

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: P838445

Luminaire Tested: HCSQ620D010-HM60525935-61SQH

Issue Date: 5/21/2024

Test Information

Test Method: LM-79-2019
Report Number: P838445
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-HM60525935-61SQH
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: -

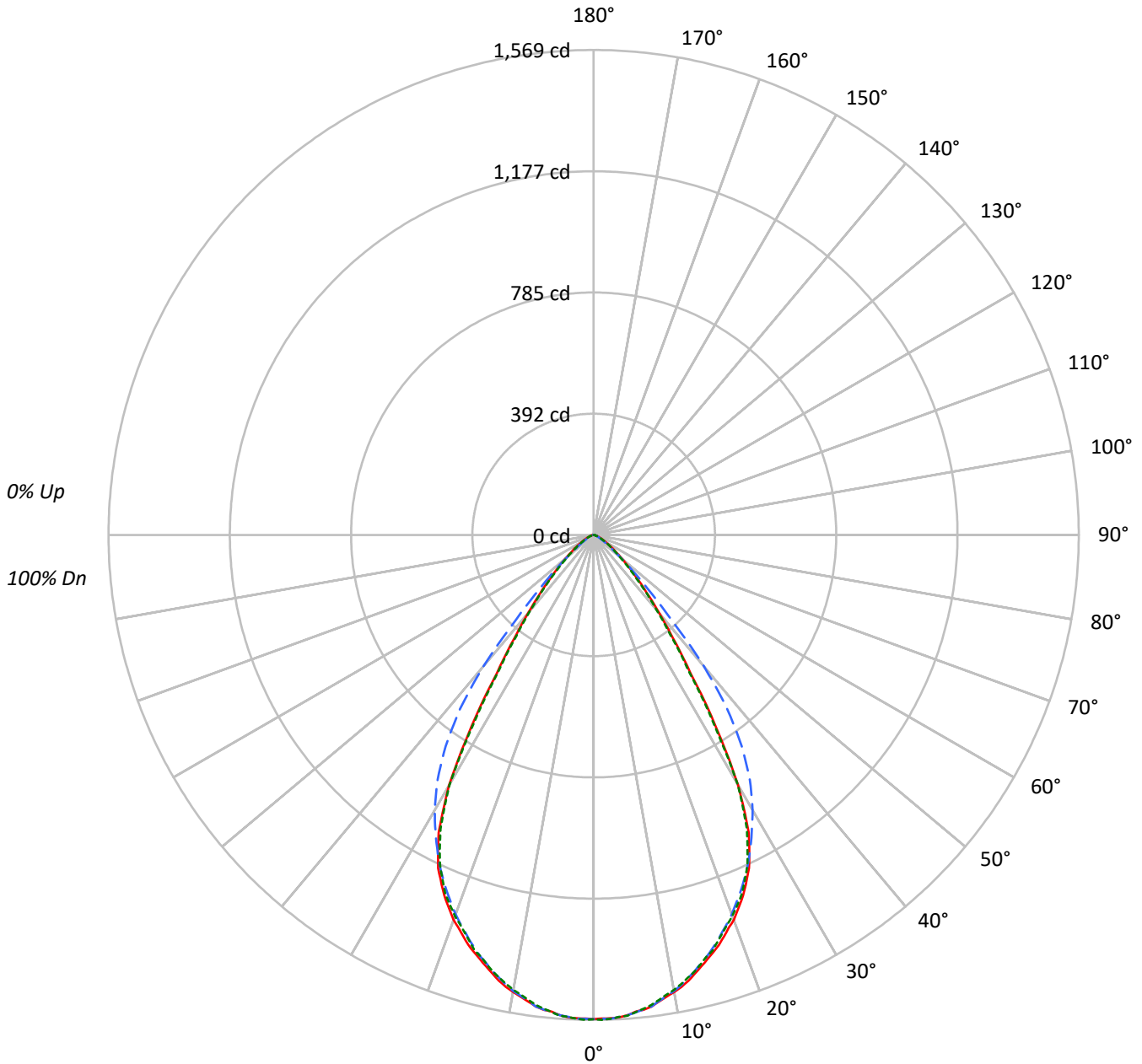
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1762.1 lumens
Efficiency: N/A
Efficacy: 88.1 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					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°	67455	67455	67455
5°	66926	67039	67000
10°	65650	65497	65344
15°	63327	62979	62939
20°	60719	59839	60119
25°	56514	56020	55896
30°	46440	51108	46311
35°	28683	43894	27999
40°	18413	31110	17778
45°	12014	15082	11429
50°	7971	7509	7448
55°	5412	3911	5022
60°	3668	2394	3367
65°	2567	1773	2302
70°	1637	1309	1536
75°	1164	1015	1015
80°	868	645	645
85°	445	840	445

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 15082 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	146.3	8.3
10°-20°	397.1	22.5
20°-30°	536.1	30.4
30°-40°	418.4	23.7
40°-50°	175.3	9.9
50°-60°	59.4	3.4
60°-70°	21.2	1.2
70°-80°	6.9	0.4
80°-90°	1.4	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°	1079.5	61.3
0°-40°	1497.9	85.0
0°-60°	1732.6	98.3
0°-90°	1762.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1762.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1567	1567	1567	1567	1567	
5°	1548	1550	1551	1548	1550	146
15°	1421	1417	1413	1411	1412	400
25°	1190	1184	1179	1179	1177	535
35°	546	640	835	640	533	359
45°	197	211	248	202	188	158
55°	72	66	52	63	67	67
65°	25	21	17	20	23	26
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°	1566.7	1566.7	1566.7	1566.7	1566.7
1°	1565.0	1567.6	1565.9	1566.7	1569.3
2°	1565.0	1565.0	1566.7	1565.9	1566.7
3°	1563.2	1563.2	1561.5	1561.5	1561.5
4°	1558.0	1558.0	1558.0	1556.3	1559.8
5°	1548.5	1550.2	1551.1	1548.5	1550.2
6°	1545.0	1545.9	1544.1	1543.3	1541.5
7°	1537.2	1534.6	1537.2	1531.1	1532.0
8°	1524.1	1524.1	1522.4	1520.7	1518.9
9°	1512.0	1512.0	1510.2	1507.6	1505.9
10°	1501.6	1498.9	1498.1	1495.5	1494.6
11°	1489.4	1484.2	1483.3	1480.7	1480.7
12°	1474.6	1472.0	1465.9	1465.1	1465.1
13°	1456.4	1453.8	1449.4	1445.9	1449.4
14°	1439.0	1437.2	1429.4	1432.0	1431.2
15°	1420.7	1417.3	1412.9	1411.2	1412.0
16°	1404.2	1398.1	1392.1	1392.9	1398.1
17°	1386.8	1378.2	1372.1	1371.2	1373.8
18°	1365.1	1358.2	1348.6	1352.1	1352.1
19°	1343.4	1333.8	1327.8	1326.9	1330.4
20°	1325.2	1310.4	1306.0	1305.2	1312.1
22.5°	1262.6	1247.8	1244.3	1247.8	1254.8
25°	1189.6	1184.4	1179.2	1179.2	1176.6
27.5°	1086.2	1098.4	1104.4	1092.3	1072.3
30°	934.1	985.4	1028.0	979.3	931.5
32.5°	736.0	842.0	940.2	839.4	718.6
35°	545.7	640.4	835.1	639.5	532.7
37.5°	420.6	481.4	709.9	473.6	408.4
40°	327.6	363.2	553.5	358.9	316.3
42.5°	254.6	277.2	368.4	272.0	245.9
45°	197.3	211.2	247.7	201.6	187.7
47.5°	153.8	159.9	169.4	152.9	145.1
50°	119.0	119.0	112.1	114.7	111.2
52.5°	92.1	88.6	75.6	83.4	85.2
55°	72.1	66.0	52.1	62.6	66.9
57.5°	54.7	48.7	37.4	46.1	50.4
60°	42.6	36.5	27.8	34.8	39.1
62.5°	33.0	27.8	21.7	26.1	29.5
65°	25.2	20.9	17.4	20.0	22.6
67.5°	19.1	15.6	13.0	14.8	17.4
70°	13.0	12.2	10.4	11.3	12.2
72.5°	9.6	8.7	7.8	7.8	8.7
75°	7.0	6.1	6.1	6.1	6.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
82.5°	1.7	1.7	1.7	1.7	1.7
85°	0.9	0.9	1.7	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°	4.3	4.3	4.3	4.3	4.3
80°	3.5	3.5	2.6	2.6	2.6

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(END OF REPORT)