

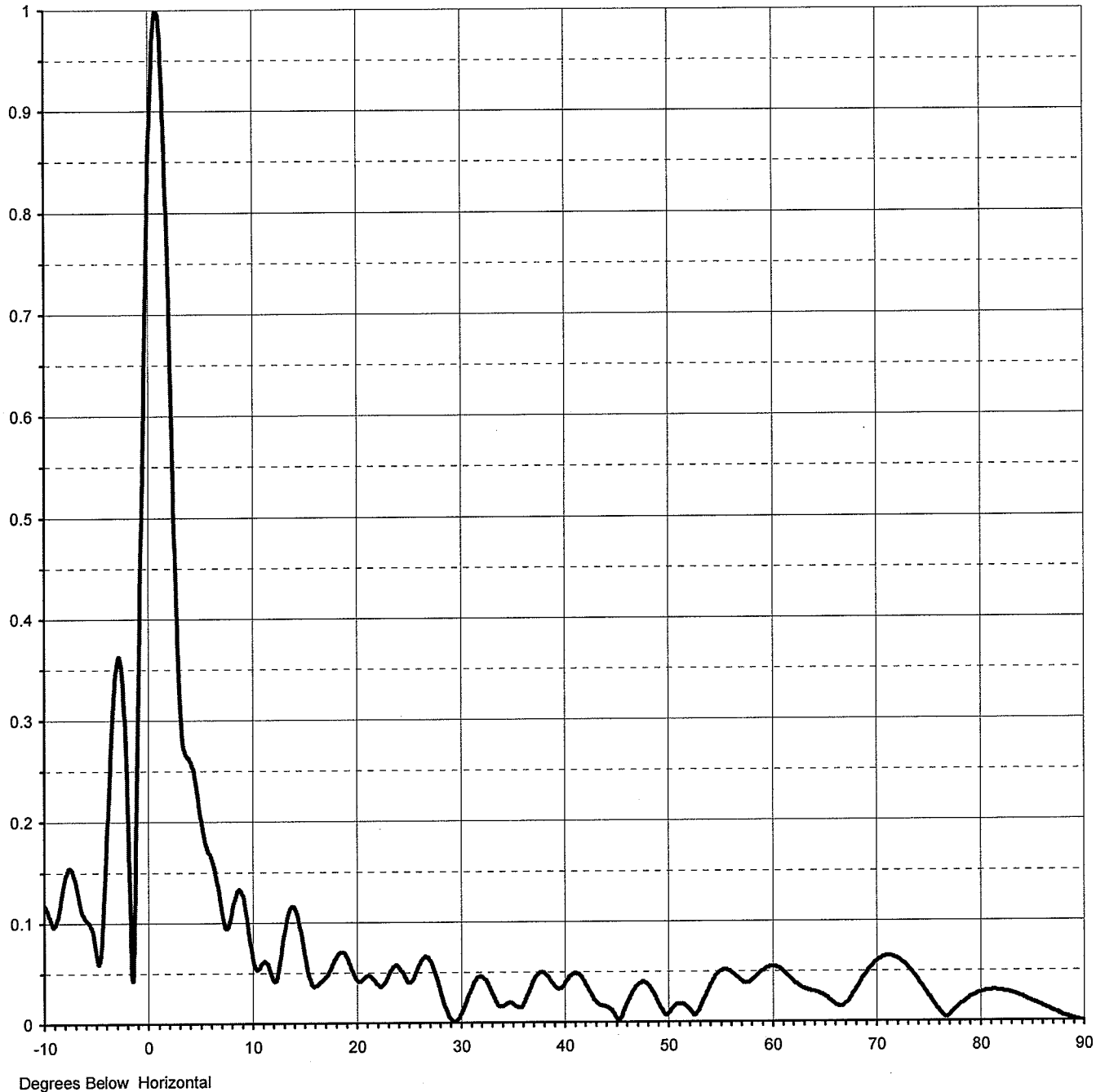


| | | | |
|-----------------|----------------|---------|----|
| Proposal Number | DCA-11262 | | |
| Date | 7-Nov-05 | | |
| Call Letters | WVVA-DT | Channel | 46 |
| Location | Bluefield, WV | | |
| Customer | | | |
| Antenna Type | TFU-24JTH-R 04 | | |

ELEVATION PATTERN

| | | |
|------------------------|------------|--------------|
| RMS Gain at Main Lobe | 21.50 | (13.32 dB) |
| RMS Gain at Horizontal | 15.50 | (11.90 dB) |
| Calculated / Measured | Calculated | |

| | |
|-----------|--------------|
| Beam Tilt | 0.75 deg |
| Frequency | 665.00 MHz |
| Drawing # | 24J215075-90 |





Proposal Number **DCA-11262**
 Date **7-Nov-05**
 Call Letters **WVVA-DT** Channel **46**
 Location **Bluefield, WV**
 Customer
 Antenna Type **TFU-24JTH-R O4**

TABULATION OF ELEVATION PATTERN

Elevation Pattern Drawing #: **24J215075-90**

| Angle | Field | Angle | Field | Angle | Field | Angle | Field | Angle | Field | Angle | Field |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| -10.0 | 0.118 | 2.4 | 0.505 | 10.6 | 0.054 | 30.5 | 0.019 | 51.0 | 0.018 | 71.5 | 0.064 |
| -9.5 | 0.105 | 2.6 | 0.429 | 10.8 | 0.057 | 31.0 | 0.032 | 51.5 | 0.018 | 72.0 | 0.062 |
| -9.0 | 0.097 | 2.8 | 0.365 | 11.0 | 0.060 | 31.5 | 0.042 | 52.0 | 0.013 | 72.5 | 0.058 |
| -8.5 | 0.118 | 3.0 | 0.316 | 11.5 | 0.059 | 32.0 | 0.046 | 52.5 | 0.007 | 73.0 | 0.053 |
| -8.0 | 0.145 | 3.2 | 0.286 | 12.0 | 0.044 | 32.5 | 0.042 | 53.0 | 0.012 | 73.5 | 0.047 |
| -7.5 | 0.154 | 3.4 | 0.270 | 12.5 | 0.050 | 33.0 | 0.031 | 53.5 | 0.024 | 74.0 | 0.040 |
| -7.0 | 0.138 | 3.6 | 0.265 | 13.0 | 0.082 | 33.5 | 0.020 | 54.0 | 0.035 | 74.5 | 0.033 |
| -6.5 | 0.114 | 3.8 | 0.263 | 13.5 | 0.109 | 34.0 | 0.016 | 54.5 | 0.045 | 75.0 | 0.025 |
| -6.0 | 0.103 | 4.0 | 0.260 | 14.0 | 0.116 | 34.5 | 0.019 | 55.0 | 0.050 | 75.5 | 0.018 |
| -5.5 | 0.095 | 4.2 | 0.253 | 14.5 | 0.101 | 35.0 | 0.019 | 55.5 | 0.052 | 76.0 | 0.011 |
| -5.0 | 0.068 | 4.4 | 0.243 | 15.0 | 0.073 | 35.5 | 0.016 | 56.0 | 0.050 | 76.5 | 0.005 |
| -4.5 | 0.080 | 4.6 | 0.230 | 15.5 | 0.047 | 36.0 | 0.017 | 56.5 | 0.046 | 77.0 | 0.006 |
| -4.0 | 0.182 | 4.8 | 0.215 | 16.0 | 0.036 | 36.5 | 0.028 | 57.0 | 0.041 | 77.5 | 0.011 |
| -3.5 | 0.293 | 5.0 | 0.201 | 16.5 | 0.040 | 37.0 | 0.040 | 57.5 | 0.039 | 78.0 | 0.016 |
| -3.0 | 0.358 | 5.2 | 0.189 | 17.0 | 0.044 | 37.5 | 0.048 | 58.0 | 0.040 | 78.5 | 0.020 |
| -2.8 | 0.362 | 5.4 | 0.179 | 17.5 | 0.053 | 38.0 | 0.050 | 58.5 | 0.045 | 79.0 | 0.024 |
| -2.6 | 0.349 | 5.6 | 0.173 | 18.0 | 0.064 | 38.5 | 0.045 | 59.0 | 0.050 | 79.5 | 0.026 |
| -2.4 | 0.320 | 5.8 | 0.168 | 18.5 | 0.070 | 39.0 | 0.037 | 59.5 | 0.054 | 80.0 | 0.028 |
| -2.2 | 0.273 | 6.0 | 0.163 | 19.0 | 0.067 | 39.5 | 0.033 | 60.0 | 0.055 | 80.5 | 0.030 |
| -2.0 | 0.209 | 6.2 | 0.156 | 19.5 | 0.055 | 40.0 | 0.038 | 60.5 | 0.054 | 81.0 | 0.030 |
| -1.8 | 0.131 | 6.4 | 0.148 | 20.0 | 0.043 | 40.5 | 0.045 | 61.0 | 0.051 | 81.5 | 0.031 |
| -1.6 | 0.048 | 6.6 | 0.136 | 20.5 | 0.042 | 41.0 | 0.049 | 61.5 | 0.046 | 82.0 | 0.030 |
| -1.4 | 0.085 | 6.8 | 0.123 | 21.0 | 0.046 | 41.5 | 0.047 | 62.0 | 0.041 | 82.5 | 0.029 |
| -1.2 | 0.196 | 7.0 | 0.110 | 21.5 | 0.045 | 42.0 | 0.040 | 62.5 | 0.037 | 83.0 | 0.028 |
| -1.0 | 0.315 | 7.2 | 0.100 | 22.0 | 0.039 | 42.5 | 0.030 | 63.0 | 0.033 | 83.5 | 0.026 |
| -0.8 | 0.436 | 7.4 | 0.094 | 22.5 | 0.037 | 43.0 | 0.022 | 63.5 | 0.031 | 84.0 | 0.024 |
| -0.6 | 0.554 | 7.6 | 0.096 | 23.0 | 0.045 | 43.5 | 0.017 | 64.0 | 0.030 | 84.5 | 0.022 |
| -0.4 | 0.664 | 7.8 | 0.103 | 23.5 | 0.055 | 44.0 | 0.016 | 64.5 | 0.028 | 85.0 | 0.019 |
| -0.2 | 0.764 | 8.0 | 0.113 | 24.0 | 0.056 | 44.5 | 0.013 | 65.0 | 0.025 | 85.5 | 0.017 |
| 0.0 | 0.849 | 8.2 | 0.122 | 24.5 | 0.049 | 45.0 | 0.006 | 65.5 | 0.021 | 86.0 | 0.015 |
| 0.2 | 0.917 | 8.4 | 0.129 | 25.0 | 0.040 | 45.5 | 0.005 | 66.0 | 0.017 | 86.5 | 0.012 |
| 0.4 | 0.966 | 8.6 | 0.133 | 25.5 | 0.044 | 46.0 | 0.017 | 66.5 | 0.015 | 87.0 | 0.010 |
| 0.6 | 0.994 | 8.8 | 0.132 | 26.0 | 0.057 | 46.5 | 0.028 | 67.0 | 0.018 | 87.5 | 0.008 |
| 0.8 | 1.000 | 9.0 | 0.127 | 26.5 | 0.065 | 47.0 | 0.036 | 67.5 | 0.024 | 88.0 | 0.005 |
| 1.0 | 0.986 | 9.2 | 0.117 | 27.0 | 0.063 | 47.5 | 0.040 | 68.0 | 0.033 | 88.5 | 0.004 |
| 1.2 | 0.952 | 9.4 | 0.105 | 27.5 | 0.052 | 48.0 | 0.038 | 68.5 | 0.041 | 89.0 | 0.002 |
| 1.4 | 0.901 | 9.6 | 0.090 | 28.0 | 0.035 | 48.5 | 0.031 | 69.0 | 0.049 | 89.5 | 0.001 |
| 1.6 | 0.835 | 9.8 | 0.083 | 28.5 | 0.017 | 49.0 | 0.021 | 69.5 | 0.055 | 90.0 | 0.000 |
| 1.8 | 0.758 | 10.0 | 0.069 | 29.0 | 0.005 | 49.5 | 0.011 | 70.0 | 0.060 | | |
| 2.0 | 0.675 | 10.2 | 0.059 | 29.5 | 0.001 | 50.0 | 0.008 | 70.5 | 0.064 | | |
| 2.2 | 0.589 | 10.4 | 0.054 | 30.0 | 0.007 | 50.5 | 0.014 | 71.0 | 0.065 | | |