

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: P838405

Luminaire Tested: HCSQ615D010-HM60525935-61SQH

Issue Date: 5/21/2024

Test Information

Test Method: LM-79-2019
Report Number: P838405
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-HM60525935-61SQH
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: -

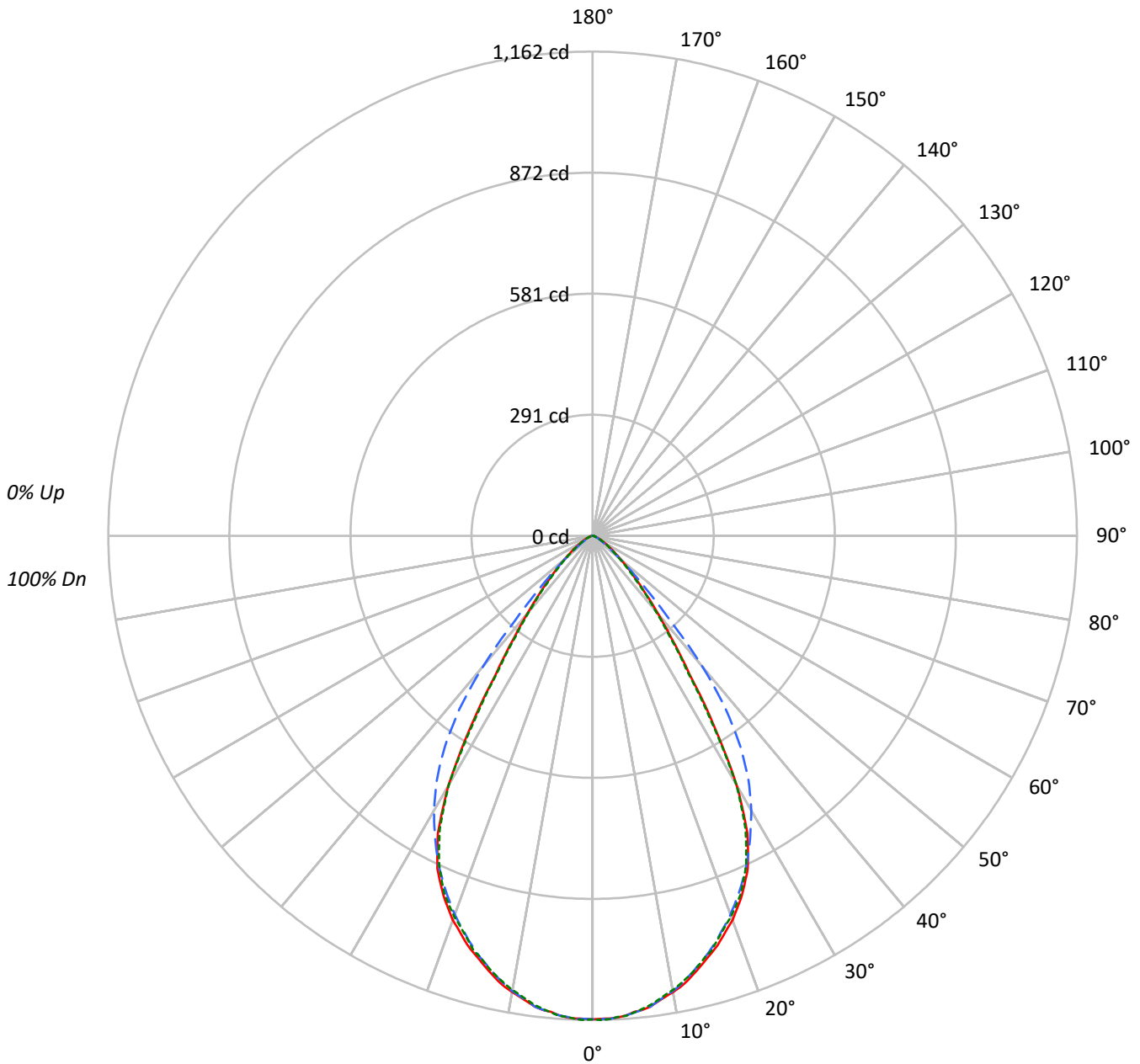
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1305.1 lumens
Efficiency: N/A
Efficacy: 93.2 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					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°	49966	49966	49966
5°	49569	49656	49625
10°	48625	48512	48398
15°	46906	46647	46620
20°	44971	44325	44531
25°	41858	41492	41402
30°	34399	37854	34304
35°	21245	32509	20735
40°	13635	23044	13169
45°	8896	11167	8464
50°	5908	5560	5519
55°	4008	2898	3723
60°	2713	1774	2497
65°	1905	1314	1701
70°	1221	969	1133
75°	848	749	749
80°	645	471	471
85°	296	642	296

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 11167 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	108.4	8.3
10°-20°	294.1	22.5
20°-30°	397.1	30.4
30°-40°	309.9	23.7
40°-50°	129.8	9.9
50°-60°	44.0	3.4
60°-70°	15.7	1.2
70°-80°	5.1	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°	799.6	61.3
0°-40°	1109.5	85.0
0°-60°	1283.3	98.3
0°-90°	1305.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1305.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1160	1160	1160	1160	1160	
5°	1147	1148	1149	1147	1148	108
15°	1052	1050	1046	1045	1046	296
25°	881	877	873	873	872	396
35°	404	474	618	474	394	266
45°	146	156	183	149	139	117
55°	53	49	39	46	50	49
65°	19	15	13	15	17	19
75°	5	4	4	4	4	6
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°	1160.5	1160.5	1160.5	1160.5	<i>1160.5</i>
1°	<i>1159.2</i>	<i>1161.1</i>	<i>1159.8</i>	<i>1160.5</i>	<i>1162.4</i>
2°	1159.2	1159.2	1160.5	1159.8	<i>1160.5</i>
3°	1157.9	1157.9	1156.6	1156.6	<i>1156.6</i>
4°	1154.0	1154.0	1154.0	1152.7	<i>1155.3</i>
5°	1146.9	1148.2	1148.9	1146.9	<i>1148.2</i>
6°	1144.4	1145.0	1143.7	1143.1	<i>1141.8</i>
7°	1138.6	1136.6	1138.6	1134.1	<i>1134.7</i>
8°	1128.9	1128.9	1127.6	1126.4	<i>1125.1</i>
9°	1119.9	1119.9	1118.6	1116.7	<i>1115.4</i>
10°	1112.2	1110.3	1109.6	1107.7	<i>1107.0</i>
11°	1103.2	1099.3	1098.7	1096.7	<i>1096.7</i>
12°	1092.2	1090.3	1085.8	1085.2	<i>1085.2</i>
13°	1078.7	1076.8	1073.6	1071.0	<i>1073.6</i>
14°	1065.9	1064.6	1058.8	1060.7	<i>1060.1</i>
15°	1052.3	1049.8	1046.5	1045.3	<i>1045.9</i>
16°	1040.1	1035.6	1031.1	1031.7	<i>1035.6</i>
17°	1027.2	1020.8	1016.3	1015.6	<i>1017.6</i>
18°	1011.1	1006.0	998.9	1001.5	<i>1001.5</i>
19°	995.1	988.0	983.5	982.8	<i>985.4</i>
20°	981.5	970.6	967.4	966.7	<i>971.9</i>
22.5°	935.2	924.3	921.7	924.3	<i>929.4</i>
25°	881.1	877.3	873.4	873.4	<i>871.5</i>
27.5°	804.5	813.5	818.1	809.0	<i>794.2</i>
30°	691.9	729.9	761.4	725.4	<i>690.0</i>
32.5°	545.2	623.7	696.4	621.7	<i>532.3</i>
35°	404.2	474.4	618.5	473.7	<i>394.5</i>
37.5°	311.5	356.6	525.8	350.8	<i>302.5</i>
40°	242.6	269.0	410.0	265.8	<i>234.3</i>
42.5°	188.6	205.3	272.9	201.5	<i>182.1</i>
45°	146.1	156.4	183.4	149.3	<i>139.0</i>
47.5°	113.9	118.4	125.5	113.3	<i>107.5</i>
50°	88.2	88.2	83.0	85.0	<i>82.4</i>
52.5°	68.2	65.7	56.0	61.8	<i>63.1</i>
55°	53.4	48.9	38.6	46.3	<i>49.6</i>
57.5°	40.5	36.0	27.7	34.1	<i>37.3</i>
60°	31.5	27.0	20.6	25.7	<i>29.0</i>
62.5°	24.5	20.6	16.1	19.3	<i>21.9</i>
65°	18.7	15.4	12.9	14.8	<i>16.7</i>
67.5°	14.2	11.6	9.7	10.9	<i>12.9</i>
70°	9.7	9.0	7.7	8.4	<i>9.0</i>
72.5°	7.1	6.4	5.8	5.8	<i>6.4</i>
75°	5.1	4.5	4.5	4.5	<i>4.5</i>



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
82.5°	1.3	1.3	1.3	1.3	1.3
85°	0.6	0.6	1.3	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°	3.2	3.2	3.2	3.2	3.2
80°	2.6	2.6	1.9	1.9	1.9

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Scaled Data Report



(END OF REPORT)