

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: P838365

Luminaire Tested: HCSQ610D010-HM60525935-61SQH

Issue Date: 5/21/2024

Test Information

Test Method: LM-79-2019
Report Number: P838365
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-HM60525935-61SQH
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: -

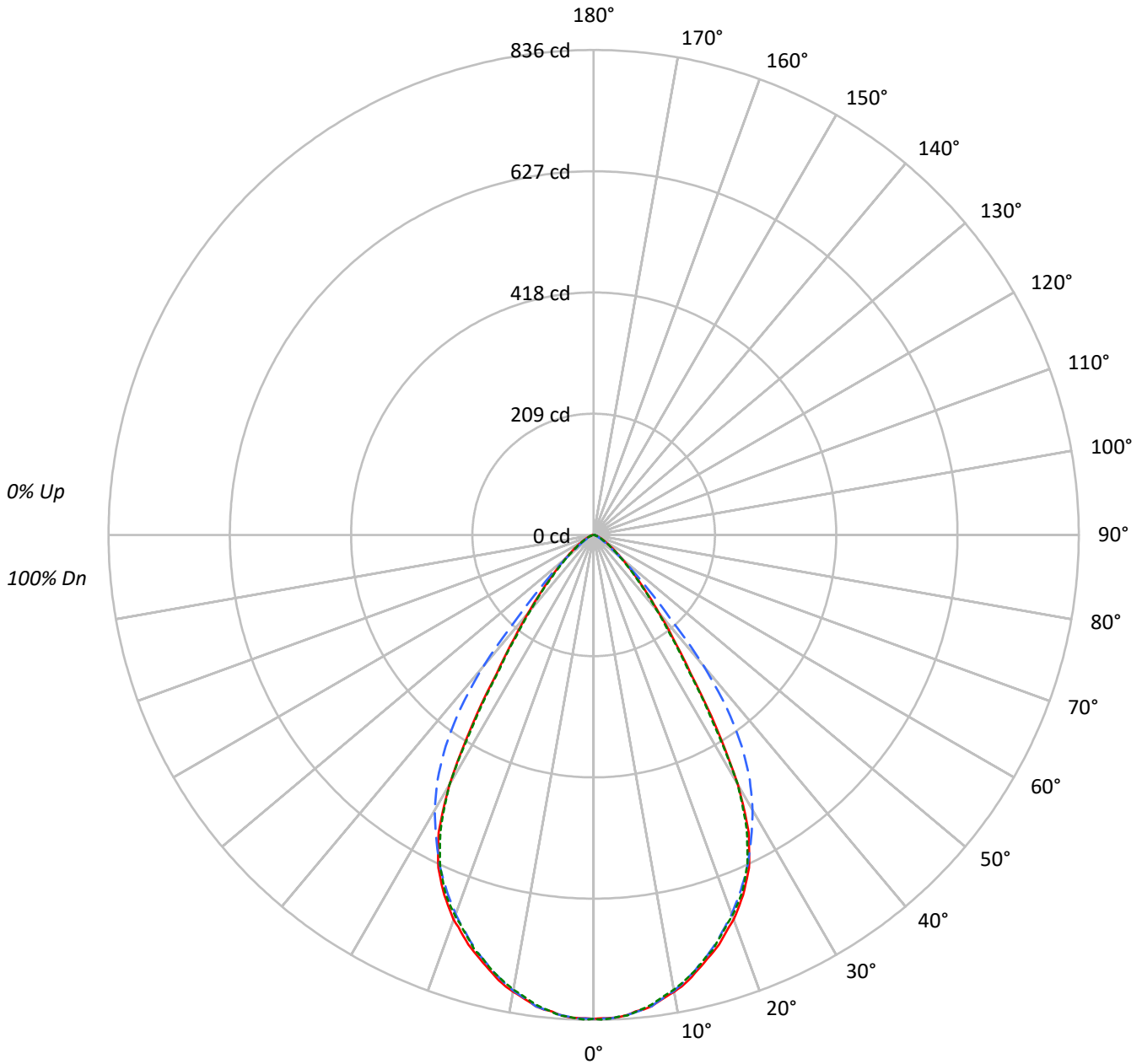
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 938.3 lumens
Efficiency: N/A
Efficacy: 94.8 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	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	78	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°	35921	35921	35921
5°	35639	35700	35678
10°	34958	34875	34797
15°	33725	33538	33516
20°	32334	31867	32014
25°	30095	29829	29763
30°	24729	27215	24659
35°	15274	23374	14912
40°	9802	16569	9465
45°	6393	8031	6083
50°	4247	3999	3965
55°	2883	2087	2672
60°	1955	1274	1791
65°	1365	947	1223
70°	869	705	818
75°	616	532	532
80°	471	347	347
85°	247	445	247

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 8031 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.9	8.3
10°-20°	211.5	22.5
20°-30°	285.5	30.4
30°-40°	222.8	23.7
40°-50°	93.3	9.9
50°-60°	31.6	3.4
60°-70°	11.3	1.2
70°-80°	3.7	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°	574.9	61.3
0°-40°	797.7	85.0
0°-60°	922.6	98.3
0°-90°	938.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	938.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	834	834	834	834	834	
5°	825	826	826	825	826	78
15°	757	755	752	752	752	213
25°	634	631	628	628	626	285
35°	291	341	445	341	284	191
45°	105	112	132	107	100	84
55°	38	35	28	33	36	35
65°	13	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°	834.3	834.3	834.3	834.3	<i>834.3</i>
1°	<i>833.4</i>	<i>834.8</i>	<i>833.8</i>	<i>834.3</i>	<i>835.7</i>
2°	833.4	833.4	834.3	833.8	<i>834.3</i>
3°	832.5	832.5	831.5	831.5	<i>831.5</i>
4°	829.7	829.7	829.7	828.8	<i>830.6</i>
5°	824.6	825.5	826.0	824.6	<i>825.5</i>
6°	822.7	823.2	822.3	821.8	<i>820.9</i>
7°	818.6	817.2	818.6	815.3	<i>815.8</i>
8°	811.6	811.6	810.7	809.8	<i>808.9</i>
9°	805.2	805.2	804.2	802.8	<i>801.9</i>
10°	799.6	798.2	797.7	796.4	<i>795.9</i>
11°	793.1	790.3	789.9	788.5	<i>788.5</i>
12°	785.3	783.9	780.6	780.2	<i>780.2</i>
13°	775.5	774.1	771.8	770.0	<i>771.8</i>
14°	766.3	765.4	761.2	762.6	<i>762.1</i>
15°	756.6	754.7	752.4	751.5	<i>751.9</i>
16°	747.8	744.5	741.3	741.8	<i>744.5</i>
17°	738.5	733.9	730.7	730.2	<i>731.6</i>
18°	727.0	723.2	718.2	720.0	<i>720.0</i>
19°	715.4	710.3	707.1	706.6	<i>708.4</i>
20°	705.7	697.8	695.5	695.0	<i>698.7</i>
22.5°	672.3	664.5	662.6	664.5	<i>668.2</i>
25°	633.5	630.7	627.9	627.9	<i>626.5</i>
27.5°	578.4	584.9	588.1	581.7	<i>571.0</i>
30°	497.4	524.7	547.4	521.5	<i>496.0</i>
32.5°	391.9	448.4	500.7	447.0	<i>382.7</i>
35°	290.6	341.0	444.7	340.6	<i>283.7</i>
37.5°	224.0	256.4	378.1	252.2	<i>217.5</i>
40°	174.4	193.4	294.8	191.1	<i>168.4</i>
42.5°	135.6	147.6	196.2	144.8	<i>131.0</i>
45°	105.0	112.4	131.9	107.4	<i>99.9</i>
47.5°	81.9	85.1	90.2	81.4	<i>77.3</i>
50°	63.4	63.4	59.7	61.1	<i>59.2</i>
52.5°	49.0	47.2	40.3	44.4	<i>45.3</i>
55°	38.4	35.2	27.8	33.3	<i>35.6</i>
57.5°	29.2	25.9	19.9	24.5	<i>26.8</i>
60°	22.7	19.4	14.8	18.5	<i>20.8</i>
62.5°	17.6	14.8	11.6	13.9	<i>15.7</i>
65°	13.4	11.1	9.3	10.6	<i>12.0</i>
67.5°	10.2	8.3	6.9	7.9	<i>9.3</i>
70°	6.9	6.5	5.6	6.0	<i>6.5</i>
72.5°	5.1	4.6	4.2	4.2	<i>4.6</i>
75°	3.7	3.2	3.2	3.2	<i>3.2</i>



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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°	2.3	2.3	2.3	2.3	2.3
80°	1.9	1.9	1.4	1.4	1.4

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Scaled Data Report



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