

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: P838400

Luminaire Tested: HCSQ615D010-HM60525930-61SQH

Issue Date: 5/21/2024

Test Information

Test Method: LM-79-2019
Report Number: P838400
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: HCSQ615D010-HM60525930-61SQH
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: -

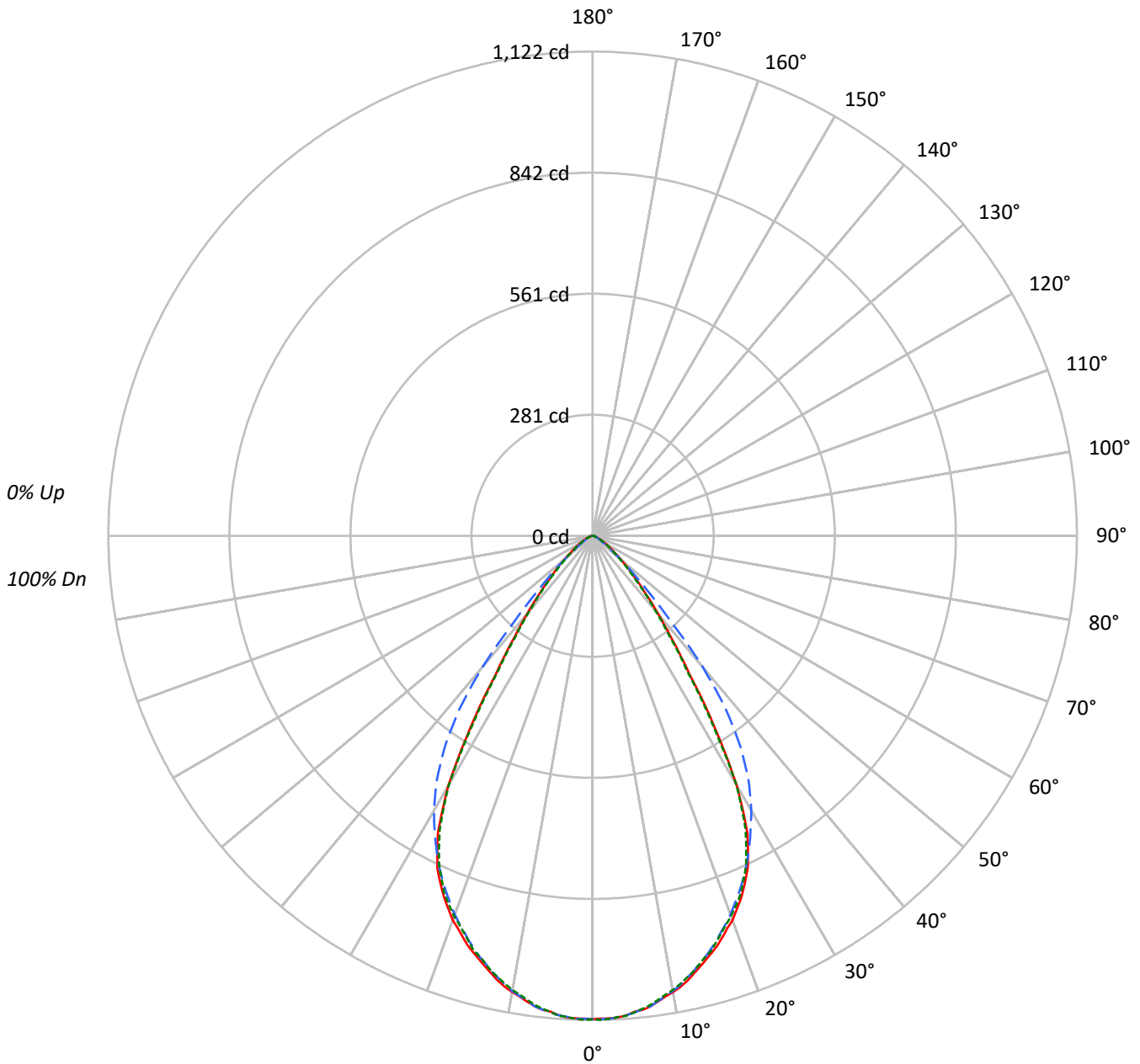
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1260.0 lumens
Efficiency: N/A
Efficacy: 90.0 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): 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			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°	48240	48240	48240
5°	47858	47940	47914
10°	46946	46837	46728
15°	45288	45038	45011
20°	43418	42790	42992
25°	40414	40058	39972
30°	33211	36547	33116
35°	20509	31390	20021
40°	13169	22246	12714
45°	8592	10784	8171
50°	5700	5372	5325
55°	3873	2800	3588
60°	2618	1714	2411
65°	1834	1263	1650
70°	1171	944	1095
75°	832	715	715
80°	620	471	471
85°	296	593	296

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 10784 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	104.6	8.3
10°-20°	284.0	22.5
20°-30°	383.3	30.4
30°-40°	299.2	23.7
40°-50°	125.3	9.9
50°-60°	42.5	3.4
60°-70°	15.2	1.2
70°-80°	4.9	0.4
80°-90°	1.0	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°	772.0	61.3
0°-40°	1071.1	85.0
0°-60°	1239.0	98.3
0°-90°	1260.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1260.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1120	1120	1120	1120	1120	
5°	1107	1109	1109	1107	1109	105
15°	1016	1014	1010	1009	1010	286
25°	851	847	843	843	841	383
35°	390	458	597	457	381	257
45°	141	151	177	144	134	113
55°	52	47	37	45	48	48
65°	18	15	12	14	16	19
75°	5	4	4	4	4	5
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°	1120.4	1120.4	1120.4	1120.4	<i>1120.4</i>
1°	<i>1119.1</i>	<i>1121.0</i>	<i>1119.7</i>	<i>1120.4</i>	<i>1122.2</i>
2°	1119.1	1119.1	1120.4	1119.7	<i>1120.4</i>
3°	1117.9	1117.9	1116.6	1116.6	<i>1116.6</i>
4°	1114.1	1114.1	1114.1	1112.9	<i>1115.4</i>
5°	1107.3	1108.6	1109.2	1107.3	<i>1108.6</i>
6°	1104.8	1105.4	1104.2	1103.6	<i>1102.3</i>
7°	1099.2	1097.4	1099.2	1094.9	<i>1095.5</i>
8°	1089.9	1089.9	1088.7	1087.4	<i>1086.2</i>
9°	1081.2	1081.2	1080.0	1078.1	<i>1076.9</i>
10°	1073.8	1071.9	1071.3	1069.4	<i>1068.8</i>
11°	1065.1	1061.3	1060.7	1058.8	<i>1058.8</i>
12°	1054.5	1052.6	1048.3	1047.7	<i>1047.7</i>
13°	1041.4	1039.6	1036.5	1034.0	<i>1036.5</i>
14°	1029.0	1027.8	1022.2	1024.0	<i>1023.4</i>
15°	1016.0	1013.5	1010.4	1009.1	<i>1009.8</i>
16°	1004.2	999.8	995.5	996.1	<i>999.8</i>
17°	991.7	985.5	981.2	980.5	<i>982.4</i>
18°	976.2	971.2	964.4	966.9	<i>966.9</i>
19°	960.7	953.8	949.5	948.9	<i>951.3</i>
20°	947.6	937.0	933.9	933.3	<i>938.3</i>
22.5°	902.9	892.3	889.8	892.3	<i>897.3</i>
25°	850.7	846.9	843.2	843.2	<i>841.4</i>
27.5°	776.7	785.4	789.8	781.1	<i>766.8</i>
30°	668.0	704.7	735.1	700.3	<i>666.1</i>
32.5°	526.3	602.1	672.3	600.3	<i>513.9</i>
35°	390.2	458.0	597.2	457.3	<i>380.9</i>
37.5°	300.8	344.2	507.7	338.7	<i>292.1</i>
40°	234.3	259.7	395.8	256.6	<i>226.2</i>
42.5°	182.1	198.2	263.5	194.5	<i>175.9</i>
45°	141.1	151.0	177.1	144.2	<i>134.2</i>
47.5°	110.0	114.3	121.2	109.4	<i>103.8</i>
50°	85.1	85.1	80.2	82.0	<i>79.5</i>
52.5°	65.9	63.4	54.1	59.7	<i>60.9</i>
55°	51.6	47.2	37.3	44.7	<i>47.8</i>
57.5°	39.1	34.8	26.7	32.9	<i>36.0</i>
60°	30.4	26.1	19.9	24.9	<i>28.0</i>
62.5°	23.6	19.9	15.5	18.6	<i>21.1</i>
65°	18.0	14.9	12.4	14.3	<i>16.2</i>
67.5°	13.7	11.2	9.3	10.6	<i>12.4</i>
70°	9.3	8.7	7.5	8.1	<i>8.7</i>
72.5°	6.8	6.2	5.6	5.6	<i>6.2</i>
75°	5.0	4.3	4.3	4.3	<i>4.3</i>



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
82.5°	1.2	1.2	1.2	1.2	1.2
85°	0.6	0.6	1.2	0.6	0.6
87.5°	0.6	0.6	0.6	0.6	0.6
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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— 0°-180° - - 45°-225° - - - - 90°-270°

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77.5°	3.1	3.1	3.1	3.1	3.1
80°	2.5	2.5	1.9	1.9	1.9

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Scaled Data Report



(END OF REPORT)