

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: P838338

Luminaire Tested: HCSQ610D010-HM60525827-61SQMW

Issue Date: 5/21/2024



Test Information

Test Method: LM-79-2019
Report Number: P838338
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: HCSQ610D010-HM60525827-61SQMW
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, MATTE WHITE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT
Ballast/Driver: -

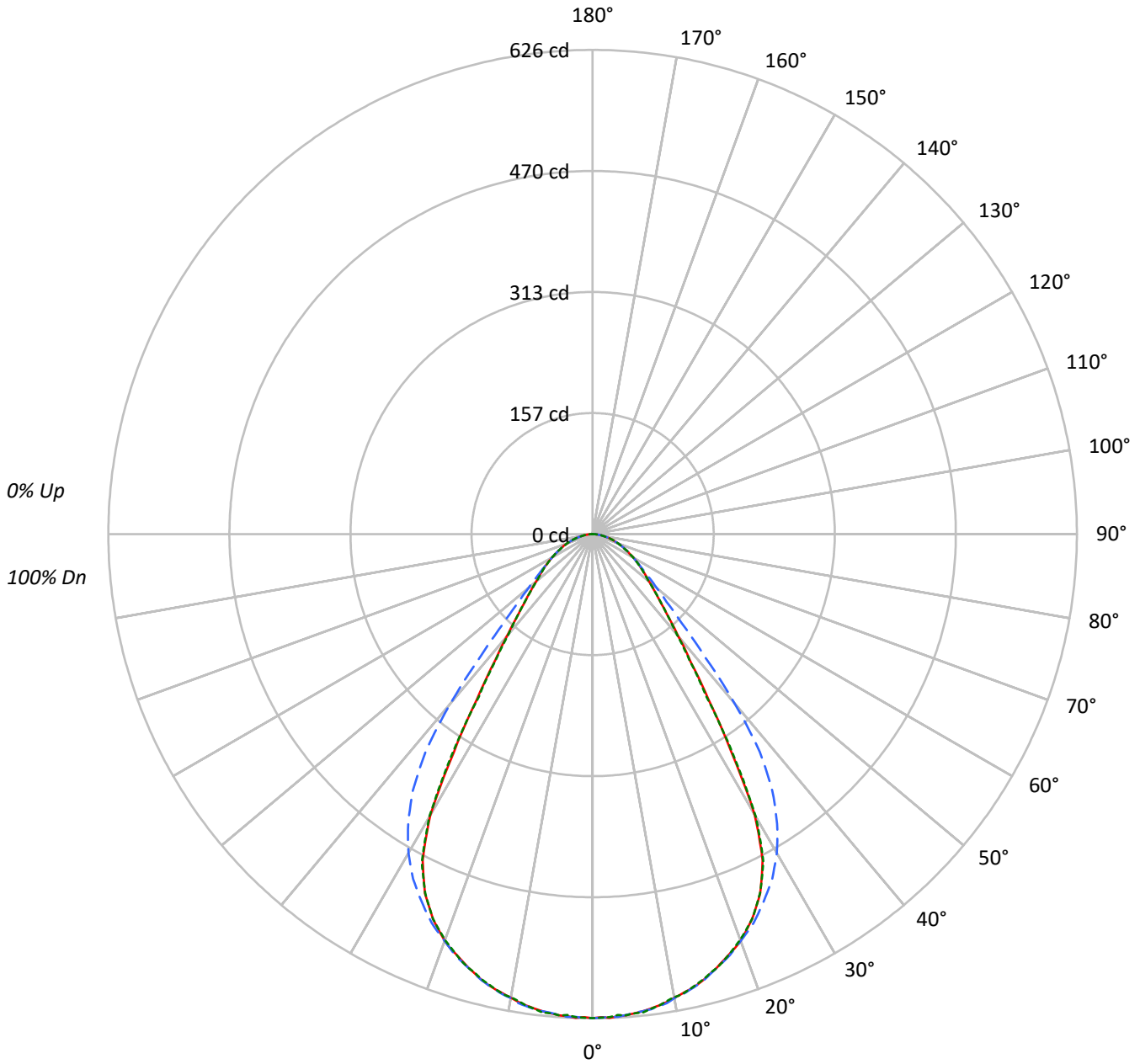
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 923.2 lumens
Efficiency: N/A
Efficacy: 93.2 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): 9.9
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	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°	26949	26949	26949
5°	26879	26861	26879
10°	26617	26634	26577
15°	26219	26241	26183
20°	25631	25649	25572
25°	24352	24870	24328
30°	20851	23680	20985
35°	13703	21287	13492
40°	9684	16052	9516
45°	7508	9882	7563
50°	6383	7207	6330
55°	5742	5908	5742
60°	5201	5201	5201
65°	4768	4727	4727
70°	4356	4356	4406
75°	4076	3926	4009
80°	3570	3570	3570
85°	3013	3013	3013

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 9882 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.0	6.4
10°-20°	165.7	17.9
20°-30°	236.1	25.6
30°-40°	201.3	21.8
40°-50°	111.4	12.1
50°-60°	70.2	7.6
60°-70°	46.6	5.0
70°-80°	25.6	2.8
80°-90°	7.3	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°	460.8	49.9
0°-40°	662.1	71.7
0°-60°	843.7	91.4
0°-90°	923.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	923.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	626	626	626	626	626	
5°	622	623	622	621	622	59
15°	588	588	589	588	587	166
25°	513	519	524	518	512	232
35°	261	308	405	308	257	169
45°	123	135	162	134	124	98
55°	76	78	79	77	76	69
65°	47	47	46	47	46	47
75°	24	24	24	24	24	26
85°	6	6	6	7	6	7
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	625.9	625.9	625.9	625.9	625.9
1°	624.5	625.4	625.4	625.0	625.4
2°	625.9	624.5	624.5	624.5	625.0
3°	624.1	625.0	625.0	623.7	622.8
4°	623.7	623.2	623.2	624.5	623.7
5°	621.9	622.8	621.5	620.6	621.9
6°	620.2	620.6	620.2	620.6	621.9
7°	618.0	619.3	618.9	618.4	618.4
8°	615.4	617.1	616.2	616.2	615.8
9°	612.7	613.2	614.1	614.1	611.4
10°	608.8	610.1	609.2	609.7	607.9
11°	605.3	607.1	606.6	605.7	606.2
12°	602.2	603.1	602.7	601.4	601.8
13°	598.3	599.2	598.7	598.7	597.4
14°	593.9	593.1	594.4	593.5	593.1
15°	588.2	588.2	588.7	588.2	587.4
16°	583.0	583.4	583.4	583.0	583.4
17°	576.9	578.6	578.2	577.3	577.8
18°	571.2	572.5	572.9	572.5	571.2
19°	565.9	566.8	566.4	564.6	564.6
20°	559.4	559.8	559.8	558.9	558.1
22.5°	538.8	541.9	544.1	542.3	538.8
25°	512.6	518.7	523.5	518.3	512.1
27.5°	475.8	488.1	502.5	489.4	478.0
30°	419.4	447.4	476.3	450.0	422.1
32.5°	333.7	388.8	443.9	394.1	339.0
35°	260.7	307.5	405.0	307.9	256.7
37.5°	208.2	241.4	355.1	239.2	206.0
40°	172.3	194.6	285.6	193.8	169.3
42.5°	143.9	160.9	213.9	159.2	143.9
45°	123.3	135.1	162.3	134.3	124.2
47.5°	108.0	115.5	129.9	115.0	108.0
50°	95.3	99.7	107.6	99.3	94.5
52.5°	85.3	87.9	91.0	87.0	84.4
55°	76.5	77.8	78.7	77.4	76.5
57.5°	68.2	69.1	68.7	68.2	67.8
60°	60.4	60.8	60.4	60.8	60.4
62.5°	53.4	53.8	52.9	53.4	52.9
65°	46.8	47.2	46.4	46.8	46.4
67.5°	40.7	40.7	40.7	40.7	40.2
70°	34.6	35.0	34.6	35.0	35.0
72.5°	29.3	29.3	28.9	29.3	29.3
75°	24.5	24.1	23.6	24.1	24.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
82.5°	10.5	10.5	10.1	10.5	10.5
85°	6.1	6.1	6.1	6.6	6.1
87.5°	3.1	2.6	2.6	3.1	3.1
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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77.5°	19.2	19.2	18.8	19.2	19.2
80°	14.4	14.9	14.4	14.9	14.4

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