

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: P838488

Luminaire Tested: HCSQ625D010-HM60525935-61SQMW

Issue Date: 5/21/2024

Test Information

Test Method: LM-79-2019
Report Number: P838488
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2309-166-3)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 5/21/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO COMMERCIAL
Catalog Number: HCSQ625D010-HM60525935-61SQMW
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, MATTE WHITE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: -

Summary

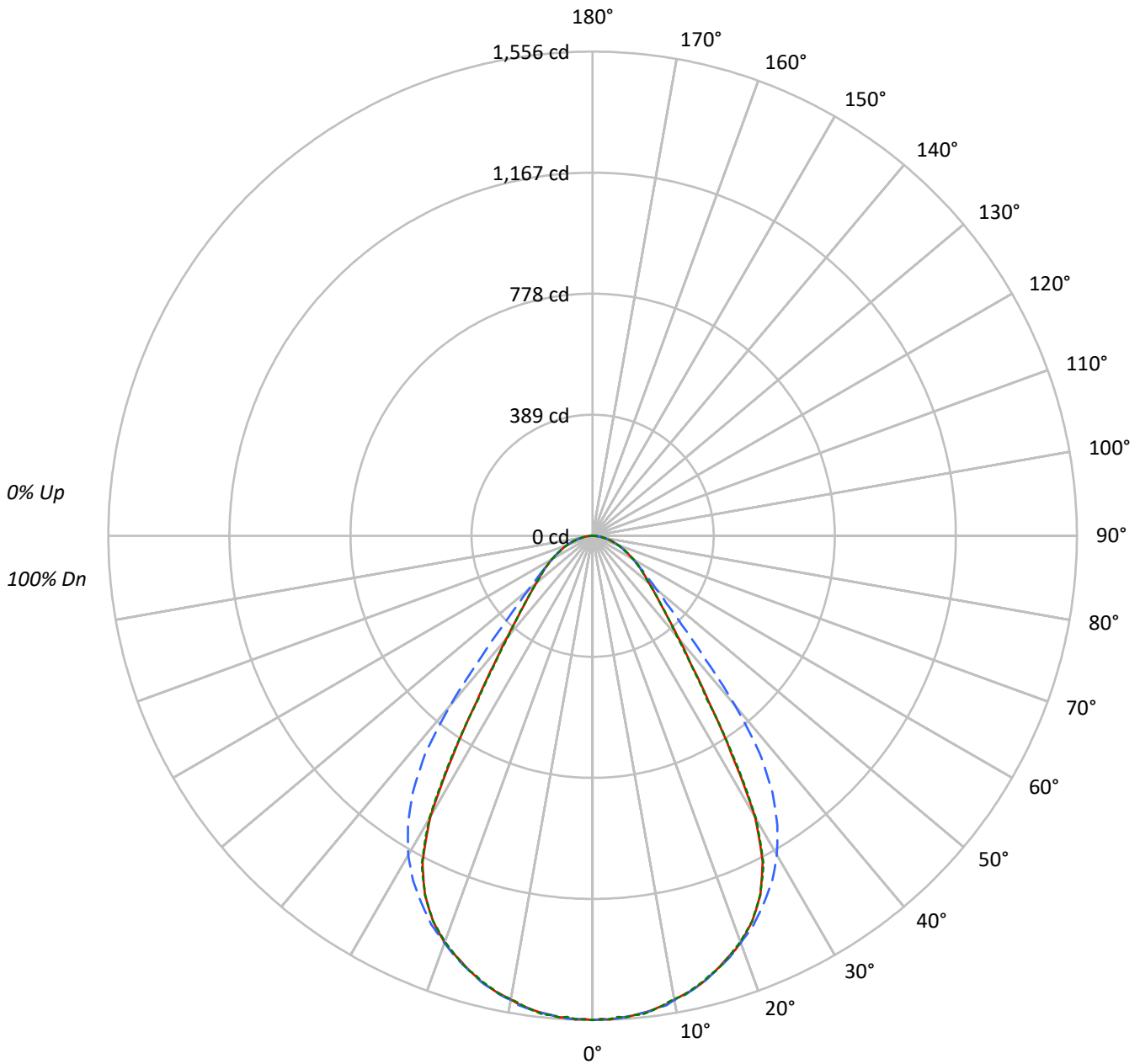
Lumens per Lamp: N/A
Luminaire Lumens: 2295.6 lumens
Efficiency: N/A
Efficacy: 82.9 lumens/watt
Spacing Criteria (0/90/45): 1.08 / 1.08 / 1.11
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 27.7
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	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89																			
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79																			
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71																			
4	91	81	74	69	89	80	73	68	77	72	67	75	70	67	73	69	66	64																			
5	85	74	67	62	83	73	66	61	71	65	61	70	64	60	68	63	60	58																			
6	80	69	61	56	78	68	61	56	66	60	55	64	59	55	63	58	54	53																			
7	75	63	56	51	73	63	56	51	61	55	51	60	54	50	59	54	50	48																			
8	70	59	52	47	69	58	51	47	57	51	46	56	50	46	55	50	46	44																			
9	66	55	48	43	65	54	48	43	53	47	43	52	47	43	51	46	43	41																			
10	63	51	45	40	62	51	44	40	50	44	40	49	44	40	48	43	40	38																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	67008	67008	67008
5°	66840	66792	66840
10°	66188	66231	66091
15°	65199	65248	65106
20°	63734	63784	63583
25°	60552	61844	60500
30°	51854	58879	52177
35°	34070	52934	33555
40°	24084	39917	23657
45°	18675	24569	18809
50°	15882	17918	15734
55°	14285	14698	14285
60°	12925	12925	12925
65°	11859	11747	11747
70°	10814	10814	10952
75°	10131	9765	9948
80°	8901	8901	8901
85°	7509	7509	7509

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 24569 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	146.7	6.4
10°-20°	412.0	17.9
20°-30°	587.2	25.6
30°-40°	500.6	21.8
40°-50°	277.0	12.1
50°-60°	174.5	7.6
60°-70°	115.8	5.0
70°-80°	63.7	2.8
80°-90°	18.1	0.8
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°	1145.9	49.9
0°-40°	1646.5	71.7
0°-60°	2098.0	91.4
0°-90°	2295.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2295.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1556	1556	1556	1556	1556	
5°	1546	1549	1545	1543	1546	147
15°	1463	1463	1464	1463	1461	412
25°	1275	1290	1302	1289	1274	576
35°	648	764	1007	766	638	421
45°	307	336	404	334	309	243
55°	190	194	196	192	190	171
65°	116	118	115	116	115	116
75°	61	60	59	60	60	64
85°	15	15	15	16	15	18
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1556.3	1556.3	1556.3	1556.3	1556.3
1°	1553.0	1555.2	1555.2	1554.1	1555.2
2°	1556.3	1553.0	1553.0	1553.0	1554.1
3°	1551.9	1554.1	1554.1	1550.8	1548.7
4°	1550.8	1549.7	1549.7	1553.0	1550.8
5°	1546.5	1548.7	1545.4	1543.2	1546.5
6°	1542.1	1543.2	1542.1	1543.2	1546.5
7°	1536.7	1540.0	1538.9	1537.8	1537.8
8°	1530.2	1534.5	1532.3	1532.3	1531.3
9°	1523.6	1524.7	1526.9	1526.9	1520.4
10°	1513.9	1517.1	1514.9	1516.0	1511.7
11°	1505.2	1509.5	1508.4	1506.2	1507.3
12°	1497.5	1499.7	1498.6	1495.4	1496.5
13°	1487.8	1489.9	1488.8	1488.8	1485.6
14°	1476.9	1474.7	1478.0	1475.8	1474.7
15°	1462.7	1462.7	1463.8	1462.7	1460.6
16°	1449.7	1450.8	1450.8	1449.7	1450.8
17°	1434.5	1438.8	1437.7	1435.6	1436.6
18°	1420.3	1423.6	1424.7	1423.6	1420.3
19°	1407.3	1409.5	1408.4	1404.0	1404.0
20°	1391.0	1392.1	1392.1	1389.9	1387.7
22.5°	1339.9	1347.5	1352.9	1348.6	1339.9
25°	1274.6	1289.8	1301.8	1288.7	1273.5
27.5°	1183.2	1213.7	1249.6	1217.0	1188.7
30°	1043.0	1112.6	1184.3	1119.1	1049.5
32.5°	829.8	966.8	1103.9	979.9	842.8
35°	648.2	764.5	1007.1	765.6	638.4
37.5°	517.7	600.3	883.1	594.9	512.2
40°	428.5	484.0	710.2	481.8	420.9
42.5°	357.8	400.2	531.8	395.9	357.8
45°	306.7	336.1	403.5	333.9	308.9
47.5°	268.6	287.1	323.0	286.0	268.6
50°	237.1	248.0	267.5	246.9	234.9
52.5°	212.1	218.6	226.2	216.4	209.9
55°	190.3	193.6	195.8	192.5	190.3
57.5°	169.7	171.8	170.7	169.7	168.6
60°	150.1	151.2	150.1	151.2	150.1
62.5°	132.7	133.8	131.6	132.7	131.6
65°	116.4	117.5	115.3	116.4	115.3
67.5°	101.1	101.1	101.1	101.1	100.1
70°	85.9	87.0	85.9	87.0	87.0
72.5°	72.9	72.9	71.8	72.9	72.9
75°	60.9	59.8	58.7	59.8	59.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
82.5°	26.1	26.1	25.0	26.1	26.1
85°	15.2	15.2	15.2	16.3	15.2
87.5°	7.6	6.5	6.5	7.6	7.6
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°	47.9	47.9	46.8	47.9	47.9
80°	35.9	37.0	35.9	37.0	35.9

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