

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: P838380

Luminaire Tested: HCSQ615D010-HM60525830-61SQH

Issue Date: 5/21/2024

Test Information

Test Method: LM-79-2019
Report Number: P838380
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-HM60525830-61SQH
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, HAZE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT
Ballast/Driver: -

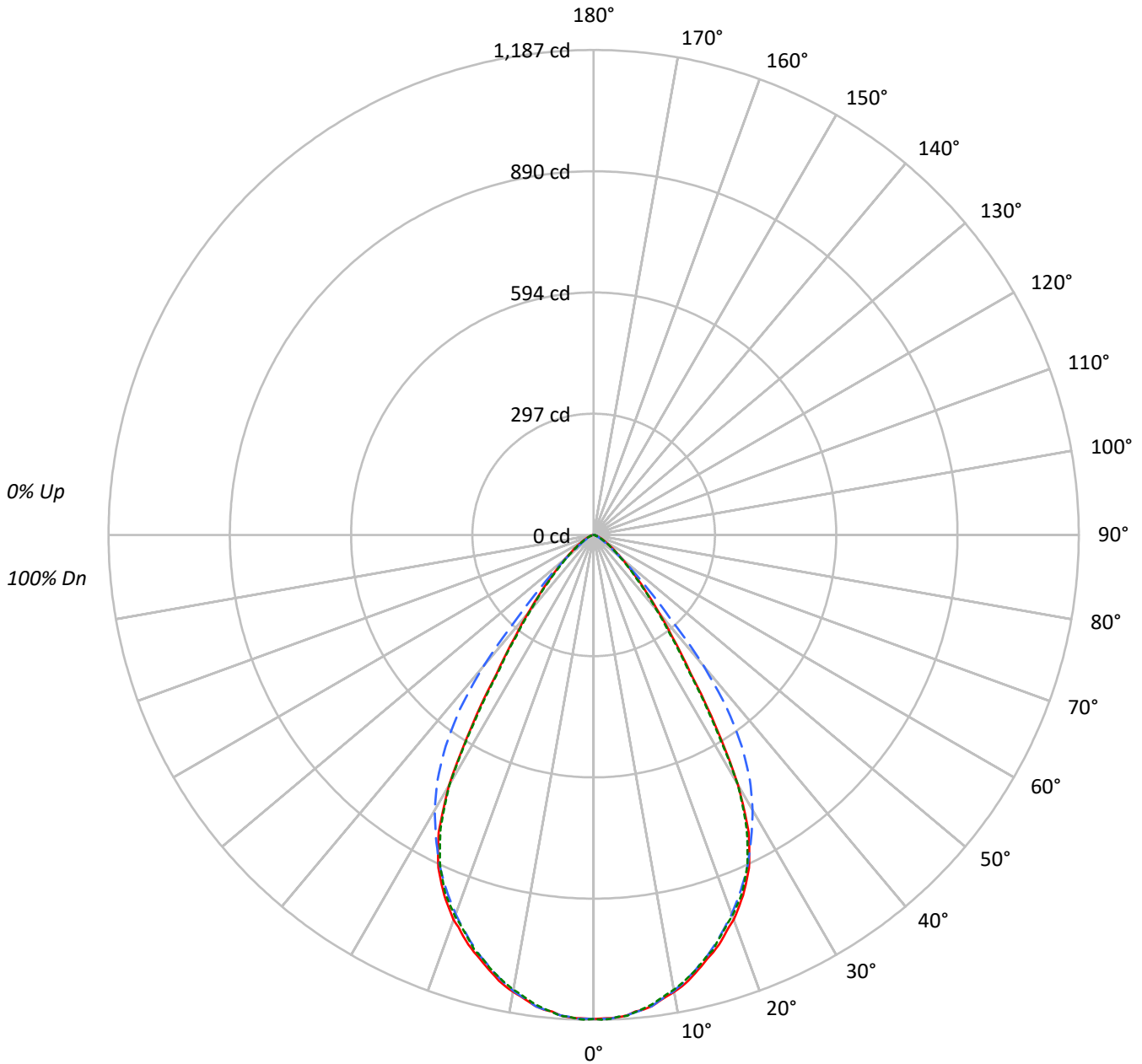
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1332.6 lumens
Efficiency: N/A
Efficacy: 95.2 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									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	78	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°	51017	51017	51017
5°	50615	50697	50671
10°	49648	49535	49417
15°	47895	47632	47601
20°	45920	45255	45466
25°	42742	42366	42271
30°	35125	38650	35025
35°	21692	33192	21172
40°	13928	23527	13444
45°	9085	11405	8640
50°	6028	5680	5633
55°	4091	2958	3798
60°	2773	1808	2549
65°	1946	1335	1742
70°	1246	995	1158
75°	882	765	765
80°	645	496	496
85°	346	642	346

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 11405 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.7	8.3
10°-20°	300.3	22.5
20°-30°	405.4	30.4
30°-40°	316.4	23.7
40°-50°	132.5	9.9
50°-60°	44.9	3.4
60°-70°	16.0	1.2
70°-80°	5.2	0.4
80°-90°	1.1	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°	816.4	61.3
0°-40°	1132.8	85.0
0°-60°	1310.3	98.3
0°-90°	1332.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1332.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1185	1185	1185	1185	1185	
5°	1171	1172	1173	1171	1172	111
15°	1074	1072	1069	1067	1068	302
25°	900	896	892	892	890	405
35°	413	484	632	484	403	271
45°	149	160	187	152	142	120
55°	54	50	39	47	51	50
65°	19	16	13	15	17	20
75°	5	5	5	5	5	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°	1184.9	1184.9	1184.9	1184.9	<i>1184.9</i>
1°	<i>1183.6</i>	<i>1185.5</i>	<i>1184.2</i>	<i>1184.9</i>	<i>1186.8</i>
2°	1183.6	1183.6	1184.9	1184.2	<i>1184.9</i>
3°	1182.2	1182.2	1180.9	1180.9	<i>1180.9</i>
4°	1178.3	1178.3	1178.3	1177.0	<i>1179.6</i>
5°	1171.1	1172.4	1173.0	1171.1	<i>1172.4</i>
6°	1168.4	1169.1	1167.8	1167.1	<i>1165.8</i>
7°	1162.5	1160.6	1162.5	1157.9	<i>1158.6</i>
8°	1152.7	1152.7	1151.4	1150.0	<i>1148.7</i>
9°	1143.5	1143.5	1142.2	1140.2	<i>1138.9</i>
10°	1135.6	1133.6	1133.0	1131.0	<i>1130.3</i>
11°	1126.4	1122.4	1121.8	1119.8	<i>1119.8</i>
12°	1115.2	1113.2	1108.6	1108.0	<i>1108.0</i>
13°	1101.4	1099.4	1096.2	1093.5	<i>1096.2</i>
14°	1088.3	1087.0	1081.0	1083.0	<i>1082.4</i>
15°	1074.5	1071.8	1068.6	1067.2	<i>1067.9</i>
16°	1062.0	1057.4	1052.8	1053.4	<i>1057.4</i>
17°	1048.8	1042.3	1037.7	1037.0	<i>1039.0</i>
18°	1032.4	1027.2	1019.9	1022.6	<i>1022.6</i>
19°	1016.0	1008.8	1004.2	1003.5	<i>1006.1</i>
20°	1002.2	991.0	987.7	987.1	<i>992.3</i>
22.5°	954.9	943.7	941.1	943.7	<i>949.0</i>
25°	899.7	895.7	891.8	891.8	<i>889.8</i>
27.5°	821.5	830.7	835.3	826.1	<i>810.9</i>
30°	706.5	745.2	777.4	740.6	<i>704.5</i>
32.5°	556.6	636.8	711.1	634.8	<i>543.5</i>
35°	412.7	484.3	631.5	483.7	<i>402.8</i>
37.5°	318.1	364.1	536.9	358.2	<i>308.9</i>
40°	247.8	274.7	418.6	271.4	<i>239.2</i>
42.5°	192.6	209.6	278.6	205.7	<i>186.0</i>
45°	149.2	159.7	187.3	152.5	<i>141.9</i>
47.5°	116.3	120.9	128.1	115.7	<i>109.7</i>
50°	90.0	90.0	84.8	86.7	<i>84.1</i>
52.5°	69.7	67.0	57.2	63.1	<i>64.4</i>
55°	54.5	49.9	39.4	47.3	<i>50.6</i>
57.5°	41.4	36.8	28.3	34.8	<i>38.1</i>
60°	32.2	27.6	21.0	26.3	<i>29.6</i>
62.5°	25.0	21.0	16.4	19.7	<i>22.3</i>
65°	19.1	15.8	13.1	15.1	<i>17.1</i>
67.5°	14.5	11.8	9.9	11.2	<i>13.1</i>
70°	9.9	9.2	7.9	8.5	<i>9.2</i>
72.5°	7.2	6.6	5.9	5.9	<i>6.6</i>
75°	5.3	4.6	4.6	4.6	<i>4.6</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°	0.7	0.7	1.3	0.7	0.7
87.5°	0.7	0.7	0.7	0.7	0.7
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°	3.3	3.3	3.3	3.3	3.3
80°	2.6	2.6	2.0	2.0	2.0

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Scaled Data Report



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