

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: P838318

Luminaire Tested: HCSQ607D010-HM60525927-61SQMW

Issue Date: 5/21/2024



Test Information

Test Method: LM-79-2019
Report Number: P838318
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: HCSQ607D010-HM60525927-61SQMW
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, MATTE WHITE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: -

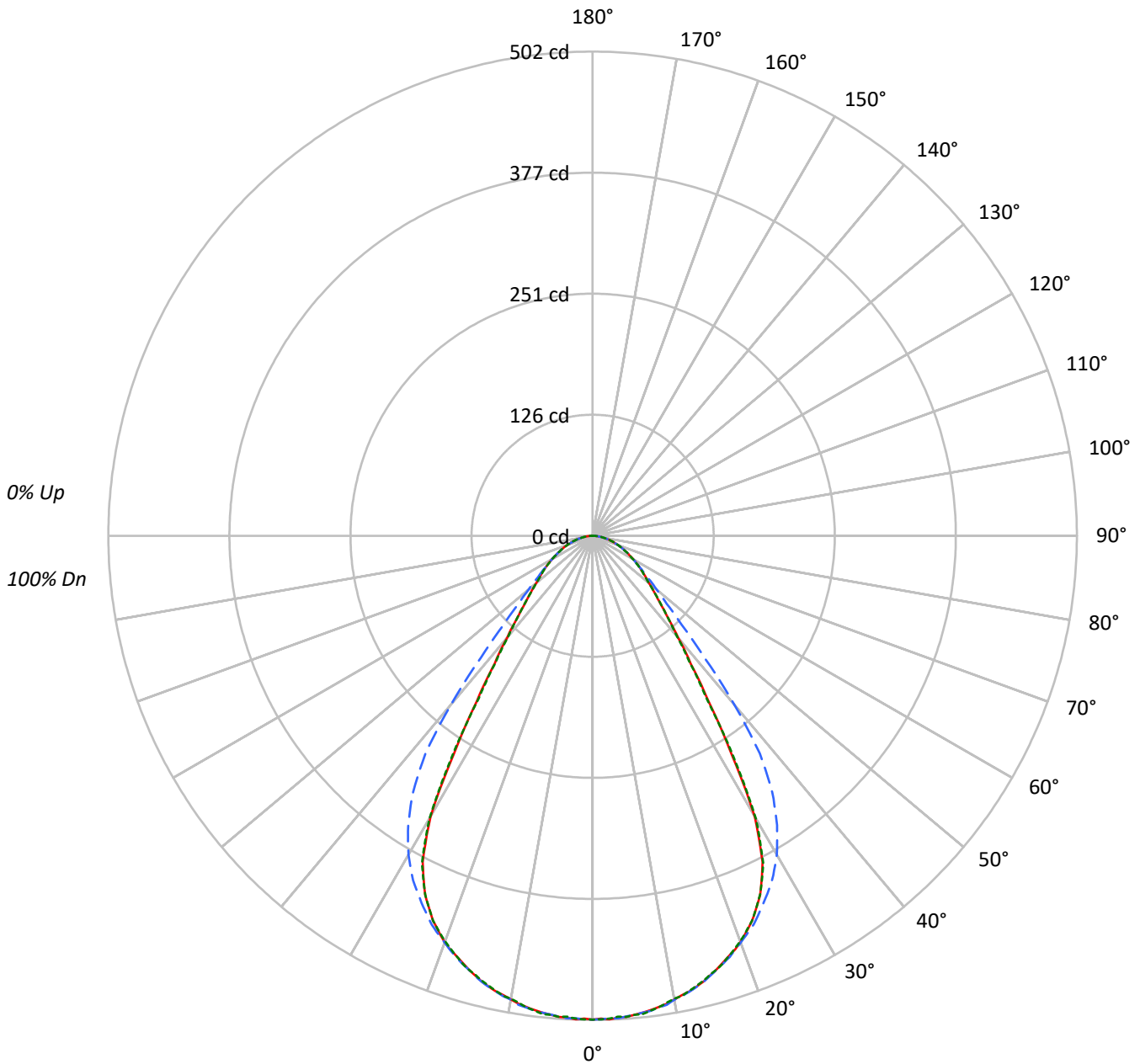
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 740.1 lumens
Efficiency: N/A
Efficacy: 92.5 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): 8
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	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°	21601	21601	21601
5°	21550	21532	21550
10°	21340	21353	21309
15°	21021	21035	20990
20°	20545	20564	20499
25°	19520	19939	19506
30°	16715	18982	16819
35°	10985	17067	10817
40°	7762	12865	7627
45°	6022	7922	6065
50°	5117	5781	5071
55°	4609	4737	4609
60°	4168	4168	4168
65°	3820	3790	3790
70°	3487	3487	3525
75°	3261	3144	3211
80°	2876	2876	2876
85°	2421	2421	2421

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 7922 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.3	6.4
10°-20°	132.8	17.9
20°-30°	189.3	25.6
30°-40°	161.4	21.8
40°-50°	89.3	12.1
50°-60°	56.2	7.6
60°-70°	37.3	5.0
70°-80°	20.5	2.8
80°-90°	5.8	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°	369.4	49.9
0°-40°	530.8	71.7
0°-60°	676.4	91.4
0°-90°	740.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	740.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	502	502	502	502	502	
5°	499	499	498	498	499	47
15°	472	472	472	472	471	133
25°	411	416	420	416	411	186
35°	209	246	325	247	206	136
45°	99	108	130	108	100	78
55°	61	62	63	62	61	55
65°	38	38	37	38	37	37
75°	20	19	19	19	19	21
85°	5	5	5	5	5	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	501.7	501.7	501.7	501.7	501.7
1°	500.7	501.4	501.4	501.0	501.4
2°	501.7	500.7	500.7	500.7	501.0
3°	500.3	501.0	501.0	500.0	499.3
4°	500.0	499.6	499.6	500.7	500.0
5°	498.6	499.3	498.2	497.5	498.6
6°	497.2	497.5	497.2	497.5	498.6
7°	495.4	496.5	496.1	495.8	495.8
8°	493.3	494.7	494.0	494.0	493.7
9°	491.2	491.6	492.3	492.3	490.2
10°	488.1	489.1	488.4	488.8	487.4
11°	485.2	486.6	486.3	485.6	485.9
12°	482.8	483.5	483.1	482.1	482.4
13°	479.6	480.3	480.0	480.0	478.9
14°	476.1	475.4	476.5	475.8	475.4
15°	471.6	471.6	471.9	471.6	470.9
16°	467.4	467.7	467.7	467.4	467.7
17°	462.5	463.9	463.5	462.8	463.2
18°	457.9	459.0	459.3	459.0	457.9
19°	453.7	454.4	454.0	452.6	452.6
20°	448.4	448.8	448.8	448.1	447.4
22.5°	432.0	434.4	436.2	434.8	432.0
25°	410.9	415.8	419.7	415.5	410.6
27.5°	381.5	391.3	402.9	392.3	383.2
30°	336.2	358.7	381.8	360.8	338.3
32.5°	267.5	311.7	355.9	315.9	271.7
35°	209.0	246.5	324.7	246.8	205.8
37.5°	166.9	193.5	284.7	191.8	165.1
40°	138.1	156.0	228.9	155.3	135.7
42.5°	115.4	129.0	171.4	127.6	115.4
45°	98.9	108.3	130.1	107.6	99.6
47.5°	86.6	92.6	104.1	92.2	86.6
50°	76.4	79.9	86.3	79.6	75.7
52.5°	68.4	70.5	72.9	69.8	67.7
55°	61.4	62.4	63.1	62.1	61.4
57.5°	54.7	55.4	55.0	54.7	54.3
60°	48.4	48.7	48.4	48.7	48.4
62.5°	42.8	43.1	42.4	42.8	42.4
65°	37.5	37.9	37.2	37.5	37.2
67.5°	32.6	32.6	32.6	32.6	32.3
70°	27.7	28.0	27.7	28.0	28.0
72.5°	23.5	23.5	23.1	23.5	23.5
75°	19.6	19.3	18.9	19.3	19.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
82.5°	8.4	8.4	8.1	8.4	8.4
85°	4.9	4.9	4.9	5.3	4.9
87.5°	2.5	2.1	2.1	2.5	2.5
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°	15.4	15.4	15.1	15.4	15.4
80°	11.6	11.9	11.6	11.9	11.6

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Scaled Data Report



(END OF REPORT)