

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: P838469

Luminaire Tested: HCSQ625D010-HM60525840-61SQC

Issue Date: 5/21/2024

Test Information

Test Method: LM-79-2019
Report Number: P838469
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-HM60525840-61SQC
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT
Ballast/Driver: -

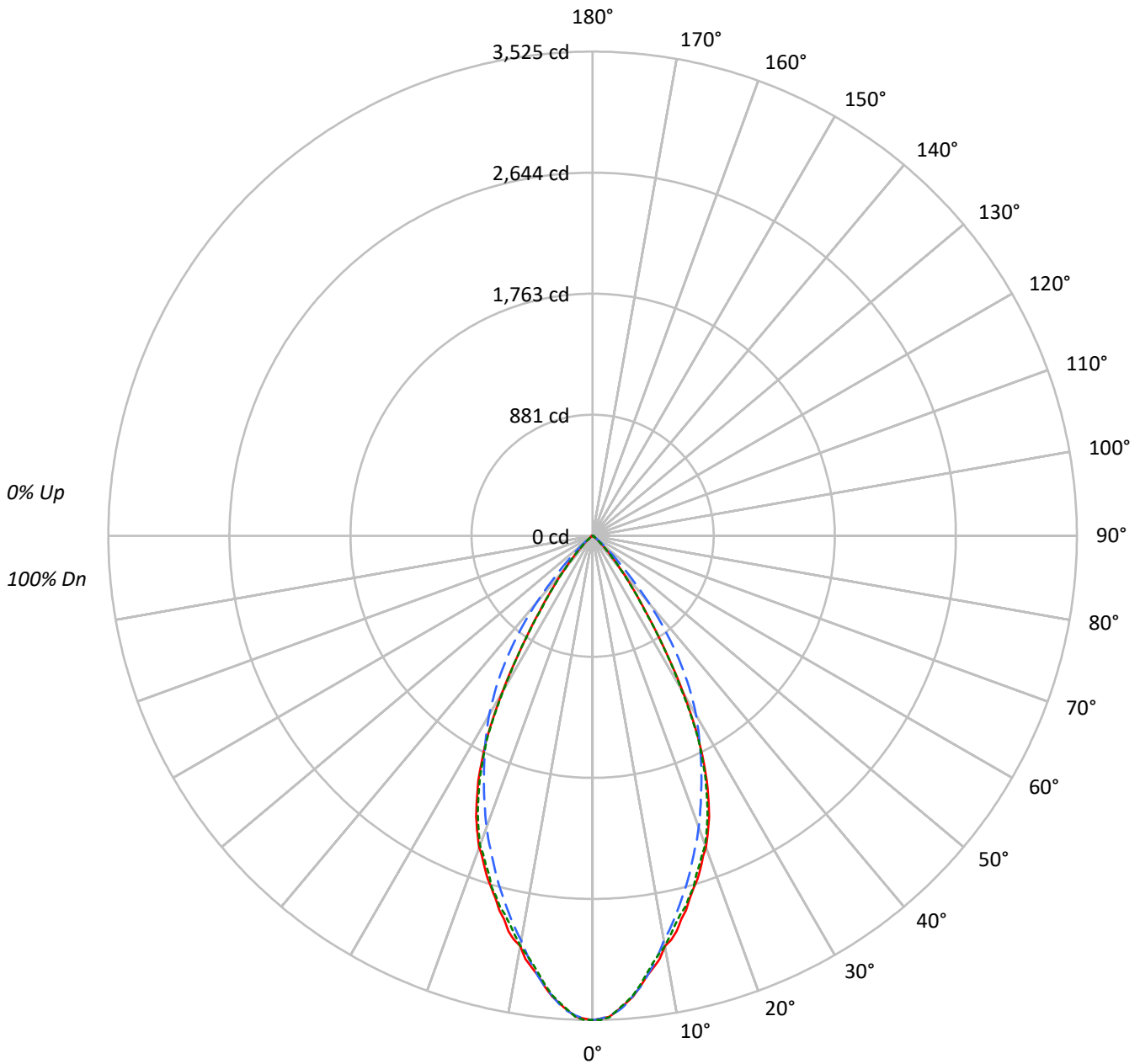
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2640.7 lumens
Efficiency: N/A
Efficacy: 95.3 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_{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									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	96	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	77	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°	151788	151788	151788
5°	145600	145345	145142
10°	132611	130810	132511
15°	121876	117414	121140
20°	110602	103477	109846
25°	93474	88942	92187
30°	65447	74873	64338
35°	35153	57434	34475
40°	17407	35539	17272
45°	7599	14985	7459
50°	2445	5439	2445
55°	1239	1772	1148
60°	809	809	809
65°	601	601	601
70°	441	441	441
75°	399	399	399
80°	298	298	298
85°	593	593	593

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 14985 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	309.6	11.7
10°-20°	747.5	28.3
20°-30°	863.5	32.7
30°-40°	539.3	20.4
40°-50°	149.8	5.7
50°-60°	21.0	0.8
60°-70°	6.2	0.2
70°-80°	2.7	0.1
80°-90°	1.1	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°	1920.7	72.7
0°-40°	2459.9	93.2
0°-60°	2630.7	99.6
0°-90°	2640.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2640.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3525	3525	3525	3525	3525	
5°	3369	3359	3363	3358	3358	310
15°	2734	2682	2634	2675	2718	766
25°	1968	1910	1872	1909	1940	879
35°	669	825	1093	816	656	444
45°	125	159	246	158	122	108
55°	16	16	24	16	15	16
65°	6	6	6	6	6	6
75°	2	2	2	2	2	3
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°	3525.4	3525.4	3525.4	3525.4	3525.4
1°	3514.8	3514.8	3514.8	3524.3	3524.3
2°	3504.2	3501.9	3496.0	3503.1	3506.6
3°	3460.7	3465.4	3467.7	3464.2	3456.0
4°	3415.9	3411.2	3424.2	3415.9	3408.9
5°	3368.8	3359.4	3362.9	3358.2	3358.2
6°	3302.9	3314.7	3305.2	3297.0	3292.3
7°	3231.1	3240.5	3234.6	3222.8	3214.6
8°	3174.5	3168.7	3159.2	3156.9	3142.8
9°	3120.4	3099.2	3078.0	3081.5	3085.1
10°	3033.2	3035.6	2992.0	3025.0	3030.9
11°	2996.7	2983.8	2926.1	2953.2	2962.6
12°	2943.8	2902.5	2853.1	2875.5	2893.1
13°	2867.2	2824.8	2780.1	2814.2	2831.9
14°	2809.5	2761.2	2704.7	2748.3	2784.8
15°	2734.2	2682.3	2634.1	2675.3	2717.7
16°	2668.2	2608.2	2559.9	2599.9	2663.5
17°	2610.5	2536.3	2477.5	2519.9	2581.1
18°	2543.4	2457.4	2403.3	2448.0	2517.5
19°	2469.2	2382.1	2333.8	2370.3	2450.4
20°	2413.9	2316.1	2258.4	2293.8	2397.4
22.5°	2216.1	2113.6	2060.6	2103.0	2185.4
25°	1967.6	1909.9	1872.2	1908.7	1940.5
27.5°	1673.2	1673.2	1686.2	1670.9	1661.5
30°	1316.4	1411.8	1506.0	1407.1	1294.1
32.5°	960.8	1113.9	1303.5	1133.9	959.7
35°	668.8	825.4	1092.7	816.0	655.9
37.5°	465.1	568.7	861.9	574.6	459.2
40°	309.7	381.5	632.3	388.6	307.3
42.5°	202.5	252.0	408.6	253.2	197.8
45°	124.8	159.0	246.1	157.8	122.5
47.5°	73.0	94.2	143.7	95.4	71.8
50°	36.5	55.3	81.2	54.2	36.5
52.5°	21.2	29.4	44.7	28.3	21.2
55°	16.5	16.5	23.6	16.5	15.3
57.5°	13.0	13.0	13.0	13.0	11.8
60°	9.4	10.6	9.4	9.4	9.4
62.5°	8.2	8.2	7.1	8.2	7.1
65°	5.9	5.9	5.9	5.9	5.9
67.5°	4.7	4.7	4.7	4.7	4.7
70°	3.5	3.5	3.5	3.5	3.5
72.5°	2.4	3.5	2.4	3.5	3.5
75°	2.4	2.4	2.4	2.4	2.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
82.5°	1.2	1.2	1.2	1.2	1.2
85°	1.2	1.2	1.2	1.2	1.2
87.5°	1.2	1.2	1.2	1.2	1.2
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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77.5°	2.4	2.4	2.4	2.4	1.2
80°	1.2	1.2	1.2	1.2	1.2

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(END OF REPORT)