

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: P838283

Luminaire Tested: HCSQ605D010-HM60525930-61SQMW

Issue Date: 5/21/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P838283  
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-HM60525930-61SQMW  
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, MATTE WHITE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: -

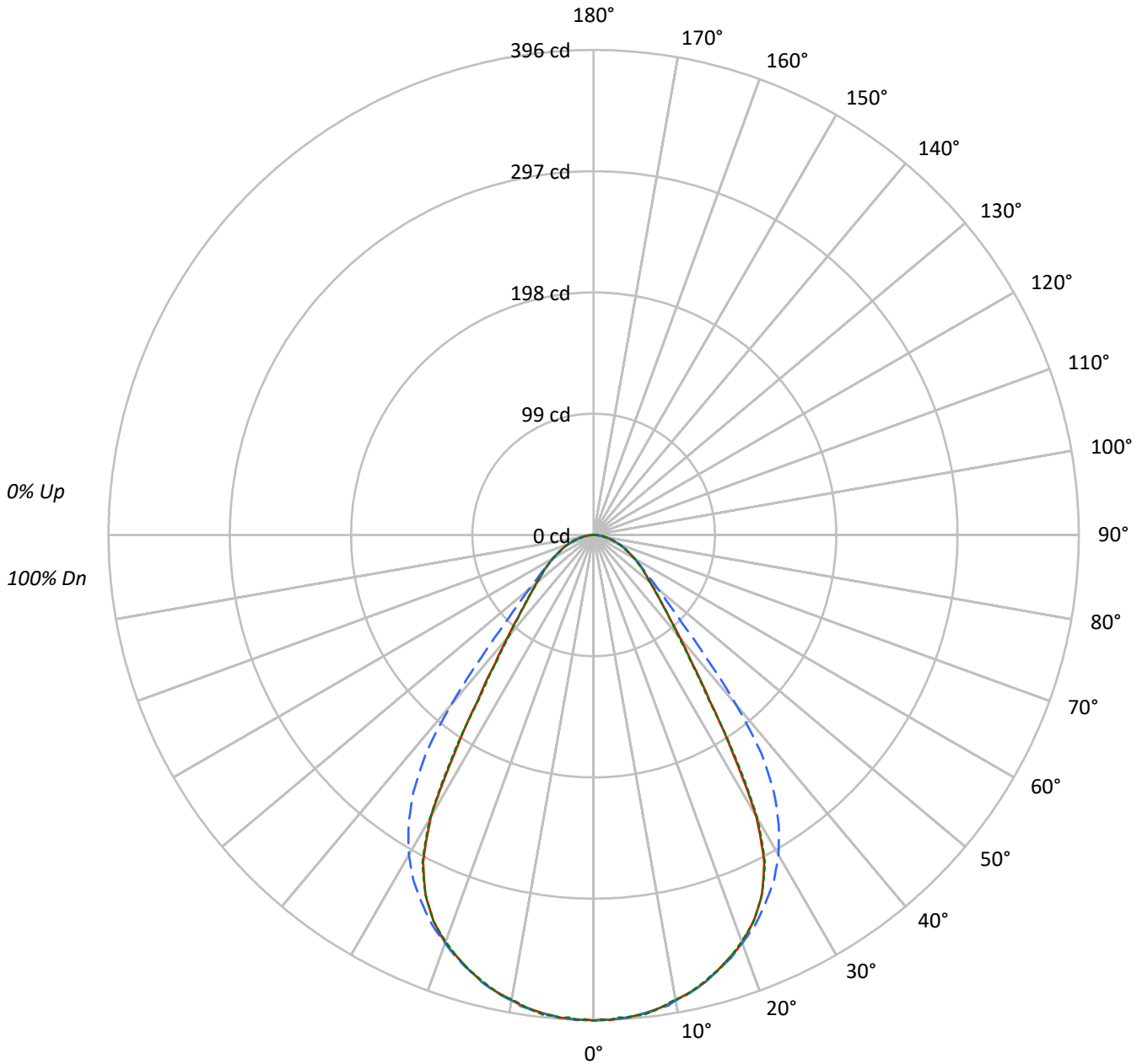
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 584.8 lumens  
Efficiency: N/A  
Efficacy: 97.5 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): 6  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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°	17072	17072	17072
5°	17029	17016	17029
10°	16863	16876	16837
15°	16613	16622	16586
20°	16238	16252	16197
25°	15425	15758	15416
30°	13210	14999	13294
35°	8678	13487	8546
40°	6138	10168	6025
45°	4756	6259	4792
50°	4046	4568	4006
55°	3641	3746	3641
60°	3289	3289	3289
65°	3016	2995	2995
70°	2757	2757	2795
75°	2578	2495	2529
80°	2256	2256	2256
85°	1927	1927	1927

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 6259 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	37.4	6.4
10°-20°	105.0	17.9
20°-30°	149.6	25.6
30°-40°	127.5	21.8
40°-50°	70.6	12.1
50°-60°	44.4	7.6
60°-70°	29.5	5.0
70°-80°	16.2	2.8
80°-90°	4.6	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°	291.9	49.9
0°-40°	419.5	71.7
0°-60°	534.5	91.4
0°-90°	584.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	584.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	396	396	396	396	396	
5°	394	395	394	393	394	37
15°	373	373	373	373	372	105
25°	325	329	332	328	324	147
35°	165	195	257	195	163	107
45°	78	86	103	85	79	62
55°	48	49	50	49	48	44
65°	30	30	29	30	29	29
75°	16	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°	396.5	396.5	396.5	396.5	396.5
1°	395.7	396.2	396.2	395.9	396.2
2°	396.5	395.7	395.7	395.7	395.9
3°	395.4	395.9	395.9	395.1	394.6
4°	395.1	394.8	394.8	395.7	395.1
5°	394.0	394.6	393.7	393.2	394.0
6°	392.9	393.2	392.9	393.2	394.0
7°	391.5	392.3	392.1	391.8	391.8
8°	389.8	390.9	390.4	390.4	390.1
9°	388.2	388.5	389.0	389.0	387.3
10°	385.7	386.5	386.0	386.2	385.1
11°	383.5	384.6	384.3	383.7	384.0
12°	381.5	382.1	381.8	381.0	381.3
13°	379.0	379.6	379.3	379.3	378.5
14°	376.3	375.7	376.5	376.0	375.7
15°	372.7	372.7	372.9	372.7	372.1
16°	369.3	369.6	369.6	369.3	369.6
17°	365.5	366.6	366.3	365.7	366.0
18°	361.9	362.7	363.0	362.7	361.9
19°	358.5	359.1	358.8	357.7	357.7
20°	354.4	354.7	354.7	354.1	353.5
22.5°	341.4	343.3	344.7	343.6	341.4
25°	324.7	328.6	331.7	328.3	324.5
27.5°	301.5	309.2	318.4	310.0	302.8
30°	265.7	283.4	301.7	285.1	267.4
32.5°	211.4	246.3	281.2	249.6	214.7
35°	165.1	194.8	256.6	195.1	162.6
37.5°	131.9	152.9	225.0	151.6	130.5
40°	109.2	123.3	180.9	122.7	107.2
42.5°	91.2	102.0	135.5	100.9	91.2
45°	78.1	85.6	102.8	85.1	78.7
47.5°	68.4	73.1	82.3	72.9	68.4
50°	60.4	63.2	68.2	62.9	59.8
52.5°	54.0	55.7	57.6	55.1	53.5
55°	48.5	49.3	49.9	49.0	48.5
57.5°	43.2	43.8	43.5	43.2	42.9
60°	38.2	38.5	38.2	38.5	38.2
62.5°	33.8	34.1	33.5	33.8	33.5
65°	29.6	29.9	29.4	29.6	29.4
67.5°	25.8	25.8	25.8	25.8	25.5
70°	21.9	22.2	21.9	22.2	22.2
72.5°	18.6	18.6	18.3	18.6	18.6
75°	15.5	15.2	15.0	15.2	15.2



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
82.5°	6.6	6.6	6.4	6.6	6.6
85°	3.9	3.9	3.9	4.2	3.9
87.5°	1.9	1.7	1.7	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°	12.2	12.2	11.9	12.2	12.2
80°	9.1	9.4	9.1	9.4	9.1

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Scaled Data Report



(END OF REPORT)