

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: P838419

Luminaire Tested: HCSQ620D010-HM60525830-61SQC

Issue Date: 5/21/2024



Test Information

Test Method: LM-79-2019
Report Number: P838419
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: HCSQ620D010-HM60525830-61SQC
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT
Ballast/Driver: -

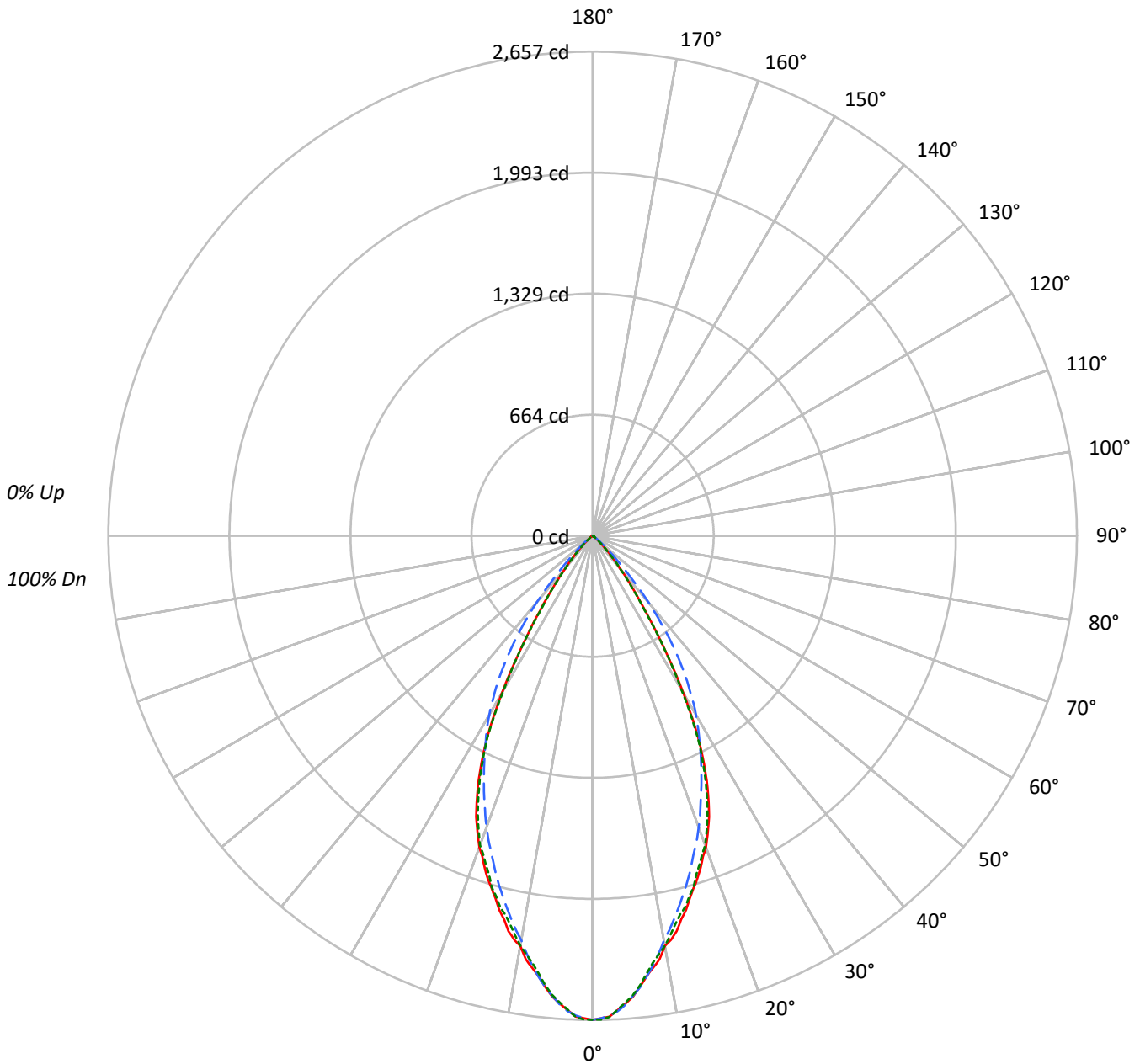
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1989.9 lumens
Efficiency: N/A
Efficacy: 99.5 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): 20
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					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	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	100	100	100	100		
	1	114	111	108	106	111	109	107	105	105	103	101	101	100	98	98	96	95	94	94	94	94	94	94		
	2	108	103	99	96	106	102	98	95	98	95	93	95	93	91	93	91	89	87	87	87	87	87	87		
	3	103	96	92	88	101	95	91	87	93	89	86	90	87	84	88	85	83	81	81	81	81	81	81		
	4	98	90	85	81	96	89	84	80	87	83	79	85	81	78	83	80	77	76	76	76	76	76	76		
	5	93	85	79	75	91	84	78	74	82	77	74	80	76	73	79	75	72	71	71	71	71	71	71		
	6	88	80	74	70	87	79	73	69	77	72	69	76	72	68	75	71	68	66	66	66	66	66	66		
	7	84	75	69	65	83	74	69	65	73	68	64	72	67	64	71	67	64	62	62	62	62	62	62		
	8	80	71	65	61	79	70	65	61	69	64	60	68	64	60	67	63	60	59	59	59	59	59	59		
	9	76	67	61	57	75	66	61	57	65	60	57	65	60	57	64	60	56	55	55	55	55	55	55		
	10	73	63	58	54	72	63	57	54	62	57	54	61	57	53	61	56	53	52	52	52	52	52	52		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	114382	114382	114382
5°	109719	109528	109373
10°	99930	98571	99852
15°	91837	88476	91284
20°	83345	77979	82776
25°	70438	67022	69469
30°	49319	56423	48483
35°	26491	43279	25976
40°	13118	26782	13017
45°	5730	11289	5620
50°	1842	4099	1842
55°	931	1329	863
60°	611	611	611
65°	448	448	448
70°	340	340	340
75°	299	299	299
80°	223	223	223
85°	445	445	445

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 11289 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	233.3	11.7
10°-20°	563.3	28.3
20°-30°	650.7	32.7
30°-40°	406.4	20.4
40°-50°	112.9	5.7
50°-60°	15.8	0.8
60°-70°	4.6	0.2
70°-80°	2.0	0.1
80°-90°	0.9	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°	1447.3	72.7
0°-40°	1853.7	93.2
0°-60°	1982.4	99.6
0°-90°	1989.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1989.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2657	2657	2657	2657	2657	
5°	2539	2532	2534	2531	2531	234
15°	2060	2021	1985	2016	2048	577
25°	1483	1439	1411	1438	1462	662
35°	504	622	823	615	494	335
45°	94	120	185	119	92	82
55°	12	12	18	12	12	12
65°	4	4	4	4	4	5
75°	2	2	2	2	2	2
85°	1	1	1	1	1	1
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2656.6	2656.6	2656.6	2656.6	2656.6
1°	2648.6	2648.6	2648.6	2655.7	2655.7
2°	2640.6	2638.9	2634.4	2639.7	2642.4
3°	2607.8	2611.3	2613.1	2610.5	2604.2
4°	2574.1	2570.5	2580.3	2574.1	2568.8
5°	2538.6	2531.5	2534.2	2530.6	2530.6
6°	2488.9	2497.8	2490.7	2484.5	2480.9
7°	2434.8	2441.9	2437.4	2428.6	2422.4
8°	2392.2	2387.7	2380.6	2378.9	2368.2
9°	2351.4	2335.4	2319.4	2322.1	2324.7
10°	2285.7	2287.5	2254.6	2279.5	2283.9
11°	2258.2	2248.4	2205.0	2225.4	2232.5
12°	2218.3	2187.2	2149.9	2166.8	2180.1
13°	2160.6	2128.7	2094.9	2120.7	2134.0
14°	2117.1	2080.7	2038.1	2071.0	2098.5
15°	2060.3	2021.3	1984.9	2016.0	2047.9
16°	2010.6	1965.4	1929.0	1959.2	2007.1
17°	1967.2	1911.3	1866.9	1898.8	1945.0
18°	1916.6	1851.8	1811.0	1844.7	1897.1
19°	1860.7	1795.0	1758.6	1786.2	1846.5
20°	1819.0	1745.3	1701.9	1728.5	1806.6
22.5°	1669.9	1592.7	1552.8	1584.7	1646.8
25°	1482.7	1439.2	1410.8	1438.3	1462.3
27.5°	1260.9	1260.9	1270.6	1259.1	1252.0
30°	992.0	1063.9	1134.9	1060.3	975.2
32.5°	724.0	839.4	982.3	854.5	723.2
35°	504.0	622.0	823.4	614.9	494.2
37.5°	350.5	428.6	649.5	433.0	346.1
40°	233.4	287.5	476.5	292.8	231.6
42.5°	152.6	189.9	307.9	190.8	149.1
45°	94.1	119.8	185.4	118.9	92.3
47.5°	55.0	71.0	108.3	71.9	54.1
50°	27.5	41.7	61.2	40.8	27.5
52.5°	16.0	22.2	33.7	21.3	16.0
55°	12.4	12.4	17.7	12.4	11.5
57.5°	9.8	9.8	9.8	9.8	8.9
60°	7.1	8.0	7.1	7.1	7.1
62.5°	6.2	6.2	5.3	6.2	5.3
65°	4.4	4.4	4.4	4.4	4.4
67.5°	3.5	3.5	3.5	3.5	3.5
70°	2.7	2.7	2.7	2.7	2.7
72.5°	1.8	2.7	1.8	2.7	2.7
75°	1.8	1.8	1.8	1.8	1.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
82.5°	0.9	0.9	0.9	0.9	0.9
85°	0.9	0.9	0.9	0.9	0.9
87.5°	0.9	0.9	0.9	0.9	0.9
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°	1.8	1.8	1.8	1.8	0.9
80°	0.9	0.9	0.9	0.9	0.9

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Scaled Data Report



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