

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: P838467

Luminaire Tested: HCSQ625D010-HM60525835-61SQMB

Issue Date: 5/21/2024



Test Information

Test Method: LM-79-2019
Report Number: P838467
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2309-166-4)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 5/21/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO COMMERCIAL
Catalog Number: HCSQ625D010-HM60525835-61SQMB
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, MATTE BLACK TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1408.1 lumens
Efficiency: N/A
Efficacy: 50.8 lumens/watt
Spacing Criteria (0/90/45): 1 / 1.01 / 1.03
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



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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	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	111	108	106	111	109	106	104	105	103	101	101	99	98	97	96	95	93								
2	108	103	99	96	106	101	98	94	98	95	92	95	93	90	92	90	89	87								
3	102	96	91	87	100	94	90	86	92	88	85	89	86	83	87	85	82	81								
4	97	89	84	80	95	88	83	79	86	82	78	84	80	77	82	79	76	75								
5	92	84	78	73	90	83	77	73	81	76	72	79	75	72	78	74	71	70								
6	87	78	72	68	86	77	72	68	76	71	67	75	70	67	73	69	66	65								
7	83	73	67	63	81	73	67	63	71	66	63	70	66	62	69	65	62	60								
8	79	69	63	59	77	68	63	59	67	62	58	66	62	58	65	61	58	56								
9	75	65	59	55	74	64	59	55	63	58	55	63	58	54	62	57	54	53								
10	71	61	55	51	70	61	55	51	60	55	51	59	54	51	58	54	51	50								

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	60984	60984	60984
5°	60474	60521	60474
10°	58956	59057	59057
15°	56931	56775	57082
20°	54671	54039	54827
25°	50343	50728	50837
30°	39241	46679	40728
35°	19900	39552	20625
40°	9055	25866	9055
45°	3501	9736	3434
50°	543	3081	543
55°	173	608	173
60°	103	103	103
65°	122	0	122
70°	0	0	151
75°	0	0	200
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°

Vertical Angle: 45°

Luminance: 9736 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	132.3	9.4
10°-20°	358.7	25.5
20°-30°	483.5	34.3
30°-40°	339.9	24.1
40°-50°	86.8	6.2
50°-60°	6.0	0.4
60°-70°	0.8	0.1
70°-80°	0.1	0.0
80°-90°	0.0	0.0
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°	974.4	69.2
0°-40°	1314.4	93.3
0°-60°	1407.2	99.9
0°-90°	1408.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1408.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1416	1416	1416	1416	1416	
5°	1399	1402	1400	1402	1399	132
15°	1277	1275	1274	1277	1281	359
25°	1060	1063	1068	1071	1070	474
35°	379	502	752	514	392	255
45°	58	86	160	87	56	50
55°	2	2	8	2	2	3
65°	1	1	0	1	1	1
75°	0	0	0	0	1	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1416.4	1416.4	1416.4	1416.4	1416.4
1°	1415.3	1416.4	1417.6	1417.6	1416.4
2°	1416.4	1413.0	1419.9	1416.4	1417.6
3°	1416.4	1409.5	1413.0	1415.3	1414.1
4°	1410.7	1406.1	1409.5	1408.4	1406.1
5°	1399.2	1401.5	1400.3	1401.5	1399.2
6°	1392.3	1394.6	1396.9	1393.4	1390.0
7°	1386.5	1385.4	1386.5	1388.8	1388.8
8°	1376.1	1378.4	1376.1	1377.3	1373.8
9°	1364.6	1364.6	1364.6	1366.9	1363.5
10°	1348.5	1354.3	1350.8	1353.1	1350.8
11°	1340.5	1338.2	1338.2	1339.3	1338.2
12°	1320.9	1323.2	1322.1	1324.4	1327.8
13°	1310.6	1311.7	1307.1	1312.9	1312.9
14°	1294.5	1293.3	1295.6	1294.5	1296.8
15°	1277.2	1274.9	1273.7	1277.2	1280.6
16°	1264.5	1258.8	1255.3	1259.9	1264.5
17°	1246.1	1240.4	1235.8	1245.0	1246.1
18°	1227.7	1225.4	1213.9	1225.4	1231.2
19°	1212.8	1204.7	1194.3	1207.0	1213.9
20°	1193.2	1186.3	1179.4	1186.3	1196.6
22.5°	1136.8	1131.1	1125.3	1133.4	1139.1
25°	1059.7	1063.2	1067.8	1071.2	1070.1
27.5°	950.4	981.5	1010.2	991.8	967.7
30°	789.3	867.6	938.9	880.2	819.2
32.5°	571.9	705.3	853.8	731.8	577.6
35°	378.6	501.7	752.5	514.3	392.4
37.5°	246.2	337.1	628.2	338.3	257.7
40°	161.1	219.8	460.2	224.4	161.1
42.5°	99.0	139.2	279.6	145.0	99.0
45°	57.5	86.3	159.9	87.4	56.4
47.5°	26.5	47.2	90.9	46.0	27.6
50°	8.1	20.7	46.0	20.7	8.1
52.5°	3.5	5.8	21.9	5.8	3.5
55°	2.3	2.3	8.1	2.3	2.3
57.5°	2.3	1.2	2.3	2.3	2.3
60°	1.2	1.2	1.2	1.2	1.2
62.5°	1.2	1.2	1.2	1.2	1.2
65°	1.2	1.2	0.0	1.2	1.2
67.5°	1.2	0.0	0.0	0.0	1.2
70°	0.0	0.0	0.0	0.0	1.2
72.5°	0.0	0.0	0.0	0.0	1.2
75°	0.0	0.0	0.0	0.0	1.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
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°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0

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(END OF REPORT)