

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: P838364

Luminaire Tested: HCSQ610D010-HM60525935-61SQC

Issue Date: 5/21/2024

Test Information

Test Method: LM-79-2019
Report Number: P838364
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-HM60525935-61SQC
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: -

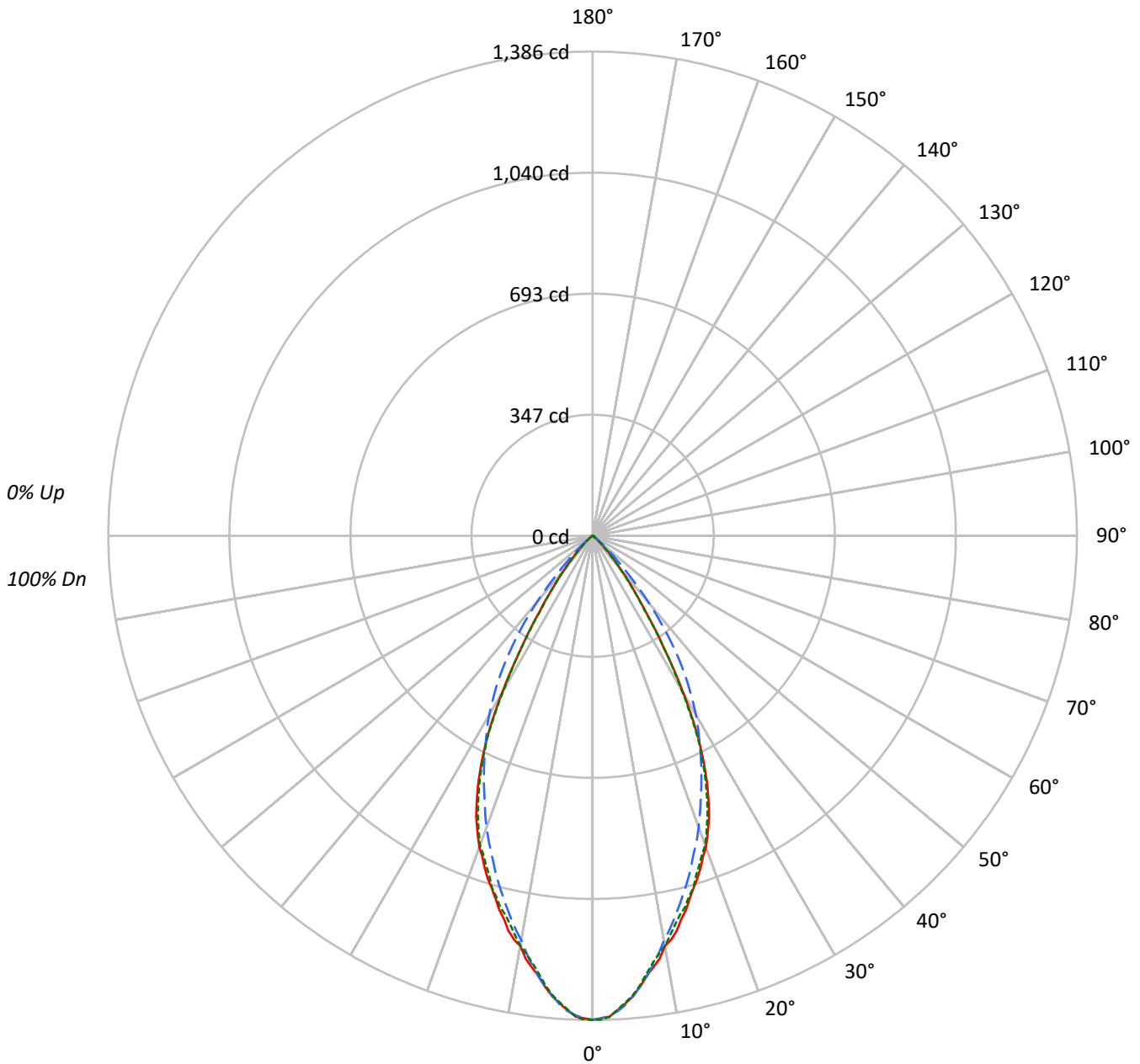
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1037.9 lumens
Efficiency: N/A
Efficacy: 104.8 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°	59654	59654	59654
5°	57223	57124	57042
10°	52118	51410	52079
15°	47900	46144	47610
20°	43468	40669	43171
25°	36737	34955	36229
30°	25723	29427	25286
35°	13818	22575	13550
40°	6840	13967	6790
45°	2990	5888	2929
50°	958	2137	958
55°	488	698	450
60°	319	319	319
65°	234	234	234
70°	176	176	176
75°	150	150	150
80°	124	124	124
85°	247	247	247

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 5888 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	121.7	11.7
10°-20°	293.8	28.3
20°-30°	339.4	32.7
30°-40°	211.9	20.4
40°-50°	58.9	5.7
50°-60°	8.2	0.8
60°-70°	2.4	0.2
70°-80°	1.0	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°	754.8	72.7
0°-40°	966.8	93.2
0°-60°	1033.9	99.6
0°-90°	1037.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1037.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1386	1386	1386	1386	1386	
5°	1324	1320	1322	1320	1320	122
15°	1075	1054	1035	1051	1068	301
25°	773	751	736	750	763	345
35°	263	324	430	321	258	175
45°	49	62	97	62	48	43
55°	6	6	9	6	6	6
65°	2	2	2	2	2	2
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°	1385.5	1385.5	1385.5	1385.5	1385.5
1°	1381.4	1381.4	1381.4	1385.1	1385.1
2°	1377.2	1376.3	1374.0	1376.7	1378.1
3°	1360.1	1361.9	1362.9	1361.5	1358.2
4°	1342.5	1340.6	1345.7	1342.5	1339.7
5°	1324.0	1320.3	1321.7	1319.8	1319.8
6°	1298.1	1302.7	1299.0	1295.8	1293.9
7°	1269.8	1273.5	1271.2	1266.6	1263.4
8°	1247.6	1245.3	1241.6	1240.7	1235.1
9°	1226.3	1218.0	1209.7	1211.1	1212.5
10°	1192.1	1193.0	1175.9	1188.9	1191.2
11°	1177.7	1172.7	1150.0	1160.6	1164.3
12°	1156.9	1140.7	1121.3	1130.1	1137.0
13°	1126.8	1110.2	1092.6	1106.0	1113.0
14°	1104.2	1085.2	1063.0	1080.1	1094.5
15°	1074.6	1054.2	1035.2	1051.4	1068.1
16°	1048.6	1025.0	1006.1	1021.8	1046.8
17°	1026.0	996.8	973.7	990.3	1014.4
18°	999.6	965.8	944.5	962.1	989.4
19°	970.4	936.2	917.2	931.6	963.0
20°	948.7	910.3	887.6	901.5	942.2
22.5°	870.9	830.7	809.8	826.5	858.9
25°	773.3	750.6	735.8	750.2	762.6
27.5°	657.6	657.6	662.7	656.7	653.0
30°	517.4	554.9	591.9	553.0	508.6
32.5°	377.6	437.8	512.3	445.6	377.2
35°	262.9	324.4	429.5	320.7	257.8
37.5°	182.8	223.5	338.7	225.8	180.5
40°	121.7	149.9	248.5	152.7	120.8
42.5°	79.6	99.0	160.6	99.5	77.7
45°	49.1	62.5	96.7	62.0	48.1
47.5°	28.7	37.0	56.5	37.5	28.2
50°	14.3	21.8	31.9	21.3	14.3
52.5°	8.3	11.6	17.6	11.1	8.3
55°	6.5	6.5	9.3	6.5	6.0
57.5°	5.1	5.1	5.1	5.1	4.6
60°	3.7	4.2	3.7	3.7	3.7
62.5°	3.2	3.2	2.8	3.2	2.8
65°	2.3	2.3	2.3	2.3	2.3
67.5°	1.9	1.9	1.9	1.9	1.9
70°	1.4	1.4	1.4	1.4	1.4
72.5°	0.9	1.4	0.9	1.4	1.4
75°	0.9	0.9	0.9	0.9	0.9



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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

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°	0.9	0.9	0.9	0.9	0.5
80°	0.5	0.5	0.5	0.5	0.5

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(END OF REPORT)