

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: P838475

Luminaire Tested: HCSQ625D010-HM60525927-61SQH

Issue Date: 5/21/2024

Test Information

Test Method: LM-79-2019
Report Number: P838475
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-HM60525927-61SQH
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: -

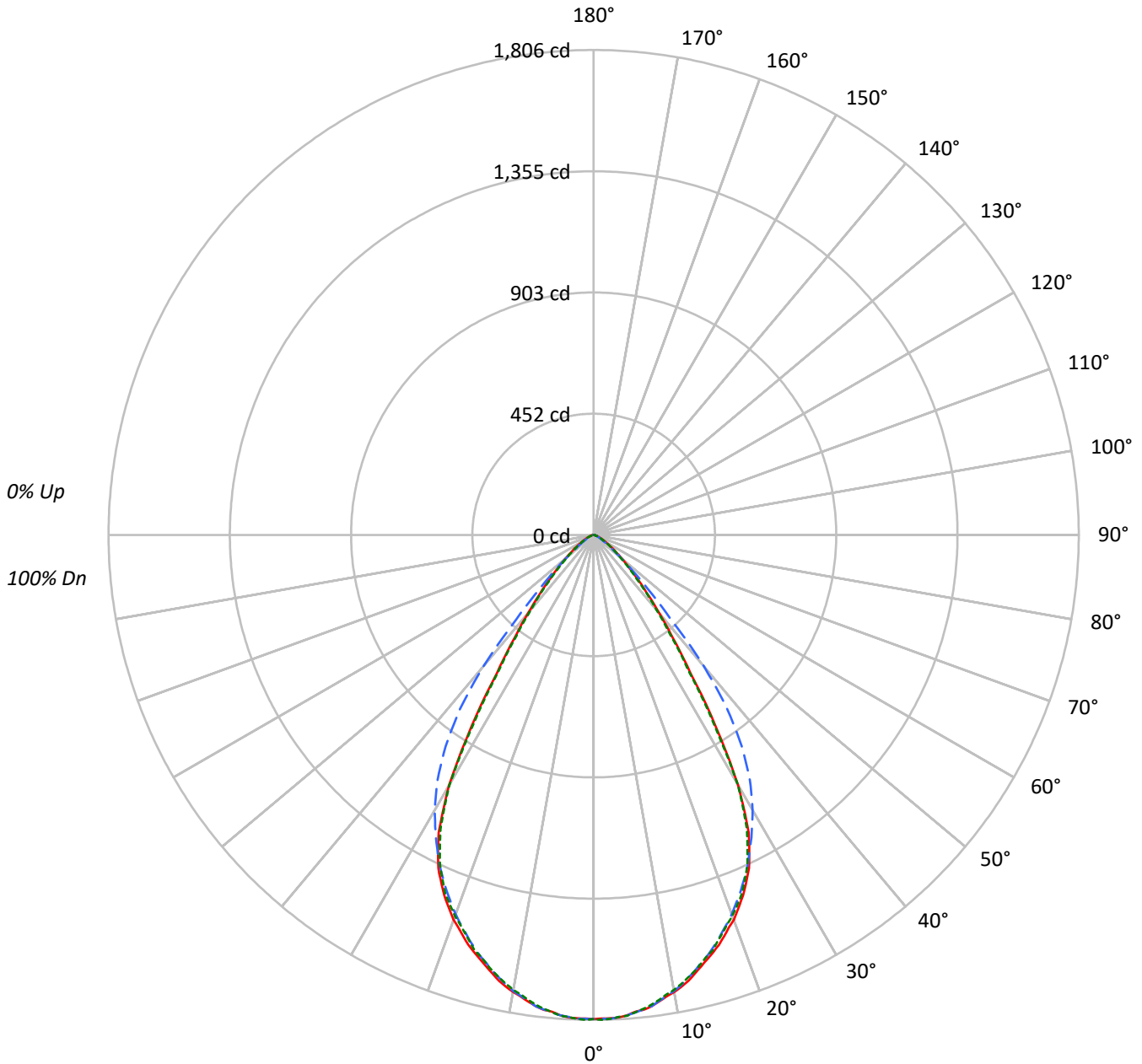
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2028.0 lumens
Efficiency: N/A
Efficacy: 73.2 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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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20				
RC	80					70					50					30				
RW	70	50	30	10	70	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	79	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°	77638	77638	77638
5°	77027	77157	77113
10°	75557	75382	75207
15°	72888	72487	72442
20°	69878	68870	69191
25°	65041	64471	64329
30°	53450	58819	53301
35°	33014	50517	32225
40°	21189	35808	20459
45°	13822	17354	13152
50°	9177	8641	8574
55°	6230	4504	5780
60°	4219	2756	3875
65°	2954	2038	2649
70°	1888	1511	1762
75°	1331	1164	1164
80°	992	744	744
85°	494	988	494

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 17354 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	168.4	8.3
10°-20°	457.1	22.5
20°-30°	617.0	30.4
30°-40°	481.5	23.7
40°-50°	201.7	9.9
50°-60°	68.4	3.4
60°-70°	24.4	1.2
70°-80°	7.9	0.4
80°-90°	1.6	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°	1242.4	61.3
0°-40°	1724.0	85.0
0°-60°	1994.0	98.3
0°-90°	2028.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2028.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1803	1803	1803	1803	1803	
5°	1782	1784	1785	1782	1784	169
15°	1635	1631	1626	1624	1625	460
25°	1369	1363	1357	1357	1354	616
35°	628	737	961	736	613	413
45°	227	243	285	232	216	182
55°	83	76	60	72	77	77
65°	29	24	20	23	26	30
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°	1803.2	1803.2	1803.2	1803.2	1803.2
1°	1801.2	1804.2	1802.2	1803.2	1806.2
2°	1801.2	1801.2	1803.2	1802.2	1803.2
3°	1799.2	1799.2	1797.2	1797.2	1797.2
4°	1793.2	1793.2	1793.2	1791.2	1795.2
5°	1782.2	1784.2	1785.2	1782.2	1784.2
6°	1778.2	1779.2	1777.2	1776.2	1774.2
7°	1769.2	1766.2	1769.2	1762.2	1763.2
8°	1754.2	1754.2	1752.2	1750.2	1748.2
9°	1740.2	1740.2	1738.2	1735.2	1733.2
10°	1728.2	1725.2	1724.2	1721.2	1720.2
11°	1714.2	1708.2	1707.2	1704.2	1704.2
12°	1697.2	1694.2	1687.2	1686.2	1686.2
13°	1676.2	1673.2	1668.2	1664.2	1668.2
14°	1656.2	1654.2	1645.2	1648.2	1647.2
15°	1635.2	1631.2	1626.2	1624.2	1625.2
16°	1616.2	1609.2	1602.2	1603.2	1609.2
17°	1596.2	1586.2	1579.2	1578.2	1581.2
18°	1571.2	1563.2	1552.2	1556.2	1556.2
19°	1546.2	1535.1	1528.1	1527.1	1531.1
20°	1525.1	1508.1	1503.1	1502.1	1510.1
22.5°	1453.1	1436.1	1432.1	1436.1	1444.1
25°	1369.1	1363.1	1357.1	1357.1	1354.1
27.5°	1250.1	1264.1	1271.1	1257.1	1234.1
30°	1075.1	1134.1	1183.1	1127.1	1072.1
32.5°	847.1	969.1	1082.1	966.1	827.1
35°	628.1	737.1	961.1	736.1	613.1
37.5°	484.0	554.1	817.1	545.1	470.0
40°	377.0	418.0	637.1	413.0	364.0
42.5°	293.0	319.0	424.0	313.0	283.0
45°	227.0	243.0	285.0	232.0	216.0
47.5°	177.0	184.0	195.0	176.0	167.0
50°	137.0	137.0	129.0	132.0	128.0
52.5°	106.0	102.0	87.0	96.0	98.0
55°	83.0	76.0	60.0	72.0	77.0
57.5°	63.0	56.0	43.0	53.0	58.0
60°	49.0	42.0	32.0	40.0	45.0
62.5°	38.0	32.0	25.0	30.0	34.0
65°	29.0	24.0	20.0	23.0	26.0
67.5°	22.0	18.0	15.0	17.0	20.0
70°	15.0	14.0	12.0	13.0	14.0
72.5°	11.0	10.0	9.0	9.0	10.0
75°	8.0	7.0	7.0	7.0	7.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
82.5°	2.0	2.0	2.0	2.0	2.0
85°	1.0	1.0	2.0	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°	5.0	5.0	5.0	5.0	5.0
80°	4.0	4.0	3.0	3.0	3.0

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(END OF REPORT)