

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: CORELITE

Report Number: P35731

Luminaire Tested: **DSI-WS-20L830-1D-UNV-4-STD-SC-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P35731
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: DSI-WS-20L830-1D-UNV-4-STD-SC-W
Description: DIVIDE 4' SUSPENDED WAVESTREAM LED LUMINAIRE
WaveStream SPECULAR OPTIC WITH SOLID COVER, LIGHT LEVEL 1.
Light Source: (308) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1918.5 lumens
Efficiency: N/A
Efficacy: 125.4 lumens/watt
Spacing Criteria (0/90/45): 1.36 / 1.4 / 1.49
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')
CIE Type: Direct

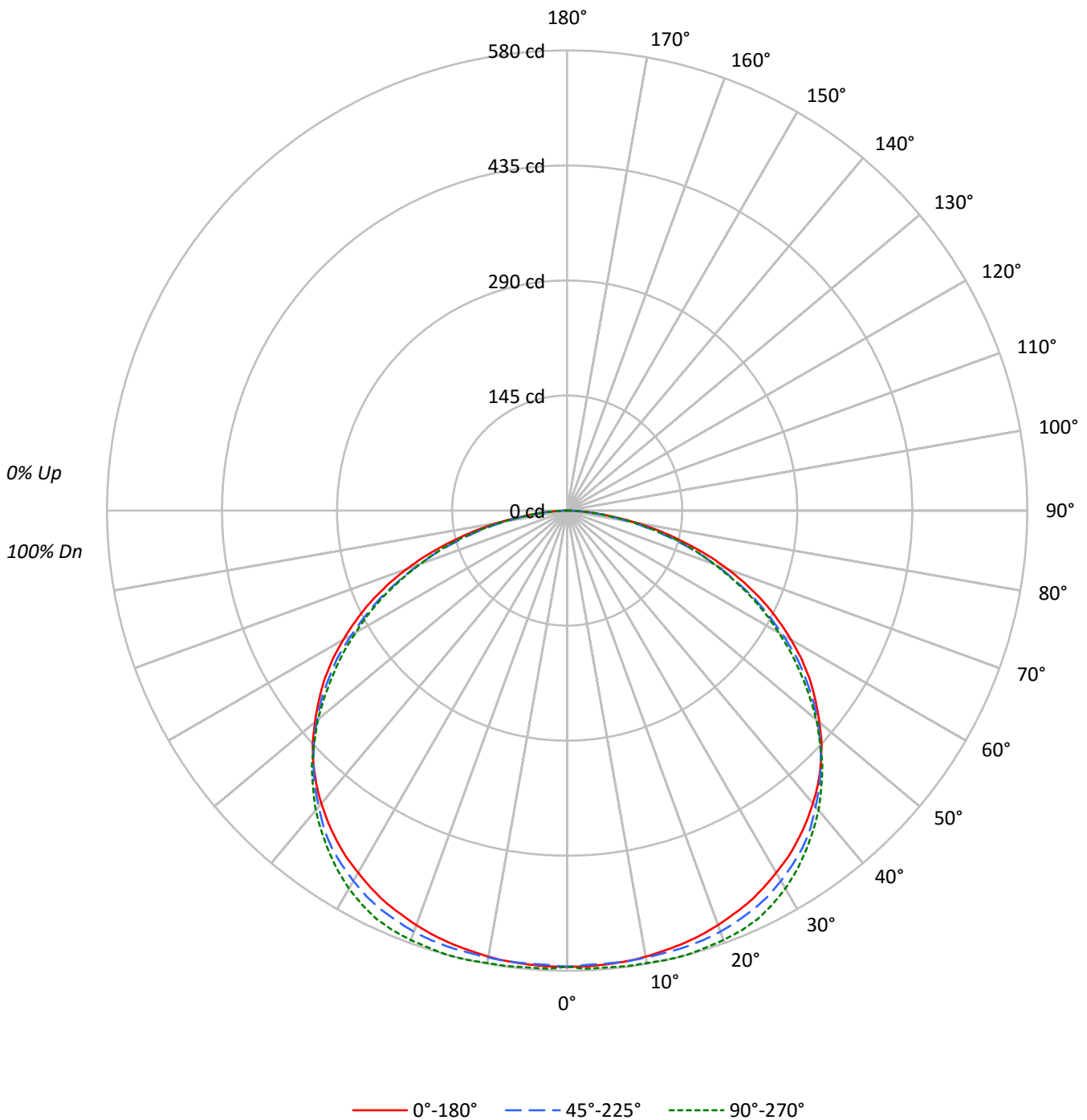
Input Watts (W): 15.3
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |
| 1 | 108 | 103 | 99 | 95 | 106 | 101 | 97 | 93 | 97 | 93 | 90 | 93 | 90 | 88 | 89 | 87 | 85 | 83 |
| 2 | 98 | 89 | 82 | 76 | 95 | 88 | 81 | 75 | 84 | 78 | 74 | 81 | 76 | 72 | 78 | 74 | 70 | 68 |
| 3 | 89 | 78 | 70 | 63 | 87 | 76 | 69 | 62 | 73 | 67 | 61 | 71 | 65 | 60 | 68 | 63 | 59 | 57 |
| 4 | 81 | 69 | 60 | 53 | 79 | 67 | 59 | 52 | 65 | 58 | 52 | 63 | 56 | 51 | 60 | 55 | 50 | 48 |
| 5 | 75 | 61 | 52 | 45 | 72 | 60 | 51 | 45 | 58 | 50 | 44 | 56 | 49 | 44 | 54 | 48 | 43 | 41 |
| 6 | 69 | 55 | 46 | 39 | 67 | 54 | 45 | 39 | 52 | 44 | 39 | 50 | 43 | 38 | 49 | 43 | 38 | 36 |
| 7 | 64 | 50 | 41 | 34 | 62 | 49 | 40 | 34 | 47 | 39 | 34 | 46 | 39 | 34 | 44 | 38 | 33 | 31 |
| 8 | 59 | 45 | 36 | 30 | 57 | 44 | 36 | 30 | 43 | 35 | 30 | 42 | 35 | 30 | 41 | 34 | 30 | 28 |
| 9 | 55 | 41 | 33 | 27 | 54 | 41 | 33 | 27 | 40 | 32 | 27 | 38 | 32 | 27 | 37 | 31 | 27 | 25 |
| 10 | 52 | 38 | 30 | 25 | 50 | 37 | 30 | 24 | 36 | 29 | 24 | 36 | 29 | 24 | 35 | 29 | 24 | 22 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 1938 | 1938 | 1938 |
| 5° | 1942 | 1938 | 1955 |
| 10° | 1954 | 1957 | 1981 |
| 15° | 1971 | 1988 | 2023 |
| 20° | 1994 | 2026 | 2065 |
| 25° | 2023 | 2063 | 2112 |
| 30° | 2050 | 2097 | 2140 |
| 35° | 2086 | 2131 | 2155 |
| 40° | 2120 | 2142 | 2169 |
| 45° | 2154 | 2154 | 2168 |
| 50° | 2175 | 2160 | 2149 |
| 55° | 2197 | 2150 | 2115 |
| 60° | 2197 | 2116 | 2076 |
| 65° | 2185 | 2065 | 2033 |
| 70° | 2118 | 1951 | 1941 |
| 75° | 1966 | 1784 | 1849 |
| 80° | 1708 | 1533 | 1611 |
| 85° | 1237 | 1199 | 1237 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 54.9 | 2.9 |
| 10°-20° | 161.8 | 8.4 |
| 20°-30° | 256.3 | 13.4 |
| 30°-40° | 323.3 | 16.9 |
| 40°-50° | 349.3 | 18.2 |
| 50°-60° | 327.6 | 17.1 |
| 60°-70° | 258.0 | 13.4 |
| 70°-80° | 150.1 | 7.8 |
| 80°-90° | 37.3 | 1.9 |
| 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° | 472.9 | 24.7 |
| 0°-40° | 796.3 | 41.5 |
| 0°-60° | 1473.1 | 76.8 |
| 0°-90° | 1918.5 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1918.5 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 575 | 575 | 575 | 575 | 575 | |
| 5° | 574 | 575 | 573 | 577 | 578 | 55 |
| 15° | 565 | 567 | 570 | 577 | 580 | 160 |
| 25° | 544 | 548 | 555 | 564 | 568 | 251 |
| 35° | 507 | 511 | 518 | 523 | 524 | 317 |
| 45° | 452 | 453 | 452 | 454 | 455 | 348 |
| 55° | 374 | 373 | 366 | 362 | 360 | 334 |
| 65° | 274 | 269 | 259 | 256 | 255 | 270 |
| 75° | 151 | 146 | 137 | 140 | 142 | 160 |
| 85° | 32 | 32 | 31 | 32 | 32 | 40 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



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CATALOG NUMBER: DSI-WS-20L830-1D-UNV-4-STD-SC-W

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-----|-------|-----|-------|-----|
| 0° | 575 | 575 | 575 | 575 | 575 |
| 2.5° | 575 | 575 | 573 | 576 | 578 |
| 5° | 574 | 575 | 573 | 577 | 578 |
| 7.5° | 573 | 573 | 573 | 577 | 579 |
| 10° | 571 | 572 | 572 | 578 | 579 |
| 12.5° | 568 | 570 | 571 | 577 | 580 |
| 15° | 565 | 567 | 570 | 577 | 580 |
| 17.5° | 561 | 564 | 568 | 576 | 578 |
| 20° | 556 | 559 | 565 | 574 | 576 |
| 22.5° | 550 | 555 | 560 | 569 | 573 |
| 25° | 544 | 548 | 555 | 564 | 568 |
| 27.5° | 536 | 541 | 548 | 556 | 560 |
| 30° | 527 | 533 | 539 | 548 | 550 |
| 32.5° | 518 | 523 | 529 | 536 | 538 |
| 35° | 507 | 511 | 518 | 523 | 524 |
| 37.5° | 495 | 499 | 504 | 508 | 509 |
| 40° | 482 | 485 | 487 | 491 | 493 |
| 42.5° | 468 | 470 | 471 | 473 | 474 |
| 45° | 452 | 453 | 452 | 454 | 455 |
| 47.5° | 435 | 435 | 433 | 433 | 432 |
| 50° | 415 | 415 | 412 | 410 | 410 |
| 52.5° | 395 | 395 | 390 | 387 | 385 |
| 55° | 374 | 373 | 366 | 362 | 360 |
| 57.5° | 351 | 349 | 342 | 336 | 335 |
| 60° | 326 | 323 | 314 | 310 | 308 |
| 62.5° | 300 | 296 | 286 | 283 | 282 |
| 65° | 274 | 269 | 259 | 256 | 255 |
| 67.5° | 245 | 239 | 228 | 226 | 226 |
| 70° | 215 | 208 | 198 | 198 | 197 |
| 72.5° | 184 | 178 | 168 | 170 | 170 |
| 75° | 151 | 146 | 137 | 140 | 142 |
| 77.5° | 120 | 112 | 108 | 111 | 111 |
| 80° | 88 | 83 | 79 | 80 | 83 |
| 82.5° | 57 | 55 | 53 | 54 | 54 |
| 85° | 32 | 32 | 31 | 32 | 32 |
| 87.5° | 14 | 14 | 10 | 6 | 6 |
| 90° | 0 | 0 | 0 | 0 | 0 |

(END OF REPORT)