

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: P33919

Luminaire Tested: **S125DS-135-SR0048-1D-UDD-4-W**

Test Date: 03/06/15

Test Information

Test Method: LM-79-08
Report Number: P33919
Test Lab: INNOVATION CENTER-P3
Test Date: 03/06/15
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DS-135-SR0048-1D-UDD-4-W
Description: NEORAY DIRECT- INDIRECT 5" FIXTURE WITH A DROP DIFFUSE LENS.LL1
Light Source: [117] NICHIA 3500K LED
Nichia 757D
Ballast/Driver: [1] OSRAM SYLVANIA ELECTRONIC DRIVER
OT50WPRG1400C

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2546.6 lumens
Efficiency: N/A
Efficacy: 90.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.24 / 1.36
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.17')
CIE Type: Direct

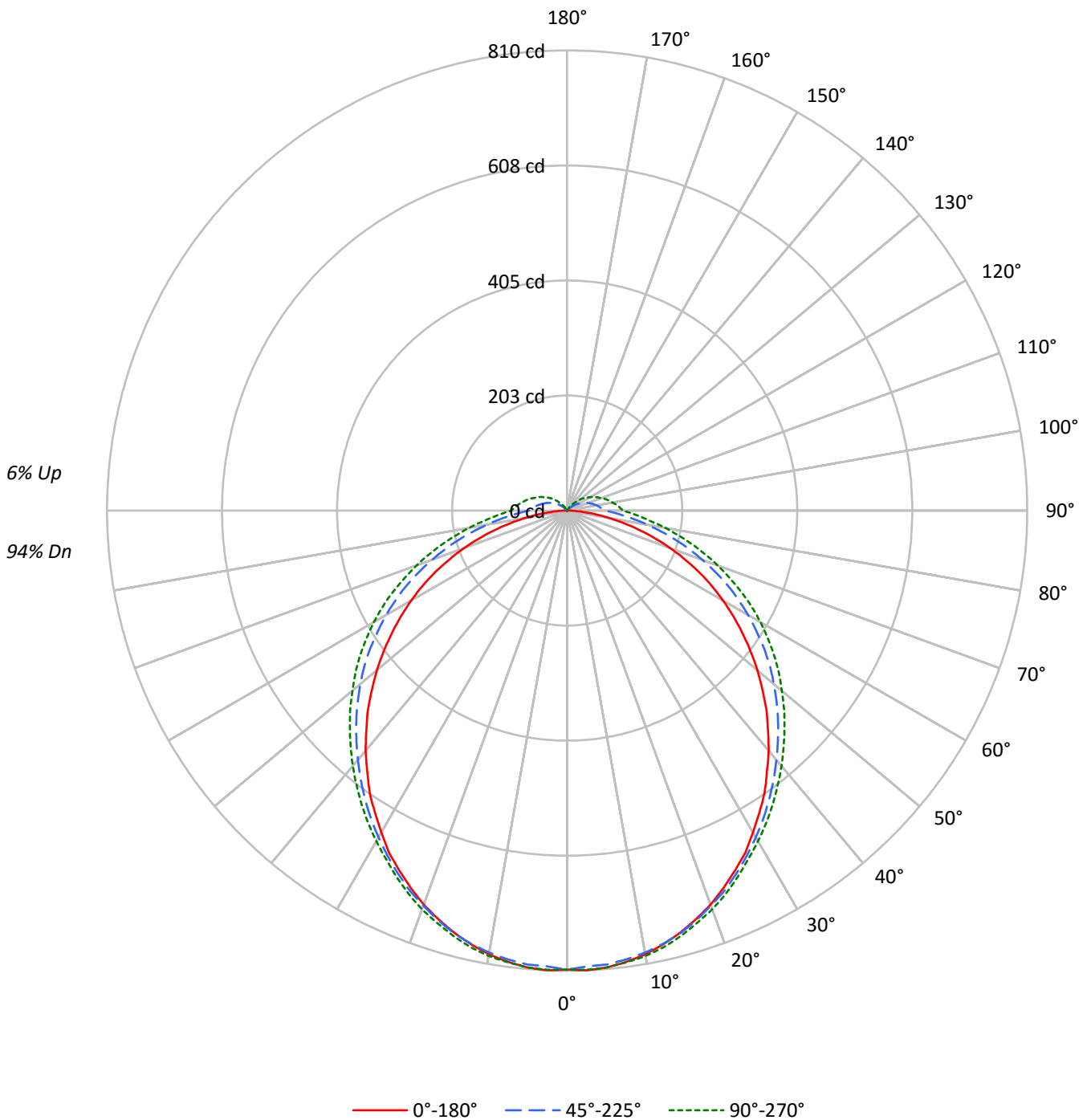
Input Watts (W): 28.2
Input Voltage (V): 120.0
Input Current (Ain): 0.236
Voltage Rise (V): NR
Power Factor: 0.9972
Total Harmonic Distortion (THDi): 7.39
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: HR
Ambient Temperature (°C): 24.9
Test Distance: 25 FT



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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 | 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 | 87 | 80 | 74 | 93 | 85 | 78 | 73 | 80 | 75 | 70 | 76 | 72 | 68 | 72 | 69 | 65 | 63 |
| 3 | 87 | 77 | 68 | 61 | 84 | 74 | 67 | 60 | 71 | 64 | 58 | 67 | 61 | 57 | 64 | 59 | 55 | 52 |
| 4 | 80 | 68 | 59 | 52 | 77 | 66 | 57 | 51 | 63 | 55 | 50 | 59 | 53 | 48 | 57 | 51 | 47 | 45 |
| 5 | 73 | 60 | 51 | 44 | 71 | 59 | 50 | 44 | 56 | 48 | 43 | 53 | 47 | 42 | 51 | 45 | 41 | 38 |
| 6 | 68 | 54 | 45 | 39 | 65 | 53 | 44 | 38 | 51 | 43 | 37 | 48 | 42 | 37 | 46 | 40 | 36 | 34 |
| 7 | 63 | 49 | 40 | 34 | 61 | 48 | 40 | 34 | 46 | 38 | 33 | 44 | 37 | 32 | 42 | 36 | 32 | 30 |
| 8 | 58 | 45 | 36 | 30 | 57 | 44 | 36 | 30 | 42 | 35 | 29 | 40 | 34 | 29 | 39 | 33 | 28 | 26 |
| 9 | 55 | 41 | 33 | 27 | 53 | 40 | 32 | 27 | 39 | 32 | 27 | 37 | 31 | 26 | 36 | 30 | 26 | 24 |
| 10 | 51 | 38 | 30 | 25 | 50 | 37 | 30 | 24 | 36 | 29 | 24 | 34 | 28 | 24 | 33 | 27 | 23 | 21 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 5218 | 5218 | 5218 |
| 5° | 5213 | 5061 | 5055 |
| 10° | 5163 | 4910 | 4876 |
| 15° | 5085 | 4751 | 4680 |
| 20° | 4996 | 4567 | 4482 |
| 25° | 4886 | 4385 | 4270 |
| 30° | 4763 | 4195 | 4071 |
| 35° | 4642 | 4011 | 3886 |
| 40° | 4497 | 3828 | 3705 |
| 45° | 4349 | 3654 | 3529 |
| 50° | 4183 | 3478 | 3354 |
| 55° | 4007 | 3294 | 3189 |
| 60° | 3819 | 3085 | 2999 |
| 65° | 3591 | 2855 | 2780 |
| 70° | 3270 | 2571 | 2537 |
| 75° | 2851 | 2270 | 2272 |
| 80° | 2226 | 1919 | 1991 |
| 85° | 1456 | 1605 | 1742 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 76.5 | 3.0 |
| 10°-20° | 217.7 | 8.5 |
| 20°-30° | 325.6 | 12.8 |
| 30°-40° | 388.3 | 15.2 |
| 40°-50° | 403.8 | 15.9 |
| 50°-60° | 373.8 | 14.7 |
| 60°-70° | 302.1 | 11.9 |
| 70°-80° | 200.7 | 7.9 |
| 80°-90° | 102.2 | 4.0 |
| 90°-100° | 58.1 | 2.3 |
| 100°-110° | 43.6 | 1.7 |
| 110°-120° | 29.1 | 1.1 |
| 120°-130° | 16.5 | 0.6 |
| 130°-140° | 7.2 | 0.3 |
| 140°-150° | 1.4 | 0.1 |
| 150°-160° | 0.0 | 0.0 |
| 160°-170° | 0.0 | 0.0 |
| 170°-180° | 0.0 | 0.0 |
| 0°-30° | 619.9 | 24.3 |
| 0°-40° | 1008.2 | 39.6 |
| 0°-60° | 1785.8 | 70.1 |
| 0°-90° | 2390.8 | 93.9 |
| 90°-120° | 130.8 | 5.1 |
| 90°-150° | 155.8 | 6.1 |
| 90°-180° | 156.0 | 6.1 |
| 0°-180° | 2546.6 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-----|-------|-----|-------|-----|------|
| 0° | 808 | 808 | 808 | 808 | 808 | |
| 5° | 807 | 806 | 802 | 807 | 807 | 77 |
| 15° | 769 | 771 | 770 | 776 | 775 | 217 |
| 25° | 699 | 705 | 705 | 712 | 711 | 322 |
| 35° | 606 | 614 | 620 | 629 | 631 | 378 |
| 45° | 496 | 511 | 525 | 538 | 541 | 382 |
| 55° | 377 | 399 | 423 | 439 | 445 | 337 |
| 65° | 256 | 282 | 312 | 332 | 338 | 253 |
| 75° | 132 | 163 | 197 | 219 | 227 | 140 |
| 85° | 29 | 63 | 99 | 123 | 131 | 33 |
| 90° | 0 | 32 | 67 | 91 | 98 | 2 |
| 95° | 0 | 26 | 59 | 82 | 90 | 0 |
| 105° | 0 | 16 | 46 | 66 | 73 | 1 |
| 115° | 0 | 7 | 32 | 50 | 56 | 0 |
| 125° | 1 | 1 | 18 | 34 | 39 | 1 |
| 135° | 1 | 0 | 6 | 18 | 22 | 1 |
| 145° | 1 | 1 | 0 | 4 | 7 | 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: P33919

CATALOG NUMBER: S125DS-135-SR0048-1D-UDD-4-W

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-----|-------|-----|-------|-----|
| 0° | 808 | 808 | 808 | 808 | 808 |
| 2.5° | 810 | 809 | 803 | 809 | 809 |
| 5° | 807 | 806 | 802 | 807 | 807 |
| 7.5° | 801 | 801 | 797 | 803 | 802 |
| 10° | 793 | 794 | 790 | 796 | 796 |
| 12.5° | 782 | 783 | 781 | 787 | 787 |
| 15° | 769 | 771 | 770 | 776 | 775 |
| 17.5° | 754 | 758 | 756 | 762 | 761 |
| 20° | 738 | 742 | 740 | 747 | 747 |
| 22.5° | 719 | 724 | 724 | 730 | 730 |
| 25° | 699 | 705 | 705 | 712 | 711 |
| 27.5° | 679 | 685 | 685 | 692 | 691 |
| 30° | 654 | 662 | 664 | 672 | 672 |
| 32.5° | 630 | 639 | 643 | 650 | 652 |
| 35° | 606 | 614 | 620 | 629 | 631 |
| 37.5° | 578 | 590 | 597 | 608 | 609 |
| 40° | 552 | 564 | 573 | 585 | 587 |
| 42.5° | 523 | 538 | 549 | 562 | 564 |
| 45° | 496 | 511 | 525 | 538 | 541 |
| 47.5° | 466 | 484 | 500 | 514 | 518 |
| 50° | 437 | 456 | 475 | 490 | 493 |
| 52.5° | 407 | 428 | 450 | 465 | 470 |
| 55° | 377 | 399 | 423 | 439 | 445 |
| 57.5° | 347 | 371 | 395 | 413 | 419 |
| 60° | 317 | 341 | 368 | 386 | 393 |
| 62.5° | 287 | 311 | 340 | 359 | 366 |
| 65° | 256 | 282 | 312 | 332 | 338 |
| 67.5° | 224 | 252 | 282 | 303 | 309 |
| 70° | 193 | 222 | 253 | 275 | 282 |
| 72.5° | 162 | 192 | 225 | 247 | 254 |
| 75° | 132 | 163 | 197 | 219 | 227 |
| 77.5° | 102 | 135 | 169 | 192 | 200 |
| 80° | 74 | 108 | 143 | 166 | 175 |
| 82.5° | 50 | 84 | 120 | 144 | 151 |
| 85° | 29 | 63 | 99 | 123 | 131 |
| 87.5° | 13 | 46 | 82 | 105 | 113 |
| 90° | 0 | 32 | 67 | 91 | 98 |
| 92.5° | 0 | 29 | 63 | 86 | 94 |
| 95° | 0 | 26 | 59 | 82 | 90 |
| 97.5° | 0 | 24 | 56 | 78 | 86 |
| 100° | 0 | 21 | 53 | 74 | 81 |
| 102.5° | 0 | 19 | 49 | 70 | 77 |
| 105° | 0 | 16 | 46 | 66 | 73 |
| 107.5° | 1 | 14 | 42 | 62 | 69 |
| 110° | 1 | 12 | 39 | 58 | 64 |



TEST NUMBER: P33919

CATALOG NUMBER: S125DS-135-SR0048-1D-UDD-4-W

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|----|-------|-----|-------|-----|
| 112.5° | 0 | 9 | 35 | 54 | 60 |
| 115° | 0 | 7 | 32 | 50 | 56 |
| 117.5° | 0 | 5 | 28 | 46 | 52 |
| 120° | 1 | 3 | 25 | 42 | 47 |
| 122.5° | 1 | 1 | 22 | 37 | 43 |
| 125° | 1 | 1 | 18 | 34 | 39 |
| 127.5° | 0 | 1 | 15 | 30 | 35 |
| 130° | 1 | 0 | 12 | 26 | 31 |
| 132.5° | 1 | 1 | 9 | 22 | 27 |
| 135° | 1 | 0 | 6 | 18 | 22 |
| 137.5° | 1 | 0 | 4 | 14 | 18 |
| 140° | 1 | 1 | 1 | 11 | 14 |
| 142.5° | 1 | 1 | 0 | 7 | 10 |
| 145° | 1 | 1 | 0 | 4 | 7 |
| 147.5° | 0 | 0 | 0 | 0 | 0 |
| 150° | 0 | 0 | 0 | 0 | 0 |
| 152.5° | 0 | 0 | 0 | 0 | 0 |
| 155° | 0 | 0 | 0 | 0 | 0 |
| 157.5° | 0 | 0 | 0 | 0 | 0 |
| 160° | 0 | 0 | 0 | 0 | 0 |
| 162.5° | 0 | 0 | 0 | 0 | 0 |
| 165° | 0 | 0 | 0 | 0 | 0 |
| 167.5° | 0 | 0 | 0 | 0 | 0 |
| 170° | 0 | 0 | 0 | 0 | 0 |
| 172.5° | 0 | 0 | 0 | 0 | 0 |
| 175° | 0 | 0 | 0 | 0 | 0 |
| 177.5° | 0 | 0 | 0 | 0 | 0 |
| 180° | 0 | 0 | 0 | 0 | 0 |

(END OF REPORT)