

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: P838379

Luminaire Tested: HCSQ615D010-HM60525830-61SQC

Issue Date: 5/21/2024



Test Information

Test Method: LM-79-2019
Report Number: P838379
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2309-166-1)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 5/21/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO COMMERCIAL
Catalog Number: HCSQ615D010-HM60525830-61SQC
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT
Ballast/Driver: -

Summary

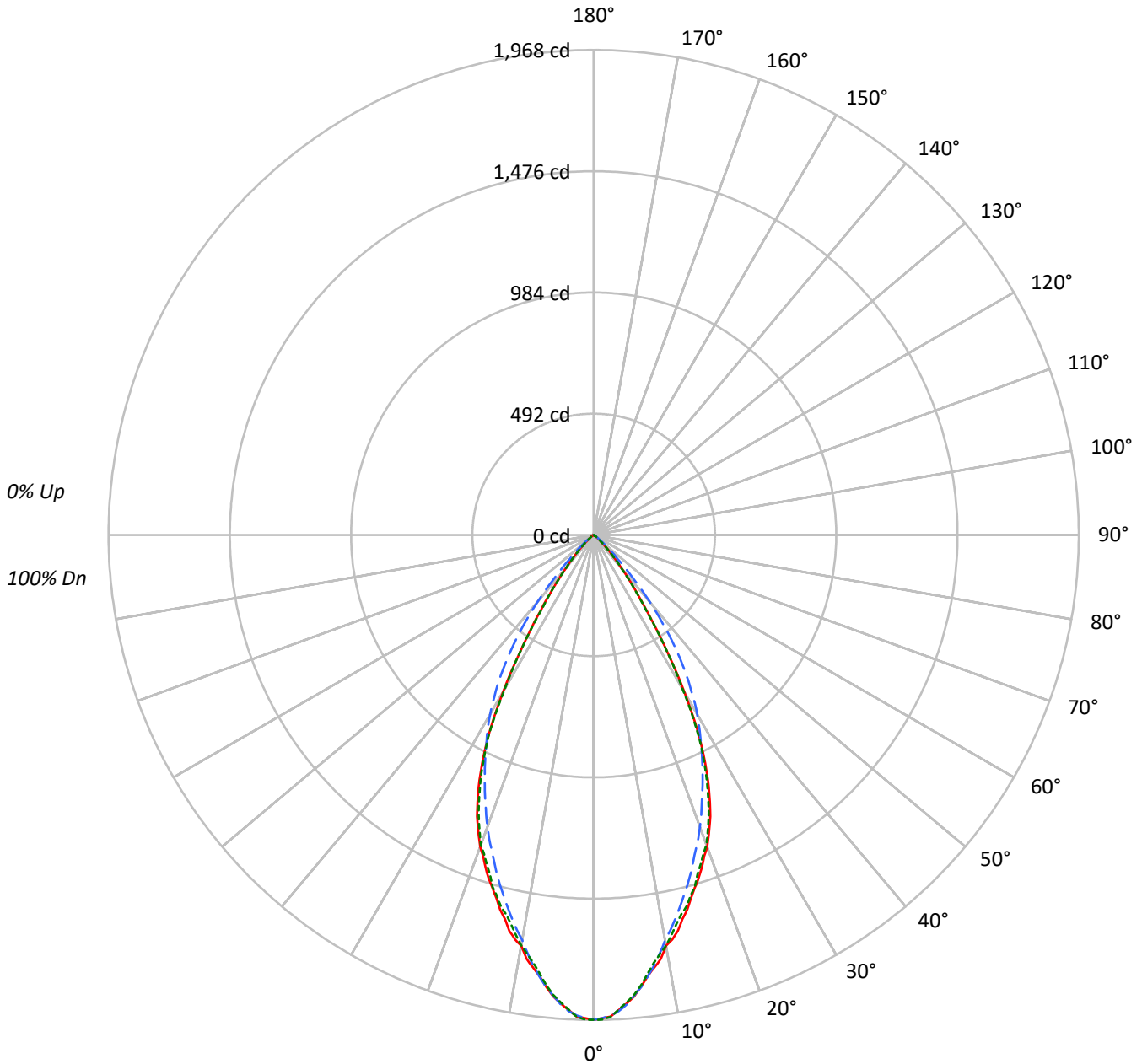
Lumens per Lamp: N/A
Luminaire Lumens: 1473.9 lumens
Efficiency: N/A
Efficacy: 105.3 lumens/watt
Spacing Criteria (0/90/45): 0.82 / 0.81 / 0.85
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 14
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	114	111	108	106	111	109	107	105	105	103	101	101	100	98	98	96	95	94								
2	108	103	99	96	106	102	98	95	98	95	93	95	93	91	93	91	89	87								
3	103	96	92	88	101	95	91	87	93	89	86	90	87	84	88	85	83	81								
4	98	90	85	81	96	89	84	80	87	83	79	85	81	78	83	80	77	76								
5	93	85	79	75	91	84	78	74	82	77	74	80	76	73	79	75	72	71								
6	88	80	74	70	87	79	73	69	77	72	69	76	72	68	75	71	68	66								
7	84	75	69	65	83	74	69	65	73	68	64	72	67	64	71	67	64	62								
8	80	71	65	61	79	70	65	61	69	64	60	68	64	60	67	63	60	59								
9	76	67	61	57	75	66	61	57	65	60	57	65	60	57	64	60	56	55								
10	73	63	58	54	72	63	57	54	62	57	54	61	57	53	61	56	53	52								

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	84721	84721	84721
5°	81267	81124	81012
10°	74018	73012	73961
15°	68025	65533	67615
20°	61732	57759	61310
25°	52172	49644	51454
30°	36532	41792	35910
35°	19621	32057	19243
40°	9718	19835	9639
45°	4244	8366	4165
50°	1366	3034	1366
55°	691	983	638
60°	456	456	456
65°	336	336	336
70°	252	252	252
75°	216	216	216
80°	174	174	174
85°	346	346	346

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 8366 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	172.8	11.7
10°-20°	417.2	28.3
20°-30°	482.0	32.7
30°-40°	301.0	20.4
40°-50°	83.6	5.7
50°-60°	11.7	0.8
60°-70°	3.4	0.2
70°-80°	1.5	0.1
80°-90°	0.7	0.0
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°	1072.0	72.7
0°-40°	1373.0	93.2
0°-60°	1468.3	99.6
0°-90°	1473.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1473.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1968	1968	1968	1968	1968	
5°	1880	1875	1877	1874	1874	173
15°	1526	1497	1470	1493	1517	427
25°	1098	1066	1045	1065	1083	490
35°	373	461	610	456	366	248
45°	70	89	137	88	68	60
55°	9	9	13	9	8	9
65°	3	3	3	3	3	3
75°	1	1	1	1	1	1
85°	1	1	1	1	1	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1967.7	1967.7	1967.7	1967.7	1967.7
1°	1961.8	1961.8	1961.8	1967.1	1967.1
2°	1955.9	1954.6	1951.3	1955.2	1957.2
3°	1931.6	1934.2	1935.5	1933.6	1929.0
4°	1906.6	1904.0	1911.2	1906.6	1902.7
5°	1880.3	1875.1	1877.0	1874.4	1874.4
6°	1843.5	1850.1	1844.8	1840.2	1837.6
7°	1803.4	1808.7	1805.4	1798.8	1794.2
8°	1771.9	1768.6	1763.3	1762.0	1754.1
9°	1741.6	1729.8	1718.0	1720.0	1721.9
10°	1693.0	1694.3	1670.0	1688.4	1691.7
11°	1672.6	1665.4	1633.2	1648.3	1653.6
12°	1643.1	1620.1	1592.5	1604.9	1614.8
13°	1600.3	1576.7	1551.7	1570.8	1580.6
14°	1568.1	1541.2	1509.6	1534.0	1554.3
15°	1526.1	1497.2	1470.2	1493.2	1516.9
16°	1489.3	1455.8	1428.8	1451.2	1486.6
17°	1457.1	1415.7	1382.8	1406.5	1440.6
18°	1419.6	1371.6	1341.4	1366.4	1405.1
19°	1378.2	1329.6	1302.6	1323.0	1367.7
20°	1347.3	1292.8	1260.6	1280.3	1338.1
22.5°	1236.9	1179.7	1150.1	1173.8	1219.8
25°	1098.2	1066.0	1045.0	1065.4	1083.1
27.5°	933.9	933.9	941.1	932.6	927.3
30°	734.8	788.0	840.6	785.4	722.3
32.5°	536.3	621.7	727.5	632.9	535.6
35°	373.3	460.7	609.9	455.5	366.1
37.5°	259.6	317.4	481.1	320.7	256.3
40°	172.9	212.9	352.9	216.9	171.5
42.5°	113.0	140.6	228.1	141.3	110.4
45°	69.7	88.7	137.4	88.1	68.4
47.5°	40.7	52.6	80.2	53.2	40.1
50°	20.4	30.9	45.3	30.2	20.4
52.5°	11.8	16.4	25.0	15.8	11.8
55°	9.2	9.2	13.1	9.2	8.5
57.5°	7.2	7.2	7.2	7.2	6.6
60°	5.3	5.9	5.3	5.3	5.3
62.5°	4.6	4.6	3.9	4.6	3.9
65°	3.3	3.3	3.3	3.3	3.3
67.5°	2.6	2.6	2.6	2.6	2.6
70°	2.0	2.0	2.0	2.0	2.0
72.5°	1.3	2.0	1.3	2.0	2.0
75°	1.3	1.3	1.3	1.3	1.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
82.5°	0.7	0.7	0.7	0.7	0.7
85°	0.7	0.7	0.7	0.7	0.7
87.5°	0.7	0.7	0.7	0.7	0.7
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°	1.3	1.3	1.3	1.3	0.7
80°	0.7	0.7	0.7	0.7	0.7

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