

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



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: P838754

Luminaire Tested: HCSQ660D010-HM64560927-61SQC

Issue Date: 5/21/2024



Test Information

Test Method: LM-79-2019
Report Number: P838754
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: HCSQ660D010-HM64560927-61SQC
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: -

Summary

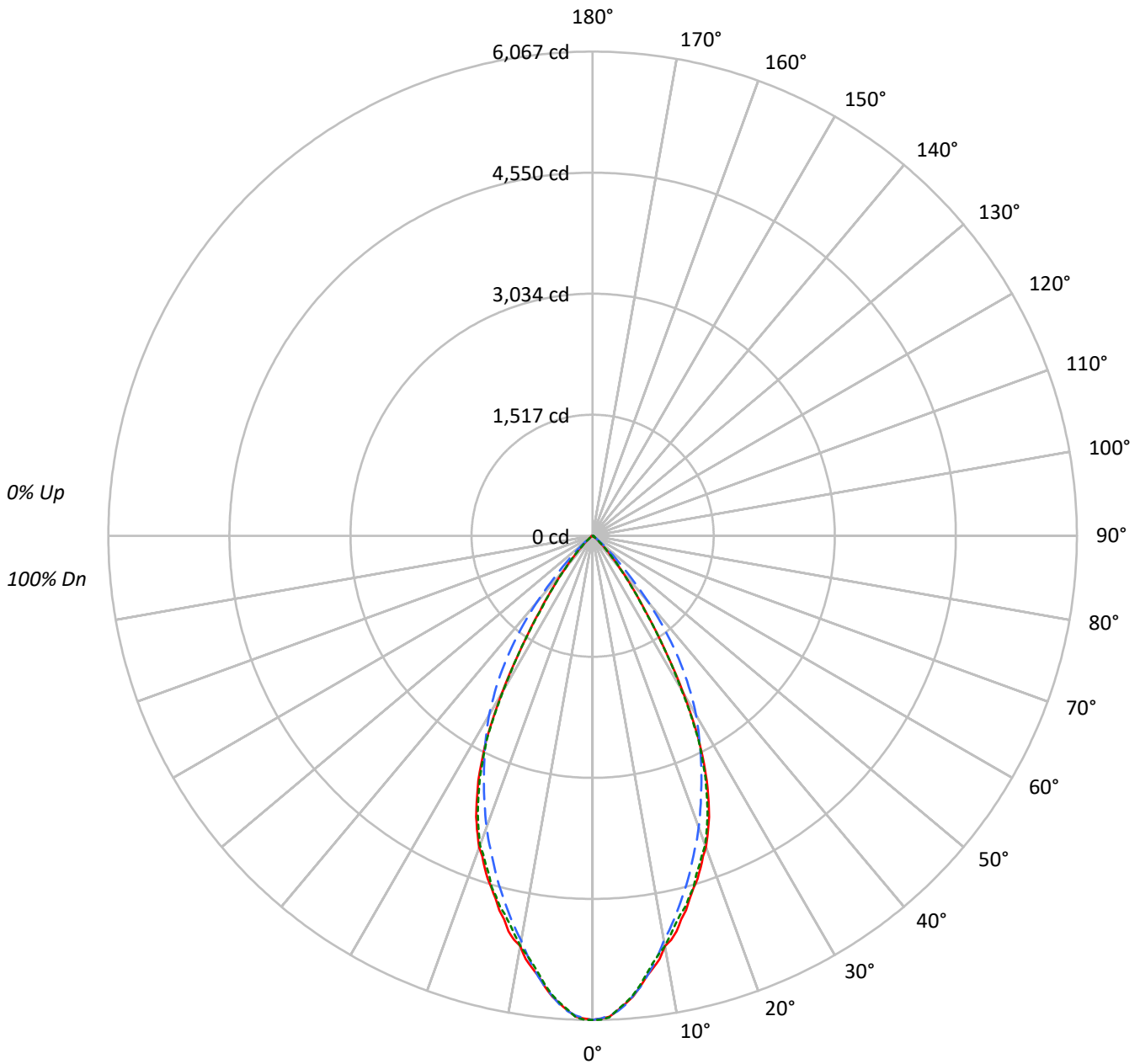
Lumens per Lamp: N/A
Luminaire Lumens: 4544.6 lumens
Efficiency: N/A
Efficacy: 81.2 lumens/watt
Spacing Criteria (0/90/45): 0.82 / 0.81 / 0.85
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 56
Input Voltage (V): NR
Input Current (Ain): 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	97	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	78	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°	261236	261236	261236
5°	250586	250145	249795
10°	228231	225131	228052
15°	209750	202070	208484
20°	190350	178093	189049
25°	160872	153076	158658
30°	112637	128860	110723
35°	60503	98847	59331
40°	29957	61162	29727
45°	13079	25787	12836
50°	4207	9364	4207
55°	2132	3040	1974
60°	1395	1395	1395
65°	1029	1029	1029
70°	768	768	768
75°	682	682	682
80°	496	496	496
85°	988	988	988

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 25787 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	532.8	11.7
10°-20°	1286.6	28.3
20°-30°	1486.2	32.7
30°-40°	928.1	20.4
40°-50°	257.8	5.7
50°-60°	36.1	0.8
60°-70°	10.6	0.2
70°-80°	4.6	0.1
80°-90°	1.9	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°	3305.5	72.7
0°-40°	4233.6	93.2
0°-60°	4527.5	99.6
0°-90°	4544.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4544.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6067	6067	6067	6067	6067	
5°	5798	5782	5788	5780	5780	534
15°	4706	4616	4533	4604	4677	1318
25°	3386	3287	3222	3285	3340	1512
35°	1151	1421	1881	1404	1129	765
45°	215	274	424	272	211	186
55°	28	28	40	28	26	28
65°	10	10	10	10	10	11
75°	4	4	4	4	4	4
85°	2	2	2	2	2	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6067.4	6067.4	6067.4	6067.4	6067.4
1°	6049.1	6049.1	6049.1	6065.4	6065.4
2°	6030.9	6026.8	6016.7	6028.9	6035.0
3°	5955.9	5964.0	5968.1	5962.0	5947.8
4°	5878.9	5870.8	5893.1	5878.9	5866.8
5°	5797.9	5781.6	5787.7	5779.6	5779.6
6°	5684.4	5704.6	5688.4	5674.2	5666.1
7°	5560.7	5577.0	5566.8	5546.6	5532.4
8°	5463.5	5453.3	5437.1	5433.1	5408.8
9°	5370.3	5333.8	5297.3	5303.4	5309.5
10°	5220.3	5224.3	5149.4	5206.1	5216.2
11°	5157.5	5135.2	5035.9	5082.5	5098.7
12°	5066.3	4995.4	4910.2	4948.7	4979.1
13°	4934.6	4861.6	4784.6	4843.4	4873.8
14°	4835.3	4752.2	4654.9	4729.9	4792.7
15°	4705.6	4616.4	4533.3	4604.2	4677.2
16°	4592.1	4488.7	4405.6	4474.5	4584.0
17°	4492.8	4365.1	4263.8	4336.7	4442.1
18°	4377.3	4229.3	4136.1	4213.1	4332.7
19°	4249.6	4099.6	4016.5	4079.4	4217.2
20°	4154.4	3986.1	3886.9	3947.6	4126.0
22.5°	3813.9	3637.6	3546.4	3619.4	3761.2
25°	3386.3	3287.0	3222.2	3285.0	3339.7
27.5°	2879.7	2879.7	2902.0	2875.6	2859.4
30°	2265.6	2429.8	2591.9	2421.7	2227.1
32.5°	1653.6	1917.1	2243.3	1951.5	1651.6
35°	1151.1	1420.6	1880.6	1404.4	1128.8
37.5°	800.5	978.8	1483.4	988.9	790.3
40°	533.0	656.6	1088.2	668.7	528.9
42.5°	348.6	433.7	703.2	435.7	340.5
45°	214.8	273.6	423.5	271.6	210.8
47.5°	125.6	162.1	247.2	164.1	123.6
50°	62.8	95.2	139.8	93.2	62.8
52.5°	36.5	50.7	77.0	48.6	36.5
55°	28.4	28.4	40.5	28.4	26.3
57.5°	22.3	22.3	22.3	22.3	20.3
60°	16.2	18.2	16.2	16.2	16.2
62.5°	14.2	14.2	12.2	14.2	12.2
65°	10.1	10.1	10.1	10.1	10.1
67.5°	8.1	8.1	8.1	8.1	8.1
70°	6.1	6.1	6.1	6.1	6.1
72.5°	4.1	6.1	4.1	6.1	6.1
75°	4.1	4.1	4.1	4.1	4.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
82.5°	2.0	2.0	2.0	2.0	2.0
85°	2.0	2.0	2.0	2.0	2.0
87.5°	2.0	2.0	2.0	2.0	2.0
90°	0.0	0.0	0.0	0.0	0.0

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— 0°-180° - - 45°-225° - - - - 90°-270°

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77.5°	4.1	4.1	4.1	4.1	2.0
80°	2.0	2.0	2.0	2.0	2.0

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(END OF REPORT)