

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: P838708

Luminaire Tested: HCSQ655D010-HM64560835-61SQMW

Issue Date: 5/21/2024

Test Information

Test Method: LM-79-2019
Report Number: P838708
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2309-166-3)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 5/21/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO COMMERCIAL
Catalog Number: HCSQ655D010-HM64560835-61SQMW
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, MATTE WHITE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT
Ballast/Driver: -

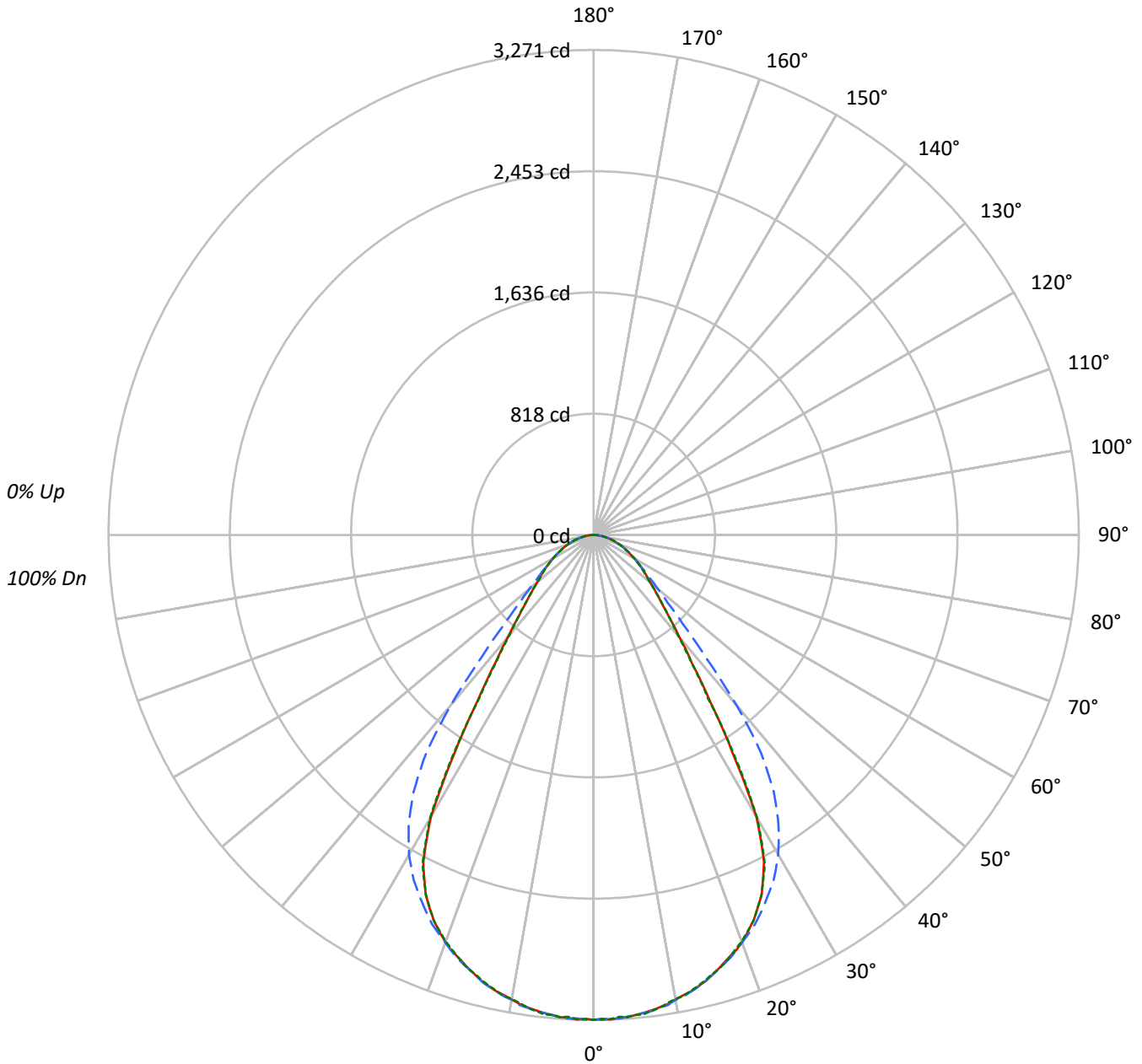
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4825.0 lumens
Efficiency: N/A
Efficacy: 89.4 lumens/watt
Spacing Criteria (0/90/45): 1.08 / 1.08 / 1.11
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 54
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					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	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89								
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79								
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71								
4	91	81	74	69	89	80	73	68	77	72	67	75	70	67	73	69	66	64								
5	85	74	67	62	83	73	66	61	71	65	61	70	64	60	68	63	60	58								
6	80	69	61	56	78	68	61	56	66	60	55	64	59	55	63	58	54	53								
7	75	63	56	51	73	63	56	51	61	55	51	60	54	50	59	54	50	48								
8	70	59	52	47	69	58	51	47	57	51	46	56	50	46	55	50	46	44								
9	66	55	48	43	65	54	48	43	53	47	43	52	47	43	51	46	43	41								
10	63	51	45	40	62	51	44	40	50	44	40	49	44	40	48	43	40	38								

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	140839	140839	140839
5°	140487	140388	140487
10°	139112	139213	138915
15°	137044	137147	136839
20°	133956	134061	133644
25°	127270	129988	127166
30°	108988	123759	109669
35°	71609	111256	70527
40°	50618	83897	49719
45°	39250	51641	39530
50°	33377	37664	33069
55°	30026	30889	30026
60°	27168	27168	27168
65°	24919	24685	24685
70°	22735	22735	23025
75°	21293	20528	20911
80°	18695	18695	18695
85°	15808	15808	15808

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°

Vertical Angle: 45°

Luminance: 51641 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	308.4	6.4
10°-20°	866.0	17.9
20°-30°	1234.1	25.6
30°-40°	1052.3	21.8
40°-50°	582.2	12.1
50°-60°	366.7	7.6
60°-70°	243.5	5.0
70°-80°	133.8	2.8
80°-90°	38.1	0.8
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°	2408.5	49.9
0°-40°	3460.8	71.7
0°-60°	4409.6	91.4
0°-90°	4825.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4825.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3271	3271	3271	3271	3271	
5°	3250	3255	3248	3244	3250	308
15°	3074	3074	3077	3074	3070	866
25°	2679	2711	2736	2709	2677	1210
35°	1362	1607	2117	1609	1342	886
45°	645	706	848	702	649	511
55°	400	407	412	405	400	359
65°	245	247	242	245	242	243
75°	128	126	123	126	126	134
85°	32	32	32	34	32	38
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3271.1	3271.1	3271.1	3271.1	3271.1
1°	3264.2	3268.8	3268.8	3266.5	3268.8
2°	3271.1	3264.2	3264.2	3264.2	3266.5
3°	3261.9	3266.5	3266.5	3259.7	3255.1
4°	3259.7	3257.4	3257.4	3264.2	3259.7
5°	3250.5	3255.1	3248.2	3243.7	3250.5
6°	3241.4	3243.7	3241.4	3243.7	3250.5
7°	3229.9	3236.8	3234.5	3232.2	3232.2
8°	3216.2	3225.4	3220.8	3220.8	3218.5
9°	3202.5	3204.8	3209.4	3209.4	3195.7
10°	3181.9	3188.8	3184.2	3186.5	3177.4
11°	3163.7	3172.8	3170.5	3165.9	3168.2
12°	3147.7	3152.2	3149.9	3143.1	3145.4
13°	3127.1	3131.7	3129.4	3129.4	3122.5
14°	3104.2	3099.6	3106.5	3101.9	3099.6
15°	3074.5	3074.5	3076.8	3074.5	3069.9
16°	3047.1	3049.4	3049.4	3047.1	3049.4
17°	3015.1	3024.2	3021.9	3017.4	3019.6
18°	2985.4	2992.2	2994.5	2992.2	2985.4
19°	2957.9	2962.5	2960.2	2951.1	2951.1
20°	2923.6	2925.9	2925.9	2921.4	2916.8
22.5°	2816.2	2832.2	2843.6	2834.5	2816.2
25°	2679.0	2711.0	2736.2	2708.8	2676.8
27.5°	2487.0	2551.0	2626.5	2557.9	2498.5
30°	2192.2	2338.5	2489.3	2352.2	2205.9
32.5°	1744.1	2032.1	2320.2	2059.6	1771.6
35°	1362.4	1607.0	2116.7	1609.3	1341.8
37.5°	1088.1	1261.8	1856.1	1250.4	1076.6
40°	900.6	1017.2	1492.7	1012.6	884.6
42.5°	752.1	841.2	1117.8	832.1	752.1
45°	644.6	706.3	848.1	701.8	649.2
47.5°	564.6	603.5	678.9	601.2	564.6
50°	498.3	521.2	562.3	518.9	493.7
52.5°	445.7	459.5	475.5	454.9	441.2
55°	400.0	406.9	411.5	404.6	400.0
57.5°	356.6	361.2	358.9	356.6	354.3
60°	315.5	317.7	315.5	317.7	315.5
62.5°	278.9	281.2	276.6	278.9	276.6
65°	244.6	246.9	242.3	244.6	242.3
67.5°	212.6	212.6	212.6	212.6	210.3
70°	180.6	182.9	180.6	182.9	182.9
72.5°	153.2	153.2	150.9	153.2	153.2
75°	128.0	125.7	123.4	125.7	125.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
82.5°	54.9	54.9	52.6	54.9	54.9
85°	32.0	32.0	32.0	34.3	32.0
87.5°	16.0	13.7	13.7	16.0	16.0
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°	100.6	100.6	98.3	100.6	100.6
80°	75.4	77.7	75.4	77.7	75.4

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Scaled Data Report



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