

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



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: P838344

Luminaire Tested: HCSQ610D010-HM60525835-61SQC

Issue Date: 5/21/2024

Test Information

Test Method: LM-79-2019
Report Number: P838344
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2309-166-1)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 5/21/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO COMMERCIAL
Catalog Number: HCSQ610D010-HM60525835-61SQC
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT
Ballast/Driver: -

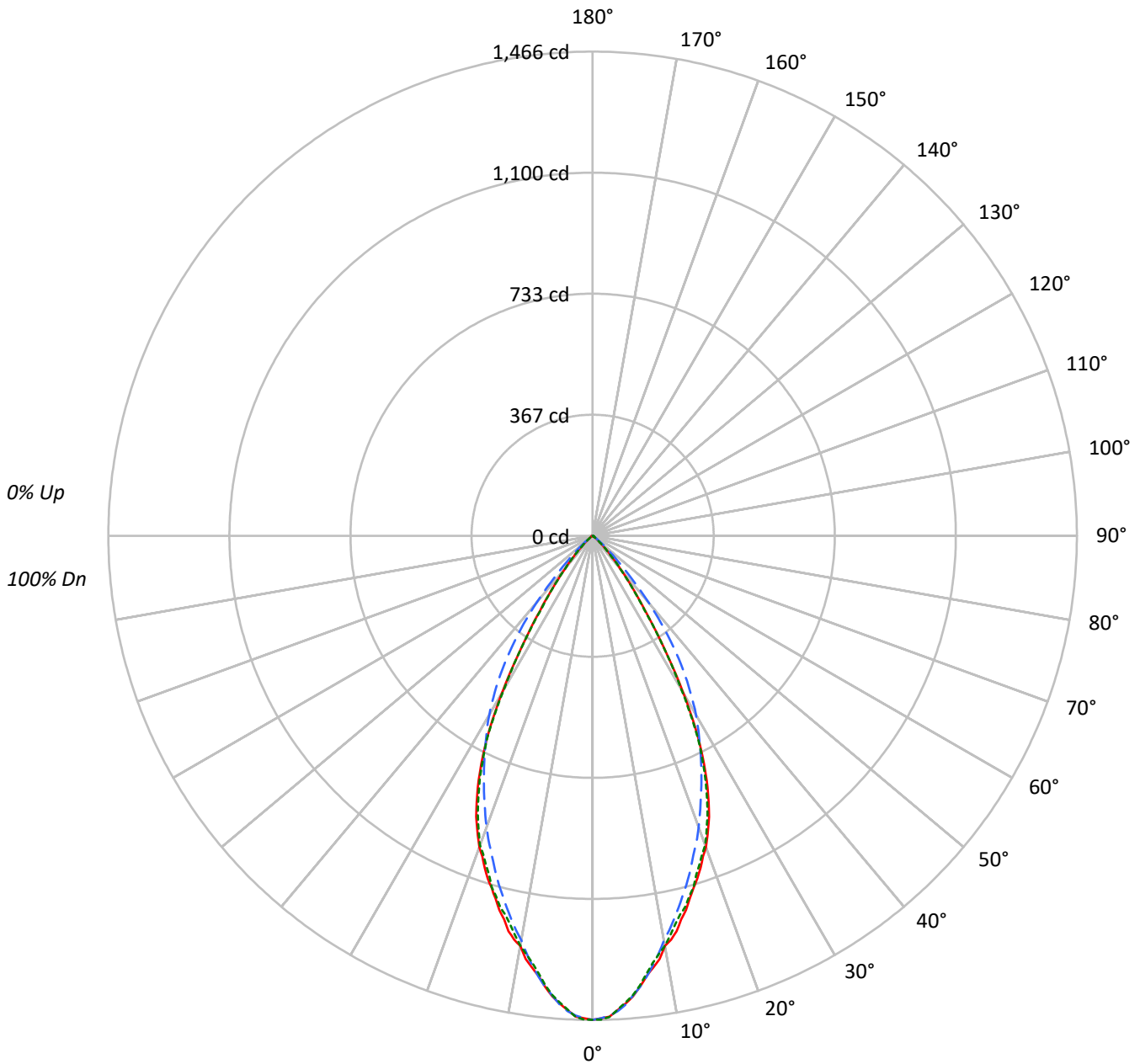
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1097.9 lumens
Efficiency: N/A
Efficacy: 110.9 lumens/watt
Spacing Criteria (0/90/45): 0.82 / 0.81 / 0.85
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 9.9
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	107	105	105	103	101	101	100	98	98	96	95	94																			
2	108	103	99	96	106	102	98	95	98	95	93	95	93	91	93	91	89	87																			
3	103	96	92	88	101	95	91	87	93	89	86	90	87	84	88	85	83	81																			
4	98	90	85	81	96	89	84	80	87	83	79	85	81	78	83	80	77	76																			
5	93	85	79	75	91	84	78	74	82	77	74	80	76	73	79	75	72	71																			
6	88	80	74	70	87	79	73	69	77	72	69	76	72	68	75	71	68	66																			
7	84	75	69	65	83	74	69	65	73	68	64	72	67	64	71	67	64	62																			
8	80	71	65	61	79	70	65	61	69	64	60	68	64	60	67	63	60	59																			
9	76	67	61	57	75	66	61	57	65	60	57	65	60	57	64	60	56	55																			
10	73	63	58	54	72	63	57	54	62	57	54	61	57	53	61	56	53	52																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	63107	63107	63107
5°	60534	60426	60344
10°	55135	54383	55091
15°	50668	48814	50365
20°	45984	43019	45668
25°	38860	36979	38328
30°	27210	31127	26747
35°	14617	23879	14333
40°	7234	14776	7183
45°	3160	6229	3099
50°	1018	2264	1018
55°	518	736	480
60°	336	336	336
65°	245	245	245
70°	189	189	189
75°	166	166	166
80°	124	124	124
85°	247	247	247

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 6229 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	128.7	11.7
10°-20°	310.8	28.3
20°-30°	359.0	32.7
30°-40°	224.2	20.4
40°-50°	62.3	5.7
50°-60°	8.7	0.8
60°-70°	2.6	0.2
70°-80°	1.1	0.1
80°-90°	0.5	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°	798.5	72.7
0°-40°	1022.7	93.2
0°-60°	1093.7	99.6
0°-90°	1097.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1097.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1466	1466	1466	1466	1466	
5°	1401	1397	1398	1396	1396	129
15°	1137	1115	1095	1112	1130	318
25°	818	794	778	794	807	365
35°	278	343	454	339	273	185
45°	52	66	102	66	51	45
55°	7	7	10	7	6	7
65°	2	2	2	2	2	3
75°	1	1	1	1	1	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1465.7	1465.7	1465.7	1465.7	1465.7
1°	1461.3	1461.3	1461.3	1465.2	1465.2
2°	1456.9	1455.9	1453.4	1456.4	1457.9
3°	1438.8	1440.7	1441.7	1440.2	1436.8
4°	1420.2	1418.2	1423.6	1420.2	1417.2
5°	1400.6	1396.7	1398.1	1396.2	1396.2
6°	1373.2	1378.1	1374.1	1370.7	1368.8
7°	1343.3	1347.2	1344.8	1339.9	1336.4
8°	1319.8	1317.4	1313.4	1312.5	1306.6
9°	1297.3	1288.5	1279.7	1281.1	1282.6
10°	1261.1	1262.0	1243.9	1257.6	1260.1
11°	1245.9	1240.5	1216.5	1227.8	1231.7
12°	1223.9	1206.7	1186.2	1195.5	1202.8
13°	1192.0	1174.4	1155.8	1170.0	1177.3
14°	1168.0	1148.0	1124.5	1142.6	1157.8
15°	1136.7	1115.2	1095.1	1112.2	1129.9
16°	1109.3	1084.3	1064.3	1080.9	1107.3
17°	1085.3	1054.5	1030.0	1047.6	1073.1
18°	1057.4	1021.7	999.2	1017.8	1046.6
19°	1026.6	990.3	970.3	985.4	1018.7
20°	1003.6	962.9	938.9	953.6	996.7
22.5°	921.3	878.7	856.7	874.3	908.6
25°	818.0	794.0	778.4	793.5	806.8
27.5°	695.6	695.6	701.0	694.7	690.7
30°	547.3	587.0	626.1	585.0	538.0
32.5°	399.5	463.1	541.9	471.4	399.0
35°	278.1	343.2	454.3	339.3	272.7
37.5°	193.4	236.4	358.3	238.9	190.9
40°	128.7	158.6	262.9	161.5	127.8
42.5°	84.2	104.8	169.9	105.3	82.2
45°	51.9	66.1	102.3	65.6	50.9
47.5°	30.4	39.2	59.7	39.7	29.9
50°	15.2	23.0	33.8	22.5	15.2
52.5°	8.8	12.2	18.6	11.7	8.8
55°	6.9	6.9	9.8	6.9	6.4
57.5°	5.4	5.4	5.4	5.4	4.9
60°	3.9	4.4	3.9	3.9	3.9
62.5°	3.4	3.4	2.9	3.4	2.9
65°	2.4	2.4	2.4	2.4	2.4
67.5°	2.0	2.0	2.0	2.0	2.0
70°	1.5	1.5	1.5	1.5	1.5
72.5°	1.0	1.5	1.0	1.5	1.5
75°	1.0	1.0	1.0	1.0	1.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
82.5°	0.5	0.5	0.5	0.5	0.5
85°	0.5	0.5	0.5	0.5	0.5
87.5°	0.5	0.5	0.5	0.5	0.5
90°	0.0	0.0	0.0	0.0	0.0

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Scaled Data Report



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Scaled Data Report





— 0°-180° - - 45°-225° - - - - 90°-270°

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77.5°	1.0	1.0	1.0	1.0	0.5
80°	0.5	0.5	0.5	0.5	0.5

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(END OF REPORT)