

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: P838290

Luminaire Tested: HCSQ605D010-HM60525940-61SQH

Issue Date: 5/21/2024

Test Information

Test Method: LM-79-2019
Report Number: P838290
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-HM60525940-61SQH
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: -

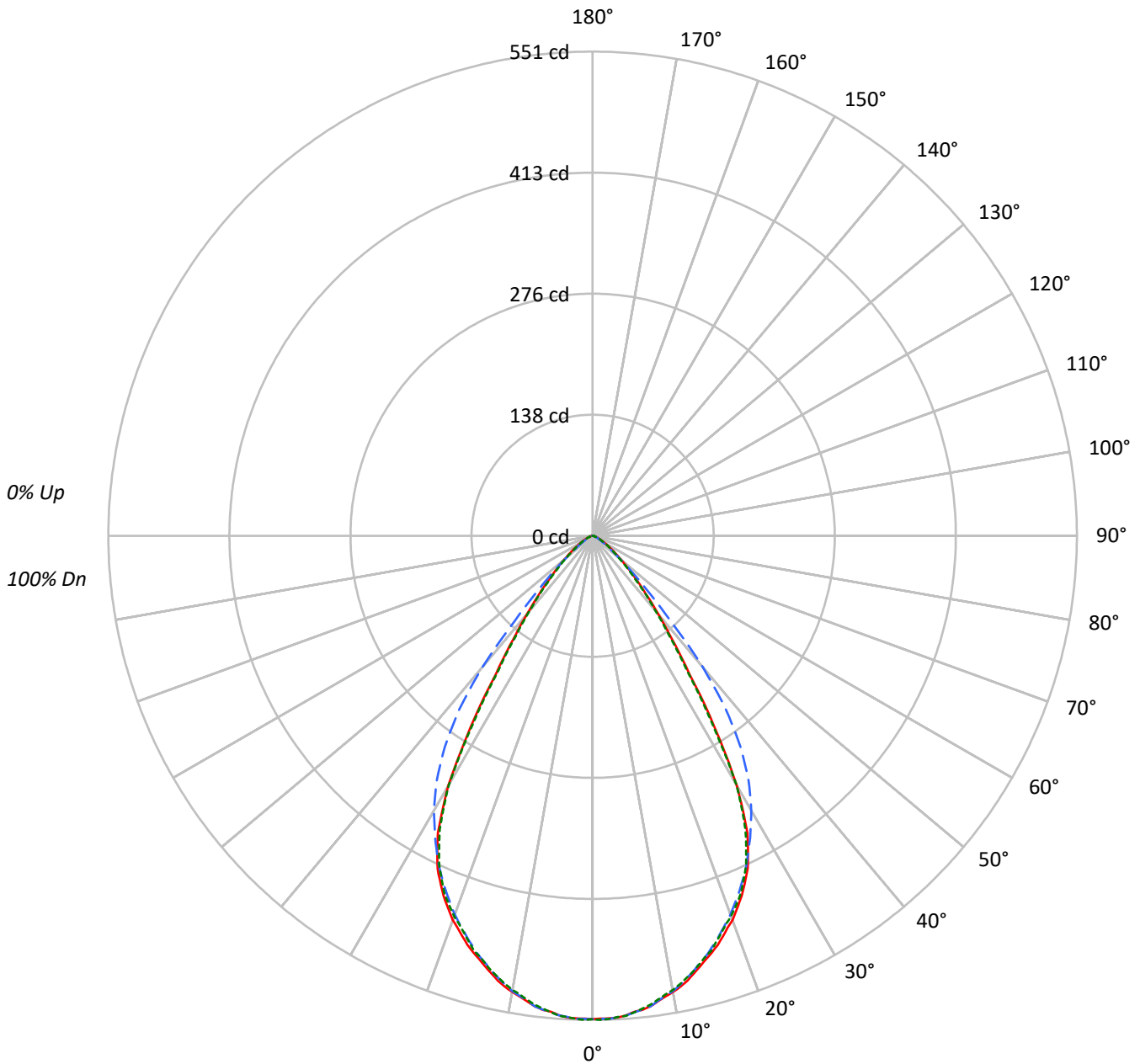
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 618.7 lumens
Efficiency: N/A
Efficacy: 103.1 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_{in}): 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°	23685	23685	23685
5°	23499	23538	23525
10°	23049	22997	22944
15°	22234	22113	22100
20°	21320	21013	21109
25°	19844	19668	19625
30°	16307	17943	16262
35°	10071	15411	9829
40°	6464	10921	6244
45°	4220	5297	4013
50°	2800	2639	2619
55°	1899	1374	1764
60°	1283	844	1180
65°	897	621	805
70°	579	466	541
75°	399	349	349
80°	298	223	223
85°	148	296	148

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 5297 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.4	8.3
10°-20°	139.4	22.5
20°-30°	188.2	30.4
30°-40°	146.9	23.7
40°-50°	61.5	9.9
50°-60°	20.9	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°	379.0	61.3
0°-40°	525.9	85.0
0°-60°	608.3	98.3
0°-90°	618.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	618.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	550	550	550	550	550	
5°	544	544	545	544	544	51
15°	499	498	496	496	496	140
25°	418	416	414	414	413	188
35°	192	225	293	225	187	126
45°	69	74	87	71	66	56
55°	25	23	18	22	24	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°	550.1	550.1	550.1	550.1	550.1
1°	549.5	550.4	549.8	550.1	551.0
2°	549.5	549.5	550.1	549.8	550.1
3°	548.9	548.9	548.3	548.3	548.3
4°	547.0	547.0	547.0	546.4	547.6
5°	543.7	544.3	544.6	543.7	544.3
6°	542.5	542.8	542.2	541.9	541.2
7°	539.7	538.8	539.7	537.6	537.9
8°	535.1	535.1	534.5	533.9	533.3
9°	530.9	530.9	530.3	529.3	528.7
10°	527.2	526.3	526.0	525.1	524.8
11°	522.9	521.1	520.8	519.9	519.9
12°	517.8	516.8	514.7	514.4	514.4
13°	511.3	510.4	508.9	507.7	508.9
14°	505.2	504.6	501.9	502.8	502.5
15°	498.8	497.6	496.1	495.5	495.8
16°	493.0	490.9	488.8	489.1	490.9
17°	486.9	483.9	481.7	481.4	482.4
18°	479.3	476.9	473.5	474.7	474.7
19°	471.7	468.3	466.2	465.9	467.1
20°	465.3	460.1	458.6	458.3	460.7
22.5°	443.3	438.1	436.9	438.1	440.6
25°	417.7	415.8	414.0	414.0	413.1
27.5°	381.4	385.6	387.8	383.5	376.5
30°	328.0	346.0	360.9	343.8	327.1
32.5°	258.4	295.6	330.1	294.7	252.3
35°	191.6	224.9	293.2	224.6	187.0
37.5°	147.7	169.0	249.3	166.3	143.4
40°	115.0	127.5	194.3	126.0	111.1
42.5°	89.4	97.3	129.4	95.5	86.3
45°	69.3	74.1	87.0	70.8	65.9
47.5°	54.0	56.1	59.5	53.7	51.0
50°	41.8	41.8	39.4	40.3	39.1
52.5°	32.3	31.1	26.5	29.3	29.9
55°	25.3	23.2	18.3	22.0	23.5
57.5°	19.2	17.1	13.1	16.2	17.7
60°	14.9	12.8	9.8	12.2	13.7
62.5°	11.6	9.8	7.6	9.2	10.4
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	3.7	4.0	4.3
72.5°	3.4	3.1	2.7	2.7	3.1
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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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)