

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: P249835

Luminaire Tested: **LSR8B100D010 EC8B100935 8LBN0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249835
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13959)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B100D010 EC8B100935 8LBN0H
Description: PORTFOLIO 8 INCH NARROW DISTRIBUTION 50 DEGREE CUTOFF RECESSED
DOWNLIGHT- CYLINDEC
90 CRI 3500 CCT WITH SEMI-SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8354.0 lumens
Efficiency: N/A
Efficacy: 78.6 lumens/watt
Spacing Criteria (0/90/45): 0.77 / 0.77 / 0.81
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

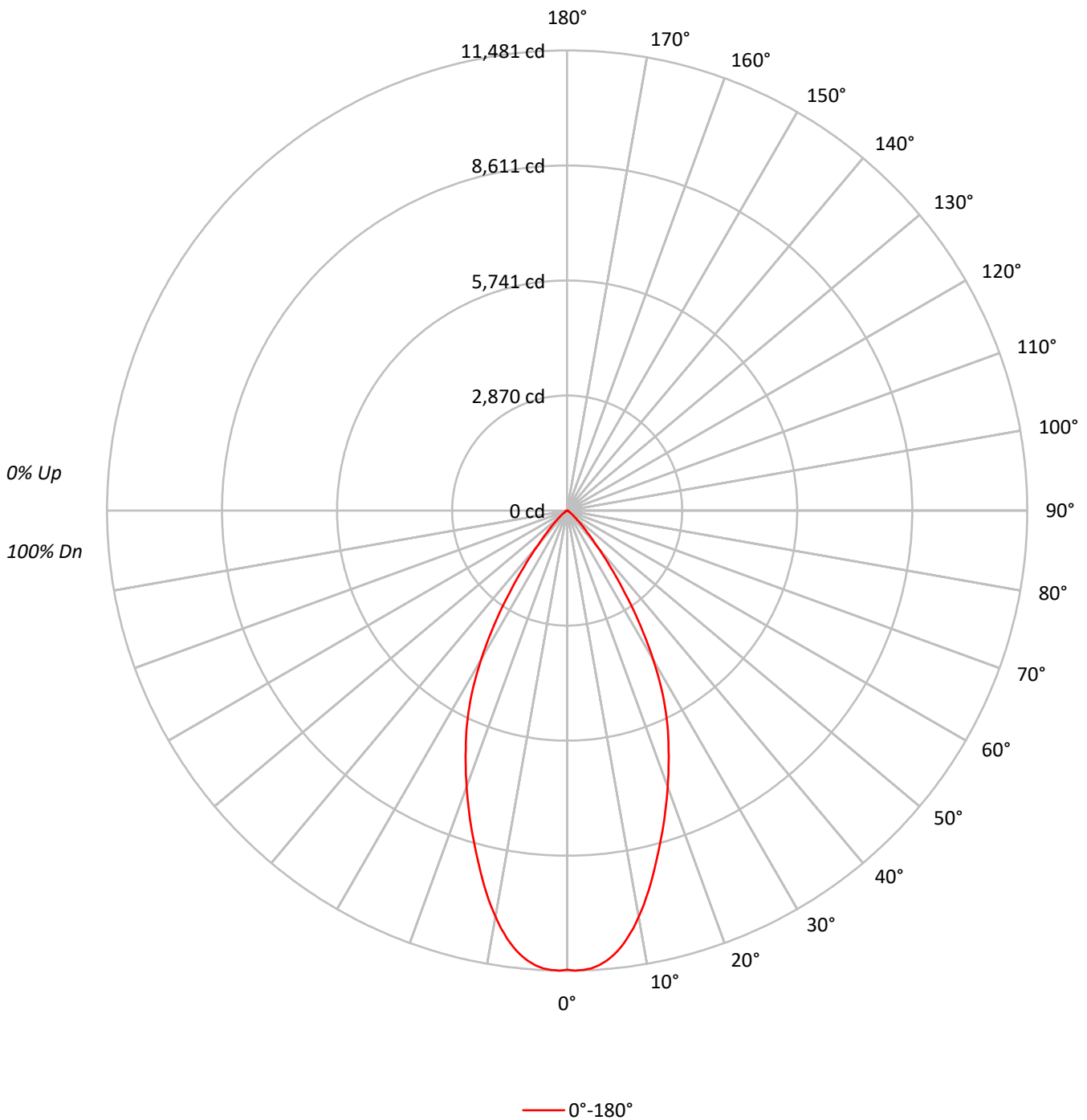
Input Watts (W): 106.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 103 | 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 | 85 | 83 | 82 |
| 4 | 98 | 91 | 85 | 81 | 96 | 89 | 84 | 81 | 87 | 83 | 80 | 85 | 82 | 79 | 83 | 80 | 78 | 76 |
| 5 | 93 | 85 | 79 | 75 | 92 | 84 | 79 | 75 | 82 | 78 | 74 | 81 | 77 | 74 | 79 | 76 | 73 | 71 |
| 6 | 89 | 80 | 74 | 70 | 87 | 79 | 74 | 70 | 78 | 73 | 69 | 76 | 72 | 69 | 75 | 71 | 68 | 67 |
| 7 | 84 | 75 | 70 | 66 | 83 | 75 | 69 | 65 | 74 | 69 | 65 | 72 | 68 | 65 | 71 | 67 | 64 | 63 |
| 8 | 81 | 71 | 65 | 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 | 57 | 64 | 60 | 57 | 56 |
| 10 | 73 | 64 | 58 | 55 | 72 | 64 | 58 | 55 | 63 | 58 | 54 | 62 | 57 | 54 | 61 | 57 | 54 | 53 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|--------|
| | 0° |
| 0° | 353326 |
| 5° | 348986 |
| 10° | 322304 |
| 15° | 281041 |
| 20° | 240740 |
| 25° | 201515 |
| 30° | 153308 |
| 35° | 95037 |
| 40° | 46884 |
| 45° | 22315 |
| 50° | 10851 |
| 55° | 5317 |
| 60° | 3312 |
| 65° | 2269 |
| 70° | 1271 |
| 75° | 1013 |
| 80° | 1012 |
| 85° | 991 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 1044.8 | 12.5 |
| 10°-20° | 2453.0 | 29.4 |
| 20°-30° | 2681.0 | 32.1 |
| 30°-40° | 1595.4 | 19.1 |
| 40°-50° | 437.6 | 5.2 |
| 50°-60° | 99.1 | 1.2 |
| 60°-70° | 30.6 | 0.4 |
| 70°-80° | 9.3 | 0.1 |
| 80°-90° | 3.1 | 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° | 6178.8 | 74.0 |
| 0°-40° | 7774.2 | 93.1 |
| 0°-60° | 8311.0 | 99.5 |
| 0°-90° | 8354.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 8354.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|-------|------|
| 0° | 11458 | |
| 5° | 11274 | ### |
| 15° | 8803 | 2453 |
| 25° | 5923 | 2681 |
| 35° | 2525 | 1595 |
| 45° | 512 | 438 |
| 55° | 99 | 99 |
| 65° | 31 | 31 |
| 75° | 8 | 9 |
| 85° | 3 | 3 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|---------|
| 0° | 11458.1 |
| 1° | 11480.7 |
| 2° | 11466.5 |
| 3° | 11438.3 |
| 4° | 11373.2 |
| 5° | 11274.3 |
| 6° | 11147.1 |
| 7° | 10977.5 |
| 8° | 10779.6 |
| 9° | 10550.6 |
| 10° | 10293.3 |
| 11° | 10019.1 |
| 12° | 9725.1 |
| 13° | 9422.6 |
| 14° | 9108.8 |
| 15° | 8803.4 |
| 16° | 8503.8 |
| 17° | 8209.8 |
| 18° | 7915.8 |
| 19° | 7621.7 |
| 20° | 7336.2 |
| 22.5° | 6618.1 |
| 25° | 5922.7 |
| 27.5° | 5156.5 |
| 30° | 4305.6 |
| 32.5° | 3392.5 |
| 35° | 2524.6 |
| 37.5° | 1755.6 |
| 40° | 1164.7 |
| 42.5° | 763.3 |
| 45° | 511.7 |
| 47.5° | 339.2 |
| 50° | 226.2 |
| 52.5° | 138.5 |
| 55° | 98.9 |
| 57.5° | 70.7 |
| 60° | 53.7 |
| 62.5° | 39.6 |
| 65° | 31.1 |
| 67.5° | 19.8 |
| 70° | 14.1 |
| 72.5° | 11.3 |
| 75° | 8.5 |
| 77.5° | 5.7 |
| 80° | 5.7 |



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CANDELA DISTRIBUTION (continued):

| | 0° |
|-------|-----|
| 82.5° | 2.8 |
| 85° | 2.8 |
| 87.5° | 2.8 |
| 90° | 0.0 |

(END OF REPORT)