

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: CORELITE

Report Number: P302447

Luminaire Tested: **ZX-WO-65L930-UNV-24-STD**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P302447
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1902-133-42)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: ZX-WO-65L930-UNV-24-STD
Description: CORELITE CLASS RX 2X2 LED LUMINAIRE.
FLAT LENS, STANDARD LUMEN PACKAGE.
Light Source: (392)3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5089.8 lumens
Efficiency: N/A
Efficacy: 104.1 lumens/watt
Spacing Criteria (0/90/45): 1.37 / 1.39 / 1.48
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

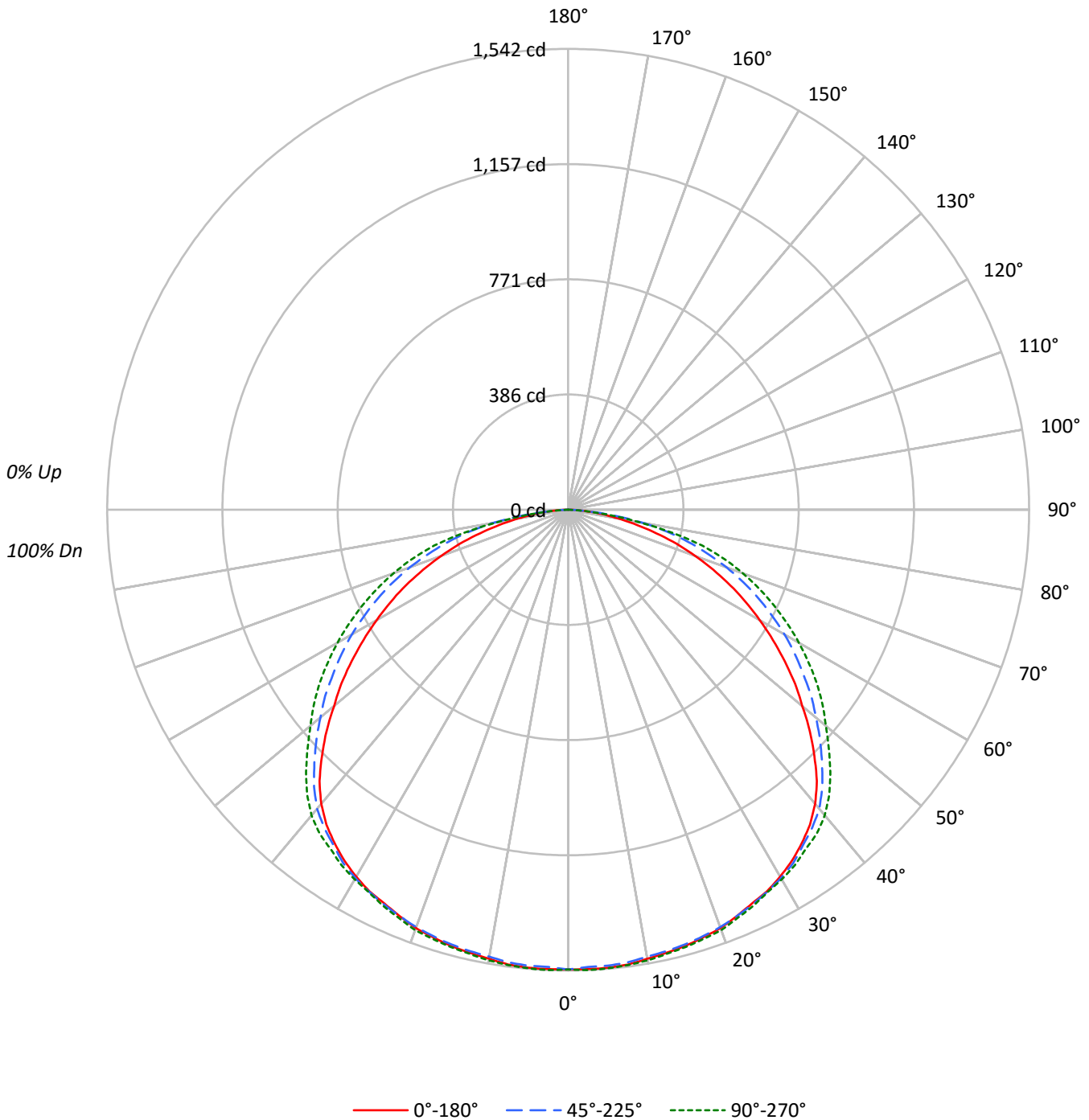
Input Watts (W): 48.9
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P302447

CATALOG NUMBER: ZX-WO-65L930-UNV-24-STD

Luminous Intensity Polar Plot





TEST NUMBER: P302447

CATALOG NUMBER: ZX-WO-65L930-UNV-24-STD

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 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |
| 1 | 108 | 103 | 99 | 95 | 106 | 101 | 97 | 93 | 97 | 93 | 90 | 93 | 90 | 88 | 89 | 87 | 85 | 83 |
| 2 | 98 | 89 | 82 | 76 | 95 | 87 | 81 | 75 | 84 | 78 | 74 | 81 | 76 | 72 | 77 | 74 | 70 | 68 |
| 3 | 89 | 78 | 69 | 63 | 86 | 76 | 68 | 62 | 73 | 67 | 61 | 71 | 65 | 60 | 68 | 63 | 59 | 57 |
| 4 | 81 | 69 | 60 | 53 | 79 | 67 | 59 | 52 | 65 | 57 | 52 | 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 | 38 | 50 | 43 | 38 | 49 | 43 | 38 | 36 |
| 7 | 63 | 50 | 41 | 34 | 62 | 49 | 40 | 34 | 47 | 39 | 34 | 46 | 39 | 34 | 44 | 38 | 33 | 31 |
| 8 | 59 | 45 | 36 | 30 | 57 | 44 | 36 | 30 | 43 | 35 | 30 | 42 | 35 | 30 | 41 | 34 | 30 | 28 |
| 9 | 55 | 41 | 33 | 27 | 54 | 41 | 33 | 27 | 39 | 32 | 27 | 38 | 32 | 27 | 37 | 31 | 27 | 25 |
| 10 | 52 | 38 | 30 | 25 | 50 | 37 | 30 | 24 | 36 | 29 | 24 | 35 | 29 | 24 | 35 | 28 | 24 | 22 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 2070 | 2070 | 2070 |
| 5° | 2078 | 2068 | 2080 |
| 10° | 2085 | 2075 | 2092 |
| 15° | 2105 | 2098 | 2110 |
| 20° | 2133 | 2128 | 2144 |
| 25° | 2159 | 2164 | 2172 |
| 30° | 2203 | 2212 | 2220 |
| 35° | 2238 | 2250 | 2276 |
| 40° | 2257 | 2295 | 2346 |
| 45° | 2216 | 2285 | 2360 |
| 50° | 2141 | 2265 | 2355 |
| 55° | 2074 | 2251 | 2382 |
| 60° | 1993 | 2249 | 2399 |
| 65° | 1905 | 2237 | 2421 |
| 70° | 1775 | 2213 | 2447 |
| 75° | 1588 | 2158 | 2411 |
| 80° | 1323 | 1991 | 1852 |
| 85° | 999 | 1166 | 971 |



TEST NUMBER: P302447

CATALOG NUMBER: ZX-WO-65L930-UNV-24-STD

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 146.4 | 2.9 |
| 10°-20° | 427.6 | 8.4 |
| 20°-30° | 674.4 | 13.2 |
| 30°-40° | 860.9 | 16.9 |
| 40°-50° | 927.4 | 18.2 |
| 50°-60° | 854.5 | 16.8 |
| 60°-70° | 683.4 | 13.4 |
| 70°-80° | 419.5 | 8.2 |
| 80°-90° | 95.7 | 1.9 |
| 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° | 1248.3 | 24.5 |
| 0°-40° | 2109.3 | 41.4 |
| 0°-60° | 3891.1 | 76.4 |
| 0°-90° | 5089.8 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 5089.8 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1538 | 1538 | 1538 | 1538 | 1538 | |
| 5° | 1538 | 1538 | 1531 | 1540 | 1540 | 146 |
| 15° | 1512 | 1513 | 1506 | 1515 | 1515 | 427 |
| 25° | 1454 | 1456 | 1458 | 1465 | 1463 | 672 |
| 35° | 1362 | 1366 | 1370 | 1384 | 1386 | 852 |
| 45° | 1165 | 1177 | 1201 | 1231 | 1240 | 897 |
| 55° | 884 | 908 | 960 | 1003 | 1016 | 790 |
| 65° | 598 | 638 | 703 | 746 | 760 | 591 |
| 75° | 306 | 354 | 415 | 453 | 464 | 325 |
| 85° | 65 | 86 | 76 | 66 | 63 | 79 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P302447

CATALOG NUMBER: ZX-WO-65L930-UNV-24-STD

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1538.5 | 1538.5 | 1538.5 | 1538.5 | 1538.5 |
| 2.5° | 1538.5 | 1540.3 | 1531.3 | 1540.3 | 1542.1 |
| 5° | 1538.5 | 1538.5 | 1531.3 | 1540.3 | 1540.3 |
| 7.5° | 1534.9 | 1534.9 | 1527.7 | 1536.7 | 1536.7 |
| 10° | 1525.9 | 1525.9 | 1518.7 | 1527.7 | 1531.3 |
| 12.5° | 1518.7 | 1518.7 | 1513.3 | 1522.3 | 1522.3 |
| 15° | 1511.5 | 1513.3 | 1506.1 | 1515.1 | 1515.1 |
| 17.5° | 1500.8 | 1500.8 | 1497.2 | 1504.4 | 1506.1 |
| 20° | 1490.0 | 1490.0 | 1486.4 | 1495.4 | 1497.2 |
| 22.5° | 1472.0 | 1473.8 | 1472.0 | 1479.2 | 1479.2 |
| 25° | 1454.0 | 1455.8 | 1457.6 | 1464.8 | 1463.0 |
| 27.5° | 1439.6 | 1441.4 | 1441.4 | 1448.6 | 1443.2 |
| 30° | 1418.1 | 1423.5 | 1423.5 | 1427.1 | 1428.9 |
| 32.5° | 1392.9 | 1400.1 | 1401.9 | 1409.1 | 1410.9 |
| 35° | 1362.4 | 1366.0 | 1369.6 | 1383.9 | 1385.7 |
| 37.5° | 1328.2 | 1337.2 | 1340.8 | 1360.6 | 1366.0 |
| 40° | 1285.1 | 1295.9 | 1306.6 | 1331.8 | 1335.4 |
| 42.5° | 1231.2 | 1243.7 | 1258.1 | 1285.1 | 1292.3 |
| 45° | 1164.7 | 1177.2 | 1200.6 | 1231.2 | 1240.1 |
| 47.5° | 1096.4 | 1110.7 | 1143.1 | 1175.4 | 1182.6 |
| 50° | 1022.7 | 1044.2 | 1082.0 | 1119.7 | 1125.1 |
| 52.5° | 956.2 | 977.7 | 1024.5 | 1064.0 | 1073.0 |
| 55° | 884.3 | 907.6 | 959.8 | 1002.9 | 1015.5 |
| 57.5° | 812.4 | 842.9 | 898.7 | 941.8 | 954.4 |
| 60° | 740.5 | 772.8 | 835.8 | 875.3 | 891.5 |
| 62.5° | 670.4 | 706.3 | 769.3 | 814.2 | 826.8 |
| 65° | 598.5 | 638.0 | 702.7 | 745.9 | 760.3 |
| 67.5° | 524.8 | 566.2 | 634.5 | 677.6 | 692.0 |
| 70° | 451.1 | 497.9 | 562.6 | 609.3 | 621.9 |
| 72.5° | 381.0 | 424.2 | 488.9 | 530.2 | 546.4 |
| 75° | 305.5 | 354.1 | 415.2 | 452.9 | 463.7 |
| 77.5° | 237.2 | 284.0 | 337.9 | 361.3 | 357.7 |
| 80° | 170.7 | 219.3 | 257.0 | 249.8 | 239.0 |
| 82.5° | 115.0 | 154.6 | 160.0 | 149.2 | 145.6 |
| 85° | 64.7 | 86.3 | 75.5 | 66.5 | 62.9 |
| 87.5° | 27.0 | 23.4 | 12.6 | 5.4 | 3.6 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)