

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



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: P838389

Luminaire Tested: HCSQ615D010-HM60525840-61SQC

Issue Date: 5/21/2024

Test Information

Test Method: LM-79-2019
Report Number: P838389
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-HM60525840-61SQC
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT
Ballast/Driver: -

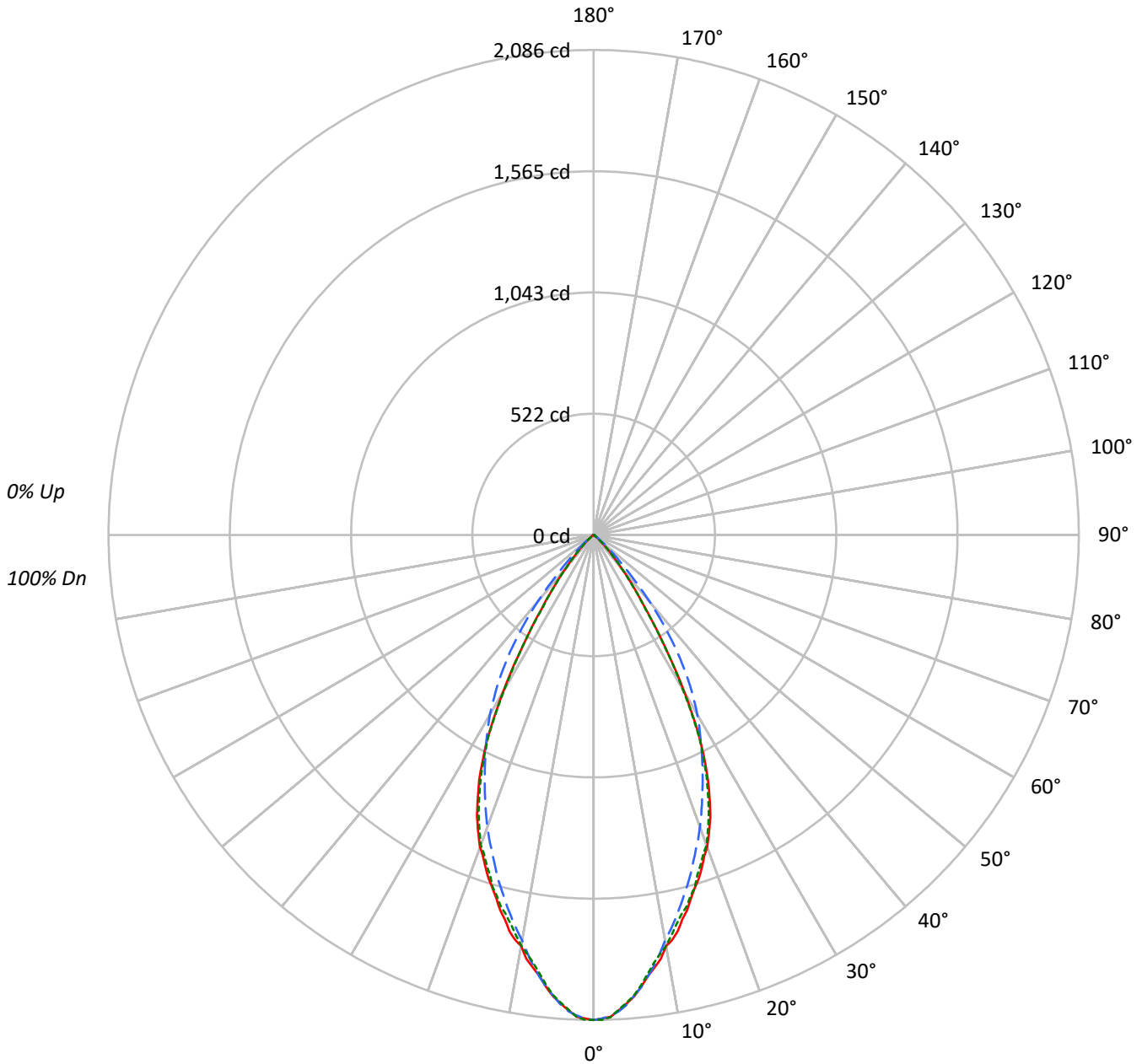
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1562.9 lumens
Efficiency: N/A
Efficacy: 111.6 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	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	100	100	100	100		
	1	114	111	108	106	111	109	107	105	105	103	101	101	100	98	98	96	95	94	94	94	94	94	94		
	2	108	103	99	96	106	102	98	95	98	95	93	95	93	91	93	91	89	87	87	87	87	87	87		
	3	103	96	92	88	101	95	91	87	93	89	86	90	87	84	88	85	83	81	81	81	81	81	81		
	4	98	90	85	81	96	89	84	80	87	83	79	85	81	78	83	80	77	76	76	76	76	76	76		
	5	93	85	79	75	91	84	78	74	82	77	74	80	76	73	79	75	72	71	71	71	71	71	71		
	6	88	80	74	70	87	79	73	69	77	72	69	76	72	68	75	71	68	66	66	66	66	66	66		
	7	84	75	69	65	83	74	69	65	73	68	64	72	67	64	71	67	64	62	62	62	62	62	62		
	8	80	71	65	61	79	70	65	61	69	64	60	68	64	60	67	63	60	59	59	59	59	59	59		
	9	76	67	61	57	75	66	61	57	65	60	57	65	60	57	64	60	56	55	55	55	55	55	55		
	10	73	63	58	54	72	63	57	54	62	57	54	61	57	53	61	56	53	52	52	52	52	52	52		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	89836	89836	89836
5°	86172	86021	85900
10°	78486	77419	78425
15°	72130	69487	71694
20°	65457	61242	65008
25°	55322	52637	54561
30°	38734	44312	38078
35°	20804	33991	20404
40°	10302	21032	10224
45°	4500	8866	4415
50°	1447	3222	1447
55°	736	1043	683
60°	482	482	482
65°	357	357	357
70°	264	264	264
75°	233	233	233
80°	174	174	174
85°	346	346	346

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 8866 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	183.2	11.7
10°-20°	442.4	28.3
20°-30°	511.1	32.7
30°-40°	319.2	20.4
40°-50°	88.7	5.7
50°-60°	12.4	0.8
60°-70°	3.7	0.2
70°-80°	1.6	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°	1136.7	72.7
0°-40°	1455.9	93.2
0°-60°	1557.0	99.6
0°-90°	1562.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1562.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2086	2086	2086	2086	2086	
5°	1994	1988	1990	1988	1988	184
15°	1618	1588	1559	1583	1608	453
25°	1164	1130	1108	1130	1148	520
35°	396	488	647	483	388	263
45°	74	94	146	93	72	64
55°	10	10	14	10	9	10
65°	4	4	4	4	4	4
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°	2086.5	2086.5	2086.5	2086.5	2086.5
1°	2080.2	2080.2	2080.2	2085.8	2085.8
2°	2073.9	2072.5	2069.0	2073.2	2075.3
3°	2048.1	2050.9	2052.3	2050.2	2045.3
4°	2021.7	2018.9	2026.5	2021.7	2017.5
5°	1993.8	1988.2	1990.3	1987.5	1987.5
6°	1954.8	1961.7	1956.1	1951.3	1948.5
7°	1912.2	1917.8	1914.3	1907.4	1902.5
8°	1878.8	1875.3	1869.7	1868.3	1860.0
9°	1846.7	1834.2	1821.6	1823.7	1825.8
10°	1795.2	1796.6	1770.8	1790.3	1793.8
11°	1773.6	1765.9	1731.7	1747.8	1753.4
12°	1742.2	1717.8	1688.5	1701.8	1712.2
13°	1696.9	1671.8	1645.3	1665.5	1676.0
14°	1662.8	1634.2	1600.7	1626.5	1648.1
15°	1618.2	1587.5	1558.9	1583.3	1608.4
16°	1579.1	1543.6	1515.0	1538.7	1576.3
17°	1545.0	1501.1	1466.2	1491.3	1527.6
18°	1505.3	1454.4	1422.3	1448.8	1489.9
19°	1461.4	1409.8	1381.2	1402.8	1450.2
20°	1428.6	1370.8	1336.6	1357.5	1418.8
22.5°	1311.5	1250.9	1219.5	1244.6	1293.4
25°	1164.5	1130.3	1108.0	1129.6	1148.5
27.5°	990.3	990.3	997.9	988.9	983.3
30°	779.1	835.6	891.3	832.8	765.9
32.5°	568.7	659.2	771.4	671.1	568.0
35°	395.8	488.5	646.7	482.9	388.2
37.5°	275.3	336.6	510.1	340.1	271.8
40°	183.3	225.8	374.2	230.0	181.9
42.5°	119.9	149.1	241.8	149.8	117.1
45°	73.9	94.1	145.6	93.4	72.5
47.5°	43.2	55.8	85.0	56.4	42.5
50°	21.6	32.8	48.1	32.1	21.6
52.5°	12.5	17.4	26.5	16.7	12.5
55°	9.8	9.8	13.9	9.8	9.1
57.5°	7.7	7.7	7.7	7.7	7.0
60°	5.6	6.3	5.6	5.6	5.6
62.5°	4.9	4.9	4.2	4.9	4.2
65°	3.5	3.5	3.5	3.5	3.5
67.5°	2.8	2.8	2.8	2.8	2.8
70°	2.1	2.1	2.1	2.1	2.1
72.5°	1.4	2.1	1.4	2.1	2.1
75°	1.4	1.4	1.4	1.4	1.4



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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

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— 0°-180° - - 45°-225° - - - - 90°-270°

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77.5°	1.4	1.4	1.4	1.4	0.7
80°	0.7	0.7	0.7	0.7	0.7

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(END OF REPORT)