

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: P838425

Luminaire Tested: HCSQ620D010-HM60525835-61SQH

Issue Date: 5/21/2024

Test Information

Test Method: LM-79-2019
Report Number: P838425
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: HCSQ620D010-HM60525835-61SQH
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, HAZE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT
Ballast/Driver: -

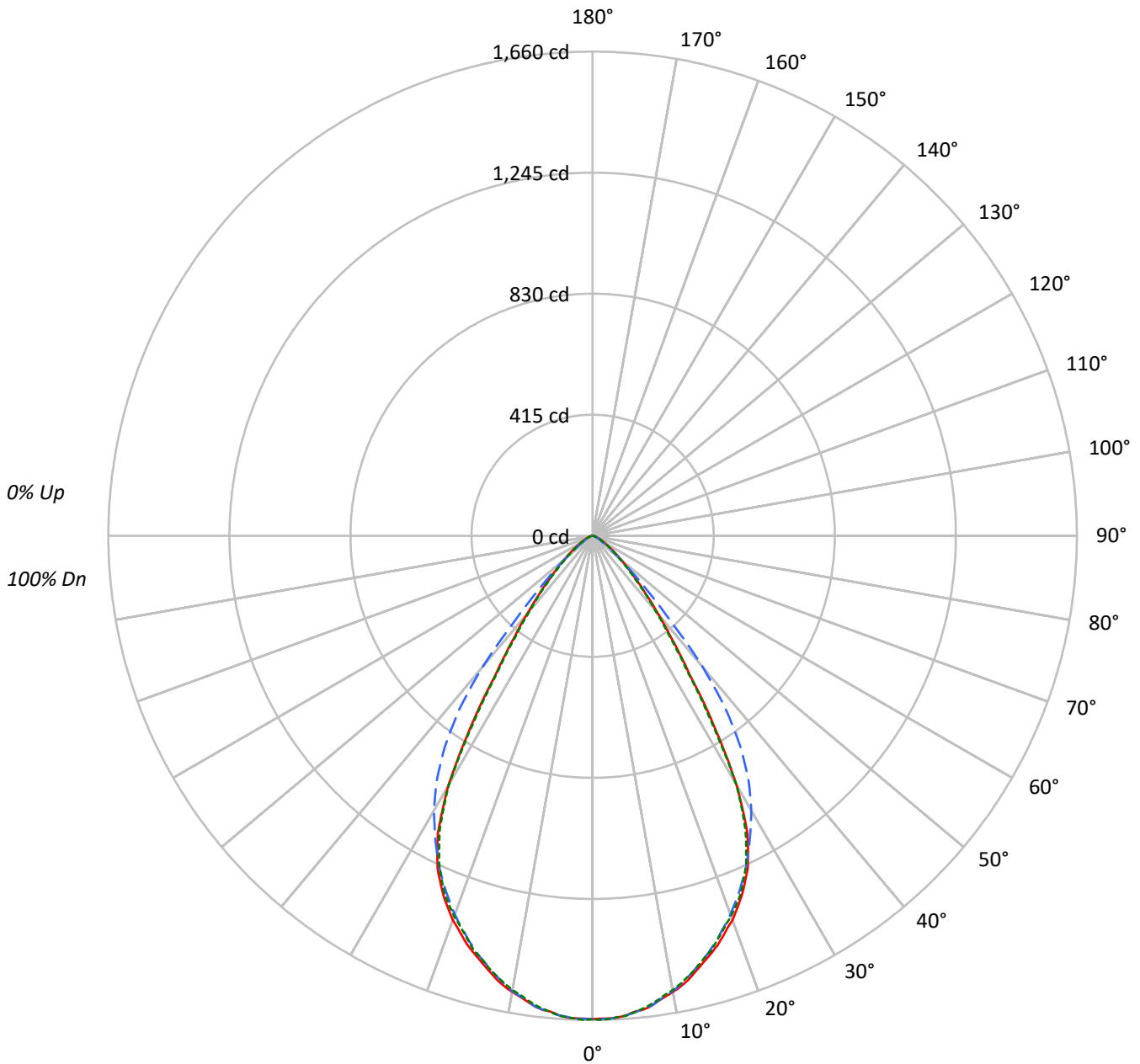
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1864.0 lumens
Efficiency: N/A
Efficacy: 93.2 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): 20
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	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°	71360	71360	71360
5°	70799	70916	70877
10°	69445	69283	69125
15°	66991	66626	66581
20°	64229	63303	63597
25°	59782	59260	59127
30°	49130	54062	48991
35°	30344	46433	29618
40°	19475	32908	18806
45°	12708	15953	12093
50°	8433	7944	7884
55°	5727	4144	5315
60°	3875	2532	3565
65°	2720	1875	2435
70°	1737	1385	1624
75°	1231	1065	1065
80°	917	694	694
85°	445	889	445

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 15953 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	154.8	8.3
10°-20°	420.1	22.5
20°-30°	567.1	30.4
30°-40°	442.6	23.7
40°-50°	185.4	9.9
50°-60°	62.9	3.4
60°-70°	22.4	1.2
70°-80°	7.3	0.4
80°-90°	1.5	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°	1142.0	61.3
0°-40°	1584.6	85.0
0°-60°	1832.8	98.3
0°-90°	1864.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1864.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1657	1657	1657	1657	1657	
5°	1638	1640	1641	1638	1640	155
15°	1503	1499	1495	1493	1494	423
25°	1258	1253	1247	1247	1245	566
35°	577	678	883	676	564	380
45°	209	223	262	213	199	167
55°	76	70	55	66	71	70
65°	27	22	18	21	24	27
75°	7	6	6	6	6	8
85°	1	1	2	1	1	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1657.4	1657.4	1657.4	1657.4	1657.4
1°	1655.5	1658.3	1656.4	1657.4	1660.1
2°	1655.5	1655.5	1657.4	1656.4	1657.4
3°	1653.7	1653.7	1651.8	1651.8	1651.8
4°	1648.2	1648.2	1648.2	1646.3	1650.0
5°	1638.1	1639.9	1640.8	1638.1	1639.9
6°	1634.4	1635.3	1633.5	1632.5	1630.7
7°	1626.1	1623.3	1626.1	1619.7	1620.6
8°	1612.3	1612.3	1610.5	1608.6	1606.8
9°	1599.4	1599.4	1597.6	1594.9	1593.0
10°	1588.4	1585.7	1584.7	1582.0	1581.1
11°	1575.5	1570.0	1569.1	1566.4	1566.4
12°	1559.9	1557.2	1550.7	1549.8	1549.8
13°	1540.6	1537.9	1533.3	1529.6	1533.3
14°	1522.2	1520.4	1512.1	1514.9	1514.0
15°	1502.9	1499.3	1494.7	1492.8	1493.7
16°	1485.5	1479.0	1472.6	1473.5	1479.0
17°	1467.1	1457.9	1451.5	1450.5	1453.3
18°	1444.1	1436.7	1426.6	1430.3	1430.3
19°	1421.1	1411.0	1404.6	1403.7	1407.3
20°	1401.8	1386.2	1381.6	1380.7	1388.0
22.5°	1335.6	1320.0	1316.3	1320.0	1327.4
25°	1258.4	1252.9	1247.4	1247.4	1244.6
27.5°	1149.0	1161.9	1168.3	1155.5	1134.3
30°	988.2	1042.4	1087.4	1036.0	985.4
32.5°	778.6	890.7	994.6	888.0	760.2
35°	577.3	677.5	883.4	676.5	563.5
37.5°	444.9	509.2	751.0	501.0	432.0
40°	346.5	384.2	585.5	379.6	334.6
42.5°	269.3	293.2	389.8	287.7	260.1
45°	208.7	223.4	262.0	213.3	198.6
47.5°	162.7	169.1	179.2	161.8	153.5
50°	125.9	125.9	118.6	121.3	117.7
52.5°	97.4	93.8	80.0	88.2	90.1
55°	76.3	69.9	55.2	66.2	70.8
57.5°	57.9	51.5	39.5	48.7	53.3
60°	45.0	38.6	29.4	36.8	41.4
62.5°	34.9	29.4	23.0	27.6	31.3
65°	26.7	22.1	18.4	21.1	23.9
67.5°	20.2	16.5	13.8	15.6	18.4
70°	13.8	12.9	11.0	11.9	12.9
72.5°	10.1	9.2	8.3	8.3	9.2
75°	7.4	6.4	6.4	6.4	6.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
82.5°	1.8	1.8	1.8	1.8	1.8
85°	0.9	0.9	1.8	0.9	0.9
87.5°	0.9	0.9	0.9	0.9	0.9
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°	4.6	4.6	4.6	4.6	4.6
80°	3.7	3.7	2.8	2.8	2.8

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Scaled Data Report



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