

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: P838394

Luminaire Tested: HCSQ615D010-HM60525927-61SQC

Issue Date: 5/21/2024

Test Information

Test Method: LM-79-2019
Report Number: P838394
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-HM60525927-61SQC
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: -

Summary

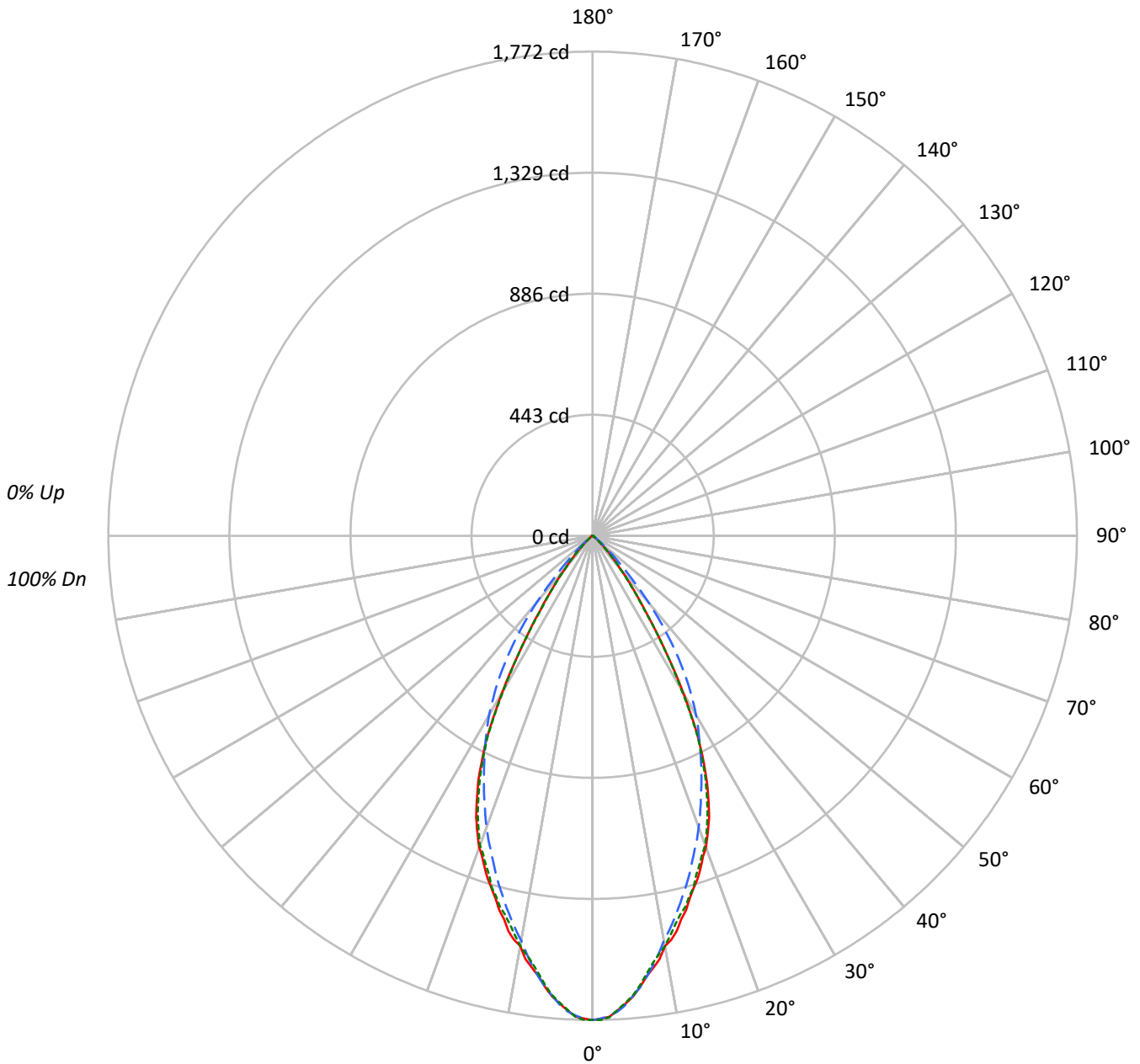
Lumens per Lamp: N/A
Luminaire Lumens: 1327.5 lumens
Efficiency: N/A
Efficacy: 94.8 lumens/watt
Spacing Criteria (0/90/45): 0.82 / 0.81 / 0.85
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
CIE Type: Direct

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									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°	76308	76308	76308
5°	73193	73068	72964
10°	66664	65759	66612
15°	61268	59026	60898
20°	55601	52018	55221
25°	46989	44713	46343
30°	32902	37640	32341
35°	17671	28872	17329
40°	8751	17868	8684
45°	3818	7532	3751
50°	1232	2733	1232
55°	623	886	578
60°	405	405	405
65°	306	306	306
70°	227	227	227
75°	200	200	200
80°	149	149	149
85°	296	296	296

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 7532 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	155.6	11.7
10°-20°	375.8	28.3
20°-30°	434.1	32.7
30°-40°	271.1	20.4
40°-50°	75.3	5.7
50°-60°	10.5	0.8
60°-70°	3.1	0.2
70°-80°	1.3	0.1
80°-90°	0.6	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°	965.5	72.7
0°-40°	1236.6	93.2
0°-60°	1322.5	99.6
0°-90°	1327.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1327.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1772	1772	1772	1772	1772	
5°	1694	1689	1691	1688	1688	156
15°	1374	1348	1324	1345	1366	385
25°	989	960	941	960	976	442
35°	336	415	549	410	330	223
45°	63	80	124	79	62	54
55°	8	8	12	8	8	8
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°	1772.3	1772.3	1772.3	1772.3	1772.3
1°	1766.9	1766.9	1766.9	1771.7	1771.7
2°	1761.6	1760.4	1757.5	1761.0	1762.8
3°	1739.7	1742.1	1743.3	1741.5	1737.3
4°	1717.2	1714.8	1721.4	1717.2	1713.7
5°	1693.5	1688.8	1690.6	1688.2	1688.2
6°	1660.4	1666.3	1661.6	1657.4	1655.1
7°	1624.3	1629.0	1626.1	1620.1	1616.0
8°	1595.9	1592.9	1588.2	1587.0	1579.9
9°	1568.6	1558.0	1547.3	1549.1	1550.9
10°	1524.8	1526.0	1504.1	1520.7	1523.6
11°	1506.5	1500.0	1471.0	1484.6	1489.3
12°	1479.8	1459.1	1434.3	1445.5	1454.4
13°	1441.4	1420.1	1397.6	1414.7	1423.6
14°	1412.4	1388.1	1359.7	1381.6	1399.9
15°	1374.5	1348.4	1324.2	1344.9	1366.2
16°	1341.3	1311.1	1286.9	1307.0	1339.0
17°	1312.3	1275.0	1245.4	1266.7	1297.5
18°	1278.6	1235.4	1208.1	1230.6	1265.6
19°	1241.3	1197.5	1173.2	1191.6	1231.8
20°	1213.5	1164.3	1135.3	1153.1	1205.2
22.5°	1114.0	1062.5	1035.9	1057.2	1098.6
25°	989.1	960.1	941.2	959.5	975.5
27.5°	841.1	841.1	847.7	840.0	835.2
30°	661.8	709.7	757.1	707.4	650.5
32.5°	483.0	560.0	655.3	570.0	482.4
35°	336.2	414.9	549.3	410.2	329.7
37.5°	233.8	285.9	433.3	288.9	230.9
40°	155.7	191.8	317.9	195.3	154.5
42.5°	101.8	126.7	205.4	127.3	99.4
45°	62.7	79.9	123.7	79.3	61.6
47.5°	36.7	47.4	72.2	47.9	36.1
50°	18.4	27.8	40.8	27.2	18.4
52.5°	10.7	14.8	22.5	14.2	10.7
55°	8.3	8.3	11.8	8.3	7.7
57.5°	6.5	6.5	6.5	6.5	5.9
60°	4.7	5.3	4.7	4.7	4.7
62.5°	4.1	4.1	3.6	4.1	3.6
65°	3.0	3.0	3.0	3.0	3.0
67.5°	2.4	2.4	2.4	2.4	2.4
70°	1.8	1.8	1.8	1.8	1.8
72.5°	1.2	1.8	1.2	1.8	1.8
75°	1.2	1.2	1.2	1.2	1.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
82.5°	0.6	0.6	0.6	0.6	0.6
85°	0.6	0.6	0.6	0.6	0.6
87.5°	0.6	0.6	0.6	0.6	0.6
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°	1.2	1.2	1.2	1.2	0.6
80°	0.6	0.6	0.6	0.6	0.6

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