

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: P#

Luminaire Tested: **8ILED-LD5-32-W-FLUPL-UNV-L835-CD4-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P#
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P34183)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8ILED-LD5-32-W-FLUPL-UNV-L835-CD4-U
Description: Metalux 8' ILED WITH FROST LENS WITH UPL DISTRIBUTION

Light Source: (1) 3500 CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

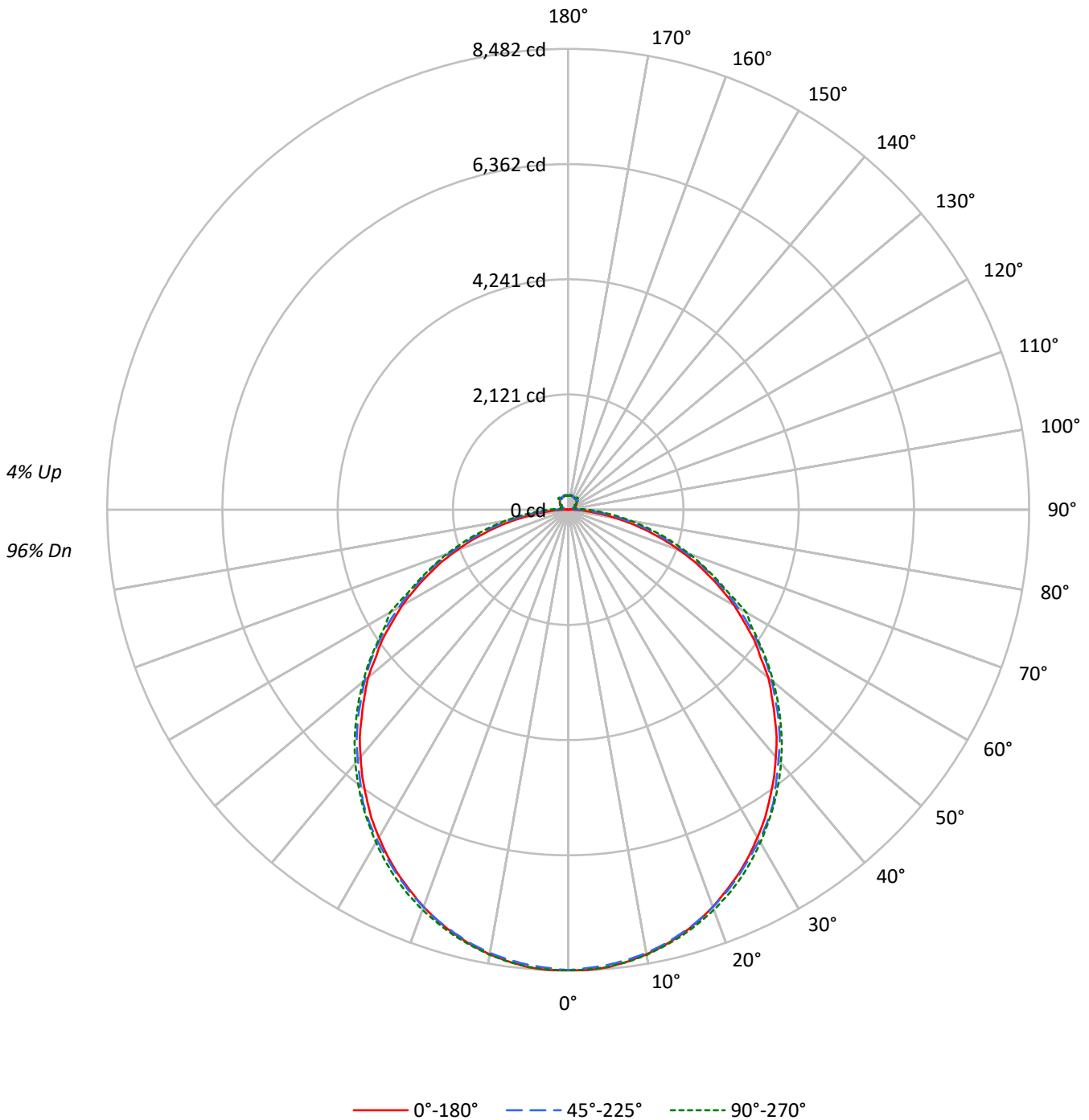
Lumens per Lamp: N/A
Luminaire Lumens: 25021.0 lumens
Efficiency: N/A
Efficacy: 98.8 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.24 / 1.35
Luminous Opening: Rectangular w/ Sides (W: 0.92' x L: 8' x H: 0.1')
CIE Type: Direct

Input Watts (W): 253.2
Input Voltage (V):
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: P#
CATALOG NUMBER: 8ILED-LD5-32-W-FLUPL-UNV-L835-CD4-U

Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: 8ILED-LD5-32-W-FLUPL-UNV-L835-CD4-U

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 | 118 | 118 | 118 | 118 | 115 | 115 | 115 | 115 | 109 | 109 | 109 | 103 | 103 | 103 | 98 | 98 | 98 | 96 |
| 1 | 107 | 103 | 98 | 94 | 104 | 100 | 96 | 92 | 95 | 91 | 89 | 90 | 87 | 85 | 86 | 84 | 82 | 79 |
| 2 | 98 | 89 | 82 | 76 | 95 | 87 | 81 | 75 | 83 | 77 | 73 | 79 | 74 | 70 | 75 | 72 | 68 | 66 |
| 3 | 89 | 78 | 70 | 63 | 86 | 76 | 69 | 63 | 73 | 66 | 61 | 69 | 64 | 59 | 66 | 62 | 58 | 55 |
| 4 | 81 | 69 | 60 | 54 | 79 | 68 | 59 | 53 | 65 | 58 | 52 | 62 | 56 | 51 | 59 | 54 | 50 | 47 |
| 5 | 75 | 62 | 53 | 46 | 72 | 60 | 52 | 46 | 58 | 50 | 45 | 55 | 49 | 44 | 53 | 48 | 43 | 41 |
| 6 | 69 | 56 | 47 | 40 | 67 | 55 | 46 | 40 | 52 | 45 | 39 | 50 | 44 | 39 | 48 | 42 | 38 | 36 |
| 7 | 64 | 50 | 42 | 36 | 62 | 49 | 41 | 35 | 48 | 40 | 35 | 46 | 39 | 34 | 44 | 38 | 34 | 32 |
| 8 | 60 | 46 | 38 | 32 | 58 | 45 | 37 | 31 | 43 | 36 | 31 | 42 | 35 | 31 | 40 | 35 | 30 | 28 |
| 9 | 56 | 42 | 34 | 28 | 54 | 41 | 34 | 28 | 40 | 33 | 28 | 39 | 32 | 28 | 37 | 31 | 27 | 25 |
| 10 | 52 | 39 | 31 | 26 | 51 | 38 | 31 | 26 | 37 | 30 | 25 | 36 | 29 | 25 | 35 | 29 | 25 | 23 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 12443 | 12443 | 12443 |
| 5° | 12438 | 12301 | 12328 |
| 10° | 12359 | 12163 | 12165 |
| 15° | 12247 | 11986 | 11978 |
| 20° | 12097 | 11790 | 11773 |
| 25° | 11919 | 11567 | 11550 |
| 30° | 11718 | 11350 | 11278 |
| 35° | 11496 | 11124 | 11000 |
| 40° | 11265 | 10759 | 10691 |
| 45° | 11011 | 10467 | 10339 |
| 50° | 10810 | 10115 | 9949 |
| 55° | 10502 | 9700 | 9521 |
| 60° | 10137 | 9205 | 9349 |
| 65° | 9632 | 8621 | 8447 |
| 70° | 9011 | 7936 | 7809 |
| 75° | 8179 | 7083 | 7003 |
| 80° | 7030 | 6009 | 6095 |
| 85° | 5625 | 4770 | 5065 |



TEST NUMBER: P#

CATALOG NUMBER: 8ILED-LD5-32-W-FLUPL-UNV-L835-CD4-U

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 801.1 | 3.2 |
| 10°-20° | 2282.6 | 9.1 |
| 20°-30° | 3429.8 | 13.7 |
| 30°-40° | 4103.6 | 16.4 |
| 40°-50° | 4218.8 | 16.9 |
| 50°-60° | 3799.5 | 15.2 |
| 60°-70° | 2920.1 | 11.7 |
| 70°-80° | 1738.5 | 6.9 |
| 80°-90° | 629.9 | 2.5 |
| 90°-100° | 135.7 | 0.5 |
| 100°-110° | 112.8 | 0.5 |
| 110°-120° | 133.0 | 0.5 |
| 120°-130° | 164.6 | 0.7 |
| 130°-140° | 179.7 | 0.7 |
| 140°-150° | 154.3 | 0.6 |
| 150°-160° | 116.1 | 0.5 |
| 160°-170° | 75.4 | 0.3 |
| 170°-180° | 25.4 | 0.1 |
| 0°-30° | 6513.6 | 26.0 |
| 0°-40° | 10617.1 | 42.4 |
| 0°-60° | 18635.5 | 74.5 |
| 0°-90° | 23923.9 | 95.6 |
| 90°-120° | 381.6 | 1.5 |
| 90°-150° | 880.2 | 3.5 |
| 90°-180° | 1097.0 | 4.4 |
| 0°-180° | 25021.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 8477 | 8477 | 8477 | 8477 | 8477 | |
| 5° | 8451 | 8446 | 8411 | 8442 | 8446 | 802 |
| 15° | 8087 | 8091 | 8069 | 8104 | 8113 | 2280 |
| 25° | 7402 | 7415 | 7428 | 7481 | 7494 | 3409 |
| 35° | 6472 | 6551 | 6582 | 6595 | 6608 | 4051 |
| 45° | 5371 | 5428 | 5476 | 5529 | 5524 | 4151 |
| 55° | 4177 | 4195 | 4256 | 4291 | 4300 | 3720 |
| 65° | 2848 | 2874 | 2940 | 2997 | 3001 | 2823 |
| 75° | 1509 | 1553 | 1650 | 1742 | 1738 | 1602 |
| 85° | 382 | 456 | 562 | 645 | 676 | 419 |
| 90° | 9 | 114 | 228 | 312 | 338 | 30 |
| 95° | 31 | 75 | 110 | 158 | 176 | 31 |
| 105° | 92 | 79 | 101 | 162 | 145 | 96 |
| 115° | 145 | 162 | 114 | 118 | 118 | 143 |
| 125° | 184 | 184 | 211 | 171 | 149 | 165 |
| 135° | 215 | 211 | 241 | 254 | 250 | 167 |
| 145° | 237 | 241 | 233 | 254 | 272 | 149 |
| 155° | 250 | 268 | 250 | 241 | 241 | 116 |
| 165° | 259 | 268 | 276 | 268 | 259 | 74 |
| 175° | 263 | 263 | 268 | 263 | 254 | 25 |
| 180° | 259 | 259 | 259 | 259 | 259 | |



TEST NUMBER: P#

CATALOG NUMBER: 8ILED-LD5-32-W-FLUPL-UNV-L835-CD4-U

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 8477.2 | 8477.2 | 8477.2 | 8477.2 | 8477.2 |
| 2.5° | 8481.6 | 8477.2 | 8442.1 | 8468.4 | 8472.8 |
| 5° | 8450.8 | 8446.5 | 8411.3 | 8442.1 | 8446.5 |
| 7.5° | 8389.4 | 8389.4 | 8354.3 | 8389.4 | 8393.8 |
| 10° | 8310.4 | 8310.4 | 8284.1 | 8314.8 | 8319.2 |
| 12.5° | 8209.5 | 8213.9 | 8187.6 | 8222.7 | 8222.7 |
| 15° | 8086.7 | 8091.0 | 8069.1 | 8104.2 | 8113.0 |
| 17.5° | 7946.2 | 7946.2 | 7937.5 | 7977.0 | 7981.3 |
| 20° | 7779.5 | 7801.4 | 7783.9 | 7827.8 | 7836.6 |
| 22.5° | 7590.8 | 7612.8 | 7612.8 | 7661.0 | 7674.2 |
| 25° | 7402.2 | 7415.3 | 7428.5 | 7481.1 | 7494.3 |
| 27.5° | 7191.5 | 7217.9 | 7222.3 | 7279.3 | 7292.5 |
| 30° | 6963.4 | 7007.3 | 7029.2 | 7064.3 | 7073.1 |
| 32.5° | 6735.2 | 6792.3 | 6818.6 | 6836.1 | 6840.5 |
| 35° | 6472.0 | 6550.9 | 6581.6 | 6594.8 | 6608.0 |
| 37.5° | 6217.5 | 6283.3 | 6292.1 | 6340.3 | 6353.5 |
| 40° | 5941.0 | 6020.0 | 6020.0 | 6077.1 | 6090.2 |
| 42.5° | 5677.8 | 5695.3 | 5761.1 | 5800.6 | 5818.2 |
| 45° | 5370.6 | 5427.7 | 5475.9 | 5528.6 | 5524.2 |
| 47.5° | 5081.0 | 5155.6 | 5168.8 | 5217.1 | 5230.2 |
| 50° | 4804.6 | 4857.3 | 4883.6 | 4923.1 | 4923.1 |
| 52.5° | 4462.4 | 4532.6 | 4589.6 | 4611.5 | 4624.7 |
| 55° | 4177.2 | 4194.7 | 4256.1 | 4291.2 | 4300.0 |
| 57.5° | 3830.5 | 3874.4 | 3931.4 | 3975.3 | 3997.3 |
| 60° | 3527.8 | 3554.1 | 3602.4 | 3663.8 | 3786.6 |
| 62.5° | 3185.5 | 3216.2 | 3277.7 | 3461.9 | 3334.7 |
| 65° | 2847.7 | 2874.0 | 2939.8 | 2996.8 | 3001.2 |
| 67.5° | 2527.4 | 2553.7 | 2645.8 | 2663.4 | 2676.5 |
| 70° | 2171.9 | 2207.0 | 2286.0 | 2343.1 | 2365.0 |
| 72.5° | 1847.2 | 1878.0 | 1956.9 | 2022.8 | 2044.7 |
| 75° | 1509.4 | 1553.3 | 1649.8 | 1741.9 | 1737.6 |
| 77.5° | 1189.1 | 1268.1 | 1347.0 | 1421.6 | 1443.6 |
| 80° | 890.7 | 952.1 | 1057.5 | 1136.4 | 1167.1 |
| 82.5° | 623.1 | 693.3 | 798.6 | 877.6 | 908.3 |
| 85° | 381.7 | 456.3 | 561.6 | 645.0 | 675.7 |
| 87.5° | 184.3 | 258.9 | 373.0 | 456.3 | 491.4 |
| 90° | 8.8 | 114.1 | 228.2 | 311.5 | 337.9 |
| 92.5° | 17.6 | 65.8 | 149.2 | 215.0 | 236.9 |
| 95° | 30.7 | 74.6 | 109.7 | 158.0 | 175.5 |
| 97.5° | 43.9 | 65.8 | 96.5 | 127.2 | 140.4 |
| 100° | 61.4 | 65.8 | 109.7 | 114.1 | 122.9 |
| 102.5° | 74.6 | 70.2 | 105.3 | 114.1 | 114.1 |
| 105° | 92.1 | 79.0 | 100.9 | 162.3 | 144.8 |
| 107.5° | 105.3 | 109.7 | 96.5 | 114.1 | 122.9 |
| 110° | 118.5 | 127.2 | 105.3 | 122.9 | 122.9 |



TEST NUMBER: P#

CATALOG NUMBER: 8ILED-LD5-32-W-FLUPL-UNV-L835-CD4-U

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 131.6 | 144.8 | 114.1 | 114.1 | 122.9 |
| 115° | 144.8 | 162.3 | 114.1 | 118.5 | 118.5 |
| 117.5° | 158.0 | 166.7 | 136.0 | 127.2 | 127.2 |
| 120° | 166.7 | 171.1 | 171.1 | 127.2 | 136.0 |
| 122.5° | 175.5 | 179.9 | 193.1 | 140.4 | 136.0 |
| 125° | 184.3 | 184.3 | 210.6 | 171.1 | 149.2 |
| 127.5° | 193.1 | 193.1 | 223.8 | 201.8 | 179.9 |
| 130° | 201.8 | 193.1 | 236.9 | 219.4 | 210.6 |
| 132.5° | 210.6 | 201.8 | 241.3 | 236.9 | 228.2 |
| 135° | 215.0 | 210.6 | 241.3 | 254.5 | 250.1 |
| 137.5° | 223.8 | 219.4 | 232.6 | 267.7 | 263.3 |
| 140° | 228.2 | 228.2 | 232.6 | 267.7 | 276.4 |
| 142.5° | 232.6 | 232.6 | 232.6 | 263.3 | 276.4 |
| 145° | 236.9 | 241.3 | 232.6 | 254.5 | 272.0 |
| 147.5° | 241.3 | 250.1 | 232.6 | 250.1 | 258.9 |
| 150° | 245.7 | 254.5 | 232.6 | 245.7 | 250.1 |
| 152.5° | 250.1 | 263.3 | 241.3 | 241.3 | 245.7 |
| 155° | 250.1 | 267.7 | 250.1 | 241.3 | 241.3 |
| 157.5° | 254.5 | 267.7 | 254.5 | 241.3 | 241.3 |
| 160° | 254.5 | 272.0 | 263.3 | 250.1 | 245.7 |
| 162.5° | 258.9 | 272.0 | 272.0 | 258.9 | 254.5 |
| 165° | 258.9 | 267.7 | 276.4 | 267.7 | 258.9 |
| 167.5° | 263.3 | 267.7 | 276.4 | 272.0 | 263.3 |
| 170° | 263.3 | 267.7 | 272.0 | 272.0 | 263.3 |
| 172.5° | 263.3 | 267.7 | 272.0 | 267.7 | 263.3 |
| 175° | 263.3 | 263.3 | 267.7 | 263.3 | 254.5 |
| 177.5° | 263.3 | 263.3 | 263.3 | 258.9 | 254.5 |
| 180° | 258.9 | 258.9 | 258.9 | 258.9 | 258.9 |

(END OF REPORT)