

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: P838265

Luminaire Tested: HCSQ605D010-HM60525835-61SQH

Issue Date: 5/21/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P838265  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2309-166-2)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 5/21/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO COMMERCIAL  
Catalog Number: HCSQ605D010-HM60525835-61SQH  
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT  
Ballast/Driver: -

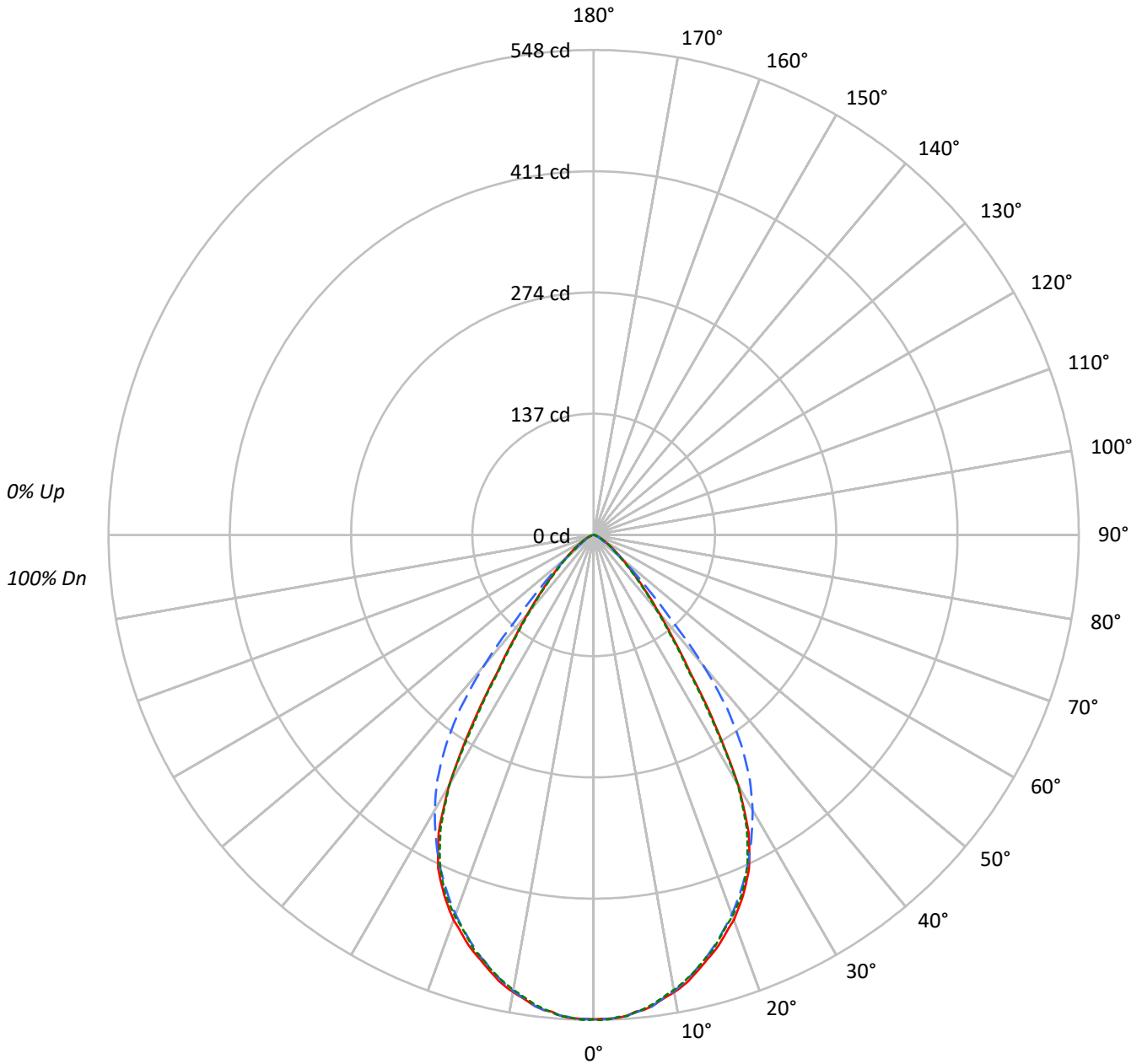
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 615.6 lumens  
Efficiency: N/A  
Efficacy: 102.6 lumens/watt  
Spacing Criteria (0/90/45): 1.02 / 1.01 / 1.04  
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				100															
1	113	110	107	105	110	108	105	103	104	102	100	100	98	97	97	95	94	92				92															
2	107	101	97	93	104	100	96	92	96	93	90	93	91	88	91	88	86	85				85															
3	101	94	88	84	99	92	87	83	90	85	82	87	84	81	85	82	79	78				78															
4	95	87	81	76	93	86	80	76	83	78	75	81	77	74	79	76	73	71				71															
5	90	80	74	69	88	79	74	69	78	72	68	76	71	68	74	70	67	66				66															
6	85	75	68	64	83	74	68	63	72	67	63	71	66	63	70	65	62	61				61															
7	80	70	63	59	79	69	63	59	68	62	58	67	62	58	65	61	58	56				56															
8	76	65	59	54	74	65	59	54	64	58	54	63	57	54	62	57	54	52				52															
9	72	61	55	51	70	61	55	50	60	54	50	59	54	50	58	53	50	48				48															
10	68	58	51	47	67	57	51	47	56	51	47	55	50	47	55	50	47	45				45															

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

	0°	45°	90°
0°	23569	23569	23569
5°	23382	23421	23408
10°	22935	22883	22831
15°	22127	22002	21989
20°	21214	20907	21003
25°	19744	19573	19530
30°	16227	17853	16178
35°	10023	15332	9782
40°	6435	10870	6211
45°	4195	5267	3994
50°	2786	2626	2606
55°	1892	1366	1757
60°	1283	835	1180
65°	897	621	805
70°	579	453	541
75°	399	349	349
80°	298	223	223
85°	148	296	148

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 5267 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	51.1	8.3
10°-20°	138.7	22.5
20°-30°	187.3	30.4
30°-40°	146.2	23.7
40°-50°	61.2	9.9
50°-60°	20.8	3.4
60°-70°	7.4	1.2
70°-80°	2.4	0.4
80°-90°	0.5	0.1
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°	377.2	61.3
0°-40°	523.3	85.0
0°-60°	605.3	98.3
0°-90°	615.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	615.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	547	547	547	547	547	
5°	541	542	542	541	542	51
15°	496	495	494	493	493	140
25°	416	414	412	412	411	187
35°	191	224	292	223	186	125
45°	69	74	86	70	66	55
55°	25	23	18	22	23	23
65°	9	7	6	7	8	9
75°	2	2	2	2	2	3
85°	0	0	1	0	0	0
90°	0	0	0	0	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	547.4	547.4	547.4	547.4	547.4
1°	546.8	547.7	547.1	547.4	548.3
2°	546.8	546.8	547.4	547.1	547.4
3°	546.2	546.2	545.5	545.5	545.5
4°	544.3	544.3	544.3	543.7	544.9
5°	541.0	541.6	541.9	541.0	541.6
6°	539.8	540.1	539.5	539.2	538.6
7°	537.0	536.1	537.0	534.9	535.2
8°	532.5	532.5	531.9	531.3	530.7
9°	528.2	528.2	527.6	526.7	526.1
10°	524.6	523.7	523.4	522.5	522.2
11°	520.3	518.5	518.2	517.3	517.3
12°	515.2	514.3	512.2	511.8	511.8
13°	508.8	507.9	506.4	505.2	506.4
14°	502.7	502.1	499.4	500.3	500.0
15°	496.4	495.2	493.6	493.0	493.3
16°	490.6	488.5	486.3	486.7	488.5
17°	484.5	481.5	479.4	479.1	480.0
18°	476.9	474.5	471.2	472.4	472.4
19°	469.3	466.0	463.9	463.6	464.8
20°	463.0	457.8	456.3	456.0	458.4
22.5°	441.1	436.0	434.7	436.0	438.4
25°	415.6	413.8	412.0	412.0	411.1
27.5°	379.5	383.7	385.9	381.6	374.6
30°	326.4	344.3	359.1	342.1	325.4
32.5°	257.1	294.2	328.5	293.3	251.1
35°	190.7	223.7	291.7	223.4	186.1
37.5°	146.9	168.2	248.0	165.5	142.7
40°	114.5	126.9	193.4	125.4	110.5
42.5°	89.0	96.8	128.7	95.0	85.9
45°	68.9	73.8	86.5	70.4	65.6
47.5°	53.7	55.9	59.2	53.4	50.7
50°	41.6	41.6	39.2	40.1	38.9
52.5°	32.2	31.0	26.4	29.1	29.8
55°	25.2	23.1	18.2	21.9	23.4
57.5°	19.1	17.0	13.1	16.1	17.6
60°	14.9	12.8	9.7	12.1	13.7
62.5°	11.5	9.7	7.6	9.1	10.3
65°	8.8	7.3	6.1	7.0	7.9
67.5°	6.7	5.5	4.6	5.2	6.1
70°	4.6	4.3	3.6	3.9	4.3
72.5°	3.3	3.0	2.7	2.7	3.0
75°	2.4	2.1	2.1	2.1	2.1



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
82.5°	0.6	0.6	0.6	0.6	0.6
85°	0.3	0.3	0.6	0.3	0.3
87.5°	0.3	0.3	0.3	0.3	0.3
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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Scaled Data Report





77.5°	1.5	1.5	1.5	1.5	1.5
80°	1.2	1.2	0.9	0.9	0.9

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Scaled Data Report



(END OF REPORT)