

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: P838258

Luminaire Tested: HCSQ605D010-HM60525827-61SQMW

Issue Date: 5/21/2024



Test Information

Test Method: LM-79-2019
Report Number: P838258
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: HCSQ605D010-HM60525827-61SQMW
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, MATTE WHITE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT
Ballast/Driver: -

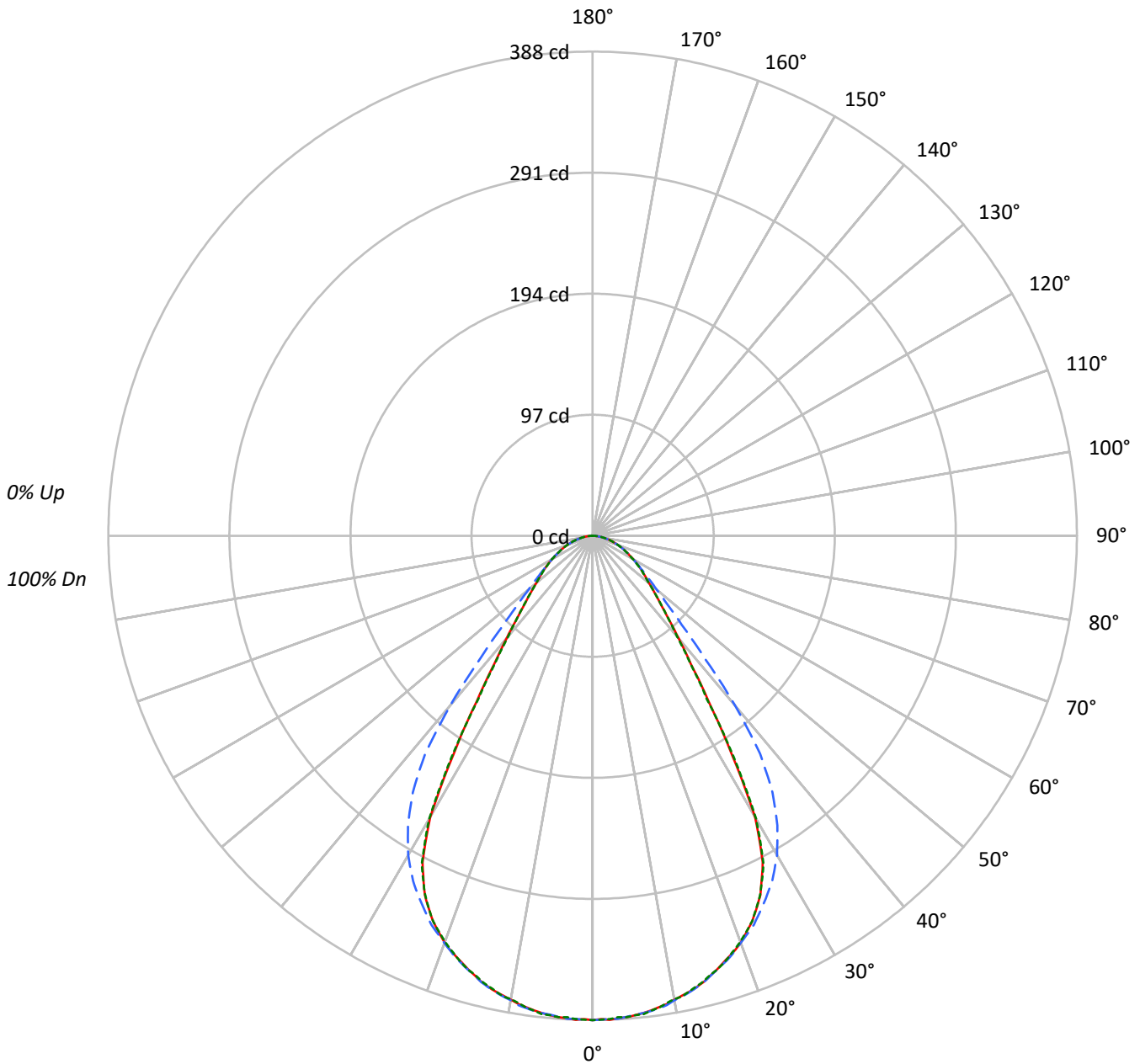
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 572.5 lumens
Efficiency: N/A
Efficacy: 95.4 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): 6
Input Voltage (V): NR
Input Current (Ain): 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°	16714	16714	16714
5°	16670	16657	16670
10°	16509	16522	16482
15°	16261	16274	16238
20°	15895	15908	15858
25°	15102	15425	15088
30°	12931	14686	13016
35°	8499	13203	8368
40°	6008	9954	5902
45°	4658	6126	4689
50°	3959	4468	3925
55°	3566	3663	3566
60°	3221	3221	3221
65°	2954	2934	2934
70°	2694	2694	2732
75°	2529	2429	2479
80°	2232	2232	2232
85°	1877	1877	1877

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 6126 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.6	6.4
10°-20°	102.8	17.9
20°-30°	146.4	25.6
30°-40°	124.9	21.8
40°-50°	69.1	12.1
50°-60°	43.5	7.6
60°-70°	28.9	5.0
70°-80°	15.9	2.8
80°-90°	4.5	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°	285.8	49.9
0°-40°	410.7	71.7
0°-60°	523.3	91.4
0°-90°	572.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	572.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	388	388	388	388	388	
5°	386	386	385	385	386	37
15°	365	365	365	365	364	103
25°	318	322	325	321	318	144
35°	162	191	251	191	159	105
45°	76	84	101	83	77	61
55°	48	48	49	48	48	43
65°	29	29	29	29	29	29
75°	15	15	15	15	15	16
85°	4	4	4	4	4	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	388.2	388.2	388.2	388.2	388.2
1°	387.3	387.9	387.9	387.6	387.9
2°	388.2	387.3	387.3	387.3	387.6
3°	387.1	387.6	387.6	386.8	386.3
4°	386.8	386.5	386.5	387.3	386.8
5°	385.7	386.3	385.4	384.9	385.7
6°	384.6	384.9	384.6	384.9	385.7
7°	383.3	384.1	383.8	383.5	383.5
8°	381.6	382.7	382.2	382.2	381.9
9°	380.0	380.3	380.8	380.8	379.2
10°	377.6	378.4	377.9	378.1	377.0
11°	375.4	376.5	376.2	375.7	376.0
12°	373.5	374.1	373.8	373.0	373.2
13°	371.1	371.6	371.3	371.3	370.5
14°	368.4	367.8	368.6	368.1	367.8
15°	364.8	364.8	365.1	364.8	364.3
16°	361.6	361.8	361.8	361.6	361.8
17°	357.8	358.9	358.6	358.0	358.3
18°	354.3	355.1	355.3	355.1	354.3
19°	351.0	351.5	351.3	350.2	350.2
20°	346.9	347.2	347.2	346.7	346.1
22.5°	334.2	336.1	337.4	336.3	334.2
25°	317.9	321.7	324.7	321.4	317.6
27.5°	295.1	302.7	311.7	303.5	296.5
30°	260.1	277.5	295.4	279.1	261.8
32.5°	207.0	241.1	275.3	244.4	210.2
35°	161.7	190.7	251.2	191.0	159.2
37.5°	129.1	149.7	220.3	148.4	127.8
40°	106.9	120.7	177.1	120.2	105.0
42.5°	89.2	99.8	132.6	98.7	89.2
45°	76.5	83.8	100.6	83.3	77.0
47.5°	67.0	71.6	80.6	71.3	67.0
50°	59.1	61.8	66.7	61.6	58.6
52.5°	52.9	54.5	56.4	54.0	52.4
55°	47.5	48.3	48.8	48.0	47.5
57.5°	42.3	42.9	42.6	42.3	42.0
60°	37.4	37.7	37.4	37.7	37.4
62.5°	33.1	33.4	32.8	33.1	32.8
65°	29.0	29.3	28.8	29.0	28.8
67.5°	25.2	25.2	25.2	25.2	25.0
70°	21.4	21.7	21.4	21.7	21.7
72.5°	18.2	18.2	17.9	18.2	18.2
75°	15.2	14.9	14.6	14.9	14.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
82.5°	6.5	6.5	6.2	6.5	6.5
85°	3.8	3.8	3.8	4.1	3.8
87.5°	1.9	1.6	1.6	1.9	1.9
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°	11.9	11.9	11.7	11.9	11.9
80°	9.0	9.2	9.0	9.2	9.0

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Scaled Data Report



(END OF REPORT)