

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: P383848

Luminaire Tested: **24ID-45-L840-CFR1**

Issue Date: 2/25/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P383848  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1911-572-65)  
Test Lab: INNOVATION CENTER (G2)  
Issue Date: 2/25/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: 24ID-45-L840-CFR1  
Description: 2X4 IN DEPTH TROFFER WITH 1INCH RECESSED COFFER LENS

Light Source: -  
Ballast/Driver: -

**Summary**

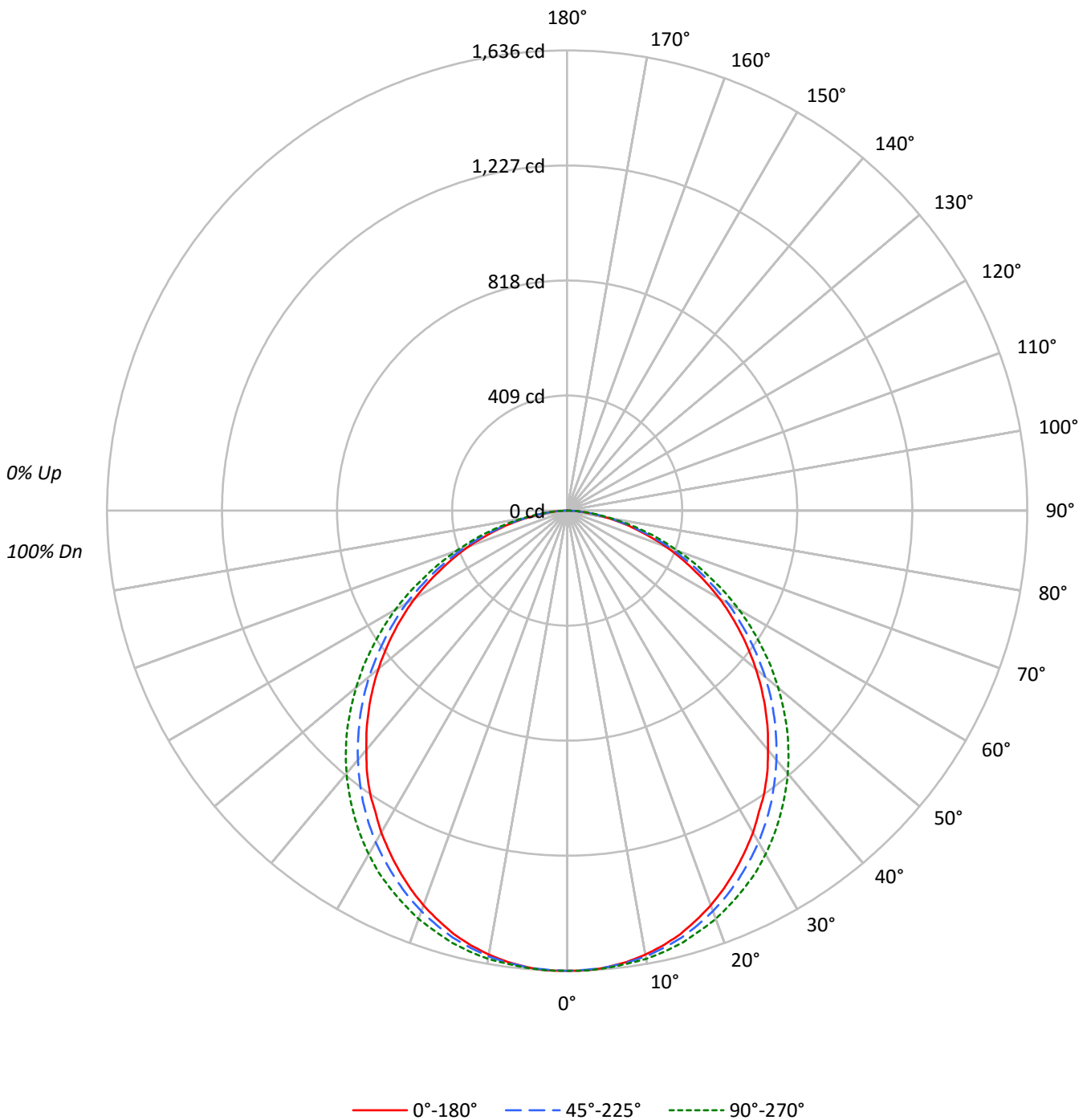
Lumens per Lamp: N/A  
Luminaire Lumens: 4444.1 lumens  
Efficiency: N/A  
Efficacy: 111.1 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.35  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 40  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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: P383848  
CATALOG NUMBER: 24ID-45-L840-CFR1

### Luminous Intensity Polar Plot





TEST NUMBER: P383848

CATALOG NUMBER: 24ID-45-L840-CFR1

**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   | 109 | 104 | 100 | 96  | 106 | 102 | 98  | 95  | 98  | 95  | 92  |  | 94  | 91  | 89  |  | 90  | 88  | 86  | 84  |
| 2   | 99  | 91  | 84  | 79  | 97  | 89  | 83  | 78  | 86  | 81  | 76  |  | 82  | 78  | 74  |  | 79  | 76  | 73  | 71  |
| 3   | 91  | 80  | 72  | 66  | 88  | 79  | 71  | 65  | 76  | 69  | 64  |  | 73  | 67  | 63  |  | 70  | 66  | 62  | 60  |
| 4   | 83  | 71  | 62  | 56  | 81  | 70  | 62  | 55  | 67  | 60  | 55  |  | 65  | 59  | 54  |  | 63  | 58  | 53  | 51  |
| 5   | 76  | 64  | 55  | 48  | 74  | 63  | 54  | 48  | 60  | 53  | 47  |  | 58  | 52  | 47  |  | 57  | 51  | 46  | 44  |
| 6   | 71  | 57  | 48  | 42  | 69  | 56  | 48  | 42  | 55  | 47  | 42  |  | 53  | 46  | 41  |  | 51  | 45  | 41  | 39  |
| 7   | 65  | 52  | 43  | 37  | 64  | 51  | 43  | 37  | 50  | 42  | 37  |  | 48  | 42  | 37  |  | 47  | 41  | 36  | 34  |
| 8   | 61  | 47  | 39  | 33  | 59  | 47  | 39  | 33  | 45  | 38  | 33  |  | 44  | 38  | 33  |  | 43  | 37  | 32  | 31  |
| 9   | 57  | 44  | 35  | 30  | 56  | 43  | 35  | 30  | 42  | 35  | 30  |  | 41  | 34  | 30  |  | 40  | 34  | 29  | 28  |
| 10  | 53  | 40  | 32  | 27  | 52  | 40  | 32  | 27  | 39  | 32  | 27  |  | 38  | 31  | 27  |  | 37  | 31  | 27  | 25  |

**AVERAGE LUMINANCE (cd/sqm):**

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 2202 | 2202 | 2202 |
| 5°  | 2201 | 2201 | 2204 |
| 10° | 2190 | 2199 | 2211 |
| 15° | 2170 | 2189 | 2214 |
| 20° | 2138 | 2170 | 2212 |
| 25° | 2097 | 2144 | 2204 |
| 30° | 2053 | 2115 | 2192 |
| 35° | 2008 | 2078 | 2170 |
| 40° | 1951 | 2034 | 2144 |
| 45° | 1897 | 1982 | 2106 |
| 50° | 1834 | 1923 | 2049 |
| 55° | 1762 | 1851 | 1982 |
| 60° | 1684 | 1775 | 1901 |
| 65° | 1573 | 1665 | 1779 |
| 70° | 1460 | 1539 | 1644 |
| 75° | 1302 | 1371 | 1487 |
| 80° | 1091 | 1143 | 1247 |
| 85° | 829  | 829  | 932  |



TEST NUMBER: P383848

CATALOG NUMBER: 24ID-45-L840-CFR1

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 154.9  | 3.5       |
| 10°-20°   | 443.1  | 10.0      |
| 20°-30°   | 666.3  | 15.0      |
| 30°-40°   | 792.7  | 17.8      |
| 40°-50°   | 806.5  | 18.1      |
| 50°-60°   | 709.8  | 16.0      |
| 60°-70°   | 520.7  | 11.7      |
| 70°-80°   | 282.6  | 6.4       |
| 80°-90°   | 67.4   | 1.5       |
| 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°    | 1264.3 | 28.4      |
| 0°-40°    | 2057.0 | 46.3      |
| 0°-60°    | 3573.4 | 80.4      |
| 0°-90°    | 4444.1 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 4444.1 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1636 | 1636  | 1636 | 1636  | 1636 |      |
| 5°  | 1630 | 1627  | 1630 | 1630  | 1632 | 155  |
| 15° | 1558 | 1560  | 1572 | 1580  | 1589 | 439  |
| 25° | 1413 | 1422  | 1444 | 1469  | 1484 | 651  |
| 35° | 1223 | 1232  | 1265 | 1303  | 1321 | 764  |
| 45° | 997  | 1006  | 1042 | 1086  | 1107 | 769  |
| 55° | 751  | 762   | 789  | 827   | 845  | 672  |
| 65° | 494  | 503   | 523  | 546   | 559  | 491  |
| 75° | 250  | 255   | 264  | 277   | 286  | 266  |
| 85° | 54   | 54    | 54   | 58    | 60   | 65   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |



TEST NUMBER: P383848

CATALOG NUMBER: 24ID-45-L840-CFR1

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1636.4 | 1636.4 | 1636.4 | 1636.4 | 1636.4 |
| 2.5°  | 1636.4 | 1634.1 | 1634.1 | 1634.1 | 1636.4 |
| 5°    | 1629.6 | 1627.4 | 1629.6 | 1629.6 | 1631.9 |
| 7.5°  | 1618.5 | 1616.2 | 1620.7 | 1622.9 | 1625.2 |
| 10°   | 1602.8 | 1602.8 | 1609.5 | 1614.0 | 1618.5 |
| 12.5° | 1582.7 | 1584.9 | 1591.6 | 1598.4 | 1605.1 |
| 15°   | 1558.1 | 1560.3 | 1571.5 | 1580.5 | 1589.4 |
| 17.5° | 1526.8 | 1531.3 | 1544.7 | 1558.1 | 1567.1 |
| 20°   | 1493.3 | 1500.0 | 1515.6 | 1533.5 | 1544.7 |
| 22.5° | 1455.3 | 1464.2 | 1482.1 | 1504.5 | 1515.6 |
| 25°   | 1412.8 | 1421.8 | 1444.1 | 1468.7 | 1484.3 |
| 27.5° | 1368.1 | 1379.3 | 1403.9 | 1432.9 | 1450.8 |
| 30°   | 1321.2 | 1332.3 | 1361.4 | 1392.7 | 1410.6 |
| 32.5° | 1269.7 | 1283.2 | 1314.4 | 1350.2 | 1368.1 |
| 35°   | 1222.8 | 1231.7 | 1265.3 | 1303.3 | 1321.2 |
| 37.5° | 1169.1 | 1180.3 | 1211.6 | 1251.9 | 1272.0 |
| 40°   | 1111.0 | 1122.2 | 1158.0 | 1198.2 | 1220.6 |
| 42.5° | 1055.1 | 1064.1 | 1099.8 | 1144.6 | 1164.7 |
| 45°   | 997.0  | 1006.0 | 1041.7 | 1086.4 | 1106.6 |
| 47.5° | 936.7  | 947.8  | 981.4  | 1023.8 | 1044.0 |
| 50°   | 876.3  | 885.2  | 918.8  | 959.0  | 979.1  |
| 52.5° | 813.7  | 822.6  | 853.9  | 894.2  | 914.3  |
| 55°   | 751.1  | 762.3  | 789.1  | 827.1  | 845.0  |
| 57.5° | 688.5  | 699.7  | 724.3  | 760.1  | 775.7  |
| 60°   | 625.9  | 634.9  | 659.5  | 690.8  | 706.4  |
| 62.5° | 558.9  | 565.6  | 590.2  | 621.5  | 634.9  |
| 65°   | 494.0  | 503.0  | 523.1  | 545.5  | 558.9  |
| 67.5° | 433.7  | 438.1  | 456.0  | 480.6  | 489.6  |
| 70°   | 371.1  | 375.6  | 391.2  | 411.3  | 418.0  |
| 72.5° | 308.5  | 315.2  | 326.4  | 344.3  | 353.2  |
| 75°   | 250.4  | 254.8  | 263.8  | 277.2  | 286.1  |
| 77.5° | 194.5  | 196.7  | 203.4  | 214.6  | 221.3  |
| 80°   | 140.8  | 143.1  | 147.5  | 156.5  | 161.0  |
| 82.5° | 93.9   | 96.1   | 98.4   | 102.8  | 107.3  |
| 85°   | 53.7   | 53.7   | 53.7   | 58.1   | 60.4   |
| 87.5° | 20.1   | 17.9   | 17.9   | 17.9   | 17.9   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)