

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: P251243

Luminaire Tested: **LSR8B70D010 EC8B70830 8LBN0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P251243
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P201794)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B70D010 EC8B70830 8LBN0GPH
Description: PORTFOLIO 8 INCH NARROW DISTRIBUTION 50 DEGREE CUTOFF RECESSED
DOWNLIGHT- CYLINDEC
80 CRI 3000 CCT WITH GRAPHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: 2183 (1 lamp)
Luminaire Lumens: 5857.0 lumens
Efficiency: 268.3%
Efficacy: 77.2 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

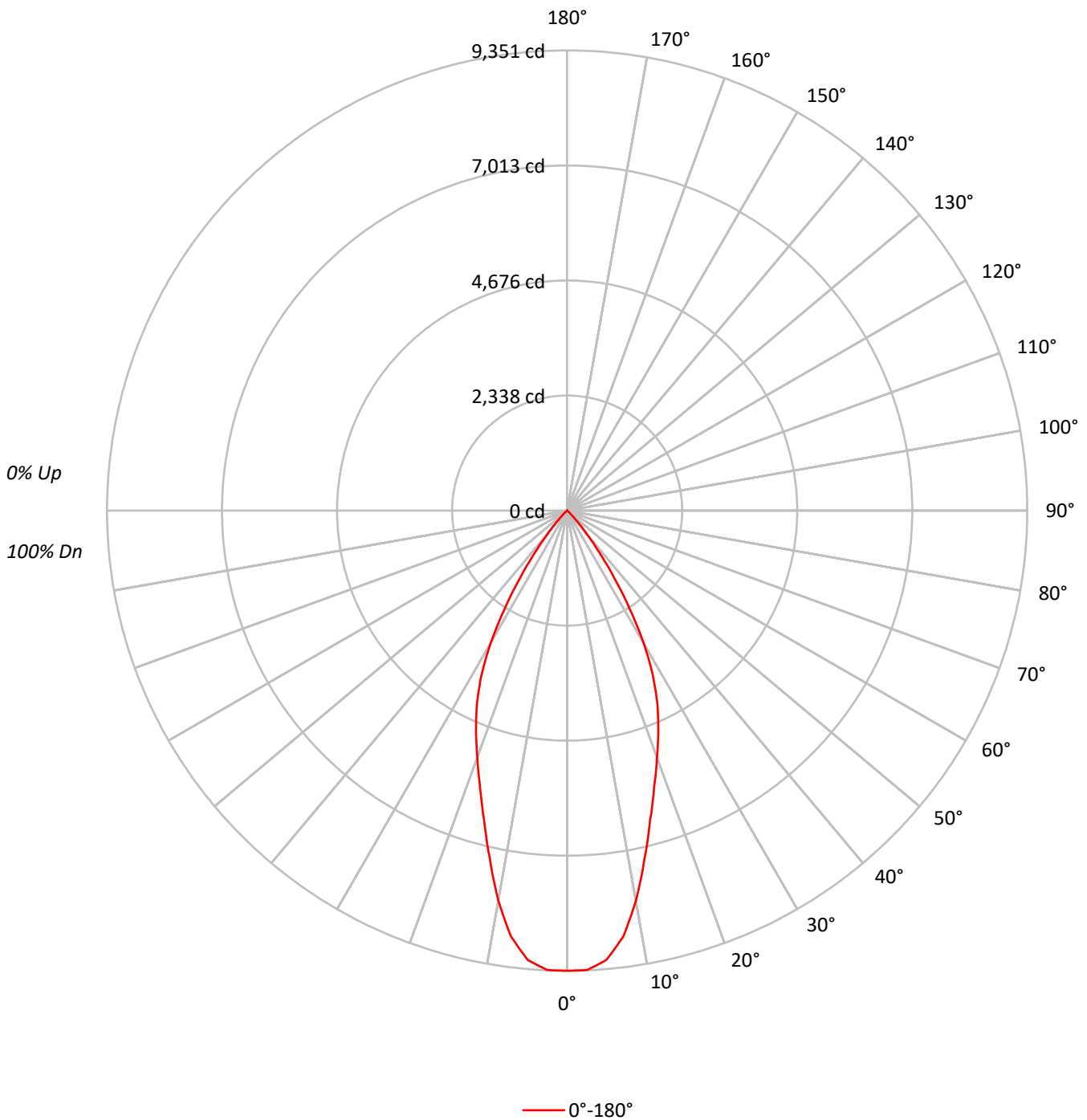
Input Watts (W): 75.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 319 | 319 | 319 | 319 | 312 | 312 | 312 | 312 | 298 | 298 | 298 | 285 | 285 | 285 | 274 | 274 | 274 | 268 | 268 | 268 | 268 |
| 1 | 306 | 299 | 293 | 287 | 299 | 293 | 287 | 282 | 282 | 278 | 274 | 272 | 269 | 266 | 263 | 260 | 258 | 253 | 253 | 253 | 253 |
| 2 | 292 | 280 | 270 | 261 | 286 | 275 | 266 | 259 | 267 | 259 | 253 | 259 | 253 | 248 | 252 | 247 | 242 | 238 | 238 | 238 | 238 |
| 3 | 279 | 263 | 251 | 241 | 274 | 259 | 248 | 239 | 252 | 243 | 235 | 246 | 238 | 231 | 240 | 233 | 228 | 224 | 224 | 224 | 224 |
| 4 | 266 | 247 | 234 | 223 | 261 | 244 | 232 | 222 | 239 | 228 | 219 | 233 | 224 | 217 | 229 | 221 | 214 | 210 | 210 | 210 | 210 |
| 5 | 254 | 233 | 219 | 208 | 250 | 231 | 217 | 207 | 226 | 214 | 205 | 222 | 212 | 204 | 218 | 209 | 202 | 198 | 198 | 198 | 198 |
| 6 | 242 | 220 | 206 | 195 | 239 | 218 | 204 | 194 | 214 | 202 | 193 | 211 | 200 | 192 | 207 | 198 | 190 | 187 | 187 | 187 | 187 |
| 7 | 232 | 209 | 194 | 183 | 228 | 207 | 193 | 183 | 204 | 191 | 182 | 200 | 189 | 181 | 198 | 188 | 180 | 176 | 176 | 176 | 176 |
| 8 | 221 | 198 | 183 | 173 | 218 | 196 | 182 | 172 | 193 | 181 | 172 | 191 | 179 | 171 | 188 | 178 | 170 | 167 | 167 | 167 | 167 |
| 9 | 212 | 188 | 173 | 163 | 209 | 187 | 173 | 163 | 184 | 171 | 162 | 182 | 170 | 162 | 180 | 169 | 161 | 158 | 158 | 158 | 158 |
| 10 | 203 | 179 | 164 | 155 | 200 | 178 | 164 | 154 | 176 | 163 | 154 | 174 | 162 | 154 | 172 | 161 | 153 | 150 | 150 | 150 | 150 |

AVERAGE LUMINANCE (cd/sqm):

| 0° | |
|-----|--------|
| 0° | 288357 |
| 5° | 283735 |
| 10° | 252109 |
| 15° | 208011 |
| 20° | 175112 |
| 25° | 147739 |
| 30° | 110602 |
| 35° | 62557 |
| 40° | 24700 |
| 45° | 6659 |
| 50° | 1276 |
| 55° | 0 |
| 60° | 160 |
| 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° | 838.8 | 14.3 | 38.4 | 0° | 9351 | |
| 10°-20° | 1828.2 | 31.2 | 83.7 | 5° | 9166 | 839 |
| 20°-30° | 1958.3 | 33.4 | 89.7 | 15° | 6516 | 1828 |
| 30°-40° | 1061.2 | 18.1 | 48.6 | 25° | 4342 | 1958 |
| 40°-50° | 165.2 | 2.8 | 7.6 | 35° | 1662 | 1061 |
| 50°-60° | 4.3 | 0.1 | 0.2 | 45° | 153 | 165 |
| 60°-70° | 1.0 | 0.0 | 0.0 | 55° | 0 | 4 |
| 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° | 4625.3 | 79.0 | 211.9 | 165° | 0 | 0 |
| 0°-40° | 5686.5 | 97.1 | 260.5 | 175° | 0 | 0 |
| 0°-60° | 5856.0 | 100.0 | 268.3 | 180° | 0 | 0 |
| 0°-90° | 5857.0 | 100.0 | 268.3 | | | |
| 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° | 5857.0 | 100.0 | 268.3 | | | |



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CANDELA DISTRIBUTION (FULL):

| 0° | |
|--------|--------|
| 0° | 9351.2 |
| 2.5° | 9343.6 |
| 5° | 9166.3 |
| 7.5° | 8729.4 |
| 10° | 8051.5 |
| 12.5° | 7258.0 |
| 15° | 6515.8 |
| 17.5° | 5885.8 |
| 20° | 5336.3 |
| 22.5° | 4843.2 |
| 25° | 4342.2 |
| 27.5° | 3773.6 |
| 30° | 3106.2 |
| 32.5° | 2369.2 |
| 35° | 1661.8 |
| 37.5° | 1064.3 |
| 40° | 613.6 |
| 42.5° | 327.0 |
| 45° | 152.7 |
| 47.5° | 83.4 |
| 50° | 26.6 |
| 52.5° | 2.6 |
| 55° | 0.0 |
| 57.5° | 2.6 |
| 60° | 2.6 |
| 62.5° | 0.0 |
| 65° | 0.0 |
| 67.5° | 2.6 |
| 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)