

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: P838340

Luminaire Tested: HCSQ610D010-HM60525830-61SQH

Issue Date: 5/21/2024

Test Information

Test Method: LM-79-2019
Report Number: P838340
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: HCSQ610D010-HM60525830-61SQH
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, HAZE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT
Ballast/Driver: -

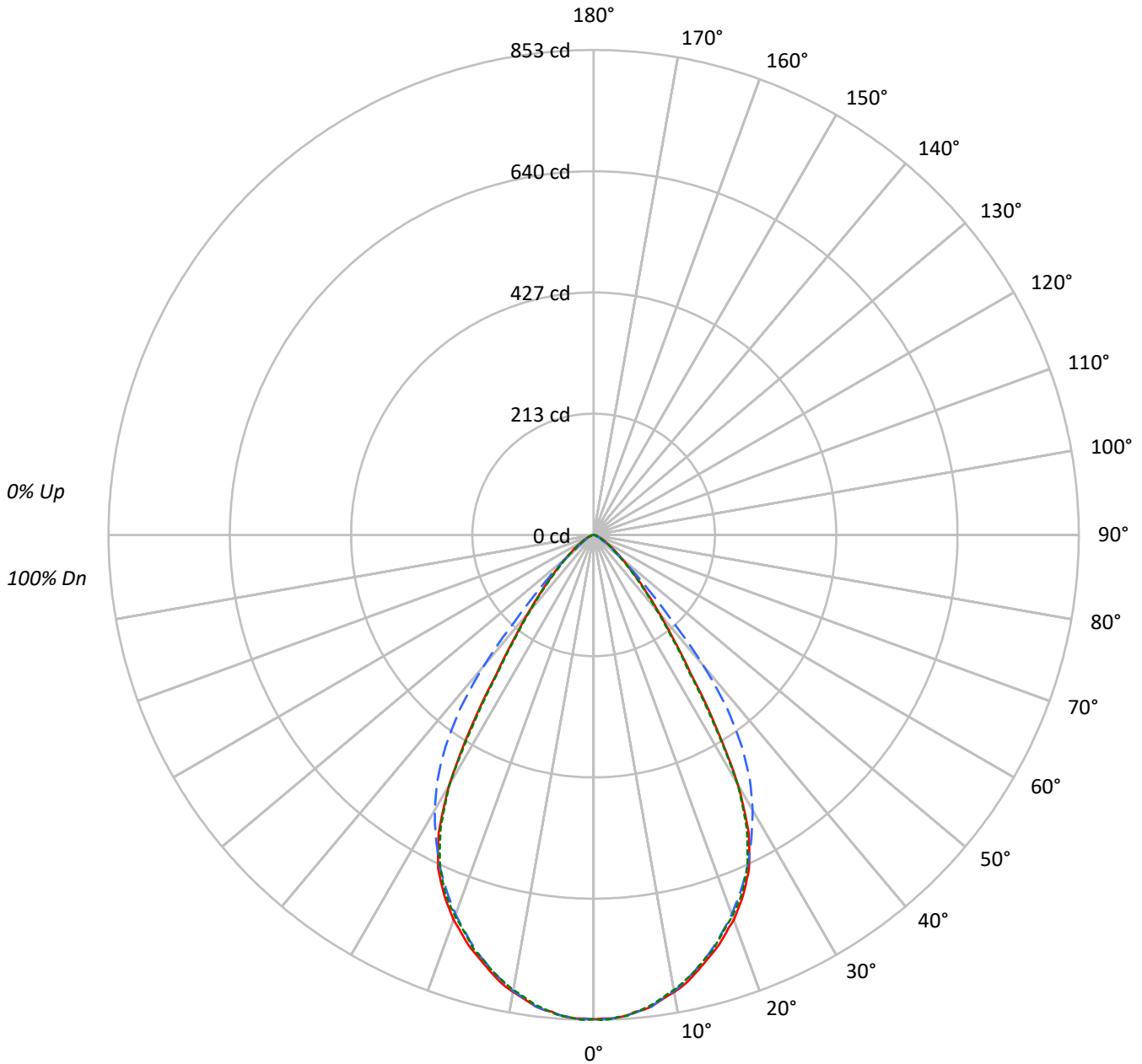
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 958.1 lumens
Efficiency: N/A
Efficacy: 96.8 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): 9.9
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	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	113	110	107	105	110	108	105	103	104	102	100	100	98	97	97	95	94	92					92			
2	107	101	97	93	104	100	96	92	96	93	90	93	91	88	91	88	86	85					85			
3	101	94	88	84	99	92	87	83	90	85	82	87	84	81	85	82	79	78					78			
4	95	87	81	76	93	86	80	76	83	78	75	81	77	74	79	76	73	71					71			
5	90	80	74	69	88	79	74	69	78	72	68	76	71	68	74	70	67	66					66			
6	85	75	68	64	83	74	68	63	72	67	63	71	66	63	70	65	62	61					61			
7	80	70	63	59	79	69	63	59	68	62	58	67	62	58	65	61	58	56					56			
8	76	65	59	54	74	65	59	54	64	58	54	63	57	54	62	57	54	52					52			
9	72	61	55	51	70	61	55	50	60	54	50	59	54	50	58	53	50	48					48			
10	68	58	51	47	67	57	51	47	56	51	47	55	50	47	55	50	47	45					45			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	36679	36679	36679
5°	36387	36452	36430
10°	35693	35610	35527
15°	34434	34242	34224
20°	33013	32536	32687
25°	30727	30457	30390
30°	25251	27786	25181
35°	15595	23863	15222
40°	10010	16918	9667
45°	6527	8202	6217
50°	4334	4079	4052
55°	2943	2124	2732
60°	1998	1300	1834
65°	1396	958	1253
70°	894	718	831
75°	632	549	549
80°	471	347	347
85°	247	445	247

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 8202 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.6	8.3
10°-20°	215.9	22.5
20°-30°	291.5	30.4
30°-40°	227.5	23.7
40°-50°	95.3	9.9
50°-60°	32.3	3.4
60°-70°	11.5	1.2
70°-80°	3.8	0.4
80°-90°	0.8	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°	587.0	61.3
0°-40°	814.4	85.0
0°-60°	942.0	98.3
0°-90°	958.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	958.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	852	852	852	852	852	
5°	842	843	843	842	843	80
15°	772	771	768	767	768	217
25°	647	644	641	641	640	291
35°	297	348	454	348	290	195
45°	107	115	135	110	102	86
55°	39	36	28	34	36	36
65°	14	11	9	11	12	14
75°	4	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°	851.9	851.9	851.9	851.9	851.9
1°	850.9	852.3	851.4	851.9	853.3
2°	850.9	850.9	851.9	851.4	851.9
3°	850.0	850.0	849.0	849.0	849.0
4°	847.1	847.1	847.1	846.2	848.1
5°	841.9	842.9	843.4	841.9	842.9
6°	840.0	840.5	839.6	839.1	838.2
7°	835.8	834.4	835.8	832.5	833.0
8°	828.7	828.7	827.8	826.8	825.9
9°	822.1	822.1	821.1	819.7	818.8
10°	816.4	815.0	814.5	813.1	812.6
11°	809.8	807.0	806.5	805.1	805.1
12°	801.8	800.4	797.0	796.6	796.6
13°	791.9	790.4	788.1	786.2	788.1
14°	782.4	781.5	777.2	778.6	778.2
15°	772.5	770.6	768.2	767.3	767.8
16°	763.5	760.2	756.9	757.4	760.2
17°	754.1	749.3	746.0	745.6	747.0
18°	742.2	738.5	733.3	735.2	735.2
19°	730.4	725.2	721.9	721.5	723.3
20°	720.5	712.5	710.1	709.6	713.4
22.5°	686.5	678.5	676.6	678.5	682.2
25°	646.8	644.0	641.1	641.1	639.7
27.5°	590.6	597.2	600.5	593.9	583.0
30°	507.9	535.8	558.9	532.5	506.5
32.5°	400.2	457.8	511.2	456.4	390.7
35°	296.7	348.2	454.0	347.7	289.6
37.5°	228.7	261.7	386.0	257.5	222.1
40°	178.1	197.5	301.0	195.1	172.0
42.5°	138.4	150.7	200.3	147.9	133.7
45°	107.2	114.8	134.7	109.6	102.1
47.5°	83.6	86.9	92.1	83.2	78.9
50°	64.7	64.7	60.9	62.4	60.5
52.5°	50.1	48.2	41.1	45.4	46.3
55°	39.2	35.9	28.3	34.0	36.4
57.5°	29.8	26.5	20.3	25.0	27.4
60°	23.2	19.8	15.1	18.9	21.3
62.5°	18.0	15.1	11.8	14.2	16.1
65°	13.7	11.3	9.4	10.9	12.3
67.5°	10.4	8.5	7.1	8.0	9.4
70°	7.1	6.6	5.7	6.1	6.6
72.5°	5.2	4.7	4.3	4.3	4.7
75°	3.8	3.3	3.3	3.3	3.3



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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°	0.5	0.5	0.9	0.5	0.5
87.5°	0.5	0.5	0.5	0.5	0.5
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°	2.4	2.4	2.4	2.4	2.4
80°	1.9	1.9	1.4	1.4	1.4

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Scaled Data Report



(END OF REPORT)