

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: P838459

Luminaire Tested: HCSQ625D010-HM60525830-61SQC

Issue Date: 5/21/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P838459  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2309-166-1)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 5/21/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO COMMERCIAL  
Catalog Number: HCSQ625D010-HM60525830-61SQC  
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, SPECULAR CLEAR TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT  
Ballast/Driver: -

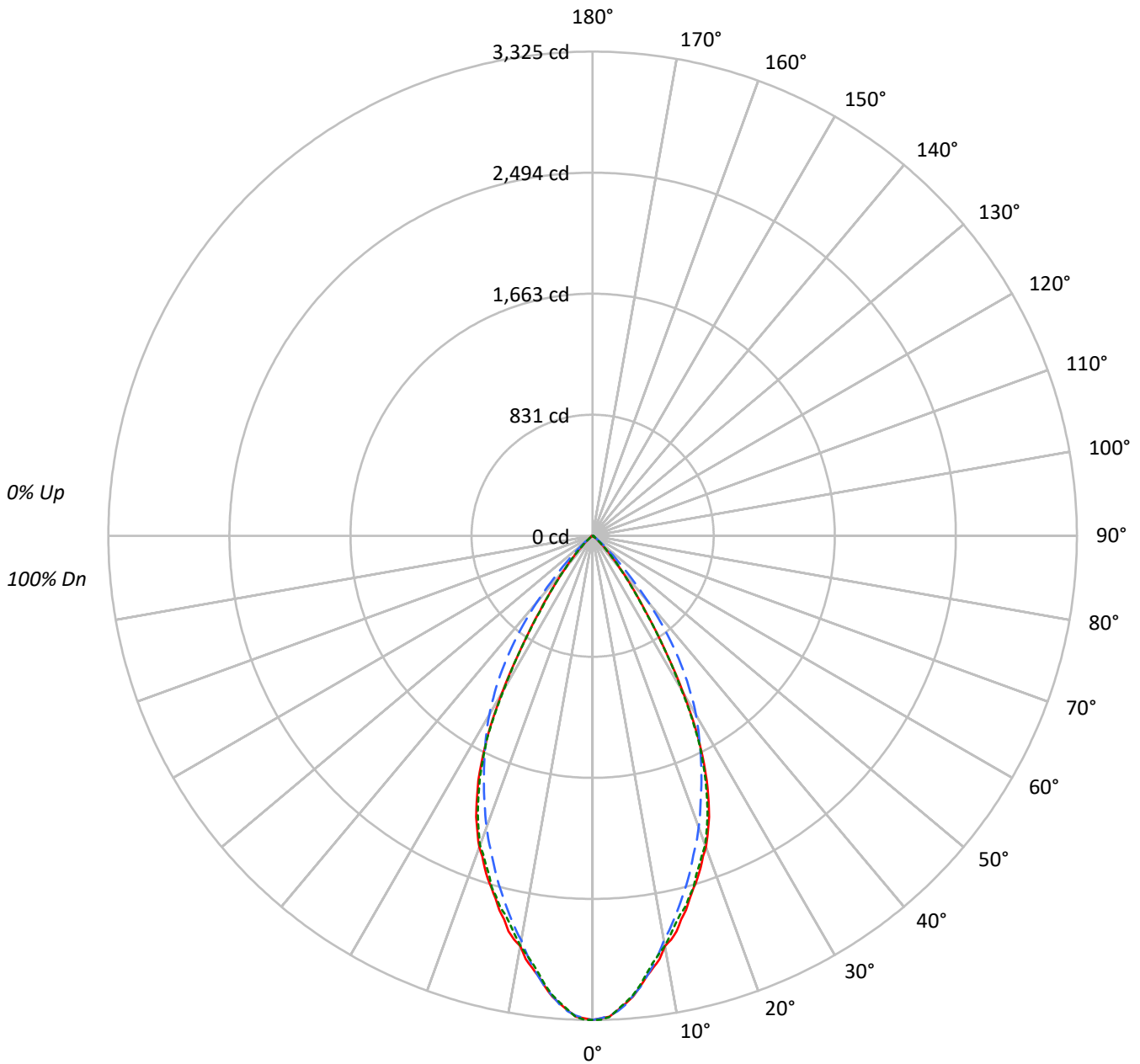
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2490.3 lumens  
Efficiency: N/A  
Efficacy: 89.9 lumens/watt  
Spacing Criteria (0/90/45): 0.82 / 0.81 / 0.85  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 27.7  
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	114	111	108	106	111	109	107	105	105	103	101	101	100	98	98	96	95	94																			
2	108	103	99	96	106	102	98	95	98	95	93	95	93	91	93	91	89	87																			
3	103	97	92	88	101	95	91	87	93	89	86	90	87	84	88	85	83	81																			
4	98	90	85	81	96	89	84	80	87	83	79	85	81	78	83	80	78	76																			
5	93	85	79	75	91	84	78	74	82	77	74	80	76	73	79	75	72	71																			
6	88	80	74	70	87	79	73	69	77	72	69	76	72	68	75	71	68	66																			
7	84	75	69	65	83	74	69	65	73	68	64	72	67	64	71	67	64	62																			
8	80	71	65	61	79	70	65	61	69	64	60	68	64	60	67	63	60	59																			
9	76	67	61	57	75	66	61	57	65	60	57	65	60	57	64	60	56	55																			
10	73	63	58	54	72	63	57	54	62	57	54	61	57	53	61	56	53	52																			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	143151	143151	143151
5°	137315	137077	136882
10°	125065	123369	124969
15°	114940	110732	114244
20°	104307	97590	103596
25°	88153	83883	86942
30°	61723	70612	60674
35°	33156	54164	32509
40°	16418	33515	16288
45°	7167	14133	7033
50°	2304	5131	2304
55°	1164	1666	1081
60°	766	766	766
65°	571	571	571
70°	415	415	415
75°	366	366	366
80°	273	273	273
85°	543	543	543

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 14133 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	292.0	11.7
10°-20°	705.0	28.3
20°-30°	814.4	32.7
30°-40°	508.6	20.4
40°-50°	141.3	5.7
50°-60°	19.8	0.8
60°-70°	5.8	0.2
70°-80°	2.5	0.1
80°-90°	1.0	0.0
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°	1811.4	72.7
0°-40°	2319.9	93.2
0°-60°	2481.0	99.6
0°-90°	2490.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2490.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3325	3325	3325	3325	3325	
5°	3177	3168	3172	3167	3167	293
15°	2579	2530	2484	2523	2563	722
25°	1856	1801	1766	1800	1830	829
35°	631	778	1030	770	618	419
45°	118	150	232	149	116	102
55°	16	16	22	16	14	15
65°	6	6	6	6	6	6
75°	2	2	2	2	2	2
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°	3324.8	3324.8	3324.8	3324.8	3324.8
1°	3314.8	3314.8	3314.8	3323.7	3323.7
2°	3304.8	3302.6	3297.1	3303.7	3307.1
3°	3263.7	3268.2	3270.4	3267.1	3259.3
4°	3221.5	3217.1	3229.3	3221.5	3214.9
5°	3177.1	3168.2	3171.6	3167.1	3167.1
6°	3114.9	3126.0	3117.2	3109.4	3104.9
7°	3047.2	3056.1	3050.5	3039.4	3031.7
8°	2993.9	2988.3	2979.5	2977.2	2963.9
9°	2942.8	2922.8	2902.8	2906.2	2909.5
10°	2860.6	2862.9	2821.8	2852.9	2858.4
11°	2826.2	2814.0	2759.6	2785.1	2794.0
12°	2776.2	2737.4	2690.7	2711.8	2728.5
13°	2704.1	2664.1	2621.9	2654.1	2670.7
14°	2649.6	2604.1	2550.8	2591.9	2626.3
15°	2578.6	2529.7	2484.2	2523.0	2563.0
16°	2516.4	2459.7	2414.2	2452.0	2511.9
17°	2462.0	2392.0	2336.5	2376.5	2434.2
18°	2398.7	2317.6	2266.5	2308.7	2374.2
19°	2328.7	2246.5	2201.0	2235.4	2310.9
20°	2276.5	2184.3	2129.9	2163.2	2261.0
22.5°	2090.0	1993.3	1943.4	1983.3	2061.1
25°	1855.6	1801.2	1765.7	1800.1	1830.1
27.5°	1578.0	1578.0	1590.2	1575.8	1566.9
30°	1241.5	1331.5	1420.3	1327.0	1220.4
32.5°	906.2	1050.5	1229.3	1069.4	905.1
35°	630.8	778.5	1030.5	769.6	618.5
37.5°	438.6	536.4	812.9	541.9	433.1
40°	292.1	359.8	596.3	366.5	289.8
42.5°	191.0	237.6	385.3	238.8	186.6
45°	117.7	149.9	232.1	148.8	115.5
47.5°	68.9	88.8	135.5	90.0	67.7
50°	34.4	52.2	76.6	51.1	34.4
52.5°	20.0	27.8	42.2	26.7	20.0
55°	15.5	15.5	22.2	15.5	14.4
57.5°	12.2	12.2	12.2	12.2	11.1
60°	8.9	10.0	8.9	8.9	8.9
62.5°	7.8	7.8	6.7	7.8	6.7
65°	5.6	5.6	5.6	5.6	5.6
67.5°	4.4	4.4	4.4	4.4	4.4
70°	3.3	3.3	3.3	3.3	3.3
72.5°	2.2	3.3	2.2	3.3	3.3
75°	2.2	2.2	2.2	2.2	2.2



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
82.5°	1.1	1.1	1.1	1.1	1.1
85°	1.1	1.1	1.1	1.1	1.1
87.5°	1.1	1.1	1.1	1.1	1.1
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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Scaled Data Report





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

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Scaled Data Report





77.5°	2.2	2.2	2.2	2.2	1.1
80°	1.1	1.1	1.1	1.1	1.1

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Scaled Data Report



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