.09/3.48        | 3.45/3.56        | 3.31/2.98        | 2.32/1.62        | 0.34/-1.34       | -3.09/-5.19      | -7.14/-4.85      | -10.91/-15.09    | -17.33/-17.21    | -14.82/-8.17     | -5.06/-3.41      |
| Θ(52.5°)  | -1.65/-0.04   | 1.28/2         | 2.23/2.71      | 2.83/2.94      | 2.72/1.81      | 0.85/0         | -1.1/-2.92     | -5.59/-9.62      | -15.1/-19.69     | -19.1/-12        | -8.64/-4.84      | -7.79/-6.48      | -5.35/-1.73      | -0.41/-3.01      | -0.18/0.4        | 0.18/0.08        | -0.52/-          |                  |                  |                  |                  |                  |                  |                  |



# Radiated Composite Gain Data\_5GHz UNII-2C~3, 6GHz-4TX(Radio 2)

# Appendix D

|           |               |                |                |                |                |                |                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
|-----------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Θ(52.5°)  | -2.23/-2.54   | -3.63/-5.22    | -7/-10.4       | -19.47/-18.91  | -9.89/-4.25    | -2.48/-1.85    | 0.09/1.14      | -1/-3.96         | -2.89/-1.99      | -2.47/-2.96      | -4.09/-3.68      | -1.31/-0.41      | -1.08/-2.19      | -2.91/-5.44      | -10.21/-17.79    | -18.12/-10.19    | -7.11/-6.94      | -6.87/-4.81      | -3.19/-4.28      | -5.5/-4.97       | -4.69/-4.84      | -4.78/-5.62      | -6.34/-14.4      | -2.27/-1.83      |
| Θ(60°)    | -3.74/-3.42   | -4.99/-8.09    | -10.27/-12.97  | -18.67/-17.63  | -13.71/-7.41   | -4.72/-3.71    | -1.82/-0.84    | -3.94/-9.18      | -7.19/-5.1       | -7.64/-9.33      | -7.96/-6.03      | -2.62/-1.26      | -2.59/-3.79      | -3.55/-5.39      | -10.4/-19.08     | -18.79/-10.8     | -7.9/-7.3        | -9.7/-8.66       | -5.35/-6.26      | -8.89/-10.68     | -10.77/-9.14     | -7.65/-8.86      | -7.57/-5.27      | -4.04/-4.43      |
| Θ(67.5°)  | -5.6/-6.51    | -7.77/-11.59   | -12.04/-13.76  | -18.93/-14.44  | -12.23/-10.72  | -6.29/-3.69    | -1.57/-2.24    | -6.31/-10.67     | -8.49/-7.26      | -1.93/-2.88      | -1.57/-5.16      | -2.56/-1.88      | -1.93/-2.54      | -3.55/-6.08      | -9.58/-19.07     | -16.49/-11.19    | -7.57/-5.08      | -8.13/-8.35      | -3.36/-4.46      | -8.52/-10.84     | -10.67/-10.73    | -10.37/-10.73    | -15.97/-7.29     | -6.02/-6.42      |
| Θ(75°)    | -7.53/-8.62   | -9.18/-12.01   | -11.95/-13.28  | -18.72/-15.59  | -12.25/-13.31  | -10.37/-9.92   | -3.65/-4.99    | -7.16/-10.12     | -12.19/-10.31    | -16.58/-13.44    | -8.52/-5.42      | -3.49/-2.54      | -4.37/-6.18      | -5.49/-6.08      | -8.87/-18.19     | -16.27/-11.47    | -7.59/-4.51      | -6.48/-8.23      | -3.16/-3.36      | -7.8/-13.11      | -13.74/-11.96    | -14.87/-14.53    | -16.65/-11.2     | -7.79/-7.72      |
| Θ(82.5°)  | -10.79/-10.82 | -10.21/-12.74  | -12.41/-12.92  | -18.71/-15.35  | -12.4/-13.69   | -16.21/-10.3   | -6.57/-7.85    | -7.55/-8.67      | -14.3/-14.76     | -19.3/-16.08     | -13.36/-8.65     | -5.86/-2.45      | -5.67/-6.13      | -6.11/-6.52      | -9.94/-17.9      | -17.97/-10.96    | -6.7/-4.7        | -6.33/-8.55      | -4.96/-4.41      | -8.58/-16.81     | -17.42/-12.96    | -16.11/-18.05    | -18.93/-14.48    | -10.65/-11.83    |
| Θ(90°)    | -15.66/-16.52 | -14.48/-14.56  | -13.92/-14.51  | -18.51/-19.66  | -18.74/-18.23  | -17.38/-11.46  | -6.42/-6.84    | -9.83/-9.66      | -13.41/-18.68    | -18.75/-16.76    | -17.78/-12.47    | -8.6/-7.28       | -7.85/-7.42      | -7.77/-8.2       | -12.09/-15.8     | -18.15/-13.35    | -9.09/-7.19      | -8.93/-10.34     | -7.49/-5.88      | -9.39/-16.72     | -17.71/-17.75    | -16.16/-18.81    | -18.27/-15.37    | -13.82/-13.65    |
| Θ(87.5°)  | -18.59/-19.03 | -17.51/-17.7   | -15.56/-18.23  | -17.68/-18.93  | -17.35/-16.09  | -19.22/-11.75  | -9.3/-9.32     | -11/-13.89       | -18.56/-16.04    | -16.96/-18.19    | -19.16/-13.6     | -9.16/-8.77      | -12.52/-9.43     | -8.9/-10.14      | -15.04/-19.22    | -19.07/-19.25    | -11.96/-9.94     | -12.49/-11.24    | -11.13/-10.91    | -14.98/-18.57    | -18.75/-18.94    | -18.89/-17.84    | -18.08/-19.27    | -15.84/-15.35    |
| Θ(105°)   | -17.54/-18.31 | -17.99/-19.05  | -18.61/-18.41  | -17.57/-19.04  | -15.68/-18.04  | -17.55/-17.57  | -13.05/-10.68  | -19.08/-18.99    | -18.53/-13.9     | -14.78/-17.8     | -18.87/-14.35    | -10.18/-11.3     | -16.85/-14.61    | -11.84/-9.79     | -15.81/-19.3     | -18.71/-18.11    | -13.5/-12.16     | -14.16/-13.14    | -12.86/-13.67    | -15.78/-18.67    | -18.06/-19       | -18.64/-17.85    | -17.63/-18.83    | -18.77/-16.35    |
| Θ(112.5°) | -18.58/-19.3  | -19.33/-18.72  | -16.72/-17.49  | -18.47/-17.54  | -17.47/-18.92  | -17.17/-15.74  | -10.18/-11.94  | -17.99/-14.89    | -15.33/-12.95    | -18.41/-17.73    | -18.87/-13.54    | -11.53/-12.93    | -17.25/-18.84    | -16.83/-11.76    | -17.25/-18.06    | -18.52/-18.28    | -14.09/-13.23    | -18.14/-18.15    | -16/-16.05       | -18.38/-18.59    | -18.38/-18.82    | -17.2/-17.82     | -18.39/-18.12    | -17.84/-19.25    |
| Θ(120°)   | -18.56/-17.42 | -18.64/-18.95  | -17.42/-17.87  | -17.93/-18.11  | -18.07/-19.39  | -17.77/-16.72  | -15.77/-19.07  | -12.14/-12.08    | -17.06/-17.31    | -19.06/-18.8     | -17.92/-16.02    | -15.8/-16.42     | -17.78/-18.96    | -19.18/-14.64    | -15.43/-18.41    | -18.79/-18.14    | -19.13/-16.05    | -18.71/-17.67    | -18.58/-17.39    | -17.54/-17.68    | -17.3/-18.43     | -18.07/-18.73    | -17.22/-18.1     | -17.85/-18.42    |
| Θ(127.5°) | -17.99/-17.57 | -14.8/-15.21   | -18.56/-18.46  | -18.04/-18.08  | -16.76/-19.06  | -15.64/-15     | -18.03/-13     | -10.96/-16.84    | -18.26/-18.76    | -18.49/-18.6     | -17.51/-19.87    | -15.75/-15.57    | -18.16/-17.17    | -18.75/-12.02    | -15.96/-17.96    | -18/-18.63       | -17.75/-18.07    | -18.86/-17.9     | -17.62/-18.39    | -18.44/-17.87    | -18.37/-17.57    | -19.19/-18.45    | -18.14/-18.47    | -18.32/-18.81    |
| Θ(135°)   | -18.17/-17.87 | -18.69/-18.43  | -18.6/-18.57   | -17.91/-19.19  | -18.45/-18.42  | -18.71/-19.07  | -13.33/-11.39  | -14.85/-18.47    | -15.64/-19.05    | -19.23/-19.02    | -18.54/-16.61    | -17.71/-18.81    | -19.47/-14.29    | -13.87/-12.28    | -18.73/-17.23    | -18.74/-18.65    | -15.79/-12.29    | -12.94/-17.49    | -18.54/-16.08    | -18.58/-17.89    | -17.49/-19.16    | -18/-17.25       | -18.97/-14.99    | -16.64/-18.36    |
| Θ(142.5°) | -17.3/-17.8   | -18.37/-17.28  | -18.48/-19.09  | -18.16/-19.27  | -18.99/-18.34  | -17.66/-13.06  | -14.34/-18.32  | -18.36/-18.99    | -18.39/-18.48    | -17.91/-18.36    | -17.51/-16.57    | -18.56/-17.68    | -17.6/-16        | -17.53/-15.83    | -18.97/-19.77    | -15.81/-19.34    | -17.73/-18.06    | -17.62/-14.52    | -16.26/-18.83    | -18.06/-17.94    | -18.89/-19.38    | -17.18/-18.23    | -18.9/-18.46     | -17.95/-18.32    |
| Θ(150°)   | -18.24/-17.71 | -18.09/-18.24  | -15.48/-18     | -18.01/-16.69  | -17.88/-19.12  | -18.75/-17.8   | -19.24/-18.77  | -18.87/-18.97    | -18.99/-18.13    | -18.18/-18.62    | -18.77/-18.89    | -17.86/-17.43    | -16.5/-16.39     | -19.05/-17.66    | -17.59/-17.99    | -17.53/-19.3     | -14.39/-13.38    | -14.95/-15.48    | -19.01/-18.33    | -19.09/-18.49    | -18.22/-18.29    | -18.31/-17.98    | -18.5/-19.01     | -18.75/-17.64    |
| Θ(157.5°) | -17.79/-17.37 | -18.81/-18.4   | -18.33/-19.02  | -18.94/-18.19  | -18.45/-17.62  | -18.46/-18.17  | -18.43/-18.14  | -18.74/-18.38    | -18.45/-18.39    | -16.68/-17.82    | -18.23/-18.05    | -17.9/-18.81     | -18.26/-14.35    | -11.95/-13.28    | -18.73/-18.56    | -18.4/-18.8      | -18/-18.05       | -17.52/-15.57    | -15.69/-18.4     | -17.89/-18.24    | -17.65/-19.47    | -18.31/-17.56    | -15.89/-15.96    |                  |
| Θ(165°)   | -18.06/-18.59 | -18.73/-17.92  | -18.77/-18.87  | -18.74/-17.66  | -19.87/-18.94  | -17.27/-18.71  | -18.49/-18.58  | -17.99/-17.18    | -17.05/-17.74    | -18.36/-18       | -18.37/-17.39    | -18.33/-17.49    | -18.64/-18.9     | -18.76/-17.1     | -18.29/-17.84    | -18.25/-17.87    | -18.07/-15.31    | -15.19/-18.72    | -18.59/-18.91    | -18.68/-18.59    | -18.43/-18.88    | -18.88/-17.31    | -17.02/-17.44    | -18.93/-18.6     |
| Θ(172.5°) | -19.05/-18.36 | -19.24/-18.21  | -18.44/-18.16  | -17.93/-18.22  | -17.56/-17.21  | -16.04/-13.19  | -11.98/-11.3   | -11.18/-11.56    | -12.69/-14.7     | -17.91/-17.83    | -19.28/-18.1     | -18.26/-19.12    | -18.97/-17.51    | -17.61/-18.57    | -16.6/-18.4      | -13.33/-13       | -13.57/-14.99    | -17.28/-18.6     | -18.04/-19.01    | -17.15/-18.7     | -18.88/-19.12    | -16.36/-15.53    | -15.9/-16.55     | -18.57/-18       |
| Θ(180°)   | -17.83/-17.95 | -19.02/-18.74  | -18.67/-17.16  | -15.9/-14.93   | -14.5/-13.9    | -13.88/-13.95  | -14.17/-14.7   | -15.38/-16.59    | -18.15/-18.1     | -18.51/-17.99    | -19.11/-18.43    | -18.17/-17.51    | -17.82/-18.43    | -18.84/-18.14    | -18.44/-18.32    | -18.04/-18.46    | -18.27/-17.77    | -17.75/-19.04    | -19.17/-18.31    | -18.49/-17.92    | -19.04/-17.54    | -18.12/-18.59    | -19.41/-18.68    |                  |
| Freq(Hz)  | 6.475GHzPol.  | Theta/Ant. 4   | Φ(30°)Φ(37.5°) | Φ(45°)Φ(52.5°) | Φ(60°)Φ(67.5°) | Φ(75°)Φ(82.5°) | Φ(90°)Φ(97.5°) | Φ(105°)Φ(112.5°) | Φ(120°)Φ(127.5°) | Φ(135°)Φ(142.5°) | Φ(150°)Φ(157.5°) | Φ(165°)Φ(172.5°) | Φ(180°)Φ(187.5°) | Φ(195°)Φ(202.5°) | Φ(210°)Φ(217.5°) | Φ(225°)Φ(232.5°) | Φ(240°)Φ(247.5°) | Φ(255°)Φ(262.5°) | Φ(270°)Φ(277.5°) | Φ(285°)Φ(292.5°) | Φ(300°)Φ(307.5°) | Φ(315°)Φ(322.5°) | Φ(330°)Φ(337.5°) | Φ(345°)Φ(352.5°) |
| Gain      | 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°)     | 4/4.83        | 5.44/5.84      | 6.14/6.28      | 6.27/6.09      | 5.815/3.9      | 4.76/3.93      | 2.02/-2.59     | 5.75/-9.66       | 1.17/2.64        | 0.23/-6.19       | 1.17/2.64        | 0.23/-6.19       | 1.17/2.64        | 0.23/-6.19       | 1.17/2.64        | 0.23/-6.19       | 1.17/2.64        | 0.23/-6.19       | 1.17/2.64        | 0.23/-6.19       | 1.17/2.64        | 0.23/-6.19       | 1.17/2.64        | 1.37/2.85        |
| Θ(7.5°)   | 3.57/4.42     | 5.02/5.5       | 5.72/5.8       | 5.76/5.54      | 5.24/4.72      | 4.11/3.29      | 2.21/0.8       | -1.18/-3.95      | -7.8/-11.73      | -9.92/-5.42      | -2.18/0.07       | 1.68/2.99        | 3.89/4.63        | 5.21/5.61        | 5.87/5.96        | 5.93/5.79        | 5.54/5.16        | 4.51/3.56        | 2.44/0.97        | -1.02/-3.76      | -7.54/-10.95     | -8.46/-4.94      | -2.32/-0.45      | 1.19/2.51        |
| Θ(15°)    | 3.1/3.78      | 4.32/4.62      | 4.68/4.6       | 4.58/4.49      | 4.35/4.15      | 3.88/3.37      | 2.49/1.3       | -0.52/-3.06      | -6.86/-13.5      | -15.78/-8.41     | -4.46/-1.8       | 0.1/31           | 2.27/2.96        | 3.37/3.69        | 3.92/4.03        | 4.4/0.5          | 4.07/3.89        | 3.46/2.81        | 1.84/0.56        | -1.09/-3.43      | -6.95/-12.18     | -10.91/-5.33     | -2.04/0.03       | 1.38/2.41        |
| Θ(22.5°)  | 2.39/3.1      | 3.74/4.16      | 4.34/4.45      | 4.67/4.67      | 4.47/4.14      | 3.76/3.21      | 2.47/1.29      | -0.63/-3.38      | -7.79/-15.13     | -13.95/-13.3     | -3.74/-4.94      | -2.76/-1.01      | 0.25/1.4         | 1.81/1.94        | 1.96/2.13        | 2.36/2.5         | 2.38/2.01        | 1.49/0.53        | -0.51/-1.81      | -4.53/-5.89      | -8.26/-12.47     | -14.53/-10.44    | -4.53/-0.86      | 1.06/1.93        |
| Θ(30°)    | 0.91/9.2      | 2.86/3.46      | 3.86/4.42      | 4.86/4.75      | 4.37/3.78      | 2.99/2.07      | 1.07/0.24      | -1.92/-4.11      | -7.32/-13.23     | -18.76/-16.9     | -12.86/-8.63     | -5.3/-2.93       | -1.06/0.4        | 1.37/2.04        | 2.49/2.54        | 2.09/1.46        | 0.79/0.03        | -1.12/-2.36      | -3.52/-4.66      | -6.62/-9.22      | -10.91/-12.15    | -18.2/-14.24     | -6.38/-2.9       | -1.23/0.01       |
| Θ(37.5°)  | -1.03/0.59    | 1.62/2.41      | 3.22/4.14      | 4.56/4.53      | 4.14/3.43      | 2.52/1.43      | -0.09/-1.75    | -3.38/-4.93      | -6.68/-3.32      | -10.91/-17.86    | -17.91/-12.96    | -8.43/-6.39      | -3.57/-1.53      | 0.22/2.11        | 2.51/1.93        | 1.28/0.32        | -0.59/-1.94      | -3.74/-5.06      | -6.67/-8.1       | -8.83/-11.32     | -15.11/-15.02    | -15.83/-13       | -7.62/-5.1       | -4.49/-3.07      |
| Θ(45°)    | -1.29/0.25    | 0.82/1.24      | 2.02/3.07      | 3.47/3.13      | 2.76/2.47      | 1.86/0.54      | -1.51/-4.31    | -6.95/-7.56      | -7.51/-8.18      | -8.73/-9.42      | -7.87/-8.66      | -6.74/-3.58      | -1.09/0.7        | 0.78/0.26        | 0.56/-0.16       | -1.37/-3.67      | -6.42/-10.08     | -13.15/-14       | -13/-14.23       | -17.26/-17.37    | -15.04/-14.66    | -12.71/-9.01     | -6.21/-3.4       |                  |
| Θ(52.5°)  | -2.08/-0.06   | 0.29/0.24      | 0.88/2.08      | 2.31/1.2       | 0.51/0.92      | 0.77/-0.69     | -2.74/-5.06    | -7.63/-9.87      | -9.13/-8.94      | -9.15/-3.69      | -4.52/-5.07      | -8.55/-11.37     | -9.69/-6.26      | -3.96/-2.8       | -3.59/-3.11      | -1.91/-2.32      | -2.6/-4.84       | -8.17/-12.96     | -16.39/-15.89    | -14.18/-13.58    | -15.28/-13.87    | -11.12/-13.02    | -13.88/-9.83     | -6.56/-3.48      |
| Θ(60°)    | -4.25/-1.57   | -0.49/-0.84    | -0.59/0.52     | 1.01/1.03      | -1.22/0.37     | 0.03/-2.19     | -4.51/-5.42    | -6.42/-9.39      | -11.09/-9.34     | -7.78/-5.7       | -4.66/-6.06      | -11.78/-15.27    | -11.64/-8.79     | -6.73/-6.85      | -7.37/-7.7       | -7.56/-7.6       | -6.58/-6.26      | -11.4/-18.69     | -17.41/-12       | -9.64/-8.29      | -9.74/-12.5      | -11.16/-14.95    | -14.95/-11.23    | -8.52/-5.34      |
| Θ(67.5°)  | -6.99/-3.26   | -1.11/-2.4     | -2.86/-2.49    | -1.59/-3.94    | -3.65/-1.68    | -1.28/-3.5     | -6.06/-6.05    | -6.85/-10.1      | -12.17/-9.22     | -7.46/-6.35      | -6.31/-9.81      | -18.37/-18.6     | -14.22/-9.72     | -8.58/-7.94      | -7.55/-7.45      | -10.79/-9.91     | -11.31/-11.85    | -17.33/-18.84    | -13.22/-8.69     | -6.62/-4.84      | -6.44/-10.1      | -13.83/-18.21    | -18.84/-14.16    | -9.72/-8.24      |
| Θ(75°)    | -12.85/-6.53  | -2.82/-4.49    | -5.95/-6.4     | -4.85/-7.77    | -7.16/-3.76    | -1.84/-3.93    | -8.24/-8.85    | -7.23/-12.53     | -14.04/-9.82     | -7.45/-7.91      | -8.28/-14.84     | -18.84/-19.02    | -18.88/-11.71    | -9.94/-8.51      | -6.54/-5.91      | -7.57/-7.73      | -13.37/-15.42    | -19.21/-14.32    | -11.3/-8.6       | -6.98/-4.08      | -5.08/-8.7       | -13.76/-18.14    | -18.04/-12.93    | -9.44/-12.69     |
| Θ(82.5°)  | -18.85/-9.34  | -6.65/-8.15    | -11.41/-11.2   | -9.56/-10.77   | -12.3/-4.47    | -3.52/-6.5     | -11.52/-11.83  | -7.86/-14.76     | -11.98/-9.81     | -7.91/-8.1       | -11.76/-17.28    | -19.7/-17.08     | -18.38/-15.16    | -11.22/-9.94     | -6.47/-6.55      | -5.94/-5.43      | -9.99/-14.67     | -18.25/-12.38    | -11.07/-10.36    | -8.12/-3.5       | -5.52/-8.9       | -13.25/-18.77    | -16.26/-11.38    | -10/-15.89       |
| Θ(90°)    | -18.62/-12.31 | -9.48/-10.83   | -15.04/-14.96  | -13.13/-15.06  | -18.61/-5.6    | -6.24/-9.44    | -14.34/-12.99  | -8.71/-14.87     | -11.61/-10.1     | -9.87/-11.19     | -1               |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |



Radiated Composite Gain Data\_5GHz UNII-2C~3, 6GHz-4TX(Radio 2)

Appendix D

|            |               |                 |                 |                 |                 |                 |                 |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |
|------------|---------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Θ (105°)   | -11.87/-12.78 | -13.94/-13.2    | -11.77/-14.74   | -18.26/-18.73   | -18.47/-13.55   | -8.66/-7.65     | -17.67/-10.53   | -6.47/-9.88       | -18.25/-11.12     | -11.32/-17.17     | -18.89/-18.42     | -18.43/-12.73     | -10.78/-12.63     | -10.95/-12.5      | -16.46/-14.97     | -14.8/-19.08      | -14.41/-10.9      | -11.84/-18.36     | -11.82/-12.47     | -17.09/-18.03     | -17.6/-17.87      | -16.86/-16.97     | -17.64/-17.73     | -15.44/-14.15     |
| Θ (112.5°) | -13.31/-16.19 | -18/-14.56      | -14.96/-17.19   | -17.2/-16.41    | -12.58/-14.2    | -11.41/-18.75   | -16.62/-8.77    | -10.95/-17.94     | -19.02/-10.5      | -14.29/-14        | -19.38/-18.29     | -16.99/-12.97     | -14.18/-16.31     | -13.12/-16.62     | -15.69/-18.75     | -18.99/-17.02     | -18.79/-13.23     | -10.78/-18.17     | -12.37/-12.1      | -18.55/-16.43     | -14.06/-18.41     | -14.9/-16.46      | -14.42/-15.87     | -17.11/-15.72     |
| Θ (120°)   | -13.45/-10.04 | -12.24/-14.16   | -16.66/-18.57   | -18.21/-18.77   | -18.94/-18.11   | -16.09/-11.87   | -8.41/-11.14    | -17.09/-18.08     | -9.77/-8.34       | -19.09/-15.05     | -15.21/-17.19     | -16.39/-13.01     | -15.9/-14.59      | -12.73/-18.71     | -16.63/-17.32     | -17.64/-18.59     | -15.56/-18.6      | -18.95/-17.74     | -18.06/-18.08     | -18.39/-14.89     | -18.82/-15.05     | -18.37/-15.78     | -14.34/-17.11     | -17.45/-15.17     |
| Θ (127.5°) | -18.38/-17.35 | -14.49/-14.57   | -18.68/-17.71   | -17.68/-17.87   | -13.33/-12.34   | -12.6/-18.96    | -16.38/-17.2    | -16.85/-12.04     | -9.51/-13.38      | -14.81/-13.33     | -17.26/-14.89     | -18.29/-15.6      | -11.86/-13.77     | -16.26/-12.5      | -17.59/-18.09     | -16.86/-13.83     | -13.1/-13.04      | -19.04/-13.77     | -11.07/-15.7      | -18.23/-18.27     | -14.45/-16.7      | -18.01/-10.66     | -13.75/-10.39     | -14.55/-17.62     |
| Θ (135°)   | -15.73/-13.93 | -10.05/-9.58    | -18.73/-18.61   | -18.7/-17.42    | -18.57/-18.85   | -16.91/-18.46   | -17.68/-13.11   | -8.93/-11.15      | -11.42/-14.33     | -13.05/-15.96     | -16.15/-17.44     | -14.8/-15.57      | -13.45/-14.22     | -13.53/-11.03     | -16.48/-15.54     | -16.91/-17.68     | -18.76/-11.42     | -8.81/-13.23      | -14.55/-8.99      | -10.77/-9.47      | -12.96/-17.87     | -10.38/-9.71      | -18.74/-17.38     | -16.27/-13.63     |
| Θ (142.5°) | -18.36/-19.18 | -18.85/-14.82   | -14.93/-19.29   | -15.65/-17.1    | -18.49/-13.63   | -13.16/-13.49   | -12.2/-12.53    | -13.29/-13.73     | -11.01/-11.06     | -12.1/-14.29      | -17.02/-15.38     | -17.65/-18.66     | -16.96/-13.54     | -9.83/-9.29       | -8.81/-13.25      | -19.33/-16.33     | -15.98/-16.99     | -11.47/-11.26     | -12.73/-18.98     | -17.74/-18.65     | -14.33/-15.32     | -11.16/-14.89     | -18.36/-14.27     | -10.88/-14.49     |
| Θ (150°)   | -19.9/-18.86  | -18.86/-12.63   | -11.47/-18.06   | -15.12/-11.72   | -14.35/-18.73   | -17.43/-13.26   | -12.69/-12.1    | -12.5/-15.56      | -18.36/-18.42     | -16.53/-15.01     | -15.97/-15.81     | -17.46/-17.37     | -16.53/-18.22     | -13.76/-8.63      | -8.45/-8.93       | -11.4/-14.92      | -18.57/-9.81      | -7.43/-8.42       | -12.33/-16.16     | -11.37/-12.31     | -18.55/-17.68     | -17.92/-17.67     | -17.9/-16.51      | -16.43/-15.49     |
| Θ (157.5°) | -11.32/-12.54 | -12.94/-14.24   | -17.67/-18.87   | -19.19/-17.96   | -16.85/-14.71   | -13.2/-13.65    | -16.5/-19.13    | -19.07/-18.54     | -18.85/-17.43     | -17.32/-18.5      | -17.95/-16.7      | -18.51/-16.57     | -19.13/-18.94     | -13.34/-11.72     | -11.92/-13.1      | -15.79/-15.24     | -14.65/-15.88     | -13.66/-10.21     | -9.55/-8.86       | -6.78/-8.48       | -14.14/-14.85     | -14.9/-13.82      | -11.16/-8.35      | -8.03/-9.64       |
| Θ (165°)   | -18.61/-18.53 | -16.87/-18.36   | -18.01/-19.05   | -15.05/-13.53   | -13.98/-16.9    | -19.06/-16.22   | -14.15/-13.84   | -14.32/-14.74     | -13.79/-12.24     | -11.83/-14.4      | -18.69/-18.73     | -17.75/-17.91     | -17.6/-16.8       | -13.63/-8.2       | -6.71/-7.6        | -8.99/-11.52      | -13.78/-10        | -7.32/-7.52       | -9.82/-14.96      | -17.33/-18.62     | -19.14/-18.23     | -18.35/-15.99     | -15.72/-14.87     | -18.23/-18.9      |
| Θ (172.5°) | -18.39/-17.73 | -18.09/-17.19   | -16.2/-15.05    | -15.05/-16.32   | -16.21/-15      | -13.23/-11.86   | -11.91/-12.99   | -14.84/-17.5      | -19.24/-19.22     | -18.48/-19.2      | -19.02/-19        | -17.72/-18.47     | -18.56/-17.63     | -14.43/-13.43     | -14.39/-18.16     | -17.99/-14.83     | -11.68/-11.02     | -12.23/-14.79     | -16.85/-14.15     | -11.3/-9.91       | -10.27/-10.47     | -10.48/-11.9      | -14.36/-15.14     | -16.35/-18.35     |
| Θ (180°)   | -19.13/-18.89 | -18.82/-18.25   | -19.28/-17.94   | -15.71/-14.39   | -13.33/-11.97   | -11.43/-10.94   | -10.71/-10.71   | -10.73/-10.87     | -11.89/-13.35     | -15.03/-17.46     | -18.55/-17.79     | -18.48/-18.39     | -19.13/-16.3      | -15.29/-13.96     | -11.69/-11.37     | -10.36/-9.62      | -10.48/-12.15     | -13.45/-13.82     | -13.76/-13.61     | -13.44/-12.84     | -12.05/-11.78     | -13.26/-14.59     | -17.15/-18.6      | -18.39/-18.37     |
| Freq(Hz)   | 6.995G/Pol.   | Theta/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°)     | 2.63/3.67     | 4.43/5.01       | 5.47/5.81       | 6.04/6.12       | 6.07/5.85       | 5.39/4.68       | 4.09/3.28       | 2.09/0.67         | -1.33/-4.11       | -8.6/-14.53       | -10.44/-5         | -1.64/0.73        | 2.33/3.63         | 4.64/5.42         | 5.97/6.28         | 6.47/6.59         | 6.46/6.16         | 5.74/5.17         | 4.36/3.42         | 2.12/0.26         | -2.04/-5.32       | -10.17/-15.95     | -8.8/-3.97        | -1.09/1.08        |
| Θ (7.5°)   | 3.17/4.53     | 5.31/5.91       | 6.36/6.65       | 6.78/6.76       | 6.58/6.24       | 5.74/5.11       | 4.34/3.28       | 2.05/0.57         | -1.46/-4.29       | -8.59/-16.11      | -14.46/-8.14      | -4.25/-1.5        | 0.32/1.96         | 3.24/0.4          | 4.64/5.13         | 5.47/5.64         | 5.64/5.46         | 5.28/4.97         | 4.43/3.83         | 2.86/1.59         | -0.08/-2.32       | -5.26/-9.13       | -8.66/-4.14       | -0.92/1.55        |
| Θ (15°)    | 3.74/4.97     | 5.63/5.86       | 6.04/6.22       | 6.21/6.07       | 5.89/5.48       | 4.83/3.8        | 2.41/0.71       | -1.53/-4.1        | -7.23/-10.24      | -11.64/-12.29     | -11.31/-7.57      | -4.78/-2.4        | -0.45/1.28        | 2.77/3.85         | 4.89/5.35         | 5.46/5.26         | 4.83/4.44         | 4.04/3.77         | 3.23/2.53         | 1.81/0.67         | -0.79/-3.07       | -5.16/-5.89       | -5.42/-2.9        | -0.18/2.21        |
| Θ (22.5°)  | 2.39/3.79     | 4.65/5.18       | 5.72/5.98       | 5.88/5.64       | 5.34/7.9        | 4.06/5          | 1.56/-0.64      | -3.66/-6.86       | -8.59/-7.14       | -5.06/-4.1        | -4.59/-4.45       | -3.36/-2.11       | -0.46/1.16        | 2.54/3.69         | 4.44/4.45         | 4.11/3.71         | 3.25/2.47         | 1.57/0.36         | -0.86/-2.1        | -3.32/-4.28       | -5.76/-8.39       | -12.23/-12.62     | -7.77/-3.97       | -1.39/0.46        |
| Θ (30°)    | -0.25/1.11    | 2.36/3.76       | 4.94/5.59       | 5.65/5.38       | 4.94/4.15       | 3.25/2.17       | 0.72/-0.82      | -2.43/-3.74       | -4.48/-4.09       | -3.67/-4.2        | -5.23/-6.36       | -5.2/-2.77        | -1.56/0.07        | 1.47/1.78         | 2.75/3.77         | 4.01/3.97         | 3.25/2.06         | 0.7/-1.36         | -3.3/-3.6         | -3.56/-5.5        | -9.65/-13.18      | -11.6/-11.06      | -9.93/-7          | -3.58/-1.76       |
| Θ (37.5°)  | -2.12/0.02    | 1.91/3.39       | 4.73/5.41       | 5.78/5.67       | 5.03/4.09       | 2.71/0.36       | -1.99/-3.82     | -5.41/-5.62       | -4.37/-3.46       | -3.2/-4.41        | -3.47/-2.78       | -2.04/-1.67       | -1.44/-0.52       | 0.08/1.18         | 2.85/3.44         | 3.18/2.81         | 1.93/0.62         | -1.98/-3.68       | -4.34/-4.5        | -4.61/-5.05       | -7.93/-15.07      | -18.76/-13.83     | -10.07/-9.57      | -6.66/-3.15       |
| Θ (45°)    | -4.77/-2.08   | 0.48/2.05       | 2.94/3.25       | 3.75/4.07       | 4.05/3.59       | 2.37/0.13       | -3.08/-6.85     | -10.24/-8.8       | -4.84/-2.75       | -2.86/-2.69       | -2.04/-2.57       | -3.14/-4.07       | -5.25/-3.96       | -2.57/-1.18       | 1.02/1.32         | 0.69/-0.47        | -2.88/-4.67       | -7.56/-9.5        | -7.42/-5.98       | -6.82/-7.39       | -7.95/-9.29       | -14.19/-17.8      | -18.66/-19.11     | -16.8/-10.5       |
| Θ (52.5°)  | -3.45/-1.26   | 0.64/1.77       | 2.27/2.49       | 3.12/3.75       | 4.47/4.12       | 3.15/1.16       | -2.9/-9.06      | -19.33/-18.88     | -9/-5.42          | -3.77/-3.27       | -3.04/-2.63       | -4.56/-9.1        | -13.43/-11.35     | -6.26/-4.2        | -2.84/-3.66       | -2.77/-3.78       | -6.75/-9.4        | -13.73/-15.23     | -9.5/-6.26        | -7.51/-9.78       | -9.92/-11.81      | -10.44/-14.13     | -18.14/-15.22     | -18.38/-10.1      |
| Θ (60°)    | -1.51/-1.36   | -0.42/0.52      | 1.14/2.25       | 3.11/3.4        | 3.61/3.13       | 2.79/0.49       | -5.14/-12.91    | -18.04/-16.15     | -11.06/-8.56      | -5.5/-4.65        | -3.95/-3.33       | -5.51/-11.58      | -17.7/-18.76      | -18.49/-11.14     | -8.52/-9.27       | -6.51/-7.37       | -9.86/-13.74      | -12.61/-11.99     | -6.72/-4.6        | -5.82/-9.11       | -8.31/-9.38       | -8.91/-10.88      | -16.59/-18.59     | -9.49/-5.07       |
| Θ (67.5°)  | -3.07/-3.04   | -3.01/-0.72     | -0.45/1.32      | 1.74/1.93       | 1.31/1.41       | -0.93/-5.53     | -5.83/-7.5      | -10.02/-12.55     | -14.61/-10.41     | -6.15/-6.48       | -8.79/-8.58       | -12.55/-17.88     | -17.54/-13.23     | -9.11/-16.5       | -17.05/-16.09     | -18.43/-13.47     | -14.93/-15.54     | -9.18/-3.85       | -4.91/-7.78       | -6.45/-9.32       | -9.68/-11.9       | -15.65/-12.35     | -16.66/-19.11     | -6.15/-3.95       |
| Θ (75°)    | -8.58/-6.67   | -6.09/-2.63     | -3.54/-2.3      | -1.3/-1.1       | -0.2/-2.05      | -7.82/-9.53     | -5.17/-5.21     | -5.35/-6.62       | -13.63/-15.17     | -8.32/-7.77       | -13.11/-13.9      | -18.27/-15.55     | -11.02/-9.56      | -5.49/-7.24       | -10.7/-8.22       | -13.97/-16.97     | -9.53/-9.63       | -17.91/-10.86     | -9.4/-3.63        | -3.16/-6.97       | -7.06/-8.63       | -15.19/-18.45     | -14.29/-10.8      | -4.85/-5.78       |
| Θ (82.5°)  | -11.35/-8.9   | -8.86/-6.05     | -7.02/-4.71     | -4.69/-4.36     | -1.16/-10.55    | -9.13/-10.87    | -9.93/-8.7      | -4.26/-6.48       | -13.37/-13.37     | -8.68/-8.69       | -9.34/-10.28      | -11.31/-14.34     | -13.09/-8.42      | -6.2/-7.43        | -8.07/-5.74       | -7.69/-6.72       | -8.57/-7.63       | -15.9/-10.55      | -10.35/-3.87      | -2.99/-5.01       | -6.75/-8.44       | -17.03/-13.24     | -11.8/-9.25       | -4.11/-6.13       |
| Θ (90°)    | -15.23/-15.86 | -16.29/-11.71   | -10.07/-8.51    | -9.94/-7.18     | -4.41/-16.27    | -6.15/-11.01    | -17.58/-10.42   | -3.02/-8.63       | -17.98/-12.59     | -9.51/-9.54       | -8.81/-8.79       | -13.44/-16.55     | -18.16/-12.38     | -10.08/-9.21      | -8.68/-6.98       | -8.92/-5.64       | -6.03/-12.24      | -13.74/-7.9       | -12.27/-7.47      | -5.21/-6.38       | -8.9/-9           | -13.28/-16.89     | -12.81/-11.03     | -5.22/-7.45       |
| Θ (97.5°)  | -18.57/-19.33 | -12.03/-14.04   | -12.85/-13.96   | -13.16/-9.74    | -13.23/-6.12    | -7.63/-17.68    | -14.24/-5.92    | -3.52/-17.97      | -18.22/-9.95      | -9.19/-11.72      | -10.65/-15.27     | -17.57/-17.52     | -19.13/-15.02     | -14.26/-18.38     | -14.99/-9.53      | -9.5/-7.75        | -4.45/-15.23      | -17.89/-9.11      | -11.33/-10.12     | -9.33/-8          | -9.41/-9.72       | -14.81/-16.7      | -19.39/-15.99     | -6.34/-8.15       |
| Θ (105°)   | -17.39/-18.06 | -16.65/-14.76   | -10.19/-10.93   | -15.66/-11.91   | -15.39/-5.28    | -11.38/-13.77   | -11.68/-6.03    | -6.34/-19.26      | -18.98/-9.48      | -10.54/-13.63     | -13.32/-18.1      | -18.32/-12.26     | -9.59/-8.28       | -7.28/-12.43      | -13.98/-11.21     | -13.09/-10.52     | -6.82/-12.45      | -13.04/-12.16     | -7.72/-13.03      | -11.88/-9.96      | -11.51/-14.52     | -17.56/-17.54     | -15.4/-17.92      | -12.11/-13.31     |
| Θ (112.5°) | -17.98/-19.05 | -19/-18.03      | -17.31/-18.64   | -18.57/-10.73   | -13.28/-10.45   | -18.37/-8.26    | -9.81/-7.69     | -19.12/-9.1       | -15.39/-13.07     | -10.72/-13.16     | -18.62/-16.29     | -12.31/-10.25     | -7.33/-7.22       | -5.01/-12.19      | -15.21/-19.13     | -16.42/-19.6      | -11.51/-8.85      | -8.76/-15.96      | -8.35/-7.39       | -14.05/-17.59     | -16.14/-14.52     | -18.95/-17.42     | -17.57/-16.02     | -10.9/-17.94      |
| Θ (120°)   | -17.75/-18.3  | -13.79/-13.96   | -17.63/-13.04   | -12.15/-10.87   | -17.44/-13.74   | -13.67/-9.75    | -11.76/-15.67   | -12.49/-5.61      | -13.81/-14.06     | -14.75/-15.33     | -18.22/-18.16     | -13.14/-12.2      | -8.49/-9.24       | -6.8/-7.64        | -12.09/-14.23     | -18.18/-18.05     | -18.2/-10.68      | -10.33/-17.96     | -18.94/-10.57     | -19.16/-18.08     | -16.72/-14.22     | -17.55/-18.35     | -18.13/-19.1      | -9.59/-15.18      |
| Θ (127.5°) | -18.28/-18.06 | -19.16/-18.65   | -18.73/-18.7    | -18.54/-17.69   | -12.82/-9.38    | -10.48/-18.18   | -19/-15.03      | -7.91/-9.43       | -18.9/-18.91      | -17.61/-17.74     | -17.93/-14.69     | -12.98/-9.71      | -8.16/-5.81       | -6.43/-5.46       | -11.1/-9.47       | -18.59/-12.24     | -19.28/-14.82     | -13.78/-18.96     | -16.61/-9.69      | -13.97/-15.86     | -8.24/-11.99      | -12.95/-17.76     | -12.26/-16.3      | -9.14/-15.36      |
| Θ (135°)   | -10.01/-12.58 | -11.94/-9.82    | -8.49/-7.52     | -9.06/-10.89    | -14.37/-15.89   | -9.31/-8.74     | -14.23/-17.78   | -11.69/-14.71     | -18.58/-18.83     | -18.81/-15.9      | -16.65/-11.36     | -9.25/-9.43       | -8.94/-8.29       | -8.26/-8.08       | -7.86/-4.72       | -8.88/-15.1       | -18.08/-16.86     | -14.62/-18.84     | -14.48/-8.48      | -14.17/-18.44     | -11.36/-16.76     | -14.9/-17.82      | -10.1/-11.13      | -10.18/-9.3       |
| Θ (142.5°) | -14.53/-14.34 | -15.89/-14.83   | -17.35/-17.8    | -12.53/-12.53   | -11.52/-11.86   | -18.12/-17.36   | -12.16/-11.95   | -17.35/-16.09     | -13.66/-15.42     | -14.21/-11.63     | -11.24/-10.99     | -9.57/-10.09      | -8.26/-6.25       | -5.28/-5.83       | -5.77/-6.52       | -8.55/-13.89      | -18.75/-17.93     | -18.46/-14.91     | -19.31/-11.92     | -14.24/-15.44     | -18.09/-12.06     | -14.58/-9.14      | -11.69/-14        |                   |





# Antenna Pattern\_2.4GHz, 5GHz UNII-1~UNII-3(Radio 1)

# Appendix E

|           |               |                 |                 |                 |                 |                 |                 |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |
|-----------|---------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Θ(22.5°)  | 3.373.39      | 3.093.26        | 3.703.57        | 3.303.45        | 4.014.54        | 4.674.73        | 4.514.12        | 3.883.93          | 4.023.93          | 3.823.81          | 3.733.50          | 3.363.19          | 3.052.86          | 2.392.02          | 1.732.62          | 1.691.56          | 1.040.88          | 1.763.00          | 3.713.83          | 3.613.03          | 2.472.09          | 2.042.44          | 3.023.41          | 3.483.29          |
| Θ(30°)    | 3.553.17      | 2.542.11        | 2.692.61        | 2.873.00        | 3.464.03        | 3.943.46        | 2.932.95        | 3.514.11          | 4.574.71          | 4.434.08          | 3.693.02          | 2.512.37          | 2.211.92          | 1.431.00          | 0.920.65          | 0.381-0.16        | -0.680.21         | 1.993.02          | 2.992.39          | 2.022.33          | 2.993.63          | 4.284.40          | 3.753.38          | 3.673.87          |
| Θ(37.5°)  | 3.853.33      | 2.290.62        | 3.071.24        | 1.982.00        | 2.432.73        | 2.862.67        | 2.982.61        | 4.054.54          | 5.075.32          | 5.133.61          | 3.963.33          | 2.541.88          | 1.300.75          | 0.420.05          | -0.391-1.28       | -1.891-2.35       | -2.000.20         | 1.662.16          | 2.953.36          | 3.653.79          | 3.743.84          | 4.004.19          | 3.953.72          |                   |
| Θ(45°)    | 3.223.06      | 2.320.08        | -2.461-0.95     | -0.131-0.19     | 0.031.63        | 2.142.11        | 2.512.87        | 3.294.11          | 4.925.17          | 4.904.54          | 4.023.25          | 2.331.66          | 1.570.83          | -0.041-0.72       | -1.621-1.97       | -3.081-4.99       | -3.501-1.33       | 0.450.98          | 1.051.58          | 2.202.78          | 3.293.72          | 4.244.25          | 3.613.66          | 3.703.55          |
| Θ(52.5°)  | 1.671.02      | 0.641-0.75      | -4.351-4.12     | -2.861-3.26     | -1.061-0.64     | 0.540.41        | 0.250.63        | 2.183.49          | 3.753.40          | 3.072.88          | 2.551.45          | -0.161-0.59       | -0.631-0.84       | -0.941-1.20       | -3.371-4.41       | -5.151-5.11       | -3.381-1.03       | -0.561-0.09       | -0.401-0.54       | 0.541.98          | 2.812.79          | 2.923.18          | 2.471.48          | 1.341.59          |
| Θ(60°)    | -0.271-1.08   | -1.731-3.37     | -6.841-7.38     | -6.841-7.38     | -3.561-1.98     | -2.101-2.17     | -2.581-0.65     | 1.361.60          | 0.820.35          | 0.550.48          | 0.750.95          | -0.201-3.16       | -3.991-2.63       | -2.631-3.21       | -4.681-6.38       | -6.531-5.28       | -4.011-2.62       | -4.541-4.73       | -2.251-0.90       | -0.641-1.30       | -0.981-0.15       | 1.700.15          | -0.831-0.38       |                   |
| Θ(67.5°)  | -1.411-2.45   | -3.921-6.81     | -8.581-10.46    | -11.821-11.79   | -6.211-5.06     | -4.711-4.59     | -3.911-0.62     | 0.841-0.23        | -1.131-0.04       | 0.571-0.31        | -0.591-0.23       | -1.321-3.88       | -6.601-5.05       | -4.761-6.22       | -7.471-7.39       | -6.231-6.34       | -5.391-3.84       | -3.991-3.90       | -7.421-5.53       | -3.301-3.04       | -3.171-4.77       | -3.091-0.95       | 0.461.03          | 0.091-1.14        |
| Θ(75°)    | -2.941-3.79   | -5.651-9.04     | -10.001-13.86   | -15.491-12.70   | -10.021-8.01    | -7.721-6.24     | -4.241-3.14     | -0.491-0.04       | -0.811-0.64       | 1.100.01          | -1.411-1.41       | -1.101-4.29       | -6.451-8.02       | -6.491-7.59       | -8.301-10.37      | -7.641-7.01       | -8.011-6.36       | -5.231-4.46       | -5.921-3.69       | -2.291-1.86       | -2.461-3.76       | -3.591-1.23       | 0.001-0.02        | 0.101-1.90        |
| Θ(82.5°)  | -4.771-6.65   | -7.331-10.04    | -11.541-14.85   | -14.961-14.41   | -11.821-10.96   | -9.811-6.86     | -4.721-1.96     | -1.831-2.28       | -0.981-0.48       | 0.711-0.84        | -2.181-2.40       | -3.191-4.46       | -7.871-9.39       | -8.401-11.67      | -11.931-11.22     | -8.441-9.47       | -10.551-8.05      | -5.501-5.84       | -4.651-3.71       | -2.011-1.80       | -2.551-3.56       | -5.091-2.71       | -0.991-0.74       | -1.481-3.57       |
| Θ(90°)    | -7.851-8.65   | -9.341-11.82    | -12.501-16.06   | -16.041-13.84   | -13.311-13.39   | -10.661-8.39    | -6.171-3.30     | -2.951-3.25       | -1.621-0.86       | -0.641-1.90       | -3.001-3.71       | -4.001-4.23       | -8.001-11.16      | -11.801-12.52     | -11.821-14.51     | -10.911-10.77     | -11.271-10.88     | -8.011-7.23       | -6.041-4.82       | -3.581-3.16       | -3.771-4.84       | -7.811-5.16       | -3.561-3.73       | -3.391-5.76       |
| Θ(97.5°)  | -9.751-9.88   | -12.211-13.57   | -15.701-15.37   | -14.631-15.19   | -14.381-15.81   | -10.521-9.95    | -7.361-5.12     | -4.561-4.48       | -2.991-2.40       | -2.491-4.08       | -4.991-4.71       | -5.951-6.61       | -11.261-11.66     | -12.091-15.46     | -13.181-13.99     | -12.581-13.19     | -12.801-13.20     | -11.171-10.81     | -8.001-8.31       | -6.401-6.11       | -6.341-6.98       | -10.931-7.59      | -6.231-6.20       | -6.611-8.59       |
| Θ(105°)   | -13.481-11.91 | -12.501-14.51   | -15.011-16.09   | -15.271-14.49   | -15.811-15.49   | -13.301-12.18   | -9.221-5.66     | -6.331-6.17       | -5.101-4.35       | -3.851-4.79       | -6.471-6.90       | -6.501-8.13       | -11.561-12.20     | -15.631-15.41     | -13.711-14.89     | -14.951-13.78     | -14.201-15.57     | -15.531-13.28     | -13.281-13.10     | -11.591-10.82     | -10.651-10.21     | -13.271-10.12     | -8.611-8.03       | -10.261-11.08     |
| Θ(112.5°) | -13.101-12.55 | -15.771-15.70   | -15.971-16.17   | -15.641-14.69   | -15.151-15.04   | -15.341-13.92   | -11.811-8.96    | -7.641-7.93       | -6.901-6.15       | -5.891-6.87       | -8.371-9.17       | -9.231-9.60       | -13.331-14.96     | -15.351-14.80     | -14.891-15.39     | -15.041-15.01     | -15.471-15.67     | -14.571-14.84     | -14.651-14.62     | -15.551-14.70     | -14.041-11.82     | -12.871-13.51     | -10.871-10.24     | -11.721-12.00     |
| Θ(120°)   | -13.671-13.69 | -15.271-15.49   | -15.701-15.37   | -15.651-15.62   | -15.351-15.63   | -15.901-13.73   | -12.331-10.78   | -9.231-8.78       | -7.941-6.95       | -6.951-7.62       | -8.331-9.86       | -10.071-11.35     | -12.601-15.18     | -15.891-14.54     | -15.101-14.70     | -16.011-14.67     | -15.591-15.42     | -15.021-15.93     | -15.691-16.01     | -15.241-13.66     | -11.901-12.78     | -15.381-14.23     | -11.781-10.06     | -13.141-11.60     |
| Θ(127.5°) | -15.181-14.74 | -15.621-15.46   | -15.021-15.25   | -14.981-15.29   | -15.191-15.59   | -15.841-14.08   | -12.961-12.09   | -11.551-11.42     | -11.191-9.40      | -9.381-10.55      | -10.941-10.62     | -11.911-13.28     | -13.191-15.41     | -15.221-15.11     | -14.861-15.77     | -14.841-14.96     | -15.381-15.34     | -15.061-15.19     | -15.381-15.34     | -14.881-15.94     | -13.971-13.41     | -15.281-14.52     | -12.711-12.37     | -15.621-14.88     |
| Θ(135°)   | -15.811-15.60 | -14.751-15.56   | -16.131-15.68   | -15.871-15.49   | -16.131-15.43   | -16.061-15.45   | -14.771-14.99   | -12.821-10.80     | -10.711-10.29     | -9.791-10.45      | -9.981-10.32      | -12.911-13.11     | -14.911-15.02     | -15.481-15.80     | -15.261-15.99     | -15.311-15.29     | -15.811-15.81     | -15.021-15.66     | -15.431-15.62     | -15.401-15.84     | -15.161-14.76     | -14.001-11.47     | -13.441-14.59     | -14.281-14.63     |
| Θ(142.5°) | -15.441-15.71 | -15.231-15.66   | -14.831-15.29   | -16.001-15.96   | -15.281-15.56   | -15.841-15.63   | -13.051-11.92   | -13.391-13.29     | -11.981-11.88     | -12.081-11.97     | -12.781-13.90     | -13.291-14.42     | -15.461-16.10     | -15.321-15.17     | -15.421-15.41     | -15.111-14.96     | -15.731-14.93     | -15.551-15.18     | -15.231-15.75     | -14.711-15.34     | -15.391-15.96     | -15.181-15.36     | -14.771-15.27     | -15.361-15.97     |
| Θ(150°)   | -15.121-14.54 | -15.871-15.70   | -15.341-15.47   | -14.951-15.58   | -15.051-15.59   | -15.371-14.76   | -14.941-14.69   | -13.741-14.76     | -15.411-15.14     | -14.941-13.19     | -13.471-13.80     | -14.391-14.53     | -15.161-15.31     | -15.021-15.54     | -14.911-15.34     | -15.491-15.26     | -15.771-14.42     | -15.061-15.12     | -15.451-16.07     | -15.921-14.85     | -14.041-13.84     | -14.351-15.26     | -15.291-14.52     |                   |
| Θ(157.5°) | -14.611-15.93 | -15.831-15.48   | -14.771-15.16   | -15.001-14.90   | -15.331-14.91   | -15.951-15.66   | -14.701-15.20   | -15.861-14.83     | -13.961-14.02     | -13.971-14.44     | -14.201-14.54     | -14.911-15.24     | -15.351-14.98     | -15.131-15.63     | -15.521-15.29     | -14.611-15.55     | -15.191-15.77     | -15.251-14.70     | -15.611-15.46     | -15.101-15.38     | -15.161-15.02     | -15.401-15.43     | -15.471-15.52     | -15.851-15.70     |
| Θ(165°)   | -15.691-16.07 | -14.961-15.70   | -15.641-15.57   | -15.271-15.10   | -15.741-15.15   | -15.381-15.55   | -15.231-15.43   | -15.231-15.43     | -15.461-15.05     | -14.861-14.41     | -13.781-14.73     | -15.071-14.77     | -14.981-15.05     | -15.401-15.31     | -15.321-15.93     | -15.901-15.80     | -14.361-15.10     | -15.231-15.75     | -14.711-15.34     | -15.391-15.96     | -15.181-15.36     | -14.771-15.27     | -15.361-15.97     | -15.771-15.23     |
| Θ(172.5°) | -15.041-14.96 | -15.601-15.51   | -15.471-14.92   | -15.981-15.16   | -14.991-15.34   | -15.331-15.79   | -15.711-15.93   | -15.391-15.09     | -15.501-15.17     | -14.451-14.98     | -15.641-15.61     | -15.591-15.40     | -15.711-16.41     | -15.801-15.41     | -15.891-14.85     | -16.071-15.59     | -15.891-15.20     | -15.211-14.81     | -15.081-15.59     | -15.521-15.45     | -15.181-15.36     | -15.491-15.34     | -15.851-14.98     | -15.061-15.78     |
| Θ(180°)   | -15.751-14.48 | -15.231-15.14   | -15.581-14.92   | -15.951-15.58   | -14.151-14.95   | -15.441-15.09   | -15.341-15.15   | -14.701-14.30     | -14.321-14.48     | -14.911-15.75     | -15.501-15.26     | -15.261-15.43     | -16.301-14.74     | -13.571-12.52     | -12.731-13.46     | -15.241-15.46     | -15.241-14.94     | -15.711-14.87     | -15.611-14.93     | -15.411-15.70     | -15.251-15.50     | -14.921-15.63     | -15.781-15.60     | -15.341-15.30     |
| Freq(Hz)  | 2.450GPol.    | 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°)     | 4.204.28      | 4.304.30        | 4.274.16        | 4.033.88        | 3.803.72        | 3.683.62        | 3.513.30        | 3.052.90          | 2.842.84          | 2.883.03          | 3.253.49          | 3.723.80          | 3.823.85          | 3.893.96          | 4.074.19          | 4.274.27          | 4.224.14          | 4.013.87          | 3.803.70          | 3.693.73          | 3.763.77          | 3.813.86          | 3.923.94          | 3.984.08          |
| Θ(7.5°)   | 3.713.78      | 3.833.87        | 3.944.01        | 4.054.00        | 4.153.87        | 3.934.19        | 4.014.02        | 3.813.66          | 3.543.40          | 3.373.45          | 3.583.72          | 3.823.88          | 3.913.90          | 3.903.91          | 3.923.92          | 3.883.82          | 3.723.57          | 3.343.10          | 2.932.85          | 2.882.98          | 3.093.17          | 3.243.29          | 3.323.35          | 3.423.56          |
| Θ(15°)    | 2.482.38      | 2.282.31        | 2.242.68        | 2.252.84        | 2.712.62        | 2.702.94        | 3.213.42        | 3.553.82          | 3.803.75          | 3.643.60          | 3.633.66          | 3.943.97          | 3.824.00          | 4.013.99          | 3.913.80          | 3.933.44          | 3.253.04          | 2.742.41          | 2.111.95          | 1.972.13          | 2.352.52          | 2.632.67          | 2.642.55          | 2.512.52          |
| Θ(22.5°)  | 0.730.36      | 0.240.42        | 0.821.14        | 1.441.52        | 1.481.35        | 1.521.82        | 2.182.58        | 2.933.24          | 3.483.60          | 3.833.94          | 3.743.67          | 3.893.85          | 3.873.93          | 4.034.08          | 4.084.02          | 3.913.71          | 3.493.18          | 2.802.30          | 1.811.46          | 1.411.62          | 1.922.16          | 2.282.26          | 2.051.72          | 1.391.09          |
| Θ(30°)    | -0.551-0.29   | 0.4211.17       | 1.751.90        | 1.961.88        | 1.761.92        | 1.811.69        | 1.521.37        | 1.452.35          | 2.813.18          | 3.353.33          | 3.153.00          | 3.002.77          | 2.762.85          | 3.073.33          | 3.563.68          | 3.663.54          | 3.302.95          | 2.471.86          | 1.230.68          | 0.460.70          | 1.181.62          | 1.891.86          | 1.460.76          | 0.071-0.39        |
| Θ(37.5°)  | -0.371-0.98   | 2.152.94        | 3.403.56        | 3.473.33        | 3.193.04        | 2.842.58        | 1.931.63        | 1.471.53          | 1.932.29          | 2.422.11          | 1.551.01          | 0.550.50          | 0.831.42          | 2.022.49          | 2.792.91          | 2.932.77          | 2.442.00          | 1.460.81          | 0.081-0.71        | -1.201-1.04       | -0.360.43         | 1.011.02          | 0.401-0.76        | -1.621-1.48       |
| Θ(45°)    | -0.231-1.41   | 2.533.13        | 3.473.76        | 3.873.94        | 3.883.45        | 3.112.66        | 2.071.34        | 0.590.17          | 0.780.61          | -0.281-0.37       | -1.251-1.71       | -1.701-0.33       | 0.801-1.41        | 2.012.34          | 2.552.68          | 2.632.28          | 1.600.84          | 0.241-0.12        | -0.551-1.34       | -2.301-2.88       | -2.531-1.54       | -0.581-0.16       | -0.731-2.13       | -0.221-2.13       |
| Θ(52.5°)  | -0.141-1.12   | 1.721.91        | 2.022.08        | 2.512.44        | 2.522.46        | 2.282.04        | 1.070.35        | -0.211-0.66       | -1.381-2.40       | -2.321-2.71       | -2.331-1.31       | -0.3501-0.99      | 0.6811-0.10       | 1.3111-0.54       | 1.9221-0.19       | 2.0611-0.32       | -0.2121-1.55      | -3.2121-2.78      | -2.261-2.46       | -3.141-3.77       | -3.781-2.95       | -1.961-1.33       | -1.421-2.12       | -2.361-1.51       |
| Θ(60°)    | 0.991-1.82    | 2.011-1.68      | 1.160-0.92      | 0.900-0.68      | 1.321-1.12      | 1.401-1.52      | 1.230-0.35      | -1.181-1.32       | -4.191-4.77       | -3.501-1.81       | -1.171-1.18       | -1.441-1.51       | -1.121-0.97       | 0.190-0.89        | 1.602-0.00        | 2.011-1.38        | -0.271-3.22       | -7.001-7.72       | -6.071-5.11       | -5.441-5.76       | -3.581-4.33       | -3.421-2.95       | -2.81             |                   |



# Antenna Pattern\_2.4GHz, 5GHz UNII-1~UNII-3(Radio 1)

# Appendix E

|           |               |                 |                 |                 |                 |                 |                 |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |
|-----------|---------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Θ(67.5°)  | -4.59/-3.08   | -1.41/-1.17     | -1.09/-1.32     | -1.56/-1.18     | -0.17/-0.46     | -1.76/-4.06     | -3.93/-2.45     | -3.48/-6.27       | -5.41/-6.64       | -6.30/-8.86       | -5.35/-4.13       | -4.34/-4.05       | -5.09/-2.10       | -0.50/-1.21       | -2.75/-4.09       | -4.30/-3.55       | -2.89/-1.98       | -2.72/-5.77       | -4.56/-4.48       | -6.28/-10.48      | -11.99/-10.77     | -11.41/-13.10     | -8.71/-4.79       | -4.07/-4.00       |
| Θ(75°)    | -6.22/-4.26   | -2.69/-2.27     | -2.93/-2.90     | -2.90/-2.81     | -2.22/-2.00     | -2.45/-4.69     | -6.40/-6.39     | -5.54/-7.12       | -8.72/-8.30       | -7.79/-10.96      | -6.74/-5.58       | -5.54/-5.01       | -5.14/-2.40       | -0.57/-1.94       | -3.46/-4.84       | -5.10/-3.11       | -1.47/-0.99       | -1.80/-5.62       | -6.57/-5.21       | -7.61/-6.11       | -12.45/-14.66     | -15.73/-15.11     | -13.05/-6.89      | -6.78/-6.01       |
| Θ(82.5°)  | -7.30/-4.53   | -3.59/-4.32     | -4.38/-3.88     | -3.98/-4.50     | -4.36/-3.59     | -3.82/-6.86     | -6.93/-9.08     | -8.00/-10.85      | -9.84/-8.73       | -12.73/-11.38     | -7.96/-8.08       | -6.94/-6.13       | -5.99/-3.97       | -1.93/-2.99       | -4.55/-6.58       | -5.94/-3.42       | -1.19/-1.22       | -2.79/-5.06       | -6.72/-6.12       | -8.36/-13.54      | -15.88/-15.31     | -13.78/-12.45     | -0.99/-8.13       |                   |
| Θ(90°)    | -8.59/-6.08   | -5.00/-5.44     | -5.54/-5.19     | -4.45/-4.97     | -5.52/-5.04     | -5.09/-7.60     | -8.09/-11.75    | -9.59/-12.70      | -11.11/-9.34      | -14.88/-12.19     | -10.04/-11.69     | -9.68/-8.15       | -7.43/-7.36       | -4.59/-5.55       | -6.37/-8.37       | -8.04/-6.14       | -2.68/-2.37       | -5.12/-6.98       | -8.92/-8.78       | -9.68/-15.68      | -14.94/-15.53     | -16.12/-15.51     | -15.05/-12.37     | -11.26/-9.79      |
| Θ(97.5°)  | -10.79/-7.20  | -6.21/-6.25     | -6.13/-5.89     | -5.78/-6.50     | -7.03/-6.26     | -6.60/-8.43     | -9.20/-14.17    | -10.11/-15.20     | -12.65/-10.71     | -15.91/-13.91     | -13.55/-12.91     | -13.03/-12.20     | -10.00/-10.24     | -8.03/-8.80       | -8.53/-9.48       | -10.48/-8.17      | -6.33/-6.39       | -8.95/-8.76       | -11.73/-11.15     | -13.28/-15.73     | -15.39/-15.15     | -15.44/-13.98     | -16.31/-15.65     | -11.64/-9.97      |
| Θ(105°)   | -12.06/-10.42 | -7.72/-6.68     | -6.56/-7.08     | -7.51/-7.94     | -8.22/-7.21     | -7.88/-9.31     | -10.85/-13.99   | -12.63/-15.48     | -13.65/-13.57     | -14.93/-14.29     | -15.57/-14.67     | -14.58/-14.62     | -13.59/-13.41     | -9.84/-12.81      | -12.54/-10.45     | -12.75/-11.72     | -15.47/-13.46     | -13.83/-14.35     | -14.81/-15.66     | -15.42/-12.38     | -12.38/-14.94     | -13.14/-11.27     |                   |                   |
| Θ(112.5°) | -10.89/-10.45 | -8.91/-9.99     | -8.98/-8.29     | -8.73/-9.30     | -9.03/-8.42     | -9.20/-10.32    | -14.41/-11.97   | -14.95/-14.97     | -15.14/-15.51     | -16.25/-14.58     | -15.25/-14.95     | -15.61/-15.71     | -14.48/-12.88     | -12.14/-15.80     | -14.04/-14.43     | -12.82/-11.09     | -15.80/-14.09     | -15.37/-13.36     | -15.18/-13.34     | -15.72/-15.71     | -13.68/-15.38     | -15.34/-13.93     | -11.63/-12.89     | -15.76/-11.97     |
| Θ(120°)   | -11.56/-11.70 | -11.51/-10.88   | -10.87/-10.57   | -10.24/-10.01   | -9.91/-10.72    | -11.07/-11.41   | -14.42/-15.07   | -15.67/-14.26     | -15.32/-14.70     | -15.70/-15.73     | -15.24/-15.67     | -15.60/-14.74     | -15.26/-15.46     | -11.73/-14.83     | -16.05/-15.11     | -14.11/-13.83     | -10.55/-11.98     | -12.14/-10.38     | -15.28/-14.73     | -15.21/-15.13     | -13.80/-13.39     | -15.27/-15.30     | -12.65/-10.99     | -15.42/-13.88     |
| Θ(127.5°) | -15.11/-14.80 | -12.76/-12.68   | -11.69/-11.44   | -11.33/-11.57   | -11.37/-10.76   | -10.91/-13.20   | -15.38/-15.30   | -16.19/-14.11     | -15.35/-15.33     | -15.56/-15.40     | -15.70/-15.88     | -15.90/-16.10     | -15.37/-14.82     | -11.63/-14.58     | -15.01/-16.10     | -14.05/-12.48     | -12.87/-15.18     | -15.03/-15.29     | -15.54/-15.27     | -14.84/-15.21     | -15.56/-15.49     | -14.23/-14.04     | -15.68/-13.92     | -14.00/-14.73     |
| Θ(135°)   | -11.76/-10.98 | -13.14/-13.07   | -11.98/-11.89   | -12.31/-12.67   | -12.50/-12.90   | -13.60/-14.64   | -14.21/-15.29   | -15.38/-15.13     | -15.46/-15.72     | -15.88/-15.55     | -14.76/-15.84     | -15.67/-15.45     | -15.18/-15.90     | -13.47/-14.82     | -15.50/-15.17     | -16.08/-15.70     | -15.47/-15.25     | -15.15/-15.22     | -15.79/-15.02     | -15.53/-16.11     | -15.36/-15.13     | -15.06/-13.27     | -14.42/-15.57     | -16.48/-11.40     |
| Θ(142.5°) | -15.75/-14.29 | -12.47/-12.18   | -13.25/-12.92   | -13.03/-12.79   | -13.38/-14.70   | -15.03/-15.51   | -16.19/-15.86   | -15.84/-15.56     | -14.86/-15.73     | -15.05/-14.73     | -14.72/-15.63     | -15.07/-15.43     | -14.93/-14.98     | -15.64/-15.03     | -15.30/-15.68     | -15.09/-12.57     | -15.89/-14.48     | -15.13/-15.04     | -15.26/-15.15     | -15.63/-15.51     | -15.63/-13.13     | -14.46/-16.03     | -15.39/-15.92     | -15.53/-15.52     |
| Θ(150°)   | -14.91/-15.87 | -15.69/-15.20   | -13.97/-14.56   | -14.40/-14.45   | -14.07/-13.09   | -12.78/-13.88   | -14.76/-14.97   | -15.87/-15.51     | -14.36/-14.40     | -14.68/-14.06     | -14.59/-15.07     | -13.76/-13.91     | -15.95/-15.08     | -15.86/-12.03     | -13.76/-15.08     | -15.08/-15.35     | -14.83/-15.47     | -15.06/-14.32     | -14.59/-15.65     | -15.58/-15.32     | -14.81/-15.45     | -15.90/-15.39     | -13.98/-13.89     | -12.34/-14.81     |
| Θ(157.5°) | -15.57/-13.64 | -13.30/-14.15   | -13.68/-13.32   | -13.94/-14.73   | -15.69/-15.61   | -14.98/-15.36   | -14.82/-15.28   | -15.67/-15.28     | -15.54/-15.49     | -15.38/-14.45     | -15.39/-15.30     | -15.44/-14.80     | -15.16/-15.07     | -15.74/-14.82     | -14.70/-14.94     | -15.36/-15.08     | -16.05/-14.91     | -15.22/-14.79     | -13.57/-15.48     | -15.23/-15.72     | -15.42/-15.23     | -13.75/-13.54     | -15.12/-15.42     | -14.44/-15.31     |
| Θ(165°)   | -14.48/-15.47 | -15.58/-15.64   | -15.77/-15.63   | -15.36/-14.49   | -16.09/-15.52   | -14.42/-15.62   | -15.13/-15.07   | -14.86/-13.81     | -14.85/-14.72     | -15.48/-15.59     | -16.13/-15.92     | -15.41/-16.03     | -14.93/-15.24     | -15.79/-15.39     | -16.09/-15.36     | -15.28/-14.64     | -14.18/-13.90     | -14.31/-16.47     | -15.36/-14.89     | -15.16/-16.12     | -15.75/-15.50     | -15.48/-15.72     | -15.55/-15.38     | -14.91/-13.86     |
| Θ(172.5°) | -15.18/-15.58 | -15.14/-14.87   | -15.46/-14.87   | -14.47/-14.68   | -13.76/-12.99   | -12.89/-13.07   | -13.39/-13.99   | -15.10/-17.99     | -16.06/-15.90     | -15.28/-15.28     | -15.31/-15.47     | -15.98/-14.98     | -15.88/-15.22     | -15.28/-16.05     | -14.61/-14.88     | -15.32/-15.48     | -15.39/-15.03     | -15.74/-15.31     | -15.03/-14.39     | -15.14/-14.78     | -14.77/-15.55     | -15.69/-14.92     | -15.02/-15.15     |                   |
| Θ(180°)   | -14.05/-14.73 | -15.64/-14.73   | -14.70/-15.21   | -15.59/-14.99   | -15.09/-14.86   | -14.27/-13.49   | -13.84/-14.75   | -14.54/-14.94     | -15.42/-15.40     | -13.51/-12.93     | -13.50/-14.04     | -14.52/-15.11     | -15.05/-15.26     | -14.69/-15.06     | -15.47/-14.34     | -13.11/-12.45     | -11.77/-12.00     | -12.28/-12.80     | -13.22/-13.96     | -14.96/-14.65     | -13.94/-13.75     | -13.76/-13.48     | -14.12/-15.25     | -15.07/-13.25     |
| Freq(Hz)  | 5.785GPol.    | TotalAnt. 2     | -               | -               | -               | -               | -               | -                 | -                 | -                 | -                 | -                 | -                 | -                 | -                 | -                 | -                 | -                 | -                 | -                 | -                 | -                 | -                 | -                 |
| Gain      | Φ(0°)/Φ(7.5°) | Φ(15°)/Φ(22.5°) | Φ(30°)/Φ(37.5°) | Φ(45°)/Φ(52.5°) | Φ(60°)/Φ(67.5°) | Φ(75°)/Φ(82.5°) | Φ(90°)/Φ(97.5°) | Φ(105°)/Φ(112.5°) | Φ(120°)/Φ(127.5°) | Φ(135°)/Φ(142.5°) | Φ(150°)/Φ(157.5°) | Φ(165°)/Φ(172.5°) | Φ(180°)/Φ(187.5°) | Φ(195°)/Φ(202.5°) | Φ(210°)/Φ(217.5°) | Φ(225°)/Φ(232.5°) | Φ(240°)/Φ(247.5°) | Φ(255°)/Φ(262.5°) | Φ(270°)/Φ(277.5°) | Φ(285°)/Φ(292.5°) | Φ(300°)/Φ(307.5°) | Φ(315°)/Φ(322.5°) | Φ(330°)/Φ(337.5°) | Φ(345°)/Φ(352.5°) |
| Θ(0°)     | 3.74/3.76     | 3.58/3.56       | 3.69/3.71       | 3.64/3.49       | 3.34/3.40       | 3.49/3.50       | 3.61/3.57       | 3.53/3.71         | 3.84/3.81         | 3.68/3.57         | 3.61/3.85         | 4.13/4.14         | 4.08/3.93         | 4.04/4.02         | 3.83/3.77         | 3.79/3.73         | 3.72/3.75         | 3.73/3.61         | 3.55/3.51         | 3.56/3.48         | 3.45/3.47         | 3.54/3.64         |                   |                   |
| Θ(7.5°)   | 3.38/3.47     | 3.52/3.45       | 3.40/3.53       | 3.49/3.34       | 3.24/3.16       | 3.03/2.95       | 2.93/2.85       | 2.62/2.61         | 2.82/3.02         | 3.04/3.02         | 3.03/3.10         | 3.12/3.08         | 2.91/2.74         | 2.64/2.66         | 2.62/2.46         | 2.51/2.65         | 2.78/3.08         | 3.68/3.90         | 4.07/3.99         | 4.03/4.03         | 4.10/4.05         | 3.97/3.81         | 3.59/3.43         |                   |
| Θ(15°)    | 3.65/3.67     | 3.61/3.64       | 3.63/3.61       | 3.43/3.43       | 3.24/3.04       | 3.11/3.06       | 3.01/3.01       | 2.81/2.50         | 2.63/2.98         | 3.20/3.37         | 3.51/3.67         | 3.71/3.47         | 3.10/3.20         | 2.93/3.00         | 3.09/2.90         | 2.57/2.63         | 2.07/1.76         | 1.48/1.13         | 1.32/2.08         | 3.22/3.11         | 3.00/2.99         | 2.95/3.03         | 3.10/3.39         |                   |
| Θ(22.5°)  | 2.84/2.96     | 3.17/3.41       | 3.46/3.31       | 3.17/3.08       | 2.93/2.71       | 2.73/3.10       | 3.33/3.31       | 3.23/2.87         | 2.37/2.27         | 2.50/2.38         | 1.86/1.82         | 2.23/2.23         | 2.42/2.72         | 2.36/1.58         | 1.24/1.28         | 1.46/1.95         | 2.72/3.32         | 3.43/2.68         | 1.80/1.43         | 1.95/2.48         | 2.50/1.90         | 1.97/2.73         | 3.30/3.38         | 3.06/2.88         |
| Θ(30°)    | 1.59/2.02     | 2.32/2.57       | 2.91/3.29       | 3.70/3.78       | 3.39/2.70       | 2.35/2.60       | 2.84/2.41       | 2.89/2.51         | 1.33/3.75         | 0.55/0.81         | -0.26/1.05        | 2.56/2.49         | 2.52/2.01         | 1.94/2.83         | 3.30/3.03         | 2.29/1.23         | 0.41/1.26         | 2.53/2.92         | 2.21/0.71         | 0.16/1.09         | 1.09/0.47         | 1.27/2.01         | 1.65/0.77         | 0.25/0.81         |
| Θ(37.5°)  | 1.49/1.53     | 2.25/2.88       | 3.55/4.13       | 4.47/4.52       | 4.14/3.11       | 2.08/1.98       | 1.89/1.70       | 1.78/1.32         | 0.18/0.38         | 3.07/1.27         | -1.19/1.54        | 2.06/1.37         | 1.74/1.46         | 1.35/1.88         | 2.67/2.71         | 2.23/2.19         | 2.17/0.75         | -1.44/-1.40       | -1.22/-2.02       | -1.05/-0.91       | -2.36/-1.10       | 1.06/1.59         |                   |                   |
| Θ(45°)    | -0.76/0.06    | 1.30/2.51       | 3.38/3.87       | 4.13/4.10       | 3.78/3.13       | 2.13/1.90       | 2.51/1.74       | 0.80/0.44         | -0.12/0.54        | 0.03/-2.26        | -1.02/1.12        | 1.17/1.38         | 2.52/2.67         | 2.51/2.44         | 3.06/3.70         | 3.61/2.75         | 1.44/1.10         | 1.64/1.72         | 0.89/0.34         | -1.20/-5.64       | -5.89/-5.94       | -5.22/-5.72       | -4.89/-1.10       | 0.46/0.02         |
| Θ(52.5°)  | -2.79/-0.28   | 1.03/1.79       | 1.66/1.98       | 2.64/3.07       | 2.32/2.69       | 1.13/0.66       | 1.68/1.13       | 0.41/0.19         | -1.06/0.85        | -1.57/4.01        | -1.84/0.35        | 0.32/1.80         | 1.37/-0.04        | 0.45/1.35         | 1.31/1.41         | 1.98/2.03         | 1.16/0.15         | -0.11/-1.26       | -1.58/-1.06       | -2.87/-3.39       | -11.78/-10.29     | -9.71/-8.54       | -5.14/-3.34       | -3.16/-3.34       |
| Θ(60°)    | -4.09/-1.10   | 0.06/0.06       | -0.81/-1.64     | -0.36/0.77      | 1.02/1.24       | 0.06/-1.82      | -0.93/-0.26     | -0.91/0.17        | -2.05/-0.92       | -3.48/-3.95       | -0.70/1.30        | -0.67/-0.30       | -1.23/-3.56       | -0.55/-0.21       | -2.06/-3.45       | -2.67/-2.24       | -2.54/-2.63       | -3.52/-3.44       | -4.66/-6.21       | -5.67/-13.15      | -13.89/-15.82     | -14.86/-11.17     | -8.29/-6.19       | -6.22/-5.84       |
| Θ(67.5°)  | -5.03/-2.57   | -1.77/-1.45     | -1.94/-2.28     | -1.10/-0.09     | -0.23/0.49      | -0.20/-1.83     | -4.05/-2.05     | -2.91/-1.83       | -4.05/-2.71       | -5.75/-3.23       | -5.80/-2.41       | -1.73/-2.71       | -3.78/-1.13       | 0.25/-0.26        | -2.21/-4.22       | -4.19/-3.25       | -3.59/-3.40       | -3.54/-6.14       | -6.43/-9.57       | -8.97/-13.43      | -12.23/-15.96     | -14.73/-12.74     | -10.42/-9.12      | -8.50/-7.70       |
| Θ(75°)    | -5.46/-3.25   | -2.74/-2.05     | -2.21/-1.73     | -0.75/0.43      | -1.03/-0.01     | -1.15/-2.67     | -6.49/-4.74     | -4.25/-3.95       | -7.05/-5.09       | -6.95/-4.11       | -7.87/-3.77       | -3.21/-4.51       | -3.42/-1.75       | -0.35/-1.26       | -2.66/-4.64       | -5.30/-1.97       | -1.63/-2.07       | -3.15/-5.34       | -7.12/-4.76       | -9.91/-9.96       | -11.98/-12.57     | -15.61/-13.77     | -11.61/-11.52     | -10.88/-9.94      |
| Θ(82.5°)  | -6.67/-4.58   | -3.19/-2.65     | -2.78/-1.56     | -0.79/-1.26     | -1.95/-0.82     | -2.32/-3.00     | -6.31/-6.38     | -7.39/-5.41       | -9.72/-8.07       | -7.60/-6.10       | -8.82/-6.00       | -5.80/-6.71       | -4.08/-3.34       | -2.26/-3.27       | -4.42/-6.78       | -7.18/-2.92       | -1.08/-1.21       | -3.95/-6.48       | -9.84/-5.83       | -9.41/-9.12       | -14.55/-15.19     | -13.00/-13.23     | -12.41/-14.12     | -9.88/-11.02      |
| Θ(90°)    | -7.52/-5.49   | -3.97/-3.93     | -4.05/-2.49     | -2.09/-2.61     | -3.06/-2.81     | -4.17/-3.73     | -6.84/-7.16     | -10.07/-8.24      | -10.20/-11.29     | -8.99/-8.60       | -9.95/-9.83       | -8.31/-8.33       | -6.84/-5.48       | -3.56/-5.33       | -6.80/-8.41       | -8.81/-4.88       | -1.67/-2.37       | -4.77/-8.70       | -6.80/-7.38       | -9.72/-8.68       | -15.18/-14.45     | -13.06/-15.15     | -11.69/-15.60     | -11.84/-11.68     |
| Θ(97.5°)  | -6.84/-7.13   | -5.65/-6.12     | -5.40/-5.53     | -3.15/-4.07     | -3.76/-4.49     | -6.14/-5.70     | -9.00/-7.95     | -10.01/-11.82     | -12.81/-12.93     | -11.67/-13.89     | -9.74/-13.48      | -11.77/-9.57      | -8.42/-7.72       | -5.37/-7.71       | -8.42/-9.55       | -9.30/-7.60       | -5.10/-5.66       | -8.81/-11.51      | -9.34/-10.24      | -12.07/-10.85     | -15.11/-11.76     | -15.10/-14.92     | -12.39/-14.20     | -14.90/-11.71     |
| Θ(105°)   | -8.79/-7.14   | -7.65/-6.54     | -7.38/-5.16     | -4.77/4.94      | -4.38/-6.33     | -5.96/-7.92     | -9.98/-11.01    | -11.45/-14.24     | -13.80/-14.39     | -14.40/-15.05     | -12.87/-15.55     | -15.42/-13.68     | -11.39/-9.83      | -7.01/-8.70       | -9.98/-10.56      | -8.47/-9.20       | -11.85/-10.63     | -13.40/-15.21     | -13.35/-14.94     | -14.64/-15.46     | -14.92/-11.67     | -15.74/-13.15     | -13.59/-10.65     | -9.37/-13.44      |
| Θ(112.5°) | -12.95/-10.41 | -9.77/-8.21     | -7.68/-6.77     | -7.31/-7.02     | -7.68/-7.25     | -7.23/-11.56    | -9.73/-14.11    | -11.29/-14.49     | -13.81/-15.96     | -14.55/-15.98     | -14.98/-15.71     | -14.52/-13.76     | -12.41/-12.93     |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |



# Antenna Pattern\_2.4GHz, 5GHz UNII-1~UNII-3(Radio 1)

# Appendix E

|           |               |                |                |                |                |                |                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
|-----------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Θ(120°)   | -15.01/-14.25 | -14.34/-14.81  | -14.92/-15.11  | -15.02/-15.57  | -14.96/-15.27  | -15.03/-15.39  | -14.92/-14.97  | -12.69/-13.83    | -14.50/-15.72    | -13.10/-12.80    | -14.23/-13.91    | -12.80/-13.26    | -11.75/-13.38    | -15.60/-15.46    | -15.86/-15.67    | -15.17/-15.20    | -15.62/-15.26    | -15.32/-13.71    | -13.07/-12.02    | -10.14/-9.78     | -12.00/-14.21    | -14.08/-10.79    | -9.80/-12.06     | -13.83/-12.68    |
| Θ(127.5°) | -15.30/-15.26 | -15.20/-14.77  | -15.13/-15.37  | -15.29/-15.96  | -14.65/-15.33  | -15.28/-15.01  | -15.29/-15.03  | -13.96/-13.28    | -14.85/-14.58    | -13.27/-15.40    | -15.79/-14.53    | -12.49/-13.68    | -14.30/-15.24    | -14.82/-15.44    | -15.02/-14.78    | -15.34/-15.71    | -14.11/-14.77    | -14.91/-15.68    | -15.54/-14.17    | -13.00/-13.18    | -15.91/-15.24    | -14.73/-11.44    | -11.75/-15.30    | -15.72/-15.77    |
| Θ(135°)   | -15.09/-15.36 | -15.18/-16.34  | -14.92/-15.16  | -15.52/-14.69  | -15.89/-15.81  | -15.94/-15.84  | -14.92/-15.71  | -15.21/-15.81    | -15.03/-15.19    | -13.55/-13.69    | -14.73/-15.16    | -13.67/-13.67    | -14.50/-15.20    | -15.07/-15.65    | -15.43/-16.21    | -15.56/-14.10    | -13.76/-15.17    | -15.38/-13.21    | -12.07/-13.48    | -13.39/-15.50    | -13.18/-12.73    | -11.64/-13.83    | -15.69/-15.07    |                  |
| Θ(142.5°) | -15.48/-15.78 | -15.05/-15.62  | -14.57/-15.26  | -15.20/-15.48  | -15.32/-15.27  | -15.07/-15.35  | -15.98/-16.03  | -15.84/-14.98    | -15.44/-15.66    | -15.99/-15.45    | -15.26/-14.57    | -16.17/-15.34    | -15.73/-15.54    | -15.60/-15.82    | -15.41/-15.47    | -14.47/-13.97    | -14.96/-15.60    | -14.69/-15.36    | -14.20/-15.40    | -12.92/-12.21    | -13.08/-15.47    | -16.22/-14.43    | -13.28/-13.46    | -14.87/-15.14    |
| Θ(150°)   | -15.67/-16.09 | -15.29/-15.72  | -15.10/-15.36  | -15.51/-15.42  | -15.38/-15.19  | -15.37/-15.34  | -15.40/-15.20  | -15.68/-15.45    | -15.24/-15.18    | -14.79/-14.91    | -15.56/-15.46    | -15.38/-14.95    | -15.67/-15.44    | -15.10/-15.48    | -15.15/-15.16    | -15.85/-15.00    | -16.46/-15.97    | -15.21/-15.44    | -14.81/-14.99    | -14.81/-15.72    | -14.59/-15.61    | -15.63/-15.22    | -14.86/-15.43    | -15.06/-15.29    |
| Θ(157.5°) | -15.88/-15.68 | -15.43/-14.65  | -15.11/-14.77  | -15.42/-15.07  | -15.53/-15.55  | -14.89/-15.09  | -15.26/-15.43  | -14.93/-15.27    | -14.61/-15.48    | -14.84/-15.33    | -15.61/-14.40    | -15.12/-14.98    | -15.17/-15.84    | -15.13/-15.38    | -15.15/-15.38    | -15.86/-15.67    | -16.23/-15.99    | -15.51/-16.09    | -15.13/-15.06    | -15.27/-15.45    | -14.73/-15.04    | -13.55/-13.10    | -14.48/-15.79    | -15.21/-15.62    |
| Θ(165°)   | -15.61/-15.39 | -15.20/-15.23  | -15.19/-15.34  | -15.26/-15.71  | -15.13/-15.17  | -15.73/-15.09  | -15.81/-14.51  | -15.68/-14.67    | -14.71/-15.42    | -15.39/-14.78    | -14.99/-15.31    | -15.07/-15.66    | -15.28/-15.46    | -15.31/-15.12    | -16.09/-15.37    | -14.94/-15.16    | -15.34/-15.72    | -15.16/-15.82    | -15.44/-14.82    | -15.68/-15.32    | -15.83/-15.92    | -15.53/-15.54    | -15.16/-15.76    | -15.75/-14.78    |
| Θ(172.5°) | -15.18/-14.62 | -15.41/-15.69  | -15.26/-14.78  | -14.80/-15.05  | -16.13/-15.77  | -15.79/-15.97  | -15.83/-15.48  | -15.48/-14.90    | -14.72/-14.81    | -14.89/-15.74    | -15.23/-15.68    | -15.12/-16.05    | -15.47/-15.51    | -15.50/-15.12    | -15.00/-16.27    | -15.69/-15.64    | -15.33/-15.31    | -15.44/-15.22    | -14.88/-15.39    | -14.84/-14.69    | -13.72/-13.85    | -14.04/-14.53    | -15.11/-14.92    | -15.34/-15.77    |
| Θ(180°)   | -14.73/-15.56 | -16.22/-15.08  | -14.71/-15.08  | -15.12/-15.54  | -15.15/-15.05  | -15.40/-16.11  | -15.69/-15.25  | -15.61/-15.83    | -16.06/-15.77    | -15.46/-16.09    | -16.36/-15.59    | -14.70/-15.76    | -15.34/-14.91    | -14.93/-15.46    | -15.70/-14.76    | -15.88/-14.99    | -14.92/-15.72    | -15.57/-15.43    | -15.31/-14.63    | -15.10/-14.82    | -15.29/-15.22    | -15.24/-15.69    | -15.47/-15.75    | -15.96/-15.00    |
| Freq(Hz)  | 5.6GPol.      | TotalAnt. 3    | -              | -              | -              | -              | -              | -                | -                | -                | -                | -                | -                | -                | -                | -                | -                | -                | -                | -                | -                | -                | -                | -                |
| Gain      | Φ(0°)Ψ(7.5°)  | Φ(15°)Ψ(22.5°) | Φ(30°)Ψ(37.5°) | Φ(45°)Ψ(52.5°) | Φ(60°)Ψ(67.5°) | Φ(75°)Ψ(82.5°) | Φ(90°)Ψ(97.5°) | Φ(105°)Ψ(112.5°) | Φ(120°)Ψ(127.5°) | Φ(135°)Ψ(142.5°) | Φ(150°)Ψ(157.5°) | Φ(165°)Ψ(172.5°) | Φ(180°)Ψ(187.5°) | Φ(195°)Ψ(202.5°) | Φ(210°)Ψ(217.5°) | Φ(225°)Ψ(232.5°) | Φ(240°)Ψ(247.5°) | Φ(255°)Ψ(262.5°) | Φ(270°)Ψ(277.5°) | Φ(285°)Ψ(292.5°) | Φ(300°)Ψ(307.5°) | Φ(315°)Ψ(322.5°) | Φ(330°)Ψ(337.5°) | Φ(345°)Ψ(352.5°) |
| Θ(0°)     | 2.50/2.46     | 2.57/2.65      | 2.76/2.72      | 2.81/2.79      | 2.94/3.08      | 3.07/3.08      | 3.07/3.00      | 2.90/2.86        | 2.87/2.81        | 2.77/2.72        | 2.76/2.70        | 2.64/3.07        | 2.75/2.72        | 2.75/2.72        | 2.73/2.83        | 2.72/2.81        | 2.74/2.73        | 2.72/2.81        | 2.86/2.85        | 2.78/2.63        | 2.59/2.60        | 2.70/2.75        | 2.75/2.66        | 2.58/2.54        |
| Θ(7.5°)   | 2.17/1.99     | 1.83/1.82      | 1.94/2.07      | 2.23/2.31      | 2.44/2.56      | 2.53/2.53      | 2.57/2.66      | 2.63/2.55        | 2.48/2.40        | 2.44/2.46        | 2.50/2.58        | 2.69/2.78        | 2.92/3.03        | 3.16/3.25        | 3.39/3.51        | <b>3.52/3.50</b> | 3.50/3.50        | 3.46/3.43        | 3.36/3.28        | 3.13/2.95        | 2.83/2.78        | 2.74/2.68        | 2.60/2.47        | 2.41/2.32        |
| Θ(15°)    | 2.56/2.29     | 1.96/1.80      | 1.82/1.82      | 1.96/2.07      | 2.30/2.39      | 2.39/2.44      | 2.47/2.53      | 2.53/2.47        | 2.33/2.10        | 1.89/1.83        | 1.79/1.62        | 1.44/1.45        | 1.69/1.98        | 2.30/2.62        | 2.93/3.11        | 3.18/3.13        | 3.10/3.05        | 3.07/3.05        | 2.97/2.81        | 2.62/2.40        | 2.22/2.11        | 2.18/2.28        | 2.34/2.33        | 2.41/2.56        |
| Θ(22.5°)  | 1.92/1.92     | 1.91/1.82      | 1.51/1.33      | 1.38/1.58      | 1.65/1.45      | 1.45/1.65      | 1.88/1.89      | 1.68/1.31        | 0.97/0.93        | 1.25/1.75        | 2.21/2.42        | 2.35/1.95        | 1.55/1.42        | 1.58/1.82        | 2.00/2.03        | 2.16/2.20        | 2.26/2.36        | 2.45/2.52        | 2.58/2.49        | 2.32/2.09        | 1.92/1.78        | 1.69/1.59        | 1.49/1.56        | 1.70/1.80        |
| Θ(30°)    | 1.19/1.32     | 1.30/1.07      | 0.60/0.43      | 0.61/0.92      | 0.63/0.10      | 0.27/1.32      | 1.94/1.94      | 1.74/1.98        | 2.41/2.63        | 2.41/1.89        | 1.62/1.87        | 2.32/2.50        | 1.98/0.99        | 0.52/0.88        | 1.12/1.06        | 1.36/1.62        | 1.49/1.63        | 2.03/2.35        | 2.31/2.22        | 2.35/2.55        | 2.64/2.57        | 2.26/1.83        | 1.50/1.18        | 0.86/0.91        |
| Θ(37.5°)  | 0.95/0.90     | 0.38/-0.21     | -0.37/-0.44    | -0.59/-0.61    | -1.22/-1.61    | 0.30/1.86      | 1.88/1.55      | 1.99/2.74        | 3.17/3.24        | 3.08/2.65        | 2.04/1.78        | 2.15/2.59        | 2.22/1.05        | -0.28/-0.59      | -0.62/-0.55      | 0.19/0.42        | 0.19/0.70        | 1.46/1.39        | 0.95/1.07        | 1.76/2.51        | 2.98/3.11        | 2.60/2.35        | 1.81/1.18        | 0.78/0.79        |
| Θ(45°)    | 0.78/0.80     | 0.07/-0.95     | -1.83/-2.54    | -3.48/-3.40    | -3.30/-1.64    | 0.70/1.35      | 0.79/1.07      | 2.01/2.41        | 2.71/2.86        | 3.08/3.22        | 2.84/2.04        | 1.69/1.91        | 1.82/1.32        | -0.31/-2.57      | -3.13/-2.98      | -2.26/-2.11      | -2.30/-1.07      | -0.08/-0.16      | -0.24/0.75       | 1.72/2.51        | 2.98/3.21        | 3.19/2.85        | 2.13/0.97        | 0.26/0.21        |
| Θ(52.5°)  | -0.33/-0.50   | -0.76/-1.67    | -0.07/-4.65    | -5.27/-5.37    | -4.71/-2.37    | -0.40/-0.28    | -0.63/0.16     | 0.86/1.51        | 2.36/2.70        | 2.60/2.27        | 1.67/0.75        | 0.02/-0.20       | -0.02/0.04       | -1.21/-4.29      | -5.80/-5.77      | -5.58/-5.41      | -3.64/-1.55      | -0.84/-0.89      | -0.58/0.32       | 1.38/1.89        | 1.96/1.75        | 1.70/1.65        | 1.39/0.21        | -1.17/-1.12      |
| Θ(60°)    | -3.39/-2.36   | -2.27/-3.21    | -6.84/-7.27    | -7.26/-7.61    | -6.32/-3.58    | -2.25/-1.96    | -2.29/-2.37    | -1.12/-0.20      | -0.03/-0.63      | -1.41/-1.78      | -1.24/-0.81      | -1.14/-1.52      | -1.63/-1.80      | -2.28/-4.74      | -7.81/-8.18      | -7.98/-9.03      | -5.94/-3.01      | -2.05/-2.40      | -2.11/-0.92      | 0.07/0.15        | -0.55/-1.25      | -1.16/-0.40      | -0.09/-0.90      | -2.88/-4.46      |
| Θ(67.5°)  | -6.35/-5.70   | -5.48/-5.54    | -9.46/-9.32    | -8.80/-9.60    | -7.94/-5.19    | -3.45/-2.43    | -3.42/-2.54    | -0.70/-0.58      | -2.34/-4.54      | -4.36/-2.47      | -0.76/0.22       | -0.52/-0.25      | -2.97/-3.28      | -4.51/-7.79      | -10.20/-10.27    | -9.98/-11.60     | -7.42/-4.27      | -3.55/-4.51      | -4.12/-1.99      | -0.78/-1.41      | -2.95/-4.13      | -4.06/-2.72      | -1.63/-1.93      | -3.80/-6.45      |
| Θ(75°)    | -8.85/-7.53   | -8.71/-9.24    | -12.59/-10.96  | -10.57/-11.30  | -9.15/-6.44    | -4.89/-4.02    | -5.61/-2.59    | -0.54/-0.60      | -2.56/-3.33      | -3.08/-1.66      | -0.42/0.42       | -0.20/-2.56      | -4.64/-5.54      | -6.17/-9.30      | -11.49/-12.54    | -13.33/-13.23    | -10.36/-6.79     | -6.03/-6.72      | -5.21/-2.23      | -1.15/-2.47      | -4.51/-4.99      | -5.02/-4.01      | -2.81/-3.18      | -5.30/-7.76      |
| Θ(82.5°)  | -11.05/-10.17 | -10.59/-12.23  | -14.63/-11.95  | -12.00/-13.54  | -11.25/-9.19   | -7.09/-6.75    | -8.15/-3.74    | -2.02/-1.74      | -3.63/-4.24      | -3.90/-3.10      | -1.79/-0.98      | -1.71/-4.54      | -3.88/-11.59     | -13.89/-15.44    | -15.52/-13.17    | -11.60/-8.49     | -8.42/-9.05      | -6.00/-2.59      | -2.10/-3.68      | -5.34/-5.79      | -6.19/-5.93      | -4.41/-4.26      | -6.14/-8.00      |                  |
| Θ(90°)    | -11.25/-12.70 | -14.05/-14.61  | -15.38/-13.25  | -12.68/-14.58  | -13.98/-11.60  | -10.38/-9.96   | -10.69/-9.16   | -4.41/-3.64      | -5.76/-6.51      | -6.59/-5.84      | -4.31/-3.77      | -3.80/-6.84      | -9.67/-10.36     | -10.62/-12.78    | -14.61/-16.14    | -15.64/-15.04    | -14.30/-11.40    | -12.24/-11.47    | -7.46/-4.13      | -3.64/-4.53      | -6.50/-6.79      | -6.75/-7.07      | -5.89/-5.64      | -7.68/-8.57      |
| Θ(97.5°)  | -11.01/-14.04 | -14.12/-15.39  | -15.32/-15.13  | -14.92/-15.61  | -15.17/-14.23  | -14.22/-13.68  | -12.41/-8.93   | -7.56/-6.49      | -8.79/-9.64      | -10.06/-9.12     | -7.19/-6.96      | -7.31/-9.64      | -12.11/-12.16    | -12.84/-14.66    | -14.89/-15.44    | -15.49/-15.48    | -15.49/-14.04    | -14.87/-13.47    | -10.28/-6.48     | -6.06/-6.99      | -7.13/-7.83      | -8.22/-8.12      | -6.53/-7.07      | -8.88/-9.63      |
| Θ(105°)   | -12.48/-15.01 | -15.33/-16.09  | -15.07/-15.16  | -15.19/-15.58  | -15.17/-15.33  | -13.95/-15.34  | -13.73/-12.16  | -9.97/-8.85      | -11.11/-12.36    | -11.78/-10.81    | -9.50/-10.14     | -10.38/-11.35    | -13.28/-13.33    | -14.59/-15.67    | -15.25/-14.85    | -15.09/-15.96    | -16.09/-15.46    | -14.89/-14.81    | -10.88/-9.14     | -8.71/-8.65      | -8.30/-8.37      | -8.38/-8.10      | -8.13/-8.43      | -9.69/-11.29     |
| Θ(112.5°) | -13.88/-15.66 | -14.98/-15.50  | -15.76/-16.16  | -15.23/-16.06  | -15.77/-15.29  | -15.11/-14.99  | -13.97/-13.81  | -12.21/-11.95    | -14.50/-14.76    | -12.71/-11.99    | -12.31/-13.26    | -12.90/-12.31    | -13.60/-12.61    | -13.89/-14.89    | -15.72/-16.07    | -15.49/-15.46    | -15.75/-15.61    | -15.93/-15.44    | -12.05/-10.21    | -8.72/-8.95      | -11.85/-11.24    | -10.70/-9.50     | -9.07/-9.80      | -12.03/-13.18    |
| Θ(120°)   | -14.72/-14.66 | -14.57/-14.98  | -15.35/-15.33  | -15.44/-14.78  | -15.72/-14.91  | -15.61/-15.29  | -15.33/-14.78  | -13.17/-13.47    | -15.66/-15.65    | -13.61/-13.79    | -14.69/-14.40    | -13.65/-14.45    | -14.06/-15.13    | -14.59/-15.24    | -15.15/-15.69    | -15.32/-15.24    | -15.28/-15.26    | -14.40/-15.71    | -14.61/-10.37    | -9.65/-10.17     | -13.31/-14.42    | -13.40/-12.87    | -11.56/-12.71    | -12.65/-14.92    |
| Θ(127.5°) | -15.52/-15.55 | -15.84/-15.37  | -15.29/-15.53  | -15.03/-15.81  | -15.34/-15.27  | -14.92/-15.97  | -15.62/-16.05  | -14.86/-14.00    | -15.22/-15.16    | -13.68/-14.55    | -15.47/-15.10    | -15.58/-14.83    | -14.25/-15.34    | -15.51/-15.64    | -15.11/-14.95    | -14.36/-15.46    | -15.61/-15.85    | -15.00/-11.94    | -12.01/-11.95    | -14.18/-13.88    | -11.71/-8.87     | -9.77/-12.36     | -14.97/-15.47    |                  |
| Θ(135°)   | -15.78/-15.16 | -15.44/-15.56  | -15.46/-15.61  | -15.25/-15.73  | -15.40/-15.81  | -14.68/-15.30  | -15.05/-15.25  | -15.89/-15.98    | -15.18/-15.55    | -15.15/-15.46    | -14.59/-14.40    | -15.59/-15.64    | -15.30/-15.94    | -15.24/-15.28    | -15.69/-15.66    | -14.82/-15.00    | -15.54/-14.87    | -15.11/-16.16    | -13.48/-12.68    | -12.72/-12.50    | -12.75/-15.34    | -15.88/-12.17    | -10.93/-14.49    | -16.05/-15.69    |
| Θ(142.5°) | -15.49/-15.53 | -15.23/-15.52  | -15.50/-15.61  | -15.00/-15.14  | -15.30/-15.73  | -15.30/-15.41  | -15.64/-15.54  | -14.77/-15.57    | -14.67/-15.55    | -14.99/-14.92    | -14.67/-15.22    | -15.12/-15.07    | -15.84/-14.78    | -14.93/-15.47    | -14.79/-15.74    | -15.38/-16.16    | -15.17/-15.19    | -15.08/-15.61    | -15.96/-13.16    | -11.90/-13.91    | -15.97/-15.82    | -15.36/-14.78    | -14.38/-14.49    | -14.96/-15.09    |
| Θ(150°)   | -15.57/-16.02 | -15.91/-15.08  | -14.71/-15.95  | -15.73/-15.62  | -15.61/-14.73  | -14.91/-15.74  | -15.48/-15.57  | -15.64/-15.76    | -14.99/-15.26    | -15.28/-14.72    | -15.50/-15.94    | -15.15/-15.47    | -15.31/-15.60    | -15.27/-15.77    | -15.45/-14.81    | -14.98/-15.63    | -16.15/-15.19    | -15.64/-15.59    | -15.69/-15.08    | -15.29/-16.15    | -16.00/-15.02    | -14.83/-14.74    | -15.43/-15.12    | -15.48/-15.10    |
| Θ(157.5°) | -14.79/-15.53 | -15.46/-15.28  | -15.05/-15.47  | -15.23/-14.79  | -15.14/-14.38  | -15.53/-15.63  | -15.03/-15.54  | -15.49/-14.89    | -15.57/-15.62    | -14.93/-15.65    | -14.89/-15.97    | -16.06/-15.16    | -15.38/-15.20    | -14.97/-14.58    | -15.72/-16.02    |                  |                  |                  |                  |                  |                  |                  |                  |                  |

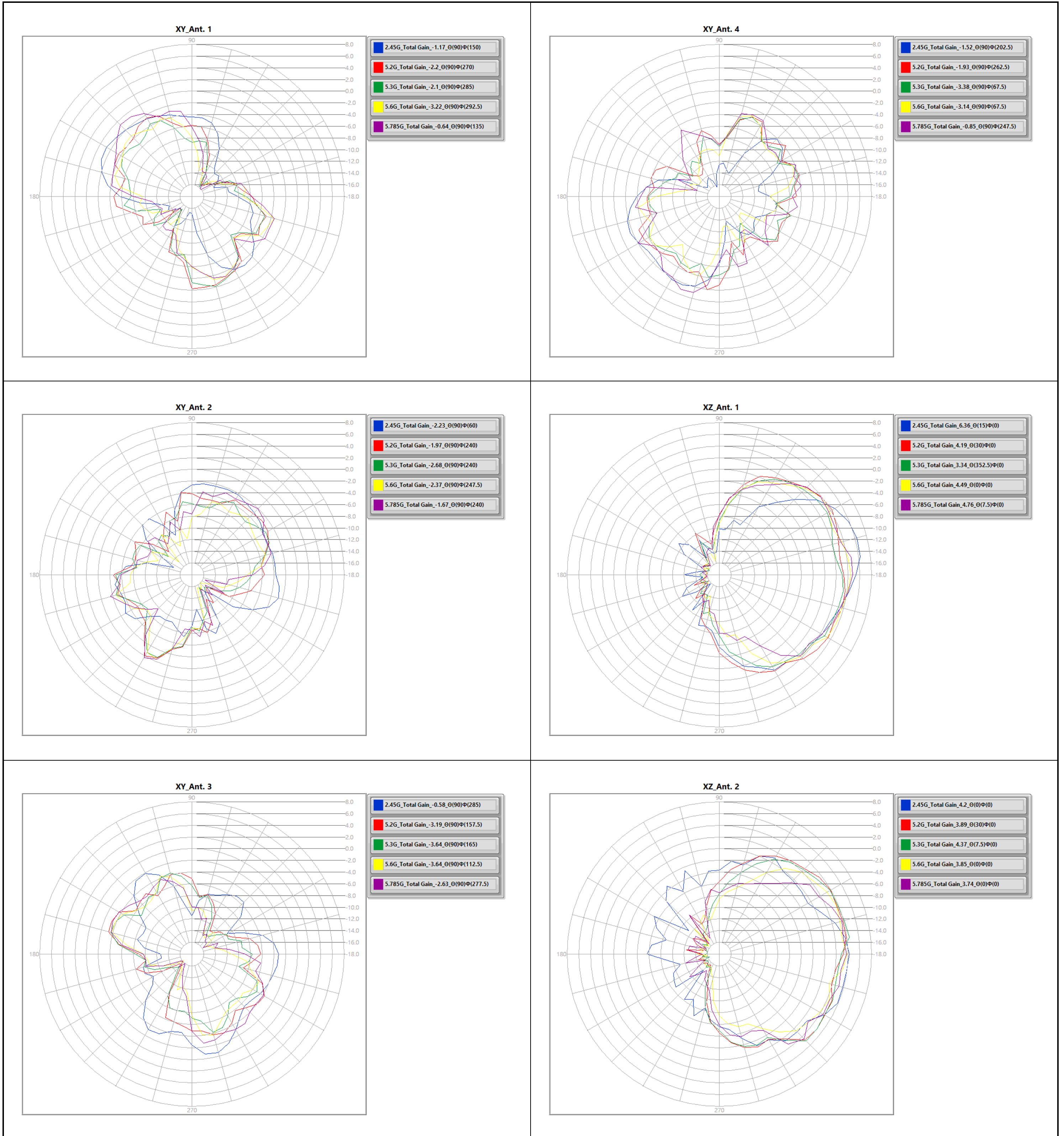


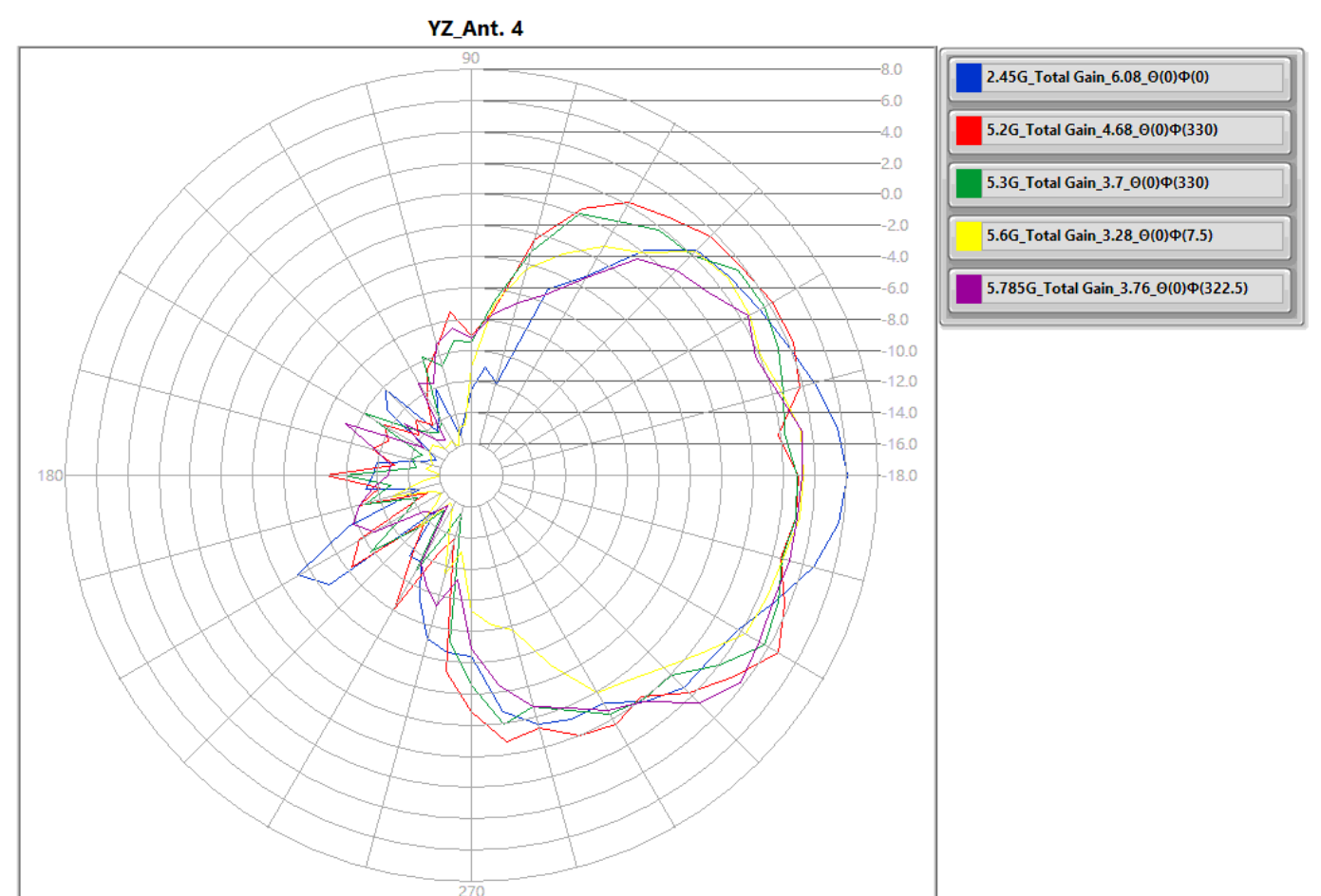
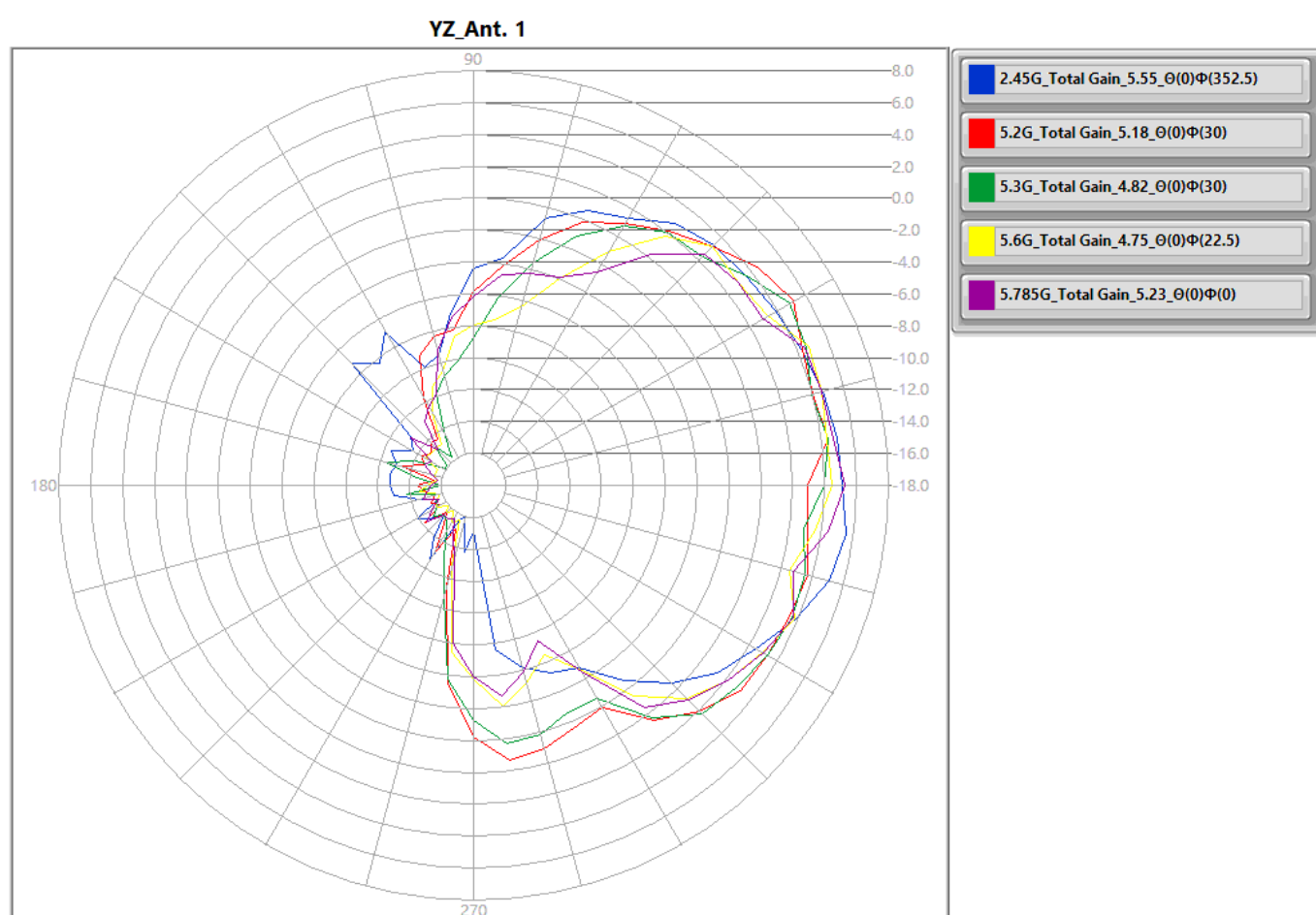
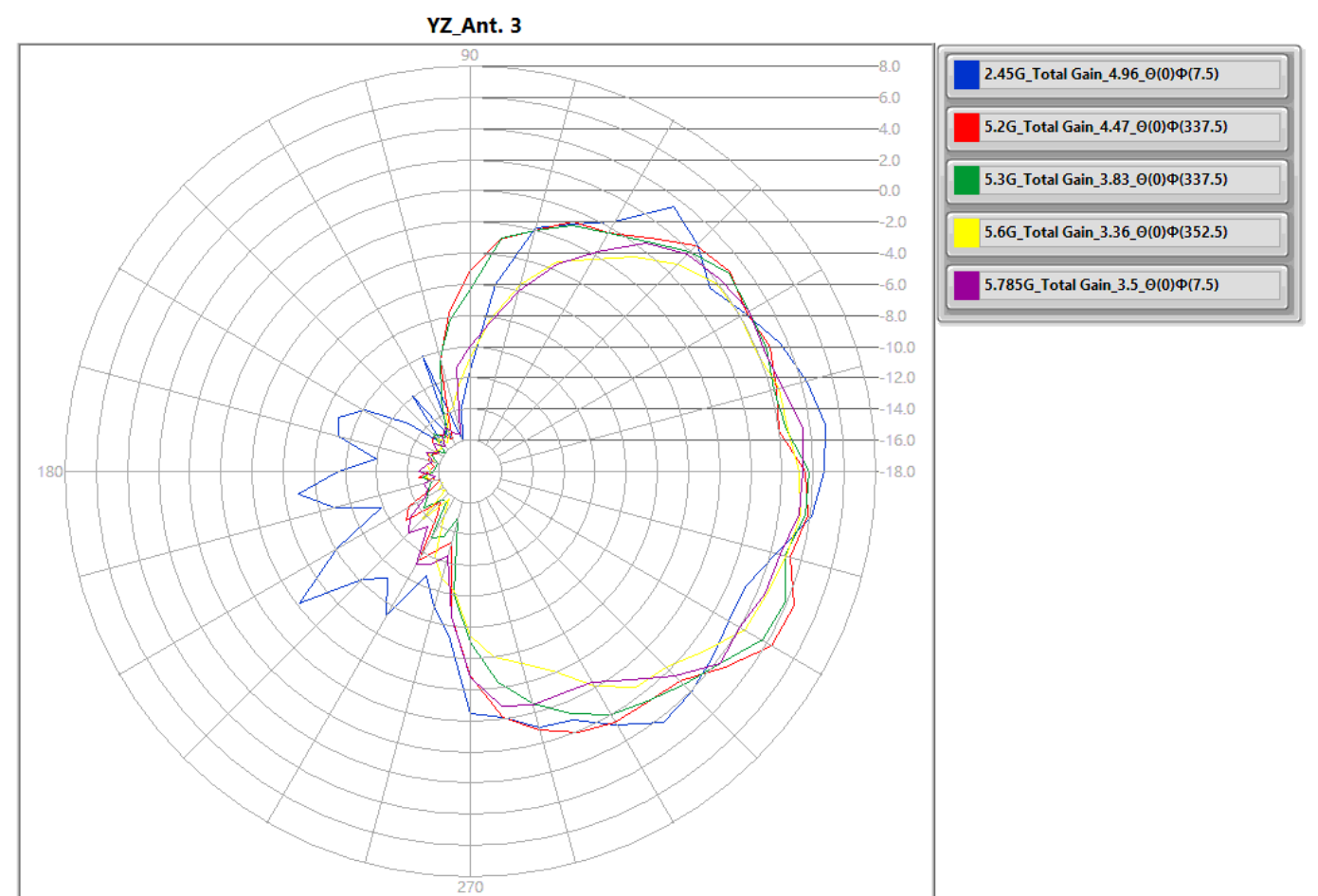
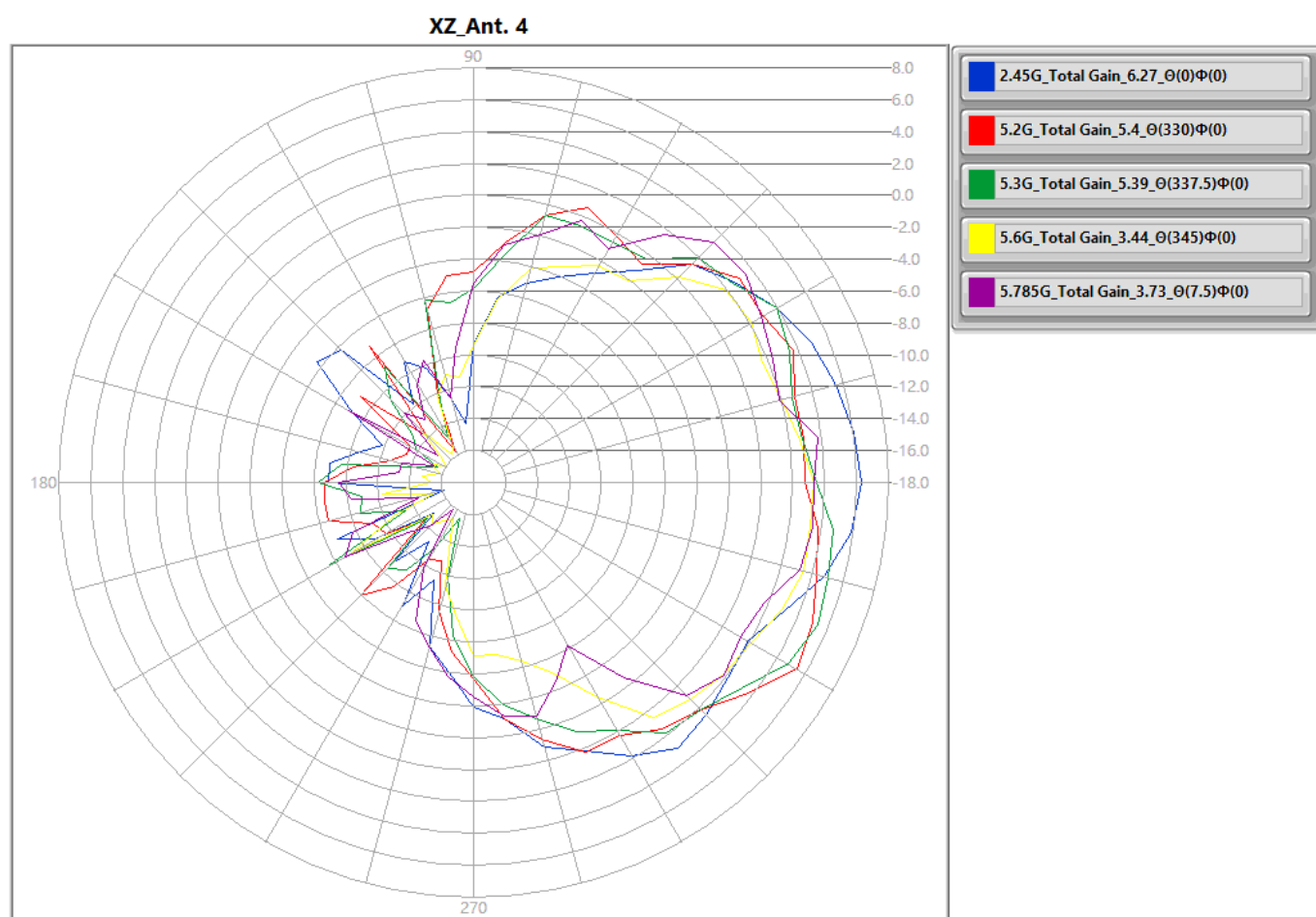
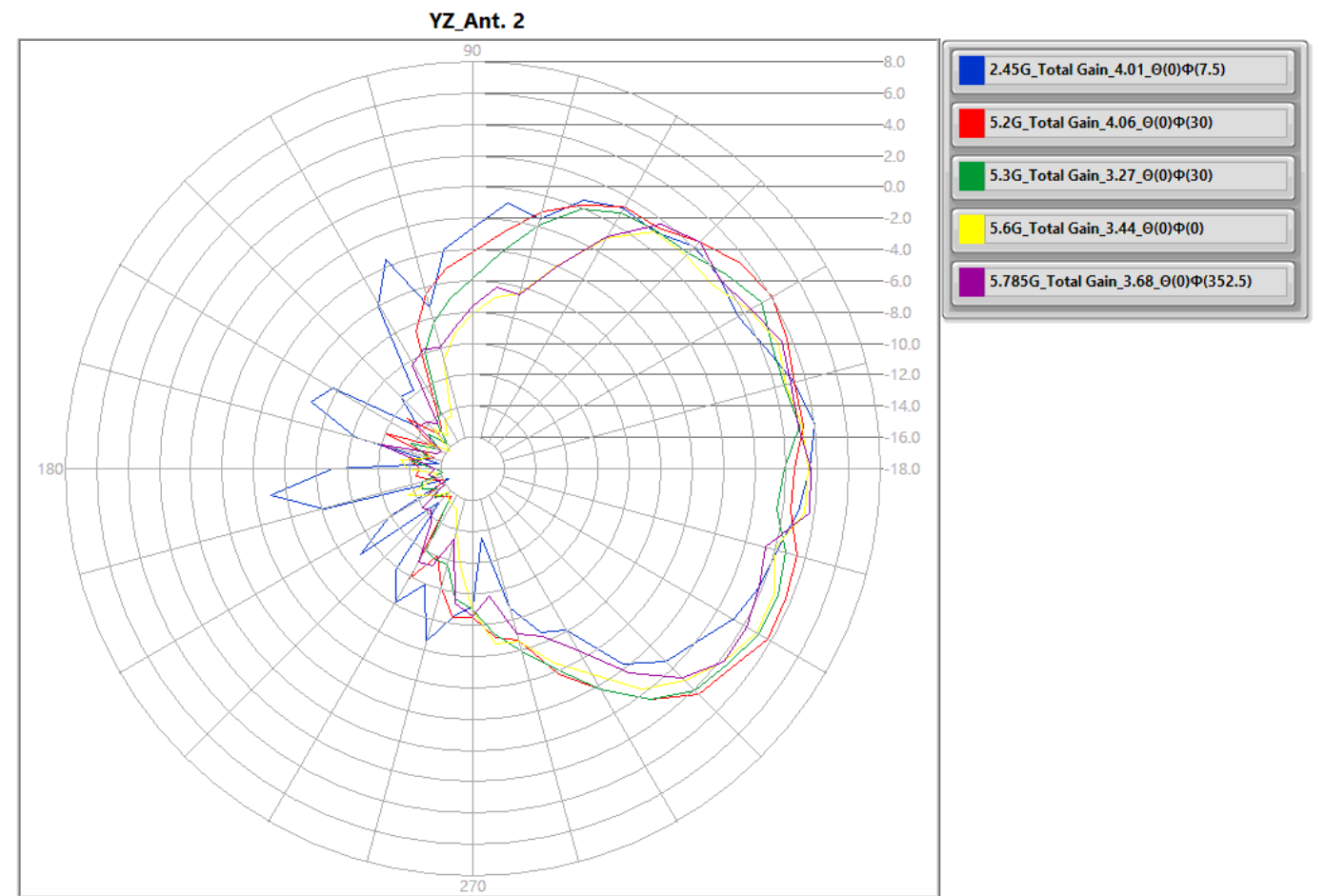
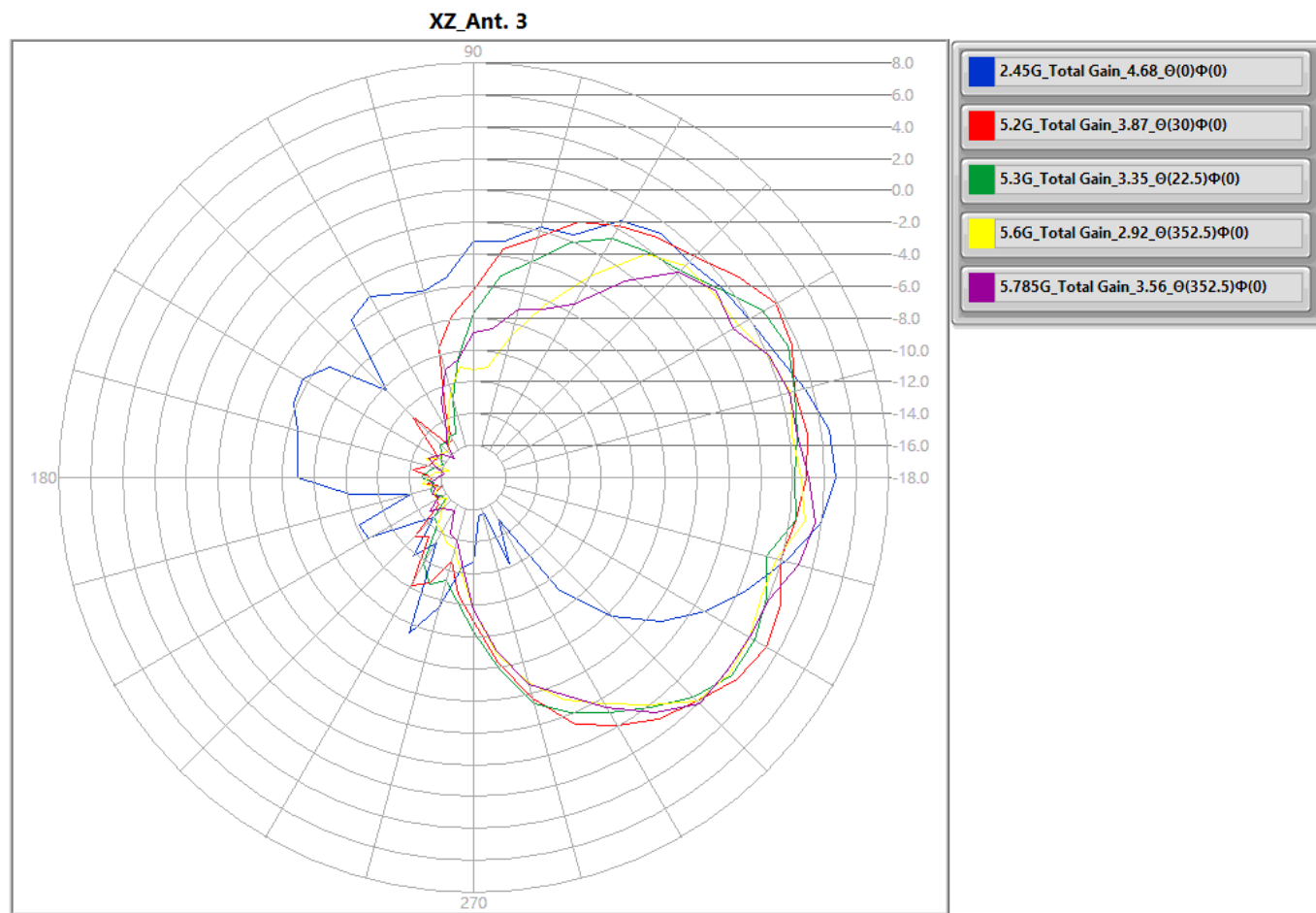
# Antenna Pattern\_2.4GHz, 5GHz UNII-1~UNII-3(Radio 1)

# Appendix E

|           |               |                 |                 |                 |                 |                 |                 |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |
|-----------|---------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Θ(157.5°) | -13.45/-14.21 | -13.58/-11.58   | -9.57/-9.27     | -10.05/-10.73   | -11.20/-11.85   | -12.80/-12.57   | -12.24/-11.82   | -11.73/-11.53     | -11.54/-11.65     | -12.89/-12.22     | -10.55/-9.49      | -9.23/-10.53      | -11.24/-10.12     | -9.56/-10.45      | -12.80/-14.86     | -14.67/-12.06     | -11.11/-12.14     | -13.65/-13.87     | -14.98/-16.00     | -13.43/-11.48     | -11.02/-12.67     | -14.84/-16.24     | -15.07/-14.89     | -15.36/-13.90     |
| Θ(165°)   | -12.58/-12.54 | -12.35/-12.61   | -12.13/-12.11   | -12.93/-12.86   | -11.72/-11.34   | -11.29/-11.45   | -11.43/-12.58   | -14.13/-14.47     | -15.15/-14.21     | -14.17/-15.20     | -14.81/-13.76     | -11.56/-9.95      | -8.56/-7.82       | -8.05/-8.07       | -8.34/-8.90       | -9.69/-10.77      | -12.75/-14.43     | -13.54/-11.80     | -10.61/-10.24     | -10.73/-11.47     | -11.89/-13.24     | -14.07/-14.55     | -15.67/-15.79     | -14.35/-12.38     |
| Θ(172.5°) | -10.38/-11.74 | -12.10/-12.84   | -12.39/-13.89   | -13.77/-13.51   | -13.53/-13.70   | -13.39/-13.12   | -13.61/-13.25   | -13.93/-14.29     | -13.85/-13.81     | -14.05/-14.02     | -13.61/-12.03     | -10.01/-9.01      | -8.56/-8.72       | -9.29/-9.29       | -9.77/-11.31      | -12.82/-14.15     | -14.03/-14.45     | -13.98/-12.83     | -12.08/-11.69     | -11.99/-11.95     | -10.96/-10.12     | -9.10/-8.27       | -8.42/-8.74       | -8.97/-9.03       |
| Θ(180°)   | -8.63/-9.55   | -9.91/-10.36    | -10.18/-9.89    | -9.86/-9.70     | -9.66/-9.59     | -8.99/-8.52     | -8.70/-8.89     | -10.07/-10.89     | -11.43/-11.38     | -10.32/-9.78      | -9.80/-10.22      | -11.06/-11.17     | -10.75/-10.67     | -10.58/-10.34     | -9.64/-8.72       | -8.17/-8.09       | -7.70/-7.38       | -7.41/-7.75       | -8.18/-8.46       | -8.31/-8.14       | -7.99/-7.75       | -7.62/-7.48       | -7.38/-7.65       | -7.79/-7.99       |
| Freq(Hz)  | 5.3G/Pol.     | TotalAnt.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°)     | 3.50/3.62     | 3.57/3.46       | 3.43/3.41       | 3.43/3.40       | 3.27/3.17       | 3.03/2.94       | 2.87/2.73       | 2.67/2.70         | 2.79/2.93         | 3.07/3.12         | 3.30/3.56         | 3.73/3.63         | 3.45/3.26         | 3.15/3.07         | 2.86/2.62         | 2.63/2.71         | 2.64/2.48         | 2.35/2.28         | 2.23/2.22         | 2.31/2.39         | 2.47/2.65         | 2.84/2.95         | 3.01/2.99         | 3.06/3.22         |
| Θ(7.5°)   | 2.80/2.85     | 2.79/2.72       | 2.66/2.49       | 2.43/2.38       | 2.34/2.27       | 2.25/2.20       | 2.18/2.09       | 2.19/2.32         | 2.60/2.90         | 3.17/3.32         | 3.52/3.86         | 4.39/4.77         | 4.73/4.54         | 4.40/4.29         | 4.21/4.07         | 3.86/3.75         | 3.62/3.39         | 3.18/3.04         | 2.93/2.74         | 2.66/2.67         | 2.74/2.78         | 2.89/3.03         | 3.06/2.85         | 2.81/2.81         |
| Θ(15°)    | 2.68/2.73     | 2.76/2.62       | 2.55/2.58       | 2.69/2.80       | 2.96/3.03       | 2.98/2.92       | 2.67/2.40       | 2.13/2.04         | 2.20/2.49         | 2.76/3.05         | 3.36/3.77         | 4.34/4.89         | 5.04/4.93         | 4.70/4.42         | 4.19/3.99         | 3.81/3.68         | 3.67/3.55         | 3.33/2.97         | 2.55/2.10         | 1.87/2.05         | 2.31/2.33         | 2.22/2.14         | 2.28/2.61         | 2.38/2.61         |
| Θ(22.5°)  | 3.42/3.34     | 3.16/2.87       | 2.57/2.53       | 2.56/2.65       | 2.77/2.90       | 2.96/3.16       | 3.22/2.96       | 2.54/2.45         | 2.64/2.85         | 2.92/3.05         | 3.44/4.16         | 5.01/5.47         | 5.39/4.99         | 4.49/4.01         | 3.67/3.50         | 3.42/3.47         | 3.79/4.04         | 4.04/3.80         | 3.27/2.68         | 2.10/1.67         | 1.76/2.19         | 2.34/2.03         | 1.32/1.02         | 1.97/3.00         |
| Θ(30°)    | 3.90/3.51     | 3.16/3.28       | 3.67/4.26       | 4.60/4.60       | 4.33/3.82       | 3.49/3.67       | 3.64/3.10       | 2.15/1.52         | 1.99/2.67         | 2.76/2.64         | 3.16/4.06         | 4.77/5.03         | 4.74/4.22         | 3.79/3.55         | 3.49/3.48         | 3.46/3.45         | 3.58/3.85         | 3.87/3.84         | 3.70/3.30         | 2.52/1.83         | 1.50/1.65         | 1.53/1.02         | 0.67/1.37         | 2.84/3.78         |
| Θ(37.5°)  | 2.50/2.46     | 2.62/3.06       | 3.46/3.54       | 3.58/3.78       | 3.89/3.71       | 3.44/3.42       | 3.52/3.80       | 3.04/1.25         | 0.38/0.77         | 0.93/1.31         | 2.47/3.48         | 3.78/3.54         | 3.21/3.01         | 3.13/3.53         | 3.97/4.02         | 3.64/3.29         | 2.98/2.67         | 2.56/2.48         | 2.00/1.33         | 1.40/1.10         | 0.28/0.27         | 0.75/-0.08        | -0.76/0.58        | 1.90/2.48         |
| Θ(45°)    | 1.91/2.23     | 2.35/2.87       | 3.55/3.66       | 3.68/3.91       | 4.25/4.10       | 3.54/2.71       | 1.87/1.91       | 2.23/1.36         | -0.35/-1.01       | -1.16/-0.45       | 1.00/1.93         | 2.15/2.10         | 2.15/2.47         | 2.84/3.07         | 3.48/3.48         | 3.05/2.74         | 1.85/0.91         | 0.51/0.11         | 0.08/0.14         | 0.08/-0.41        | -1.53/-2.26       | -1.78/-1.82       | -1.06/1.07        | 1.75/1.70         |
| Θ(52.5°)  | -0.34/0.45    | 0.74/0.96       | 1.33/1.07       | 1.35/2.08       | 2.34/1.92       | 1.54/1.65       | 1.76/1.81       | 1.92/0.94         | -1.28/-2.62       | -3.14/-2.79       | -1.36/0.03        | 1.02/1.61         | 1.77/2.21         | 2.78/3.11         | 3.42/3.13         | 2.85/2.68         | 2.24/1.87         | 1.37/1.19         | 0.11/-1.09        | -2.90/-4.59       | -4.72/-4.79       | -3.66/-3.65       | -2.65/-0.48       | 0.06/-0.38        |
| Θ(60°)    | -0.59/0.61    | 0.54/-0.00      | -0.83/-2.22     | -1.55/-0.54     | 0.08/0.93       | 1.52/1.45       | 0.73/0.50       | 0.58/-0.87        | -4.14/-5.80       | -5.69/-4.92       | -3.13/-1.40       | -0.49/-0.16       | -0.03/0.53        | 1.81/2.82         | 3.18/2.83         | 2.24/2.18         | 2.11/0.99         | 0.48/0.04         | -0.33/-1.34       | -2.02/-3.15       | -4.91/-7.36       | -6.20/-4.19       | -2.73/-1.07       | -0.10/-0.55       |
| Θ(67.5°)  | -0.55/1.28    | 1.35/0.98       | -1.00/-2.76     | -1.73/-1.41     | -0.64/1.19      | 2.20/1.75       | 0.09/-1.19      | -3.27/-6.85       | -9.49/-8.60       | -8.73/-8.81       | -5.02/-1.96       | -0.78/-0.68       | -1.09/-1.41       | -0.36/1.16        | 1.60/1.01         | 0.07/0.96         | 1.35/1.07         | 0.37/-0.41        | -1.68/-2.29       | -3.29/-3.96       | -3.72/-6.86       | -8.33/-7.08       | -4.81/-3.17       | -1.60/-2.12       |
| Θ(75°)    | -0.64/0.43    | 0.02/-0.07      | -2.09/-2.47     | -1.62/-1.81     | -0.37/1.46      | 2.03/0.17       | -3.20/-5.45     | -6.98/-10.33      | -13.63/-14.74     | -15.50/-13.45     | -9.50/-5.11       | -2.85/-2.39       | -2.68/-4.37       | -2.87/-3.02       | 0.22/-0.55        | -2.31/-2.41       | -0.05/0.36        | -0.64/-0.82       | -2.65/-3.84       | -4.94/-4.61       | -3.80/-6.77       | -11.23/-14.74     | -7.70/-4.78       | -1.56/-1.47       |
| Θ(82.5°)  | -3.68/-2.42   | -1.72/-1.83     | -4.22/-3.61     | -3.20/-2.87     | -0.86/-0.01     | -0.10/-2.93     | -6.80/-6.94     | -6.95/-9.05       | -14.43/-12.39     | -12.82/-12.11     | -8.83/-6.30       | -4.82/-3.72       | -3.97/-5.86       | -5.38/-2.93       | -1.61/-2.28       | -3.52/-3.37       | -2.52/-1.89       | -1.94/-3.72       | -7.32/-7.50       | -6.55/-9.24       | -11.07/-8.90      | -6.29/-5.55       | -3.57/-5.29       |                   |
| Θ(90°)    | -5.88/-5.36   | -4.11/4.28      | -6.59/-4.80     | -5.97/-6.14     | -3.95/-3.38     | -4.35/-7.64     | -9.43/-8.18     | -7.34/-9.83       | -11.50/-10.39     | -11.09/-12.29     | -9.91/-9.86       | -8.40/-7.37       | -5.83/-6.07       | -6.92/4.98        | -4.12/4.27        | -5.07/-5.77       | -4.94/4.67        | -6.15/4.09        | -4.54/-5.37       | -8.51/-8.87       | -11.01/-12.21     | -7.85/-5.82       | -6.22/-7.31       | -5.28/-8.33       |
| Θ(97.5°)  | -6.66/-7.05   | -7.18/-9.09     | -9.58/-8.62     | -13.19/-10.48   | -6.52/-6.31     | -6.85/-8.24     | -9.34/-9.38     | -7.81/-7.27       | -9.88/-12.31      | -14.00/-13.09     | -9.72/-10.36      | -8.31/-7.55       | -7.50/-7.18       | -6.66/-5.91       | -6.41/-7.05       | -10.48/-9.73      | -7.32/-7.81       | -10.08/-10.86     | -11.47/-8.40      | -7.91/-8.09       | -8.51/-8.83       | -10.33/-10.01     |                   |                   |
| Θ(105°)   | -6.14/-7.57   | -10.05/-13.93   | -12.93/-11.32   | -13.22/-11.50   | -8.45/-8.59     | -10.14/-9.80    | -10.74/-10.80   | -8.40/-10.39      | -11.96/-13.57     | -14.50/-11.87     | -8.89/-9.28       | -8.02/-12.14      | -11.90/-9.69      | -9.00/-8.24       | -9.60/-10.01      | -7.94/-7.77       | -6.97/-7.32       | -11.64/-11.55     | -15.53/-12.97     | -10.40/-11.23     | -10.61/-10.29     | -9.71/-12.40      | -14.67/-13.64     | -12.81/-6.81      |
| Θ(112.5°) | -12.44/-14.05 | -11.17/-12.89   | -15.12/-14.59   | -10.60/-10.43   | -11.63/-12.84   | -11.70/-9.32    | -9.77/-10.96    | -11.54/-11.90     | -12.78/-14.54     | -15.21/-13.12     | -10.73/-10.25     | -9.53/-13.11      | -15.60/-12.47     | -8.95/-8.81       | -10.13/-12.77     | -11.38/-9.24      | -7.59/-7.81       | -9.23/-11.22      | -14.10/-14.52     | -10.75/-10.66     | -11.19/-10.19     | -12.20/-15.40     | -13.75/-12.62     | -12.77/-10.85     |
| Θ(120°)   | -14.76/-9.77  | -10.28/-13.00   | -16.01/-14.56   | -9.92/-13.07    | -14.38/-14.47   | -12.54/-12.21   | -14.20/-14.70   | -15.20/-15.89     | -14.08/-15.61     | -15.98/-14.48     | -11.78/-9.66      | -9.45/-9.78       | -13.23/-12.46     | -10.04/-8.19      | -8.15/-10.98      | -15.42/-15.36     | -10.81/-9.95      | -8.31/-8.42       | -10.94/-14.16     | -14.93/-15.92     | -14.93/-12.44     | -10.40/-8.66      | -7.73/-8.20       | -9.91/-12.38      |
| Θ(127.5°) | -8.91/-8.58   | -10.21/-12.64   | -12.89/-12.42   | -14.77/-15.44   | -15.31/-15.45   | -13.11/-13.78   | -14.51/-12.19   | -15.14/-15.33     | -15.31/-16.01     | -15.18/-13.19     | -10.07/-8.73      | -8.33/-9.46       | -11.08/-13.10     | -12.70/-8.80      | -5.88/-9.29       | -10.69/-15.29     | -13.76/-9.95      | -10.09/-13.79     | -15.14/-12.53     | -13.90/-13.88     | -12.34/-14.20     | -12.95/-10.40     | -9.91/-8.20       | -8.85/-9.89       |
| Θ(135°)   | -10.65/-9.48  | -11.91/-15.06   | -14.96/-12.72   | -10.42/-9.77    | -12.53/-14.38   | -11.52/-11.28   | -14.13/-14.97   | -15.88/-12.91     | -12.30/-12.13     | -13.86/-11.61     | -10.91/-10.04     | -7.51/-9.20       | -10.32/-12.50     | -14.84/-15.74     | -11.92/-10.06     | -10.27/-7.64      | -8.14/-9.23       | -9.53/-11.74      | -13.17/-12.88     | -13.22/-13.74     | -9.81/-9.00       | -9.40/-12.41      | -14.60/-14.11     | -11.80/-9.59      |
| Θ(142.5°) | -13.23/-10.62 | -11.10/-11.62   | -12.37/-13.00   | -15.55/-13.58   | -12.13/-10.72   | -11.13/-13.04   | -13.09/-11.80   | -11.38/-11.42     | -12.08/-11.09     | -8.64/-10.29      | -11.73/-14.58     | -12.32/-11.92     | -14.36/-15.42     | -10.51/-9.63      | -10.93/-13.69     | -12.72/-9.09      | -8.66/-9.77       | -9.92/-11.62      | -8.54/-11.54      | -13.20/-13.30     | -12.03/-9.60      | -8.99/-8.63       | -11.04/-12.94     |                   |
| Θ(150°)   | -13.86/-12.16 | -11.65/-11.28   | -12.61/-13.30   | -13.71/-15.04   | -15.11/-14.81   | -12.77/-10.65   | -10.19/-10.92   | -12.29/-12.21     | -11.59/-12.37     | -14.97/-13.85     | -13.93/-10.80     | -10.44/-6.38      | -7.62/-10.15      | -14.13/-14.28     | -12.86/-10.19     | -9.23/-9.11       | -9.96/-11.09      | -12.74/-13.15     | -13.08/-13.19     | -13.86/-13.60     | -14.73/-13.41     | -13.26/-14.47     | -13.46/-12.05     | -12.93/-13.29     |
| Θ(157.5°) | -15.52/-14.74 | -13.97/-12.35   | -11.63/-10.71   | -9.63/-9.81     | -10.80/-12.56   | -14.79/-15.11   | -14.58/-12.37   | -11.24/-10.87     | -10.96/-11.55     | -12.08/-13.33     | -13.45/-12.63     | -13.03/-12.94     | -13.36/-14.98     | -13.22/-12.47     | -14.04/-14.88     | -12.36/-9.94      | -9.31/-9.74       | -11.83/-13.63     | -14.22/-14.21     | -12.68/-11.25     | -10.78/-11.61     | -14.53/-15.25     | -15.82/-15.32     | -15.34/-15.61     |
| Θ(165°)   | -14.40/-14.25 | -13.94/-14.55   | -15.13/-13.62   | -14.62/-14.02   | -13.44/-13.45   | -13.63/-13.44   | -14.05/-15.11   | -16.38/-15.37     | -15.40/-14.20     | -13.60/-13.71     | -14.41/-14.00     | -12.19/-11.39     | -10.68/-9.43      | -9.04/-9.81       | -9.96/-10.26      | -10.99/-11.69     | -13.02/-13.69     | -13.28/-12.26     | -10.96/-10.26     | -10.98/-12.12     | -14.31/-16.00     | -14.80/-14.70     | -15.78/-15.07     | -15.57/-14.60     |
| Θ(172.5°) | -9.66/-10.61  | -11.98/-13.13   | -13.60/-14.16   | -14.15/-14.28   | -14.09/-13.77   | -14.29/-14.65   | -14.44/-15.07   | -15.44/-14.72     | -15.00/-13.50     | -13.51/-14.25     | -14.75/-14.77     | -13.00/-11.37     | -10.91/-10.07     | -10.07/-11.83     | -13.46/-13.56     | -13.82/-14.25     | -14.39/-14.56     | -13.88/-13.15     | -12.74/-13.22     | -11.26/-8.53      | -7.34/-7.52       | -7.93/-8.24       | -8.33/-8.73       |                   |
| Θ(180°)   | -8.29/-8.83   | -9.70/-10.30    | -9.91/-9.65     | -10.07/-10.28   | -10.41/-10.20   | -10.04/-9.85    | -9.87/-10.26    | -11.03/-12.03     | -12.74/-12.91     | -12.19/-10.50     | -9.30/-9.04       | -9.11/-10.18      | -10.58/-10.30     | -10.02/-9.49      | -8.72/-8.11       | -7.38/-7.05       | -6.73/-6.70       | -6.93/-7.44       | -7.89/-8.23       | -8.37/-8.12       | -7.34/-6.39       | -5.96/-6.26       | -6.70/-6.83       | -6.84/-7.28       |
| Freq(Hz)  | 5.6G/Pol.     | TotalAnt.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°)     | 3.30/3.42     | 3.50/3.40       | 3.38/3.41       | 3.36/3.26       | 3.20/3.18       | 3.20/3.23       | 3.23/3.20       | 3.18/3.22         | 3.19/3.18         | 3.27/3.25         | 3.24/3.34         | 3.49/3.57         | 3.50/3.35         | 3.28/3.32         | 3.34/3.25         | 3.11/3.04         | 3.04/3.12         | 3.16/3.18         | 3.10/3.08         | 3.12/3.20         | 3.19/3            |                   |                   |                   |

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









# Antenna Pattern\_5GHz UNII-2C~3, 6GHz(Radio 2)

# Appendix F

|           |               |                 |                 |                 |                 |                 |                 |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |
|-----------|---------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Θ(22.5°)  | 4.18/4.16     | 4.51/4.86       | 5.25/5.47       | 5.58/5.57       | 5.60/5.61       | 5.57/5.45       | 5.45/5.46       | 5.42/5.32         | 5.23/5.35         | 5.53/5.54         | 5.50/5.56         | 5.54/5.32         | 5.02/4.86         | 4.77/4.81         | 4.95/5.15         | 5.34/5.32         | 5.12/4.83         | 4.45/4.11         | 3.86/3.73         | 3.80/4.09         | 4.48/4.89         | 5.16/5.34         | 5.35/5.16         | 4.96/4.62         |
| Θ(30°)    | 3.23/2.14     | 1.94/2.71       | 3.63/4.24       | 4.32/4.18       | 4.05/3.78       | 3.46/3.52       | 3.87/4.23       | 4.26/4.14         | 4.08/4.14         | 4.25/4.49         | 4.59/4.49         | 4.07/3.51         | 3.04/2.93         | 3.20/3.59         | 3.82/3.72         | 3.36/2.88         | 2.45/2.06         | 2.24/2.86         | 3.35/3.60         | 3.90/4.25         | 4.61/5.05         | 5.41/5.71         | 5.80/5.55         | 5.06/4.34         |
| Θ(37.5°)  | 1.57/0.06     | -0.06/0.84      | 2.62/2.35       | 2.13/2.14       | 1.99/1.49       | 1.24/1.86       | 2.92/3.46       | 3.64/3.72         | 3.46/3.14         | 3.29/3.42         | 3.40/2.97         | 2.39/2.15         | 1.74/1.46         | 1.99/2.60         | 2.29/1.68         | 0.99/0.10         | -0.71/0.79        | 0.55/1.67         | 2.00/0.19         | 3.94/5.46         | 4.87/4.92         | 5.01/4.91         | 4.60/4.20         | 3.70/2.75         |
| Θ(45°)    | 0.62/-0.18    | -1.71/-1.17     | 0.43/0.35       | -0.58/-0.92     | -1.06/-1.29     | 0.08/1.35       | 1.86/1.95       | 2.05/2.22         | 2.17/1.59         | 1.33/1.87         | 1.95/1.37         | 0.92/1.14         | 1.10/0.69         | 0.48/0.34         | -0.47/-0.85       | -1.39/-1.70       | -2.63/-1.61       | 0.59/1.31         | 1.46/2.12         | 3.27/3.85         | 3.52/3.05         | 2.74/2.86         | 3.02/3.02         | 2.53/1.91         |
| Θ(52.5°)  | 0.08/-0.06    | -2.87/-3.07     | -2.09/-2.44     | -2.88/-2.28     | -3.04/-2.48     | -0.02/0.75      | 0.08/-0.17      | 0.04/0.10         | -0.75/-2.19       | -2.27/-1.11       | -0.74/-1.34       | -1.94/-1.12       | -0.54/0.11        | -0.22/-1.59       | -3.05/-3.58       | -3.80/-4.53       | -5.36/-3.09       | 0.07/0.71         | 0.46/1.99         | 3.06/3.00         | 1.99/1.63         | 1.51/1.18         | 1.42/2.09         | 1.86/1.57         |
| Θ(60°)    | -0.77/-2.26   | -4.09/-4.30     | -3.36/-4.69     | -4.29/-2.88     | -3.08/-2.93     | -1.11/-0.41     | -2.68/-2.95     | -2.03/-2.36       | -4.62/-7.80       | -8.19/-5.28       | -3.85/-3.94       | -4.09/-3.40       | -1.81/-0.83       | -1.50/-2.64       | -4.46/-5.46       | -4.68/-7.41       | -9.26/-6.41       | -2.89/-2.07       | 0.20/-0.19        | -0.37/-0.27       | 0.46/0.07         | -0.33/-0.07       | 0.02/0.06         |                   |
| Θ(67.5°)  | -3.54/-4.24   | -5.12/-4.93     | -4.04/-5.84     | -5.70/-3.09     | -2.50/-3.24     | -0.69/-0.53     | -3.74/-4.03     | -2.21/-4.01       | -8.05/-12.48      | -11.98/-7.24      | -5.25/-5.85       | -5.94/-5.11       | -2.48/-0.91       | -2.27/-5.28       | -6.30/-6.92       | -6.12/-7.73       | -8.86/-6.57       | -4.28/-5.54       | -4.22/-3.29       | -1.78/-1.90       | -1.43/-1.80       | -1.23/-1.14       | -1.59/-2.04       | -1.78/-2.61       |
| Θ(75°)    | -7.23/-5.94   | -6.04/-6.41     | -5.34/-6.53     | -6.34/-4.26     | -3.54/-4.05     | -2.57/-2.41     | -4.59/-5.03     | -3.15/-4.72       | -8.64/-9.57       | -9.95/-7.43       | -5.77/-7.01       | -6.76/-6.44       | -4.15/-1.55       | -3.12/-7.13       | -7.38/-9.46       | -8.14/-9.26       | -8.10/-7.04       | -4.76/-6.67       | -6.45/-4.76       | -2.23/-1.89       | -2.96/-4.36       | -3.59/-2.68       | -3.02/-4.06       | -3.34/-6.65       |
| Θ(82.5°)  | -11.06/-9.72  | -7.45/-7.76     | -7.27/-7.78     | -7.79/-5.79     | -5.68/-4.54     | -4.27/-2.91     | -4.45/-4.25     | -3.77/-6.88       | -8.95/-8.20       | -9.33/-7.88       | -7.32/-9.54       | -9.22/-7.00       | -3.70/-3.08       | -5.85/-10.57      | -8.72/-10.65      | -10.39/-10.28     | -8.34/-7.71       | -4.88/-4.59       | -7.42/-4.87       | -2.07/-2.04       | -3.95/-6.46       | -6.10/-4.24       | -5.06/-7.73       | -5.52/-9.73       |
| Θ(90°)    | -12.75/-12.66 | -9.23/-10.00    | -9.70/-9.15     | -10.27/-7.40    | -7.76/-7.04     | -4.41/-3.91     | -4.84/-4.49     | -4.33/-8.71       | -8.55/-7.81       | -9.96/-9.10       | -7.51/-11.02      | -10.08/-6.98      | -4.86/-4.72       | -6.82/-11.79      | -10.80/-10.78     | -10.41/-11.97     | -10.22/-9.28      | -7.96/-5.64       | -8.43/-6.38       | -3.72/-3.84       | -6.63/-8.84       | -9.49/-6.02       | -7.23/-10.89      | -8.94/-11.81      |
| Θ(97.5°)  | -13.95/-12.08 | -10.35/-12.89   | -11.07/-10.78   | -12.72/-9.04    | -10.38/-7.91    | -4.53/-5.73     | -6.18/-6.63     | -5.65/-10.93      | -8.49/-8.82       | -12.00/-9.70      | -7.78/-10.62      | -9.77/-7.06       | -5.96/-6.77       | -8.09/-13.87      | -11.99/-10.79     | -10.60/-13.71     | -14.25/-11.56     | -12.37/-9.64      | -10.38/-11.32     | -8.67/-7.43       | -9.96/-10.45      | -11.88/-8.27      | -9.45/-11.42      | -11.49/-14.81     |
| Θ(105°)   | -12.62/-11.29 | -11.77/-13.03   | -12.54/-10.82   | -12.24/-10.52   | -11.97/-8.48    | -6.93/-8.25     | -8.63/-8.24     | -9.61/-11.36      | -9.21/-12.96      | -12.60/-9.60      | -8.61/-11.37      | -9.01/-8.10       | -7.15/-7.38       | -9.07/-14.66      | -12.15/-11.27     | -12.38/-13.78     | -15.20/-12.48     | -15.13/-11.57     | -14.07/-15.01     | -15.75/-10.83     | -10.16/-9.28      | -10.99/-12.40     | -11.82/-13.87     | -15.63/-15.34     |
| Θ(112.5°) | -15.63/-14.35 | -13.37/-12.97   | -13.28/-13.08   | -14.04/-12.95   | -12.84/-11.52   | -8.02/-7.90     | -9.02/-10.01    | -11.02/-8.73      | -11.21/-12.74     | -11.98/-9.65      | -10.21/-12.30     | -10.80/-10.62     | -8.84/-8.15       | -9.63/-13.68      | -11.16/-12.23     | -13.12/-12.25     | -15.00/-12.19     | -11.77/-15.47     | -13.02/-12.98     | -13.50/-9.04      | -9.65/-13.39      | -12.88/-9.46      | -13.30/-15.04     | -15.11/-15.97     |
| Θ(120°)   | -15.23/-12.07 | -15.67/-16.01   | -15.37/-14.81   | -16.13/-14.90   | -14.19/-12.80   | -8.14/-11.11    | -13.10/-14.03   | -13.48/-10.44     | -12.30/-13.88     | -10.91/-11.26     | -13.31/-11.52     | -11.36/-11.20     | -11.22/-11.31     | -10.69/-11.10     | -12.97/-14.91     | -15.05/-14.12     | -15.88/-14.75     | -13.56/-15.61     | -14.60/-14.58     | -15.43/-13.58     | -16.07/-13.09     | -15.24/-14.69     | -15.24/-15.31     |                   |
| Θ(127.5°) | -15.09/-15.21 | -15.76/-15.43   | -15.55/-15.18   | -13.59/-14.40   | -13.00/-12.25   | -12.38/-15.12   | -15.97/-14.01   | -12.79/-13.88     | -14.65/-11.88     | -10.37/-11.79     | -13.13/-11.47     | -10.18/-13.23     | -15.65/-10.55     | -9.35/-13.44      | -14.20/-14.87     | -14.92/-15.11     | -15.28/-15.12     | -15.33/-14.70     | -15.12/-13.81     | -15.88/-11.89     | -12.88/-12.02     | -15.79/-15.96     | -15.73/-15.64     |                   |
| Θ(135°)   | -15.03/-14.18 | -11.24/-14.30   | -15.65/-14.77   | -15.24/-14.67   | -16.21/-15.44   | -14.05/-12.00   | -13.76/-12.52   | -14.78/-15.35     | -13.93/-10.89     | -9.29/-11.81      | -13.82/-15.42     | -13.62/-15.07     | -15.55/-11.99     | -11.24/-13.50     | -14.76/-14.82     | -15.79/-11.28     | -15.01/-15.27     | -12.33/-13.11     | -12.12/-15.69     | -14.28/-15.37     | -12.57/-15.55     | -15.62/-12.43     | -13.22/-15.35     | -14.93/-15.66     |
| Θ(142.5°) | -14.90/-14.86 | -15.50/-15.82   | -14.88/-15.48   | -14.94/-14.26   | -15.60/-13.36   | -12.44/-14.02   | -15.55/-14.80   | -15.17/-15.03     | -14.75/-15.28     | -14.84/-15.20     | -13.42/-12.57     | -14.16/-16.29     | -15.65/-12.47     | -10.83/-12.74     | -15.62/-15.56     | -15.37/-14.75     | -15.36/-15.91     | -15.19/-16.28     | -14.70/-15.74     | -15.44/-15.49     | -15.40/-13.58     | -11.09/-12.48     | -15.99/-14.80     | -14.99/-14.96     |
| Θ(150°)   | -16.05/-15.26 | -15.53/-15.74   | -15.15/-15.24   | -14.28/-14.84   | -13.76/-15.75   | -15.30/-14.08   | -14.08/-15.95   | -15.62/-15.61     | -15.05/-15.95     | -15.43/-14.39     | -14.02/-16.23     | -15.75/-15.60     | -14.28/-13.11     | -13.22/-15.34     | -15.58/-15.28     | -15.86/-15.34     | -15.72/-15.66     | -14.48/-14.89     | -14.85/-15.49     | -15.00/-13.70     | -15.70/-15.45     | -15.38/-15.18     | -14.74/-15.30     |                   |
| Θ(157.5°) | -15.57/-15.95 | -15.59/-15.57   | -14.28/-14.89   | -15.05/-15.62   | -14.32/-14.52   | -13.66/-16.02   | -14.88/-14.35   | -15.66/-14.73     | -13.00/-12.80     | -12.69/-12.58     | -12.85/-14.01     | -15.71/-15.50     | -15.56/-14.94     | -16.20/-13.60     | -15.16/-15.27     | -15.86/-15.55     | -15.28/-15.28     | -14.34/-15.15     | -15.27/-15.15     | -14.83/-14.86     | -14.82/-15.97     | -15.51/-15.22     | -15.44/-15.73     | -15.31/-14.68     |
| Θ(165°)   | -13.92/-14.18 | -15.27/-15.32   | -15.70/-15.05   | -14.54/-12.73   | -11.63/-12.64   | -14.58/-14.94   | -14.08/-13.63   | -13.66/-13.43     | -12.95/-12.38     | -11.95/-11.81     | -13.26/-14.29     | -14.45/-15.02     | -15.03/-15.54     | -14.97/-15.71     | -14.86/-13.96     | -15.63/-15.61     | -15.69/-15.13     | -15.55/-15.25     | -15.20/-15.66     | -16.12/-14.78     | -14.69/-14.79     | -15.32/-16.00     | -15.83/-14.66     | -13.53/-13.66     |
| Θ(172.5°) | -15.57/-14.88 | -15.87/-15.23   | -15.11/-14.46   | -14.54/-13.92   | -13.39/-13.92   | -14.77/-15.77   | -15.41/-15.76   | -15.96/-16.28     | -15.04/-14.94     | -15.08/-15.16     | -14.89/-14.45     | -14.23/-14.11     | -15.41/-14.90     | -13.74/-15.21     | -13.61/-14.95     | -15.08/-15.47     | -15.15/-14.62     | -15.19/-13.57     | -16.02/-15.74     | -14.98/-15.53     | -15.65/-15.04     | -16.12/-14.95     | -15.15/-15.99     | -15.72/-14.76     |
| Θ(180°)   | -15.61/-15.10 | -14.14/-14.52   | -15.40/-15.02   | -15.22/-15.73   | -14.97/-15.49   | -15.56/-15.37   | -15.36/-15.10   | -15.34/-14.66     | -15.18/-14.32     | -15.99/-15.18     | -15.13/-15.38     | -15.36/-15.03     | -15.50/-14.99     | -15.25/-13.04     | -15.58/-14.81     | -15.36/-15.21     | -14.88/-14.68     | -15.20/-15.74     | -14.52/-15.34     | -15.93/-15.27     | -15.52/-14.95     | -14.02/-14.90     | -15.68/-14.61     | -15.35/-15.68     |
| Freq(Hz)  | 6.995GPol.    | TotalAnt. 2     | -               | -               | -               | -               | -               | -                 | -                 | -                 | -                 | -                 | -                 | -                 | -                 | -                 | -                 | -                 | -                 | -                 | -                 | -                 | -                 | -                 |
| Gain      | Φ(0°)/Φ(7.5°) | Φ(15°)/Φ(22.5°) | Φ(30°)/Φ(37.5°) | Φ(45°)/Φ(52.5°) | Φ(60°)/Φ(67.5°) | Φ(75°)/Φ(82.5°) | Φ(90°)/Φ(97.5°) | Φ(105°)/Φ(112.5°) | Φ(120°)/Φ(127.5°) | Φ(135°)/Φ(142.5°) | Φ(150°)/Φ(157.5°) | Φ(165°)/Φ(172.5°) | Φ(180°)/Φ(187.5°) | Φ(195°)/Φ(202.5°) | Φ(210°)/Φ(217.5°) | Φ(225°)/Φ(232.5°) | Φ(240°)/Φ(247.5°) | Φ(255°)/Φ(262.5°) | Φ(270°)/Φ(277.5°) | Φ(285°)/Φ(292.5°) | Φ(300°)/Φ(307.5°) | Φ(315°)/Φ(322.5°) | Φ(330°)/Φ(337.5°) | Φ(345°)/Φ(352.5°) |
| Θ(0°)     | 7.11/7.05     | 7.00/6.84       | 6.84/6.84       | 6.83/6.84       | 6.81/6.83       | 6.80/6.75       | 6.73/6.71       | 6.73/6.71         | 6.69/6.63         | 6.66/6.66         | 6.66/6.65         | 6.72/6.81         | 6.87/6.88         | 6.92/6.91         | 6.95/6.97         | 6.95/6.98         | 6.94/6.97         | 6.94/6.98         | 7.12/7.15         | 7.14/7.15         | 7.13/7.17         | 7.15/7.09         | 7.10/7.10         | 7.13/7.09         |
| Θ(7.5°)   | 7.23/7.21     | 7.17/7.14       | 7.11/7.09       | 7.12/7.15       | 7.20/7.30       | 7.35/7.35       | 7.51/7.29       | 7.27/7.30         | 7.33/7.29         | 7.19/7.06         | 6.96/6.87         | 6.85/6.73         | 6.63/6.48         | 6.37/6.20         | 6.01/6.83         | 5.72/5.64         | 5.61/5.62         | 5.52/5.62         | 5.79/5.92         | 5.99/6.17         | 6.34/6.50         | 6.57/6.71         | 6.82/6.98         | 7.07/7.14         |
| Θ(15°)    | 5.59/6.48     | 6.20/5.99       | 5.86/5.86       | 5.98/6.16       | 6.11/6.71       | 7.40/7.32       | 7.46/7.49       | 7.44/7.46         | 7.50/7.51         | 7.46/7.46         | 7.27/7.23         | 7.18/7.08         | 6.67/6.58         | 6.56/6.42         | 6.41/6.05         | 5.80/5.64         | 5.69/5.42         | 5.29/5.17         | 5.12/5.21         | 5.35/5.48         | 5.70/5.94         | 6.22/6.35         | 6.50/6.56         | 6.52/6.62         |
| Θ(22.5°)  | 5.30/5.35     | 5.31/5.08       | 5.06/5.10       | 5.21/5.50       | 5.90/6.31       | 6.61/6.82       | 6.83/6.67       | 6.44/6.32         | 6.26/6.20         | 6.14/6.18         | 6.13/6.09         | 6.11/5.96         | 5.74/5.54         | 5.50/5.49         | 5.31/5.20         | 5.29/5.38         | 5.30/5.02         | 4.72/4.44         | 4.46/4.57         | 4.74/4.92         | 5.11/5.34         | 5.66/5.73         | 5.88/6.01         | 5.96/5.65         |
| Θ(30°)    | 3.69/6.35     | 4.00/4.23       | 4.45/4.38       | 4.39/4.38       | 4.31/4.53       | 4.79/5.04       | 4.92/4.44       | 3.78/3.33         | 3.43/3.72         | 3.99/3.99         | 3.93/3.84         | 4.12/4.51         | 4.53/4.05         | 3.06/2.51         | 2.43/2.58         | 2.75/2.91         | 3.02/2.98         | 2.90/3.49         | 4.34/4.93         | 4.99/4.73         | 4.52/4.49         | 4.68/5.00         | 5.19/5.05         | 4.71/4.32         |
| Θ(37.5°)  | 2.89/1.85     | 1.90/2.10       | 2.22/2.08       | 2.42/2.34       | 2.12/2.65       | 3.56/3.83       | 3.37/2.42       | 1.67/1.24         | 1.51/2.11         | 2.42/2.16         | 3.46/3.36         | 1.89/0.50         | -0.57/-0.44       | -0.29/0.25        | 0.73/0.82         | 1.65/3.27         | 4.46/5.21         | 5.49/5.28         | 4.77/4.13         | 3.65/3.20         | 3.19/3.58         | 3.66/3.43         |                   |                   |
| Θ(45°)    | 2.47/1.16     | -0.61/-1.16     | -0.99/-1.14     | -0.43/-0.41     | -0.91/1.10      | 2.59/2.26       | 1.14/0.80       | 1.00/1.11         | 1.44/2.04         | 2.14/1.40         | 0.39/-0.76        | -1.84/-1.15       | 0.94/2.07         | 1.17/0.95         | -2.82/-2.77       | -2.84/-2.37       | -1.89/-1.37       | 1.01/2.53         | 1.39/3.86         | 4.39/4.62         | 4.03/2.82         | 2.01/2.15         | 2.41/2.58         | 2.76/2.91         |
| Θ(52.5°)  | 1.92/0.21     | -3.27/-5.14     | -3.21/-2.91     | -1.78/-2.50     | -2.38/0.26      | 1.50/-0.05      | -1.86/-1.09     | 0.15/0.40         | 0.47/0.50         | 0.28/-0.03        | -0.99/-2.32       | -4.39/-4.69       | 2.08/0.18         | -0.21/-2.54       | -5.04/-5.19       | -4.54/-4.23       | -4.14/-3.21       | -0.24/1.01        | 0.92/1.96         | 3.41/3.77         | 3.23/2.61         | 2.10/2.19         | 2.46/2.63         | 2.17/2.25         |
| Θ(60°)    | 0.63/-0.41    | -5.43/-8.92     | -5.14/-4.80     | -4.55/-3.80     | -3.85/-1.69     | -0.23/-2.09     | -4.53/-2.99     | -1.70/-1.66       | -2.52/-3.51       | -3.88/-4.50       | -5.13/-7.00       | -5.46/-2.17       | -1.49/-3.92       | -6.66/-7.23       | -4.89/-5.62       | -6.54/-6.32       | -3.74/-2.47       | -2.51/-1.49       | -0.28/1.02        | 1.68/1.99         | 2.03/2.52         | 1.96/1.70         | 0.65/0.18         |                   |
| Θ(67.5°)  | -1.48/-1.13   | -4.66/-9.82     | -7.02/-8.02     | -6.87/-4.69     | -5.46/-4.27     | -3.63/-7.49     | -9.65/-6.35     | -4.27/-4.42       | -5.89/-8.21       | -11.38/-9.05      | -6.66/-5.01       | -5.84/-8.49       | -6.36/-4.74       | -4.71/-1.74       | -8.94/-9.90       | -6.75/-8.45       | -8.08/-7.13       | -                 |                   |                   |                   |                   |                   |                   |



# Antenna Pattern\_5GHz UNII-2C~3, 6GHz(Radio 2)

# Appendix F

|           |               |                |                |                |                |                |                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
|-----------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Θ(75°)    | -3.23/-4.38   | -4.82/-2.99    | -2.85/-3.47    | -3.96/-3.71    | -2.89/-2.70    | -3.94/-2.92    | -2.03/-2.72    | -3.53/-2.94      | -4.73/-6.80      | -7.44/-7.95      | -7.60/-6.57      | -7.28/-8.75      | -4.98/-1.51      | -1.18/-4.14      | -6.69/-8.71      | -10.03/-6.68     | -2.820.21        | 0.31/-2.26       | -3.71/-5.11      | -5.17/-5.71      | -10.36/-7.35     | -7.94/-6.43      | -5.96/-5.62      | -4.05/-3.26      |
| Θ(82.5°)  | -3.91/-4.54   | -5.37/-3.23    | -3.15/-3.69    | -4.70/-4.40    | -3.08/-3.54    | -5.29/-3.46    | -2.50/-2.83    | -5.44/-4.72      | -7.64/-9.45      | -8.27/-9.42      | -9.62/-8.33      | -9.83/-10.00     | -6.59/-3.09      | -3.20/-7.14      | -10.79/-14.90    | -15.15/-8.76     | -3.64/-0.74      | -0.31/-2.39      | -4.17/-5.22      | -8.46/-6.57      | -10.86/-10.00    | -9.59/-8.68      | -8.57/-7.06      | -5.49/-4.54      |
| Θ(90°)    | -6.06/-7.62   | -4.74/-4.70    | -4.42/-6.62    | -6.44/-5.71    | -4.28/-5.06    | -6.95/-6.40    | -5.66/-3.11    | -5.56/-8.06      | -9.28/-11.70     | -10.41/-12.01    | -10.69/-8.66     | -14.81/-12.29    | -9.66/-6.31      | -5.19/-9.15      | -12.15/-14.27    | -16.08/-13.63    | -6.51/-2.93      | -2.13/-3.66      | -5.62/-6.37      | -8.02/-9.31      | -10.48/-10.27    | -10.74/-9.08     | -7.57/-6.62      |                  |
| Θ(97.5°)  | -9.15/-10.36  | -9.60/-6.16    | -6.88/-8.40    | -8.16/-7.00    | -5.51/-7.22    | -9.09/-5.91    | -4.99/-4.79    | -7.33/-9.60      | -11.44/-12.64    | -11.18/-13.50    | -11.91/-13.94    | -13.14/-12.26    | -11.81/-9.28     | -7.71/-11.81     | -11.73/-12.15    | -15.94/-15.45    | -10.77/-7.03     | -6.83/-7.49      | -9.82/-11.16     | -10.75/-12.13    | -14.73/-14.57    | -13.31/-11.57    | -11.81/-10.39    | -9.54/-7.96      |
| Θ(105°)   | -8.89/-10.72  | -10.70/-8.68   | -9.31/-9.25    | -8.85/-8.20    | -8.09/-10.08   | -11.27/-7.15   | -6.82/-2.77    | -10.99/-10.85    | -12.57/-11.69    | -12.14/-15.39    | -11.79/-15.20    | -15.23/-15.24    | -14.87/-14.26    | -11.28/-12.32    | -14.46/-11.19    | -14.84/-15.62    | -14.73/-11.52    | -13.66/-13.66    | -12.93/-14.93    | -14.39/-13.20    | -15.70/-14.37    | -14.29/-13.36    | -13.67/-12.93    | -12.66/-10.67    |
| Θ(112.5°) | -11.98/-13.03 | -10.51/-8.86   | -8.35/-8.82    | -9.09/-8.57    | -9.02/-11.10   | -11.37/-9.78   | -6.62/-11.03   | -11.56/-11.54    | -13.73/-12.02    | -13.13/-15.25    | -13.43/-15.49    | -13.63/-15.74    | -15.69/-15.53    | -12.90/-13.12    | -15.86/-12.94    | -15.90/-15.35    | -15.39/-12.55    | -11.89/-13.73    | -12.91/-16.00    | -15.43/-14.70    | -14.87/-14.70    | -11.83/-15.71    | -15.24/-12.17    | -12.42/-13.83    |
| Θ(120°)   | -15.06/-14.99 | -14.33/-11.03  | -12.34/-12.82  | -12.84/-10.82  | -8.93/-10.83   | -12.28/-11.13  | -11.15/-12.60  | -11.95/-14.87    | -14.26/-13.07    | -15.80/-14.73    | -15.92/-15.78    | -15.07/-15.07    | -15.48/-14.95    | -12.84/-12.23    | -15.27/-14.61    | -15.34/-15.02    | -13.10/-11.77    | -12.94/-15.76    | -15.93/-14.97    | -13.94/-15.42    | -14.99/-16.12    | -16.06/-14.70    | -15.02/-12.28    | -10.87/-14.86    |
| Θ(127.5°) | -11.84/-12.89 | -14.65/-13.28  | -11.06/-12.03  | -11.25/-11.76  | -12.95/-14.36  | -13.53/-14.85  | -14.86/-13.97  | -13.71/-15.95    | -15.14/-14.70    | -15.96/-14.56    | -14.87/-16.32    | -14.88/-13.57    | -15.51/-15.77    | -13.77/-14.79    | -15.50/-14.85    | -15.38/-15.00    | -15.89/-15.89    | -14.29/-15.57    | -15.36/-15.94    | -14.45/-16.33    | -15.56/-15.24    | -15.42/-14.64    | -14.62/-15.23    | -13.16/-12.50    |
| Θ(135°)   | -15.14/-13.42 | -11.49/-12.84  | -12.85/-12.33  | -12.04/-12.11  | -13.06/-13.37  | -13.14/-13.67  | -14.30/-14.24  | -15.45/-15.07    | -15.50/-15.01    | -15.60/-15.25    | -15.38/-15.65    | -15.88/-15.20    | -15.40/-15.44    | -15.12/-15.25    | -14.64/-15.17    | -15.63/-13.21    | -14.65/-14.58    | -14.27/-14.51    | -14.35/-14.86    | -15.43/-15.24    | -15.25/-15.80    | -15.10/-15.32    | -15.24/-14.33    | -15.52/-14.85    |
| Θ(142.5°) | -13.83/-13.36 | -14.04/-13.73  | -14.15/-14.34  | -14.92/-15.14  | -15.40/-15.45  | -14.53/-15.76  | -15.21/-14.62  | -15.43/-15.66    | -14.98/-15.55    | -15.59/-15.27    | -15.69/-14.93    | -15.58/-15.41    | -14.82/-14.39    | -15.53/-15.24    | -15.62/-15.05    | -15.83/-14.71    | -14.00/-13.80    | -15.22/-15.49    | -15.80/-15.27    | -15.08/-15.42    | -15.48/-15.42    | -13.97/-15.10    | -15.01/-14.93    | -13.94/-14.28    |
| Θ(150°)   | -13.43/-15.49 | -15.26/-15.11  | -15.07/-15.18  | -15.54/-15.26  | -15.06/-15.75  | -14.80/-14.66  | -14.51/-15.41  | -15.02/-15.88    | -15.73/-15.40    | -15.10/-15.74    | -14.90/-14.91    | -15.39/-15.05    | -15.67/-15.39    | -14.22/-14.97    | -15.79/-15.08    | -15.56/-15.53    | -15.13/-15.08    | -14.67/-15.43    | -15.89/-15.97    | -14.96/-15.31    | -15.30/-14.55    | -13.67/-15.26    | -15.63/-15.29    | -14.77/-13.34    |
| Θ(157.5°) | -14.34/-14.84 | -15.04/-15.05  | -15.34/-15.21  | -14.32/-14.24  | -14.86/-14.01  | -14.72/-15.22  | -15.75/-14.74  | -15.05/-15.11    | -15.38/-15.40    | -15.37/-15.25    | -14.99/-16.11    | -14.73/-16.02    | -15.22/-15.30    | -16.03/-15.40    | -16.10/-13.67    | -13.74/-16.08    | -15.39/-15.57    | -14.58/-14.25    | -15.85/-15.87    | -15.74/-15.54    | -15.73/-15.55    | -15.06/-15.70    | -15.32/-14.89    |                  |
| Θ(165°)   | -15.84/-15.07 | -16.04/-14.50  | -12.75/-11.78  | -12.24/-12.34  | -13.13/-14.27  | -14.89/-14.13  | -14.26/-13.45  | -12.24/-11.89    | -12.80/-14.73    | -15.25/-15.69    | -16.32/-15.44    | -14.63/-15.12    | -15.47/-15.26    | -15.08/-15.18    | -15.09/-13.89    | -14.57/-14.88    | -15.60/-15.08    | -15.28/-14.96    | -15.88/-15.42    | -15.22/-15.20    | -15.77/-15.61    | -15.67/-15.52    | -15.23/-14.91    | -15.73/-14.40    |
| Θ(172.5°) | -15.19/-15.41 | -16.18/-15.89  | -15.08/-15.23  | -15.21/-14.66  | -15.26/-15.75  | -15.54/-15.58  | -15.93/-14.10  | -13.38/-13.06    | -14.25/-16.03    | -15.41/-15.14    | -15.32/-15.27    | -15.18/-14.62    | -14.70/-14.69    | -14.51/-14.09    | -13.03/-12.88    | -13.46/-14.50    | -15.73/-15.95    | -15.47/-16.27    | -15.38/-15.87    | -15.76/-15.63    | -14.94/-15.94    | -15.41/-15.98    | -15.58/-15.72    |                  |
| Θ(180°)   | -12.05/-11.73 | -11.57/-11.03  | -11.15/-11.49  | -11.90/-12.69  | -13.40/-13.99  | -15.22/-15.03  | -14.16/-13.56  | -13.17/-13.21    | -13.93/-15.51    | -15.51/-15.67    | -15.98/-15.23    | -15.04/-14.92    | -13.93/-14.21    | -14.31/-14.16    | -14.65/-14.53    | -15.05/-15.03    | -14.68/-15.07    | -15.59/-15.52    | -15.21/-14.59    | -15.14/-14.79    | -14.56/-14.01    | -14.09/-14.65    | -14.56/-14.40    | -13.72/-12.69    |
| 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°)     | 3.97/3.82     | 3.69/3.58      | 3.56/3.49      | 3.42/3.45      | 3.45/3.49      | 3.56/3.63      | 3.75/3.90      | 4.01/4.15        | 4.29/4.37        | 4.39/4.44        | 4.40/4.34        | 4.34/4.31        | 4.22/4.05        | 3.98/3.92        | 3.86/3.73        | 3.263.61         | 3.49/3.51        | 3.53/3.68        | 3.79/3.92        | 4.10/4.24        | 4.31/4.32        | 4.38/4.33        | 4.28/4.27        | 4.35/4.35        |
| Θ(7.5°)   | 4.58/4.57     | 4.49/4.39      | 4.32/4.28      | 4.29/4.18      | 4.08/3.96      | 3.86/3.85      | 3.91/3.96      | 4.08/4.17        | 4.28/4.36        | 4.40/4.42        | 4.39/4.37        | 4.40/4.40        | 4.34/4.25        | 4.34/4.25        | 4.14/4.15        | 4.15/4.13        | 4.11/4.11        | 4.12/4.09        | 4.03/4.07        | 4.15/4.28        | 4.39/4.46        | 4.49/4.48        | 4.51/4.47        | 4.43/4.44        |
| Θ(15°)    | 4.36/4.56     | 4.65/4.67      | 4.66/4.63      | 4.57/4.53      | 4.54/4.55      | 4.51/4.45      | 4.23/3.97      | 3.80/3.83        | 3.95/4.12        | 4.31/4.43        | 4.55/4.58        | 4.54/4.45        | 4.42/4.42        | 4.41/4.27        | 4.13/4.11        | 4.12/4.19        | 4.29/4.40        | 4.47/4.43        | 4.35/4.22        | 4.12/3.98        | 3.74/3.51        | 3.35/3.25        | 3.36/3.64        | 3.89/4.14        |
| Θ(22.5°)  | 2.77/3.32     | 3.73/3.96      | 4.06/4.05      | 4.01/4.02      | 4.08/4.25      | 4.36/4.30      | 3.94/3.50      | 3.07/3.05        | 3.16/3.28        | 3.31/3.44        | 3.81/4.16        | 4.44/4.76        | <b>4.99/4.89</b> | 4.81/4.84        | 4.92/4.98        | 4.86/4.86        | 4.38/4.11        | 3.86/3.49        | 3.00/2.67        | 2.49/2.34        | 1.97/1.53        | 1.14/0.78        | 0.91/1.37        | 1.98/2.40        |
| Θ(30°)    | 2.11/2.61     | 2.98/3.23      | 3.16/2.84      | 2.63/2.94      | 3.52/4.04      | 4.09/3.79      | 3.36/3.00      | 2.53/2.14        | 1.76/1.68        | 2.21/2.58        | 2.79/3.31        | 3.89/4.47        | 4.58/4.26        | 4.19/4.10        | 3.89/3.62        | 3.52/3.37        | 3.28/3.22        | 2.88/2.52        | 2.08/1.51        | 1.00/0.72        | 0.48/0.21        | 0.15/0.53        | 1.04/1.38        | 1.66/1.80        |
| Θ(37.5°)  | 1.99/2.20     | 2.26/2.44      | 2.25/1.84      | 1.41/1.78      | 2.82/3.73      | 4.02/3.73      | 3.01/2.35      | 2.21/2.11        | 1.72/1.20        | 1.44/1.89        | 1.47/1.56        | 2.24/2.91        | 2.93/2.77        | 2.58/2.38        | 2.60/2.58        | 2.00/1.32        | 1.05/1.37        | 1.72/1.76        | 1.32/0.76        | 0.16/0.19        | 0.26/0.16        | -0.34/0.27       | 1.45/1.88        | 1.71/1.53        |
| Θ(45°)    | 1.43/1.20     | 0.68/0.15      | -0.14/-0.69    | -1.06/-0.54    | 0.87/2.06      | 2.69/2.86      | 2.45/1.59      | 3.16/3.83        | 1.67/0.68        | 0.40/0.80        | -0.27/0.45       | 0.90/1.74        | 1.91/1.62        | 0.82/0.05        | 0.48/0.86        | 0.60/-0.01       | -1.05/0.23       | 0.65/0.87        | 0.87/0.66        | -0.29/-1.21      | -1.03/-0.88      | -1.64/-1.24      | 0.62/1.12        | 0.96/1.08        |
| Θ(52.5°)  | 0.09/-0.65    | -1.41/-2.10    | -3.39/-5.03    | -5.15/-3.38    | -1.23/-0.16    | 0.14/0.46      | 0.74/0.44      | -0.15/0.33       | 0.30/-0.91       | -0.39/-0.90      | -2.97/-1.72      | -0.35/0.05       | 0.15/-0.30       | -1.40/-2.85      | -1.67/-1.05      | -1.17/-1.36      | -0.38/0.40       | 0.16/-0.44       | -0.57/-0.96      | -1.97/-3.35      | -2.78/-2.30      | -3.03/-2.72      | -0.94/-0.25      | 0.05/0.20        |
| Θ(60°)    | -1.70/-3.23   | -3.69/-3.59    | -5.49/-9.74    | -10.55/-6.46   | -3.34/-2.44    | -2.79/-2.67    | -1.23/0.54     | -1.25/-1.41      | -1.41/-2.59      | -2.05/-3.46      | -4.89/-3.69      | -3.26/-3.54      | -2.81/-1.74      | -2.20/-4.10      | -3.25/-2.84      | -3.08/-4.04      | -2.55/-1.33      | -1.47/-2.49      | -3.26/-3.87      | -4.65/-6.92      | -5.83/-3.31      | -4.44/-3.41      | -2.00/-1.48      | -0.64/-0.75      |
| Θ(67.5°)  | -2.81/-5.04   | -4.15/-3.48    | -6.40/-4.66    | -10.32/-6.57   | -3.72/-3.42    | -5.08/-4.93    | -1.82/-0.76    | -2.62/-2.36      | -3.15/-3.92      | -3.19/-5.68      | -4.85/-6.19      | -5.83/-6.24      | -2.92/-5.77      | -5.84/-6.15      | -4.64/-5.98      | -3.74/-1.65      | -1.90/-4.35      | -5.60/-6.23      | -6.69/-6.37      | -8.06/-4.97      | -3.28/-4.40      | -3.58/-3.18      | -1.55/-0.96      |                  |
| Θ(75°)    | -4.31/-6.34   | -4.44/-3.61    | -4.64/-6.53    | -7.81/-5.87    | -3.77/-3.82    | -5.19/-5.50    | -2.06/-0.12    | -3.00/-4.78      | -4.76/-5.61      | -5.02/-6.60      | -6.24/-5.93      | -7.37/-7.92      | -7.05/-4.20      | -3.97/-7.09      | -9.28/-10.62     | -10.36/-8.17     | -4.81/-2.15      | -2.67/-5.05      | -6.87/-6.38      | -7.24/-8.38      | -10.21/-4.49     | -6.10/-5.84      | -5.05/-4.83      | -2.82/-1.73      |
| Θ(82.5°)  | -6.10/-7.96   | -5.14/-4.24    | -5.08/-6.87    | -7.15/-6.40    | -4.41/-5.30    | -6.72/-7.99    | -3.25/-1.47    | -4.58/-7.00      | -7.20/-8.13      | -7.05/-8.34      | -7.88/-9.31      | -10.50/-11.34    | -9.96/-5.77      | -5.16/-6.21      | -10.92/-13.64    | -14.19/-10.02    | -5.17/-1.22      | -3.61/-6.68      | -7.63/-6.33      | -7.58/-6.69      | -12.14/-6.58     | -8.71/-7.51      | -6.81/-6.84      | -4.33/-3.43      |
| Θ(90°)    | -7.34/-9.66   | -6.34/-5.13    | -6.28/-7.80    | -8.14/-7.64    | -5.82/-6.40    | -7.52/-10.53   | -5.75/-3.46    | -6.77/-8.04      | -10.17/-10.97    | -7.74/-9.17      | -11.42/-12.16    | -11.29/-12.83    | -11.69/-8.19     | -6.56/-9.34      | -11.27/-13.14    | -15.24/-14.89    | -8.66/-3.98      | -4.99/-6.69      | -9.14/-8.91      | -8.84/-11.50     | -12.25/-9.56     | -10.72/-9.29     | -9.29/-7.78      | -5.45/-5.18      |
| Θ(97.5°)  | -9.09/-10.65  | -7.43/-6.62    | -6.88/-8.59    | -8.97/-8.59    | -7.20/-8.01    | -8.99/-12.02   | -7.52/-5.05    | -8.80/-10.02     | -13.79/-13.18    | -9.91/-9.54      | -12.80/-12.48    | -11.49/-15.53    | -12.93/-9.32     | -8.49/-11.63     | -13.59/-13.71    | -15.08/-15.59    | -14.13/-8.67     | -10.22/-14.92    | -12.82/-12.67    | -14.55/-15.80    | -12.56/-12.03    | -12.71/-13.18    | -12.27/-8.79     | -6.67/-5.70      |
| Θ(105°)   | -11.09/-10.47 | -8.51/-8.32    | -9.17/-8.29    | -8.60/-8.17    | -9.26/-9.87    | -10.45/-13.32  | -9.26/-6.22    | -8.00/-13.85     | -14.71/-14.75    | -11.74/-11.80    | -13.67/-12.69    | -12.16/-14.46    | -16.00/-12.31    | -10.25/-12.99    | -15.23/-13.51    | -15.69/-15.08    | -15.13/-13.15    | -15.53/-15.59    | -14.28/-14.96    | -15.70/-15.62    | -12.43/-11.56    | -12.98/-15.38    | -15.55/-10.68    | -8.88/-9.48      |
| Θ(112.5°) | -14.67/-14.07 | -12.04/-9.41   | -9.70/-9.29    | -9.94/-11.53   | -10.31/-11.44  | -11.51/-12.54  | -9.16/-7.52    | -10.39/-14.52    | -15.39/-14.63    | -14.03/-14.63    | -12.88/-12.52    | -15.50/-15.43    | -15.97/-13.10    | -11.29/-12.13    | -15.24/-14.17    | -15.37/-15.73    | -14.50/-13.32    | -15.29/-15.62    | -16.03/-14.57    | -15.55/-14.67    | -15.01/-14.73    | -15.58/-13.93    | -15.22/-13.19    | -10.52/-10.62    |
| Θ(120°)   | -12.70/-13.91 | -13.46/-11.51  | -12.02/-15.30  | -14.37/-11.70  | -              |                |                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |



# Antenna Pattern\_5GHz UNII-2C~3, 6GHz(Radio 2)

# Appendix F

|            |               |                |                |                |                |                |                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
|------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Θ (127.5°) | -13.53/-10.69 | -11.30/-10.74  | -14.80/-14.80  | -15.28/-15.21  | -16.04/-15.73  | -15.29/-15.82  | -15.38/-15.13  | -15.47/-15.97    | -15.35/-14.88    | -15.47/-15.53    | -15.05/-15.52    | -15.72/-15.65    | -15.46/-15.24    | -15.34/-12.77    | -15.54/-15.86    | -15.80/-12.89    | -13.72/-14.58    | -13.20/-13.54    | -15.37/-13.86    | -12.81/-12.15    | -15.09/-13.93    | -13.83/-13.57    | -15.23/-12.62    | -15.01/-14.99    |
| Θ (135°)   | -15.50/-15.94 | -15.54/-14.62  | -15.26/-15.12  | -14.53/-14.97  | -15.29/-15.39  | -15.47/-15.49  | -15.17/-15.22  | -15.84/-14.79    | -15.33/-15.43    | -15.65/-15.66    | -16.21/-15.07    | -15.24/-14.85    | -15.73/-14.15    | -15.40/-15.94    | -14.59/-15.73    | -15.17/-10.61    | -14.86/-14.57    | -12.99/-13.92    | -14.22/-14.52    | -14.96/-10.67    | -15.13/-14.20    | -14.59/-9.95     | -12.02/-13.63    | -13.18/-14.46    |
| Θ (142.5°) | -15.06/-15.02 | -14.64/-15.92  | -15.92/-15.49  | -15.54/-15.43  | -15.95/-14.54  | -15.49/-15.24  | -15.71/-15.02  | -15.52/-15.07    | -15.97/-15.71    | -15.67/-15.16    | -15.48/-14.83    | -15.13/-15.63    | -16.02/-15.45    | -15.34/-15.17    | -16.16/-15.03    | -14.96/-15.16    | -14.78/-14.27    | -14.22/-15.00    | -14.14/-12.18    | -14.80/-10.16    | -13.97/-15.37    | -14.68/-14.73    | -14.65/-15.46    | -15.34/-15.21    |
| Θ (150°)   | -15.23/-14.66 | -14.13/-15.27  | -15.17/-13.75  | -13.99/-14.82  | -15.20/-15.44  | -14.86/-15.15  | -14.92/-15.51  | -15.54/-15.60    | -15.46/-15.06    | -15.40/-15.83    | -16.12/-15.43    | -15.12/-14.91    | -14.90/-14.33    | -15.75/-15.46    | -15.40/-14.88    | -15.37/-14.83    | -14.63/-15.37    | -16.00/-15.09    | -14.96/-15.06    | -16.30/-15.77    | -15.61/-14.54    | -13.72/-14.76    | -16.06/-13.98    | -13.94/-14.83    |
| Θ (157.5°) | -16.09/-15.09 | -15.14/-16.13  | -15.19/-15.50  | -15.91/-15.56  | -15.23/-14.75  | -15.76/-15.19  | -15.84/-15.18  | -15.67/-15.14    | -15.28/-14.92    | -15.23/-15.03    | -15.24/-15.53    | -15.65/-14.15    | -14.73/-15.27    | -15.28/-16.18    | -15.60/-15.61    | -15.61/-14.84    | -14.98/-15.52    | -15.64/-15.96    | -15.87/-15.46    | -14.28/-14.46    | -14.62/-15.02    | -14.52/-14.32    | -15.75/-15.15    | -15.46/-14.52    |
| Θ (165°)   | -14.20/-14.71 | -15.57/-15.19  | -15.22/-15.50  | -15.72/-15.70  | -14.58/-15.61  | -15.02/-14.71  | -14.57/-15.53  | -15.68/-15.99    | -15.07/-15.47    | -16.00/-15.93    | -15.63/-14.21    | -14.52/-15.90    | -15.36/-15.16    | -15.76/-15.42    | -16.01/-15.43    | -15.26/-14.81    | -14.90/-15.20    | -15.16/-15.94    | -15.13/-16.07    | -15.06/-15.15    | -15.49/-15.52    | -15.42/-15.25    | -15.34/-15.21    |                  |
| Θ (172.5°) | -12.74/-11.74 | -10.83/-10.66  | -11.55/-12.12  | -12.91/-13.89  | -14.96/-14.79  | -15.26/-15.70  | -15.49/-15.32  | -15.82/-15.53    | -14.90/-15.47    | -15.54/-15.98    | -15.64/-15.53    | -15.68/-15.29    | -15.20/-13.78    | -12.96/-12.75    | -12.69/-12.93    | -13.47/-13.99    | -14.62/-14.64    | -15.00/-14.45    | -14.23/-13.88    | -14.33/-14.20    | -14.63/-15.54    | -15.64/-15.79    | -14.71/-15.74    | -15.91/-14.72    |
| Θ (180°)   | -15.06/-15.38 | -15.40/-14.84  | -14.33/-13.98  | -13.89/-13.57  | -13.94/-13.78  | -13.89/-14.12  | -13.99/-13.20  | -12.90/-12.72    | -13.08/-12.85    | -13.17/-13.71    | -14.20/-14.36    | -14.11/-14.31    | -14.34/-13.93    | -13.86/-13.52    | -13.76/-13.29    | -13.57/-13.90    | -14.23/-15.03    | -15.01/-15.22    | -16.47/-15.72    | -14.91/-14.43    | -14.79/-14.68    | -14.61/-14.70    | -15.05/-14.27    | -15.40/-14.99    |
| Freq(Hz)   | 5.785GPol.    | Total/Ant. 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°)     | 6.06/0.63     | 6.03/6.02      | 6.02/6.01      | 6.01/6.09      | 6.15/6.18      | 6.19/6.17      | 6.15/6.10      | 6.08/6.11        | 6.16/6.21        | 6.22/6.27        | 6.32/6.37        | 6.38/6.40        | 6.42/6.35        | 6.33/6.27        | 6.24/6.20        | 6.16/6.11        | 6.07/6.03        | 6.02/6.04        | 6.04/6.01        | 6.03/6.04        | 6.04/6.06        | 6.06/6.08        | 6.13/6.15        | 6.16/6.14        |
| Θ (7.5°)   | 6.23/6.23     | 6.08/6.01      | 5.95/5.88      | 5.81/5.76      | 5.71/5.67      | 5.65/5.61      | 5.56/5.49      | 5.51/5.56        | 5.60/5.67        | 5.74/5.81        | 5.90/5.97        | 6.02/6.10        | 6.14/6.20        | 6.23/6.21        | 6.21/6.23        | 6.19/6.17        | 6.17/6.21        | 6.20/6.18        | 6.17/6.22        | 6.29/6.32        | 6.37/6.41        | 6.48/6.50        | 6.40/6.34        |                  |
| Θ (15°)    | 5.84/5.74     | 5.59/5.55      | 5.51/5.45      | 5.38/5.33      | 5.21/5.23      | 5.29/5.39      | 5.55/5.72      | 5.90/6.04        | 6.12/6.20        | 6.18/6.13        | 6.02/5.90        | 5.85/5.85        | 5.82/5.75        | 5.61/5.46        | 5.32/5.26        | 5.22/5.27        | 5.25/5.27        | 5.23/5.15        | 5.02/4.88        | 4.76/4.75        | 4.83/4.93        | 5.13/5.35        | 5.55/5.70        | 5.75/5.88        |
| Θ (22.5°)  | 4.65/4.60     | 4.61/4.65      | 4.65/4.50      | 4.33/4.22      | 4.27/4.54      | 4.86/5.22      | 5.58/5.88      | 6.12/6.30        | 6.36/6.42        | 6.51/6.47        | 6.21/5.88        | 5.64/5.45        | 5.09/4.51        | 4.07/3.79        | 3.84/4.03        | 4.31/4.59        | 4.81/4.85        | 4.73/4.49        | 4.12/3.85        | 3.64/3.70        | 3.85/4.09        | 4.28/4.38        | 4.45/4.46        | 4.57/4.66        |
| Θ (30°)    | 3.75/3.83     | 3.97/3.91      | 3.64/3.19      | 2.89/2.82      | 2.99/3.39      | 4.00/4.72      | 5.34/5.78      | 6.15/6.43        | 6.63/6.61        | 6.50/6.74        | 6.44/5.98        | 5.68/5.29        | 4.57/3.76        | 3.05/2.69        | 2.60/2.62        | 2.77/2.90        | 3.13/3.35        | 3.47/3.31        | 3.00/2.80        | 2.78/2.96        | 3.29/3.77        | 4.13/4.30        | 4.27/4.15        | 3.92/3.78        |
| Θ (37.5°)  | 2.20/2.41     | 2.98/3.12      | 2.70/2.26      | 1.92/1.69      | 1.80/2.35      | 3.23/4.00      | 4.57/5.04      | 5.34/5.46        | 5.74/5.92        | 5.90/5.94        | 5.91/5.63        | 5.26/4.55        | 3.67/2.74        | 1.73/1.04        | 0.89/0.71        | 0.69/0.69        | 0.99/1.56        | 1.79/1.72        | 1.57/1.60        | 1.88/2.42        | 2.88/3.22        | 3.61/3.94        | 3.90/3.46        | 2.83/2.32        |
| Θ (45°)    | 0.20/0.19     | 0.55/0.80      | 0.60/0.41      | 0.08/0.16      | 0.22/1.12      | 0.96/2.30      | 3.10/3.76      | 4.44/4.61        | 4.38/4.29        | 4.41/4.24        | 4.27/4.16        | 3.79/3.06        | 2.10/1.31        | 0.03/-1.17       | -1.86/-1.78      | -1.01/-0.68      | -0.64/-0.59      | -0.60/-0.38      | -0.05/0.34       | 0.90/1.30        | 1.67/1.93        | 1.94/2.16        | 2.00/2.02        | 1.49/0.45        |
| Θ (52.5°)  | -1.91/-2.42   | -1.39/-1.27    | -1.53/-1.93    | -2.47/-2.88    | -2.19/-0.99    | -1.90/0.61     | 0.78/1.53      | 2.39/2.98        | 3.07/2.77        | 2.59/2.27        | 2.36/2.44        | 2.33/1.10        | 0.31/-0.57       | -1.12/-2.41      | -3.92/-3.89      | -5.04/-2.69      | -0.96/-0.45      | -0.04/-0.10      | -1.74/-1.20      | -0.96/-1.00      | -0.04/-0.10      | -0.41/-0.04      | -0.13/0.53       | -0.06/-0.04      |
| Θ (60°)    | -2.31/-2.80   | -1.77/-1.70    | -2.71/-3.99    | -5.07/-5.64    | -4.41/-2.90    | -2.31/-1.60    | -1.28/-0.86    | 0.16/0.97        | 1.35/1.48        | 0.90/0.63        | 0.73/1.13        | 1.08/-0.05       | -0.84/-2.25      | -2.74/-3.64      | -4.86/-5.93      | -6.20/-5.08      | -3.30/-2.62      | -3.30/-3.71      | -3.18/-3.40      | -3.62/-3.66      | -3.81/-3.30      | -4.56/-3.62      | -3.81/-2.09      | -1.56/-1.22      |
| Θ (67.5°)  | -3.15/-2.98   | -2.22/-2.21    | -4.02/-5.28    | -7.34/-7.56    | -6.08/-5.12    | -4.30/-3.04    | -2.66/-2.14    | -1.28/-1.41      | -1.44/-1.00      | -1.65/-1.89      | -1.04/-0.26      | -0.37/-1.37      | -3.23/-4.94      | -5.71/-5.71      | -7.22/-7.28      | -7.51/-5.24      | -2.85/-1.62      | -2.18/-3.09      | -2.89/-3.21      | -4.10/-1.47      | -5.11/-5.00      | -5.79/-4.70      | -5.08/-3.14      | -1.96/-1.64      |
| Θ (75°)    | -3.98/-3.62   | -3.54/-3.55    | -5.40/-7.42    | -9.17/-9.02    | -4.69/-5.59    | -4.95/-3.38    | -2.61/-0.48    | -5.58/-5.99      | -4.95/-5.94      | -5.87/-5.94      | -5.09/-2.32      | -6.35/-8.85      | -8.20/-8.26      | -10.79/-10.35    | -8.70/-2.97      | -2.79/-1.45      | -1.32/-2.78      | -0.39/-2.81      | -3.64/-3.87      | -4.83/-6.09      | -4.80/-5.36      | -4.89/-3.82      | -3.16/-2.50      |                  |
| Θ (82.5°)  | -5.88/-5.29   | -5.62/-5.51    | -7.06/-9.86    | -10.81/-10.81  | -10.31/-10.31  | -10.10/-9.96   | -7.61/-5.14    | -4.77/-6.37      | -9.65/-1.18      | -10.49/-11.02    | -7.71/-5.10      | -5.37/-5.83      | -8.19/-8.92      | -10.74/-11.05    | -14.36/-13.05    | -8.73/-5.55      | -3.09/-1.76      | -1.89/-3.23      | -3.38/-2.85      | -3.46/-3.84      | -4.50/-6.00      | -7.42/-6.29      | -5.58/-5.14      | -4.44/-4.16      |
| Θ (90°)    | -7.10/-7.31   | -7.71/-6.93    | -8.97/-12.53   | -13.40/-13.90  | -13.53/-13.19  | -13.38/-13.66  | -8.90/-0.77    | -8.45/-8.76      | -13.61/-15.41    | -13.78/-14.29    | -10.69/-8.95     | -8.49/-8.76      | -11.57/-11.29    | -13.26/-12.37    | -15.45/-16.15    | -11.95/-6.78     | -4.48/-2.99      | -5.41/-4.27      | -6.47/-4.98      | -5.81/-6.21      | -8.15/-7.21      | -6.18/-6.65      | -5.30/-5.97      |                  |
| Θ (97.5°)  | -8.36/-8.39   | -8.43/-8.63    | -15.49/-13.14  | -15.28/-15.23  | -15.76/-15.72  | -11.73/-9.76   | -15.22/-11.56  | -15.09/-15.57    | -15.46/-15.06    | -13.39/-13.06    | -10.62/-11.83    | -13.46/-14.38    | -14.81/-13.75    | -15.23/-15.23    | -13.26/-9.87     | -6.77/-6.58      | -7.80/-7.61      | -9.61/-8.27      | -7.90/-7.77      | -9.16/-8.17      | -8.98/-8.73      | -7.96/-8.37      | -7.12/-7.40      |                  |
| Θ (105°)   | -11.51/-11.60 | -12.50/-12.26  | -13.99/-14.94  | -15.08/-14.25  | -15.29/-15.28  | -14.73/-14.81  | -14.10/-13.12  | -13.32/-12.04    | -15.09/-15.82    | -15.27/-14.22    | -13.83/-15.68    | -14.11/-13.16    | -14.74/-15.02    | -15.99/-13.80    | -15.07/-15.74    | -15.46/-11.29    | -9.96/-10.42     | -12.64/-9.84     | -12.34/-12.18    | -10.25/-11.34    | -12.17/-11.19    | -8.92/-9.16      | -8.97/-10.76     | -10.26/-10.78    |
| Θ (112.5°) | -13.31/-15.83 | -13.46/-14.63  | -15.45/-15.77  | -15.80/-14.77  | -15.36/-15.43  | -15.70/-15.27  | -15.33/-15.21  | -15.73/-13.26    | -16.29/-15.66    | -15.61/-16.24    | -15.35/-14.71    | -13.34/-15.41    | -15.32/-16.15    | -14.79/-15.21    | -15.65/-15.36    | -13.97/-11.84    | -8.69/-11.86     | -12.43/-10.46    | -12.70/-13.05    | -8.97/-13.47     | -10.48/-15.63    | -12.16/-15.00    | -9.93/-10.70     | -11.64/-13.16    |
| Θ (120°)   | -16.27/-13.38 | -12.22/-13.00  | -14.30/-14.17  | -15.31/-15.25  | -15.57/-15.18  | -15.80/-15.95  | -15.47/-15.50  | -13.09/-14.77    | -15.69/-15.26    | -15.04/-15.44    | -15.39/-13.42    | -14.12/-13.38    | -15.12/-15.23    | -15.03/-15.58    | -9.83/-11.46     | -11.84/-11.64    | -12.59/-12.22    | -9.69/-11.64     | -11.91/-13.22    | -11.85/-12.41    | -11.85/-12.43    | -13.51/-12.38    |                  |                  |
| Θ (127.5°) | -13.61/-13.51 | -12.37/-14.14  | -15.20/-16.00  | -15.20/-14.76  | -15.27/-15.72  | -15.20/-15.64  | -15.23/-15.91  | -15.45/-15.06    | -15.80/-15.70    | -16.12/-15.56    | -14.96/-14.31    | -14.88/-15.69    | -16.03/-15.82    | -14.63/-12.46    | -15.61/-15.96    | -14.98/-15.95    | -12.94/-15.50    | -13.78/-12.65    | -15.35/-14.42    | -11.66/-12.01    | -12.37/-16.08    | -11.84/-13.63    | -11.39/-10.59    | -15.28/-15.14    |
| Θ (135°)   | -15.46/-15.47 | -15.34/-14.80  | -15.00/-14.91  | -14.68/-15.74  | -15.97/-14.96  | -15.62/-14.74  | -15.55/-15.58  | -15.50/-14.35    | -15.15/-15.39    | -15.22/-15.51    | -14.70/-15.45    | -13.92/-15.97    | -14.58/-15.18    | -15.92/-14.96    | -15.00/-14.95    | -14.85/-10.44    | -15.22/-16.47    | -15.31/-12.43    | -15.12/-13.33    | -12.77/-10.40    | -14.95/-12.12    | -14.13/-10.95    | -14.67/-14.13    | -13.50/-15.12    |
| Θ (142.5°) | -15.69/-15.54 | -14.98/-15.52  | -15.61/-15.84  | -15.46/-15.01  | -15.62/-15.35  | -15.68/-15.27  | -14.24/-15.02  | -14.83/-15.18    | -15.54/-15.37    | -15.76/-15.57    | -15.13/-15.05    | -15.16/-15.09    | -15.19/-15.06    | -16.18/-15.16    | -14.88/-15.71    | -15.57/-14.98    | -14.78/-13.24    | -13.53/-14.56    | -13.45/-11.93    | -14.86/-11.92    | -14.34/-15.86    | -15.50/-15.30    | -15.48/-15.51    | -15.10/-15.01    |
| Θ (150°)   | -15.41/-14.70 | -13.99/-15.12  | -14.71/-15.20  | -15.26/-14.74  | -14.79/-15.95  | -15.62/-15.26  | -14.60/-14.96  | -15.73/-14.80    | -15.52/-15.20    | -15.63/-16.05    | -15.31/-15.17    | -14.36/-14.79    | -15.10/-15.63    | -13.74/-13.29    | -15.30/-15.97    | -15.36/-15.38    | -15.42/-15.66    | -15.83/-15.55    | -15.17/-16.26    | -15.18/-15.90    | -14.70/-14.98    | -14.85/-14.46    | -14.45/-13.80    | -13.04/-14.53    |
| Θ (157.5°) | -14.92/-15.20 | -15.21/-15.84  | -15.68/-15.79  | -14.89/-15.34  | -15.29/-15.42  | -14.97/-15.39  | -15.73/-14.59  | -15.12/-15.87    | -14.96/-15.20    | -15.32/-15.89    | -14.91/-14.98    | -14.87/-15.56    | -15.15/-14.98    | -16.02/-15.18    | -15.37/-15.15    | -15.52/-15.05    | -16.07/-16.01    | -16.11/-15.95    | -15.40/-15.24    | -14.36/-14.34    | -13.79/-14.53    | -13.33/-15.34    | -15.92/-15.27    | -15.23/-15.94    |
| Θ (165°)   | -15.40/-14.79 | -15.83/-16.10  | -15.28/-15.70  | -15.09/-15.27  | -15.82/-15.05  | -14.68/-15.60  | -15.71/-15.66  | -16.17/-15.78    | -14.69/-15.65    | -15.63/-15.55    | -15.55/-14.96    | -15.02/-15.48    | -16.16/-14.99    | -15.27/-14.72    | -14.55/-15.50    | -15.90/-15.98    | -15.75/-15.62    | -14.79/-14.98    | -15.69/-15.15    | -15.07/-14.99    | -14.93/-15.72    | -15.59/-14.      |                  |                  |



# Antenna Pattern\_5GHz UNII-2C~3, 6GHz(Radio 2)

# Appendix F

| Φ(180°)   | -15.17/-15.66 | -15.22/-14.85  | -14.79/-14.53  | -14.31/-15.13  | -14.64/-16.14  | -14.95/-14.98  | -14.50/-14.85  | -14.37/-14.09    | -14.18/-14.64    | -15.23/-15.52    | -15.21/-14.69    | -15.23/-15.55    | -15.00/-15.30    | -15.41/-15.83    | -15.29/-14.92    | -15.48/-15.27    | -16.03/-15.90    | -15.61/-14.34    | -14.60/-14.40    | -14.39/-14.63    | -15.22/-15.31    | -15.43/-15.04    | -14.75/-15.06    | -14.77/-15.55    |
|-----------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Freq(Hz)  | 6.995GPol.    | 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°)     | 7.127/13      | 7.016/93       | 6.926/81       | 6.816/75       | 6.796/74       | 6.696/67       | 6.596/57       | 6.566/53         | 6.636/65         | 6.616/72         | 6.786/87         | 6.907/01         | 7.037/05         | 7.067/06         | 7.017/04         | 7.057/03         | 7.067/04         | 7.057/03         | 6.956/88         | 6.816/88         | 6.916/88         | 6.876/96         | 7.016/97         | 7.057/10         |
| Θ(7.5°)   | 6.846/93      | 6.836/93       | 6.977/04       | 7.087/17       | 7.257/25       | 7.207/19       | 7.137/07       | 6.996/92         | 6.896/84         | 6.806/81         | 6.826/80         | 6.806/80         | 6.706/64         | 6.506/43         | 6.436/41         | 6.446/55         | 6.636/66         | 6.666/60         | 6.516/51         | 6.516/53         | 6.526/54         | 6.576/58         | 6.616/64         | 6.706/75         |
| Θ(15°)    | 5.935/95      | 5.966/23       | 6.446/76       | 6.977/15       | 7.227/27       | 7.207/12       | 7.107/16       | 7.187/27         | 7.307/29         | 7.207/09         | 6.926/79         | 6.756/71         | 6.536/40         | 6.145/97         | 5.846/70         | 5.705/74         | 5.855/98         | 6.066/12         | 6.126/16         | 6.106/10         | 6.116/13         | 6.186/21         | 6.206/21         | 6.086/03         |
| Θ(22.5°)  | 5.094/78      | 4.604/73       | 5.275/76       | 6.246/43       | 6.486/44       | 6.296/08       | 5.856/63       | 5.595/74         | 5.956/09         | 6.126/07         | 5.815/66         | 5.675/77         | 5.775/68         | 5.605/56         | 5.324/90         | 4.383/89         | 3.603/66         | 4.034/54         | 4.995/21         | 5.235/07         | 4.884/85         | 4.945/15         | 5.395/51         | 5.465/31         |
| Θ(30°)    | 2.782/67      | 2.682/64       | 2.823/07       | 4.074/68       | 5.005/02       | 4.994/72       | 4.253/92       | 3.974/51         | 5.105/26         | 5.225/30         | 5.154/77         | 4.594/56         | 4.704/74         | 4.594/41         | 4.113/52         | 2.481/29         | 1.141/95         | 2.963/76         | 4.274/42         | 4.384/17         | 3.893/50         | 3.133/20         | 3.423/69         | 3.853/17         |
| Θ(37.5°)  | 2.092/31      | 2.061/40       | 4.090/24       | 0.791/51       | 2.462/98       | 3.173/24       | 3.243/48       | 4.264/96         | 5.335/19         | 4.915/03         | 5.144/73         | 3.903/21         | 3.133/00         | 2.491/89         | 1.570/62         | -0.46/-0.31      | 0.641/68         | 2.262/72         | 2.872/96         | 2.862/32         | 2.142/53         | 2.512/43         | 2.022/01         | 2.342/03         |
| Θ(45°)    | 1.762/12      | 1.920/57       | -0.61/-0.77    | -1.35/-1.68    | -1.01/-0.46    | 0.120/93       | 2.143/20       | 3.754/11         | 4.544/76         | 4.774/91         | 5.104/75         | 3.903/11         | 2.380/90         | -0.17/-1.36      | -2.19/-3.15      | -2.03/-2.63      | -0.101/04        | 0.880/46         | -0.39/-0.58      | 0.220/11         | -0.440/0.54      | 0.981/15         | 0.670/73         | 0.930/98         |
| Θ(52.5°)  | -2.06/-0.12   | 0.271/-1.63    | -3.62/-2.58    | -3.21/-4.46    | -3.81/-2.79    | -1.540/0.33    | 2.553/78       | 4.084/45         | 4.484/39         | 4.634/64         | 4.413/92         | 3.572/44         | 0.79/-1.90       | -3.18/-3.68      | -4.30/-5.24      | -5.43/-4.38      | -1.92/-0.35      | -1.27/-3.12      | -4.69/-4.89      | -4.34/-3.09      | -3.39/-2.77      | -2.70/-1.77      | -1.91/-2.00      | -3.09/-3.01      |
| Θ(60°)    | -7.04/-4.15   | -1.88/-3.67    | -6.13/-4.96    | -4.73/-5.80    | -0.89/-6.40    | -0.31/-0.97    | 0.872/29       | 3.283/71         | 3.893/42         | 3.523/28         | 2.171/53         | 1.440/17         | -1.02/-3.50      | -5.20/-6.10      | -6.21/-9.07      | -6.18/-5.70      | -7.01/-7.72      | -7.68/-7.23      | -7.49/-6.46      | -9.71/-5.44      | -4.77/-4.84      | -4.77/-4.84      | -5.88/-5.78      |                  |
| Θ(67.5°)  | -9.06/-7.45   | -6.24/-7.40    | -7.48/-6.59    | -5.41/-7.56    | -10.48/-7.12   | -4.25/-1.56    | -1.53/-0.97    | 0.741/78         | 1.811/99         | 1.521/35         | -0.74/-0.69      | -1.57/-2.88      | -3.13/-3.05      | -6.33/-8.61      | -10.04/-10.96    | -7.77/-6.29      | -6.30/-4.29      | -4.48/-6.42      | -8.01/-9.05      | -8.02/-12.57     | -13.71/-14.97    | -11.84/-7.83     | -8.05/-5.86      | -7.54/-11.19     |
| Θ(75°)    | -8.11/-8.51   | -11.38/-12.03  | -9.65/-5.83    | -7.14/-10.83   | -11.52/-7.41   | -4.89/-1.86    | -1.92/-1.67    | -2.04/-0.23      | -0.60/-0.78      | -0.97/-0.72      | -2.00/-1.47      | -2.44/-3.80      | -4.25/-2.77      | -5.29/-11.39     | -10.97/-13.91    | -9.34/-6.05      | -6.24/-6.48      | -5.42/-4.98      | -7.81/-8.69      | -6.51/-8.01      | -15.28/-14.28    | -9.18/-9.88      | -7.57/-6.43      | -8.58/-11.22     |
| Θ(82.5°)  | -6.87/-8.28   | -11.50/-12.57  | -12.28/-7.05   | -8.23/-13.79   | -9.07/-9.02    | -4.34/-2.92    | -2.66/-2.14    | -2.58/-2.39      | -2.58/-5.08      | -5.06/-3.31      | -2.91/-2.06      | -2.75/-4.22      | -5.62/-3.75      | -6.47/-13.81     | -14.01/-15.65    | -8.69/-7.09      | -7.26/-5.92      | -5.86/-4.50      | -8.70/-9.43      | -5.46/-4.82      | -9.43/-10.64     | -8.79/-8.44      | -6.49/-6.78      | -8.19/-9.24      |
| Θ(90°)    | -7.24/-8.10   | -10.77/-13.27  | -14.58/-8.51   | -9.35/-15.56   | -9.68/-10.83   | -4.70/-6.27    | -4.39/-4.94    | -2.71/-4.56      | -5.80/-9.24      | -9.51/-6.67      | -4.72/-3.65      | -4.02/-6.41      | -7.25/-5.13      | -7.48/-12.14     | -14.65/-14.99    | -11.75/-9.11     | -10.88/-9.90     | -7.66/-5.70      | -10.31/-11.30    | -5.82/-4.60      | -7.10/-10.57     | -9.98/-7.42      | -5.65/-6.34      | -7.64/-9.53      |
| Θ(97.5°)  | -8.03/-10.30  | -10.49/-12.72  | -14.88/-10.17  | -11.41/-14.65  | -10.57/-10.03  | -5.97/-8.22    | -7.03/-7.76    | -4.45/-8.52      | -8.59/-13.37     | -13.58/-10.02    | -6.90/-6.22      | -5.44/-8.87      | -10.01/-6.89     | -8.28/-14.59     | -14.40/-15.18    | -11.51/-10.65    | -15.62/-12.88    | -9.47/-7.38      | -12.72/-13.24    | -8.48/-6.32      | -7.56/-12.31     | -10.99/-7.97     | -5.62/-6.44      | -7.52/-9.52      |
| Θ(105°)   | -8.90/-9.42   | -10.85/-13.72  | -15.18/-10.22  | -13.78/-14.86  | -15.22/-9.23   | -10.63/-10.46  | -9.97/-9.00    | -7.18/-11.24     | -8.72/-15.47     | -15.86/-11.48    | -8.53/-8.35      | -6.98/-9.13      | -10.31/-9.15     | -9.71/-14.26     | -14.88/-15.48    | -13.35/-10.02    | -13.73/-12.38    | -12.64/-7.38     | -13.55/-12.93    | -13.46/-8.43     | -9.33/-12.73     | -12.81/-9.25     | -6.68/-9.00      | -9.37/-11.13     |
| Θ(112.5°) | -9.01/-11.03  | -12.43/-13.97  | -15.59/-11.92  | -13.93/-13.43  | -15.50/-11.79  | -14.87/-12.70  | -14.82/-10.75  | -10.09/-10.22    | -13.12/-15.50    | -14.87/-13.44    | -10.63/-10.55    | -10.19/-12.10    | -12.58/-9.56     | -11.51/-13.07    | -14.40/-15.25    | -13.82/-10.78    | -12.98/-12.70    | -13.19/-7.81     | -14.89/-16.31    | -10.09/-13.31    | -10.00/-13.73    | -11.27/-8.97     | -9.21/-11.09     | -10.94/-11.13    |
| Θ(120°)   | -11.77/-12.83 | -11.73/-13.43  | -15.37/-16.01  | -15.07/-15.78  | -15.89/-14.27  | -13.58/-14.64  | -13.59/-14.31  | -13.79/-12.18    | -13.07/-15.06    | -14.71/-14.10    | -14.17/-12.63    | -12.57/-13.36    | -13.73/-12.69    | -11.27/-11.98    | -12.08/-14.90    | -15.05/-12.99    | -15.37/-9.86     | -12.78/-14.84    | -14.99/-15.76    | -12.14/-12.53    | -13.54/-8.78     | -9.72/-11.11     | -12.14/-13.02    |                  |
| Θ(127.5°) | -12.06/-12.02 | -15.89/-15.11  | -16.06/-15.31  | -15.35/-15.17  | -13.70/-14.59  | -13.57/-15.08  | -14.26/-14.78  | -12.38/-12.66    | -13.41/-14.71    | -14.18/-15.73    | -15.21/-14.87    | -15.39/-13.81    | -14.96/-14.11    | -12.78/-12.14    | -14.26/-15.13    | -13.85/-14.77    | -10.99/-14.91    | -13.52/-6.97     | -14.29/-15.44    | -11.93/-14.05    | -13.75/-12.04    | -12.06/-10.52    | -12.19/-12.38    | -13.35/-11.72    |
| Θ(135°)   | -14.28/-15.27 | -16.04/-15.56  | -16.02/-15.36  | -15.28/-14.92  | -14.98/-14.51  | -13.87/-15.95  | -15.30/-15.43  | -14.61/-13.31    | -12.55/-15.52    | -15.35/-15.46    | -15.96/-13.31    | -15.47/-15.49    | -15.31/-15.04    | -14.00/-12.92    | -11.15/-14.26    | -15.02/-13.34    | -11.06/-14.84    | -13.76/-6.83     | -12.59/-15.85    | -9.70/-13.27     | -11.02/-12.69    | -10.78/-8.12     | -11.28/-13.05    | -14.67/-15.05    |
| Θ(142.5°) | -12.16/-14.08 | -15.38/-15.01  | -15.41/-14.85  | -15.11/-15.60  | -14.73/-12.72  | -14.10/-14.77  | -14.76/-15.52  | -14.75/-15.61    | -13.76/-15.41    | -15.26/-15.65    | -14.18/-14.46    | -13.94/-15.53    | -14.94/-12.78    | -13.66/-12.37    | -13.77/-11.58    | -15.40/-14.96    | -12.37/-15.18    | -12.11/-8.12     | -12.51/-15.88    | -14.80/-12.27    | -15.44/-16.20    | -12.81/-14.86    | -14.66/-13.81    | -13.34/-13.95    |
| Θ(150°)   | -12.22/-12.65 | -14.45/-16.09  | -15.72/-16.27  | -14.93/-15.58  | -15.27/-13.52  | -14.62/-15.32  | -15.25/-15.56  | -15.88/-16.20    | -15.67/-15.69    | -15.57/-16.06    | -15.39/-15.76    | -15.61/-15.12    | -15.36/-13.08    | -10.76/-11.50    | -14.64/-14.76    | -14.07/-15.28    | -15.18/-15.41    | -15.05/-14.45    | -13.81/-13.01    | -15.88/-13.76    | -15.12/-15.49    | -15.26/-14.45    | -15.26/-15.89    | -15.06/-13.00    |
| Θ(157.5°) | -15.41/-15.04 | -14.57/-14.62  | -14.42/-14.54  | -15.51/-15.00  | -15.13/-15.08  | -15.46/-15.60  | -15.41/-15.65  | -15.73/-14.85    | -14.69/-15.99    | -15.45/-15.07    | -14.49/-12.93    | -13.74/-14.85    | -15.49/-15.85    | -15.51/-14.71    | -13.98/-14.65    | -15.58/-15.67    | -14.83/-13.20    | -13.70/-15.31    | -13.24/-12.09    | -15.62/-15.17    | -13.77/-13.75    | -14.64/-14.19    | -14.48/-14.12    | -12.81/-14.94    |
| Θ(165°)   | -15.29/-15.48 | -15.22/-15.75  | -16.10/-15.41  | -14.99/-15.74  | -14.99/-15.66  | -15.37/-15.86  | -15.64/-15.40  | -15.79/-15.26    | -14.69/-16.29    | -14.69/-14.43    | -14.62/-15.32    | -15.60/-15.73    | -15.50/-14.84    | -15.47/-14.90    | -14.90/-14.82    | -15.16/-12.45    | -13.70/-14.59    | -14.80/-14.59    | -14.80/-14.59    | -13.70/-14.99    | -15.47/-14.61    | -14.38/-15.26    | -13.75/-13.71    | -15.95/-14.20    |
| Θ(172.5°) | -14.45/-15.10 | -15.70/-15.56  | -14.80/-14.89  | -15.99/-14.48  | -15.44/-15.36  | -14.31/-14.43  | -14.62/-14.91  | -14.48/-13.83    | -13.43/-13.23    | -13.40/-14.16    | -15.01/-15.70    | -15.61/-15.55    | -14.97/-13.56    | -12.55/-11.40    | -10.91/-10.80    | -10.13/-10.07    | -10.72/-11.54    | -12.26/-12.82    | -13.44/-13.19    | -12.82/-11.82    | -12.02/-12.37    | -13.17/-13.75    | -14.73/-15.80    | -15.00/-15.52    |
| Θ(180°)   | -13.41/-13.16 | -13.32/-12.91  | -13.63/-13.77  | -14.02/-15.62  | -15.31/-14.85  | -15.07/-15.57  | -15.36/-15.76  | -15.31/-15.19    | -15.91/-14.93    | -16.10/-15.23    | -15.71/-15.08    | -15.37/-15.25    | -15.96/-15.16    | -15.40/-16.07    | -15.85/-15.43    | -15.24/-15.33    | -15.89/-15.32    | -14.74/-14.20    | -15.02/-14.80    | -14.93/-14.76    | -14.88/-14.69    | -14.86/-13.78    | -13.34/-14.06    | -13.70/-13.69    |
| Freq(Hz)  | 6.60Pol.      | TotalAnt.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°)     | 5.805/83      | 5.845/93       | 6.026/07       | 6.126/16       | 6.226/25       | 6.276/27       | 6.246/18       | 6.176/18         | 6.186/14         | 6.096/06         | 6.056/07         | 6.076/10         | 6.136/11         | 6.096/09         | 6.106/13         | 6.136/18         | 6.186/21         | 6.186/14         | 6.146/15         | 6.076/03         | 5.975/90         | 5.835/75         | 5.785/85         | 5.855/78         |
| Θ(7.5°)   | 5.645/65      | 5.705/77       | 5.815/89       | 5.935/94       | 5.996/03       | 6.096/11       | 6.066/01       | 6.025/97         | 5.885/89         | 5.835/83         | 5.865/87         | 5.815/84         | 5.845/85         | 5.885/97         | 6.066/15         | 6.216/29         | 6.066/24         | 6.266/22         | 6.186/13         | 6.066/02         | 5.935/84         | 5.765/73         | 5.735/71         | 5.675/62         |
| Θ(15°)    | 5.295/34      | 5.465/64       | 5.956/19       | 6.396/47       | 6.546/52       | 6.446/33       | 6.226/07       | 5.945/84         | 5.765/72         | 5.665/62         | 5.575/49         | 5.395/29         | 5.215/16         | 5.155/20         | 5.255/33         | 5.385/44         | 5.525/57         | 5.645/72         | 5.695/65         | 5.445/27         | 5.044/77         | 4.644/73         | 4.884/98         | 5.075/22         |
| Θ(22.5°)  | 4.935/13      | 5.345/71       | 6.146/45       | 6.586/54       | 6.506/47       | 6.396/17       | 5.855/42       | 5.044/76         | 4.684/76         | 4.915/10         | 5.165/12         | 4.994/87         | 4.784/75         | 4.724/80         | 4.904/88         | 4.744/62         | 4.564/64         | 4.744/77         | 4.764/72         | 4.594/41         | 4.083/67         | 3.223/01         | 3.133/53         | 4.014/54         |
| Θ(30°)    | 4.214/74      | 5.205/51       | 6.455/77       | 5.715/79       | 6.036/13       | 6.085/86       | 5.514/54       | 4.243/59         | 3.193/20         | 3.524/53         | 4.42             |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |



# Antenna Pattern\_5GHz UNII-2C~3, 6GHz(Radio 2)

# Appendix F

|           |               |                 |                 |                 |                 |                 |                 |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |              |
|-----------|---------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|--------------|
| Θ(15°)    | 5.40/5.26     | 5.08/4.93       | 4.75/4.62       | 4.72/4.92       | 5.20/5.55       | 5.97/6.33       | 6.59/6.82       | 6.95/6.95         | 6.80/6.58         | 6.37/6.21         | 6.16/6.07         | 5.92/5.79         | 5.60/5.32         | 5.00/4.71         | 4.47/4.30         | 4.12/4.15         | 4.31/4.47         | 4.57/4.73         | 4.94/5.19         | 5.49/5.76         | 6.06/6.23         | 6.26/6.30         | 6.24/6.12         | 5.90/5.68         |              |
| Θ(22.5°)  | 4.92/4.83     | 4.77/4.67       | 4.52/4.48       | 4.76/5.01       | 5.22/5.45       | 5.72/6.04       | 6.38/6.63       | 6.74/6.67         | 6.39/5.95         | 5.46/5.03         | 4.85/4.82         | 4.76/4.64         | 4.54/4.26         | 3.84/3.35         | 2.80/2.50         | 2.41/2.54         | 2.73/2.89         | 3.13/3.22         | 3.52/3.89         | 4.15/4.34         | 4.49/4.50         | 4.52/4.75         | 5.04/5.24         | 5.28/5.13         |              |
| Θ(30°)    | 3.96/4.24     | 4.21/4.21       | 4.22/4.53       | 4.89/4.87       | 4.82/4.85       | 4.89/4.95       | 4.98/4.98       | 4.92/4.74         | 4.50/4.30         | 4.17/3.92         | 3.76/3.82         | 4.10/4.33         | 4.42/4.38         | 4.32/4.00         | 3.33/2.70         | 2.13/1.77         | 1.79/2.04         | 2.28/2.31         | 2.12/2.19         | 2.61/2.93         | 2.90/2.62         | 2.54/2.69         | 2.89/3.10         | 3.13/3.46         |              |
| Θ(37.5°)  | 2.50/2.94     | 2.79/2.98       | 3.53/4.27       | 4.59/4.58       | 4.51/4.40       | 4.26/4.24       | 4.07/3.59       | 2.87/2.35         | 2.18/2.34         | 2.75/2.96         | 2.74/2.60         | 2.94/3.11         | 3.20/3.40         | 3.63/3.74         | 3.06/2.01         | 1.35/0.74         | 0.56/0.65         | 0.84/0.73         | -0.13/-0.55       | 0.10/0.80         | 1.00/0.50         | 0.39/0.62         | 0.19/0.13         | 0.51/1.57         |              |
| Θ(45°)    | 2.04/2.38     | 2.23/2.25       | 2.70/3.36       | 3.53/3.16       | 3.06/3.20       | 3.08/2.88       | 3.05/2.77       | 1.24/0.05         | 0.38/0.77         | 1.04/1.32         | 1.18/0.98         | 1.30/1.63         | 1.42/1.64         | 2.18/2.33         | 1.51/0.36         | 0.61/0.16         | -0.29/-1.20       | -1.60/-1.34       | -1.38/-1.99       | -2.28/-1.62       | -0.80/-1.04       | -1.51/-1.91       | -2.21/-2.21       | -0.47/-1.16       |              |
| Θ(52.5°)  | 0.86/1.88     | 1.77/1.33       | 1.54/2.32       | 2.34/1.24       | 0.89/2.07       | 2.45/1.78       | 1.91/2.07       | -0.15/-2.97       | -1.96/-1.19       | -1.63/-1.33       | -1.29/-1.13       | -0.56/-0.08       | -0.52/-0.75       | -0.39/-0.91       | -2.73/-2.96       | -1.81/-1.66       | -1.28/-2.75       | -4.46/-4.19       | -2.99/-3.99       | -4.95/-4.41       | -4.33/-4.30       | -3.87/-4.89       | -5.64/-3.10       | -0.90/4.43        |              |
| Θ(60°)    | -0.98/0.28    | 0.83/-0.09      | -0.15/0.71      | 1.06/0.64       | -0.98/1.04      | 1.28/0.13       | 0.05/0.46       | -2.00/-6.27       | -5.71/-3.72       | -4.70/-4.14       | -2.99/-3.03       | -2.12/-1.09       | -2.08/-2.60       | -1.84/-3.05       | -5.62/-7.39       | -7.24/-5.90       | -4.17/-4.74       | -7.46/-8.25       | -5.09/-5.23       | -6.24/-6.31       | -7.21/-7.49       | -6.05/-7.92       | -6.84/-4.29       | -2.72/-1.85       |              |
| Θ(67.5°)  | -3.23/-1.58   | -0.26/-1.91     | -2.37/-2.18     | -1.51/-3.57     | -3.09/-1.17     | -0.09/-0.58     | -0.25/-0.73     | -3.56/-7.37       | -6.91/-5.12       | -6.38/-5.39       | -3.86/-3.88       | -2.38/-1.79       | -3.54/-3.97       | -3.10/-3.90       | -5.44/-7.16       | -9.79/-7.49       | -5.98/-4.25       | -7.70/-7.98       | -2.93/-3.01       | -4.46/-3.87       | -5.30/-7.39       | -8.75/-10.02      | -11.16/-6.48      | -4.48/-4.09       |              |
| Θ(75°)    | -6.41/-4.44   | -1.92/-3.78     | -4.98/-5.59     | -4.68/-7.11     | -5.99/-3.30     | -1.27/-2.16     | -2.35/-3.49     | -4.18/-8.15       | -10.01/-7.05      | -6.95/-6.84       | -5.39/-4.95       | -3.37/-2.44       | -4.22/-5.11       | -4.16/-4.12       | -4.54/-5.66       | -7.02/-6.20       | -6.57/-4.17       | -5.45/-6.53       | -8.51/-8.42       | -5.66/-4.83       | -8.04/-4.22       | -6.20/-9.21       | -11.97/-15.12     | -13.88/-11.00     | -9.48/-12.30 |
| Θ(82.5°)  | -10.16/-7.01  | -4.35/-6.85     | -8.87/-8.92     | -9.06/-9.47     | -9.34/-3.98     | -3.29/-4.99     | -4.59/-6.39     | -4.69/-7.71       | -9.98/-9.15       | -7.61/-8.31       | -9.48/-8.09       | -5.68/-4.03       | -5.44/-5.62       | -4.94/-4.89       | -4.86/-6.24       | -5.68/-4.36       | -5.03/-4.28       | -6.06/-7.05       | -4.01/-3.43       | -5.33/-3.30       | -5.25/-7.46       | -11.44/-15.38     | -14.38/-9.65      | -7.30/-10.39      |              |
| Θ(90°)    | -13.82/-10.82 | -8.29/-9.30     | -11.43/-11.72   | -12.02/-13.66   | -15.66/-5.37    | -5.92/-7.32     | -5.77/-7.28     | -6.22/-8.52       | -9.41/-9.54       | -9.34/-10.13      | -13.11/-11.62     | -8.19/-6.41       | -7.41/-7.12       | -6.77/-7.00       | -7.26/-8.00       | -6.51/-4.87       | -5.45/-6.53       | -8.51/-8.42       | -5.66/-4.83       | -8.04/-4.22       | -6.20/-9.21       | -11.97/-15.12     | -13.88/-11.00     | -9.48/-12.30      |              |
| Θ(97.5°)  | -14.78/-14.08 | -11.49/-11.54   | -12.87/-14.45   | -14.72/-15.83   | -15.12/-6.66    | -8.62/-8.61     | -8.44/-7.70     | -7.69/-12.12      | -11.17/-9.98      | -11.06/-13.68     | -16.04/-12.51     | -8.35/-7.47       | -11.16/-8.85      | -8.30/-9.30       | -9.10/-9.42       | -9.23/-8.25       | -7.43/-8.34       | -11.54/-9.98      | -8.42/-8.81       | -13.22/-7.82      | -8.82/-11.36      | -13.90/-14.75     | -12.19/-13.35     | -11.50/-13.34     |              |
| Θ(105°)   | -15.23/-15.45 | -14.08/-13.94   | -15.66/-15.14   | -15.04/-15.54   | -12.18/-11.30   | -11.62/-10.07   | -11.04/-8.54    | -12.40/-12.38     | -12.35/-10.91     | -11.21/-15.34     | -15.42/-13.00     | -9.32/-9.45       | -14.28/-13.11     | -11.00/-9.25      | -10.73/-9.65      | -10.59/-11.35     | -9.42/-9.31       | -12.99/-12.14     | -8.75/-7.65       | -14.13/-11.72     | -9.27/-13.17      | -15.57/-14.76     | -12.46/-11.91     | -12.49/-14.31     |              |
| Θ(112.5°) | -15.28/-15.77 | -15.42/-14.09   | -14.32/-15.32   | -13.77/-14.34   | -14.64/-15.10   | -13.28/-12.12   | -9.38/-10.47    | -15.16/-9.23      | -13.13/-11.46     | -15.04/-14.92     | -15.69/-12.46     | -10.52/-11.41     | -14.87/-16.11     | -14.30/-10.46     | -12.68/-11.79     | -10.44/-13.24     | -11.71/-10.87     | -14.86/-15.19     | -12.62/-8.95      | -14.88/-10.81     | -12.16/-11.95     | -14.40/-15.32     | -13.98/-14.77     | -14.52/-15.37     |              |
| Θ(120°)   | -14.95/-14.37 | -15.65/-16.02   | -15.02/-14.97   | -13.75/-15.52   | -15.45/-11.07   | -11.84/-14.74   | -13.63/-16.01   | -9.52/-8.03       | -14.27/-14.87     | -16.14/-15.29     | -15.19/-14.02     | -13.73/-13.57     | -14.59/-15.49     | -15.20/-11.42     | -12.84/-13.95     | -13.61/-12.85     | -12.87/-13.17     | -13.17/-15.00     | -15.16/-10.69     | -15.26/-15.41     | -13.54/-14.02     | -15.25/-15.33     | -13.21/-15.07     | -15.28/-15.45     |              |
| Θ(127.5°) | -15.29/-15.04 | -12.42/-13.10   | -14.81/-15.84   | -14.53/-12.75   | -11.59/-15.54   | -13.61/-13.30   | -15.11/-12.04   | -8.70/-12.05      | -15.39/-15.27     | -15.00/-15.40     | -14.55/-15.63     | -13.91/-13.02     | -14.91/-14.76     | -15.42/-11.17     | -12.01/-10.49     | -13.04/-15.03     | -11.12/-15.53     | -12.76/-15.40     | -15.03/-11.38     | -15.66/-15.52     | -12.49/-14.71     | -15.73/-15.16     | -10.95/-14.81     | -15.69/-15.54     |              |
| Θ(135°)   | -15.36/-15.34 | -15.43/-14.87   | -15.26/-15.35   | -15.18/-14.92   | -15.46/-15.80   | -13.57/-12.72   | -10.98/-10.57   | -12.79/-15.59     | -13.36/-15.51     | -16.22/-15.79     | -15.56/-14.18     | -15.21/-15.60     | -16.24/-12.66     | -12.53/-11.45     | -8.65/-10.74      | -10.26/-14.51     | -10.18/-11.16     | -11.49/-15.14     | -15.22/-10.47     | -15.04/-14.51     | -13.86/-12.84     | -15.33/-14.79     | -15.85/-13.44     | -14.28/-15.54     |              |
| Θ(142.5°) | -15.11/-14.56 | -15.72/-14.83   | -15.50/-14.99   | -15.50/-14.33   | -15.41/-11.73   | -12.77/-15.24   | -15.20/-16.12   | -15.20/-15.66     | -15.37/-15.68     | -15.12/-14.34     | -14.16/-14.29     | -14.45/-14.04     | -14.49/-14.12     | -12.30/-14.30     | -14.39/-15.17     | -14.77/-12.69     | -14.15/-15.06     | -15.57/-15.07     | -15.90/-15.96     | -14.92/-13.99     | -13.17/-15.21     | -15.54/-15.62     |                   |                   |              |
| Θ(150°)   | -15.52/-15.29 | -14.98/-15.25   | -13.88/-14.76   | -15.60/-15.11   | -14.97/-16.09   | -15.88/-15.23   | -15.72/-15.56   | -15.72/-15.60     | -14.88/-14.81     | -14.90/-15.57     | -15.72/-15.49     | -15.49/-15.35     | -14.26/-14.27     | -16.03/-15.27     | -14.82/-15.61     | -13.64/-13.61     | -11.01/-11.46     | -13.19/-13.74     | -15.56/-15.45     | -15.39/-15.49     | -15.15/-15.38     | -15.31/-15.40     | -15.32/-16.00     | -15.83/-14.48     |              |
| Θ(157.5°) | -15.25/-14.95 | -15.58/-15.50   | -15.35/-15.66   | -15.25/-15.58   | -14.89/-14.40   | -14.30/-14.74   | -15.65/-14.87   | -15.64/-15.57     | -14.91/-15.50     | -14.06/-13.98     | -15.00/-15.40     | -15.04/-15.56     | -15.48/-12.82     | -11.05/-12.15     | -15.67/-15.79     | -15.48/-14.35     | -12.98/-14.13     | -14.04/-12.69     | -15.20/-13.94     | -13.68/-15.40     | -15.06/-15.05     | -15.38/-15.66     | -14.65/-14.20     | -14.37/-14.03     |              |
| Θ(165°)   | -14.77/-15.50 | -15.87/-15.24   | -15.74/-15.36   | -15.28/-14.10   | -15.30/-14.92   | -14.30/-14.84   | -14.96/-15.45   | -14.95/-14.93     | -14.45/-15.29     | -15.64/-15.09     | -15.61/-14.61     | -15.37/-14.73     | -15.49/-15.50     | -15.09/-14.88     | -15.54/-15.30     | -15.14/-15.64     | -14.61/-12.94     | -13.31/-14.96     | -15.36/-14.83     | -13.98/-13.76     | -15.69/-15.85     | -15.56/-15.01     | -13.90/-12.58     | -13.13/-14.26     |              |
| Θ(172.5°) | -16.02/-15.58 | -16.07/-15.25   | -15.72/-15.27   | -14.97/-15.28   | -14.44/-14.69   | -13.61/-12.00   | -10.99/-10.36   | -10.29/-10.56     | -11.52/-13.05     | -14.94/-15.42     | -14.87/-15.16     | -14.97/-13.60     | -13.41/-13.45     | -12.67/-12.11     | -11.99/-12.66     | -12.23/-13.19     | -14.96/-15.42     | -14.68/-15.75     | -13.85/-13.96     | -13.65/-14.03     | -13.73/-13.50     | -14.02/-14.39     | -15.39/-15.34     |                   |              |
| Θ(180°)   | -15.57/-14.88 | -15.84/-15.25   | -15.41/-15.92   | -15.89/-14.69   | -13.92/-13.27   | -13.04/-12.83   | -12.68/-12.73   | -12.50/-13.15     | -13.70/-14.00     | -14.69/-15.05     | -15.88/-14.85     | -15.11/-14.79     | -14.50/-14.32     | -15.08/-15.18     | -16.15/-15.67     | -15.57/-15.33     | -15.35/-15.70     | -14.84/-14.66     | -15.41/-15.24     | -16.05/-15.33     | -15.56/-14.93     | -15.61/-14.80     | -15.90/-15.72     | -15.72/-15.46     |              |
| Freq(Hz)  | 6.695GHz      | 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°)     | 4.91/4.91     | 4.95/4.98       | 4.95/4.97       | 4.94/4.90       | 4.89/4.91       | 4.89/5.11       | 5.10/5.09       | 5.00/4.99         | 4.99/4.91         | 4.83/4.79         | 4.75/4.83         | 4.83/4.78         | 4.75/4.78         | 4.74/4.72         | 4.78/4.83         | 4.79/4.79         | 4.82/4.91         | 4.97/4.98         | 5.04/5.17         | 5.17/5.23         | 5.24/5.17         | 5.16/5.16         | 5.09/4.99         | 5.01/4.97         |              |
| Θ(7.5°)   | 5.23/5.27     | 5.30/5.35       | 5.42/5.44       | 5.40/5.40       | 5.48/5.51       | 5.62/5.68       | 5.68/5.70       | 5.68/5.65         | 5.63/5.59         | 5.52/5.32         | 5.23/5.13         | 5.10/4.98         | 4.81/4.68         | 4.55/4.53         | 4.52/4.52         | 4.49/4.52         | 4.60/4.64         | 4.75/4.83         | 4.95/5.00         | 4.97/5.03         | 4.95/4.93         | 4.96/5.04         | 5.10/5.11         | 5.21/5.18         |              |
| Θ(15°)    | 5.62/5.56     | 5.53/5.32       | 5.29/5.30       | 5.35/5.44       | 5.57/5.71       | 5.88/6.08       | 6.14/6.17       | 6.14/6.08         | 6.05/6.00         | 5.85/5.77         | 5.75/5.71         | 5.66/5.52         | 5.28/5.00         | 4.78/4.69         | 4.60/4.55         | 4.56/4.67         | 4.70/4.78         | 4.84/4.84         | 4.76/4.70         | 4.64/4.72         | 4.81/5.00         | 5.20/5.34         | 5.49/5.61         | 5.62/5.63         |              |
| Θ(22.5°)  | 4.75/4.84     | 4.91/4.90       | 4.97/5.14       | 5.28/5.49       | 5.77/6.10       | 6.33/6.49       | 6.50/6.39       | 6.00/5.51         | 5.04/4.84         | 4.98/5.16         | 5.24/5.35         | 5.48/5.53         | 5.47/5.48         | 5.47/5.25         | 4.82/4.35         | 4.19/4.19         | 4.18/4.07         | 3.85/5.53         | 3.20/2.90         | 2.78/2.69         | 2.69/3.03         | 3.55/4.03         | 4.56/5.07         | 5.20/4.97         |              |
| Θ(30°)    | 3.43/3.72     | 4.24/3.74       | 4.79/5.13       | 5.56/6.24       | 6.80/6.94       | 6.70/6.35       | 5.97/5.54       | 5.04/4.37         | 3.63/3.28         | 3.40/3.60         | 3.67/3.99         | 4.32/4.44         | 4.59/4.59         | 4.20/3.91         | 3.64/3.31         | 3.11/3.15         | 3.09/2.86         | 2.58/2.47         | 2.28/1.90         | 1.70/2.16         | 2.52/2.49         | 2.38/2.41         | 2.83/3.48         | 3.86/3.81         |              |
| Θ(37.5°)  | 1.89/1.94     | 2.28/3.64       | 4.42/5.00       | 5.43/6.24       | 6.64/6.38       | 5.73/5.07       | 4.42/3.85       | 3.67/3.33         | 2.50/2.11         | 2.15/2.23         | 2.31/2.73         | 3.44/3.47         | 2.72/2.80         | 1.87/1.68         | 1.49/0.66         | 0.49/0.70         | 0.95/0.90         | 0.41/0.12         | -0.08/-0.76       | -0.76/0.51        | 1.48/0.99         | 0.71/1.05         | 1.75/2.13         | 1.81/1.86         |              |
| Θ(45°)    | -0.18/-0.65   | -0.02/1.67      | 3.34/4.02       | 4.13/4.56       | 5.28/5.17       | 4.27/3.80       | 3.67/2.83       | 1.88/1.84         | 1.41/1.34         | 1.69/1.55         | 1.53/2.31         | 2.71/1.99         | 0.47/-0.22        | -1.43/-2.38       | -2.02/-1.25       | -1.31/-1.39       | -0.19/0.08        | -0.88/-1.31       | -1.09/-1.36       | -1.97/-1.11       | -0.21/-2.08       | -0.60/-3.08       | -0.83/-1.15       | -0.27/0.14        |              |
| Θ(52.5°)  | 0.12/-0.43    | 0.21/0.97       | 2.34/3.12       | 3.09/3.00       | 4.41/4.66       | 3.29/2.30       | 2.43/1.01       | -0.09/-0.36       | -0.27/0.26        | -0.54/0.13        | 1.16/-3.02        | -2.08/-2.38       | -2.73/-6.18       | -6.09/-5.18       | -3.77/-4.14       | -1.83/-1.45       | -2.47/-3.00       | -2.76/-3.35       | -3.16/-2.79       | -3.38/-3.89       | -1.95/-2.18       | -3.49/-3.79       | -1.19/-0.44       |                   |              |
| Θ(60°)    | -0.10/-0.08   | 0.42/-0.36      | 0.67/1.75       | 2.36/1.73       | 3.14/3.11       | 2.09/0.86       | 0.16/-0.04      | -1.47/-2.81       | -3.21/-2.65       | -2.24/-2.44       | -3.05/-2.20       | -0.25/-0.90       | -2.75/-2.91       |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |              |

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

