

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: P334310

Luminaire Tested: **S125DS-S375D840-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P334310
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-17)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DS-S375D840-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT LED LUMINAIRE, DROP SATIN WHITE DIFFUSER
PENDANT/SURFACE/WALL MOUNT, 375 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1393.2 lumens
Efficiency: N/A
Efficacy: 120.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Direct

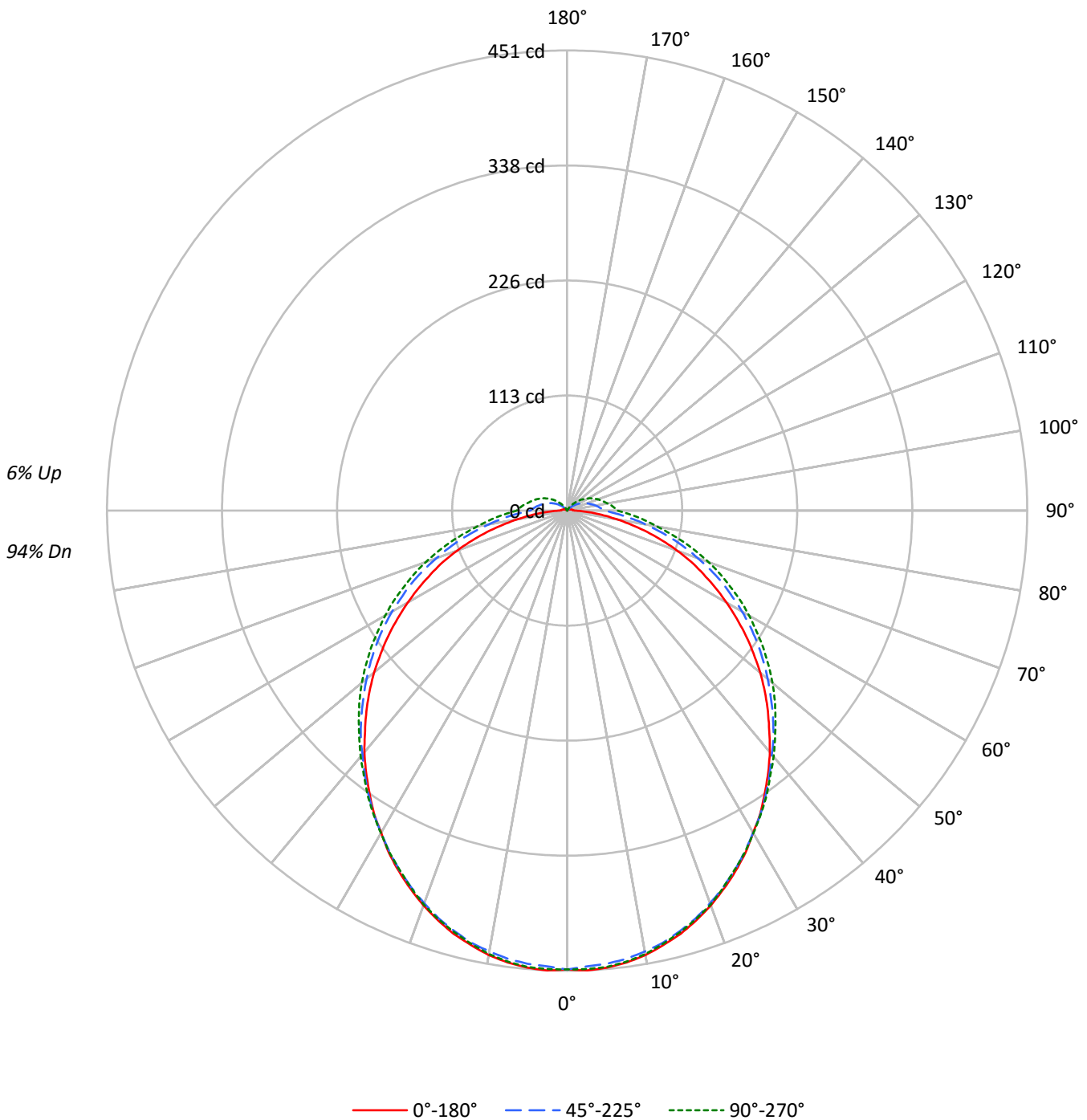
Input Watts (W): 11.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P334310

CATALOG NUMBER: S125DS-S375D840-4F0-1E-UDD-D

Luminous Intensity Polar Plot





TEST NUMBER: P334310

CATALOG NUMBER: S125DS-S375D840-4F0-1E-UDD-D

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 | 114 | 114 | 114 | 114 | 108 | 108 | 108 | 102 | 102 | 102 | 96 | 96 | 96 | 94 |
| 1 | 106 | 101 | 96 | 92 | 103 | 98 | 94 | 90 | 93 | 89 | 86 | 88 | 85 | 82 | 83 | 81 | 79 | 76 |
| 2 | 96 | 88 | 80 | 74 | 93 | 85 | 78 | 73 | 81 | 75 | 70 | 76 | 72 | 68 | 72 | 69 | 65 | 63 |
| 3 | 88 | 77 | 68 | 61 | 84 | 75 | 67 | 60 | 71 | 64 | 59 | 67 | 61 | 57 | 64 | 59 | 55 | 53 |
| 4 | 80 | 68 | 59 | 52 | 77 | 66 | 58 | 51 | 63 | 55 | 50 | 60 | 53 | 48 | 57 | 51 | 47 | 45 |
| 5 | 74 | 60 | 51 | 44 | 71 | 59 | 50 | 44 | 56 | 49 | 43 | 53 | 47 | 42 | 51 | 45 | 41 | 39 |
| 6 | 68 | 54 | 45 | 39 | 66 | 53 | 45 | 38 | 51 | 43 | 38 | 48 | 42 | 37 | 46 | 40 | 36 | 34 |
| 7 | 63 | 49 | 40 | 34 | 61 | 48 | 40 | 34 | 46 | 39 | 33 | 44 | 37 | 33 | 42 | 36 | 32 | 30 |
| 8 | 59 | 45 | 36 | 30 | 57 | 44 | 36 | 30 | 42 | 35 | 30 | 40 | 34 | 29 | 39 | 33 | 29 | 27 |
| 9 | 55 | 41 | 33 | 27 | 53 | 40 | 33 | 27 | 39 | 32 | 27 | 37 | 31 | 26 | 36 | 30 | 26 | 24 |
| 10 | 51 | 38 | 30 | 25 | 50 | 37 | 30 | 25 | 36 | 29 | 24 | 35 | 28 | 24 | 33 | 28 | 23 | 22 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 2904 | 2904 | 2904 |
| 5° | 2915 | 2890 | 2910 |
| 10° | 2901 | 2877 | 2895 |
| 15° | 2872 | 2854 | 2860 |
| 20° | 2830 | 2815 | 2824 |
| 25° | 2781 | 2771 | 2768 |
| 30° | 2719 | 2719 | 2723 |
| 35° | 2663 | 2677 | 2687 |
| 40° | 2606 | 2632 | 2654 |
| 45° | 2541 | 2606 | 2638 |
| 50° | 2481 | 2578 | 2640 |
| 55° | 2408 | 2567 | 2642 |
| 60° | 2329 | 2558 | 2660 |
| 65° | 2251 | 2567 | 2696 |
| 70° | 2164 | 2572 | 2781 |
| 75° | 2024 | 2662 | 2937 |
| 80° | 1852 | 2901 | 3329 |
| 85° | 1801 | 4016 | 5002 |



TEST NUMBER: P334310

CATALOG NUMBER: S125DS-S375D840-4F0-1E-UDD-D

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 42.6 | 3.1 |
| 10°-20° | 120.8 | 8.7 |
| 20°-30° | 179.7 | 12.9 |
| 30°-40° | 212.8 | 15.3 |
| 40°-50° | 220.0 | 15.8 |
| 50°-60° | 202.6 | 14.5 |
| 60°-70° | 163.8 | 11.8 |
| 70°-80° | 109.6 | 7.9 |
| 80°-90° | 56.7 | 4.1 |
| 90°-100° | 31.9 | 2.3 |
| 100°-110° | 23.5 | 1.7 |
| 110°-120° | 15.7 | 1.1 |
| 120°-130° | 8.9 | 0.6 |
| 130°-140° | 3.9 | 0.3 |
| 140°-150° | 0.8 | 0.1 |
| 150°-160° | 0.0 | 0.0 |
| 160°-170° | 0.0 | 0.0 |
| 170°-180° | 0.0 | 0.0 |
| 0°-30° | 343.0 | 24.6 |
| 0°-40° | 555.8 | 39.9 |
| 0°-60° | 978.4 | 70.2 |
| 0°-90° | 1308.4 | 93.9 |
| 90°-120° | 71.2 | 5.1 |
| 90°-150° | 84.8 | 6.1 |
| 90°-180° | 85.0 | 6.1 |
| 0°-180° | 1393.2 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-----|-------|-----|-------|-----|------|
| 0° | 450 | 450 | 450 | 450 | 450 | |
| 5° | 450 | 449 | 446 | 449 | 449 | 43 |
| 15° | 430 | 430 | 427 | 430 | 428 | 121 |
| 25° | 390 | 392 | 389 | 391 | 388 | 180 |
| 35° | 338 | 341 | 340 | 341 | 341 | 211 |
| 45° | 278 | 283 | 285 | 288 | 289 | 215 |
| 55° | 214 | 221 | 228 | 233 | 235 | 191 |
| 65° | 147 | 157 | 168 | 175 | 176 | 146 |
| 75° | 81 | 93 | 107 | 116 | 118 | 86 |
| 85° | 24 | 39 | 54 | 64 | 68 | 25 |
| 90° | 7 | 21 | 36 | 46 | 49 | 5 |
| 95° | 6 | 17 | 32 | 42 | 45 | 5 |
| 105° | 4 | 11 | 24 | 33 | 36 | 4 |
| 115° | 3 | 6 | 17 | 25 | 28 | 3 |
| 125° | 2 | 1 | 10 | 17 | 19 | 1 |
| 135° | 1 | 0 | 4 | 9 | 12 | 1 |
| 145° | 0 | 0 | 0 | 2 | 4 | 0 |
| 155° | 0 | 0 | 0 | 0 | 0 | 0 |
| 165° | 0 | 0 | 0 | 0 | 0 | 0 |
| 175° | 0 | 0 | 0 | 0 | 0 | 0 |
| 180° | 0 | 0 | 0 | 0 | 0 | 0 |



TEST NUMBER: P334310

CATALOG NUMBER: S125DS-S375D840-4F0-1E-UDD-D

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|-------|
| 0° | 449.7 | 449.7 | 449.7 | 449.7 | 449.7 |
| 2.5° | 451.1 | 450.2 | 447.1 | 450.2 | 449.7 |
| 5° | 449.7 | 448.9 | 445.8 | 449.3 | 448.9 |
| 7.5° | 446.7 | 446.2 | 443.1 | 446.2 | 445.8 |
| 10° | 442.3 | 442.3 | 438.7 | 441.8 | 441.4 |
| 12.5° | 436.1 | 436.5 | 433.9 | 436.1 | 434.8 |
| 15° | 429.5 | 429.9 | 426.8 | 429.5 | 427.7 |
| 17.5° | 421.1 | 422.0 | 418.9 | 421.1 | 419.8 |
| 20° | 411.8 | 412.7 | 409.6 | 410.9 | 410.9 |
| 22.5° | 401.2 | 403.0 | 399.5 | 401.2 | 399.9 |
| 25° | 390.2 | 391.5 | 388.9 | 390.7 | 388.5 |
| 27.5° | 378.3 | 380.1 | 377.0 | 378.3 | 377.4 |
| 30° | 364.6 | 367.3 | 364.6 | 365.5 | 365.1 |
| 32.5° | 352.3 | 354.5 | 352.7 | 353.6 | 353.2 |
| 35° | 337.8 | 340.8 | 339.5 | 340.8 | 340.8 |
| 37.5° | 323.6 | 326.3 | 325.8 | 327.6 | 327.2 |
| 40° | 309.1 | 312.6 | 312.2 | 313.9 | 314.8 |
| 42.5° | 293.2 | 298.1 | 299.4 | 301.6 | 301.6 |
| 45° | 278.2 | 283.1 | 285.3 | 288.4 | 288.8 |
| 47.5° | 262.8 | 267.2 | 270.7 | 275.1 | 276.0 |
| 50° | 246.9 | 251.8 | 256.6 | 261.5 | 262.8 |
| 52.5° | 230.2 | 236.3 | 242.5 | 247.8 | 248.7 |
| 55° | 213.9 | 220.9 | 228.0 | 232.8 | 234.6 |
| 57.5° | 197.1 | 205.5 | 213.4 | 218.7 | 220.0 |
| 60° | 180.3 | 189.2 | 198.0 | 204.6 | 205.9 |
| 62.5° | 164.0 | 172.8 | 182.5 | 190.0 | 191.8 |
| 65° | 147.3 | 157.4 | 168.0 | 174.6 | 176.4 |
| 67.5° | 131.8 | 141.5 | 152.1 | 160.1 | 162.3 |
| 70° | 114.6 | 124.8 | 136.2 | 144.6 | 147.3 |
| 72.5° | 97.9 | 108.5 | 121.3 | 130.5 | 132.3 |
| 75° | 81.1 | 92.6 | 106.7 | 115.5 | 117.7 |
| 77.5° | 64.8 | 78.0 | 91.3 | 101.0 | 102.7 |
| 80° | 49.8 | 63.1 | 78.0 | 87.7 | 89.5 |
| 82.5° | 36.2 | 50.3 | 65.7 | 75.0 | 78.5 |
| 85° | 24.3 | 38.8 | 54.2 | 63.9 | 67.5 |
| 87.5° | 15.4 | 29.5 | 44.5 | 54.7 | 57.8 |
| 90° | 7.1 | 21.2 | 36.2 | 46.3 | 49.4 |
| 92.5° | 6.2 | 19.0 | 34.4 | 44.1 | 47.2 |
| 95° | 5.7 | 17.2 | 32.2 | 41.9 | 45.0 |
| 97.5° | 5.3 | 15.9 | 30.4 | 39.7 | 42.8 |
| 100° | 4.9 | 14.1 | 28.2 | 37.5 | 40.1 |
| 102.5° | 4.4 | 12.8 | 26.5 | 35.3 | 37.9 |
| 105° | 4.0 | 11.0 | 24.3 | 33.1 | 36.2 |
| 107.5° | 3.5 | 9.7 | 22.5 | 31.3 | 34.0 |
| 110° | 3.1 | 8.4 | 20.7 | 29.1 | 32.2 |



TEST NUMBER: P334310

CATALOG NUMBER: S125DS-S375D840-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-----|-------|------|-------|------|
| 112.5° | 3.1 | 7.1 | 19.0 | 26.9 | 30.0 |
| 115° | 2.6 | 5.7 | 17.2 | 25.1 | 27.8 |
| 117.5° | 2.2 | 4.4 | 15.4 | 22.9 | 26.0 |
| 120° | 2.2 | 3.5 | 13.7 | 21.2 | 23.8 |
| 122.5° | 1.8 | 2.2 | 11.9 | 19.0 | 21.6 |
| 125° | 1.8 | 1.3 | 10.1 | 17.2 | 19.4 |
| 127.5° | 1.3 | 0.9 | 8.4 | 15.0 | 17.6 |
| 130° | 1.3 | 0.9 | 7.1 | 13.2 | 15.4 |
| 132.5° | 0.9 | 0.9 | 5.3 | 11.5 | 13.2 |
| 135° | 0.9 | 0.4 | 3.5 | 9.3 | 11.5 |
| 137.5° | 0.9 | 0.4 | 2.2 | 7.5 | 9.3 |
| 140° | 0.4 | 0.4 | 0.9 | 5.7 | 7.5 |
| 142.5° | 0.4 | 0.0 | 0.0 | 4.0 | 5.7 |
| 145° | 0.4 | 0.0 | 0.0 | 2.2 | 4.0 |
| 147.5° | 0.0 | 0.0 | 0.0 | 0.9 | 1.8 |
| 150° | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 |
| 152.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 155° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 157.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 160° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 162.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 165° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 167.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 170° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 172.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 175° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 177.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 180° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)