

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: CTL58877

Luminaire Tested: **NB-SW-3T8-DL4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: CTL58877
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: NB-SW-3T8-DL4
Description: NAVIGATOR II SUSPENDED LUMINAIRE
WITH 18 CELL LOUVER FABRICATED WHITE PAINTED METAL & DOWNLIGHT KIT

Light Source: 32 WATT T8 LAMP
FP32T8/835. LUMEN RATING = 2900 LMS.
Ballast/Driver: -

Summary

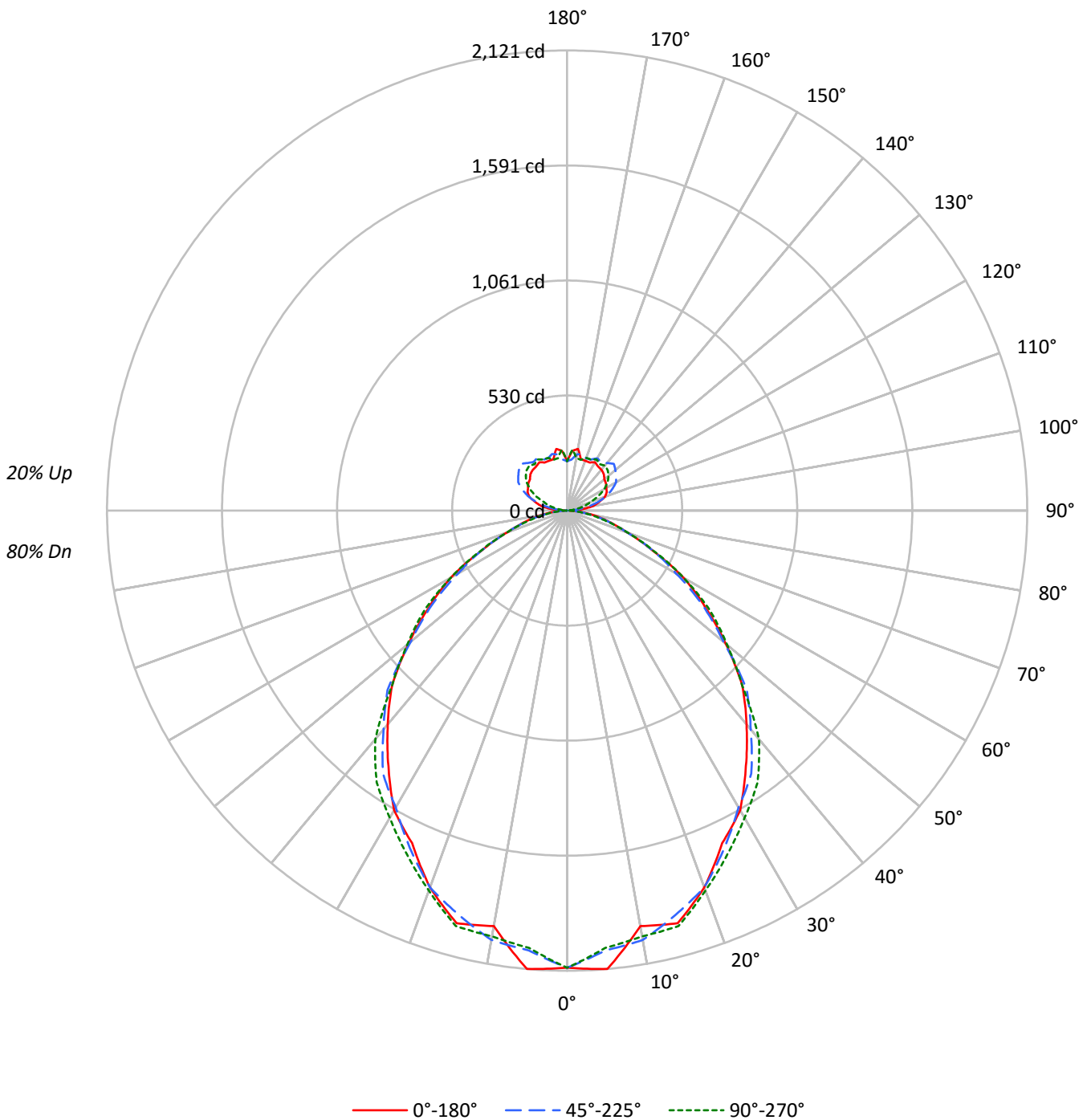
Lumens per Lamp: 2900 (3 lamps)
Luminaire Lumens: 5937.0 lumens
Efficiency: 68.2%
Efficacy: 50.7 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.16 / 1.26
Luminous Opening: Rectangular w/ Sides (W: 0.75' x L: 4' x H: 0.24')
CIE Type: Semi-Direct

Input Watts (W): 117
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





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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 | 78 | 78 | 78 | 78 | 75 | 75 | 75 | 75 | 68 | 68 | 68 | | 62 | 62 | 62 | | 57 | 57 | 57 | 54 |
| 1 | 72 | 69 | 66 | 64 | 69 | 66 | 64 | 62 | 61 | 59 | 57 | | 56 | 54 | 53 | | 51 | 50 | 49 | 47 |
| 2 | 66 | 61 | 57 | 53 | 63 | 58 | 54 | 51 | 54 | 51 | 48 | | 49 | 47 | 45 | | 46 | 44 | 42 | 40 |
| 3 | 60 | 54 | 49 | 45 | 57 | 52 | 47 | 43 | 48 | 44 | 41 | | 44 | 41 | 39 | | 41 | 38 | 36 | 34 |
| 4 | 55 | 48 | 42 | 38 | 53 | 46 | 41 | 37 | 43 | 39 | 35 | | 40 | 36 | 33 | | 37 | 34 | 32 | 30 |
| 5 | 51 | 43 | 37 | 33 | 49 | 41 | 36 | 32 | 38 | 34 | 31 | | 36 | 32 | 29 | | 33 | 30 | 28 | 26 |
| 6 | 47 | 39 | 33 | 29 | 45 | 37 | 32 | 28 | 35 | 30 | 27 | | 32 | 29 | 26 | | 30 | 27 | 25 | 23 |
| 7 | 44 | 35 | 30 | 26 | 42 | 34 | 29 | 25 | 32 | 27 | 24 | | 30 | 26 | 23 | | 28 | 24 | 22 | 20 |
| 8 | 41 | 32 | 27 | 23 | 39 | 31 | 26 | 23 | 29 | 25 | 22 | | 27 | 23 | 21 | | 25 | 22 | 20 | 18 |
| 9 | 38 | 30 | 24 | 21 | 36 | 29 | 24 | 20 | 27 | 23 | 20 | | 25 | 21 | 19 | | 24 | 20 | 18 | 17 |
| 10 | 36 | 27 | 22 | 19 | 34 | 26 | 22 | 18 | 25 | 21 | 18 | | 23 | 20 | 17 | | 22 | 19 | 16 | 15 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 7560 | 7560 | 7560 |
| 5° | 7599 | 7160 | 7089 |
| 10° | 7011 | 6991 | 6873 |
| 15° | 7199 | 6686 | 6784 |
| 20° | 6909 | 6430 | 6377 |
| 25° | 6514 | 6036 | 6024 |
| 30° | 6387 | 5668 | 5722 |
| 35° | 6039 | 5458 | 5477 |
| 40° | 5736 | 5032 | 5083 |
| 45° | 5465 | 4685 | 4388 |
| 50° | 4965 | 3978 | 3889 |
| 55° | 4482 | 3454 | 3457 |
| 60° | 4034 | 2841 | 2867 |
| 65° | 3253 | 2349 | 2216 |
| 70° | 2631 | 1767 | 1652 |
| 75° | 2279 | 1348 | 1173 |
| 80° | 1908 | 893 | 775 |
| 85° | 1290 | 444 | 305 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture | % Lamp |
|-----------|--------|-----------|--------|
| 0°-10° | 193.7 | 3.3 | 2.2 |
| 10°-20° | 546.5 | 9.2 | 6.3 |
| 20°-30° | 793.4 | 13.4 | 9.1 |
| 30°-40° | 922.2 | 15.5 | 10.6 |
| 40°-50° | 879.4 | 14.8 | 10.1 |
| 50°-60° | 694.2 | 11.7 | 8.0 |
| 60°-70° | 436.5 | 7.4 | 5.0 |
| 70°-80° | 209.8 | 3.5 | 2.4 |
| 80°-90° | 54.7 | 0.9 | 0.6 |
| 90°-100° | 42.6 | 0.7 | 0.5 |
| 100°-110° | 140.9 | 2.4 | 1.6 |
| 110°-120° | 203.4 | 3.4 | 2.3 |
| 120°-130° | 223.3 | 3.8 | 2.6 |
| 130°-140° | 210.0 | 3.5 | 2.4 |
| 140°-150° | 170.2 | 2.9 | 2.0 |
| 150°-160° | 119.6 | 2.0 | 1.4 |
| 160°-170° | 72.2 | 1.2 | 0.8 |
| 170°-180° | 24.3 | 0.4 | 0.3 |
| 0°-30° | 1533.6 | 25.8 | 17.6 |
| 0°-40° | 2455.9 | 41.4 | 28.2 |
| 0°-60° | 4029.4 | 67.9 | 46.3 |
| 0°-90° | 4730.4 | 79.7 | 54.4 |
| 90°-120° | 386.9 | 6.5 | 4.4 |
| 90°-150° | 990.4 | 16.7 | 11.4 |
| 90°-180° | 1207.0 | 20.3 | 13.9 |
| 0°-180° | 5937.0 | 100.0 | 68.2 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 2107 | 2107 | 2107 | 2107 | 2107 | |
| 5° | 2121 | 2011 | 2035 | 2017 | 2023 | 196 |
| 15° | 1969 | 1940 | 1929 | 1960 | 1982 | 547 |
| 25° | 1691 | 1705 | 1715 | 1742 | 1748 | 787 |
| 35° | 1436 | 1455 | 1480 | 1514 | 1530 | 901 |
| 45° | 1142 | 1125 | 1171 | 1136 | 1141 | 873 |
| 55° | 778 | 778 | 764 | 773 | 805 | 700 |
| 65° | 432 | 424 | 436 | 436 | 440 | 439 |
| 75° | 201 | 202 | 195 | 188 | 186 | 216 |
| 85° | 53 | 49 | 44 | 38 | 34 | 60 |
| 90° | 11 | 4 | 2 | 1 | 1 | 20 |
| 95° | 69 | 49 | 27 | 15 | 12 | 66 |
| 105° | 152 | 177 | 142 | 105 | 84 | 161 |
| 115° | 202 | 234 | 227 | 184 | 160 | 198 |
| 125° | 218 | 261 | 275 | 242 | 228 | 195 |
| 135° | 239 | 256 | 304 | 287 | 264 | 183 |
| 145° | 248 | 276 | 272 | 283 | 261 | 157 |
| 155° | 244 | 260 | 259 | 252 | 259 | 115 |
| 165° | 245 | 262 | 270 | 247 | 242 | 72 |
| 175° | 276 | 267 | 237 | 257 | 282 | 26 |
| 180° | 227 | 227 | 227 | 227 | 227 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|------|--------|--------|--------|--------|--------|
| 0° | 2107.1 | 2107.1 | 2107.1 | 2107.1 | 2107.1 |
| 5° | 2121.0 | 2011.3 | 2034.6 | 2016.6 | 2023.1 |
| 10° | 1944.6 | 2010.6 | 2009.6 | 2003.2 | 1992.7 |
| 15° | 1969.1 | 1940.5 | 1929.3 | 1960.1 | 1982.5 |
| 20° | 1848.8 | 1816.1 | 1848.4 | 1825.8 | 1864.3 |
| 25° | 1691.4 | 1704.6 | 1715.2 | 1742.3 | 1748.2 |
| 30° | 1594.9 | 1583.6 | 1579.9 | 1625.6 | 1635.8 |
| 35° | 1436.5 | 1454.8 | 1480.0 | 1513.6 | 1530.1 |
| 40° | 1286.2 | 1301.2 | 1316.2 | 1342.0 | 1376.1 |
| 45° | 1141.6 | 1124.6 | 1171.0 | 1136.1 | 1141.0 |
| 50° | 953.0 | 951.3 | 940.5 | 947.2 | 961.8 |
| 55° | 777.7 | 778.5 | 763.6 | 773.0 | 804.6 |
| 60° | 620.5 | 604.6 | 579.8 | 608.6 | 620.5 |
| 65° | 432.4 | 424.5 | 435.7 | 435.7 | 439.8 |
| 70° | 292.1 | 301.2 | 292.6 | 295.4 | 295.7 |
| 75° | 201.1 | 201.9 | 194.6 | 187.5 | 185.5 |
| 80° | 123.7 | 115.5 | 108.9 | 104.9 | 105.5 |
| 85° | 52.8 | 49.1 | 43.8 | 37.5 | 34.4 |
| 90° | 10.9 | 3.9 | 1.6 | 1.0 | 1.3 |
| 95° | 68.8 | 48.9 | 26.8 | 15.3 | 12.0 |
| 100° | 121.4 | 120.5 | 87.1 | 61.7 | 41.5 |
| 105° | 151.6 | 176.8 | 141.9 | 105.1 | 83.5 |
| 110° | 185.4 | 210.7 | 189.9 | 152.4 | 112.9 |
| 115° | 201.5 | 234.0 | 226.8 | 183.8 | 159.9 |
| 120° | 208.1 | 243.8 | 260.3 | 223.0 | 197.2 |
| 125° | 218.5 | 260.9 | 274.9 | 242.2 | 227.5 |
| 130° | 223.6 | 265.3 | 290.1 | 262.5 | 249.0 |
| 135° | 238.9 | 255.7 | 304.4 | 287.1 | 264.0 |
| 140° | 245.4 | 256.9 | 286.0 | 288.1 | 270.3 |
| 145° | 248.3 | 276.2 | 272.1 | 283.4 | 260.8 |
| 150° | 256.6 | 269.1 | 278.2 | 261.6 | 271.8 |
| 155° | 244.5 | 259.7 | 259.0 | 252.0 | 259.2 |
| 160° | 244.2 | 259.4 | 256.5 | 243.9 | 258.2 |
| 165° | 244.6 | 262.4 | 269.8 | 246.7 | 242.3 |
| 170° | 288.7 | 259.5 | 262.4 | 235.3 | 245.2 |
| 175° | 276.0 | 266.9 | 236.7 | 256.8 | 282.1 |
| 180° | 227.1 | 227.1 | 227.1 | 227.1 | 227.1 |

(END OF REPORT)