

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: P251249

Luminaire Tested: **LD8B70D010 ER8B70850 8LBN0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P251249
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: LD8B70D010 ER8B70850 8LBN0GPH
Description: PORTFOLIO 8 INCH NARROW DISTRIBUTION 50 DEGREE CUTOFF RECESSED
DOWNLIGHT
80 CRI 5000 CCT WITH GRAPHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: 2183 (1 lamp)
Luminaire Lumens: 6170.0 lumens
Efficiency: 282.6%
Efficacy: 81.3 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

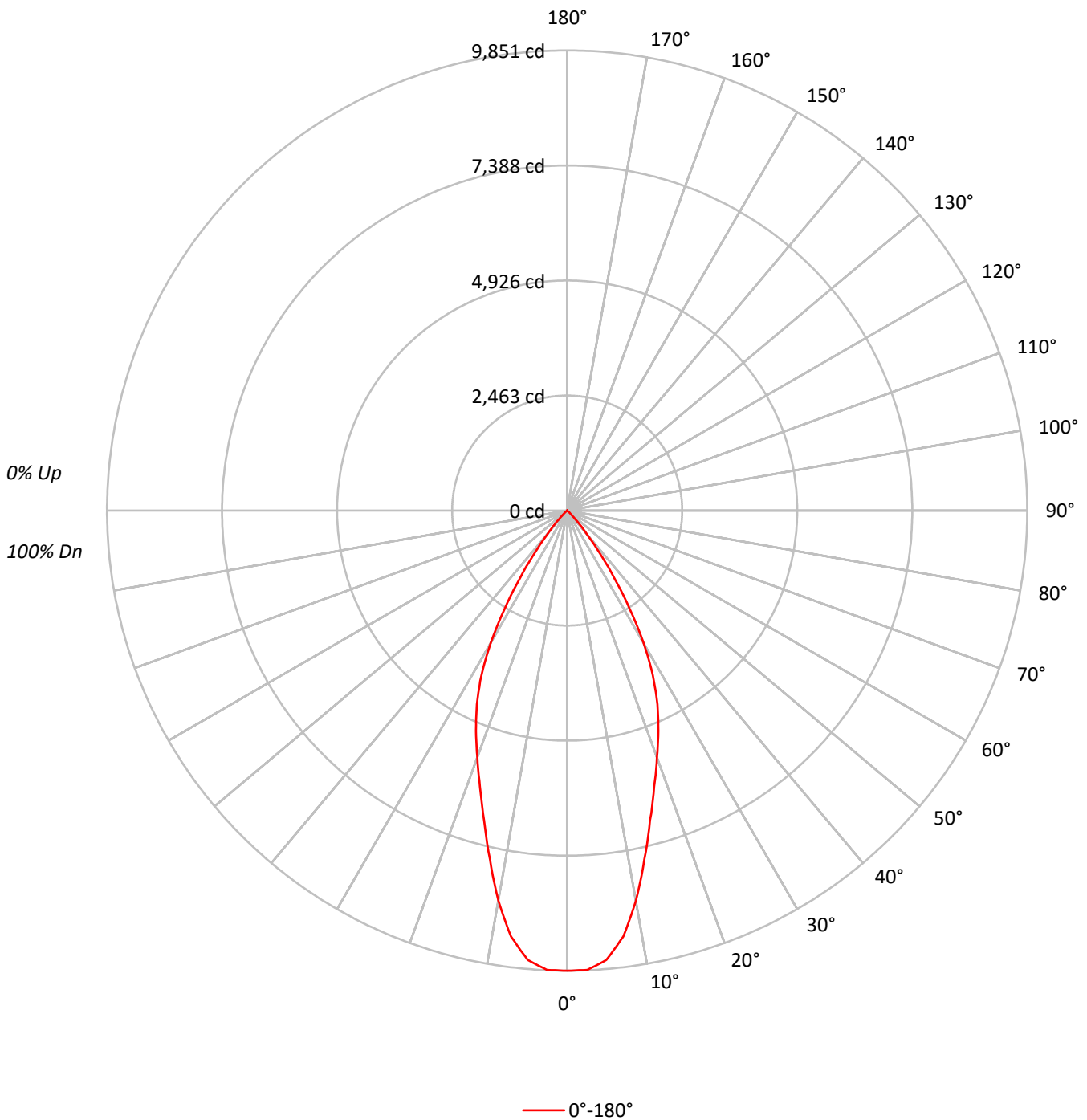
Input Watts (W): 75.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 336 | 336 | 336 | 336 | 329 | 329 | 329 | 329 | 314 | 314 | 314 | 301 | 301 | 301 | 288 | 288 | 288 | 283 | | | |
| 1 | 322 | 315 | 308 | 302 | 315 | 309 | 303 | 297 | 297 | 293 | 288 | 287 | 283 | 280 | 277 | 274 | 272 | 267 | | | |
| 2 | 308 | 295 | 284 | 275 | 302 | 290 | 280 | 272 | 281 | 273 | 266 | 273 | 266 | 261 | 265 | 260 | 255 | 251 | | | |
| 3 | 294 | 277 | 264 | 254 | 288 | 273 | 261 | 252 | 266 | 256 | 248 | 259 | 251 | 244 | 253 | 246 | 240 | 236 | | | |
| 4 | 280 | 261 | 246 | 235 | 275 | 257 | 244 | 234 | 251 | 240 | 231 | 246 | 236 | 228 | 241 | 233 | 226 | 222 | | | |
| 5 | 267 | 246 | 230 | 219 | 263 | 243 | 229 | 218 | 238 | 226 | 216 | 234 | 223 | 215 | 229 | 220 | 213 | 209 | | | |
| 6 | 255 | 232 | 217 | 205 | 251 | 230 | 215 | 205 | 226 | 213 | 203 | 222 | 211 | 202 | 218 | 208 | 201 | 197 | | | |
| 7 | 244 | 220 | 204 | 193 | 240 | 218 | 203 | 193 | 214 | 201 | 192 | 211 | 199 | 191 | 208 | 198 | 190 | 186 | | | |
| 8 | 233 | 208 | 193 | 182 | 230 | 207 | 192 | 182 | 204 | 190 | 181 | 201 | 189 | 180 | 198 | 188 | 179 | 176 | | | |
| 9 | 223 | 198 | 182 | 172 | 220 | 197 | 182 | 172 | 194 | 181 | 171 | 192 | 179 | 171 | 189 | 178 | 170 | 167 | | | |
| 10 | 214 | 188 | 173 | 163 | 211 | 187 | 173 | 163 | 185 | 172 | 162 | 183 | 171 | 162 | 181 | 170 | 161 | 158 | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° |
|-----|--------|
| 0° | 303765 |
| 5° | 298899 |
| 10° | 265579 |
| 15° | 219127 |
| 20° | 184468 |
| 25° | 155633 |
| 30° | 116512 |
| 35° | 65900 |
| 40° | 26020 |
| 45° | 7012 |
| 50° | 1343 |
| 55° | 0 |
| 60° | 173 |
| 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° | 883.6 | 14.3 | 40.5 | 0° | 9851 | |
| 10°-20° | 1925.9 | 31.2 | 88.2 | 5° | 9656 | 884 |
| 20°-30° | 2063.0 | 33.4 | 94.5 | 15° | 6864 | 1926 |
| 30°-40° | 1117.9 | 18.1 | 51.2 | 25° | 4574 | 2063 |
| 40°-50° | 174.0 | 2.8 | 8.0 | 35° | 1751 | 1118 |
| 50°-60° | 4.6 | 0.1 | 0.2 | 45° | 161 | 174 |
| 60°-70° | 1.0 | 0.0 | 0.0 | 55° | 0 | 5 |
| 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° | 4872.5 | 79.0 | 223.2 | 165° | 0 | 0 |
| 0°-40° | 5990.4 | 97.1 | 274.4 | 175° | 0 | 0 |
| 0°-60° | 6168.9 | 100.0 | 282.6 | 180° | 0 | 0 |
| 0°-90° | 6170.0 | 100.0 | 282.6 | | | |
| 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° | 6170.0 | 100.0 | 282.6 | | | |



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CANDELA DISTRIBUTION (FULL):

| 0° | |
|--------|--------|
| 0° | 9850.9 |
| 2.5° | 9842.9 |
| 5° | 9656.2 |
| 7.5° | 9195.9 |
| 10° | 8481.7 |
| 12.5° | 7645.9 |
| 15° | 6864.0 |
| 17.5° | 6200.3 |
| 20° | 5621.4 |
| 22.5° | 5102.0 |
| 25° | 4574.2 |
| 27.5° | 3975.3 |
| 30° | 3272.2 |
| 32.5° | 2495.8 |
| 35° | 1750.6 |
| 37.5° | 1121.1 |
| 40° | 646.4 |
| 42.5° | 344.4 |
| 45° | 160.8 |
| 47.5° | 87.8 |
| 50° | 28.0 |
| 52.5° | 2.8 |
| 55° | 0.0 |
| 57.5° | 2.8 |
| 60° | 2.8 |
| 62.5° | 0.0 |
| 65° | 0.0 |
| 67.5° | 2.8 |
| 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)