

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: P213063

Luminaire Tested: **DSI-WD-20L840-1D-UNV-4-STD-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P213063
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35732)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: DSI-WD-20L840-1D-UNV-4-STD-W
Description: DIVIDE 4' SUSPENDED WAVESTREAM LED LUMINAIRE
WaveStream DIFFUSE OPTIC, LIGHT LEVEL 1.
Light Source: (308) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2148.5 lumens
Efficiency: N/A
Efficacy: 141.3 lumens/watt
Spacing Criteria (0/90/45): 1.33 / 1.45 / 1.52
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')
CIE Type: Semi-Direct

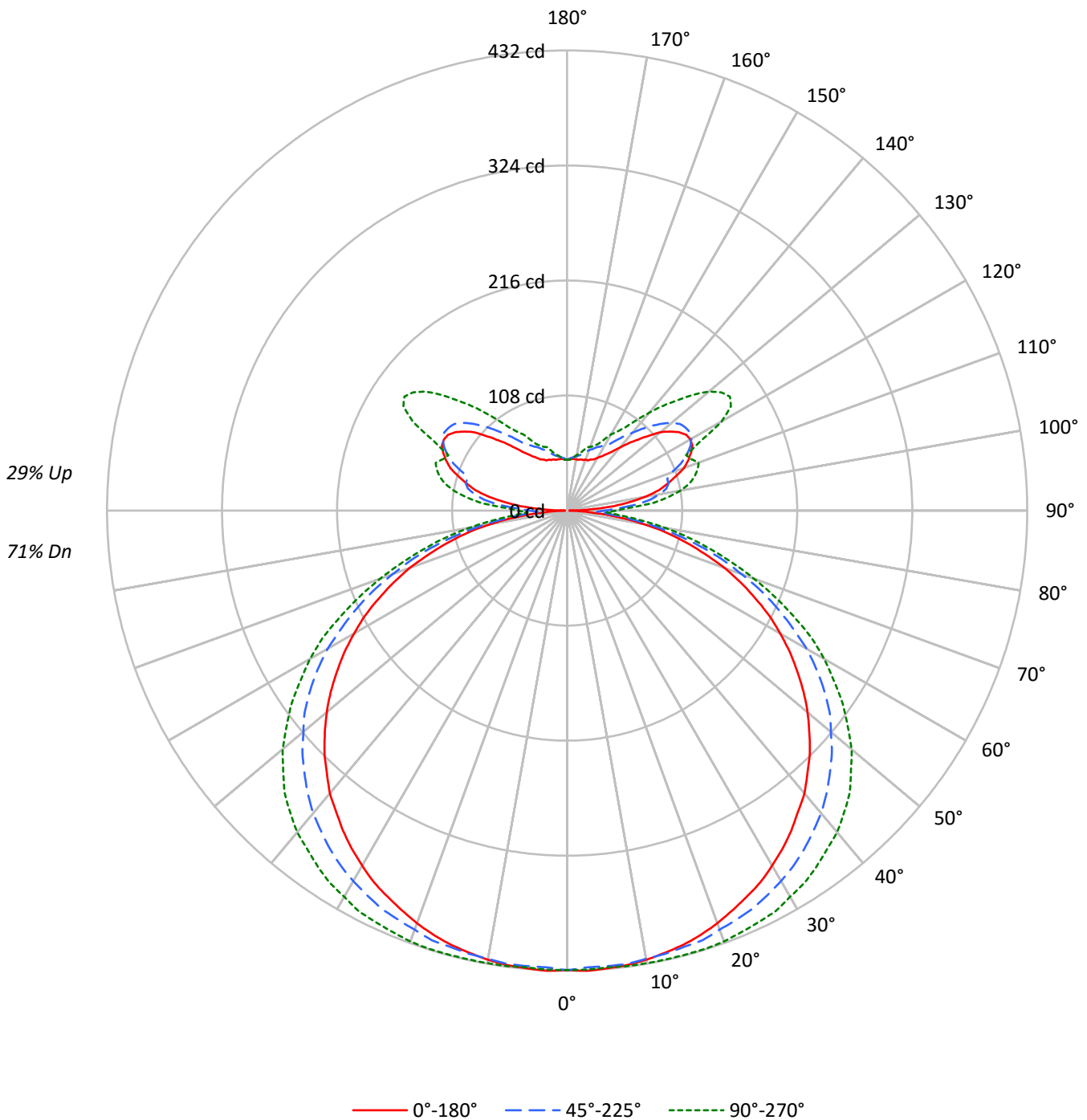
Input Watts (W): 15.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 112 | 112 | 112 | 112 | 106 | 106 | 106 | 106 | 95 | 95 | 95 | 85 | 85 | 85 | 75 | 75 | 75 | 71 |
| 1 | 101 | 97 | 92 | 88 | 96 | 91 | 88 | 84 | 82 | 79 | 76 | 73 | 71 | 69 | 65 | 63 | 62 | 58 |
| 2 | 92 | 83 | 77 | 71 | 86 | 79 | 73 | 68 | 71 | 66 | 62 | 63 | 59 | 56 | 56 | 53 | 51 | 47 |
| 3 | 83 | 73 | 65 | 58 | 78 | 69 | 62 | 56 | 62 | 56 | 51 | 55 | 51 | 47 | 49 | 45 | 42 | 39 |
| 4 | 76 | 64 | 55 | 49 | 71 | 61 | 53 | 47 | 55 | 48 | 43 | 49 | 44 | 39 | 43 | 39 | 36 | 33 |
| 5 | 69 | 57 | 48 | 41 | 65 | 54 | 46 | 40 | 49 | 42 | 37 | 44 | 38 | 34 | 39 | 34 | 31 | 28 |
| 6 | 64 | 51 | 42 | 36 | 60 | 48 | 40 | 34 | 44 | 37 | 32 | 39 | 33 | 29 | 35 | 30 | 27 | 24 |
| 7 | 59 | 46 | 37 | 31 | 55 | 43 | 36 | 30 | 39 | 33 | 28 | 35 | 30 | 26 | 32 | 27 | 24 | 21 |
| 8 | 55 | 41 | 33 | 27 | 52 | 39 | 32 | 26 | 36 | 29 | 25 | 32 | 27 | 23 | 29 | 24 | 21 | 19 |
| 9 | 51 | 38 | 30 | 24 | 48 | 36 | 29 | 23 | 33 | 26 | 22 | 30 | 24 | 20 | 27 | 22 | 19 | 17 |
| 10 | 48 | 35 | 27 | 22 | 45 | 33 | 26 | 21 | 30 | 24 | 20 | 27 | 22 | 18 | 25 | 20 | 17 | 15 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 1454 | 1454 | 1454 |
| 5° | 1459 | 1452 | 1456 |
| 10° | 1465 | 1462 | 1476 |
| 15° | 1472 | 1479 | 1505 |
| 20° | 1478 | 1501 | 1543 |
| 25° | 1486 | 1533 | 1584 |
| 30° | 1497 | 1563 | 1629 |
| 35° | 1509 | 1596 | 1679 |
| 40° | 1525 | 1632 | 1734 |
| 45° | 1535 | 1662 | 1788 |
| 50° | 1545 | 1695 | 1828 |
| 55° | 1550 | 1731 | 1856 |
| 60° | 1557 | 1750 | 1879 |
| 65° | 1555 | 1741 | 1868 |
| 70° | 1546 | 1712 | 1838 |
| 75° | 1504 | 1683 | 1808 |
| 80° | 1418 | 1583 | 1810 |
| 85° | 1025 | 1597 | 1887 |



TEST NUMBER: P213063

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 41.1 | 1.9 |
| 10°-20° | 120.5 | 5.6 |
| 20°-30° | 190.6 | 8.9 |
| 30°-40° | 243.0 | 11.3 |
| 40°-50° | 269.2 | 12.5 |
| 50°-60° | 261.0 | 12.1 |
| 60°-70° | 214.4 | 10.0 |
| 70°-80° | 135.5 | 6.3 |
| 80°-90° | 49.5 | 2.3 |
| 90°-100° | 65.8 | 3.1 |
| 100°-110° | 108.4 | 5.0 |
| 110°-120° | 125.7 | 5.9 |
| 120°-130° | 130.3 | 6.1 |
| 130°-140° | 91.3 | 4.2 |
| 140°-150° | 52.1 | 2.4 |
| 150°-160° | 29.7 | 1.4 |
| 160°-170° | 15.7 | 0.7 |
| 170°-180° | 4.8 | 0.2 |
| 0°-30° | 352.2 | 16.4 |
| 0°-40° | 595.2 | 27.7 |
| 0°-60° | 1125.4 | 52.4 |
| 0°-90° | 1524.8 | 71.0 |
| 90°-120° | 300.0 | 14.0 |
| 90°-150° | 573.5 | 26.7 |
| 90°-180° | 624.0 | 29.0 |
| 0°-180° | 2148.5 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-----|-------|-----|-------|-----|------|
| 0° | 431 | 431 | 431 | 431 | 431 | |
| 5° | 431 | 431 | 429 | 430 | 430 | 41 |
| 15° | 422 | 423 | 424 | 430 | 431 | 119 |
| 25° | 400 | 404 | 412 | 423 | 426 | 184 |
| 35° | 367 | 374 | 388 | 403 | 408 | 230 |
| 45° | 322 | 332 | 349 | 368 | 375 | 248 |
| 55° | 264 | 276 | 295 | 310 | 316 | 236 |
| 65° | 195 | 206 | 218 | 230 | 234 | 193 |
| 75° | 116 | 123 | 129 | 134 | 139 | 122 |
| 85° | 26 | 32 | 41 | 48 | 49 | 32 |
| 90° | 2 | 20 | 35 | 42 | 46 | 4 |
| 95° | 40 | 48 | 65 | 76 | 81 | 39 |
| 105° | 98 | 88 | 99 | 117 | 124 | 102 |
| 115° | 128 | 123 | 124 | 122 | 123 | 126 |
| 125° | 128 | 130 | 136 | 168 | 187 | 114 |
| 135° | 94 | 103 | 112 | 134 | 146 | 74 |
| 145° | 65 | 73 | 81 | 91 | 95 | 41 |
| 155° | 53 | 58 | 66 | 68 | 69 | 25 |
| 165° | 50 | 52 | 55 | 58 | 58 | 14 |
| 175° | 49 | 49 | 50 | 50 | 49 | 5 |
| 180° | 48 | 48 | 48 | 48 | 48 | |



TEST NUMBER: P213063

CATALOG NUMBER: DSI-WD-20L840-1D-UNV-4-STD-W

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|-------|
| 0° | 431.4 | 431.4 | 431.4 | 431.4 | 431.4 |
| 2.5° | 432.5 | 432.5 | 429.3 | 431.4 | 431.4 |
| 5° | 431.4 | 431.4 | 429.3 | 430.4 | 430.4 |
| 7.5° | 430.4 | 430.4 | 429.3 | 431.4 | 431.4 |
| 10° | 428.2 | 428.2 | 427.2 | 430.4 | 431.4 |
| 12.5° | 425.1 | 425.1 | 426.1 | 430.4 | 431.4 |
| 15° | 421.9 | 422.9 | 424.0 | 430.4 | 431.4 |
| 17.5° | 417.6 | 418.7 | 422.9 | 429.3 | 431.4 |
| 20° | 412.3 | 414.5 | 418.7 | 427.2 | 430.4 |
| 22.5° | 406.0 | 409.2 | 415.5 | 425.1 | 428.2 |
| 25° | 399.6 | 403.9 | 412.3 | 422.9 | 426.1 |
| 27.5° | 393.3 | 397.5 | 407.0 | 419.8 | 424.0 |
| 30° | 384.8 | 390.1 | 401.7 | 414.5 | 418.7 |
| 32.5° | 376.3 | 382.7 | 395.4 | 409.2 | 414.5 |
| 35° | 366.8 | 374.2 | 388.0 | 402.8 | 408.1 |
| 37.5° | 356.2 | 364.6 | 379.5 | 395.4 | 400.7 |
| 40° | 346.6 | 354.0 | 371.0 | 388.0 | 394.3 |
| 42.5° | 333.9 | 343.4 | 360.4 | 377.4 | 384.8 |
| 45° | 322.2 | 331.8 | 348.7 | 367.8 | 375.2 |
| 47.5° | 308.5 | 319.1 | 337.1 | 356.2 | 361.5 |
| 50° | 294.7 | 305.3 | 323.3 | 341.3 | 348.7 |
| 52.5° | 279.8 | 290.4 | 310.6 | 326.5 | 331.8 |
| 55° | 263.9 | 275.6 | 294.7 | 309.5 | 315.9 |
| 57.5° | 248.0 | 259.7 | 277.7 | 291.5 | 296.8 |
| 60° | 231.1 | 241.7 | 259.7 | 272.4 | 278.8 |
| 62.5° | 214.1 | 223.7 | 238.5 | 252.3 | 258.6 |
| 65° | 195.0 | 205.6 | 218.4 | 230.0 | 234.3 |
| 67.5° | 176.0 | 185.5 | 197.2 | 206.7 | 210.9 |
| 70° | 156.9 | 165.4 | 173.8 | 183.4 | 186.6 |
| 72.5° | 135.7 | 144.2 | 152.6 | 157.9 | 162.2 |
| 75° | 115.5 | 123.0 | 129.3 | 133.6 | 138.9 |
| 77.5° | 95.4 | 100.7 | 104.9 | 113.4 | 116.6 |
| 80° | 73.1 | 77.4 | 81.6 | 90.1 | 93.3 |
| 82.5° | 49.8 | 53.0 | 59.4 | 66.8 | 70.0 |
| 85° | 26.5 | 31.8 | 41.3 | 47.7 | 48.8 |
| 87.5° | 10.6 | 18.0 | 27.6 | 33.9 | 37.1 |
| 90° | 2.1 | 20.1 | 35.0 | 42.4 | 45.6 |
| 92.5° | 18.0 | 33.9 | 47.7 | 55.1 | 57.2 |
| 95° | 40.3 | 47.7 | 64.7 | 76.3 | 80.6 |
| 97.5° | 58.3 | 60.4 | 78.4 | 91.2 | 95.4 |
| 100° | 74.2 | 67.8 | 88.0 | 103.9 | 108.1 |
| 102.5° | 88.0 | 78.4 | 95.4 | 111.3 | 117.7 |
| 105° | 97.5 | 88.0 | 98.6 | 116.6 | 124.0 |
| 107.5° | 107.1 | 98.6 | 98.6 | 120.8 | 128.3 |
| 110° | 116.6 | 108.1 | 103.9 | 120.8 | 131.4 |



TEST NUMBER: P213063

CATALOG NUMBER: DSI-WD-20L840-1D-UNV-4-STD-W

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 123.0 | 116.6 | 115.5 | 117.7 | 126.1 |
| 115° | 128.3 | 123.0 | 124.0 | 121.9 | 123.0 |
| 117.5° | 132.5 | 128.3 | 130.4 | 147.3 | 141.0 |
| 120° | 133.6 | 131.4 | 134.6 | 162.2 | 167.5 |
| 122.5° | 132.5 | 132.5 | 136.7 | 167.5 | 182.3 |
| 125° | 128.3 | 130.4 | 135.7 | 167.5 | 186.6 |
| 127.5° | 121.9 | 125.1 | 133.6 | 163.2 | 182.3 |
| 130° | 114.5 | 118.7 | 128.3 | 154.8 | 173.8 |
| 132.5° | 103.9 | 111.3 | 120.8 | 145.2 | 161.1 |
| 135° | 94.3 | 102.8 | 112.4 | 133.6 | 146.3 |
| 137.5° | 85.9 | 94.3 | 103.9 | 121.9 | 133.6 |
| 140° | 77.4 | 85.9 | 95.4 | 110.2 | 119.8 |
| 142.5° | 70.0 | 79.5 | 88.0 | 99.6 | 107.1 |
| 145° | 64.7 | 73.1 | 80.6 | 91.2 | 95.4 |
| 147.5° | 60.4 | 67.8 | 74.2 | 84.8 | 88.0 |
| 150° | 57.2 | 63.6 | 71.0 | 78.4 | 82.7 |
| 152.5° | 54.1 | 60.4 | 67.8 | 72.1 | 75.3 |
| 155° | 53.0 | 58.3 | 65.7 | 67.8 | 68.9 |
| 157.5° | 50.9 | 56.2 | 62.5 | 65.7 | 65.7 |
| 160° | 50.9 | 54.1 | 60.4 | 63.6 | 63.6 |
| 162.5° | 49.8 | 53.0 | 57.2 | 61.5 | 62.5 |
| 165° | 49.8 | 51.9 | 55.1 | 58.3 | 58.3 |
| 167.5° | 48.8 | 50.9 | 53.0 | 55.1 | 55.1 |
| 170° | 48.8 | 49.8 | 51.9 | 53.0 | 53.0 |
| 172.5° | 48.8 | 49.8 | 50.9 | 50.9 | 50.9 |
| 175° | 48.8 | 48.8 | 49.8 | 49.8 | 48.8 |
| 177.5° | 47.7 | 48.8 | 48.8 | 48.8 | 47.7 |
| 180° | 47.7 | 47.7 | 47.7 | 47.7 | 47.7 |

(END OF REPORT)