

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: P838491

Luminaire Tested: HCSQ625D010-HM60525940-61SQLWW

Issue Date: 5/21/2024



Test Information

Test Method: LM-79-2019
Report Number: P838491
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2309-166-5)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 5/21/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO COMMERCIAL
Catalog Number: HCSQ625D010-HM60525940-61SQLWW
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, LENSED WALLWASH TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: -

Summary

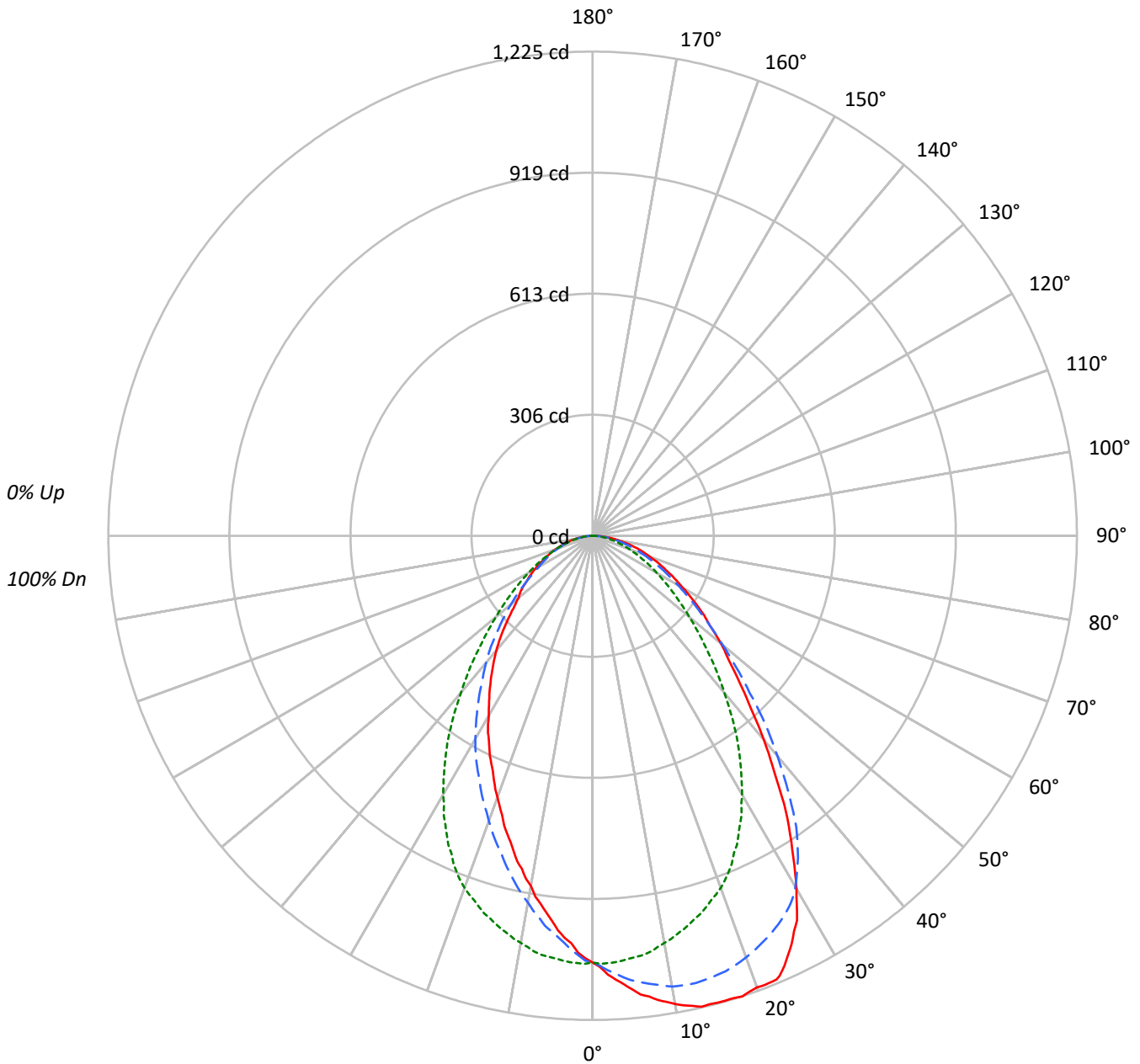
Lumens per Lamp: N/A
Luminaire Lumens: 2041.6 lumens
Efficiency: N/A
Efficacy: 73.7 lumens/watt
Spacing Criteria (0/90/45): 1.11 / 1.08 / 1.17
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 27.7
Input Voltage (V): NR
Input Current (Ain): 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	100	100	100	100		
	1	110	106	103	99	108	104	101	98	100	97	95	96	94	92	92	91	89	87	87	87	87	87	87		
	2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75	75	75	75	75	75		
	3	94	85	78	72	92	83	77	71	80	75	70	78	73	69	75	71	68	66	66	66	66	66	66		
	4	87	76	69	63	85	75	68	62	73	66	62	71	65	61	68	64	60	58	58	58	58	58	58		
	5	81	69	61	55	79	68	61	55	66	60	55	64	59	54	63	58	53	51	51	51	51	51	51		
	6	75	63	55	49	74	62	55	49	61	54	49	59	53	48	58	52	48	46	46	46	46	46	46		
	7	70	58	50	44	69	57	50	44	56	49	44	54	48	44	53	48	43	42	42	42	42	42	42		
	8	66	53	46	40	64	53	45	40	51	45	40	50	44	40	49	44	39	38	38	38	38	38	38		
	9	62	49	42	37	60	49	42	37	48	41	36	47	41	36	46	40	36	34	34	34	34	34	34		
	10	58	46	39	34	57	45	38	34	44	38	34	44	38	33	43	37	33	32	32	32	32	32	32		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	104587	104587	104587	104587	104587
5°	112075	109771	104432	99035	97459
10°	118368	113932	102905	92674	88464
15°	122658	116049	100513	85901	80455
20°	125361	117020	97722	79124	72577
25°	125040	117013	92300	72525	65737
30°	115341	114759	84568	66334	58705
35°	100890	106147	75736	59333	53183
40°	85223	91875	65495	53063	47942
45°	72050	76968	56061	46553	41964
50°	63932	64550	48077	40587	36939
55°	57205	55255	41582	34945	34759
60°	51073	48147	36290	30225	32705
65°	46900	42797	31542	28080	29937
70°	43223	38309	27843	26200	27843
75°	40686	34192	24217	23805	25527
80°	37378	30628	21255	21925	23208
85°	37236	27621	18007	18007	20563

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 40°
 Vertical Angle: 45°
 Luminance: 77598 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.8	5.0
10°-20°	283.8	13.9
20°-30°	404.8	19.8
30°-40°	417.2	20.4
40°-50°	335.9	16.5
50°-60°	237.5	11.6
60°-70°	153.9	7.5
70°-80°	82.7	4.1
80°-90°	23.9	1.2
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°	790.5	38.7
0°-40°	1207.7	59.2
0°-60°	1781.1	87.2
0°-90°	2041.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2041.6	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1080	1080	1080	1080	1080	
5°	1152	1129	1074	1018	1002	112
15°	1223	1157	1002	856	802	346
25°	1170	1095	864	678	615	533
35°	853	898	640	502	450	530
45°	526	562	409	340	306	411
55°	339	327	246	207	206	303
65°	205	187	138	122	131	204
75°	109	91	65	64	68	115
85°	34	25	16	16	18	37
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
0°	1079.6	1079.6	1079.6	1079.6	1079.6	1079.6	1079.6	1079.6	1079.6	1079.6	1079.6
1°	1091.2	1095.8	1092.3	1092.3	1088.9	1087.7	1090.0	1086.6	1085.4	1083.1	1078.5
2°	1110.8	1107.4	1106.2	1107.4	1100.4	1100.4	1097.0	1090.0	1086.6	1081.9	1069.2
3°	1124.7	1122.4	1120.1	1118.9	1112.0	1106.2	1101.6	1093.5	1086.6	1080.8	1062.3
4°	1137.4	1137.4	1135.1	1130.5	1123.6	1116.6	1107.4	1098.1	1087.7	1077.3	1053.0
5°	1152.5	1153.6	1143.2	1142.1	1134.0	1123.6	1113.2	1100.4	1087.7	1073.9	1047.3
6°	1167.5	1161.7	1159.4	1151.3	1139.7	1130.5	1117.8	1103.9	1086.6	1070.4	1034.6
7°	1174.4	1173.3	1167.5	1159.4	1149.0	1134.0	1121.2	1102.8	1084.3	1068.1	1025.3
8°	1186.0	1186.0	1179.0	1168.6	1153.6	1139.7	1123.6	1101.6	1083.1	1062.3	1012.6
9°	1194.1	1194.1	1184.8	1175.6	1161.7	1143.2	1124.7	1100.4	1077.3	1053.0	1001.0
10°	1203.3	1201.0	1194.1	1180.2	1168.6	1147.8	1124.7	1099.3	1073.9	1046.1	989.5
11°	1210.3	1206.8	1198.7	1188.3	1169.8	1149.0	1124.7	1099.3	1069.2	1039.2	977.9
12°	1216.0	1213.7	1203.3	1190.6	1172.1	1151.3	1123.6	1094.7	1061.1	1029.9	962.9
13°	1223.0	1216.0	1205.6	1194.1	1173.3	1149.0	1118.9	1087.7	1055.4	1021.8	950.2
14°	1221.8	1220.7	1211.4	1195.2	1172.1	1146.7	1117.8	1080.8	1047.3	1012.6	935.1
15°	1223.0	1221.8	1211.4	1196.4	1171.0	1143.2	1114.3	1076.2	1039.2	1002.2	920.1
16°	1223.0	1223.0	1209.1	1194.1	1169.8	1139.7	1107.4	1071.5	1031.1	994.1	907.4
17°	1223.0	1223.0	1211.4	1190.6	1166.3	1137.4	1100.4	1062.3	1021.8	982.5	888.9
18°	1225.3	1221.8	1206.8	1189.4	1161.7	1131.6	1095.8	1055.4	1013.7	969.8	876.2
19°	1219.5	1217.2	1204.5	1182.5	1158.2	1124.7	1088.9	1047.3	1005.7	959.4	861.2
20°	1216.0	1219.5	1202.2	1179.0	1151.3	1118.9	1081.9	1039.2	994.1	947.9	846.1
21°	1217.2	1216.0	1197.5	1173.3	1146.7	1110.8	1073.9	1029.9	981.4	934.0	832.3
22.5°	1214.9	1211.4	1191.8	1165.2	1132.8	1100.4	1060.0	1014.9	962.9	909.7	805.7
23°	1210.3	1206.8	1191.8	1162.9	1128.2	1095.8	1053.0	1005.7	955.9	901.6	798.7
24°	1191.8	1190.6	1183.7	1154.8	1122.4	1086.6	1045.0	990.6	935.1	878.5	781.4
25°	1169.8	1172.1	1168.6	1150.1	1113.2	1076.2	1032.2	972.1	915.5	863.5	760.6
26°	1149.0	1149.0	1146.7	1139.7	1103.9	1064.6	1013.7	950.2	895.8	841.5	738.6
27°	1122.4	1127.0	1122.4	1118.9	1094.7	1051.9	994.1	935.1	873.9	820.7	720.1
28°	1101.6	1101.6	1099.3	1093.5	1085.4	1036.9	973.3	913.2	853.1	802.2	699.3
29°	1064.6	1071.5	1072.7	1073.9	1072.7	1017.2	953.6	888.9	831.1	775.6	679.7
30°	1031.1	1038.0	1042.6	1050.7	1051.9	999.9	930.5	869.3	810.3	756.0	662.3
32.5°	939.8	952.5	965.2	979.1	986.0	947.9	873.9	806.8	746.7	698.2	609.2
35°	853.1	856.5	870.4	902.8	909.7	885.4	806.8	743.3	686.6	640.4	559.5
37.5°	754.8	761.8	781.4	818.4	820.7	801.1	746.7	672.7	619.6	579.1	508.6
40°	673.9	677.4	691.2	722.5	732.9	720.1	672.7	605.7	557.2	517.9	460.1
42.5°	593.0	597.6	615.0	639.2	654.3	639.2	597.6	539.8	492.4	463.5	413.8
45°	525.9	531.7	547.9	561.8	566.4	557.2	520.2	472.8	439.3	409.2	371.1
47.5°	468.1	473.9	485.5	491.3	497.0	487.8	458.9	419.6	386.1	361.8	327.1
50°	424.2	423.1	431.2	433.5	433.5	423.1	398.8	366.4	338.7	319.0	290.1
52.5°	374.5	376.8	382.6	380.3	379.1	369.9	349.1	321.3	298.2	280.9	254.3
55°	338.7	335.2	338.7	336.4	331.8	322.5	304.0	280.9	261.2	246.2	221.9
57.5°	299.4	299.4	300.5	295.9	290.1	279.7	263.6	245.1	227.7	215.0	195.4
60°	263.6	265.9	264.7	260.1	254.3	242.7	230.0	211.5	196.5	187.3	168.8



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
67.5°	179.2	179.2	175.7	172.2	164.1	153.7	144.5	132.9	124.8	116.7	105.2
70°	152.6	154.9	150.3	144.5	138.7	131.8	121.4	112.1	104.0	98.3	89.0
72.5°	131.8	130.6	127.2	121.4	116.7	108.7	99.4	92.5	85.5	80.9	74.0
75°	108.7	108.7	105.2	100.6	94.8	87.9	80.9	75.1	69.4	64.7	61.3
77.5°	86.7	87.9	84.4	80.9	76.3	69.4	63.6	59.0	54.3	50.9	48.5
80°	67.0	68.2	64.7	62.4	56.6	53.2	48.5	43.9	40.5	38.1	37.0
82.5°	50.9	49.7	47.4	46.2	41.6	38.1	33.5	31.2	28.9	26.6	26.6
85°	33.5	32.4	31.2	30.1	26.6	23.1	22.0	19.7	17.3	16.2	16.2
87.5°	17.3	17.3	16.2	15.0	13.9	11.6	10.4	8.1	6.9	6.9	6.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	1079.6	1079.6	1079.6
1°	1075.0	1070.4	1069.2
2°	1061.1	1054.2	1055.4
3°	1048.4	1040.3	1032.2
4°	1032.2	1019.5	1019.5
5°	1018.4	1005.7	1002.2
6°	1005.7	984.8	980.2
7°	994.1	968.7	960.6
8°	974.4	949.0	940.9
9°	960.6	932.8	924.7
10°	942.1	914.3	899.3
11°	927.1	895.8	884.3
12°	910.9	872.7	861.2
13°	892.4	853.1	846.1
14°	875.0	836.9	824.2
15°	856.5	817.2	802.2
16°	836.9	797.6	783.7
17°	820.7	776.8	766.4
18°	804.5	758.3	742.1
19°	784.9	740.9	722.5
20°	767.5	719.0	704.0
21°	749.0	702.8	686.6
22.5°	723.6	671.6	656.6
23°	715.5	662.3	646.2
24°	697.0	643.8	630.0
25°	678.5	630.0	615.0
26°	662.3	609.2	595.3
27°	646.2	593.0	578.0
28°	628.8	575.7	564.1
29°	611.5	557.2	545.6
30°	593.0	544.4	524.8
32.5°	546.8	502.8	486.6
35°	501.7	463.5	449.7
37.5°	457.7	426.5	413.8
40°	419.6	391.9	379.1
42.5°	380.3	354.9	342.2
45°	339.8	319.0	306.3
47.5°	302.9	285.5	271.6
50°	269.3	252.0	245.1
52.5°	237.0	225.4	228.9
55°	206.9	206.9	205.8
57.5°	178.0	186.1	187.3
60°	156.0	166.5	168.8



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
67.5°	107.5	113.3	115.6
70°	92.5	97.1	98.3
72.5°	78.6	82.1	84.4
75°	63.6	68.2	68.2
77.5°	52.0	54.3	55.5
80°	39.3	40.5	41.6
82.5°	27.7	28.9	30.1
85°	16.2	17.3	18.5
87.5°	6.9	6.9	6.9
90°	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



Report Generated By 670245859 / DESKTOP-T8S5UU9

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Scaled Data Report





— 0°-180° - - 45°-225° - - - - 90°-270°

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62.5°	233.5	235.8	232.3	226.6	220.8	210.4	198.8	182.6	171.1	161.8	145.6
65°	204.6	205.8	203.4	197.7	191.9	181.5	169.9	156.0	146.8	137.6	123.7

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62.5°	139.9	148.0	149.1
65°	122.5	129.5	130.6

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(END OF REPORT)