

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: P838444

Luminaire Tested: HCSQ620D010-HM60525935-61SQC

Issue Date: 5/21/2024



Test Information

Test Method: LM-79-2019
Report Number: P838444
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: HCSQ620D010-HM60525935-61SQC
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: -

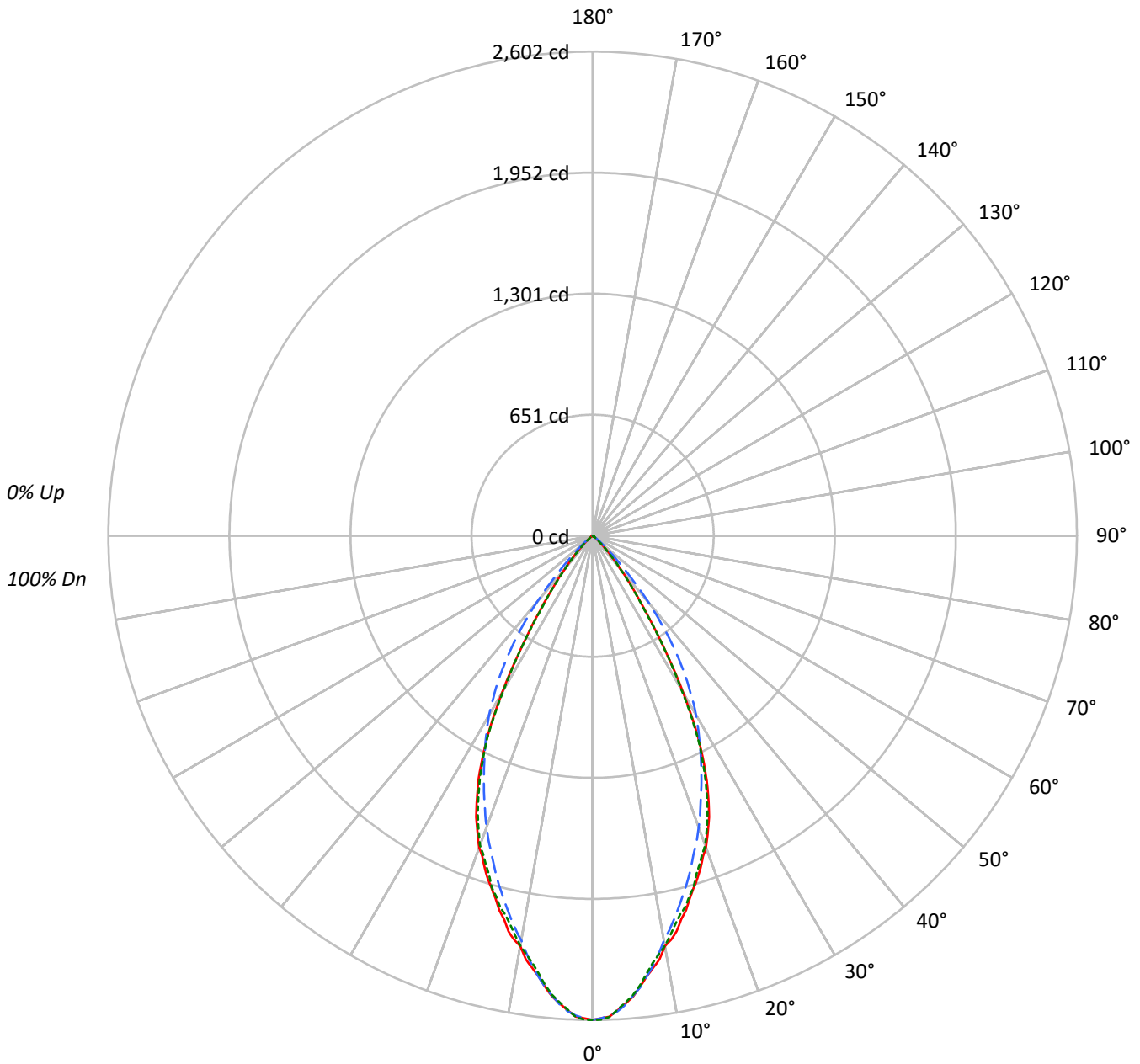
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1948.9 lumens
Efficiency: N/A
Efficacy: 97.4 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): 20
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°	112027	112027	112027
5°	107458	107268	107121
10°	97871	96542	97797
15°	89947	86653	89403
20°	81626	76371	81067
25°	68984	65645	68039
30°	48304	55260	47484
35°	25944	42391	25440
40°	12849	26231	12747
45°	5608	11058	5504
50°	1802	4019	1802
55°	916	1306	848
60°	603	603	603
65°	438	438	438
70°	327	327	327
75°	283	283	283
80°	223	223	223
85°	445	445	445

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 11058 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	228.5	11.7
10°-20°	551.7	28.3
20°-30°	637.3	32.7
30°-40°	398.0	20.4
40°-50°	110.6	5.7
50°-60°	15.5	0.8
60°-70°	4.6	0.2
70°-80°	1.9	0.1
80°-90°	0.9	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°	1417.5	72.7
0°-40°	1815.5	93.2
0°-60°	1941.6	99.6
0°-90°	1948.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1948.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2602	2602	2602	2602	2602	
5°	2486	2479	2482	2478	2478	229
15°	2018	1980	1944	1974	2006	565
25°	1452	1410	1382	1409	1432	649
35°	494	609	806	602	484	328
45°	92	117	182	116	90	80
55°	12	12	17	12	11	12
65°	4	4	4	4	4	5
75°	2	2	2	2	2	2
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°	2601.9	2601.9	2601.9	2601.9	2601.9
1°	2594.0	2594.0	2594.0	2601.0	2601.0
2°	2586.2	2584.5	2580.1	2585.4	2588.0
3°	2554.1	2557.5	2559.3	2556.7	2550.6
4°	2521.0	2517.6	2527.1	2521.0	2515.8
5°	2486.3	2479.3	2481.9	2478.5	2478.5
6°	2437.6	2446.3	2439.4	2433.3	2429.8
7°	2384.6	2391.6	2387.2	2378.5	2372.4
8°	2342.9	2338.6	2331.6	2329.9	2319.4
9°	2302.9	2287.3	2271.6	2274.2	2276.8
10°	2238.6	2240.4	2208.2	2232.5	2236.9
11°	2211.7	2202.1	2159.5	2179.5	2186.5
12°	2172.6	2142.2	2105.7	2122.2	2135.2
13°	2116.1	2084.8	2051.8	2077.0	2090.0
14°	2073.5	2037.9	1996.2	2028.3	2055.2
15°	2017.9	1979.6	1944.0	1974.4	2005.7
16°	1969.2	1924.9	1889.3	1918.8	1965.7
17°	1926.6	1871.9	1828.4	1859.7	1904.9
18°	1877.1	1813.7	1773.7	1806.7	1858.0
19°	1822.3	1758.0	1722.4	1749.4	1808.4
20°	1781.5	1709.4	1666.8	1692.9	1769.3
22.5°	1635.5	1559.9	1520.8	1552.1	1612.9
25°	1452.1	1409.6	1381.8	1408.7	1432.2
27.5°	1234.9	1234.9	1244.4	1233.1	1226.2
30°	971.6	1042.0	1111.5	1038.5	955.1
32.5°	709.1	822.1	962.0	836.9	708.3
35°	493.6	609.2	806.5	602.2	484.0
37.5°	343.3	419.7	636.1	424.1	338.9
40°	228.6	281.6	466.7	286.8	226.8
42.5°	149.5	186.0	301.6	186.8	146.0
45°	92.1	117.3	181.6	116.4	90.4
47.5°	53.9	69.5	106.0	70.4	53.0
50°	26.9	40.8	60.0	40.0	26.9
52.5°	15.6	21.7	33.0	20.9	15.6
55°	12.2	12.2	17.4	12.2	11.3
57.5°	9.6	9.6	9.6	9.6	8.7
60°	7.0	7.8	7.0	7.0	7.0
62.5°	6.1	6.1	5.2	6.1	5.2
65°	4.3	4.3	4.3	4.3	4.3
67.5°	3.5	3.5	3.5	3.5	3.5
70°	2.6	2.6	2.6	2.6	2.6
72.5°	1.7	2.6	1.7	2.6	2.6
75°	1.7	1.7	1.7	1.7	1.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
82.5°	0.9	0.9	0.9	0.9	0.9
85°	0.9	0.9	0.9	0.9	0.9
87.5°	0.9	0.9	0.9	0.9	0.9
90°	0.0	0.0	0.0	0.0	0.0

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Scaled Data Report



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Scaled Data Report





— 0°-180° - - 45°-225° - - - 90°-270°

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77.5°	1.7	1.7	1.7	1.7	0.9
80°	0.9	0.9	0.9	0.9	0.9

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(END OF REPORT)