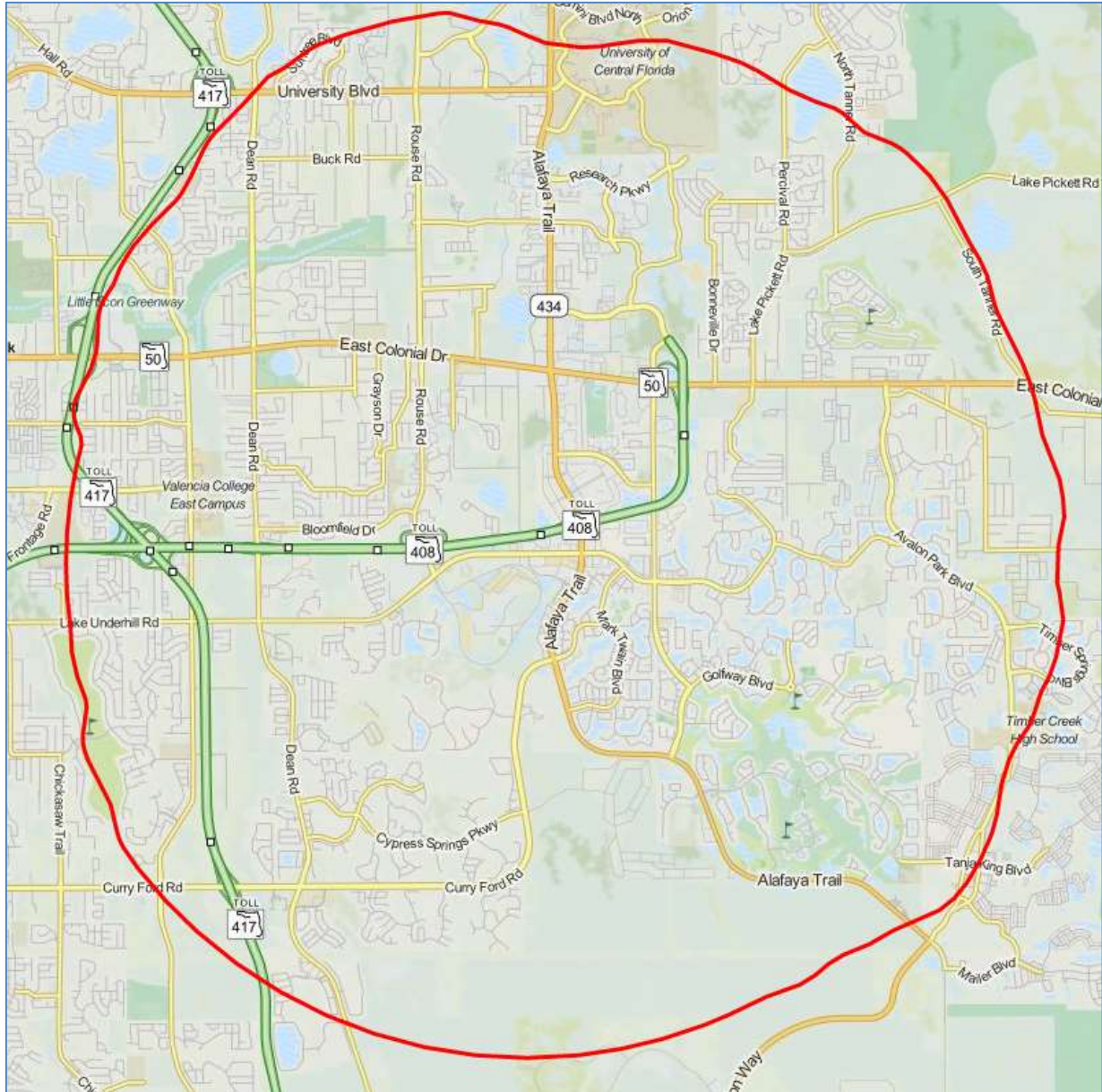




REC Broadcast Services
11541 Riverton Wharf Rd.
Mardela Springs, MD 21837
844.REC.LPFM/202.621.2355
recnet.com

Minor Change for WWID-LP
ORLANDO, FL
LA MISION, INC.
BMPL-20160309ABR

PROPOSED 60dBu F(50,50) SERVICE CONTOUR



ORLANDO, FL – Channel 241L1 (96.1 MHz) ~ ERP 0.100 kW

Elev: 27 meters ~ RCAGL: 28 meters ~ RCAMSL: 55 meters ~ HAAT: 30m (GLOBE)

Overall tower height: 42.6 meters – ASR: None (No nearby airports)

NAD83 Latitude: 28° 32' 44.2" NL – Longitude: 81° 12' 38.3" WL

NAD27 Latitude: 28° 32' 43.2" NL – Longitude: 81° 12' 39.1" WL

No AM stations within 3km

R E C NETWORKS
CHANNEL REPORT

NAD27 LATITUDE: 28 - 32' 43.2" - LONGITUDE: 81 - 12' 39.1"
CHANNEL: 241 - CLASS: LPFM(LP-100)

| CHAN | FREQ | CALL | LOCATION | CLS | DIST | REQ | CLEAR | BEAR |
|------|------|---|-------------------|-------|-------|-------|-------|-------|
| 239 | 95.7 | WHOG-FM : SOUTHERN STONE COMMUNICATIONS, LLC | ORMOND-BY-THE-SEA | FL C2 | 77.8 | 53.0 | 24.8 | 9.8 |
| 240 | 95.9 | WSJZ-FM : CUMULUS LICENSING LLC | SEBASTIAN | FL C3 | 99.2 | 67.0 | 32.2 | 144.4 |
| 240 | 95.9 | WJRN-LP : HISPANIC CHRISTIAN EDUCATION COMMUNICATION, INC. | SUMMERFIELD | FL L1 | 103.2 | 14.0 | 89.2 | 300.4 |
| 240 | 95.9 | WAPQ-LP : HIGHLANDS CHRISTIAN EDUCATION STATION | AVON PARK | FL L1 | 106.2 | 14.0 | 92.2 | 196.7 |
| 240 | 95.9 | W240BV : CENTRAL FLORIDA EDUCATIONAL FOUNDATION, INC. | ORLANDO | FL D5 | 21.3 | 21.0 | 0.3 | 288.3 |
| 240 | 95.9 | WSJZ-FM : CUMULUS LICENSING LLC | SEBASTIAN | FL C3 | 97.0 | 67.0 | 30.0 | 138.6 |
| 240 | 95.9 | WGRL-LP : K & A BROADCASTING GROUP CORP | SAINT CLOUD | FL L1 | 34.0 | 14.0 | 20.0 | 192.6 |
| 240 | 95.9 | WGRL-LP : K & A BROADCASTING GROUP CORP | SAINT CLOUD | FL L1 | 35.0 | 14.0 | 21.0 | 194.7 |
| 240 | 95.9 | W254AI : RADIO TRAINING NETWORK, INC. | AUBURNDALE | FL D4 | 79.2 | 21.0 | 58.2 | 221.8 |
| 241 | 96.1 | WEJZ : RENDA BROADCASTING CORP. OF NEVADA | JACKSONVILLE | FL C0 | 201.4 | 122.0 | 79.4 | 348.1 |
| 241 | 96.1 | WRXK-FM : BEASLEY MEDIA GROUP, LLC | BONITA SPRINGS | FL C | 238.8 | 130.0 | 108.8 | 189.9 |
| 241 | 96.1 | WTMP-FM : SCOTT SAVAGE, RECEIVER | DADE CITY | FL A | 106.5 | 67.0 | 39.5 | 265.8 |
| 241 | 96.1 | W241BP : BIBLE BROADCASTING NETWORK, INC. | KISSIMMEE | FL D2 | 26.2 | 26.0 | 0.2 | 220.9 |
| 241 | 96.1 | WWID-LP : LA MISION, INC. : Currently authorized site | ORLANDO | FL L1 | 0.0 | 24.0 | -24.0 | HERE |
| 243 | 96.5 | WDBO-FM : COX RADIO, INC. | ORLANDO | FL C | 15.5 | 93.0 | -77.5 | 80.3 |
| 244 | 96.7 | WXOF : WGUL-FM, INC. | YANKEETOWN | FL C3 | 153.7 | 0.0 | 153.7 | 290.5 |
| 244 | 96.7 | W244BJ : HALL COMMUNICATIONS, INC. | LAKELAND | FL D6 | 95.9 | 0.0 | 95.9 | 225.8 |

| Azimuth | Field | ERP | HAAT | Contour | Latitude | Longitude |
|----------------|--------------|------------|-------------|----------------|-----------------|------------------|
| 0 | 1.000 | 0.100 | 40.1 | 6.455 | 28.6037 | 81.2106 |
| 5 | 1.000 | 0.100 | 38.7 | 6.345 | 28.6025 | 81.2050 |
| 10 | 1.000 | 0.100 | 40.2 | 6.463 | 28.6029 | 81.1991 |
| 15 | 1.000 | 0.100 | 42.1 | 6.618 | 28.6031 | 81.1931 |
| 20 | 1.000 | 0.100 | 42.4 | 6.643 | 28.6018 | 81.1874 |
| 25 | 1.000 | 0.100 | 42.5 | 6.651 | 28.5998 | 81.1818 |
| 30 | 1.000 | 0.100 | 42.2 | 6.627 | 28.5972 | 81.1767 |
| 35 | 1.000 | 0.100 | 43.4 | 6.725 | 28.5951 | 81.1711 |
| 40 | 1.000 | 0.100 | 44.0 | 6.773 | 28.5923 | 81.1660 |
| 45 | 1.000 | 0.100 | 44.8 | 6.836 | 28.5891 | 81.1611 |
| 50 | 1.000 | 0.100 | 44.0 | 6.773 | 28.5848 | 81.1575 |
| 55 | 1.000 | 0.100 | 42.8 | 6.676 | 28.5800 | 81.1546 |
| 60 | 1.000 | 0.100 | 41.5 | 6.569 | 28.5751 | 81.1524 |
| 65 | 1.000 | 0.100 | 40.9 | 6.518 | 28.5704 | 81.1501 |
| 70 | 1.000 | 0.100 | 41.1 | 6.535 | 28.5657 | 81.1478 |
| 75 | 1.000 | 0.100 | 40.7 | 6.501 | 28.5607 | 81.1463 |
| 80 | 1.000 | 0.100 | 41.5 | 6.569 | 28.5559 | 81.1444 |
| 85 | 1.000 | 0.100 | 41.8 | 6.594 | 28.5508 | 81.1434 |
| 90 | 1.000 | 0.100 | 40.6 | 6.494 | 28.5456 | 81.1442 |
| 95 | 1.000 | 0.100 | 41.5 | 6.569 | 28.5404 | 81.1436 |
| 100 | 1.000 | 0.100 | 41.5 | 6.569 | 28.5353 | 81.1444 |
| 105 | 1.000 | 0.100 | 40.3 | 6.471 | 28.5305 | 81.1467 |
| 110 | 1.000 | 0.100 | 39.2 | 6.385 | 28.5260 | 81.1492 |
| 115 | 1.000 | 0.100 | 39.4 | 6.400 | 28.5213 | 81.1513 |
| 120 | 1.000 | 0.100 | 41.5 | 6.569 | 28.5161 | 81.1524 |
| 125 | 1.000 | 0.100 | 42.3 | 6.635 | 28.5114 | 81.1550 |
| 130 | 1.000 | 0.100 | 41.7 | 6.585 | 28.5075 | 81.1590 |
| 135 | 1.000 | 0.100 | 38.6 | 6.337 | 28.5053 | 81.1648 |
| 140 | 1.000 | 0.100 | 36.7 | 6.183 | 28.5030 | 81.1700 |
| 145 | 1.000 | 0.100 | 36.2 | 6.142 | 28.5004 | 81.1746 |
| 150 | 1.000 | 0.100 | 35.3 | 6.066 | 28.4984 | 81.1796 |
| 155 | 1.000 | 0.100 | 35.0 | 6.041 | 28.4964 | 81.1845 |
| 160 | 1.000 | 0.100 | 35.0 | 6.041 | 28.4946 | 81.1895 |
| 165 | 1.000 | 0.100 | 35.0 | 6.041 | 28.4931 | 81.1946 |
| 170 | 1.000 | 0.100 | 35.0 | 6.041 | 28.4921 | 81.1999 |
| 175 | 1.000 | 0.100 | 35.0 | 6.041 | 28.4915 | 81.2052 |

| Azimuth | Field | ERP | HAAT | Contour | Latitude | Longitude |
|----------------|--------------|------------|-------------|----------------|-----------------|------------------|
| 180 | 1.000 | 0.100 | 35.0 | 6.041 | 28.4913 | 81.2106 |
| 185 | 1.000 | 0.100 | 35.0 | 6.041 | 28.4915 | 81.2160 |
| 190 | 1.000 | 0.100 | 35.0 | 6.041 | 28.4921 | 81.2214 |
| 195 | 1.000 | 0.100 | 35.0 | 6.041 | 28.4931 | 81.2266 |
| 200 | 1.000 | 0.100 | 35.0 | 6.041 | 28.4946 | 81.2318 |
| 205 | 1.000 | 0.100 | 35.0 | 6.041 | 28.4964 | 81.2368 |
| 210 | 1.000 | 0.100 | 35.0 | 6.041 | 28.4986 | 81.2415 |
| 215 | 1.000 | 0.100 | 35.0 | 6.041 | 28.5011 | 81.2461 |
| 220 | 1.000 | 0.100 | 35.0 | 6.041 | 28.5040 | 81.2504 |
| 225 | 1.000 | 0.100 | 35.0 | 6.041 | 28.5072 | 81.2544 |
| 230 | 1.000 | 0.100 | 35.0 | 6.041 | 28.5107 | 81.2580 |
| 235 | 1.000 | 0.100 | 34.9 | 6.032 | 28.5145 | 81.2612 |
| 240 | 1.000 | 0.100 | 33.0 | 5.881 | 28.5192 | 81.2628 |
| 245 | 1.000 | 0.100 | 32.9 | 5.873 | 28.5233 | 81.2651 |
| 250 | 1.000 | 0.100 | 31.5 | 5.760 | 28.5279 | 81.2660 |
| 255 | 1.000 | 0.100 | 30.3 | 5.661 | 28.5324 | 81.2666 |
| 260 | 1.000 | 0.100 | 30.3 | 5.661 | 28.5368 | 81.2677 |
| 265 | 1.000 | 0.100 | 28.9 | 5.636 | 28.5412 | 81.2681 |
| 270 | 1.000 | 0.100 | 27.6 | 5.636 | 28.5456 | 81.2683 |
| 275 | 1.000 | 0.100 | 26.6 | 5.636 | 28.5500 | 81.2681 |
| 280 | 1.000 | 0.100 | 27.3 | 5.636 | 28.5544 | 81.2675 |
| 285 | 1.000 | 0.100 | 29.7 | 5.636 | 28.5587 | 81.2664 |
| 290 | 1.000 | 0.100 | 32.9 | 5.873 | 28.5637 | 81.2671 |
| 295 | 1.000 | 0.100 | 32.6 | 5.849 | 28.5678 | 81.2649 |
| 300 | 1.000 | 0.100 | 35.1 | 6.049 | 28.5728 | 81.2643 |
| 305 | 1.000 | 0.100 | 36.0 | 6.125 | 28.5772 | 81.2620 |
| 310 | 1.000 | 0.100 | 36.7 | 6.183 | 28.5813 | 81.2591 |
| 315 | 1.000 | 0.100 | 36.6 | 6.175 | 28.5849 | 81.2554 |
| 320 | 1.000 | 0.100 | 38.4 | 6.321 | 28.5892 | 81.2523 |
| 325 | 1.000 | 0.100 | 41.0 | 6.527 | 28.5937 | 81.2490 |
| 330 | 1.000 | 0.100 | 42.7 | 6.668 | 28.5975 | 81.2448 |
| 335 | 1.000 | 0.100 | 43.9 | 6.765 | 28.6007 | 81.2399 |
| 340 | 1.000 | 0.100 | 44.8 | 6.836 | 28.6034 | 81.2346 |
| 345 | 1.000 | 0.100 | 44.7 | 6.828 | 28.6049 | 81.2287 |
| 350 | 1.000 | 0.100 | 44.5 | 6.813 | 28.6059 | 81.2228 |
| 355 | 1.000 | 0.100 | 42.6 | 6.660 | 28.6053 | 81.2166 |

WAIVER OF §73.807(a) REQUEST
SHORT-SPACED SECOND ADJACENT CHANNEL

WWID-LP
Orlando, Florida
Channel 241L1 (96.1 MHz)

The proposed modification will keep the proposed station to be second-adjacent channel short-spaced to WDBO-FM, Orlando, Florida.

WDBO-FM operates on Channel 243C with 100 kW at 454m height above average terrain (HAAT) into a non-directional antenna. WDBO-FM is located 15.5 km from the LPFM site and has a 449.0m effective HAAT on the 260 degree radial towards the LPFM. Based on that, WDBO-FM places a 95.9 dBu service contour at the proposed LPFM site.

Using the U/D method¹, the proposed LPFM station is predicted to produce an undesired interference overlap in respect to WDBO-FM to the proposed LPFM station's 135.9 dBu interference contour ("overlap zone"). At 100 watts ERP, the overlap zone extends to 11 meters from the radiation center.

The applicant is proposing to operate at 28 meters above ground at a leased American Tower site.

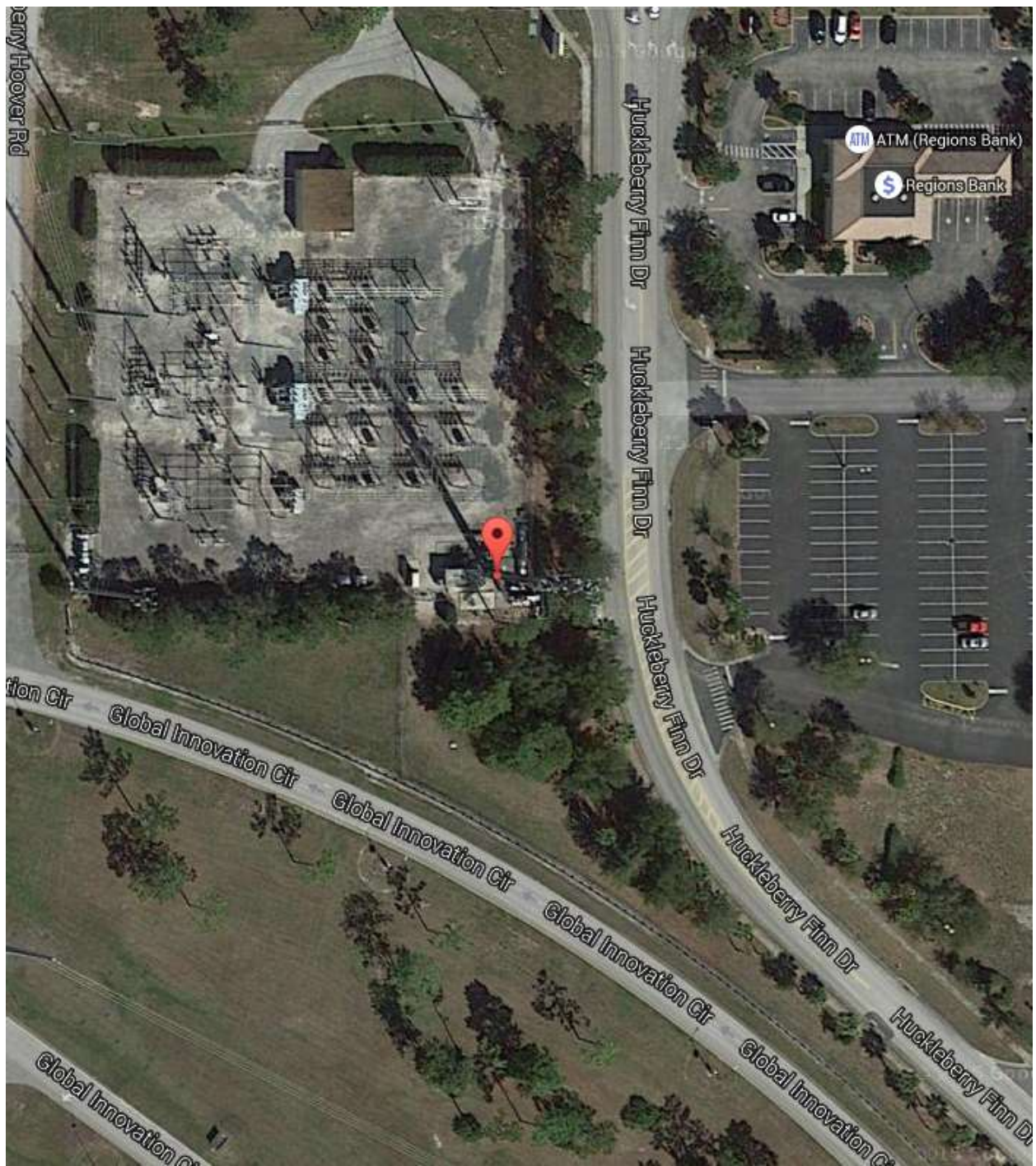
As the interference only extends 11 meters from the radiation center, the interference will not reach any point lower than 17 meters above ground level and therefore will not reach any occupied space.

Based on these findings, the proposed modified LPFM station will not create any interference to listeners or potential listeners of WDBO-FM. The applicant is requesting a waiver of §73.807(a) in respect to second-adjacent channel short-spaced station WDBO-FM, Orlando, Florida.

Prepared by
Michelle Bradley
REC Broadcast Services
April 14, 2016

¹ - See *Living Way Ministries, Inc.* Memorandum Opinion and Order, 17 FCC Rcd 17054, 17056 (2002) at 5. *Recon denied* 23 FCC Rcd 15070 (2008).





REQUEST TO USE GLOBE TERRAIN DATA

Using the alternative GLOBE terrain data in lieu of the FCC NGC-30 terrain data, the height above average terrain (HAAT) at this location has been calculated at 30 meters using 8 radials. At 30 meters HAAT, an LPFM station would be authorized at 100 watts ERP. The applicant is requesting operation at 100 watts ERP.

Antenna Height Above Average Terrain Calculations -- Results

Input Data

Latitude **28° 32' 43.2" North**

Longitude **81° 12' 39.1" West (NAD 83)**

Height of antenna radiation center above mean sea level: **55 meters AMSL**

Number of Evenly Spaced Radials = **8** 0° is referenced to True North

Results

Calculated HAAT = 30 meters

Antenna Height Above Average Terrain calculated
using 1 km **GLOBE terrain data**

Individual "Radial HAAT" Values, in meters

| | |
|------|--------|
| 0° | 31.9 m |
| 45° | 30.6 m |
| 90° | 33.0 m |
| 135° | 31.8 m |
| 180° | 29.9 m |
| 225° | 27.0 m |
| 270° | 25.4 m |
| 315° | 33.7 m |

[Print Results?](#)

[New Calculation?](#)