

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



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

Test Report Prepared for

Cooper Lighting Solutions

Brand: HALO COMMERCIAL

Report Number: P838519

Luminaire Tested: HCSQ630D010-HM63040930-61SQC

Issue Date: 5/21/2024

Test Information

Test Method: LM-79-2019
Report Number: P838519
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-HM63040930-61SQC
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: -

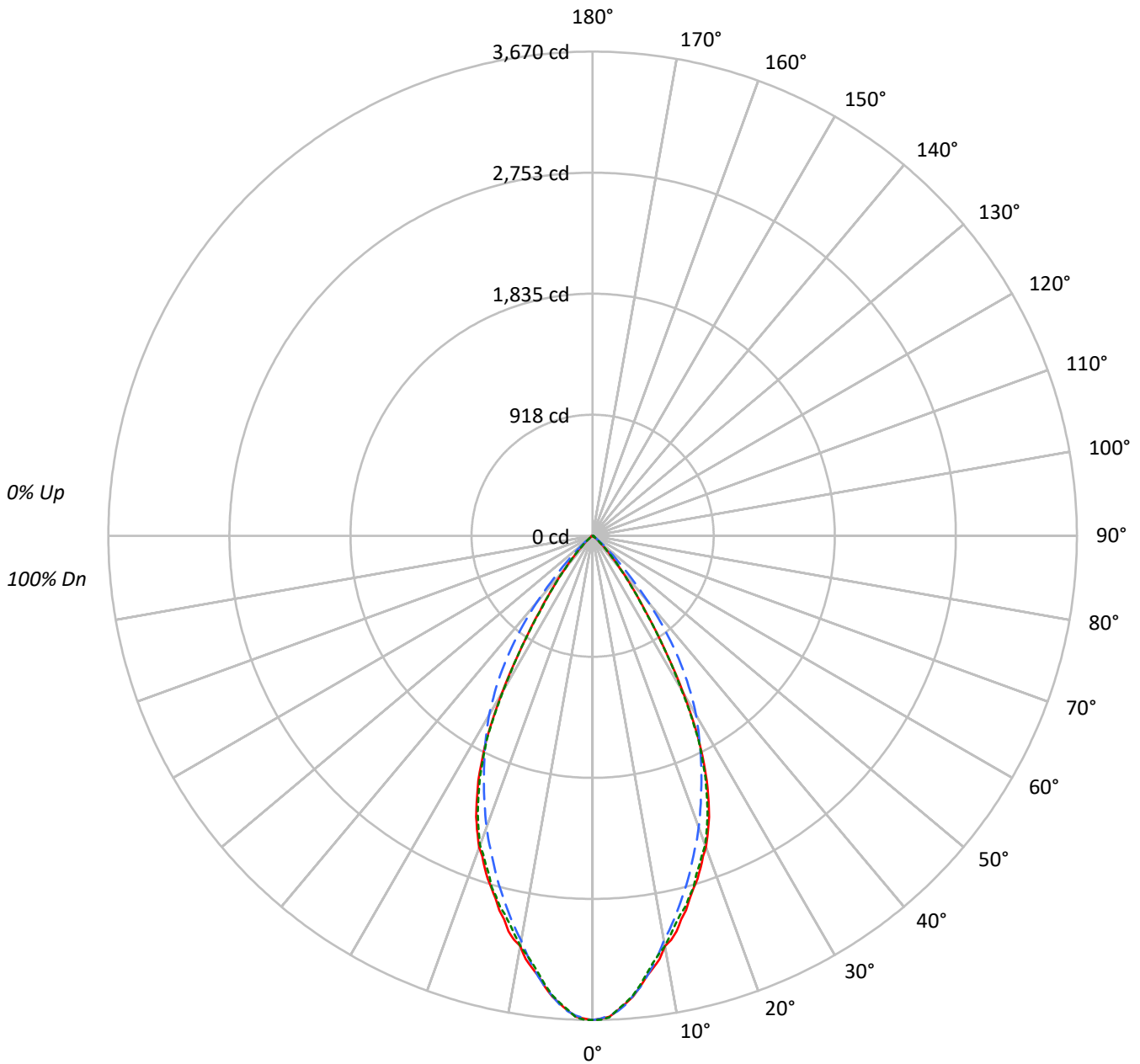
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2749.2 lumens
Efficiency: N/A
Efficacy: 97.5 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°	158027	158027	158027
5°	151586	151318	151106
10°	138063	136187	137954
15°	126881	122237	126119
20°	115147	107734	114359
25°	97317	92600	95978
30°	68136	77950	66983
35°	36598	59794	35889
40°	18121	37000	17986
45°	7910	15600	7763
50°	2545	5667	2545
55°	1291	1839	1194
60°	844	844	844
65°	621	621	621
70°	466	466	466
75°	416	416	416
80°	298	298	298
85°	593	593	593

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 15600 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	322.3	11.7
10°-20°	778.3	28.3
20°-30°	899.0	32.7
30°-40°	561.4	20.4
40°-50°	156.0	5.7
50°-60°	21.8	0.8
60°-70°	6.4	0.2
70°-80°	2.8	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°	1999.6	72.7
0°-40°	2561.0	93.2
0°-60°	2738.8	99.6
0°-90°	2749.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2749.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3670	3670	3670	3670	3670	
5°	3507	3498	3501	3496	3496	323
15°	2846	2793	2742	2785	2829	797
25°	2048	1988	1949	1987	2020	915
35°	696	859	1138	850	683	463
45°	130	166	256	164	128	113
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°	3670.3	3670.3	3670.3	3670.3	3670.3
1°	3659.3	3659.3	3659.3	3669.1	3669.1
2°	3648.2	3645.8	3639.7	3647.0	3650.7
3°	3602.9	3607.8	3610.2	3606.6	3598.0
4°	3556.3	3551.4	3564.9	3556.3	3549.0
5°	3507.3	3497.5	3501.1	3496.2	3496.2
6°	3438.6	3450.9	3441.1	3432.5	3427.6
7°	3363.8	3373.6	3367.5	3355.3	3346.7
8°	3305.0	3298.9	3289.1	3286.6	3271.9
9°	3248.6	3226.5	3204.5	3208.2	3211.8
10°	3157.9	3160.3	3115.0	3149.3	3155.4
11°	3119.9	3106.4	3046.3	3074.5	3084.3
12°	3064.7	3021.8	2970.3	2993.6	3012.0
13°	2985.0	2940.9	2894.3	2929.9	2948.3
14°	2925.0	2874.7	2815.9	2861.2	2899.2
15°	2846.5	2792.6	2742.3	2785.2	2829.4
16°	2777.9	2715.3	2665.1	2706.8	2773.0
17°	2717.8	2640.6	2579.3	2623.4	2687.2
18°	2647.9	2558.4	2502.0	2548.6	2621.0
19°	2570.7	2480.0	2429.7	2467.7	2551.1
20°	2513.1	2411.3	2351.3	2388.0	2495.9
22.5°	2307.1	2200.5	2145.3	2189.4	2275.3
25°	2048.5	1988.4	1949.2	1987.2	2020.3
27.5°	1742.0	1742.0	1755.5	1739.5	1729.7
30°	1370.5	1469.8	1567.9	1464.9	1347.3
32.5°	1000.3	1159.7	1357.1	1180.5	999.1
35°	696.3	859.3	1137.6	849.5	682.8
37.5°	484.2	592.1	897.4	598.2	478.1
40°	322.4	397.2	658.3	404.5	320.0
42.5°	210.9	262.3	425.4	263.6	205.9
45°	129.9	165.5	256.2	164.3	127.5
47.5°	76.0	98.1	149.6	99.3	74.8
50°	38.0	57.6	84.6	56.4	38.0
52.5°	22.1	30.6	46.6	29.4	22.1
55°	17.2	17.2	24.5	17.2	15.9
57.5°	13.5	13.5	13.5	13.5	12.3
60°	9.8	11.0	9.8	9.8	9.8
62.5°	8.6	8.6	7.4	8.6	7.4
65°	6.1	6.1	6.1	6.1	6.1
67.5°	4.9	4.9	4.9	4.9	4.9
70°	3.7	3.7	3.7	3.7	3.7
72.5°	2.5	3.7	2.5	3.7	3.7
75°	2.5	2.5	2.5	2.5	2.5



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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

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

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77.5°	2.5	2.5	2.5	2.5	1.2
80°	1.2	1.2	1.2	1.2	1.2

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(END OF REPORT)