

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: P838399

Luminaire Tested: HCSQ615D010-HM60525930-61SQC

Issue Date: 5/21/2024

Test Information

Test Method: LM-79-2019
Report Number: P838399
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-HM60525930-61SQC
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: -

Summary

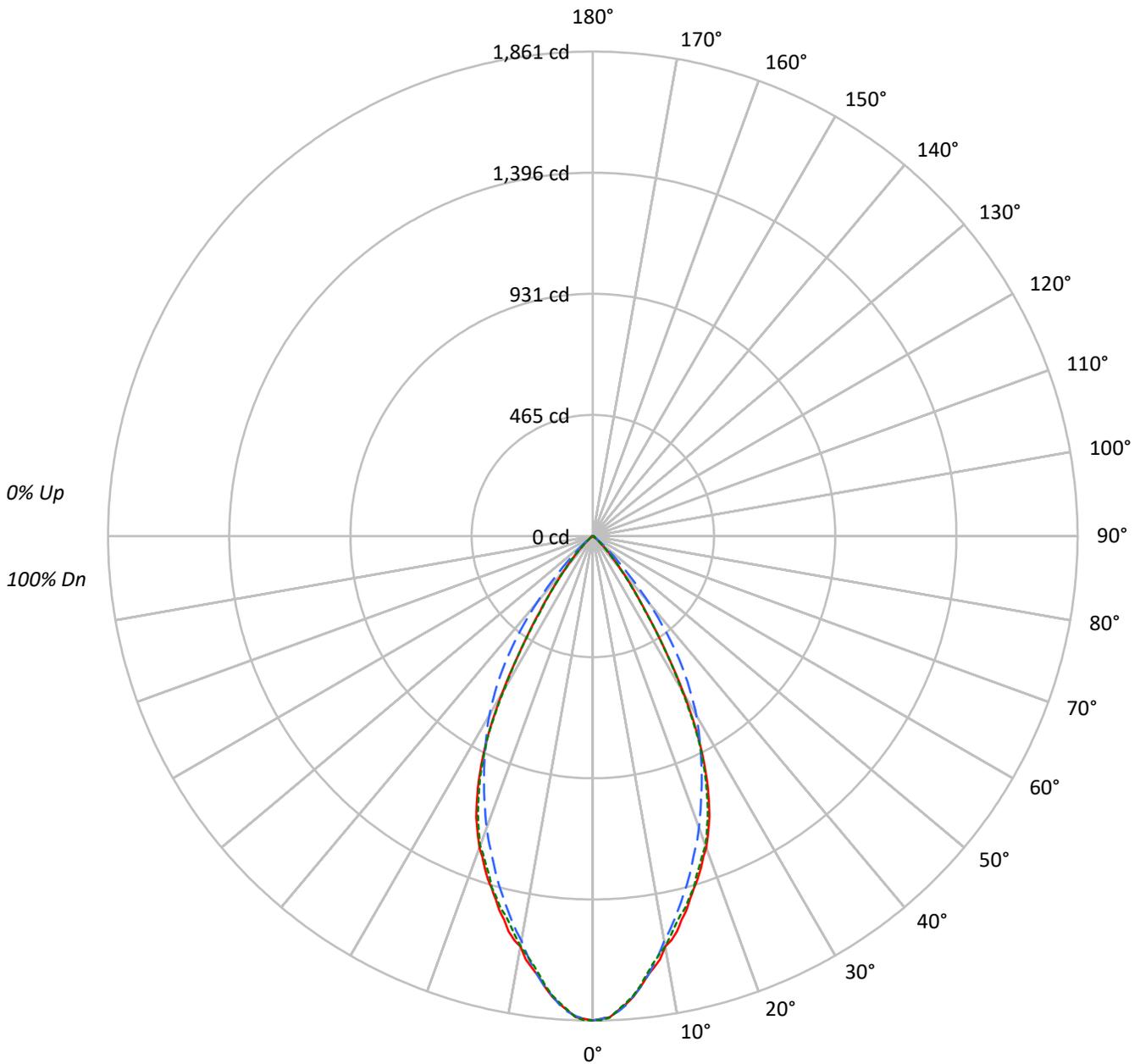
Lumens per Lamp: N/A
Luminaire Lumens: 1393.6 lumens
Efficiency: N/A
Efficacy: 99.5 lumens/watt
Spacing Criteria (0/90/45): 0.82 / 0.81 / 0.85
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
CIE Type: Direct

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	97	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	78	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°	80109	80109	80109
5°	76841	76707	76599
10°	69987	69038	69934
15°	64321	61967	63933
20°	58369	54612	57970
25°	49331	46941	48652
30°	34543	39515	33956
35°	18554	30312	18191
40°	9184	18756	9116
45°	4013	7910	3933
50°	1293	2874	1293
55°	653	931	608
60°	431	431	431
65°	316	316	316
70°	239	239	239
75°	200	200	200
80°	149	149	149
85°	296	296	296

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 7910 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	163.4	11.7
10°-20°	394.5	28.3
20°-30°	455.7	32.7
30°-40°	284.6	20.4
40°-50°	79.1	5.7
50°-60°	11.1	0.8
60°-70°	3.3	0.2
70°-80°	1.4	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°	1013.7	72.7
0°-40°	1298.3	93.2
0°-60°	1388.4	99.6
0°-90°	1393.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1393.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1861	1861	1861	1861	1861	
5°	1778	1773	1775	1772	1772	164
15°	1443	1416	1390	1412	1434	404
25°	1038	1008	988	1007	1024	464
35°	353	436	577	431	346	235
45°	66	84	130	83	65	57
55°	9	9	12	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°	1860.6	1860.6	1860.6	1860.6	1860.6
1°	1855.0	1855.0	1855.0	1860.0	1860.0
2°	1849.4	1848.2	1845.0	1848.8	1850.6
3°	1826.4	1828.9	1830.1	1828.3	1823.9
4°	1802.8	1800.3	1807.1	1802.8	1799.1
5°	1777.9	1773.0	1774.8	1772.3	1772.3
6°	1743.1	1749.3	1744.4	1740.0	1737.5
7°	1705.2	1710.2	1707.1	1700.9	1696.5
8°	1675.4	1672.3	1667.3	1666.1	1658.6
9°	1646.8	1635.6	1624.4	1626.3	1628.2
10°	1600.8	1602.1	1579.1	1596.5	1599.6
11°	1581.6	1574.7	1544.3	1558.6	1563.5
12°	1553.6	1531.8	1505.7	1517.6	1526.9
13°	1513.2	1490.8	1467.2	1485.2	1494.6
14°	1482.8	1457.3	1427.4	1450.4	1469.7
15°	1443.0	1415.6	1390.2	1411.9	1434.3
16°	1408.2	1376.5	1351.0	1372.1	1405.7
17°	1377.7	1338.6	1307.5	1329.9	1362.2
18°	1342.3	1296.9	1268.4	1292.0	1328.6
19°	1303.2	1257.2	1231.7	1251.0	1293.2
20°	1273.9	1222.4	1191.9	1210.6	1265.2
22.5°	1169.5	1115.5	1087.5	1109.9	1153.4
25°	1038.4	1008.0	988.1	1007.4	1024.1
27.5°	883.1	883.1	889.9	881.8	876.8
30°	694.8	745.1	794.8	742.6	683.0
32.5°	507.1	587.9	687.9	598.4	506.5
35°	353.0	435.6	576.7	430.7	346.1
37.5°	245.5	300.2	454.9	303.3	242.4
40°	163.4	201.3	333.7	205.1	162.2
42.5°	106.9	133.0	215.6	133.6	104.4
45°	65.9	83.9	129.9	83.3	64.6
47.5°	38.5	49.7	75.8	50.3	37.9
50°	19.3	29.2	42.9	28.6	19.3
52.5°	11.2	15.5	23.6	14.9	11.2
55°	8.7	8.7	12.4	8.7	8.1
57.5°	6.8	6.8	6.8	6.8	6.2
60°	5.0	5.6	5.0	5.0	5.0
62.5°	4.4	4.4	3.7	4.4	3.7
65°	3.1	3.1	3.1	3.1	3.1
67.5°	2.5	2.5	2.5	2.5	2.5
70°	1.9	1.9	1.9	1.9	1.9
72.5°	1.2	1.9	1.2	1.9	1.9
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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Scaled Data Report



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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(END OF REPORT)