

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: P246341

Luminaire Tested: **LD8B50D010 ER8B50840 8LBN0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P246341
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P201749)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LD8B50D010 ER8B50840 8LBN0B
Description: PORTFOLIO 8 INCH NARROW DISTRIBUTION 50 DEGREE CUTOFF RECESSED
DOWNLIGHT
80 CRI 4000 CCT WITH SPECULAR BLACK TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: 1887 (1 lamp)
Luminaire Lumens: 3145.0 lumens
Efficiency: 166.7%
Efficacy: 59.3 lumens/watt
Spacing Criteria (0/90/45): 0.69 / 0.69 / 0.77
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

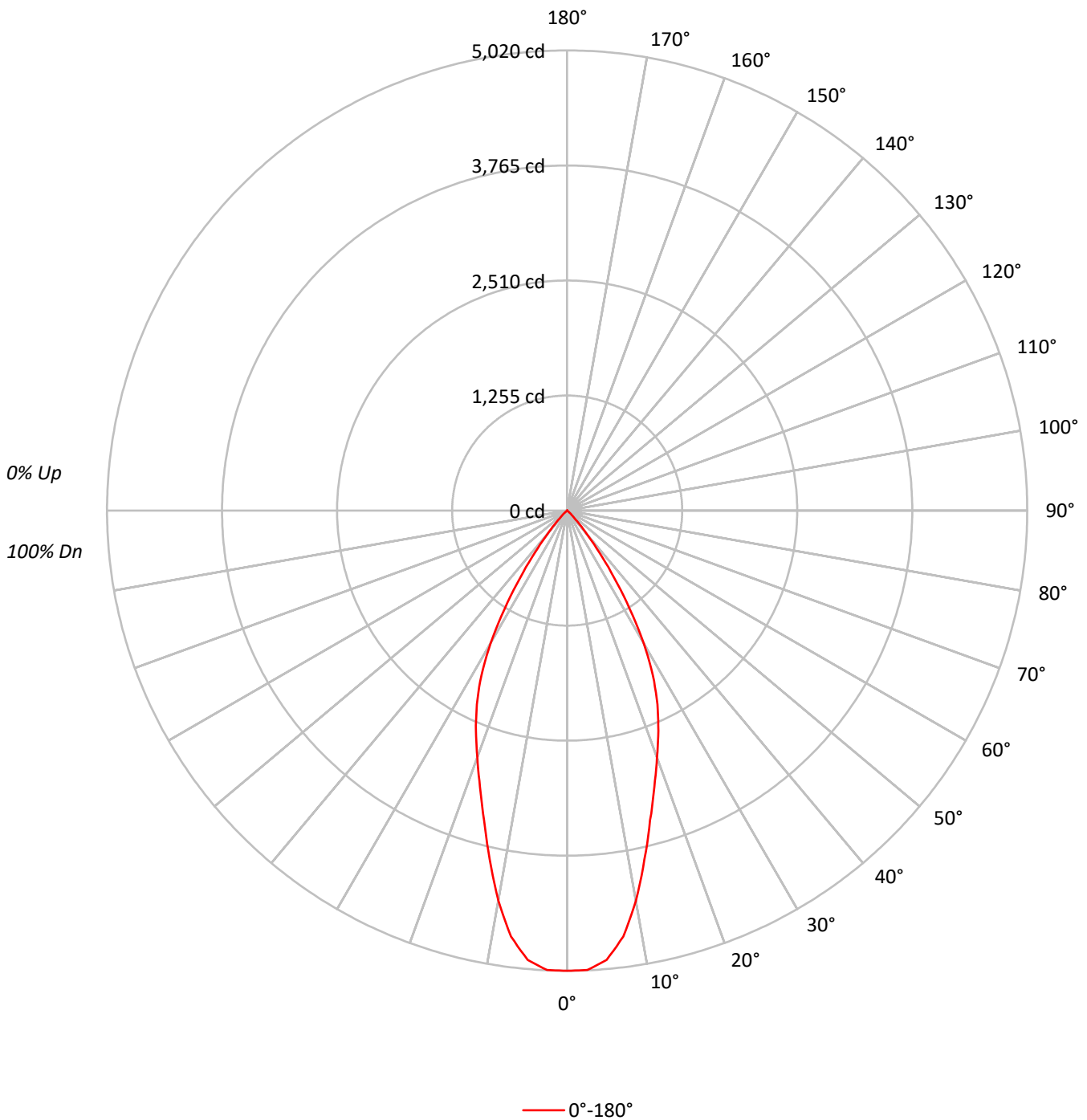
Input Watts (W): 53
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | | | |
| RW | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 |
| RCR | | | | | | | | | | | | | | | | | | | | |
| 0 | 198 | 198 | 198 | 198 | 194 | 194 | 194 | 194 | 185 | 185 | 185 | 177 | 177 | 177 | 170 | 170 | 170 | 167 | 167 | 167 |
| 1 | 190 | 186 | 182 | 178 | 186 | 182 | 179 | 175 | 175 | 173 | 170 | 169 | 167 | 165 | 163 | 162 | 160 | 157 | 157 | 157 |
| 2 | 181 | 174 | 168 | 162 | 178 | 171 | 165 | 161 | 166 | 161 | 157 | 161 | 157 | 154 | 156 | 153 | 151 | 148 | 148 | 148 |
| 3 | 173 | 163 | 156 | 150 | 170 | 161 | 154 | 148 | 157 | 151 | 146 | 153 | 148 | 144 | 149 | 145 | 142 | 139 | 139 | 139 |
| 4 | 165 | 154 | 145 | 139 | 162 | 152 | 144 | 138 | 148 | 142 | 136 | 145 | 139 | 135 | 142 | 137 | 133 | 131 | 131 | 131 |
| 5 | 158 | 145 | 136 | 129 | 155 | 143 | 135 | 129 | 140 | 133 | 128 | 138 | 131 | 126 | 135 | 130 | 125 | 123 | 123 | 123 |
| 6 | 151 | 137 | 128 | 121 | 148 | 136 | 127 | 121 | 133 | 126 | 120 | 131 | 124 | 119 | 129 | 123 | 118 | 116 | 116 | 116 |
| 7 | 144 | 130 | 120 | 114 | 142 | 128 | 120 | 114 | 126 | 119 | 113 | 125 | 118 | 112 | 123 | 116 | 112 | 110 | 110 | 110 |
| 8 | 138 | 123 | 114 | 107 | 136 | 122 | 113 | 107 | 120 | 112 | 107 | 119 | 111 | 106 | 117 | 111 | 106 | 104 | 104 | 104 |
| 9 | 132 | 117 | 108 | 101 | 130 | 116 | 107 | 101 | 114 | 106 | 101 | 113 | 106 | 101 | 112 | 105 | 100 | 98 | 98 | 98 |
| 10 | 126 | 111 | 102 | 96 | 124 | 110 | 102 | 96 | 109 | 101 | 96 | 108 | 101 | 95 | 107 | 100 | 95 | 93 | 93 | 93 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° |
|-----|--------|
| 0° | 154795 |
| 5° | 152350 |
| 10° | 135340 |
| 15° | 111674 |
| 20° | 94032 |
| 25° | 79314 |
| 30° | 59406 |
| 35° | 33597 |
| 40° | 13268 |
| 45° | 3550 |
| 50° | 715 |
| 55° | 0 |
| 60° | 99 |
| 65° | 0 |
| 70° | 0 |
| 75° | 0 |
| 80° | 0 |
| 85° | 0 |



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

| Zone | Lumens | % Fixture | % Lamp | 0° | Flux | |
|-----------|--------|-----------|--------|------|------|------|
| 0°-10° | 450.3 | 14.3 | 23.9 | 0° | 5020 | |
| 10°-20° | 981.6 | 31.2 | 52.0 | 5° | 4922 | 450 |
| 20°-30° | 1051.6 | 33.4 | 55.7 | 15° | 3498 | 982 |
| 30°-40° | 569.9 | 18.1 | 30.2 | 25° | 2331 | 1052 |
| 40°-50° | 88.5 | 2.8 | 4.7 | 35° | 892 | 570 |
| 50°-60° | 2.5 | 0.1 | 0.1 | 45° | 81 | 88 |
| 60°-70° | 0.6 | 0.0 | 0.0 | 55° | 0 | 2 |
| 70°-80° | 0.0 | 0.0 | 0.0 | 65° | 0 | 1 |
| 80°-90° | 0.0 | 0.0 | 0.0 | 75° | 0 | 0 |
| 90°-100° | 0.0 | 0.0 | 0.0 | 85° | 0 | 0 |
| 100°-110° | 0.0 | 0.0 | 0.0 | 90° | 0 | 0 |
| 110°-120° | 0.0 | 0.0 | 0.0 | 95° | 0 | 0 |
| 120°-130° | 0.0 | 0.0 | 0.0 | 105° | 0 | 0 |
| 130°-140° | 0.0 | 0.0 | 0.0 | 115° | 0 | 0 |
| 140°-150° | 0.0 | 0.0 | 0.0 | 125° | 0 | 0 |
| 150°-160° | 0.0 | 0.0 | 0.0 | 135° | 0 | 0 |
| 160°-170° | 0.0 | 0.0 | 0.0 | 145° | 0 | 0 |
| 170°-180° | 0.0 | 0.0 | 0.0 | 155° | 0 | 0 |
| 0°-30° | 2483.5 | 79.0 | 131.6 | 165° | 0 | 0 |
| 0°-40° | 3053.4 | 97.1 | 161.8 | 175° | 0 | 0 |
| 0°-60° | 3144.4 | 100.0 | 166.6 | 180° | 0 | 0 |
| 0°-90° | 3145.0 | 100.0 | 166.7 | | | |
| 90°-120° | 0.0 | 0.0 | 0.0 | | | |
| 90°-150° | 0.0 | 0.0 | 0.0 | | | |
| 90°-180° | 0.0 | 0.0 | 0.0 | | | |
| 0°-180° | 3145.0 | 100.0 | 166.7 | | | |



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CANDELA DISTRIBUTION (FULL):

| 0° | |
|--------|--------|
| 0° | 5019.9 |
| 2.5° | 5016.6 |
| 5° | 4921.8 |
| 7.5° | 4687.0 |
| 10° | 4322.3 |
| 12.5° | 3897.7 |
| 15° | 3498.1 |
| 17.5° | 3160.2 |
| 20° | 2865.5 |
| 22.5° | 2600.7 |
| 25° | 2331.1 |
| 27.5° | 2026.4 |
| 30° | 1668.4 |
| 32.5° | 1272.1 |
| 35° | 892.5 |
| 37.5° | 571.3 |
| 40° | 329.6 |
| 42.5° | 176.4 |
| 45° | 81.4 |
| 47.5° | 43.2 |
| 50° | 14.9 |
| 52.5° | 1.6 |
| 55° | 0.0 |
| 57.5° | 1.6 |
| 60° | 1.6 |
| 62.5° | 0.0 |
| 65° | 0.0 |
| 67.5° | 1.6 |
| 70° | 0.0 |
| 72.5° | 0.0 |
| 75° | 0.0 |
| 77.5° | 0.0 |
| 80° | 0.0 |
| 82.5° | 0.0 |
| 85° | 0.0 |
| 87.5° | 0.0 |
| 90° | 0.0 |
| 92.5° | 0.0 |
| 95° | 0.0 |
| 97.5° | 0.0 |
| 100° | 0.0 |
| 102.5° | 0.0 |
| 105° | 0.0 |
| 107.5° | 0.0 |
| 110° | 0.0 |



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CANDELA DISTRIBUTION (continued):

| | 0° |
|--------|-----|
| 112.5° | 0.0 |
| 115° | 0.0 |
| 117.5° | 0.0 |
| 120° | 0.0 |
| 122.5° | 0.0 |
| 125° | 0.0 |
| 127.5° | 0.0 |
| 130° | 0.0 |
| 132.5° | 0.0 |
| 135° | 0.0 |
| 137.5° | 0.0 |
| 140° | 0.0 |
| 142.5° | 0.0 |
| 145° | 0.0 |
| 147.5° | 0.0 |
| 150° | 0.0 |
| 152.5° | 0.0 |
| 155° | 0.0 |
| 157.5° | 0.0 |
| 160° | 0.0 |
| 162.5° | 0.0 |
| 165° | 0.0 |
| 167.5° | 0.0 |
| 170° | 0.0 |
| 172.5° | 0.0 |
| 175° | 0.0 |
| 177.5° | 0.0 |
| 180° | 0.0 |

(END OF REPORT)