

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: P506648

Luminaire Tested: **24PD-45-PL1-L840**

Issue Date: 3/26/2021



Test Information

Test Method: LM-79-08
Report Number: P506648
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2102-132-11)
Test Lab: INNOVATION CENTER
Issue Date: 3/26/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: 24PD-45-PL1-L840
Description: 4500 LUMEN, 2X4 PERCEIVE LED LUMINAIRE WITH LEAVES LENS AND 80 CRI,
4000K LEDS
Light Source: -
Ballast/Driver: -

Summary

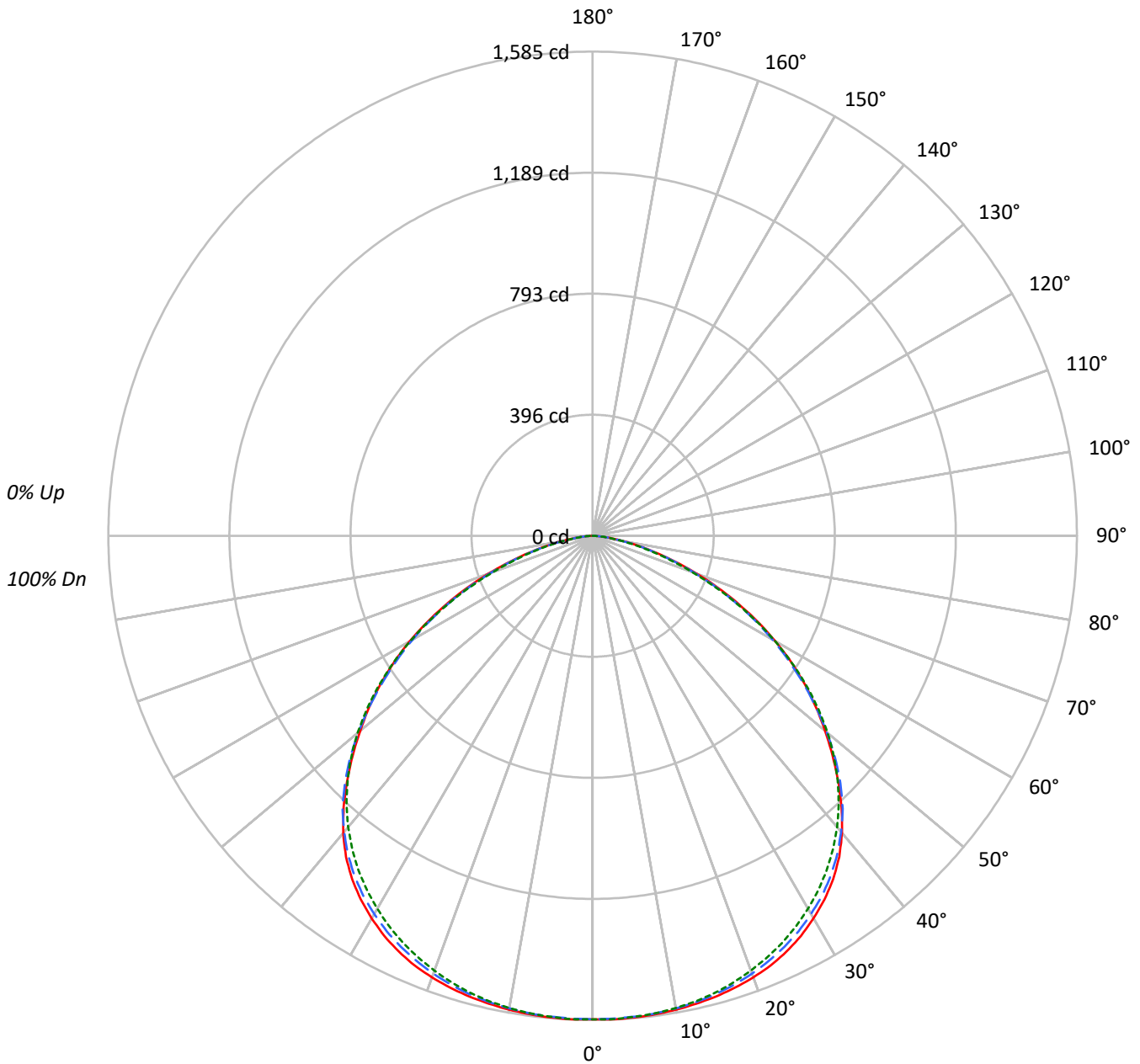
Lumens per Lamp: N/A
Luminaire Lumens: 4540.4 lumens
Efficiency: N/A
Efficacy: 137.6 lumens/watt
Spacing Criteria (0/90/45): 1.35 / 1.32 / 1.43
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 33
Input Voltage (V): NR
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

TEST NUMBER: P506648

CATALOG NUMBER: 24PD-45-PL1-L840

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 | 50 | 30 | 10 | 0 |
| RCR | | | | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 | | | 100 |
| 1 | 109 | 105 | 101 | 97 | 107 | 103 | 99 | 96 | 99 | 96 | 93 | 95 | 92 | 90 | 91 | 89 | 87 | 85 | | | 85 |
| 2 | 100 | 92 | 85 | 80 | 97 | 90 | 84 | 79 | 87 | 82 | 77 | 83 | 79 | 75 | 80 | 77 | 74 | 72 | | | 72 |
| 3 | 91 | 81 | 73 | 67 | 89 | 79 | 72 | 66 | 76 | 70 | 65 | 74 | 68 | 64 | 71 | 67 | 63 | 61 | | | 61 |
| 4 | 84 | 72 | 63 | 57 | 81 | 71 | 63 | 56 | 68 | 61 | 56 | 66 | 60 | 55 | 64 | 58 | 54 | 52 | | | 52 |
| 5 | 77 | 64 | 55 | 49 | 75 | 63 | 55 | 49 | 61 | 54 | 48 | 59 | 53 | 48 | 57 | 52 | 47 | 45 | | | 45 |
| 6 | 71 | 58 | 49 | 43 | 69 | 57 | 48 | 42 | 55 | 48 | 42 | 53 | 47 | 42 | 52 | 46 | 41 | 39 | | | 39 |
| 7 | 66 | 52 | 44 | 38 | 64 | 52 | 43 | 37 | 50 | 43 | 37 | 49 | 42 | 37 | 47 | 41 | 37 | 35 | | | 35 |
| 8 | 61 | 48 | 39 | 33 | 60 | 47 | 39 | 33 | 46 | 38 | 33 | 44 | 38 | 33 | 43 | 37 | 33 | 31 | | | 31 |
| 9 | 57 | 44 | 36 | 30 | 56 | 43 | 35 | 30 | 42 | 35 | 30 | 41 | 34 | 30 | 40 | 34 | 30 | 28 | | | 28 |
| 10 | 53 | 40 | 32 | 27 | 52 | 40 | 32 | 27 | 39 | 32 | 27 | 38 | 31 | 27 | 37 | 31 | 27 | 25 | | | 25 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 2130 | 2130 | 2130 |
| 5° | 2138 | 2134 | 2135 |
| 10° | 2152 | 2146 | 2145 |
| 15° | 2175 | 2164 | 2158 |
| 20° | 2202 | 2184 | 2169 |
| 25° | 2229 | 2204 | 2182 |
| 30° | 2247 | 2221 | 2190 |
| 35° | 2254 | 2232 | 2195 |
| 40° | 2230 | 2222 | 2186 |
| 45° | 2162 | 2182 | 2158 |
| 50° | 2078 | 2094 | 2101 |
| 55° | 1989 | 1973 | 2003 |
| 60° | 1860 | 1830 | 1853 |
| 65° | 1674 | 1641 | 1639 |
| 70° | 1425 | 1393 | 1360 |
| 75° | 1122 | 1097 | 1052 |
| 80° | 803 | 779 | 735 |
| 85° | 475 | 468 | 435 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 150.6 | 3.3 |
| 10°-20° | 439.3 | 9.7 |
| 20°-30° | 684.8 | 15.1 |
| 30°-40° | 847.4 | 18.7 |
| 40°-50° | 878.5 | 19.3 |
| 50°-60° | 756.4 | 16.7 |
| 60°-70° | 513.2 | 11.3 |
| 70°-80° | 229.0 | 5.0 |
| 80°-90° | 41.2 | 0.9 |
| 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° | 1274.7 | 28.1 |
| 0°-40° | 2122.1 | 46.7 |
| 0°-60° | 3757.0 | 82.7 |
| 0°-90° | 4540.4 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 4540.4 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1583 | 1583 | 1583 | 1583 | 1583 | |
| 5° | 1583 | 1581 | 1580 | 1580 | 1581 | 151 |
| 15° | 1562 | 1557 | 1554 | 1550 | 1549 | 442 |
| 25° | 1502 | 1496 | 1485 | 1474 | 1470 | 692 |
| 35° | 1372 | 1369 | 1359 | 1344 | 1336 | 857 |
| 45° | 1136 | 1142 | 1147 | 1142 | 1134 | 876 |
| 55° | 848 | 848 | 841 | 851 | 854 | 756 |
| 65° | 526 | 528 | 515 | 510 | 515 | 520 |
| 75° | 216 | 218 | 211 | 206 | 202 | 234 |
| 85° | 31 | 31 | 30 | 30 | 28 | 42 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1582.7 | 1582.7 | 1582.7 | 1582.7 | 1582.7 |
| 2.5° | 1584.9 | 1581.4 | 1581.9 | 1582.3 | 1584.0 |
| 5° | 1582.7 | 1580.6 | 1580.1 | 1580.1 | 1580.6 |
| 7.5° | 1580.1 | 1577.5 | 1577.1 | 1576.7 | 1576.7 |
| 10° | 1575.4 | 1572.8 | 1571.0 | 1570.2 | 1569.7 |
| 12.5° | 1568.9 | 1565.8 | 1563.7 | 1561.9 | 1560.6 |
| 15° | 1561.5 | 1557.2 | 1553.7 | 1550.2 | 1548.9 |
| 17.5° | 1551.1 | 1547.2 | 1541.1 | 1535.5 | 1533.3 |
| 20° | 1538.1 | 1534.2 | 1525.5 | 1517.7 | 1514.7 |
| 22.5° | 1522.9 | 1517.3 | 1506.5 | 1497.8 | 1493.5 |
| 25° | 1501.7 | 1496.1 | 1484.8 | 1473.9 | 1469.6 |
| 27.5° | 1477.0 | 1471.8 | 1459.6 | 1446.6 | 1441.4 |
| 30° | 1446.2 | 1442.7 | 1429.7 | 1415.4 | 1409.8 |
| 32.5° | 1412.0 | 1408.5 | 1397.2 | 1381.2 | 1374.7 |
| 35° | 1372.5 | 1368.6 | 1358.7 | 1343.9 | 1336.1 |
| 37.5° | 1325.7 | 1324.4 | 1314.9 | 1299.7 | 1292.4 |
| 40° | 1269.8 | 1272.4 | 1265.1 | 1252.1 | 1244.7 |
| 42.5° | 1206.1 | 1211.7 | 1211.7 | 1199.6 | 1192.2 |
| 45° | 1136.3 | 1141.5 | 1146.7 | 1142.4 | 1134.2 |
| 47.5° | 1064.8 | 1070.5 | 1076.5 | 1078.3 | 1071.3 |
| 50° | 992.9 | 996.4 | 1000.3 | 1008.1 | 1003.7 |
| 52.5° | 921.4 | 922.7 | 921.4 | 931.8 | 930.9 |
| 55° | 847.7 | 848.1 | 841.2 | 850.7 | 853.8 |
| 57.5° | 771.0 | 772.3 | 761.0 | 766.2 | 772.7 |
| 60° | 691.3 | 692.6 | 680.0 | 680.9 | 688.7 |
| 62.5° | 608.9 | 610.6 | 598.1 | 595.0 | 602.0 |
| 65° | 525.7 | 527.9 | 515.3 | 509.7 | 514.9 |
| 67.5° | 442.9 | 445.5 | 433.8 | 426.9 | 428.2 |
| 70° | 362.3 | 364.5 | 354.1 | 347.6 | 345.8 |
| 72.5° | 285.6 | 287.8 | 279.5 | 273.0 | 270.0 |
| 75° | 215.8 | 217.6 | 211.1 | 206.3 | 202.4 |
| 77.5° | 155.2 | 156.5 | 151.3 | 147.8 | 143.9 |
| 80° | 103.6 | 104.0 | 100.5 | 98.4 | 94.9 |
| 82.5° | 62.0 | 62.4 | 60.2 | 59.4 | 56.8 |
| 85° | 30.8 | 31.2 | 30.3 | 30.3 | 28.2 |
| 87.5° | 10.8 | 10.4 | 10.8 | 10.8 | 9.5 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



Report Generated By 670246072 / DESKTOP-MV3F9LC





— 0°-180° - - 45°-225° - - - - 90°-270°







(END OF REPORT)