

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P32063

Luminaire Tested: **J2-WL-1N5-1C-UNV-4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P32063
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: J2-WL-1N5-1C-UNV-4
Description: CORELITE 4' SUSPENDED FLUORESCENT FIXTURE WITH WHITE PAINTED UPPER REFLECTOR AND FROSTED LENS
Light Source: (1) DOUBLE ENDED BIPIN T5 LINEAR FLUORESCENT LAMPS 3500K GE F28W/T5/835/ECO
Ballast/Driver: UNIVERSAL ACCUSTART ELECTRONIC BALLAST B228PUNV90-C

Summary

Lumens per Lamp: 2900 (1 lamp)
Luminaire Lumens: 2680.8 lumens
Efficiency: 92.4%
Efficacy: 93.7 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.26 / 1.37
Luminous Opening: Rectangular (W 0.33' x L: 3.58' x H: 0')
CIE Type: Semi-Indirect

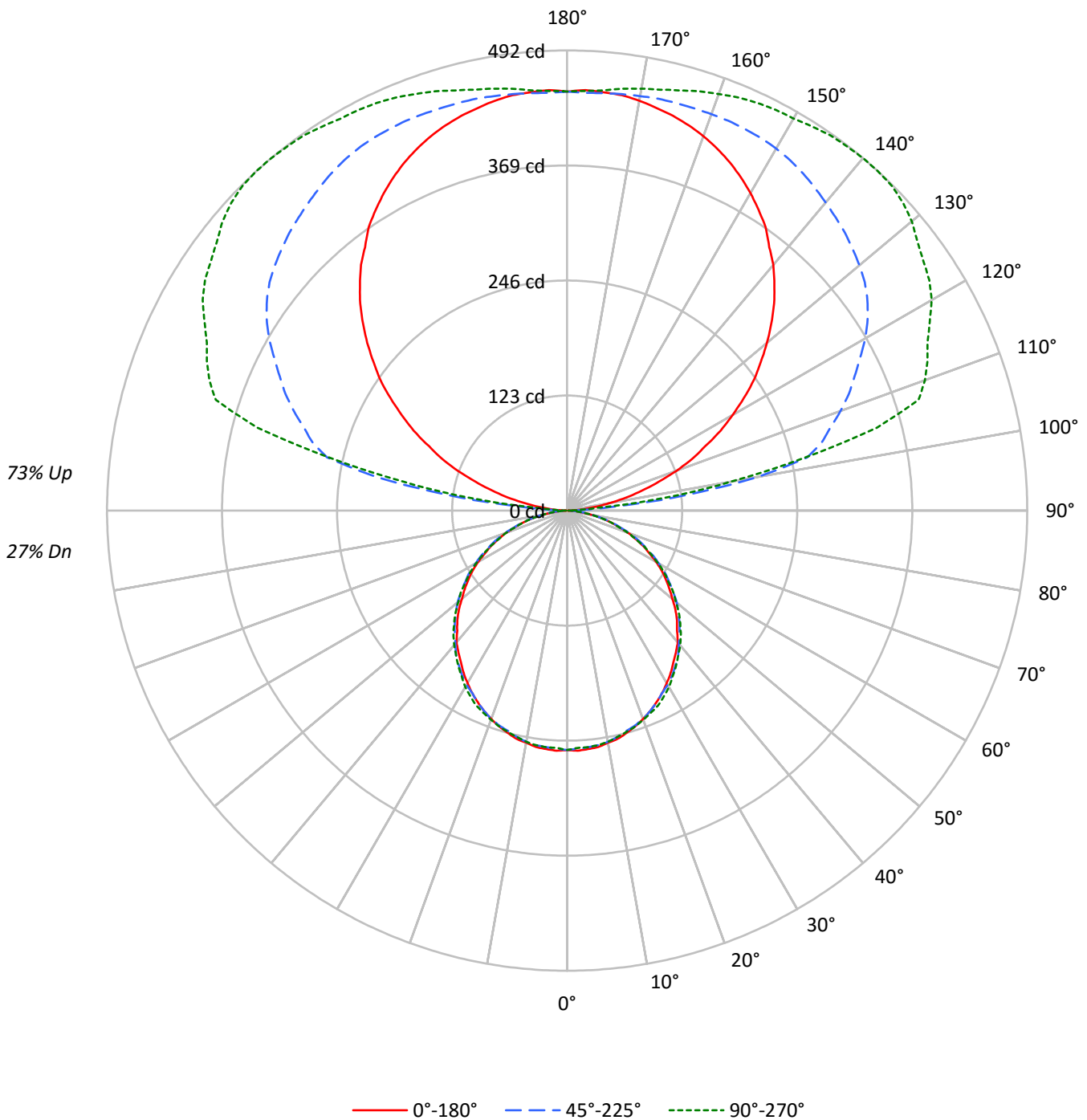
Input Watts (W): 28.6
Input Voltage (V): 120.00
Input Current (A_{in}): 0.2391
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P32063

CATALOG NUMBER: J2-WL-1N5-1C-UNV-4

Luminous Intensity Polar Plot





TEST NUMBER: P32063

CATALOG NUMBER: J2-WL-1N5-1C-UNV-4

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 | 94 | 94 | 94 | 94 | 84 | 84 | 84 | 84 | 65 | 65 | 65 | 48 | 48 | 48 | 33 | 33 | 33 | 25 |
| 1 | 86 | 82 | 78 | 75 | 76 | 73 | 70 | 68 | 57 | 55 | 53 | 42 | 41 | 40 | 29 | 28 | 27 | 21 |
| 2 | 78 | 71 | 66 | 61 | 69 | 64 | 59 | 55 | 50 | 47 | 44 | 37 | 35 | 33 | 25 | 24 | 23 | 17 |
| 3 | 71 | 62 | 56 | 51 | 63 | 56 | 50 | 46 | 44 | 40 | 37 | 33 | 30 | 28 | 22 | 21 | 19 | 15 |
| 4 | 65 | 55 | 48 | 43 | 58 | 49 | 43 | 39 | 39 | 34 | 31 | 29 | 26 | 24 | 20 | 18 | 17 | 13 |
| 5 | 59 | 49 | 42 | 36 | 53 | 44 | 38 | 33 | 35 | 30 | 27 | 26 | 23 | 20 | 18 | 16 | 14 | 11 |
| 6 | 54 | 44 | 36 | 31 | 48 | 39 | 33 | 28 | 31 | 26 | 23 | 23 | 20 | 18 | 16 | 14 | 12 | 9 |
| 7 | 50 | 39 | 32 | 27 | 45 | 35 | 29 | 25 | 28 | 23 | 20 | 21 | 18 | 16 | 14 | 13 | 11 | 8 |
| 8 | 46 | 35 | 29 | 24 | 41 | 32 | 26 | 22 | 25 | 21 | 18 | 19 | 16 | 14 | 13 | 11 | 10 | 7 |
| 9 | 43 | 32 | 26 | 21 | 38 | 29 | 23 | 19 | 23 | 19 | 16 | 18 | 14 | 12 | 12 | 10 | 9 | 7 |
| 10 | 40 | 29 | 23 | 19 | 36 | 27 | 21 | 17 | 21 | 17 | 14 | 16 | 13 | 11 | 11 | 9 | 8 | 6 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 2307 | 2307 | 2307 |
| 5° | 2316 | 2298 | 2298 |
| 10° | 2306 | 2297 | 2297 |
| 15° | 2295 | 2276 | 2286 |
| 20° | 2273 | 2273 | 2282 |
| 25° | 2247 | 2247 | 2287 |
| 30° | 2216 | 2237 | 2268 |
| 35° | 2178 | 2222 | 2233 |
| 40° | 2165 | 2188 | 2212 |
| 45° | 2116 | 2167 | 2179 |
| 50° | 2061 | 2145 | 2131 |
| 55° | 2027 | 2090 | 2074 |
| 60° | 1983 | 2037 | 2019 |
| 65° | 1919 | 1962 | 1940 |
| 70° | 1818 | 1871 | 1818 |
| 75° | 1671 | 1741 | 1671 |
| 80° | 1401 | 1453 | 1401 |
| 85° | 1034 | 1137 | 1034 |



TEST NUMBER: P32063

CATALOG NUMBER: J2-WL-1N5-1C-UNV-4

ZONAL LUMENS:

| Zone | Lumens | % Fixture | % Lamp |
|-----------|--------|-----------|--------|
| 0°-10° | 24.2 | 0.9 | 0.8 |
| 10°-20° | 69.3 | 2.6 | 2.4 |
| 20°-30° | 104.8 | 3.9 | 3.6 |
| 30°-40° | 126.2 | 4.7 | 4.4 |
| 40°-50° | 130.7 | 4.9 | 4.5 |
| 50°-60° | 118.5 | 4.4 | 4.1 |
| 60°-70° | 90.6 | 3.4 | 3.1 |
| 70°-80° | 51.3 | 1.9 | 1.8 |
| 80°-90° | 13.7 | 0.5 | 0.5 |
| 90°-100° | 68.7 | 2.6 | 2.4 |
| 100°-110° | 257.7 | 9.6 | 8.9 |
| 110°-120° | 319.6 | 11.9 | 11.0 |
| 120°-130° | 335.1 | 12.5 | 11.6 |
| 130°-140° | 318.6 | 11.9 | 11.0 |
| 140°-150° | 273.2 | 10.2 | 9.4 |
| 150°-160° | 207.6 | 7.7 | 7.2 |
| 160°-170° | 128.1 | 4.8 | 4.4 |
| 170°-180° | 43.0 | 1.6 | 1.5 |
| 0°-30° | 198.3 | 7.4 | 6.8 |
| 0°-40° | 324.4 | 12.1 | 11.2 |
| 0°-60° | 573.6 | 21.4 | 19.8 |
| 0°-90° | 729.2 | 27.2 | 25.1 |
| 90°-120° | 646.0 | 24.1 | 22.3 |
| 90°-150° | 1573.0 | 58.7 | 54.2 |
| 90°-180° | 1952.0 | 72.8 | 67.3 |
| 0°-180° | 2680.8 | 100.0 | 92.4 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-----|-------|-----|-------|-----|------|
| 0° | 256 | 256 | 256 | 256 | 256 | |
| 5° | 256 | 256 | 254 | 255 | 254 | 24 |
| 15° | 246 | 245 | 244 | 246 | 245 | 69 |
| 25° | 226 | 226 | 226 | 229 | 230 | 104 |
| 35° | 198 | 200 | 202 | 204 | 203 | 124 |
| 45° | 166 | 168 | 170 | 171 | 171 | 128 |
| 55° | 129 | 133 | 133 | 134 | 132 | 115 |
| 65° | 90 | 92 | 92 | 92 | 91 | 88 |
| 75° | 48 | 50 | 50 | 48 | 48 | 50 |
| 85° | 10 | 12 | 11 | 11 | 10 | 11 |
| 90° | 1 | 3 | 2 | 1 | 1 | 2 |
| 95° | 17 | 76 | 56 | 41 | 30 | 20 |
| 105° | 83 | 180 | 282 | 345 | 343 | 89 |
| 115° | 163 | 250 | 339 | 404 | 425 | 163 |
| 125° | 244 | 304 | 392 | 447 | 465 | 217 |
| 135° | 313 | 355 | 420 | 473 | 491 | 241 |
| 145° | 370 | 397 | 440 | 477 | 490 | 231 |
| 155° | 411 | 427 | 450 | 474 | 481 | 189 |
| 165° | 437 | 443 | 451 | 463 | 465 | 123 |
| 175° | 449 | 449 | 448 | 452 | 451 | 43 |
| 180° | 448 | 448 | 448 | 448 | 448 | |



TEST NUMBER: P32063

CATALOG NUMBER: J2-WL-1N5-1C-UNV-4

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-----|-------|-----|-------|-----|
| 0° | 256 | 256 | 256 | 256 | 256 |
| 2.5° | 257 | 256 | 255 | 256 | 254 |
| 5° | 256 | 256 | 254 | 255 | 254 |
| 7.5° | 255 | 254 | 253 | 254 | 253 |
| 10° | 252 | 252 | 251 | 252 | 251 |
| 12.5° | 250 | 249 | 248 | 249 | 248 |
| 15° | 246 | 245 | 244 | 246 | 245 |
| 17.5° | 242 | 242 | 241 | 243 | 242 |
| 20° | 237 | 237 | 237 | 238 | 238 |
| 22.5° | 232 | 232 | 232 | 234 | 234 |
| 25° | 226 | 226 | 226 | 229 | 230 |
| 27.5° | 220 | 220 | 220 | 224 | 224 |
| 30° | 213 | 214 | 215 | 218 | 218 |
| 32.5° | 206 | 207 | 209 | 211 | 210 |
| 35° | 198 | 200 | 202 | 204 | 203 |
| 37.5° | 191 | 193 | 195 | 196 | 195 |
| 40° | 184 | 185 | 186 | 188 | 188 |
| 42.5° | 174 | 176 | 178 | 180 | 180 |
| 45° | 166 | 168 | 170 | 171 | 171 |
| 47.5° | 157 | 160 | 161 | 162 | 162 |
| 50° | 147 | 151 | 153 | 153 | 152 |
| 52.5° | 138 | 142 | 143 | 144 | 143 |
| 55° | 129 | 133 | 133 | 134 | 132 |
| 57.5° | 120 | 122 | 124 | 124 | 123 |
| 60° | 110 | 113 | 113 | 113 | 112 |
| 62.5° | 99 | 102 | 103 | 103 | 101 |
| 65° | 90 | 92 | 92 | 92 | 91 |
| 67.5° | 79 | 82 | 82 | 81 | 79 |
| 70° | 69 | 71 | 71 | 70 | 69 |
| 72.5° | 58 | 60 | 59 | 59 | 57 |
| 75° | 48 | 50 | 50 | 48 | 48 |
| 77.5° | 37 | 39 | 38 | 37 | 37 |
| 80° | 27 | 29 | 28 | 28 | 27 |
| 82.5° | 17 | 20 | 20 | 19 | 18 |
| 85° | 10 | 12 | 11 | 11 | 10 |
| 87.5° | 3 | 6 | 6 | 5 | 5 |
| 90° | 1 | 3 | 2 | 1 | 1 |
| 92.5° | 6 | 24 | 13 | 10 | 9 |
| 95° | 17 | 76 | 56 | 41 | 30 |
| 97.5° | 31 | 123 | 130 | 109 | 107 |
| 100° | 46 | 143 | 207 | 189 | 178 |
| 102.5° | 65 | 162 | 263 | 273 | 258 |
| 105° | 83 | 180 | 282 | 345 | 343 |
| 107.5° | 103 | 199 | 295 | 368 | 394 |
| 110° | 124 | 218 | 311 | 383 | 407 |



TEST NUMBER: P32063

CATALOG NUMBER: J2-WL-1N5-1C-UNV-4

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-----|-------|-----|-------|-----|
| 112.5° | 145 | 236 | 326 | 392 | 417 |
| 115° | 163 | 250 | 339 | 404 | 425 |
| 117.5° | 185 | 264 | 353 | 418 | 437 |
| 120° | 204 | 277 | 368 | 430 | 450 |
| 122.5° | 224 | 291 | 381 | 438 | 459 |
| 125° | 244 | 304 | 392 | 447 | 465 |
| 127.5° | 261 | 319 | 401 | 456 | 472 |
| 130° | 279 | 331 | 408 | 464 | 481 |
| 132.5° | 296 | 344 | 414 | 469 | 487 |
| 135° | 313 | 355 | 420 | 473 | 491 |
| 137.5° | 328 | 367 | 425 | 476 | 492 |
| 140° | 343 | 377 | 430 | 477 | 492 |
| 142.5° | 355 | 388 | 435 | 477 | 491 |
| 145° | 370 | 397 | 440 | 477 | 490 |
| 147.5° | 381 | 405 | 444 | 477 | 487 |
| 150° | 392 | 413 | 447 | 476 | 484 |
| 152.5° | 402 | 420 | 449 | 476 | 483 |
| 155° | 411 | 427 | 450 | 474 | 481 |
| 157.5° | 419 | 432 | 451 | 472 | 478 |
| 160° | 426 | 437 | 451 | 469 | 474 |
| 162.5° | 432 | 440 | 451 | 466 | 470 |
| 165° | 437 | 443 | 451 | 463 | 465 |
| 167.5° | 441 | 445 | 451 | 460 | 461 |
| 170° | 445 | 447 | 450 | 458 | 458 |
| 172.5° | 448 | 448 | 449 | 455 | 455 |
| 175° | 449 | 449 | 448 | 452 | 451 |
| 177.5° | 450 | 450 | 447 | 450 | 449 |
| 180° | 448 | 448 | 448 | 448 | 448 |

(END OF REPORT)