

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: P838462

Luminaire Tested: HCSQ625D010-HM60525830-61SQMB

Issue Date: 5/21/2024



Test Information

Test Method: LM-79-2019
Report Number: P838462
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-HM60525830-61SQMB
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, MATTE BLACK TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT
Ballast/Driver: -

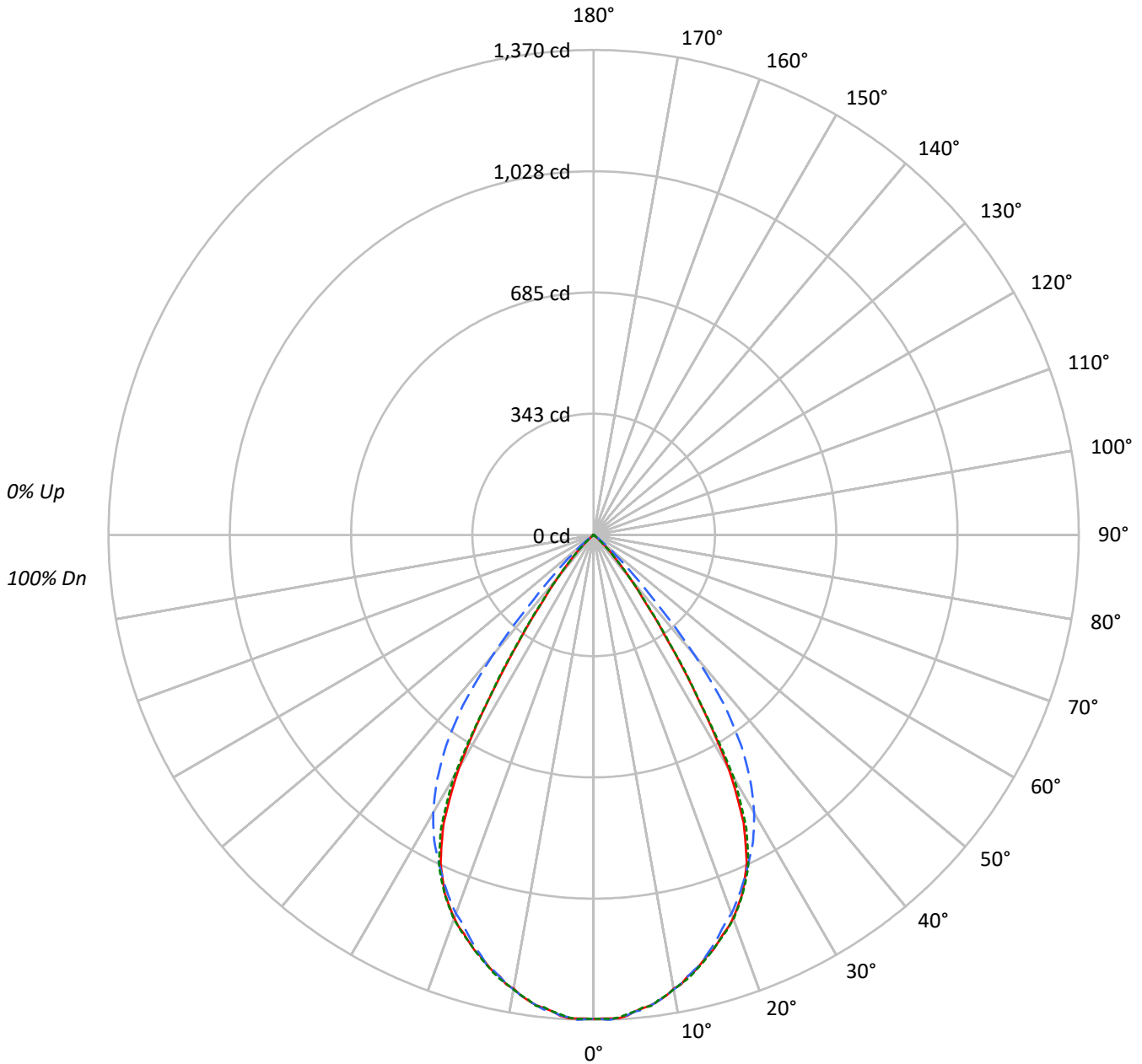
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1359.0 lumens
Efficiency: N/A
Efficacy: 49.1 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					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	100	100	100	100		
	1	114	111	108	106	111	109	106	104	105	103	101	101	99	98	97	96	95	93	93	93	93	93	93		
	2	108	103	99	96	106	101	98	94	98	95	92	95	93	90	92	90	89	87	87	87	87	87	87		
	3	102	96	91	87	100	94	90	86	92	88	85	89	86	83	87	85	82	81	81	81	81	81	81		
	4	97	89	84	80	95	88	83	79	86	82	78	84	80	77	82	79	76	75	75	75	75	75	75		
	5	92	84	78	73	90	83	77	73	81	76	72	79	75	72	78	74	71	70	70	70	70	70	70		
	6	87	78	72	68	86	77	72	68	76	71	67	75	70	67	73	69	66	65	65	65	65	65	65		
	7	83	73	67	63	81	73	67	63	71	66	63	70	66	62	69	65	62	60	60	60	60	60	60		
	8	79	69	63	59	77	68	63	59	67	62	58	66	62	58	65	61	58	56	56	56	56	56	56		
	9	75	65	59	55	74	64	59	55	63	58	55	63	58	54	62	57	54	53	53	53	53	53	53		
	10	71	61	55	51	70	61	55	51	60	55	51	59	54	51	58	54	51	50	50	50	50	50	50		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	58861	58861	58861
5°	58369	58416	58369
10°	56906	57002	57002
15°	54947	54800	55099
20°	52770	52156	52921
25°	48590	48960	49065
30°	37879	45053	39311
35°	19206	38175	19905
40°	8740	24966	8740
45°	3379	9401	3312
50°	522	2974	522
55°	165	586	165
60°	95	95	95
65°	112	0	112
70°	0	0	138
75°	0	0	183
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 9401 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	127.7	9.4
10°-20°	346.2	25.5
20°-30°	466.7	34.3
30°-40°	328.1	24.1
40°-50°	83.8	6.2
50°-60°	5.8	0.4
60°-70°	0.7	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°	940.5	69.2
0°-40°	1268.6	93.4
0°-60°	1358.2	99.9
0°-90°	1359.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1359.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1367	1367	1367	1367	1367	
5°	1350	1353	1352	1353	1350	128
15°	1233	1230	1229	1233	1236	347
25°	1023	1026	1031	1034	1033	457
35°	365	484	726	496	379	246
45°	56	83	154	84	54	48
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°	1367.1	1367.1	1367.1	1367.1	1367.1
1°	1366.0	1367.1	1368.2	1368.2	1367.1
2°	1367.1	1363.8	1370.5	1367.1	1368.2
3°	1367.1	1360.5	1363.8	1366.0	1364.9
4°	1361.6	1357.1	1360.5	1359.4	1357.1
5°	1350.5	1352.7	1351.6	1352.7	1350.5
6°	1343.8	1346.0	1348.2	1344.9	1341.6
7°	1338.3	1337.1	1338.3	1340.5	1340.5
8°	1328.3	1330.5	1328.3	1329.4	1326.0
9°	1317.1	1317.1	1317.1	1319.4	1316.0
10°	1301.6	1307.2	1303.8	1306.0	1303.8
11°	1293.8	1291.6	1291.6	1292.7	1291.6
12°	1274.9	1277.2	1276.1	1278.3	1281.6
13°	1265.0	1266.1	1261.6	1267.2	1267.2
14°	1249.4	1248.3	1250.5	1249.4	1251.6
15°	1232.7	1230.5	1229.4	1232.7	1236.1
16°	1220.5	1215.0	1211.6	1216.1	1220.5
17°	1202.8	1197.2	1192.8	1201.6	1202.8
18°	1185.0	1182.8	1171.7	1182.8	1188.3
19°	1170.6	1162.8	1152.8	1165.0	1171.7
20°	1151.7	1145.0	1138.3	1145.0	1155.0
22.5°	1097.3	1091.7	1086.1	1093.9	1099.5
25°	1022.8	1026.2	1030.6	1034.0	1032.8
27.5°	917.3	947.3	975.1	957.3	934.0
30°	761.9	837.4	906.2	849.6	790.7
32.5°	552.0	680.8	824.1	706.3	557.5
35°	365.4	484.2	726.3	496.4	378.7
37.5°	237.7	325.4	606.4	326.5	248.8
40°	155.5	212.1	444.2	216.6	155.5
42.5°	95.5	134.4	269.9	139.9	95.5
45°	55.5	83.3	154.4	84.4	54.4
47.5°	25.5	45.5	87.7	44.4	26.7
50°	7.8	20.0	44.4	20.0	7.8
52.5°	3.3	5.6	21.1	5.6	3.3
55°	2.2	2.2	7.8	2.2	2.2
57.5°	2.2	1.1	2.2	2.2	2.2
60°	1.1	1.1	1.1	1.1	1.1
62.5°	1.1	1.1	1.1	1.1	1.1
65°	1.1	1.1	0.0	1.1	1.1
67.5°	1.1	0.0	0.0	0.0	1.1
70°	0.0	0.0	0.0	0.0	1.1
72.5°	0.0	0.0	0.0	0.0	1.1
75°	0.0	0.0	0.0	0.0	1.1



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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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Scaled Data Report



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