

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: P838514

Luminaire Tested: HCSQ630D010-HM63040927-61SQC

Issue Date: 5/21/2024

Test Information

Test Method: LM-79-2019
Report Number: P838514
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: HCSQ630D010-HM63040927-61SQC
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: -

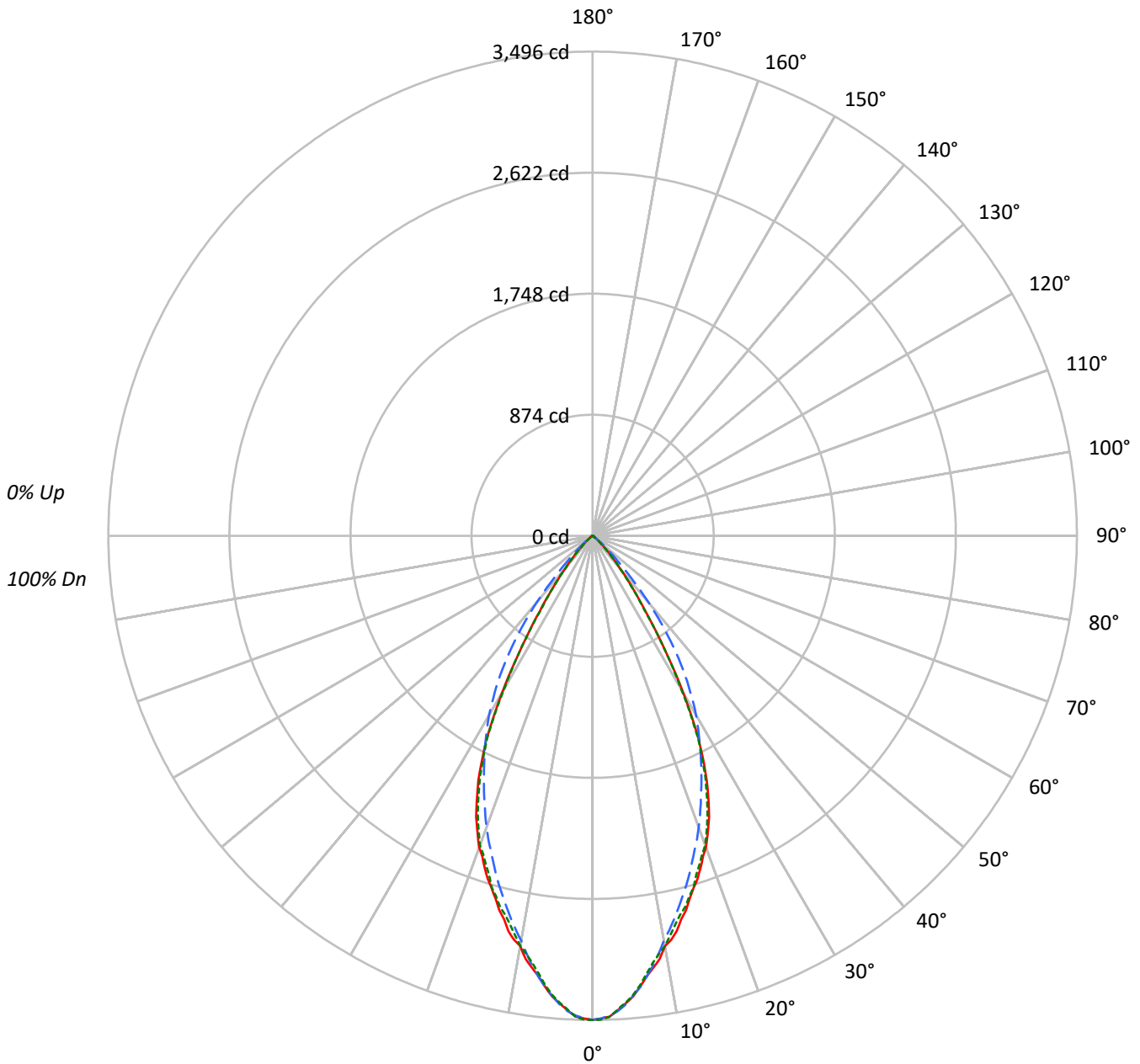
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2618.7 lumens
Efficiency: N/A
Efficacy: 92.9 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): 28.2
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	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°	150527	150527	150527
5°	144390	144135	143936
10°	131509	129721	131404
15°	120859	116433	120128
20°	109681	102616	108930
25°	92695	88201	91422
30°	64905	74251	63801
35°	34864	56955	34186
40°	17261	35246	17131
45°	7538	14857	7392
50°	2425	5399	2425
55°	1224	1757	1141
60°	801	801	801
65°	591	591	591
70°	441	441	441
75°	383	383	383
80°	298	298	298
85°	593	593	593

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°

Vertical Angle: 45°

Luminance: 14857 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	307.0	11.7
10°-20°	741.3	28.3
20°-30°	856.3	32.7
30°-40°	534.8	20.4
40°-50°	148.6	5.7
50°-60°	20.8	0.8
60°-70°	6.1	0.2
70°-80°	2.6	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°	1904.7	72.7
0°-40°	2439.5	93.2
0°-60°	2608.8	99.6
0°-90°	2618.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2618.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3496	3496	3496	3496	3496	
5°	3341	3331	3335	3330	3330	308
15°	2711	2660	2612	2653	2695	759
25°	1951	1894	1857	1893	1924	871
35°	663	819	1084	809	650	441
45°	124	158	244	156	121	107
55°	16	16	23	16	15	16
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°	3496.1	3496.1	3496.1	3496.1	3496.1
1°	3485.6	3485.6	3485.6	3494.9	3494.9
2°	3475.1	3472.7	3466.9	3473.9	3477.4
3°	3431.9	3436.5	3438.9	3435.4	3427.2
4°	3387.5	3382.8	3395.7	3387.5	3380.5
5°	3340.8	3331.4	3334.9	3330.3	3330.3
6°	3275.4	3287.1	3277.7	3269.5	3264.9
7°	3204.2	3213.5	3207.7	3196.0	3187.8
8°	3148.1	3142.3	3132.9	3130.6	3116.6
9°	3094.4	3073.4	3052.4	3055.9	3059.4
10°	3008.0	3010.3	2967.1	2999.8	3005.6
11°	2971.8	2958.9	2901.7	2928.6	2937.9
12°	2919.2	2878.4	2829.3	2851.5	2869.0
13°	2843.3	2801.3	2756.9	2790.8	2808.3
14°	2786.1	2738.2	2682.2	2725.4	2761.6
15°	2711.4	2660.0	2612.1	2653.0	2695.0
16°	2646.0	2586.4	2538.6	2578.3	2641.3
17°	2588.8	2515.2	2456.8	2498.9	2559.6
18°	2522.2	2437.0	2383.3	2427.6	2496.5
19°	2448.7	2362.2	2314.4	2350.6	2430.0
20°	2393.8	2296.9	2239.6	2274.7	2377.4
22.5°	2197.6	2096.0	2043.5	2085.5	2167.2
25°	1951.2	1894.0	1856.6	1892.8	1924.4
27.5°	1659.3	1659.3	1672.1	1657.0	1647.6
30°	1305.5	1400.1	1493.5	1395.4	1283.3
32.5°	952.8	1104.6	1292.6	1124.5	951.7
35°	663.3	818.6	1083.6	809.2	650.4
37.5°	461.2	564.0	854.8	569.8	455.4
40°	307.1	378.3	627.1	385.3	304.8
42.5°	200.8	249.9	405.2	251.1	196.2
45°	123.8	157.6	244.0	156.5	121.4
47.5°	72.4	93.4	142.5	94.6	71.2
50°	36.2	54.9	80.6	53.7	36.2
52.5°	21.0	29.2	44.4	28.0	21.0
55°	16.3	16.3	23.4	16.3	15.2
57.5°	12.8	12.8	12.8	12.8	11.7
60°	9.3	10.5	9.3	9.3	9.3
62.5°	8.2	8.2	7.0	8.2	7.0
65°	5.8	5.8	5.8	5.8	5.8
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°	2.3	3.5	2.3	3.5	3.5
75°	2.3	2.3	2.3	2.3	2.3



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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°	2.3	2.3	2.3	2.3	1.2
80°	1.2	1.2	1.2	1.2	1.2

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(END OF REPORT)