

Minor Modification of Permit W275AZ; BMPFT-20190410AAD Facility ID No. 148955

This exhibit is for minor modification of translator permit for W275AZ Facility ID No. 148955, BMPFT-20190410AAD. It specifies a change in location, antenna elevation and, antenna pattern only.

Antenna Location

The proposed antenna is to be mounted on an existing tower in the antenna array of standard band stations WTMP and WMGG, identified by registration number 1041410 at 58 meters above ground, having a horizontal plane azimuth gain pattern as given in **Figure 0** below.

Below as **Figure 1** is an overlap and spacing study from which it can be determined that this proposal is within the protected contour of **second** adjacent channel station WHPT; and **third** adjacent channel station WFUS.

73.1204 Compliance

We will demonstrate that a lack of population and/or other factors allow this proposal to be compliant with 74.1204. The process commonly called "Living Way", allows for the use of D/U Analysis, also known as "signal strength ratio methodology" to be utilized to demonstrate compliance. In this instant case the facility to be protected is on a second or third adjacent channel and is to be afforded protection from signals 40 dB stronger than the protected facility presents near the proposed translator antenna location.

Concerning WHPT; In **Figure 2** a map showing the predicted 66.2 dBu signal contour of the protected facility at the proposed translator antenna location is given. This proposal can only cause predicted interference to the protected facility by having a signal exceeding 106.2 dBu (66.2 + 40) in a habitable/populated area. Utilizing the line of sight equation shown in **Figure 3** which considers the vertical elevation pattern of the proposed antenna, it has been determined that a 106.2 dBu signal developed by 160 watts, as proposed, emitted by the proposed antenna mounted 58 meters above ground, will not reach habitable areas or ground level. With examination of the image in **Figure 4** it can be determined that no habitable space extends above this height within the confines of this contour. Thus the provisions of the rules section concerning prohibited overlap will not apply as it has been demonstrated that no actual interference will occur due to a lack of population and other factors as applied in this instant proposal.

Concerning WFUS; In **Figure 2** a map showing the predicted 82.3 dBu signal contour of the protected facility at the proposed translator antenna location is given. As this signal is due the same 40

dB protection, and is of higher value than that of WHPT, the demonstrated protection of the weaker WHPT provides for the protection of WFUS.

Thus the provisions of the rules section concerning prohibited overlap will not apply as it has been demonstrated that no actual interference will occur due to a lack of population and other factors as applied in this instant proposal.

Fill-in and Minor Change Status

This proposal is to serve as a fill-in translator for station WFUS(FM), Facility ID 63984, Gulfport, FL. The map of **Figure 5** demonstrates that the proposed 60 dBu contour is contained within that of the WFUS(FM) facility. It can also be seen that the proposed and licensed facilities have service contour overlap.

RF Fields Statement

The proposed facilities were evaluated in terms of potential radio frequency fields exposure at ground level in accordance with OET Bulletin No. 65, "Evaluating Compliance With FCC-Specified Guidelines for Human Exposure to Radio frequency Radiation."

The proposed antenna system is an **ERI LP-5E-DA-HW**, a five (5) element, half-wave spaced antenna, mounted 58 meters above ground. As this element type is not modeled in any current RF Fields calculation computer program, for purposes of this analysis the FM Model RF Fields program has been set to calculate values for an array of "worst case" type of antenna element(s) "Ring Stub", operated with an effective radiated power of 0.16 Kilowatts in the Horizontal and Vertical plane. At 2 meters above the surface, at 276 meters from the base of the tower, this proposal will contribute worst case, 0.05 microwatts per square centimeter, or 0.01 percent of the allowable ANSI limit for controlled exposure, and 0.5 percent of the allowable limit for uncontrolled exposure. This figure is less than 5.0% of the applicable FCC exposure limit at all locations extending out from the base of the tower. Section 1.1307(b)(3) excludes applications when the calculated level is predicted to be less than 5.0% of the applicable exposure limit. It is therefore believed that this proposal is in compliance with OET Bulletin Number 65 as required by the Federal Communications Commission.

Further, the applicant will see that signs are posted in the vicinity of the tower, warning of potential radio frequency hazards at the site. The site itself is restricted from public access. The applicant will cooperate with other users of the tower to reduce power of the facility, or discontinue operation, as necessary to limit human exposure to levels less than specified by the Federal Communications Commission should anyone be required to climb the tower for maintenance or inspection.

Figure 0. Antenna Pattern

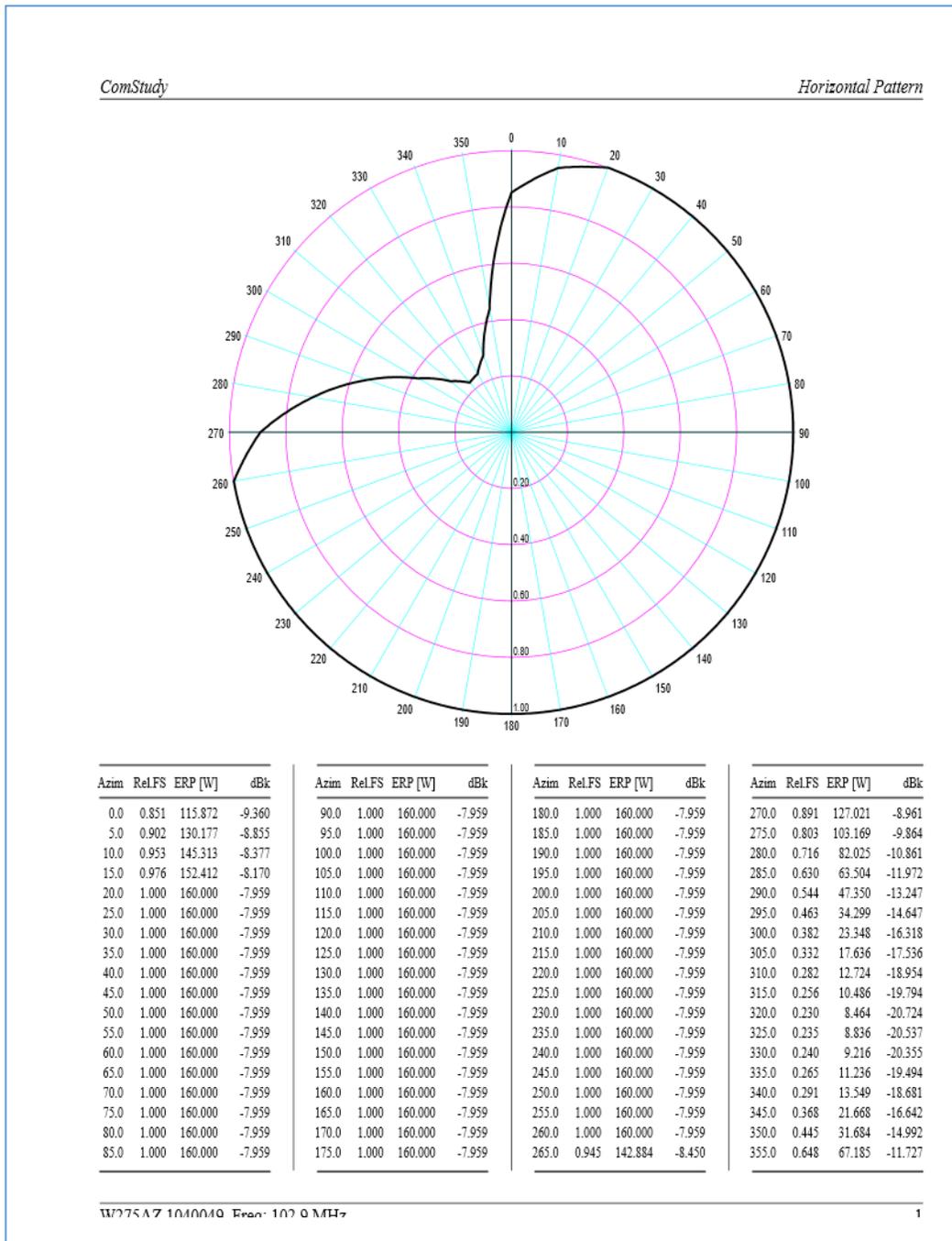


Figure 1. Overlap and Spacing Study

W275AZ at ASR 1040049
Citicasters Licenses, Inc.

REFERENCE CH# 275D - 102.9 MHz, Pwr= 0.16 kw DA, HAAT= 65.9 M, COR= 71 M DISPLAY DATES
28 00 41.00 N. DATA 11-07-19
82 29 52.00 W. Average Protected F(50-50)= 9.49 km SEARCH 11-07-19
Standard Directional

| CH CITY | CALL | TYPE | ANT STATE | AZI <-- | DIST FILE # | LAT LNG | PWR(KW) HAAT(M) | INT(km) COR(M) | PRO(km) LICENSEE | *IN* (Overlap in km) | *OUT* |
|---------|-----------------|------|-----------|---------|------------------|-------------|-----------------|----------------|----------------------------|----------------------|--------|
| 278CO | WFUS | LIC | FL | 132.4 | 31.58 | 27 49 10.80 | 68.000 | 11.2 | 82.0 | 10.8 | -51.3* |
| | Gulfport | | | 312.5 | BLH20111004ADI | 82 15 38.00 | 472 | 491 | Citicasters Licenses, Inc. | | |
| 275D | W275AZ | CP | D FL | 95.9 | 1.77 | 28 00 35.10 | 0.250 | | --- | Reference--- | |
| | Tampa | | | 275.9 | BMPFT20190410AAD | 82 28 47.40 | | 89 | Citicasters Licenses, Inc. | | |
| 275D | W275AZ | LIC | FL | 185.7 | 13.28 | 27 53 33.00 | 0.200 | | --- | Reference--- | |
| | Wesley Chapel | | South FL | 5.7 | BLFT20141202AAY | 82 30 40.00 | | 55 | Citicasters Licenses, Inc. | | |
| 273C | WHPT | LIC | FL | 159.9 | 71.31 | 27 24 31.20 | 100.000 | 12.6 | 86.9 | 48.9 | -16.4* |
| | Sarasota | | | 340.0 | BMLH20100212AAW | 82 14 59.30 | 503 | 520 | Cox Radio, Inc. | | |
| 276D | W276CX | LIC | D FL | 305.7 | 32.61 | 28 10 57.00 | 0.250 | 40.3 | 24.2 | -11.8* | 0.8 |
| | New Port Richey | | | 125.6 | BLFT20170113AAI | 82 46 04.40 | | 414 | Beasley Media Group Licens | | |
| 275D | W275AX | CP | D FL | 97.3 | 58.00 | 27 56 37.10 | 0.240 | 43.1 | 12.8 | 5.6 | 14.1 |
| | Bartow | | | 277.6 | BPFT20180705AAG | 81 54 43.30 | | 182 | Glades Media Company, LLC | | |
| 275D | W275AX | LIC | D FL | 97.3 | 58.00 | 27 56 37.10 | 0.240 | 37.6 | 11.1 | 11.4 | 16.4 |
| | Bartow | | | 277.6 | BLFT20130906AAJ | 81 54 43.30 | 143 | 182 | Glades Media Company, LLC | | |
| 275C1 | WJGO | LIC | N FL | 161.5 | 178.43 | 26 29 17.30 | 96.000 | 152.7 | 57.3 | 15.9 | 88.6 |
| | Tice | | | 341.8 | BMLH20150427AAW | 81 55 45.30 | 142 | 144 | Renda Broadcasting Corp. O | | |
| 276C2 | WOTW | LIC | Z FL | 55.2 | 107.41 | 28 33 33.00 | 22.000 | 76.8 | 52.1 | 21.2 | 42.3 |
| | Windermere | | | 235.7 | BLH20090317ACS | 81 35 38.30 | 227 | 259 | Jvc Media Of Florida, LLC | | |
| 273D | W273CP | LIC | D FL | 305.7 | 32.61 | 28 10 57.00 | 0.250 | 0.0 | 1.6 | 25.5 | 26.9 |
| | New Port Richey | | | 125.6 | BLFT20161209AAL | 82 46 04.40 | | 154 | Cox Radio, Inc. | | |
| 275L1 | WZEU-LP | LIC | FL | 357.3 | 63.53 | 28 34 56.00 | 0.012 | 85 | | 36.6 | 31.4 |
| | Weeki Wachee | | | 177.3 | BLL20181119AAI | 82 31 43.40 | | 100 | Weeki Wachee Community Rad | | |
| 276D | W276CR | CP | FL | 188.7 | 61.57 | 27 27 50.10 | 0.250 | 19.1 | 12.8 | 32.8 | 35.2 |
| | Bradenton | | | 8.7 | BPFT20190829AAB | 82 35 32.40 | | 99 | Citicasters Licenses, Inc. | | |
| 276D | W276CR | LIC | D FL | 188.7 | 61.57 | 27 27 50.10 | 0.250 | 15.2 | 10.2 | 37.1 | 36.1 |
| | Bradenton | | | 8.7 | BLFT20160115ABW | 82 35 32.40 | | 99 | Citicasters Licenses, Inc. | | |
| 272D | W272EH | LIC | FL | 40.0 | 46.91 | 28 20 04.00 | 0.250 | 1.1 | 8.5 | 36.4 | 37.4 |
| | Dade City | | | 220.1 | BLFT20190709AAA | 82 11 23.30 | | 78 | Radio world Inc. | | |
| 274L1 | WXIO-LP | LIC | FL | 29.4 | 63.55 | 28 30 31.90 | 0.100 | 17 | | 46.4 | 45.2 |
| | Ridge Manor | | | 209.6 | BLL20150225ACN | 82 10 41.30 | | 43 | Anchor Of Our Soul Ministr | | |
| 274D | W274BB | LIC | FL | 85.6 | 87.27 | 28 04 10.00 | 0.038 | 9.3 | 6.5 | 68.5 | 67.6 |
| | Haines City | | | 266.0 | BLFT20150805AAS | 81 36 39.00 | 66 | 102 | Central Florida Educationa | | |
| 272C2 | WXUS | LIC | FL | 4.4 | 131.17 | 29 11 15.90 | 50.000 | 6.0 | 52.6 | 116.4 | 77.8 |
| | Dunnellon | | | 184.4 | BMLH20011214AJZ | 82 23 39.40 | 149 | 171 | Jvc Media Of Florida, LLC | | |
| 221C3 | WCTQ | LIC | FL | 178.0 | 95.37 | 27 09 04.20 | 11.500 | 0.0 | 0.0 | 11.5R | 83.9M |
| | Venice | | | 358.0 | BLH20040406ACI | 82 27 50.30 | 145 | 147 | Citicasters Licenses, Inc. | | |
| 275C | WEZI | LIC | FL | 19.6 | 267.62 | 30 16 34.90 | 100.000 | 173.0 | 73.1 | 85.5 | 164.9 |
| | Jacksonville | | | 200.0 | BMLH20130124AAQ | 81 33 52.30 | 309 | 315 | Cox Radio, Inc. | | |
| 274D | W274BR | LIC | D FL | 27.8 | 112.37 | 28 54 16.90 | 0.250 | 17.5 | 11.9 | 85.8 | 87.7 |
| | The Villages | | | 208.0 | BLFT20190213AAB | 81 57 35.30 | | 105 | Central Florida Educationa | | |
| 277C2 | WXCZ | LIC | N FL | 339.9 | 140.40 | 29 11 45.90 | 31.000 | 5.1 | 46.5 | 127.6 | 93.6 |
| | Cedar Key | | | 159.6 | BLH20180105AAI | 82 59 45.40 | 140 | 140 | wgul-Fm, Inc. | | |
| 278D | W278CI | LIC | FL | 21.3 | 106.40 | 28 54 07.90 | 0.250 | 1.1 | 11.1 | 96.2 | 94.4 |
| | Oxford | | | 201.5 | BLFT20170227ABT | 82 05 59.30 | | 85 | Marc Radio Gainesville, LL | | |
| 275L1 | WIEB-LP | LIC | FL | 15.0 | 135.47 | 29 11 16.90 | 0.100 | 32 | | 107.9 | 100.5 |
| | Ocala | | | 195.2 | BMLL20170301AAH | 82 08 13.30 | | 54 | Institucion Educativa Beth | | |
| 278D | NEW | APP | D FL | 37.3 | 114.45 | 28 49 43.00 | 0.080 | 0.6 | 7.0 | 104.5 | 106.5 |
| | Leesburg-Eustis | | | 217.6 | BNPFT20180503AAK | 81 47 09.30 | | 76 | Wlbe 790, Inc. | | |
| 273D | W273CA | LIC | FL | 57.7 | 124.66 | 28 36 21.20 | 0.250 | 1.1 | 14.7 | 114.2 | 109.1 |
| | Orlando | | | 238.2 | BLFT20121018ACJ | 81 25 04.30 | 143 | 169 | Central Florida Educationa | | |

Figure 2. Contour Map

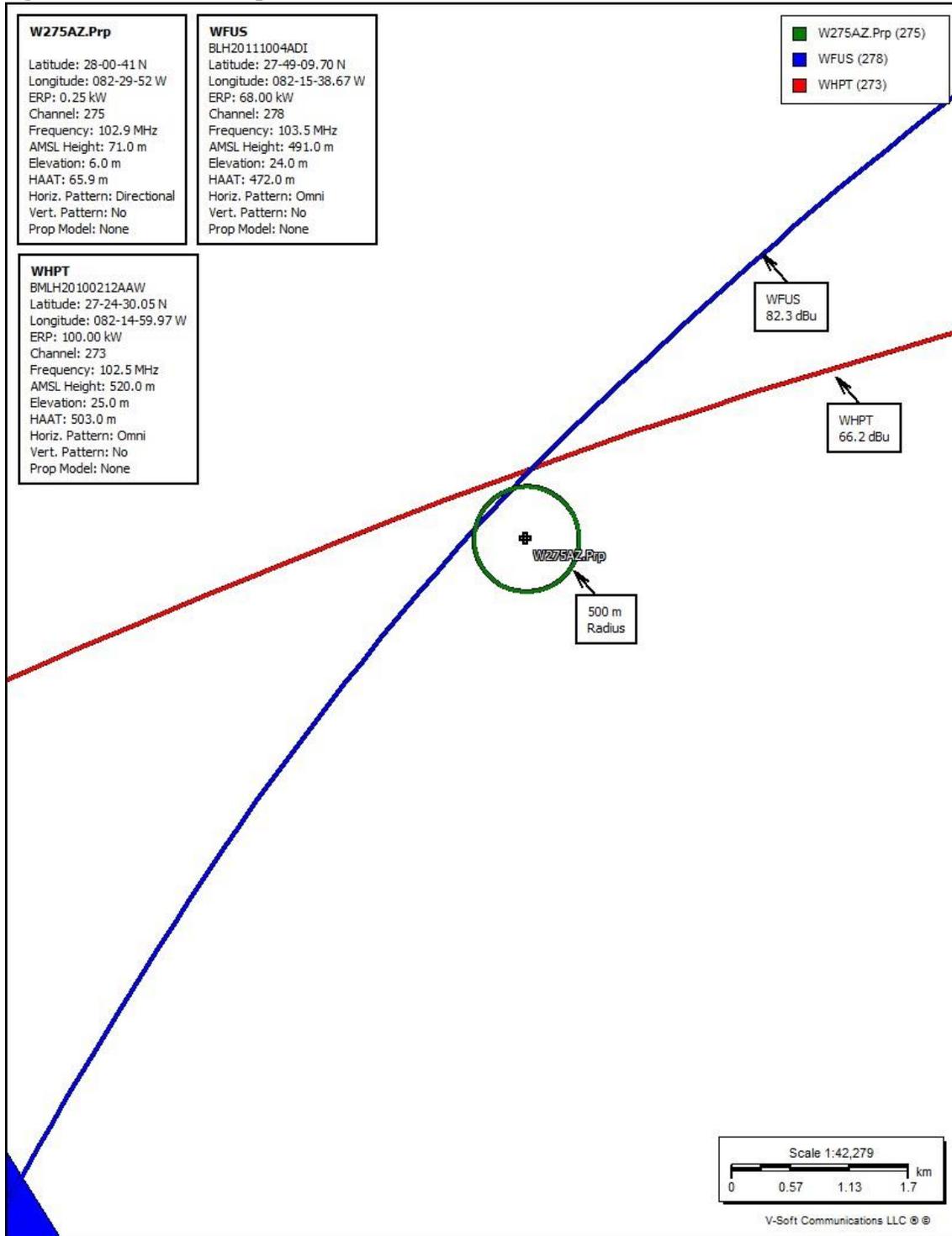


Figure 3. Signal Level at or Near Ground Level

Proposed Antenna: LP-5E-DA-HW
 Proposed Power: 0.16 kW
 Antenna Height AGL: 58 meters
 Interference Contour: 106 dBu
 Artificial Rcv Antenna Height: 2 meters
 Distance (Free Space) Equation: $= (10^{((106.92 - [\text{desired dBu}] + [\text{ERP in dBk}]) / 20)}) * 1000$
 Field Strength (dBu) Equation: $= 106.92 - (20 * (\text{LOG}_{10}[\text{DistMeters} / 1000])) + [\text{ERP in dBk}]$

Fill in
 "yellow"
 cells

| Depression | | | | Distance | | | | |
|------------|----------|-------|--------|-----------|------------------|------------------|-----------------|----------------|
| Angle | Antenna | | | from Ant. | Distance | Field Strength | Distance | Field Strength |
| Below | Relative | ERP | ERP | to Interf | from Ant. to | in dBu @ | from Ant. | in dBu @ |
| Horizon | Field | in kW | in dBk | Contour | Artificial Plane | Artificial Plane | to Ground Level | Ground Level |
| 0° | 1.000 | 0.160 | -7.96 | 444.69 m | infinite | --- | infinite | --- |
| -5° | 0.924 | 0.137 | -8.65 | 410.90 m | 642.53 m | 102.12 dBu | 665.48 m | 101.81 dBu |
| -10° | 0.717 | 0.082 | -10.85 | 318.84 m | 322.49 m | 105.90 dBu | 334.01 m | 105.60 dBu |
| -15° | 0.439 | 0.031 | -15.11 | 195.22 m | 216.37 m | 105.11 dBu | 224.09 m | 104.80 dBu |
| -20° | 0.163 | 0.004 | -23.72 | 72.48 m | 163.73 m | 98.92 dBu | 169.58 m | 98.62 dBu |
| -25° | 0.053 | 0.000 | -33.47 | 23.57 m | 132.51 m | 91.00 dBu | 137.24 m | 90.70 dBu |
| -30° | 0.177 | 0.005 | -23.00 | 78.71 m | 112.00 m | 102.94 dBu | 116.00 m | 102.63 dBu |
| -35° | 0.210 | 0.007 | -21.51 | 93.39 m | 97.63 m | 105.61 dBu | 101.12 m | 105.31 dBu |
| -40° | 0.177 | 0.005 | -23.00 | 78.71 m | 87.12 m | 105.12 dBu | 90.23 m | 104.81 dBu |
| -45° | 0.111 | 0.002 | -27.05 | 49.36 m | 79.20 m | 101.89 dBu | 82.02 m | 101.59 dBu |
| -50° | 0.039 | 0.000 | -36.14 | 17.34 m | 73.10 m | 93.50 dBu | 75.71 m | 93.20 dBu |
| -55° | 0.020 | 0.000 | -41.94 | 8.89 m | 68.36 m | 88.29 dBu | 70.80 m | 87.98 dBu |
| -60° | 0.057 | 0.001 | -32.84 | 25.35 m | 64.66 m | 97.87 dBu | 66.97 m | 97.56 dBu |
| -65° | 0.074 | 0.001 | -30.57 | 32.91 m | 61.79 m | 100.53 dBu | 64.00 m | 100.22 dBu |
| -70° | 0.076 | 0.001 | -30.34 | 33.80 m | 59.59 m | 101.07 dBu | 61.72 m | 100.77 dBu |
| -75° | 0.068 | 0.001 | -31.31 | 30.24 m | 57.98 m | 100.35 dBu | 60.05 m | 100.04 dBu |
| -80° | 0.055 | 0.000 | -33.15 | 24.46 m | 56.86 m | 98.67 dBu | 58.89 m | 98.37 dBu |
| -85° | 0.040 | 0.000 | -35.92 | 17.79 m | 56.21 m | 96.01 dBu | 58.22 m | 95.70 dBu |
| -90° | 0.025 | 0.000 | -40.00 | 11.12 m | 56.00 m | 91.96 dBu | 58.00 m | 91.65 dBu |

Figure 4. Image of Proposed Support Tower

