

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: P838300

Luminaire Tested: HCSQ607D010-HM60525830-61SQH

Issue Date: 5/21/2024

Test Information

Test Method: LM-79-2019
Report Number: P838300
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: HCSQ607D010-HM60525830-61SQH
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, HAZE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT
Ballast/Driver: -

Summary

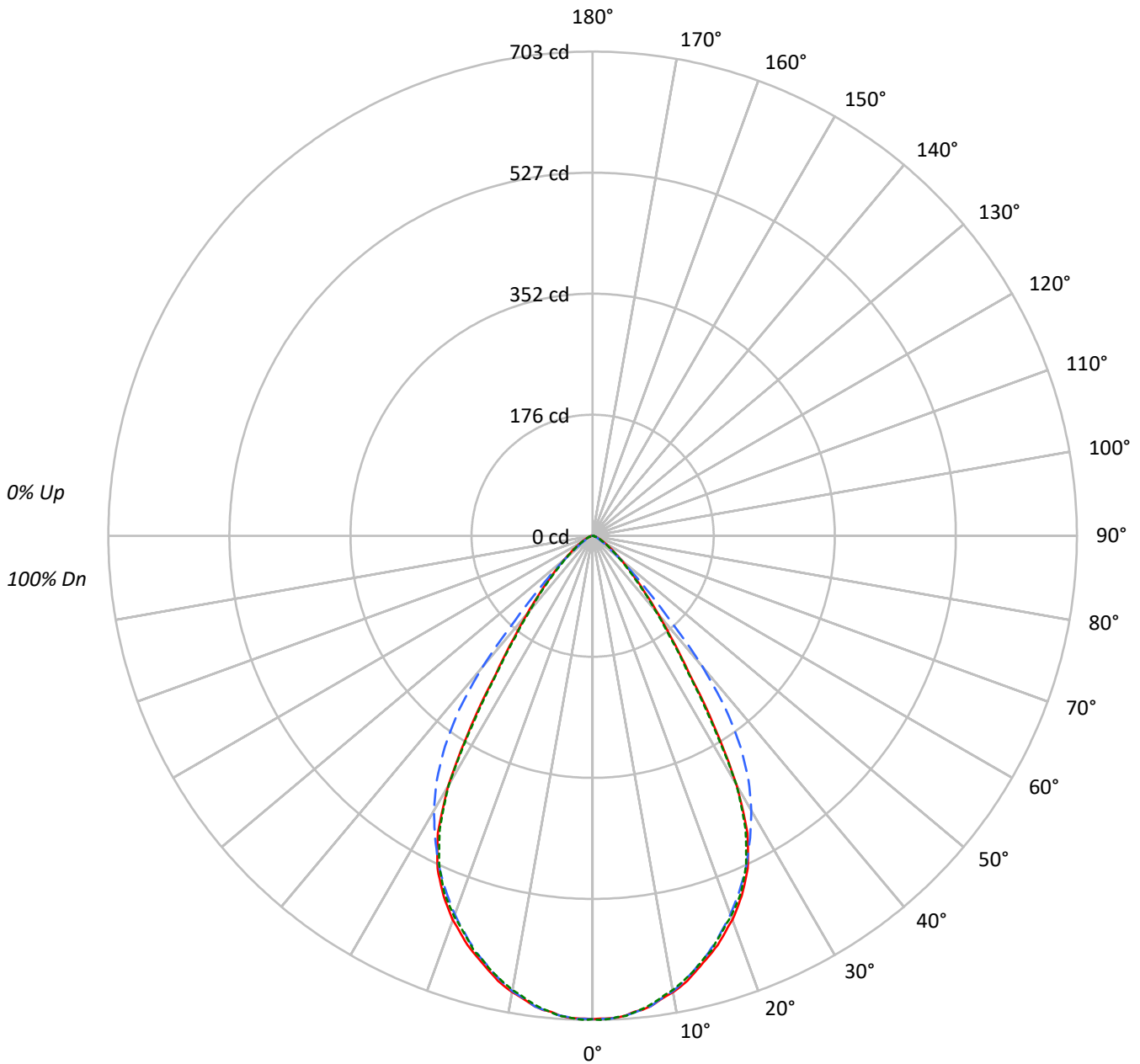
Lumens per Lamp: N/A
Luminaire Lumens: 789.4 lumens
Efficiency: N/A
Efficacy: 98.7 lumens/watt
Spacing Criteria (0/90/45): 1.02 / 1.01 / 1.04
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 8
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	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°	30221	30221	30221
5°	29982	30034	30016
10°	29410	29340	29275
15°	28372	28216	28198
20°	27198	26809	26932
25°	25316	25093	25041
30°	20806	22894	20747
35°	12851	19663	12541
40°	8251	13939	7964
45°	5383	6753	5121
50°	3570	3363	3336
55°	2425	1757	2252
60°	1645	1076	1507
65°	1151	795	1029
70°	730	592	680
75°	516	449	449
80°	397	298	298
85°	198	395	198

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 6753 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.5	8.3
10°-20°	177.9	22.5
20°-30°	240.2	30.4
30°-40°	187.4	23.7
40°-50°	78.5	9.9
50°-60°	26.6	3.4
60°-70°	9.5	1.2
70°-80°	3.1	0.4
80°-90°	0.6	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°	483.6	61.3
0°-40°	671.0	85.0
0°-60°	776.2	98.3
0°-90°	789.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	789.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	702	702	702	702	702	
5°	694	694	695	694	694	66
15°	636	635	633	632	633	179
25°	533	531	528	528	527	240
35°	244	287	374	286	239	161
45°	88	95	111	90	84	71
55°	32	30	23	28	30	30
65°	11	9	8	9	10	12
75°	3	3	3	3	3	3
85°	0	0	1	0	0	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	701.9	701.9	701.9	701.9	701.9
1°	701.1	702.3	701.5	701.9	703.0
2°	701.1	701.1	701.9	701.5	701.9
3°	700.3	700.3	699.5	699.5	699.5
4°	698.0	698.0	698.0	697.2	698.8
5°	693.7	694.5	694.9	693.7	694.5
6°	692.1	692.5	691.7	691.4	690.6
7°	688.6	687.5	688.6	685.9	686.3
8°	682.8	682.8	682.0	681.2	680.5
9°	677.3	677.3	676.6	675.4	674.6
10°	672.7	671.5	671.1	669.9	669.6
11°	667.2	664.9	664.5	663.3	663.3
12°	660.6	659.4	656.7	656.3	656.3
13°	652.4	651.3	649.3	647.8	649.3
14°	644.6	643.9	640.4	641.5	641.1
15°	636.5	634.9	633.0	632.2	632.6
16°	629.1	626.3	623.6	624.0	626.3
17°	621.3	617.4	614.7	614.3	615.4
18°	611.6	608.4	604.2	605.7	605.7
19°	601.8	597.5	594.8	594.4	596.0
20°	593.6	587.0	585.1	584.7	587.8
22.5°	565.6	559.0	557.4	559.0	562.1
25°	532.9	530.6	528.2	528.2	527.1
27.5°	486.6	492.0	494.8	489.3	480.4
30°	418.5	441.4	460.5	438.7	417.3
32.5°	329.7	377.2	421.2	376.0	321.9
35°	244.5	286.9	374.1	286.5	238.6
37.5°	188.4	215.7	318.0	212.2	183.0
40°	146.8	162.7	248.0	160.8	141.7
42.5°	114.1	124.2	165.1	121.8	110.2
45°	88.4	94.6	110.9	90.3	84.1
47.5°	68.9	71.6	75.9	68.5	65.0
50°	53.3	53.3	50.2	51.4	49.8
52.5°	41.3	39.7	33.9	37.4	38.1
55°	32.3	29.6	23.4	28.0	30.0
57.5°	24.5	21.8	16.7	20.6	22.6
60°	19.1	16.3	12.5	15.6	17.5
62.5°	14.8	12.5	9.7	11.7	13.2
65°	11.3	9.3	7.8	9.0	10.1
67.5°	8.6	7.0	5.8	6.6	7.8
70°	5.8	5.4	4.7	5.1	5.4
72.5°	4.3	3.9	3.5	3.5	3.9
75°	3.1	2.7	2.7	2.7	2.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
82.5°	0.8	0.8	0.8	0.8	0.8
85°	0.4	0.4	0.8	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°	1.9	1.9	1.9	1.9	1.9
80°	1.6	1.6	1.2	1.2	1.2

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Scaled Data Report



(END OF REPORT)