

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: PORTFOLIO

Report Number: P244322

Luminaire Tested: **LSR8B20D010 EC8B20840 8LBN0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P244322
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P27944)
Test Lab: INNOVATION CENTER-P2
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B20D010 EC8B20840 8LBN0H
Description: PORTFOLIO 8 INCH NARROW DISTRIBUTION 50 DEGREE CUTOFF RECESSED
DOWNLIGHT- CYLINDEC
80 CRI 4000 CCT WITH SEMI-SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1998.0 lumens
Efficiency: N/A
Efficacy: 93.8 lumens/watt
Spacing Criteria (0/90/45): 0.69 / 0.69 / 0.79
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

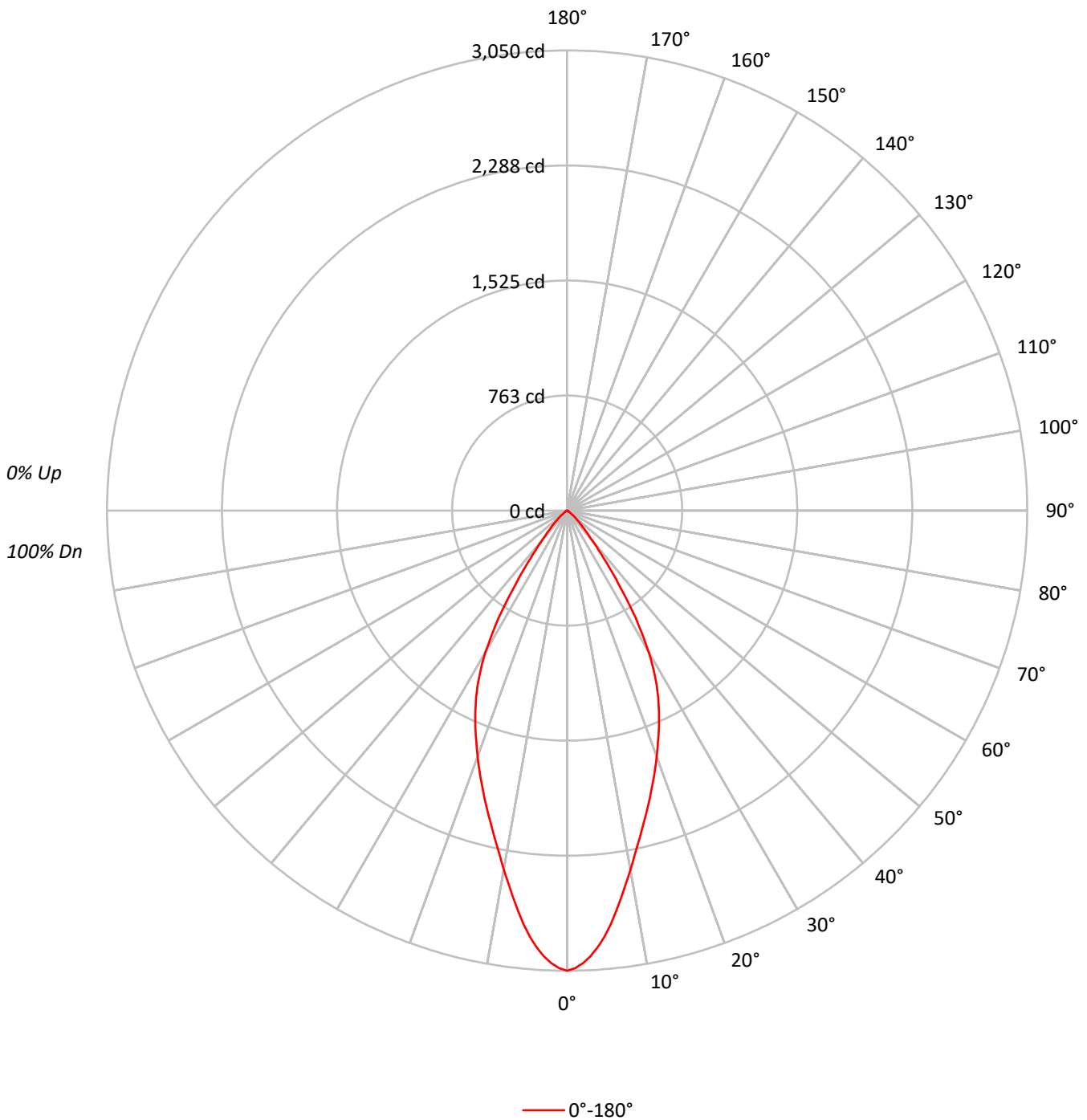
Input Watts (W): 21.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | | 106 | 106 | 106 | | 102 | 102 | 102 | 100 |
| 1 | 114 | 111 | 109 | 106 | 111 | 109 | 107 | 105 | 105 | 103 | 101 | | 101 | 100 | 98 | | 98 | 97 | 96 | 94 |
| 2 | 108 | 104 | 100 | 96 | 106 | 102 | 98 | 95 | 99 | 96 | 93 | | 96 | 93 | 91 | | 93 | 91 | 89 | 88 |
| 3 | 103 | 97 | 92 | 88 | 101 | 95 | 91 | 87 | 93 | 89 | 86 | | 90 | 87 | 85 | | 88 | 86 | 83 | 82 |
| 4 | 98 | 91 | 85 | 81 | 96 | 90 | 85 | 81 | 87 | 83 | 80 | | 85 | 82 | 79 | | 84 | 80 | 78 | 76 |
| 5 | 93 | 85 | 79 | 75 | 92 | 84 | 79 | 75 | 82 | 78 | 74 | | 81 | 77 | 74 | | 79 | 76 | 73 | 72 |
| 6 | 89 | 80 | 74 | 70 | 87 | 79 | 74 | 70 | 78 | 73 | 69 | | 76 | 72 | 69 | | 75 | 71 | 69 | 67 |
| 7 | 85 | 76 | 70 | 66 | 83 | 75 | 69 | 65 | 74 | 69 | 65 | | 72 | 68 | 65 | | 71 | 67 | 64 | 63 |
| 8 | 81 | 71 | 66 | 62 | 79 | 71 | 65 | 61 | 70 | 65 | 61 | | 69 | 64 | 61 | | 68 | 64 | 61 | 59 |
| 9 | 77 | 68 | 62 | 58 | 76 | 67 | 62 | 58 | 66 | 61 | 58 | | 65 | 61 | 58 | | 64 | 60 | 57 | 56 |
| 10 | 74 | 64 | 59 | 55 | 73 | 64 | 58 | 55 | 63 | 58 | 55 | | 62 | 58 | 54 | | 61 | 57 | 54 | 53 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|-------|
| | 0° |
| 0° | 94051 |
| 5° | 87724 |
| 10° | 75619 |
| 15° | 65444 |
| 20° | 56928 |
| 25° | 48923 |
| 30° | 38441 |
| 35° | 22428 |
| 40° | 10349 |
| 45° | 5355 |
| 50° | 2686 |
| 55° | 1306 |
| 60° | 666 |
| 65° | 394 |
| 70° | 180 |
| 75° | 155 |
| 80° | 124 |
| 85° | 0 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 256.5 | 12.8 |
| 10°-20° | 573.2 | 28.7 |
| 20°-30° | 651.7 | 32.6 |
| 30°-40° | 382.7 | 19.2 |
| 40°-50° | 102.7 | 5.1 |
| 50°-60° | 24.4 | 1.2 |
| 60°-70° | 5.6 | 0.3 |
| 70°-80° | 1.2 | 0.1 |
| 80°-90° | 0.1 | 0.0 |
| 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° | 1481.3 | 74.1 |
| 0°-40° | 1864.0 | 93.3 |
| 0°-60° | 1991.1 | 99.7 |
| 0°-90° | 1998.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1998.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 3050 | |
| 5° | 2834 | 256 |
| 15° | 2050 | 573 |
| 25° | 1438 | 652 |
| 35° | 596 | 383 |
| 45° | 123 | 103 |
| 55° | 24 | 24 |
| 65° | 5 | 6 |
| 75° | 1 | 1 |
| 85° | 0 | 0 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| 0° | |
|-------|--------|
| 0° | 3050.0 |
| 1° | 3033.1 |
| 2° | 3002.1 |
| 3° | 2958.2 |
| 4° | 2901.5 |
| 5° | 2834.0 |
| 6° | 2757.8 |
| 7° | 2671.4 |
| 8° | 2585.0 |
| 9° | 2498.0 |
| 10° | 2415.0 |
| 11° | 2334.0 |
| 12° | 2257.8 |
| 13° | 2186.9 |
| 14° | 2116.1 |
| 15° | 2050.0 |
| 16° | 1985.2 |
| 17° | 1921.1 |
| 18° | 1859.0 |
| 19° | 1796.2 |
| 20° | 1734.8 |
| 21° | 1673.4 |
| 22° | 1614.7 |
| 23° | 1556.7 |
| 24° | 1497.3 |
| 25° | 1437.9 |
| 26° | 1376.5 |
| 27° | 1309.7 |
| 28° | 1239.6 |
| 29° | 1162.6 |
| 30° | 1079.6 |
| 32.5° | 846.8 |
| 35° | 595.8 |
| 37.5° | 392.7 |
| 40° | 257.1 |
| 42.5° | 177.5 |
| 45° | 122.8 |
| 47.5° | 84.3 |
| 50° | 56.0 |
| 52.5° | 36.4 |
| 55° | 24.3 |
| 57.5° | 16.2 |
| 60° | 10.8 |
| 62.5° | 7.4 |
| 65° | 5.4 |



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CANDELA DISTRIBUTION (continued):

| | 0° |
|-------|-----|
| 67.5° | 3.4 |
| 70° | 2.0 |
| 72.5° | 1.3 |
| 75° | 1.3 |
| 77.5° | 0.7 |
| 80° | 0.7 |
| 82.5° | 0.0 |
| 85° | 0.0 |
| 87.5° | 0.0 |
| 90° | 0.0 |

(END OF REPORT)