

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: P838485

Luminaire Tested: HCSQ625D010-HM60525935-61SQH

Issue Date: 5/21/2024

Test Information

Test Method: LM-79-2019
Report Number: P838485
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-HM60525935-61SQH
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: -

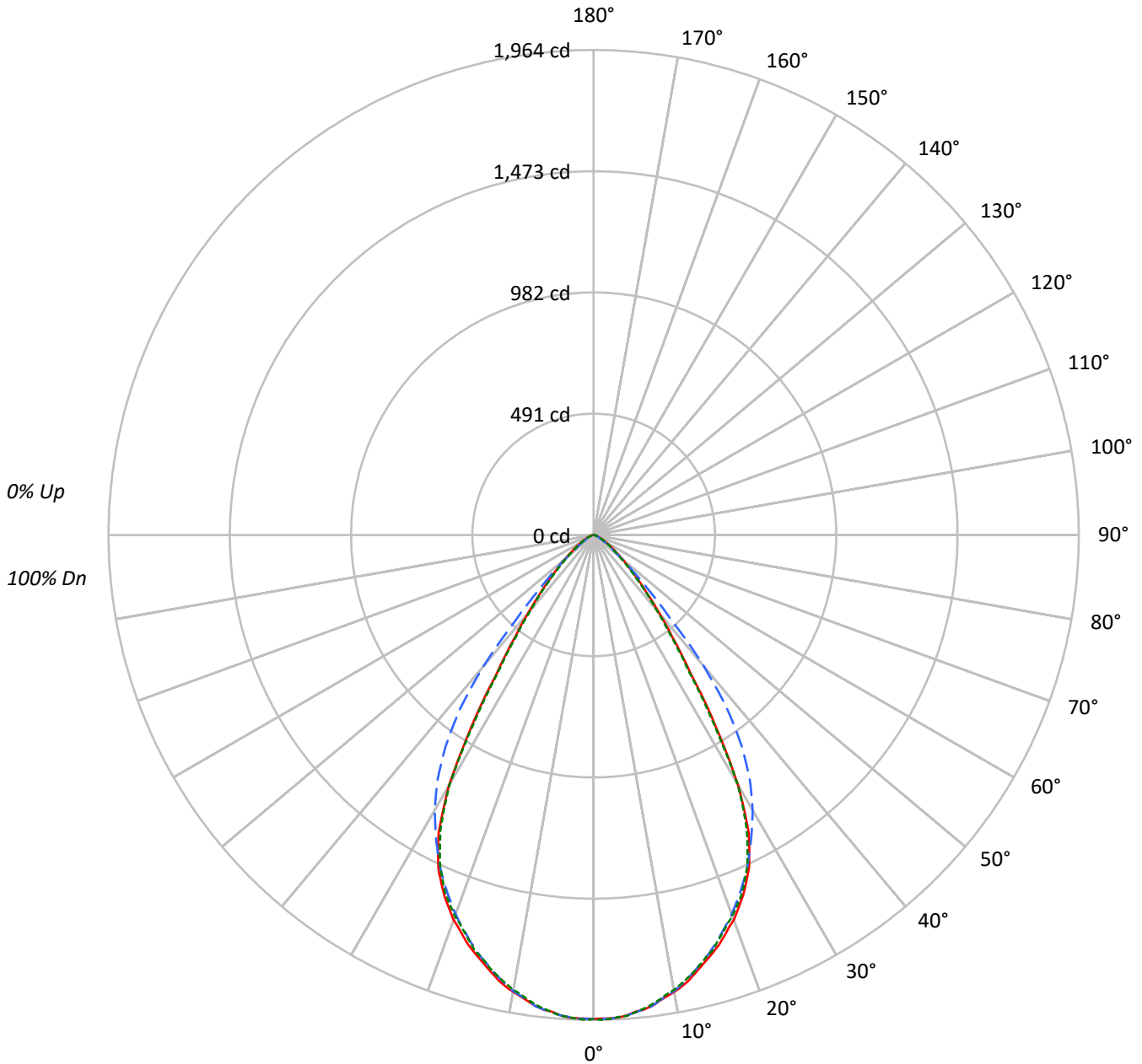
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2205.3 lumens
Efficiency: N/A
Efficacy: 79.6 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					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	113	110	107	105	110	108	105	103	104	102	100	100	98	97	97	95	94	92								
2	107	101	97	93	104	100	96	92	96	93	90	93	91	88	91	88	86	85								
3	101	94	88	84	99	92	87	83	90	85	82	87	84	81	85	82	79	78								
4	95	87	81	76	93	86	80	76	83	78	75	81	77	74	79	76	73	71								
5	90	80	74	69	88	79	74	69	78	72	68	76	71	68	74	70	67	66								
6	85	75	68	64	83	74	68	63	72	67	63	71	66	63	70	65	62	61								
7	80	70	63	59	78	69	63	59	68	62	58	67	62	58	65	61	58	56								
8	76	65	59	54	74	65	59	54	64	58	54	63	57	54	62	57	54	52								
9	72	61	55	51	70	61	55	50	60	54	50	59	54	50	58	53	50	48								
10	68	58	51	47	67	57	51	47	56	51	47	55	50	47	55	50	47	45								

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	84424	84424	84424
5°	83761	83899	83851
10°	82158	81970	81778
15°	79258	78821	78772
20°	75991	74891	75244
25°	70728	70110	69954
30°	58123	63960	57959
35°	35899	54932	35043
40°	23044	38939	22252
45°	15034	18870	14303
50°	9980	9398	9324
55°	6778	4902	6283
60°	4590	2997	4211
65°	3209	2221	2883
70°	2052	1649	1913
75°	1447	1264	1264
80°	1091	818	818
85°	543	1087	543

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°

Vertical Angle: 45°

Luminance: 18870 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	183.1	8.3
10°-20°	497.0	22.5
20°-30°	670.9	30.4
30°-40°	523.6	23.7
40°-50°	219.4	9.9
50°-60°	74.4	3.4
60°-70°	26.5	1.2
70°-80°	8.6	0.4
80°-90°	1.8	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°	1351.1	61.3
0°-40°	1874.7	85.0
0°-60°	2168.4	98.3
0°-90°	2205.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2205.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1961	1961	1961	1961	1961	
5°	1938	1940	1941	1938	1940	183
15°	1778	1774	1768	1766	1767	500
25°	1489	1482	1476	1476	1472	670
35°	683	802	1045	800	667	449
45°	247	264	310	252	235	198
55°	90	83	65	78	84	83
65°	32	26	22	25	28	32
75°	9	8	8	8	8	10
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°	1960.8	1960.8	1960.8	1960.8	<i>1960.8</i>
1°	<i>1958.6</i>	<i>1961.9</i>	<i>1959.7</i>	<i>1960.8</i>	<i>1964.1</i>
2°	1958.6	1958.6	1960.8	1959.7	<i>1960.8</i>
3°	1956.5	1956.5	1954.3	1954.3	<i>1954.3</i>
4°	1949.9	1949.9	1949.9	1947.8	<i>1952.1</i>
5°	1938.0	1940.1	1941.2	1938.0	<i>1940.1</i>
6°	1933.6	1934.7	1932.5	1931.4	<i>1929.3</i>
7°	1923.8	1920.6	1923.8	1916.2	<i>1917.3</i>
8°	1907.5	1907.5	1905.3	1903.2	<i>1901.0</i>
9°	1892.3	1892.3	1890.1	1886.9	<i>1884.7</i>
10°	1879.2	1876.0	1874.9	1871.6	<i>1870.5</i>
11°	1864.0	1857.5	1856.4	1853.1	<i>1853.1</i>
12°	1845.5	1842.3	1834.7	1833.6	<i>1833.6</i>
13°	1822.7	1819.4	1814.0	1809.6	<i>1814.0</i>
14°	1800.9	1798.8	1789.0	1792.2	<i>1791.2</i>
15°	1778.1	1773.8	1768.3	1766.1	<i>1767.2</i>
16°	1757.4	1749.8	1742.2	1743.3	<i>1749.8</i>
17°	1735.7	1724.8	1717.2	1716.1	<i>1719.4</i>
18°	1708.5	1699.8	1687.8	1692.2	<i>1692.2</i>
19°	1681.3	1669.4	1661.7	1660.6	<i>1665.0</i>
20°	1658.5	1640.0	1634.5	1633.5	<i>1642.2</i>
22.5°	1580.2	1561.7	1557.3	1561.7	<i>1570.4</i>
25°	1488.8	1482.3	1475.8	1475.8	<i>1472.5</i>
27.5°	1359.4	1374.6	1382.2	1367.0	<i>1342.0</i>
30°	1169.1	1233.3	1286.5	1225.6	<i>1165.8</i>
32.5°	921.1	1053.8	1176.7	1050.5	<i>899.4</i>
35°	683.0	801.5	1045.1	800.4	<i>666.7</i>
37.5°	526.4	602.5	888.5	592.7	<i>511.1</i>
40°	410.0	454.6	692.8	449.1	<i>395.9</i>
42.5°	318.6	346.9	461.1	340.4	<i>307.8</i>
45°	246.9	264.3	309.9	252.3	<i>234.9</i>
47.5°	192.5	200.1	212.1	191.4	<i>181.6</i>
50°	149.0	149.0	140.3	143.6	<i>139.2</i>
52.5°	115.3	110.9	94.6	104.4	<i>106.6</i>
55°	90.3	82.7	65.3	78.3	<i>83.7</i>
57.5°	68.5	60.9	46.8	57.6	<i>63.1</i>
60°	53.3	45.7	34.8	43.5	<i>48.9</i>
62.5°	41.3	34.8	27.2	32.6	<i>37.0</i>
65°	31.5	26.1	21.8	25.0	<i>28.3</i>
67.5°	23.9	19.6	16.3	18.5	<i>21.8</i>
70°	16.3	15.2	13.1	14.1	<i>15.2</i>
72.5°	12.0	10.9	9.8	9.8	<i>10.9</i>
75°	8.7	7.6	7.6	7.6	<i>7.6</i>



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
82.5°	2.2	2.2	2.2	2.2	2.2
85°	1.1	1.1	2.2	1.1	1.1
87.5°	1.1	1.1	1.1	1.1	1.1
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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— 0°-180° - - 45°-225° - - - - 90°-270°

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77.5°	5.4	5.4	5.4	5.4	5.4
80°	4.4	4.4	3.3	3.3	3.3

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Scaled Data Report



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