

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: PrentaLux

Report Number: P600673

Luminaire Tested: PRLX-215-90-27K-LL8-UNV-STD-X-X-WHHR-BR-X

Issue Date: 7/6/2022

Test Information

Test Method: LM-79-2019
Report Number: P600673
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2203-582-13)
Test Lab: INNOVATION CENTER
Issue Date: 7/6/2022
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PentaLux
Catalog Number: PRLX-215-90-27K-LL8-UNV-STD-X-X-WHHR-BR-X
Description: PentaLux 200 SERIES 3D PRINTED LUMINAIRE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5302.5 lumens
Efficiency: N/A
Efficacy: 73.4 lumens/watt
Spacing Criteria (0/90/45): 0.9 / 0.9 / 0.85
Luminous Opening: Circular (Dia: 1' x H: 0')
CIE Type: Direct

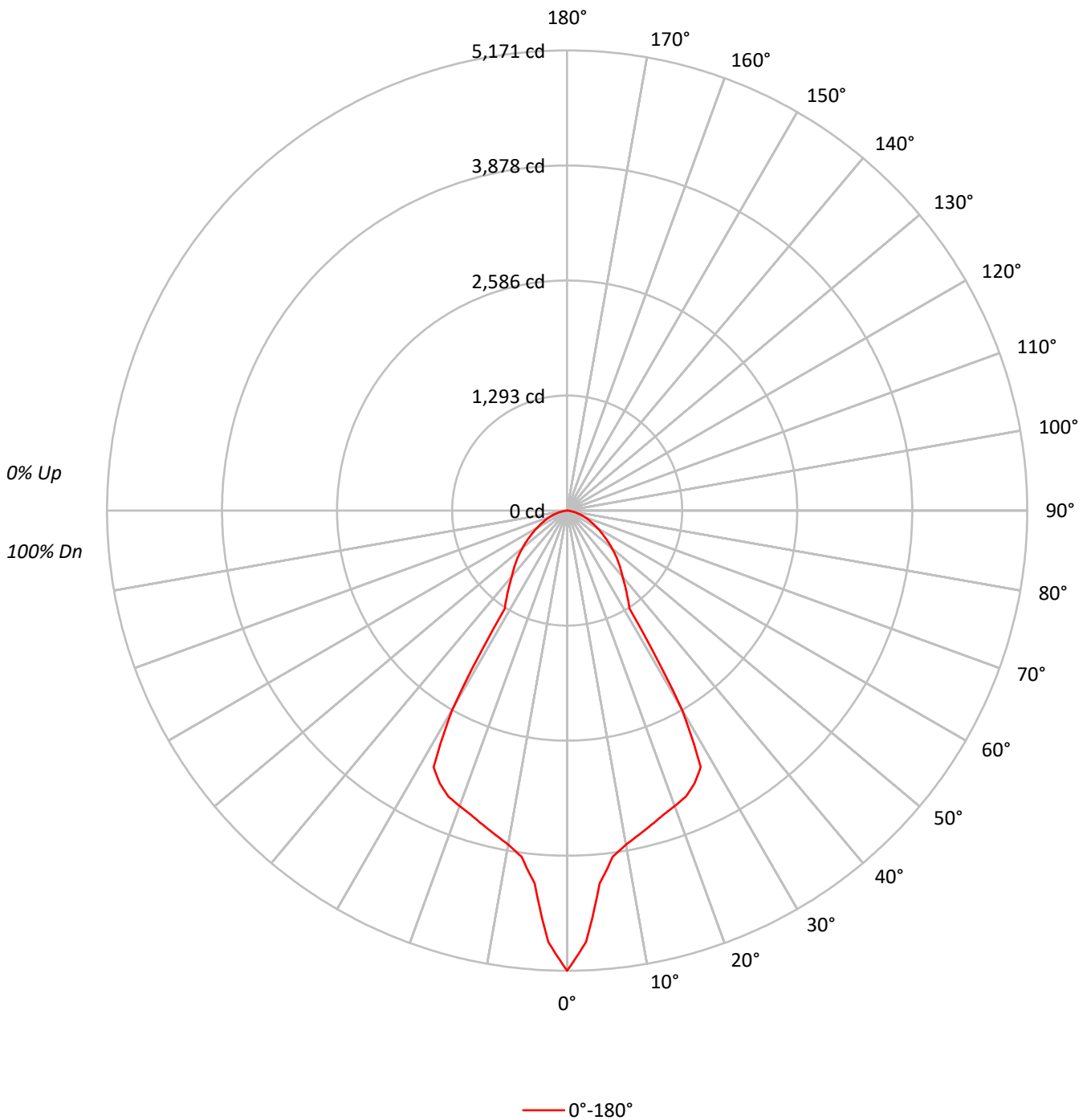
Input Watts (W): 72.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot





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CATALOG NUMBER: PRLX-215-90-27K-LL8-UNV-STD-X-X-WHHR-BR-X

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 | 112 | 108 | 105 | 102 | 109 | 106 | 103 | 100 | 102 | 99 | 97 | 98 | 96 | 94 | 95 | 93 | 92 | 90 |
| 2 | 104 | 98 | 93 | 89 | 102 | 96 | 92 | 87 | 93 | 89 | 86 | 90 | 87 | 84 | 87 | 84 | 82 | 80 |
| 3 | 97 | 89 | 83 | 78 | 95 | 88 | 82 | 77 | 85 | 80 | 76 | 82 | 78 | 75 | 80 | 77 | 74 | 72 |
| 4 | 91 | 82 | 75 | 70 | 89 | 81 | 74 | 69 | 78 | 73 | 68 | 76 | 71 | 67 | 74 | 70 | 67 | 65 |
| 5 | 85 | 75 | 68 | 63 | 84 | 74 | 67 | 62 | 72 | 66 | 62 | 70 | 65 | 61 | 69 | 64 | 61 | 59 |
| 6 | 80 | 70 | 62 | 57 | 79 | 69 | 62 | 57 | 67 | 61 | 56 | 66 | 60 | 56 | 64 | 59 | 56 | 54 |
| 7 | 76 | 65 | 57 | 52 | 74 | 64 | 57 | 52 | 62 | 56 | 52 | 61 | 56 | 52 | 60 | 55 | 51 | 50 |
| 8 | 71 | 60 | 53 | 48 | 70 | 60 | 53 | 48 | 58 | 52 | 48 | 57 | 52 | 48 | 56 | 51 | 47 | 46 |
| 9 | 68 | 56 | 49 | 45 | 66 | 56 | 49 | 45 | 55 | 49 | 45 | 54 | 48 | 44 | 53 | 48 | 44 | 43 |
| 10 | 64 | 53 | 46 | 42 | 63 | 52 | 46 | 42 | 51 | 46 | 42 | 51 | 45 | 41 | 50 | 45 | 41 | 40 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|-------|
| | 0° |
| 0° | 70866 |
| 5° | 57848 |
| 10° | 53038 |
| 15° | 51883 |
| 20° | 51523 |
| 25° | 51184 |
| 30° | 40932 |
| 35° | 19762 |
| 40° | 17318 |
| 45° | 15726 |
| 50° | 13961 |
| 55° | 12267 |
| 60° | 10734 |
| 65° | 9382 |
| 70° | 8194 |
| 75° | 6910 |
| 80° | 4806 |
| 85° | 1714 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 15726 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 393.7 | 7.4 |
| 10°-20° | 1033.9 | 19.5 |
| 20°-30° | 1514.4 | 28.6 |
| 30°-40° | 823.1 | 15.5 |
| 40°-50° | 624.7 | 11.8 |
| 50°-60° | 462.0 | 8.7 |
| 60°-70° | 290.3 | 5.5 |
| 70°-80° | 138.7 | 2.6 |
| 80°-90° | 21.9 | 0.4 |
| 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° | 2941.9 | 55.5 |
| 0°-40° | 3765.0 | 71.0 |
| 0°-60° | 4851.6 | 91.5 |
| 0°-90° | 5302.5 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 5302.5 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 5171 | |
| 5° | 4205 | 394 |
| 15° | 3657 | 1034 |
| 25° | 3385 | 1514 |
| 35° | 1181 | 823 |
| 45° | 811 | 625 |
| 55° | 513 | 462 |
| 65° | 289 | 290 |
| 75° | 130 | 139 |
| 85° | 11 | 22 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|--------|
| 0° | 5170.8 |
| 2.5° | 4851.0 |
| 5° | 4204.9 |
| 7.5° | 3922.1 |
| 10° | 3811.2 |
| 12.5° | 3730.7 |
| 15° | 3656.7 |
| 17.5° | 3587.1 |
| 20° | 3532.7 |
| 22.5° | 3480.5 |
| 25° | 3384.8 |
| 27.5° | 3249.9 |
| 30° | 2586.5 |
| 32.5° | 1305.2 |
| 35° | 1181.2 |
| 37.5° | 1068.1 |
| 40° | 968.0 |
| 42.5° | 887.5 |
| 45° | 811.4 |
| 47.5° | 733.1 |
| 50° | 654.8 |
| 52.5° | 583.0 |
| 55° | 513.4 |
| 57.5° | 450.3 |
| 60° | 391.6 |
| 62.5° | 339.4 |
| 65° | 289.3 |
| 67.5° | 248.0 |
| 70° | 204.5 |
| 72.5° | 167.5 |
| 75° | 130.5 |
| 77.5° | 95.7 |
| 80° | 60.9 |
| 82.5° | 34.8 |
| 85° | 10.9 |
| 87.5° | 4.4 |
| 90° | 0.0 |

(END OF REPORT)