

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: P567499

Luminaire Tested: **8SNX-168HL-LC-UNV-L835-CD**

Issue Date: 9/15/2022



**Test Information**

Test Method: LM-79-08  
Report Number: P567499  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2205-663-3)  
Test Lab: INNOVATION CENTER  
Issue Date: 9/15/2022  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 8SNX-168HL-LC-UNV-L835-CD  
Description: 8FT 16800 LUMEN, SNX FIXTURE WITH 3500K, 80CRI LEDS AND LC LENS  
Light Source: -  
Ballast/Driver: -

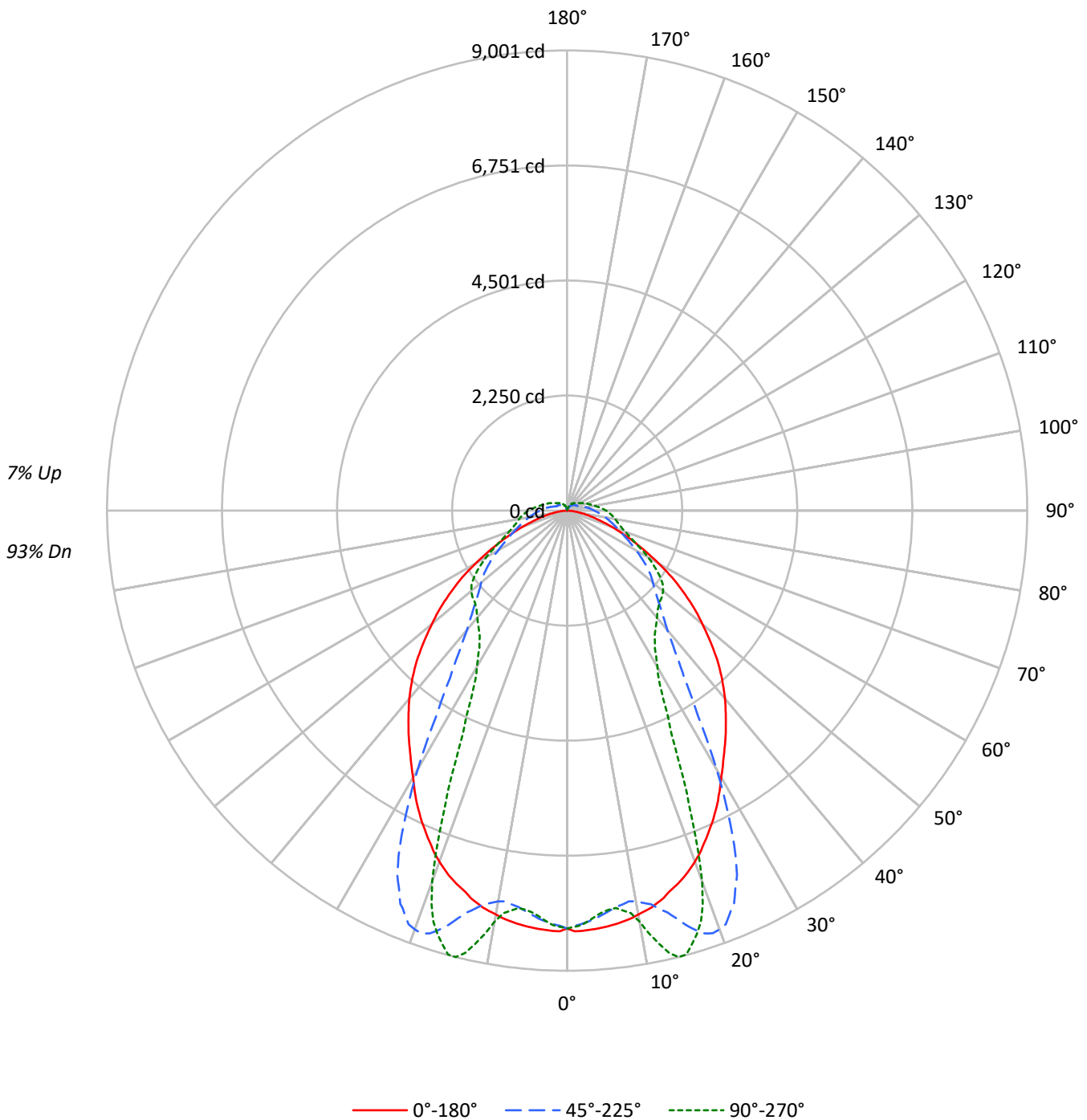
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 18168.0 lumens  
Efficiency: N/A  
Efficacy: 156.9 lumens/watt  
Spacing Criteria (0/90/45): 1.12 / 0.89 / 1.01  
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 8' x H: 0.17')  
CIE Type: Direct  
  
Input Watts (W): 115.8  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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

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CATALOG NUMBER: 8SNX-168HL-LC-UNV-L835-CD

### Luminous Intensity Polar Plot





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**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 | 0  |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |    |    |
| 0   | 117 | 117 | 117 | 117 | 114 | 114 | 114 | 114 | 107 | 107 | 107 | 101 | 101 | 101 | 96 | 96 | 96 | 93 |
| 1   | 107 | 103 | 99  | 95  | 104 | 100 | 96  | 93  | 94  | 91  | 89  | 89  | 87  | 85  | 85 | 83 | 81 | 78 |
| 2   | 99  | 91  | 84  | 79  | 95  | 88  | 83  | 78  | 84  | 79  | 75  | 80  | 76  | 72  | 76 | 72 | 69 | 67 |
| 3   | 91  | 81  | 73  | 67  | 88  | 79  | 72  | 66  | 75  | 69  | 64  | 71  | 66  | 62  | 68 | 64 | 60 | 58 |
| 4   | 84  | 73  | 64  | 58  | 81  | 71  | 63  | 57  | 68  | 61  | 56  | 64  | 59  | 54  | 62 | 57 | 53 | 51 |
| 5   | 78  | 66  | 57  | 51  | 75  | 64  | 56  | 51  | 61  | 55  | 49  | 59  | 53  | 48  | 56 | 51 | 47 | 45 |
| 6   | 72  | 60  | 51  | 45  | 70  | 58  | 51  | 45  | 56  | 49  | 44  | 54  | 48  | 43  | 52 | 46 | 42 | 40 |
| 7   | 67  | 55  | 46  | 41  | 65  | 54  | 46  | 40  | 51  | 45  | 40  | 49  | 43  | 39  | 48 | 42 | 38 | 36 |
| 8   | 63  | 50  | 42  | 37  | 61  | 49  | 42  | 36  | 47  | 41  | 36  | 46  | 40  | 35  | 44 | 39 | 35 | 33 |
| 9   | 59  | 46  | 39  | 34  | 57  | 46  | 38  | 33  | 44  | 37  | 33  | 42  | 36  | 32  | 41 | 36 | 32 | 30 |
| 10  | 56  | 43  | 36  | 31  | 54  | 42  | 35  | 30  | 41  | 34  | 30  | 40  | 34  | 30  | 38 | 33 | 29 | 27 |

**AVERAGE LUMINANCE (cd/sqm):**

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 43996 | 43996 | 43996 |
| 5°  | 44128 | 41112 | 40272 |
| 10° | 43680 | 39081 | 39935 |
| 15° | 42743 | 40695 | 42513 |
| 20° | 41532 | 42426 | 35580 |
| 25° | 39529 | 38069 | 21877 |
| 30° | 37014 | 28361 | 15833 |
| 35° | 34974 | 19579 | 13357 |
| 40° | 33155 | 15199 | 12310 |
| 45° | 31023 | 12942 | 11641 |
| 50° | 28215 | 11617 | 11428 |
| 55° | 25250 | 10508 | 10573 |
| 60° | 21412 | 9094  | 9146  |
| 65° | 17415 | 7921  | 7633  |
| 70° | 13666 | 7120  | 6721  |
| 75° | 10596 | 6620  | 6267  |
| 80° | 7459  | 6270  | 6204  |
| 85° | 4150  | 5982  | 6160  |



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**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 760.7   | 4.2       |
| 10°-20°   | 2324.4  | 12.8      |
| 20°-30°   | 3129.8  | 17.2      |
| 30°-40°   | 2962.0  | 16.3      |
| 40°-50°   | 2614.4  | 14.4      |
| 50°-60°   | 2123.5  | 11.7      |
| 60°-70°   | 1444.2  | 7.9       |
| 70°-80°   | 929.3   | 5.1       |
| 80°-90°   | 617.9   | 3.4       |
| 90°-100°  | 424.7   | 2.3       |
| 100°-110° | 285.0   | 1.6       |
| 110°-120° | 201.1   | 1.1       |
| 120°-130° | 143.6   | 0.8       |
| 130°-140° | 101.3   | 0.6       |
| 140°-150° | 62.9    | 0.3       |
| 150°-160° | 30.7    | 0.2       |
| 160°-170° | 10.7    | 0.1       |
| 170°-180° | 1.9     | 0.0       |
| 0°-30°    | 6214.8  | 34.2      |
| 0°-40°    | 9176.8  | 50.5      |
| 0°-60°    | 13914.7 | 76.6      |
| 0°-90°    | 16906.0 | 93.1      |
| 90°-120°  | 910.8   | 5.0       |
| 90°-150°  | 1218.7  | 6.7       |
| 90°-180°  | 1262.0  | 6.9       |
| 0°-180°   | 18168.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 8175 | 8175  | 8175 | 8175  | 8175 |      |
| 5°   | 8183 | 8108  | 7933 | 7928  | 7889 | 776  |
| 15°  | 7714 | 7664  | 8255 | 8985  | 8993 | 2175 |
| 25°  | 6721 | 7969  | 7864 | 5712  | 4829 | 3084 |
| 35°  | 5401 | 7578  | 3994 | 3076  | 2982 | 3380 |
| 45°  | 4161 | 5098  | 2527 | 2496  | 2549 | 3195 |
| 55°  | 2771 | 3015  | 1897 | 2119  | 2200 | 2475 |
| 65°  | 1429 | 1626  | 1270 | 1412  | 1456 | 1434 |
| 75°  | 549  | 768   | 896  | 1004  | 1051 | 598  |
| 85°  | 83   | 327   | 635  | 804   | 860  | 109  |
| 90°  | 3    | 228   | 530  | 713   | 760  | 5    |
| 95°  | 3    | 175   | 447  | 605   | 646  | 2    |
| 105° | 6    | 122   | 294  | 413   | 463  | 5    |
| 115° | 6    | 105   | 216  | 308   | 347  | 6    |
| 125° | 8    | 89    | 186  | 233   | 250  | 8    |
| 135° | 11   | 69    | 153  | 194   | 205  | 9    |
| 145° | 11   | 50    | 108  | 150   | 164  | 8    |
| 155° | 14   | 30    | 67   | 100   | 114  | 6    |
| 165° | 14   | 19    | 36   | 50    | 61   | 4    |
| 175° | 17   | 17    | 17   | 17    | 14   | 2    |
| 180° | 14   | 14    | 14   | 14    | 14   |      |



TEST NUMBER: P567499

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 8174.7 | 8174.7 | 8174.7 | 8174.7 | 8174.7 |
| 1°    | 8230.2 | 8205.2 | 8122.0 | 8166.4 | 8144.2 |
| 2°    | 8227.4 | 8185.8 | 8091.5 | 8141.4 | 8113.7 |
| 3°    | 8213.5 | 8169.2 | 8047.1 | 8077.6 | 8036.0 |
| 4°    | 8199.7 | 8147.0 | 7999.9 | 7999.9 | 7952.8 |
| 5°    | 8183.0 | 8108.1 | 7933.4 | 7927.8 | 7889.0 |
| 6°    | 8163.6 | 8077.6 | 7875.1 | 7869.6 | 7847.4 |
| 7°    | 8135.9 | 8024.9 | 7811.3 | 7850.2 | 7833.5 |
| 8°    | 8102.6 | 7975.0 | 7778.0 | 7875.1 | 7900.1 |
| 9°    | 8072.1 | 7914.0 | 7739.2 | 7952.8 | 7972.2 |
| 10°   | 8022.1 | 7858.5 | 7764.2 | 8108.1 | 8166.4 |
| 11°   | 7980.5 | 7811.3 | 7819.6 | 8260.7 | 8435.5 |
| 12°   | 7938.9 | 7761.4 | 7872.3 | 8452.1 | 8665.7 |
| 13°   | 7869.6 | 7722.6 | 7988.9 | 8660.1 | 8879.3 |
| 14°   | 7808.5 | 7692.0 | 8102.6 | 8871.0 | 9001.3 |
| 15°   | 7714.2 | 7664.3 | 8255.1 | 8984.7 | 8993.0 |
| 16°   | 7650.4 | 7644.9 | 8432.7 | 8993.0 | 8837.7 |
| 17°   | 7578.3 | 7636.6 | 8576.9 | 8848.8 | 8665.7 |
| 18°   | 7497.9 | 7653.2 | 8696.2 | 8668.5 | 8457.6 |
| 19°   | 7406.3 | 7669.9 | 8746.1 | 8418.8 | 8147.0 |
| 20°   | 7306.5 | 7694.8 | 8718.4 | 8158.1 | 7719.8 |
| 21°   | 7206.6 | 7728.1 | 8665.7 | 7883.4 | 7159.5 |
| 22.5° | 7020.8 | 7808.5 | 8416.0 | 7112.3 | 6233.0 |
| 23°   | 6968.1 | 7825.2 | 8357.8 | 6871.0 | 5991.6 |
| 24°   | 6837.7 | 7894.5 | 8091.5 | 6307.9 | 5353.6 |
| 25°   | 6721.2 | 7969.4 | 7864.0 | 5711.5 | 4829.4 |
| 26°   | 6590.8 | 8024.9 | 7520.1 | 5162.2 | 4507.6 |
| 27°   | 6463.2 | 8058.2 | 7128.9 | 4735.1 | 4147.0 |
| 28°   | 6316.2 | 8094.3 | 6704.5 | 4366.1 | 3875.1 |
| 29°   | 6177.5 | 8099.8 | 6285.7 | 4072.1 | 3661.6 |
| 30°   | 6027.7 | 8072.1 | 5844.6 | 3836.3 | 3528.4 |
| 32.5° | 5700.4 | 7919.5 | 4765.6 | 3386.9 | 3195.5 |
| 35°   | 5400.8 | 7578.3 | 3994.4 | 3076.3 | 2982.0 |
| 37.5° | 5098.4 | 7040.2 | 3453.5 | 2882.1 | 2851.6 |
| 40°   | 4801.6 | 6402.2 | 3045.8 | 2726.8 | 2732.3 |
| 42.5° | 4488.2 | 5744.8 | 2765.6 | 2599.2 | 2624.1 |
| 45°   | 4160.9 | 5098.4 | 2527.0 | 2496.5 | 2549.2 |
| 47.5° | 3797.5 | 4507.6 | 2338.4 | 2429.9 | 2510.4 |
| 50°   | 3453.5 | 3922.3 | 2191.4 | 2366.1 | 2449.4 |
| 52.5° | 3126.2 | 3442.4 | 2058.2 | 2258.0 | 2355.0 |
| 55°   | 2771.1 | 3015.2 | 1897.4 | 2119.3 | 2199.7 |
| 57.5° | 2432.7 | 2629.7 | 1728.1 | 1947.3 | 2019.4 |
| 60°   | 2061.0 | 2249.6 | 1556.2 | 1761.4 | 1830.8 |
| 62.5° | 1725.4 | 1925.1 | 1409.1 | 1575.6 | 1631.1 |
| 65°   | 1428.6 | 1625.5 | 1270.4 | 1411.9 | 1456.3 |



TEST NUMBER: P567499

CATALOG NUMBER: 8SNX-168HL-LC-UNV-L835-CD

**CANDELA DISTRIBUTION (continued):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 67.5°  | 1165.0 | 1375.9 | 1156.7 | 1276.0 | 1317.6 |
| 70°    | 918.2  | 1140.1 | 1056.9 | 1165.0 | 1209.4 |
| 72.5°  | 718.4  | 943.1  | 973.6  | 1073.5 | 1117.9 |
| 75°    | 549.2  | 768.4  | 896.0  | 1004.2 | 1051.3 |
| 77.5°  | 407.8  | 626.9  | 823.9  | 948.7  | 998.6  |
| 80°    | 269.1  | 499.3  | 760.1  | 898.7  | 957.0  |
| 82.5°  | 169.2  | 402.2  | 696.3  | 848.8  | 909.8  |
| 85°    | 83.2   | 327.3  | 635.2  | 804.4  | 859.9  |
| 87.5°  | 27.7   | 271.8  | 579.7  | 760.1  | 807.2  |
| 90°    | 2.8    | 227.5  | 529.8  | 712.9  | 760.1  |
| 92.5°  | 2.8    | 196.9  | 488.2  | 657.4  | 704.6  |
| 95°    | 2.8    | 174.8  | 446.6  | 604.7  | 646.3  |
| 97.5°  | 2.8    | 158.1  | 407.8  | 549.2  | 593.6  |
| 100°   | 2.8    | 141.5  | 366.2  | 496.5  | 543.7  |
| 102.5° | 5.5    | 130.4  | 330.1  | 452.1  | 502.1  |
| 105°   | 5.5    | 122.1  | 294.0  | 413.3  | 463.2  |
| 107.5° | 5.5    | 116.5  | 263.5  | 382.8  | 430.0  |
| 110°   | 5.5    | 111.0  | 241.3  | 355.1  | 405.0  |
| 112.5° | 5.5    | 108.2  | 227.5  | 330.1  | 377.3  |
| 115°   | 5.5    | 105.4  | 216.4  | 307.9  | 346.7  |
| 117.5° | 8.3    | 102.6  | 208.0  | 285.7  | 316.2  |
| 120°   | 8.3    | 97.1   | 202.5  | 266.3  | 291.3  |
| 122.5° | 8.3    | 91.5   | 194.2  | 249.7  | 269.1  |
| 125°   | 8.3    | 88.8   | 185.9  | 233.0  | 249.7  |
| 127.5° | 8.3    | 83.2   | 177.5  | 219.1  | 235.8  |
| 130°   | 11.1   | 77.7   | 169.2  | 208.0  | 221.9  |
| 132.5° | 11.1   | 72.1   | 160.9  | 202.5  | 213.6  |
| 135°   | 11.1   | 69.3   | 152.6  | 194.2  | 205.3  |
| 137.5° | 11.1   | 63.8   | 144.2  | 185.9  | 196.9  |
| 140°   | 11.1   | 58.3   | 133.1  | 174.8  | 185.9  |
| 142.5° | 11.1   | 55.5   | 122.1  | 163.7  | 174.8  |
| 145°   | 11.1   | 49.9   | 108.2  | 149.8  | 163.7  |
| 147.5° | 13.9   | 47.2   | 97.1   | 138.7  | 149.8  |
| 150°   | 13.9   | 41.6   | 86.0   | 127.6  | 138.7  |
| 152.5° | 13.9   | 36.1   | 74.9   | 113.7  | 124.8  |
| 155°   | 13.9   | 30.5   | 66.6   | 99.9   | 113.7  |
| 157.5° | 13.9   | 27.7   | 58.3   | 83.2   | 99.9   |
| 160°   | 13.9   | 25.0   | 49.9   | 72.1   | 86.0   |
| 162.5° | 13.9   | 22.2   | 44.4   | 61.0   | 74.9   |
| 165°   | 13.9   | 19.4   | 36.1   | 49.9   | 61.0   |
| 167.5° | 16.6   | 19.4   | 30.5   | 38.8   | 49.9   |
| 170°   | 16.6   | 19.4   | 25.0   | 30.5   | 38.8   |
| 172.5° | 16.6   | 16.6   | 19.4   | 22.2   | 25.0   |
| 175°   | 16.6   | 16.6   | 16.6   | 16.6   | 13.9   |
| 177.5° | 16.6   | 16.6   | 16.6   | 13.9   | 13.9   |



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**CANDELA DISTRIBUTION (continued):**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  |
|------|------|-------|------|-------|------|
| 180° | 13.9 | 13.9  | 13.9 | 13.9  | 13.9 |

(END OF REPORT)