

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P#

Luminaire Tested: **8ILED-LD5-32-W-ASY-UNV-L840-CD4-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P#
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P34179)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8ILED-LD5-32-W-ASY-UNV-L840-CD4-U
Description: Metalux 8' ILED WITH ASYMMETRIC DIRECTIONAL LOUVER DISTRIBUTION

Light Source: (1) 4000 CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

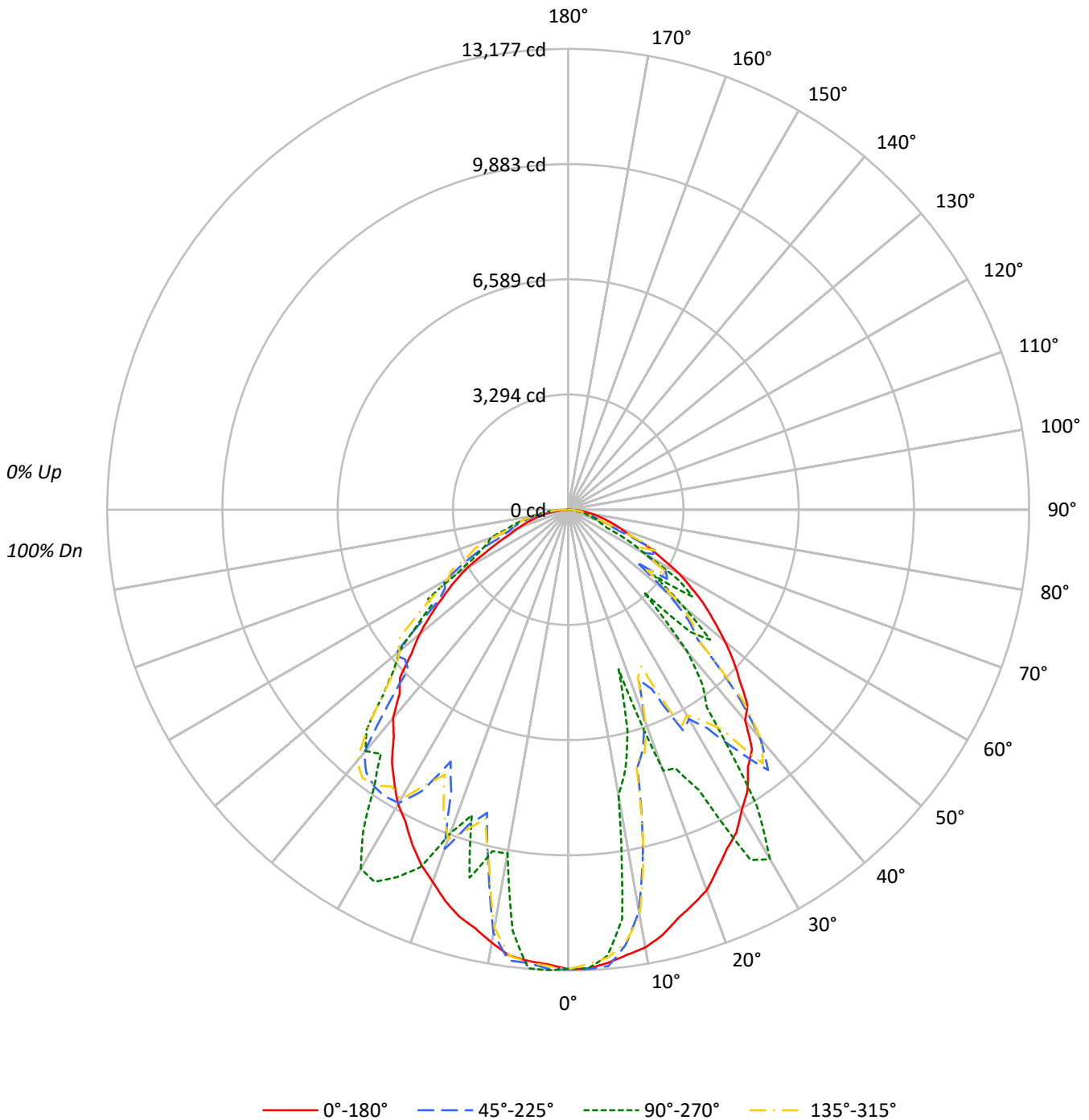
Lumens per Lamp: N/A
Luminaire Lumens: 25870.0 lumens
Efficiency: N/A
Efficacy: 102.2 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.25 / 1.27
Luminous Opening: Rectangular w/ Sides (W: 0.92' x L: 8' x H: 0.1')
CIE Type: Direct

Input Watts (W): 253.2
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P#
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Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: 8ILED-LD5-32-W-ASY-UNV-L840-CD4-U

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|-----|---|--|---|
| RF | 20 | | | | | 20 | | | | | 20 | | | | | 20 | | | | | 20 | | | | | |
| RC | 80 | | | | | 70 | | | | | 50 | | | | | 30 | | | | | 10 | | | | | 0 |
| RW | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0 | | |
| RCR | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 | | | | | 100 | | | |
| 1 | 110 | 105 | 101 | 98 | 107 | 103 | 100 | 96 | 99 | 96 | 93 | 95 | 93 | 90 | 91 | 90 | 88 | 86 | | | | | 86 | | | |
| 2 | 101 | 93 | 87 | 81 | 98 | 91 | 85 | 80 | 88 | 83 | 79 | 84 | 80 | 77 | 81 | 78 | 75 | 73 | | | | | 73 | | | |
| 3 | 92 | 82 | 75 | 69 | 90 | 81 | 74 | 68 | 78 | 72 | 67 | 75 | 70 | 66 | 73 | 68 | 65 | 63 | | | | | 63 | | | |
| 4 | 85 | 74 | 65 | 59 | 83 | 72 | 65 | 59 | 70 | 63 | 58 | 68 | 62 | 57 | 65 | 60 | 56 | 54 | | | | | 54 | | | |
| 5 | 78 | 66 | 58 | 51 | 76 | 65 | 57 | 51 | 63 | 56 | 51 | 61 | 55 | 50 | 59 | 54 | 50 | 47 | | | | | 47 | | | |
| 6 | 73 | 60 | 51 | 45 | 71 | 59 | 51 | 45 | 57 | 50 | 45 | 56 | 49 | 44 | 54 | 48 | 44 | 42 | | | | | 42 | | | |
| 7 | 68 | 55 | 46 | 40 | 66 | 54 | 46 | 40 | 52 | 45 | 40 | 51 | 44 | 40 | 50 | 44 | 39 | 37 | | | | | 37 | | | |
| 8 | 63 | 50 | 42 | 36 | 61 | 49 | 41 | 36 | 48 | 41 | 36 | 47 | 40 | 36 | 46 | 40 | 35 | 34 | | | | | 34 | | | |
| 9 | 59 | 46 | 38 | 33 | 58 | 45 | 38 | 33 | 44 | 37 | 32 | 43 | 37 | 32 | 42 | 36 | 32 | 30 | | | | | 30 | | | |
| 10 | 55 | 43 | 35 | 30 | 54 | 42 | 35 | 30 | 41 | 34 | 30 | 40 | 34 | 29 | 39 | 34 | 29 | 28 | | | | | 28 | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 90° | 180° | 270° |
|-----|-------|-------|-------|-------|
| 0° | 19282 | 19282 | 19282 | 19282 |
| 5° | 19143 | 18696 | 19071 | 19205 |
| 10° | 18904 | 12128 | 18697 | 14589 |
| 15° | 18330 | 9661 | 18235 | 16084 |
| 20° | 18004 | 11929 | 17601 | 14760 |
| 25° | 17253 | 13630 | 16986 | 17865 |
| 30° | 16690 | 18391 | 16359 | 18897 |
| 35° | 15925 | 11489 | 15599 | 16079 |
| 40° | 14912 | 9247 | 14759 | 15816 |
| 45° | 14241 | 9248 | 13929 | 13973 |
| 50° | 13132 | 8611 | 12487 | 12699 |
| 55° | 11962 | 9583 | 11017 | 10544 |
| 60° | 10533 | 6299 | 9568 | 9106 |
| 65° | 8554 | 3427 | 7418 | 7697 |
| 70° | 6722 | 3000 | 6202 | 7788 |
| 75° | 6014 | 2219 | 5505 | 6350 |
| 80° | 5511 | 1543 | 4628 | 5189 |
| 85° | 4880 | 1141 | 3165 | 4260 |



TEST NUMBER: P#

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 1195.4 | 4.6 |
| 10°-20° | 2776.3 | 10.7 |
| 20°-30° | 4132.5 | 16.0 |
| 30°-40° | 5211.9 | 20.1 |
| 40°-50° | 4720.4 | 18.2 |
| 50°-60° | 3924.6 | 15.2 |
| 60°-70° | 2371.0 | 9.2 |
| 70°-80° | 1175.9 | 4.5 |
| 80°-90° | 361.9 | 1.4 |
| 90°-100° | 0.0 | 0.0 |
| 100°-110° | 0.0 | 0.0 |
| 110°-120° | 0.0 | 0.0 |
| 120°-130° | 0.0 | 0.0 |
| 130°-140° | 0.0 | 0.0 |
| 140°-150° | 0.0 | 0.0 |
| 150°-160° | 0.0 | 0.0 |
| 160°-170° | 0.0 | 0.0 |
| 170°-180° | 0.0 | 0.0 |
| 0°-30° | 8104.3 | 31.3 |
| 0°-40° | 13316.1 | 51.5 |
| 0°-60° | 21961.1 | 84.9 |
| 0°-90° | 25870.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 25870.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 90° | 180° | 270° | 360° | Flux |
|-----|-------|-------|-------|-------|-------|------|
| 0° | 13136 | 13136 | 13136 | 13136 | 13136 | |
| 5° | 13007 | 12810 | 12958 | 13159 | 13007 | ### |
| 15° | 12103 | 6544 | 12040 | 10894 | 12103 | 3423 |
| 25° | 10715 | 8844 | 10550 | 11592 | 10715 | 4955 |
| 35° | 8965 | 6902 | 8782 | 9659 | 8965 | 5633 |
| 45° | 6946 | 4941 | 6794 | 7466 | 6946 | 5358 |
| 55° | 4758 | 4328 | 4382 | 4762 | 4758 | 4234 |
| 65° | 2529 | 1217 | 2193 | 2735 | 2529 | 2485 |
| 75° | 1110 | 550 | 1016 | 1576 | 1110 | 1191 |
| 85° | 331 | 152 | 215 | 568 | 331 | 367 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P#

CATALOG NUMBER: 8ILED-LD5-32-W-ASY-UNV-L840-CD4-U

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° | 202.5° | 225° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 13136.5 | 13136.5 | 13136.5 | 13136.5 | 13136.5 | 13136.5 | 13136.5 | 13136.5 | 13136.5 | 13136.5 | 13136.5 |
| 2.5° | 13132.0 | 13208.1 | 13145.4 | 13132.0 | 13127.5 | 13141.0 | 13006.7 | 12966.4 | 13011.2 | 13145.4 | 13141.0 |
| 5° | 13006.7 | 13118.6 | 13100.7 | 12912.7 | 12809.8 | 12921.7 | 12859.0 | 12867.9 | 12957.5 | 13051.4 | 13006.7 |
| 7.5° | 12841.1 | 12979.8 | 12559.1 | 12026.5 | 11807.2 | 12084.7 | 12496.4 | 12818.7 | 12859.0 | 13011.2 | 13002.2 |
| 10° | 12711.3 | 12836.6 | 11646.0 | 9833.3 | 8293.7 | 9511.1 | 11771.4 | 12559.1 | 12572.5 | 12782.9 | 12290.6 |
| 12.5° | 12456.2 | 12277.1 | 9887.1 | 7707.3 | 7577.5 | 7783.4 | 9954.2 | 11981.7 | 12263.7 | 12406.9 | 10509.2 |
| 15° | 12102.6 | 11570.0 | 7635.7 | 6736.1 | 6543.6 | 6762.9 | 7501.5 | 11480.4 | 12039.9 | 12174.2 | 8974.0 |
| 17.5° | 11838.5 | 10831.4 | 7130.0 | 5966.2 | 4784.6 | 5693.2 | 7282.1 | 11055.2 | 11717.7 | 11502.8 | 9444.0 |
| 20° | 11578.9 | 10088.5 | 6333.3 | 6489.9 | 7940.1 | 6458.6 | 6431.7 | 10231.7 | 11319.3 | 10039.2 | 10321.2 |
| 22.5° | 11131.3 | 8499.6 | 5250.1 | 7738.7 | 8002.7 | 7662.6 | 5209.8 | 8786.0 | 10983.6 | 9063.5 | 8732.3 |
| 25° | 10715.1 | 7044.9 | 5657.4 | 8034.1 | 8844.2 | 7922.2 | 4941.3 | 6964.4 | 10549.5 | 8105.7 | 7944.6 |
| 27.5° | 10406.2 | 6646.6 | 7121.0 | 9238.1 | 11292.5 | 8602.5 | 6995.7 | 6431.7 | 10066.1 | 7667.1 | 9076.9 |
| 30° | 9918.4 | 6091.6 | 6910.6 | 11279.0 | 11534.2 | 11077.6 | 6789.8 | 6185.6 | 9721.5 | 8114.6 | 9681.2 |
| 32.5° | 9533.5 | 5411.2 | 7407.5 | 10639.0 | 10034.8 | 10585.3 | 7130.0 | 5769.3 | 9251.5 | 8539.8 | 9730.4 |
| 35° | 8965.0 | 5129.3 | 8383.2 | 9305.2 | 6901.7 | 9009.8 | 7671.5 | 5299.4 | 8781.5 | 7890.8 | 9663.3 |
| 37.5° | 8629.4 | 4220.7 | 9385.8 | 6310.9 | 6306.4 | 6319.8 | 9144.1 | 4672.7 | 8181.8 | 6700.3 | 9479.8 |
| 40° | 7864.0 | 4565.3 | 8548.8 | 5769.3 | 5268.0 | 5890.2 | 8571.2 | 3813.4 | 7783.4 | 5921.5 | 9068.0 |
| 42.5° | 7586.5 | 5124.8 | 7116.5 | 4739.9 | 3195.7 | 5030.8 | 7371.7 | 4833.9 | 7130.0 | 6185.6 | 7693.9 |
| 45° | 6946.5 | 4990.5 | 5232.2 | 2998.8 | 4941.3 | 3200.2 | 5209.8 | 4780.2 | 6794.3 | 6521.2 | 6467.5 |
| 47.5° | 6409.4 | 4681.7 | 4659.3 | 4605.6 | 5505.2 | 4471.3 | 4829.4 | 4489.2 | 6064.7 | 6342.2 | 6328.8 |
| 50° | 5836.5 | 4842.8 | 3714.9 | 4842.8 | 4261.0 | 4910.0 | 4131.2 | 4225.2 | 5550.0 | 5948.3 | 6463.1 |
| 52.5° | 5268.0 | 5066.6 | 2439.3 | 3620.9 | 3088.3 | 3746.2 | 2837.7 | 4171.5 | 4959.2 | 5590.3 | 5339.6 |
| 55° | 4757.8 | 5035.3 | 3446.4 | 3110.7 | 4328.1 | 2963.0 | 3110.7 | 4623.5 | 4381.8 | 5030.8 | 4498.2 |
| 57.5° | 4184.9 | 4252.0 | 3316.6 | 3795.5 | 3746.2 | 3983.5 | 3334.5 | 4099.8 | 3871.6 | 4475.8 | 4175.9 |
| 60° | 3665.7 | 3164.4 | 2439.3 | 2967.5 | 2551.2 | 3298.7 | 2484.1 | 3379.2 | 3330.0 | 3518.0 | 4099.8 |
| 62.5° | 3003.3 | 2560.2 | 2739.2 | 2170.8 | 2000.7 | 2139.4 | 2349.8 | 2448.3 | 2663.1 | 2980.9 | 3401.6 |
| 65° | 2528.8 | 2023.1 | 2698.9 | 1383.0 | 1217.4 | 1620.2 | 2748.1 | 2161.8 | 2193.1 | 2698.9 | 2833.2 |
| 67.5° | 1893.3 | 1490.4 | 1548.6 | 1110.0 | 1002.6 | 1087.6 | 1933.5 | 1674.0 | 1759.0 | 1996.2 | 2184.2 |
| 70° | 1620.2 | 1324.8 | 1123.4 | 913.1 | 908.6 | 917.5 | 1212.9 | 1248.7 | 1494.9 | 1682.9 | 1808.2 |
| 72.5° | 1351.7 | 1092.1 | 895.2 | 751.9 | 680.3 | 828.0 | 886.2 | 1029.4 | 1266.7 | 2000.7 | 1651.6 |
| 75° | 1110.0 | 1262.2 | 725.1 | 617.7 | 550.5 | 604.2 | 711.7 | 935.4 | 1016.0 | 1244.3 | 1351.7 |
| 77.5° | 895.2 | 734.0 | 568.4 | 514.7 | 492.3 | 532.6 | 550.5 | 975.7 | 796.7 | 962.3 | 1141.3 |
| 80° | 698.2 | 546.0 | 443.1 | 344.6 | 295.4 | 335.7 | 438.6 | 496.8 | 586.3 | 716.1 | 850.4 |
| 82.5° | 501.3 | 416.2 | 308.8 | 250.6 | 214.8 | 246.2 | 290.9 | 349.1 | 398.3 | 492.3 | 595.3 |
| 85° | 331.2 | 273.0 | 219.3 | 179.0 | 152.2 | 174.6 | 196.9 | 219.3 | 214.8 | 295.4 | 380.4 |
| 87.5° | 165.6 | 147.7 | 147.7 | 129.8 | 107.4 | 120.8 | 134.3 | 116.4 | 62.7 | 129.8 | 232.7 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



TEST NUMBER: P#

CATALOG NUMBER: 8ILED-LD5-32-W-ASY-UNV-L840-CD4-U

CANDELA DISTRIBUTION (continued):

| | 247.5° | 270° | 292.5° | 315° | 337.5° | 360° |
|-------|---------|---------|---------|---------|---------|---------|
| 0° | 13136.5 | 13136.5 | 13136.5 | 13136.5 | 13136.5 | 13136.5 |
| 2.5° | 13141.0 | 13176.8 | 13167.8 | 13055.9 | 13064.9 | 13132.0 |
| 5° | 13047.0 | 13158.9 | 13132.0 | 12988.8 | 12979.8 | 13006.7 |
| 7.5° | 12594.9 | 12147.3 | 12805.3 | 12863.5 | 12814.2 | 12841.1 |
| 10° | 10276.5 | 9976.6 | 10737.5 | 12133.9 | 12715.8 | 12711.3 |
| 12.5° | 9224.6 | 10003.4 | 9376.8 | 10433.1 | 12438.3 | 12456.2 |
| 15° | 10518.1 | 10894.1 | 10665.8 | 9130.6 | 12125.0 | 12102.6 |
| 17.5° | 9846.8 | 9157.5 | 9936.3 | 9578.2 | 11726.6 | 11838.5 |
| 20° | 8781.5 | 9824.4 | 8884.5 | 10025.8 | 10330.2 | 11578.9 |
| 22.5° | 10656.9 | 11068.7 | 10240.6 | 9305.2 | 9350.0 | 11131.3 |
| 25° | 10921.0 | 11592.3 | 10715.1 | 8356.3 | 8517.5 | 10715.1 |
| 27.5° | 11229.8 | 11995.2 | 11162.7 | 8880.0 | 8016.2 | 10406.2 |
| 30° | 11359.6 | 11851.9 | 11565.5 | 9560.3 | 8172.8 | 9918.4 |
| 32.5° | 11108.9 | 10912.0 | 11364.1 | 9381.3 | 8065.4 | 9533.5 |
| 35° | 9806.5 | 9658.8 | 10348.1 | 9627.5 | 7966.9 | 8965.0 |
| 37.5° | 8320.5 | 8795.0 | 9085.9 | 9663.3 | 7268.7 | 8629.4 |
| 40° | 8195.2 | 9009.8 | 8392.1 | 9381.3 | 6655.5 | 7864.0 |
| 42.5° | 8387.7 | 8526.4 | 8222.1 | 8490.6 | 6149.8 | 7586.5 |
| 45° | 7461.2 | 7465.6 | 7958.0 | 7474.6 | 6203.5 | 6946.5 |
| 47.5° | 6494.4 | 6745.0 | 6973.3 | 6660.0 | 6158.7 | 6409.4 |
| 50° | 5702.2 | 6284.0 | 6252.7 | 6288.5 | 5738.0 | 5836.5 |
| 52.5° | 5702.2 | 5460.5 | 5523.1 | 6118.4 | 5473.9 | 5268.0 |
| 55° | 4851.8 | 4762.3 | 5169.6 | 5268.0 | 5259.1 | 4757.8 |
| 57.5° | 4305.7 | 4748.8 | 4449.0 | 4534.0 | 4726.5 | 4184.9 |
| 60° | 3822.3 | 3688.1 | 4261.0 | 3974.5 | 4189.4 | 3665.7 |
| 62.5° | 2985.4 | 3101.7 | 3303.1 | 3755.2 | 3500.1 | 3003.3 |
| 65° | 2555.7 | 2734.7 | 2860.0 | 3142.0 | 2833.2 | 2528.8 |
| 67.5° | 2408.0 | 2484.1 | 2448.3 | 2877.9 | 2434.8 | 1893.3 |
| 70° | 2117.1 | 2358.7 | 2197.6 | 2157.3 | 2009.6 | 1620.2 |
| 72.5° | 1763.5 | 1839.6 | 2009.6 | 1718.7 | 1553.1 | 1351.7 |
| 75° | 1503.9 | 1575.5 | 1588.9 | 1486.0 | 1526.2 | 1110.0 |
| 77.5° | 1195.0 | 1271.1 | 1262.2 | 1266.7 | 1262.2 | 895.2 |
| 80° | 939.9 | 993.6 | 993.6 | 971.2 | 850.4 | 698.2 |
| 82.5° | 707.2 | 760.9 | 774.3 | 702.7 | 631.1 | 501.3 |
| 85° | 505.8 | 568.4 | 564.0 | 501.3 | 416.2 | 331.2 |
| 87.5° | 326.7 | 398.3 | 407.3 | 322.3 | 246.2 | 165.6 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)