

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: P838280

Luminaire Tested: HCSQ605D010-HM60525930-61SQH

Issue Date: 5/21/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P838280  
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-HM60525930-61SQH  
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: -

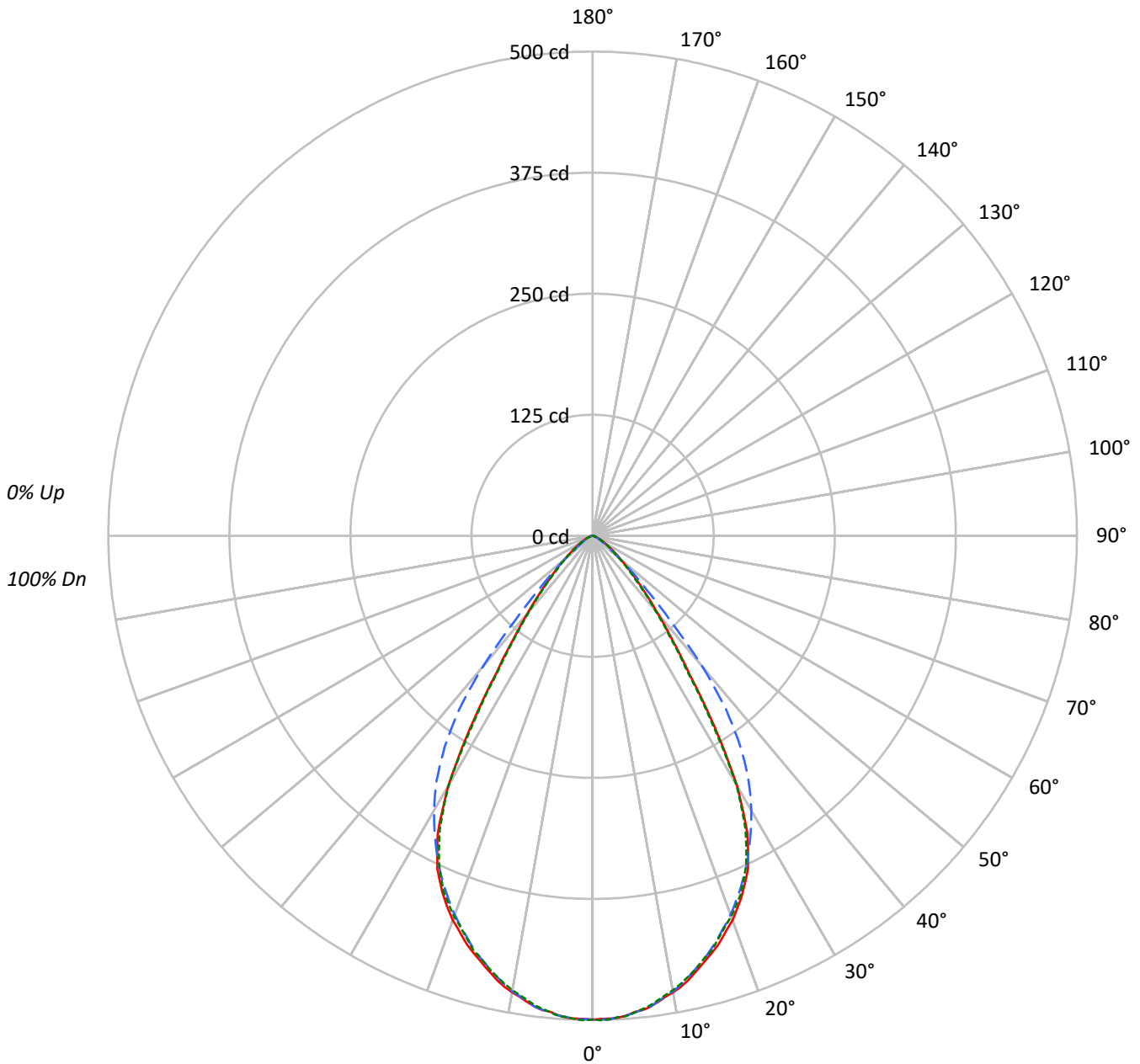
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 561.9 lumens  
Efficiency: N/A  
Efficacy: 93.6 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	78	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°	21511	21511	21511
5°	21338	21377	21364
10°	20933	20885	20837
15°	20192	20081	20067
20°	19358	19079	19171
25°	18019	17863	17820
30°	14806	16297	14766
35°	9146	13997	8925
40°	5873	9920	5671
45°	3830	4810	3641
50°	2545	2391	2378
55°	1727	1246	1599
60°	1171	766	1076
65°	815	560	734
70°	529	415	491
75°	366	316	316
80°	273	198	198
85°	148	296	148

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 4810 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	46.7	8.3
10°-20°	126.6	22.5
20°-30°	170.9	30.4
30°-40°	133.4	23.7
40°-50°	55.9	9.9
50°-60°	19.0	3.4
60°-70°	6.8	1.2
70°-80°	2.2	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°	344.2	61.3
0°-40°	477.6	85.0
0°-60°	552.5	98.3
0°-90°	561.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	561.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	500	500	500	500	500	
5°	494	494	495	494	494	47
15°	453	452	450	450	450	127
25°	379	378	376	376	375	171
35°	174	204	266	204	170	114
45°	63	67	79	64	60	50
55°	23	21	17	20	21	21
65°	8	7	6	6	7	8
75°	2	2	2	2	2	2
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°	499.6	499.6	499.6	499.6	499.6
1°	499.0	499.8	499.3	499.6	500.4
2°	499.0	499.0	499.6	499.3	499.6
3°	498.4	498.4	497.9	497.9	497.9
4°	496.8	496.8	496.8	496.2	497.3
5°	493.7	494.3	494.6	493.7	494.3
6°	492.6	492.9	492.3	492.1	491.5
7°	490.1	489.3	490.1	488.2	488.5
8°	486.0	486.0	485.4	484.9	484.3
9°	482.1	482.1	481.5	480.7	480.2
10°	478.8	477.9	477.7	476.8	476.6
11°	474.9	473.2	473.0	472.1	472.1
12°	470.2	469.4	467.4	467.1	467.1
13°	464.4	463.5	462.1	461.0	462.1
14°	458.8	458.3	455.8	456.6	456.3
15°	453.0	451.9	450.5	450.0	450.2
16°	447.7	445.8	443.9	444.1	445.8
17°	442.2	439.4	437.5	437.2	438.0
18°	435.3	433.1	430.0	431.1	431.1
19°	428.3	425.3	423.4	423.1	424.2
20°	422.5	417.8	416.4	416.2	418.4
22.5°	402.6	397.9	396.8	397.9	400.1
25°	379.3	377.6	376.0	376.0	375.1
27.5°	346.3	350.2	352.2	348.3	341.9
30°	297.8	314.2	327.8	312.3	297.0
32.5°	234.7	268.5	299.8	267.6	229.1
35°	174.0	204.2	266.3	203.9	169.8
37.5°	134.1	153.5	226.4	151.0	130.2
40°	104.5	115.8	176.5	114.4	100.9
42.5°	81.2	88.4	117.5	86.7	78.4
45°	62.9	67.3	79.0	64.3	59.8
47.5°	49.0	51.0	54.0	48.8	46.3
50°	38.0	38.0	35.7	36.6	35.5
52.5°	29.4	28.3	24.1	26.6	27.2
55°	23.0	21.1	16.6	19.9	21.3
57.5°	17.5	15.5	11.9	14.7	16.1
60°	13.6	11.6	8.9	11.1	12.5
62.5°	10.5	8.9	6.9	8.3	9.4
65°	8.0	6.6	5.5	6.4	7.2
67.5°	6.1	5.0	4.2	4.7	5.5
70°	4.2	3.9	3.3	3.6	3.9
72.5°	3.0	2.8	2.5	2.5	2.8
75°	2.2	1.9	1.9	1.9	1.9



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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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77.5°	1.4	1.4	1.4	1.4	1.4
80°	1.1	1.1	0.8	0.8	0.8

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Scaled Data Report



(END OF REPORT)