EXISTING BASE STATION

| | | | | |
|---|---|---|---|---|
| Az 210.0 | 500.000 W | 6.20 mi | 83.93 dBu |
| Az 210.0 | 500.000 W | 6.40 mi | 83.65 dBu |
| Az 210.0 | 500.000 W | 6.60 mi | 73.31 dBu |
| Az 210.0 | 500.000 W | 6.80 mi | 75.91 dBu |
| Az 210.0 | 500.000 W | 7.00 mi | 77.16 dBu |
| Az 210.0 | 500.000 W | 7.20 mi | 54.04 dBu |
| Az 210.0 | 500.000 W | 7.40 mi | 78.65 dBu |
| Az 210.0 | 500.000 W | 7.60 mi | 45.75 dBu |
| Az 210.0 | 500.000 W | 7.80 mi | 74.48 dBu |
| Az 210.0 | 500.000 W | 8.00 mi | 79.50 dBu |
| Az 210.0 | 500.000 W | 8.20 mi | 64.31 dBu |
| Az 210.0 | 500.000 W | 8.40 mi | 80.02 dBu |
| Az 210.0 | 500.000 W | 8.60 mi | 76.41 dBu |
| Az 210.0 | 500.000 W | 8.80 mi | 55.93 dBu |
| Az 210.0 | 500.000 W | 9.00 mi | 50.31 dBu |
| Az 210.0 | 500.000 W | 9.20 mi | 66.43 dBu |
| Az 210.0 | 500.000 W | 9.40 mi | 75.09 dBu |
| Az 210.0 | 500.000 W | 9.60 mi | 80.13 dBu |
| Az 210.0 | 500.000 W | 9.80 mi | 68.67 dBu |
| Az 210.0 | 500.000 W | 10.00 mi | 77.58 dBu |
| Az 210.0 | 500.000 W | 10.20 mi | 76.60 dBu |
| Az 210.0 | 500.000 W | 10.40 mi | 76.90 dBu |
| Az 210.0 | 500.000 W | 10.60 mi | 79.20 dBu |
| Az 210.0 | 500.000 W | 10.80 mi | 79.11 dBu |
| Az 210.0 | 500.000 W | 11.00 mi | 68.49 dBu |
| Az 210.0 | 500.000 W | 11.20 mi | 66.00 dBu |
| Az 210.0 | 500.000 W | 11.40 mi | 63.04 dBu |
| Az 210.0 | 500.000 W | 11.60 mi | 67.25 dBu |
| Az 210.0 | 500.000 W | 11.80 mi | 39.88 dBu |
| Az 210.0 | 500.000 W | 12.00 mi | 45.85 dBu |
| Az 210.0 | 500.000 W | 12.20 mi | 42.46 dBu |
| Az 210.0 | 500.000 W | 12.40 mi | 11.19 dBu |

INTERPOLATED DISTANCE TO CONTOURS - BULLINGTON OBSTRUCTION METHOD
COMPUTED FIELD VALUES - BULLINGTON OBSTRUCTION METHOD

Transmitter Latitude: 38:55:13.0N
Longitude: 77:13:48.0W
Transmitter center of radiation: 700.0 ft MSL (190 ft AGL)
Frequency: 854.000 MHz
Power: 500.000 W
Non-directional antenna

Receiver antenna: 9.0 ft AGL

72 radials, from .20 mi to 30.00 mi in .20 mi steps until 18 dBu Contour.
Path loss based on peak attenuation at inflection points and 1.333 earth curvature.

| | | | | |
|---|---|---|---|---|
| Az 215.0 | 500.000 W | .20 mi | 113.76 | dBu |
| Az 215.0 | 500.000 W | .40 mi | 107.74 | dBu |
| Az 215.0 | 500.000 W | .60 mi | 104.21 | dBu |
| Az 215.0 | 500.000 W | .80 mi | 101.71 | dBu |
| Az 215.0 | 500.000 W | 1.00 mi | 99.78 | dBu |
| Az 215.0 | 500.000 W | 1.20 mi | 98.19 | dBu |
| Az 215.0 | 500.000 W | 1.40 mi | 96.85 | dBu |
| Az 215.0 | 500.000 W | 1.60 mi | 95.69 | dBu |
| Az 215.0 | 500.000 W | 1.80 mi | 94.67 | dBu |
| Az 215.0 | 500.000 W | 2.00 mi | 93.76 | dBu |

EXISTING BASE STATION

| | | | |
|---|---|---|---|
| Az 215.0 | 500.000 W | 6.20 mi | 83.93 dBu |
| Az 215.0 | 500.000 W | 6.40 mi | 83.65 dBu |
| Az 215.0 | 500.000 W | 6.60 mi | 83.39 dBu |
| Az 215.0 | 500.000 W | 6.80 mi | 83.13 dBu |
| Az 215.0 | 500.000 W | 7.00 mi | 82.19 dBu |
| Az 215.0 | 500.000 W | 7.20 mi | 81.87 dBu |
| Az 215.0 | 500.000 W | 7.40 mi | 70.56 dBu |
| Az 215.0 | 500.000 W | 7.60 mi | 69.45 dBu |
| Az 215.0 | 500.000 W | 7.80 mi | 81.19 dBu |
| Az 215.0 | 500.000 W | 8.00 mi | 67.23 dBu |
| Az 215.0 | 500.000 W | 8.20 mi | 61.26 dBu |
| Az 215.0 | 500.000 W | 8.40 mi | 64.26 dBu |
| Az 215.0 | 500.000 W | 8.60 mi | 64.73 dBu |
| Az 215.0 | 500.000 W | 8.80 mi | 65.60 dBu |

EXISTING BASE STATION

INTERPOLATED DISTANCE TO CONTOURS - BULLINGTON OBSTRUCTION METHOD
COMPUTED FIELD VALUES - BULLINGTON OBSTRUCTION METHOD

Transmitter Latitude: 38:55:13.0N
Longitude: 77:13:48.0W
Transmitter center of radiation: 700.0 ft MSL (190 ft AGL)
Frequency: 854.000 MHz
Power: 500.000 W
Non-directional antenna

Receiver antenna: 9.0 ft AGL

72 radials, from .20 mi to 30.00 mi in .20 mi steps until
18 dBu Contour.
Path loss based on peak attenuation at inflection points

EXISTING BASE STATION

| | | | | | |
|---|---|---|---|---|---|
| Az | 220.0 | 500.000 | W | 6.20 mi | 83.93 dBu |
| Az | 220.0 | 500.000 | W | 6.40 mi | 83.65 dBu |
| Az | 220.0 | 500.000 | W | 6.60 mi | 83.38 dBu |
| Az | 220.0 | 500.000 | W | 6.80 mi | 83.13 dBu |
| Az | 220.0 | 500.000 | W | 7.00 mi | 82.87 dBu |
| Az | 220.0 | 500.000 | W | 7.20 mi | 75.33 dBu |
| Az | 220.0 | 500.000 | W | 7.40 mi | 72.83 dBu |
| Az | 220.0 | 500.000 | W | 7.60 mi | 74.15 dBu |
| Az | 220.0 | 500.000 | W | 7.80 mi | 67.18 dBu |
| Az | 220.0 | 500.000 | W | 8.00 mi | 61.10 dBu |
| Az | 220.0 | 500.000 | W | 8.20 mi | 61.81 dBu |
| Az | 220.0 | 500.000 | W | 8.40 mi | 63.43 dBu |
| Az | 220.0 | 500.000 | W | 8.60 mi | 65.54 dBu |
| Az | 220.0 | 500.000 | W | 8.80 mi | 41.99 dBu |
| Az | 220.0 | 500.000 | W | 9.00 mi | 55.79 dBu |
| Az | 220.0 | 500.000 | W | 9.20 mi | 63.71 dBu |
| Az | 220.0 | 500.000 | W | 9.40 mi | 71.00 dBu |
| Az | 220.0 | 500.000 | W | 9.60 mi | 59.08 dBu |
| Az | 220.0 | 500.000 | W | 9.80 mi | 46.21 dBu |
| Az | 220.0 | 500.000 | W | 10.00 mi | 63.86 dBu |
| Az | 220.0 | 500.000 | W | 10.20 mi | 71.20 dBu |
| Az | 220.0 | 500.000 | W | 10.40 mi | 36.17 dBu |
| Az | 220.0 | 500.000 | W | 10.60 mi | 21.00 dBu |
| Az | 220.0 | 500.000 | W | 10.80 mi | 34.16 dBu |
| Az | 220.0 | 500.000 | W | 11.00 mi | 58.88 dBu |
| Az | 220.0 | 500.000 | W | 11.20 mi | 57.21 dBu |
| Az | 220.0 | 500.000 | W | 11.40 mi | 66.70 dBu |
| Az | 220.0 | 500.000 | W | 11.60 mi | 46.39 dBu |
| Az | 220.0 | 500.000 | W | 11.80 mi | 54.32 dBu |
| Az | 220.0 | 500.000 | W | 12.00 mi | 33.27 dBu |
| Az | 220.0 | 500.000 | W | 12.20 mi | 22.50 dBu |
| Az | 220.0 | 500.000 | W | 12.40 mi | 28.35 dBu |
| Az | 220.0 | 500.000 | W | 12.60 mi | 61.39 dBu |
| Az | 220.0 | 500.000 | W | 12.80 mi | 64.35 dBu |
| Az | 220.0 | 500.000 | W | 13.00 mi | 54.20 dBu |
| Az | 220.0 | 500.000 | W | 13.20 mi | 57.25 dBu |
| Az | 220.0 | 500.000 | W | 13.40 mi | 55.86 dBu |
| Az | 220.0 | 500.000 | W | 13.60 mi | 68.48 dBu |
| Az | 220.0 | 500.000 | W | 13.80 mi | 26.05 dBu |
| Az | 220.0 | 500.000 | W | 14.00 mi | 32.99 dBu |
| Az | 220.0 | 500.000 | W | 14.20 mi | 59.67 dBu |
| Az | 220.0 | 500.000 | W | 14.40 mi | 37.72 dBu |
| Az | 220.0 | 500.000 | W | 14.60 mi | 30.75 dBu |
| Az | 220.0 | 500.000 | W | 14.80 mi | -24.75 dBu |

INTERPOLATED DISTANCE TO CONTOURS - BULLINGTON OBSTRUCTION METHOD
COMPUTED FIELD VALUES - BULLINGTON OBSTRUCTION METHOD

Transmitter Latitude: 38:55:13.0N
Longitude: 77:13:48.0W
Transmitter center of radiation: 700.0 ft MSL (190 ft AGL)
Frequency: 854.000 MHz
Power: 500.000 W
Non-directional antenna

Receiver antenna: 9.0 ft AGL

72 radials, from .20 mi to 30.00 mi in .20 mi steps until 18 dBu Contour.
Path loss based on peak attenuation at inflection points and 1.333 earth curvature.

| | | | | |
|---|---|---|---|---|
| Az 225.0 | 500.000 W | .20 mi | 113.76 | dBu |
| Az 225.0 | 500.000 W | .40 mi | 107.74 | dBu |
| Az 225.0 | 500.000 W | .60 mi | 104.21 | dBu |
| Az 225.0 | 500.000 W | .80 mi | 101.71 | dBu |
| Az 225.0 | 500.000 W | 1.00 mi | 99.78 | dBu |
| Az 225.0 | 500.000 W | 1.20 mi | 98.19 | dBu |
| Az 225.0 | 500.000 W | 1.40 mi | 96.85 | dBu |
| Az 225.0 | 500.000 W | 1.60 mi | 95.69 | dBu |
| Az 225.0 | 500.000 W | 1.80 mi | 94.67 | dBu |
| Az 225.0 | 500.000 W | 2.00 mi | 93.76 | dBu |
| Az 225.0 | 500.000 W | 2.20 mi | 92.93 | dBu |
| Az 225.0 | 500.000 W | 2.40 mi | 92.17 | dBu |
| Az 225.0 | 500.000 W | 2.60 mi | 91.48 | dBu |
| Az 225.0 | 500.000 W | 2.80 mi | 90.83 | dBu |
| Az 225.0 | 500.000 W | 3.00 mi | 84.23 | dBu |
| Az 225.0 | 500.000 W | 3.20 mi | 86.08 | dBu |
| Az 225.0 | 500.000 W | 3.40 mi | 89.15 | dBu |
| Az 225.0 | 500.000 W | 3.60 mi | 88.65 | dBu |
| Az 225.0 | 500.000 W | 3.80 mi | 88.18 | dBu |
| Az 225.0 | 500.000 W | 4.00 mi | 87.74 | dBu |
| Az 225.0 | 500.000 W | 4.20 mi | 87.05 | dBu |
| Az 225.0 | 500.000 W | 4.40 mi | 86.23 | dBu |
| Az 225.0 | 500.000 W | 4.60 mi | 86.52 | dBu |
| Az 225.0 | 500.000 W | 4.80 mi | 86.15 | dBu |
| Az 225.0 | 500.000 W | 5.00 mi | 85.80 | dBu |
| Az 225.0 | 500.000 W | 5.20 mi | 85.46 | dBu |
| Az 225.0 | 500.000 W | 5.40 mi | 85.13 | dBu |
| Az 225.0 | 500.000 W | 5.60 mi | 84.81 | dBu |
| Az 225.0 | 500.000 W | 5.80 mi | 84.51 | dBu |
| Az 225.0 | 500.000 W | 6.00 mi | 84.21 | dBu |

EXISTING BASE STATION

| | | | | |
|---|---|---|---|---|
| Az 225.0 | 500.000 W | 6.20 mi | 83.93 dBu |
| Az 225.0 | 500.000 W | 6.40 mi | 83.65 dBu |
| Az 225.0 | 500.000 W | 6.60 mi | 83.38 dBu |
| Az 225.0 | 500.000 W | 6.80 mi | 83.02 dBu |
| Az 225.0 | 500.000 W | 7.00 mi | 82.87 dBu |
| Az 225.0 | 500.000 W | 7.20 mi | 80.54 dBu |
| Az 225.0 | 500.000 W | 7.40 mi | 78.74 dBu |
| Az 225.0 | 500.000 W | 7.60 mi | 73.15 dBu |
| Az 225.0 | 500.000 W | 7.80 mi | 73.40 dBu |
| Az 225.0 | 500.000 W | 8.00 mi | 81.55 dBu |
| Az 225.0 | 500.000 W | 8.20 mi | 81.50 dBu |
| Az 225.0 | 500.000 W | 8.40 mi | 80.46 dBu |
| Az 225.0 | 500.000 W | 8.60 mi | 74.52 dBu |
| Az 225.0 | 500.000 W | 8.80 mi | 79.79 dBu |
| Az 225.0 | 500.000 W | 9.00 mi | 77.86 dBu |
| Az 225.0 | 500.000 W | 9.20 mi | 78.16 dBu |
| Az 225.0 | 500.000 W | 9.40 mi | 76.96 dBu |
| Az 225.0 | 500.000 W | 9.60 mi | 79.26 dBu |
| Az 225.0 | 500.000 W | 9.80 mi | 73.34 dBu |
| Az 225.0 | 500.000 W | 10.00 mi | 57.44 dBu |
| Az 225.0 | 500.000 W | 10.20 mi | 47.06 dBu |
| Az 225.0 | 500.000 W | 10.40 mi | 52.39 dBu |
| Az 225.0 | 500.000 W | 10.60 mi | 55.79 dBu |
| Az 225.0 | 500.000 W | 10.80 mi | 63.79 dBu |
| Az 225.0 | 500.000 W | 11.00 mi | 56.65 dBu |
| Az 225.0 | 500.000 W | 11.20 mi | 54.58 dBu |
| Az 225.0 | 500.000 W | 11.40 mi | 51.47 dBu |
| Az 225.0 | 500.000 W | 11.60 mi | 54.42 dBu |
| Az 225.0 | 500.000 W | 11.80 mi | 54.71 dBu |
| Az 225.0 | 500.000 W | 12.00 mi | 48.16 dBu |
| Az 225.0 | 500.000 W | 12.20 mi | 49.48 dBu |
| Az 225.0 | 500.000 W | 12.40 mi | 63.09 dBu |
| Az 225.0 | 500.000 W | 12.60 mi | 70.64 dBu |
| Az 225.0 | 500.000 W | 12.80 mi | 75.22 dBu |
| Az 225.0 | 500.000 W | 13.00 mi | 47.74 dBu |
| Az 225.0 | 500.000 W | 13.20 mi | 48.37 dBu |
| Az 225.0 | 500.000 W | 13.40 mi | 26.93 dBu |
| Az 225.0 | 500.000 W | 13.60 mi | 26.87 dBu |
| Az 225.0 | 500.000 W | 13.80 mi | 1.01 dBu |

INTERPOLATED DISTANCE TO CONTOURS - BULLINGTON OBSTRUCTION METHOD
COMPUTED FIELD VALUES - BULLINGTON OBSTRUCTION METHOD

Transmitter Latitude: 38:55:13.0N
Longitude: 77:13:48.0W
Transmitter center of radiation: 700.0 ft MSL (190 ft AGL)
Frequency: 854.000 MHz
Power: 500.000 W
Non-directional antenna

Receiver antenna: 9.0 ft AGL

72 radials, from .20 mi to 30.00 mi in .20 mi steps until 18 dBu Contour.
Path loss based on peak attenuation at inflection points and 1.333 earth curvature.

| | | | | |
|---|---|---|---|---|
| Az 230.0 | 500.000 W | .20 mi | 113.76 | dBu |
| Az 230.0 | 500.000 W | .40 mi | 107.74 | dBu |
| Az 230.0 | 500.000 W | .60 mi | 104.21 | dBu |
| Az 230.0 | 500.000 W | .80 mi | 101.71 | dBu |
| Az 230.0 | 500.000 W | 1.00 mi | 99.78 | dBu |
| Az 230.0 | 500.000 W | 1.20 mi | 98.19 | dBu |
| Az 230.0 | 500.000 W | 1.40 mi | 96.85 | dBu |
| Az 230.0 | 500.000 W | 1.60 mi | 95.69 | dBu |
| Az 230.0 | 500.000 W | 1.80 mi | 94.67 | dBu |
| Az 230.0 | 500.000 W | 2.00 mi | 93.76 | dBu |
| Az 230.0 | 500.000 W | 2.20 mi | 92.93 | dBu |
| Az 230.0 | 500.000 W | 2.40 mi | 92.17 | dBu |
| Az 230.0 | 500.000 W | 2.60 mi | 91.48 | dBu |
| Az 230.0 | 500.000 W | 2.80 mi | 90.83 | dBu |
| Az 230.0 | 500.000 W | 3.00 mi | 86.05 | dBu |
| Az 230.0 | 500.000 W | 3.20 mi | 89.67 | dBu |
| Az 230.0 | 500.000 W | 3.40 mi | 89.15 | dBu |
| Az 230.0 | 500.000 W | 3.60 mi | 88.65 | dBu |
| Az 230.0 | 500.000 W | 3.80 mi | 88.18 | dBu |
| Az 230.0 | 500.000 W | 4.00 mi | 87.74 | dBu |
| Az 230.0 | 500.000 W | 4.20 mi | 87.31 | dBu |
| Az 230.0 | 500.000 W | 4.40 mi | 82.52 | dBu |
| Az 230.0 | 500.000 W | 4.60 mi | 84.99 | dBu |
| Az 230.0 | 500.000 W | 4.80 mi | 80.42 | dBu |
| Az 230.0 | 500.000 W | 5.00 mi | 85.80 | dBu |
| Az 230.0 | 500.000 W | 5.20 mi | 85.46 | dBu |
| Az 230.0 | 500.000 W | 5.40 mi | 85.13 | dBu |
| Az 230.0 | 500.000 W | 5.60 mi | 84.81 | dBu |
| Az 230.0 | 500.000 W | 5.80 mi | 84.51 | dBu |
| Az 230.0 | 500.000 W | 6.00 mi | 84.21 | dBu |

EXISTING BASE STATION

| | | | | |
|---|---|---|---|---|
| Az | 230.0 | 500.000 W | 6.20 mi | 83.93 dBu |
| Az | 230.0 | 500.000 W | 6.40 mi | 83.65 dBu |
| Az | 230.0 | 500.000 W | 6.60 mi | 83.39 dBu |
| Az | 230.0 | 500.000 W | 6.80 mi | 82.52 dBu |
| Az | 230.0 | 500.000 W | 7.00 mi | 82.19 dBu |
| Az | 230.0 | 500.000 W | 7.20 mi | 82.45 dBu |
| Az | 230.0 | 500.000 W | 7.40 mi | 82.39 dBu |
| Az | 230.0 | 500.000 W | 7.60 mi | 77.53 dBu |
| Az | 230.0 | 500.000 W | 7.80 mi | 74.75 dBu |
| Az | 230.0 | 500.000 W | 8.00 mi | 75.76 dBu |
| Az | 230.0 | 500.000 W | 8.20 mi | 76.39 dBu |
| Az | 230.0 | 500.000 W | 8.40 mi | 73.87 dBu |
| Az | 230.0 | 500.000 W | 8.60 mi | 64.70 dBu |
| Az | 230.0 | 500.000 W | 8.80 mi | 59.30 dBu |
| Az | 230.0 | 500.000 W | 9.00 mi | 61.84 dBu |
| Az | 230.0 | 500.000 W | 9.20 mi | 64.00 dBu |
| Az | 230.0 | 500.000 W | 9.40 mi | 58.62 dBu |
| Az | 230.0 | 500.000 W | 9.60 mi | 57.77 dBu |
| Az | 230.0 | 500.000 W | 9.80 mi | 61.07 dBu |
| Az | 230.0 | 500.000 W | 10.00 mi | 57.96 dBu |
| Az | 230.0 | 500.000 W | 10.20 mi | 63.79 dBu |
| Az | 230.0 | 500.000 W | 10.40 mi | 69.13 dBu |
| Az | 230.0 | 500.000 W | 10.60 mi | 68.50 dBu |
| Az | 230.0 | 500.000 W | 10.80 mi | 67.07 dBu |
| Az | 230.0 | 500.000 W | 11.00 mi | 67.71 dBu |
| Az | 230.0 | 500.000 W | 11.20 mi | 68.73 dBu |
| Az | 230.0 | 500.000 W | 11.40 mi | 48.95 dBu |
| Az | 230.0 | 500.000 W | 11.60 mi | 43.91 dBu |
| Az | 230.0 | 500.000 W | 11.80 mi | 38.58 dBu |
| Az | 230.0 | 500.000 W | 12.00 mi | 37.40 dBu |

EXISTING BASE STATION

EXHIBIT 1

EXISTING BASE STATION

| | | | | |
|---|---|---|---|---|
| Az | 235.0 | 500.000 W | 6.20 mi | 80.82 dBu |
| Az | 235.0 | 500.000 W | 6.40 mi | 72.29 dBu |
| Az | 235.0 | 500.000 W | 6.60 mi | 71.15 dBu |
| Az | 235.0 | 500.000 W | 6.80 mi | 76.39 dBu |
| Az | 235.0 | 500.000 W | 7.00 mi | 75.25 dBu |
| Az | 235.0 | 500.000 W | 7.20 mi | 78.16 dBu |
| Az | 235.0 | 500.000 W | 7.40 mi | 78.82 dBu |
| Az | 235.0 | 500.000 W | 7.60 mi | 75.01 dBu |
| Az | 235.0 | 500.000 W | 7.80 mi | 78.03 dBu |
| Az | 235.0 | 500.000 W | 8.00 mi | 80.46 dBu |
| Az | 235.0 | 500.000 W | 8.20 mi | 81.47 dBu |
| Az | 235.0 | 500.000 W | 8.40 mi | 81.29 dBu |
| Az | 235.0 | 500.000 W | 8.60 mi | 76.27 dBu |
| Az | 235.0 | 500.000 W | 8.80 mi | 71.51 dBu |
| Az | 235.0 | 500.000 W | 9.00 mi | 69.11 dBu |
| Az | 235.0 | 500.000 W | 9.20 mi | 73.58 dBu |
| Az | 235.0 | 500.000 W | 9.40 mi | 78.27 dBu |
| Az | 235.0 | 500.000 W | 9.60 mi | 73.83 dBu |
| Az | 235.0 | 500.000 W | 9.80 mi | 77.91 dBu |
| Az | 235.0 | 500.000 W | 10.00 mi | 66.51 dBu |
| Az | 235.0 | 500.000 W | 10.20 mi | 52.83 dBu |
| Az | 235.0 | 500.000 W | 10.40 mi | 56.10 dBu |
| Az | 235.0 | 500.000 W | 10.60 mi | 58.37 dBu |
| Az | 235.0 | 500.000 W | 10.80 mi | 56.45 dBu |
| Az | 235.0 | 500.000 W | 11.00 mi | 59.83 dBu |
| Az | 235.0 | 500.000 W | 11.20 mi | 35.51 dBu |
| Az | 235.0 | 500.000 W | 11.40 mi | 42.59 dBu |
| Az | 235.0 | 500.000 W | 11.60 mi | 37.13 dBu |
| Az | 235.0 | 500.000 W | 11.80 mi | 38.68 dBu |
| Az | 235.0 | 500.000 W | 12.00 mi | 41.23 dBu |
| Az | 235.0 | 500.000 W | 12.20 mi | 42.89 dBu |
| Az | 235.0 | 500.000 W | 12.40 mi | 32.23 dBu |
| Az | 235.0 | 500.000 W | 12.60 mi | 16.26 dBu |

INTERPOLATED DISTANCE TO CONTOURS - BULLINGTON OBSTRUCTION METHOD
COMPUTED FIELD VALUES - BULLINGTON OBSTRUCTION METHOD

Transmitter Latitude: 38:55:13.0N
Longitude: 77:13:48.0W
Transmitter center of radiation: 700.0 ft MSL (190 ft AGL)
Frequency: 854.000 MHz
Power: 500.000 W
Non-directional antenna

Receiver antenna: 9.0 ft AGL

72 radials, from .20 mi to 30.00 mi in .20 mi steps until 18 dBu Contour.
Path loss based on peak attenuation at inflection points and 1.333 earth curvature.

| | | | | |
|---|---|---|---|---|
| Az 240.0 | 500.000 W | .20 mi | 113.76 | dBu |
| Az 240.0 | 500.000 W | .40 mi | 107.74 | dBu |
| Az 240.0 | 500.000 W | .60 mi | 104.21 | dBu |
| Az 240.0 | 500.000 W | .80 mi | 101.71 | dBu |
| Az 240.0 | 500.000 W | 1.00 mi | 99.78 | dBu |
| Az 240.0 | 500.000 W | 1.20 mi | 98.19 | dBu |
| Az 240.0 | 500.000 W | 1.40 mi | 96.85 | dBu |
| Az 240.0 | 500.000 W | 1.60 mi | 95.69 | dBu |
| Az 240.0 | 500.000 W | 1.80 mi | 94.67 | dBu |
| Az 240.0 | 500.000 W | 2.00 mi | 93.76 | dBu |
| Az 240.0 | 500.000 W | 2.20 mi | 90.09 | dBu |
| Az 240.0 | 500.000 W | 2.40 mi | 92.17 | dBu |
| Az 240.0 | 500.000 W | 2.60 mi | 91.48 | dBu |
| Az 240.0 | 500.000 W | 2.80 mi | 90.83 | dBu |
| Az 240.0 | 500.000 W | 3.00 mi | 90.23 | dBu |
| Az 240.0 | 500.000 W | 3.20 mi | 89.67 | dBu |
| Az 240.0 | 500.000 W | 3.40 mi | 89.15 | dBu |
| Az 240.0 | 500.000 W | 3.60 mi | 88.65 | dBu |
| Az 240.0 | 500.000 W | 3.80 mi | 86.57 | dBu |
| Az 240.0 | 500.000 W | 4.00 mi | 79.12 | dBu |
| Az 240.0 | 500.000 W | 4.20 mi | 84.23 | dBu |
| Az 240.0 | 500.000 W | 4.40 mi | 86.91 | dBu |
| Az 240.0 | 500.000 W | 4.60 mi | 83.92 | dBu |
| Az 240.0 | 500.000 W | 4.80 mi | 82.98 | dBu |
| Az 240.0 | 500.000 W | 5.00 mi | 85.80 | dBu |
| Az 240.0 | 500.000 W | 5.20 mi | 83.04 | dBu |
| Az 240.0 | 500.000 W | 5.40 mi | 83.27 | dBu |
| Az 240.0 | 500.000 W | 5.60 mi | 84.11 | dBu |
| Az 240.0 | 500.000 W | 5.80 mi | 84.51 | dBu |
| Az 240.0 | 500.000 W | 6.00 mi | 84.08 | dBu |

EXISTING BASE STATION

| | | | |
|---|---|---|---|
| Az 240.0 | 500.000 W | 6.20 mi | 83.93 dBu |
| Az 240.0 | 500.000 W | 6.40 mi | 80.61 dBu |
| Az 240.0 | 500.000 W | 6.60 mi | 69.34 dBu |
| Az 240.0 | 500.000 W | 6.80 mi | 79.63 dBu |
| Az 240.0 | 500.000 W | 7.00 mi | 71.27 dBu |
| Az 240.0 | 500.000 W | 7.20 mi | 70.54 dBu |
| Az 240.0 | 500.000 W | 7.40 mi | 76.06 dBu |
| Az 240.0 | 500.000 W | 7.60 mi | 82.16 dBu |
| Az 240.0 | 500.000 W | 7.80 mi | 81.93 dBu |
| Az 240.0 | 500.000 W | 8.00 mi | 81.71 dBu |
| Az 240.0 | 500.000 W | 8.20 mi | 81.36 dBu |
| Az 240.0 | 500.000 W | 8.40 mi | 80.14 dBu |

INTERPOLATED DISTANCE TO CONTOURS - BULLINGTON OBSTRUCTION METHOD
COMPUTED FIELD VALUES - BULLINGTON OBSTRUCTION METHOD

Transmitter Latitude: 38:55:13.0N
Longitude: 77:13:48.0W
Transmitter center of radiation: 700.0 ft MSL (190 ft AGL)
Frequency: 854.000 MHz
Power: 500.000 W
Non-directional antenna

Receiver antenna: 9.0 ft AGL

72 radials, from .20 mi to 30.00 mi in .20 mi steps until 18 dBu Contour.
Path loss based on peak attenuation at inflection points and 1.333 earth curvature.

| | | | | |
|---|---|---|---|---|
| Az 245.0 | 500.000 W | .20 mi | 113.76 | dBu |
| Az 245.0 | 500.000 W | .40 mi | 107.74 | dBu |
| Az 245.0 | 500.000 W | .60 mi | 104.21 | dBu |
| Az 245.0 | 500.000 W | .80 mi | 101.71 | dBu |
| Az 245.0 | 500.000 W | 1.00 mi | 99.78 | dBu |
| Az 245.0 | 500.000 W | 1.20 mi | 98.19 | dBu |
| Az 245.0 | 500.000 W | 1.40 mi | 96.85 | dBu |
| Az 245.0 | 500.000 W | 1.60 mi | 95.69 | dBu |
| Az 245.0 | 500.000 W | 1.80 mi | 94.67 | dBu |
| Az 245.0 | 500.000 W | 2.00 mi | 93.76 | dBu |
| Az 245.0 | 500.000 W | 2.20 mi | 85.15 | dBu |
| Az 245.0 | 500.000 W | 2.40 mi | 92.17 | dBu |
| Az 245.0 | 500.000 W | 2.60 mi | 91.48 | dBu |
| Az 245.0 | 500.000 W | 2.80 mi | 90.83 | dBu |
| Az 245.0 | 500.000 W | 3.00 mi | 90.23 | dBu |

EXISTING BASE STATION

| | | | | |
|---|---|---|---|---|
| Az 245.0 | 500.000 W | 6.20 mi | 83.93 dBu |
| Az 245.0 | 500.000 W | 6.40 mi | 83.65 dBu |
| Az 245.0 | 500.000 W | 6.60 mi | 83.39 dBu |
| Az 245.0 | 500.000 W | 6.80 mi | 83.13 dBu |
| Az 245.0 | 500.000 W | 7.00 mi | 78.17 dBu |
| Az 245.0 | 500.000 W | 7.20 mi | 82.63 dBu |
| Az 245.0 | 500.000 W | 7.40 mi | 79.35 dBu |
| Az 245.0 | 500.000 W | 7.60 mi | 81.87 dBu |
| Az 245.0 | 500.000 W | 7.80 mi | 81.93 dBu |
| Az 245.0 | 500.000 W | 8.00 mi | 81.71 dBu |
| Az 245.0 | 500.000 W | 8.20 mi | 80.41 dBu |
| Az 245.0 | 500.000 W | 8.40 mi | 79.84 dBu |
| Az 245.0 | 500.000 W | 8.60 mi | 70.84 dBu |
| Az 245.0 | 500.000 W | 8.80 mi | 67.93 dBu |
| Az 245.0 | 500.000 W | 9.00 mi | 69.71 dBu |
| Az 245.0 | 500.000 W | 9.20 mi | 71.21 dBu |
| Az 245.0 | 500.000 W | 9.40 mi | 71.39 dBu |
| Az 245.0 | 500.000 W | 9.60 mi | 70.89 dBu |
| Az 245.0 | 500.000 W | 9.80 mi | 72.05 dBu |
| Az 245.0 | 500.000 W | 10.00 mi | 69.66 dBu |
| Az 245.0 | 500.000 W | 10.20 mi | 60.94 dBu |
| Az 245.0 | 500.000 W | 10.40 mi | 56.95 dBu |
| Az 245.0 | 500.000 W | 10.60 mi | 58.14 dBu |
| Az 245.0 | 500.000 W | 10.80 mi | 49.10 dBu |
| Az 245.0 | 500.000 W | 11.00 mi | 52.22 dBu |
| Az 245.0 | 500.000 W | 11.20 mi | 63.25 dBu |
| Az 245.0 | 500.000 W | 11.40 mi | 64.70 dBu |
| Az 245.0 | 500.000 W | 11.60 mi | 64.75 dBu |
| Az 245.0 | 500.000 W | 11.80 mi | 51.55 dBu |
| Az 245.0 | 500.000 W | 12.00 mi | 39.56 dBu |
| Az 245.0 | 500.000 W | 12.20 mi | 39.35 dBu |
| Az 245.0 | 500.000 W | 12.40 mi | 40.05 dBu |
| Az 245.0 | 500.000 W | 12.60 mi | 20.74 dBu |
| Az 245.0 | 500.000 W | 12.80 mi | 16.15 dBu |

INTERPOLATED DISTANCE TO CONTOURS - BULLINGTON OBSTRUCTION METHOD
COMPUTED FIELD VALUES - BULLINGTON OBSTRUCTION METHOD

Transmitter Latitude: 38:55:13.0N
Longitude: 77:13:48.0W
Transmitter center of radiation: 700.0 ft MSL (190 ft AGL)
Frequency: 854.000 MHz
Power: 500.000 W
Non-directional antenna

Receiver antenna: 9.0 ft AGL

72 radials, from .20 mi to 30.00 mi in .20 mi steps until 18 dBu Contour.
Path loss based on peak attenuation at inflection points and 1.333 earth curvature.

| | | | | |
|---|---|---|---|---|
| Az 250.0 | 500.000 W | .20 mi | 113.76 | dBu |
| Az 250.0 | 500.000 W | .40 mi | 107.74 | dBu |
| Az 250.0 | 500.000 W | .60 mi | 104.21 | dBu |
| Az 250.0 | 500.000 W | .80 mi | 101.71 | dBu |
| Az 250.0 | 500.000 W | 1.00 mi | 99.78 | dBu |
| Az 250.0 | 500.000 W | 1.20 mi | 98.19 | dBu |
| Az 250.0 | 500.000 W | 1.40 mi | 96.85 | dBu |
| Az 250.0 | 500.000 W | 1.60 mi | 95.69 | dBu |
| Az 250.0 | 500.000 W | 1.80 mi | 94.67 | dBu |
| Az 250.0 | 500.000 W | 2.00 mi | 93.76 | dBu |
| Az 250.0 | 500.000 W | 2.20 mi | 87.21 | dBu |
| Az 250.0 | 500.000 W | 2.40 mi | 92.17 | dBu |
| Az 250.0 | 500.000 W | 2.60 mi | 91.48 | dBu |
| Az 250.0 | 500.000 W | 2.80 mi | 90.83 | dBu |
| Az 250.0 | 500.000 W | 3.00 mi | 90.23 | dBu |
| Az 250.0 | 500.000 W | 3.20 mi | 77.83 | dBu |
| Az 250.0 | 500.000 W | 3.40 mi | 89.15 | dBu |
| Az 250.0 | 500.000 W | 3.60 mi | 88.65 | dBu |
| Az 250.0 | 500.000 W | 3.80 mi | 85.36 | dBu |
| Az 250.0 | 500.000 W | 4.00 mi | 78.61 | dBu |
| Az 250.0 | 500.000 W | 4.20 mi | 81.63 | dBu |
| Az 250.0 | 500.000 W | 4.40 mi | 74.76 | dBu |

EXISTING BASE STATION

| | | | | |
|---|---|---|---|---|
| Az 250.0 | 500.000 W | 6.20 mi | 83.93 dBu |
| Az 250.0 | 500.000 W | 6.40 mi | 83.65 dBu |
| Az 250.0 | 500.000 W | 6.60 mi | 83.39 dBu |
| Az 250.0 | 500.000 W | 6.80 mi | 83.13 dBu |
| Az 250.0 | 500.000 W | 7.00 mi | 82.87 dBu |
| Az 250.0 | 500.000 W | 7.20 mi | 82.63 dBu |
| Az 250.0 | 500.000 W | 7.40 mi | 81.83 dBu |
| Az 250.0 | 500.000 W | 7.60 mi | 81.26 dBu |
| Az 250.0 | 500.000 W | 7.80 mi | 80.91 dBu |
| Az 250.0 | 500.000 W | 8.00 mi | 80.60 dBu |
| Az 250.0 | 500.000 W | 8.20 mi | 79.86 dBu |
| Az 250.0 | 500.000 W | 8.40 mi | 77.45 dBu |
| Az 250.0 | 500.000 W | 8.60 mi | 79.23 dBu |
| Az 250.0 | 500.000 W | 8.80 mi | 67.14 dBu |
| Az 250.0 | 500.000 W | 9.00 mi | 66.91 dBu |
| Az 250.0 | 500.000 W | 9.20 mi | 66.40 dBu |
| Az 250.0 | 500.000 W | 9.40 mi | 66.04 dBu |
| Az 250.0 | 500.000 W | 9.60 mi | 66.27 dBu |
| Az 250.0 | 500.000 W | 9.80 mi | 66.53 dBu |
| Az 250.0 | 500.000 W | 10.00 mi | 56.53 dBu |
| Az 250.0 | 500.000 W | 10.20 mi | 57.00 dBu |
| Az 250.0 | 500.000 W | 10.40 mi | 53.21 dBu |
| Az 250.0 | 500.000 W | 10.60 mi | 59.73 dBu |
| Az 250.0 | 500.000 W | 10.80 mi | 63.19 dBu |
| Az 250.0 | 500.000 W | 11.00 mi | 60.83 dBu |
| Az 250.0 | 500.000 W | 11.20 mi | 60.49 dBu |
| Az 250.0 | 500.000 W | 11.40 mi | 52.33 dBu |
| Az 250.0 | 500.000 W | 11.60 mi | 44.58 dBu |
| Az 250.0 | 500.000 W | 11.80 mi | 42.40 dBu |
| Az 250.0 | 500.000 W | 12.00 mi | 45.33 dBu |
| Az 250.0 | 500.000 W | 12.20 mi | 47.58 dBu |
| Az 250.0 | 500.000 W | 12.40 mi | 45.20 dBu |
| Az 250.0 | 500.000 W | 12.60 mi | 29.26 dBu |
| Az 250.0 | 500.000 W | 12.80 mi | 25.02 dBu |
| Az 250.0 | 500.000 W | 13.00 mi | 29.19 dBu |
| Az 250.0 | 500.000 W | 13.20 mi | 32.40 dBu |
| Az 250.0 | 500.000 W | 13.40 mi | 31.50 dBu |
| Az 250.0 | 500.000 W | 13.60 mi | 36.14 dBu |
| Az 250.0 | 500.000 W | 13.80 mi | 37.18 dBu |
| Az 250.0 | 500.000 W | 14.00 mi | 39.00 dBu |
| Az 250.0 | 500.000 W | 14.20 mi | 40.79 dBu |
| Az 250.0 | 500.000 W | 14.40 mi | 46.50 dBu |
| Az 250.0 | 500.000 W | 14.60 mi | 53.18 dBu |
| Az 250.0 | 500.000 W | 14.80 mi | 58.13 dBu |
| Az 250.0 | 500.000 W | 15.00 mi | 48.04 dBu |
| Az 250.0 | 500.000 W | 15.20 mi | 35.05 dBu |
| Az 250.0 | 500.000 W | 15.40 mi | 22.22 dBu |
| Az 250.0 | 500.000 W | 15.60 mi | 20.50 dBu |
| Az 250.0 | 500.000 W | 15.80 mi | 23.03 dBu |
| Az 250.0 | 500.000 W | 16.00 mi | 25.38 dBu |
| Az 250.0 | 500.000 W | 16.20 mi | 25.94 dBu |

EXISTING BASE STATION

| | | | | |
|---|---|---|---|---|
| Az 250.0 | 500.000 W | 16.40 mi | 27.84 dBu |
| Az 250.0 | 500.000 W | 16.60 mi | 29.55 dBu |
| Az 250.0 | 500.000 W | 16.80 mi | 31.10 dBu |
| Az 250.0 | 500.000 W | 17.00 mi | 32.67 dBu |
| Az 250.0 | 500.000 W | 17.20 mi | 35.11 dBu |
| Az 250.0 | 500.000 W | 17.40 mi | 48.94 dBu |
| Az 250.0 | 500.000 W | 17.60 mi | 52.76 dBu |
| Az 250.0 | 500.000 W | 17.80 mi | 51.68 dBu |
| Az 250.0 | 500.000 W | 18.00 mi | 51.86 dBu |
| Az 250.0 | 500.000 W | 18.20 mi | 52.40 dBu |
| Az 250.0 | 500.000 W | 18.40 mi | 58.64 dBu |
| Az 250.0 | 500.000 W | 18.60 mi | 65.13 dBu |
| Az 250.0 | 500.000 W | 18.80 mi | 63.79 dBu |
| Az 250.0 | 500.000 W | 19.00 mi | 63.30 dBu |
| Az 250.0 | 500.000 W | 19.20 mi | 63.20 dBu |
| Az 250.0 | 500.000 W | 19.40 mi | 63.18 dBu |
| Az 250.0 | 500.000 W | 19.60 mi | 63.27 dBu |
| Az 250.0 | 500.000 W | 19.80 mi | 63.51 dBu |
| Az 250.0 | 500.000 W | 20.00 mi | 63.43 dBu |
| Az 250.0 | 500.000 W | 20.20 mi | 63.49 dBu |
| Az 250.0 | 500.000 W | 20.40 mi | 63.50 dBu |
| Az 250.0 | 500.000 W | 20.60 mi | 63.51 dBu |
| Az 250.0 | 500.000 W | 20.80 mi | 63.56 dBu |
| Az 250.0 | 500.000 W | 21.00 mi | 63.63 dBu |
| Az 250.0 | 500.000 W | 21.20 mi | 60.44 dBu |
| Az 250.0 | 500.000 W | 21.40 mi | 63.66 dBu |
| Az 250.0 | 500.000 W | 21.60 mi | 63.66 dBu |
| Az 250.0 | 500.000 W | 21.80 mi | 63.64 dBu |
| Az 250.0 | 500.000 W | 22.00 mi | 63.61 dBu |
| Az 250.0 | 500.000 W | 22.20 mi | 63.58 dBu |
| Az 250.0 | 500.000 W | 22.40 mi | 63.08 dBu |
| Az 250.0 | 500.000 W | 22.60 mi | 69.52 dBu |
| Az 250.0 | 500.000 W | 22.80 mi | 66.83 dBu |
| Az 250.0 | 500.000 W | 23.00 mi | 66.29 dBu |
| Az 250.0 | 500.000 W | 23.20 mi | 65.56 dBu |
| Az 250.0 | 500.000 W | 23.40 mi | 65.83 dBu |
| Az 250.0 | 500.000 W | 23.60 mi | 71.67 dBu |
| Az 250.0 | 500.000 W | 23.80 mi | 67.53 dBu |

| | | | | |
|---|---|---|---|---|
| Az 250.0 | 500.000 W | 26.60 mi | 42.92 dBu |
| Az 250.0 | 500.000 W | 26.80 mi | 65.21 dBu |
| Az 250.0 | 500.000 W | 27.00 mi | 71.15 dBu |
| Az 250.0 | 500.000 W | 27.20 mi | 71.09 dBu |
| Az 250.0 | 500.000 W | 27.40 mi | 69.32 dBu |
| Az 250.0 | 500.000 W | 27.60 mi | 56.06 dBu |
| Az 250.0 | 500.000 W | 27.80 mi | 55.51 dBu |
| Az 250.0 | 500.000 W | 28.00 mi | 65.62 dBu |
| Az 250.0 | 500.000 W | 28.20 mi | 70.77 dBu |
| Az 250.0 | 500.000 W | 28.40 mi | 70.71 dBu |
| Az 250.0 | 500.000 W | 28.60 mi | 70.65 dBu |
| Az 250.0 | 500.000 W | 28.80 mi | 36.75 dBu |
| Az 250.0 | 500.000 W | 29.00 mi | 28.25 dBu |
| Az 250.0 | 500.000 W | 29.20 mi | 37.25 dBu |
| Az 250.0 | 500.000 W | 29.40 mi | 47.57 dBu |
| Az 250.0 | 500.000 W | 29.60 mi | 23.21 dBu |
| Az 250.0 | 500.000 W | 29.80 mi | 27.50 dBu |
| Az 250.0 | 500.000 W | 30.00 mi | 17.72 dBu |

INTERPOLATED DISTANCE TO CONTOURS - BULLINGTON OBSTRUCTION METHOD
COMPUTED FIELD VALUES - BULLINGTON OBSTRUCTION METHOD

Transmitter Latitude: 38:55:13.0N
Longitude: 77:13:48.0W
Transmitter center of radiation: 700.0 ft MSL (190 ft AGL)
Frequency: 854.000 MHz
Power: 500.000 W
Non-directional antenna

Receiver antenna: 9.0 ft AGL

72 radials, from .20 mi to 30.00 mi in .20 mi steps until 18 dBu Contour.
Path loss based on peak attenuation at inflection points and 1.333 earth curvature.

| | | | | |
|---|---|---|---|---|
| Az 255.0 | 500.000 W | .20 mi | 113.76 | dBu |
| Az 255.0 | 500.000 W | .40 mi | 107.74 | dBu |
| Az 255.0 | 500.000 W | .60 mi | 104.21 | dBu |
| Az 255.0 | 500.000 W | .80 mi | 101.71 | dBu |
| Az 255.0 | 500.000 W | 1.00 mi | 99.78 | dBu |
| Az 255.0 | 500.000 W | 1.20 mi | 98.19 | dBu |
| Az 255.0 | 500.000 W | 1.40 mi | 96.85 | dBu |
| Az 255.0 | 500.000 W | 1.60 mi | 95.69 | dBu |
| Az 255.0 | 500.000 W | 1.80 mi | 94.67 | dBu |
| Az 255.0 | 500.000 W | 2.00 mi | 93.76 | dBu |
| Az 255.0 | 500.000 W | 2.20 mi | 84.37 | dBu |
| Az 255.0 | 500.000 W | 2.40 mi | 89.74 | dBu |
| Az 255.0 | 500.000 W | 2.60 mi | 91.48 | dBu |
| Az 255.0 | 500.000 W | 2.80 mi | 90.83 | dBu |
| Az 255.0 | 500.000 W | 3.00 mi | 90.23 | dBu |
| Az 255.0 | 500.000 W | 3.20 mi | 77.01 | dBu |
| Az 255.0 | 500.000 W | 3.40 mi | 89.15 | dBu |
| Az 255.0 | 500.000 W | 3.60 mi | 88.65 | dBu |
| Az 255.0 | 500.000 W | 3.80 mi | 87.50 | dBu |
| Az 255.0 | 500.000 W | 4.00 mi | 82.64 | dBu |
| Az 255.0 | 500.000 W | 4.20 mi | 81.60 | dBu |
| Az 255.0 | 500.000 W | 4.40 mi | 83.95 | dBu |
| Az 255.0 | 500.000 W | 4.60 mi | 85.37 | dBu |
| Az 255.0 | 500.000 W | 4.80 mi | 65.28 | dBu |
| Az 255.0 | 500.000 W | 5.00 mi | 75.06 | dBu |

EXISTING BASE STATION

| | | | | |
|---|---|---|---|---|
| Az | 255.0 | 500.000 W | 6.20 mi | 79.81 dBu |
| Az | 255.0 | 500.000 W | 6.40 mi | 83.31 dBu |
| Az | 255.0 | 500.000 W | 6.60 mi | 68.28 dBu |
| Az | 255.0 | 500.000 W | 6.80 mi | 83.13 dBu |
| Az | 255.0 | 500.000 W | 7.00 mi | 82.87 dBu |
| Az | 255.0 | 500.000 W | 7.20 mi | 80.95 dBu |
| Az | 255.0 | 500.000 W | 7.40 mi | 82.39 dBu |
| Az | 255.0 | 500.000 W | 7.60 mi | 82.15 dBu |
| Az | 255.0 | 500.000 W | 7.80 mi | 81.93 dBu |
| Az | 255.0 | 500.000 W | 8.00 mi | 81.71 dBu |
| Az | 255.0 | 500.000 W | 8.20 mi | 81.32 dBu |
| Az | 255.0 | 500.000 W | 8.40 mi | 78.35 dBu |
| Az | 255.0 | 500.000 W | 8.60 mi | 65.38 dBu |
| Az | 255.0 | 500.000 W | 8.80 mi | 68.29 dBu |
| Az | 255.0 | 500.000 W | 9.00 mi | 53.00 dBu |
| Az | 255.0 | 500.000 W | 9.20 mi | 52.58 dBu |
| Az | 255.0 | 500.000 W | 9.40 mi | 55.22 dBu |
| Az | 255.0 | 500.000 W | 9.60 mi | 58.00 dBu |
| Az | 255.0 | 500.000 W | 9.80 mi | 59.40 dBu |
| Az | 255.0 | 500.000 W | 10.00 mi | 62.46 dBu |
| Az | 255.0 | 500.000 W | 10.20 mi | 62.49 dBu |
| Az | 255.0 | 500.000 W | 10.40 mi | 61.70 dBu |
| Az | 255.0 | 500.000 W | 10.60 mi | 45.21 dBu |
| Az | 255.0 | 500.000 W | 10.80 mi | 45.03 dBu |
| Az | 255.0 | 500.000 W | 11.00 mi | 48.57 dBu |
| Az | 255.0 | 500.000 W | 11.20 mi | 64.20 dBu |
| Az | 255.0 | 500.000 W | 11.40 mi | 38.74 dBu |
| Az | 255.0 | 500.000 W | 11.60 mi | 44.27 dBu |
| Az | 255.0 | 500.000 W | 11.80 mi | 47.62 dBu |
| Az | 255.0 | 500.000 W | 12.00 mi | 49.08 dBu |
| Az | 255.0 | 500.000 W | 12.20 mi | 21.14 dBu |
| Az | 255.0 | 500.000 W | 12.40 mi | 23.15 dBu |
| Az | 255.0 | 500.000 W | 12.60 mi | 28.08 dBu |
| Az | 255.0 | 500.000 W | 12.80 mi | 31.86 dBu |
| Az | 255.0 | 500.000 W | 13.00 mi | 33.93 dBu |
| Az | 255.0 | 500.000 W | 13.20 mi | 36.53 dBu |
| Az | 255.0 | 500.000 W | 13.40 mi | 38.80 dBu |
| Az | 255.0 | 500.000 W | 13.60 mi | 40.81 dBu |
| Az | 255.0 | 500.000 W | 13.80 mi | 42.61 dBu |
| Az | 255.0 | 500.000 W | 14.00 mi | 44.24 dBu |
| Az | 255.0 | 500.000 W | 14.20 mi | 45.72 dBu |
| Az | 255.0 | 500.000 W | 14.40 mi | 50.98 dBu |
| Az | 255.0 | 500.000 W | 14.60 mi | 54.49 dBu |
| Az | 255.0 | 500.000 W | 14.80 mi | 55.06 dBu |
| Az | 255.0 | 500.000 W | 15.00 mi | 61.28 dBu |
| Az | 255.0 | 500.000 W | 15.20 mi | 47.62 dBu |
| Az | 255.0 | 500.000 W | 15.40 mi | 40.76 dBu |
| Az | 255.0 | 500.000 W | 15.60 mi | 40.52 dBu |
| Az | 255.0 | 500.000 W | 15.80 mi | 41.98 dBu |
| Az | 255.0 | 500.000 W | 16.00 mi | 22.07 dBu |
| Az | 255.0 | 500.000 W | 16.20 mi | 27.39 dBu |

EXISTING BASE STATION

| | | | |
|---|---|---|---|
| Az 255.0 | 500.000 W | 16.40 mi | 45.39 dBu |
| Az 255.0 | 500.000 W | 16.60 mi | 53.58 dBu |
| Az 255.0 | 500.000 W | 16.80 mi | 53.37 dBu |
| Az 255.0 | 500.000 W | 17.00 mi | 47.25 dBu |
| Az 255.0 | 500.000 W | 17.20 mi | 39.77 dBu |
| Az 255.0 | 500.000 W | 17.40 mi | 55.04 dBu |
| Az 255.0 | 500.000 W | 17.60 mi | 48.86 dBu |
| Az 255.0 | 500.000 W | 17.80 mi | 14.29 dBu |

INTERPOLATED DISTANCE TO CONTOURS - BULLINGTON OBSTRUCTION METHOD
COMPUTED FIELD VALUES - BULLINGTON OBSTRUCTION METHOD

Transmitter Latitude: 38:55:13.0N
Longitude: 77:13:48.0W
Transmitter center of radiation: 700.0 ft MSL (190 ft AGL)
Frequency: 854.000 MHz
Power: 500.000 W
Non-directional antenna

Receiver antenna: 9.0 ft AGL

72 radials, from .20 mi to 30.00 mi in .20 mi steps until 18 dBu Contour.
Path loss based on peak attenuation at inflection points and 1.333 earth curvature.

| | | | | |
|---|---|---|---|---|
| Az 260.0 | 500.000 W | .20 mi | 113.76 | dBu |
| Az 260.0 | 500.000 W | .40 mi | 107.74 | dBu |
| Az 260.0 | 500.000 W | .60 mi | 104.21 | dBu |
| Az 260.0 | 500.000 W | .80 mi | 101.71 | dBu |
| Az 260.0 | 500.000 W | 1.00 mi | 99.78 | dBu |
| Az 260.0 | 500.000 W | 1.20 mi | 98.19 | dBu |
| Az 260.0 | 500.000 W | 1.40 mi | 96.85 | dBu |
| Az 260.0 | 500.000 W | 1.60 mi | 92.48 | dBu |
| Az 260.0 | 500.000 W | 1.80 mi | 94.67 | dBu |
| Az 260.0 | 500.000 W | 2.00 mi | 93.76 | dBu |
| Az 260.0 | 500.000 W | 2.20 mi | 87.60 | dBu |
| Az 260.0 | 500.000 W | 2.40 mi | 89.54 | dBu |
| Az 260.0 | 500.000 W | 2.60 mi | 91.48 | dBu |
| Az 260.0 | 500.000 W | 2.80 mi | 90.35 | dBu |
| Az 260.0 | 500.000 W | 3.00 mi | 90.23 | dBu |
| Az 260.0 | 500.000 W | 3.20 mi | 79.96 | dBu |
| Az 260.0 | 500.000 W | 3.40 mi | 89.15 | dBu |
| Az 260.0 | 500.000 W | 3.60 mi | 88.65 | dBu |
| Az 260.0 | 500.000 W | 3.80 mi | 85.99 | dBu |
| Az 260.0 | 500.000 W | 4.00 mi | 87.74 | dBu |
| Az 260.0 | 500.000 W | 4.20 mi | 87.31 | dBu |
| Az 260.0 | 500.000 W | 4.40 mi | 85.67 | dBu |
| Az 260.0 | 500.000 W | 4.60 mi | 86.52 | dBu |
| Az 260.0 | 500.000 W | 4.80 mi | 77.83 | dBu |
| Az 260.0 | 500.000 W | 5.00 mi | 85.80 | dBu |
| Az 260.0 | 500.000 W | 5.20 mi | 85.46 | dBu |
| Az 260.0 | 500.000 W | 5.40 mi | 85.13 | dBu |
| Az 260.0 | 500.000 W | 5.60 mi | 84.81 | dBu |
| Az 260.0 | 500.000 W | 5.80 mi | 84.51 | dBu |
| Az 260.0 | 500.000 W | 6.00 mi | 84.21 | dBu |

EXISTING BASE STATION

| | | | | |
|---|---|---|---|---|
| Az | 260.0 | 500.000 W | 6.20 mi | 69.24 dBu |
| Az | 260.0 | 500.000 W | 6.40 mi | 83.65 dBu |
| Az | 260.0 | 500.000 W | 6.60 mi | 83.39 dBu |
| Az | 260.0 | 500.000 W | 6.80 mi | 83.13 dBu |
| Az | 260.0 | 500.000 W | 7.00 mi | 81.36 dBu |
| Az | 260.0 | 500.000 W | 7.20 mi | 82.63 dBu |
| Az | 260.0 | 500.000 W | 7.40 mi | 82.39 dBu |
| Az | 260.0 | 500.000 W | 7.60 mi | 82.16 dBu |
| Az | 260.0 | 500.000 W | 7.80 mi | 81.93 dBu |
| Az | 260.0 | 500.000 W | 8.00 mi | 81.71 dBu |
| Az | 260.0 | 500.000 W | 8.20 mi | 81.50 dBu |
| Az | 260.0 | 500.000 W | 8.40 mi | 73.71 dBu |
| Az | 260.0 | 500.000 W | 8.60 mi | 68.05 dBu |
| Az | 260.0 | 500.000 W | 8.80 mi | 66.36 dBu |
| Az | 260.0 | 500.000 W | 9.00 mi | 64.48 dBu |
| Az | 260.0 | 500.000 W | 9.20 mi | 64.93 dBu |
| Az | 260.0 | 500.000 W | 9.40 mi | 66.42 dBu |
| Az | 260.0 | 500.000 W | 9.60 mi | 64.70 dBu |
| Az | 260.0 | 500.000 W | 9.80 mi | 57.32 dBu |
| Az | 260.0 | 500.000 W | 10.00 mi | 53.90 dBu |
| Az | 260.0 | 500.000 W | 10.20 mi | 56.37 dBu |
| Az | 260.0 | 500.000 W | 10.40 mi | 56.38 dBu |
| Az | 260.0 | 500.000 W | 10.60 mi | 57.41 dBu |
| Az | 260.0 | 500.000 W | 10.80 mi | 59.19 dBu |
| Az | 260.0 | 500.000 W | 11.00 mi | 60.86 dBu |
| Az | 260.0 | 500.000 W | 11.20 mi | 62.03 dBu |
| Az | 260.0 | 500.000 W | 11.40 mi | 62.90 dBu |
| Az | 260.0 | 500.000 W | 11.60 mi | 63.25 dBu |
| Az | 260.0 | 500.000 W | 11.80 mi | 57.66 dBu |
| Az | 260.0 | 500.000 W | 12.00 mi | 56.16 dBu |
| Az | 260.0 | 500.000 W | 12.20 mi | 57.09 dBu |
| Az | 260.0 | 500.000 W | 12.40 mi | 58.32 dBu |
| Az | 260.0 | 500.000 W | 12.60 mi | 67.35 dBu |
| Az | 260.0 | 500.000 W | 12.80 mi | 66.11 dBu |
| Az | 260.0 | 500.000 W | 13.00 mi | 40.78 dBu |
| Az | 260.0 | 500.000 W | 13.20 mi | 44.54 dBu |
| Az | 260.0 | 500.000 W | 13.40 mi | 50.24 dBu |
| Az | 260.0 | 500.000 W | 13.60 mi | 55.32 dBu |
| Az | 260.0 | 500.000 W | 13.80 mi | 59.63 dBu |
| Az | 260.0 | 500.000 W | 14.00 mi | 54.39 dBu |
| Az | 260.0 | 500.000 W | 14.20 mi | 56.09 dBu |
| Az | 260.0 | 500.000 W | 14.40 mi | 51.25 dBu |
| Az | 260.0 | 500.000 W | 14.60 mi | 48.17 dBu |
| Az | 260.0 | 500.000 W | 14.80 mi | 50.40 dBu |
| Az | 260.0 | 500.000 W | 15.00 mi | 52.28 dBu |
| Az | 260.0 | 500.000 W | 15.20 mi | 55.63 dBu |
| Az | 260.0 | 500.000 W | 15.40 mi | 64.28 dBu |
| Az | 260.0 | 500.000 W | 15.60 mi | 70.89 dBu |
| Az | 260.0 | 500.000 W | 15.80 mi | 69.20 dBu |
| Az | 260.0 | 500.000 W | 16.00 mi | 68.79 dBu |
| Az | 260.0 | 500.000 W | 16.20 mi | 67.84 dBu |

EXISTING BASE STATION

| | | | | |
|---|---|---|---|---|
| Az 260.0 | 500.000 W | 16.40 mi | 71.61 dBu |
| Az 260.0 | 500.000 W | 16.60 mi | 72.75 dBu |
| Az 260.0 | 500.000 W | 16.80 mi | 67.78 dBu |
| Az 260.0 | 500.000 W | 17.00 mi | 69.05 dBu |
| Az 260.0 | 500.000 W | 17.20 mi | 52.39 dBu |
| Az 260.0 | 500.000 W | 17.40 mi | 46.01 dBu |
| Az 260.0 | 500.000 W | 17.60 mi | 45.86 dBu |
| Az 260.0 | 500.000 W | 17.80 mi | 49.87 dBu |
| Az 260.0 | 500.000 W | 18.00 mi | 42.71 dBu |
| Az 260.0 | 500.000 W | 18.20 mi | 51.94 dBu |
| Az 260.0 | 500.000 W | 18.40 mi | 50.84 dBu |
| Az 260.0 | 500.000 W | 18.60 mi | 51.07 dBu |
| Az 260.0 | 500.000 W | 18.80 mi | 58.30 dBu |
| Az 260.0 | 500.000 W | 19.00 mi | 58.80 dBu |
| Az 260.0 | 500.000 W | 19.20 mi | 44.90 dBu |
| Az 260.0 | 500.000 W | 19.40 mi | 54.00 dBu |
| Az 260.0 | 500.000 W | 19.60 mi | 65.58 dBu |
| Az 260.0 | 500.000 W | 19.80 mi | 42.97 dBu |
| Az 260.0 | 500.000 W | 20.00 mi | 66.18 dBu |
| Az 260.0 | 500.000 W | 20.20 mi | 65.18 dBu |
| Az 260.0 | 500.000 W | 20.40 mi | 62.75 dBu |
| Az 260.0 | 500.000 W | 20.60 mi | 71.53 dBu |
| Az 260.0 | 500.000 W | 20.80 mi | 73.13 dBu |
| Az 260.0 | 500.000 W | 21.00 mi | 70.40 dBu |
| Az 260.0 | 500.000 W | 21.20 mi | 69.96 dBu |
| Az 260.0 | 500.000 W | 21.40 mi | 68.94 dBu |
| Az 260.0 | 500.000 W | 21.60 mi | 64.88 dBu |
| Az 260.0 | 500.000 W | 21.80 mi | 64.39 dBu |
| Az 260.0 | 500.000 W | 22.00 mi | 64.06 dBu |
| Az 260.0 | 500.000 W | 22.20 mi | 63.81 dBu |
| Az 260.0 | 500.000 W | 22.40 mi | 63.59 dBu |
| Az 260.0 | 500.000 W | 22.60 mi | 64.44 dBu |
| Az 260.0 | 500.000 W | 22.80 mi | 68.03 dBu |
| Az 260.0 | 500.000 W | 23.00 mi | 72.54 dBu |
| Az 260.0 | 500.000 W | 23.20 mi | 69.50 dBu |
| Az 260.0 | 500.000 W | 23.40 mi | 68.35 dBu |
| Az 260.0 | 500.000 W | 23.60 mi | 67.71 dBu |
| Az 260.0 | 500.000 W | 23.80 mi | 66.64 dBu |
| Az 260.0 | 500.000 W | 24.00 mi | 72.17 dBu |
| Az 260.0 | 500.000 W | 24.20 mi | 72.10 dBu |
| Az 260.0 | 500.000 W | 24.40 mi | 72.03 dBu |
| Az 260.0 | 500.000 W | 24.60 mi | 68.89 dBu |