

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: P34340

Luminaire Tested: **142-24-P1S-L5/835-UNV-NA-24**

Test Date: 08/05/15

Test Information

Test Method: LM-79-08
Report Number: P34340
Test Lab: INNOVATION CENTER-P3
Test Date: 08/05/15
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: SHAPER
Catalog Number: 142-24-P1S-L5/835-UNV-NA-24
Description: SHAPER 142 SERIES 24" FABRIQUE DRUM PENDANT LUMINAIRE
Light Source: 15 CKTS 3500K LEDS
12441843
Ballast/Driver: (2) HATCH ELECTRONIC DRIVER
LC25-1050Z-UNV-Q

Summary

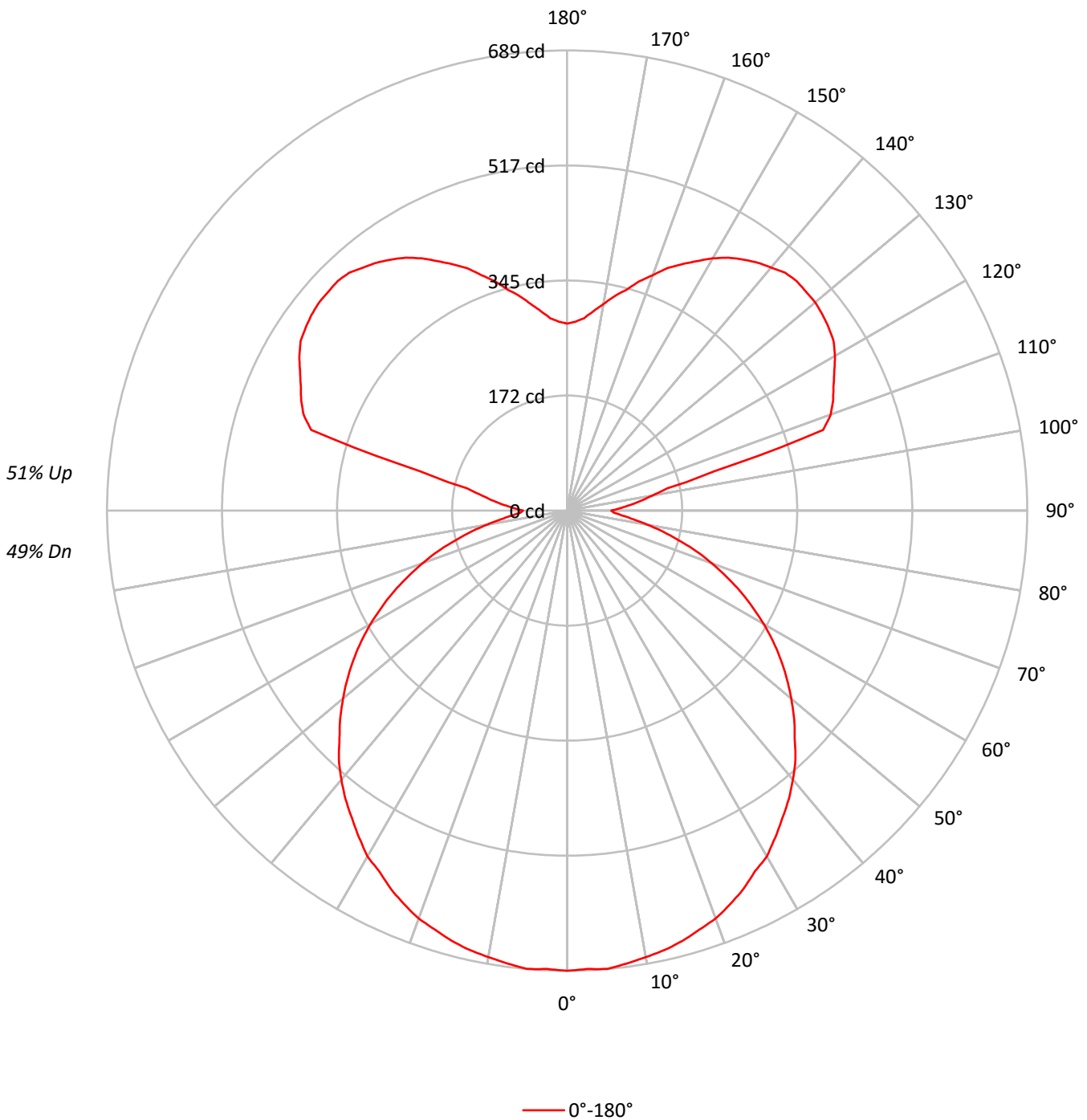
Lumens per Lamp: N/A
Luminaire Lumens: 4404.1 lumens
Efficiency: N/A
Efficacy: 93.9 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.28 / 1.41
Luminous Opening: Vertical Cylinder (Dia: 2' x H: 0.67')
CIE Type: General Diffuse

Input Watts (W): 46.9
Input Voltage (V): 120.0
Input Current (Ain): 0.392
Voltage Rise (V): NR
Power Factor: 0.9985
Total Harmonic Distortion (THDi): 6.81
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: HR
Ambient Temperature (°C): 25.0
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 | 107 | 107 | 107 | 107 | 99 | 99 | 99 | 99 | 83 | 83 | 83 | | 69 | 69 | 69 | | 56 | 56 | 56 | 49 |
| 1 | 97 | 92 | 88 | 84 | 89 | 85 | 81 | 78 | 72 | 69 | 67 | | 59 | 57 | 56 | | 48 | 47 | 45 | 40 |
| 2 | 88 | 80 | 74 | 68 | 81 | 74 | 68 | 63 | 62 | 58 | 54 | | 52 | 48 | 46 | | 42 | 39 | 38 | 33 |
| 3 | 80 | 70 | 62 | 56 | 73 | 65 | 58 | 53 | 55 | 49 | 45 | | 45 | 41 | 38 | | 37 | 34 | 32 | 27 |
| 4 | 73 | 62 | 54 | 47 | 67 | 57 | 50 | 44 | 48 | 43 | 38 | | 40 | 36 | 32 | | 32 | 29 | 27 | 23 |
| 5 | 67 | 55 | 46 | 40 | 61 | 51 | 43 | 38 | 43 | 37 | 33 | | 36 | 31 | 28 | | 29 | 26 | 23 | 20 |
| 6 | 61 | 49 | 41 | 35 | 56 | 45 | 38 | 33 | 39 | 33 | 28 | | 32 | 28 | 24 | | 26 | 23 | 20 | 17 |
| 7 | 57 | 44 | 36 | 30 | 52 | 41 | 34 | 28 | 35 | 29 | 25 | | 29 | 25 | 21 | | 24 | 21 | 18 | 15 |
| 8 | 53 | 40 | 32 | 27 | 48 | 37 | 30 | 25 | 32 | 26 | 22 | | 27 | 22 | 19 | | 22 | 19 | 16 | 14 |
| 9 | 49 | 36 | 29 | 24 | 45 | 34 | 27 | 22 | 29 | 24 | 20 | | 25 | 20 | 17 | | 20 | 17 | 14 | 12 |
| 10 | 46 | 33 | 26 | 21 | 42 | 31 | 24 | 20 | 27 | 21 | 18 | | 23 | 18 | 15 | | 19 | 15 | 13 | 11 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|------|
| | 0° |
| 0° | 2361 |
| 5° | 2285 |
| 10° | 2198 |
| 15° | 2124 |
| 20° | 2053 |
| 25° | 1972 |
| 30° | 1900 |
| 35° | 1812 |
| 40° | 1735 |
| 45° | 1640 |
| 50° | 1550 |
| 55° | 1454 |
| 60° | 1343 |
| 65° | 1214 |
| 70° | 1064 |
| 75° | 891 |
| 80° | 707 |
| 85° | 551 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 65.4 | 1.5 |
| 10°-20° | 188.3 | 4.3 |
| 20°-30° | 288.1 | 6.5 |
| 30°-40° | 352.3 | 8.0 |
| 40°-50° | 372.9 | 8.5 |
| 50°-60° | 349.3 | 7.9 |
| 60°-70° | 282.7 | 6.4 |
| 70°-80° | 185.0 | 4.2 |
| 80°-90° | 94.3 | 2.1 |
| 90°-100° | 104.0 | 2.4 |
| 100°-110° | 278.5 | 6.3 |
| 110°-120° | 437.4 | 9.9 |
| 120°-130° | 427.5 | 9.7 |
| 130°-140° | 374.5 | 8.5 |
| 140°-150° | 288.1 | 6.5 |
| 150°-160° | 189.0 | 4.3 |
| 160°-170° | 98.4 | 2.2 |
| 170°-180° | 28.4 | 0.6 |
| 0°-30° | 541.8 | 12.3 |
| 0°-40° | 894.1 | 20.3 |
| 0°-60° | 1616.3 | 36.7 |
| 0°-90° | 2178.3 | 49.5 |
| 90°-120° | 819.8 | 18.6 |
| 90°-150° | 1910.0 | 43.4 |
| 90°-180° | 2226.0 | 50.5 |
| 0°-180° | 4404.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|------|-----|------|
| 0° | 689 | |
| 5° | 689 | 65 |
| 15° | 667 | 188 |
| 25° | 625 | 288 |
| 35° | 562 | 352 |
| 45° | 482 | 373 |
| 55° | 391 | 349 |
| 65° | 286 | 283 |
| 75° | 174 | 185 |
| 85° | 82 | 76 |
| 90° | 66 | 39 |
| 95° | 94 | 84 |
| 105° | 228 | 278 |
| 115° | 440 | 437 |
| 125° | 478 | 428 |
| 135° | 486 | 375 |
| 145° | 459 | 288 |
| 155° | 407 | 189 |
| 165° | 342 | 98 |
| 175° | 289 | 28 |
| 180° | 280 | |



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CANDELA DISTRIBUTION (FULL):

| 0° | |
|--------|-----|
| 0° | 689 |
| 2.5° | 687 |
| 5° | 689 |
| 7.5° | 684 |
| 10° | 679 |
| 12.5° | 674 |
| 15° | 667 |
| 17.5° | 658 |
| 20° | 650 |
| 22.5° | 638 |
| 25° | 625 |
| 27.5° | 609 |
| 30° | 598 |
| 32.5° | 580 |
| 35° | 562 |
| 37.5° | 545 |
| 40° | 526 |
| 42.5° | 506 |
| 45° | 482 |
| 47.5° | 461 |
| 50° | 438 |
| 52.5° | 415 |
| 55° | 391 |
| 57.5° | 366 |
| 60° | 340 |
| 62.5° | 313 |
| 65° | 286 |
| 67.5° | 258 |
| 70° | 230 |
| 72.5° | 203 |
| 75° | 174 |
| 77.5° | 148 |
| 80° | 122 |
| 82.5° | 100 |
| 85° | 82 |
| 87.5° | 70 |
| 90° | 66 |
| 92.5° | 79 |
| 95° | 94 |
| 97.5° | 111 |
| 100° | 129 |
| 102.5° | 154 |
| 105° | 228 |
| 107.5° | 402 |
| 110° | 420 |



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CANDELA DISTRIBUTION (continued):

| | 0° |
|--------|-----|
| 112.5° | 431 |
| 115° | 440 |
| 117.5° | 451 |
| 120° | 463 |
| 122.5° | 473 |
| 125° | 478 |
| 127.5° | 482 |
| 130° | 485 |
| 132.5° | 485 |
| 135° | 486 |
| 137.5° | 483 |
| 140° | 475 |
| 142.5° | 468 |
| 145° | 459 |
| 147.5° | 449 |
| 150° | 436 |
| 152.5° | 421 |
| 155° | 407 |
| 157.5° | 393 |
| 160° | 375 |
| 162.5° | 360 |
| 165° | 342 |
| 167.5° | 329 |
| 170° | 314 |
| 172.5° | 301 |
| 175° | 289 |
| 177.5° | 283 |
| 180° | 280 |

(END OF REPORT)