

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: P838261

Luminaire Tested: HCSQ605D010-HM60525830-61SQLWW

Issue Date: 5/21/2024



**Test Information**

Test Method: LM-79-2019  
Report Number: P838261  
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: HCSQ605D010-HM60525830-61SQLWW  
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, LENSED WALLWASH TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT  
Ballast/Driver: -

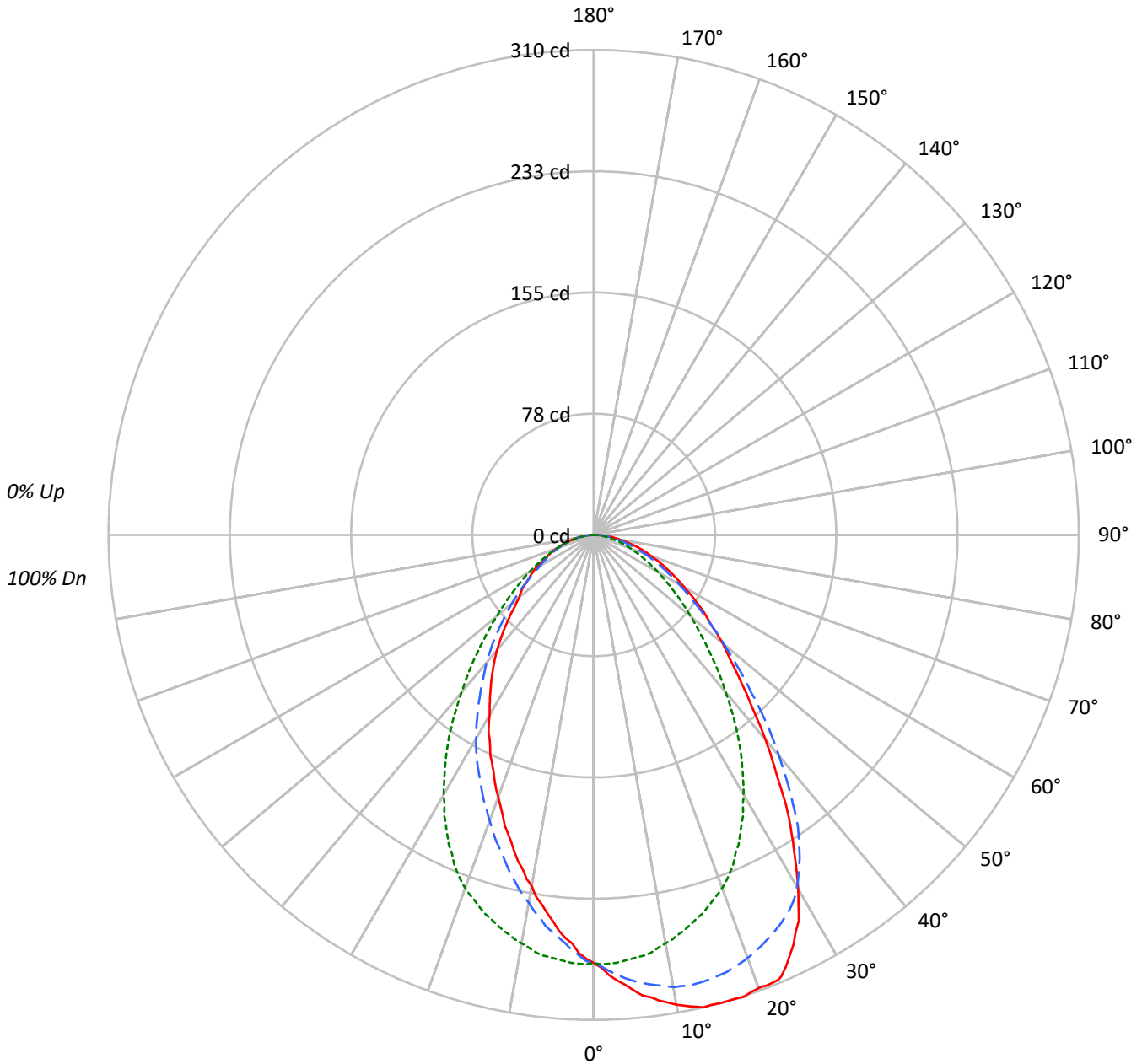
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 517.4 lumens  
Efficiency: N/A  
Efficacy: 86.2 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): 6  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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																			
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°	26505	26505	26505	26505	26505
5°	28405	27822	26470	25099	24700
10°	30003	28876	26078	23491	22418
15°	31091	29411	25474	21774	20390
20°	31773	29660	24763	20052	18392
25°	31693	29651	23388	18385	16664
30°	29230	29084	21433	16813	14878
35°	25568	26905	19194	15031	13482
40°	21600	23282	16592	13443	12153
45°	18262	19509	14207	11796	10631
50°	16201	16360	12193	10294	9359
55°	14491	14002	10539	8850	8800
60°	12943	12206	9203	7673	8293
65°	11897	10842	8000	7129	7587
70°	10962	9715	7053	6628	7053
75°	10293	8665	6138	6026	6475
80°	9484	7782	5411	5579	5858
85°	9448	7003	4557	4557	5224

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 40°  
 Vertical Angle: 45°  
 Luminance: 19674 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	25.8	5.0
10°-20°	71.9	13.9
20°-30°	102.6	19.8
30°-40°	105.7	20.4
40°-50°	85.1	16.5
50°-60°	60.2	11.6
60°-70°	39.0	7.5
70°-80°	21.0	4.1
80°-90°	6.1	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°	200.3	38.7
0°-40°	306.1	59.2
0°-60°	451.4	87.2
0°-90°	517.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	517.4	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	274	274	274	274	274	
5°	292	286	272	258	254	28
15°	310	293	254	217	203	88
25°	296	277	219	172	156	135
35°	216	228	162	127	114	134
45°	133	142	104	86	78	104
55°	86	83	62	52	52	77
65°	52	47	35	31	33	52
75°	28	23	16	16	17	29
85°	8	6	4	4	5	9
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°	273.6	273.6	273.6	273.6	273.6	273.6	273.6	273.6	273.6	273.6	273.6
1°	276.6	277.7	276.9	276.9	276.0	275.7	276.3	275.4	275.1	274.5	273.3
2°	281.5	280.7	280.4	280.7	278.9	278.9	278.0	276.3	275.4	274.2	271.0
3°	285.1	284.5	283.9	283.6	281.8	280.4	279.2	277.1	275.4	273.9	269.2
4°	288.3	288.3	287.7	286.5	284.8	283.0	280.7	278.3	275.7	273.0	266.9
5°	292.1	292.4	289.7	289.4	287.4	284.8	282.1	278.9	275.7	272.2	265.4
6°	295.9	294.4	293.8	291.8	288.9	286.5	283.3	279.8	275.4	271.3	262.2
7°	297.7	297.4	295.9	293.8	291.2	287.4	284.2	279.5	274.8	270.7	259.9
8°	300.6	300.6	298.8	296.2	292.4	288.9	284.8	279.2	274.5	269.2	256.6
9°	302.6	302.6	300.3	297.9	294.4	289.7	285.1	278.9	273.0	266.9	253.7
10°	305.0	304.4	302.6	299.1	296.2	290.9	285.1	278.6	272.2	265.1	250.8
11°	306.7	305.9	303.8	301.2	296.5	291.2	285.1	278.6	271.0	263.4	247.8
12°	308.2	307.6	305.0	301.8	297.1	291.8	284.8	277.4	268.9	261.0	244.0
13°	310.0	308.2	305.6	302.6	297.4	291.2	283.6	275.7	267.5	259.0	240.8
14°	309.7	309.4	307.0	302.9	297.1	290.6	283.3	273.9	265.4	256.6	237.0
15°	310.0	309.7	307.0	303.2	296.8	289.7	282.4	272.7	263.4	254.0	233.2
16°	310.0	310.0	306.4	302.6	296.5	288.9	280.7	271.6	261.3	251.9	230.0
17°	310.0	310.0	307.0	301.8	295.6	288.3	278.9	269.2	259.0	249.0	225.3
18°	310.5	309.7	305.9	301.5	294.4	286.8	277.7	267.5	256.9	245.8	222.1
19°	309.1	308.5	305.3	299.7	293.5	285.1	276.0	265.4	254.9	243.2	218.3
20°	308.2	309.1	304.7	298.8	291.8	283.6	274.2	263.4	251.9	240.2	214.4
21°	308.5	308.2	303.5	297.4	290.6	281.5	272.2	261.0	248.7	236.7	210.9
22.5°	307.9	307.0	302.0	295.3	287.1	278.9	268.6	257.2	244.0	230.6	204.2
23°	306.7	305.9	302.0	294.7	285.9	277.7	266.9	254.9	242.3	228.5	202.4
24°	302.0	301.8	300.0	292.7	284.5	275.4	264.8	251.1	237.0	222.7	198.0
25°	296.5	297.1	296.2	291.5	282.1	272.7	261.6	246.4	232.0	218.8	192.8
26°	291.2	291.2	290.6	288.9	279.8	269.8	256.9	240.8	227.0	213.3	187.2
27°	284.5	285.6	284.5	283.6	277.4	266.6	251.9	237.0	221.5	208.0	182.5
28°	279.2	279.2	278.6	277.1	275.1	262.8	246.7	231.4	216.2	203.3	177.2
29°	269.8	271.6	271.9	272.2	271.9	257.8	241.7	225.3	210.6	196.6	172.3
30°	261.3	263.1	264.3	266.3	266.6	253.4	235.8	220.3	205.4	191.6	167.9
32.5°	238.2	241.4	244.6	248.1	249.9	240.2	221.5	204.5	189.3	176.9	154.4
35°	216.2	217.1	220.6	228.8	230.6	224.4	204.5	188.4	174.0	162.3	141.8
37.5°	191.3	193.1	198.0	207.4	208.0	203.0	189.3	170.5	157.0	146.8	128.9
40°	170.8	171.7	175.2	183.1	185.7	182.5	170.5	153.5	141.2	131.2	116.6
42.5°	150.3	151.5	155.9	162.0	165.8	162.0	151.5	136.8	124.8	117.5	104.9
45°	133.3	134.8	138.9	142.4	143.6	141.2	131.8	119.8	111.3	103.7	94.0
47.5°	118.7	120.1	123.0	124.5	126.0	123.6	116.3	106.3	97.8	91.7	82.9
50°	107.5	107.2	109.3	109.9	109.9	107.2	101.1	92.9	85.8	80.9	73.5
52.5°	94.9	95.5	97.0	96.4	96.1	93.7	88.5	81.4	75.6	71.2	64.5
55°	85.8	85.0	85.8	85.3	84.1	81.7	77.0	71.2	66.2	62.4	56.2
57.5°	75.9	75.9	76.2	75.0	73.5	70.9	66.8	62.1	57.7	54.5	49.5
60°	66.8	67.4	67.1	65.9	64.5	61.5	58.3	53.6	49.8	47.5	42.8



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
67.5°	45.4	45.4	44.5	43.7	41.6	39.0	36.6	33.7	31.6	29.6	26.7
70°	38.7	39.3	38.1	36.6	35.2	33.4	30.8	28.4	26.4	24.9	22.6
72.5°	33.4	33.1	32.2	30.8	29.6	27.5	25.2	23.4	21.7	20.5	18.7
75°	27.5	27.5	26.7	25.5	24.0	22.3	20.5	19.0	17.6	16.4	15.5
77.5°	22.0	22.3	21.4	20.5	19.3	17.6	16.1	14.9	13.8	12.9	12.3
80°	17.0	17.3	16.4	15.8	14.4	13.5	12.3	11.1	10.3	9.7	9.4
82.5°	12.9	12.6	12.0	11.7	10.5	9.7	8.5	7.9	7.3	6.7	6.7
85°	8.5	8.2	7.9	7.6	6.7	5.9	5.6	5.0	4.4	4.1	4.1
87.5°	4.4	4.4	4.1	3.8	3.5	2.9	2.6	2.1	1.8	1.8	1.8
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°	273.6	273.6	273.6
1°	272.5	271.3	271.0
2°	268.9	267.2	267.5
3°	265.7	263.7	261.6
4°	261.6	258.4	258.4
5°	258.1	254.9	254.0
6°	254.9	249.6	248.4
7°	251.9	245.5	243.5
8°	247.0	240.5	238.5
9°	243.5	236.4	234.4
10°	238.8	231.7	227.9
11°	235.0	227.0	224.1
12°	230.9	221.2	218.3
13°	226.2	216.2	214.4
14°	221.8	212.1	208.9
15°	217.1	207.1	203.3
16°	212.1	202.1	198.6
17°	208.0	196.9	194.2
18°	203.9	192.2	188.1
19°	198.9	187.8	183.1
20°	194.5	182.2	178.4
21°	189.8	178.1	174.0
22.5°	183.4	170.2	166.4
23°	181.3	167.9	163.8
24°	176.7	163.2	159.7
25°	172.0	159.7	155.9
26°	167.9	154.4	150.9
27°	163.8	150.3	146.5
28°	159.4	145.9	143.0
29°	155.0	141.2	138.3
30°	150.3	138.0	133.0
32.5°	138.6	127.4	123.3
35°	127.1	117.5	114.0
37.5°	116.0	108.1	104.9
40°	106.3	99.3	96.1
42.5°	96.4	89.9	86.7
45°	86.1	80.9	77.6
47.5°	76.8	72.4	68.8
50°	68.3	63.9	62.1
52.5°	60.1	57.1	58.0
55°	52.4	52.4	52.1
57.5°	45.1	47.2	47.5
60°	39.6	42.2	42.8





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**CANDELA DISTRIBUTION (continued):**

	135°	157.5°	180°
67.5°	27.2	28.7	29.3
70°	23.4	24.6	24.9
72.5°	19.9	20.8	21.4
75°	16.1	17.3	17.3
77.5°	13.2	13.8	14.1
80°	10.0	10.3	10.5
82.5°	7.0	7.3	7.6
85°	4.1	4.4	4.7
87.5°	1.8	1.8	1.8
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



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Scaled Data Report





62.5°	59.2	59.8	58.9	57.4	56.0	53.3	50.4	46.3	43.4	41.0	36.9
65°	51.9	52.1	51.6	50.1	48.6	46.0	43.1	39.6	37.2	34.9	31.3

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62.5°	35.4	37.5	37.8
65°	31.1	32.8	33.1

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Scaled Data Report



(END OF REPORT)