

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: P838481

Luminaire Tested: HCSQ625D010-HM60525930-61SQLWW

Issue Date: 5/21/2024

Test Information

Test Method: LM-79-2019
Report Number: P838481
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-HM60525930-61SQLWW
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, LENSED WALLWASH TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: -

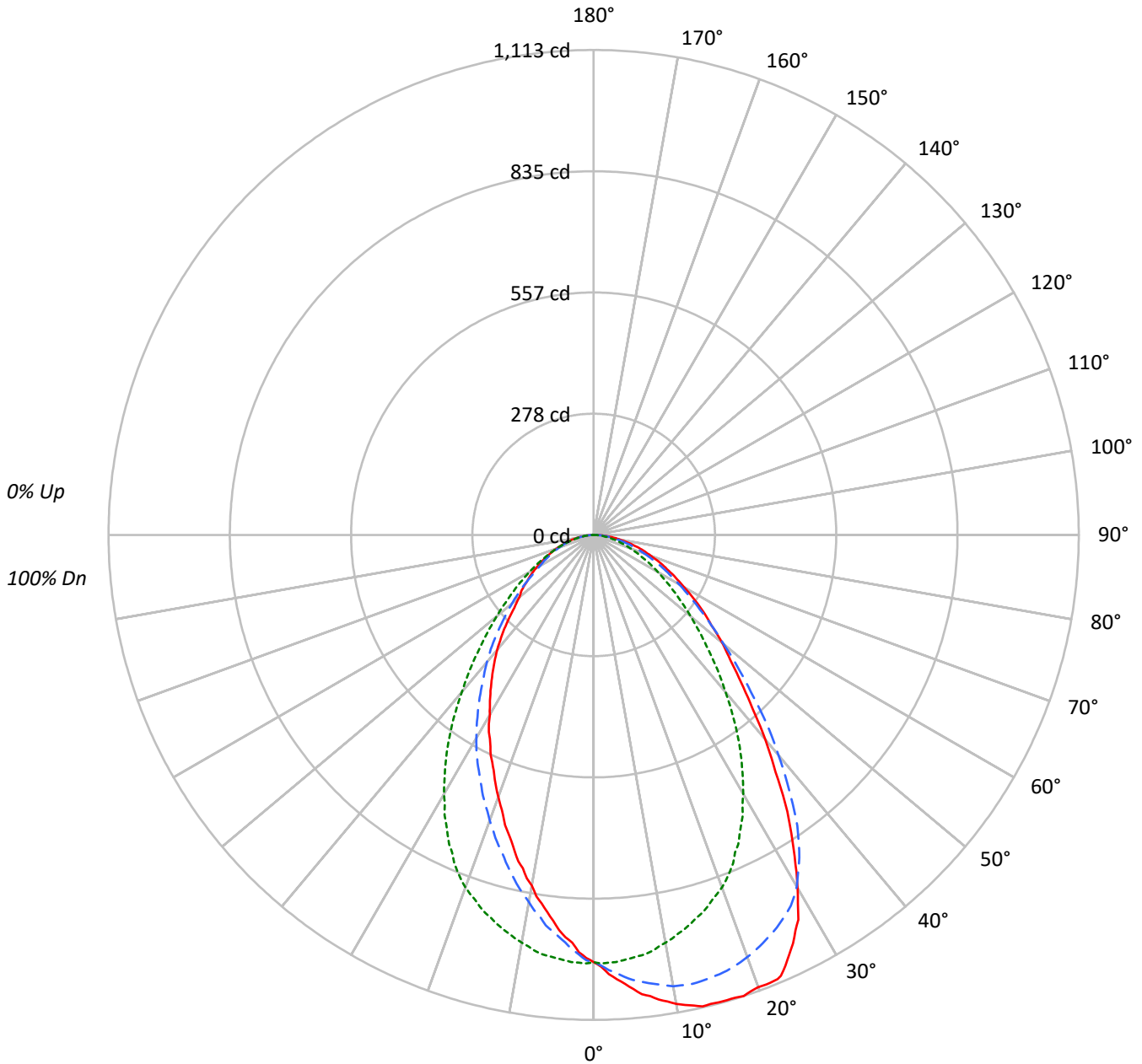
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1854.0 lumens
Efficiency: N/A
Efficacy: 66.9 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 (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	110	106	103	99	108	104	101	98	100	97	95	96	94	92	92	91	89	87								
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75								
3	94	85	78	72	92	83	77	71	80	75	70	78	73	69	75	71	68	66								
4	87	76	69	63	85	75	68	62	73	66	62	71	65	61	68	64	60	58								
5	81	69	61	55	79	68	61	55	66	60	55	64	59	54	63	58	53	51								
6	75	63	55	49	74	62	55	49	61	54	49	59	53	48	58	52	48	46								
7	70	58	50	44	69	57	50	44	56	49	44	54	48	44	53	48	43	42								
8	66	53	46	40	64	53	45	40	51	45	40	50	44	40	49	44	39	38								
9	62	49	42	37	60	49	42	37	48	41	36	47	41	36	46	40	36	34								
10	58	46	39	34	57	45	38	34	44	38	34	44	38	33	43	37	33	32								

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	94977	94977	94977	94977	94977
5°	101777	99681	94834	89933	88503
10°	107499	103470	93451	84155	80339
15°	111385	105388	91276	78008	73063
20°	113845	106268	88742	71856	65907
25°	113549	106260	83813	65866	59698
30°	104748	104216	76793	60238	53313
35°	91618	96396	68770	53881	48287
40°	77395	83433	59475	48195	43541
45°	65432	69899	50910	42279	38114
50°	58054	58612	43661	36864	33533
55°	51953	50179	37765	31736	31567
60°	46365	43720	32957	27454	29702
65°	42590	38865	28630	25513	27186
70°	39258	34797	25265	23793	25265
75°	36943	31048	22009	21597	23169
80°	33975	27810	19303	19916	21088
85°	33790	25065	16339	16339	18674

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 40°
 Vertical Angle: 45°
 Luminance: 70474 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.5	5.0
10°-20°	257.7	13.9
20°-30°	367.7	19.8
30°-40°	378.9	20.4
40°-50°	305.0	16.5
50°-60°	215.7	11.6
60°-70°	139.8	7.5
70°-80°	75.1	4.0
80°-90°	21.7	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°	717.9	38.7
0°-40°	1096.8	59.2
0°-60°	1617.5	87.2
0°-90°	1854.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1854.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	980	980	980	980	980	
5°	1047	1025	975	925	910	101
15°	1111	1051	910	778	728	314
25°	1062	994	784	616	558	484
35°	775	815	582	456	408	481
45°	478	510	372	309	278	373
55°	308	297	224	188	187	275
65°	186	170	125	111	119	185
75°	99	83	59	58	62	105
85°	30	23	15	15	17	33
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°	980.4	980.4	980.4	980.4	980.4	980.4	980.4	980.4	980.4	980.4	980.4
1°	990.9	995.1	992.0	992.0	988.8	987.8	989.9	986.7	985.7	983.6	979.4
2°	1008.8	1005.6	1004.6	1005.6	999.3	999.3	996.2	989.9	986.7	982.5	971.0
3°	1021.4	1019.3	1017.2	1016.1	1009.8	1004.6	1000.4	993.0	986.7	981.5	964.7
4°	1032.9	1032.9	1030.8	1026.6	1020.3	1014.0	1005.6	997.2	987.8	978.3	956.3
5°	1046.6	1047.6	1038.2	1037.1	1029.8	1020.3	1010.9	999.3	987.8	975.2	951.1
6°	1060.2	1055.0	1052.9	1045.5	1035.0	1026.6	1015.1	1002.5	986.7	972.0	939.5
7°	1066.5	1065.5	1060.2	1052.9	1043.4	1029.8	1018.2	1001.4	984.6	969.9	931.1
8°	1077.0	1077.0	1070.7	1061.3	1047.6	1035.0	1020.3	1000.4	983.6	964.7	919.6
9°	1084.4	1084.4	1076.0	1067.6	1055.0	1038.2	1021.4	999.3	978.3	956.3	909.1
10°	1092.8	1090.7	1084.4	1071.8	1061.3	1042.4	1021.4	998.3	975.2	950.0	898.6
11°	1099.1	1095.9	1088.6	1079.1	1062.3	1043.4	1021.4	998.3	971.0	943.7	888.1
12°	1104.3	1102.2	1092.8	1081.2	1064.4	1045.5	1020.3	994.1	963.6	935.3	874.4
13°	1110.6	1104.3	1094.9	1084.4	1065.5	1043.4	1016.1	987.8	958.4	928.0	862.9
14°	1109.6	1108.5	1100.1	1085.4	1064.4	1041.3	1015.1	981.5	951.1	919.6	849.2
15°	1110.6	1109.6	1100.1	1086.5	1063.4	1038.2	1011.9	977.3	943.7	910.1	835.6
16°	1110.6	1110.6	1098.0	1084.4	1062.3	1035.0	1005.6	973.1	936.4	902.8	824.0
17°	1110.6	1110.6	1100.1	1081.2	1059.2	1032.9	999.3	964.7	928.0	892.3	807.2
18°	1112.7	1109.6	1095.9	1080.2	1055.0	1027.7	995.1	958.4	920.6	880.7	795.7
19°	1107.5	1105.4	1093.8	1073.9	1051.8	1021.4	988.8	951.1	913.3	871.3	782.0
20°	1104.3	1107.5	1091.7	1070.7	1045.5	1016.1	982.5	943.7	902.8	860.8	768.4
21°	1105.4	1104.3	1087.5	1065.5	1041.3	1008.8	975.2	935.3	891.2	848.2	755.8
22.5°	1103.3	1100.1	1082.3	1058.1	1028.7	999.3	962.6	921.7	874.4	826.1	731.7
23°	1099.1	1095.9	1082.3	1056.0	1024.5	995.1	956.3	913.3	868.1	818.8	725.4
24°	1082.3	1081.2	1074.9	1048.7	1019.3	986.7	949.0	899.6	849.2	797.8	709.6
25°	1062.3	1064.4	1061.3	1044.5	1010.9	977.3	937.4	882.8	831.4	784.1	690.7
26°	1043.4	1043.4	1041.3	1035.0	1002.5	966.8	920.6	862.9	813.5	764.2	670.8
27°	1019.3	1023.5	1019.3	1016.1	994.1	955.3	902.8	849.2	793.6	745.3	654.0
28°	1000.4	1000.4	998.3	993.0	985.7	941.6	883.9	829.3	774.7	728.5	635.1
29°	966.8	973.1	974.1	975.2	974.1	923.8	866.0	807.2	754.8	704.4	617.2
30°	936.4	942.7	946.9	954.2	955.3	908.0	845.0	789.4	735.9	686.5	601.5
32.5°	853.4	865.0	876.5	889.1	895.4	860.8	793.6	732.7	678.1	634.0	553.2
35°	774.7	777.8	790.4	819.8	826.1	804.1	732.7	675.0	623.5	581.5	508.1
37.5°	685.5	691.8	709.6	743.2	745.3	727.5	678.1	610.9	562.7	525.9	461.9
40°	612.0	615.1	627.7	656.1	665.5	654.0	610.9	550.1	506.0	470.3	417.8
42.5°	538.5	542.7	558.5	580.5	594.1	580.5	542.7	490.2	447.2	420.9	375.8
45°	477.6	482.9	497.6	510.2	514.4	506.0	472.4	429.3	398.9	371.6	337.0
47.5°	425.1	430.4	440.9	446.1	451.4	443.0	416.7	381.1	350.6	328.6	297.1
50°	385.2	384.2	391.5	393.6	393.6	384.2	362.2	332.8	307.6	289.7	263.5
52.5°	340.1	342.2	347.5	345.4	344.3	335.9	317.0	291.8	270.8	255.1	230.9
55°	307.6	304.4	307.6	305.5	301.3	292.9	276.1	255.1	237.2	223.6	201.5
57.5°	271.9	271.9	272.9	268.7	263.5	254.0	239.3	222.5	206.8	195.2	177.4
60°	239.3	241.4	240.4	236.2	230.9	220.4	208.9	192.1	178.5	170.1	153.3



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
67.5°	162.7	162.7	159.6	156.4	149.1	139.6	131.2	120.7	113.4	106.0	95.5
70°	138.6	140.7	136.5	131.2	126.0	119.7	110.2	101.8	94.5	89.2	80.8
72.5°	119.7	118.6	115.5	110.2	106.0	98.7	90.3	84.0	77.7	73.5	67.2
75°	98.7	98.7	95.5	91.3	86.1	79.8	73.5	68.2	63.0	58.8	55.6
77.5°	78.7	79.8	76.6	73.5	69.3	63.0	57.7	53.5	49.3	46.2	44.1
80°	60.9	61.9	58.8	56.7	51.4	48.3	44.1	39.9	36.7	34.6	33.6
82.5°	46.2	45.1	43.0	42.0	37.8	34.6	30.4	28.3	26.2	24.1	24.1
85°	30.4	29.4	28.3	27.3	24.1	21.0	19.9	17.8	15.7	14.7	14.7
87.5°	15.7	15.7	14.7	13.6	12.6	10.5	9.4	7.3	6.3	6.3	6.3
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°	980.4	980.4	980.4
1°	976.2	972.0	971.0
2°	963.6	957.4	958.4
3°	952.1	944.8	937.4
4°	937.4	925.9	925.9
5°	924.8	913.3	910.1
6°	913.3	894.4	890.2
7°	902.8	879.7	872.3
8°	884.9	861.8	854.5
9°	872.3	847.1	839.8
10°	855.5	830.3	816.7
11°	841.9	813.5	803.0
12°	827.2	792.5	782.0
13°	810.4	774.7	768.4
14°	794.6	760.0	748.5
15°	777.8	742.2	728.5
16°	760.0	724.3	711.7
17°	745.3	705.4	696.0
18°	730.6	688.6	673.9
19°	712.8	672.9	656.1
20°	697.0	652.9	639.3
21°	680.2	638.2	623.5
22.5°	657.1	609.9	596.2
23°	649.8	601.5	586.8
24°	633.0	584.7	572.1
25°	616.2	572.1	558.5
26°	601.5	553.2	540.6
27°	586.8	538.5	524.9
28°	571.1	522.8	512.3
29°	555.3	506.0	495.5
30°	538.5	494.4	476.6
32.5°	496.5	456.6	441.9
35°	455.6	420.9	408.3
37.5°	415.7	387.3	375.8
40°	381.1	355.9	344.3
42.5°	345.4	322.3	310.7
45°	308.6	289.7	278.2
47.5°	275.0	259.3	246.7
50°	244.6	228.8	222.5
52.5°	215.2	204.7	207.8
55°	187.9	187.9	186.9
57.5°	161.7	169.0	170.1
60°	141.7	151.2	153.3



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
67.5°	97.6	102.9	105.0
70°	84.0	88.2	89.2
72.5°	71.4	74.5	76.6
75°	57.7	61.9	61.9
77.5°	47.2	49.3	50.4
80°	35.7	36.7	37.8
82.5°	25.2	26.2	27.3
85°	14.7	15.7	16.8
87.5°	6.3	6.3	6.3
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°	212.0	214.1	211.0	205.7	200.5	191.1	180.6	165.9	155.4	147.0	132.3
65°	185.8	186.9	184.8	179.5	174.3	164.8	154.3	141.7	133.3	124.9	112.3

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62.5°	127.0	134.4	135.4
65°	111.3	117.6	118.6

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Scaled Data Report



(END OF REPORT)