

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: P838472

Luminaire Tested: HCSQ625D010-HM60525840-61SQMB

Issue Date: 5/21/2024

Test Information

Test Method: LM-79-2019
Report Number: P838472
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-HM60525840-61SQMB
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, MATTE BLACK TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT
Ballast/Driver: -

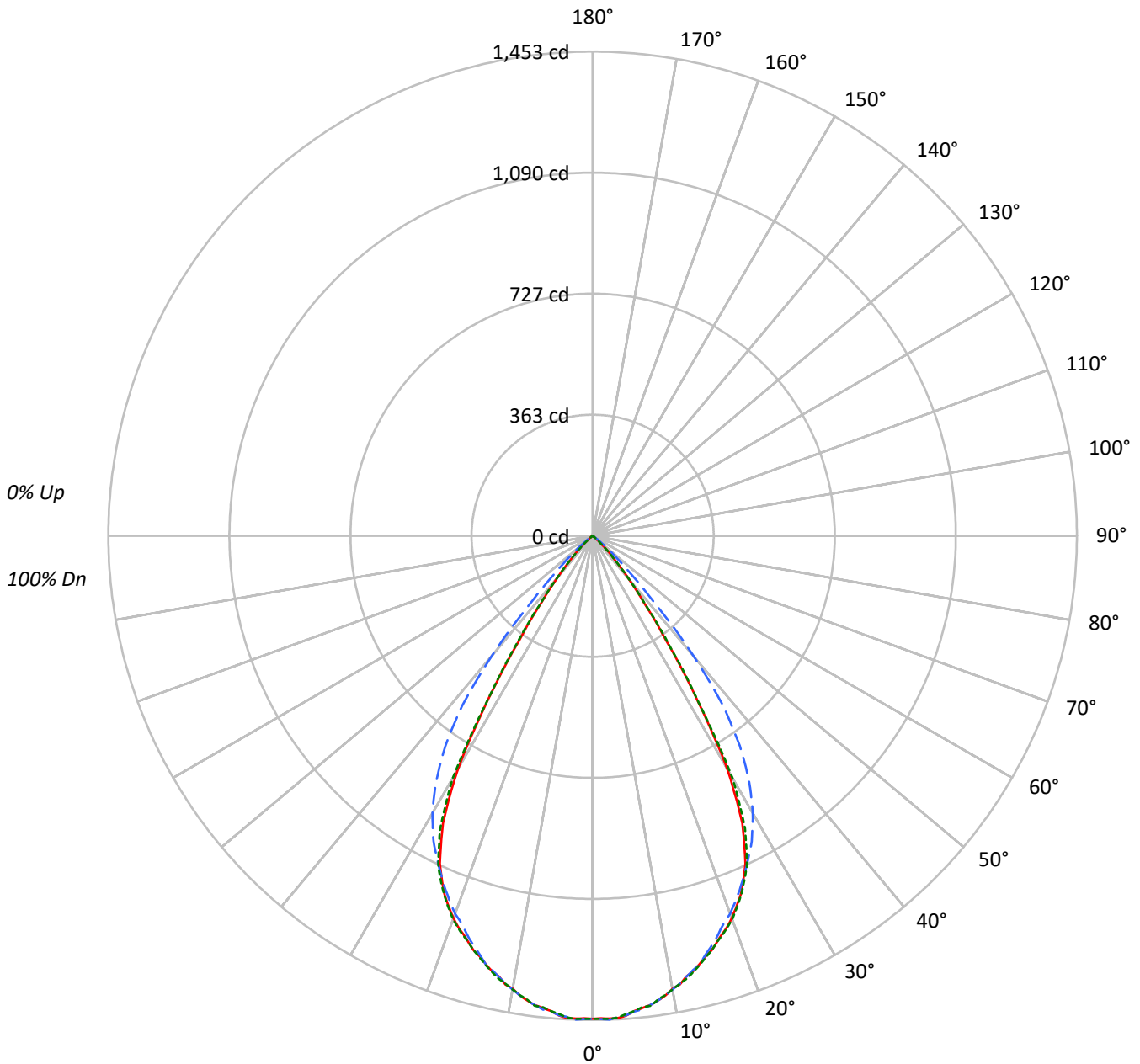
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1441.0 lumens
Efficiency: N/A
Efficacy: 52.0 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 (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	114	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°	62413	62413	62413
5°	61891	61939	61891
10°	60338	60443	60443
15°	58263	58107	58424
20°	55954	55303	56114
25°	51526	51915	52029
30°	40161	47772	41682
35°	20362	40477	21109
40°	9268	26473	9268
45°	3586	9968	3513
50°	549	3155	549
55°	180	616	180
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: 9968 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	135.4	9.4
10°-20°	367.1	25.5
20°-30°	494.8	34.3
30°-40°	347.9	24.1
40°-50°	88.8	6.2
50°-60°	6.2	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°	997.3	69.2
0°-40°	1345.2	93.3
0°-60°	1440.2	99.9
0°-90°	1441.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1441.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1450	1450	1450	1450	1450	
5°	1432	1434	1433	1434	1432	135
15°	1307	1305	1304	1307	1311	368
25°	1085	1088	1093	1096	1095	485
35°	387	513	770	526	402	261
45°	59	88	164	90	58	51
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°	1449.6	1449.6	1449.6	1449.6	1449.6
1°	1448.4	1449.6	1450.8	1450.8	1449.6
2°	1449.6	1446.1	1453.1	1449.6	1450.8
3°	1449.6	1442.6	1446.1	1448.4	1447.3
4°	1443.7	1439.0	1442.6	1441.4	1439.0
5°	1432.0	1434.3	1433.1	1434.3	1432.0
6°	1424.9	1427.2	1429.6	1426.1	1422.5
7°	1419.0	1417.8	1419.0	1421.4	1421.4
8°	1408.4	1410.8	1408.4	1409.6	1406.0
9°	1396.6	1396.6	1396.6	1399.0	1395.4
10°	1380.1	1386.0	1382.5	1384.8	1382.5
11°	1371.9	1369.5	1369.5	1370.7	1369.5
12°	1351.9	1354.2	1353.1	1355.4	1358.9
13°	1341.3	1342.5	1337.7	1343.6	1343.6
14°	1324.8	1323.6	1326.0	1324.8	1327.1
15°	1307.1	1304.8	1303.6	1307.1	1310.7
16°	1294.2	1288.3	1284.8	1289.5	1294.2
17°	1275.3	1269.4	1264.7	1274.2	1275.3
18°	1256.5	1254.1	1242.4	1254.1	1260.0
19°	1241.2	1232.9	1222.3	1235.3	1242.4
20°	1221.2	1214.1	1207.0	1214.1	1224.7
22.5°	1163.5	1157.6	1151.7	1159.9	1165.8
25°	1084.6	1088.1	1092.8	1096.3	1095.2
27.5°	972.7	1004.5	1033.9	1015.1	990.4
30°	807.8	887.9	960.9	900.9	838.4
32.5°	585.3	721.9	873.8	748.9	591.2
35°	387.4	513.4	770.1	526.4	401.6
37.5°	252.0	345.0	643.0	346.2	263.8
40°	164.9	224.9	471.0	229.6	164.9
42.5°	101.3	142.5	286.2	148.4	101.3
45°	58.9	88.3	163.7	89.5	57.7
47.5°	27.1	48.3	93.0	47.1	28.3
50°	8.2	21.2	47.1	21.2	8.2
52.5°	3.5	5.9	22.4	5.9	3.5
55°	2.4	2.4	8.2	2.4	2.4
57.5°	2.4	1.2	2.4	2.4	2.4
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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