

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: P253161

Luminaire Tested: **SMD6S12950WHE**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P253161
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1805-792-2)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: SMD6S12950WHE
Description: HALO 6" SQUARE SURFACE MOUNT 1200LM UNV Voltage
Light Source: (28) 5000K CCT, 92 CRI LEDS
Ballast/Driver: LEEDARSON ELECTRONIC DRIVER

Summary

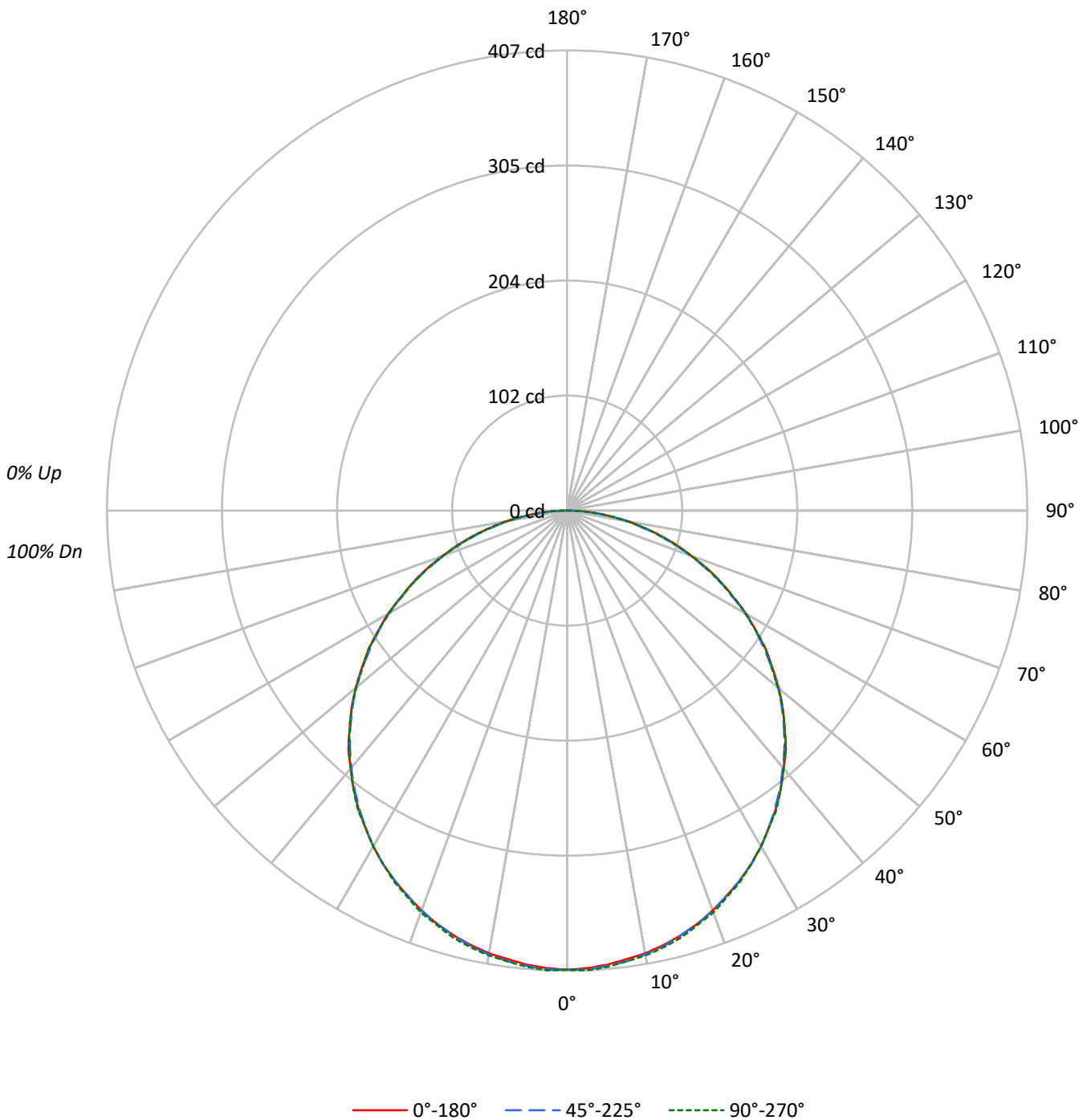
Lumens per Lamp: N/A
Luminaire Lumens: 1180.0 lumens
Efficiency: N/A
Efficacy: 73.7 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.37
Luminous Opening: Rectangular (W 0.52' x L: 0.52' x H: 0')
CIE Type: Direct

Input Watts (W): 16
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



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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 | 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 | | | | | 100 | | | |
| 1 | 108 | 103 | 99 | 95 | 106 | 101 | 97 | 94 | 97 | 94 | 91 | 93 | 90 | 88 | 89 | 87 | 85 | 83 | | | | | 83 | | | |
| 2 | 98 | 90 | 83 | 77 | 96 | 88 | 82 | 76 | 84 | 79 | 74 | 81 | 77 | 73 | 78 | 74 | 71 | 69 | | | | | 69 | | | |
| 3 | 90 | 79 | 70 | 64 | 87 | 77 | 69 | 63 | 74 | 68 | 62 | 71 | 66 | 61 | 69 | 64 | 60 | 58 | | | | | 58 | | | |
| 4 | 82 | 70 | 61 | 54 | 80 | 68 | 60 | 54 | 66 | 59 | 53 | 63 | 57 | 52 | 61 | 56 | 51 | 49 | | | | | 49 | | | |
| 5 | 75 | 62 | 53 | 46 | 73 | 61 | 52 | 46 | 59 | 51 | 46 | 57 | 50 | 45 | 55 | 49 | 45 | 42 | | | | | 42 | | | |
| 6 | 69 | 56 | 47 | 40 | 68 | 55 | 46 | 40 | 53 | 46 | 40 | 51 | 45 | 39 | 50 | 44 | 39 | 37 | | | | | 37 | | | |
| 7 | 64 | 51 | 42 | 36 | 63 | 50 | 41 | 35 | 48 | 41 | 35 | 47 | 40 | 35 | 45 | 39 | 35 | 33 | | | | | 33 | | | |
| 8 | 60 | 46 | 38 | 32 | 58 | 46 | 37 | 32 | 44 | 37 | 31 | 43 | 36 | 31 | 42 | 36 | 31 | 29 | | | | | 29 | | | |
| 9 | 56 | 42 | 34 | 29 | 55 | 42 | 34 | 28 | 41 | 33 | 28 | 40 | 33 | 28 | 39 | 32 | 28 | 26 | | | | | 26 | | | |
| 10 | 52 | 39 | 31 | 26 | 51 | 39 | 31 | 26 | 38 | 31 | 26 | 37 | 30 | 26 | 36 | 30 | 25 | 24 | | | | | 24 | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 16114 | 16114 | 16114 |
| 5° | 16060 | 16100 | 16136 |
| 10° | 16016 | 16052 | 16093 |
| 15° | 15972 | 15972 | 16054 |
| 20° | 15894 | 15894 | 15974 |
| 25° | 15810 | 15810 | 15849 |
| 30° | 15711 | 15711 | 15711 |
| 35° | 15588 | 15540 | 15637 |
| 40° | 15431 | 15379 | 15431 |
| 45° | 15264 | 15207 | 15264 |
| 50° | 15075 | 15019 | 15019 |
| 55° | 14839 | 14708 | 14839 |
| 60° | 14515 | 14444 | 14444 |
| 65° | 14121 | 14027 | 14027 |
| 70° | 13551 | 13446 | 13551 |
| 75° | 13062 | 12771 | 12924 |
| 80° | 12477 | 12042 | 12248 |
| 85° | 11792 | 10881 | 10881 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 38.4 | 3.3 |
| 10°-20° | 109.9 | 9.3 |
| 20°-30° | 166.6 | 14.1 |
| 30°-40° | 201.2 | 17.1 |
| 40°-50° | 209.6 | 17.8 |
| 50°-60° | 190.6 | 16.2 |
| 60°-70° | 147.6 | 12.5 |
| 70°-80° | 88.8 | 7.5 |
| 80°-90° | 27.3 | 2.3 |
| 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° | 314.9 | 26.7 |
| 0°-40° | 516.1 | 43.7 |
| 0°-60° | 916.3 | 77.7 |
| 0°-90° | 1180.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1180.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 406 | 406 | 406 | 406 | 406 | |
| 5° | 403 | 404 | 404 | 404 | 405 | 38 |
| 15° | 389 | 390 | 389 | 390 | 391 | 110 |
| 25° | 361 | 362 | 361 | 362 | 362 | 166 |
| 35° | 322 | 322 | 321 | 322 | 323 | 201 |
| 45° | 272 | 272 | 271 | 272 | 272 | 210 |
| 55° | 214 | 214 | 213 | 214 | 214 | 191 |
| 65° | 150 | 149 | 149 | 148 | 149 | 148 |
| 75° | 85 | 84 | 83 | 83 | 84 | 90 |
| 85° | 26 | 25 | 24 | 24 | 24 | 29 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P253161

CATALOG NUMBER: SMD6S12950WHE

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 406.1 | 406.1 | 406.1 | 406.1 | 406.1 |
| 2.5° | 405.1 | 406.1 | 406.1 | 406.1 | 407.0 |
| 5° | 403.2 | 404.2 | 404.2 | 404.2 | 405.1 |
| 7.5° | 400.3 | 402.2 | 402.2 | 402.2 | 402.2 |
| 10° | 397.5 | 398.4 | 398.4 | 398.4 | 399.4 |
| 12.5° | 393.6 | 394.6 | 394.6 | 394.6 | 395.5 |
| 15° | 388.8 | 389.8 | 388.8 | 389.8 | 390.8 |
| 17.5° | 383.1 | 384.0 | 383.1 | 384.0 | 384.0 |
| 20° | 376.4 | 377.3 | 376.4 | 377.3 | 378.3 |
| 22.5° | 368.7 | 369.7 | 368.7 | 369.7 | 369.7 |
| 25° | 361.1 | 362.0 | 361.1 | 362.0 | 362.0 |
| 27.5° | 352.4 | 352.4 | 352.4 | 352.4 | 352.4 |
| 30° | 342.9 | 342.9 | 342.9 | 343.8 | 342.9 |
| 32.5° | 332.3 | 332.3 | 332.3 | 333.3 | 332.3 |
| 35° | 321.8 | 321.8 | 320.8 | 321.8 | 322.8 |
| 37.5° | 310.3 | 310.3 | 309.3 | 310.3 | 310.3 |
| 40° | 297.9 | 297.9 | 296.9 | 297.9 | 297.9 |
| 42.5° | 286.4 | 285.4 | 284.4 | 285.4 | 285.4 |
| 45° | 272.0 | 272.0 | 271.0 | 272.0 | 272.0 |
| 47.5° | 258.6 | 258.6 | 257.6 | 257.6 | 258.6 |
| 50° | 244.2 | 243.3 | 243.3 | 243.3 | 243.3 |
| 52.5° | 228.9 | 228.9 | 227.9 | 227.9 | 227.9 |
| 55° | 214.5 | 213.6 | 212.6 | 213.6 | 214.5 |
| 57.5° | 198.2 | 197.3 | 197.3 | 197.3 | 198.2 |
| 60° | 182.9 | 182.0 | 182.0 | 182.0 | 182.0 |
| 62.5° | 165.7 | 165.7 | 164.7 | 164.7 | 165.7 |
| 65° | 150.4 | 149.4 | 149.4 | 148.4 | 149.4 |
| 67.5° | 134.1 | 133.1 | 132.2 | 132.2 | 133.1 |
| 70° | 116.8 | 116.8 | 115.9 | 115.9 | 116.8 |
| 72.5° | 101.5 | 99.6 | 99.6 | 99.6 | 99.6 |
| 75° | 85.2 | 84.3 | 83.3 | 83.3 | 84.3 |
| 77.5° | 69.0 | 68.0 | 67.0 | 68.0 | 69.0 |
| 80° | 54.6 | 53.6 | 52.7 | 52.7 | 53.6 |
| 82.5° | 39.3 | 38.3 | 38.3 | 37.4 | 38.3 |
| 85° | 25.9 | 24.9 | 23.9 | 23.9 | 23.9 |
| 87.5° | 12.5 | 11.5 | 10.5 | 10.5 | 10.5 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)