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	45.0	500.000	W	6.20	mi	83.93 dBu
Az	45.0	500.000	W	6.40	mi	83.65 dBu
Az	45.0	500.000	W	6.60	mi	83.39 dBu
Az	45.0	500.000	W	6.80	mi	83.13 dBu
Az	45.0	500.000	W	7.00	mi	82.87 dBu
Az	45.0	500.000	W	7.20	mi	82.63 dBu
Az	45.0	500.000	W	7.40	mi	68.92 dBu
Az	45.0	500.000	W	7.60	mi	72.63 dBu
Az	45.0	500.000	W	7.80	mi	78.89 dBu
Az	45.0	500.000	W	8.00	mi	79.91 dBu
Az	45.0	500.000	W	8.20	mi	81.50 dBu
Az	45.0	500.000	W	8.40	mi	81.29 dBu
Az	45.0	500.000	W	8.60	mi	81.09 dBu
Az	45.0	500.000	W	8.80	mi	80.89 dBu
Az	45.0	500.000	W	9.00	mi	76.90 dBu
Az	45.0	500.000	W	9.20	mi	76.02 dBu
Az	45.0	500.000	W	9.40	mi	64.18 dBu
Az	45.0	500.000	W	9.60	mi	62.47 dBu
Az	45.0	500.000	W	9.80	mi	64.39 dBu
Az	45.0	500.000	W	10.00	mi	66.45 dBu
Az	45.0	500.000	W	10.20	mi	67.89 dBu
Az	45.0	500.000	W	10.40	mi	59.32 dBu
Az	45.0	500.000	W	10.60	mi	61.22 dBu
Az	45.0	500.000	W	10.80	mi	62.90 dBu
Az	45.0	500.000	W	11.00	mi	64.09 dBu
Az	45.0	500.000	W	11.20	mi	65.30 dBu
Az	45.0	500.000	W	11.40	mi	75.69 dBu
Az	45.0	500.000	W	11.60	mi	78.49 dBu
Az	45.0	500.000	W	11.80	mi	74.42 dBu
Az	45.0	500.000	W	12.00	mi	78.19 dBu
Az	45.0	500.000	W	12.20	mi	78.05 dBu
Az	45.0	500.000	W	12.40	mi	77.91 dBu
Az	45.0	500.000	W	12.60	mi	72.99 dBu
Az	45.0	500.000	W	12.80	mi	77.63 dBu
Az	45.0	500.000	W	13.00	mi	68.70 dBu
Az	45.0	500.000	W	13.20	mi	75.93 dBu
Az	45.0	500.000	W	13.40	mi	74.56 dBu
Az	45.0	500.000	W	13.60	mi	77.11 dBu
Az	45.0	500.000	W	13.80	mi	74.94 dBu
Az	45.0	500.000	W	14.00	mi	62.87 dBu
Az	45.0	500.000	W	14.20	mi	60.75 dBu
Az	45.0	500.000	W	14.40	mi	37.74 dBu
Az	45.0	500.000	W	14.60	mi	57.76 dBu
Az	45.0	500.000	W	14.80	mi	44.57 dBu
Az	45.0	500.000	W	15.00	mi	23.26 dBu
Az	45.0	500.000	W	15.20	mi	30.90 dBu
Az	45.0	500.000	W	15.40	mi	28.75 dBu
Az	45.0	500.000	W	15.60	mi	26.93 dBu
Az	45.0	500.000	W	15.80	mi	38.36 dBu
Az	45.0	500.000	W	16.00	mi	51.57 dBu
Az	45.0	500.000	W	16.20	mi	54.68 dBu

EXISTING BASE STATION

Az	45.0	500.000	W	16.40	mi	56.66 dBu
Az	45.0	500.000	W	16.60	mi	61.31 dBu
Az	45.0	500.000	W	16.80	mi	69.09 dBu
Az	45.0	500.000	W	17.00	mi	73.41 dBu
Az	45.0	500.000	W	17.20	mi	71.31 dBu
Az	45.0	500.000	W	17.40	mi	70.41 dBu
Az	45.0	500.000	W	17.60	mi	74.44 dBu
Az	45.0	500.000	W	17.80	mi	74.77 dBu
Az	45.0	500.000	W	18.00	mi	73.04 dBu
Az	45.0	500.000	W	18.20	mi	71.76 dBu
Az	45.0	500.000	W	18.40	mi	63.80 dBu
Az	45.0	500.000	W	18.60	mi	57.40 dBu
Az	45.0	500.000	W	18.80	mi	64.51 dBu
Az	45.0	500.000	W	19.00	mi	69.80 dBu
Az	45.0	500.000	W	19.20	mi	65.77 dBu
Az	45.0	500.000	W	19.40	mi	66.86 dBu
Az	45.0	500.000	W	19.60	mi	61.07 dBu
Az	45.0	500.000	W	19.80	mi	51.91 dBu
Az	45.0	500.000	W	20.00	mi	46.24 dBu
Az	45.0	500.000	W	20.20	mi	46.49 dBu
Az	45.0	500.000	W	20.40	mi	27.60 dBu
Az	45.0	500.000	W	20.60	mi	-.40 dBu

EXISTING BASE STATION

EXHIBIT 1

EXISTING BASE STATION

Az	55.0	500.000 W	.20 mi	113.76	dBu
Az	55.0	500.000 W	.40 mi	107.74	dBu
Az	55.0	500.000 W	.60 mi	104.21	dBu
Az	55.0	500.000 W	.80 mi	101.71	dBu
Az	55.0	500.000 W	1.00 mi	99.78	dBu
Az	55.0	500.000 W	1.20 mi	98.19	dBu
Az	55.0	500.000 W	1.40 mi	96.85	dBu
Az	55.0	500.000 W	1.60 mi	95.69	dBu
Az	55.0	500.000 W	1.80 mi	94.67	dBu
Az	55.0	500.000 W	2.00 mi	93.76	dBu
Az	55.0	500.000 W	2.20 mi	86.27	dBu
Az	55.0	500.000 W	2.40 mi	92.17	dBu
Az	55.0	500.000 W	2.60 mi	91.48	dBu

EXISTING BASE STATION

Az	55.0	500.000 W	10.40 mi	18.01 dBu
Az	55.0	500.000 W	10.60 mi	9.51 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	60.0	500.000 W	.20 mi	113.76 dBu
Az	60.0	500.000 W	.40 mi	107.74 dBu
Az	60.0	500.000 W	.60 mi	104.21 dBu
Az	60.0	500.000 W	.80 mi	101.71 dBu
Az	60.0	500.000 W	1.00 mi	99.78 dBu
Az	60.0	500.000 W	1.20 mi	98.19 dBu
Az	60.0	500.000 W	1.40 mi	96.85 dBu
Az	60.0	500.000 W	1.60 mi	95.69 dBu
Az	60.0	500.000 W	1.80 mi	94.67 dBu
Az	60.0	500.000 W	2.00 mi	93.76 dBu
Az	60.0	500.000 W	2.20 mi	85.73 dBu
Az	60.0	500.000 W	2.40 mi	92.17 dBu
Az	60.0	500.000 W	2.60 mi	89.24 dBu
Az	60.0	500.000 W	2.80 mi	90.72 dBu
Az	60.0	500.000 W	3.00 mi	90.23 dBu
Az	60.0	500.000 W	3.20 mi	89.67 dBu
Az	60.0	500.000 W	3.40 mi	89.15 dBu
Az	60.0	500.000 W	3.60 mi	88.65 dBu
Az	60.0	500.000 W	3.80 mi	88.18 dBu
Az	60.0	500.000 W	4.00 mi	76.51 dBu
Az	60.0	500.000 W	4.20 mi	77.54 dBu

EXISTING BASE STATION

Az	60.0	500.000 W	6.20 mi	83.93 dBu
Az	60.0	500.000 W	6.40 mi	83.65 dBu
Az	60.0	500.000 W	6.60 mi	83.39 dBu
Az	60.0	500.000 W	6.80 mi	83.13 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

EXISTING BASE STATION

Az	65.0	500.000	W	6.20	mi	83.93 dBu
Az	65.0	500.000	W	6.40	mi	83.65 dBu
Az	65.0	500.000	W	6.60	mi	71.31 dBu
Az	65.0	500.000	W	6.80	mi	71.32 dBu
Az	65.0	500.000	W	7.00	mi	77.13 dBu
Az	65.0	500.000	W	7.20	mi	82.63 dBu
Az	65.0	500.000	W	7.40	mi	67.01 dBu
Az	65.0	500.000	W	7.60	mi	76.17 dBu
Az	65.0	500.000	W	7.80	mi	81.93 dBu
Az	65.0	500.000	W	8.00	mi	81.71 dBu
Az	65.0	500.000	W	8.20	mi	81.50 dBu
Az	65.0	500.000	W	8.40	mi	81.29 dBu
Az	65.0	500.000	W	8.60	mi	77.66 dBu
Az	65.0	500.000	W	8.80	mi	80.89 dBu
Az	65.0	500.000	W	9.00	mi	80.69 dBu
Az	65.0	500.000	W	9.20	mi	79.42 dBu
Az	65.0	500.000	W	9.40	mi	79.38 dBu
Az	65.0	500.000	W	9.60	mi	70.33 dBu
Az	65.0	500.000	W	9.80	mi	67.48 dBu
Az	65.0	500.000	W	10.00	mi	60.07 dBu
Az	65.0	500.000	W	10.20	mi	65.06 dBu
Az	65.0	500.000	W	10.40	mi	62.84 dBu
Az	65.0	500.000	W	10.60	mi	42.24 dBu
Az	65.0	500.000	W	10.80	mi	41.22 dBu
Az	65.0	500.000	W	11.00	mi	54.07 dBu
Az	65.0	500.000	W	11.20	mi	42.98 dBu
Az	65.0	500.000	W	11.40	mi	66.42 dBu
Az	65.0	500.000	W	11.60	mi	72.57 dBu
Az	65.0	500.000	W	11.80	mi	78.34 dBu
Az	65.0	500.000	W	12.00	mi	76.77 dBu
Az	65.0	500.000	W	12.20	mi	77.97 dBu
Az	65.0	500.000	W	12.40	mi	65.18 dBu
Az	65.0	500.000	W	12.60	mi	62.45 dBu
Az	65.0	500.000	W	12.80	mi	61.83 dBu
Az	65.0	500.000	W	13.00	mi	33.63 dBu
Az	65.0	500.000	W	13.20	mi	56.98 dBu
Az	65.0	500.000	W	13.40	mi	65.45 dBu
Az	65.0	500.000	W	13.60	mi	68.72 dBu
Az	65.0	500.000	W	13.80	mi	61.86 dBu
Az	65.0	500.000	W	14.00	mi	42.91 dBu
Az	65.0	500.000	W	14.20	mi	24.75 dBu
Az	65.0	500.000	W	14.40	mi	28.92 dBu
Az	65.0	500.000	W	14.60	mi	44.09 dBu
Az	65.0	500.000	W	14.80	mi	53.02 dBu
Az	65.0	500.000	W	15.00	mi	59.09 dBu
Az	65.0	500.000	W	15.20	mi	37.01 dBu
Az	65.0	500.000	W	15.40	mi	48.73 dBu
Az	65.0	500.000	W	15.60	mi	28.64 dBu
Az	65.0	500.000	W	15.80	mi	53.09 dBu
Az	65.0	500.000	W	16.00	mi	26.40 dBu
Az	65.0	500.000	W	16.20	mi	6.90 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	70.0	500.000 W	.20 mi	113.76	dBu
Az	70.0	500.000 W	.40 mi	107.74	dBu
Az	70.0	500.000 W	.60 mi	104.21	dBu
Az	70.0	500.000 W	.80 mi	101.71	dBu
Az	70.0	500.000 W	1.00 mi	99.78	dBu
Az	70.0	500.000 W	1.20 mi	98.19	dBu
Az	70.0	500.000 W	1.40 mi	96.85	dBu
Az	70.0	500.000 W	1.60 mi	95.69	dBu
Az	70.0	500.000 W	1.80 mi	94.67	dBu
Az	70.0	500.000 W	2.00 mi	93.76	dBu
Az	70.0	500.000 W	2.20 mi	89.64	dBu
Az	70.0	500.000 W	2.40 mi	92.17	dBu
Az	70.0	500.000 W	2.60 mi	91.48	dBu
Az	70.0	500.000 W	2.80 mi	90.83	dBu
Az	70.0	500.000 W	3.00 mi	90.23	dBu
Az	70.0	500.000 W	3.20 mi	89.67	dBu
Az	70.0	500.000 W	3.40 mi	89.15	dBu
Az	70.0	500.000 W	3.60 mi	82.39	dBu
Az	70.0	500.000 W	3.80 mi	87.48	dBu
Az	70.0	500.000 W	4.00 mi	87.74	dBu
Az	70.0	500.000 W	4.20 mi	87.31	dBu
Az	70.0	500.000 W	4.40 mi	86.91	dBu
Az	70.0	500.000 W	4.60 mi	86.52	dBu
Az	70.0	500.000 W	4.80 mi	86.15	dBu
Az	70.0	500.000 W	5.00 mi	85.80	dBu
Az	70.0	500.000 W	5.20 mi	84.86	dBu
Az	70.0	500.000 W	5.40 mi	76.07	dBu

EXISTING BASE STATION

Az	70.0	500.000	W	6.20	mi	83.93 dBu
Az	70.0	500.000	W	6.40	mi	83.65 dBu
Az	70.0	500.000	W	6.60	mi	68.84 dBu
Az	70.0	500.000	W	6.80	mi	73.47 dBu
Az	70.0	500.000	W	7.00	mi	81.71 dBu
Az	70.0	500.000	W	7.20	mi	82.63 dBu
Az	70.0	500.000	W	7.40	mi	82.39 dBu
Az	70.0	500.000	W	7.60	mi	82.16 dBu
Az	70.0	500.000	W	7.80	mi	81.93 dBu
Az	70.0	500.000	W	8.00	mi	81.71 dBu
Az	70.0	500.000	W	8.20	mi	81.50 dBu
Az	70.0	500.000	W	8.40	mi	81.29 dBu
Az	70.0	500.000	W	8.60	mi	79.74 dBu
Az	70.0	500.000	W	8.80	mi	70.44 dBu
Az	70.0	500.000	W	9.00	mi	73.14 dBu
Az	70.0	500.000	W	9.20	mi	75.47 dBu
Az	70.0	500.000	W	9.40	mi	80.31 dBu
Az	70.0	500.000	W	9.60	mi	63.32 dBu
Az	70.0	500.000	W	9.80	mi	67.17 dBu
Az	70.0	500.000	W	10.00	mi	58.17 dBu
Az	70.0	500.000	W	10.20	mi	36.22 dBu
Az	70.0	500.000	W	10.40	mi	26.91 dBu
Az	70.0	500.000	W	10.60	mi	25.66 dBu
Az	70.0	500.000	W	10.80	mi	30.24 dBu
Az	70.0	500.000	W	11.00	mi	48.23 dBu
Az	70.0	500.000	W	11.20	mi	75.58 dBu
Az	70.0	500.000	W	11.40	mi	76.01 dBu
Az	70.0	500.000	W	11.60	mi	76.37 dBu
Az	70.0	500.000	W	11.80	mi	75.80 dBu
Az	70.0	500.000	W	12.00	mi	75.88 dBu
Az	70.0	500.000	W	12.20	mi	67.26 dBu
Az	70.0	500.000	W	12.40	mi	56.94 dBu
Az	70.0	500.000	W	12.60	mi	31.37 dBu
Az	70.0	500.000	W	12.80	mi	35.17 dBu
Az	70.0	500.000	W	13.00	mi	31.77 dBu
Az	70.0	500.000	W	13.20	mi	43.55 dBu
Az	70.0	500.000	W	13.40	mi	40.00 dBu
Az	70.0	500.000	W	13.60	mi	45.40 dBu
Az	70.0	500.000	W	13.80	mi	54.79 dBu
Az	70.0	500.000	W	14.00	mi	38.85 dBu
Az	70.0	500.000	W	14.20	mi	28.49 dBu
Az	70.0	500.000	W	14.40	mi	11.85 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	75.0	500.000 W	.20 mi	113.76	dBu
Az	75.0	500.000 W	.40 mi	107.74	dBu
Az	75.0	500.000 W	.60 mi	104.21	dBu
Az	75.0	500.000 W	.80 mi	101.71	dBu
Az	75.0	500.000 W	1.00 mi	99.78	dBu
Az	75.0	500.000 W	1.20 mi	98.19	dBu
Az	75.0	500.000 W	1.40 mi	96.85	dBu
Az	75.0	500.000 W	1.60 mi	95.69	dBu
Az	75.0	500.000 W	1.80 mi	94.67	dBu
Az	75.0	500.000 W	2.00 mi	93.76	dBu
Az	75.0	500.000 W	2.20 mi	92.93	dBu
Az	75.0	500.000 W	2.40 mi	92.17	dBu
Az	75.0	500.000 W	2.60 mi	91.48	dBu
Az	75.0	500.000 W	2.80 mi	90.83	dBu
Az	75.0	500.000 W	3.00 mi	90.23	dBu
Az	75.0	500.000 W	3.20 mi	89.03	dBu
Az	75.0	500.000 W	3.40 mi	89.15	dBu
Az	75.0	500.000 W	3.60 mi	88.65	dBu
Az	75.0	500.000 W	3.80 mi	81.58	dBu
Az	75.0	500.000 W	4.00 mi	83.59	dBu
Az	75.0	500.000 W	4.20 mi	87.31	dBu
Az	75.0	500.000 W	4.40 mi	86.91	dBu
Az	75.0	500.000 W	4.60 mi	86.52	dBu
Az	75.0	500.000 W	4.80 mi	82.51	dBu
Az	75.0	500.000 W	5.00 mi	85.80	dBu
Az	75.0	500.000 W	5.20 mi	85.46	dBu
Az	75.0	500.000 W	5.40 mi	85.13	dBu
Az	75.0	500.000 W	5.60 mi	76.72	dBu
Az	75.0	500.000 W	5.80 mi	53.03	dBu
Az	75.0	500.000 W	6.00 mi	60.29	dBu

EXISTING BASE STATION

Az	75.0	500.000	W	6.20	mi	66.34 dBu
Az	75.0	500.000	W	6.40	mi	83.09 dBu
Az	75.0	500.000	W	6.60	mi	83.39 dBu
Az	75.0	500.000	W	6.80	mi	83.13 dBu
Az	75.0	500.000	W	7.00	mi	82.87 dBu
Az	75.0	500.000	W	7.20	mi	82.63 dBu
Az	75.0	500.000	W	7.40	mi	82.39 dBu
Az	75.0	500.000	W	7.60	mi	82.16 dBu
Az	75.0	500.000	W	7.80	mi	81.93 dBu
Az	75.0	500.000	W	8.00	mi	81.71 dBu
Az	75.0	500.000	W	8.20	mi	81.50 dBu
Az	75.0	500.000	W	8.40	mi	81.29 dBu
Az	75.0	500.000	W	8.60	mi	80.45 dBu
Az	75.0	500.000	W	8.80	mi	66.17 dBu
Az	75.0	500.000	W	9.00	mi	62.21 dBu
Az	75.0	500.000	W	9.20	mi	62.58 dBu
Az	75.0	500.000	W	9.40	mi	46.04 dBu
Az	75.0	500.000	W	9.60	mi	40.16 dBu
Az	75.0	500.000	W	9.80	mi	62.34 dBu
Az	75.0	500.000	W	10.00	mi	68.16 dBu
Az	75.0	500.000	W	10.20	mi	55.44 dBu
Az	75.0	500.000	W	10.40	mi	26.48 dBu
Az	75.0	500.000	W	10.60	mi	22.95 dBu
Az	75.0	500.000	W	10.80	mi	56.88 dBu
Az	75.0	500.000	W	11.00	mi	60.08 dBu
Az	75.0	500.000	W	11.20	mi	65.52 dBu
Az	75.0	500.000	W	11.40	mi	65.31 dBu
Az	75.0	500.000	W	11.60	mi	55.53 dBu
Az	75.0	500.000	W	11.80	mi	51.88 dBu
Az	75.0	500.000	W	12.00	mi	60.03 dBu
Az	75.0	500.000	W	12.20	mi	64.18 dBu
Az	75.0	500.000	W	12.40	mi	38.42 dBu
Az	75.0	500.000	W	12.60	mi	41.67 dBu
Az	75.0	500.000	W	12.80	mi	40.75 dBu
Az	75.0	500.000	W	13.00	mi	19.84 dBu
Az	75.0	500.000	W	13.20	mi	15.48 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	80.0	500.000	W	.20 mi	113.76 dBu
Az	80.0	500.000	W	.40 mi	107.74 dBu
Az	80.0	500.000	W	.60 mi	104.21 dBu
Az	80.0	500.000	W	.80 mi	101.71 dBu
Az	80.0	500.000	W	1.00 mi	99.78 dBu
Az	80.0	500.000	W	1.20 mi	98.19 dBu
Az	80.0	500.000	W	1.40 mi	96.85 dBu
Az	80.0	500.000	W	1.60 mi	95.69 dBu
Az	80.0	500.000	W	1.80 mi	94.67 dBu
Az	80.0	500.000	W	2.00 mi	90.99 dBu
Az	80.0	500.000	W	2.20 mi	92.93 dBu
Az	80.0	500.000	W	2.40 mi	92.17 dBu
Az	80.0	500.000	W	2.60 mi	91.48 dBu
Az	80.0	500.000	W	2.80 mi	90.83 dBu
Az	80.0	500.000	W	3.00 mi	90.23 dBu
Az	80.0	500.000	W	3.20 mi	83.68 dBu
Az	80.0	500.000	W	3.40 mi	89.15 dBu
Az	80.0	500.000	W	3.60 mi	88.65 dBu
Az	80.0	500.000	W	3.80 mi	88.18 dBu
Az	80.0	500.000	W	4.00 mi	82.53 dBu
Az	80.0	500.000	W	4.20 mi	87.31 dBu
Az	80.0	500.000	W	4.40 mi	86.91 dBu
Az	80.0	500.000	W	4.60 mi	86.52 dBu
Az	80.0	500.000	W	4.80 mi	75.53 dBu
Az	80.0	500.000	W	5.00 mi	79.40 dBu
Az	80.0	500.000	W	5.20 mi	74.91 dBu
Az	80.0	500.000	W	5.40 mi	70.38 dBu
Az	80.0	500.000	W	5.60 mi	80.10 dBu
Az	80.0	500.000	W	5.80 mi	77.41 dBu
Az	80.0	500.000	W	6.00 mi	39.56 dBu

EXISTING BASE STATION

Az	80.0	500.000	W	6.20 mi	56.88 dBu
Az	80.0	500.000	W	6.40 mi	77.29 dBu
Az	80.0	500.000	W	6.60 mi	83.39 dBu
Az	80.0	500.000	W	6.80 mi	83.13 dBu
Az	80.0	500.000	W	7.00 mi	82.87 dBu
Az	80.0	500.000	W	7.20 mi	82.63 dBu
Az	80.0	500.000	W	7.40 mi	82.39 dBu
Az	80.0	500.000	W	7.60 mi	82.16 dBu
Az	80.0	500.000	W	7.80 mi	81.93 dBu
Az	80.0	500.000	W	8.00 mi	81.57 dBu
Az	80.0	500.000	W	8.20 mi	79.29 dBu
Az	80.0	500.000	W	8.40 mi	81.21 dBu
Az	80.0	500.000	W	8.60 mi	80.71 dBu
Az	80.0	500.000	W	8.80 mi	64.94 dBu
Az	80.0	500.000	W	9.00 mi	67.44 dBu
Az	80.0	500.000	W	9.20 mi	56.51 dBu
Az	80.0	500.000	W	9.40 mi	54.08 dBu
Az	80.0	500.000	W	9.60 mi	22.18 dBu
Az	80.0	500.000	W	9.80 mi	19.58 dBu
Az	80.0	500.000	W	10.00 mi	25.37 dBu
Az	80.0	500.000	W	10.20 mi	49.15 dBu
Az	80.0	500.000	W	10.40 mi	55.58 dBu
Az	80.0	500.000	W	10.60 mi	58.10 dBu
Az	80.0	500.000	W	10.80 mi	60.16 dBu
Az	80.0	500.000	W	11.00 mi	59.86 dBu
Az	80.0	500.000	W	11.20 mi	62.14 dBu
Az	80.0	500.000	W	11.40 mi	71.20 dBu
Az	80.0	500.000	W	11.60 mi	74.18 dBu
Az	80.0	500.000	W	11.80 mi	76.83 dBu
Az	80.0	500.000	W	12.00 mi	62.41 dBu
Az	80.0	500.000	W	12.20 mi	64.23 dBu
Az	80.0	500.000	W	12.40 mi	46.14 dBu
Az	80.0	500.000	W	12.60 mi	24.49 dBu
Az	80.0	500.000	W	12.80 mi	17.91 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	85.0	500.000 W	.20 mi	113.76	dBu
Az	85.0	500.000 W	.40 mi	107.74	dBu
Az	85.0	500.000 W	.60 mi	104.21	dBu
Az	85.0	500.000 W	.80 mi	101.71	dBu
Az	85.0	500.000 W	1.00 mi	99.78	dBu
Az	85.0	500.000 W	1.20 mi	98.19	dBu
Az	85.0	500.000 W	1.40 mi	96.85	dBu
Az	85.0	500.000 W	1.60 mi	95.69	dBu
Az	85.0	500.000 W	1.80 mi	94.67	dBu
Az	85.0	500.000 W	2.00 mi	89.93	dBu
Az	85.0	500.000 W	2.20 mi	92.93	dBu
Az	85.0	500.000 W	2.40 mi	92.17	dBu
Az	85.0	500.000 W	2.60 mi	91.48	dBu
Az	85.0	500.000 W	2.80 mi	90.83	dBu
Az	85.0	500.000 W	3.00 mi	86.26	dBu
Az	85.0	500.000 W	3.20 mi	87.43	dBu
Az	85.0	500.000 W	3.40 mi	89.15	dBu
Az	85.0	500.000 W	3.60 mi	88.65	dBu
Az	85.0	500.000 W	3.80 mi	79.45	dBu

EXISTING BASE STATION

Az	85.0	500.000 W	6.20 mi	32.92 dBu
Az	85.0	500.000 W	6.40 mi	40.19 dBu
Az	85.0	500.000 W	6.60 mi	49.54 dBu
Az	85.0	500.000 W	6.80 mi	76.70 dBu
Az	85.0	500.000 W	7.00 mi	82.87 dBu
Az	85.0	500.000 W	7.20 mi	82.63 dBu
Az	85.0	500.000 W	7.40 mi	78.32 dBu
Az	85.0	500.000 W	7.60 mi	82.16 dBu
Az	85.0	500.000 W	7.80 mi	72.35 dBu
Az	85.0	500.000 W	8.00 mi	68.60 dBu
Az	85.0	500.000 W	8.20 mi	81.13 dBu
Az	85.0	500.000 W	8.40 mi	81.29 dBu
Az	85.0	500.000 W	8.60 mi	80.49 dBu
Az	85.0	500.000 W	8.80 mi	72.27 dBu
Az	85.0	500.000 W	9.00 mi	63.86 dBu
Az	85.0	500.000 W	9.20 mi	59.79 dBu
Az	85.0	500.000 W	9.40 mi	55.79 dBu
Az	85.0	500.000 W	9.60 mi	54.68 dBu
Az	85.0	500.000 W	9.80 mi	13.74 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	90.0	500.000	W	.20 mi	113.76 dBu
Az	90.0	500.000	W	.40 mi	107.74 dBu
Az	90.0	500.000	W	.60 mi	104.21 dBu
Az	90.0	500.000	W	.80 mi	101.71 dBu
Az	90.0	500.000	W	1.00 mi	99.78 dBu
Az	90.0	500.000	W	1.20 mi	98.19 dBu
Az	90.0	500.000	W	1.40 mi	96.85 dBu
Az	90.0	500.000	W	1.60 mi	95.68 dBu
Az	90.0	500.000	W	1.80 mi	94.67 dBu
Az	90.0	500.000	W	2.00 mi	90.47 dBu
Az	90.0	500.000	W	2.20 mi	92.93 dBu
Az	90.0	500.000	W	2.40 mi	92.17 dBu
Az	90.0	500.000	W	2.60 mi	91.48 dBu
Az	90.0	500.000	W	2.80 mi	90.83 dBu
Az	90.0	500.000	W	3.00 mi	82.74 dBu
Az	90.0	500.000	W	3.20 mi	89.67 dBu
Az	90.0	500.000	W	3.40 mi	89.15 dBu
Az	90.0	500.000	W	3.60 mi	88.65 dBu
Az	90.0	500.000	W	3.80 mi	88.18 dBu
Az	90.0	500.000	W	4.00 mi	87.74 dBu
Az	90.0	500.000	W	4.20 mi	87.31 dBu
Az	90.0	500.000	W	4.40 mi	74.16 dBu
Az	90.0	500.000	W	4.60 mi	79.54 dBu
Az	90.0	500.000	W	4.80 mi	86.15 dBu
Az	90.0	500.000	W	5.00 mi	85.80 dBu
Az	90.0	500.000	W	5.20 mi	79.63 dBu
Az	90.0	500.000	W	5.40 mi	77.70 dBu
Az	90.0	500.000	W	5.60 mi	80.13 dBu
Az	90.0	500.000	W	5.80 mi	60.95 dBu
Az	90.0	500.000	W	6.00 mi	62.65 dBu

EXISTING BASE STATION

Az	90.0	500.000 W	6.20 mi	83.48 dBu
Az	90.0	500.000 W	6.40 mi	50.47 dBu
Az	90.0	500.000 W	6.60 mi	26.73 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	95.0	500.000	W	.20 mi	113.76 dBu
Az	95.0	500.000	W	.40 mi	107.74 dBu
Az	95.0	500.000	W	.60 mi	104.21 dBu
Az	95.0	500.000	W	.80 mi	101.71 dBu
Az	95.0	500.000	W	1.00 mi	99.78 dBu
Az	95.0	500.000	W	1.20 mi	98.19 dBu
Az	95.0	500.000	W	1.40 mi	96.85 dBu
Az	95.0	500.000	W	1.60 mi	95.69 dBu
Az	95.0	500.000	W	1.80 mi	94.67 dBu
Az	95.0	500.000	W	2.00 mi	90.20 dBu
Az	95.0	500.000	W	2.20 mi	92.93 dBu
Az	95.0	500.000	W	2.40 mi	92.17 dBu
Az	95.0	500.000	W	2.60 mi	91.48 dBu
Az	95.0	500.000	W	2.80 mi	90.83 dBu
Az	95.0	500.000	W	3.00 mi	90.23 dBu
Az	95.0	500.000	W	3.20 mi	89.67 dBu
Az	95.0	500.000	W	3.40 mi	89.15 dBu
Az	95.0	500.000	W	3.60 mi	88.65 dBu
Az	95.0	500.000	W	3.80 mi	88.18 dBu
Az	95.0	500.000	W	4.00 mi	83.25 dBu
Az	95.0	500.000	W	4.20 mi	79.71 dBu
Az	95.0	500.000	W	4.40 mi	81.61 dBu
Az	95.0	500.000	W	4.60 mi	73.78 dBu
Az	95.0	500.000	W	4.80 mi	83.55 dBu
Az	95.0	500.000	W	5.00 mi	85.80 dBu
Az	95.0	500.000	W	5.20 mi	85.46 dBu
Az	95.0	500.000	W	5.40 mi	85.09 dBu
Az	95.0	500.000	W	5.60 mi	71.73 dBu
Az	95.0	500.000	W	5.80 mi	70.04 dBu
Az	95.0	500.000	W	6.00 mi	69.32 dBu

EXISTING BASE STATION

Az	95.0	500.000	W	6.20	mi	51.00 dBu
Az	95.0	500.000	W	6.40	mi	67.83 dBu
Az	95.0	500.000	W	6.60	mi	73.11 dBu
Az	95.0	500.000	W	6.80	mi	44.33 dBu
Az	95.0	500.000	W	7.00	mi	32.70 dBu
Az	95.0	500.000	W	7.20	mi	32.24 dBu
Az	95.0	500.000	W	7.40	mi	39.76 dBu
Az	95.0	500.000	W	7.60	mi	47.39 dBu
Az	95.0	500.000	W	7.80	mi	53.11 dBu
Az	95.0	500.000	W	8.00	mi	57.35 dBu
Az	95.0	500.000	W	8.20	mi	61.37 dBu
Az	95.0	500.000	W	8.40	mi	70.39 dBu
Az	95.0	500.000	W	8.60	mi	71.97 dBu
Az	95.0	500.000	W	8.80	mi	65.96 dBu
Az	95.0	500.000	W	9.00	mi	60.50 dBu
Az	95.0	500.000	W	9.20	mi	62.94 dBu
Az	95.0	500.000	W	9.40	mi	49.20 dBu
Az	95.0	500.000	W	9.60	mi	59.94 dBu
Az	95.0	500.000	W	9.80	mi	72.28 dBu
Az	95.0	500.000	W	10.00	mi	71.72 dBu
Az	95.0	500.000	W	10.20	mi	72.79 dBu
Az	95.0	500.000	W	10.40	mi	75.00 dBu
Az	95.0	500.000	W	10.60	mi	74.55 dBu
Az	95.0	500.000	W	10.80	mi	74.76 dBu
Az	95.0	500.000	W	11.00	mi	74.57 dBu
Az	95.0	500.000	W	11.20	mi	75.46 dBu
Az	95.0	500.000	W	11.40	mi	75.87 dBu
Az	95.0	500.000	W	11.60	mi	76.12 dBu
Az	95.0	500.000	W	11.80	mi	76.35 dBu
Az	95.0	500.000	W	12.00	mi	75.60 dBu
Az	95.0	500.000	W	12.20	mi	76.67 dBu
Az	95.0	500.000	W	12.40	mi	76.99 dBu
Az	95.0	500.000	W	12.60	mi	77.62 dBu
Az	95.0	500.000	W	12.80	mi	73.63 dBu
Az	95.0	500.000	W	13.00	mi	76.34 dBu
Az	95.0	500.000	W	13.20	mi	77.37 dBu
Az	95.0	500.000	W	13.40	mi	77.23 dBu
Az	95.0	500.000	W	13.60	mi	77.11 dBu
Az	95.0	500.000	W	13.80	mi	75.05 dBu
Az	95.0	500.000	W	14.00	mi	66.06 dBu
Az	95.0	500.000	W	14.20	mi	67.36 dBu
Az	95.0	500.000	W	14.40	mi	69.05 dBu
Az	95.0	500.000	W	14.60	mi	70.40 dBu
Az	95.0	500.000	W	14.80	mi	71.06 dBu
Az	95.0	500.000	W	15.00	mi	71.79 dBu
Az	95.0	500.000	W	15.20	mi	72.39 dBu
Az	95.0	500.000	W	15.40	mi	74.28 dBu
Az	95.0	500.000	W	15.60	mi	73.48 dBu
Az	95.0	500.000	W	15.80	mi	74.91 dBu
Az	95.0	500.000	W	16.00	mi	75.69 dBu
Az	95.0	500.000	W	16.20	mi	72.75 dBu

EXISTING BASE STATION

Az	95.0	500.000 W	16.40 mi	75.48	dBu
Az	95.0	500.000 W	16.60 mi	75.37	dBu
Az	95.0	500.000 W	16.80 mi	75.27	dBu
Az	95.0	500.000 W	17.00 mi	74.11	dBu
Az	95.0	500.000 W	17.20 mi	73.85	dBu
Az	95.0	500.000 W	17.40 mi	73.70	dBu
Az	95.0	500.000 W	17.60 mi	74.48	dBu
Az	95.0	500.000 W	17.80 mi	72.24	dBu
Az	95.0	500.000 W	18.00 mi	72.39	dBu
Az	95.0	500.000 W	18.20 mi	74.58	dBu
Az	95.0	500.000 W	18.40 mi	74.48	dBu
Az	95.0	500.000 W	18.60 mi	74.39	dBu
Az	95.0	500.000 W	18.80 mi	74.29	dBu
Az	95.0	500.000 W	19.00 mi	73.41	dBu
Az	95.0	500.000 W	19.20 mi	70.66	dBu
Az	95.0	500.000 W	19.40 mi	70.60	dBu
Az	95.0	500.000 W	19.60 mi	70.65	dBu
Az	95.0	500.000 W	19.80 mi	67.50	dBu
Az	95.0	500.000 W	20.00 mi	64.63	dBu
Az	95.0	500.000 W	20.20 mi	57.70	dBu
Az	95.0	500.000 W	20.40 mi	60.49	dBu
Az	95.0	500.000 W	20.60 mi	54.63	dBu
Az	95.0	500.000 W	20.80 mi	48.23	dBu
Az	95.0	500.000 W	21.00 mi	55.53	dBu
Az	95.0	500.000 W	21.20 mi	53.65	dBu
Az	95.0	500.000 W	21.40 mi	57.35	dBu
Az	95.0	500.000 W	21.60 mi	53.90	dBu
Az	95.0	500.000 W	21.80 mi	55.75	dBu
Az	95.0	500.000 W	22.00 mi	63.95	dBu
Az	95.0	500.000 W	22.20 mi	55.81	dBu
Az	95.0	500.000 W	22.40 mi	48.90	dBu
Az	95.0	500.000 W	22.60 mi	31.47	dBu
Az	95.0	500.000 W	22.80 mi	31.66	dBu
Az	95.0	500.000 W	23.00 mi	33.86	dBu
Az	95.0	500.000 W	23.20 mi	35.60	dBu
Az	95.0	500.000 W	23.40 mi	37.10	dBu
Az	95.0	500.000 W	23.60 mi	35.86	dBu
Az	95.0	500.000 W	23.80 mi	36.97	dBu
Az	95.0	500.000 W	24.00 mi	37.95	dBu
Az	95.0	500.000 W	24.20 mi	38.82	dBu
Az	95.0	500.000 W	24.40 mi	33.13	dBu
Az	95.0	500.000 W	24.60 mi	34.05	dBu
Az	95.0	500.000 W	24.80 mi	34.90	dBu
Az	95.0	500.000 W	25.00 mi	35.66	dBu
Az	95.0	500.000 W	25.20 mi	36.36	dBu
Az	95.0	500.000 W	25.40 mi	39.98	dBu
Az	95.0	500.000 W	25.60 mi	49.05	dBu
Az	95.0	500.000 W	25.80 mi	56.13	dBu
Az	95.0	500.000 W	26.00 mi	48.05	dBu
Az	95.0	500.000 W	26.20 mi	27.73	dBu
Az	95.0	500.000 W	26.40 mi	28.25	dBu

EXISTING BASE STATION

Az	95.0	500.000 W	26.60 mi	31.09 dBu
Az	95.0	500.000 W	26.80 mi	33.45 dBu
Az	95.0	500.000 W	27.00 mi	51.80 dBu
Az	95.0	500.000 W	27.20 mi	52.32 dBu
Az	95.0	500.000 W	27.40 mi	51.31 dBu
Az	95.0	500.000 W	27.60 mi	52.24 dBu
Az	95.0	500.000 W	27.80 mi	22.72 dBu
Az	95.0	500.000 W	28.00 mi	21.42 dBu
Az	95.0	500.000 W	28.20 mi	23.65 dBu
Az	95.0	500.000 W	28.40 mi	25.26 dBu
Az	95.0	500.000 W	28.60 mi	26.49 dBu
Az	95.0	500.000 W	28.80 mi	11.13 dBu

EXISTING BASE STATION

INTERPOLATED DISTANCE TO CONTOURS - BULLINGTON OBSTRUCTION METHOD