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401 Main St., Ste 213, Cedar Falls, IA 50613

Contour-to-Contour Allocations Study

Town Of Monroe, Connecticut

REFERENCE CH# 208A - 89.5 MHz, Pwr= 0.225 kW DA, HAAT= 230.8 M, COR= 473 M
40 51 33.8 N. 75 18 04.4 W. Average Protected F(50-50)= 19.37 km
Standard Directional

DISPLAY DATES
DATA 11-29-16
SEARCH 11-29-16

| CH CITY | CALL FILE # | TYPE STATE | ANT AZI <-- | DIST # | LAT LNG | PWR(kW) HAAT(M) | INT(km) COR(M) | PRO(km) LICENSEE | *IN* (Overlap in km) | *OUT* (Overlap in km) |
|--|----------------|----------------|----------------------------|--------------------------|---------------|--------------------|------------------------------------|---------------------|----------------------------|-----------------------------|
| 208A WWP3 Pen Argyl | CP DCX PA | 49.8 229.9 | 4.34 BPED20131028ANS | 40 53 04.6 75 15 42.1 | 0.500 324 | 55.5 547 | 17.3 Mercer County Community Co | -60.9* | -45.4* | |
| 208A WWP3 Pen Argyl | LIC DEX PA | 50.8 230.8 | 4.26 BLED20011113ACH | 40 53 01.0 75 15 43.0 | 0.100 333 | 54.3 557 | 16.8 Mercer County Community Co | -60.0* | -46.3* | |
| 208A WWP3 Pen Argyl | APP _VX PA | 49.8 229.9 | 4.34 BESTA20140917AAN | 40 53 04.6 75 15 42.1 | 0.030 324 | 42.7 547 | 12.8 Mercer County Community Co | -48.0* | -40.9* | |
| 06 1C WPVI-TV Philadelphia | AP _CY PA | 176.8 356.9 | 90.95 BPCDT20120604AEC | 40 02 33.0 75 14 33.0 | 62.900 330 | 6.0 395 | 99.8 99.4R | 105.8R | -14.9M<--* | |
| 06 1C WPVI-TV Philadelphia | LI _CY PA | 176.8 356.9 | 90.95 BLCDT20111019ACJ | 40 02 33.0 75 14 33.0 | 34.000 330 | 6.0 395 | 93.4 | 99.4R | -8.4M<--* | |
| 207A WJCS Allentown | LIC DEX PA | 199.7 19.6 | 34.82 BLED20090824AGH | 40 33 52.0 75 26 25.0 | 0.120 279 | 20.8 432 | 14.1 Beacon Broadcasting Corpor | 2.9 | 3.9 | |
| 209B1 WDVR Delaware Township | LIC DE_ NJ | 143.3 323.5 | 48.36 BLED20090330ABU | 40 30 36.0 74 57 34.0 | 3.800 221 | 33.9 221 | 20.8 Penn-jersey Educational Ra | 4.0 | 9.1 | |
| 208B WITF-FM Harrisburg | LIC _CX PA | 247.2 66.1 | 144.11 BMLED20040130ADW | 40 20 44.0 76 52 07.0 | 5.900 415 | 118.7 599 | 46.1 witf, Inc. | 8.1 | 38.3 | |
| 207A WNJY Netcong | LIC DEX NJ | 86.3 266.7 | 50.75 BLED20080707AE0 | 40 53 14.0 74 41 55.0 | 0.520 131 | 26.0 385 | 16.8 New York Public Radio | 9.6 | 9.9 | |
| 208A WSOU South Orange | LIC _CX NJ | 98.1 278.8 | 89.86 BMLED20050909ABX | 40 44 28.0 74 14 42.0 | 2.400 95 | 65.5 149 | 18.5 Seton Hall University | 10.1 | 22.2 | |
| 208A WUUA Glen Spey | LIC _CX NY | 25.9 206.2 | 82.28 BLED20130614AAU | 41 31 27.0 74 52 08.0 | 0.110 120 | 48.6 477 | 12.3 B. Stephen Demchuk Foundat | 16.2 | 10.2 | |
| 210B WVIA-FM Scranton | LIC DCX PA | 307.1 126.7 | 59.77 BLED20081107AE0 | 41 10 55.0 75 52 17.0 | 7.400 381 | 4.3 761 | 45.2 Northeastern Pennsylvania | 37.0 | 13.3 | |
| 205A WBYO Sellersville | LIC DVN PA | 184.5 4.5 | 53.02 BLED19950531KB | 40 23 02.0 75 21 02.0 | 0.900 133 | 1.5 274 | 18.0 Four Rivers Community Broa | 41.2 | 33.5 | |

Terrain database is NED 03 SEC , R= 73.215 qualifying spacings or FCC minimum Spacings in KM, M= Margin in KM
In & Out distances between contours are shown at closest points. Reference zone= - Zone 1, Co to 3rd adjacent.
All separation margins (if shown) include rounding. Call signs with strikeout need not be protected.
Ant Column: (D= DA Standard, Z= DA 73.215, N= Not DA 73.215, _= Omni), Polarization (C,H,V,E), Beamtilt(Y,N,X)
**affixed to 'IN' or 'OUT' values = site inside restricted contour.

« = Station meets FCC minimum distance spacing for its class.

*<-- Ch 6 TV is protected using section 73.525 - Please see channel-six TV attachment

HOW TO READ THE FM COMPUTER PRINT-OUT

Full Service Stations

The computer printout should be self-explanatory for the most part. The parameters of the station being checked, (reference station) are printed in the heading. Contour distances are in kilometers and are predicted using the Commission's TVFMINT FORTRAN subroutine. When interference contour distances are less than 16 kilometers the F(50-50) tables are used. If signal contour distances are less than 1.6 km the free-space equation is used.

The column listed "IN" is the difference in kilometers between of the reference station's protected contour and the data file station's interference contour at the closest point between the contours. (All distances are derived by the method detailed in Sec. 73.208 of the Rules and Regulations as amended in Docket 80-90.) Therefore, "IN" column is a measure of incoming interference. Negative distances in this column indicate the presence of contour overlap. Listed antenna heights and power are those given in the FCC database. The column labeled "OUT" shows the greatest distance in kilometers of overlap or smallest of clearance between the reference station's interference contour and the database station's protected contour. Negative distance figures in this column indicate outgoing contour overlap.

Under the "AZI" column, the first row of numbers indicate the True North bearings from the reference station toward the database stations, while the numbers in the second row indicate the reverse bearings from the database stations to the reference station.

The columns labeled "INT" and "PRO" contain the distance in kilometers of the appropriate interference contour and the protected contour of a data base station.

For I.F. relationships, some channel-six TV relationships and relationships with commercial channel stations providing clearance the minimum spacings values the "IN" and "OUT" columns can change their significance. The letter "R" stands for the minimum **required** distance in kilometers, while the letter "M" in the next column follows the **available clear space** (or lack of it) in kilometers. Minimum separation distances when displayed are taken from Sec 73.207 of the rules as amended. Canadian and Mexican separation distances, U/D ratios and protected contour values are from the US/Mexican Working Agreement and the US/Canada Working Agreement".

The call letters of stations meeting the minimum separation distances under the rules will be flagged by the characters "<<" appended to the right-hand side of the call sign. The "^" character appended to the call sign means the station has been "max-classed" according to the provisions of section 73.525 of the Rules.

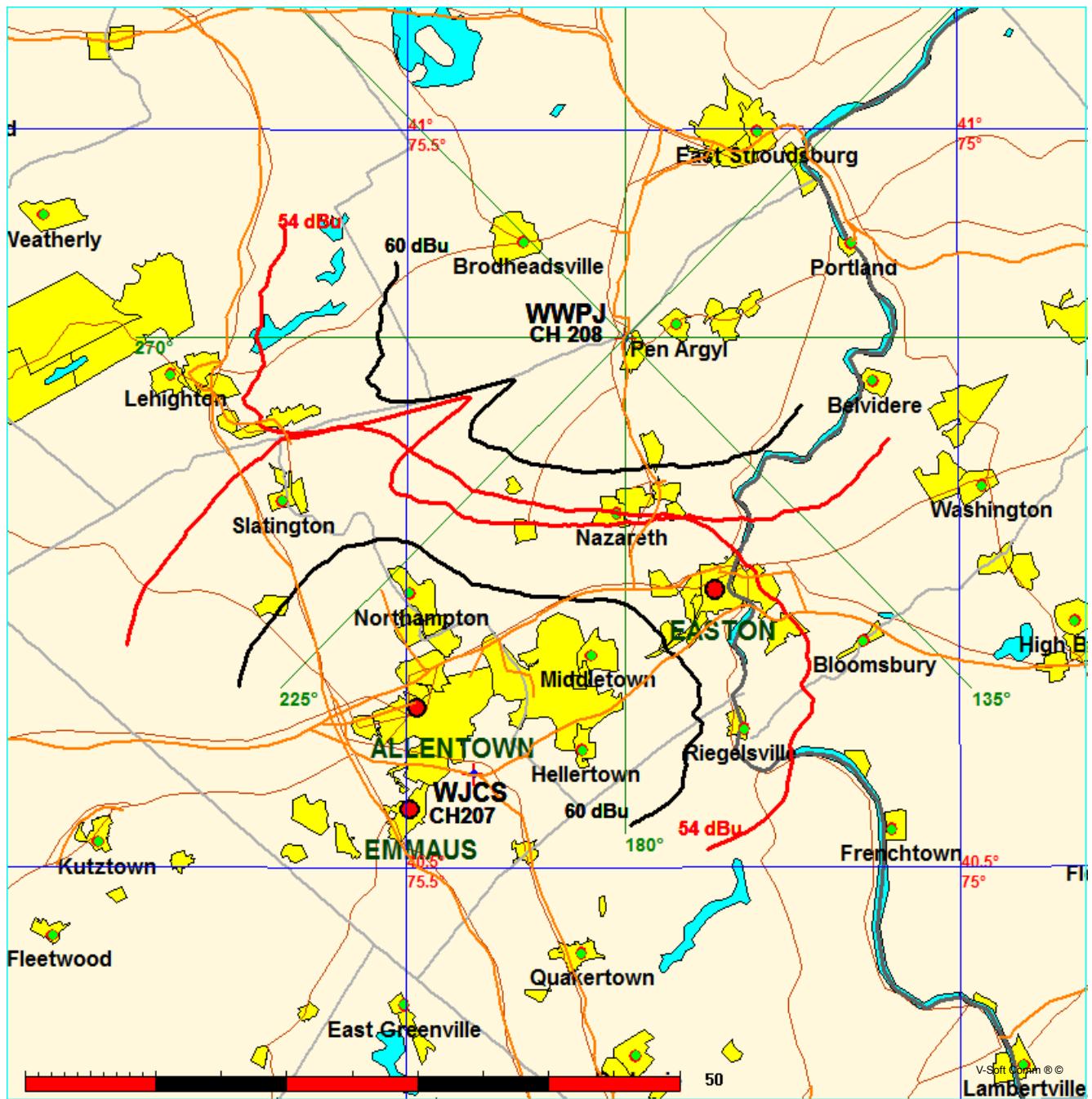
The first three letters of the "TYPE" column identify the current FCC status of the stations. The fourth letter will be a "D" if the facility is directional. "Z" indicates a 73.215 directional. An "N" indicates it is a 73.215 station that operates with an omni-directional antenna. The fifth letter will be an E, H or V depending on the type of antenna polarization. The sixth letter will be a "Y" if the antenna uses beam tilt or an "X" if the commission is not sure, otherwise it will be an "N" or left blank.

Contour-to-Contour Map Study WWPJ vs WJCS
 Town Of Monroe, Connecticut

FMCommander Single Allocation Study - 11-30-2016 - NED 03 SEC
 WWPJ's Overlaps (In= 2.91 km, Out= 3.86 km)

WWPJ CH 208 A DA
 Lat= 40 51 33.8, Lng= 75 18 04.4
 0.225 kW 230.8 m HAAT, 473 m COR
 Prot.= 60 dBu, Intef.= 54 dBu

WJCS CH 207 A DA BLED20090824AGH
 Lat= 40 33 52.0, Lng= 75 26 25.0
 0.12 kW 279 m HAAT, 432 m COR
 Prot.= 60 dBu, Intef.= 54 dBu



11-30-2016

Terrain Data: NED 03 SEC FMOver Analysis

WWPJ

WJCS BLED20090824AGH

Channel = 208A
 Max ERP = 0.225 kW
 RCAMSL = 473 m
 N. Lat. 40 51 33.8
 W. Lng. 75 18 04.4
 Protected
 60 dBu

Channel = 207A
 Max ERP = 0.12 kW
 RCAMSL = 432 m
 N. Lat. 40 33 52.0
 W. Lng. 75 26 25.0
 Interfering
 54 dBu

| Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Actual (dBu) | IX (km) |
|----------------------|-------------|-------------|--------------|----------------------|-------------|-------------|--------------|-----------------|------------|
| 140.0 | 000.0185 | 0319.6 | 012.2 | 039.7 | 000.0715 | 0311.9 | 030.5 | 50.50 | |
| 141.0 | 000.0180 | 0319.9 | 012.1 | 039.5 | 000.0709 | 0311.9 | 030.4 | 50.57 | |
| 142.0 | 000.0176 | 0315.3 | 011.9 | 039.2 | 000.0698 | 0312.4 | 030.2 | 50.62 | |
| 143.0 | 000.0171 | 0313.5 | 011.8 | 038.9 | 000.0689 | 0313.0 | 030.0 | 50.68 | |
| 144.0 | 000.0168 | 0312.5 | 011.8 | 038.6 | 000.0682 | 0313.6 | 029.8 | 50.76 | |
| 145.0 | 000.0163 | 0312.4 | 011.7 | 038.3 | 000.0674 | 0314.1 | 029.7 | 50.82 | |
| 146.0 | 000.0158 | 0305.8 | 011.5 | 037.9 | 000.0661 | 0314.0 | 029.5 | 50.81 | |
| 147.0 | 000.0154 | 0303.0 | 011.4 | 037.5 | 000.0651 | 0313.7 | 029.4 | 50.83 | |
| 148.0 | 000.0150 | 0302.8 | 011.3 | 037.2 | 000.0643 | 0313.3 | 029.2 | 50.85 | |
| 149.0 | 000.0146 | 0303.6 | 011.2 | 037.0 | 000.0636 | 0313.0 | 029.0 | 50.90 | |
| 150.0 | 000.0142 | 0304.3 | 011.1 | 036.7 | 000.0629 | 0312.4 | 028.9 | 50.92 | |
| 151.0 | 000.0136 | 0306.4 | 011.1 | 036.4 | 000.0620 | 0312.0 | 028.8 | 50.94 | |
| 152.0 | 000.0131 | 0309.7 | 011.0 | 036.1 | 000.0613 | 0311.2 | 028.6 | 50.96 | |
| 153.0 | 000.0125 | 0312.1 | 010.9 | 035.8 | 000.0605 | 0310.1 | 028.5 | 50.95 | |
| 154.0 | 000.0120 | 0314.0 | 010.8 | 035.5 | 000.0596 | 0309.0 | 028.3 | 50.93 | |
| 155.0 | 000.0114 | 0316.2 | 010.7 | 035.1 | 000.0586 | 0308.3 | 028.2 | 50.91 | |
| 156.0 | 000.0109 | 0319.2 | 010.7 | 034.8 | 000.0577 | 0308.3 | 028.1 | 50.92 | |
| 157.0 | 000.0104 | 0320.7 | 010.6 | 034.4 | 000.0567 | 0308.3 | 028.0 | 50.91 | |
| 158.0 | 000.0099 | 0320.2 | 010.4 | 034.0 | 000.0556 | 0308.2 | 027.9 | 50.87 | |
| 159.0 | 000.0095 | 0319.7 | 010.3 | 033.6 | 000.0544 | 0309.0 | 027.8 | 50.85 | |
| 160.0 | 000.0090 | 0320.3 | 010.2 | 033.1 | 000.0534 | 0309.7 | 027.8 | 50.83 | |
| 161.0 | 000.0089 | 0321.1 | 010.1 | 032.9 | 000.0527 | 0310.3 | 027.6 | 50.88 | |
| 162.0 | 000.0088 | 0321.4 | 010.1 | 032.6 | 000.0521 | 0310.9 | 027.5 | 50.92 | |
| 163.0 | 000.0088 | 0319.9 | 010.1 | 032.3 | 000.0514 | 0310.9 | 027.4 | 50.94 | |
| 164.0 | 000.0087 | 0318.2 | 010.0 | 032.0 | 000.0506 | 0310.6 | 027.3 | 50.93 | |
| 165.0 | 000.0086 | 0316.2 | 010.0 | 031.7 | 000.0497 | 0310.6 | 027.2 | 50.91 | |
| 166.0 | 000.0086 | 0315.4 | 010.0 | 031.4 | 000.0490 | 0311.1 | 027.1 | 50.92 | |
| 167.0 | 000.0085 | 0313.4 | 009.9 | 031.0 | 000.0481 | 0312.3 | 027.0 | 50.94 | |
| 168.0 | 000.0085 | 0314.7 | 009.9 | 030.8 | 000.0476 | 0313.4 | 026.9 | 51.00 | |
| 169.0 | 000.0084 | 0316.4 | 009.9 | 030.5 | 000.0469 | 0314.5 | 026.8 | 51.04 | |
| 170.0 | 000.0083 | 0312.9 | 009.8 | 030.1 | 000.0460 | 0315.9 | 026.7 | 51.03 | |
| 171.0 | 000.0084 | 0313.2 | 009.9 | 029.9 | 000.0455 | 0316.3 | 026.6 | 51.09 | |
| 172.0 | 000.0085 | 0313.2 | 009.9 | 029.6 | 000.0452 | 0316.6 | 026.5 | 51.16 | |
| 173.0 | 000.0086 | 0315.4 | 009.9 | 029.4 | 000.0450 | 0316.7 | 026.3 | 51.24 | |
| 174.0 | 000.0086 | 0315.1 | 010.0 | 029.1 | 000.0447 | 0317.0 | 026.2 | 51.30 | |
| 175.0 | 000.0087 | 0312.1 | 010.0 | 028.8 | 000.0443 | 0317.0 | 026.1 | 51.31 | |

| Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Actual (dBu) |
|----------------------|-------------|-------------|--------------|----------------------|-------------|-------------|--------------|-----------------|
| 176.0 | 000.0088 | 0311.6 | 010.0 | 028.5 | 000.0439 | 0316.8 | 026.0 | 51.35 |
| 177.0 | 000.0089 | 0309.2 | 010.0 | 028.2 | 000.0435 | 0317.2 | 025.9 | 51.38 |
| 178.0 | 000.0090 | 0305.9 | 009.9 | 027.8 | 000.0431 | 0317.5 | 025.8 | 51.40 |
| 179.0 | 000.0091 | 0302.6 | 009.9 | 027.4 | 000.0427 | 0317.7 | 025.8 | 51.40 |
| 180.0 | 000.0092 | 0301.1 | 009.9 | 027.1 | 000.0423 | 0317.6 | 025.7 | 51.42 |
| 181.0 | 000.0094 | 0300.4 | 010.0 | 026.8 | 000.0420 | 0317.5 | 025.6 | 51.46 |
| 182.0 | 000.0095 | 0299.8 | 010.0 | 026.5 | 000.0416 | 0317.8 | 025.5 | 51.49 |
| 183.0 | 000.0096 | 0301.0 | 010.0 | 026.2 | 000.0412 | 0318.3 | 025.4 | 51.56 |
| 184.0 | 000.0097 | 0302.7 | 010.1 | 025.8 | 000.0409 | 0318.6 | 025.2 | 51.61 |
| 185.0 | 000.0099 | 0304.2 | 010.2 | 025.5 | 000.0405 | 0318.6 | 025.1 | 51.67 |
| 186.0 | 000.0101 | 0301.7 | 010.2 | 025.2 | 000.0401 | 0318.2 | 025.0 | 51.66 |
| 187.0 | 000.0102 | 0296.0 | 010.1 | 024.7 | 000.0396 | 0317.8 | 025.1 | 51.59 |
| 188.0 | 000.0104 | 0293.6 | 010.1 | 024.3 | 000.0392 | 0317.6 | 025.0 | 51.58 |
| 189.0 | 000.0105 | 0294.9 | 010.2 | 024.0 | 000.0388 | 0317.7 | 024.9 | 51.61 |
| 190.0 | 000.0107 | 0293.1 | 010.2 | 023.6 | 000.0384 | 0318.0 | 024.8 | 51.61 |
| 191.0 | 000.0110 | 0292.6 | 010.3 | 023.2 | 000.0380 | 0317.9 | 024.7 | 51.64 |
| 192.0 | 000.0113 | 0292.6 | 010.3 | 022.8 | 000.0376 | 0317.5 | 024.6 | 51.66 |
| 193.0 | 000.0117 | 0291.7 | 010.4 | 022.5 | 000.0372 | 0317.0 | 024.5 | 51.67 |
| 194.0 | 000.0120 | 0291.0 | 010.5 | 022.1 | 000.0368 | 0316.7 | 024.4 | 51.67 |
| 195.0 | 000.0123 | 0287.8 | 010.5 | 021.6 | 000.0363 | 0316.7 | 024.4 | 51.65 |
| 196.0 | 000.0126 | 0286.8 | 010.5 | 021.2 | 000.0359 | 0316.6 | 024.3 | 51.64 |
| 197.0 | 000.0130 | 0286.7 | 010.6 | 020.8 | 000.0354 | 0316.4 | 024.3 | 51.64 |
| 198.0 | 000.0134 | 0284.9 | 010.6 | 020.4 | 000.0350 | 0316.1 | 024.2 | 51.62 |
| 199.0 | 000.0137 | 0283.6 | 010.7 | 019.9 | 000.0346 | 0315.6 | 024.1 | 51.59 |
| 200.0 | 000.0141 | 0283.2 | 010.7 | 019.5 | 000.0346 | 0315.5 | 024.1 | 51.63 |
| 201.0 | 000.0145 | 0280.8 | 010.8 | 019.0 | 000.0346 | 0315.4 | 024.1 | 51.65 |
| 202.0 | 000.0150 | 0277.6 | 010.8 | 018.6 | 000.0346 | 0315.5 | 024.0 | 51.67 |
| 203.0 | 000.0154 | 0274.1 | 010.8 | 018.1 | 000.0346 | 0315.2 | 024.0 | 51.66 |
| 204.0 | 000.0159 | 0272.3 | 010.9 | 017.7 | 000.0346 | 0314.6 | 024.0 | 51.66 |
| 205.0 | 000.0164 | 0271.1 | 010.9 | 017.2 | 000.0346 | 0313.9 | 024.0 | 51.66 |
| 206.0 | 000.0169 | 0267.5 | 010.9 | 016.8 | 000.0346 | 0313.2 | 024.0 | 51.63 |
| 207.0 | 000.0174 | 0266.8 | 011.0 | 016.3 | 000.0346 | 0312.8 | 024.0 | 51.64 |
| 208.0 | 000.0179 | 0267.7 | 011.1 | 015.8 | 000.0346 | 0312.8 | 023.9 | 51.68 |
| 209.0 | 000.0184 | 0269.9 | 011.2 | 015.3 | 000.0346 | 0312.9 | 023.8 | 51.74 |
| 210.0 | 000.0189 | 0268.4 | 011.2 | 014.8 | 000.0346 | 0312.6 | 023.9 | 51.73 |
| 211.0 | 000.0200 | 0264.7 | 011.3 | 014.3 | 000.0346 | 0312.3 | 023.8 | 51.73 |
| 212.0 | 000.0209 | 0263.5 | 011.4 | 013.8 | 000.0346 | 0312.0 | 023.8 | 51.75 |
| 213.0 | 000.0219 | 0262.5 | 011.5 | 013.2 | 000.0346 | 0311.9 | 023.8 | 51.77 |
| 214.0 | 000.0229 | 0260.8 | 011.6 | 012.7 | 000.0346 | 0311.6 | 023.8 | 51.76 |
| 215.0 | 000.0241 | 0259.3 | 011.7 | 012.2 | 000.0346 | 0311.2 | 023.7 | 51.77 |
| 216.0 | 000.0251 | 0259.7 | 011.8 | 011.6 | 000.0346 | 0310.6 | 023.7 | 51.78 |
| 217.0 | 000.0263 | 0257.5 | 011.9 | 011.0 | 000.0346 | 0310.1 | 023.7 | 51.76 |
| 218.0 | 000.0276 | 0255.0 | 012.0 | 010.5 | 000.0346 | 0309.6 | 023.7 | 51.72 |
| 219.0 | 000.0288 | 0254.4 | 012.1 | 009.9 | 000.0346 | 0309.4 | 023.7 | 51.72 |
| 220.0 | 000.0303 | 0251.4 | 012.2 | 009.4 | 000.0348 | 0309.4 | 023.8 | 51.71 |
| 221.0 | 000.0316 | 0248.2 | 012.2 | 008.9 | 000.0350 | 0309.3 | 023.9 | 51.68 |
| 222.0 | 000.0332 | 0247.1 | 012.3 | 008.3 | 000.0351 | 0309.0 | 023.9 | 51.68 |
| 223.0 | 000.0348 | 0243.7 | 012.4 | 007.8 | 000.0353 | 0308.7 | 024.0 | 51.63 |
| 224.0 | 000.0364 | 0238.3 | 012.4 | 007.4 | 000.0354 | 0308.2 | 024.1 | 51.55 |
| 225.0 | 000.0380 | 0233.5 | 012.4 | 007.0 | 000.0356 | 0308.0 | 024.2 | 51.47 |
| 226.0 | 000.0399 | 0227.8 | 012.4 | 006.6 | 000.0357 | 0308.1 | 024.3 | 51.38 |

| Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Actual (dBu) |
|----------------------|-------------|-------------|--------------|----------------------|-------------|-------------|--------------|-----------------|
| 227.0 | 000.0418 | 0223.9 | 012.4 | 006.1 | 000.0359 | 0308.4 | 024.5 | 51.33 |
| 228.0 | 000.0438 | 0223.5 | 012.5 | 005.6 | 000.0360 | 0308.9 | 024.5 | 51.33 |
| 229.0 | 000.0458 | 0226.0 | 012.8 | 004.9 | 000.0363 | 0309.7 | 024.5 | 51.38 |
| 230.0 | 000.0480 | 0227.7 | 012.9 | 004.2 | 000.0365 | 0309.4 | 024.5 | 51.38 |
| 231.0 | 000.0501 | 0229.3 | 013.1 | 003.5 | 000.0367 | 0308.7 | 024.6 | 51.36 |
| 232.0 | 000.0525 | 0230.8 | 013.3 | 002.8 | 000.0370 | 0308.3 | 024.6 | 51.34 |
| 233.0 | 000.0551 | 0228.6 | 013.4 | 002.3 | 000.0371 | 0308.4 | 024.7 | 51.28 |
| 234.0 | 000.0576 | 0227.9 | 013.5 | 001.8 | 000.0373 | 0308.5 | 024.8 | 51.22 |
| 235.0 | 000.0604 | 0228.3 | 013.7 | 001.1 | 000.0375 | 0308.5 | 024.9 | 51.19 |
| 236.0 | 000.0632 | 0230.7 | 013.9 | 000.4 | 000.0378 | 0307.6 | 025.0 | 51.14 |
| 237.0 | 000.0661 | 0229.0 | 014.0 | 359.9 | 000.0381 | 0307.4 | 025.1 | 51.07 |
| 238.0 | 000.0693 | 0222.5 | 014.0 | 359.7 | 000.0386 | 0307.6 | 025.4 | 50.97 |
| 239.0 | 000.0726 | 0212.5 | 013.8 | 359.7 | 000.0386 | 0307.6 | 025.7 | 50.77 |
| 240.0 | 000.0760 | 0202.0 | 013.6 | 359.7 | 000.0384 | 0307.5 | 026.0 | 50.54 |
| 241.0 | 000.0797 | 0191.3 | 013.5 | 359.9 | 000.0382 | 0307.4 | 026.3 | 50.31 |
| 242.0 | 000.0832 | 0175.6 | 013.1 | 000.3 | 000.0378 | 0307.6 | 026.6 | 50.01 |
| 243.0 | 000.0873 | 0155.3 | 012.4 | 001.4 | 000.0374 | 0308.6 | 027.2 | 49.65 |
| 244.0 | 000.0913 | 0137.3 | 011.7 | 002.4 | 000.0371 | 0308.4 | 027.7 | 49.28 |
| 245.0 | 000.0956 | 0120.6 | 011.1 | 003.3 | 000.0368 | 0308.6 | 028.1 | 48.96 |
| 246.0 | 000.1001 | 0104.9 | 010.6 | 004.1 | 000.0365 | 0309.3 | 028.6 | 48.68 |
| 247.0 | 000.1050 | 0092.0 | 010.0 | 004.9 | 000.0363 | 0309.7 | 029.0 | 48.41 |
| 248.0 | 000.1099 | 0078.8 | 009.4 | 005.8 | 000.0360 | 0309.0 | 029.4 | 48.09 |
| 249.0 | 000.1150 | 0071.3 | 009.0 | 006.3 | 000.0358 | 0308.3 | 029.7 | 47.87 |
| 250.0 | 000.1206 | 0075.8 | 009.4 | 005.5 | 000.0361 | 0308.9 | 029.7 | 47.94 |
| 251.0 | 000.1262 | 0103.2 | 011.1 | 002.4 | 000.0371 | 0308.4 | 029.2 | 48.33 |
| 252.0 | 000.1320 | 0156.9 | 013.8 | 357.1 | 000.0437 | 0314.7 | 028.6 | 49.62 |
| 253.0 | 000.1383 | 0202.8 | 015.9 | 352.8 | 000.0533 | 0314.3 | 028.3 | 50.60 |
| 254.0 | 000.1447 | 0235.2 | 017.5 | 349.7 | 000.0611 | 0320.6 | 028.4 | 51.31 |
| 255.0 | 000.1517 | 0255.8 | 018.5 | 347.7 | 000.0676 | 0329.2 | 028.7 | 51.85 |
| 256.0 | 000.1588 | 0269.0 | 019.1 | 346.3 | 000.0723 | 0335.6 | 029.0 | 52.13 |
| 257.0 | 000.1660 | 0270.7 | 019.4 | 345.7 | 000.0742 | 0337.5 | 029.3 | 52.09 |
| 258.0 | 000.1738 | 0259.3 | 019.2 | 346.1 | 000.0729 | 0336.4 | 029.6 | 51.79 |
| 259.0 | 000.1822 | 0258.5 | 019.4 | 345.8 | 000.0741 | 0337.5 | 030.0 | 51.69 |

11-30-2016

Terrain Data: NED 03 SEC FMOver Analysis

WJCS BLED20090824AGH

WWPJ

Channel = 207A
 Max ERP = 0.12 kW
 RCAMSL = 432 m
 N. Lat. 40 33 52.0
 W. Lng. 75 26 25.0
 Protected
 60 dBu

Channel = 208A
 Max ERP = 0.225 kW
 RCAMSL = 473 m
 N. Lat. 40 51 33.8
 W. Lng. 75 18 04.4
 Interfering
 54 dBu

| Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Actual (dBu) | IX (km) |
|----------------------|-------------|-------------|--------------|----------------------|-------------|-------------|--------------|-----------------|------------|
| 320.0 | 000.1200 | 0317.4 | 019.4 | 233.5 | 000.0564 | 0228.0 | 030.1 | 47.08 | |
| 321.0 | 000.1200 | 0319.3 | 019.5 | 233.7 | 000.0568 | 0227.9 | 029.8 | 47.30 | |
| 322.0 | 000.1200 | 0318.7 | 019.4 | 233.6 | 000.0567 | 0227.9 | 029.4 | 47.50 | |
| 323.0 | 000.1200 | 0318.7 | 019.4 | 233.7 | 000.0568 | 0227.9 | 029.1 | 47.71 | |
| 324.0 | 000.1200 | 0318.9 | 019.5 | 233.7 | 000.0568 | 0227.9 | 028.7 | 47.92 | |
| 325.0 | 000.1200 | 0317.8 | 019.4 | 233.6 | 000.0566 | 0228.0 | 028.4 | 48.12 | |
| 326.0 | 000.1200 | 0317.1 | 019.4 | 233.5 | 000.0564 | 0228.0 | 028.1 | 48.33 | |
| 327.0 | 000.1200 | 0318.6 | 019.4 | 233.6 | 000.0566 | 0228.0 | 027.7 | 48.55 | |
| 328.0 | 000.1200 | 0320.6 | 019.5 | 233.7 | 000.0567 | 0227.9 | 027.4 | 48.79 | |
| 329.0 | 000.1200 | 0323.5 | 019.6 | 233.8 | 000.0570 | 0227.9 | 027.0 | 49.04 | |
| 330.0 | 000.1200 | 0324.9 | 019.6 | 233.8 | 000.0571 | 0227.9 | 026.7 | 49.27 | |
| 331.0 | 000.1174 | 0324.8 | 019.5 | 233.5 | 000.0563 | 0228.1 | 026.4 | 49.44 | |
| 332.0 | 000.1148 | 0323.4 | 019.4 | 233.0 | 000.0552 | 0228.6 | 026.0 | 49.59 | |
| 333.0 | 000.1123 | 0322.4 | 019.2 | 232.6 | 000.0541 | 0229.8 | 025.7 | 49.76 | |
| 334.0 | 000.1098 | 0322.4 | 019.1 | 232.2 | 000.0531 | 0230.7 | 025.4 | 49.93 | |
| 335.0 | 000.1073 | 0323.6 | 019.1 | 231.9 | 000.0522 | 0230.8 | 025.1 | 50.08 | |
| 336.0 | 000.1048 | 0324.9 | 019.0 | 231.5 | 000.0514 | 0230.4 | 024.8 | 50.22 | |
| 337.0 | 000.1024 | 0329.9 | 019.0 | 231.4 | 000.0511 | 0230.1 | 024.5 | 50.42 | |
| 338.0 | 000.1000 | 0331.6 | 018.9 | 231.0 | 000.0502 | 0229.4 | 024.2 | 50.54 | |
| 339.0 | 000.0976 | 0332.0 | 018.8 | 230.6 | 000.0492 | 0228.2 | 023.9 | 50.61 | |
| 340.0 | 000.0953 | 0332.7 | 018.7 | 230.1 | 000.0482 | 0227.8 | 023.6 | 50.71 | |
| 341.0 | 000.0914 | 0334.0 | 018.6 | 229.4 | 000.0468 | 0227.1 | 023.4 | 50.74 | |
| 342.0 | 000.0876 | 0336.5 | 018.4 | 228.8 | 000.0454 | 0225.6 | 023.1 | 50.74 | |
| 343.0 | 000.0839 | 0335.8 | 018.2 | 228.0 | 000.0438 | 0223.5 | 022.9 | 50.66 | |
| 344.0 | 000.0803 | 0337.3 | 018.1 | 227.3 | 000.0424 | 0223.3 | 022.7 | 50.67 | |
| 345.0 | 000.0767 | 0337.0 | 017.8 | 226.4 | 000.0407 | 0225.8 | 022.5 | 50.73 | |
| 346.0 | 000.0732 | 0337.0 | 017.6 | 225.6 | 000.0391 | 0230.3 | 022.4 | 50.84 | |
| 347.0 | 000.0698 | 0332.7 | 017.3 | 224.5 | 000.0371 | 0236.0 | 022.3 | 50.89 | |
| 348.0 | 000.0665 | 0327.3 | 017.0 | 223.3 | 000.0352 | 0242.2 | 022.2 | 50.90 | |
| 349.0 | 000.0633 | 0321.6 | 016.6 | 222.0 | 000.0332 | 0247.0 | 022.2 | 50.83 | |
| 350.0 | 000.0602 | 0320.4 | 016.3 | 221.1 | 000.0317 | 0248.1 | 022.2 | 50.71 | |
| 351.0 | 000.0577 | 0317.7 | 016.1 | 220.1 | 000.0304 | 0251.0 | 022.1 | 50.66 | |
| 352.0 | 000.0553 | 0315.0 | 015.8 | 219.1 | 000.0290 | 0254.1 | 022.1 | 50.58 | |

| Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Actual (dBu) |
|----------------------|-------------|-------------|--------------|----------------------|-------------|-------------|--------------|-----------------|
| 353.0 | 000.0529 | 0314.2 | 015.6 | 218.2 | 000.0279 | 0254.7 | 022.0 | 50.48 |
| 354.0 | 000.0506 | 0313.9 | 015.4 | 217.4 | 000.0268 | 0256.5 | 022.0 | 50.40 |
| 355.0 | 000.0484 | 0315.0 | 015.3 | 216.6 | 000.0258 | 0258.3 | 021.9 | 50.36 |
| 356.0 | 000.0462 | 0315.4 | 015.1 | 215.8 | 000.0249 | 0259.5 | 021.8 | 50.27 |
| 357.0 | 000.0440 | 0314.8 | 014.9 | 214.9 | 000.0240 | 0259.4 | 021.8 | 50.11 |
| 358.0 | 000.0419 | 0311.2 | 014.6 | 214.0 | 000.0229 | 0260.8 | 021.9 | 49.91 |
| 359.0 | 000.0399 | 0308.8 | 014.4 | 213.1 | 000.0220 | 0262.7 | 021.9 | 49.76 |
| 000.0 | 000.0379 | 0307.3 | 014.2 | 212.2 | 000.0212 | 0263.1 | 022.0 | 49.57 |
| 001.0 | 000.0376 | 0308.4 | 014.2 | 211.7 | 000.0206 | 0263.9 | 021.8 | 49.58 |
| 002.0 | 000.0372 | 0308.4 | 014.2 | 211.1 | 000.0200 | 0264.6 | 021.8 | 49.55 |
| 003.0 | 000.0369 | 0308.3 | 014.1 | 210.5 | 000.0194 | 0266.9 | 021.7 | 49.55 |
| 004.0 | 000.0366 | 0309.2 | 014.1 | 209.9 | 000.0188 | 0268.9 | 021.6 | 49.56 |
| 005.0 | 000.0362 | 0309.5 | 014.1 | 209.2 | 000.0185 | 0270.2 | 021.5 | 49.59 |
| 006.0 | 000.0359 | 0308.7 | 014.0 | 208.6 | 000.0182 | 0269.0 | 021.4 | 49.51 |
| 007.0 | 000.0356 | 0308.0 | 014.0 | 207.9 | 000.0179 | 0267.4 | 021.4 | 49.42 |
| 008.0 | 000.0353 | 0308.8 | 014.0 | 207.3 | 000.0175 | 0266.2 | 021.3 | 49.36 |
| 009.0 | 000.0349 | 0309.3 | 014.0 | 206.7 | 000.0172 | 0266.8 | 021.3 | 49.35 |
| 010.0 | 000.0346 | 0309.4 | 013.9 | 206.0 | 000.0169 | 0267.5 | 021.2 | 49.32 |
| 011.0 | 000.0346 | 0310.1 | 013.9 | 205.4 | 000.0166 | 0270.6 | 021.1 | 49.40 |
| 012.0 | 000.0346 | 0311.0 | 014.0 | 204.8 | 000.0163 | 0271.7 | 021.1 | 49.41 |
| 013.0 | 000.0346 | 0311.8 | 014.0 | 204.1 | 000.0160 | 0272.4 | 021.0 | 49.40 |
| 014.0 | 000.0346 | 0312.2 | 014.0 | 203.5 | 000.0157 | 0273.0 | 020.9 | 49.37 |
| 015.0 | 000.0346 | 0312.8 | 014.0 | 202.8 | 000.0154 | 0274.7 | 020.9 | 49.38 |
| 016.0 | 000.0346 | 0312.8 | 014.0 | 202.1 | 000.0150 | 0277.2 | 020.9 | 49.39 |
| 017.0 | 000.0346 | 0313.6 | 014.0 | 201.5 | 000.0147 | 0279.4 | 020.8 | 49.40 |
| 018.0 | 000.0346 | 0315.1 | 014.1 | 200.8 | 000.0144 | 0281.1 | 020.8 | 49.39 |
| 019.0 | 000.0346 | 0315.4 | 014.1 | 200.1 | 000.0141 | 0282.9 | 020.8 | 49.37 |
| 020.0 | 000.0346 | 0315.6 | 014.1 | 199.5 | 000.0139 | 0283.5 | 020.8 | 49.31 |
| 021.0 | 000.0356 | 0316.5 | 014.2 | 198.8 | 000.0136 | 0283.8 | 020.6 | 49.34 |
| 022.0 | 000.0367 | 0316.7 | 014.3 | 198.1 | 000.0134 | 0284.7 | 020.5 | 49.37 |
| 023.0 | 000.0378 | 0317.7 | 014.4 | 197.3 | 000.0131 | 0286.6 | 020.4 | 49.40 |
| 024.0 | 000.0389 | 0317.7 | 014.5 | 196.6 | 000.0128 | 0286.2 | 020.4 | 49.35 |
| 025.0 | 000.0400 | 0318.0 | 014.6 | 195.8 | 000.0126 | 0287.0 | 020.3 | 49.35 |
| 026.0 | 000.0411 | 0318.5 | 014.7 | 195.1 | 000.0123 | 0287.7 | 020.2 | 49.34 |
| 027.0 | 000.0422 | 0317.6 | 014.8 | 194.3 | 000.0121 | 0290.1 | 020.2 | 49.34 |
| 028.0 | 000.0433 | 0317.5 | 014.9 | 193.5 | 000.0119 | 0291.7 | 020.2 | 49.32 |
| 029.0 | 000.0445 | 0317.0 | 015.0 | 192.7 | 000.0116 | 0292.1 | 020.2 | 49.25 |
| 030.0 | 000.0457 | 0316.2 | 015.1 | 192.0 | 000.0113 | 0292.5 | 020.2 | 49.14 |
| 031.0 | 000.0481 | 0312.5 | 015.2 | 191.2 | 000.0110 | 0292.5 | 020.2 | 49.05 |
| 032.0 | 000.0505 | 0310.6 | 015.3 | 190.3 | 000.0108 | 0293.0 | 020.1 | 49.00 |
| 033.0 | 000.0530 | 0310.0 | 015.5 | 189.4 | 000.0106 | 0293.8 | 020.1 | 48.98 |
| 034.0 | 000.0556 | 0308.2 | 015.7 | 188.5 | 000.0105 | 0294.5 | 020.0 | 48.97 |
| 035.0 | 000.0582 | 0308.2 | 015.8 | 187.6 | 000.0103 | 0294.5 | 020.0 | 48.95 |
| 036.0 | 000.0609 | 0310.7 | 016.1 | 186.5 | 000.0102 | 0298.4 | 019.9 | 49.07 |
| 037.0 | 000.0637 | 0313.0 | 016.4 | 185.4 | 000.0100 | 0304.9 | 019.8 | 49.24 |
| 038.0 | 000.0665 | 0314.1 | 016.6 | 184.4 | 000.0098 | 0303.8 | 019.8 | 49.15 |
| 039.0 | 000.0693 | 0312.7 | 016.7 | 183.5 | 000.0097 | 0301.5 | 019.8 | 49.00 |
| 040.0 | 000.0723 | 0311.9 | 016.9 | 182.5 | 000.0095 | 0300.5 | 019.9 | 48.87 |
| 041.0 | 000.0739 | 0312.7 | 017.0 | 181.6 | 000.0094 | 0299.6 | 020.0 | 48.72 |
| 042.0 | 000.0755 | 0313.7 | 017.1 | 180.7 | 000.0093 | 0300.6 | 020.1 | 48.62 |
| 043.0 | 000.0771 | 0314.8 | 017.3 | 179.8 | 000.0092 | 0301.2 | 020.2 | 48.48 |

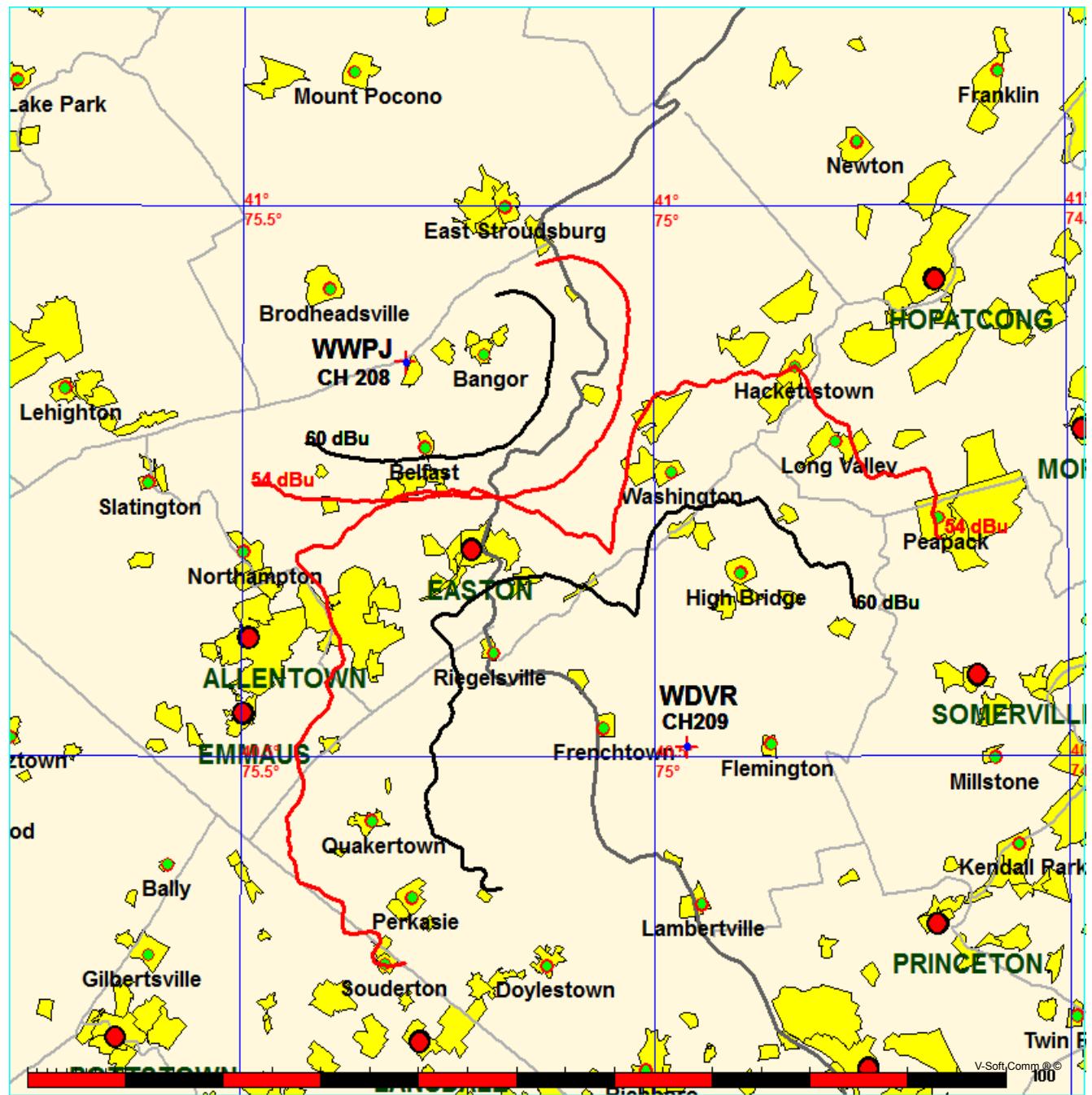
| Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Actual (dBu) |
|----------------------|-------------|-------------|--------------|----------------------|-------------|-------------|--------------|-----------------|
| 044.0 | 000.0787 | 0315.5 | 017.4 | 179.0 | 000.0091 | 0302.6 | 020.3 | 48.38 |
| 045.0 | 000.0804 | 0313.3 | 017.4 | 178.4 | 000.0090 | 0304.9 | 020.5 | 48.25 |
| 046.0 | 000.0821 | 0312.0 | 017.5 | 177.7 | 000.0090 | 0306.8 | 020.7 | 48.12 |
| 047.0 | 000.0838 | 0310.2 | 017.5 | 177.0 | 000.0089 | 0309.0 | 020.9 | 48.00 |
| 048.0 | 000.0855 | 0307.1 | 017.5 | 176.5 | 000.0089 | 0310.9 | 021.1 | 47.84 |
| 049.0 | 000.0872 | 0305.2 | 017.5 | 175.9 | 000.0088 | 0311.6 | 021.3 | 47.66 |
| 050.0 | 000.0890 | 0305.4 | 017.6 | 175.2 | 000.0088 | 0311.9 | 021.5 | 47.49 |
| 051.0 | 000.0909 | 0302.3 | 017.6 | 174.8 | 000.0087 | 0312.4 | 021.8 | 47.28 |
| 052.0 | 000.0929 | 0298.3 | 017.6 | 174.4 | 000.0087 | 0313.7 | 022.1 | 47.09 |
| 053.0 | 000.0949 | 0295.4 | 017.6 | 174.0 | 000.0086 | 0315.2 | 022.3 | 46.92 |
| 054.0 | 000.0969 | 0296.4 | 017.8 | 173.3 | 000.0086 | 0315.9 | 022.5 | 46.75 |
| 055.0 | 000.0989 | 0294.6 | 017.8 | 172.8 | 000.0085 | 0314.9 | 022.8 | 46.51 |
| 056.0 | 000.1010 | 0288.2 | 017.7 | 172.7 | 000.0085 | 0314.6 | 023.1 | 46.25 |
| 057.0 | 000.1031 | 0280.7 | 017.5 | 172.7 | 000.0085 | 0314.6 | 023.4 | 46.00 |
| 058.0 | 000.1052 | 0277.3 | 017.5 | 172.5 | 000.0085 | 0314.2 | 023.7 | 45.76 |
| 059.0 | 000.1073 | 0277.8 | 017.6 | 171.9 | 000.0085 | 0313.1 | 024.0 | 45.54 |
| 060.0 | 000.1094 | 0280.8 | 017.8 | 171.2 | 000.0084 | 0313.0 | 024.2 | 45.34 |
| 061.0 | 000.1094 | 0286.4 | 018.0 | 170.6 | 000.0083 | 0313.2 | 024.4 | 45.15 |
| 062.0 | 000.1094 | 0288.0 | 018.0 | 170.2 | 000.0083 | 0312.8 | 024.7 | 44.93 |
| 063.0 | 000.1094 | 0288.2 | 018.0 | 170.0 | 000.0083 | 0312.9 | 025.0 | 44.71 |
| 064.0 | 000.1094 | 0291.9 | 018.2 | 169.5 | 000.0083 | 0315.4 | 025.3 | 44.61 |
| 065.0 | 000.1094 | 0295.9 | 018.3 | 169.0 | 000.0084 | 0316.4 | 025.5 | 44.46 |
| 066.0 | 000.1094 | 0296.7 | 018.3 | 168.8 | 000.0084 | 0316.0 | 025.8 | 44.25 |
| 067.0 | 000.1094 | 0299.7 | 018.4 | 168.5 | 000.0084 | 0315.2 | 026.1 | 44.04 |
| 068.0 | 000.1094 | 0302.3 | 018.5 | 168.2 | 000.0085 | 0314.9 | 026.4 | 43.85 |
| 069.0 | 000.1094 | 0305.1 | 018.6 | 167.9 | 000.0085 | 0314.5 | 026.7 | 43.64 |
| 070.0 | 000.1094 | 0299.1 | 018.4 | 168.2 | 000.0085 | 0314.9 | 027.1 | 43.41 |
| 071.0 | 000.1091 | 0293.8 | 018.2 | 168.5 | 000.0084 | 0315.1 | 027.4 | 43.18 |
| 072.0 | 000.1087 | 0294.9 | 018.2 | 168.3 | 000.0084 | 0315.0 | 027.7 | 42.98 |
| 073.0 | 000.1083 | 0293.4 | 018.2 | 168.4 | 000.0084 | 0315.1 | 028.1 | 42.78 |
| 074.0 | 000.1080 | 0286.6 | 017.9 | 168.8 | 000.0084 | 0316.0 | 028.4 | 42.58 |
| 075.0 | 000.1076 | 0274.5 | 017.5 | 169.6 | 000.0083 | 0314.5 | 028.7 | 42.29 |
| 076.0 | 000.1073 | 0274.3 | 017.5 | 169.6 | 000.0083 | 0314.5 | 029.1 | 42.10 |
| 077.0 | 000.1069 | 0284.4 | 017.8 | 169.0 | 000.0084 | 0316.3 | 029.3 | 42.01 |
| 078.0 | 000.1065 | 0288.2 | 017.9 | 168.7 | 000.0084 | 0315.8 | 029.7 | 41.83 |
| 079.0 | 000.1062 | 0284.8 | 017.8 | 169.0 | 000.0084 | 0316.3 | 030.0 | 41.65 |

Contour-to-Contour Map, WWPJ vs WDVR
Town Of Monroe, Connecticut

FMCommander Single Allocation Study - 11-30-2016 - NED 03 SEC
WWPJ's Overlaps (In= 4.03 km, Out= 9.09 km)

WWPJ CH 208 A DA
Lat= 40 51 33.8, Lng= 75 18 04.4
0.225 kW 230.8 m HAAT, 473 m COR
Prot.= 60 dBu, Intef.= 54 dBu

WDVR CH 209 B1 DA BLED20090330ABU
Lat= 40 30 36.0, Lng= 74 57 34.0
3.8 kW 221 m HAAT, 220.7 m COR
Prot.= 60 dBu, Intef.= 54 dBu



11-30-2016

Terrain Data: NED 03 SEC FMOver Analysis

WWPJ

WDVR BLED20090330ABU

Channel = 208A
 Max ERP = 0.225 kW
 RCAMSL = 473 m
 N. Lat. 40 51 33.8
 W. Lng. 75 18 04.4
 Protected
 60 dBu

Channel = 209B1
 Max ERP = 3.8 kW
 RCAMSL = 220.7 m
 N. Lat. 40 30 36.0
 W. Lng. 74 57 34.0
 Interfering
 54 dBu

| Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Actual (dBu) | IX (km) |
|----------------------|-------------|-------------|--------------|----------------------|-------------|-------------|--------------|-----------------|------------|
| 083.0 | 000.0666 | 0264.0 | 015.1 | 341.3 | 003.4769 | 0040.8 | 042.9 | 45.11 | |
| 084.0 | 000.0656 | 0264.6 | 015.0 | 341.2 | 003.4724 | 0040.5 | 042.7 | 45.14 | |
| 085.0 | 000.0646 | 0264.8 | 015.0 | 341.0 | 003.4669 | 0040.1 | 042.5 | 45.13 | |
| 086.0 | 000.0637 | 0265.2 | 014.9 | 340.9 | 003.4615 | 0039.7 | 042.2 | 45.13 | |
| 087.0 | 000.0627 | 0265.4 | 014.9 | 340.7 | 003.4557 | 0039.4 | 042.0 | 45.13 | |
| 088.0 | 000.0615 | 0270.5 | 015.0 | 340.7 | 003.4556 | 0039.4 | 041.7 | 45.22 | |
| 089.0 | 000.0606 | 0271.9 | 015.0 | 340.6 | 003.4508 | 0038.9 | 041.5 | 45.20 | |
| 090.0 | 000.0597 | 0269.2 | 014.8 | 340.3 | 003.4402 | 0037.7 | 041.3 | 45.04 | |
| 091.0 | 000.0590 | 0269.1 | 014.8 | 340.1 | 003.4334 | 0037.2 | 041.0 | 45.00 | |
| 092.0 | 000.0583 | 0268.9 | 014.7 | 339.9 | 003.4244 | 0036.5 | 040.8 | 44.93 | |
| 093.0 | 000.0574 | 0269.1 | 014.7 | 339.7 | 003.4122 | 0036.2 | 040.6 | 44.92 | |
| 094.0 | 000.0567 | 0270.4 | 014.7 | 339.5 | 003.4033 | 0036.0 | 040.4 | 44.95 | |
| 095.0 | 000.0560 | 0269.8 | 014.6 | 339.3 | 003.3898 | 0035.8 | 040.2 | 44.96 | |
| 096.0 | 000.0554 | 0272.4 | 014.6 | 339.2 | 003.3828 | 0035.3 | 039.9 | 44.92 | |
| 097.0 | 000.0547 | 0270.5 | 014.5 | 338.9 | 003.3658 | 0034.1 | 039.7 | 44.72 | |
| 098.0 | 000.0538 | 0277.5 | 014.7 | 338.9 | 003.3661 | 0034.1 | 039.4 | 44.82 | |
| 099.0 | 000.0531 | 0280.8 | 014.7 | 338.8 | 003.3588 | 0033.8 | 039.2 | 44.82 | |
| 100.0 | 000.0525 | 0282.3 | 014.7 | 338.6 | 003.3474 | 0033.2 | 039.0 | 44.77 | |
| 101.0 | 000.0516 | 0283.2 | 014.7 | 338.3 | 003.3334 | 0032.9 | 038.8 | 44.75 | |
| 102.0 | 000.0510 | 0286.5 | 014.7 | 338.2 | 003.3247 | 0032.9 | 038.5 | 44.82 | |
| 103.0 | 000.0501 | 0287.7 | 014.7 | 337.9 | 003.3101 | 0033.6 | 038.4 | 45.01 | |
| 104.0 | 000.0495 | 0288.7 | 014.7 | 337.7 | 003.2960 | 0034.3 | 038.2 | 45.22 | |
| 105.0 | 000.0487 | 0290.0 | 014.7 | 337.4 | 003.2811 | 0034.9 | 038.0 | 45.37 | |
| 106.0 | 000.0478 | 0289.5 | 014.6 | 337.1 | 003.2624 | 0035.7 | 037.8 | 45.57 | |
| 107.0 | 000.0472 | 0288.7 | 014.5 | 336.7 | 003.2439 | 0037.0 | 037.7 | 45.86 | |
| 108.0 | 000.0464 | 0291.1 | 014.5 | 336.5 | 003.2297 | 0038.1 | 037.5 | 46.14 | |
| 109.0 | 000.0458 | 0289.2 | 014.4 | 336.1 | 003.2090 | 0040.0 | 037.4 | 46.52 | |
| 110.0 | 000.0450 | 0291.1 | 014.4 | 335.8 | 003.1933 | 0040.9 | 037.2 | 46.73 | |
| 111.0 | 000.0438 | 0293.0 | 014.4 | 335.5 | 003.1752 | 0041.2 | 037.0 | 46.83 | |
| 112.0 | 000.0426 | 0290.3 | 014.2 | 335.1 | 003.1499 | 0041.7 | 037.0 | 46.91 | |
| 113.0 | 000.0416 | 0292.1 | 014.2 | 334.7 | 003.1322 | 0042.4 | 036.8 | 47.06 | |
| 114.0 | 000.0404 | 0298.4 | 014.2 | 334.5 | 003.1192 | 0042.7 | 036.6 | 47.17 | |
| 115.0 | 000.0393 | 0298.1 | 014.1 | 334.1 | 003.0970 | 0043.8 | 036.6 | 47.39 | |
| 116.0 | 000.0382 | 0297.5 | 014.0 | 333.7 | 003.0743 | 0043.5 | 036.5 | 47.31 | |
| 117.0 | 000.0371 | 0297.8 | 013.9 | 333.3 | 003.0530 | 0043.4 | 036.4 | 47.29 | |
| 118.0 | 000.0362 | 0300.7 | 013.9 | 333.0 | 003.0352 | 0043.7 | 036.3 | 47.38 | |

| Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Actual (dBu) |
|----------------------|-------------|-------------|--------------|----------------------|-------------|-------------|--------------|-----------------|
| 119.0 | 000.0351 | 0304.0 | 013.9 | 332.6 | 003.0166 | 0043.6 | 036.2 | 47.38 |
| 120.0 | 000.0340 | 0306.3 | 013.8 | 332.3 | 002.9967 | 0044.2 | 036.1 | 47.49 |
| 121.0 | 000.0334 | 0310.8 | 013.8 | 332.0 | 002.9803 | 0045.2 | 036.0 | 47.70 |
| 122.0 | 000.0327 | 0312.6 | 013.8 | 331.6 | 002.9610 | 0046.1 | 035.9 | 47.87 |
| 123.0 | 000.0318 | 0311.8 | 013.7 | 331.2 | 002.9387 | 0046.8 | 035.8 | 47.97 |
| 124.0 | 000.0311 | 0312.2 | 013.6 | 330.8 | 002.9181 | 0047.5 | 035.8 | 48.10 |
| 125.0 | 000.0305 | 0312.9 | 013.6 | 330.4 | 002.8978 | 0047.8 | 035.7 | 48.14 |
| 126.0 | 000.0298 | 0316.2 | 013.6 | 330.1 | 002.8793 | 0048.6 | 035.6 | 48.29 |
| 127.0 | 000.0292 | 0314.4 | 013.5 | 329.6 | 002.8738 | 0050.0 | 035.6 | 48.51 |
| 128.0 | 000.0284 | 0314.4 | 013.4 | 329.2 | 002.8712 | 0051.9 | 035.6 | 48.82 |
| 129.0 | 000.0277 | 0317.0 | 013.4 | 328.9 | 002.8688 | 0053.7 | 035.6 | 49.12 |
| 130.0 | 000.0271 | 0315.6 | 013.3 | 328.5 | 002.8661 | 0056.0 | 035.6 | 49.45 |
| 131.0 | 000.0262 | 0316.0 | 013.2 | 328.1 | 002.8634 | 0058.4 | 035.6 | 49.78 |
| 132.0 | 000.0253 | 0312.5 | 013.0 | 327.6 | 002.8606 | 0060.4 | 035.7 | 49.98 |
| 133.0 | 000.0244 | 0310.0 | 012.8 | 327.2 | 002.8578 | 0062.8 | 035.8 | 50.22 |
| 134.0 | 000.0235 | 0308.6 | 012.7 | 326.8 | 002.8552 | 0064.1 | 035.9 | 50.34 |
| 135.0 | 000.0226 | 0306.3 | 012.5 | 326.4 | 002.8526 | 0064.1 | 036.0 | 50.29 |
| 136.0 | 000.0218 | 0306.3 | 012.4 | 326.1 | 002.8502 | 0064.7 | 036.1 | 50.33 |
| 137.0 | 000.0209 | 0305.7 | 012.3 | 325.7 | 002.8477 | 0065.6 | 036.2 | 50.40 |
| 138.0 | 000.0201 | 0307.7 | 012.2 | 325.3 | 002.8454 | 0066.5 | 036.2 | 50.48 |
| 139.0 | 000.0193 | 0312.1 | 012.2 | 325.0 | 002.8432 | 0067.9 | 036.3 | 50.63 |
| 140.0 | 000.0185 | 0319.6 | 012.2 | 324.7 | 002.8410 | 0069.3 | 036.2 | 50.80 |
| 141.0 | 000.0180 | 0319.9 | 012.1 | 324.3 | 002.8388 | 0070.7 | 036.3 | 50.94 |
| 142.0 | 000.0176 | 0315.3 | 011.9 | 324.0 | 002.8365 | 0072.6 | 036.4 | 51.09 |
| 143.0 | 000.0171 | 0313.5 | 011.8 | 323.6 | 002.8344 | 0074.5 | 036.5 | 51.25 |
| 144.0 | 000.0168 | 0312.5 | 011.8 | 323.3 | 002.8323 | 0076.5 | 036.6 | 51.43 |
| 145.0 | 000.0163 | 0312.4 | 011.7 | 323.0 | 002.8302 | 0077.9 | 036.7 | 51.54 |
| 146.0 | 000.0158 | 0305.8 | 011.5 | 322.7 | 002.8282 | 0078.9 | 036.9 | 51.56 |
| 147.0 | 000.0154 | 0303.0 | 011.4 | 322.4 | 002.8263 | 0079.6 | 037.0 | 51.58 |
| 148.0 | 000.0150 | 0302.8 | 011.3 | 322.1 | 002.8244 | 0080.2 | 037.2 | 51.60 |
| 149.0 | 000.0146 | 0303.6 | 011.2 | 321.8 | 002.8225 | 0081.3 | 037.2 | 51.68 |
| 150.0 | 000.0142 | 0304.3 | 011.1 | 321.6 | 002.8207 | 0082.6 | 037.3 | 51.76 |
| 151.0 | 000.0136 | 0306.4 | 011.1 | 321.3 | 002.8189 | 0083.7 | 037.4 | 51.83 |
| 152.0 | 000.0131 | 0309.7 | 011.0 | 321.0 | 002.8171 | 0085.0 | 037.5 | 51.92 |
| 153.0 | 000.0125 | 0312.1 | 010.9 | 320.7 | 002.8154 | 0086.8 | 037.6 | 52.04 |
| 154.0 | 000.0120 | 0314.0 | 010.8 | 320.5 | 002.8137 | 0088.7 | 037.8 | 52.17 |
| 155.0 | 000.0114 | 0316.2 | 010.7 | 320.3 | 002.8122 | 0089.7 | 037.9 | 52.21 |
| 156.0 | 000.0109 | 0319.2 | 010.7 | 320.0 | 002.8106 | 0089.9 | 038.0 | 52.17 |
| 157.0 | 000.0104 | 0320.7 | 010.6 | 319.8 | 002.8225 | 0089.7 | 038.2 | 52.10 |
| 158.0 | 000.0099 | 0320.2 | 010.4 | 319.6 | 002.8342 | 0089.4 | 038.4 | 52.01 |
| 159.0 | 000.0095 | 0319.7 | 010.3 | 319.4 | 002.8452 | 0089.1 | 038.6 | 51.92 |
| 160.0 | 000.0090 | 0320.3 | 010.2 | 319.2 | 002.8561 | 0088.9 | 038.7 | 51.84 |
| 161.0 | 000.0089 | 0321.1 | 010.1 | 319.0 | 002.8701 | 0088.9 | 038.8 | 51.83 |
| 162.0 | 000.0088 | 0321.4 | 010.1 | 318.8 | 002.8836 | 0089.2 | 038.9 | 51.84 |
| 163.0 | 000.0088 | 0319.9 | 010.1 | 318.5 | 002.8969 | 0089.4 | 039.0 | 51.84 |
| 164.0 | 000.0087 | 0318.2 | 010.0 | 318.3 | 002.9089 | 0089.9 | 039.1 | 51.85 |
| 165.0 | 000.0086 | 0316.2 | 010.0 | 318.1 | 002.9204 | 0090.2 | 039.3 | 51.85 |
| 166.0 | 000.0086 | 0315.4 | 010.0 | 318.0 | 002.9323 | 0090.6 | 039.4 | 51.85 |
| 167.0 | 000.0085 | 0313.4 | 009.9 | 317.8 | 002.9432 | 0091.0 | 039.5 | 51.85 |
| 168.0 | 000.0085 | 0314.7 | 009.9 | 317.5 | 002.9571 | 0091.7 | 039.6 | 51.90 |
| 169.0 | 000.0084 | 0316.4 | 009.9 | 317.3 | 002.9699 | 0092.6 | 039.7 | 51.97 |

| Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Actual (dBu) |
|----------------------|-------------|-------------|--------------|----------------------|-------------|-------------|--------------|-----------------|
| 170.0 | 000.0083 | 0312.9 | 009.8 | 317.2 | 002.9788 | 0093.2 | 039.8 | 51.98 |
| 171.0 | 000.0084 | 0313.2 | 009.9 | 316.9 | 002.9928 | 0093.8 | 039.9 | 52.02 |
| 172.0 | 000.0085 | 0313.2 | 009.9 | 316.7 | 003.0065 | 0093.9 | 040.0 | 52.02 |
| 173.0 | 000.0086 | 0315.4 | 009.9 | 316.5 | 003.0218 | 0093.6 | 040.0 | 51.99 |
| 174.0 | 000.0086 | 0315.1 | 010.0 | 316.3 | 003.0351 | 0093.6 | 040.1 | 51.97 |
| 175.0 | 000.0087 | 0312.1 | 010.0 | 316.1 | 003.0459 | 0093.7 | 040.2 | 51.94 |
| 176.0 | 000.0088 | 0311.6 | 010.0 | 315.9 | 003.0586 | 0094.0 | 040.3 | 51.95 |
| 177.0 | 000.0089 | 0309.2 | 010.0 | 315.7 | 003.0696 | 0094.3 | 040.5 | 51.94 |
| 178.0 | 000.0090 | 0305.9 | 009.9 | 315.5 | 003.0795 | 0094.6 | 040.6 | 51.93 |
| 179.0 | 000.0091 | 0302.6 | 009.9 | 315.4 | 003.0891 | 0095.1 | 040.7 | 51.93 |
| 180.0 | 000.0092 | 0301.1 | 009.9 | 315.2 | 003.0999 | 0095.8 | 040.8 | 51.96 |
| 181.0 | 000.0094 | 0300.4 | 010.0 | 315.0 | 003.1129 | 0096.4 | 040.9 | 51.99 |
| 182.0 | 000.0095 | 0299.8 | 010.0 | 314.8 | 003.1243 | 0096.8 | 041.1 | 51.99 |
| 183.0 | 000.0096 | 0301.0 | 010.0 | 314.6 | 003.1389 | 0097.5 | 041.1 | 52.04 |
| 184.0 | 000.0097 | 0302.7 | 010.1 | 314.4 | 003.1522 | 0098.3 | 041.2 | 52.08 |
| 185.0 | 000.0099 | 0304.2 | 010.2 | 314.1 | 003.1669 | 0099.0 | 041.3 | 52.12 |
| 186.0 | 000.0101 | 0301.7 | 010.2 | 314.0 | 003.1771 | 0099.6 | 041.5 | 52.13 |
| 187.0 | 000.0102 | 0296.0 | 010.1 | 313.9 | 003.1817 | 0099.7 | 041.6 | 52.08 |
| 188.0 | 000.0104 | 0293.6 | 010.1 | 313.7 | 003.1914 | 0100.0 | 041.8 | 52.05 |
| 189.0 | 000.0105 | 0294.9 | 010.2 | 313.5 | 003.2033 | 0100.2 | 041.9 | 52.04 |
| 190.0 | 000.0107 | 0293.1 | 010.2 | 313.4 | 003.2130 | 0100.5 | 042.0 | 52.02 |
| 191.0 | 000.0110 | 0292.6 | 010.3 | 313.2 | 003.2259 | 0100.6 | 042.1 | 52.00 |
| 192.0 | 000.0113 | 0292.6 | 010.3 | 313.0 | 003.2390 | 0100.9 | 042.3 | 51.99 |
| 193.0 | 000.0117 | 0291.7 | 010.4 | 312.8 | 003.2525 | 0101.4 | 042.4 | 52.00 |
| 194.0 | 000.0120 | 0291.0 | 010.5 | 312.6 | 003.2643 | 0101.8 | 042.5 | 51.99 |
| 195.0 | 000.0123 | 0287.8 | 010.5 | 312.4 | 003.2724 | 0102.0 | 042.7 | 51.96 |
| 196.0 | 000.0126 | 0286.8 | 010.5 | 312.3 | 003.2831 | 0102.4 | 042.8 | 51.94 |
| 197.0 | 000.0130 | 0286.7 | 010.6 | 312.1 | 003.2947 | 0102.7 | 043.0 | 51.93 |
| 198.0 | 000.0134 | 0284.9 | 010.6 | 311.9 | 003.3055 | 0102.9 | 043.1 | 51.90 |
| 199.0 | 000.0137 | 0283.6 | 010.7 | 311.8 | 003.3149 | 0103.2 | 043.3 | 51.87 |
| 200.0 | 000.0141 | 0283.2 | 010.7 | 311.6 | 003.3252 | 0103.4 | 043.4 | 51.84 |
| 201.0 | 000.0145 | 0280.8 | 010.8 | 311.5 | 003.3339 | 0103.7 | 043.6 | 51.81 |
| 202.0 | 000.0150 | 0277.6 | 010.8 | 311.4 | 003.3409 | 0103.9 | 043.7 | 51.76 |

11-30-2016

Terrain Data: NED 03 SEC

FMOver Analysis

WDVR BLED20090330ABU

WWPJ

Channel = 209B1
 Max ERP = 3.8 kW
 RCAMSL = 220.7 m
 N. Lat. 40 30 36.0
 W. Lng. 74 57 34.0
 Protected
 60 dBu

Channel = 208A
 Max ERP = 0.225 kW
 RCAMSL = 473 m
 N. Lat. 40 51 33.8
 W. Lng. 75 18 04.4
 Interfering
 54 dBu

| Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Actual (dBu) | IX (km) |
|----------------------|-------------|-------------|--------------|----------------------|-------------|-------------|--------------|-----------------|------------|
| 264.0 | 003.8000 | 0102.9 | 025.9 | 175.7 | 000.0088 | 0311.5 | 041.7 | 36.07 | |
| 265.0 | 003.8000 | 0102.4 | 025.8 | 175.6 | 000.0088 | 0311.5 | 041.3 | 36.27 | |
| 266.0 | 003.8000 | 0103.3 | 025.9 | 175.7 | 000.0088 | 0311.5 | 040.8 | 36.48 | |
| 267.0 | 003.8000 | 0104.7 | 026.1 | 176.0 | 000.0088 | 0311.6 | 040.4 | 36.69 | |
| 268.0 | 003.8000 | 0104.5 | 026.1 | 175.9 | 000.0088 | 0311.6 | 039.9 | 36.89 | |
| 269.0 | 003.8000 | 0106.3 | 026.3 | 176.2 | 000.0088 | 0311.3 | 039.4 | 37.10 | |
| 270.0 | 003.8000 | 0106.0 | 026.2 | 176.1 | 000.0088 | 0311.4 | 039.0 | 37.31 | |
| 271.0 | 003.8000 | 0102.3 | 025.8 | 175.4 | 000.0088 | 0311.7 | 038.6 | 37.48 | |
| 272.0 | 003.8000 | 0100.5 | 025.6 | 175.0 | 000.0087 | 0312.0 | 038.1 | 37.67 | |
| 273.0 | 003.8000 | 0098.8 | 025.4 | 174.7 | 000.0087 | 0312.7 | 037.7 | 37.86 | |
| 274.0 | 003.8000 | 0097.1 | 025.2 | 174.2 | 000.0087 | 0314.3 | 037.3 | 38.08 | |
| 275.0 | 003.8000 | 0092.7 | 024.6 | 173.3 | 000.0086 | 0315.9 | 037.0 | 38.24 | |
| 276.0 | 003.8000 | 0090.8 | 024.4 | 172.8 | 000.0085 | 0314.7 | 036.6 | 38.35 | |
| 277.0 | 003.8000 | 0090.1 | 024.3 | 172.5 | 000.0085 | 0314.2 | 036.2 | 38.51 | |
| 278.0 | 003.8000 | 0089.3 | 024.2 | 172.1 | 000.0085 | 0313.4 | 035.9 | 38.65 | |
| 279.0 | 003.8000 | 0091.5 | 024.5 | 172.4 | 000.0085 | 0314.0 | 035.4 | 38.91 | |
| 280.0 | 003.8000 | 0093.6 | 024.8 | 172.6 | 000.0085 | 0314.4 | 034.9 | 39.17 | |
| 281.0 | 003.8000 | 0090.8 | 024.4 | 171.8 | 000.0085 | 0313.1 | 034.6 | 39.24 | |
| 282.0 | 003.8000 | 0090.5 | 024.4 | 171.5 | 000.0084 | 0312.9 | 034.2 | 39.41 | |
| 283.0 | 003.8000 | 0087.7 | 024.0 | 170.7 | 000.0084 | 0313.2 | 033.9 | 39.50 | |
| 284.0 | 003.8000 | 0087.3 | 023.9 | 170.3 | 000.0083 | 0312.9 | 033.6 | 39.66 | |
| 285.0 | 003.8000 | 0089.1 | 024.2 | 170.4 | 000.0083 | 0313.0 | 033.1 | 39.90 | |
| 286.0 | 003.8000 | 0090.6 | 024.4 | 170.4 | 000.0083 | 0313.0 | 032.6 | 40.13 | |
| 287.0 | 003.8000 | 0091.5 | 024.5 | 170.3 | 000.0083 | 0312.8 | 032.2 | 40.33 | |
| 288.0 | 003.8000 | 0094.7 | 024.9 | 170.6 | 000.0083 | 0313.2 | 031.6 | 40.64 | |
| 289.0 | 003.8000 | 0098.0 | 025.3 | 170.9 | 000.0084 | 0313.2 | 031.0 | 40.96 | |
| 290.0 | 003.8000 | 0100.2 | 025.6 | 170.9 | 000.0084 | 0313.2 | 030.5 | 41.24 | |
| 291.0 | 003.8000 | 0102.4 | 025.8 | 170.9 | 000.0084 | 0313.2 | 030.0 | 41.54 | |
| 292.0 | 003.8000 | 0104.2 | 026.0 | 170.8 | 000.0084 | 0313.1 | 029.5 | 41.82 | |
| 293.0 | 003.8000 | 0108.2 | 026.5 | 171.1 | 000.0084 | 0313.1 | 028.9 | 42.20 | |
| 294.0 | 003.8000 | 0118.1 | 027.5 | 172.4 | 000.0085 | 0314.0 | 027.9 | 42.86 | |
| 295.0 | 003.8000 | 0132.6 | 028.8 | 174.2 | 000.0087 | 0314.4 | 026.8 | 43.67 | |
| 296.0 | 003.8000 | 0135.3 | 029.1 | 174.1 | 000.0087 | 0314.7 | 026.3 | 44.06 | |

| Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Actual (dBu) |
|----------------------|-------------|-------------|--------------|----------------------|-------------|-------------|--------------|-----------------|
| 297.0 | 003.8000 | 0131.1 | 028.7 | 172.8 | 000.0085 | 0314.9 | 026.1 | 44.15 |
| 298.0 | 003.8000 | 0127.0 | 028.3 | 171.5 | 000.0084 | 0312.9 | 025.9 | 44.16 |
| 299.0 | 003.8000 | 0114.5 | 027.2 | 168.8 | 000.0084 | 0316.0 | 026.2 | 44.00 |
| 300.0 | 003.8000 | 0112.0 | 026.9 | 167.7 | 000.0085 | 0314.2 | 026.0 | 44.11 |
| 301.0 | 003.7621 | 0112.8 | 026.9 | 167.0 | 000.0085 | 0313.4 | 025.7 | 44.34 |
| 302.0 | 003.7244 | 0113.6 | 026.9 | 166.3 | 000.0085 | 0314.7 | 025.3 | 44.65 |
| 303.0 | 003.6869 | 0111.5 | 026.7 | 165.1 | 000.0086 | 0316.2 | 025.2 | 44.83 |
| 304.0 | 003.6495 | 0110.7 | 026.5 | 164.1 | 000.0087 | 0317.7 | 025.0 | 45.06 |
| 305.0 | 003.6124 | 0110.4 | 026.4 | 163.2 | 000.0088 | 0319.9 | 024.8 | 45.31 |
| 306.0 | 003.5754 | 0108.7 | 026.2 | 162.0 | 000.0088 | 0321.5 | 024.7 | 45.43 |
| 307.0 | 003.5387 | 0108.3 | 026.1 | 161.0 | 000.0089 | 0321.1 | 024.5 | 45.59 |
| 308.0 | 003.5021 | 0106.7 | 025.9 | 159.8 | 000.0091 | 0320.1 | 024.5 | 45.69 |
| 309.0 | 003.4657 | 0105.3 | 025.6 | 158.6 | 000.0096 | 0319.9 | 024.4 | 45.96 |
| 310.0 | 003.4295 | 0105.3 | 025.6 | 157.6 | 000.0101 | 0320.8 | 024.3 | 46.31 |
| 311.0 | 003.3648 | 0104.4 | 025.4 | 156.5 | 000.0107 | 0320.2 | 024.2 | 46.54 |
| 312.0 | 003.3008 | 0102.8 | 025.1 | 155.2 | 000.0113 | 0316.7 | 024.3 | 46.63 |
| 313.0 | 003.2373 | 0100.8 | 024.7 | 154.0 | 000.0120 | 0313.9 | 024.5 | 46.72 |
| 314.0 | 003.1745 | 0099.4 | 024.5 | 152.8 | 000.0126 | 0311.7 | 024.6 | 46.80 |
| 315.0 | 003.1123 | 0096.4 | 024.0 | 151.6 | 000.0133 | 0308.2 | 024.9 | 46.71 |
| 316.0 | 003.0507 | 0093.7 | 023.6 | 150.4 | 000.0140 | 0304.7 | 025.2 | 46.61 |
| 317.0 | 002.9897 | 0093.7 | 023.5 | 149.4 | 000.0144 | 0303.5 | 025.2 | 46.71 |
| 318.0 | 002.9294 | 0090.5 | 022.9 | 148.3 | 000.0149 | 0303.1 | 025.6 | 46.54 |
| 319.0 | 002.8696 | 0088.9 | 022.6 | 147.3 | 000.0153 | 0302.8 | 025.9 | 46.49 |
| 320.0 | 002.8105 | 0089.9 | 022.7 | 146.4 | 000.0156 | 0303.8 | 025.8 | 46.66 |
| 321.0 | 002.8170 | 0085.1 | 022.1 | 145.5 | 000.0161 | 0309.9 | 026.3 | 46.56 |
| 322.0 | 002.8236 | 0080.6 | 021.5 | 144.6 | 000.0165 | 0312.3 | 026.9 | 46.39 |
| 323.0 | 002.8301 | 0077.9 | 021.2 | 143.7 | 000.0169 | 0312.9 | 027.2 | 46.28 |
| 324.0 | 002.8367 | 0072.5 | 020.4 | 143.0 | 000.0171 | 0313.5 | 027.9 | 45.91 |
| 325.0 | 002.8433 | 0067.8 | 019.8 | 142.3 | 000.0175 | 0313.9 | 028.6 | 45.61 |
| 326.0 | 002.8498 | 0064.9 | 019.4 | 141.7 | 000.0178 | 0316.9 | 029.0 | 45.51 |
| 327.0 | 002.8564 | 0063.8 | 019.3 | 141.0 | 000.0180 | 0319.8 | 029.1 | 45.55 |
| 328.0 | 002.8630 | 0058.8 | 018.6 | 140.6 | 000.0182 | 0322.3 | 029.9 | 45.24 |
| 329.0 | 002.8696 | 0053.1 | 017.6 | 140.2 | 000.0184 | 0321.5 | 030.9 | 44.71 |
| 330.0 | 002.8762 | 0048.8 | 016.8 | 139.9 | 000.0186 | 0318.6 | 031.7 | 44.21 |
| 331.0 | 002.9294 | 0047.1 | 016.5 | 139.5 | 000.0189 | 0314.8 | 032.1 | 44.02 |
| 332.0 | 002.9830 | 0045.0 | 016.2 | 139.1 | 000.0192 | 0312.9 | 032.5 | 43.82 |
| 333.0 | 003.0371 | 0043.7 | 016.0 | 138.7 | 000.0195 | 0311.1 | 032.7 | 43.72 |
| 334.0 | 003.0917 | 0043.9 | 016.1 | 138.2 | 000.0200 | 0308.3 | 032.7 | 43.75 |
| 335.0 | 003.1468 | 0041.9 | 015.7 | 137.9 | 000.0202 | 0307.5 | 033.1 | 43.57 |
| 336.0 | 003.2024 | 0040.4 | 015.5 | 137.6 | 000.0205 | 0307.1 | 033.4 | 43.47 |
| 337.0 | 003.2584 | 0036.0 | 014.6 | 137.6 | 000.0204 | 0307.1 | 034.3 | 43.03 |
| 338.0 | 003.3150 | 0033.4 | 014.2 | 137.5 | 000.0205 | 0307.0 | 034.8 | 42.80 |
| 339.0 | 003.3720 | 0034.4 | 014.5 | 136.9 | 000.0210 | 0305.7 | 034.7 | 42.94 |
| 340.0 | 003.4295 | 0036.8 | 015.0 | 136.2 | 000.0216 | 0306.2 | 034.2 | 43.27 |
| 341.0 | 003.4657 | 0040.0 | 015.7 | 135.3 | 000.0224 | 0306.1 | 033.7 | 43.69 |
| 342.0 | 003.5021 | 0042.5 | 016.3 | 134.4 | 000.0231 | 0308.3 | 033.3 | 44.10 |
| 343.0 | 003.5387 | 0044.6 | 016.9 | 133.5 | 000.0239 | 0309.0 | 032.9 | 44.43 |
| 344.0 | 003.5754 | 0045.9 | 017.2 | 132.8 | 000.0246 | 0311.0 | 032.8 | 44.67 |
| 345.0 | 003.6124 | 0048.8 | 017.8 | 131.7 | 000.0255 | 0313.6 | 032.4 | 45.11 |
| 346.0 | 003.6495 | 0050.9 | 018.3 | 130.8 | 000.0264 | 0316.6 | 032.2 | 45.45 |
| 347.0 | 003.6869 | 0054.2 | 019.0 | 129.6 | 000.0274 | 0315.3 | 031.8 | 45.75 |

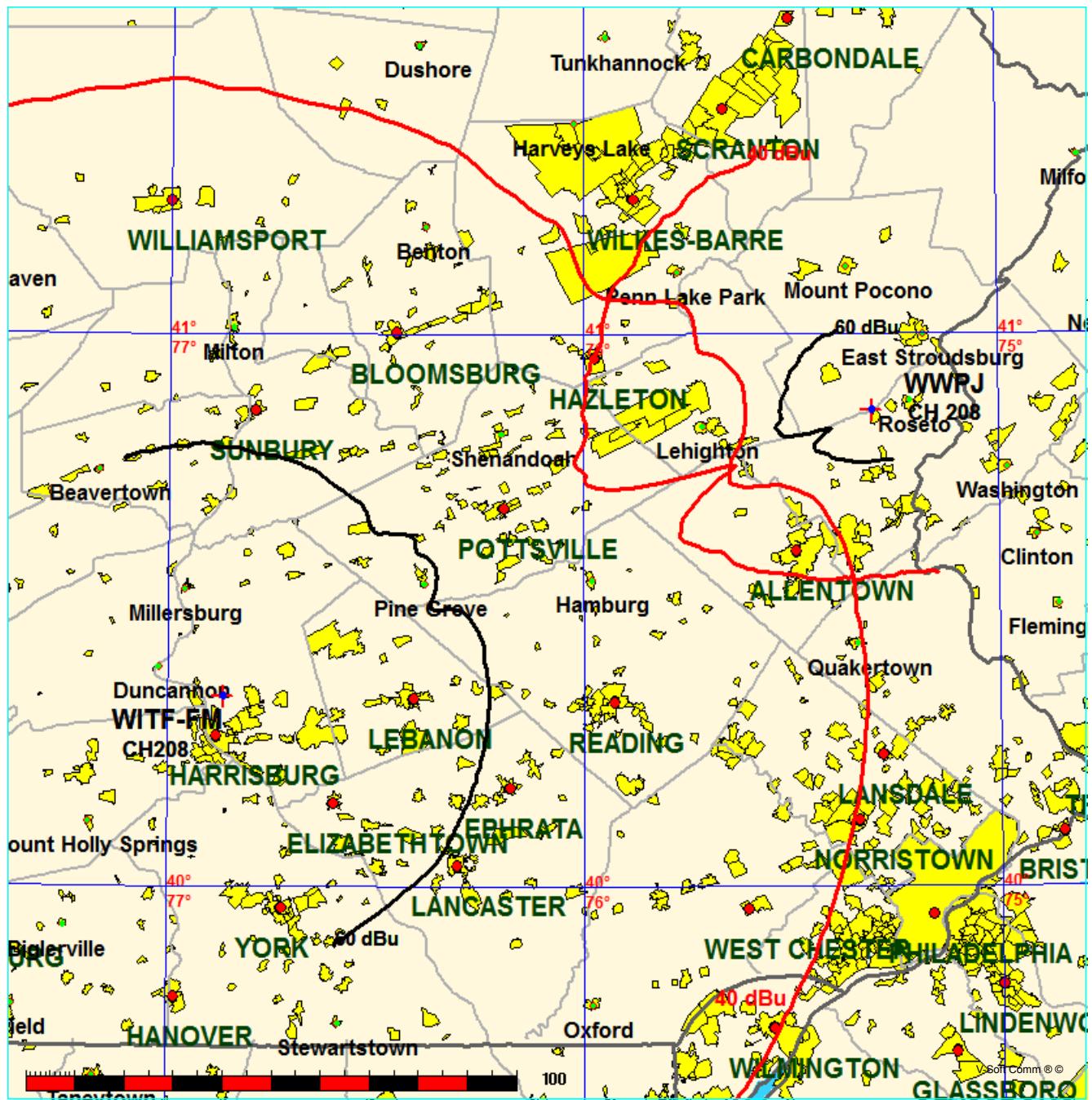
| Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Actual (dBu) |
|----------------------|-------------|-------------|--------------|----------------------|-------------|-------------|--------------|-----------------|
| 348.0 | 003.7244 | 0060.8 | 020.2 | 127.8 | 000.0285 | 0313.8 | 031.2 | 46.24 |
| 349.0 | 003.7621 | 0065.4 | 020.9 | 126.4 | 000.0295 | 0316.0 | 030.9 | 46.62 |
| 350.0 | 003.8000 | 0069.9 | 021.6 | 125.0 | 000.0305 | 0313.1 | 030.6 | 46.80 |
| 351.0 | 003.8000 | 0073.4 | 022.1 | 123.9 | 000.0312 | 0311.9 | 030.5 | 46.91 |
| 352.0 | 003.8000 | 0076.1 | 022.4 | 122.9 | 000.0319 | 0312.2 | 030.6 | 47.00 |
| 353.0 | 003.8000 | 0079.1 | 022.8 | 121.8 | 000.0328 | 0312.9 | 030.6 | 47.12 |
| 354.0 | 003.8000 | 0082.4 | 023.3 | 120.7 | 000.0336 | 0309.3 | 030.7 | 47.09 |
| 355.0 | 003.8000 | 0084.8 | 023.6 | 119.7 | 000.0343 | 0305.7 | 030.8 | 47.01 |
| 356.0 | 003.8000 | 0085.2 | 023.7 | 119.2 | 000.0349 | 0304.3 | 031.1 | 46.87 |
| 357.0 | 003.8000 | 0084.6 | 023.6 | 118.9 | 000.0352 | 0303.9 | 031.5 | 46.69 |
| 358.0 | 003.8000 | 0085.5 | 023.7 | 118.4 | 000.0358 | 0302.7 | 031.8 | 46.58 |
| 359.0 | 003.8000 | 0088.9 | 024.1 | 117.3 | 000.0368 | 0298.2 | 031.9 | 46.50 |
| 000.0 | 003.8000 | 0089.5 | 024.2 | 116.8 | 000.0373 | 0297.6 | 032.3 | 46.37 |
| 001.0 | 003.8000 | 0088.1 | 024.0 | 116.8 | 000.0373 | 0297.6 | 032.7 | 46.14 |
| 002.0 | 003.8000 | 0087.5 | 024.0 | 116.6 | 000.0375 | 0297.3 | 033.1 | 45.96 |
| 003.0 | 003.8000 | 0088.0 | 024.0 | 116.2 | 000.0380 | 0297.4 | 033.5 | 45.83 |
| 004.0 | 003.8000 | 0090.2 | 024.3 | 115.5 | 000.0388 | 0297.8 | 033.8 | 45.80 |
| 005.0 | 003.8000 | 0090.0 | 024.3 | 115.2 | 000.0390 | 0297.9 | 034.2 | 45.63 |
| 006.0 | 003.8000 | 0090.9 | 024.4 | 114.8 | 000.0395 | 0298.4 | 034.5 | 45.52 |
| 007.0 | 003.8000 | 0094.0 | 024.8 | 114.0 | 000.0405 | 0298.2 | 034.8 | 45.49 |
| 008.0 | 003.8000 | 0095.1 | 025.0 | 113.6 | 000.0410 | 0295.3 | 035.2 | 45.27 |
| 009.0 | 003.8000 | 0095.4 | 025.0 | 113.3 | 000.0412 | 0293.9 | 035.6 | 45.06 |
| 010.0 | 003.8000 | 0097.0 | 025.2 | 112.8 | 000.0418 | 0291.5 | 036.0 | 44.86 |
| 011.0 | 003.8000 | 0096.3 | 025.1 | 112.8 | 000.0418 | 0291.4 | 036.4 | 44.65 |
| 012.0 | 003.8000 | 0095.2 | 025.0 | 112.9 | 000.0417 | 0291.7 | 036.9 | 44.43 |
| 013.0 | 003.8000 | 0096.8 | 025.2 | 112.5 | 000.0421 | 0290.4 | 037.3 | 44.25 |
| 014.0 | 003.8000 | 0098.0 | 025.3 | 112.2 | 000.0424 | 0290.0 | 037.7 | 44.08 |
| 015.0 | 003.8000 | 0100.9 | 025.7 | 111.5 | 000.0431 | 0291.4 | 038.1 | 44.01 |
| 016.0 | 003.8000 | 0104.5 | 026.1 | 110.8 | 000.0439 | 0293.3 | 038.5 | 43.96 |
| 017.0 | 003.8000 | 0103.0 | 025.9 | 111.0 | 000.0437 | 0292.9 | 039.0 | 43.71 |
| 018.0 | 003.8000 | 0100.6 | 025.6 | 111.4 | 000.0433 | 0291.8 | 039.4 | 43.42 |
| 019.0 | 003.8000 | 0096.0 | 025.1 | 112.2 | 000.0424 | 0290.0 | 039.9 | 43.06 |
| 020.0 | 003.8000 | 0092.9 | 024.7 | 112.7 | 000.0419 | 0291.0 | 040.4 | 42.84 |
| 021.0 | 003.8000 | 0090.0 | 024.3 | 113.2 | 000.0414 | 0293.2 | 040.8 | 42.65 |
| 022.0 | 003.8000 | 0087.8 | 024.0 | 113.6 | 000.0409 | 0295.4 | 041.2 | 42.48 |
| 023.0 | 003.8000 | 0087.3 | 023.9 | 113.7 | 000.0408 | 0296.0 | 041.7 | 42.30 |

Contour-to-Contour Map, WWPJ vs WITF-FM
 Town Of Monroe, Connecticut

FMCommander Single Allocation Study - 11-30-2016 - NED 03 SEC
 WWPJ's Overlaps (In= 8.09 km, Out= 38.34 km)

WWPJ CH 208 A DA
 Lat= 40 51 33.8, Lng= 75 18 04.4
 0.225 kW 230.8 m HAAT, 473 m COR
 Prot.= 60 dBu, Intef.= 40 dBu

WITF-FM CH 208 B BMLED20040130ADW
 Lat= 40 20 44.0, Lng= 76 52 07.0
 5.9 kW 415 m HAAT, 599 m COR
 Prot.= 60 dBu, Intef.= 40 dBu



11-30-2016

Terrain Data: NED 03 SEC

FMOver Analysis

WWPJ

WITF-FM BMLED20040130ADW

Channel = 208A
 Max ERP = 0.225 kW
 RCAMSL = 473 m
 N. Lat. 40 51 33.8
 W. Lng. 75 18 04.4
 Protected
 60 dBu

Channel = 208B
 Max ERP = 5.9 kW
 RCAMSL = 599 m
 N. Lat. 40 20 44.0
 W. Lng. 76 52 07.0
 Interfering
 40 dBu

| Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Actual (dBu) | IX (km) |
|----------------------|-------------|-------------|--------------|----------------------|-------------|-------------|--------------|-----------------|------------|
| 187.0 | 000.0102 | 0296.0 | 010.1 | 069.7 | 005.9000 | 0386.3 | 139.4 | 36.03 | |
| 188.0 | 000.0104 | 0293.6 | 010.1 | 069.7 | 005.9000 | 0385.6 | 139.2 | 36.05 | |
| 189.0 | 000.0105 | 0294.9 | 010.2 | 069.7 | 005.9000 | 0385.1 | 139.0 | 36.08 | |
| 190.0 | 000.0107 | 0293.1 | 010.2 | 069.7 | 005.9000 | 0384.4 | 138.8 | 36.10 | |
| 191.0 | 000.0110 | 0292.6 | 010.3 | 069.7 | 005.9000 | 0384.1 | 138.7 | 36.13 | |
| 192.0 | 000.0113 | 0292.6 | 010.3 | 069.6 | 005.9000 | 0383.7 | 138.5 | 36.17 | |
| 193.0 | 000.0117 | 0291.7 | 010.4 | 069.6 | 005.9000 | 0383.4 | 138.3 | 36.20 | |
| 194.0 | 000.0120 | 0291.0 | 010.5 | 069.6 | 005.9000 | 0382.9 | 138.1 | 36.23 | |
| 195.0 | 000.0123 | 0287.8 | 010.5 | 069.6 | 005.9000 | 0381.9 | 137.9 | 36.24 | |
| 196.0 | 000.0126 | 0286.8 | 010.5 | 069.5 | 005.9000 | 0381.2 | 137.8 | 36.27 | |
| 197.0 | 000.0130 | 0286.7 | 010.6 | 069.5 | 005.9000 | 0380.6 | 137.6 | 36.29 | |
| 198.0 | 000.0134 | 0284.9 | 010.6 | 069.5 | 005.9000 | 0379.9 | 137.4 | 36.32 | |
| 199.0 | 000.0137 | 0283.6 | 010.7 | 069.5 | 005.9000 | 0379.0 | 137.2 | 36.33 | |
| 200.0 | 000.0141 | 0283.2 | 010.7 | 069.4 | 005.9000 | 0378.3 | 137.0 | 36.36 | |
| 201.0 | 000.0145 | 0280.8 | 010.8 | 069.4 | 005.9000 | 0377.3 | 136.9 | 36.37 | |
| 202.0 | 000.0150 | 0277.6 | 010.8 | 069.3 | 005.9000 | 0376.2 | 136.7 | 36.37 | |
| 203.0 | 000.0154 | 0274.1 | 010.8 | 069.3 | 005.9000 | 0374.9 | 136.6 | 36.37 | |
| 204.0 | 000.0159 | 0272.3 | 010.9 | 069.3 | 005.9000 | 0373.8 | 136.4 | 36.38 | |
| 205.0 | 000.0164 | 0271.1 | 010.9 | 069.2 | 005.9000 | 0372.8 | 136.2 | 36.40 | |
| 206.0 | 000.0169 | 0267.5 | 010.9 | 069.2 | 005.9000 | 0371.2 | 136.1 | 36.38 | |
| 207.0 | 000.0174 | 0266.8 | 011.0 | 069.1 | 005.9000 | 0370.0 | 135.9 | 36.39 | |
| 208.0 | 000.0179 | 0267.7 | 011.1 | 069.1 | 005.9000 | 0369.1 | 135.7 | 36.41 | |
| 209.0 | 000.0184 | 0269.9 | 011.2 | 069.1 | 005.9000 | 0368.2 | 135.5 | 36.44 | |
| 210.0 | 000.0189 | 0268.4 | 011.2 | 069.0 | 005.9000 | 0366.7 | 135.3 | 36.44 | |
| 211.0 | 000.0200 | 0264.7 | 011.3 | 069.0 | 005.9000 | 0365.1 | 135.1 | 36.43 | |
| 212.0 | 000.0209 | 0263.5 | 011.4 | 068.9 | 005.9000 | 0363.8 | 134.9 | 36.44 | |
| 213.0 | 000.0219 | 0262.5 | 011.5 | 068.9 | 005.9000 | 0362.4 | 134.7 | 36.45 | |
| 214.0 | 000.0229 | 0260.8 | 011.6 | 068.8 | 005.9000 | 0360.8 | 134.6 | 36.44 | |
| 215.0 | 000.0241 | 0259.3 | 011.7 | 068.8 | 005.9000 | 0359.2 | 134.4 | 36.45 | |
| 216.0 | 000.0251 | 0259.7 | 011.8 | 068.8 | 005.9000 | 0357.8 | 134.1 | 36.45 | |
| 217.0 | 000.0263 | 0257.5 | 011.9 | 068.7 | 005.9000 | 0355.9 | 134.0 | 36.44 | |
| 218.0 | 000.0276 | 0255.0 | 012.0 | 068.6 | 005.9000 | 0353.8 | 133.8 | 36.42 | |
| 219.0 | 000.0288 | 0254.4 | 012.1 | 068.6 | 005.9000 | 0351.9 | 133.6 | 36.41 | |
| 220.0 | 000.0303 | 0251.4 | 012.2 | 068.5 | 005.9000 | 0349.4 | 133.4 | 36.37 | |
| 221.0 | 000.0316 | 0248.2 | 012.2 | 068.5 | 005.9000 | 0346.6 | 133.3 | 36.31 | |
| 222.0 | 000.0332 | 0247.1 | 012.3 | 068.4 | 005.9000 | 0344.1 | 133.1 | 36.28 | |

| Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Actual (dBu) |
|----------------------|-------------|-------------|--------------|----------------------|-------------|-------------|--------------|-----------------|
| 223.0 | 000.0348 | 0243.7 | 012.4 | 068.3 | 005.9000 | 0340.9 | 132.9 | 36.22 |
| 224.0 | 000.0364 | 0238.3 | 012.4 | 068.2 | 005.9000 | 0337.2 | 132.8 | 36.13 |
| 225.0 | 000.0380 | 0233.5 | 012.4 | 068.2 | 005.9000 | 0333.3 | 132.7 | 36.03 |
| 226.0 | 000.0399 | 0227.8 | 012.4 | 068.1 | 005.9000 | 0329.5 | 132.6 | 35.93 |
| 227.0 | 000.0418 | 0223.9 | 012.4 | 068.0 | 005.9000 | 0325.9 | 132.5 | 35.85 |
| 228.0 | 000.0438 | 0223.5 | 012.5 | 067.9 | 005.9000 | 0322.8 | 132.3 | 35.81 |
| 229.0 | 000.0458 | 0226.0 | 012.8 | 067.9 | 005.9000 | 0320.2 | 132.1 | 35.79 |
| 230.0 | 000.0480 | 0227.7 | 012.9 | 067.8 | 005.9000 | 0317.4 | 131.8 | 35.77 |
| 231.0 | 000.0501 | 0229.3 | 013.1 | 067.7 | 005.9000 | 0314.5 | 131.6 | 35.74 |
| 232.0 | 000.0525 | 0230.8 | 013.3 | 067.7 | 005.9000 | 0311.9 | 131.3 | 35.73 |
| 233.0 | 000.0551 | 0228.6 | 013.4 | 067.6 | 005.9000 | 0309.3 | 131.2 | 35.70 |
| 234.0 | 000.0576 | 0227.9 | 013.5 | 067.5 | 005.9000 | 0307.4 | 131.0 | 35.69 |
| 235.0 | 000.0604 | 0228.3 | 013.7 | 067.4 | 005.9000 | 0306.3 | 130.8 | 35.71 |
| 236.0 | 000.0632 | 0230.7 | 013.9 | 067.3 | 005.9000 | 0305.7 | 130.5 | 35.75 |
| 237.0 | 000.0661 | 0229.0 | 014.0 | 067.2 | 005.9000 | 0305.4 | 130.3 | 35.78 |
| 238.0 | 000.0693 | 0222.5 | 014.0 | 067.1 | 005.9000 | 0305.6 | 130.3 | 35.79 |
| 239.0 | 000.0726 | 0212.5 | 013.8 | 067.0 | 005.9000 | 0306.2 | 130.4 | 35.78 |
| 240.0 | 000.0760 | 0202.0 | 013.6 | 066.9 | 005.9000 | 0307.0 | 130.6 | 35.76 |
| 241.0 | 000.0797 | 0191.3 | 013.5 | 066.8 | 005.9000 | 0307.8 | 130.7 | 35.75 |
| 242.0 | 000.0832 | 0175.6 | 013.1 | 066.7 | 005.9000 | 0308.5 | 131.1 | 35.69 |
| 243.0 | 000.0873 | 0155.3 | 012.4 | 066.5 | 005.9000 | 0309.4 | 131.7 | 35.57 |
| 244.0 | 000.0913 | 0137.3 | 011.7 | 066.4 | 005.9000 | 0310.2 | 132.4 | 35.45 |
| 245.0 | 000.0956 | 0120.6 | 011.1 | 066.3 | 005.9000 | 0310.9 | 133.0 | 35.34 |
| 246.0 | 000.1001 | 0104.9 | 010.6 | 066.2 | 005.9000 | 0311.5 | 133.6 | 35.24 |
| 247.0 | 000.1050 | 0092.0 | 010.0 | 066.1 | 005.9000 | 0311.9 | 134.1 | 35.13 |
| 248.0 | 000.1099 | 0078.8 | 009.4 | 066.1 | 005.9000 | 0312.2 | 134.7 | 35.01 |
| 249.0 | 000.1150 | 0071.3 | 009.0 | 066.0 | 005.9000 | 0312.5 | 135.1 | 34.94 |
| 250.0 | 000.1206 | 0075.8 | 009.4 | 065.9 | 005.9000 | 0312.8 | 134.7 | 35.03 |
| 251.0 | 000.1262 | 0103.2 | 011.1 | 065.8 | 005.9000 | 0313.2 | 133.1 | 35.38 |
| 252.0 | 000.1320 | 0156.9 | 013.8 | 065.6 | 005.9000 | 0313.7 | 130.4 | 35.98 |
| 253.0 | 000.1383 | 0202.8 | 015.9 | 065.4 | 005.9000 | 0314.9 | 128.3 | 36.47 |
| 254.0 | 000.1447 | 0235.2 | 017.5 | 065.2 | 005.9000 | 0317.6 | 126.8 | 36.87 |
| 255.0 | 000.1517 | 0255.8 | 018.5 | 065.0 | 005.9000 | 0321.6 | 125.9 | 37.19 |
| 256.0 | 000.1588 | 0269.0 | 019.1 | 064.8 | 005.9000 | 0325.8 | 125.2 | 37.47 |
| 257.0 | 000.1660 | 0270.7 | 019.4 | 064.6 | 005.9000 | 0328.9 | 125.0 | 37.62 |
| 258.0 | 000.1738 | 0259.3 | 019.2 | 064.5 | 005.9000 | 0331.1 | 125.3 | 37.64 |
| 259.0 | 000.1822 | 0258.5 | 019.4 | 064.3 | 005.9000 | 0333.7 | 125.2 | 37.76 |
| 260.0 | 000.1909 | 0264.3 | 019.9 | 064.1 | 005.9000 | 0336.6 | 124.8 | 37.94 |
| 261.0 | 000.1963 | 0263.2 | 020.0 | 063.9 | 005.9000 | 0338.8 | 124.8 | 38.02 |
| 262.0 | 000.2018 | 0251.2 | 019.7 | 063.8 | 005.9000 | 0340.2 | 125.2 | 37.97 |
| 263.0 | 000.2078 | 0239.7 | 019.3 | 063.7 | 005.9000 | 0341.5 | 125.6 | 37.93 |
| 264.0 | 000.2135 | 0229.2 | 019.0 | 063.6 | 005.9000 | 0342.8 | 126.0 | 37.89 |
| 265.0 | 000.2192 | 0222.1 | 018.9 | 063.5 | 005.9000 | 0344.3 | 126.3 | 37.88 |
| 266.0 | 000.2250 | 0213.6 | 018.6 | 063.4 | 005.9000 | 0345.7 | 126.6 | 37.84 |
| 267.0 | 000.2250 | 0214.9 | 018.7 | 063.3 | 005.9000 | 0347.5 | 126.7 | 37.89 |
| 268.0 | 000.2250 | 0215.4 | 018.7 | 063.1 | 005.9000 | 0349.1 | 126.8 | 37.92 |
| 269.0 | 000.2250 | 0219.0 | 018.9 | 063.0 | 005.9000 | 0350.8 | 126.8 | 37.99 |
| 270.0 | 000.2250 | 0221.5 | 019.0 | 062.8 | 005.9000 | 0352.5 | 126.8 | 38.03 |
| 271.0 | 000.2250 | 0220.4 | 018.9 | 062.7 | 005.9000 | 0353.6 | 127.0 | 38.03 |
| 272.0 | 000.2250 | 0215.9 | 018.7 | 062.6 | 005.9000 | 0354.4 | 127.4 | 37.98 |
| 273.0 | 000.2250 | 0216.4 | 018.8 | 062.5 | 005.9000 | 0355.5 | 127.5 | 37.98 |

| Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Actual (dBu) |
|----------------------|-------------|-------------|--------------|----------------------|-------------|-------------|--------------|-----------------|
| 274.0 | 000.2250 | 0215.7 | 018.7 | 062.3 | 005.9000 | 0356.5 | 127.7 | 37.97 |
| 275.0 | 000.2250 | 0216.5 | 018.8 | 062.2 | 005.9000 | 0357.5 | 127.8 | 37.97 |
| 276.0 | 000.2250 | 0217.6 | 018.8 | 062.1 | 005.9000 | 0358.5 | 128.0 | 37.97 |
| 277.0 | 000.2250 | 0219.4 | 018.9 | 061.9 | 005.9000 | 0359.6 | 128.1 | 37.98 |
| 278.0 | 000.2250 | 0213.8 | 018.6 | 061.9 | 005.9000 | 0360.1 | 128.5 | 37.91 |
| 279.0 | 000.2250 | 0213.1 | 018.6 | 061.8 | 005.9000 | 0361.2 | 128.7 | 37.89 |
| 280.0 | 000.2250 | 0213.0 | 018.6 | 061.6 | 005.9000 | 0362.4 | 128.9 | 37.89 |
| 281.0 | 000.2250 | 0211.3 | 018.5 | 061.6 | 005.9000 | 0363.4 | 129.1 | 37.85 |
| 282.0 | 000.2250 | 0208.7 | 018.4 | 061.5 | 005.9000 | 0364.2 | 129.4 | 37.81 |
| 283.0 | 000.2250 | 0205.9 | 018.3 | 061.4 | 005.9000 | 0364.8 | 129.7 | 37.76 |
| 284.0 | 000.2250 | 0202.1 | 018.1 | 061.3 | 005.9000 | 0365.3 | 130.1 | 37.69 |
| 285.0 | 000.2250 | 0201.6 | 018.1 | 061.2 | 005.9000 | 0366.0 | 130.3 | 37.66 |
| 286.0 | 000.2250 | 0203.5 | 018.2 | 061.1 | 005.9000 | 0366.8 | 130.4 | 37.64 |
| 287.0 | 000.2250 | 0205.7 | 018.3 | 061.0 | 005.9000 | 0367.6 | 130.6 | 37.63 |
| 288.0 | 000.2250 | 0209.9 | 018.5 | 060.8 | 005.9000 | 0368.7 | 130.7 | 37.64 |
| 289.0 | 000.2250 | 0211.0 | 018.5 | 060.7 | 005.9000 | 0369.7 | 130.9 | 37.62 |
| 290.0 | 000.2250 | 0211.6 | 018.5 | 060.6 | 005.9000 | 0370.4 | 131.1 | 37.59 |
| 291.0 | 000.2250 | 0211.9 | 018.6 | 060.5 | 005.9000 | 0371.1 | 131.4 | 37.55 |
| 292.0 | 000.2250 | 0212.5 | 018.6 | 060.4 | 005.9000 | 0371.7 | 131.6 | 37.51 |
| 293.0 | 000.2250 | 0212.9 | 018.6 | 060.3 | 005.9000 | 0372.2 | 131.8 | 37.47 |
| 294.0 | 000.2250 | 0214.7 | 018.7 | 060.2 | 005.9000 | 0372.8 | 132.0 | 37.43 |
| 295.0 | 000.2250 | 0213.9 | 018.6 | 060.1 | 005.9000 | 0373.2 | 132.3 | 37.38 |
| 296.0 | 000.2250 | 0215.5 | 018.7 | 060.0 | 005.9000 | 0373.8 | 132.5 | 37.34 |
| 297.0 | 000.2250 | 0211.3 | 018.5 | 060.0 | 005.9000 | 0373.9 | 132.9 | 37.25 |
| 298.0 | 000.2250 | 0207.7 | 018.4 | 060.0 | 005.9000 | 0374.0 | 133.3 | 37.16 |
| 299.0 | 000.2250 | 0204.9 | 018.3 | 060.0 | 005.9000 | 0374.1 | 133.6 | 37.08 |
| 300.0 | 000.2250 | 0203.8 | 018.2 | 059.9 | 005.9000 | 0374.4 | 133.9 | 37.02 |
| 301.0 | 000.2250 | 0200.4 | 018.1 | 059.9 | 005.9000 | 0374.5 | 134.3 | 36.93 |
| 302.0 | 000.2250 | 0201.4 | 018.1 | 059.8 | 005.9000 | 0374.9 | 134.5 | 36.88 |
| 303.0 | 000.2250 | 0202.6 | 018.2 | 059.7 | 005.9000 | 0375.3 | 134.8 | 36.83 |
| 304.0 | 000.2250 | 0203.2 | 018.2 | 059.7 | 005.9000 | 0375.7 | 135.0 | 36.77 |
| 305.0 | 000.2250 | 0206.1 | 018.3 | 059.6 | 005.9000 | 0376.4 | 135.3 | 36.74 |
| 306.0 | 000.2250 | 0210.4 | 018.5 | 059.4 | 005.9000 | 0377.3 | 135.5 | 36.71 |

11-30-2016

Terrain Data: NED 03 SEC FMOver Analysis

WITF-FM BMLED20040130ADW

WWPJ

Channel = 208B
 Max ERP = 5.9 kW
 RCAMSL = 599 m
 N. Lat. 40 20 44.0
 W. Lng. 76 52 07.0
 Protected
 60 dBu

Channel = 208A
 Max ERP = 0.225 kW
 RCAMSL = 473 m
 N. Lat. 40 51 33.8
 W. Lng. 75 18 04.4
 Interfering
 40 dBu

| Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Actual (dBu) | IX (km) |
|----------------------|-------------|-------------|--------------|----------------------|-------------|-------------|--------------|-----------------|------------|
| 006.0 | 005.9000 | 0365.9 | 049.4 | 266.9 | 000.2250 | 0214.4 | 127.0 | 20.20 | |
| 007.0 | 005.9000 | 0364.3 | 049.3 | 266.8 | 000.2250 | 0214.0 | 126.1 | 20.35 | |
| 008.0 | 005.9000 | 0363.5 | 049.2 | 266.7 | 000.2250 | 0213.8 | 125.3 | 20.51 | |
| 009.0 | 005.9000 | 0363.7 | 049.3 | 266.6 | 000.2250 | 0213.6 | 124.5 | 20.67 | |
| 010.0 | 005.9000 | 0362.6 | 049.2 | 266.5 | 000.2250 | 0213.3 | 123.6 | 20.83 | |
| 011.0 | 005.9000 | 0363.7 | 049.3 | 266.4 | 000.2250 | 0213.1 | 122.8 | 20.99 | |
| 012.0 | 005.9000 | 0365.3 | 049.4 | 266.3 | 000.2250 | 0212.9 | 121.9 | 21.16 | |
| 013.0 | 005.9000 | 0366.3 | 049.4 | 266.2 | 000.2250 | 0212.9 | 121.1 | 21.33 | |
| 014.0 | 005.9000 | 0364.3 | 049.3 | 266.0 | 000.2250 | 0213.5 | 120.3 | 21.51 | |
| 015.0 | 005.9000 | 0362.4 | 049.2 | 265.8 | 000.2241 | 0214.9 | 119.5 | 21.68 | |
| 016.0 | 005.9000 | 0362.4 | 049.2 | 265.7 | 000.2232 | 0216.1 | 118.7 | 21.86 | |
| 017.0 | 005.9000 | 0362.0 | 049.2 | 265.5 | 000.2223 | 0217.5 | 118.0 | 22.03 | |
| 018.0 | 005.9000 | 0361.7 | 049.1 | 265.4 | 000.2213 | 0218.8 | 117.2 | 22.21 | |
| 019.0 | 005.9000 | 0361.0 | 049.1 | 265.2 | 000.2202 | 0220.6 | 116.4 | 22.40 | |
| 020.0 | 005.9000 | 0359.6 | 049.0 | 264.9 | 000.2189 | 0222.5 | 115.7 | 22.58 | |
| 021.0 | 005.9000 | 0357.8 | 048.9 | 264.7 | 000.2175 | 0224.2 | 115.0 | 22.75 | |
| 022.0 | 005.9000 | 0359.3 | 049.0 | 264.5 | 000.2166 | 0225.2 | 114.2 | 22.93 | |
| 023.0 | 005.9000 | 0358.0 | 048.9 | 264.3 | 000.2152 | 0226.6 | 113.5 | 23.09 | |
| 024.0 | 005.9000 | 0353.7 | 048.7 | 264.0 | 000.2133 | 0229.5 | 112.9 | 23.27 | |
| 025.0 | 005.9000 | 0351.0 | 048.5 | 263.7 | 000.2116 | 0233.5 | 112.2 | 23.48 | |
| 026.0 | 005.9000 | 0348.0 | 048.3 | 263.4 | 000.2098 | 0237.0 | 111.6 | 23.68 | |
| 027.0 | 005.9000 | 0343.6 | 048.0 | 263.0 | 000.2078 | 0239.8 | 111.1 | 23.85 | |
| 028.0 | 005.9000 | 0341.0 | 047.9 | 262.7 | 000.2058 | 0243.0 | 110.5 | 24.04 | |
| 029.0 | 005.9000 | 0340.7 | 047.8 | 262.4 | 000.2042 | 0246.3 | 109.8 | 24.26 | |
| 030.0 | 005.9000 | 0340.3 | 047.8 | 262.1 | 000.2025 | 0249.6 | 109.2 | 24.48 | |
| 031.0 | 005.9000 | 0338.0 | 047.7 | 261.8 | 000.2006 | 0254.1 | 108.6 | 24.70 | |
| 032.0 | 005.9000 | 0336.9 | 047.6 | 261.5 | 000.1989 | 0258.6 | 108.1 | 24.95 | |
| 033.0 | 005.9000 | 0336.8 | 047.6 | 261.2 | 000.1972 | 0262.0 | 107.4 | 25.18 | |
| 034.0 | 005.9000 | 0337.7 | 047.7 | 260.9 | 000.1957 | 0263.6 | 106.8 | 25.37 | |
| 035.0 | 005.9000 | 0340.5 | 047.8 | 260.6 | 000.1943 | 0264.3 | 106.1 | 25.56 | |
| 036.0 | 005.9000 | 0338.3 | 047.7 | 260.3 | 000.1923 | 0264.6 | 105.6 | 25.65 | |
| 037.0 | 005.9000 | 0331.5 | 047.3 | 259.8 | 000.1889 | 0263.5 | 105.4 | 25.62 | |
| 038.0 | 005.9000 | 0324.5 | 046.8 | 259.3 | 000.1847 | 0260.3 | 105.2 | 25.49 | |

| Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Actual (dBu) |
|----------------------|-------------|-------------|--------------|----------------------|-------------|-------------|--------------|-----------------|
| 039.0 | 005.9000 | 0316.8 | 046.4 | 258.8 | 000.1803 | 0257.3 | 105.0 | 25.34 |
| 040.0 | 005.9000 | 0307.7 | 045.8 | 258.2 | 000.1758 | 0258.0 | 105.0 | 25.26 |
| 041.0 | 005.9000 | 0299.6 | 045.3 | 257.7 | 000.1717 | 0261.4 | 104.9 | 25.28 |
| 042.0 | 005.9000 | 0295.5 | 045.0 | 257.3 | 000.1683 | 0267.3 | 104.6 | 25.44 |
| 043.0 | 005.9000 | 0296.5 | 045.1 | 257.0 | 000.1657 | 0271.1 | 104.1 | 25.63 |
| 044.0 | 005.9000 | 0305.3 | 045.7 | 256.7 | 000.1642 | 0272.6 | 103.3 | 25.89 |
| 045.0 | 005.9000 | 0319.4 | 046.5 | 256.6 | 000.1632 | 0272.8 | 102.1 | 26.22 |
| 046.0 | 005.9000 | 0330.9 | 047.2 | 256.4 | 000.1618 | 0272.4 | 101.1 | 26.48 |
| 047.0 | 005.9000 | 0342.6 | 048.0 | 256.2 | 000.1602 | 0270.9 | 100.0 | 26.71 |
| 048.0 | 005.9000 | 0358.2 | 048.9 | 256.0 | 000.1590 | 0269.2 | 098.8 | 27.01 |
| 049.0 | 005.9000 | 0371.1 | 049.7 | 255.8 | 000.1571 | 0266.4 | 097.7 | 27.20 |
| 050.0 | 005.9000 | 0377.0 | 050.0 | 255.4 | 000.1544 | 0261.2 | 097.1 | 27.17 |
| 051.0 | 005.9000 | 0375.3 | 049.9 | 254.9 | 000.1509 | 0254.5 | 096.8 | 26.95 |
| 052.0 | 005.9000 | 0366.8 | 049.4 | 254.3 | 000.1469 | 0243.5 | 096.9 | 26.45 |
| 053.0 | 005.9000 | 0357.6 | 048.9 | 253.7 | 000.1430 | 0227.2 | 097.1 | 25.74 |
| 054.0 | 005.9000 | 0354.3 | 048.7 | 253.2 | 000.1397 | 0210.4 | 097.0 | 25.09 |
| 055.0 | 005.9000 | 0367.6 | 049.5 | 252.9 | 000.1375 | 0197.8 | 096.0 | 24.88 |
| 056.0 | 005.9000 | 0375.8 | 050.0 | 252.4 | 000.1348 | 0180.0 | 095.3 | 24.34 |
| 057.0 | 005.9000 | 0379.8 | 050.2 | 252.0 | 000.1319 | 0155.4 | 094.9 | 23.45 |
| 058.0 | 005.9000 | 0382.5 | 050.3 | 251.5 | 000.1290 | 0127.3 | 094.6 | 22.35 |
| 059.0 | 005.9000 | 0380.4 | 050.2 | 250.9 | 000.1259 | 0100.8 | 094.5 | 21.16 |
| 060.0 | 005.9000 | 0374.0 | 049.9 | 250.4 | 000.1227 | 0083.1 | 094.7 | 20.26 |
| 061.0 | 005.9000 | 0367.5 | 049.5 | 249.8 | 000.1196 | 0074.1 | 094.9 | 19.71 |
| 062.0 | 005.9000 | 0359.0 | 049.0 | 249.3 | 000.1166 | 0071.6 | 095.3 | 19.39 |
| 063.0 | 005.9000 | 0350.5 | 048.5 | 248.7 | 000.1137 | 0072.7 | 095.8 | 19.23 |
| 064.0 | 005.9000 | 0338.1 | 047.7 | 248.2 | 000.1110 | 0076.9 | 096.5 | 19.14 |
| 065.0 | 005.9000 | 0321.4 | 046.6 | 247.7 | 000.1084 | 0083.1 | 097.5 | 19.06 |
| 066.0 | 005.9000 | 0312.6 | 046.1 | 247.2 | 000.1061 | 0089.4 | 098.0 | 19.10 |
| 067.0 | 005.9000 | 0306.2 | 045.7 | 246.8 | 000.1038 | 0095.4 | 098.4 | 19.15 |
| 068.0 | 005.9000 | 0326.4 | 047.0 | 246.3 | 000.1013 | 0101.3 | 097.2 | 19.57 |
| 069.0 | 005.9000 | 0366.3 | 049.4 | 245.7 | 000.0986 | 0109.9 | 094.8 | 20.41 |
| 070.0 | 005.9000 | 0392.3 | 050.9 | 245.1 | 000.0959 | 0119.7 | 093.4 | 21.05 |
| 071.0 | 005.9000 | 0411.3 | 051.9 | 244.4 | 000.0932 | 0130.1 | 092.5 | 21.60 |
| 072.0 | 005.9000 | 0423.4 | 052.5 | 243.8 | 000.0905 | 0140.3 | 092.0 | 22.04 |
| 073.0 | 005.9000 | 0428.0 | 052.8 | 243.2 | 000.0882 | 0150.9 | 091.9 | 22.38 |
| 074.0 | 005.9000 | 0432.7 | 053.1 | 242.6 | 000.0858 | 0163.0 | 091.8 | 22.75 |
| 075.0 | 005.9000 | 0439.5 | 053.4 | 242.0 | 000.0832 | 0175.4 | 091.7 | 23.14 |
| 076.0 | 005.9000 | 0443.8 | 053.7 | 241.4 | 000.0811 | 0185.7 | 091.7 | 23.42 |
| 077.0 | 005.9000 | 0446.0 | 053.8 | 240.8 | 000.0790 | 0193.4 | 091.9 | 23.55 |
| 078.0 | 005.9000 | 0449.1 | 054.0 | 240.2 | 000.0768 | 0199.6 | 092.0 | 23.62 |
| 079.0 | 005.9000 | 0449.6 | 054.0 | 239.7 | 000.0748 | 0205.3 | 092.3 | 23.64 |
| 080.0 | 005.9000 | 0448.9 | 053.9 | 239.1 | 000.0731 | 0210.9 | 092.6 | 23.62 |
| 081.0 | 005.9000 | 0447.7 | 053.9 | 238.6 | 000.0713 | 0216.7 | 093.1 | 23.59 |
| 082.0 | 005.9000 | 0443.0 | 053.6 | 238.2 | 000.0698 | 0221.1 | 093.7 | 23.47 |
| 083.0 | 005.9000 | 0448.4 | 053.9 | 237.6 | 000.0679 | 0226.2 | 093.8 | 23.48 |
| 084.0 | 005.9000 | 0450.0 | 054.0 | 237.0 | 000.0662 | 0228.9 | 094.2 | 23.36 |
| 085.0 | 005.9000 | 0450.2 | 054.0 | 236.5 | 000.0647 | 0230.3 | 094.6 | 23.17 |
| 086.0 | 005.9000 | 0453.0 | 054.2 | 236.0 | 000.0631 | 0230.6 | 095.0 | 22.97 |
| 087.0 | 005.9000 | 0452.7 | 054.2 | 235.5 | 000.0618 | 0229.8 | 095.5 | 22.69 |
| 088.0 | 005.9000 | 0453.3 | 054.2 | 235.0 | 000.0604 | 0228.3 | 096.0 | 22.39 |
| 089.0 | 005.9000 | 0455.9 | 054.3 | 234.5 | 000.0590 | 0228.0 | 096.4 | 22.15 |

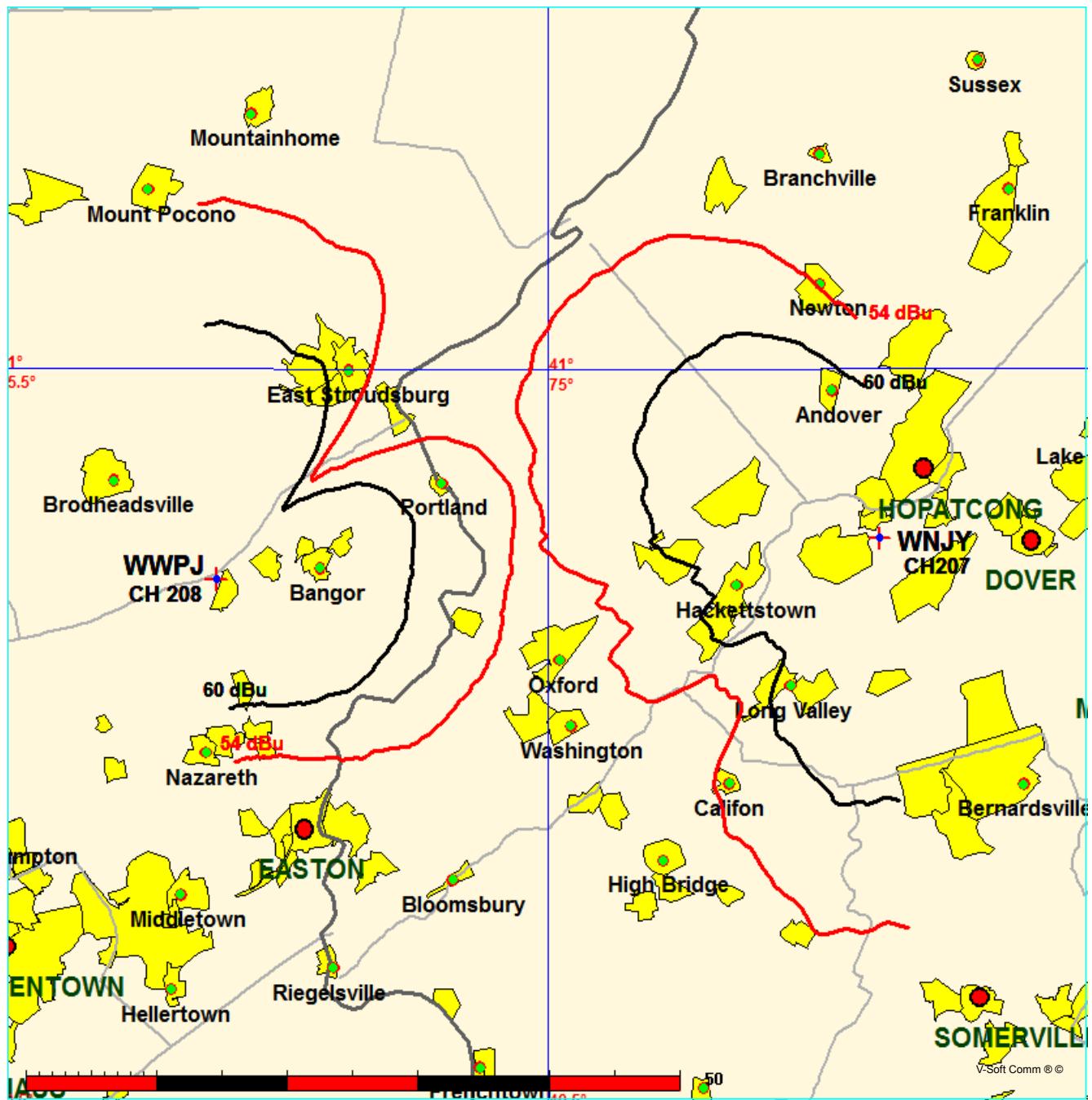
| Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Actual (dBu) |
|----------------------|-------------|-------------|--------------|----------------------|-------------|-------------|--------------|-----------------|
| 090.0 | 005.9000 | 0455.8 | 054.3 | 234.1 | 000.0578 | 0227.9 | 096.9 | 21.88 |
| 091.0 | 005.9000 | 0455.6 | 054.3 | 233.6 | 000.0567 | 0228.0 | 097.5 | 21.62 |
| 092.0 | 005.9000 | 0454.0 | 054.2 | 233.2 | 000.0557 | 0228.3 | 098.2 | 21.35 |
| 093.0 | 005.9000 | 0453.1 | 054.2 | 232.8 | 000.0546 | 0229.2 | 098.9 | 21.11 |
| 094.0 | 005.9000 | 0454.1 | 054.2 | 232.4 | 000.0535 | 0230.4 | 099.4 | 20.88 |
| 095.0 | 005.9000 | 0454.7 | 054.3 | 232.0 | 000.0524 | 0230.8 | 100.1 | 20.62 |
| 096.0 | 005.9000 | 0453.0 | 054.2 | 231.6 | 000.0516 | 0230.5 | 100.8 | 20.32 |
| 097.0 | 005.9000 | 0453.8 | 054.2 | 231.2 | 000.0507 | 0229.9 | 101.5 | 20.03 |
| 098.0 | 005.9000 | 0454.2 | 054.2 | 230.9 | 000.0499 | 0228.8 | 102.1 | 19.73 |
| 099.0 | 005.9000 | 0454.4 | 054.2 | 230.5 | 000.0491 | 0228.1 | 102.8 | 19.44 |
| 100.0 | 005.9000 | 0452.5 | 054.1 | 230.2 | 000.0485 | 0227.9 | 103.6 | 19.15 |
| 101.0 | 005.9000 | 0452.8 | 054.2 | 229.9 | 000.0478 | 0227.7 | 104.4 | 18.88 |
| 102.0 | 005.9000 | 0452.2 | 054.1 | 229.6 | 000.0471 | 0227.3 | 105.1 | 18.59 |
| 103.0 | 005.9000 | 0452.9 | 054.2 | 229.3 | 000.0464 | 0226.7 | 105.9 | 18.31 |
| 104.0 | 005.9000 | 0453.0 | 054.2 | 229.0 | 000.0457 | 0226.0 | 106.7 | 18.02 |
| 105.0 | 005.9000 | 0454.1 | 054.2 | 228.7 | 000.0451 | 0225.2 | 107.4 | 17.74 |
| 106.0 | 005.9000 | 0453.7 | 054.2 | 228.4 | 000.0446 | 0224.4 | 108.2 | 17.45 |
| 107.0 | 005.9000 | 0453.8 | 054.2 | 228.2 | 000.0441 | 0223.8 | 109.0 | 17.18 |
| 108.0 | 005.9000 | 0455.2 | 054.3 | 227.9 | 000.0435 | 0223.4 | 109.8 | 16.92 |
| 109.0 | 005.9000 | 0454.9 | 054.3 | 227.7 | 000.0431 | 0223.2 | 110.7 | 16.66 |
| 110.0 | 005.9000 | 0456.1 | 054.3 | 227.4 | 000.0426 | 0223.2 | 111.5 | 16.42 |
| 111.0 | 005.9000 | 0455.0 | 054.3 | 227.2 | 000.0422 | 0223.4 | 112.4 | 16.19 |
| 112.0 | 005.9000 | 0455.6 | 054.3 | 227.0 | 000.0418 | 0223.8 | 113.2 | 15.97 |
| 113.0 | 005.9000 | 0458.3 | 054.5 | 226.8 | 000.0413 | 0224.5 | 114.0 | 15.75 |
| 114.0 | 005.9000 | 0457.9 | 054.4 | 226.6 | 000.0410 | 0225.2 | 114.9 | 15.54 |
| 115.0 | 005.9000 | 0456.0 | 054.3 | 226.5 | 000.0408 | 0225.7 | 115.8 | 15.32 |
| 116.0 | 005.9000 | 0455.6 | 054.3 | 226.3 | 000.0405 | 0226.3 | 116.7 | 15.11 |
| 117.0 | 005.9000 | 0456.4 | 054.4 | 226.1 | 000.0402 | 0227.1 | 117.6 | 14.91 |
| 118.0 | 005.9000 | 0457.2 | 054.4 | 226.0 | 000.0399 | 0227.9 | 118.5 | 14.71 |
| 119.0 | 005.9000 | 0457.1 | 054.4 | 225.9 | 000.0396 | 0228.6 | 119.4 | 14.50 |
| 120.0 | 005.9000 | 0459.5 | 054.5 | 225.7 | 000.0393 | 0229.7 | 120.3 | 14.31 |
| 121.0 | 005.9000 | 0460.7 | 054.6 | 225.5 | 000.0390 | 0230.6 | 121.2 | 14.11 |
| 122.0 | 005.9000 | 0462.2 | 054.7 | 225.4 | 000.0387 | 0231.4 | 122.1 | 13.92 |
| 123.0 | 005.9000 | 0465.0 | 054.8 | 225.2 | 000.0384 | 0232.3 | 123.0 | 13.72 |
| 124.0 | 005.9000 | 0465.1 | 054.9 | 225.2 | 000.0383 | 0232.8 | 124.0 | 13.52 |
| 125.0 | 005.9000 | 0463.9 | 054.8 | 225.1 | 000.0382 | 0233.0 | 124.9 | 13.33 |

Contour-to-Contour Map, WWPJ vs WNJY
 Town Of Monroe, Connecticut

FMCommander Single Allocation Study - 11-30-2016 - NED 03 SEC
 WWPJ's Overlaps (In= 9.63 km, Out= 9.87 km)

WWPJ CH 208 A DA
 Lat= 40 51 33.8, Lng= 75 18 04.4
 0.225 kW 230.8 m HAAT, 473 m COR
 Prot.= 60 dBu, Intef.= 54 dBu

WNJY CH 207 A DA BLED20080707AEO
 Lat= 40 53 14.0, Lng= 74 41 55.0
 0.52 kW 131 m HAAT, 385 m COR
 Prot.= 60 dBu, Intef.= 54 dBu



11-30-2016

Terrain Data: NED 03 SEC FMOver Analysis

WWPJ

WNJY BLED20080707AEO

Channel = 208A
 Max ERP = 0.225 kW
 RCAMSL = 473 m
 N. Lat. 40 51 33.8
 W. Lng. 75 18 04.4
 Protected
 60 dBu

Channel = 207A
 Max ERP = 0.52 kW
 RCAMSL = 385 m
 N. Lat. 40 53 14.0
 W. Lng. 74 41 55.0
 Interfering
 54 dBu

| Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Actual (dBu) | IX (km) |
|----------------------|-------------|-------------|--------------|----------------------|-------------|-------------|--------------|-----------------|------------|
| 026.0 | 000.1192 | 0276.6 | 018.1 | 287.3 | 000.5200 | 0150.6 | 044.7 | 46.04 | |
| 027.0 | 000.1176 | 0270.7 | 017.8 | 286.9 | 000.5200 | 0148.7 | 044.4 | 46.06 | |
| 028.0 | 000.1160 | 0264.4 | 017.5 | 286.4 | 000.5200 | 0146.8 | 044.1 | 46.06 | |
| 029.0 | 000.1144 | 0257.7 | 017.2 | 286.0 | 000.5200 | 0144.8 | 043.9 | 46.06 | |
| 030.0 | 000.1128 | 0250.1 | 016.9 | 285.4 | 000.5200 | 0142.4 | 043.7 | 46.02 | |
| 031.0 | 000.1109 | 0239.5 | 016.4 | 284.7 | 000.5200 | 0139.3 | 043.6 | 45.91 | |
| 032.0 | 000.1090 | 0227.2 | 015.9 | 283.9 | 000.5200 | 0135.9 | 043.5 | 45.78 | |
| 033.0 | 000.1071 | 0213.1 | 015.3 | 283.1 | 000.5200 | 0135.3 | 043.4 | 45.77 | |
| 034.0 | 000.1053 | 0199.2 | 014.7 | 282.3 | 000.5200 | 0134.8 | 043.4 | 45.76 | |
| 035.0 | 000.1034 | 0184.8 | 014.1 | 281.4 | 000.5200 | 0136.0 | 043.4 | 45.82 | |
| 036.0 | 000.1013 | 0172.8 | 013.6 | 280.7 | 000.5200 | 0136.2 | 043.3 | 45.84 | |
| 037.0 | 000.0995 | 0158.9 | 013.0 | 279.8 | 000.5200 | 0134.9 | 043.4 | 45.73 | |
| 038.0 | 000.0977 | 0146.4 | 012.3 | 278.9 | 000.5200 | 0135.4 | 043.5 | 45.72 | |
| 039.0 | 000.0959 | 0132.2 | 011.6 | 278.0 | 000.5200 | 0133.9 | 043.7 | 45.56 | |
| 040.0 | 000.0942 | 0115.4 | 010.9 | 277.0 | 000.5200 | 0131.2 | 044.0 | 45.31 | |
| 041.0 | 000.0933 | 0097.1 | 010.0 | 275.9 | 000.5200 | 0128.1 | 044.3 | 44.99 | |
| 042.0 | 000.0924 | 0075.9 | 008.8 | 274.6 | 000.5200 | 0124.9 | 044.9 | 44.58 | |
| 043.0 | 000.0916 | 0063.1 | 008.0 | 273.7 | 000.5200 | 0123.1 | 045.3 | 44.32 | |
| 044.0 | 000.0907 | 0052.9 | 007.3 | 272.9 | 000.5200 | 0122.4 | 045.6 | 44.13 | |
| 045.0 | 000.0899 | 0050.6 | 007.1 | 272.6 | 000.5200 | 0122.2 | 045.7 | 44.11 | |
| 046.0 | 000.0887 | 0059.2 | 007.7 | 273.0 | 000.5200 | 0122.4 | 045.2 | 44.32 | |
| 047.0 | 000.0879 | 0072.3 | 008.5 | 273.6 | 000.5200 | 0123.1 | 044.5 | 44.63 | |
| 048.0 | 000.0870 | 0075.7 | 008.7 | 273.7 | 000.5200 | 0123.1 | 044.3 | 44.73 | |
| 049.0 | 000.0862 | 0082.8 | 009.1 | 273.9 | 000.5200 | 0123.3 | 043.9 | 44.90 | |
| 050.0 | 000.0854 | 0096.5 | 009.8 | 274.4 | 000.5200 | 0124.4 | 043.3 | 45.22 | |
| 051.0 | 000.0845 | 0103.9 | 010.1 | 274.5 | 000.5200 | 0124.7 | 042.9 | 45.39 | |
| 052.0 | 000.0837 | 0115.8 | 010.6 | 274.8 | 000.5200 | 0124.8 | 042.4 | 45.60 | |
| 053.0 | 000.0826 | 0125.8 | 011.0 | 274.9 | 000.5200 | 0125.0 | 042.0 | 45.79 | |
| 054.0 | 000.0818 | 0135.5 | 011.3 | 275.1 | 000.5200 | 0125.2 | 041.6 | 45.98 | |
| 055.0 | 000.0810 | 0148.1 | 011.9 | 275.3 | 000.5200 | 0125.5 | 041.1 | 46.23 | |
| 056.0 | 000.0802 | 0162.1 | 012.4 | 275.6 | 000.5200 | 0126.6 | 040.5 | 46.54 | |
| 057.0 | 000.0794 | 0174.8 | 012.9 | 275.8 | 000.5200 | 0127.4 | 040.0 | 46.81 | |
| 058.0 | 000.0783 | 0186.4 | 013.2 | 275.8 | 000.5200 | 0127.6 | 039.6 | 47.01 | |
| 059.0 | 000.0775 | 0196.6 | 013.5 | 275.8 | 000.5200 | 0127.5 | 039.2 | 47.17 | |
| 060.0 | 000.0767 | 0203.6 | 013.7 | 275.7 | 000.5200 | 0127.0 | 038.9 | 47.28 | |
| 061.0 | 000.0765 | 0210.2 | 013.9 | 275.6 | 000.5200 | 0126.4 | 038.6 | 47.38 | |

| Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Actual (dBu) |
|----------------------|-------------|-------------|--------------|----------------------|-------------|-------------|--------------|-----------------|
| 062.0 | 000.0762 | 0217.8 | 014.2 | 275.5 | 000.5200 | 0125.9 | 038.3 | 47.50 |
| 063.0 | 000.0762 | 0224.8 | 014.4 | 275.3 | 000.5200 | 0125.5 | 038.0 | 47.62 |
| 064.0 | 000.0760 | 0231.4 | 014.6 | 275.1 | 000.5200 | 0125.3 | 037.7 | 47.74 |
| 065.0 | 000.0757 | 0236.8 | 014.7 | 274.9 | 000.5200 | 0125.0 | 037.4 | 47.85 |
| 066.0 | 000.0754 | 0241.1 | 014.9 | 274.7 | 000.5200 | 0124.9 | 037.2 | 47.95 |
| 067.0 | 000.0752 | 0244.3 | 014.9 | 274.4 | 000.5200 | 0124.4 | 037.0 | 48.01 |
| 068.0 | 000.0752 | 0247.0 | 015.0 | 274.1 | 000.5200 | 0123.8 | 036.8 | 48.06 |
| 069.0 | 000.0749 | 0249.4 | 015.1 | 273.7 | 000.5200 | 0123.1 | 036.6 | 48.10 |
| 070.0 | 000.0746 | 0255.2 | 015.3 | 273.5 | 000.5200 | 0122.7 | 036.4 | 48.20 |
| 071.0 | 000.0741 | 0260.0 | 015.4 | 273.2 | 000.5200 | 0122.5 | 036.2 | 48.29 |
| 072.0 | 000.0736 | 0264.0 | 015.5 | 272.8 | 000.5200 | 0122.4 | 036.0 | 48.37 |
| 073.0 | 000.0731 | 0267.2 | 015.6 | 272.4 | 000.5200 | 0122.1 | 035.8 | 48.42 |
| 074.0 | 000.0726 | 0268.8 | 015.6 | 272.0 | 000.5200 | 0122.3 | 035.7 | 48.49 |
| 075.0 | 000.0721 | 0268.5 | 015.5 | 271.6 | 000.5200 | 0122.1 | 035.7 | 48.49 |
| 076.0 | 000.0718 | 0268.1 | 015.5 | 271.2 | 000.5200 | 0122.7 | 035.6 | 48.56 |
| 077.0 | 000.0713 | 0267.8 | 015.5 | 270.7 | 000.5200 | 0122.1 | 035.6 | 48.53 |
| 078.0 | 000.0708 | 0266.3 | 015.4 | 270.3 | 000.5200 | 0119.9 | 035.6 | 48.39 |
| 079.0 | 000.0703 | 0266.2 | 015.4 | 269.9 | 000.5171 | 0118.0 | 035.6 | 48.25 |
| 080.0 | 000.0698 | 0265.6 | 015.3 | 269.4 | 000.5087 | 0121.1 | 035.6 | 48.38 |
| 081.0 | 000.0688 | 0264.1 | 015.2 | 269.0 | 000.5001 | 0127.1 | 035.6 | 48.64 |
| 082.0 | 000.0678 | 0263.4 | 015.1 | 268.5 | 000.4918 | 0128.7 | 035.7 | 48.64 |
| 083.0 | 000.0666 | 0264.0 | 015.1 | 268.1 | 000.4837 | 0127.9 | 035.7 | 48.51 |
| 084.0 | 000.0656 | 0264.6 | 015.0 | 267.7 | 000.4757 | 0126.2 | 035.7 | 48.33 |
| 085.0 | 000.0646 | 0264.8 | 015.0 | 267.3 | 000.4679 | 0124.3 | 035.8 | 48.12 |
| 086.0 | 000.0637 | 0265.2 | 014.9 | 266.8 | 000.4602 | 0123.2 | 035.8 | 47.96 |
| 087.0 | 000.0627 | 0265.4 | 014.9 | 266.4 | 000.4526 | 0122.7 | 035.9 | 47.83 |
| 088.0 | 000.0615 | 0270.5 | 015.0 | 266.0 | 000.4450 | 0123.0 | 035.8 | 47.81 |
| 089.0 | 000.0606 | 0271.9 | 015.0 | 265.6 | 000.4376 | 0123.8 | 035.8 | 47.77 |
| 090.0 | 000.0597 | 0269.2 | 014.8 | 265.2 | 000.4305 | 0123.8 | 036.0 | 47.63 |
| 091.0 | 000.0590 | 0269.1 | 014.8 | 264.8 | 000.4234 | 0122.6 | 036.0 | 47.45 |
| 092.0 | 000.0583 | 0268.9 | 014.7 | 264.4 | 000.4165 | 0120.9 | 036.1 | 47.23 |
| 093.0 | 000.0574 | 0269.1 | 014.7 | 264.0 | 000.4098 | 0119.1 | 036.2 | 47.00 |
| 094.0 | 000.0567 | 0270.4 | 014.7 | 263.6 | 000.4029 | 0117.1 | 036.3 | 46.77 |
| 095.0 | 000.0560 | 0269.8 | 014.6 | 263.2 | 000.3965 | 0115.2 | 036.4 | 46.53 |
| 096.0 | 000.0554 | 0272.4 | 014.6 | 262.8 | 000.3897 | 0113.7 | 036.4 | 46.33 |
| 097.0 | 000.0547 | 0270.5 | 014.5 | 262.5 | 000.3839 | 0112.6 | 036.6 | 46.11 |
| 098.0 | 000.0538 | 0277.5 | 014.7 | 262.0 | 000.3764 | 0111.3 | 036.5 | 45.96 |
| 099.0 | 000.0531 | 0280.8 | 014.7 | 261.6 | 000.3697 | 0109.4 | 036.5 | 45.73 |
| 100.0 | 000.0525 | 0282.3 | 014.7 | 261.2 | 000.3635 | 0107.1 | 036.6 | 45.44 |
| 101.0 | 000.0516 | 0283.2 | 014.7 | 260.9 | 000.3577 | 0105.1 | 036.7 | 45.15 |
| 102.0 | 000.0510 | 0286.5 | 014.7 | 260.5 | 000.3513 | 0102.8 | 036.8 | 44.86 |
| 103.0 | 000.0501 | 0287.7 | 014.7 | 260.1 | 000.3457 | 0101.8 | 036.9 | 44.65 |
| 104.0 | 000.0495 | 0288.7 | 014.7 | 259.8 | 000.3408 | 0102.4 | 037.0 | 44.58 |
| 105.0 | 000.0487 | 0290.0 | 014.7 | 259.4 | 000.3365 | 0103.9 | 037.2 | 44.59 |
| 106.0 | 000.0478 | 0289.5 | 014.6 | 259.1 | 000.3327 | 0105.7 | 037.3 | 44.60 |
| 107.0 | 000.0472 | 0288.7 | 014.5 | 258.8 | 000.3290 | 0107.1 | 037.5 | 44.59 |
| 108.0 | 000.0464 | 0291.1 | 014.5 | 258.5 | 000.3248 | 0108.7 | 037.6 | 44.60 |
| 109.0 | 000.0458 | 0289.2 | 014.4 | 258.3 | 000.3216 | 0109.6 | 037.9 | 44.53 |
| 110.0 | 000.0450 | 0291.1 | 014.4 | 257.9 | 000.3177 | 0110.9 | 038.0 | 44.52 |
| 111.0 | 000.0438 | 0293.0 | 014.4 | 257.7 | 000.3143 | 0113.3 | 038.2 | 44.56 |
| 112.0 | 000.0426 | 0290.3 | 014.2 | 257.5 | 000.3122 | 0114.9 | 038.5 | 44.52 |

| Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Actual (dBu) |
|----------------------|-------------|-------------|--------------|----------------------|-------------|-------------|--------------|-----------------|
| 113.0 | 000.0416 | 0292.1 | 014.2 | 257.2 | 000.3089 | 0116.8 | 038.6 | 44.53 |
| 114.0 | 000.0404 | 0298.4 | 014.2 | 256.9 | 000.3048 | 0118.8 | 038.7 | 44.55 |
| 115.0 | 000.0393 | 0298.1 | 014.1 | 256.7 | 000.3025 | 0119.6 | 039.0 | 44.46 |
| 116.0 | 000.0382 | 0297.5 | 014.0 | 256.5 | 000.3004 | 0120.0 | 039.2 | 44.35 |
| 117.0 | 000.0371 | 0297.8 | 013.9 | 256.3 | 000.2982 | 0119.9 | 039.4 | 44.21 |
| 118.0 | 000.0362 | 0300.7 | 013.9 | 256.1 | 000.2952 | 0118.8 | 039.6 | 44.02 |
| 119.0 | 000.0351 | 0304.0 | 013.9 | 255.9 | 000.2925 | 0117.1 | 039.8 | 43.79 |
| 120.0 | 000.0340 | 0306.3 | 013.8 | 255.7 | 000.2902 | 0115.6 | 040.0 | 43.56 |
| 121.0 | 000.0334 | 0310.8 | 013.8 | 255.4 | 000.2870 | 0113.8 | 040.2 | 43.33 |
| 122.0 | 000.0327 | 0312.6 | 013.8 | 255.2 | 000.2846 | 0113.0 | 040.4 | 43.15 |
| 123.0 | 000.0318 | 0311.8 | 013.7 | 255.1 | 000.2833 | 0112.6 | 040.6 | 42.99 |
| 124.0 | 000.0311 | 0312.2 | 013.6 | 254.9 | 000.2815 | 0112.1 | 040.8 | 42.84 |
| 125.0 | 000.0305 | 0312.9 | 013.6 | 254.8 | 000.2797 | 0111.7 | 041.0 | 42.69 |
| 126.0 | 000.0298 | 0316.2 | 013.6 | 254.6 | 000.2773 | 0111.2 | 041.2 | 42.54 |
| 127.0 | 000.0292 | 0314.4 | 013.5 | 254.5 | 000.2764 | 0111.2 | 041.5 | 42.42 |
| 128.0 | 000.0284 | 0314.4 | 013.4 | 254.4 | 000.2754 | 0111.3 | 041.7 | 42.30 |
| 129.0 | 000.0277 | 0317.0 | 013.4 | 254.2 | 000.2735 | 0111.8 | 041.9 | 42.22 |
| 130.0 | 000.0271 | 0315.6 | 013.3 | 254.2 | 000.2727 | 0112.0 | 042.2 | 42.12 |
| 131.0 | 000.0262 | 0316.0 | 013.2 | 254.1 | 000.2721 | 0112.2 | 042.4 | 42.02 |
| 132.0 | 000.0253 | 0312.5 | 013.0 | 254.2 | 000.2726 | 0112.1 | 042.7 | 41.90 |
| 133.0 | 000.0244 | 0310.0 | 012.8 | 254.2 | 000.2729 | 0112.0 | 043.0 | 41.78 |
| 134.0 | 000.0235 | 0308.6 | 012.7 | 254.2 | 000.2731 | 0111.9 | 043.3 | 41.67 |
| 135.0 | 000.0226 | 0306.3 | 012.5 | 254.2 | 000.2735 | 0111.8 | 043.5 | 41.56 |
| 136.0 | 000.0218 | 0306.3 | 012.4 | 254.2 | 000.2735 | 0111.8 | 043.8 | 41.46 |
| 137.0 | 000.0209 | 0305.7 | 012.3 | 254.2 | 000.2737 | 0111.8 | 044.0 | 41.35 |
| 138.0 | 000.0201 | 0307.7 | 012.2 | 254.2 | 000.2733 | 0111.9 | 044.2 | 41.26 |
| 139.0 | 000.0193 | 0312.1 | 012.2 | 254.1 | 000.2725 | 0112.1 | 044.5 | 41.18 |
| 140.0 | 000.0185 | 0319.6 | 012.2 | 254.0 | 000.2710 | 0112.6 | 044.6 | 41.12 |
| 141.0 | 000.0180 | 0319.9 | 012.1 | 254.0 | 000.2709 | 0112.7 | 044.9 | 41.03 |
| 142.0 | 000.0176 | 0315.3 | 011.9 | 254.1 | 000.2717 | 0112.4 | 045.1 | 40.92 |
| 143.0 | 000.0171 | 0313.5 | 011.8 | 254.1 | 000.2722 | 0112.2 | 045.4 | 40.82 |
| 144.0 | 000.0168 | 0312.5 | 011.8 | 254.1 | 000.2722 | 0112.2 | 045.6 | 40.73 |
| 145.0 | 000.0163 | 0312.4 | 011.7 | 254.1 | 000.2724 | 0112.1 | 045.8 | 40.64 |

11-30-2016

Terrain Data: NED 03 SEC FMOver Analysis

WNJY BLED20080707AEO

WWPJ

Channel = 207A
 Max ERP = 0.52 kW
 RCAMSL = 385 m
 N. Lat. 40 53 14.0
 W. Lng. 74 41 55.0
 Protected
 60 dBu

Channel = 208A
 Max ERP = 0.225 kW
 RCAMSL = 473 m
 N. Lat. 40 51 33.8
 W. Lng. 75 18 04.4
 Interfering
 54 dBu

| Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Actual (dBu) | IX (km) |
|----------------------|-------------|-------------|--------------|----------------------|-------------|-------------|--------------|-----------------|------------|
| 207.0 | 000.3928 | 0136.6 | 017.1 | 105.6 | 000.0482 | 0289.9 | 044.6 | 41.55 | |
| 208.0 | 000.3761 | 0137.5 | 016.9 | 105.3 | 000.0484 | 0290.1 | 044.4 | 41.68 | |
| 209.0 | 000.3597 | 0135.0 | 016.5 | 104.8 | 000.0488 | 0289.7 | 044.2 | 41.80 | |
| 210.0 | 000.3437 | 0131.4 | 016.1 | 104.1 | 000.0494 | 0288.8 | 044.0 | 41.89 | |
| 211.0 | 000.3429 | 0127.0 | 015.8 | 103.6 | 000.0498 | 0288.0 | 043.9 | 41.97 | |
| 212.0 | 000.3422 | 0123.0 | 015.5 | 103.1 | 000.0500 | 0287.7 | 043.7 | 42.05 | |
| 213.0 | 000.3414 | 0119.9 | 015.3 | 102.8 | 000.0503 | 0287.9 | 043.5 | 42.17 | |
| 214.0 | 000.3407 | 0117.1 | 015.1 | 102.4 | 000.0506 | 0287.8 | 043.3 | 42.27 | |
| 215.0 | 000.3399 | 0110.4 | 014.6 | 101.7 | 000.0512 | 0284.9 | 043.3 | 42.25 | |
| 216.0 | 000.3392 | 0099.7 | 013.8 | 100.6 | 000.0519 | 0282.7 | 043.3 | 42.21 | |
| 217.0 | 000.3384 | 0085.4 | 012.8 | 099.3 | 000.0530 | 0281.3 | 043.6 | 42.14 | |
| 218.0 | 000.3376 | 0075.9 | 012.1 | 098.3 | 000.0536 | 0278.7 | 043.7 | 42.06 | |
| 219.0 | 000.3369 | 0069.7 | 011.7 | 097.7 | 000.0541 | 0275.5 | 043.8 | 41.97 | |
| 220.0 | 000.3361 | 0067.1 | 011.5 | 097.3 | 000.0544 | 0272.4 | 043.7 | 41.93 | |
| 221.0 | 000.3338 | 0066.4 | 011.4 | 097.1 | 000.0546 | 0270.9 | 043.6 | 41.95 | |
| 222.0 | 000.3315 | 0066.4 | 011.4 | 096.9 | 000.0547 | 0270.4 | 043.4 | 42.01 | |
| 223.0 | 000.3291 | 0068.8 | 011.5 | 097.0 | 000.0547 | 0270.4 | 043.2 | 42.12 | |
| 224.0 | 000.3268 | 0069.7 | 011.6 | 096.9 | 000.0548 | 0270.2 | 043.0 | 42.21 | |
| 225.0 | 000.3245 | 0068.3 | 011.5 | 096.6 | 000.0550 | 0270.7 | 042.9 | 42.27 | |
| 226.0 | 000.3222 | 0069.0 | 011.5 | 096.4 | 000.0551 | 0271.2 | 042.7 | 42.37 | |
| 227.0 | 000.3199 | 0071.2 | 011.6 | 096.4 | 000.0551 | 0271.3 | 042.5 | 42.48 | |
| 228.0 | 000.3177 | 0071.3 | 011.6 | 096.2 | 000.0552 | 0271.9 | 042.3 | 42.58 | |
| 229.0 | 000.3154 | 0070.0 | 011.5 | 095.9 | 000.0554 | 0272.5 | 042.2 | 42.64 | |
| 230.0 | 000.3131 | 0068.6 | 011.4 | 095.6 | 000.0556 | 0272.4 | 042.2 | 42.68 | |
| 231.0 | 000.3004 | 0073.2 | 011.6 | 095.6 | 000.0556 | 0272.5 | 041.9 | 42.82 | |
| 232.0 | 000.2880 | 0084.4 | 012.3 | 096.1 | 000.0553 | 0272.3 | 041.3 | 43.06 | |
| 233.0 | 000.2758 | 0099.1 | 013.1 | 096.7 | 000.0549 | 0270.4 | 040.5 | 43.31 | |
| 234.0 | 000.2639 | 0115.3 | 014.0 | 097.3 | 000.0544 | 0272.0 | 039.7 | 43.68 | |
| 235.0 | 000.2523 | 0125.3 | 014.4 | 097.4 | 000.0543 | 0273.3 | 039.2 | 43.92 | |
| 236.0 | 000.2409 | 0129.7 | 014.5 | 097.2 | 000.0545 | 0271.7 | 039.0 | 43.99 | |
| 237.0 | 000.2297 | 0135.1 | 014.6 | 097.1 | 000.0546 | 0270.8 | 038.7 | 44.10 | |
| 238.0 | 000.2189 | 0141.8 | 014.8 | 097.0 | 000.0547 | 0270.5 | 038.4 | 44.24 | |
| 239.0 | 000.2083 | 0148.1 | 015.0 | 096.9 | 000.0548 | 0270.2 | 038.1 | 44.38 | |

| Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Actual (dBu) |
|----------------------|-------------|-------------|--------------|----------------------|-------------|-------------|--------------|-----------------|
| 240.0 | 000.1980 | 0148.1 | 014.8 | 096.4 | 000.0551 | 0271.4 | 038.1 | 44.45 |
| 241.0 | 000.2008 | 0145.5 | 014.7 | 096.0 | 000.0554 | 0272.4 | 038.0 | 44.53 |
| 242.0 | 000.2036 | 0144.7 | 014.7 | 095.7 | 000.0556 | 0272.6 | 037.9 | 44.62 |
| 243.0 | 000.2065 | 0143.4 | 014.7 | 095.3 | 000.0558 | 0271.4 | 037.8 | 44.66 |
| 244.0 | 000.2094 | 0144.8 | 014.8 | 095.1 | 000.0560 | 0270.4 | 037.5 | 44.76 |
| 245.0 | 000.2123 | 0146.5 | 015.0 | 094.9 | 000.0561 | 0269.0 | 037.2 | 44.85 |
| 246.0 | 000.2153 | 0145.8 | 015.0 | 094.5 | 000.0563 | 0268.7 | 037.1 | 44.92 |
| 247.0 | 000.2182 | 0141.1 | 014.8 | 094.0 | 000.0567 | 0270.4 | 037.2 | 44.97 |
| 248.0 | 000.2212 | 0132.1 | 014.3 | 093.3 | 000.0572 | 0270.0 | 037.5 | 44.85 |
| 249.0 | 000.2242 | 0121.8 | 013.8 | 092.7 | 000.0577 | 0268.5 | 037.9 | 44.67 |
| 250.0 | 000.2272 | 0114.6 | 013.4 | 092.1 | 000.0582 | 0268.6 | 038.1 | 44.60 |
| 251.0 | 000.2378 | 0113.8 | 013.5 | 091.9 | 000.0584 | 0269.2 | 037.9 | 44.72 |
| 252.0 | 000.2486 | 0115.6 | 013.8 | 091.7 | 000.0585 | 0269.3 | 037.6 | 44.89 |
| 253.0 | 000.2596 | 0115.3 | 013.9 | 091.4 | 000.0587 | 0269.4 | 037.4 | 45.00 |
| 254.0 | 000.2709 | 0112.7 | 013.9 | 091.0 | 000.0590 | 0269.1 | 037.3 | 45.04 |
| 255.0 | 000.2824 | 0112.4 | 014.1 | 090.7 | 000.0592 | 0268.8 | 037.1 | 45.14 |
| 256.0 | 000.2942 | 0118.3 | 014.6 | 090.6 | 000.0593 | 0268.7 | 036.5 | 45.41 |
| 257.0 | 000.3062 | 0118.1 | 014.7 | 090.2 | 000.0595 | 0268.9 | 036.3 | 45.54 |
| 258.0 | 000.3185 | 0110.5 | 014.4 | 089.7 | 000.0599 | 0269.5 | 036.6 | 45.45 |
| 259.0 | 000.3310 | 0106.4 | 014.2 | 089.3 | 000.0603 | 0271.0 | 036.7 | 45.49 |
| 260.0 | 000.3437 | 0101.9 | 014.0 | 088.9 | 000.0607 | 0272.1 | 036.8 | 45.48 |
| 261.0 | 000.3597 | 0105.7 | 014.5 | 088.6 | 000.0610 | 0272.2 | 036.4 | 45.73 |
| 262.0 | 000.3761 | 0111.2 | 015.1 | 088.3 | 000.0613 | 0271.9 | 035.8 | 46.03 |
| 263.0 | 000.3928 | 0114.3 | 015.5 | 087.9 | 000.0616 | 0270.2 | 035.3 | 46.21 |
| 264.0 | 000.4099 | 0119.1 | 016.0 | 087.6 | 000.0621 | 0268.1 | 034.8 | 46.45 |
| 265.0 | 000.4273 | 0123.3 | 016.5 | 087.1 | 000.0626 | 0266.0 | 034.2 | 46.67 |
| 266.0 | 000.4451 | 0123.0 | 016.7 | 086.7 | 000.0631 | 0264.9 | 034.1 | 46.76 |
| 267.0 | 000.4633 | 0123.6 | 016.9 | 086.2 | 000.0635 | 0265.0 | 033.8 | 46.91 |
| 268.0 | 000.4818 | 0127.6 | 017.4 | 085.6 | 000.0640 | 0265.2 | 033.4 | 47.18 |
| 269.0 | 000.5007 | 0126.9 | 017.5 | 085.1 | 000.0645 | 0264.9 | 033.2 | 47.26 |
| 270.0 | 000.5200 | 0118.6 | 017.1 | 084.6 | 000.0650 | 0264.5 | 033.7 | 47.06 |
| 271.0 | 000.5200 | 0122.7 | 017.4 | 084.1 | 000.0655 | 0264.6 | 033.4 | 47.23 |
| 272.0 | 000.5200 | 0122.3 | 017.4 | 083.6 | 000.0660 | 0264.3 | 033.5 | 47.22 |
| 273.0 | 000.5200 | 0122.4 | 017.4 | 083.0 | 000.0665 | 0264.0 | 033.5 | 47.23 |
| 274.0 | 000.5200 | 0123.6 | 017.5 | 082.5 | 000.0672 | 0263.9 | 033.5 | 47.28 |
| 275.0 | 000.5200 | 0125.1 | 017.6 | 082.0 | 000.0679 | 0263.4 | 033.4 | 47.33 |
| 276.0 | 000.5200 | 0128.3 | 017.8 | 081.3 | 000.0685 | 0264.1 | 033.3 | 47.46 |
| 277.0 | 000.5200 | 0131.2 | 018.0 | 080.7 | 000.0691 | 0264.5 | 033.2 | 47.57 |
| 278.0 | 000.5200 | 0133.9 | 018.2 | 080.1 | 000.0697 | 0265.6 | 033.1 | 47.69 |
| 279.0 | 000.5200 | 0135.5 | 018.3 | 079.5 | 000.0700 | 0265.6 | 033.1 | 47.72 |
| 280.0 | 000.5200 | 0135.1 | 018.3 | 079.0 | 000.0703 | 0266.2 | 033.2 | 47.69 |
| 281.0 | 000.5200 | 0136.5 | 018.4 | 078.4 | 000.0706 | 0266.3 | 033.2 | 47.70 |
| 282.0 | 000.5200 | 0134.7 | 018.3 | 078.0 | 000.0708 | 0266.3 | 033.5 | 47.59 |
| 283.0 | 000.5200 | 0135.4 | 018.3 | 077.5 | 000.0711 | 0267.2 | 033.6 | 47.59 |
| 284.0 | 000.5200 | 0136.1 | 018.4 | 077.0 | 000.0713 | 0267.9 | 033.7 | 47.58 |
| 285.0 | 000.5200 | 0140.6 | 018.7 | 076.2 | 000.0717 | 0268.1 | 033.5 | 47.68 |
| 286.0 | 000.5200 | 0145.1 | 019.0 | 075.5 | 000.0720 | 0268.4 | 033.4 | 47.76 |
| 287.0 | 000.5200 | 0149.4 | 019.3 | 074.7 | 000.0722 | 0268.7 | 033.3 | 47.82 |
| 288.0 | 000.5200 | 0153.6 | 019.6 | 074.0 | 000.0726 | 0268.8 | 033.3 | 47.87 |
| 289.0 | 000.5200 | 0157.1 | 019.8 | 073.3 | 000.0730 | 0267.7 | 033.3 | 47.85 |
| 290.0 | 000.5200 | 0159.4 | 019.9 | 072.6 | 000.0733 | 0266.6 | 033.4 | 47.80 |

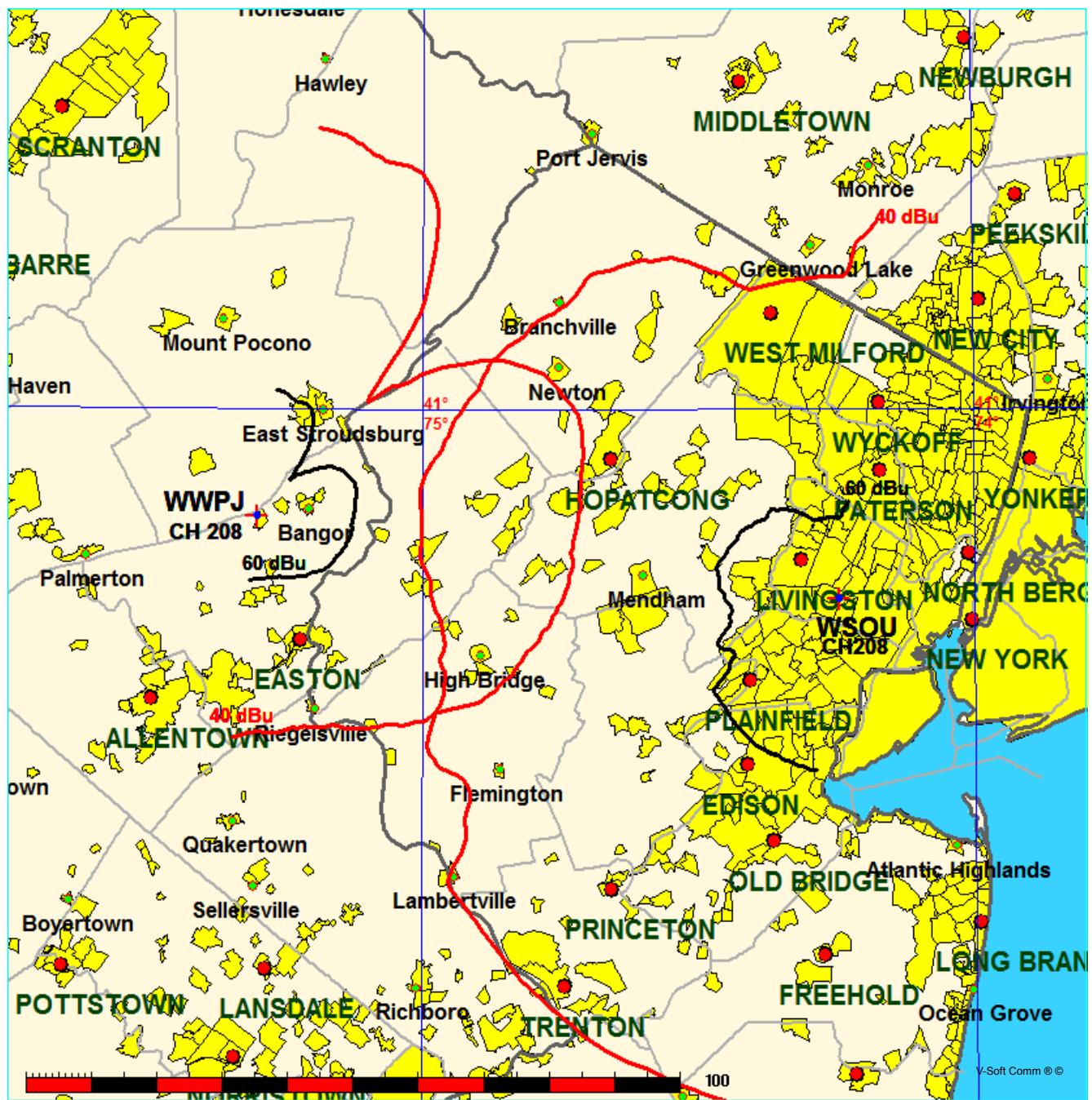
| Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Actual (dBu) |
|----------------------|-------------|-------------|--------------|----------------------|-------------|-------------|--------------|-----------------|
| 291.0 | 000.5200 | 0160.5 | 020.0 | 072.1 | 000.0736 | 0264.4 | 033.5 | 47.66 |
| 292.0 | 000.5200 | 0160.8 | 020.0 | 071.6 | 000.0738 | 0262.5 | 033.7 | 47.51 |
| 293.0 | 000.5200 | 0161.3 | 020.1 | 071.1 | 000.0741 | 0260.5 | 034.0 | 47.36 |
| 294.0 | 000.5200 | 0160.2 | 020.0 | 070.8 | 000.0742 | 0259.1 | 034.2 | 47.19 |
| 295.0 | 000.5200 | 0159.2 | 019.9 | 070.4 | 000.0744 | 0257.5 | 034.5 | 47.01 |
| 296.0 | 000.5200 | 0160.4 | 020.0 | 069.9 | 000.0747 | 0254.8 | 034.7 | 46.84 |
| 297.0 | 000.5200 | 0161.9 | 020.1 | 069.4 | 000.0748 | 0251.3 | 034.9 | 46.64 |
| 298.0 | 000.5200 | 0163.4 | 020.2 | 068.9 | 000.0749 | 0249.1 | 035.1 | 46.48 |
| 299.0 | 000.5200 | 0163.8 | 020.2 | 068.5 | 000.0750 | 0248.3 | 035.4 | 46.34 |
| 300.0 | 000.5200 | 0164.4 | 020.3 | 068.1 | 000.0751 | 0247.4 | 035.6 | 46.19 |
| 301.0 | 000.5200 | 0163.1 | 020.2 | 067.9 | 000.0752 | 0246.6 | 035.9 | 46.01 |
| 302.0 | 000.5200 | 0162.6 | 020.1 | 067.6 | 000.0752 | 0245.7 | 036.2 | 45.83 |
| 303.0 | 000.5200 | 0163.5 | 020.2 | 067.2 | 000.0752 | 0244.7 | 036.5 | 45.68 |
| 304.0 | 000.5200 | 0164.3 | 020.2 | 066.8 | 000.0752 | 0243.9 | 036.8 | 45.52 |
| 305.0 | 000.5200 | 0163.2 | 020.2 | 066.6 | 000.0753 | 0243.2 | 037.1 | 45.35 |
| 306.0 | 000.5200 | 0162.4 | 020.1 | 066.4 | 000.0753 | 0242.5 | 037.4 | 45.17 |
| 307.0 | 000.5200 | 0162.6 | 020.1 | 066.1 | 000.0754 | 0241.4 | 037.7 | 45.00 |
| 308.0 | 000.5200 | 0160.8 | 020.0 | 066.0 | 000.0754 | 0241.1 | 038.1 | 44.82 |
| 309.0 | 000.5200 | 0159.0 | 019.9 | 065.9 | 000.0755 | 0240.8 | 038.4 | 44.64 |
| 310.0 | 000.5200 | 0158.7 | 019.9 | 065.7 | 000.0755 | 0240.1 | 038.8 | 44.47 |
| 311.0 | 000.5074 | 0160.4 | 019.9 | 065.5 | 000.0756 | 0239.2 | 039.1 | 44.30 |
| 312.0 | 000.4949 | 0161.6 | 019.8 | 065.3 | 000.0756 | 0238.5 | 039.4 | 44.12 |
| 313.0 | 000.4826 | 0161.9 | 019.7 | 065.3 | 000.0756 | 0238.3 | 039.8 | 43.94 |
| 314.0 | 000.4705 | 0160.1 | 019.5 | 065.4 | 000.0756 | 0238.8 | 040.2 | 43.78 |
| 315.0 | 000.4585 | 0160.5 | 019.4 | 065.4 | 000.0756 | 0238.6 | 040.5 | 43.61 |
| 316.0 | 000.4467 | 0163.4 | 019.5 | 065.1 | 000.0757 | 0237.5 | 040.8 | 43.43 |
| 317.0 | 000.4350 | 0165.1 | 019.4 | 065.0 | 000.0757 | 0236.8 | 041.2 | 43.26 |
| 318.0 | 000.4234 | 0165.2 | 019.3 | 065.0 | 000.0757 | 0236.9 | 041.5 | 43.10 |
| 319.0 | 000.4121 | 0165.9 | 019.2 | 065.0 | 000.0757 | 0236.8 | 041.9 | 42.95 |
| 320.0 | 000.4009 | 0167.9 | 019.2 | 064.9 | 000.0757 | 0236.3 | 042.2 | 42.78 |
| 321.0 | 000.3846 | 0171.8 | 019.2 | 064.8 | 000.0758 | 0235.7 | 042.5 | 42.62 |
| 322.0 | 000.3687 | 0173.5 | 019.1 | 064.8 | 000.0757 | 0235.9 | 042.9 | 42.47 |
| 323.0 | 000.3531 | 0173.5 | 018.9 | 065.0 | 000.0757 | 0236.6 | 043.2 | 42.34 |
| 324.0 | 000.3378 | 0175.4 | 018.8 | 065.0 | 000.0757 | 0236.8 | 043.6 | 42.20 |
| 325.0 | 000.3229 | 0176.2 | 018.6 | 065.2 | 000.0757 | 0237.6 | 043.9 | 42.07 |
| 326.0 | 000.3083 | 0176.9 | 018.5 | 065.3 | 000.0756 | 0238.4 | 044.3 | 41.95 |

Contour-to-Contour Map, WWPJ vs WSOU
Town Of Monroe, Connecticut

FMCommander Single Allocation Study - 11-30-2016 - NED 03 SEC
WWPJ's Overlaps (In= 10.12 km, Out= 22.24 km)

WWPJ CH 208 A DA
Lat= 40 51 33.8, Lng= 75 18 04.4
0.225 kW 230.8 m HAAT, 473 m COR
Prot.= 60 dBu, Intef.= 40 dBu

WSOU CH 208 A BMLED20050909ABX
Lat= 40 44 28.0, Lng= 74 14 42.0
2.4 kW 95 m HAAT, 149 m COR
Prot.= 60 dBu, Intef.= 40 dBu



11-30-2016

Terrain Data: NED 03 SEC

FMOver Analysis

WWPJ

WSOU BMLED20050909ABX

Channel = 208A
 Max ERP = 0.225 kW
 RCAMSL = 473 m
 N. Lat. 40 51 33.8
 W. Lng. 75 18 04.4
 Protected
 60 dBu

Channel = 208A
 Max ERP = 2.4 kW
 RCAMSL = 149 m
 N. Lat. 40 44 28.0
 W. Lng. 74 14 42.0
 Interfering
 40 dBu

| Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Actual (dBu) | IX (km) |
|----------------------|-------------|-------------|--------------|----------------------|-------------|-------------|--------------|-----------------|------------|
| 038.0 | 000.0977 | 0146.4 | 012.3 | 286.0 | 002.4000 | 0070.1 | 084.4 | 35.18 | |
| 039.0 | 000.0959 | 0132.2 | 011.6 | 285.6 | 002.4000 | 0070.2 | 084.5 | 35.17 | |
| 040.0 | 000.0942 | 0115.4 | 010.9 | 285.0 | 002.4000 | 0070.1 | 084.6 | 35.12 | |
| 041.0 | 000.0933 | 0097.1 | 010.0 | 284.4 | 002.4000 | 0069.8 | 084.8 | 35.05 | |
| 042.0 | 000.0924 | 0075.9 | 008.8 | 283.7 | 002.4000 | 0069.0 | 085.3 | 34.90 | |
| 043.0 | 000.0916 | 0063.1 | 008.0 | 283.2 | 002.4000 | 0068.2 | 085.5 | 34.79 | |
| 044.0 | 000.0907 | 0052.9 | 007.3 | 282.7 | 002.4000 | 0067.5 | 085.8 | 34.69 | |
| 045.0 | 000.0899 | 0050.6 | 007.1 | 282.6 | 002.4000 | 0067.3 | 085.8 | 34.68 | |
| 046.0 | 000.0887 | 0059.2 | 007.7 | 282.8 | 002.4000 | 0067.7 | 085.4 | 34.81 | |
| 047.0 | 000.0879 | 0072.3 | 008.5 | 283.2 | 002.4000 | 0068.3 | 084.8 | 34.99 | |
| 048.0 | 000.0870 | 0075.7 | 008.7 | 283.3 | 002.4000 | 0068.3 | 084.6 | 35.05 | |
| 049.0 | 000.0862 | 0082.8 | 009.1 | 283.4 | 002.4000 | 0068.6 | 084.2 | 35.15 | |
| 050.0 | 000.0854 | 0096.5 | 009.8 | 283.7 | 002.4000 | 0069.1 | 083.7 | 35.32 | |
| 051.0 | 000.0845 | 0103.9 | 010.1 | 283.8 | 002.4000 | 0069.3 | 083.3 | 35.42 | |
| 052.0 | 000.0837 | 0115.8 | 010.6 | 284.0 | 002.4000 | 0069.5 | 082.9 | 35.55 | |
| 053.0 | 000.0826 | 0125.8 | 011.0 | 284.2 | 002.4000 | 0069.7 | 082.5 | 35.66 | |
| 054.0 | 000.0818 | 0135.5 | 011.3 | 284.3 | 002.4000 | 0069.7 | 082.1 | 35.76 | |
| 055.0 | 000.0810 | 0148.1 | 011.9 | 284.5 | 002.4000 | 0069.9 | 081.6 | 35.89 | |
| 056.0 | 000.0802 | 0162.1 | 012.4 | 284.7 | 002.4000 | 0070.0 | 081.1 | 36.04 | |
| 057.0 | 000.0794 | 0174.8 | 012.9 | 284.8 | 002.4000 | 0070.0 | 080.6 | 36.16 | |
| 058.0 | 000.0783 | 0186.4 | 013.2 | 284.9 | 002.4000 | 0070.0 | 080.2 | 36.27 | |
| 059.0 | 000.0775 | 0196.6 | 013.5 | 284.9 | 002.4000 | 0070.0 | 079.8 | 36.37 | |
| 060.0 | 000.0767 | 0203.6 | 013.7 | 284.9 | 002.4000 | 0070.0 | 079.5 | 36.44 | |
| 061.0 | 000.0765 | 0210.2 | 013.9 | 284.8 | 002.4000 | 0070.0 | 079.2 | 36.52 | |
| 062.0 | 000.0762 | 0217.8 | 014.2 | 284.8 | 002.4000 | 0070.0 | 078.9 | 36.61 | |
| 063.0 | 000.0762 | 0224.8 | 014.4 | 284.8 | 002.4000 | 0070.0 | 078.5 | 36.70 | |
| 064.0 | 000.0760 | 0231.4 | 014.6 | 284.8 | 002.4000 | 0070.0 | 078.2 | 36.78 | |
| 065.0 | 000.0757 | 0236.8 | 014.7 | 284.7 | 002.4000 | 0070.0 | 077.9 | 36.85 | |
| 066.0 | 000.0754 | 0241.1 | 014.9 | 284.6 | 002.4000 | 0069.9 | 077.7 | 36.91 | |
| 067.0 | 000.0752 | 0244.3 | 014.9 | 284.5 | 002.4000 | 0069.9 | 077.5 | 36.97 | |
| 068.0 | 000.0752 | 0247.0 | 015.0 | 284.4 | 002.4000 | 0069.8 | 077.2 | 37.02 | |
| 069.0 | 000.0749 | 0249.4 | 015.1 | 284.2 | 002.4000 | 0069.7 | 077.0 | 37.07 | |
| 070.0 | 000.0746 | 0255.2 | 015.3 | 284.1 | 002.4000 | 0069.6 | 076.7 | 37.14 | |
| 071.0 | 000.0741 | 0260.0 | 015.4 | 284.0 | 002.4000 | 0069.5 | 076.5 | 37.20 | |
| 072.0 | 000.0736 | 0264.0 | 015.5 | 283.9 | 002.4000 | 0069.3 | 076.3 | 37.24 | |
| 073.0 | 000.0731 | 0267.2 | 015.6 | 283.7 | 002.4000 | 0069.0 | 076.1 | 37.28 | |

| Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Actual (dBu) |
|----------------------|-------------|-------------|--------------|----------------------|-------------|-------------|--------------|-----------------|
| 074.0 | 000.0726 | 0268.8 | 015.6 | 283.6 | 002.4000 | 0068.8 | 075.9 | 37.31 |
| 075.0 | 000.0721 | 0268.5 | 015.5 | 283.4 | 002.4000 | 0068.5 | 075.8 | 37.31 |
| 076.0 | 000.0718 | 0268.1 | 015.5 | 283.2 | 002.4000 | 0068.2 | 075.7 | 37.32 |
| 077.0 | 000.0713 | 0267.8 | 015.5 | 283.0 | 002.4000 | 0067.9 | 075.6 | 37.33 |
| 078.0 | 000.0708 | 0266.3 | 015.4 | 282.8 | 002.4000 | 0067.6 | 075.6 | 37.32 |
| 079.0 | 000.0703 | 0266.2 | 015.4 | 282.6 | 002.4000 | 0067.3 | 075.5 | 37.32 |
| 080.0 | 000.0698 | 0265.6 | 015.3 | 282.4 | 002.4000 | 0067.1 | 075.4 | 37.32 |
| 081.0 | 000.0688 | 0264.1 | 015.2 | 282.2 | 002.4000 | 0066.9 | 075.4 | 37.31 |
| 082.0 | 000.0678 | 0263.4 | 015.1 | 281.9 | 002.4000 | 0066.6 | 075.4 | 37.30 |
| 083.0 | 000.0666 | 0264.0 | 015.1 | 281.7 | 002.4000 | 0066.4 | 075.4 | 37.30 |
| 084.0 | 000.0656 | 0264.6 | 015.0 | 281.5 | 002.4000 | 0066.2 | 075.4 | 37.30 |
| 085.0 | 000.0646 | 0264.8 | 015.0 | 281.3 | 002.4000 | 0066.1 | 075.3 | 37.29 |
| 086.0 | 000.0637 | 0265.2 | 014.9 | 281.1 | 002.4000 | 0065.8 | 075.3 | 37.29 |
| 087.0 | 000.0627 | 0265.4 | 014.9 | 280.9 | 002.4000 | 0065.7 | 075.3 | 37.29 |
| 088.0 | 000.0615 | 0270.5 | 015.0 | 280.8 | 002.4000 | 0065.6 | 075.2 | 37.31 |
| 089.0 | 000.0606 | 0271.9 | 015.0 | 280.6 | 002.4000 | 0065.5 | 075.1 | 37.31 |
| 090.0 | 000.0597 | 0269.2 | 014.8 | 280.3 | 002.4000 | 0065.3 | 075.2 | 37.28 |
| 091.0 | 000.0590 | 0269.1 | 014.8 | 280.1 | 002.4000 | 0065.1 | 075.2 | 37.27 |
| 092.0 | 000.0583 | 0268.9 | 014.7 | 279.9 | 002.4000 | 0064.9 | 075.2 | 37.25 |
| 093.0 | 000.0574 | 0269.1 | 014.7 | 279.7 | 002.4000 | 0064.7 | 075.3 | 37.24 |
| 094.0 | 000.0567 | 0270.4 | 014.7 | 279.6 | 002.4000 | 0064.6 | 075.2 | 37.23 |
| 095.0 | 000.0560 | 0269.8 | 014.6 | 279.4 | 002.4000 | 0064.4 | 075.3 | 37.21 |
| 096.0 | 000.0554 | 0272.4 | 014.6 | 279.2 | 002.4000 | 0064.3 | 075.2 | 37.22 |
| 097.0 | 000.0547 | 0270.5 | 014.5 | 279.0 | 002.4000 | 0064.3 | 075.3 | 37.19 |
| 098.0 | 000.0538 | 0277.5 | 014.7 | 278.8 | 002.4000 | 0064.2 | 075.2 | 37.23 |
| 099.0 | 000.0531 | 0280.8 | 014.7 | 278.6 | 002.4000 | 0064.2 | 075.1 | 37.23 |
| 100.0 | 000.0525 | 0282.3 | 014.7 | 278.4 | 002.4000 | 0064.1 | 075.1 | 37.23 |
| 101.0 | 000.0516 | 0283.2 | 014.7 | 278.2 | 002.4000 | 0064.0 | 075.2 | 37.21 |
| 102.0 | 000.0510 | 0286.5 | 014.7 | 278.0 | 002.4000 | 0063.9 | 075.2 | 37.21 |
| 103.0 | 000.0501 | 0287.7 | 014.7 | 277.8 | 002.4000 | 0063.8 | 075.2 | 37.19 |
| 104.0 | 000.0495 | 0288.7 | 014.7 | 277.6 | 002.4000 | 0063.7 | 075.3 | 37.17 |
| 105.0 | 000.0487 | 0290.0 | 014.7 | 277.4 | 002.4000 | 0063.6 | 075.3 | 37.15 |
| 106.0 | 000.0478 | 0289.5 | 014.6 | 277.2 | 002.4000 | 0063.6 | 075.4 | 37.12 |
| 107.0 | 000.0472 | 0288.7 | 014.5 | 277.1 | 002.4000 | 0063.6 | 075.6 | 37.09 |
| 108.0 | 000.0464 | 0291.1 | 014.5 | 276.9 | 002.4000 | 0063.7 | 075.6 | 37.08 |
| 109.0 | 000.0458 | 0289.2 | 014.4 | 276.7 | 002.4000 | 0063.7 | 075.7 | 37.05 |
| 110.0 | 000.0450 | 0291.1 | 014.4 | 276.5 | 002.4000 | 0063.7 | 075.8 | 37.03 |
| 111.0 | 000.0438 | 0293.0 | 014.4 | 276.3 | 002.4000 | 0063.6 | 075.9 | 36.99 |
| 112.0 | 000.0426 | 0290.3 | 014.2 | 276.2 | 002.4000 | 0063.5 | 076.2 | 36.93 |
| 113.0 | 000.0416 | 0292.1 | 014.2 | 276.0 | 002.4000 | 0063.3 | 076.3 | 36.89 |
| 114.0 | 000.0404 | 0298.4 | 014.2 | 275.8 | 002.4000 | 0063.1 | 076.3 | 36.87 |
| 115.0 | 000.0393 | 0298.1 | 014.1 | 275.7 | 002.4000 | 0062.8 | 076.5 | 36.81 |
| 116.0 | 000.0382 | 0297.5 | 014.0 | 275.5 | 002.4000 | 0062.5 | 076.7 | 36.75 |
| 117.0 | 000.0371 | 0297.8 | 013.9 | 275.4 | 002.4000 | 0062.2 | 076.8 | 36.68 |
| 118.0 | 000.0362 | 0300.7 | 013.9 | 275.2 | 002.4000 | 0061.9 | 076.9 | 36.64 |
| 119.0 | 000.0351 | 0304.0 | 013.9 | 275.1 | 002.4000 | 0061.6 | 077.1 | 36.59 |
| 120.0 | 000.0340 | 0306.3 | 013.8 | 274.9 | 002.4000 | 0061.3 | 077.2 | 36.53 |
| 121.0 | 000.0334 | 0310.8 | 013.8 | 274.8 | 002.4000 | 0060.9 | 077.3 | 36.49 |
| 122.0 | 000.0327 | 0312.6 | 013.8 | 274.6 | 002.4000 | 0060.6 | 077.4 | 36.43 |
| 123.0 | 000.0318 | 0311.8 | 013.7 | 274.5 | 002.4000 | 0060.3 | 077.7 | 36.37 |
| 124.0 | 000.0311 | 0312.2 | 013.6 | 274.4 | 002.4000 | 0060.0 | 077.8 | 36.31 |

| Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Actual (dBu) |
|----------------------|-------------|-------------|--------------|----------------------|-------------|-------------|--------------|-----------------|
| 125.0 | 000.0305 | 0312.9 | 013.6 | 274.2 | 002.4000 | 0059.7 | 078.0 | 36.24 |
| 126.0 | 000.0298 | 0316.2 | 013.6 | 274.1 | 002.4000 | 0059.3 | 078.1 | 36.19 |
| 127.0 | 000.0292 | 0314.4 | 013.5 | 274.0 | 002.4000 | 0059.1 | 078.3 | 36.12 |
| 128.0 | 000.0284 | 0314.4 | 013.4 | 273.9 | 002.4000 | 0058.8 | 078.5 | 36.06 |
| 129.0 | 000.0277 | 0317.0 | 013.4 | 273.8 | 002.4000 | 0058.6 | 078.7 | 36.00 |
| 130.0 | 000.0271 | 0315.6 | 013.3 | 273.7 | 002.4000 | 0058.4 | 078.9 | 35.94 |
| 131.0 | 000.0262 | 0316.0 | 013.2 | 273.6 | 002.4000 | 0058.2 | 079.1 | 35.87 |
| 132.0 | 000.0253 | 0312.5 | 013.0 | 273.5 | 002.4000 | 0058.1 | 079.4 | 35.80 |
| 133.0 | 000.0244 | 0310.0 | 012.8 | 273.5 | 002.4000 | 0058.0 | 079.7 | 35.72 |
| 134.0 | 000.0235 | 0308.6 | 012.7 | 273.4 | 002.4000 | 0057.8 | 079.9 | 35.65 |
| 135.0 | 000.0226 | 0306.3 | 012.5 | 273.4 | 002.4000 | 0057.7 | 080.2 | 35.58 |
| 136.0 | 000.0218 | 0306.3 | 012.4 | 273.3 | 002.4000 | 0057.6 | 080.4 | 35.52 |
| 137.0 | 000.0209 | 0305.7 | 012.3 | 273.3 | 002.4000 | 0057.5 | 080.7 | 35.46 |
| 138.0 | 000.0201 | 0307.7 | 012.2 | 273.2 | 002.4000 | 0057.4 | 080.9 | 35.40 |
| 139.0 | 000.0193 | 0312.1 | 012.2 | 273.1 | 002.4000 | 0057.3 | 081.1 | 35.35 |
| 140.0 | 000.0185 | 0319.6 | 012.2 | 273.0 | 002.4000 | 0057.2 | 081.2 | 35.31 |
| 141.0 | 000.0180 | 0319.9 | 012.1 | 273.0 | 002.4000 | 0057.1 | 081.4 | 35.25 |
| 142.0 | 000.0176 | 0315.3 | 011.9 | 272.9 | 002.4000 | 0057.1 | 081.7 | 35.19 |
| 143.0 | 000.0171 | 0313.5 | 011.8 | 272.9 | 002.4000 | 0057.1 | 081.9 | 35.13 |
| 144.0 | 000.0168 | 0312.5 | 011.8 | 272.9 | 002.4000 | 0057.0 | 082.1 | 35.08 |
| 145.0 | 000.0163 | 0312.4 | 011.7 | 272.8 | 002.4000 | 0057.0 | 082.3 | 35.02 |
| 146.0 | 000.0158 | 0305.8 | 011.5 | 272.8 | 002.4000 | 0057.0 | 082.6 | 34.95 |
| 147.0 | 000.0154 | 0303.0 | 011.4 | 272.8 | 002.4000 | 0057.0 | 082.8 | 34.90 |
| 148.0 | 000.0150 | 0302.8 | 011.3 | 272.8 | 002.4000 | 0057.0 | 083.1 | 34.84 |
| 149.0 | 000.0146 | 0303.6 | 011.2 | 272.8 | 002.4000 | 0057.0 | 083.3 | 34.80 |
| 150.0 | 000.0142 | 0304.3 | 011.1 | 272.7 | 002.4000 | 0057.0 | 083.5 | 34.75 |
| 151.0 | 000.0136 | 0306.4 | 011.1 | 272.7 | 002.4000 | 0057.0 | 083.7 | 34.70 |
| 152.0 | 000.0131 | 0309.7 | 011.0 | 272.7 | 002.4000 | 0057.0 | 083.9 | 34.65 |
| 153.0 | 000.0125 | 0312.1 | 010.9 | 272.7 | 002.4000 | 0057.0 | 084.1 | 34.60 |
| 154.0 | 000.0120 | 0314.0 | 010.8 | 272.6 | 002.4000 | 0057.0 | 084.3 | 34.55 |
| 155.0 | 000.0114 | 0316.2 | 010.7 | 272.6 | 002.4000 | 0057.0 | 084.5 | 34.49 |
| 156.0 | 000.0109 | 0319.2 | 010.7 | 272.6 | 002.4000 | 0057.0 | 084.7 | 34.44 |
| 157.0 | 000.0104 | 0320.7 | 010.6 | 272.6 | 002.4000 | 0057.0 | 084.9 | 34.39 |

11-30-2016

Terrain Data: NED 03 SEC

FMOver Analysis

WSOU BMLED20050909ABX

WWPJ

Channel = 208A
 Max ERP = 2.4 kW
 RCAMSL = 149 m
 N. Lat. 40 44 28.0
 W. Lng. 74 14 42.0
 Protected
 60 dBu

Channel = 208A
 Max ERP = 0.225 kW
 RCAMSL = 473 m
 N. Lat. 40 51 33.8
 W. Lng. 75 18 04.4
 Interfering
 40 dBu

| Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Actual (dBu) | IX (km) |
|----------------------|-------------|-------------|--------------|----------------------|-------------|-------------|--------------|-----------------|------------|
| 219.0 | 002.4000 | 0115.7 | 024.6 | 113.4 | 000.0411 | 0294.5 | 080.3 | 27.76 | |
| 220.0 | 002.4000 | 0114.9 | 024.6 | 113.3 | 000.0413 | 0293.8 | 079.9 | 27.88 | |
| 221.0 | 002.4000 | 0114.5 | 024.5 | 113.2 | 000.0414 | 0293.1 | 079.5 | 28.00 | |
| 222.0 | 002.4000 | 0113.1 | 024.4 | 113.0 | 000.0416 | 0292.1 | 079.2 | 28.12 | |
| 223.0 | 002.4000 | 0111.8 | 024.3 | 112.8 | 000.0418 | 0291.4 | 078.8 | 28.23 | |
| 224.0 | 002.4000 | 0111.1 | 024.2 | 112.7 | 000.0419 | 0290.8 | 078.4 | 28.35 | |
| 225.0 | 002.4000 | 0110.1 | 024.1 | 112.5 | 000.0421 | 0290.4 | 078.1 | 28.48 | |
| 226.0 | 002.4000 | 0109.5 | 024.0 | 112.3 | 000.0423 | 0290.1 | 077.7 | 28.61 | |
| 227.0 | 002.4000 | 0108.3 | 023.9 | 112.1 | 000.0425 | 0290.0 | 077.4 | 28.74 | |
| 228.0 | 002.4000 | 0107.7 | 023.8 | 111.9 | 000.0426 | 0290.4 | 077.0 | 28.89 | |
| 229.0 | 002.4000 | 0106.5 | 023.7 | 111.7 | 000.0429 | 0290.8 | 076.7 | 29.03 | |
| 230.0 | 002.4000 | 0106.4 | 023.7 | 111.6 | 000.0431 | 0291.3 | 076.3 | 29.19 | |
| 231.0 | 002.4000 | 0106.2 | 023.7 | 111.4 | 000.0433 | 0291.8 | 076.0 | 29.34 | |
| 232.0 | 002.4000 | 0105.6 | 023.6 | 111.2 | 000.0435 | 0292.4 | 075.7 | 29.50 | |
| 233.0 | 002.4000 | 0105.8 | 023.6 | 111.1 | 000.0437 | 0292.9 | 075.3 | 29.65 | |
| 234.0 | 002.4000 | 0106.0 | 023.7 | 110.9 | 000.0439 | 0293.2 | 074.9 | 29.81 | |
| 235.0 | 002.4000 | 0103.7 | 023.4 | 110.6 | 000.0442 | 0293.7 | 074.7 | 29.93 | |
| 236.0 | 002.4000 | 0094.7 | 022.4 | 109.8 | 000.0451 | 0289.8 | 075.0 | 29.81 | |
| 237.0 | 002.4000 | 0082.8 | 021.0 | 108.7 | 000.0459 | 0290.5 | 075.5 | 29.72 | |
| 238.0 | 002.4000 | 0075.8 | 020.0 | 108.0 | 000.0464 | 0291.1 | 075.8 | 29.68 | |
| 239.0 | 002.4000 | 0072.9 | 019.7 | 107.6 | 000.0467 | 0290.3 | 075.8 | 29.69 | |
| 240.0 | 002.4000 | 0071.4 | 019.5 | 107.3 | 000.0469 | 0289.5 | 075.7 | 29.73 | |
| 241.0 | 002.4000 | 0067.3 | 018.9 | 106.9 | 000.0473 | 0288.5 | 075.8 | 29.69 | |
| 242.0 | 002.4000 | 0063.0 | 018.3 | 106.4 | 000.0476 | 0289.1 | 076.0 | 29.68 | |
| 243.0 | 002.4000 | 0060.4 | 018.0 | 106.0 | 000.0478 | 0289.5 | 076.0 | 29.70 | |
| 244.0 | 002.4000 | 0060.3 | 018.0 | 105.8 | 000.0480 | 0289.7 | 075.8 | 29.79 | |
| 245.0 | 002.4000 | 0060.3 | 017.9 | 105.6 | 000.0481 | 0289.9 | 075.6 | 29.87 | |
| 246.0 | 002.4000 | 0062.6 | 018.3 | 105.6 | 000.0481 | 0289.9 | 075.2 | 30.03 | |
| 247.0 | 002.4000 | 0066.7 | 018.8 | 105.7 | 000.0481 | 0289.8 | 074.5 | 30.24 | |
| 248.0 | 002.4000 | 0070.5 | 019.4 | 105.8 | 000.0480 | 0289.8 | 073.9 | 30.45 | |
| 249.0 | 002.4000 | 0071.6 | 019.5 | 105.6 | 000.0481 | 0289.9 | 073.6 | 30.57 | |
| 250.0 | 002.4000 | 0073.0 | 019.7 | 105.5 | 000.0482 | 0290.0 | 073.2 | 30.71 | |
| 251.0 | 002.4000 | 0072.5 | 019.6 | 105.3 | 000.0484 | 0290.1 | 073.1 | 30.78 | |

| Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Actual (dBu) |
|----------------------|-------------|-------------|--------------|----------------------|-------------|-------------|--------------|-----------------|
| 252.0 | 002.4000 | 0070.8 | 019.4 | 104.9 | 000.0487 | 0290.0 | 073.1 | 30.80 |
| 253.0 | 002.4000 | 0067.1 | 018.9 | 104.5 | 000.0491 | 0289.2 | 073.3 | 30.73 |
| 254.0 | 002.4000 | 0064.7 | 018.6 | 104.2 | 000.0494 | 0288.9 | 073.4 | 30.71 |
| 255.0 | 002.4000 | 0061.6 | 018.1 | 103.8 | 000.0496 | 0288.2 | 073.6 | 30.64 |
| 256.0 | 002.4000 | 0057.7 | 017.6 | 103.3 | 000.0499 | 0287.8 | 074.0 | 30.52 |
| 257.0 | 002.4000 | 0056.0 | 017.3 | 103.0 | 000.0501 | 0287.6 | 074.1 | 30.50 |
| 258.0 | 002.4000 | 0055.0 | 017.1 | 102.8 | 000.0503 | 0287.9 | 074.1 | 30.52 |
| 259.0 | 002.4000 | 0053.7 | 016.9 | 102.5 | 000.0506 | 0287.8 | 074.2 | 30.51 |
| 260.0 | 002.4000 | 0053.1 | 016.8 | 102.2 | 000.0508 | 0287.6 | 074.2 | 30.52 |
| 261.0 | 002.4000 | 0054.4 | 017.0 | 102.1 | 000.0509 | 0287.1 | 073.8 | 30.63 |
| 262.0 | 002.4000 | 0054.3 | 017.0 | 101.9 | 000.0511 | 0285.9 | 073.8 | 30.64 |
| 263.0 | 002.4000 | 0052.4 | 016.6 | 101.6 | 000.0513 | 0284.4 | 074.0 | 30.53 |
| 264.0 | 002.4000 | 0051.5 | 016.5 | 101.3 | 000.0514 | 0283.7 | 074.0 | 30.50 |
| 265.0 | 002.4000 | 0051.5 | 016.5 | 101.1 | 000.0516 | 0283.4 | 074.0 | 30.53 |
| 266.0 | 002.4000 | 0052.3 | 016.6 | 100.9 | 000.0517 | 0283.1 | 073.7 | 30.61 |
| 267.0 | 002.4000 | 0052.1 | 016.6 | 100.7 | 000.0519 | 0282.8 | 073.7 | 30.63 |
| 268.0 | 002.4000 | 0053.2 | 016.8 | 100.5 | 000.0520 | 0282.6 | 073.4 | 30.73 |
| 269.0 | 002.4000 | 0054.7 | 017.1 | 100.3 | 000.0522 | 0282.5 | 073.1 | 30.85 |
| 270.0 | 002.4000 | 0055.8 | 017.3 | 100.1 | 000.0524 | 0282.4 | 072.9 | 30.94 |
| 271.0 | 002.4000 | 0057.0 | 017.5 | 099.9 | 000.0525 | 0282.2 | 072.6 | 31.04 |
| 272.0 | 002.4000 | 0057.1 | 017.5 | 099.7 | 000.0527 | 0282.0 | 072.5 | 31.07 |
| 273.0 | 002.4000 | 0057.2 | 017.5 | 099.5 | 000.0528 | 0281.6 | 072.5 | 31.08 |
| 274.0 | 002.4000 | 0059.1 | 017.8 | 099.2 | 000.0530 | 0281.2 | 072.2 | 31.20 |
| 275.0 | 002.4000 | 0061.4 | 018.1 | 099.0 | 000.0531 | 0280.8 | 071.8 | 31.32 |
| 276.0 | 002.4000 | 0063.3 | 018.4 | 098.8 | 000.0533 | 0280.1 | 071.5 | 31.41 |
| 277.0 | 002.4000 | 0063.6 | 018.4 | 098.5 | 000.0535 | 0279.2 | 071.5 | 31.41 |
| 278.0 | 002.4000 | 0063.9 | 018.5 | 098.3 | 000.0536 | 0278.4 | 071.4 | 31.42 |
| 279.0 | 002.4000 | 0064.3 | 018.5 | 098.0 | 000.0538 | 0277.6 | 071.4 | 31.43 |
| 280.0 | 002.4000 | 0065.0 | 018.6 | 097.7 | 000.0540 | 0276.0 | 071.3 | 31.42 |
| 281.0 | 002.4000 | 0065.8 | 018.7 | 097.5 | 000.0543 | 0273.8 | 071.2 | 31.41 |
| 282.0 | 002.4000 | 0066.7 | 018.8 | 097.2 | 000.0545 | 0271.5 | 071.1 | 31.39 |
| 283.0 | 002.4000 | 0067.9 | 019.0 | 096.9 | 000.0547 | 0270.3 | 070.9 | 31.42 |
| 284.0 | 002.4000 | 0069.5 | 019.2 | 096.6 | 000.0549 | 0270.4 | 070.7 | 31.49 |
| 285.0 | 002.4000 | 0070.1 | 019.3 | 096.4 | 000.0551 | 0271.4 | 070.7 | 31.55 |
| 286.0 | 002.4000 | 0070.1 | 019.3 | 096.1 | 000.0553 | 0272.2 | 070.8 | 31.58 |
| 287.0 | 002.4000 | 0069.6 | 019.2 | 095.8 | 000.0555 | 0272.5 | 070.9 | 31.56 |
| 288.0 | 002.4000 | 0068.6 | 019.1 | 095.6 | 000.0556 | 0272.4 | 071.1 | 31.50 |
| 289.0 | 002.4000 | 0067.3 | 018.9 | 095.4 | 000.0558 | 0271.6 | 071.3 | 31.40 |
| 290.0 | 002.4000 | 0066.0 | 018.7 | 095.1 | 000.0559 | 0270.7 | 071.6 | 31.30 |
| 291.0 | 002.4000 | 0065.2 | 018.6 | 094.9 | 000.0561 | 0269.3 | 071.8 | 31.20 |
| 292.0 | 002.4000 | 0065.2 | 018.6 | 094.7 | 000.0563 | 0268.8 | 071.8 | 31.17 |
| 293.0 | 002.4000 | 0064.7 | 018.6 | 094.4 | 000.0564 | 0268.8 | 072.0 | 31.12 |
| 294.0 | 002.4000 | 0064.9 | 018.6 | 094.2 | 000.0566 | 0269.8 | 072.1 | 31.14 |
| 295.0 | 002.4000 | 0064.5 | 018.5 | 094.0 | 000.0567 | 0270.4 | 072.3 | 31.12 |
| 296.0 | 002.4000 | 0063.8 | 018.4 | 093.7 | 000.0569 | 0270.7 | 072.5 | 31.06 |
| 297.0 | 002.4000 | 0063.4 | 018.4 | 093.5 | 000.0570 | 0270.4 | 072.6 | 31.01 |
| 298.0 | 002.4000 | 0062.9 | 018.3 | 093.3 | 000.0572 | 0269.9 | 072.8 | 30.94 |
| 299.0 | 002.4000 | 0061.8 | 018.2 | 093.1 | 000.0573 | 0269.5 | 073.1 | 30.84 |
| 300.0 | 002.4000 | 0060.8 | 018.0 | 093.0 | 000.0574 | 0269.0 | 073.4 | 30.75 |
| 301.0 | 002.4000 | 0061.4 | 018.1 | 092.7 | 000.0576 | 0268.5 | 073.4 | 30.72 |
| 302.0 | 002.4000 | 0062.0 | 018.2 | 092.5 | 000.0579 | 0268.3 | 073.5 | 30.71 |

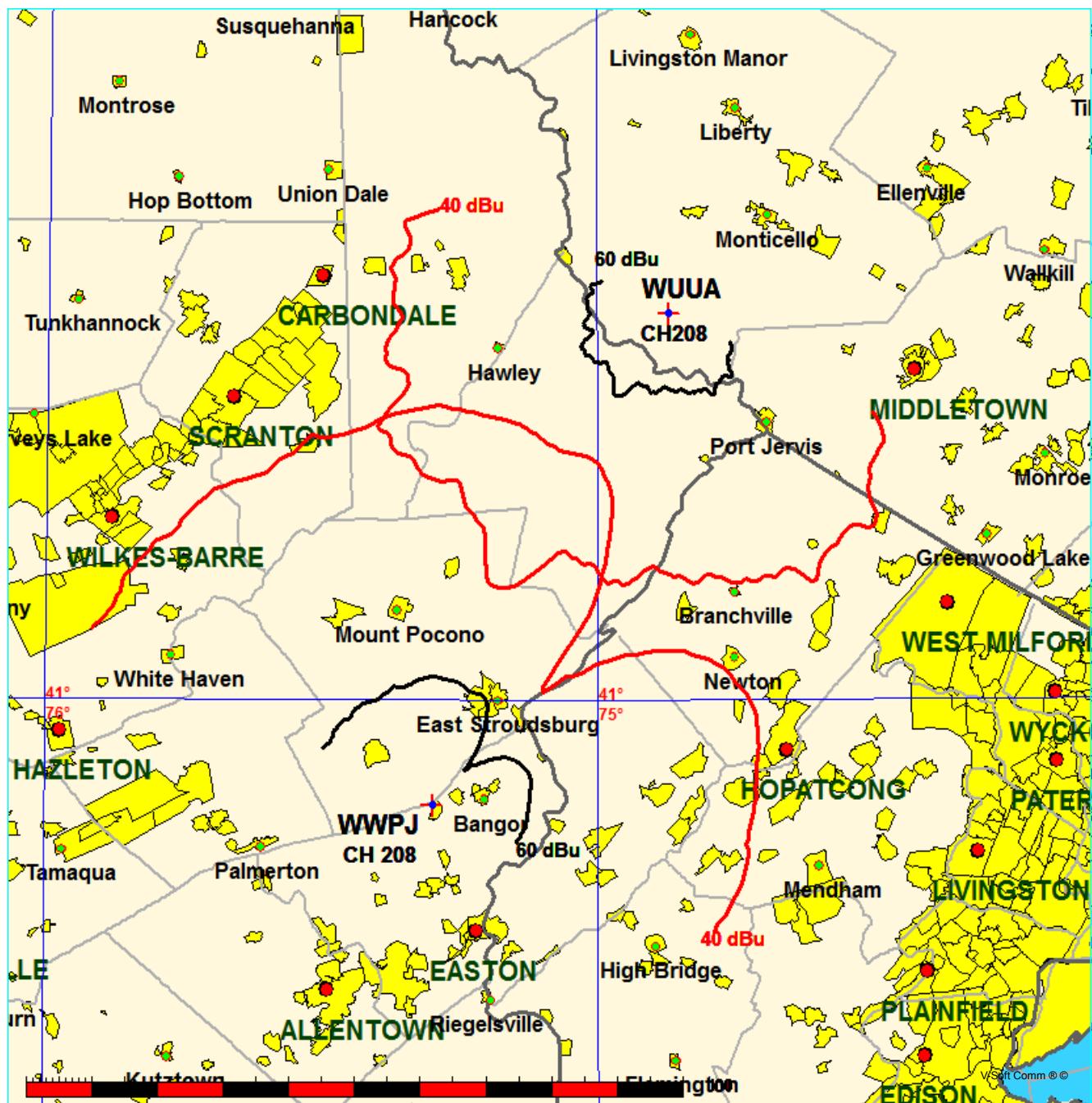
| Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Actual (dBu) |
|----------------------|-------------|-------------|--------------|----------------------|-------------|-------------|--------------|-----------------|
| 303.0 | 002.4000 | 0062.4 | 018.2 | 092.2 | 000.0581 | 0268.4 | 073.6 | 30.70 |
| 304.0 | 002.4000 | 0062.6 | 018.3 | 092.0 | 000.0583 | 0268.9 | 073.7 | 30.68 |
| 305.0 | 002.4000 | 0061.8 | 018.2 | 091.8 | 000.0584 | 0269.2 | 074.0 | 30.61 |
| 306.0 | 002.4000 | 0060.8 | 018.0 | 091.7 | 000.0585 | 0269.3 | 074.3 | 30.52 |
| 307.0 | 002.4000 | 0060.5 | 018.0 | 091.5 | 000.0586 | 0269.4 | 074.5 | 30.46 |
| 308.0 | 002.4000 | 0059.4 | 017.8 | 091.4 | 000.0587 | 0269.4 | 074.8 | 30.36 |
| 309.0 | 002.4000 | 0058.0 | 017.6 | 091.3 | 000.0588 | 0269.4 | 075.2 | 30.25 |
| 310.0 | 002.4000 | 0056.7 | 017.4 | 091.2 | 000.0588 | 0269.3 | 075.5 | 30.13 |
| 311.0 | 002.4000 | 0057.0 | 017.4 | 091.0 | 000.0590 | 0269.1 | 075.7 | 30.08 |
| 312.0 | 002.4000 | 0056.7 | 017.4 | 090.8 | 000.0591 | 0268.8 | 075.9 | 30.01 |
| 313.0 | 002.4000 | 0056.5 | 017.4 | 090.7 | 000.0592 | 0268.8 | 076.1 | 29.93 |
| 314.0 | 002.4000 | 0055.1 | 017.1 | 090.6 | 000.0592 | 0268.8 | 076.5 | 29.81 |
| 315.0 | 002.4000 | 0053.7 | 016.9 | 090.6 | 000.0593 | 0268.8 | 076.9 | 29.69 |
| 316.0 | 002.4000 | 0053.5 | 016.8 | 090.5 | 000.0593 | 0268.6 | 077.1 | 29.61 |
| 317.0 | 002.4000 | 0052.8 | 016.7 | 090.4 | 000.0594 | 0268.7 | 077.4 | 29.52 |
| 318.0 | 002.4000 | 0052.2 | 016.6 | 090.3 | 000.0595 | 0268.8 | 077.7 | 29.43 |
| 319.0 | 002.4000 | 0052.5 | 016.7 | 090.1 | 000.0596 | 0269.1 | 077.9 | 29.39 |
| 320.0 | 002.4000 | 0053.5 | 016.8 | 089.9 | 000.0598 | 0269.3 | 078.0 | 29.38 |
| 321.0 | 002.4000 | 0054.5 | 017.0 | 089.6 | 000.0600 | 0269.6 | 078.1 | 29.37 |
| 322.0 | 002.4000 | 0055.2 | 017.2 | 089.4 | 000.0602 | 0270.4 | 078.3 | 29.35 |
| 323.0 | 002.4000 | 0055.1 | 017.1 | 089.3 | 000.0603 | 0270.9 | 078.5 | 29.30 |
| 324.0 | 002.4000 | 0053.7 | 016.9 | 089.3 | 000.0603 | 0270.8 | 078.9 | 29.17 |
| 325.0 | 002.4000 | 0052.1 | 016.6 | 089.4 | 000.0602 | 0270.6 | 079.3 | 29.02 |
| 326.0 | 002.4000 | 0051.3 | 016.4 | 089.4 | 000.0603 | 0270.7 | 079.6 | 28.92 |
| 327.0 | 002.4000 | 0050.8 | 016.3 | 089.3 | 000.0603 | 0271.0 | 079.9 | 28.83 |
| 328.0 | 002.4000 | 0049.6 | 016.1 | 089.3 | 000.0603 | 0270.8 | 080.3 | 28.71 |
| 329.0 | 002.4000 | 0049.1 | 016.0 | 089.3 | 000.0603 | 0271.0 | 080.6 | 28.62 |
| 330.0 | 002.4000 | 0048.1 | 015.8 | 089.3 | 000.0603 | 0271.0 | 080.9 | 28.51 |
| 331.0 | 002.4000 | 0046.6 | 015.5 | 089.4 | 000.0602 | 0270.6 | 081.3 | 28.37 |
| 332.0 | 002.4000 | 0045.7 | 015.4 | 089.4 | 000.0602 | 0270.5 | 081.6 | 28.26 |
| 333.0 | 002.4000 | 0045.2 | 015.3 | 089.4 | 000.0603 | 0270.6 | 081.9 | 28.18 |
| 334.0 | 002.4000 | 0044.4 | 015.1 | 089.4 | 000.0602 | 0270.6 | 082.2 | 28.07 |
| 335.0 | 002.4000 | 0042.5 | 014.8 | 089.5 | 000.0601 | 0270.0 | 082.6 | 27.92 |
| 336.0 | 002.4000 | 0040.9 | 014.5 | 089.6 | 000.0600 | 0269.7 | 082.9 | 27.79 |
| 337.0 | 002.4000 | 0039.1 | 014.1 | 089.8 | 000.0599 | 0269.4 | 083.3 | 27.66 |
| 338.0 | 002.4000 | 0037.5 | 013.8 | 089.9 | 000.0598 | 0269.3 | 083.6 | 27.54 |

Contour-to-Contour Map, WWPJ vs WUUA
 Town Of Monroe, Connecticut

FMCommander Single Allocation Study - 11-30-2016 - NED 03 SEC
 WWPJ's Overlaps (In= 16.15 km, Out= 10.23 km)

WWPJ CH 208 A DA
 Lat= 40 51 33.8, Lng= 75 18 04.4
 0.225 kW 230.8 m HAAT, 473 m COR
 Prot.= 60 dBu, Intef.= 40 dBu

WUUA CH 208 A BLED20130614AAU
 Lat= 41 31 27.0, Lng= 74 52 08.0
 0.11 kW 120 m HAAT, 477 m COR
 Prot.= 60 dBu, Intef.= 40 dBu



11-30-2016

Terrain Data: NED 03 SEC

FMOver Analysis

WWPJ

WUUA BLED20130614AAU

Channel = 208A
 Max ERP = 0.225 kW
 RCAMSL = 473 m
 N. Lat. 40 51 33.8
 W. Lng. 75 18 04.4
 Protected
 60 dBu

Channel = 208A
 Max ERP = 0.11 kW
 RCAMSL = 477 m
 N. Lat. 41 31 27.0
 W. Lng. 74 52 08.0
 Interfering
 40 dBu

| Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Actual (dBu) | IX (km) |
|----------------------|-------------|-------------|--------------|----------------------|-------------|-------------|--------------|-----------------|------------|
| 326.0 | 000.2201 | 0207.5 | 018.3 | 218.4 | 000.1100 | 0168.0 | 074.8 | 29.29 | |
| 327.0 | 000.2192 | 0205.5 | 018.2 | 218.3 | 000.1100 | 0169.6 | 074.6 | 29.44 | |
| 328.0 | 000.2183 | 0204.9 | 018.1 | 218.1 | 000.1100 | 0170.9 | 074.3 | 29.60 | |
| 329.0 | 000.2174 | 0202.3 | 018.0 | 218.0 | 000.1100 | 0173.0 | 074.0 | 29.77 | |
| 330.0 | 000.2165 | 0200.6 | 017.9 | 217.8 | 000.1100 | 0175.3 | 073.8 | 29.96 | |
| 331.0 | 000.2143 | 0199.7 | 017.8 | 217.6 | 000.1100 | 0177.6 | 073.5 | 30.14 | |
| 332.0 | 000.2121 | 0199.3 | 017.7 | 217.5 | 000.1100 | 0179.0 | 073.3 | 30.28 | |
| 333.0 | 000.2095 | 0199.2 | 017.7 | 217.4 | 000.1100 | 0180.2 | 073.0 | 30.42 | |
| 334.0 | 000.2074 | 0201.0 | 017.7 | 217.3 | 000.1100 | 0180.8 | 072.7 | 30.54 | |
| 335.0 | 000.2052 | 0206.4 | 017.9 | 217.3 | 000.1100 | 0180.7 | 072.4 | 30.65 | |
| 336.0 | 000.2031 | 0210.1 | 018.0 | 217.2 | 000.1100 | 0181.0 | 072.0 | 30.77 | |
| 337.0 | 000.2009 | 0211.7 | 018.0 | 217.1 | 000.1100 | 0181.8 | 071.7 | 30.90 | |
| 338.0 | 000.1984 | 0213.4 | 018.0 | 217.0 | 000.1100 | 0182.3 | 071.5 | 31.02 | |
| 339.0 | 000.1963 | 0216.7 | 018.1 | 216.9 | 000.1100 | 0182.8 | 071.2 | 31.14 | |
| 340.0 | 000.1942 | 0221.3 | 018.3 | 216.9 | 000.1100 | 0183.0 | 070.8 | 31.26 | |
| 341.0 | 000.1929 | 0230.2 | 018.6 | 217.0 | 000.1100 | 0182.5 | 070.4 | 31.39 | |
| 342.0 | 000.1913 | 0231.1 | 018.6 | 216.8 | 000.1100 | 0183.5 | 070.1 | 31.52 | |
| 343.0 | 000.1900 | 0225.2 | 018.3 | 216.5 | 000.1100 | 0186.2 | 070.0 | 31.67 | |
| 344.0 | 000.1884 | 0222.9 | 018.2 | 216.2 | 000.1100 | 0188.0 | 069.8 | 31.80 | |
| 345.0 | 000.1867 | 0222.1 | 018.1 | 216.0 | 000.1100 | 0189.3 | 069.6 | 31.92 | |
| 346.0 | 000.1855 | 0222.8 | 018.1 | 215.9 | 000.1100 | 0190.3 | 069.4 | 32.04 | |
| 347.0 | 000.1843 | 0223.7 | 018.1 | 215.7 | 000.1100 | 0191.6 | 069.1 | 32.18 | |
| 348.0 | 000.1827 | 0225.9 | 018.2 | 215.6 | 000.1100 | 0193.0 | 068.9 | 32.32 | |
| 349.0 | 000.1810 | 0228.1 | 018.2 | 215.4 | 000.1100 | 0194.3 | 068.6 | 32.47 | |
| 350.0 | 000.1798 | 0230.6 | 018.3 | 215.3 | 000.1100 | 0195.6 | 068.3 | 32.61 | |
| 351.0 | 000.1786 | 0234.8 | 018.4 | 215.1 | 000.1100 | 0196.6 | 068.0 | 32.76 | |
| 352.0 | 000.1774 | 0239.2 | 018.6 | 215.0 | 000.1100 | 0197.6 | 067.7 | 32.91 | |
| 353.0 | 000.1758 | 0244.1 | 018.7 | 214.9 | 000.1100 | 0198.6 | 067.4 | 33.06 | |
| 354.0 | 000.1746 | 0247.0 | 018.8 | 214.7 | 000.1100 | 0200.0 | 067.1 | 33.21 | |
| 355.0 | 000.1734 | 0249.0 | 018.8 | 214.5 | 000.1100 | 0201.7 | 066.8 | 33.36 | |
| 356.0 | 000.1723 | 0251.1 | 018.9 | 214.4 | 000.1100 | 0202.7 | 066.6 | 33.49 | |
| 357.0 | 000.1711 | 0254.9 | 019.0 | 214.2 | 000.1100 | 0203.2 | 066.3 | 33.61 | |
| 358.0 | 000.1695 | 0256.5 | 019.0 | 214.0 | 000.1100 | 0203.6 | 066.1 | 33.69 | |
| 359.0 | 000.1684 | 0259.6 | 019.1 | 213.8 | 000.1100 | 0203.8 | 065.8 | 33.79 | |
| 000.0 | 000.1672 | 0263.2 | 019.2 | 213.6 | 000.1100 | 0203.5 | 065.6 | 33.87 | |
| 001.0 | 000.1653 | 0266.7 | 019.3 | 213.4 | 000.1100 | 0202.9 | 065.3 | 33.92 | |

| Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Actual (dBu) |
|----------------------|-------------|-------------|--------------|----------------------|-------------|-------------|--------------|-----------------|
| 002.0 | 000.1637 | 0264.9 | 019.2 | 213.1 | 000.1100 | 0201.6 | 065.2 | 33.90 |
| 003.0 | 000.1618 | 0264.3 | 019.1 | 212.8 | 000.1100 | 0200.7 | 065.1 | 33.90 |
| 004.0 | 000.1599 | 0264.5 | 019.0 | 212.5 | 000.1100 | 0199.7 | 065.0 | 33.89 |
| 005.0 | 000.1584 | 0262.4 | 018.9 | 212.2 | 000.1100 | 0198.9 | 065.0 | 33.88 |
| 006.0 | 000.1565 | 0265.2 | 018.9 | 211.9 | 000.1100 | 0198.5 | 064.8 | 33.92 |
| 007.0 | 000.1546 | 0264.9 | 018.9 | 211.6 | 000.1100 | 0197.1 | 064.7 | 33.89 |
| 008.0 | 000.1528 | 0264.6 | 018.8 | 211.4 | 000.1100 | 0196.1 | 064.7 | 33.87 |
| 009.0 | 000.1513 | 0266.2 | 018.8 | 211.1 | 000.1100 | 0195.4 | 064.5 | 33.89 |
| 010.0 | 000.1495 | 0266.8 | 018.8 | 210.8 | 000.1100 | 0194.8 | 064.4 | 33.89 |
| 011.0 | 000.1473 | 0268.0 | 018.8 | 210.5 | 000.1100 | 0193.4 | 064.3 | 33.87 |
| 012.0 | 000.1451 | 0268.9 | 018.7 | 210.2 | 000.1100 | 0191.6 | 064.3 | 33.81 |
| 013.0 | 000.1433 | 0268.8 | 018.7 | 209.9 | 000.1100 | 0189.1 | 064.2 | 33.72 |
| 014.0 | 000.1411 | 0268.3 | 018.6 | 209.6 | 000.1100 | 0186.0 | 064.2 | 33.59 |
| 015.0 | 000.1390 | 0266.2 | 018.4 | 209.3 | 000.1100 | 0182.3 | 064.3 | 33.42 |
| 016.0 | 000.1369 | 0265.5 | 018.3 | 209.0 | 000.1100 | 0178.4 | 064.3 | 33.24 |
| 017.0 | 000.1348 | 0261.2 | 018.1 | 208.7 | 000.1100 | 0174.2 | 064.5 | 33.00 |
| 018.0 | 000.1331 | 0258.6 | 017.9 | 208.4 | 000.1100 | 0169.9 | 064.6 | 32.76 |
| 019.0 | 000.1310 | 0260.3 | 017.9 | 208.1 | 000.1100 | 0165.8 | 064.5 | 32.58 |
| 020.0 | 000.1289 | 0260.2 | 017.8 | 207.9 | 000.1100 | 0161.8 | 064.6 | 32.37 |
| 021.0 | 000.1272 | 0263.1 | 017.9 | 207.6 | 000.1100 | 0157.6 | 064.5 | 32.18 |
| 022.0 | 000.1256 | 0267.4 | 018.0 | 207.3 | 000.1100 | 0153.1 | 064.4 | 31.99 |
| 023.0 | 000.1239 | 0269.9 | 018.0 | 207.0 | 000.1100 | 0148.8 | 064.3 | 31.78 |
| 024.0 | 000.1222 | 0273.5 | 018.1 | 206.8 | 000.1100 | 0145.1 | 064.2 | 31.61 |
| 025.0 | 000.1209 | 0274.9 | 018.1 | 206.5 | 000.1100 | 0141.9 | 064.2 | 31.44 |
| 026.0 | 000.1192 | 0276.6 | 018.1 | 206.2 | 000.1100 | 0138.3 | 064.2 | 31.25 |
| 027.0 | 000.1176 | 0270.7 | 017.8 | 205.9 | 000.1100 | 0134.9 | 064.5 | 30.98 |
| 028.0 | 000.1160 | 0264.4 | 017.5 | 205.7 | 000.1100 | 0132.0 | 064.8 | 30.73 |
| 029.0 | 000.1144 | 0257.7 | 017.2 | 205.4 | 000.1100 | 0129.6 | 065.1 | 30.49 |
| 030.0 | 000.1128 | 0250.1 | 016.9 | 205.2 | 000.1100 | 0127.4 | 065.5 | 30.25 |
| 031.0 | 000.1109 | 0239.5 | 016.4 | 205.0 | 000.1100 | 0125.6 | 066.0 | 30.00 |
| 032.0 | 000.1090 | 0227.2 | 015.9 | 204.8 | 000.1100 | 0124.4 | 066.5 | 29.75 |
| 033.0 | 000.1071 | 0213.1 | 015.3 | 204.6 | 000.1100 | 0123.5 | 067.2 | 29.51 |
| 034.0 | 000.1053 | 0199.2 | 014.7 | 204.5 | 000.1100 | 0122.7 | 067.8 | 29.27 |
| 035.0 | 000.1034 | 0184.8 | 014.1 | 204.4 | 000.1100 | 0122.0 | 068.4 | 29.05 |
| 036.0 | 000.1013 | 0172.8 | 013.6 | 204.2 | 000.1100 | 0121.4 | 068.9 | 28.84 |
| 037.0 | 000.0995 | 0158.9 | 013.0 | 204.2 | 000.1100 | 0121.1 | 069.6 | 28.62 |
| 038.0 | 000.0977 | 0146.4 | 012.3 | 204.1 | 000.1100 | 0121.0 | 070.3 | 28.41 |
| 039.0 | 000.0959 | 0132.2 | 011.6 | 204.1 | 000.1100 | 0120.9 | 071.0 | 28.18 |
| 040.0 | 000.0942 | 0115.4 | 010.9 | 204.1 | 000.1100 | 0120.9 | 071.8 | 27.94 |
| 041.0 | 000.0933 | 0097.1 | 010.0 | 204.2 | 000.1100 | 0121.1 | 072.7 | 27.68 |
| 042.0 | 000.0924 | 0075.9 | 008.8 | 204.3 | 000.1100 | 0121.8 | 073.9 | 27.36 |
| 043.0 | 000.0916 | 0063.1 | 008.0 | 204.4 | 000.1100 | 0122.3 | 074.7 | 27.14 |
| 044.0 | 000.0907 | 0052.9 | 007.3 | 204.5 | 000.1100 | 0122.8 | 075.4 | 26.95 |
| 045.0 | 000.0899 | 0050.6 | 007.1 | 204.5 | 000.1100 | 0122.6 | 075.6 | 26.87 |
| 046.0 | 000.0887 | 0059.2 | 007.7 | 204.2 | 000.1100 | 0121.3 | 075.1 | 26.96 |
| 047.0 | 000.0879 | 0072.3 | 008.5 | 203.9 | 000.1100 | 0120.3 | 074.4 | 27.11 |
| 048.0 | 000.0870 | 0075.7 | 008.7 | 203.7 | 000.1100 | 0120.1 | 074.3 | 27.13 |
| 049.0 | 000.0862 | 0082.8 | 009.1 | 203.5 | 000.1100 | 0120.2 | 074.0 | 27.23 |
| 050.0 | 000.0854 | 0096.5 | 009.8 | 203.1 | 000.1100 | 0121.5 | 073.5 | 27.46 |
| 051.0 | 000.0845 | 0103.9 | 010.1 | 202.9 | 000.1100 | 0122.5 | 073.3 | 27.57 |
| 052.0 | 000.0837 | 0115.8 | 010.6 | 202.6 | 000.1100 | 0123.7 | 072.9 | 27.74 |

| Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Actual (dBu) |
|----------------------|-------------|-------------|--------------|----------------------|-------------|-------------|--------------|-----------------|
| 053.0 | 000.0826 | 0125.8 | 011.0 | 202.3 | 000.1100 | 0124.4 | 072.7 | 27.84 |
| 054.0 | 000.0818 | 0135.5 | 011.3 | 202.0 | 000.1100 | 0124.3 | 072.5 | 27.91 |
| 055.0 | 000.0810 | 0148.1 | 011.9 | 201.6 | 000.1100 | 0123.5 | 072.1 | 27.96 |
| 056.0 | 000.0802 | 0162.1 | 012.4 | 201.2 | 000.1100 | 0122.7 | 071.8 | 28.03 |
| 057.0 | 000.0794 | 0174.8 | 012.9 | 200.9 | 000.1100 | 0123.0 | 071.5 | 28.12 |
| 058.0 | 000.0783 | 0186.4 | 013.2 | 200.6 | 000.1100 | 0123.8 | 071.4 | 28.21 |
| 059.0 | 000.0775 | 0196.6 | 013.5 | 200.3 | 000.1100 | 0125.1 | 071.3 | 28.30 |
| 060.0 | 000.0767 | 0203.6 | 013.7 | 200.0 | 000.1100 | 0125.9 | 071.3 | 28.33 |
| 061.0 | 000.0765 | 0210.2 | 013.9 | 199.8 | 000.1100 | 0126.6 | 071.3 | 28.37 |
| 062.0 | 000.0762 | 0217.8 | 014.2 | 199.5 | 000.1100 | 0126.9 | 071.3 | 28.39 |
| 063.0 | 000.0762 | 0224.8 | 014.4 | 199.2 | 000.1100 | 0126.9 | 071.3 | 28.38 |
| 064.0 | 000.0760 | 0231.4 | 014.6 | 199.0 | 000.1100 | 0126.5 | 071.4 | 28.35 |
| 065.0 | 000.0757 | 0236.8 | 014.7 | 198.8 | 000.1100 | 0125.9 | 071.5 | 28.30 |
| 066.0 | 000.0754 | 0241.1 | 014.9 | 198.5 | 000.1100 | 0125.3 | 071.6 | 28.23 |
| 067.0 | 000.0752 | 0244.3 | 014.9 | 198.4 | 000.1100 | 0124.9 | 071.7 | 28.17 |
| 068.0 | 000.0752 | 0247.0 | 015.0 | 198.2 | 000.1100 | 0124.7 | 071.8 | 28.12 |
| 069.0 | 000.0749 | 0249.4 | 015.1 | 198.0 | 000.1100 | 0124.3 | 072.0 | 28.04 |
| 070.0 | 000.0746 | 0255.2 | 015.3 | 197.8 | 000.1100 | 0123.7 | 072.1 | 27.99 |
| 071.0 | 000.0741 | 0260.0 | 015.4 | 197.6 | 000.1100 | 0123.4 | 072.2 | 27.93 |
| 072.0 | 000.0736 | 0264.0 | 015.5 | 197.4 | 000.1100 | 0123.3 | 072.4 | 27.88 |
| 073.0 | 000.0731 | 0267.2 | 015.6 | 197.2 | 000.1100 | 0123.7 | 072.6 | 27.84 |
| 074.0 | 000.0726 | 0268.8 | 015.6 | 197.1 | 000.1100 | 0124.0 | 072.8 | 27.79 |
| 075.0 | 000.0721 | 0268.5 | 015.5 | 197.0 | 000.1100 | 0124.2 | 073.1 | 27.72 |
| 076.0 | 000.0718 | 0268.1 | 015.5 | 196.9 | 000.1100 | 0124.4 | 073.3 | 27.66 |
| 077.0 | 000.0713 | 0267.8 | 015.5 | 196.8 | 000.1100 | 0124.6 | 073.6 | 27.59 |
| 078.0 | 000.0708 | 0266.3 | 015.4 | 196.8 | 000.1100 | 0124.7 | 073.8 | 27.51 |
| 079.0 | 000.0703 | 0266.2 | 015.4 | 196.7 | 000.1100 | 0124.9 | 074.1 | 27.45 |
| 080.0 | 000.0698 | 0265.6 | 015.3 | 196.6 | 000.1100 | 0125.1 | 074.3 | 27.38 |
| 081.0 | 000.0688 | 0264.1 | 015.2 | 196.6 | 000.1100 | 0125.2 | 074.6 | 27.30 |
| 082.0 | 000.0678 | 0263.4 | 015.1 | 196.6 | 000.1100 | 0125.3 | 074.9 | 27.22 |
| 083.0 | 000.0666 | 0264.0 | 015.1 | 196.5 | 000.1100 | 0125.4 | 075.2 | 27.15 |
| 084.0 | 000.0656 | 0264.6 | 015.0 | 196.5 | 000.1100 | 0125.6 | 075.4 | 27.08 |
| 085.0 | 000.0646 | 0264.8 | 015.0 | 196.4 | 000.1100 | 0125.7 | 075.7 | 27.01 |

11-30-2016

Terrain Data: NED 03 SEC

FMOver Analysis

WUUA BLED20130614AAU

WWPJ

Channel = 208A
 Max ERP = 0.11 kW
 RCAMSL = 477 m
 N. Lat. 41 31 27.0
 W. Lng. 74 52 08.0
 Protected
 60 dBu

Channel = 208A
 Max ERP = 0.225 kW
 RCAMSL = 473 m
 N. Lat. 40 51 33.8
 W. Lng. 75 18 04.4
 Interfering
 40 dBu

| Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Actual (dBu) | IX (km) |
|----------------------|-------------|-------------|--------------|----------------------|-------------|-------------|--------------|-----------------|------------|
| 146.0 | 000.1100 | 0150.7 | 012.9 | 034.3 | 000.1047 | 0193.8 | 076.7 | 29.56 | |
| 147.0 | 000.1100 | 0153.1 | 013.0 | 034.3 | 000.1046 | 0193.6 | 076.5 | 29.63 | |
| 148.0 | 000.1100 | 0155.6 | 013.1 | 034.4 | 000.1046 | 0193.3 | 076.2 | 29.70 | |
| 149.0 | 000.1100 | 0160.9 | 013.4 | 034.5 | 000.1044 | 0192.0 | 075.9 | 29.74 | |
| 150.0 | 000.1100 | 0169.6 | 013.8 | 034.6 | 000.1041 | 0189.2 | 075.5 | 29.74 | |
| 151.0 | 000.1100 | 0176.0 | 014.0 | 034.7 | 000.1039 | 0187.9 | 075.2 | 29.78 | |
| 152.0 | 000.1100 | 0174.2 | 013.9 | 034.6 | 000.1041 | 0189.7 | 075.0 | 29.93 | |
| 153.0 | 000.1100 | 0161.8 | 013.4 | 034.2 | 000.1050 | 0196.6 | 075.0 | 30.23 | |
| 154.0 | 000.1100 | 0150.5 | 012.9 | 033.7 | 000.1058 | 0203.6 | 075.1 | 30.53 | |
| 155.0 | 000.1100 | 0146.1 | 012.7 | 033.5 | 000.1062 | 0206.7 | 075.0 | 30.70 | |
| 156.0 | 000.1100 | 0145.2 | 012.6 | 033.4 | 000.1064 | 0208.2 | 074.8 | 30.82 | |
| 157.0 | 000.1100 | 0147.3 | 012.7 | 033.4 | 000.1064 | 0208.5 | 074.6 | 30.91 | |
| 158.0 | 000.1100 | 0149.4 | 012.8 | 033.3 | 000.1065 | 0208.9 | 074.4 | 31.01 | |
| 159.0 | 000.1100 | 0145.9 | 012.7 | 033.1 | 000.1069 | 0211.4 | 074.3 | 31.15 | |
| 160.0 | 000.1100 | 0143.5 | 012.6 | 033.0 | 000.1072 | 0213.7 | 074.2 | 31.29 | |
| 161.0 | 000.1100 | 0146.0 | 012.7 | 032.9 | 000.1073 | 0214.2 | 073.9 | 31.39 | |
| 162.0 | 000.1100 | 0145.9 | 012.7 | 032.8 | 000.1075 | 0215.7 | 073.7 | 31.51 | |
| 163.0 | 000.1100 | 0143.8 | 012.6 | 032.7 | 000.1078 | 0218.0 | 073.6 | 31.65 | |
| 164.0 | 000.1100 | 0139.9 | 012.4 | 032.4 | 000.1082 | 0221.1 | 073.6 | 31.80 | |
| 165.0 | 000.1100 | 0142.5 | 012.5 | 032.4 | 000.1083 | 0221.7 | 073.3 | 31.90 | |
| 166.0 | 000.1100 | 0141.2 | 012.5 | 032.2 | 000.1085 | 0223.6 | 073.2 | 32.02 | |
| 167.0 | 000.1100 | 0139.9 | 012.4 | 032.1 | 000.1088 | 0225.8 | 073.1 | 32.15 | |
| 168.0 | 000.1100 | 0135.2 | 012.2 | 031.8 | 000.1093 | 0229.3 | 073.1 | 32.30 | |
| 169.0 | 000.1100 | 0130.5 | 012.0 | 031.6 | 000.1097 | 0232.4 | 073.1 | 32.42 | |
| 170.0 | 000.1100 | 0129.9 | 011.9 | 031.5 | 000.1100 | 0234.1 | 073.0 | 32.53 | |
| 171.0 | 000.1100 | 0125.8 | 011.7 | 031.3 | 000.1104 | 0236.6 | 073.0 | 32.64 | |
| 172.0 | 000.1100 | 0125.2 | 011.7 | 031.1 | 000.1106 | 0238.1 | 072.9 | 32.74 | |
| 173.0 | 000.1100 | 0129.2 | 011.9 | 031.1 | 000.1107 | 0238.5 | 072.6 | 32.84 | |
| 174.0 | 000.1100 | 0132.6 | 012.1 | 031.0 | 000.1108 | 0239.1 | 072.4 | 32.95 | |
| 175.0 | 000.1100 | 0133.2 | 012.1 | 030.9 | 000.1111 | 0240.4 | 072.2 | 33.05 | |
| 176.0 | 000.1100 | 0130.4 | 012.0 | 030.7 | 000.1114 | 0242.5 | 072.2 | 33.15 | |
| 177.0 | 000.1100 | 0126.4 | 011.8 | 030.5 | 000.1118 | 0245.2 | 072.2 | 33.24 | |
| 178.0 | 000.1100 | 0123.7 | 011.7 | 030.3 | 000.1122 | 0247.3 | 072.2 | 33.33 | |

| Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Actual (dBu) |
|----------------------|-------------|-------------|--------------|----------------------|-------------|-------------|--------------|-----------------|
| 179.0 | 000.1100 | 0124.0 | 011.7 | 030.2 | 000.1124 | 0248.6 | 072.1 | 33.42 |
| 180.0 | 000.1100 | 0121.7 | 011.6 | 030.0 | 000.1128 | 0250.1 | 072.1 | 33.49 |
| 181.0 | 000.1100 | 0119.5 | 011.5 | 029.8 | 000.1131 | 0251.4 | 072.1 | 33.55 |
| 182.0 | 000.1100 | 0118.3 | 011.4 | 029.7 | 000.1133 | 0252.4 | 072.0 | 33.61 |
| 183.0 | 000.1100 | 0115.4 | 011.3 | 029.5 | 000.1136 | 0253.8 | 072.0 | 33.66 |
| 184.0 | 000.1100 | 0114.2 | 011.2 | 029.3 | 000.1139 | 0255.1 | 072.0 | 33.73 |
| 185.0 | 000.1100 | 0117.4 | 011.4 | 029.2 | 000.1140 | 0255.9 | 071.8 | 33.83 |
| 186.0 | 000.1100 | 0120.6 | 011.5 | 029.1 | 000.1142 | 0256.7 | 071.6 | 33.94 |
| 187.0 | 000.1100 | 0126.5 | 011.8 | 029.1 | 000.1143 | 0257.3 | 071.3 | 34.07 |
| 188.0 | 000.1100 | 0130.2 | 011.9 | 028.9 | 000.1145 | 0258.2 | 071.0 | 34.18 |
| 189.0 | 000.1100 | 0136.1 | 012.2 | 028.9 | 000.1146 | 0258.7 | 070.7 | 34.32 |
| 190.0 | 000.1100 | 0138.4 | 012.3 | 028.7 | 000.1148 | 0259.7 | 070.5 | 34.42 |
| 191.0 | 000.1100 | 0134.3 | 012.1 | 028.5 | 000.1152 | 0260.9 | 070.7 | 34.43 |
| 192.0 | 000.1100 | 0135.8 | 012.2 | 028.4 | 000.1154 | 0262.0 | 070.5 | 34.52 |
| 193.0 | 000.1100 | 0140.9 | 012.4 | 028.3 | 000.1156 | 0262.7 | 070.2 | 34.65 |
| 194.0 | 000.1100 | 0138.1 | 012.3 | 028.1 | 000.1159 | 0264.0 | 070.3 | 34.68 |
| 195.0 | 000.1100 | 0133.4 | 012.1 | 027.8 | 000.1162 | 0265.5 | 070.5 | 34.69 |
| 196.0 | 000.1100 | 0127.6 | 011.8 | 027.6 | 000.1166 | 0267.0 | 070.7 | 34.68 |
| 197.0 | 000.1100 | 0124.1 | 011.7 | 027.4 | 000.1169 | 0268.2 | 070.8 | 34.69 |
| 198.0 | 000.1100 | 0124.3 | 011.7 | 027.3 | 000.1171 | 0269.1 | 070.7 | 34.74 |
| 199.0 | 000.1100 | 0126.5 | 011.8 | 027.1 | 000.1174 | 0269.9 | 070.6 | 34.82 |
| 200.0 | 000.1100 | 0125.9 | 011.8 | 027.0 | 000.1177 | 0270.9 | 070.6 | 34.87 |
| 201.0 | 000.1100 | 0122.7 | 011.6 | 026.8 | 000.1180 | 0272.0 | 070.7 | 34.87 |
| 202.0 | 000.1100 | 0124.3 | 011.7 | 026.6 | 000.1182 | 0273.1 | 070.6 | 34.95 |
| 203.0 | 000.1100 | 0122.0 | 011.6 | 026.5 | 000.1185 | 0274.3 | 070.7 | 34.97 |
| 204.0 | 000.1100 | 0120.6 | 011.5 | 026.3 | 000.1188 | 0275.5 | 070.8 | 35.00 |
| 205.0 | 000.1100 | 0125.9 | 011.8 | 026.1 | 000.1190 | 0276.2 | 070.5 | 35.12 |
| 206.0 | 000.1100 | 0135.8 | 012.2 | 026.0 | 000.1193 | 0276.7 | 070.1 | 35.30 |
| 207.0 | 000.1100 | 0148.2 | 012.8 | 025.8 | 000.1196 | 0277.0 | 069.5 | 35.52 |
| 208.0 | 000.1100 | 0163.8 | 013.5 | 025.6 | 000.1199 | 0276.9 | 068.8 | 35.78 |
| 209.0 | 000.1100 | 0177.9 | 014.1 | 025.4 | 000.1203 | 0276.4 | 068.2 | 35.98 |
| 210.0 | 000.1100 | 0189.7 | 014.5 | 025.1 | 000.1207 | 0275.4 | 067.8 | 36.10 |
| 211.0 | 000.1100 | 0195.3 | 014.7 | 024.9 | 000.1210 | 0274.5 | 067.6 | 36.14 |
| 212.0 | 000.1100 | 0198.6 | 014.8 | 024.7 | 000.1213 | 0273.9 | 067.5 | 36.17 |
| 213.0 | 000.1100 | 0201.4 | 014.9 | 024.4 | 000.1216 | 0273.6 | 067.5 | 36.19 |
| 214.0 | 000.1100 | 0203.5 | 015.0 | 024.2 | 000.1219 | 0273.7 | 067.4 | 36.22 |
| 215.0 | 000.1100 | 0197.8 | 014.8 | 024.0 | 000.1222 | 0273.5 | 067.7 | 36.13 |
| 216.0 | 000.1100 | 0189.5 | 014.5 | 023.9 | 000.1224 | 0273.3 | 068.0 | 36.01 |
| 217.0 | 000.1100 | 0182.4 | 014.3 | 023.7 | 000.1227 | 0273.0 | 068.3 | 35.91 |
| 218.0 | 000.1100 | 0172.6 | 013.9 | 023.6 | 000.1229 | 0272.4 | 068.8 | 35.75 |
| 219.0 | 000.1100 | 0163.3 | 013.5 | 023.5 | 000.1231 | 0271.9 | 069.2 | 35.58 |
| 220.0 | 000.1100 | 0157.4 | 013.2 | 023.3 | 000.1233 | 0271.5 | 069.5 | 35.46 |
| 221.0 | 000.1100 | 0151.5 | 012.9 | 023.2 | 000.1235 | 0271.1 | 069.9 | 35.34 |
| 222.0 | 000.1100 | 0150.3 | 012.9 | 023.1 | 000.1238 | 0270.3 | 070.0 | 35.28 |
| 223.0 | 000.1100 | 0150.3 | 012.9 | 022.9 | 000.1241 | 0269.4 | 070.1 | 35.24 |
| 224.0 | 000.1100 | 0147.6 | 012.8 | 022.8 | 000.1243 | 0268.9 | 070.2 | 35.16 |
| 225.0 | 000.1100 | 0147.0 | 012.7 | 022.6 | 000.1246 | 0268.7 | 070.4 | 35.13 |
| 226.0 | 000.1100 | 0147.4 | 012.7 | 022.4 | 000.1248 | 0268.9 | 070.4 | 35.12 |
| 227.0 | 000.1100 | 0146.6 | 012.7 | 022.3 | 000.1251 | 0268.7 | 070.5 | 35.08 |
| 228.0 | 000.1100 | 0143.7 | 012.6 | 022.2 | 000.1253 | 0268.3 | 070.8 | 35.00 |
| 229.0 | 000.1100 | 0139.9 | 012.4 | 022.1 | 000.1254 | 0267.8 | 071.0 | 34.90 |

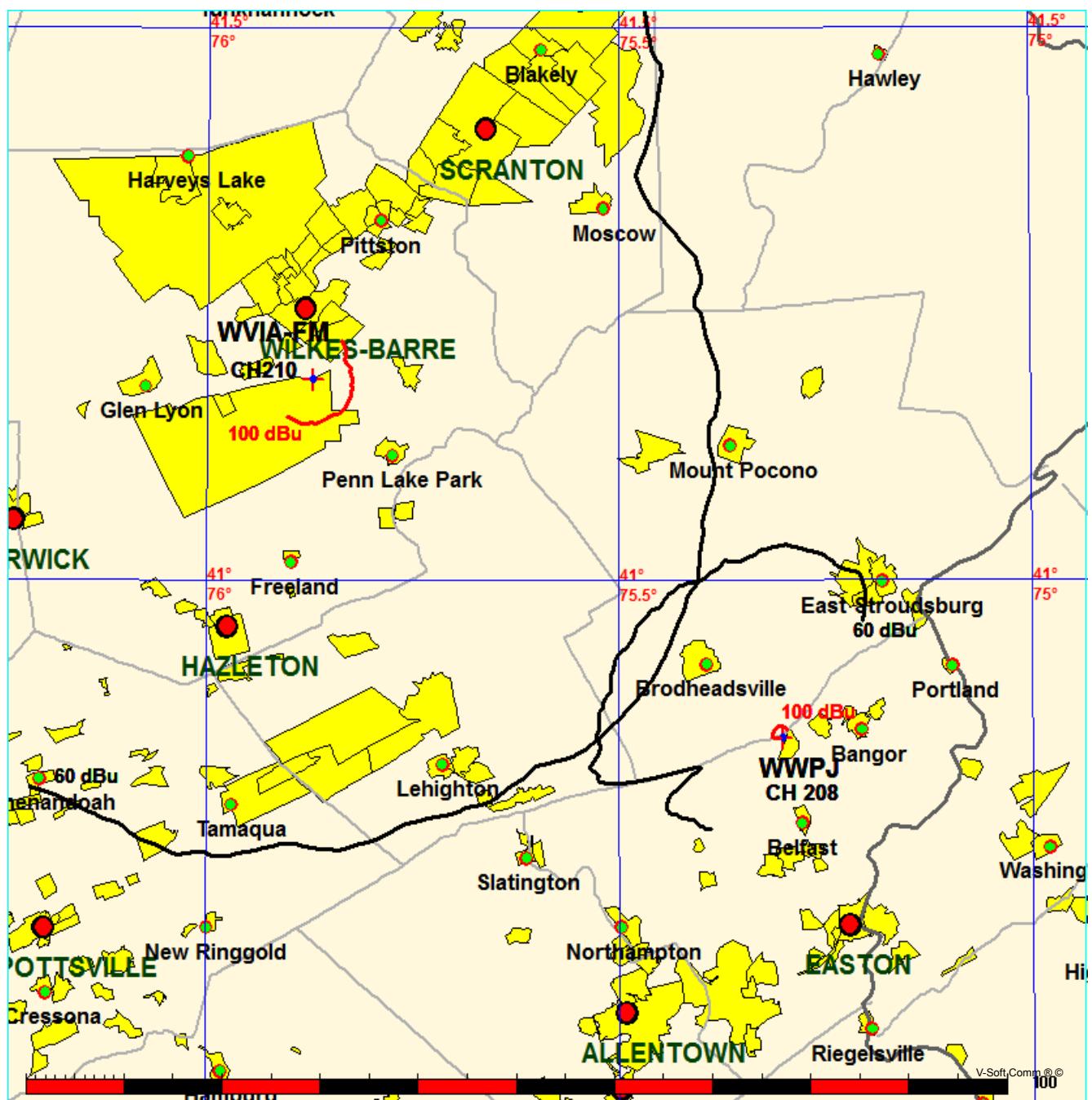
| Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Actual (dBu) |
|----------------------|-------------|-------------|--------------|----------------------|-------------|-------------|--------------|-----------------|
| 230.0 | 000.1100 | 0137.3 | 012.3 | 022.0 | 000.1256 | 0267.1 | 071.2 | 34.81 |
| 231.0 | 000.1100 | 0135.0 | 012.2 | 021.8 | 000.1258 | 0266.5 | 071.4 | 34.73 |
| 232.0 | 000.1100 | 0133.0 | 012.1 | 021.7 | 000.1260 | 0266.0 | 071.6 | 34.66 |
| 233.0 | 000.1100 | 0139.4 | 012.4 | 021.5 | 000.1265 | 0265.2 | 071.5 | 34.70 |
| 234.0 | 000.1100 | 0150.7 | 012.9 | 021.1 | 000.1271 | 0263.6 | 071.1 | 34.78 |
| 235.0 | 000.1100 | 0156.3 | 013.2 | 020.8 | 000.1275 | 0262.2 | 071.0 | 34.79 |
| 236.0 | 000.1100 | 0160.7 | 013.4 | 020.6 | 000.1280 | 0261.3 | 071.0 | 34.78 |
| 237.0 | 000.1100 | 0164.5 | 013.5 | 020.3 | 000.1284 | 0261.1 | 071.0 | 34.79 |
| 238.0 | 000.1100 | 0167.1 | 013.6 | 020.1 | 000.1287 | 0260.7 | 071.0 | 34.77 |
| 239.0 | 000.1100 | 0165.9 | 013.6 | 020.0 | 000.1289 | 0260.3 | 071.2 | 34.70 |
| 240.0 | 000.1100 | 0166.2 | 013.6 | 019.8 | 000.1292 | 0259.8 | 071.4 | 34.65 |
| 241.0 | 000.1100 | 0166.7 | 013.6 | 019.7 | 000.1296 | 0259.8 | 071.5 | 34.61 |
| 242.0 | 000.1100 | 0172.0 | 013.9 | 019.4 | 000.1301 | 0260.7 | 071.5 | 34.66 |
| 243.0 | 000.1100 | 0178.9 | 014.1 | 019.1 | 000.1307 | 0260.6 | 071.5 | 34.69 |
| 244.0 | 000.1100 | 0182.0 | 014.2 | 018.9 | 000.1311 | 0260.2 | 071.6 | 34.66 |
| 245.0 | 000.1100 | 0182.3 | 014.3 | 018.8 | 000.1314 | 0260.0 | 071.7 | 34.61 |
| 246.0 | 000.1100 | 0179.0 | 014.1 | 018.7 | 000.1316 | 0259.9 | 072.0 | 34.52 |
| 247.0 | 000.1100 | 0179.8 | 014.2 | 018.6 | 000.1319 | 0259.7 | 072.2 | 34.47 |
| 248.0 | 000.1100 | 0186.3 | 014.4 | 018.3 | 000.1324 | 0259.2 | 072.2 | 34.46 |
| 249.0 | 000.1100 | 0189.2 | 014.5 | 018.1 | 000.1328 | 0258.8 | 072.3 | 34.41 |
| 250.0 | 000.1100 | 0178.6 | 014.1 | 018.2 | 000.1326 | 0259.1 | 072.8 | 34.27 |
| 251.0 | 000.1100 | 0169.6 | 013.8 | 018.3 | 000.1324 | 0259.3 | 073.2 | 34.13 |
| 252.0 | 000.1100 | 0158.0 | 013.2 | 018.5 | 000.1319 | 0259.7 | 073.7 | 33.96 |
| 253.0 | 000.1100 | 0146.8 | 012.7 | 018.8 | 000.1315 | 0259.9 | 074.2 | 33.79 |
| 254.0 | 000.1100 | 0138.3 | 012.3 | 018.9 | 000.1312 | 0260.1 | 074.6 | 33.64 |
| 255.0 | 000.1100 | 0134.4 | 012.1 | 018.9 | 000.1311 | 0260.2 | 074.8 | 33.55 |
| 256.0 | 000.1100 | 0134.2 | 012.1 | 018.8 | 000.1313 | 0260.0 | 075.0 | 33.49 |
| 257.0 | 000.1100 | 0132.2 | 012.0 | 018.8 | 000.1314 | 0260.0 | 075.3 | 33.42 |
| 258.0 | 000.1100 | 0136.8 | 012.2 | 018.6 | 000.1318 | 0259.7 | 075.3 | 33.40 |
| 259.0 | 000.1100 | 0147.8 | 012.8 | 018.2 | 000.1327 | 0258.9 | 075.3 | 33.43 |
| 260.0 | 000.1100 | 0155.9 | 013.1 | 017.8 | 000.1333 | 0258.7 | 075.3 | 33.43 |
| 261.0 | 000.1100 | 0156.1 | 013.1 | 017.8 | 000.1335 | 0258.9 | 075.5 | 33.38 |
| 262.0 | 000.1100 | 0153.8 | 013.0 | 017.7 | 000.1335 | 0258.9 | 075.7 | 33.29 |
| 263.0 | 000.1100 | 0154.4 | 013.1 | 017.7 | 000.1337 | 0259.1 | 075.9 | 33.24 |
| 264.0 | 000.1100 | 0151.8 | 012.9 | 017.7 | 000.1336 | 0259.1 | 076.2 | 33.15 |
| 265.0 | 000.1100 | 0148.7 | 012.8 | 017.7 | 000.1336 | 0259.0 | 076.4 | 33.06 |

Contour-to-Contour Map, WWPJ vs WVIA-FM
 Town Of Monroe, Connecticut

FMCommander Single Allocation Study - 11-30-2016 - NED 03 SEC
 WWPJ's Overlaps (In= 36.99 km, Out= 13.34 km)

WWPJ CH 208 A DA
 Lat= 40 51 33.8, Lng= 75 18 04.4
 0.225 kW 230.8 m HAAT, 473 m COR
 Prot.= 60 dBu, Intef.= 100 dBu

WVIA-FM CH 210 B DA BLED20081107AEO
 Lat= 41 10 55.0, Lng= 75 52 17.0
 7.4 kW 381 m HAAT, 761 m COR
 Prot.= 60 dBu, Intef.= 100 dBu



11-30-2016

Terrain Data: NED 03 SEC

FMOver Analysis

WWPJ

WVIA-FM BLED20081107AEO

Channel = 208A
 Max ERP = 0.225 kW
 RCAMSL = 473 m
 N. Lat. 40 51 33.8
 W. Lng. 75 18 04.4
 Protected
 60 dBu

Channel = 210B
 Max ERP = 7.4 kW
 RCAMSL = 761 m
 N. Lat. 41 10 55.0
 W. Lng. 75 52 17.0
 Interfering
 100 dBu

| Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Actual (dBu) | IX (km) |
|----------------------|-------------|-------------|--------------|----------------------|-------------|-------------|--------------|-----------------|------------|
| 247.0 | 000.1050 | 0092.0 | 010.0 | 135.7 | 007.4000 | 0282.1 | 055.5 | 58.81 | |
| 248.0 | 000.1099 | 0078.8 | 009.4 | 135.0 | 007.4000 | 0282.4 | 055.5 | 58.79 | |
| 249.0 | 000.1150 | 0071.3 | 009.0 | 134.6 | 007.4000 | 0282.2 | 055.5 | 58.79 | |
| 250.0 | 000.1206 | 0075.8 | 009.4 | 134.9 | 007.4000 | 0282.3 | 055.2 | 58.92 | |
| 251.0 | 000.1262 | 0103.2 | 011.1 | 136.4 | 007.4000 | 0282.2 | 054.4 | 59.25 | |
| 252.0 | 000.1320 | 0156.9 | 013.8 | 139.0 | 007.4000 | 0284.6 | 053.1 | 59.84 | |
| 253.0 | 000.1383 | 0202.8 | 015.9 | 141.0 | 007.2364 | 0288.2 | 052.0 | 60.28 | |
| 254.0 | 000.1447 | 0235.2 | 017.5 | 142.5 | 007.0057 | 0294.0 | 051.2 | 60.65 | |
| 255.0 | 000.1517 | 0255.8 | 018.5 | 143.4 | 006.8622 | 0296.1 | 050.6 | 60.89 | |
| 256.0 | 000.1588 | 0269.0 | 019.1 | 144.0 | 006.7688 | 0297.3 | 050.0 | 61.09 | |
| 257.0 | 000.1660 | 0270.7 | 019.4 | 144.2 | 006.7455 | 0297.7 | 049.6 | 61.25 | |
| 258.0 | 000.1738 | 0259.3 | 019.2 | 143.8 | 006.8007 | 0296.7 | 049.4 | 61.35 | |
| 259.0 | 000.1822 | 0258.5 | 019.4 | 143.8 | 006.7931 | 0296.9 | 049.0 | 61.50 | |
| 260.0 | 000.1909 | 0264.3 | 019.9 | 144.1 | 006.7470 | 0297.7 | 048.5 | 61.70 | |
| 261.0 | 000.1963 | 0263.2 | 020.0 | 144.1 | 006.7589 | 0297.4 | 048.1 | 61.83 | |
| 262.0 | 000.2018 | 0251.2 | 019.7 | 143.5 | 006.8404 | 0296.2 | 048.0 | 61.91 | |
| 263.0 | 000.2078 | 0239.7 | 019.3 | 143.0 | 006.9209 | 0295.5 | 047.8 | 62.00 | |
| 264.0 | 000.2135 | 0229.2 | 019.0 | 142.5 | 007.0017 | 0294.1 | 047.7 | 62.06 | |
| 265.0 | 000.2192 | 0222.1 | 018.9 | 142.1 | 007.0621 | 0292.5 | 047.5 | 62.12 | |
| 266.0 | 000.2250 | 0213.6 | 018.6 | 141.7 | 007.1345 | 0290.3 | 047.3 | 62.16 | |
| 267.0 | 000.2250 | 0214.9 | 018.7 | 141.5 | 007.1617 | 0289.6 | 047.0 | 62.27 | |
| 268.0 | 000.2250 | 0215.4 | 018.7 | 141.3 | 007.1953 | 0289.0 | 046.8 | 62.39 | |
| 269.0 | 000.2250 | 0219.0 | 018.9 | 141.2 | 007.2092 | 0288.7 | 046.4 | 62.53 | |
| 270.0 | 000.2250 | 0221.5 | 019.0 | 141.0 | 007.2328 | 0288.3 | 046.1 | 62.67 | |
| 271.0 | 000.2250 | 0220.4 | 018.9 | 140.7 | 007.2820 | 0287.4 | 045.9 | 62.76 | |
| 272.0 | 000.2250 | 0215.9 | 018.7 | 140.3 | 007.3540 | 0286.3 | 045.7 | 62.82 | |
| 273.0 | 000.2250 | 0216.4 | 018.8 | 140.0 | 007.3954 | 0285.8 | 045.5 | 62.94 | |
| 274.0 | 000.2250 | 0215.7 | 018.7 | 139.7 | 007.4000 | 0285.8 | 045.2 | 63.03 | |
| 275.0 | 000.2250 | 0216.5 | 018.8 | 139.5 | 007.4000 | 0285.7 | 045.0 | 63.14 | |
| 276.0 | 000.2250 | 0217.6 | 018.8 | 139.2 | 007.4000 | 0285.1 | 044.7 | 63.23 | |
| 277.0 | 000.2250 | 0219.4 | 018.9 | 139.0 | 007.4000 | 0284.5 | 044.5 | 63.33 | |
| 278.0 | 000.2250 | 0213.8 | 018.6 | 138.4 | 007.4000 | 0283.2 | 044.4 | 63.30 | |
| 279.0 | 000.2250 | 0213.1 | 018.6 | 138.1 | 007.4000 | 0283.2 | 044.2 | 63.38 | |
| 280.0 | 000.2250 | 0213.0 | 018.6 | 137.8 | 007.4000 | 0283.2 | 044.0 | 63.47 | |
| 281.0 | 000.2250 | 0211.3 | 018.5 | 137.4 | 007.4000 | 0283.6 | 043.9 | 63.54 | |
| 282.0 | 000.2250 | 0208.7 | 018.4 | 136.9 | 007.4000 | 0283.0 | 043.8 | 63.56 | |

| Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Actual (dBu) |
|----------------------|-------------|-------------|--------------|----------------------|-------------|-------------|--------------|-----------------|
| 283.0 | 000.2250 | 0205.9 | 018.3 | 136.5 | 007.4000 | 0282.4 | 043.7 | 63.58 |
| 284.0 | 000.2250 | 0202.1 | 018.1 | 136.0 | 007.4000 | 0281.6 | 043.7 | 63.56 |
| 285.0 | 000.2250 | 0201.6 | 018.1 | 135.7 | 007.4000 | 0282.1 | 043.5 | 63.64 |
| 286.0 | 000.2250 | 0203.5 | 018.2 | 135.4 | 007.4000 | 0282.2 | 043.3 | 63.75 |
| 287.0 | 000.2250 | 0205.7 | 018.3 | 135.1 | 007.4000 | 0282.4 | 043.1 | 63.86 |
| 288.0 | 000.2250 | 0209.9 | 018.5 | 134.8 | 007.4000 | 0282.3 | 042.7 | 63.99 |
| 289.0 | 000.2250 | 0211.0 | 018.5 | 134.4 | 007.4000 | 0282.0 | 042.6 | 64.06 |
| 290.0 | 000.2250 | 0211.6 | 018.5 | 134.0 | 007.4000 | 0281.4 | 042.4 | 64.11 |
| 291.0 | 000.2250 | 0211.9 | 018.6 | 133.7 | 007.4000 | 0281.0 | 042.3 | 64.16 |
| 292.0 | 000.2250 | 0212.5 | 018.6 | 133.3 | 007.4000 | 0280.6 | 042.1 | 64.21 |
| 293.0 | 000.2250 | 0212.9 | 018.6 | 132.9 | 007.4000 | 0279.9 | 042.0 | 64.25 |
| 294.0 | 000.2250 | 0214.7 | 018.7 | 132.5 | 007.4000 | 0279.2 | 041.8 | 64.31 |
| 295.0 | 000.2250 | 0213.9 | 018.6 | 132.0 | 007.4000 | 0278.9 | 041.7 | 64.33 |
| 296.0 | 000.2250 | 0215.5 | 018.7 | 131.6 | 007.4000 | 0278.4 | 041.6 | 64.38 |
| 297.0 | 000.2250 | 0211.3 | 018.5 | 131.1 | 007.4000 | 0277.1 | 041.7 | 64.30 |
| 298.0 | 000.2250 | 0207.7 | 018.4 | 130.6 | 007.4000 | 0275.6 | 041.7 | 64.22 |
| 299.0 | 000.2250 | 0204.9 | 018.3 | 130.2 | 007.4000 | 0274.8 | 041.8 | 64.18 |
| 300.0 | 000.2250 | 0203.8 | 018.2 | 129.7 | 007.4000 | 0274.2 | 041.8 | 64.16 |
| 301.0 | 000.2250 | 0200.4 | 018.1 | 129.3 | 007.4000 | 0273.2 | 041.9 | 64.08 |
| 302.0 | 000.2250 | 0201.4 | 018.1 | 128.9 | 007.4000 | 0272.4 | 041.8 | 64.10 |
| 303.0 | 000.2250 | 0202.6 | 018.2 | 128.4 | 007.4000 | 0271.4 | 041.7 | 64.11 |
| 304.0 | 000.2250 | 0203.2 | 018.2 | 128.0 | 007.4000 | 0270.2 | 041.6 | 64.09 |
| 305.0 | 000.2250 | 0206.1 | 018.3 | 127.6 | 007.4000 | 0269.1 | 041.5 | 64.12 |
| 306.0 | 000.2250 | 0210.4 | 018.5 | 127.1 | 007.4000 | 0268.0 | 041.3 | 64.17 |
| 307.0 | 000.2250 | 0209.6 | 018.5 | 126.7 | 007.4000 | 0266.9 | 041.3 | 64.13 |
| 308.0 | 000.2250 | 0207.7 | 018.4 | 126.3 | 007.4000 | 0265.6 | 041.4 | 64.05 |
| 309.0 | 000.2250 | 0209.2 | 018.4 | 125.8 | 007.4000 | 0264.6 | 041.3 | 64.04 |
| 310.0 | 000.2250 | 0206.5 | 018.3 | 125.4 | 007.4000 | 0263.3 | 041.5 | 63.93 |
| 311.0 | 000.2250 | 0205.3 | 018.3 | 124.9 | 007.4000 | 0261.1 | 041.6 | 63.83 |
| 312.0 | 000.2250 | 0206.5 | 018.3 | 124.5 | 007.4000 | 0259.6 | 041.6 | 63.78 |
| 313.0 | 000.2250 | 0208.5 | 018.4 | 124.0 | 007.4000 | 0258.7 | 041.5 | 63.77 |
| 314.0 | 000.2250 | 0205.0 | 018.3 | 123.6 | 007.4000 | 0258.3 | 041.7 | 63.67 |
| 315.0 | 000.2250 | 0201.1 | 018.1 | 123.3 | 007.4000 | 0257.5 | 041.9 | 63.54 |
| 316.0 | 000.2250 | 0198.8 | 018.0 | 122.9 | 007.4000 | 0256.6 | 042.1 | 63.44 |
| 317.0 | 000.2250 | 0199.6 | 018.0 | 122.4 | 007.4000 | 0255.7 | 042.1 | 63.39 |
| 318.0 | 000.2250 | 0202.7 | 018.2 | 122.0 | 007.4000 | 0254.7 | 042.1 | 63.38 |
| 319.0 | 000.2250 | 0205.2 | 018.3 | 121.5 | 007.4000 | 0254.6 | 042.1 | 63.38 |
| 320.0 | 000.2250 | 0205.7 | 018.3 | 121.1 | 007.4000 | 0253.9 | 042.2 | 63.33 |
| 321.0 | 000.2241 | 0207.9 | 018.4 | 120.7 | 007.4000 | 0252.1 | 042.2 | 63.25 |
| 322.0 | 000.2232 | 0208.3 | 018.4 | 120.2 | 007.4000 | 0250.2 | 042.3 | 63.13 |
| 323.0 | 000.2223 | 0206.9 | 018.3 | 119.9 | 007.4000 | 0249.3 | 042.5 | 63.02 |
| 324.0 | 000.2214 | 0207.9 | 018.3 | 119.5 | 007.4000 | 0248.5 | 042.6 | 62.95 |
| 325.0 | 000.2205 | 0210.9 | 018.4 | 119.0 | 007.4000 | 0249.3 | 042.6 | 62.96 |
| 326.0 | 000.2201 | 0207.5 | 018.3 | 118.7 | 007.4000 | 0251.4 | 042.9 | 62.91 |
| 327.0 | 000.2192 | 0205.5 | 018.2 | 118.4 | 007.4000 | 0252.2 | 043.2 | 62.83 |
| 328.0 | 000.2183 | 0204.9 | 018.1 | 118.1 | 007.4000 | 0251.6 | 043.4 | 62.72 |
| 329.0 | 000.2174 | 0202.3 | 018.0 | 117.8 | 007.4000 | 0250.9 | 043.6 | 62.58 |
| 330.0 | 000.2165 | 0200.6 | 017.9 | 117.5 | 007.4000 | 0251.1 | 043.9 | 62.49 |
| 331.0 | 000.2143 | 0199.7 | 017.8 | 117.2 | 007.4000 | 0251.6 | 044.1 | 62.40 |
| 332.0 | 000.2121 | 0199.3 | 017.7 | 117.0 | 007.4000 | 0250.9 | 044.3 | 62.28 |
| 333.0 | 000.2095 | 0199.2 | 017.7 | 116.7 | 007.4000 | 0248.9 | 044.6 | 62.11 |

| Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Actual (dBu) |
|----------------------|-------------|-------------|--------------|----------------------|-------------|-------------|--------------|-----------------|
| 334.0 | 000.2074 | 0201.0 | 017.7 | 116.3 | 007.4000 | 0246.0 | 044.7 | 61.94 |
| 335.0 | 000.2052 | 0206.4 | 017.9 | 115.9 | 007.4000 | 0243.6 | 044.8 | 61.84 |
| 336.0 | 000.2031 | 0210.1 | 018.0 | 115.5 | 007.4000 | 0242.2 | 044.9 | 61.74 |
| 337.0 | 000.2009 | 0211.7 | 018.0 | 115.2 | 007.4000 | 0240.8 | 045.1 | 61.60 |
| 338.0 | 000.1984 | 0213.4 | 018.0 | 114.9 | 007.4000 | 0239.4 | 045.3 | 61.47 |
| 339.0 | 000.1963 | 0216.7 | 018.1 | 114.5 | 007.4000 | 0237.8 | 045.4 | 61.34 |
| 340.0 | 000.1942 | 0221.3 | 018.3 | 114.1 | 007.4000 | 0235.5 | 045.5 | 61.20 |
| 341.0 | 000.1929 | 0230.2 | 018.6 | 113.5 | 007.4000 | 0233.9 | 045.5 | 61.13 |
| 342.0 | 000.1913 | 0231.1 | 018.6 | 113.2 | 007.4000 | 0233.3 | 045.8 | 61.01 |
| 343.0 | 000.1900 | 0225.2 | 018.3 | 113.2 | 007.4000 | 0233.3 | 046.2 | 60.83 |
| 344.0 | 000.1884 | 0222.9 | 018.2 | 113.1 | 007.4000 | 0233.2 | 046.5 | 60.69 |
| 345.0 | 000.1867 | 0222.1 | 018.1 | 112.9 | 007.4000 | 0232.9 | 046.8 | 60.56 |
| 346.0 | 000.1855 | 0222.8 | 018.1 | 112.7 | 007.4000 | 0232.2 | 047.1 | 60.43 |
| 347.0 | 000.1843 | 0223.7 | 018.1 | 112.4 | 007.4000 | 0231.8 | 047.3 | 60.31 |
| 348.0 | 000.1827 | 0225.9 | 018.2 | 112.2 | 007.4000 | 0231.2 | 047.6 | 60.19 |
| 349.0 | 000.1810 | 0228.1 | 018.2 | 111.9 | 007.4000 | 0230.5 | 047.8 | 60.06 |
| 350.0 | 000.1798 | 0230.6 | 018.3 | 111.6 | 007.4000 | 0229.8 | 048.0 | 59.94 |
| 351.0 | 000.1786 | 0234.8 | 018.4 | 111.3 | 007.4000 | 0228.4 | 048.2 | 59.80 |
| 352.0 | 000.1774 | 0239.2 | 018.6 | 111.0 | 007.4000 | 0226.8 | 048.4 | 59.65 |
| 353.0 | 000.1758 | 0244.1 | 018.7 | 110.6 | 007.4000 | 0225.3 | 048.7 | 59.50 |
| 354.0 | 000.1746 | 0247.0 | 018.8 | 110.4 | 007.4000 | 0224.0 | 048.9 | 59.34 |
| 355.0 | 000.1734 | 0249.0 | 018.8 | 110.2 | 007.4000 | 0222.8 | 049.2 | 59.18 |
| 356.0 | 000.1723 | 0251.1 | 018.9 | 109.9 | 007.4000 | 0221.8 | 049.5 | 59.02 |
| 357.0 | 000.1711 | 0254.9 | 019.0 | 109.7 | 007.4000 | 0220.5 | 049.7 | 58.86 |
| 358.0 | 000.1695 | 0256.5 | 019.0 | 109.5 | 007.4000 | 0220.0 | 050.0 | 58.72 |
| 359.0 | 000.1684 | 0259.6 | 019.1 | 109.3 | 007.4000 | 0219.4 | 050.3 | 58.58 |
| 000.0 | 000.1672 | 0263.2 | 019.2 | 109.1 | 007.4000 | 0219.4 | 050.6 | 58.47 |
| 001.0 | 000.1653 | 0266.7 | 019.3 | 108.9 | 007.4000 | 0219.5 | 050.9 | 58.36 |
| 002.0 | 000.1637 | 0264.9 | 019.2 | 108.9 | 007.4000 | 0219.5 | 051.2 | 58.21 |
| 003.0 | 000.1618 | 0264.3 | 019.1 | 108.8 | 007.4000 | 0219.6 | 051.6 | 58.08 |
| 004.0 | 000.1599 | 0264.5 | 019.0 | 108.8 | 007.4000 | 0219.7 | 051.9 | 57.95 |
| 005.0 | 000.1584 | 0262.4 | 018.9 | 108.8 | 007.4000 | 0219.6 | 052.3 | 57.81 |
| 006.0 | 000.1565 | 0265.2 | 018.9 | 108.7 | 007.4000 | 0219.9 | 052.6 | 57.69 |

11-30-2016

Terrain Data: NED 03 SEC FMOver Analysis

WVIA-FM BLED20081107AEO

WWPJ

Channel = 210B
 Max ERP = 7.4 kW
 RCAMSL = 761 m
 N. Lat. 41 10 55.0
 W. Lng. 75 52 17.0
 Protected
 60 dBu

Channel = 208A
 Max ERP = 0.225 kW
 RCAMSL = 473 m
 N. Lat. 40 51 33.8
 W. Lng. 75 18 04.4
 Interfering
 100 dBu

| Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Actual (dBu) | IX (km) |
|----------------------|-------------|-------------|--------------|----------------------|-------------|-------------|--------------|-----------------|------------|
| 067.0 | 007.4000 | 0184.4 | 039.3 | 347.4 | 000.1836 | 0224.7 | 052.4 | 41.92 | |
| 068.0 | 007.4000 | 0189.1 | 039.7 | 347.9 | 000.1827 | 0225.8 | 051.8 | 42.19 | |
| 069.0 | 007.4000 | 0189.9 | 039.8 | 348.1 | 000.1824 | 0226.1 | 051.1 | 42.46 | |
| 070.0 | 007.4000 | 0192.6 | 040.0 | 348.5 | 000.1819 | 0226.8 | 050.5 | 42.75 | |
| 071.0 | 007.4000 | 0197.8 | 040.4 | 349.1 | 000.1810 | 0228.3 | 049.8 | 43.05 | |
| 072.0 | 007.4000 | 0202.8 | 040.8 | 349.6 | 000.1803 | 0230.0 | 049.2 | 43.36 | |
| 073.0 | 007.4000 | 0203.0 | 040.8 | 349.7 | 000.1802 | 0230.2 | 048.5 | 43.65 | |
| 074.0 | 007.4000 | 0203.1 | 040.8 | 349.8 | 000.1800 | 0230.4 | 047.8 | 43.94 | |
| 075.0 | 007.4000 | 0202.7 | 040.8 | 349.9 | 000.1800 | 0230.4 | 047.0 | 44.23 | |
| 076.0 | 007.4000 | 0200.1 | 040.6 | 349.7 | 000.1802 | 0230.1 | 046.3 | 44.52 | |
| 077.0 | 007.4000 | 0196.0 | 040.2 | 349.3 | 000.1806 | 0229.2 | 045.6 | 44.79 | |
| 078.0 | 007.4000 | 0188.3 | 039.6 | 348.6 | 000.1817 | 0227.1 | 044.9 | 45.03 | |
| 079.0 | 007.4000 | 0186.6 | 039.5 | 348.4 | 000.1820 | 0226.6 | 044.2 | 45.31 | |
| 080.0 | 007.4000 | 0190.9 | 039.8 | 348.8 | 000.1813 | 0227.8 | 043.5 | 45.65 | |
| 081.0 | 007.4000 | 0194.1 | 040.1 | 349.1 | 000.1809 | 0228.5 | 042.8 | 45.97 | |
| 082.0 | 007.4000 | 0193.8 | 040.1 | 349.0 | 000.1810 | 0228.2 | 042.1 | 46.28 | |
| 083.0 | 007.4000 | 0194.5 | 040.1 | 349.1 | 000.1810 | 0228.2 | 041.4 | 46.59 | |
| 084.0 | 007.4000 | 0196.1 | 040.2 | 349.1 | 000.1809 | 0228.6 | 040.7 | 46.92 | |
| 085.0 | 007.4000 | 0198.0 | 040.4 | 349.3 | 000.1807 | 0229.0 | 040.0 | 47.26 | |
| 086.0 | 007.4000 | 0200.3 | 040.6 | 349.4 | 000.1806 | 0229.5 | 039.3 | 47.61 | |
| 087.0 | 007.4000 | 0203.8 | 040.8 | 349.7 | 000.1802 | 0230.1 | 038.5 | 47.97 | |
| 088.0 | 007.4000 | 0206.2 | 041.0 | 349.8 | 000.1801 | 0230.3 | 037.8 | 48.33 | |
| 089.0 | 007.4000 | 0208.3 | 041.2 | 349.8 | 000.1800 | 0230.4 | 037.0 | 48.68 | |
| 090.0 | 007.4000 | 0207.9 | 041.1 | 349.6 | 000.1803 | 0230.0 | 036.3 | 49.01 | |
| 091.0 | 007.4000 | 0209.0 | 041.2 | 349.5 | 000.1804 | 0229.8 | 035.6 | 49.35 | |
| 092.0 | 007.4000 | 0209.9 | 041.3 | 349.4 | 000.1806 | 0229.4 | 034.9 | 49.69 | |
| 093.0 | 007.4000 | 0208.8 | 041.2 | 348.9 | 000.1811 | 0228.0 | 034.2 | 49.98 | |
| 094.0 | 007.4000 | 0208.4 | 041.2 | 348.6 | 000.1817 | 0227.1 | 033.5 | 50.30 | |
| 095.0 | 007.4000 | 0206.3 | 041.0 | 348.0 | 000.1827 | 0225.9 | 032.9 | 50.60 | |
| 096.0 | 007.4000 | 0201.3 | 040.6 | 346.9 | 000.1844 | 0223.6 | 032.3 | 50.83 | |
| 097.0 | 007.4000 | 0200.2 | 040.6 | 346.3 | 000.1851 | 0223.3 | 031.7 | 51.17 | |
| 098.0 | 007.4000 | 0202.0 | 040.7 | 346.1 | 000.1854 | 0223.0 | 031.0 | 51.55 | |
| 099.0 | 007.4000 | 0202.9 | 040.8 | 345.7 | 000.1859 | 0222.5 | 030.3 | 51.92 | |

| Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Actual (dBu) |
|----------------------|-------------|-------------|--------------|----------------------|-------------|-------------|--------------|-----------------|
| 100.0 | 007.4000 | 0206.8 | 041.1 | 345.7 | 000.1859 | 0222.4 | 029.5 | 52.38 |
| 101.0 | 007.4000 | 0211.7 | 041.4 | 345.7 | 000.1859 | 0222.5 | 028.7 | 52.87 |
| 102.0 | 007.4000 | 0216.1 | 041.8 | 345.7 | 000.1859 | 0222.4 | 027.9 | 53.37 |
| 103.0 | 007.4000 | 0219.0 | 042.0 | 345.3 | 000.1863 | 0222.2 | 027.2 | 53.86 |
| 104.0 | 007.4000 | 0219.7 | 042.0 | 344.7 | 000.1873 | 0222.4 | 026.5 | 54.34 |
| 105.0 | 007.4000 | 0220.3 | 042.1 | 343.9 | 000.1885 | 0222.9 | 025.9 | 54.83 |
| 106.0 | 007.4000 | 0221.1 | 042.1 | 343.2 | 000.1898 | 0224.7 | 025.2 | 55.39 |
| 107.0 | 007.4000 | 0220.2 | 042.1 | 342.1 | 000.1911 | 0230.5 | 024.7 | 56.05 |
| 108.0 | 007.4000 | 0221.1 | 042.1 | 341.2 | 000.1926 | 0231.4 | 024.0 | 56.57 |
| 109.0 | 007.4000 | 0219.4 | 042.0 | 339.9 | 000.1944 | 0220.7 | 023.5 | 56.58 |
| 110.0 | 007.4000 | 0222.0 | 042.2 | 339.0 | 000.1962 | 0217.0 | 022.8 | 56.98 |
| 111.0 | 007.4000 | 0226.9 | 042.5 | 338.4 | 000.1975 | 0214.3 | 022.1 | 57.50 |
| 112.0 | 007.4000 | 0230.7 | 042.8 | 337.6 | 000.1995 | 0212.5 | 021.3 | 58.03 |
| 113.0 | 007.4000 | 0233.1 | 042.9 | 336.4 | 000.2022 | 0210.9 | 020.7 | 58.52 |
| 114.0 | 007.4000 | 0235.2 | 043.1 | 335.1 | 000.2050 | 0207.0 | 020.1 | 58.90 |
| 115.0 | 007.4000 | 0240.1 | 043.4 | 334.0 | 000.2073 | 0201.1 | 019.4 | 59.28 |
| 116.0 | 007.4000 | 0244.0 | 043.7 | 332.7 | 000.2104 | 0199.5 | 018.7 | 59.81 |
| 117.0 | 007.4000 | 0251.0 | 044.1 | 331.5 | 000.2132 | 0199.4 | 017.9 | 60.53 |
| 118.0 | 007.4000 | 0251.3 | 044.1 | 329.5 | 000.2170 | 0202.0 | 017.5 | 61.08 |
| 119.0 | 007.4000 | 0249.4 | 044.0 | 327.0 | 000.2191 | 0205.5 | 017.2 | 61.51 |
| 120.0 | 007.4000 | 0249.5 | 044.0 | 324.7 | 000.2208 | 0210.7 | 016.9 | 62.05 |
| 121.0 | 007.4000 | 0253.6 | 044.3 | 322.6 | 000.2226 | 0207.3 | 016.3 | 62.40 |
| 122.0 | 007.4000 | 0254.7 | 044.4 | 320.1 | 000.2249 | 0205.8 | 016.0 | 62.65 |
| 123.0 | 007.4000 | 0256.9 | 044.5 | 317.6 | 000.2250 | 0201.4 | 015.6 | 62.75 |
| 124.0 | 007.4000 | 0258.6 | 044.6 | 314.8 | 000.2250 | 0201.6 | 015.4 | 62.99 |
| 125.0 | 007.4000 | 0261.4 | 044.8 | 312.0 | 000.2250 | 0206.6 | 015.1 | 63.47 |
| 126.0 | 007.4000 | 0265.0 | 045.0 | 309.1 | 000.2250 | 0209.0 | 014.8 | 63.62 |
| 127.0 | 007.4000 | 0267.7 | 045.2 | 306.0 | 000.2250 | 0210.5 | 014.6 | 63.90 |
| 128.0 | 007.4000 | 0270.2 | 045.4 | 302.9 | 000.2250 | 0202.5 | 014.5 | 63.71 |
| 129.0 | 007.4000 | 0272.7 | 045.5 | 299.7 | 000.2250 | 0204.6 | 014.4 | 63.87 |
| 130.0 | 007.4000 | 0274.6 | 045.7 | 296.5 | 000.2250 | 0213.9 | 014.4 | 64.20 |
| 131.0 | 007.4000 | 0276.7 | 045.8 | 293.3 | 000.2250 | 0213.6 | 014.5 | 64.08 |
| 132.0 | 007.4000 | 0278.8 | 045.9 | 290.2 | 000.2250 | 0211.7 | 014.7 | 63.84 |
| 133.0 | 007.4000 | 0280.2 | 046.0 | 287.2 | 000.2250 | 0206.8 | 014.9 | 63.35 |
| 134.0 | 007.4000 | 0281.4 | 046.1 | 284.4 | 000.2250 | 0201.6 | 015.2 | 63.10 |
| 135.0 | 007.4000 | 0282.3 | 046.2 | 281.7 | 000.2250 | 0209.8 | 015.6 | 63.14 |
| 136.0 | 007.4000 | 0281.6 | 046.1 | 279.4 | 000.2250 | 0213.1 | 016.1 | 62.86 |
| 137.0 | 007.4000 | 0283.0 | 046.2 | 277.0 | 000.2250 | 0219.4 | 016.5 | 62.76 |
| 138.0 | 007.4000 | 0283.1 | 046.2 | 274.9 | 000.2250 | 0216.4 | 017.1 | 62.19 |
| 139.0 | 007.4000 | 0284.7 | 046.3 | 272.8 | 000.2250 | 0216.6 | 017.6 | 61.78 |
| 140.0 | 007.4000 | 0285.8 | 046.4 | 270.9 | 000.2250 | 0220.6 | 018.1 | 61.48 |
| 141.0 | 007.2396 | 0288.2 | 046.4 | 269.4 | 000.2250 | 0220.2 | 018.8 | 60.93 |
| 142.0 | 007.0809 | 0292.0 | 046.4 | 267.8 | 000.2250 | 0215.0 | 019.4 | 60.22 |
| 143.0 | 006.9240 | 0295.5 | 046.4 | 266.4 | 000.2250 | 0213.2 | 020.0 | 59.61 |
| 144.0 | 006.7688 | 0297.3 | 046.4 | 265.4 | 000.2216 | 0218.3 | 020.8 | 59.17 |
| 145.0 | 006.6154 | 0298.7 | 046.2 | 264.6 | 000.2167 | 0225.0 | 021.5 | 58.74 |
| 146.0 | 006.4637 | 0299.3 | 046.1 | 264.0 | 000.2132 | 0229.6 | 022.3 | 58.23 |
| 147.0 | 006.3138 | 0297.3 | 045.7 | 263.8 | 000.2122 | 0232.0 | 023.2 | 57.64 |
| 148.0 | 006.1657 | 0296.5 | 045.5 | 263.5 | 000.2106 | 0235.5 | 024.0 | 57.12 |
| 149.0 | 006.0193 | 0296.0 | 045.3 | 263.2 | 000.2092 | 0237.9 | 024.8 | 56.57 |
| 150.0 | 005.8747 | 0297.1 | 045.1 | 262.8 | 000.2068 | 0241.3 | 025.6 | 56.08 |

| Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Actual (dBu) |
|----------------------|-------------|-------------|--------------|----------------------|-------------|-------------|--------------|-----------------|
| 151.0 | 005.8892 | 0301.5 | 045.4 | 261.6 | 000.1995 | 0256.9 | 026.2 | 55.99 |
| 152.0 | 005.9038 | 0304.3 | 045.6 | 260.6 | 000.1943 | 0264.3 | 026.9 | 55.65 |
| 153.0 | 005.9183 | 0304.5 | 045.6 | 260.1 | 000.1912 | 0264.4 | 027.7 | 55.09 |
| 154.0 | 005.9329 | 0305.1 | 045.7 | 259.5 | 000.1866 | 0262.1 | 028.4 | 54.43 |
| 155.0 | 005.9475 | 0307.6 | 045.9 | 258.8 | 000.1805 | 0257.4 | 029.2 | 53.69 |
| 156.0 | 005.9621 | 0310.1 | 046.0 | 258.1 | 000.1748 | 0258.6 | 029.9 | 53.15 |
| 157.0 | 005.9767 | 0311.8 | 046.2 | 257.6 | 000.1706 | 0263.1 | 030.7 | 52.75 |
| 158.0 | 005.9913 | 0311.3 | 046.2 | 257.4 | 000.1688 | 0266.5 | 031.5 | 52.38 |
| 159.0 | 006.0060 | 0307.1 | 045.9 | 257.6 | 000.1704 | 0263.5 | 032.3 | 51.90 |
| 160.0 | 006.0207 | 0304.3 | 045.8 | 257.6 | 000.1710 | 0262.6 | 033.1 | 51.48 |
| 161.0 | 006.1374 | 0303.9 | 045.9 | 257.2 | 000.1679 | 0268.1 | 033.9 | 51.20 |
| 162.0 | 006.2552 | 0301.6 | 045.9 | 257.1 | 000.1666 | 0270.0 | 034.7 | 50.83 |
| 163.0 | 006.3741 | 0298.0 | 045.9 | 257.1 | 000.1666 | 0269.9 | 035.5 | 50.44 |
| 164.0 | 006.4942 | 0293.8 | 045.8 | 257.2 | 000.1673 | 0269.0 | 036.3 | 50.05 |
| 165.0 | 006.6154 | 0290.5 | 045.7 | 257.2 | 000.1675 | 0268.8 | 037.1 | 49.67 |
| 166.0 | 006.7377 | 0288.9 | 045.8 | 257.1 | 000.1666 | 0269.9 | 037.9 | 49.31 |
| 167.0 | 006.8611 | 0286.5 | 045.8 | 257.1 | 000.1665 | 0270.0 | 038.7 | 48.94 |
| 168.0 | 006.9856 | 0283.0 | 045.7 | 257.2 | 000.1675 | 0268.8 | 039.5 | 48.56 |
| 169.0 | 007.1113 | 0283.7 | 045.9 | 256.9 | 000.1655 | 0271.3 | 040.3 | 48.23 |
| 170.0 | 007.2381 | 0286.2 | 046.2 | 256.6 | 000.1628 | 0272.8 | 041.1 | 47.83 |
| 171.0 | 007.2542 | 0290.2 | 046.5 | 256.3 | 000.1606 | 0271.3 | 041.9 | 47.36 |
| 172.0 | 007.2703 | 0293.9 | 046.8 | 256.0 | 000.1588 | 0269.1 | 042.8 | 46.87 |
| 173.0 | 007.2865 | 0296.7 | 047.0 | 255.9 | 000.1579 | 0267.7 | 043.6 | 46.44 |
| 174.0 | 007.3026 | 0297.0 | 047.0 | 256.0 | 000.1586 | 0268.7 | 044.4 | 46.15 |
| 175.0 | 007.3188 | 0298.3 | 047.1 | 256.0 | 000.1588 | 0269.0 | 045.3 | 45.81 |
| 176.0 | 007.3350 | 0303.3 | 047.5 | 255.8 | 000.1571 | 0266.3 | 046.1 | 45.31 |
| 177.0 | 007.3512 | 0303.1 | 047.5 | 256.0 | 000.1584 | 0268.5 | 046.9 | 45.09 |
| 178.0 | 007.3675 | 0299.8 | 047.3 | 256.4 | 000.1615 | 0272.2 | 047.7 | 44.98 |
| 179.0 | 007.3837 | 0299.5 | 047.3 | 256.6 | 000.1631 | 0272.8 | 048.5 | 44.72 |
| 180.0 | 007.4000 | 0298.1 | 047.2 | 256.9 | 000.1652 | 0271.6 | 049.3 | 44.42 |
| 181.0 | 007.4000 | 0294.6 | 047.0 | 257.4 | 000.1689 | 0266.3 | 050.0 | 44.04 |
| 182.0 | 007.4000 | 0291.9 | 046.8 | 257.8 | 000.1722 | 0260.9 | 050.8 | 43.64 |
| 183.0 | 007.4000 | 0291.4 | 046.8 | 258.1 | 000.1744 | 0258.9 | 051.6 | 43.31 |
| 184.0 | 007.4000 | 0294.0 | 046.9 | 258.1 | 000.1749 | 0258.5 | 052.4 | 42.97 |
| 185.0 | 007.4000 | 0297.4 | 047.2 | 258.2 | 000.1752 | 0258.4 | 053.3 | 42.63 |
| 186.0 | 007.4000 | 0302.6 | 047.5 | 258.1 | 000.1746 | 0258.7 | 054.1 | 42.27 |