

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: P838504

Luminaire Tested: HCSQ630D010-HM63040835-61SQC

Issue Date: 5/21/2024



Test Information

Test Method: LM-79-2019
Report Number: P838504
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-HM63040835-61SQC
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT
Ballast/Driver: -

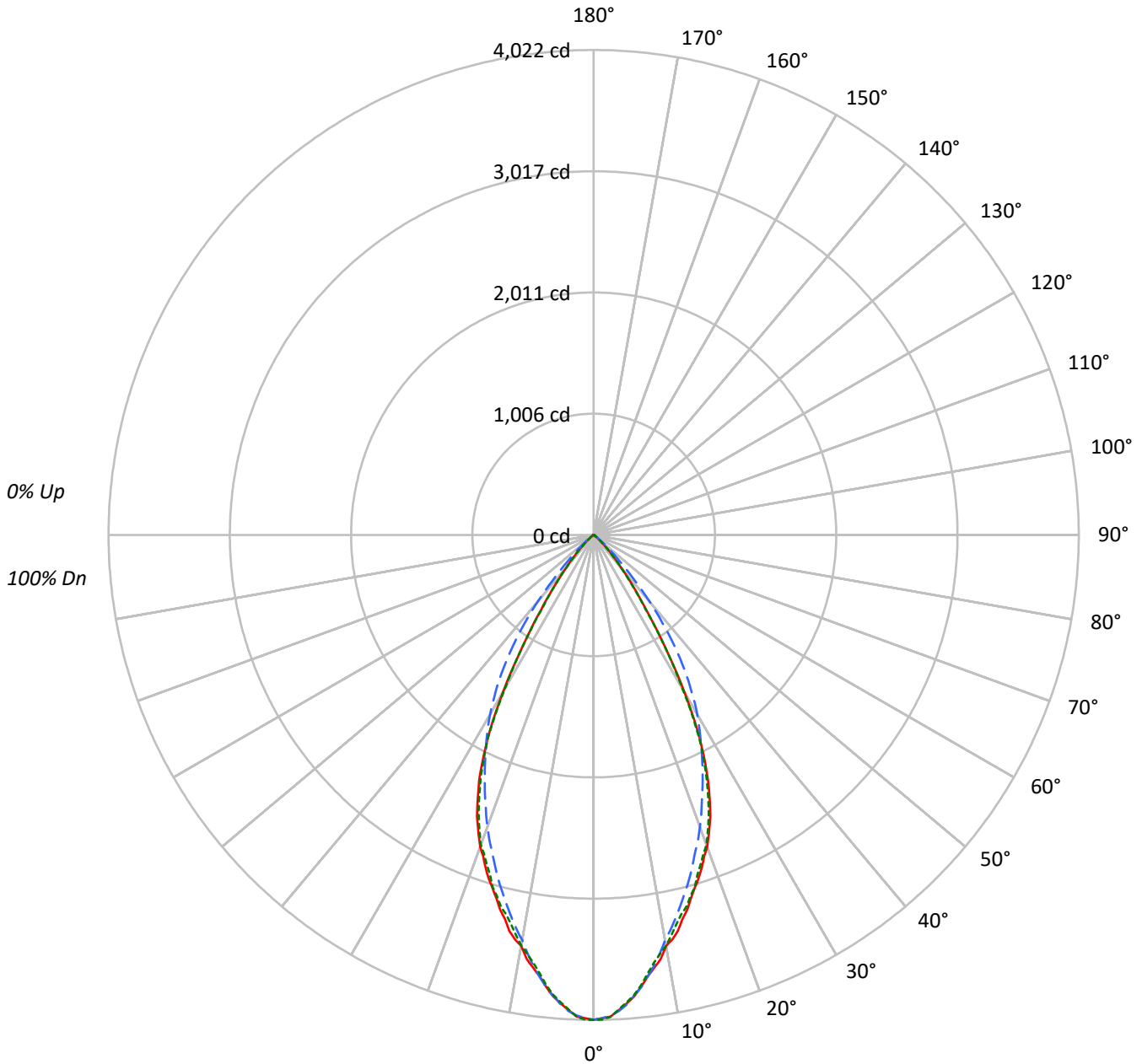
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3012.3 lumens
Efficiency: N/A
Efficacy: 106.8 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					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	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°	173153	173153	173153
5°	166095	165805	165572
10°	151279	149225	151161
15°	139028	133937	138190
20°	126167	118043	125305
25°	106629	101460	105161
30°	74659	85413	73391
35°	40104	65518	39326
40°	19857	40541	19706
45°	8671	17092	8506
50°	2786	6209	2786
55°	1411	2019	1314
60°	921	921	921
65°	683	683	683
70°	504	504	504
75°	449	449	449
80°	322	322	322
85°	642	642	642

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 17092 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	353.1	11.7
10°-20°	852.8	28.3
20°-30°	985.1	32.7
30°-40°	615.2	20.4
40°-50°	170.9	5.7
50°-60°	23.9	0.8
60°-70°	7.0	0.2
70°-80°	3.0	0.1
80°-90°	1.2	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°	2191.0	72.7
0°-40°	2806.2	93.2
0°-60°	3001.0	99.6
0°-90°	3012.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3012.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4022	4022	4022	4022	4022	
5°	3843	3832	3836	3831	3831	354
15°	3119	3060	3005	3052	3100	874
25°	2244	2179	2136	2177	2214	1002
35°	763	942	1246	931	748	507
45°	142	181	281	180	140	123
55°	19	19	27	19	18	19
65°	7	7	7	7	7	7
75°	3	3	3	3	3	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°	4021.6	4021.6	4021.6	4021.6	4021.6
1°	4009.5	4009.5	4009.5	4020.3	4020.3
2°	3997.5	3994.8	3988.1	3996.1	4000.1
3°	3947.8	3953.1	3955.8	3951.8	3942.4
4°	3896.7	3891.3	3906.1	3896.7	3888.7
5°	3843.0	3832.2	3836.3	3830.9	3830.9
6°	3767.8	3781.2	3770.5	3761.0	3755.7
7°	3685.8	3696.6	3689.9	3676.4	3667.0
8°	3621.4	3614.6	3603.9	3601.2	3585.1
9°	3559.6	3535.4	3511.2	3515.2	3519.3
10°	3460.2	3462.9	3413.2	3450.8	3457.5
11°	3418.5	3403.7	3337.9	3368.8	3379.6
12°	3358.1	3311.1	3254.7	3280.2	3300.3
13°	3270.8	3222.4	3171.4	3210.3	3230.5
14°	3205.0	3149.9	3085.4	3135.1	3176.7
15°	3119.0	3059.9	3004.8	3051.8	3100.2
16°	3043.8	2975.3	2920.2	2965.9	3038.4
17°	2977.9	2893.3	2826.2	2874.5	2944.4
18°	2901.4	2803.3	2741.5	2792.6	2871.8
19°	2816.8	2717.4	2662.3	2703.9	2795.3
20°	2753.6	2642.1	2576.3	2616.6	2734.8
22.5°	2528.0	2411.1	2350.7	2399.0	2493.0
25°	2244.5	2178.7	2135.7	2177.4	2213.6
27.5°	1908.7	1908.7	1923.5	1906.0	1895.3
30°	1501.7	1610.5	1718.0	1605.2	1476.2
32.5°	1096.1	1270.7	1487.0	1293.5	1094.7
35°	763.0	941.6	1246.5	930.9	748.2
37.5°	530.6	648.8	983.2	655.5	523.9
40°	353.3	435.2	721.3	443.3	350.6
42.5°	231.0	287.5	466.1	288.8	225.7
45°	142.4	181.3	280.7	180.0	139.7
47.5°	83.3	107.5	163.9	108.8	81.9
50°	41.6	63.1	92.7	61.8	41.6
52.5°	24.2	33.6	51.0	32.2	24.2
55°	18.8	18.8	26.9	18.8	17.5
57.5°	14.8	14.8	14.8	14.8	13.4
60°	10.7	12.1	10.7	10.7	10.7
62.5°	9.4	9.4	8.1	9.4	8.1
65°	6.7	6.7	6.7	6.7	6.7
67.5°	5.4	5.4	5.4	5.4	5.4
70°	4.0	4.0	4.0	4.0	4.0
72.5°	2.7	4.0	2.7	4.0	4.0
75°	2.7	2.7	2.7	2.7	2.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
82.5°	1.3	1.3	1.3	1.3	1.3
85°	1.3	1.3	1.3	1.3	1.3
87.5°	1.3	1.3	1.3	1.3	1.3
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°	2.7	2.7	2.7	2.7	1.3
80°	1.3	1.3	1.3	1.3	1.3

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(END OF REPORT)