

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: HALO

Report Number: P382117

Luminaire Tested: **RA6069S1EWHMDMR-2700K**

Test Date: 11/12/2019

Test Information

Test Method: LM-79-08
Report Number: P382117
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1911-579-1)
Test Lab: INNOVATION CENTER (G1)
Test Date: 11/12/2019
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: RA6069S1EWHMDMR-2700K
Description: HALO RA Direct Mount Downlight 6" 2700K
Light Source: (32) 90 CRI LEDS
BRIDGELUX2835
Ballast/Driver: ELECTRICAL DRIVER

Summary

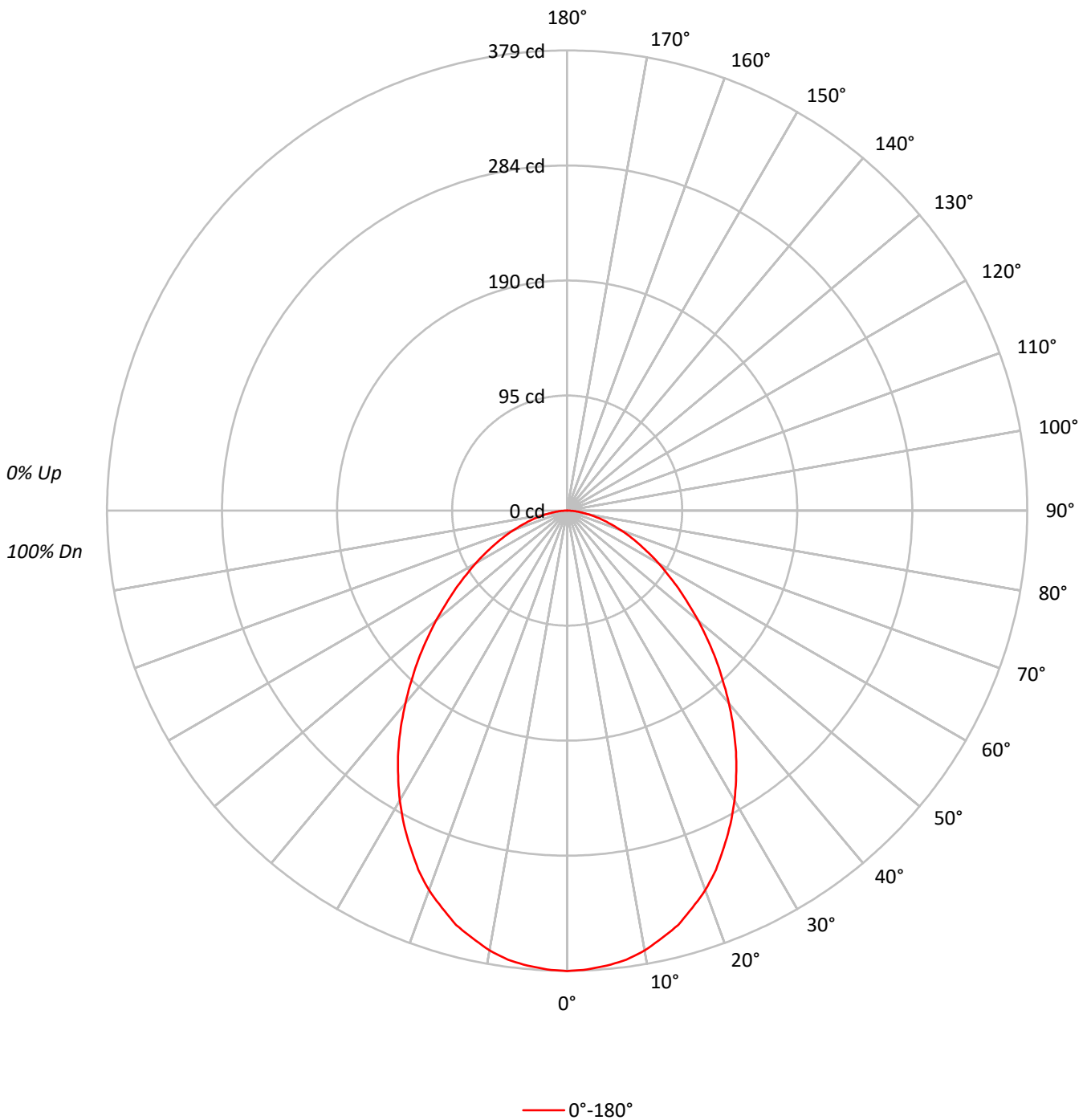
Lumens per Lamp: N/A
Luminaire Lumens: 767.2 lumens
Efficiency: N/A
Efficacy: 92.8 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1.1 / 1.18
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 8.27
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: 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 | 99 | 107 | 104 | 100 | 97 | 100 | 97 | 94 | | 96 | 93 | 91 | | 92 | 90 | 89 | 87 |
| 2 | 101 | 94 | 88 | 83 | 99 | 92 | 87 | 82 | 89 | 84 | 80 | | 85 | 82 | 78 | | 83 | 79 | 76 | 74 |
| 3 | 93 | 84 | 76 | 71 | 91 | 82 | 75 | 70 | 79 | 74 | 69 | | 77 | 72 | 68 | | 74 | 70 | 67 | 64 |
| 4 | 86 | 75 | 67 | 61 | 84 | 74 | 67 | 61 | 72 | 65 | 60 | | 69 | 64 | 59 | | 67 | 62 | 58 | 56 |
| 5 | 80 | 68 | 60 | 54 | 78 | 67 | 59 | 53 | 65 | 58 | 53 | | 63 | 57 | 52 | | 61 | 56 | 52 | 50 |
| 6 | 74 | 62 | 54 | 48 | 72 | 61 | 53 | 47 | 59 | 52 | 47 | | 58 | 51 | 47 | | 56 | 51 | 46 | 44 |
| 7 | 69 | 57 | 48 | 43 | 67 | 56 | 48 | 42 | 54 | 47 | 42 | | 53 | 47 | 42 | | 52 | 46 | 42 | 40 |
| 8 | 65 | 52 | 44 | 38 | 63 | 51 | 44 | 38 | 50 | 43 | 38 | | 49 | 43 | 38 | | 48 | 42 | 38 | 36 |
| 9 | 61 | 48 | 40 | 35 | 59 | 47 | 40 | 35 | 46 | 40 | 35 | | 45 | 39 | 35 | | 44 | 39 | 34 | 33 |
| 10 | 57 | 44 | 37 | 32 | 56 | 44 | 37 | 32 | 43 | 36 | 32 | | 42 | 36 | 32 | | 41 | 36 | 32 | 30 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|-------|
| | 0° |
| 0° | 83173 |
| 5° | 82809 |
| 10° | 81918 |
| 15° | 80227 |
| 20° | 77637 |
| 25° | 73964 |
| 30° | 69808 |
| 35° | 64915 |
| 40° | 59340 |
| 45° | 53680 |
| 50° | 48067 |
| 55° | 42780 |
| 60° | 38199 |
| 65° | 33882 |
| 70° | 29877 |
| 75° | 26349 |
| 80° | 22225 |
| 85° | 18367 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 35.7 | 4.6 |
| 10°-20° | 99.2 | 12.9 |
| 20°-30° | 140.5 | 18.3 |
| 30°-40° | 151.2 | 19.7 |
| 40°-50° | 133.5 | 17.4 |
| 50°-60° | 100.4 | 13.1 |
| 60°-70° | 65.2 | 8.5 |
| 70°-80° | 33.0 | 4.3 |
| 80°-90° | 8.3 | 1.1 |
| 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° | 275.4 | 35.9 |
| 0°-40° | 426.6 | 55.6 |
| 0°-60° | 660.6 | 86.1 |
| 0°-90° | 767.2 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 767.2 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|-----|------|
| 0° | 379 | |
| 5° | 376 | 36 |
| 15° | 353 | 99 |
| 25° | 306 | 141 |
| 35° | 242 | 151 |
| 45° | 173 | 134 |
| 55° | 112 | 100 |
| 65° | 65 | 65 |
| 75° | 31 | 33 |
| 85° | 7 | 8 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|-------|
| 0° | 379.3 |
| 2.5° | 378.3 |
| 5° | 376.2 |
| 7.5° | 373.1 |
| 10° | 367.9 |
| 12.5° | 360.6 |
| 15° | 353.4 |
| 17.5° | 343.0 |
| 20° | 332.7 |
| 22.5° | 320.2 |
| 25° | 305.7 |
| 27.5° | 291.2 |
| 30° | 275.7 |
| 32.5° | 259.1 |
| 35° | 242.5 |
| 37.5° | 224.9 |
| 40° | 207.3 |
| 42.5° | 189.7 |
| 45° | 173.1 |
| 47.5° | 156.5 |
| 50° | 140.9 |
| 52.5° | 125.4 |
| 55° | 111.9 |
| 57.5° | 98.5 |
| 60° | 87.1 |
| 62.5° | 75.7 |
| 65° | 65.3 |
| 67.5° | 56.0 |
| 70° | 46.6 |
| 72.5° | 38.3 |
| 75° | 31.1 |
| 77.5° | 23.8 |
| 80° | 17.6 |
| 82.5° | 11.4 |
| 85° | 7.3 |
| 87.5° | 3.1 |
| 90° | 0.0 |

(END OF REPORT)