

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: P838458

Luminaire Tested: HCSQ625D010-HM60525827-61SQMW

Issue Date: 5/21/2024

Test Information

Test Method: LM-79-2019
Report Number: P838458
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-HM60525827-61SQMW
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, MATTE WHITE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT
Ballast/Driver: -

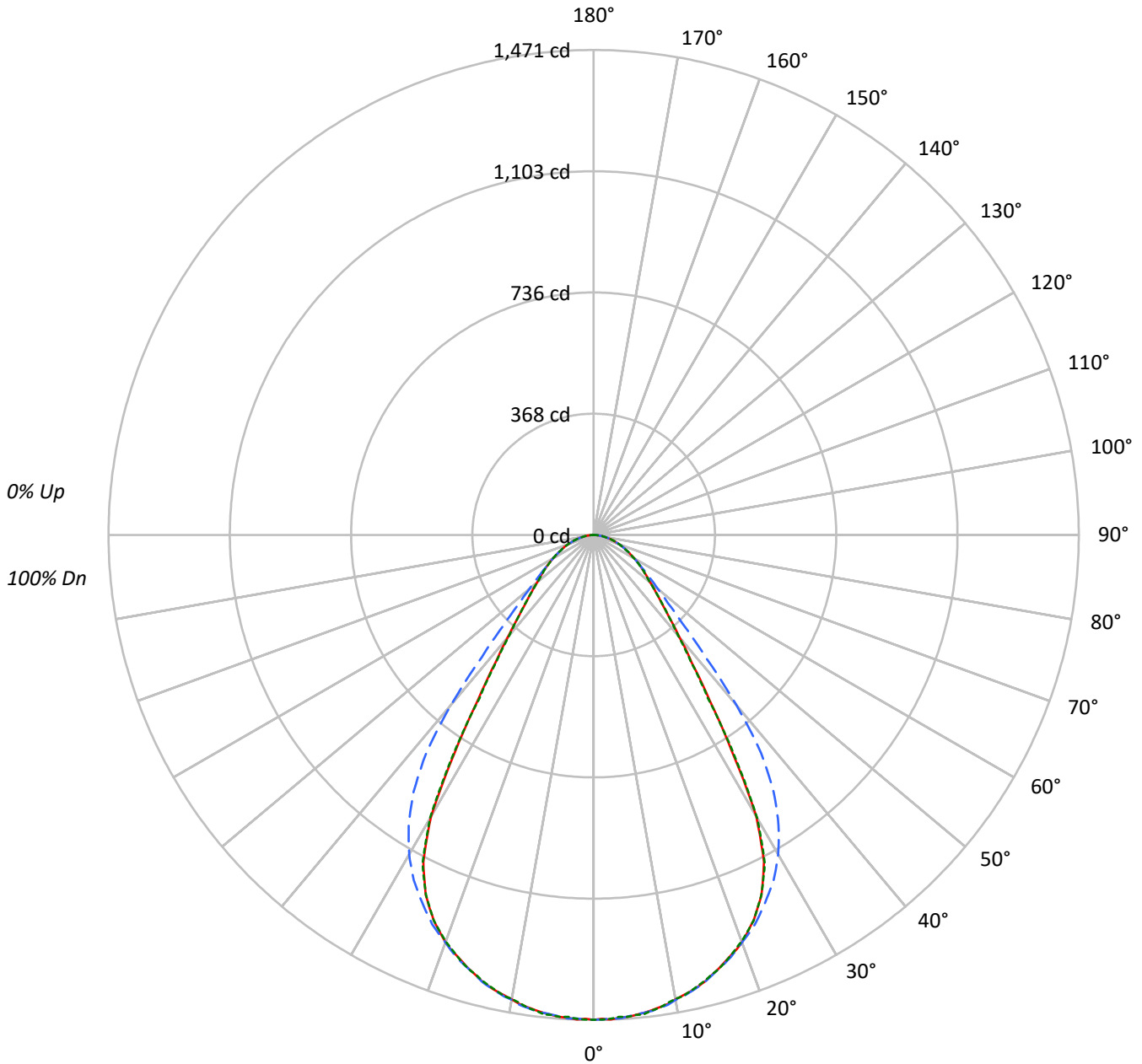
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2169.6 lumens
Efficiency: N/A
Efficacy: 78.3 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					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	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°	63331	63331	63331
5°	63175	63127	63175
10°	62554	62602	62467
15°	61624	61669	61535
20°	60238	60284	60096
25°	57231	58452	57184
30°	49010	55653	49314
35°	32199	50028	31715
40°	22763	37725	22358
45°	17652	23217	17774
50°	15011	16940	14870
55°	13504	13887	13504
60°	12211	12211	12211
65°	11207	11105	11105
70°	10222	10222	10348
75°	9582	9233	9399
80°	8405	8405	8405
85°	7114	7114	7114

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°

Vertical Angle: 45°

Luminance: 23217 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	138.7	6.4
10°-20°	389.4	17.9
20°-30°	554.9	25.6
30°-40°	473.2	21.8
40°-50°	261.8	12.1
50°-60°	164.9	7.6
60°-70°	109.5	5.0
70°-80°	60.1	2.8
80°-90°	17.1	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°	1083.1	49.9
0°-40°	1556.2	71.7
0°-60°	1982.9	91.4
0°-90°	2169.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2169.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1471	1471	1471	1471	1471	
5°	1462	1464	1461	1459	1462	139
15°	1382	1382	1384	1382	1380	389
25°	1205	1219	1230	1218	1204	544
35°	613	723	952	724	603	398
45°	290	318	381	316	292	230
55°	180	183	185	182	180	162
65°	110	111	109	110	109	109
75°	58	56	56	56	56	60
85°	14	14	14	15	14	17
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1470.9	1470.9	1470.9	1470.9	1470.9
1°	1467.8	1469.9	1469.9	1468.9	1469.9
2°	1470.9	1467.8	1467.8	1467.8	1468.9
3°	1466.8	1468.9	1468.9	1465.8	1463.7
4°	1465.8	1464.7	1464.7	1467.8	1465.8
5°	1461.7	1463.7	1460.6	1458.6	1461.7
6°	1457.6	1458.6	1457.6	1458.6	1461.7
7°	1452.4	1455.5	1454.5	1453.4	1453.4
8°	1446.2	1450.4	1448.3	1448.3	1447.3
9°	1440.1	1441.1	1443.2	1443.2	1437.0
10°	1430.8	1433.9	1431.9	1432.9	1428.8
11°	1422.6	1426.7	1425.7	1423.6	1424.7
12°	1415.4	1417.5	1416.4	1413.4	1414.4
13°	1406.2	1408.2	1407.2	1407.2	1404.1
14°	1395.9	1393.8	1396.9	1394.9	1393.8
15°	1382.5	1382.5	1383.5	1382.5	1380.5
16°	1370.2	1371.2	1371.2	1370.2	1371.2
17°	1355.8	1359.9	1358.9	1356.8	1357.8
18°	1342.4	1345.5	1346.5	1345.5	1342.4
19°	1330.1	1332.2	1331.1	1327.0	1327.0
20°	1314.7	1315.7	1315.7	1313.6	1311.6
22.5°	1266.4	1273.6	1278.7	1274.6	1266.4
25°	1204.7	1219.1	1230.4	1218.1	1203.7
27.5°	1118.3	1147.1	1181.1	1150.2	1123.5
30°	985.8	1051.5	1119.4	1057.7	991.9
32.5°	784.3	913.8	1043.3	926.1	796.6
35°	612.6	722.6	951.8	723.6	603.4
37.5°	489.3	567.4	834.7	562.3	484.1
40°	405.0	457.4	671.2	455.4	397.8
42.5°	338.2	378.3	502.6	374.2	338.2
45°	289.9	317.6	381.3	315.6	291.9
47.5°	253.9	271.4	305.3	270.3	253.9
50°	224.1	234.4	252.9	233.3	222.0
52.5°	200.4	206.6	213.8	204.6	198.4
55°	179.9	183.0	185.0	181.9	179.9
57.5°	160.4	162.4	161.4	160.4	159.3
60°	141.8	142.9	141.8	142.9	141.8
62.5°	125.4	126.4	124.4	125.4	124.4
65°	110.0	111.0	109.0	110.0	109.0
67.5°	95.6	95.6	95.6	95.6	94.6
70°	81.2	82.2	81.2	82.2	82.2
72.5°	68.9	68.9	67.8	68.9	68.9
75°	57.6	56.5	55.5	56.5	56.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
82.5°	24.7	24.7	23.6	24.7	24.7
85°	14.4	14.4	14.4	15.4	14.4
87.5°	7.2	6.2	6.2	7.2	7.2
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°	45.2	45.2	44.2	45.2	45.2
80°	33.9	34.9	33.9	34.9	33.9

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Scaled Data Report



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