

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: SHAPER

Report Number: P402562

Luminaire Tested: **ShSe-DRUM-3-L30-80-UNV-STD**

Issue Date: 6/5/2020

Test Information

Test Method: LM-79-08
Report Number: P402562
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2004-737-4)
Test Lab: INNOVATIONS CENTER
Issue Date: 6/5/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: SHAPER
Catalog Number: ShSe-DRUM-3-L30-80-UNV-STD
Description: SHAPER SENSE CIRCLE
LIGHT LEVEL 3
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

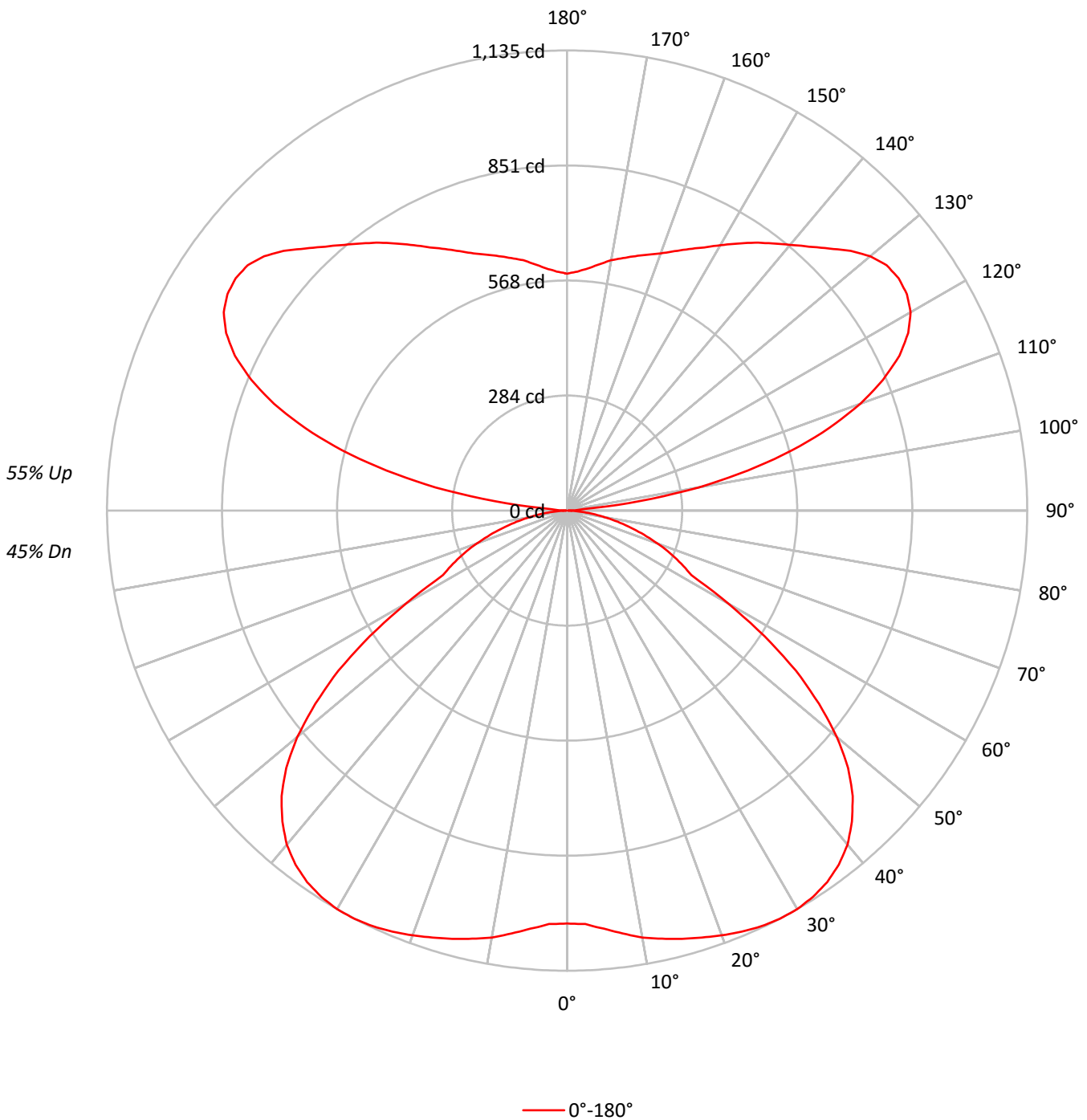
Lumens per Lamp: N/A
Luminaire Lumens: 7802.6 lumens
Efficiency: N/A
Efficacy: 129.0 lumens/watt
Spacing Criteria (0/90/45): 1.62 / 1.62 / 1.62
Luminous Opening: Circular (Dia: 2.09' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 60.5
Input Voltage (V): 120
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



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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 | 106 | 106 | 106 | 106 | 97 | 97 | 97 | 97 | 81 | 81 | 81 | | 66 | 66 | 66 | | 52 | 52 | 52 | 45 |
| 1 | 97 | 93 | 89 | 86 | 89 | 85 | 82 | 79 | 71 | 69 | 67 | | 58 | 57 | 55 | | 46 | 45 | 44 | 39 |
| 2 | 88 | 81 | 75 | 70 | 81 | 75 | 69 | 65 | 62 | 59 | 55 | | 51 | 48 | 46 | | 41 | 39 | 37 | 33 |
| 3 | 81 | 71 | 64 | 58 | 74 | 66 | 59 | 54 | 55 | 50 | 47 | | 45 | 42 | 39 | | 36 | 34 | 32 | 28 |
| 4 | 74 | 63 | 55 | 49 | 67 | 58 | 51 | 46 | 49 | 44 | 40 | | 40 | 36 | 33 | | 32 | 30 | 27 | 24 |
| 5 | 68 | 56 | 48 | 42 | 62 | 52 | 45 | 39 | 44 | 38 | 34 | | 36 | 32 | 29 | | 29 | 26 | 24 | 20 |
| 6 | 62 | 50 | 42 | 36 | 57 | 46 | 39 | 34 | 39 | 34 | 29 | | 32 | 28 | 25 | | 26 | 23 | 21 | 18 |
| 7 | 57 | 45 | 37 | 32 | 52 | 42 | 35 | 30 | 35 | 30 | 26 | | 29 | 25 | 22 | | 24 | 21 | 18 | 16 |
| 8 | 53 | 41 | 33 | 28 | 49 | 38 | 31 | 26 | 32 | 27 | 23 | | 27 | 23 | 19 | | 22 | 19 | 16 | 14 |
| 9 | 49 | 37 | 30 | 25 | 45 | 34 | 28 | 23 | 29 | 24 | 20 | | 24 | 20 | 17 | | 20 | 17 | 15 | 12 |
| 10 | 46 | 34 | 27 | 22 | 42 | 31 | 25 | 21 | 27 | 22 | 18 | | 22 | 18 | 16 | | 18 | 15 | 13 | 11 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|------|
| | 0° |
| 0° | 3203 |
| 5° | 3268 |
| 10° | 3416 |
| 15° | 3560 |
| 20° | 3731 |
| 25° | 3927 |
| 30° | 4123 |
| 35° | 4294 |
| 40° | 4416 |
| 45° | 4430 |
| 50° | 4250 |
| 55° | 3777 |
| 60° | 2889 |
| 65° | 2311 |
| 70° | 2177 |
| 75° | 1981 |
| 80° | 1702 |
| 85° | 1288 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 99.9 | 1.3 |
| 10°-20° | 310.5 | 4.0 |
| 20°-30° | 522.9 | 6.7 |
| 30°-40° | 698.7 | 9.0 |
| 40°-50° | 762.2 | 9.8 |
| 50°-60° | 605.0 | 7.8 |
| 60°-70° | 316.1 | 4.1 |
| 70°-80° | 172.5 | 2.2 |
| 80°-90° | 43.2 | 0.6 |
| 90°-100° | 110.7 | 1.4 |
| 100°-110° | 595.9 | 7.6 |
| 110°-120° | 884.6 | 11.3 |
| 120°-130° | 888.7 | 11.4 |
| 130°-140° | 710.0 | 9.1 |
| 140°-150° | 507.4 | 6.5 |
| 150°-160° | 331.0 | 4.2 |
| 160°-170° | 184.9 | 2.4 |
| 170°-180° | 58.1 | 0.7 |
| 0°-30° | 933.3 | 12.0 |
| 0°-40° | 1632.0 | 20.9 |
| 0°-60° | 2999.2 | 38.4 |
| 0°-90° | 3531.0 | 45.3 |
| 90°-120° | 1591.2 | 20.4 |
| 90°-150° | 3697.5 | 47.4 |
| 90°-180° | 4272.0 | 54.8 |
| 0°-180° | 7802.6 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|------|------|------|
| 0° | 1018 | |
| 5° | 1035 | 100 |
| 15° | 1094 | 310 |
| 25° | 1132 | 523 |
| 35° | 1118 | 699 |
| 45° | 996 | 762 |
| 55° | 689 | 605 |
| 65° | 311 | 316 |
| 75° | 163 | 173 |
| 85° | 36 | 41 |
| 90° | 2 | 5 |
| 95° | 42 | 108 |
| 105° | 575 | 596 |
| 115° | 904 | 885 |
| 125° | 998 | 889 |
| 135° | 914 | 710 |
| 145° | 807 | 507 |
| 155° | 712 | 331 |
| 165° | 650 | 185 |
| 175° | 600 | 58 |
| 180° | 584 | |



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CANDELA DISTRIBUTION (FULL):

| 0° | |
|--------|--------|
| 0° | 1018.5 |
| 2.5° | 1020.9 |
| 5° | 1035.2 |
| 7.5° | 1051.9 |
| 10° | 1069.7 |
| 12.5° | 1081.6 |
| 15° | 1093.5 |
| 17.5° | 1104.2 |
| 20° | 1114.9 |
| 22.5° | 1124.4 |
| 25° | 1131.6 |
| 27.5° | 1135.2 |
| 30° | 1135.2 |
| 32.5° | 1129.2 |
| 35° | 1118.5 |
| 37.5° | 1100.6 |
| 40° | 1075.7 |
| 42.5° | 1040.0 |
| 45° | 995.9 |
| 47.5° | 940.0 |
| 50° | 868.6 |
| 52.5° | 782.9 |
| 55° | 688.9 |
| 57.5° | 577.1 |
| 60° | 459.3 |
| 62.5° | 345.1 |
| 65° | 310.6 |
| 67.5° | 274.9 |
| 70° | 236.8 |
| 72.5° | 198.7 |
| 75° | 163.0 |
| 77.5° | 127.3 |
| 80° | 94.0 |
| 82.5° | 64.3 |
| 85° | 35.7 |
| 87.5° | 10.7 |
| 90° | 2.4 |
| 92.5° | 19.0 |
| 95° | 41.6 |
| 97.5° | 180.9 |
| 100° | 329.6 |
| 102.5° | 456.9 |
| 105° | 574.7 |
| 107.5° | 678.2 |
| 110° | 769.9 |



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CANDELA DISTRIBUTION (continued):

| | 0° |
|--------|-------|
| 112.5° | 843.6 |
| 115° | 904.3 |
| 117.5° | 948.3 |
| 120° | 978.1 |
| 122.5° | 993.6 |
| 125° | 998.3 |
| 127.5° | 993.6 |
| 130° | 975.7 |
| 132.5° | 948.3 |
| 135° | 913.8 |
| 137.5° | 882.9 |
| 140° | 855.5 |
| 142.5° | 830.5 |
| 145° | 806.7 |
| 147.5° | 780.6 |
| 150° | 755.6 |
| 152.5° | 731.8 |
| 155° | 711.6 |
| 157.5° | 692.5 |
| 160° | 674.7 |
| 162.5° | 661.6 |
| 165° | 649.7 |
| 167.5° | 637.8 |
| 170° | 627.1 |
| 172.5° | 612.8 |
| 175° | 599.7 |
| 177.5° | 590.2 |
| 180° | 584.2 |

(END OF REPORT)