

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: P838284

Luminaire Tested: HCSQ605D010-HM60525935-61SQC

Issue Date: 5/21/2024

Test Information

Test Method: LM-79-2019
Report Number: P838284
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: HCSQ605D010-HM60525935-61SQC
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: -

Summary

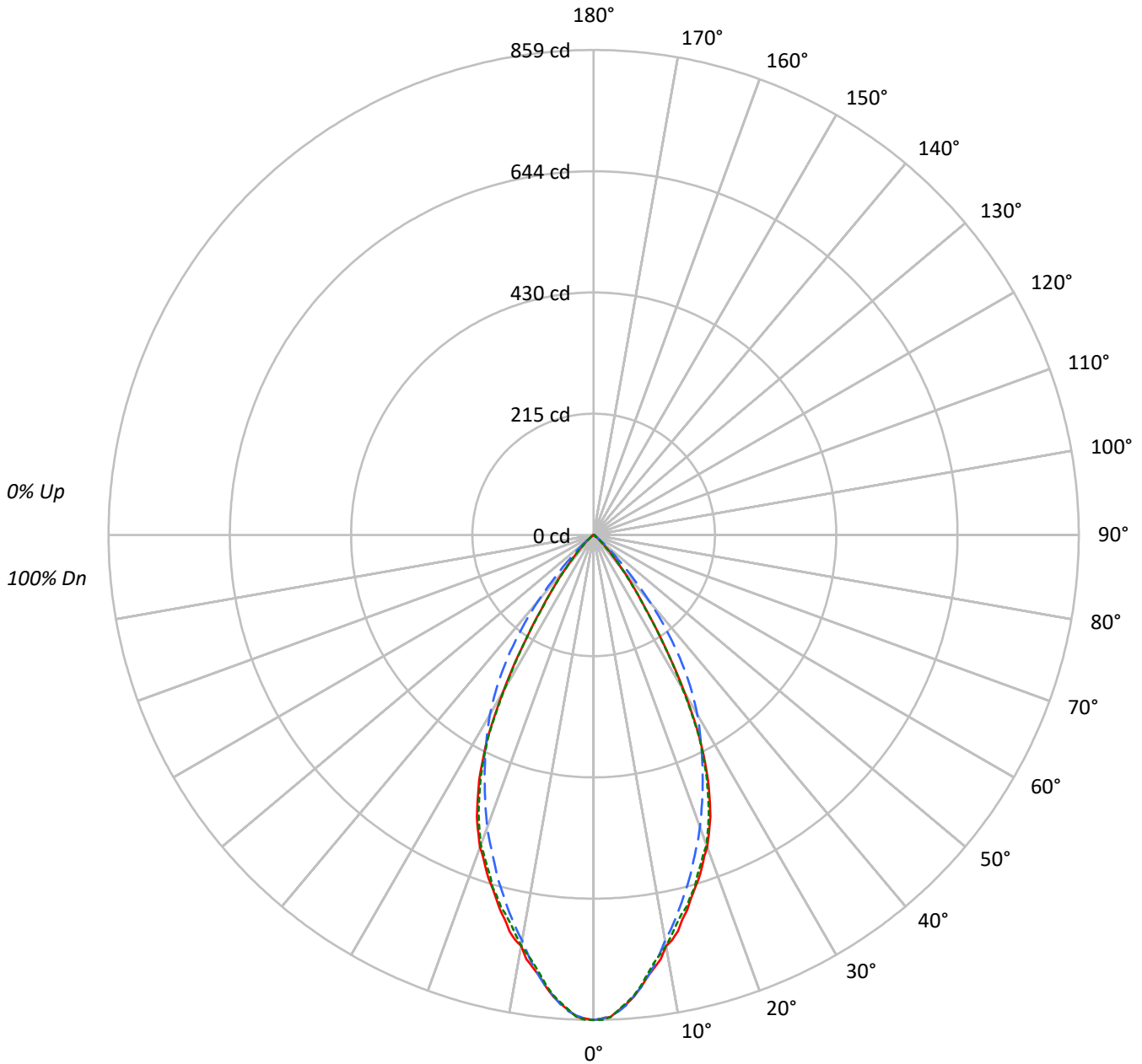
Lumens per Lamp: N/A
Luminaire Lumens: 643.7 lumens
Efficiency: N/A
Efficacy: 107.3 lumens/watt
Spacing Criteria (0/90/45): 0.82 / 0.81 / 0.85
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 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					70					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								
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°	36998	36998	36998
5°	35488	35428	35380
10°	32322	31885	32300
15°	29704	28617	29526
20°	26960	25223	26777
25°	22784	21677	22471
30°	15954	18251	15681
35°	8567	13997	8405
40°	4243	8661	4210
45°	1851	3653	1815
50°	596	1326	596
55°	300	428	278
60°	198	198	198
65°	143	143	143
70°	113	113	113
75°	100	100	100
80°	74	74	74
85°	148	148	148

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 3653 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.5	11.7
10°-20°	182.2	28.3
20°-30°	210.5	32.7
30°-40°	131.4	20.4
40°-50°	36.5	5.7
50°-60°	5.1	0.8
60°-70°	1.5	0.2
70°-80°	0.7	0.1
80°-90°	0.3	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°	468.2	72.7
0°-40°	599.6	93.2
0°-60°	641.2	99.6
0°-90°	643.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	643.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	859	859	859	859	859	
5°	821	819	820	819	819	76
15°	666	654	642	652	662	187
25°	480	466	456	465	473	214
35°	163	201	266	199	160	108
45°	30	39	60	38	30	26
55°	4	4	6	4	4	4
65°	1	1	1	1	1	2
75°	1	1	1	1	1	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	859.3	859.3	859.3	859.3	859.3
1°	856.7	856.7	856.7	859.0	859.0
2°	854.1	853.6	852.1	853.9	854.7
3°	843.5	844.7	845.2	844.4	842.4
4°	832.6	831.5	834.6	832.6	830.9
5°	821.1	818.8	819.7	818.6	818.6
6°	805.1	807.9	805.6	803.6	802.5
7°	787.6	789.9	788.4	785.5	783.5
8°	773.8	772.3	770.0	769.5	766.0
9°	760.6	755.4	750.2	751.1	752.0
10°	739.3	739.9	729.3	737.3	738.8
11°	730.4	727.3	713.2	719.8	722.1
12°	717.5	707.5	695.4	700.9	705.2
13°	698.9	688.5	677.6	686.0	690.3
14°	684.8	673.0	659.3	669.9	678.8
15°	666.4	653.8	642.0	652.1	662.4
16°	650.4	635.7	624.0	633.7	649.2
17°	636.3	618.2	603.9	614.2	629.1
18°	619.9	599.0	585.8	596.7	613.6
19°	601.9	580.6	568.9	577.8	597.3
20°	588.4	564.5	550.5	559.1	584.4
22.5°	540.2	515.2	502.3	512.6	532.7
25°	479.6	465.5	456.3	465.2	473.0
27.5°	407.8	407.8	411.0	407.3	405.0
30°	320.9	344.1	367.1	343.0	315.4
32.5°	234.2	271.5	317.7	276.4	233.9
35°	163.0	201.2	266.3	198.9	159.9
37.5°	113.4	138.6	210.1	140.1	111.9
40°	75.5	93.0	154.1	94.7	74.9
42.5°	49.4	61.4	99.6	61.7	48.2
45°	30.4	38.7	60.0	38.5	29.8
47.5°	17.8	23.0	35.0	23.2	17.5
50°	8.9	13.5	19.8	13.2	8.9
52.5°	5.2	7.2	10.9	6.9	5.2
55°	4.0	4.0	5.7	4.0	3.7
57.5°	3.2	3.2	3.2	3.2	2.9
60°	2.3	2.6	2.3	2.3	2.3
62.5°	2.0	2.0	1.7	2.0	1.7
65°	1.4	1.4	1.4	1.4	1.4
67.5°	1.1	1.1	1.1	1.1	1.1
70°	0.9	0.9	0.9	0.9	0.9
72.5°	0.6	0.9	0.6	0.9	0.9
75°	0.6	0.6	0.6	0.6	0.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
82.5°	0.3	0.3	0.3	0.3	0.3
85°	0.3	0.3	0.3	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°	0.6	0.6	0.6	0.6	0.3
80°	0.3	0.3	0.3	0.3	0.3

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Scaled Data Report



(END OF REPORT)