

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: HALO COMMERCIAL

Report Number: P838494

Luminaire Tested: HCSQ630D010-HM63040827-61SQC

Issue Date: 5/21/2024

Test Information

Test Method: LM-79-2019
Report Number: P838494
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2309-166-1)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 5/21/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO COMMERCIAL
Catalog Number: HCSQ630D010-HM63040827-61SQC
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT
Ballast/Driver: -

Summary

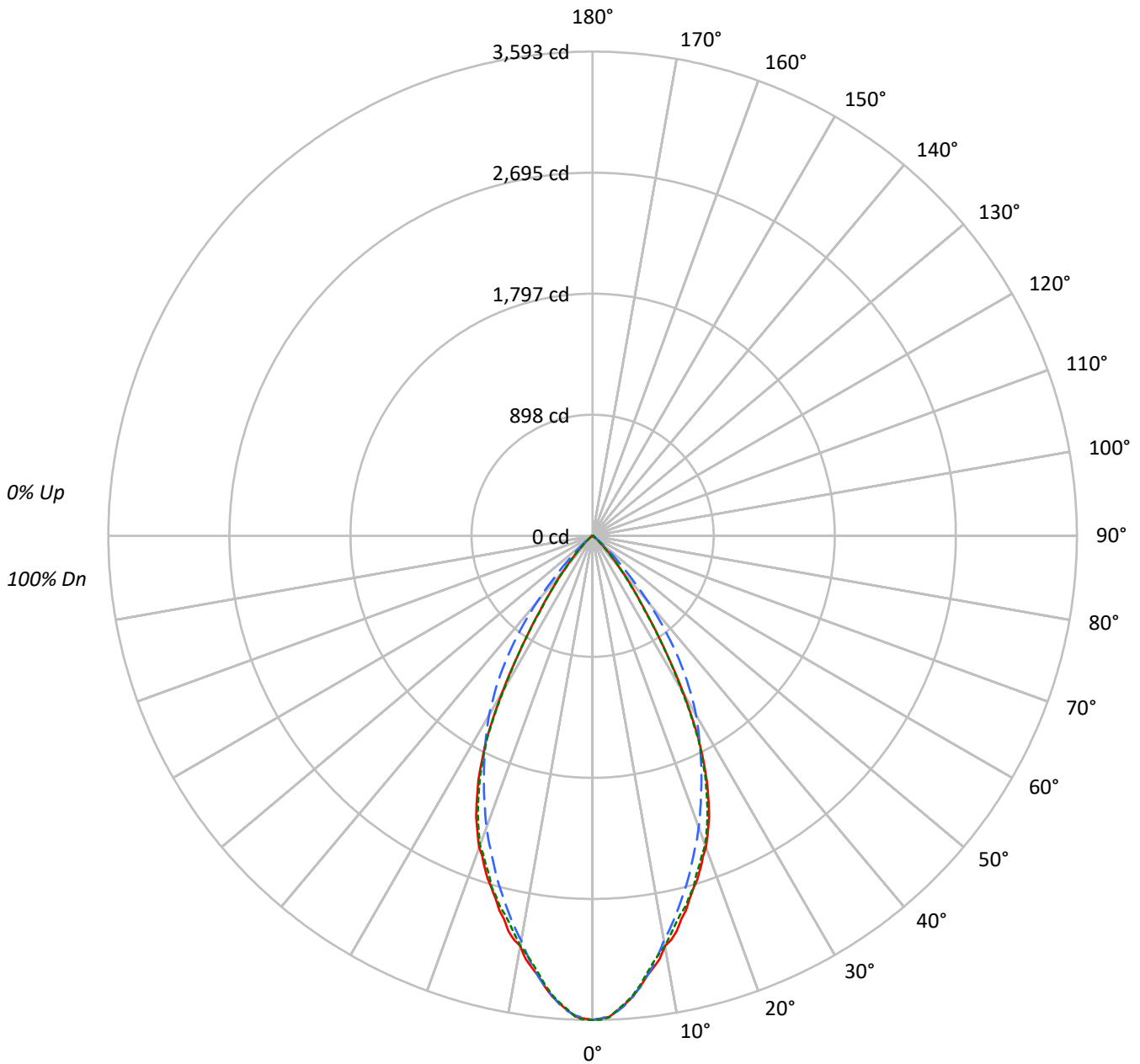
Lumens per Lamp: N/A
Luminaire Lumens: 2691.4 lumens
Efficiency: N/A
Efficacy: 95.4 lumens/watt
Spacing Criteria (0/90/45): 0.82 / 0.81 / 0.85
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 28.2
Input Voltage (V): NR
Input Current (A_{in}): 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: 24 FT

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									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	0																
RCR																																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																			
1	114	111	108	106	111	109	107	105	105	103	101	101	100	98	98	96	95	94																			
2	108	103	99	96	106	102	98	95	98	95	93	95	93	91	93	91	89	87																			
3	103	97	92	88	101	95	91	87	93	89	86	90	87	84	88	85	83	81																			
4	98	90	85	81	96	89	84	80	87	83	79	85	81	78	83	80	78	76																			
5	93	85	79	75	91	84	78	74	82	77	74	80	76	73	79	75	72	71																			
6	88	80	74	70	87	79	73	69	77	72	69	76	72	68	75	71	68	66																			
7	84	75	69	65	83	74	69	65	73	68	64	72	67	64	71	67	64	62																			
8	80	71	65	61	79	70	65	61	69	64	60	68	64	60	67	63	60	59																			
9	76	67	61	57	75	66	61	57	65	60	57	65	60	57	64	60	56	55																			
10	73	63	58	54	72	63	57	54	62	57	54	61	57	53	61	56	53	52																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	154708	154708	154708
5°	148401	148141	147934
10°	135160	133324	135055
15°	124216	119669	123467
20°	112728	105470	111958
25°	95270	90652	93959
30°	66704	76315	65571
35°	35831	58537	35137
40°	17738	36224	17603
45°	7745	15271	7599
50°	2492	5546	2492
55°	1261	1802	1171
60°	827	827	827
65°	611	611	611
70°	453	453	453
75°	399	399	399
80°	298	298	298
85°	593	593	593

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 15271 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	315.5	11.7
10°-20°	761.9	28.3
20°-30°	880.1	32.7
30°-40°	549.6	20.4
40°-50°	152.7	5.7
50°-60°	21.4	0.8
60°-70°	6.3	0.2
70°-80°	2.7	0.1
80°-90°	1.1	0.0
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°	1957.6	72.7
0°-40°	2507.2	93.2
0°-60°	2681.3	99.6
0°-90°	2691.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2691.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3593	3593	3593	3593	3593	
5°	3434	3424	3428	3423	3423	316
15°	2787	2734	2685	2727	2770	781
25°	2005	1947	1908	1945	1978	896
35°	682	841	1114	832	668	453
45°	127	162	251	161	125	110
55°	17	17	24	17	16	17
65°	6	6	6	6	6	6
75°	2	2	2	2	2	3
85°	1	1	1	1	1	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3593.2	3593.2	3593.2	3593.2	3593.2
1°	3582.4	3582.4	3582.4	3592.0	3592.0
2°	3571.6	3569.2	3563.2	3570.4	3574.0
3°	3527.2	3532.0	3534.4	3530.8	3522.4
4°	3481.6	3476.8	3490.0	3481.6	3474.4
5°	3433.6	3424.0	3427.6	3422.8	3422.8
6°	3366.4	3378.4	3368.8	3360.4	3355.6
7°	3293.2	3302.8	3296.8	3284.8	3276.4
8°	3235.6	3229.6	3220.0	3217.6	3203.2
9°	3180.3	3158.7	3137.1	3140.7	3144.3
10°	3091.5	3093.9	3049.5	3083.1	3089.1
11°	3054.3	3041.1	2982.3	3009.9	3019.5
12°	3000.3	2958.3	2907.9	2930.7	2948.7
13°	2922.3	2879.1	2833.5	2868.3	2886.3
14°	2863.5	2814.3	2756.7	2801.1	2838.3
15°	2786.7	2733.9	2684.7	2726.7	2769.9
16°	2719.5	2658.3	2609.1	2649.9	2714.7
17°	2660.7	2585.1	2525.1	2568.3	2630.7
18°	2592.3	2504.7	2449.5	2495.1	2565.9
19°	2516.7	2427.9	2378.7	2415.9	2497.5
20°	2460.3	2360.7	2301.9	2337.9	2443.5
22.5°	2258.6	2154.2	2100.2	2143.4	2227.4
25°	2005.4	1946.6	1908.2	1945.4	1977.8
27.5°	1705.4	1705.4	1718.6	1703.0	1693.4
30°	1341.7	1439.0	1535.0	1434.2	1318.9
32.5°	979.3	1135.3	1328.5	1155.7	978.1
35°	681.7	841.3	1113.7	831.7	668.5
37.5°	474.1	579.7	878.5	585.7	468.1
40°	315.6	388.8	644.5	396.0	313.2
42.5°	206.4	256.8	416.4	258.0	201.6
45°	127.2	162.0	250.8	160.8	124.8
47.5°	74.4	96.0	146.4	97.2	73.2
50°	37.2	56.4	82.8	55.2	37.2
52.5°	21.6	30.0	45.6	28.8	21.6
55°	16.8	16.8	24.0	16.8	15.6
57.5°	13.2	13.2	13.2	13.2	12.0
60°	9.6	10.8	9.6	9.6	9.6
62.5°	8.4	8.4	7.2	8.4	7.2
65°	6.0	6.0	6.0	6.0	6.0
67.5°	4.8	4.8	4.8	4.8	4.8
70°	3.6	3.6	3.6	3.6	3.6
72.5°	2.4	3.6	2.4	3.6	3.6
75°	2.4	2.4	2.4	2.4	2.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
82.5°	1.2	1.2	1.2	1.2	1.2
85°	1.2	1.2	1.2	1.2	1.2
87.5°	1.2	1.2	1.2	1.2	1.2
90°	0.0	0.0	0.0	0.0	0.0

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

Scaled Data Report



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Scaled Data Report





— 0°-180° - - 45°-225° - - - - 90°-270°

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77.5°	2.4	2.4	2.4	2.4	1.2
80°	1.2	1.2	1.2	1.2	1.2

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