

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: P838480

Luminaire Tested: HCSQ625D010-HM60525930-61SQH

Issue Date: 5/21/2024



Test Information

Test Method: LM-79-2019
Report Number: P838480
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: HCSQ625D010-HM60525930-61SQH
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: -

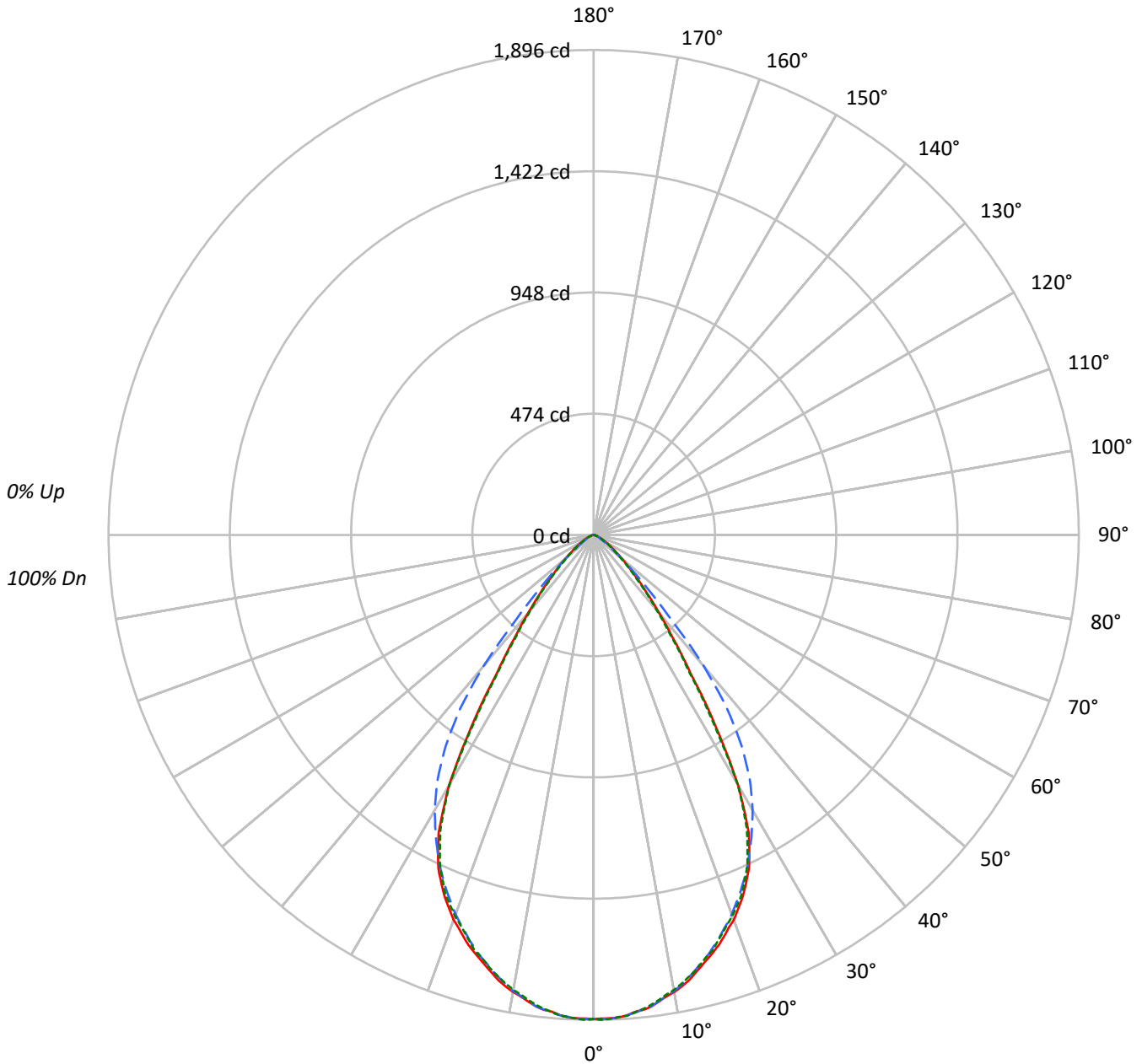
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2129.0 lumens
Efficiency: N/A
Efficacy: 76.9 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): 27.7
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	79	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°	81504	81504	81504
5°	80865	80999	80956
10°	79321	79137	78954
15°	76521	76098	76053
20°	73365	72307	72641
25°	68286	67687	67535
30°	56115	61753	55956
35°	34659	53034	33828
40°	22246	37590	21482
45°	14510	18218	13810
50°	9632	9069	9002
55°	6538	4729	6065
60°	4426	2893	4064
65°	3097	2139	2781
70°	1976	1586	1851
75°	1397	1214	1214
80°	1041	769	769
85°	494	1037	494

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 18218 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	176.8	8.3
10°-20°	479.8	22.5
20°-30°	647.7	30.4
30°-40°	505.5	23.7
40°-50°	211.8	9.9
50°-60°	71.8	3.4
60°-70°	25.6	1.2
70°-80°	8.3	0.4
80°-90°	1.7	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°	1304.4	61.3
0°-40°	1809.9	85.0
0°-60°	2093.4	98.3
0°-90°	2129.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2129.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1893	1893	1893	1893	1893	
5°	1871	1873	1874	1871	1873	177
15°	1717	1712	1707	1705	1706	483
25°	1437	1431	1425	1425	1422	647
35°	659	774	1009	773	644	434
45°	238	255	299	244	227	191
55°	87	80	63	76	81	80
65°	30	25	21	24	27	31
75°	8	7	7	7	7	9
85°	1	1	2	1	1	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1893.0	1893.0	1893.0	1893.0	1893.0
1°	1890.9	1894.1	1892.0	1893.0	1896.2
2°	1890.9	1890.9	1893.0	1892.0	1893.0
3°	1888.8	1888.8	1886.7	1886.7	1886.7
4°	1882.5	1882.5	1882.5	1880.4	1884.6
5°	1871.0	1873.1	1874.1	1871.0	1873.1
6°	1866.8	1867.8	1865.7	1864.7	1862.6
7°	1857.3	1854.2	1857.3	1850.0	1851.0
8°	1841.6	1841.6	1839.5	1837.4	1835.3
9°	1826.9	1826.9	1824.8	1821.6	1819.5
10°	1814.3	1811.1	1810.1	1806.9	1805.9
11°	1799.6	1793.3	1792.2	1789.1	1789.1
12°	1781.7	1778.6	1771.2	1770.2	1770.2
13°	1759.7	1756.5	1751.3	1747.1	1751.3
14°	1738.7	1736.6	1727.1	1730.3	1729.2
15°	1716.7	1712.5	1707.2	1705.1	1706.2
16°	1696.7	1689.4	1682.0	1683.1	1689.4
17°	1675.7	1665.2	1657.9	1656.8	1660.0
18°	1649.5	1641.1	1629.5	1633.7	1633.7
19°	1623.2	1611.7	1604.3	1603.3	1607.5
20°	1601.2	1583.3	1578.1	1577.0	1585.4
22.5°	1525.6	1507.7	1503.5	1507.7	1516.1
25°	1437.4	1431.1	1424.8	1424.8	1421.6
27.5°	1312.4	1327.1	1334.5	1319.8	1295.6
30°	1128.7	1190.6	1242.1	1183.3	1125.5
32.5°	889.3	1017.4	1136.0	1014.2	868.3
35°	659.4	773.8	1009.0	772.8	643.6
37.5°	508.2	581.7	857.8	572.2	493.5
40°	395.8	438.9	668.8	433.6	382.2
42.5°	307.6	334.9	445.2	328.6	297.1
45°	238.3	255.1	299.2	243.6	226.8
47.5°	185.8	193.2	204.7	184.8	175.3
50°	143.8	143.8	135.4	138.6	134.4
52.5°	111.3	107.1	91.3	100.8	102.9
55°	87.1	79.8	63.0	75.6	80.8
57.5°	66.1	58.8	45.1	55.6	60.9
60°	51.4	44.1	33.6	42.0	47.2
62.5°	39.9	33.6	26.2	31.5	35.7
65°	30.4	25.2	21.0	24.1	27.3
67.5°	23.1	18.9	15.7	17.8	21.0
70°	15.7	14.7	12.6	13.6	14.7
72.5°	11.5	10.5	9.4	9.4	10.5
75°	8.4	7.3	7.3	7.3	7.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
82.5°	2.1	2.1	2.1	2.1	2.1
85°	1.0	1.0	2.1	1.0	1.0
87.5°	1.0	1.0	1.0	1.0	1.0
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°	5.2	5.2	5.2	5.2	5.2
80°	4.2	4.2	3.1	3.1	3.1

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(END OF REPORT)