

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: NEO-RAY

Report Number: P333890

Luminaire Tested: **S122RDP-S290D840-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333890
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-24)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S122RDP-S290D840-4F0-1E-UDD-F
Description: DEFINE 2 REGRESSED DIRECT LED LUMINAIRE, FLUSH SATIN WHITE DIFFUSER
PENDANT/SURFACE/WALL MOUNT, 290 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

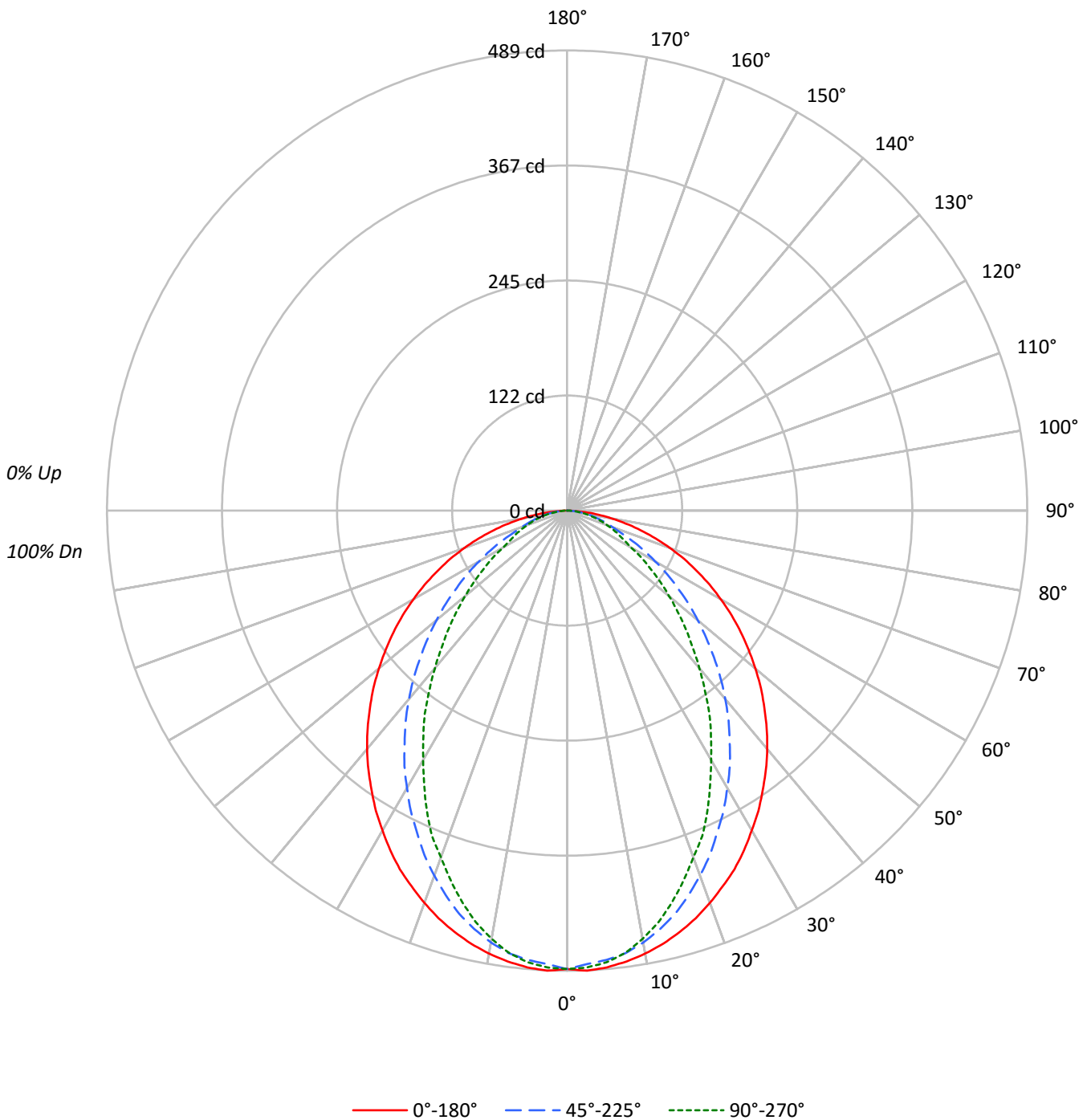
Lumens per Lamp: N/A
Luminaire Lumens: 1002.0 lumens
Efficiency: N/A
Efficacy: 86.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 11.6
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



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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 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |
| 1 | 110 | 106 | 102 | 98 | 107 | 103 | 100 | 97 | 99 | 96 | 94 | 95 | 93 | 91 | 92 | 90 | 88 | 86 |
| 2 | 101 | 94 | 87 | 82 | 98 | 92 | 86 | 81 | 88 | 83 | 79 | 85 | 81 | 78 | 82 | 79 | 76 | 74 |
| 3 | 93 | 83 | 76 | 70 | 90 | 82 | 75 | 69 | 79 | 73 | 68 | 76 | 71 | 67 | 74 | 69 | 66 | 64 |
| 4 | 86 | 75 | 66 | 60 | 83 | 73 | 66 | 60 | 71 | 64 | 59 | 69 | 63 | 58 | 66 | 62 | 57 | 55 |
| 5 | 79 | 67 | 59 | 53 | 77 | 66 | 58 | 52 | 64 | 57 | 52 | 62 | 56 | 51 | 60 | 55 | 51 | 49 |
| 6 | 74 | 61 | 53 | 47 | 72 | 60 | 52 | 46 | 58 | 51 | 46 | 57 | 50 | 46 | 55 | 50 | 45 | 43 |
| 7 | 68 | 56 | 47 | 42 | 67 | 55 | 47 | 42 | 53 | 46 | 41 | 52 | 46 | 41 | 51 | 45 | 41 | 39 |
| 8 | 64 | 51 | 43 | 38 | 62 | 51 | 43 | 37 | 49 | 42 | 37 | 48 | 42 | 37 | 47 | 41 | 37 | 35 |
| 9 | 60 | 47 | 39 | 34 | 59 | 47 | 39 | 34 | 46 | 39 | 34 | 44 | 38 | 34 | 44 | 38 | 34 | 32 |
| 10 | 56 | 44 | 36 | 31 | 55 | 43 | 36 | 31 | 42 | 36 | 31 | 41 | 35 | 31 | 41 | 35 | 31 | 29 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 7866 | 7866 | 7866 |
| 5° | 7896 | 7768 | 7810 |
| 10° | 7837 | 7642 | 7576 |
| 15° | 7746 | 7415 | 7201 |
| 20° | 7622 | 7091 | 6735 |
| 25° | 7493 | 6723 | 6283 |
| 30° | 7316 | 6346 | 5705 |
| 35° | 7143 | 5937 | 5198 |
| 40° | 6970 | 5512 | 4610 |
| 45° | 6766 | 5035 | 4078 |
| 50° | 6556 | 4551 | 3554 |
| 55° | 6342 | 4034 | 3054 |
| 60° | 6093 | 3488 | 2535 |
| 65° | 5811 | 2930 | 2308 |
| 70° | 5476 | 2412 | 2124 |
| 75° | 5059 | 2202 | 1978 |
| 80° | 4472 | 1971 | 1804 |
| 85° | 3520 | 1556 | 1556 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 45.7 | 4.6 |
| 10°-20° | 125.4 | 12.5 |
| 20°-30° | 176.0 | 17.6 |
| 30°-40° | 191.8 | 19.1 |
| 40°-50° | 176.3 | 17.6 |
| 50°-60° | 138.5 | 13.8 |
| 60°-70° | 90.1 | 9.0 |
| 70°-80° | 46.4 | 4.6 |
| 80°-90° | 11.9 | 1.2 |
| 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° | 347.0 | 34.6 |
| 0°-40° | 538.9 | 53.8 |
| 0°-60° | 853.7 | 85.2 |
| 0°-90° | 1002.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1002.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 487 | 487 | 487 | 487 | 487 | |
| 5° | 487 | 485 | 479 | 483 | 482 | 46 |
| 15° | 463 | 459 | 444 | 435 | 431 | 131 |
| 25° | 421 | 406 | 377 | 359 | 353 | 193 |
| 35° | 362 | 340 | 301 | 273 | 264 | 227 |
| 45° | 296 | 267 | 220 | 189 | 179 | 229 |
| 55° | 225 | 191 | 143 | 117 | 108 | 201 |
| 65° | 152 | 116 | 77 | 62 | 60 | 151 |
| 75° | 81 | 50 | 35 | 32 | 32 | 86 |
| 85° | 19 | 10 | 8 | 8 | 8 | 23 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P333890

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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 487.2 | 487.2 | 487.2 | 487.2 | 487.2 |
| 2.5° | 489.4 | 487.2 | 482.4 | 486.8 | 485.9 |
| 5° | 487.2 | 485.0 | 479.3 | 483.3 | 481.9 |
| 7.5° | 483.3 | 480.6 | 474.4 | 476.2 | 474.0 |
| 10° | 478.0 | 474.9 | 466.1 | 464.7 | 462.1 |
| 12.5° | 471.4 | 467.4 | 455.5 | 452.8 | 448.0 |
| 15° | 463.4 | 458.6 | 443.6 | 435.2 | 430.8 |
| 17.5° | 454.2 | 447.1 | 428.6 | 418.9 | 411.8 |
| 20° | 443.6 | 434.8 | 412.7 | 401.7 | 392.0 |
| 22.5° | 432.1 | 422.0 | 396.4 | 381.4 | 374.8 |
| 25° | 420.6 | 406.5 | 377.4 | 359.4 | 352.7 |
| 27.5° | 407.0 | 392.0 | 359.8 | 339.1 | 328.9 |
| 30° | 392.4 | 375.7 | 340.4 | 317.9 | 306.0 |
| 32.5° | 378.3 | 358.0 | 321.9 | 295.4 | 284.4 |
| 35° | 362.4 | 340.0 | 301.2 | 273.4 | 263.7 |
| 37.5° | 347.0 | 322.8 | 281.8 | 251.3 | 240.3 |
| 40° | 330.7 | 304.2 | 261.5 | 230.2 | 218.7 |
| 42.5° | 313.9 | 285.7 | 241.2 | 208.6 | 197.5 |
| 45° | 296.3 | 266.8 | 220.5 | 189.2 | 178.6 |
| 47.5° | 279.5 | 248.2 | 200.6 | 169.3 | 159.6 |
| 50° | 261.0 | 229.7 | 181.2 | 150.8 | 141.5 |
| 52.5° | 243.0 | 209.9 | 162.7 | 133.6 | 125.2 |
| 55° | 225.3 | 190.9 | 143.3 | 116.8 | 108.5 |
| 57.5° | 207.2 | 172.0 | 126.1 | 101.4 | 94.4 |
| 60° | 188.7 | 153.4 | 108.0 | 85.5 | 78.5 |
| 62.5° | 170.6 | 135.4 | 92.6 | 71.4 | 67.9 |
| 65° | 152.1 | 116.4 | 76.7 | 61.7 | 60.4 |
| 67.5° | 134.5 | 98.8 | 61.7 | 54.2 | 52.9 |
| 70° | 116.0 | 81.6 | 51.1 | 46.7 | 45.0 |
| 72.5° | 98.3 | 65.7 | 42.8 | 39.2 | 38.4 |
| 75° | 81.1 | 50.3 | 35.3 | 32.2 | 31.7 |
| 77.5° | 63.9 | 35.7 | 27.8 | 26.0 | 25.1 |
| 80° | 48.1 | 25.6 | 21.2 | 19.4 | 19.4 |
| 82.5° | 33.5 | 17.2 | 14.6 | 13.7 | 13.7 |
| 85° | 19.0 | 9.7 | 8.4 | 8.4 | 8.4 |
| 87.5° | 7.1 | 3.5 | 3.5 | 3.1 | 3.1 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)