

Antenna spec.

Polarization

Theta Frequency (MHz)

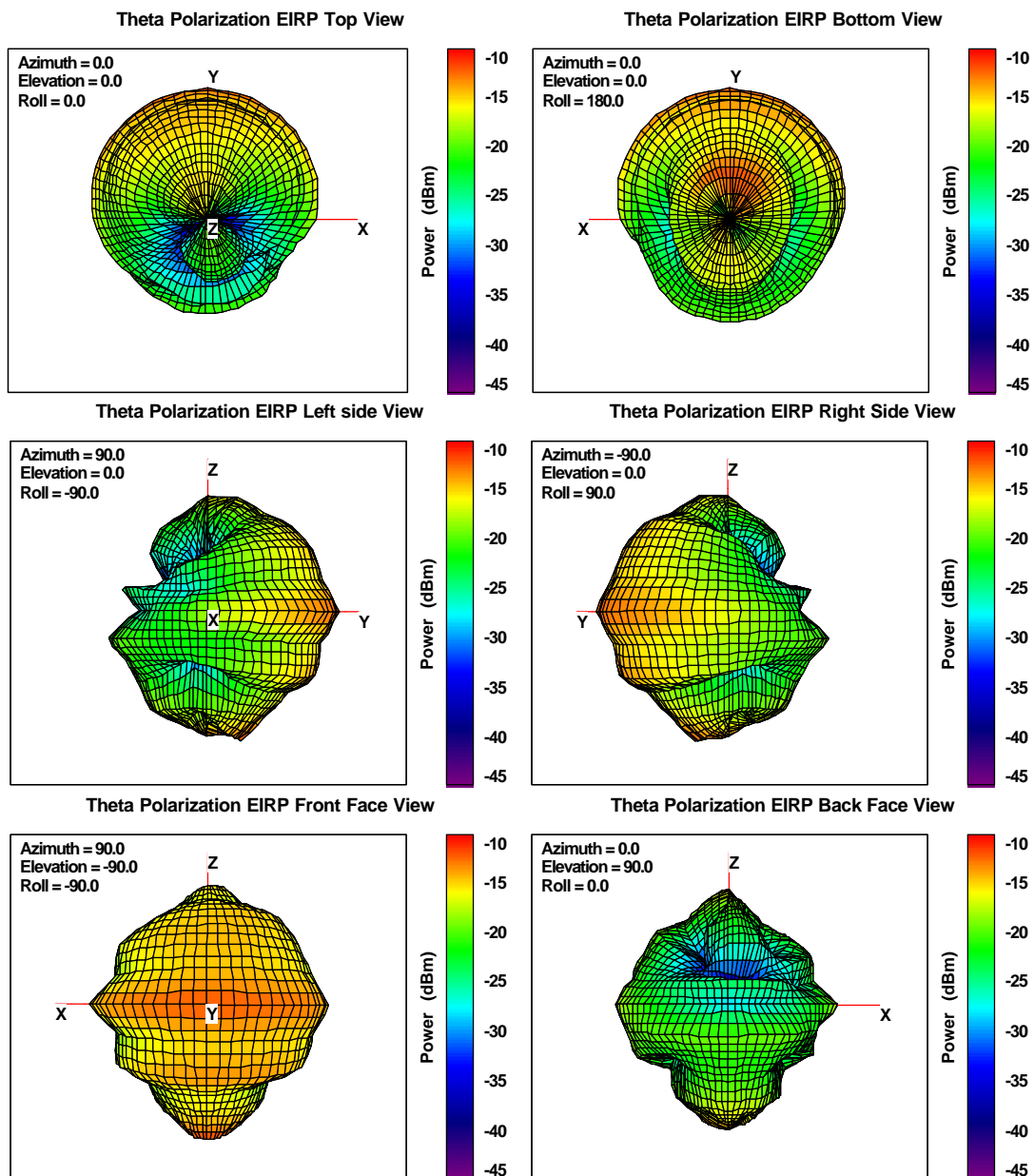
| Theta Angle (°) | 0 | 15 | 30 | 45 | 60 | 75 | 90 | 105 | 120 | 135 | 150 | 165 | 180 |
|-----------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Phi Angle (°) | Power (dBm) | Power (dBm) | Power (dBm) | Power (dBm) | Power (dBm) | Power (dBm) | Power (dBm) | Power (dBm) | Power (dBm) | Power (dBm) | Power (dBm) | Power (dBm) | Power (dBm) |
| 0 | -24.56 | -24.2 | -27.83 | -18.26 | -16.14 | -15.86 | -14.63 | -19.89 | -15.38 | -12.77 | -13.74 | -17.96 | -17.24 |
| 15 | -26.34 | -23.57 | -26.89 | -19.57 | -16.73 | -15.84 | -13.8 | -18.7 | -19.2 | -13.37 | -14.62 | -17.64 | -19.35 |
| 30 | -29.39 | -22.98 | -25.42 | -22.18 | -17.16 | -16.09 | -13.58 | -16.62 | -22.92 | -14.97 | -15.88 | -17.53 | -23.01 |
| 45 | -35.22 | -23.09 | -24.24 | -23.31 | -17.12 | -16.92 | -13.84 | -14.67 | -19.66 | -17.73 | -17.5 | -16.68 | -30.81 |
| 60 | -63.28 | -22.89 | -23.03 | -23.6 | -16.79 | -17.47 | -15.41 | -13.25 | -16.25 | -21.92 | -18.68 | -16.3 | -36.45 |
| 75 | -34.82 | -23.91 | -22.94 | -23.38 | -16.43 | -17.66 | -17.62 | -12.32 | -14.57 | -26.43 | -19.38 | -15.87 | -24.75 |
| 90 | -29.21 | -24.9 | -23.81 | -22.64 | -16.44 | -17.86 | -19.06 | -12.13 | -13.7 | -25.49 | -19.98 | -15.02 | -20.29 |
| 105 | -26.23 | -26.5 | -23.81 | -22.51 | -16.48 | -17.74 | -20.27 | -12.35 | -13.37 | -23.41 | -20.04 | -14.78 | -17.79 |
| 120 | -24.49 | -27.97 | -22.58 | -23.23 | -17.54 | -16.07 | -19.37 | -12.55 | -13.68 | -22.07 | -20.26 | -14.66 | -16.33 |
| 135 | -23.56 | -29.37 | -22.57 | -23.29 | -18.3 | -15.69 | -18.2 | -13 | -14.05 | -20.54 | -20.01 | -14.78 | -15.62 |
| 150 | -23.28 | -30.79 | -22.48 | -23.84 | -19.06 | -15.31 | -17.1 | -13.68 | -14.88 | -20.46 | -20.12 | -15.21 | -15.52 |
| 165 | -23.59 | -27.86 | -21.46 | -24.15 | -19.46 | -15.51 | -16.33 | -14.24 | -15.25 | -20.29 | -20.28 | -15.8 | -16.04 |
| 180 | -24.56 | -27.6 | -20.45 | -24.4 | -20.12 | -15.7 | -16.15 | -14.66 | -15.47 | -19.95 | -20.26 | -16.65 | -17.24 |
| 195 | -26.34 | -26.26 | -20.61 | -24.22 | -19.87 | -15.51 | -15.64 | -15.1 | -15.5 | -18.56 | -20.77 | -16.53 | -19.35 |
| 210 | -29.39 | -24.02 | -20.31 | -23.11 | -19.75 | -16.23 | -15.14 | -15.83 | -15.69 | -17.55 | -21.22 | -17 | -23.01 |
| 225 | -35.22 | -22.12 | -20.4 | -23.95 | -19.15 | -16.32 | -14.26 | -16.89 | -15.84 | -15.85 | -21.8 | -16.98 | -30.81 |
| 240 | -63.28 | -20.54 | -20.22 | -23.7 | -19.34 | -17.16 | -13.29 | -17.37 | -16.04 | -14.52 | -22.43 | -17.81 | -36.45 |
| 255 | -34.82 | -19.39 | -19.71 | -22.52 | -19.41 | -16.39 | -12.82 | -17.72 | -15.62 | -14.13 | -22.5 | -18.54 | -24.75 |
| 270 | -29.21 | -23.71 | -19.31 | -22.12 | -18.93 | -16.61 | -12.85 | -18.54 | -15.25 | -12.58 | -23.31 | -19.97 | -20.29 |
| 285 | -26.23 | -25.94 | -18.99 | -21.02 | -18.74 | -17.04 | -13.03 | -18.81 | -15.46 | -11.81 | -23.18 | -21.01 | -17.79 |
| 300 | -24.49 | -27.41 | -18.1 | -18.82 | -18.75 | -18.06 | -13.5 | -18.58 | -16.05 | -12.08 | -21.6 | -21.18 | -16.33 |
| 315 | -23.56 | -32.61 | -18.9 | -17.6 | -18.39 | -19.57 | -14.72 | -17.94 | -17.83 | -12.78 | -19.46 | -23.66 | -15.62 |
| 330 | -23.28 | -34.52 | -20.64 | -17.93 | -18.31 | -18.31 | -15.04 | -17.19 | -19.76 | -12.3 | -16.26 | -37.3 | -15.52 |
| 345 | -23.59 | -27.86 | -28.75 | -18.98 | -17.39 | -17.36 | -15.53 | -16.6 | -19.71 | -13.75 | -15.87 | -27.73 | -16.04 |
| 360 | -24.56 | -24.2 | -27.83 | -18.26 | -16.14 | -15.86 | -14.63 | -19.89 | -15.38 | -12.77 | -13.74 | -17.96 | -17.24 |

Phi Frequency (MHz)

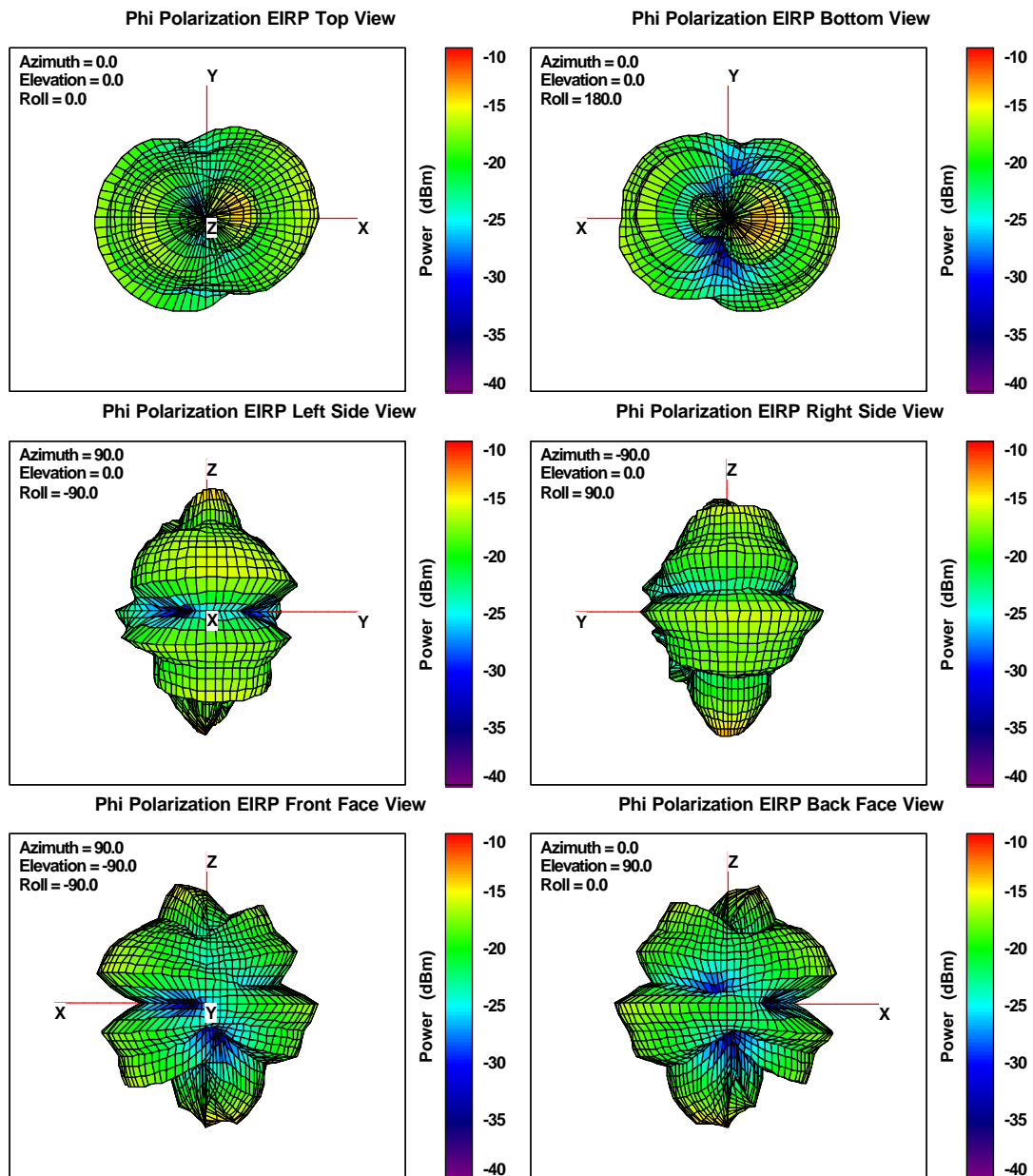
| Theta Angle (°) | 0 | 15 | 30 | 45 | 60 | 75 | 90 | 105 | 120 | 135 | 150 | 165 | 180 |
|-----------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Phi Angle (°) | Power (dBm) | Power (dBm) | Power (dBm) | Power (dBm) | Power (dBm) | Power (dBm) | Power (dBm) | Power (dBm) | Power (dBm) | Power (dBm) | Power (dBm) | Power (dBm) | Power (dBm) |
| 0 | -29.21 | -31.31 | -40.41 | -27.33 | -26.18 | -23.18 | -25.25 | -25.04 | -19.41 | -20.89 | -22.5 | -24.66 | -20.29 |
| 15 | -26.23 | -33.14 | -39.54 | -26.34 | -24.64 | -21.06 | -25.82 | -22.76 | -20.5 | -23.95 | -23.15 | -24.71 | -17.79 |
| 30 | -24.49 | -33.62 | -34.8 | -25.77 | -22.79 | -21.29 | -22.03 | -21.29 | -20.55 | -22.56 | -25.71 | -22.06 | -16.33 |
| 45 | -23.56 | -36.84 | -34.42 | -27.23 | -24.01 | -21.8 | -23.7 | -20.55 | -20.12 | -23.58 | -31.93 | -22.51 | -15.62 |
| 60 | -23.28 | -36.3 | -34.79 | -25.53 | -27.26 | -22.84 | -23.76 | -20.08 | -19.74 | -26.24 | -30.66 | -21.13 | -15.52 |
| 75 | -23.59 | -36.24 | -38.49 | -30.11 | -32.23 | -23.06 | -23.42 | -20.12 | -20.06 | -29.65 | -26.62 | -19.77 | -16.04 |
| 90 | -24.56 | -34.24 | -39.02 | -30.41 | -32.6 | -25.92 | -23.61 | -20.21 | -20.69 | -40.49 | -24.66 | -18.73 | -17.24 |
| 105 | -26.34 | -31.44 | -38.22 | -32.26 | -31.29 | -26.35 | -23.37 | -21.09 | -23.14 | -39.36 | -23.2 | -18.05 | -19.35 |
| 120 | -29.39 | -29.26 | -39.04 | -30.57 | -29.75 | -28.13 | -24.05 | -20.14 | -21.18 | -31.67 | -22 | -15.58 | -23.01 |
| 135 | -35.22 | -33.48 | -31.36 | -25.96 | -29.84 | -28.04 | -24.33 | -19.67 | -22.45 | -28.71 | -21.84 | -15.45 | -30.81 |
| 150 | -63.28 | -28.86 | -36.99 | -27.13 | -28.08 | -34.9 | -24.79 | -19.23 | -23.71 | -26.99 | -21.08 | -16.23 | -36.45 |
| 165 | -34.82 | -27.92 | -39.3 | -25.54 | -27.39 | -33.51 | -23.32 | -21.41 | -26.1 | -29.31 | -19.85 | -17.48 | -24.75 |
| 180 | -29.21 | -26.96 | -34.02 | -28.25 | -30.47 | -32.99 | -25.54 | -22.3 | -24.56 | -33.27 | -21.87 | -19.1 | -20.29 |
| 195 | -26.23 | -28.15 | -32.23 | -29.47 | -35.07 | -32.64 | -28.55 | -24.55 | -23.79 | -39.6 | -24.42 | -19.42 | -17.79 |
| 210 | -24.49 | -29.4 | -26.69 | -29.61 | -34.59 | -34.1 | -30.74 | -25.65 | -22.52 | -45.12 | -26.36 | -20.09 | -16.33 |
| 225 | -23.56 | -30.18 | -27.56 | -30.03 | -35.85 | -30.36 | -32.33 | -21.72 | -22.36 | -46.8 | -27.79 | -20.48 | -15.62 |
| 240 | -23.28 | -31.6 | -25.93 | -30.26 | -38.86 | -29.96 | -31.99 | -24.66 | -22.16 | -52.39 | -31.41 | -23.72 | -15.52 |
| 255 | -23.59 | -31.7 | -29.96 | -30.92 | -28.24 | -27.12 | -27.21 | -24.34 | -22.92 | -40.49 | -32.28 | -28.07 | -16.04 |
| 270 | -24.56 | -32.42 | -31.72 | -31.46 | -29.21 | -26.74 | -27.51 | -27.14 | -24.27 | -33.24 | -36.82 | -30.16 | -17.24 |
| 285 | -26.34 | -30.18 | -33.62 | -31.6 | -29.32 | -29.54 | -27.95 | -24.27 | -27.36 | -32.8 | -32.88 | -26.73 | -19.35 |
| 300 | -29.39 | -25.45 | -37.26 | -34.09 | -30.13 | -28.39 | -30.68 | -28.46 | -26.04 | -32.25 | -29.73 | -27.94 | -23.01 |
| 315 | -35.22 | -23.43 | -39.93 | -36.64 | -31.85 | -27.84 | -33.38 | -26.62 | -27.2 | -30.93 | -27.93 | -26.52 | -30.81 |
| 330 | -63.28 | -26.06 | -34.27 | -36.7 | -35.17 | -30.4 | -39.94 | -24.92 | -26.34 | -36.08 | -26.67 | -22.96 | -36.45 |
| 345 | -34.82 | -25.39 | -32.13 | -36.38 | -44.75 | -36.59 | -38.79 | -24.85 | -27.24 | -32.88 | -25.26 | -21.81 | -24.75 |
| 360 | -29.21 | -31.31 | -40.41 | -27.33 | -26.18 | -23.18 | -25.25 | -25.04 | -19.41 | -20.89 | -22.5 | -24.66 | -20.29 |

| Total | Frequency (MHz) | | | | | | | | | | | | | | |
|-------|-----------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--|
| | Theta Angle (°) | 0 | 15 | 30 | 45 | 60 | 75 | 90 | 105 | 120 | 135 | 150 | 165 | 180 | |
| | Phi Angle (°) | Power (dBm) | Power (dBm) | Power (dBm) | Power (dBm) | Power (dBm) | Power (dBm) | Power (dBm) | Power (dBm) | Power (dBm) | Power (dBm) | Power (dBm) | Power (dBm) | Power (dBm) | |
| | 0 | -23.28 | -23.43 | -27.6 | -17.75 | -15.73 | -15.12 | -14.27 | -18.73 | -13.93 | -12.15 | -13.19 | -17.12 | -15.49 | |
| | 15 | -23.28 | -23.12 | -26.66 | -18.74 | -16.08 | -14.7 | -13.54 | -17.26 | -16.79 | -13.01 | -14.05 | -16.86 | -15.49 | |
| | 30 | -23.28 | -22.62 | -24.94 | -20.6 | -16.11 | -14.94 | -13 | -15.34 | -18.56 | -14.27 | -15.45 | -16.22 | -15.49 | |
| | 45 | -23.28 | -22.91 | -23.84 | -21.83 | -16.31 | -15.69 | -13.41 | -13.67 | -16.87 | -16.73 | -17.35 | -15.67 | -15.49 | |
| | 60 | -23.28 | -22.7 | -22.75 | -21.45 | -16.42 | -16.36 | -14.82 | -12.43 | -14.64 | -20.55 | -18.41 | -15.06 | -15.49 | |
| | 75 | -23.28 | -23.67 | -22.82 | -22.54 | -16.32 | -16.56 | -16.61 | -11.66 | -13.49 | -24.74 | -18.63 | -14.39 | -15.49 | |
| | 90 | -23.28 | -24.42 | -23.68 | -21.97 | -16.34 | -17.23 | -17.75 | -11.5 | -12.91 | -25.36 | -18.71 | -13.48 | -15.49 | |
| | 105 | -23.28 | -25.29 | -23.66 | -22.07 | -16.34 | -17.18 | -18.54 | -11.8 | -12.94 | -23.3 | -18.33 | -13.11 | -15.49 | |
| | 120 | -23.28 | -25.56 | -22.48 | -22.49 | -17.29 | -15.81 | -18.09 | -11.85 | -12.97 | -21.62 | -18.03 | -12.09 | -15.49 | |
| | 135 | -23.28 | -27.94 | -22.03 | -21.41 | -18 | -15.44 | -17.26 | -12.15 | -13.46 | -19.93 | -17.82 | -12.09 | -15.49 | |
| | 150 | -23.28 | -26.71 | -22.32 | -22.17 | -18.55 | -15.26 | -16.41 | -12.61 | -14.35 | -19.59 | -17.56 | -12.68 | -15.49 | |
| | 165 | -23.28 | -24.88 | -21.38 | -21.78 | -18.81 | -15.44 | -15.54 | -13.48 | -14.9 | -19.78 | -17.05 | -13.55 | -15.49 | |
| | 180 | -23.28 | -24.26 | -20.26 | -22.9 | -19.74 | -15.62 | -15.68 | -13.97 | -14.96 | -19.76 | -17.98 | -14.7 | -15.49 | |
| | 195 | -23.28 | -24.09 | -20.32 | -23.08 | -19.74 | -15.42 | -15.42 | -14.63 | -14.9 | -18.52 | -19.21 | -14.73 | -15.49 | |
| | 210 | -23.28 | -22.91 | -19.41 | -22.23 | -19.61 | -16.16 | -15.02 | -15.4 | -14.87 | -17.54 | -20.06 | -15.26 | -15.49 | |
| | 225 | -23.28 | -21.49 | -19.63 | -23 | -19.06 | -16.15 | -14.19 | -15.65 | -14.97 | -15.85 | -20.82 | -15.37 | -15.49 | |
| | 240 | -23.28 | -20.21 | -19.19 | -22.83 | -19.29 | -16.94 | -13.23 | -16.63 | -15.09 | -14.52 | -21.92 | -16.82 | -15.49 | |
| | 255 | -23.28 | -19.14 | -19.32 | -21.93 | -18.88 | -16.04 | -12.66 | -16.86 | -14.88 | -14.12 | -22.07 | -18.08 | -15.49 | |
| | 270 | -23.28 | -23.16 | -19.07 | -21.65 | -18.54 | -16.21 | -12.7 | -17.98 | -14.73 | -12.55 | -23.13 | -19.57 | -15.49 | |
| | 285 | -23.28 | -24.55 | -18.84 | -20.65 | -18.38 | -16.8 | -12.89 | -17.72 | -15.19 | -11.78 | -22.73 | -19.98 | -15.49 | |
| | 300 | -23.28 | -23.31 | -18.04 | -18.69 | -18.45 | -17.67 | -13.41 | -18.15 | -15.64 | -12.04 | -20.98 | -20.35 | -15.49 | |
| | 315 | -23.28 | -22.94 | -18.86 | -17.54 | -18.2 | -18.97 | -14.66 | -17.39 | -17.36 | -12.71 | -18.88 | -21.85 | -15.49 | |
| | 330 | -23.28 | -25.48 | -20.46 | -17.87 | -18.22 | -18.05 | -15.02 | -16.52 | -18.89 | -12.28 | -15.88 | -22.8 | -15.49 | |
| | 345 | -23.28 | -23.44 | -27.1 | -18.9 | -17.38 | -17.31 | -15.51 | -15.99 | -19 | -13.69 | -15.39 | -20.82 | -15.49 | |
| | 360 | -23.28 | -23.43 | -27.6 | -17.75 | -15.73 | -15.12 | -14.27 | -18.73 | -13.93 | -12.15 | -13.19 | -17.12 | -15.49 | |

| | | |
|-------|----------------------------|----------|
| Total | Frequency (MHz) | 1900 |
| | Point Values | |
| | Ant. Port Input Pwr. (dBm) | 0 |
| | Tot. Rad. Pwr. (dBm) | -16.1974 |
| | Peak EIRP (dBm) | -11.5048 |
| | Directivity (dBi) | 4.69262 |
| | Efficiency (dB) | -16.1974 |
| | Efficiency (%) | 2.40024 |
| | Gain (dBi) | -11.5048 |
| | NHPRP 離i/4 (dBm) | -17.0996 |
| | NHPRP 離i/6 (dBm) | -18.2558 |
| | NHPRP 離i/8 (dBm) | -19.2475 |
| | Upper Hem. PRP (dBm) | -20.6082 |
| | Lower Hem. PRP (dBm) | -18.1505 |
| | NHPRP4 / TRP Ratio (dB) | -0.90212 |
| | NHPRP4 / TRP Ratio (%) | 81.2434 |
| | NHPRP6 / TRP Ratio (dB) | -2.05838 |
| | NHPRP6 / TRP Ratio (%) | 62.2533 |
| | NHPRP8 / TRP Ratio (dB) | -3.05001 |
| | NHPRP8 / TRP Ratio (%) | 49.5449 |
| | UHPRP / TRP Ratio (dB) | -4.41076 |
| | UHPRP / TRP Ratio (%) | 36.2179 |
| | LHPRP / TRP Ratio (dB) | -1.95301 |
| | LHPRP / TRP Ratio (%) | 63.7821 |
| | Front/Back Ratio (dB) | 4.70459 |
| | Phi BW (?) | 159 |
| | + Phi BW (?) | 66 |
| | - Phi BW (?) | 93 |
| | Theta BW (?) | 30 |
| | + Th. BW (?) | 20 |
| | - Th. BW (?) | 10 |
| | Boresight Phi (?) | 90 |
| | Boresight Th. (?) | 105 |
| | Maximum Power (dBm) | -11.5048 |
| | Minimum Power (dBm) | -27.9449 |
| | Average Power (dBm) | -16.7372 |
| | Max/Min Ratio (dB) | 16.4401 |
| | Max/Avg Ratio (dB) | 5.23234 |
| | Min/Avg Ratio (dB) | -11.2078 |
| | Average Gain (dB) | -16.1974 |
| | E-Plane BW (?) | 34 |
| | + E-Plane BW (?) | 23 |
| | - E-Plane BW (?) | 11 |
| | H-Plane BW (?) | 56 |
| | + H-Plane BW (?) | 20 |
| | - H-Plane BW (?) | 36 |

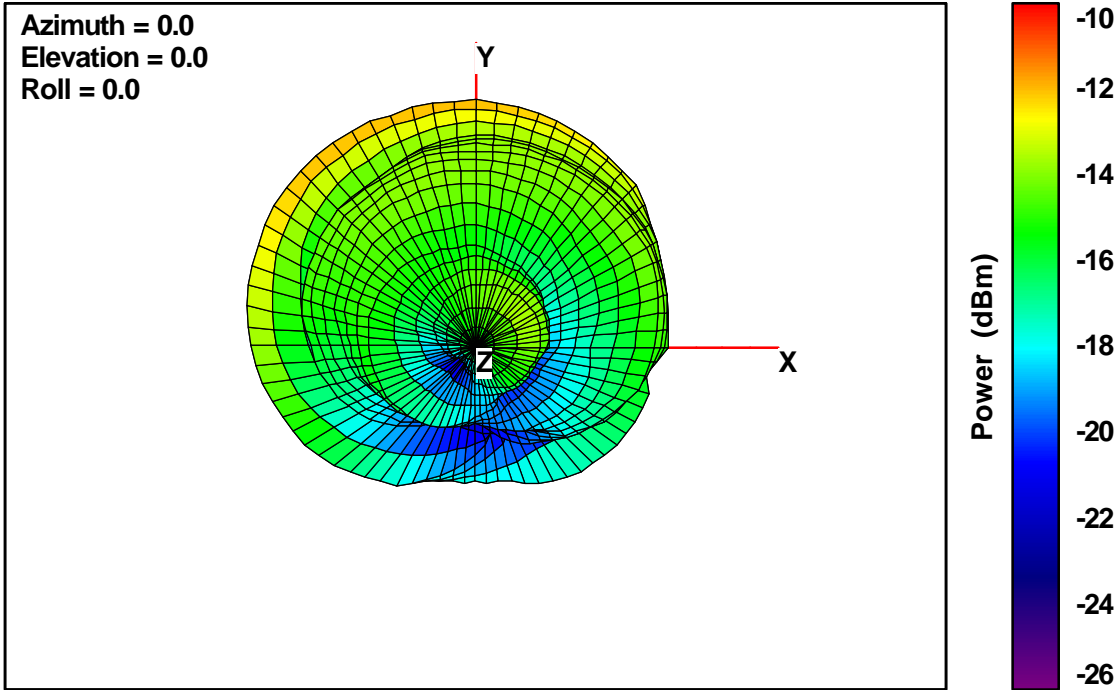


Antenna Pattern Theta Polarization EIRP



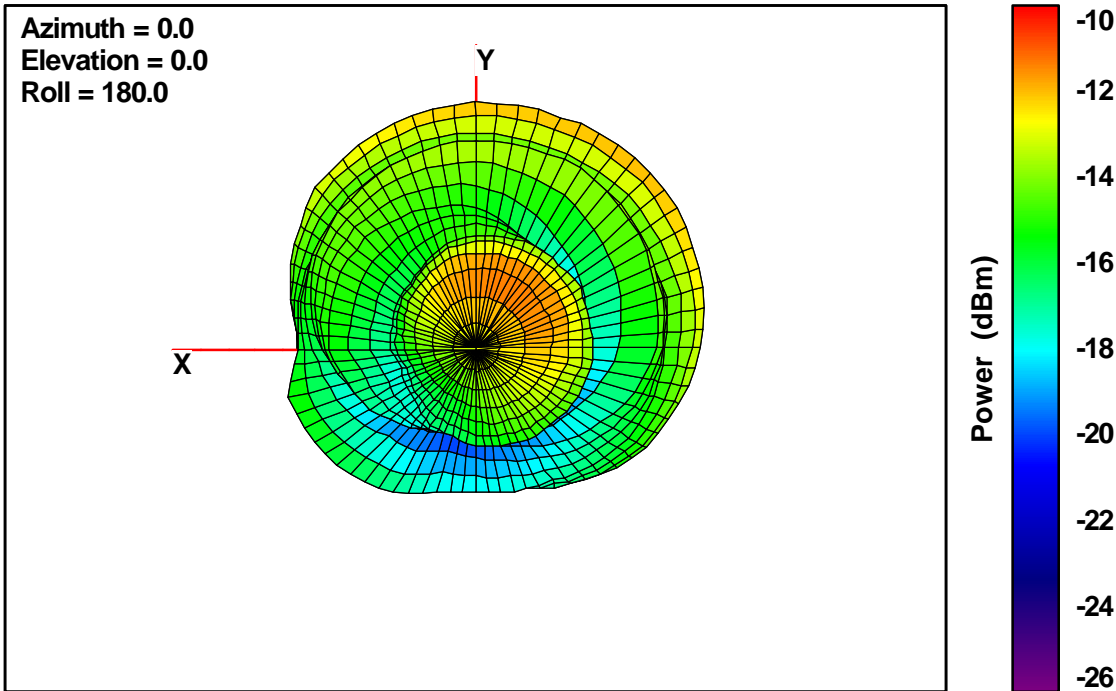
Antenna Pattern Phi Polarization EIRP

TRP Top View



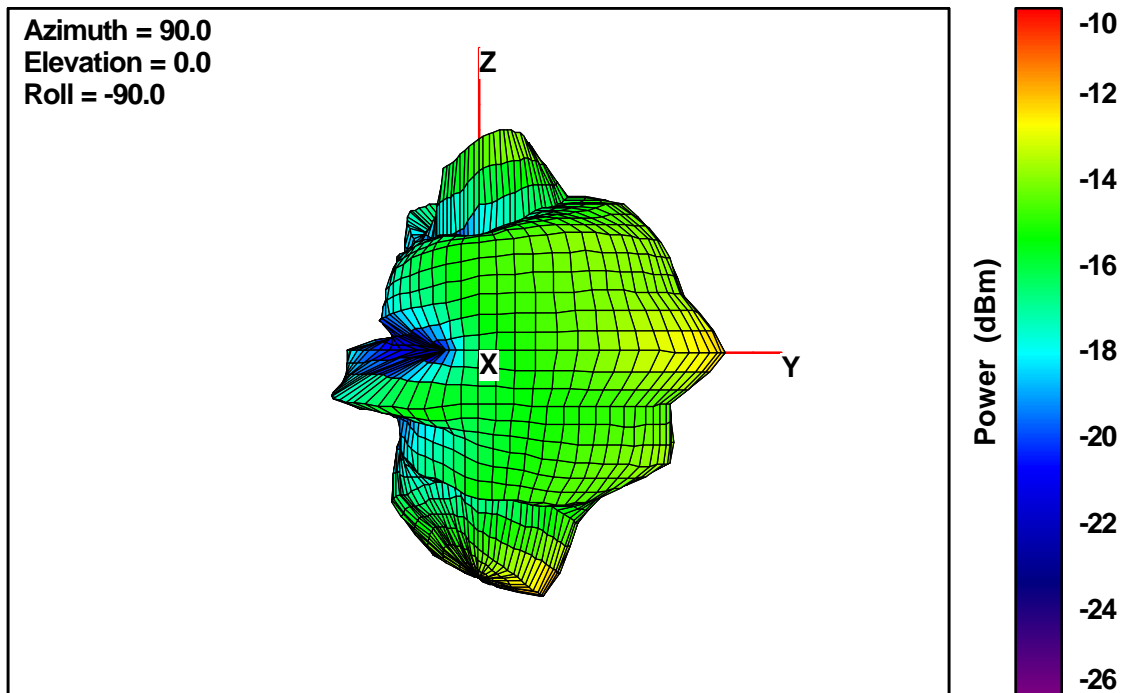
Antenna Pattern TRP, Top View

TRP Bottom View



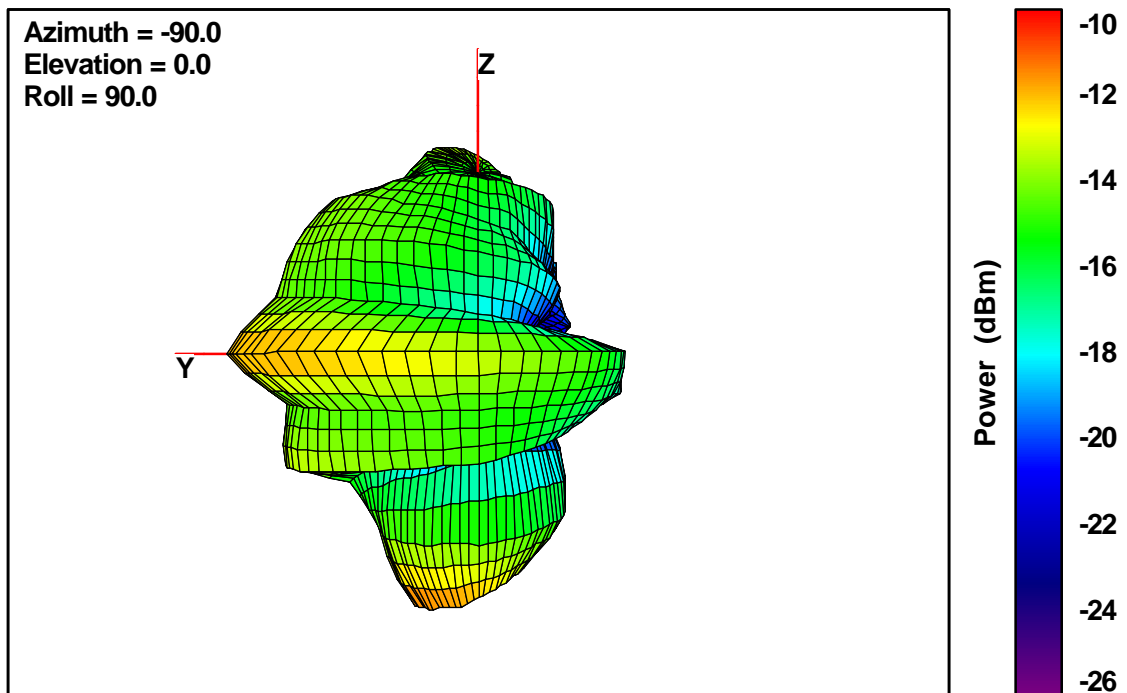
Antenna Pattern TRP, Bottom View

TRP Left Side View



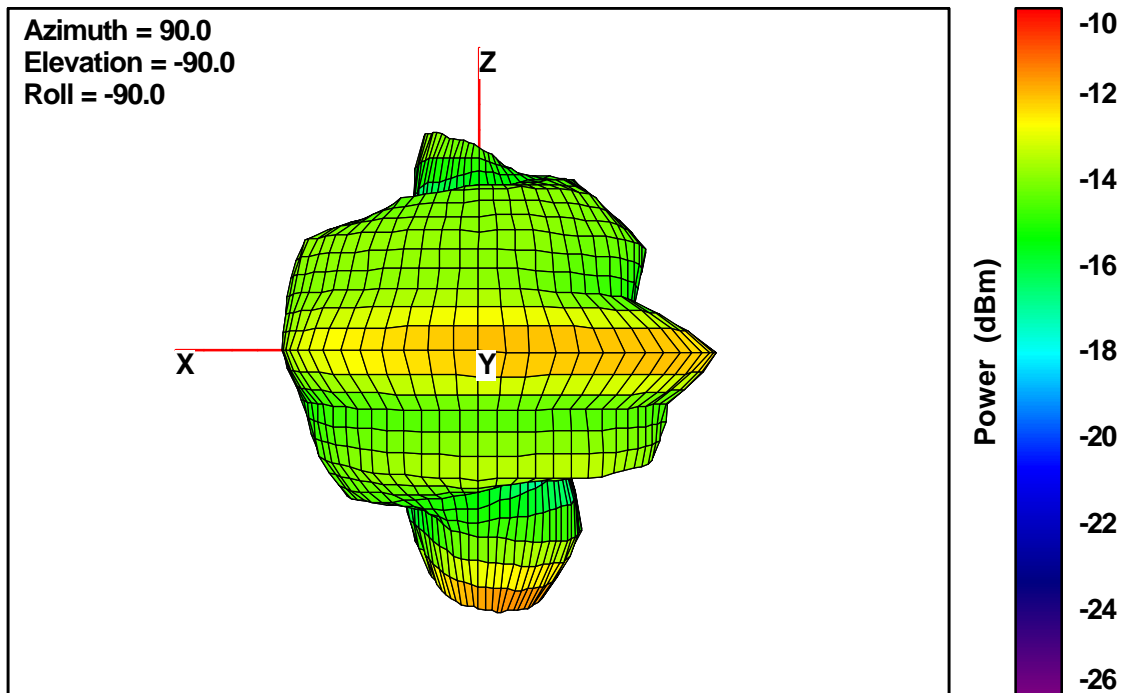
Antenna Pattern TRP, Left Side View

TRP Right Side View



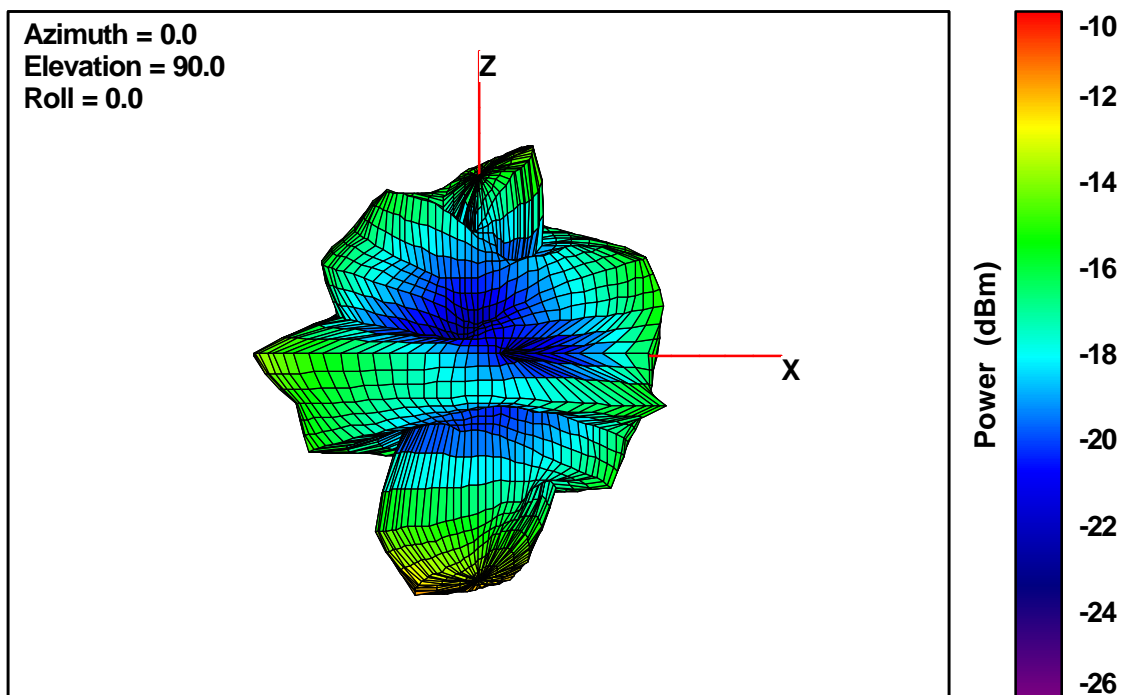
Antenna Pattern TRP, Right View

TRP Front Face View



Antenna Pattern TRP, Front Face View

TRP Back Face View



Antenna Pattern TRP, Back Face View