

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



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: LUMARK

Report Number: G3-2010-983-8

Luminaire Tested: **CLCS40S-90W-4000K**

Test Date: 10/17/2020

Report Generated By 670245982

Test Information

Test Method: LM-79-08
Report Number: G3-2010-983-8
Test Lab: COOPER LIGHTING SOLUTIONS
Test Date: 10/17/2020
Issue Date: 10/17/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: CLCS40S-90W-4000K
Description: SELECTABLE CANOPY, 90W, 4000K
Light Source: -
Ballast/Driver: -
SS-150VA-56B

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13561.7 lumens
Efficiency: N/A
Efficacy: 152.7 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 1' x L: 1' x H: 0.12')
IES Classification: Type V - Short
BUG Rating: B3 - U3 - G2

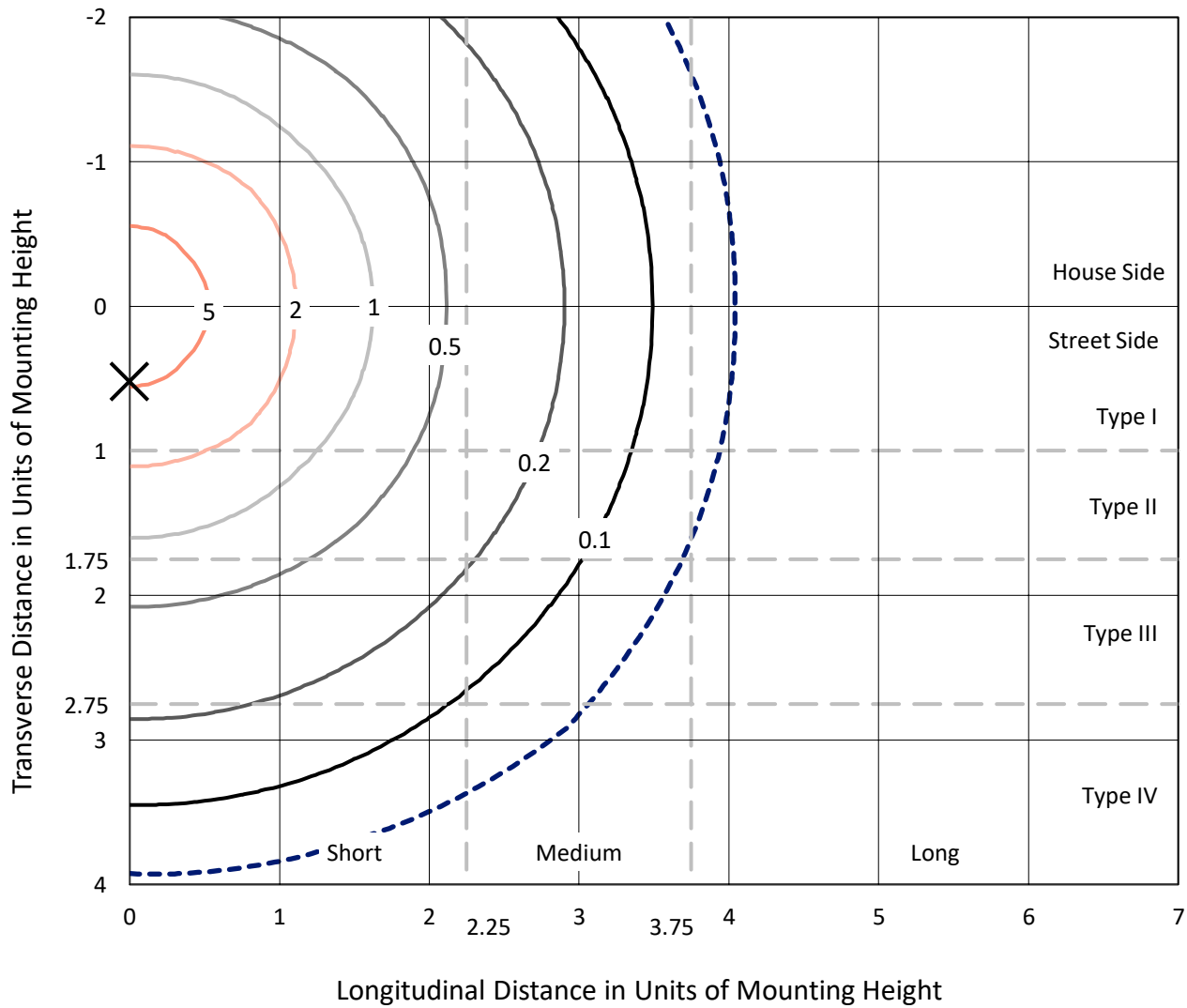
Input Watts (W): 88.8
Input Voltage (V): 120.0
Input Current (Ain): 0.744
Voltage Rise (V): NR
Power Factor: 0.9941
Total Harmonic Distortion (THDi): 4.65%
Frequency (hertz): 60
Stabilization Time: 0.5 HR
Operation Time: 3 HR
Ambient Temperature (°C): 25.3
Test Distance: 24 FT



REPORT NUMBER: G3-2010-983-8
 CATALOG NUMBER: CLCS40S-90W-4000K

Iso-Footcandle Lines of Horizontal Illumination

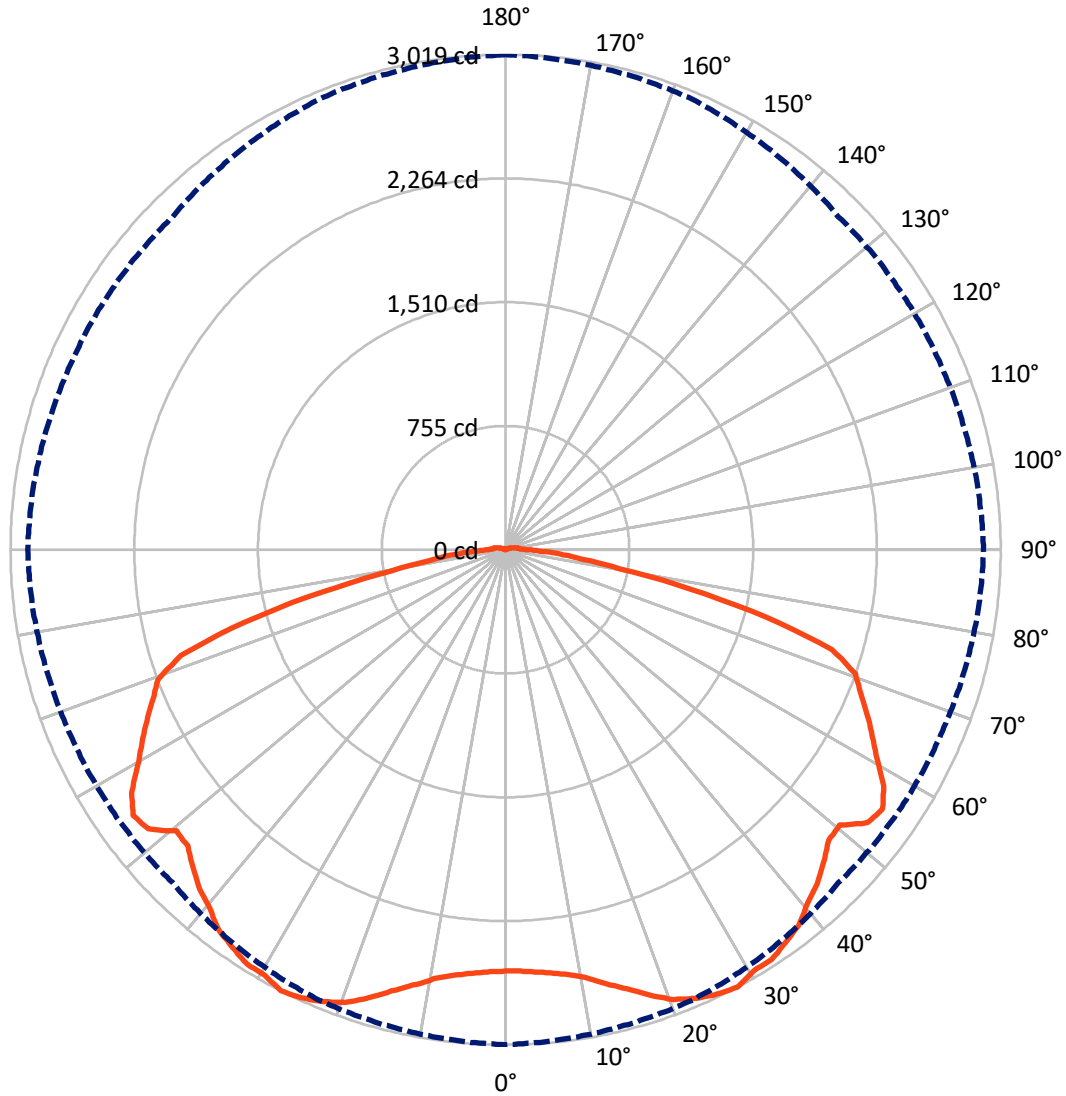
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 6.4 fc
 Type V - Short - N/A

REPORT NUMBER: G3-2010-983-8
CATALOG NUMBER: CLCS40S-90W-4000K

Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral - - - Horizontal Cone Through 27.5-Deg Vertical

REPORT NUMBER: G3-2010-983-8
 CATALOG NUMBER: CLCS40S-90W-4000K

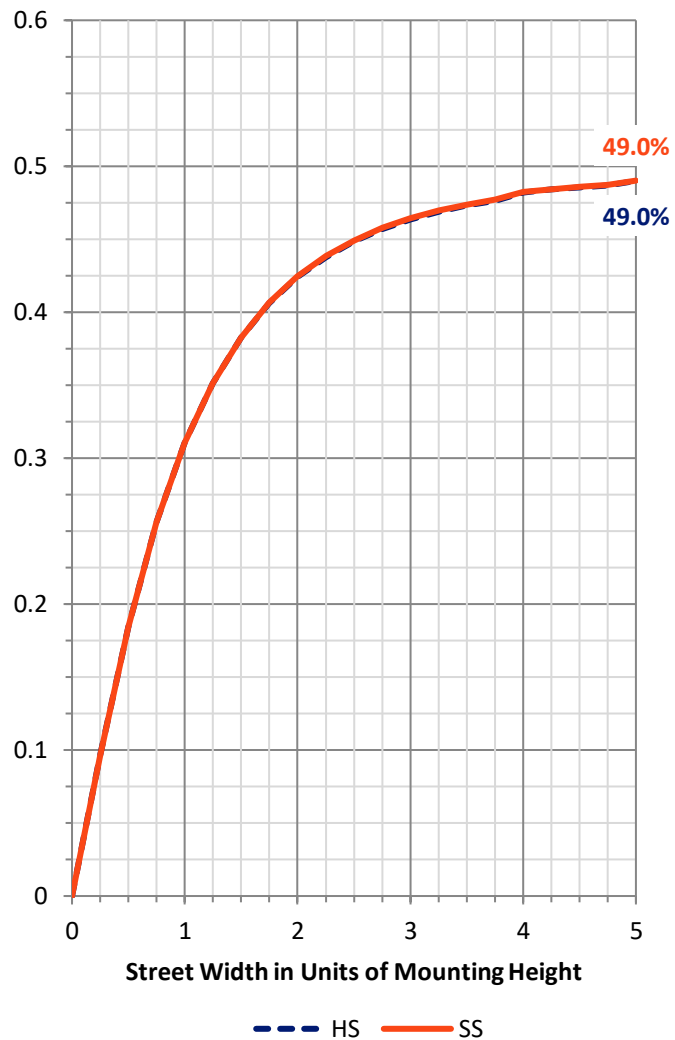
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 6717.3 | 63.6 | 6780.9 |
| | % Fixture | 49.5 | 0.5 | 50.0 |
| Street Side | Lumens | 6717.3 | 63.6 | 6780.9 |
| | % Fixture | 49.5 | 0.5 | 50.0 |
| Total | Lumens | 13434.6 | 127.1 | 13561.7 |
| | % Fixture | 99.1 | 0.9 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 248.9 | 1.8 |
| 10°-20° | 777.9 | 5.7 |
| 20°-30° | 1343.2 | 9.9 |
| 30°-40° | 1826.0 | 13.5 |
| 40°-50° | 2138.4 | 15.8 |
| 50°-60° | 2417.7 | 17.8 |
| 60°-70° | 2520.3 | 18.6 |
| 70°-80° | 1756.0 | 12.9 |
| 80°-90° | 406.1 | 3.0 |
| 90°-100° | 78.9 | 0.6 |
| 100°-110° | 36.4 | 0.3 |
| 110°-120° | 10.2 | 0.1 |
| 120°-130° | 1.6 | 0.0 |
| 130°-140° | 0.1 | 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°-90° | 13434.6 | 99.1 |
| 0°-180° | 13561.7 | 100.0 |

Coefficient of Utilization

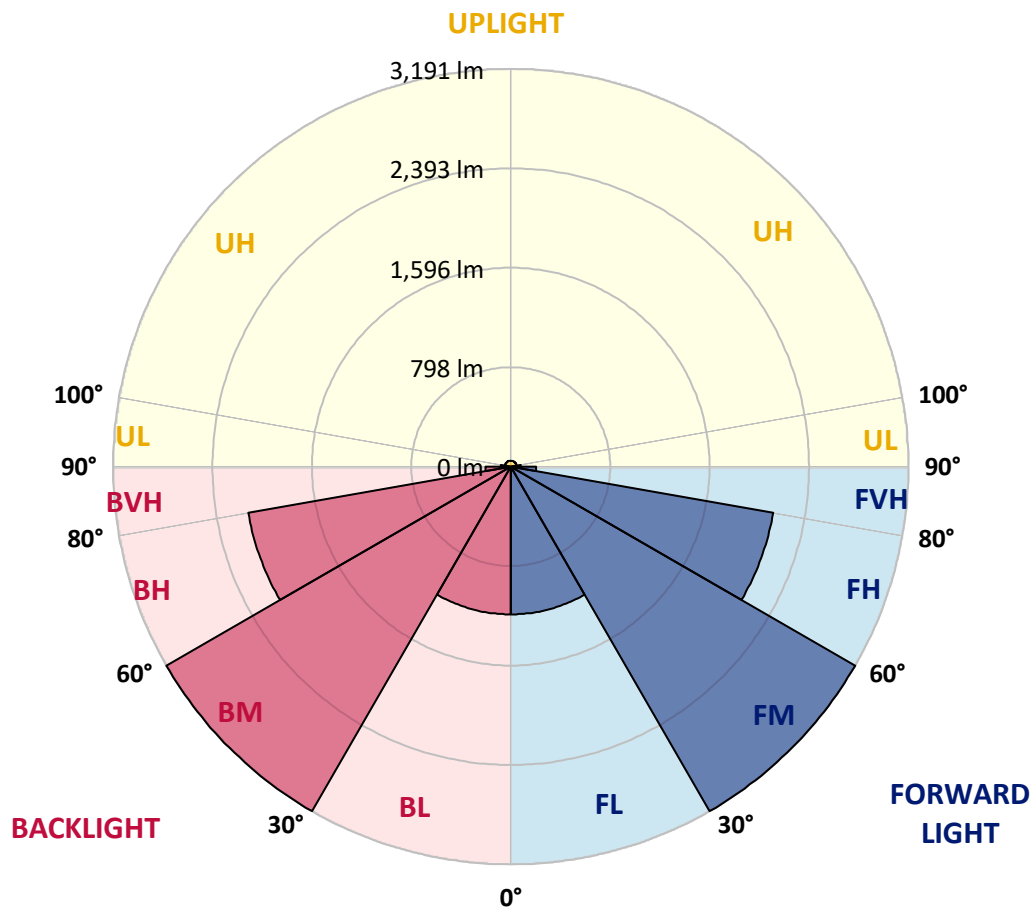


REPORT NUMBER: G3-2010-983-8
 CATALOG NUMBER: CLCS40S-90W-4000K

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|--------|---------|
| | | | B | U | G |
| FL (0°-30°) | 1185.0 | 8.7 | | | |
| FM (30°-60°) | 3191.1 | 23.5 | | | |
| FH (60°-80°) | 2138.2 | 15.8 | | | G2/5000 |
| FVH (80°-90°) | 203.1 | 1.5 | | | G2/225 |
| BL (0°-30°) | 1185.0 | 8.7 | B3/2500 | | |
| BM (30°-60°) | 3191.1 | 23.5 | B3/5000 | | |
| BH (60°-80°) | 2138.2 | 15.8 | B3/2500 | | G2/5000 |
| BVH (80°-90°) | 203.1 | 1.5 | | | G2/225 |
| UL (90°-100°) | 78.9 | 0.6 | | U3/500 | |
| UH (100°-180°) | 48.2 | 0.4 | | U2/50 | |

BUG Rating: B3-U3-G2
 Type V Short





REPORT NUMBER: G3-2010-983-8

CATALOG NUMBER: CLCS40S-90W-4000K

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|------|-------|------|-------|------|
| 0° | 2568 | 2568 | 2568 | 2568 | 2568 |
| 2.5° | 2574 | 2570 | 2570 | 2573 | 2570 |
| 5° | 2590 | 2591 | 2587 | 2584 | 2591 |
| 7.5° | 2614 | 2617 | 2609 | 2611 | 2613 |
| 10° | 2653 | 2650 | 2650 | 2644 | 2635 |
| 12.5° | 2715 | 2708 | 2674 | 2677 | 2672 |
| 15° | 2779 | 2746 | 2722 | 2711 | 2703 |
| 17.5° | 2857 | 2832 | 2747 | 2749 | 2761 |
| 20° | 2928 | 2878 | 2770 | 2793 | 2807 |
| 22.5° | 2972 | 2954 | 2831 | 2827 | 2870 |
| 25° | 3002 | 2962 | 2856 | 2868 | 2882 |
| 27.5° | 3019 | 2973 | 2872 | 2884 | 2914 |
| 30° | 2980 | 2996 | 2892 | 2916 | 2909 |
| 32.5° | 2979 | 2957 | 2934 | 2916 | 2889 |
| 35° | 2941 | 2942 | 2910 | 2890 | 2885 |
| 37.5° | 2905 | 2895 | 2899 | 2886 | 2839 |
| 40° | 2835 | 2855 | 2912 | 2831 | 2819 |
| 42.5° | 2786 | 2798 | 2873 | 2796 | 2762 |
| 45° | 2720 | 2754 | 2832 | 2744 | 2710 |
| 47.5° | 2649 | 2695 | 2810 | 2710 | 2659 |
| 50° | 2641 | 2647 | 2767 | 2665 | 2611 |
| 52.5° | 2766 | 2640 | 2710 | 2658 | 2600 |
| 55° | 2789 | 2734 | 2680 | 2634 | 2737 |
| 57.5° | 2719 | 2725 | 2652 | 2733 | 2828 |
| 60° | 2603 | 2653 | 2654 | 2775 | 2724 |
| 62.5° | 2511 | 2569 | 2657 | 2711 | 2621 |
| 65° | 2424 | 2482 | 2637 | 2624 | 2547 |
| 67.5° | 2335 | 2389 | 2535 | 2528 | 2467 |
| 70° | 2263 | 2302 | 2358 | 2406 | 2409 |
| 72.5° | 2079 | 2140 | 2122 | 2188 | 2166 |
| 75° | 1648 | 1695 | 1741 | 1757 | 1749 |
| 77.5° | 1145 | 1186 | 1313 | 1244 | 1196 |
| 80° | 706 | 762 | 855 | 791 | 786 |
| 82.5° | 471 | 505 | 550 | 518 | 514 |
| 85° | 324 | 334 | 320 | 329 | 340 |
| 87.5° | 203 | 205 | 183 | 194 | 195 |
| 90° | 121 | 121 | 107 | 113 | 117 |
| 92.5° | 90 | 82 | 69 | 77 | 85 |
| 95° | 78 | 68 | 53 | 65 | 73 |
| 97.5° | 74 | 62 | 47 | 61 | 72 |
| 100° | 63 | 54 | 39 | 55 | 63 |
| 102.5° | 54 | 44 | 29 | 46 | 55 |
| 105° | 43 | 34 | 21 | 34 | 44 |
| 107.5° | 33 | 25 | 15 | 26 | 34 |
| 110° | 26 | 19 | 10 | 19 | 26 |



REPORT NUMBER: G3-2010-983-8
CATALOG NUMBER: CLCS40S-90W-4000K

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|----|-------|-----|-------|-----|
| 112.5° | 19 | 14 | 7 | 14 | 19 |
| 115° | 14 | 10 | 4 | 10 | 14 |
| 117.5° | 10 | 7 | 1 | 7 | 9 |
| 120° | 7 | 5 | 1 | 5 | 7 |
| 122.5° | 5 | 2 | 1 | 2 | 5 |
| 125° | 2 | 1 | 1 | 1 | 2 |
| 127.5° | 1 | 1 | 0 | 1 | 1 |
| 130° | 1 | 1 | 0 | 1 | 1 |
| 132.5° | 0 | 0 | 0 | 0 | 0 |
| 135° | 0 | 0 | 0 | 0 | 0 |
| 137.5° | 0 | 0 | 0 | 0 | 0 |
| 140° | 0 | 0 | 0 | 0 | 0 |
| 142.5° | 0 | 0 | 0 | 0 | 0 |
| 145° | 0 | 0 | 0 | 0 | 0 |
| 147.5° | 0 | 0 | 0 | 0 | 0 |
| 150° | 0 | 0 | 0 | 0 | 0 |
| 152.5° | 0 | 0 | 0 | 0 | 0 |
| 155° | 0 | 0 | 0 | 0 | 0 |
| 157.5° | 0 | 0 | 0 | 0 | 0 |
| 160° | 0 | 0 | 0 | 0 | 0 |
| 162.5° | 0 | 0 | 0 | 0 | 0 |
| 165° | 0 | 0 | 0 | 0 | 0 |
| 167.5° | 0 | 0 | 0 | 0 | 0 |
| 170° | 0 | 0 | 0 | 0 | 0 |
| 172.5° | 0 | 0 | 0 | 0 | 0 |
| 175° | 0 | 0 | 0 | 0 | 0 |
| 177.5° | 0 | 0 | 0 | 0 | 0 |
| 180° | 0 | 0 | 0 | 0 | 0 |

(END OF REPORT)