

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: P838490

Luminaire Tested: HCSQ625D010-HM60525940-61SQH

Issue Date: 5/21/2024

Test Information

Test Method: LM-79-2019
Report Number: P838490
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-HM60525940-61SQH
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: -

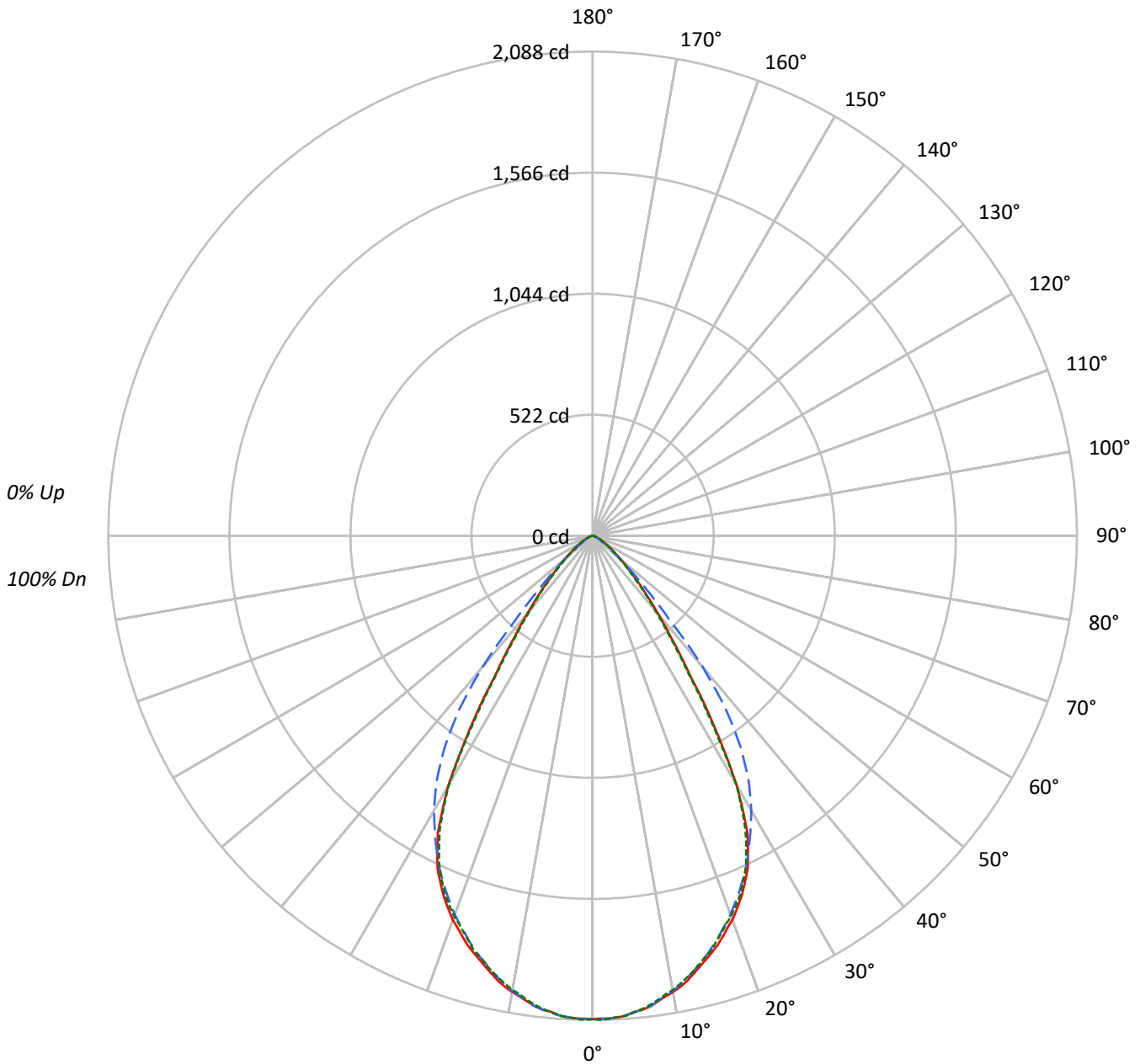
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2344.5 lumens
Efficiency: N/A
Efficacy: 84.6 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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CATALOG NUMBER: HCSQ625D010-HM60525940-61SQH

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	78	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°	89754	89754	89754
5°	89046	89193	89146
10°	87344	87142	86941
15°	84259	83796	83747
20°	80783	79619	79991
25°	75194	74533	74367
30°	61793	67997	61618
35°	38165	58401	37250
40°	24500	41395	23651
45°	15978	20063	15204
50°	10610	9987	9913
55°	7206	5210	6681
60°	4883	3186	4478
65°	3413	2353	3067
70°	2178	1750	2039
75°	1530	1347	1347
80°	1141	868	868
85°	593	1136	593

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°

Vertical Angle: 45°

Luminance: 20063 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	194.7	8.3
10°-20°	528.4	22.5
20°-30°	713.3	30.4
30°-40°	556.7	23.7
40°-50°	233.2	9.9
50°-60°	79.1	3.4
60°-70°	28.2	1.2
70°-80°	9.2	0.4
80°-90°	1.9	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°	1436.3	61.3
0°-40°	1993.0	85.0
0°-60°	2305.2	98.3
0°-90°	2344.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2344.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2085	2085	2085	2085	2085	
5°	2060	2063	2064	2060	2063	195
15°	1890	1886	1880	1878	1879	532
25°	1583	1576	1569	1569	1565	712
35°	726	852	1111	851	709	477
45°	262	281	330	268	250	211
55°	96	88	69	83	89	89
65°	34	28	23	27	30	34
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°	2084.6	2084.6	2084.6	2084.6	2084.6
1°	2082.2	2085.7	2083.4	2084.6	2088.0
2°	2082.2	2082.2	2084.6	2083.4	2084.6
3°	2079.9	2079.9	2077.6	2077.6	2077.6
4°	2073.0	2073.0	2073.0	2070.7	2075.3
5°	2060.3	2062.6	2063.7	2060.3	2062.6
6°	2055.6	2056.8	2054.5	2053.3	2051.0
7°	2045.2	2041.8	2045.2	2037.2	2038.3
8°	2027.9	2027.9	2025.6	2023.3	2021.0
9°	2011.7	2011.7	2009.4	2005.9	2003.6
10°	1997.8	1994.4	1993.2	1989.7	1988.6
11°	1981.7	1974.7	1973.6	1970.1	1970.1
12°	1962.0	1958.5	1950.4	1949.3	1949.3
13°	1937.7	1934.3	1928.5	1923.8	1928.5
14°	1914.6	1912.3	1901.9	1905.3	1904.2
15°	1890.3	1885.7	1879.9	1877.6	1878.8
16°	1868.4	1860.3	1852.2	1853.3	1860.3
17°	1845.2	1833.7	1825.6	1824.4	1827.9
18°	1816.3	1807.1	1794.4	1799.0	1799.0
19°	1787.4	1774.7	1766.6	1765.5	1770.1
20°	1763.1	1743.5	1737.7	1736.6	1745.8
22.5°	1679.9	1660.2	1655.6	1660.2	1669.5
25°	1582.8	1575.8	1568.9	1568.9	1565.4
27.5°	1445.2	1461.4	1469.5	1453.3	1426.7
30°	1242.9	1311.1	1367.7	1303.0	1239.4
32.5°	979.3	1120.3	1251.0	1116.8	956.1
35°	726.1	852.1	1111.1	850.9	708.7
37.5°	559.6	640.5	944.6	630.1	543.4
40°	435.9	483.3	736.5	477.5	420.8
42.5°	338.8	368.8	490.2	361.9	327.2
45°	262.4	280.9	329.5	268.2	249.7
47.5°	204.6	212.7	225.5	203.5	193.1
50°	158.4	158.4	149.1	152.6	148.0
52.5°	122.6	117.9	100.6	111.0	113.3
55°	96.0	87.9	69.4	83.2	89.0
57.5°	72.8	64.7	49.7	61.3	67.1
60°	56.7	48.6	37.0	46.2	52.0
62.5°	43.9	37.0	28.9	34.7	39.3
65°	33.5	27.7	23.1	26.6	30.1
67.5°	25.4	20.8	17.3	19.7	23.1
70°	17.3	16.2	13.9	15.0	16.2
72.5°	12.7	11.6	10.4	10.4	11.6
75°	9.2	8.1	8.1	8.1	8.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
82.5°	2.3	2.3	2.3	2.3	2.3
85°	1.2	1.2	2.3	1.2	1.2
87.5°	1.2	1.2	1.2	1.2	1.2
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°	5.8	5.8	5.8	5.8	5.8
80°	4.6	4.6	3.5	3.5	3.5

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(END OF REPORT)