

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: io LED

Report Number: P273483

Luminaire Tested: **0.05-12W-840-60-STD-UNV-AN-3F0**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P273483
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (ITL89169-GONIOPHOTOMETRY)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: 0.05-12W-840-60-STD-UNV-AN-3F0
Description: iO LIGHTING SERIES 2.0 LINEAR LED LUMINAIRE. 60 DEGREE OPTIC.
V2 HIGH OUTPUT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

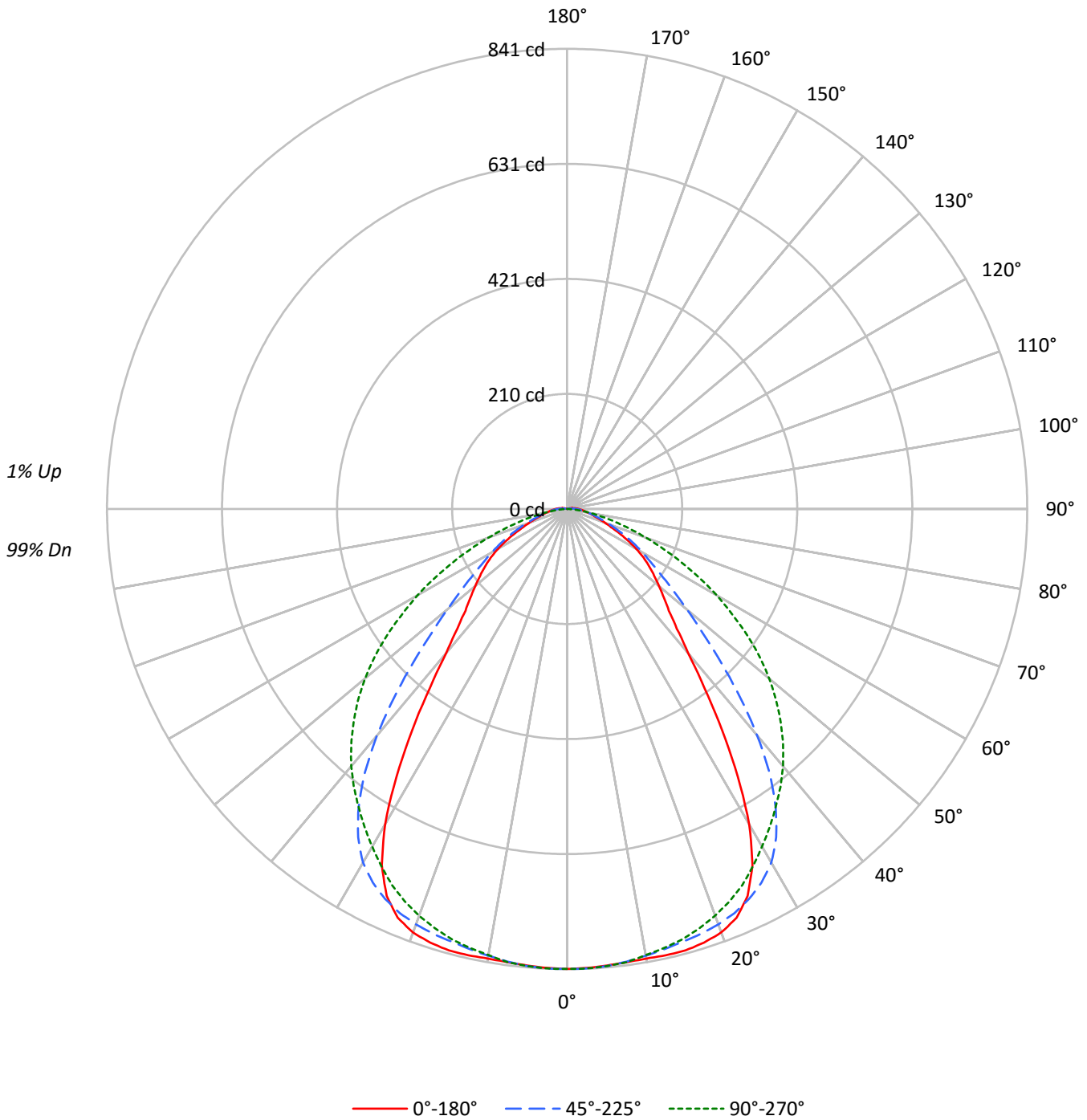
Lumens per Lamp: N/A
Luminaire Lumens: 1855.3 lumens
Efficiency: N/A
Efficacy: 52.3 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.26 / 1.26
Luminous Opening: Rectangular w/ Sides (W: 2.92' x L: 0.16' x H: 0.03')
CIE Type: Direct

Input Watts (W): 35.5
Input Voltage (V): 120
Input Current (A_{in}): 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: P273483
CATALOG NUMBER: 0.05-12W-840-60-STD-UNV-AN-3F0

Luminous Intensity Polar Plot





TEST NUMBER: P273483

CATALOG NUMBER: 0.05-12W-840-60-STD-UNV-AN-3F0

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 | 0 | |
| RCR | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 101 | 101 | 101 | 99 | | | | |
| 1 | 110 | 106 | 102 | 99 | 107 | 104 | 100 | 97 | 99 | 96 | 94 | 95 | 93 | 91 | 92 | 90 | 88 | 86 | | | | |
| 2 | 101 | 94 | 88 | 83 | 99 | 92 | 87 | 82 | 89 | 84 | 80 | 85 | 82 | 78 | 82 | 79 | 76 | 74 | | | | |
| 3 | 93 | 84 | 77 | 71 | 91 | 82 | 76 | 70 | 79 | 74 | 69 | 77 | 72 | 68 | 74 | 70 | 67 | 64 | | | | |
| 4 | 86 | 75 | 68 | 62 | 84 | 74 | 67 | 61 | 72 | 65 | 60 | 69 | 64 | 59 | 67 | 62 | 59 | 56 | | | | |
| 5 | 80 | 68 | 60 | 54 | 78 | 67 | 59 | 54 | 65 | 58 | 53 | 63 | 57 | 52 | 61 | 56 | 52 | 50 | | | | |
| 6 | 74 | 62 | 54 | 48 | 72 | 61 | 53 | 48 | 59 | 52 | 47 | 58 | 51 | 47 | 56 | 51 | 46 | 44 | | | | |
| 7 | 69 | 57 | 49 | 43 | 68 | 56 | 48 | 43 | 54 | 47 | 42 | 53 | 47 | 42 | 52 | 46 | 42 | 40 | | | | |
| 8 | 65 | 52 | 44 | 39 | 63 | 51 | 44 | 39 | 50 | 43 | 38 | 49 | 43 | 38 | 48 | 42 | 38 | 36 | | | | |
| 9 | 61 | 48 | 40 | 35 | 59 | 47 | 40 | 35 | 46 | 40 | 35 | 45 | 39 | 35 | 44 | 39 | 34 | 33 | | | | |
| 10 | 57 | 45 | 37 | 32 | 56 | 44 | 37 | 32 | 43 | 36 | 32 | 42 | 36 | 32 | 41 | 36 | 32 | 30 | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 19214 | 19214 | 19214 |
| 5° | 18949 | 19039 | 19224 |
| 10° | 18828 | 18841 | 19185 |
| 15° | 18947 | 18761 | 19219 |
| 20° | 18925 | 18824 | 19173 |
| 25° | 18300 | 18784 | 19038 |
| 30° | 16073 | 18417 | 18706 |
| 35° | 12386 | 17106 | 18432 |
| 40° | 9028 | 14651 | 18178 |
| 45° | 7318 | 11500 | 17695 |
| 50° | 6544 | 8869 | 16970 |
| 55° | 5940 | 7100 | 15810 |
| 60° | 5228 | 6015 | 14221 |
| 65° | 4215 | 5060 | 12206 |
| 70° | 3385 | 4153 | 9961 |
| 75° | 2861 | 3425 | 7700 |
| 80° | 2626 | 2988 | 5450 |
| 85° | 2638 | 2804 | 3022 |



TEST NUMBER: P273483

CATALOG NUMBER: 0.05-12W-840-60-STD-UNV-AN-3F0

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 79.8 | 4.3 |
| 10°-20° | 232.1 | 12.5 |
| 20°-30° | 355.1 | 19.1 |
| 30°-40° | 383.5 | 20.7 |
| 40°-50° | 319.1 | 17.2 |
| 50°-60° | 235.6 | 12.7 |
| 60°-70° | 142.8 | 7.7 |
| 70°-80° | 68.2 | 3.7 |
| 80°-90° | 27.4 | 1.5 |
| 90°-100° | 9.4 | 0.5 |
| 100°-110° | 2.2 | 0.1 |
| 110°-120° | 0.1 | 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° | 667.0 | 35.9 |
| 0°-40° | 1050.5 | 56.6 |
| 0°-60° | 1605.2 | 86.5 |
| 0°-90° | 1843.6 | 99.4 |
| 90°-120° | 11.8 | 0.6 |
| 90°-150° | 11.8 | 0.6 |
| 90°-180° | 12.0 | 0.6 |
| 0°-180° | 1855.3 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-----|-------|-----|-------|-----|------|
| 0° | 841 | 841 | 841 | 841 | 841 | |
| 5° | 838 | 838 | 838 | 838 | 838 | 80 |
| 15° | 835 | 829 | 818 | 812 | 814 | 236 |
| 25° | 780 | 785 | 787 | 763 | 758 | 353 |
| 35° | 494 | 552 | 665 | 675 | 665 | 309 |
| 45° | 263 | 286 | 399 | 548 | 552 | 208 |
| 55° | 183 | 185 | 209 | 360 | 402 | 164 |
| 65° | 105 | 108 | 118 | 177 | 230 | 105 |
| 75° | 52 | 53 | 56 | 71 | 90 | 56 |
| 85° | 29 | 28 | 25 | 21 | 13 | 25 |
| 90° | 21 | 20 | 17 | 9 | 0 | 12 |
| 95° | 15 | 14 | 10 | 2 | 0 | 11 |
| 105° | 5 | 4 | 1 | 0 | 0 | 6 |
| 115° | 0 | 0 | 0 | 0 | 0 | 1 |
| 125° | 0 | 0 | 0 | 0 | 0 | 0 |
| 135° | 0 | 0 | 0 | 0 | 0 | 0 |
| 145° | 0 | 0 | 0 | 0 | 0 | 0 |
| 155° | 0 | 0 | 0 | 0 | 0 | 0 |
| 165° | 0 | 0 | 0 | 0 | 0 | 0 |
| 175° | 0 | 0 | 0 | 0 | 0 | 0 |
| 180° | 0 | 0 | 0 | 0 | 0 | 0 |



TEST NUMBER: P273483

CATALOG NUMBER: 0.05-12W-840-60-STD-UNV-AN-3F0

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 840.6 | 840.6 | 840.6 | 840.6 | 840.6 | 840.6 | 840.6 | 840.6 | 840.6 | 840.6 | 840.6 |
| 2.5° | 839.6 | 839.6 | 839.6 | 839.6 | 839.6 | 839.7 | 839.9 | 840.2 | 840.4 | 840.6 | 840.6 |
| 5° | 837.5 | 837.7 | 837.9 | 838.2 | 838.4 | 838.5 | 838.5 | 838.5 | 838.5 | 838.5 | 838.5 |
| 7.5° | 835.3 | 835.3 | 835.3 | 835.3 | 835.3 | 835.2 | 835.0 | 834.7 | 834.5 | 834.3 | 834.3 |
| 10° | 834.3 | 833.9 | 833.3 | 832.9 | 832.4 | 831.8 | 831.1 | 830.4 | 829.7 | 829.0 | 828.8 |
| 12.5° | 835.3 | 834.4 | 833.4 | 832.5 | 831.5 | 830.3 | 828.7 | 827.0 | 825.4 | 823.7 | 822.9 |
| 15° | 835.3 | 834.0 | 832.5 | 831.1 | 829.7 | 827.8 | 825.5 | 823.0 | 820.7 | 818.4 | 816.7 |
| 17.5° | 831.1 | 829.9 | 828.8 | 827.6 | 826.4 | 824.5 | 821.9 | 819.3 | 816.7 | 814.1 | 811.3 |
| 20° | 823.7 | 822.5 | 821.4 | 820.2 | 819.0 | 817.2 | 814.9 | 812.4 | 810.1 | 807.8 | 803.8 |
| 22.5° | 808.8 | 808.1 | 807.5 | 806.7 | 806.0 | 804.9 | 803.5 | 802.2 | 800.7 | 799.3 | 794.6 |
| 25° | 780.2 | 781.4 | 782.6 | 783.7 | 784.9 | 785.6 | 785.8 | 786.2 | 786.4 | 786.6 | 781.2 |
| 27.5° | 733.6 | 737.4 | 741.1 | 744.9 | 748.6 | 752.7 | 756.9 | 761.1 | 765.4 | 769.6 | 764.0 |
| 30° | 665.7 | 673.0 | 680.4 | 687.7 | 695.0 | 703.9 | 714.5 | 725.1 | 735.7 | 746.3 | 741.1 |
| 32.5° | 580.9 | 591.5 | 602.1 | 612.7 | 623.3 | 637.9 | 656.2 | 674.5 | 693.0 | 711.3 | 708.8 |
| 35° | 494.0 | 506.0 | 518.1 | 530.0 | 542.0 | 561.0 | 587.0 | 612.8 | 638.8 | 664.7 | 667.2 |
| 37.5° | 411.3 | 422.3 | 433.5 | 444.5 | 455.6 | 477.4 | 509.9 | 542.4 | 574.9 | 607.4 | 617.3 |
| 40° | 343.5 | 353.1 | 362.8 | 372.4 | 382.1 | 404.0 | 438.1 | 472.4 | 506.5 | 540.6 | 559.3 |
| 42.5° | 296.8 | 303.4 | 310.0 | 316.6 | 323.2 | 342.3 | 373.9 | 405.4 | 437.0 | 468.6 | 495.9 |
| 45° | 262.9 | 266.9 | 271.0 | 274.9 | 278.9 | 294.0 | 320.1 | 346.3 | 372.4 | 398.6 | 433.7 |
| 47.5° | 239.6 | 241.7 | 243.8 | 245.9 | 248.1 | 258.8 | 278.1 | 297.5 | 316.8 | 336.0 | 376.1 |
| 50° | 219.4 | 220.4 | 221.3 | 222.3 | 223.3 | 230.5 | 244.1 | 257.8 | 271.5 | 285.2 | 326.4 |
| 52.5° | 200.4 | 201.1 | 201.7 | 202.5 | 203.2 | 207.9 | 216.6 | 225.4 | 234.1 | 242.8 | 282.1 |
| 55° | 183.4 | 183.4 | 183.4 | 183.4 | 183.4 | 186.3 | 191.9 | 197.5 | 203.2 | 208.8 | 243.9 |
| 57.5° | 165.4 | 165.2 | 164.9 | 164.6 | 164.4 | 166.2 | 169.9 | 173.7 | 177.5 | 181.3 | 210.7 |
| 60° | 146.3 | 146.1 | 145.9 | 145.5 | 145.3 | 146.7 | 149.8 | 152.9 | 155.9 | 159.0 | 182.1 |
| 62.5° | 125.1 | 125.3 | 125.5 | 125.8 | 126.0 | 127.4 | 130.1 | 132.6 | 135.3 | 137.8 | 155.5 |
| 65° | 104.9 | 105.7 | 106.3 | 107.1 | 107.8 | 109.2 | 111.3 | 113.4 | 115.5 | 117.7 | 130.8 |
| 67.5° | 86.9 | 87.7 | 88.3 | 89.0 | 89.8 | 91.1 | 93.0 | 94.8 | 96.7 | 98.6 | 108.4 |
| 70° | 73.1 | 73.6 | 74.1 | 74.5 | 75.1 | 76.1 | 77.7 | 79.4 | 81.0 | 82.7 | 89.8 |
| 72.5° | 61.5 | 61.7 | 61.9 | 62.2 | 62.4 | 63.2 | 64.3 | 65.5 | 66.7 | 67.8 | 73.0 |
| 75° | 51.9 | 52.2 | 52.4 | 52.7 | 52.9 | 53.3 | 54.1 | 54.8 | 55.4 | 56.2 | 59.5 |
| 77.5° | 44.5 | 44.7 | 44.9 | 45.3 | 45.5 | 45.7 | 45.9 | 46.2 | 46.4 | 46.6 | 48.3 |
| 80° | 38.2 | 38.2 | 38.2 | 38.2 | 38.2 | 38.2 | 38.2 | 38.2 | 38.2 | 38.2 | 38.6 |
| 82.5° | 32.9 | 32.9 | 32.9 | 32.9 | 32.9 | 32.8 | 32.5 | 32.2 | 32.0 | 31.8 | 31.4 |
| 85° | 28.6 | 28.6 | 28.6 | 28.6 | 28.6 | 28.3 | 27.6 | 26.8 | 26.2 | 25.4 | 24.5 |
| 87.5° | 24.4 | 24.4 | 24.4 | 24.4 | 24.4 | 24.1 | 23.3 | 22.6 | 21.9 | 21.2 | 19.8 |
| 90° | 21.2 | 21.0 | 20.8 | 20.5 | 20.2 | 19.8 | 19.1 | 18.3 | 17.7 | 17.0 | 15.3 |
| 92.5° | 18.0 | 17.8 | 17.6 | 17.3 | 17.1 | 16.5 | 15.6 | 14.6 | 13.7 | 12.7 | 11.0 |
| 95° | 14.8 | 14.6 | 14.4 | 14.1 | 13.9 | 13.4 | 12.4 | 11.4 | 10.5 | 9.5 | 7.8 |
| 97.5° | 11.7 | 11.4 | 11.2 | 10.9 | 10.7 | 10.2 | 9.2 | 8.3 | 7.3 | 6.4 | 5.2 |
| 100° | 9.5 | 9.3 | 9.1 | 8.8 | 8.6 | 8.1 | 7.1 | 6.1 | 5.2 | 4.2 | 3.3 |
| 102.5° | 7.4 | 7.2 | 7.0 | 6.7 | 6.5 | 5.9 | 5.0 | 4.0 | 3.1 | 2.1 | 1.7 |
| 105° | 5.3 | 5.1 | 4.9 | 4.6 | 4.3 | 3.9 | 3.2 | 2.4 | 1.8 | 1.1 | 0.8 |
| 107.5° | 3.2 | 3.0 | 2.8 | 2.4 | 2.2 | 1.9 | 1.4 | 1.0 | 0.4 | 0.0 | 0.0 |
| 110° | 2.1 | 1.9 | 1.7 | 1.4 | 1.2 | 1.0 | 0.7 | 0.4 | 0.2 | 0.0 | 0.0 |



TEST NUMBER: P273483

CATALOG NUMBER: 0.05-12W-840-60-STD-UNV-AN-3F0

CANDELA DISTRIBUTION (continued):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|--------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 112.5° | 1.1 | 0.8 | 0.6 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 115° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 117.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 120° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 122.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 125° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 127.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 130° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 132.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 135° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 137.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 140° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 142.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 145° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 147.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 150° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 152.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 155° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 157.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 160° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 162.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 165° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 167.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 170° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 172.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 175° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 177.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 180° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



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CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 840.6 | 840.6 | 840.6 | 840.6 | 840.6 | 840.6 | 840.6 | 840.6 |
| 2.5° | 840.6 | 840.6 | 840.6 | 840.6 | 840.6 | 840.6 | 840.6 | 840.6 |
| 5° | 838.5 | 838.5 | 838.5 | 838.5 | 838.5 | 838.5 | 838.5 | 838.5 |
| 7.5° | 834.3 | 834.3 | 834.3 | 834.4 | 834.6 | 834.9 | 835.1 | 835.3 |
| 10° | 828.6 | 828.2 | 828.0 | 827.9 | 827.9 | 827.9 | 827.9 | 827.9 |
| 12.5° | 822.3 | 821.6 | 820.8 | 820.6 | 820.8 | 821.1 | 821.4 | 821.6 |
| 15° | 815.1 | 813.4 | 811.8 | 811.3 | 812.0 | 812.8 | 813.4 | 814.1 |
| 17.5° | 808.5 | 805.7 | 802.8 | 801.6 | 802.2 | 802.6 | 803.1 | 803.5 |
| 20° | 799.7 | 795.8 | 791.8 | 789.9 | 790.1 | 790.4 | 790.6 | 790.8 |
| 22.5° | 789.9 | 785.2 | 780.4 | 777.9 | 777.4 | 776.9 | 776.4 | 776.0 |
| 25° | 775.8 | 770.4 | 765.0 | 761.8 | 760.8 | 759.9 | 758.9 | 758.0 |
| 27.5° | 758.3 | 752.7 | 747.0 | 743.2 | 741.3 | 739.5 | 737.6 | 735.7 |
| 30° | 735.9 | 730.7 | 725.5 | 721.8 | 719.5 | 717.0 | 714.7 | 712.4 |
| 32.5° | 706.1 | 703.6 | 700.9 | 698.5 | 696.2 | 693.7 | 691.4 | 689.1 |
| 35° | 669.9 | 672.4 | 675.1 | 675.1 | 672.4 | 669.9 | 667.2 | 664.7 |
| 37.5° | 627.3 | 637.1 | 647.0 | 650.7 | 648.0 | 645.5 | 642.8 | 640.3 |
| 40° | 577.9 | 596.5 | 615.1 | 623.2 | 620.9 | 618.5 | 616.1 | 613.8 |
| 42.5° | 523.3 | 550.5 | 577.9 | 590.7 | 589.1 | 587.4 | 585.8 | 584.1 |
| 45° | 468.8 | 503.9 | 538.9 | 556.1 | 555.2 | 554.2 | 553.3 | 552.3 |
| 47.5° | 416.2 | 456.2 | 496.2 | 516.5 | 517.0 | 517.4 | 518.0 | 518.4 |
| 50° | 367.6 | 408.9 | 450.1 | 471.9 | 474.6 | 477.1 | 479.8 | 482.3 |
| 52.5° | 321.4 | 360.7 | 400.1 | 422.3 | 427.5 | 432.7 | 437.9 | 443.1 |
| 55° | 279.0 | 314.1 | 349.2 | 370.7 | 378.4 | 386.2 | 394.0 | 401.8 |
| 57.5° | 240.2 | 269.6 | 299.0 | 318.7 | 328.3 | 338.0 | 347.6 | 357.2 |
| 60° | 205.2 | 228.2 | 251.3 | 268.8 | 280.6 | 292.4 | 304.1 | 315.9 |
| 62.5° | 173.1 | 190.8 | 208.5 | 223.5 | 235.7 | 248.0 | 260.1 | 272.4 |
| 65° | 144.1 | 157.2 | 170.5 | 183.0 | 194.7 | 206.5 | 218.3 | 230.0 |
| 67.5° | 118.4 | 128.3 | 138.1 | 148.3 | 158.7 | 169.0 | 179.4 | 189.8 |
| 70° | 96.8 | 103.9 | 111.0 | 118.7 | 127.2 | 135.7 | 144.2 | 152.7 |
| 72.5° | 78.2 | 83.4 | 88.6 | 94.2 | 100.4 | 106.4 | 112.6 | 118.7 |
| 75° | 62.8 | 66.0 | 69.3 | 73.1 | 77.4 | 81.6 | 85.9 | 90.1 |
| 77.5° | 49.9 | 51.6 | 53.2 | 55.2 | 57.6 | 60.0 | 62.3 | 64.7 |
| 80° | 39.1 | 39.5 | 40.1 | 40.6 | 41.3 | 42.1 | 42.7 | 43.5 |
| 82.5° | 30.8 | 30.4 | 29.9 | 29.4 | 28.6 | 27.9 | 27.2 | 26.5 |
| 85° | 23.5 | 22.6 | 21.6 | 20.2 | 18.3 | 16.5 | 14.6 | 12.7 |
| 87.5° | 18.3 | 17.0 | 15.6 | 13.7 | 11.3 | 8.9 | 6.6 | 4.2 |
| 90° | 13.7 | 12.0 | 10.4 | 8.5 | 6.4 | 4.2 | 2.1 | 0.0 |
| 92.5° | 9.4 | 7.7 | 6.1 | 4.7 | 3.5 | 2.3 | 1.2 | 0.0 |
| 95° | 6.3 | 4.6 | 3.0 | 1.9 | 1.4 | 1.0 | 0.4 | 0.0 |
| 97.5° | 4.0 | 2.9 | 1.7 | 1.0 | 0.7 | 0.4 | 0.2 | 0.0 |
| 100° | 2.3 | 1.4 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 102.5° | 1.2 | 0.7 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 105° | 0.6 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 107.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 110° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



TEST NUMBER: P273483

CATALOG NUMBER: 0.05-12W-840-60-STD-UNV-AN-3F0

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|--------|-----|-----|-----|-----|-----|-----|-----|-----|
| 112.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 115° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 117.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 120° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 122.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 125° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 127.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 130° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 132.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 135° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 137.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 140° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 142.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 145° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 147.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 150° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 152.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 155° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 157.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 160° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 162.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 165° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 167.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 170° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 172.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 175° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 177.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 180° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)