

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: METALUX

Report Number: P842892

Luminaire Tested: **22CZ2-20HE-HRP-UNV-B50**

Issue Date: 1/5/2024



Test Information

Test Method: LM-79-08
Report Number: P842892
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P294823)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 1/5/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-20HE-HRP-UNV-B50
Description: 2X2 2000 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 5000K CCT AND HRP LENS

Light Source: -
Ballast/Driver: -

Summary

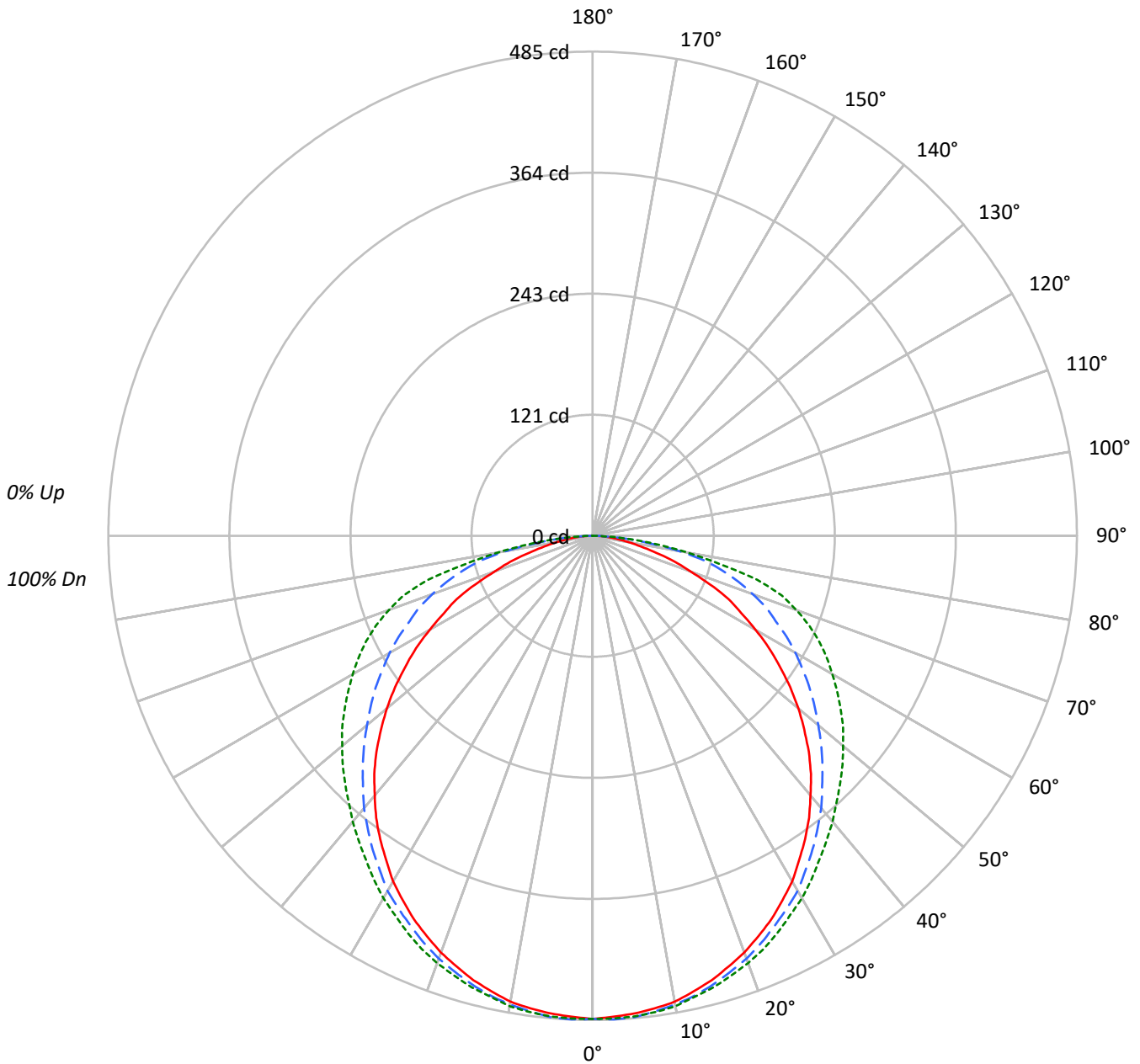
Lumens per Lamp: N/A
Luminaire Lumens: 1470.0 lumens
Efficiency: N/A
Efficacy: 91.9 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.29 / 1.38
Luminous Opening: Rectangular (W 1.92' x L: 1.98' x H: 0')
CIE Type: Direct

Input Watts (W): 16
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





TEST NUMBER: P842892

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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|---|--|--|--|--|--|--|----|--|--|--|--|--|--|--|--|---|
| RF | 20 | | | | | | | | | 20 | | | | | | | | | 20 | | | | | | | | | 20 | | | | | | | | | |
| RC | 80 | | | | | | | | | 50 | | | | | | | | | 30 | | | | | | | | | 10 | | | | | | | | | 0 |
| RW | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 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 | 108 | 103 | 98 | 94 | 105 | 101 | 96 | 93 | 96 | 93 | 90 | 92 | 90 | 87 | 89 | 87 | 84 | 82 | | | | | | | | | | | | | | | | | | | |
| 2 | 98 | 89 | 82 | 76 | 95 | 87 | 80 | 75 | 83 | 78 | 73 | 80 | 75 | 71 | 77 | 73 | 70 | 68 | | | | | | | | | | | | | | | | | | | |
| 3 | 89 | 78 | 69 | 62 | 86 | 76 | 68 | 62 | 73 | 66 | 61 | 70 | 64 | 60 | 68 | 63 | 59 | 56 | | | | | | | | | | | | | | | | | | | |
| 4 | 81 | 69 | 59 | 52 | 79 | 67 | 59 | 52 | 65 | 57 | 51 | 62 | 56 | 51 | 60 | 55 | 50 | 48 | | | | | | | | | | | | | | | | | | | |
| 5 | 74 | 61 | 52 | 45 | 72 | 60 | 51 | 45 | 58 | 50 | 44 | 56 | 49 | 44 | 54 | 48 | 43 | 41 | | | | | | | | | | | | | | | | | | | |
| 6 | 69 | 55 | 46 | 39 | 67 | 54 | 45 | 39 | 52 | 44 | 39 | 50 | 43 | 38 | 49 | 43 | 38 | 36 | | | | | | | | | | | | | | | | | | | |
| 7 | 64 | 50 | 41 | 34 | 62 | 49 | 40 | 34 | 47 | 40 | 34 | 46 | 39 | 34 | 44 | 38 | 33 | 31 | | | | | | | | | | | | | | | | | | | |
| 8 | 59 | 45 | 37 | 31 | 58 | 45 | 36 | 31 | 43 | 36 | 30 | 42 | 35 | 30 | 41 | 35 | 30 | 28 | | | | | | | | | | | | | | | | | | | |
| 9 | 55 | 42 | 33 | 28 | 54 | 41 | 33 | 27 | 40 | 32 | 27 | 39 | 32 | 27 | 38 | 31 | 27 | 25 | | | | | | | | | | | | | | | | | | | |
| 10 | 52 | 38 | 30 | 25 | 50 | 38 | 30 | 25 | 37 | 30 | 25 | 36 | 29 | 25 | 35 | 29 | 24 | 23 | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 1373 | 1373 | 1373 |
| 5° | 1368 | 1379 | 1376 |
| 10° | 1365 | 1374 | 1379 |
| 15° | 1354 | 1367 | 1375 |
| 20° | 1341 | 1361 | 1375 |
| 25° | 1327 | 1350 | 1373 |
| 30° | 1310 | 1346 | 1374 |
| 35° | 1285 | 1330 | 1371 |
| 40° | 1257 | 1319 | 1384 |
| 45° | 1228 | 1306 | 1407 |
| 50° | 1187 | 1302 | 1445 |
| 55° | 1133 | 1312 | 1500 |
| 60° | 1069 | 1331 | 1574 |
| 65° | 1009 | 1357 | 1681 |
| 70° | 861 | 1415 | 1800 |
| 75° | 721 | 1475 | 1870 |
| 80° | 592 | 1425 | 1561 |
| 85° | 514 | 1058 | 1146 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 45.9 | 3.1 |
| 10°-20° | 131.2 | 8.9 |
| 20°-30° | 198.9 | 13.5 |
| 30°-40° | 240.1 | 16.3 |
| 40°-50° | 252.3 | 17.2 |
| 50°-60° | 237.4 | 16.2 |
| 60°-70° | 198.0 | 13.5 |
| 70°-80° | 131.2 | 8.9 |
| 80°-90° | 35.0 | 2.4 |
| 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° | 376.0 | 25.6 |
| 0°-40° | 616.1 | 41.9 |
| 0°-60° | 1105.9 | 75.2 |
| 0°-90° | 1470.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1470.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 484 | 484 | 484 | 484 | 484 | |
| 5° | 480 | 481 | 484 | 484 | 483 | 46 |
| 15° | 461 | 463 | 466 | 467 | 468 | 130 |
| 25° | 424 | 427 | 431 | 437 | 439 | 195 |
| 35° | 371 | 375 | 384 | 392 | 396 | 232 |
| 45° | 306 | 311 | 325 | 342 | 351 | 236 |
| 55° | 229 | 239 | 265 | 292 | 303 | 205 |
| 65° | 150 | 163 | 202 | 236 | 250 | 146 |
| 75° | 66 | 92 | 134 | 162 | 171 | 71 |
| 85° | 16 | 24 | 32 | 35 | 35 | 18 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P842892

CATALOG NUMBER: 22CZ2-20HE-HRP-UNV-B50

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 484.0 | 484.0 | 484.0 | 484.0 | 484.0 |
| 2.5° | 482.2 | 483.2 | 485.0 | 485.0 | 484.0 |
| 5° | 480.4 | 481.2 | 484.0 | 484.0 | 483.2 |
| 7.5° | 477.5 | 478.5 | 480.4 | 482.2 | 481.2 |
| 10° | 473.9 | 474.7 | 476.7 | 478.5 | 478.5 |
| 12.5° | 467.4 | 468.2 | 472.0 | 472.9 | 472.9 |
| 15° | 460.9 | 462.7 | 465.5 | 467.4 | 468.2 |
| 17.5° | 452.5 | 454.4 | 458.1 | 461.8 | 461.8 |
| 20° | 444.2 | 446.0 | 450.7 | 454.4 | 455.4 |
| 22.5° | 434.0 | 436.7 | 441.4 | 446.0 | 447.9 |
| 25° | 423.7 | 426.6 | 431.2 | 436.7 | 438.6 |
| 27.5° | 411.7 | 414.5 | 421.0 | 427.5 | 428.4 |
| 30° | 399.7 | 402.4 | 410.7 | 416.4 | 419.2 |
| 32.5° | 384.9 | 388.6 | 396.9 | 405.2 | 408.0 |
| 35° | 370.9 | 374.6 | 383.9 | 392.2 | 395.9 |
| 37.5° | 356.1 | 359.8 | 370.0 | 380.2 | 384.9 |
| 40° | 339.4 | 344.1 | 356.1 | 367.2 | 373.7 |
| 42.5° | 323.6 | 328.3 | 340.3 | 355.2 | 361.6 |
| 45° | 306.1 | 310.6 | 325.4 | 342.2 | 350.6 |
| 47.5° | 287.4 | 293.1 | 310.6 | 331.1 | 339.4 |
| 50° | 268.9 | 275.4 | 294.9 | 318.1 | 327.4 |
| 52.5° | 249.4 | 257.8 | 280.1 | 305.1 | 316.2 |
| 55° | 229.1 | 239.3 | 265.2 | 292.1 | 303.2 |
| 57.5° | 209.6 | 218.8 | 249.4 | 278.2 | 290.3 |
| 60° | 188.3 | 200.3 | 234.6 | 264.3 | 277.3 |
| 62.5° | 167.8 | 180.8 | 218.8 | 250.4 | 264.3 |
| 65° | 150.3 | 163.2 | 202.1 | 235.6 | 250.4 |
| 67.5° | 127.0 | 144.6 | 188.3 | 219.8 | 234.6 |
| 70° | 103.8 | 128.0 | 170.6 | 203.1 | 217.0 |
| 72.5° | 86.3 | 109.5 | 153.0 | 185.5 | 198.4 |
| 75° | 65.8 | 91.8 | 134.5 | 162.3 | 170.6 |
| 77.5° | 49.2 | 76.0 | 115.0 | 128.9 | 129.8 |
| 80° | 36.2 | 58.5 | 87.2 | 91.8 | 95.5 |
| 82.5° | 25.0 | 40.8 | 56.5 | 62.1 | 64.0 |
| 85° | 15.8 | 24.1 | 32.5 | 35.2 | 35.2 |
| 87.5° | 8.3 | 9.3 | 11.2 | 11.2 | 11.2 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



Report Generated By 670246072 / DESKTOP-50001EG





— 0°-180° - - 45°-225° - - - - 90°-270°







(END OF REPORT)