

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 COMMERCIAL

Report Number: P210576

Luminaire Tested: **PR8S20D010 - PR8M12WDMB - 4000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P210576
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29051)
Test Lab: INNOVATION CENTER-P2
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PR8S20D010 - PR8M12WDMB - 4000K
Description: HALO 8" ROUND DOWNLIGHT, WIDE LENS, MATTE BLACK FINISH
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1767.5 lumens
Efficiency: N/A
Efficacy: 80.3 lumens/watt
Spacing Criteria (0/90/45): 1.37 / 1.37 / 1.39
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

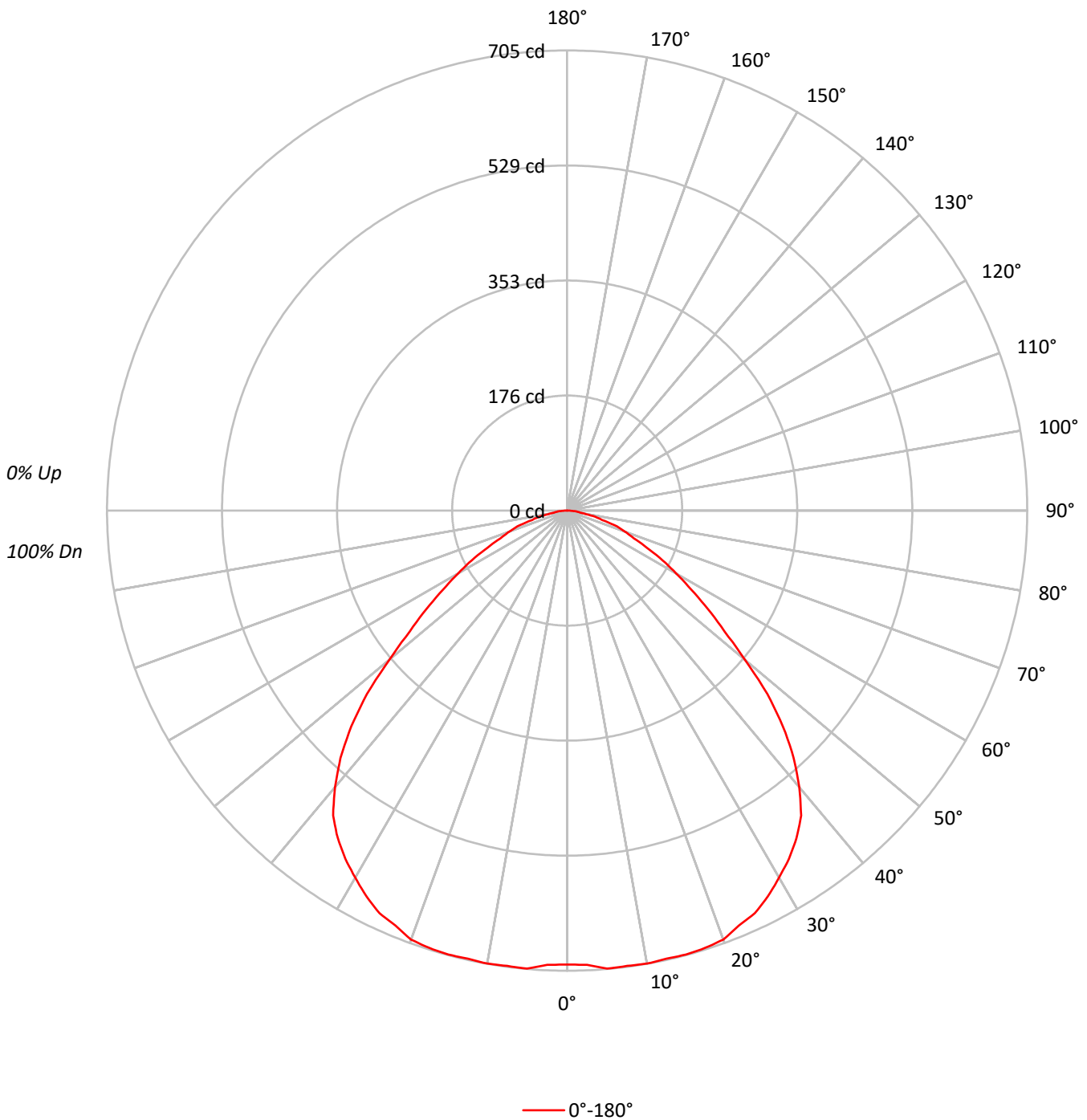
Input Watts (W): 22
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P210576

CATALOG NUMBER: PR8S20D010 - PR8M12WDMB - 4000K

Luminous Intensity Polar Plot





TEST NUMBER: P210576

CATALOG NUMBER: PR8S20D010 - PR8M12WDMB - 4000K

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 | 103 | 99 | 108 | 104 | 101 | 98 | 100 | 97 | 95 | 96 | 94 | 92 | 92 | 91 | 89 | 87 |
| 2 | 102 | 94 | 88 | 83 | 99 | 92 | 87 | 82 | 89 | 84 | 80 | 86 | 82 | 79 | 83 | 80 | 77 | 75 |
| 3 | 93 | 84 | 77 | 71 | 91 | 82 | 76 | 70 | 79 | 74 | 69 | 77 | 72 | 68 | 74 | 70 | 67 | 65 |
| 4 | 86 | 75 | 67 | 61 | 84 | 74 | 66 | 61 | 71 | 65 | 60 | 69 | 64 | 59 | 67 | 62 | 58 | 56 |
| 5 | 80 | 68 | 59 | 53 | 78 | 67 | 59 | 53 | 64 | 58 | 52 | 63 | 57 | 52 | 61 | 56 | 51 | 49 |
| 6 | 74 | 61 | 53 | 47 | 72 | 60 | 52 | 47 | 59 | 52 | 46 | 57 | 51 | 46 | 55 | 50 | 46 | 44 |
| 7 | 68 | 56 | 48 | 42 | 67 | 55 | 47 | 42 | 53 | 46 | 41 | 52 | 46 | 41 | 51 | 45 | 41 | 39 |
| 8 | 64 | 51 | 43 | 37 | 62 | 50 | 43 | 37 | 49 | 42 | 37 | 48 | 42 | 37 | 47 | 41 | 37 | 35 |
| 9 | 60 | 47 | 39 | 34 | 58 | 46 | 39 | 34 | 45 | 38 | 34 | 44 | 38 | 33 | 43 | 37 | 33 | 31 |
| 10 | 56 | 43 | 36 | 31 | 55 | 43 | 36 | 31 | 42 | 35 | 31 | 41 | 35 | 30 | 40 | 34 | 30 | 29 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|-------|
| | 0° |
| 0° | 21444 |
| 5° | 21804 |
| 10° | 22069 |
| 15° | 22475 |
| 20° | 22951 |
| 25° | 23160 |
| 30° | 23123 |
| 35° | 23068 |
| 40° | 22264 |
| 45° | 20392 |
| 50° | 17035 |
| 55° | 14161 |
| 60° | 11903 |
| 65° | 9836 |
| 70° | 8457 |
| 75° | 6636 |
| 80° | 4599 |
| 85° | 4847 |



TEST NUMBER: P210576

CATALOG NUMBER: PR8S20D010 - PR8M12WDMB - 4000K

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 67.1 | 3.8 |
| 10°-20° | 199.2 | 11.3 |
| 20°-30° | 312.9 | 17.7 |
| 30°-40° | 381.4 | 21.6 |
| 40°-50° | 356.5 | 20.2 |
| 50°-60° | 237.7 | 13.5 |
| 60°-70° | 136.8 | 7.7 |
| 70°-80° | 63.1 | 3.6 |
| 80°-90° | 12.8 | 0.7 |
| 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° | 579.2 | 32.8 |
| 0°-40° | 960.6 | 54.3 |
| 0°-60° | 1554.7 | 88.0 |
| 0°-90° | 1767.5 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1767.5 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|-----|------|
| 0° | 695 | |
| 5° | 704 | 67 |
| 15° | 704 | 199 |
| 25° | 681 | 313 |
| 35° | 613 | 381 |
| 45° | 468 | 356 |
| 55° | 263 | 238 |
| 65° | 135 | 137 |
| 75° | 56 | 63 |
| 85° | 14 | 13 |
| 90° | 0 | |



TEST NUMBER: P210576

CATALOG NUMBER: PR8S20D010 - PR8M12WDMB - 4000K

CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|-------|
| 0° | 695.4 |
| 2.5° | 696.5 |
| 5° | 704.4 |
| 7.5° | 703.7 |
| 10° | 704.8 |
| 12.5° | 703.3 |
| 15° | 704.0 |
| 17.5° | 702.6 |
| 20° | 699.4 |
| 22.5° | 687.9 |
| 25° | 680.7 |
| 27.5° | 666.3 |
| 30° | 649.4 |
| 32.5° | 632.5 |
| 35° | 612.8 |
| 37.5° | 589.0 |
| 40° | 553.1 |
| 42.5° | 513.9 |
| 45° | 467.6 |
| 47.5° | 416.2 |
| 50° | 355.1 |
| 52.5° | 303.3 |
| 55° | 263.4 |
| 57.5° | 225.3 |
| 60° | 193.0 |
| 62.5° | 165.0 |
| 65° | 134.8 |
| 67.5° | 110.7 |
| 70° | 93.8 |
| 72.5° | 79.8 |
| 75° | 55.7 |
| 77.5° | 44.2 |
| 80° | 25.9 |
| 82.5° | 16.5 |
| 85° | 13.7 |
| 87.5° | 4.0 |
| 90° | 0.0 |

(END OF REPORT)