

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: P838478

Luminaire Tested: HCSQ625D010-HM60525927-61SQMW

Issue Date: 5/21/2024



**Test Information**

Test Method: LM-79-2019  
Report Number: P838478  
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-HM60525927-61SQMW  
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, MATTE WHITE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: -

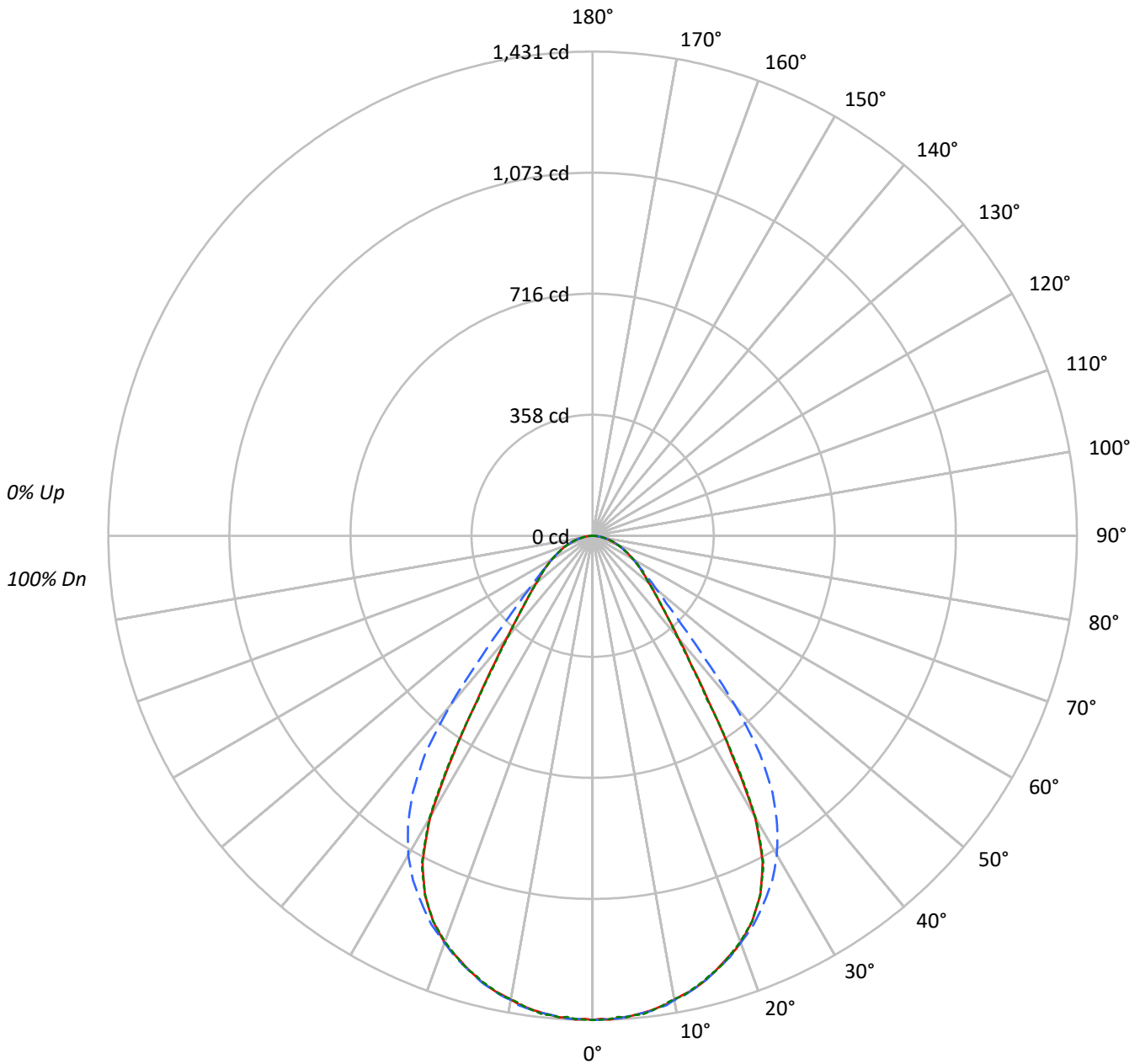
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2110.9 lumens  
Efficiency: N/A  
Efficacy: 76.2 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 (Ain): 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

TEST NUMBER: P838478

CATALOG NUMBER: HCSQ625D010-HM60525927-61SQMW

### 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	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			
1	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89					89			
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79					79			
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71					71			
4	91	81	74	69	89	80	73	68	77	72	67	75	70	67	73	69	66	64					64			
5	85	74	67	62	83	73	66	61	71	65	61	70	64	60	68	63	60	58					58			
6	80	69	61	56	78	68	61	56	66	60	55	64	59	55	63	58	54	53					53			
7	75	63	56	51	73	63	56	51	61	55	51	60	54	50	59	54	50	48					48			
8	70	59	52	47	69	58	51	47	57	51	46	56	50	46	55	50	46	44					44			
9	66	55	48	43	65	54	48	43	53	47	43	52	47	43	51	46	43	41					41			
10	63	51	45	40	62	51	44	40	50	44	40	49	44	40	48	43	40	38					38			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	61621	61621	61621
5°	61468	61424	61468
10°	60867	60911	60779
15°	59962	60006	59872
20°	58607	58653	58469
25°	55683	56870	55635
30°	47683	54146	47981
35°	31332	48677	30859
40°	22145	36708	21751
45°	17171	22590	17293
50°	14602	16478	14468
55°	13136	13512	13136
60°	11883	11883	11883
65°	10901	10799	10799
70°	9945	9945	10071
75°	9316	8983	9149
80°	8182	8182	8182
85°	6916	6916	6916

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 22590 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	134.9	6.4
10°-20°	378.9	17.9
20°-30°	539.9	25.6
30°-40°	460.4	21.8
40°-50°	254.7	12.1
50°-60°	160.4	7.6
60°-70°	106.5	5.0
70°-80°	58.5	2.8
80°-90°	16.7	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°	1053.8	49.9
0°-40°	1514.2	71.7
0°-60°	1929.3	91.4
0°-90°	2110.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2110.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1431	1431	1431	1431	1431	
5°	1422	1424	1421	1419	1422	135
15°	1345	1345	1346	1345	1343	379
25°	1172	1186	1197	1185	1171	529
35°	596	703	926	704	587	388
45°	282	309	371	307	284	224
55°	175	178	180	177	175	157
65°	107	108	106	107	106	106
75°	56	55	54	55	55	59
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°	1431.2	1431.2	1431.2	1431.2	1431.2
1°	1428.2	1430.2	1430.2	1429.2	1430.2
2°	1431.2	1428.2	1428.2	1428.2	1429.2
3°	1427.2	1429.2	1429.2	1426.2	1424.2
4°	1426.2	1425.2	1425.2	1428.2	1426.2
5°	1422.2	1424.2	1421.2	1419.2	1422.2
6°	1418.2	1419.2	1418.2	1419.2	1422.2
7°	1413.2	1416.2	1415.2	1414.2	1414.2
8°	1407.2	1411.2	1409.2	1409.2	1408.2
9°	1401.2	1402.2	1404.2	1404.2	1398.2
10°	1392.2	1395.2	1393.2	1394.2	1390.2
11°	1384.2	1388.2	1387.2	1385.2	1386.2
12°	1377.2	1379.2	1378.2	1375.2	1376.2
13°	1368.2	1370.2	1369.2	1369.2	1366.2
14°	1358.2	1356.2	1359.2	1357.2	1356.2
15°	1345.2	1345.2	1346.2	1345.2	1343.2
16°	1333.2	1334.2	1334.2	1333.2	1334.2
17°	1319.1	1323.2	1322.2	1320.2	1321.2
18°	1306.1	1309.1	1310.1	1309.1	1306.1
19°	1294.1	1296.1	1295.1	1291.1	1291.1
20°	1279.1	1280.1	1280.1	1278.1	1276.1
22.5°	1232.1	1239.1	1244.1	1240.1	1232.1
25°	1172.1	1186.1	1197.1	1185.1	1171.1
27.5°	1088.1	1116.1	1149.1	1119.1	1093.1
30°	959.1	1023.1	1089.1	1029.1	965.1
32.5°	763.1	889.1	1015.1	901.1	775.1
35°	596.1	703.1	926.1	704.1	587.1
37.5°	476.1	552.1	812.1	547.1	471.1
40°	394.0	445.1	653.1	443.1	387.0
42.5°	329.0	368.0	489.1	364.0	329.0
45°	282.0	309.0	371.0	307.0	284.0
47.5°	247.0	264.0	297.0	263.0	247.0
50°	218.0	228.0	246.0	227.0	216.0
52.5°	195.0	201.0	208.0	199.0	193.0
55°	175.0	178.0	180.0	177.0	175.0
57.5°	156.0	158.0	157.0	156.0	155.0
60°	138.0	139.0	138.0	139.0	138.0
62.5°	122.0	123.0	121.0	122.0	121.0
65°	107.0	108.0	106.0	107.0	106.0
67.5°	93.0	93.0	93.0	93.0	92.0
70°	79.0	80.0	79.0	80.0	80.0
72.5°	67.0	67.0	66.0	67.0	67.0
75°	56.0	55.0	54.0	55.0	55.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
82.5°	24.0	24.0	23.0	24.0	24.0
85°	14.0	14.0	14.0	15.0	14.0
87.5°	7.0	6.0	6.0	7.0	7.0
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°	44.0	44.0	43.0	44.0	44.0
80°	33.0	34.0	33.0	34.0	33.0

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Scaled Data Report



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