

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: P838319

Luminaire Tested: HCSQ607D010-HM60525930-61SQC

Issue Date: 5/21/2024



**Test Information**

Test Method: LM-79-2019  
Report Number: P838319  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2309-166-1)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 5/21/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO COMMERCIAL  
Catalog Number: HCSQ607D010-HM60525930-61SQC  
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, SPECULAR CLEAR TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: -

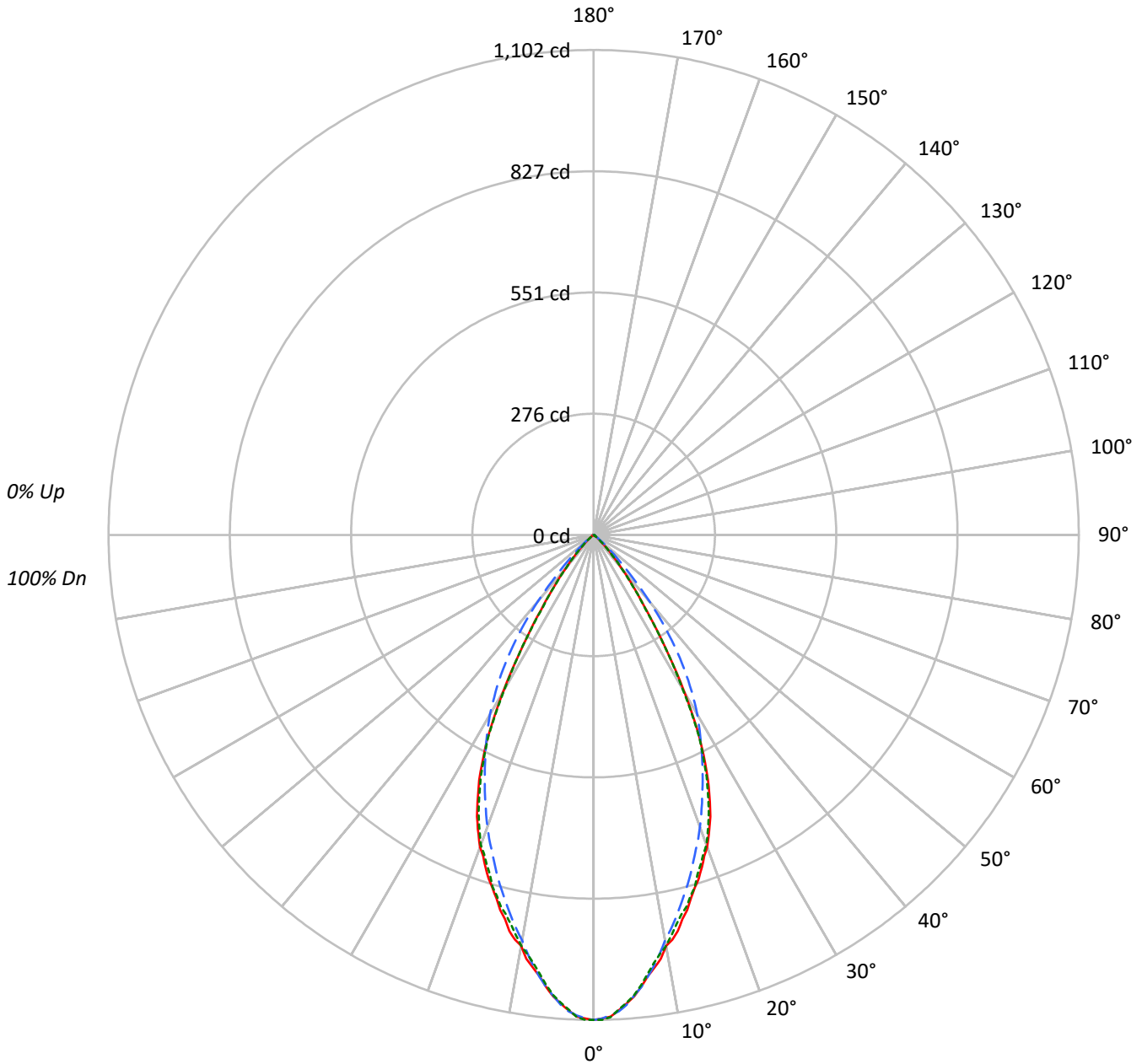
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 825.5 lumens  
Efficiency: N/A  
Efficacy: 103.2 lumens/watt  
Spacing Criteria (0/90/45): 0.82 / 0.81 / 0.85  
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 (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									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	114	111	108	106	111	109	107	105	105	103	101	101	100	98	98	96	95	94																			
2	108	103	99	96	106	102	98	95	98	95	93	95	93	91	93	91	89	87																			
3	103	97	92	88	101	95	91	87	93	89	86	90	87	84	88	85	83	81																			
4	98	90	85	81	96	89	84	80	87	83	79	85	81	78	83	80	78	76																			
5	93	85	79	75	91	84	78	74	82	77	74	80	76	73	79	75	72	71																			
6	88	80	74	70	87	79	73	69	77	72	69	76	72	68	75	71	68	66																			
7	84	75	69	65	83	74	69	65	73	68	64	72	67	64	71	67	64	62																			
8	80	71	65	61	79	70	65	61	69	64	60	68	64	60	67	63	60	59																			
9	76	67	61	57	75	66	61	57	65	60	57	65	60	57	64	60	56	55																			
10	73	63	58	54	72	63	57	54	62	57	54	61	57	53	61	56	53	52																			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	47452	47452	47452
5°	45519	45437	45377
10°	41460	40896	41425
15°	38102	36707	37870
20°	34575	32348	34341
25°	29221	27806	28818
30°	20458	23406	20115
35°	10991	17955	10775
40°	5441	11112	5401
45°	2375	4682	2332
50°	764	1701	764
55°	390	555	360
60°	250	250	250
65°	183	183	183
70°	138	138	138
75°	116	116	116
80°	99	99	99
85°	198	198	198

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 4682 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	96.8	11.7
10°-20°	233.7	28.3
20°-30°	270.0	32.7
30°-40°	168.6	20.4
40°-50°	46.8	5.7
50°-60°	6.5	0.8
60°-70°	1.9	0.2
70°-80°	0.8	0.1
80°-90°	0.4	0.0
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°	600.4	72.7
0°-40°	769.0	93.2
0°-60°	822.4	99.6
0°-90°	825.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	825.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1102	1102	1102	1102	1102	
5°	1053	1050	1051	1050	1050	97
15°	855	839	824	836	850	239
25°	615	597	585	597	607	275
35°	209	258	342	255	205	139
45°	39	50	77	49	38	34
55°	5	5	7	5	5	5
65°	2	2	2	2	2	2
75°	1	1	1	1	1	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1102.1	1102.1	1102.1	1102.1	1102.1
1°	1098.8	1098.8	1098.8	1101.8	1101.8
2°	1095.5	1094.8	1092.9	1095.1	1096.2
3°	1081.9	1083.3	1084.1	1083.0	1080.4
4°	1067.9	1066.4	1070.5	1067.9	1065.7
5°	1053.2	1050.2	1051.3	1049.9	1049.9
6°	1032.5	1036.2	1033.3	1030.7	1029.2
7°	1010.1	1013.0	1011.2	1007.5	1004.9
8°	992.4	990.6	987.6	986.9	982.5
9°	975.5	968.9	962.2	963.3	964.4
10°	948.3	949.0	935.4	945.7	947.5
11°	936.8	932.8	914.8	923.2	926.2
12°	920.3	907.4	891.9	898.9	904.4
13°	896.3	883.1	869.1	879.8	885.3
14°	878.3	863.2	845.5	859.2	870.6
15°	854.8	838.6	823.5	836.3	849.6
16°	834.1	815.4	800.3	812.8	832.7
17°	816.1	792.9	774.5	787.8	806.9
18°	795.1	768.2	751.3	765.3	787.0
19°	771.9	744.7	729.6	741.0	766.0
20°	754.6	724.1	706.0	717.1	749.5
22.5°	692.8	660.8	644.2	657.4	683.2
25°	615.1	597.1	585.3	596.7	606.6
27.5°	523.1	523.1	527.1	522.3	519.4
30°	411.5	441.4	470.8	439.9	404.6
32.5°	300.4	348.2	407.5	354.5	300.0
35°	209.1	258.0	341.6	255.1	205.0
37.5°	145.4	177.8	269.5	179.6	143.6
40°	96.8	119.3	197.7	121.5	96.1
42.5°	63.3	78.8	127.7	79.1	61.8
45°	39.0	49.7	76.9	49.3	38.3
47.5°	22.8	29.4	44.9	29.8	22.5
50°	11.4	17.3	25.4	16.9	11.4
52.5°	6.6	9.2	14.0	8.8	6.6
55°	5.2	5.2	7.4	5.2	4.8
57.5°	4.0	4.0	4.0	4.0	3.7
60°	2.9	3.3	2.9	2.9	2.9
62.5°	2.6	2.6	2.2	2.6	2.2
65°	1.8	1.8	1.8	1.8	1.8
67.5°	1.5	1.5	1.5	1.5	1.5
70°	1.1	1.1	1.1	1.1	1.1
72.5°	0.7	1.1	0.7	1.1	1.1
75°	0.7	0.7	0.7	0.7	0.7



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
82.5°	0.4	0.4	0.4	0.4	0.4
85°	0.4	0.4	0.4	0.4	0.4
87.5°	0.4	0.4	0.4	0.4	0.4
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°	0.7	0.7	0.7	0.7	0.4
80°	0.4	0.4	0.4	0.4	0.4

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Scaled Data Report



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