

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: P838378

Luminaire Tested: HCSQ615D010-HM60525827-61SQMW

Issue Date: 5/21/2024



Test Information

Test Method: LM-79-2019
Report Number: P838378
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2309-166-3)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 5/21/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO COMMERCIAL
Catalog Number: HCSQ615D010-HM60525827-61SQMW
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, MATTE WHITE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT
Ballast/Driver: -

Summary

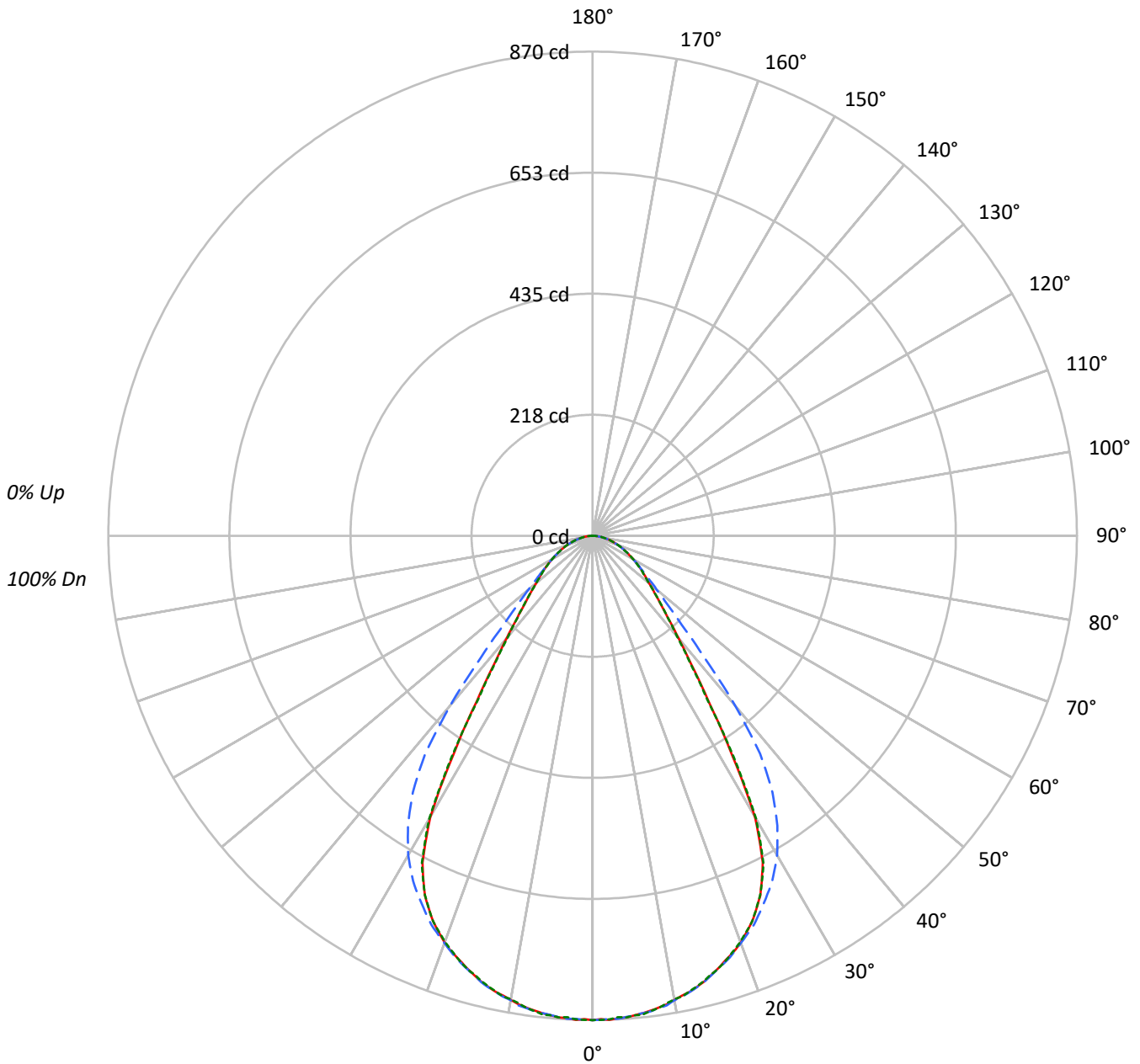
Lumens per Lamp: N/A
Luminaire Lumens: 1284.1 lumens
Efficiency: N/A
Efficacy: 91.7 lumens/watt
Spacing Criteria (0/90/45): 1.08 / 1.08 / 1.11
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 14
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	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89																			
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79																			
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71																			
4	91	81	74	69	89	80	73	68	77	72	67	75	70	67	73	69	66	64																			
5	85	74	67	62	83	73	66	61	71	65	61	70	64	60	68	63	60	58																			
6	80	69	61	56	78	68	61	56	66	60	55	64	59	55	63	58	54	53																			
7	75	63	56	51	73	63	56	51	61	55	51	60	54	50	59	54	50	48																			
8	70	59	52	47	69	58	51	47	57	51	46	56	50	46	55	50	46	44																			
9	66	55	48	43	65	54	48	43	53	47	43	52	47	43	51	46	43	41																			
10	63	51	45	40	62	51	44	40	50	44	40	49	44	40	48	43	40	38																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	37480	37480	37480
5°	37390	37359	37390
10°	37022	37048	36970
15°	36471	36498	36417
20°	35652	35679	35565
25°	33872	34594	33844
30°	29005	32937	29184
35°	19059	29608	18770
40°	13472	22325	13231
45°	10449	13743	10522
50°	8882	10027	8802
55°	7994	8220	7994
60°	7233	7233	7233
65°	6632	6571	6571
70°	6055	6055	6131
75°	5673	5473	5573
80°	4984	4984	4984
85°	4199	4199	4199

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 13743 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.1	6.4
10°-20°	230.5	17.9
20°-30°	328.4	25.6
30°-40°	280.0	21.8
40°-50°	154.9	12.1
50°-60°	97.6	7.6
60°-70°	64.8	5.0
70°-80°	35.6	2.8
80°-90°	10.1	0.8
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°	641.0	49.9
0°-40°	921.0	71.7
0°-60°	1173.6	91.4
0°-90°	1284.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1284.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	870	870	870	870	870	
5°	865	866	864	863	865	82
15°	818	818	819	818	817	230
25°	713	722	728	721	712	322
35°	363	428	563	428	357	236
45°	172	188	226	187	173	136
55°	106	108	110	108	106	96
65°	65	66	64	65	64	65
75°	34	34	33	34	34	36
85°	8	8	8	9	8	10
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	870.5	870.5	870.5	870.5	870.5
1°	868.7	869.9	869.9	869.3	869.9
2°	870.5	868.7	868.7	868.7	869.3
3°	868.1	869.3	869.3	867.5	866.3
4°	867.5	866.9	866.9	868.7	867.5
5°	865.1	866.3	864.4	863.2	865.1
6°	862.6	863.2	862.6	863.2	865.1
7°	859.6	861.4	860.8	860.2	860.2
8°	855.9	858.4	857.1	857.1	856.5
9°	852.3	852.9	854.1	854.1	850.5
10°	846.8	848.6	847.4	848.0	845.6
11°	841.9	844.4	843.8	842.5	843.2
12°	837.7	838.9	838.3	836.5	837.1
13°	832.2	833.4	832.8	832.8	831.0
14°	826.1	824.9	826.7	825.5	824.9
15°	818.2	818.2	818.8	818.2	817.0
16°	810.9	811.5	811.5	810.9	811.5
17°	802.4	804.8	804.2	803.0	803.6
18°	794.5	796.3	796.9	796.3	794.5
19°	787.2	788.4	787.8	785.4	785.4
20°	778.1	778.7	778.7	777.5	776.2
22.5°	749.5	753.7	756.8	754.3	749.5
25°	713.0	721.5	728.2	720.9	712.4
27.5°	661.9	678.9	699.0	680.7	664.9
30°	583.4	622.3	662.5	626.0	587.0
32.5°	464.2	540.8	617.5	548.1	471.5
35°	362.6	427.7	563.3	428.3	357.1
37.5°	289.6	335.8	494.0	332.8	286.5
40°	239.7	270.7	397.2	269.5	235.4
42.5°	200.1	223.9	297.5	221.4	200.1
45°	171.6	188.0	225.7	186.8	172.8
47.5°	150.3	160.6	180.7	160.0	150.3
50°	132.6	138.7	149.7	138.1	131.4
52.5°	118.6	122.3	126.5	121.1	117.4
55°	106.5	108.3	109.5	107.7	106.5
57.5°	94.9	96.1	95.5	94.9	94.3
60°	84.0	84.6	84.0	84.6	84.0
62.5°	74.2	74.8	73.6	74.2	73.6
65°	65.1	65.7	64.5	65.1	64.5
67.5°	56.6	56.6	56.6	56.6	56.0
70°	48.1	48.7	48.1	48.7	48.7
72.5°	40.8	40.8	40.2	40.8	40.8
75°	34.1	33.5	32.9	33.5	33.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
82.5°	14.6	14.6	14.0	14.6	14.6
85°	8.5	8.5	8.5	9.1	8.5
87.5°	4.3	3.7	3.7	4.3	4.3
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°	26.8	26.8	26.2	26.8	26.8
80°	20.1	20.7	20.1	20.7	20.1

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(END OF REPORT)