

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: P838465

Luminaire Tested: HCSQ625D010-HM60525835-61SQH

Issue Date: 5/21/2024

Test Information

Test Method: LM-79-2019
Report Number: P838465
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-HM60525835-61SQH
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, HAZE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT
Ballast/Driver: -

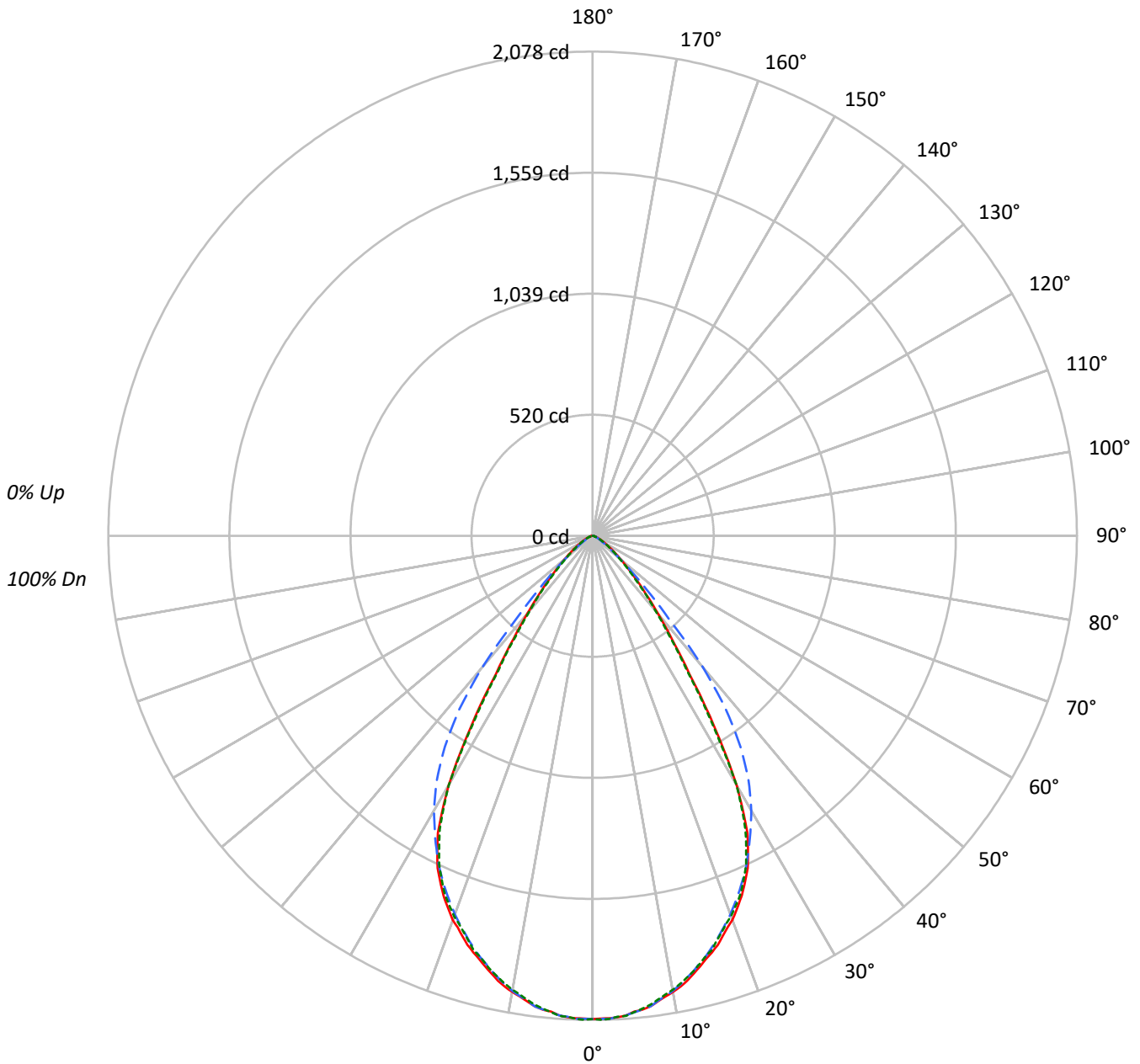
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2332.9 lumens
Efficiency: N/A
Efficacy: 84.2 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-HM60525835-61SQH

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°	89306	89306	89306
5°	88606	88753	88705
10°	86915	86714	86513
15°	83845	83381	83332
20°	80385	79225	79597
25°	74823	74163	74001
30°	61484	67664	61315
35°	37976	58112	37066
40°	24376	41187	23539
45°	15898	19966	15131
50°	10556	9940	9867
55°	7169	5180	6651
60°	4857	3169	4461
65°	3403	2343	3046
70°	2178	1737	2027
75°	1530	1347	1347
80°	1141	868	868
85°	593	1136	593

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 19966 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	193.7	8.3
10°-20°	525.8	22.5
20°-30°	709.7	30.4
30°-40°	553.9	23.7
40°-50°	232.0	9.9
50°-60°	78.7	3.4
60°-70°	28.1	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°	1429.2	61.3
0°-40°	1983.1	85.0
0°-60°	2293.8	98.3
0°-90°	2332.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2332.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2074	2074	2074	2074	2074	
5°	2050	2052	2054	2050	2052	194
15°	1881	1876	1871	1868	1870	529
25°	1575	1568	1561	1561	1558	708
35°	722	848	1106	847	705	475
45°	261	280	328	267	248	210
55°	96	87	69	83	89	88
65°	33	28	23	26	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°	2074.2	2074.2	2074.2	2074.2	2074.2
1°	2071.9	2075.4	2073.1	2074.2	2077.7
2°	2071.9	2071.9	2074.2	2073.1	2074.2
3°	2069.6	2069.6	2067.3	2067.3	2067.3
4°	2062.7	2062.7	2062.7	2060.4	2065.0
5°	2050.1	2052.4	2053.5	2050.1	2052.4
6°	2045.5	2046.6	2044.3	2043.2	2040.9
7°	2035.1	2031.7	2035.1	2027.1	2028.2
8°	2017.9	2017.9	2015.6	2013.3	2011.0
9°	2001.8	2001.8	1999.5	1996.0	1993.7
10°	1988.0	1984.5	1983.4	1979.9	1978.8
11°	1971.9	1964.9	1963.8	1960.3	1960.3
12°	1952.3	1948.8	1940.8	1939.6	1939.6
13°	1928.1	1924.7	1918.9	1914.3	1918.9
14°	1905.1	1902.8	1892.5	1895.9	1894.8
15°	1881.0	1876.4	1870.6	1868.3	1869.5
16°	1859.1	1851.1	1843.0	1844.2	1851.1
17°	1836.1	1824.6	1816.5	1815.4	1818.8
18°	1807.3	1798.1	1785.5	1790.1	1790.1
19°	1778.6	1765.9	1757.9	1756.7	1761.3
20°	1754.4	1734.9	1729.1	1728.0	1737.2
22.5°	1671.6	1652.0	1647.4	1652.0	1661.2
25°	1575.0	1568.0	1561.1	1561.1	1557.7
27.5°	1438.0	1454.2	1462.2	1446.1	1419.6
30°	1236.7	1304.6	1361.0	1296.5	1233.3
32.5°	974.4	1114.8	1244.8	1111.3	951.4
35°	722.5	847.9	1105.6	846.7	705.2
37.5°	556.8	637.3	939.9	627.0	540.7
40°	433.7	480.9	732.8	475.1	418.8
42.5°	337.1	367.0	487.8	360.1	325.6
45°	261.1	279.6	327.9	266.9	248.5
47.5°	203.6	211.7	224.3	202.5	192.1
50°	157.6	157.6	148.4	151.9	147.3
52.5°	121.9	117.3	100.1	110.4	112.7
55°	95.5	87.4	69.0	82.8	88.6
57.5°	72.5	64.4	49.5	61.0	66.7
60°	56.4	48.3	36.8	46.0	51.8
62.5°	43.7	36.8	28.8	34.5	39.1
65°	33.4	27.6	23.0	26.5	29.9
67.5°	25.3	20.7	17.3	19.6	23.0
70°	17.3	16.1	13.8	15.0	16.1
72.5°	12.7	11.5	10.4	10.4	11.5
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)