

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: P838486

Luminaire Tested: HCSQ625D010-HM60525935-61SQLWW

Issue Date: 5/21/2024



**Test Information**

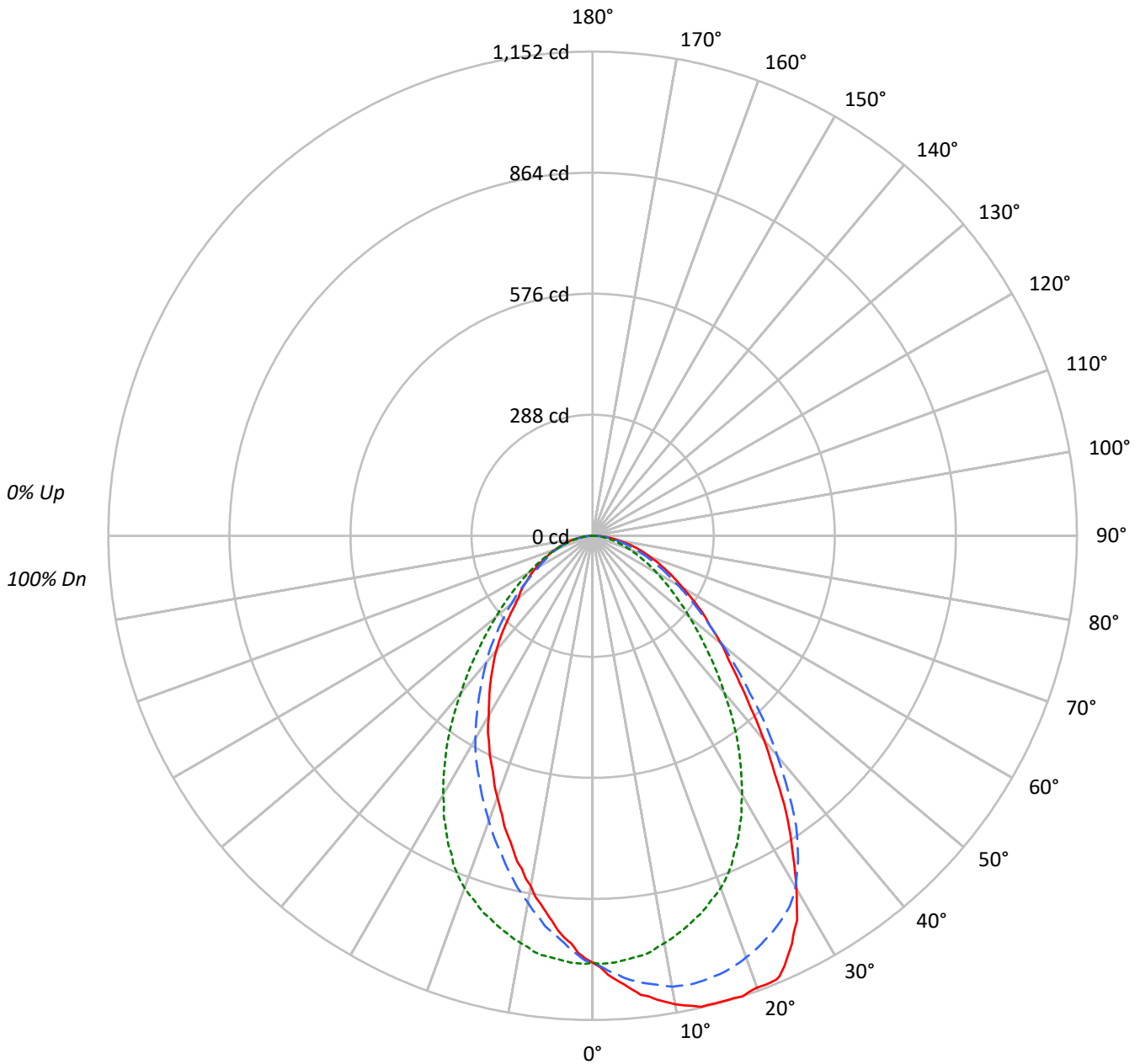
Test Method: LM-79-2019  
Report Number: P838486  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2309-166-5)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 5/21/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO COMMERCIAL  
Catalog Number: HCSQ625D010-HM60525935-61SQLWW  
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, LENSED WALLWASH TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1920.4 lumens  
Efficiency: N/A  
Efficacy: 69.3 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	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°	98377	98377	98377	98377	98377
5°	105414	103250	98228	93151	91673
10°	111345	107174	96796	87175	83211
15°	115377	109154	94546	80806	75681
20°	117917	110077	91917	74433	68268
25°	117622	110065	86816	68217	61825
30°	108495	107941	79545	62397	55215
35°	94894	99850	71242	55808	50025
40°	80164	86424	61600	49915	45096
45°	67775	72399	52732	43800	39470
50°	60134	60714	45228	38175	34739
55°	53811	51978	39117	32867	32682
60°	48031	45289	34120	28443	30748
65°	44126	40252	29662	26430	28172
70°	40646	36043	26172	24642	26172
75°	38253	32152	22795	22383	24030
80°	35202	28815	20028	20642	21813
85°	35013	25954	16895	16895	19340

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 40°  
 Vertical Angle: 45°  
 Luminance: 72995 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	95.8	5.0
10°-20°	267.0	13.9
20°-30°	380.8	19.8
30°-40°	392.5	20.4
40°-50°	315.9	16.5
50°-60°	223.4	11.6
60°-70°	144.8	7.5
70°-80°	77.8	4.1
80°-90°	22.5	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°	743.6	38.7
0°-40°	1136.0	59.2
0°-60°	1675.4	87.2
0°-90°	1920.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1920.4	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1016	1016	1016	1016	1016	
5°	1084	1062	1010	958	943	105
15°	1150	1088	943	806	755	325
25°	1100	1030	812	638	578	501
35°	802	844	602	472	423	498
45°	495	528	385	320	288	387
55°	319	308	232	195	194	285
65°	192	176	129	115	123	192
75°	102	86	61	60	64	108
85°	32	23	15	15	17	35
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°	1015.5	1015.5	1015.5	1015.5	1015.5	1015.5	1015.5	1015.5	1015.5	1015.5	1015.5
1°	1026.4	1030.8	1027.5	1027.5	1024.2	1023.2	1025.3	1022.1	1021.0	1018.8	1014.5
2°	1044.9	1041.6	1040.5	1041.6	1035.1	1035.1	1031.9	1025.3	1022.1	1017.7	1005.8
3°	1057.9	1055.8	1053.6	1052.5	1046.0	1040.5	1036.2	1028.6	1022.1	1016.6	999.2
4°	1069.9	1069.9	1067.7	1063.4	1056.9	1050.3	1041.6	1032.9	1023.2	1013.4	990.5
5°	1084.0	1085.1	1075.3	1074.3	1066.6	1056.9	1047.1	1035.1	1023.2	1010.1	985.1
6°	1098.2	1092.7	1090.6	1083.0	1072.1	1063.4	1051.4	1038.4	1022.1	1006.8	973.1
7°	1104.7	1103.6	1098.2	1090.6	1080.8	1066.6	1054.7	1037.3	1019.9	1004.7	964.4
8°	1115.6	1115.6	1109.0	1099.3	1085.1	1072.1	1056.9	1036.2	1018.8	999.2	952.5
9°	1123.2	1123.2	1114.5	1105.8	1092.7	1075.3	1057.9	1035.1	1013.4	990.5	941.6
10°	1131.9	1129.7	1123.2	1110.1	1099.3	1079.7	1057.9	1034.0	1010.1	984.0	930.7
11°	1138.4	1135.1	1127.5	1117.7	1100.4	1080.8	1057.9	1034.0	1005.8	977.5	919.9
12°	1143.8	1141.7	1131.9	1119.9	1102.5	1083.0	1056.9	1029.7	998.1	968.8	905.7
13°	1150.4	1143.8	1134.1	1123.2	1103.6	1080.8	1052.5	1023.2	992.7	961.2	893.8
14°	1149.3	1148.2	1139.5	1124.3	1102.5	1078.6	1051.4	1016.6	985.1	952.5	879.6
15°	1150.4	1149.3	1139.5	1125.4	1101.4	1075.3	1048.2	1012.3	977.5	942.7	865.5
16°	1150.4	1150.4	1137.3	1123.2	1100.4	1072.1	1041.6	1007.9	969.9	935.1	853.5
17°	1150.4	1150.4	1139.5	1119.9	1097.1	1069.9	1035.1	999.2	961.2	924.2	836.1
18°	1152.5	1149.3	1135.1	1118.8	1092.7	1064.5	1030.8	992.7	953.6	912.2	824.2
19°	1147.1	1144.9	1133.0	1112.3	1089.5	1057.9	1024.2	985.1	946.0	902.5	810.0
20°	1143.8	1147.1	1130.8	1109.0	1083.0	1052.5	1017.7	977.5	935.1	891.6	795.9
21°	1144.9	1143.8	1126.4	1103.6	1078.6	1044.9	1010.1	968.8	923.1	878.5	782.9
22.5°	1142.8	1139.5	1121.0	1096.0	1065.6	1035.1	997.1	954.7	905.7	855.7	757.9
23°	1138.4	1135.1	1121.0	1093.8	1061.2	1030.8	990.5	946.0	899.2	848.1	751.3
24°	1121.0	1119.9	1113.4	1086.2	1055.8	1022.1	982.9	931.8	879.6	826.4	735.0
25°	1100.4	1102.5	1099.3	1081.9	1047.1	1012.3	971.0	914.4	861.1	812.2	715.4
26°	1080.8	1080.8	1078.6	1072.1	1038.4	1001.4	953.6	893.8	842.7	791.6	694.8
27°	1055.8	1060.1	1055.8	1052.5	1029.7	989.4	935.1	879.6	822.0	772.0	677.4
28°	1036.2	1036.2	1034.0	1028.6	1021.0	975.3	915.5	859.0	802.4	754.6	657.8
29°	1001.4	1007.9	1009.0	1010.1	1009.0	956.8	897.0	836.1	781.8	729.6	639.3
30°	969.9	976.4	980.7	988.4	989.4	940.5	875.3	817.7	762.2	711.1	623.0
32.5°	884.0	895.9	907.9	920.9	927.5	891.6	822.0	758.9	702.4	656.7	573.0
35°	802.4	805.7	818.7	849.2	855.7	832.9	758.9	699.1	645.9	602.4	526.3
37.5°	710.0	716.5	735.0	769.8	772.0	753.5	702.4	632.8	582.8	544.7	478.4
40°	633.9	637.2	650.2	679.6	689.4	677.4	632.8	569.7	524.1	487.1	432.7
42.5°	557.8	562.1	578.4	601.3	615.4	601.3	562.1	507.8	463.2	436.0	389.3
45°	494.7	500.2	515.4	528.4	532.8	524.1	489.3	444.7	413.2	384.9	349.0
47.5°	440.4	445.8	456.7	462.1	467.5	458.8	431.7	394.7	363.2	340.3	307.7
50°	399.0	398.0	405.6	407.7	407.7	398.0	375.1	344.7	318.6	300.1	272.9
52.5°	352.3	354.5	359.9	357.7	356.6	347.9	328.4	302.3	280.5	264.2	239.2
55°	318.6	315.3	318.6	316.4	312.1	303.4	286.0	264.2	245.7	231.6	208.8
57.5°	281.6	281.6	282.7	278.3	272.9	263.1	247.9	230.5	214.2	202.2	183.8
60°	247.9	250.1	249.0	244.6	239.2	228.3	216.4	199.0	184.8	176.1	158.7



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
67.5°	168.5	168.5	165.3	162.0	154.4	144.6	135.9	125.0	117.4	109.8	98.9
70°	143.5	145.7	141.3	135.9	130.5	124.0	114.2	105.5	97.9	92.4	83.7
72.5°	124.0	122.9	119.6	114.2	109.8	102.2	93.5	87.0	80.5	76.1	69.6
75°	102.2	102.2	98.9	94.6	89.2	82.6	76.1	70.7	65.2	60.9	57.6
77.5°	81.5	82.6	79.4	76.1	71.8	65.2	59.8	55.5	51.1	47.8	45.7
80°	63.1	64.2	60.9	58.7	53.3	50.0	45.7	41.3	38.1	35.9	34.8
82.5°	47.8	46.8	44.6	43.5	39.1	35.9	31.5	29.4	27.2	25.0	25.0
85°	31.5	30.4	29.4	28.3	25.0	21.7	20.7	18.5	16.3	15.2	15.2
87.5°	16.3	16.3	15.2	14.1	13.0	10.9	9.8	7.6	6.5	6.5	6.5
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°	1015.5	1015.5	1015.5
1°	1011.2	1006.8	1005.8
2°	998.1	991.6	992.7
3°	986.2	978.6	971.0
4°	971.0	959.0	959.0
5°	957.9	946.0	942.7
6°	946.0	926.4	922.0
7°	935.1	911.2	903.5
8°	916.6	892.7	885.1
9°	903.5	877.5	869.8
10°	886.2	860.1	845.9
11°	872.0	842.7	831.8
12°	856.8	820.9	810.0
13°	839.4	802.4	795.9
14°	823.1	787.2	775.2
15°	805.7	768.7	754.6
16°	787.2	750.2	737.2
17°	772.0	730.7	720.9
18°	756.8	713.3	698.0
19°	738.3	697.0	679.6
20°	722.0	676.3	662.2
21°	704.6	661.1	645.9
22.5°	680.7	631.7	617.6
23°	673.0	623.0	607.8
24°	655.6	605.6	592.6
25°	638.2	592.6	578.4
26°	623.0	573.0	560.0
27°	607.8	557.8	543.7
28°	591.5	541.5	530.6
29°	575.2	524.1	513.2
30°	557.8	512.1	493.6
32.5°	514.3	473.0	457.8
35°	471.9	436.0	423.0
37.5°	430.6	401.2	389.3
40°	394.7	368.6	356.6
42.5°	357.7	333.8	321.8
45°	319.7	300.1	288.1
47.5°	284.9	268.6	255.5
50°	253.3	237.0	230.5
52.5°	222.9	212.0	215.3
55°	194.6	194.6	193.5
57.5°	167.4	175.1	176.1
60°	146.8	156.6	158.7





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**CANDELA DISTRIBUTION (continued):**

	135°	157.5°	180°
67.5°	101.1	106.6	108.7
70°	87.0	91.3	92.4
72.5°	73.9	77.2	79.4
75°	59.8	64.2	64.2
77.5°	48.9	51.1	52.2
80°	37.0	38.1	39.1
82.5°	26.1	27.2	28.3
85°	15.2	16.3	17.4
87.5°	6.5	6.5	6.5
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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Scaled Data Report





62.5°	219.6	221.8	218.5	213.1	207.7	197.9	187.0	171.8	160.9	152.2	137.0
65°	192.5	193.5	191.4	185.9	180.5	170.7	159.8	146.8	138.1	129.4	116.3

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62.5°	131.6	139.2	140.3
65°	115.3	121.8	122.9

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Scaled Data Report



(END OF REPORT)