

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: P838259

Luminaire Tested: HCSQ605D010-HM60525830-61SQC

Issue Date: 5/21/2024



Test Information

Test Method: LM-79-2019
Report Number: P838259
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-HM60525830-61SQC
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT
Ballast/Driver: -

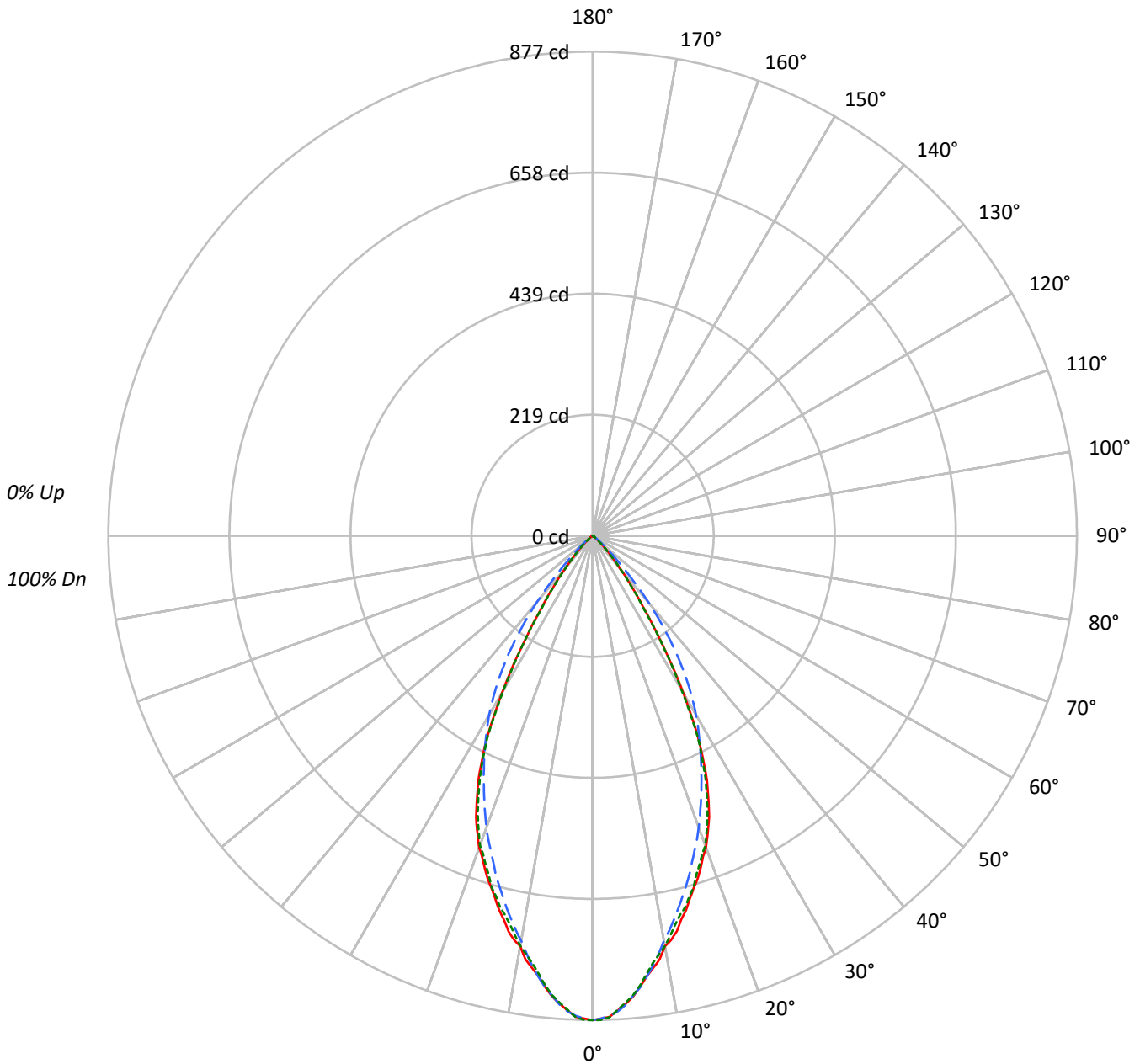
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 657.2 lumens
Efficiency: N/A
Efficacy: 109.5 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									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°	37777	37777	37777
5°	36236	36171	36123
10°	33004	32554	32978
15°	30333	29219	30150
20°	27523	25755	27336
25°	23264	22133	22941
30°	16287	18634	16014
35°	8751	14291	8578
40°	4333	8847	4300
45°	1894	3726	1857
50°	610	1353	610
55°	308	443	285
60°	198	198	198
65°	153	153	153
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: 3726 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.0	11.7
10°-20°	186.0	28.3
20°-30°	214.9	32.7
30°-40°	134.2	20.4
40°-50°	37.3	5.7
50°-60°	5.2	0.8
60°-70°	1.6	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°	478.0	72.7
0°-40°	612.2	93.2
0°-60°	654.7	99.6
0°-90°	657.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	657.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	877	877	877	877	877	
5°	838	836	837	836	836	77
15°	680	668	656	666	676	191
25°	490	475	466	475	483	219
35°	166	205	272	203	163	111
45°	31	40	61	39	30	27
55°	4	4	6	4	4	4
65°	2	2	2	2	2	2
75°	1	1	1	1	1	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	877.4	877.4	877.4	877.4	877.4
1°	874.7	874.7	874.7	877.1	877.1
2°	872.1	871.5	870.1	871.8	872.7
3°	861.3	862.4	863.0	862.1	860.1
4°	850.1	849.0	852.2	850.1	848.4
5°	838.4	836.1	836.9	835.8	835.8
6°	822.0	824.9	822.6	820.5	819.4
7°	804.1	806.5	805.0	802.1	800.0
8°	790.1	788.6	786.2	785.7	782.1
9°	776.6	771.3	766.0	766.9	767.8
10°	754.9	755.5	744.6	752.8	754.3
11°	745.8	742.6	728.2	735.0	737.3
12°	732.6	722.4	710.1	715.6	720.0
13°	713.6	703.0	691.9	700.4	704.8
14°	699.2	687.2	673.1	684.0	693.1
15°	680.5	667.6	655.5	665.8	676.4
16°	664.0	649.1	637.1	647.0	662.9
17°	649.7	631.2	616.6	627.1	642.4
18°	633.0	611.6	598.1	609.2	626.5
19°	614.5	592.8	580.8	589.9	609.8
20°	600.7	576.4	562.1	570.9	596.6
22.5°	551.5	526.0	512.8	523.4	543.9
25°	489.7	475.3	465.9	475.0	482.9
27.5°	416.4	416.4	419.6	415.8	413.5
30°	327.6	351.4	374.8	350.2	322.1
32.5°	239.1	277.2	324.4	282.2	238.8
35°	166.5	205.4	271.9	203.1	163.2
37.5°	115.8	141.5	214.5	143.0	114.3
40°	77.1	94.9	157.4	96.7	76.5
42.5°	50.4	62.7	101.7	63.0	49.2
45°	31.1	39.6	61.2	39.3	30.5
47.5°	18.2	23.4	35.8	23.7	17.9
50°	9.1	13.8	20.2	13.5	9.1
52.5°	5.3	7.3	11.1	7.0	5.3
55°	4.1	4.1	5.9	4.1	3.8
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°	2.1	2.1	1.8	2.1	1.8
65°	1.5	1.5	1.5	1.5	1.5
67.5°	1.2	1.2	1.2	1.2	1.2
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)