

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: P838330

Luminaire Tested: HCSQ607D010-HM60525940-61SQH

Issue Date: 5/21/2024

Test Information

Test Method: LM-79-2019
Report Number: P838330
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2309-166-2)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 5/21/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO COMMERCIAL
Catalog Number: HCSQ607D010-HM60525940-61SQH
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: -

Summary

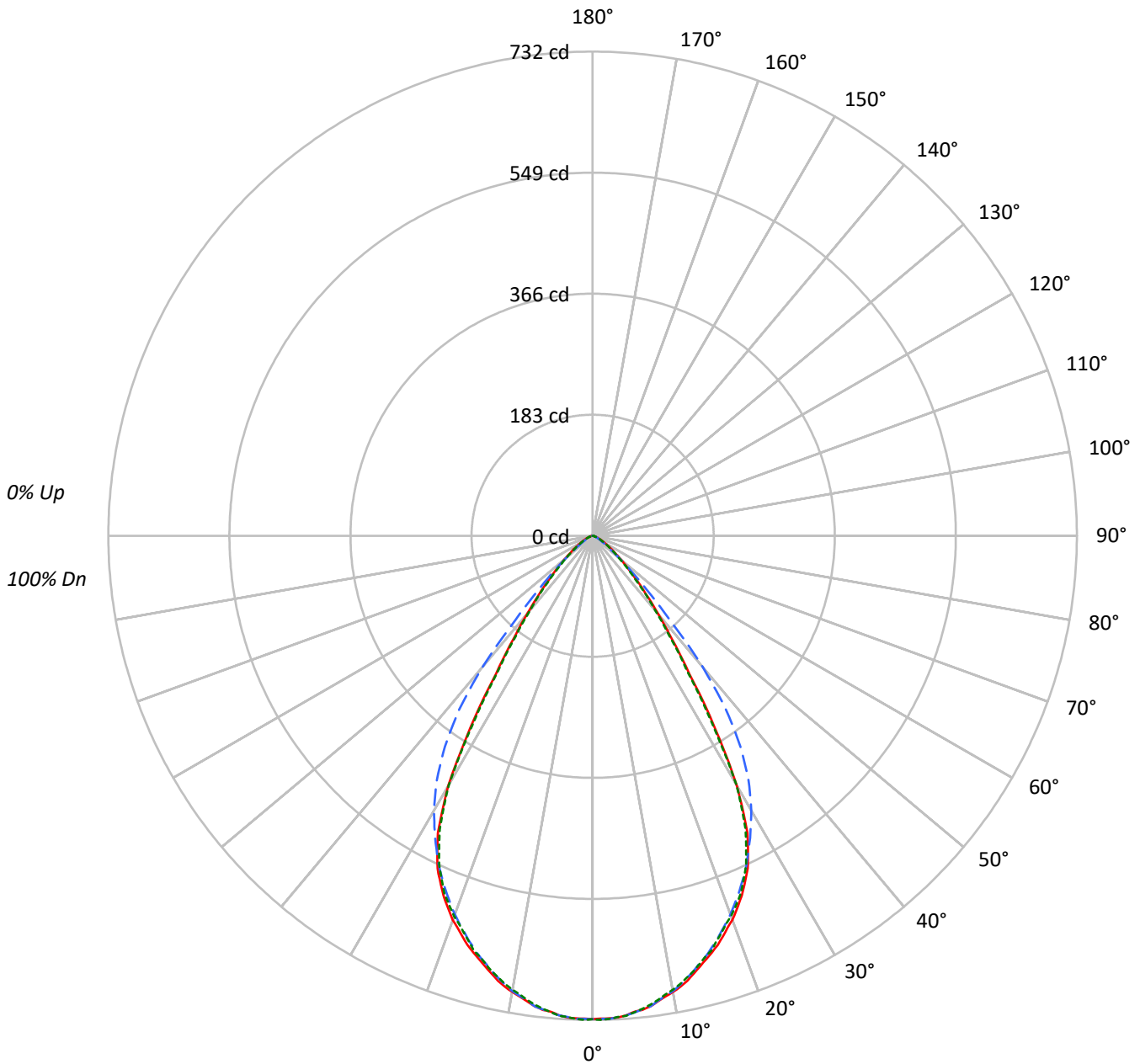
Lumens per Lamp: N/A
Luminaire Lumens: 821.9 lumens
Efficiency: N/A
Efficacy: 102.7 lumens/watt
Spacing Criteria (0/90/45): 1.02 / 1.01 / 1.04
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 8
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	113	110	107	105	110	108	105	103	104	102	100	100	98	97	97	95	94	92																			
2	107	101	97	93	104	100	96	92	96	93	90	93	91	88	91	88	86	85																			
3	101	94	88	84	99	92	87	83	90	85	82	87	84	81	85	82	79	78																			
4	95	87	81	76	93	86	80	76	83	78	75	81	77	74	79	76	73	71																			
5	90	80	74	69	88	79	74	69	78	72	68	76	71	68	74	70	67	66																			
6	85	75	68	64	83	74	68	63	72	67	63	71	66	63	70	65	62	61																			
7	80	70	63	59	79	69	63	59	68	62	58	67	62	58	65	61	58	56																			
8	76	65	59	54	74	65	59	54	64	58	54	63	57	54	62	57	54	52																			
9	72	61	55	51	70	61	55	50	60	54	50	59	54	50	58	53	50	48																			
10	68	58	51	47	67	57	51	47	56	51	47	55	50	47	55	50	47	45																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	31465	31465	31465
5°	31218	31270	31252
10°	30621	30551	30477
15°	29540	29375	29357
20°	28321	27913	28041
25°	26361	26129	26072
30°	21661	23839	21602
35°	13377	20473	13061
40°	8588	14512	8290
45°	5602	7033	5328
50°	3718	3503	3476
55°	2522	1824	2342
60°	1714	1119	1567
65°	1202	825	1070
70°	768	617	718
75°	532	466	466
80°	397	298	298
85°	198	395	198

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 7033 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.2	8.3
10°-20°	185.2	22.5
20°-30°	250.0	30.4
30°-40°	195.1	23.7
40°-50°	81.7	9.9
50°-60°	27.7	3.4
60°-70°	9.9	1.2
70°-80°	3.2	0.4
80°-90°	0.6	0.1
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°	503.5	61.3
0°-40°	698.7	85.0
0°-60°	808.1	98.3
0°-90°	821.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	821.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	731	731	731	731	731	
5°	722	723	724	722	723	68
15°	663	661	659	658	659	186
25°	555	552	550	550	549	250
35°	254	299	390	298	248	167
45°	92	98	116	94	88	74
55°	34	31	24	29	31	31
65°	12	10	8	9	10	12
75°	3	3	3	3	3	4
85°	0	0	1	0	0	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	730.8	730.8	730.8	730.8	730.8
1°	730.0	731.2	730.4	730.8	732.0
2°	730.0	730.0	730.8	730.4	730.8
3°	729.2	729.2	728.4	728.4	728.4
4°	726.7	726.7	726.7	725.9	727.5
5°	722.3	723.1	723.5	722.3	723.1
6°	720.7	721.1	720.2	719.8	719.0
7°	717.0	715.8	717.0	714.2	714.6
8°	710.9	710.9	710.1	709.3	708.5
9°	705.3	705.3	704.4	703.2	702.4
10°	700.4	699.2	698.8	697.6	697.1
11°	694.7	692.3	691.9	690.7	690.7
12°	687.8	686.6	683.8	683.4	683.4
13°	679.3	678.1	676.1	674.4	676.1
14°	671.2	670.4	666.7	668.0	667.6
15°	662.7	661.1	659.0	658.2	658.6
16°	655.0	652.2	649.3	649.7	652.2
17°	646.9	642.8	640.0	639.6	640.8
18°	636.8	633.5	629.1	630.7	630.7
19°	626.6	622.2	619.3	618.9	620.5
20°	618.1	611.2	609.2	608.8	612.0
22.5°	588.9	582.0	580.4	582.0	585.3
25°	554.9	552.4	550.0	550.0	548.8
27.5°	506.6	512.3	515.2	509.5	500.2
30°	435.7	459.6	479.5	456.8	434.5
32.5°	343.3	392.8	438.6	391.5	335.2
35°	254.5	298.7	389.5	298.3	248.5
37.5°	196.2	224.5	331.1	220.9	190.5
40°	152.8	169.4	258.2	167.4	147.5
42.5°	118.8	129.3	171.9	126.9	114.7
45°	92.0	98.5	115.5	94.0	87.5
47.5°	71.7	74.6	79.0	71.3	67.7
50°	55.5	55.5	52.3	53.5	51.9
52.5°	43.0	41.3	35.3	38.9	39.7
55°	33.6	30.8	24.3	29.2	31.2
57.5°	25.5	22.7	17.4	21.5	23.5
60°	19.9	17.0	13.0	16.2	18.2
62.5°	15.4	13.0	10.1	12.2	13.8
65°	11.8	9.7	8.1	9.3	10.5
67.5°	8.9	7.3	6.1	6.9	8.1
70°	6.1	5.7	4.9	5.3	5.7
72.5°	4.5	4.1	3.6	3.6	4.1
75°	3.2	2.8	2.8	2.8	2.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
82.5°	0.8	0.8	0.8	0.8	0.8
85°	0.4	0.4	0.8	0.4	0.4
87.5°	0.4	0.4	0.4	0.4	0.4
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°	2.0	2.0	2.0	2.0	2.0
80°	1.6	1.6	1.2	1.2	1.2

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Scaled Data Report



(END OF REPORT)