

Signify Classified - Internal  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



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: P838294

Luminaire Tested: HCSQ607D010-HM60525827-61SQC

Issue Date: 5/21/2024



**Test Information**

Test Method: LM-79-2019  
Report Number: P838294  
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-HM60525827-61SQC  
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, SPECULAR CLEAR TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT  
Ballast/Driver: -

**Summary**

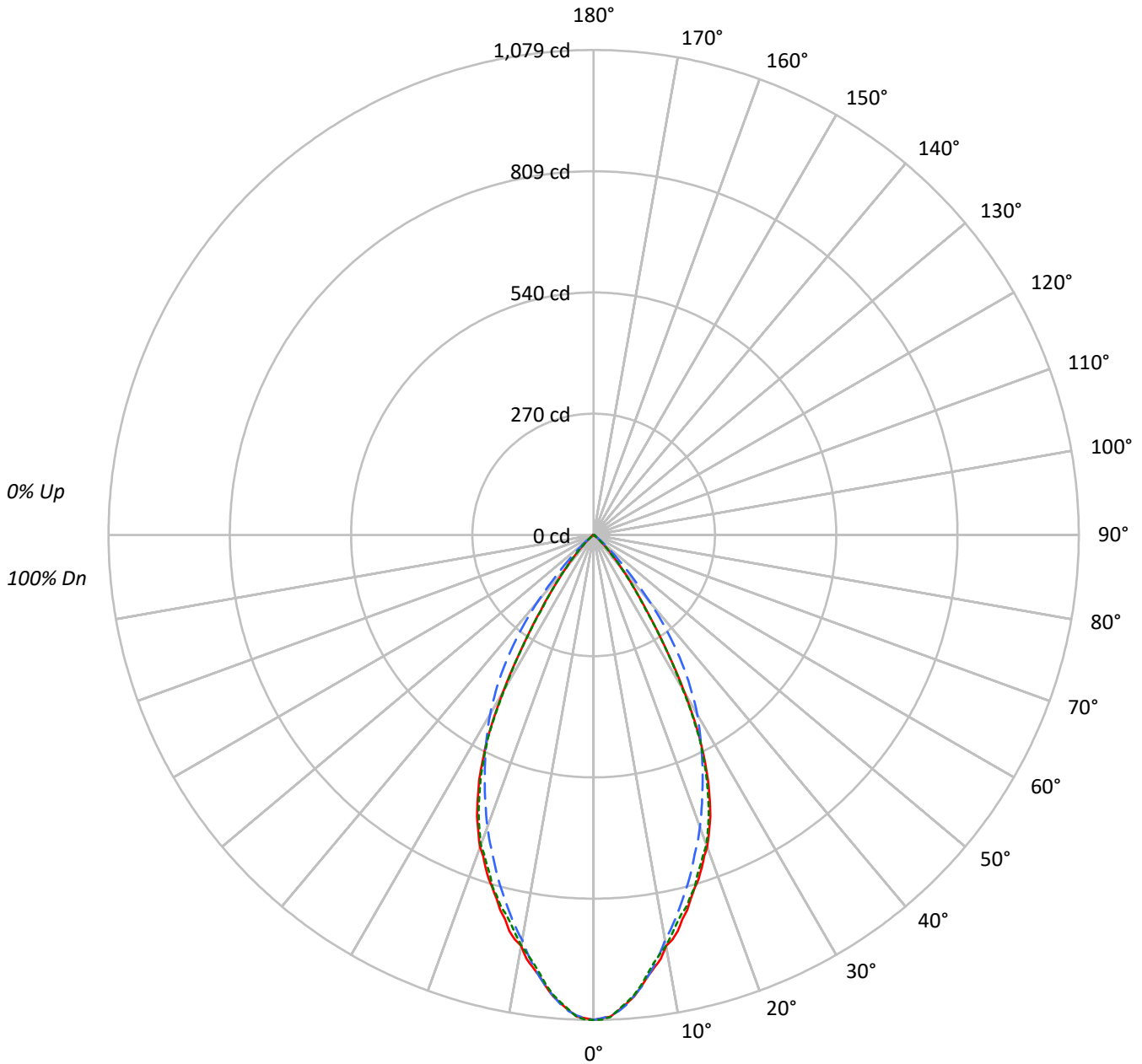
Lumens per Lamp: N/A  
Luminaire Lumens: 808.2 lumens  
Efficiency: N/A  
Efficacy: 101.0 lumens/watt  
Spacing Criteria (0/90/45): 0.82 / 0.81 / 0.85  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
CIE Type: Direct

Input Watts (W): 8  
Input Voltage (V): NR  
Input Current (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					70					50					30				
RW	70	50	30	10	70	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	96	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	77	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°	46457	46457	46457
5°	44560	44482	44422
10°	40585	40034	40555
15°	37300	35936	37073
20°	33851	31670	33617
25°	28609	27221	28214
30°	20031	22914	19693
35°	10759	17576	10549
40°	5328	10876	5289
45°	2326	4585	2283
50°	750	1668	750
55°	375	540	353
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: 4585 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	94.7	11.7
10°-20°	228.8	28.3
20°-30°	264.3	32.7
30°-40°	165.0	20.4
40°-50°	45.9	5.7
50°-60°	6.4	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°	587.8	72.7
0°-40°	752.9	93.2
0°-60°	805.1	99.6
0°-90°	808.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	808.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1079	1079	1079	1079	1079	
5°	1031	1028	1029	1028	1028	95
15°	837	821	806	819	832	234
25°	602	584	573	584	594	269
35°	205	253	334	250	201	136
45°	38	49	75	48	38	33
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°	1079.0	1079.0	1079.0	1079.0	1079.0
1°	1075.7	1075.7	1075.7	1078.6	1078.6
2°	1072.5	1071.8	1070.0	1072.1	1073.2
3°	1059.1	1060.6	1061.3	1060.2	1057.7
4°	1045.4	1044.0	1048.0	1045.4	1043.3
5°	1031.0	1028.2	1029.2	1027.8	1027.8
6°	1010.9	1014.5	1011.6	1009.1	1007.6
7°	988.9	991.8	990.0	986.3	983.8
8°	971.6	969.8	966.9	966.2	961.8
9°	955.0	948.5	942.0	943.1	944.2
10°	928.3	929.0	915.7	925.8	927.6
11°	917.2	913.2	895.5	903.8	906.7
12°	900.9	888.3	873.2	880.0	885.4
13°	877.5	864.5	850.8	861.3	866.7
14°	859.9	845.1	827.8	841.1	852.3
15°	836.8	820.9	806.2	818.8	831.7
16°	816.6	798.2	783.5	795.7	815.2
17°	799.0	776.2	758.2	771.2	789.9
18°	778.4	752.1	735.5	749.2	770.5
19°	755.7	729.0	714.3	725.4	749.9
20°	738.8	708.9	691.2	702.0	733.7
22.5°	678.2	646.9	630.7	643.6	668.9
25°	602.2	584.5	573.0	584.2	593.9
27.5°	512.1	512.1	516.1	511.4	508.5
30°	402.9	432.1	460.9	430.6	396.1
32.5°	294.1	340.9	398.9	347.0	293.7
35°	204.7	252.6	334.4	249.7	200.7
37.5°	142.3	174.1	263.8	175.9	140.5
40°	94.8	116.8	193.5	118.9	94.1
42.5°	62.0	77.1	125.1	77.5	60.5
45°	38.2	48.7	75.3	48.3	37.5
47.5°	22.3	28.8	44.0	29.2	22.0
50°	11.2	16.9	24.9	16.6	11.2
52.5°	6.5	9.0	13.7	8.6	6.5
55°	5.0	5.0	7.2	5.0	4.7
57.5°	4.0	4.0	4.0	4.0	3.6
60°	2.9	3.2	2.9	2.9	2.9
62.5°	2.5	2.5	2.2	2.5	2.2
65°	1.8	1.8	1.8	1.8	1.8
67.5°	1.4	1.4	1.4	1.4	1.4
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

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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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(END OF REPORT)