

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: P838479

Luminaire Tested: HCSQ625D010-HM60525930-61SQC

Issue Date: 5/21/2024

Test Information

Test Method: LM-79-2019
Report Number: P838479
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: HCSQ625D010-HM60525930-61SQC
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: -

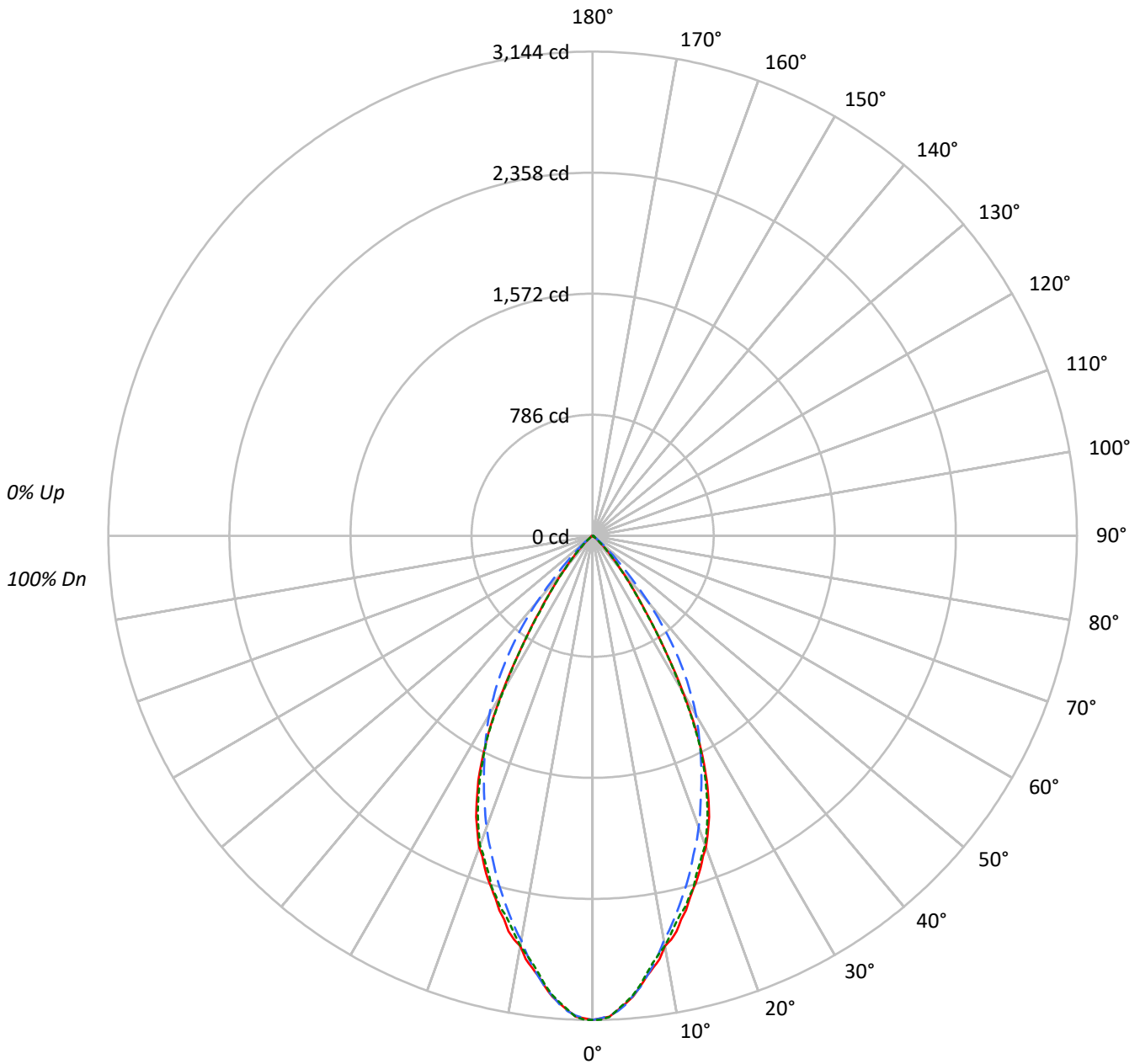
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2354.9 lumens
Efficiency: N/A
Efficacy: 85.0 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): 27.7
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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CATALOG NUMBER: HCSQ625D010-HM60525930-61SQC

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	96	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	77	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°	135358	135358	135358
5°	129838	129613	129431
10°	118258	116649	118166
15°	108682	104701	108026
20°	98630	92279	97956
25°	83355	79312	82206
30°	58362	66769	57373
35°	31348	51216	30743
40°	15524	31694	15406
45°	6777	13365	6649
50°	2184	4856	2184
55°	1103	1576	1028
60°	723	723	723
65°	540	540	540
70°	403	403	403
75°	349	349	349
80°	273	273	273
85°	543	543	543

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 13365 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	276.1	11.7
10°-20°	666.6	28.3
20°-30°	770.1	32.7
30°-40°	480.9	20.4
40°-50°	133.6	5.7
50°-60°	18.7	0.8
60°-70°	5.5	0.2
70°-80°	2.4	0.1
80°-90°	1.0	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°	1712.7	72.7
0°-40°	2193.6	93.2
0°-60°	2346.0	99.6
0°-90°	2354.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2354.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3144	3144	3144	3144	3144	
5°	3004	2996	2999	2995	2995	277
15°	2438	2392	2349	2386	2424	683
25°	1755	1703	1670	1702	1730	784
35°	596	736	974	728	585	396
45°	111	142	220	141	109	96
55°	15	15	21	15	14	15
65°	5	5	5	5	5	6
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°	3143.8	3143.8	3143.8	3143.8	3143.8
1°	3134.3	3134.3	3134.3	3142.7	3142.7
2°	3124.9	3122.8	3117.5	3123.8	3127.0
3°	3086.0	3090.2	3092.3	3089.2	3081.8
4°	3046.1	3041.9	3053.5	3046.1	3039.8
5°	3004.1	2995.7	2998.9	2994.7	2994.7
6°	2945.3	2955.8	2947.4	2940.1	2935.9
7°	2881.3	2889.7	2884.4	2873.9	2866.6
8°	2830.9	2825.6	2817.2	2815.1	2802.5
9°	2782.6	2763.7	2744.8	2747.9	2751.1
10°	2704.9	2707.0	2668.1	2697.5	2702.8
11°	2672.3	2660.8	2609.3	2633.5	2641.9
12°	2625.1	2588.3	2544.2	2564.2	2579.9
13°	2556.8	2519.0	2479.1	2509.6	2525.3
14°	2505.4	2462.3	2411.9	2450.8	2483.3
15°	2438.2	2392.0	2348.9	2385.7	2423.5
16°	2379.4	2325.8	2282.8	2318.5	2375.2
17°	2327.9	2261.8	2209.3	2247.1	2301.7
18°	2268.1	2191.4	2143.1	2183.0	2245.0
19°	2201.9	2124.2	2081.2	2113.7	2185.1
20°	2152.6	2065.4	2014.0	2045.5	2137.9
22.5°	1976.2	1884.8	1837.5	1875.3	1948.9
25°	1754.6	1703.1	1669.5	1702.1	1730.4
27.5°	1492.1	1492.1	1503.6	1490.0	1481.6
30°	1173.9	1259.0	1343.0	1254.8	1154.0
32.5°	856.8	993.3	1162.4	1011.2	855.8
35°	596.4	736.1	974.4	727.7	584.9
37.5°	414.8	507.2	768.6	512.4	409.5
40°	276.2	340.2	563.9	346.5	274.1
42.5°	180.6	224.7	364.4	225.8	176.4
45°	111.3	141.8	219.5	140.7	109.2
47.5°	65.1	84.0	128.1	85.1	64.1
50°	32.6	49.4	72.5	48.3	32.6
52.5°	18.9	26.3	39.9	25.2	18.9
55°	14.7	14.7	21.0	14.7	13.7
57.5°	11.6	11.6	11.6	11.6	10.5
60°	8.4	9.5	8.4	8.4	8.4
62.5°	7.4	7.4	6.3	7.4	6.3
65°	5.3	5.3	5.3	5.3	5.3
67.5°	4.2	4.2	4.2	4.2	4.2
70°	3.2	3.2	3.2	3.2	3.2
72.5°	2.1	3.2	2.1	3.2	3.2
75°	2.1	2.1	2.1	2.1	2.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
82.5°	1.1	1.1	1.1	1.1	1.1
85°	1.1	1.1	1.1	1.1	1.1
87.5°	1.1	1.1	1.1	1.1	1.1
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°	2.1	2.1	2.1	2.1	1.1
80°	1.1	1.1	1.1	1.1	1.1

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Scaled Data Report



(END OF REPORT)