

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: P31218

Luminaire Tested: **PD6H226E-62HC_26DTT**

Issue Date: 03/03/2020



Test Information

Test Method: LM-79-08
Report Number: P31218
Test Lab: INNOVATION CENTER-P3
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PD6H226E-62HC_26DTT
Description: HALO 6 INCH APERTURE RECESSED CFL OPEN DOWNLIGHT FIXTURE,
HORIZONTAL LAMP, SPECULAR CLEAR REFLECTOR
Light Source: (2) SYLVANIA G24Q-3 FOUR PIN QUAD CFL LAMP
CF26DD-E-841 26 WATTS
Ballast/Driver: (1) ADVANCE ELECTRONIC BALLAST
ICF-2S42-90C-M2-LD

Summary

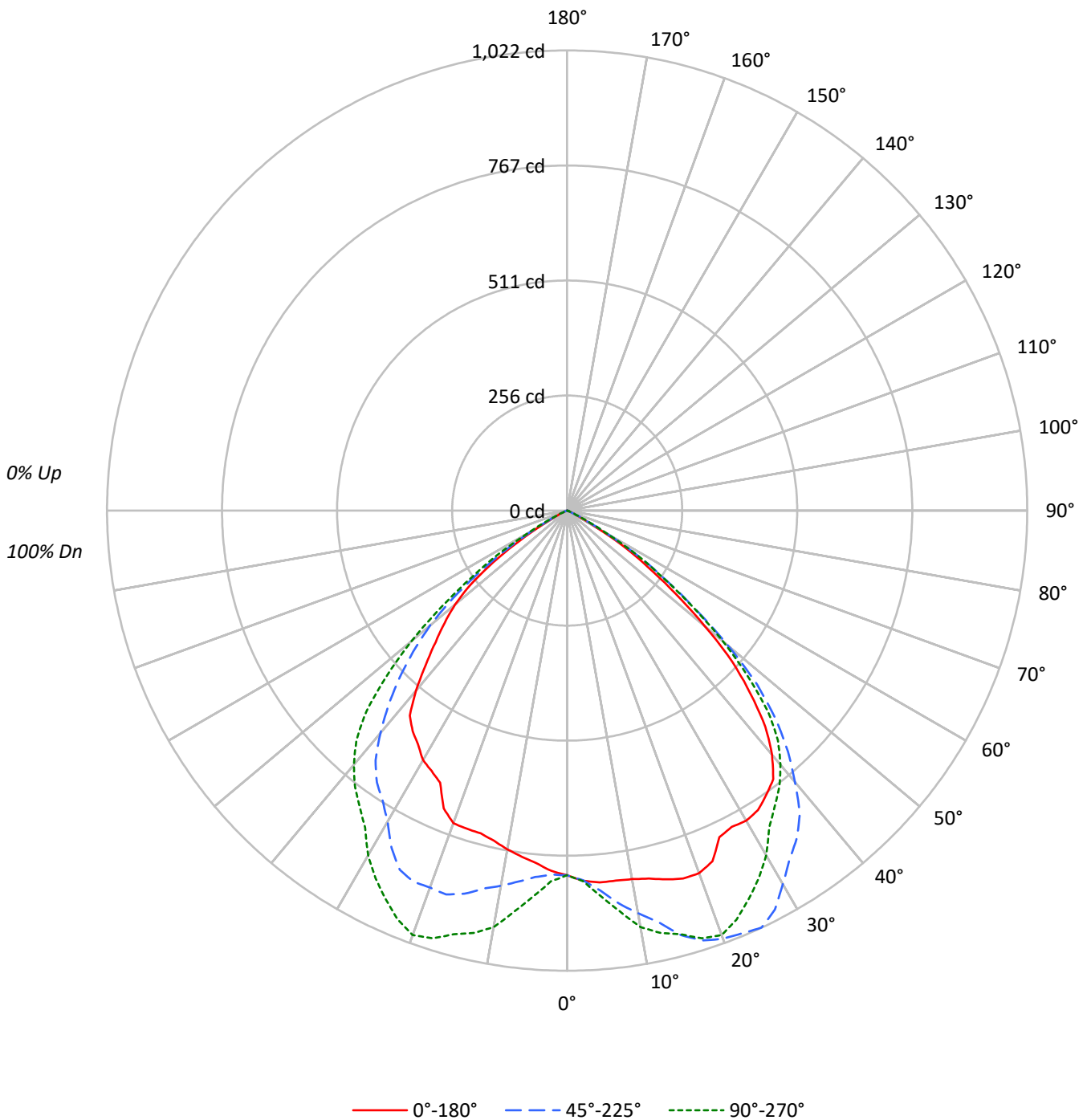
Lumens per Lamp: 1710 (2 lamps)
Luminaire Lumens: 1922.7 lumens
Efficiency: 56.2%
Efficacy: 35.7 lumens/watt
Spacing Criteria (0/90/45): 1.32 / 1.49 / 1.43
Luminous Opening: Vertical Cylinder (Dia: 0.53' x H: 0.1')
CIE Type: Direct

Input Watts (W): 53.9
Input Voltage (V): 120.03
Input Current (A_{in}): 0.4493
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: P31218

CATALOG NUMBER: PD6H226E-62HC_26DTT

Luminous Intensity Polar Plot





TEST NUMBER: P31218

CATALOG NUMBER: PD6H226E-62HC_26DTT

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 | 67 | 67 | 67 | 67 | 65 | 65 | 65 | 65 | 62 | 62 | 62 | 60 | 60 | 60 | 57 | 57 | 57 | 56 |
| 1 | 63 | 61 | 59 | 58 | 62 | 60 | 58 | 57 | 57 | 56 | 55 | 55 | 54 | 53 | 53 | 53 | 52 | 51 |
| 2 | 59 | 55 | 52 | 50 | 57 | 54 | 52 | 49 | 52 | 50 | 48 | 51 | 49 | 47 | 49 | 47 | 46 | 45 |
| 3 | 55 | 50 | 46 | 43 | 53 | 49 | 46 | 43 | 47 | 45 | 42 | 46 | 44 | 42 | 45 | 43 | 41 | 40 |
| 4 | 51 | 45 | 41 | 38 | 49 | 44 | 41 | 38 | 43 | 40 | 37 | 42 | 39 | 37 | 41 | 38 | 36 | 35 |
| 5 | 47 | 41 | 37 | 34 | 46 | 40 | 36 | 33 | 39 | 36 | 33 | 38 | 35 | 33 | 37 | 35 | 32 | 31 |
| 6 | 44 | 37 | 33 | 30 | 43 | 37 | 33 | 30 | 36 | 32 | 30 | 35 | 32 | 29 | 34 | 31 | 29 | 28 |
| 7 | 41 | 34 | 30 | 27 | 40 | 34 | 30 | 27 | 33 | 29 | 27 | 32 | 29 | 26 | 31 | 28 | 26 | 25 |
| 8 | 38 | 31 | 27 | 24 | 37 | 31 | 27 | 24 | 30 | 27 | 24 | 30 | 26 | 24 | 29 | 26 | 24 | 23 |
| 9 | 36 | 29 | 25 | 22 | 35 | 29 | 25 | 22 | 28 | 24 | 22 | 27 | 24 | 22 | 27 | 24 | 22 | 21 |
| 10 | 33 | 27 | 23 | 20 | 33 | 26 | 22 | 20 | 26 | 22 | 20 | 25 | 22 | 20 | 25 | 22 | 20 | 19 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 90° | 180° |
|-----|-------|-------|-------|
| 0° | 39334 | 39334 | 39334 |
| 5° | 39580 | 41061 | 37527 |
| 10° | 39315 | 44424 | 36145 |
| 15° | 40059 | 46012 | 35052 |
| 20° | 40734 | 47673 | 35125 |
| 25° | 38555 | 45929 | 32146 |
| 30° | 39159 | 43543 | 31524 |
| 35° | 39138 | 40762 | 30356 |
| 40° | 37366 | 38897 | 27550 |
| 45° | 31964 | 34956 | 22879 |
| 50° | 23505 | 26561 | 19098 |
| 55° | 13876 | 16336 | 12615 |
| 60° | 5216 | 7000 | 4255 |
| 65° | 1063 | 1518 | 1063 |
| 70° | 257 | 257 | 342 |
| 75° | 198 | 198 | 198 |
| 80° | 119 | 119 | 119 |
| 85° | 0 | 0 | 0 |



TEST NUMBER: P31218

CATALOG NUMBER: PD6H226E-62HC_26DTT

ZONAL LUMENS:

CANDELA DISTRIBUTION:

| Zone | Lumens | % Fixture | % Lamp | | 0° | 45° | 90° | 135° | 180° | Flux |
|-----------|--------|-----------|--------|-----|-----|------|-----|------|------|------|
| 0°-10° | 80.7 | 4.2 | 2.4 | 0° | 810 | 810 | 810 | 810 | 810 | |
| 10°-20° | 258.0 | 13.4 | 7.5 | 5° | 829 | 847 | 860 | 817 | 786 | 79 |
| 20°-30° | 410.7 | 21.4 | 12.0 | 15° | 848 | 976 | 974 | 881 | 742 | 240 |
| 30°-40° | 484.7 | 25.2 | 14.2 | 25° | 800 | 1022 | 953 | 880 | 667 | 376 |
| 40°-50° | 439.6 | 22.9 | 12.9 | 35° | 771 | 889 | 803 | 737 | 598 | 480 |
| 50°-60° | 219.7 | 11.4 | 6.4 | 45° | 577 | 656 | 631 | 527 | 413 | 439 |
| 60°-70° | 26.8 | 1.4 | 0.8 | 55° | 220 | 264 | 259 | 233 | 200 | 202 |
| 70°-80° | 1.9 | 0.1 | 0.1 | 65° | 14 | 17 | 20 | 21 | 14 | 22 |
| 80°-90° | 0.4 | 0.0 | 0.0 | 75° | 2 | 2 | 2 | 2 | 2 | 2 |
| 90°-100° | 0.0 | 0.0 | 0.0 | 85° | 0 | 0 | 0 | 0 | 0 | 0 |
| 100°-110° | 0.0 | 0.0 | 0.0 | 90° | 0 | 0 | 0 | 0 | 0 | |
| 110°-120° | 0.0 | 0.0 | 0.0 | | | | | | | |
| 120°-130° | 0.0 | 0.0 | 0.0 | | | | | | | |
| 130°-140° | 0.0 | 0.0 | 0.0 | | | | | | | |
| 140°-150° | 0.0 | 0.0 | 0.0 | | | | | | | |
| 150°-160° | 0.0 | 0.0 | 0.0 | | | | | | | |
| 160°-170° | 0.0 | 0.0 | 0.0 | | | | | | | |
| 170°-180° | 0.0 | 0.0 | 0.0 | | | | | | | |
| 0°-30° | 749.4 | 39.0 | 21.9 | | | | | | | |
| 0°-40° | 1234.1 | 64.2 | 36.1 | | | | | | | |
| 0°-60° | 1893.5 | 98.5 | 55.4 | | | | | | | |
| 0°-90° | 1922.7 | 100.0 | 56.2 | | | | | | | |
| 90°-120° | 0.0 | 0.0 | 0.0 | | | | | | | |
| 90°-150° | 0.0 | 0.0 | 0.0 | | | | | | | |
| 90°-180° | 0.0 | 0.0 | 0.0 | | | | | | | |
| 0°-180° | 1922.7 | 100.0 | 56.2 | | | | | | | |



TEST NUMBER: P31218

CATALOG NUMBER: PD6H226E-62HC_26DTT

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° |
|-------|-----|-------|------|-------|------|--------|------|--------|------|
| 0° | 810 | 810 | 810 | 810 | 810 | 810 | 810 | 810 | 810 |
| 2.5° | 823 | 822 | 822 | 823 | 824 | 814 | 809 | 800 | 801 |
| 5° | 829 | 834 | 847 | 858 | 860 | 841 | 817 | 793 | 786 |
| 7.5° | 829 | 845 | 880 | 898 | 898 | 868 | 831 | 790 | 775 |
| 10° | 831 | 865 | 908 | 937 | 939 | 897 | 846 | 796 | 764 |
| 12.5° | 837 | 894 | 936 | 956 | 961 | 909 | 860 | 808 | 751 |
| 15° | 848 | 918 | 976 | 992 | 974 | 934 | 881 | 815 | 742 |
| 17.5° | 857 | 942 | 1001 | 1019 | 996 | 952 | 894 | 818 | 741 |
| 20° | 857 | 947 | 1012 | 1023 | 1003 | 942 | 891 | 804 | 739 |
| 22.5° | 843 | 937 | 1016 | 1010 | 983 | 922 | 892 | 781 | 716 |
| 25° | 800 | 926 | 1022 | 985 | 953 | 892 | 880 | 757 | 667 |
| 27.5° | 792 | 907 | 999 | 960 | 921 | 867 | 845 | 723 | 652 |
| 30° | 795 | 888 | 958 | 924 | 884 | 830 | 797 | 708 | 640 |
| 32.5° | 789 | 884 | 919 | 873 | 835 | 783 | 763 | 691 | 616 |
| 35° | 771 | 861 | 889 | 835 | 803 | 751 | 737 | 663 | 598 |
| 37.5° | 752 | 820 | 849 | 806 | 774 | 727 | 699 | 624 | 574 |
| 40° | 708 | 765 | 787 | 760 | 737 | 683 | 645 | 577 | 522 |
| 42.5° | 652 | 704 | 726 | 704 | 693 | 634 | 588 | 519 | 465 |
| 45° | 577 | 629 | 656 | 652 | 631 | 583 | 527 | 461 | 413 |
| 47.5° | 499 | 545 | 572 | 574 | 544 | 511 | 464 | 408 | 369 |
| 50° | 400 | 448 | 466 | 470 | 452 | 429 | 397 | 350 | 325 |
| 52.5° | 303 | 339 | 357 | 357 | 352 | 343 | 319 | 284 | 271 |
| 55° | 220 | 244 | 264 | 263 | 259 | 251 | 233 | 206 | 200 |
| 57.5° | 152 | 170 | 186 | 183 | 186 | 178 | 158 | 133 | 126 |
| 60° | 76 | 85 | 99 | 99 | 102 | 99 | 83 | 66 | 62 |
| 62.5° | 33 | 36 | 43 | 48 | 50 | 49 | 44 | 34 | 33 |
| 65° | 14 | 14 | 17 | 18 | 20 | 20 | 21 | 17 | 14 |
| 67.5° | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| 70° | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 |
| 72.5° | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 |
| 75° | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 77.5° | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 80° | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 82.5° | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 85° | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 87.5° | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 90° | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(END OF REPORT)