

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: P838359

Luminaire Tested: HCSQ610D010-HM60525930-61SQC

Issue Date: 5/21/2024

Test Information

Test Method: LM-79-2019
Report Number: P838359
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-HM60525930-61SQC
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: -

Summary

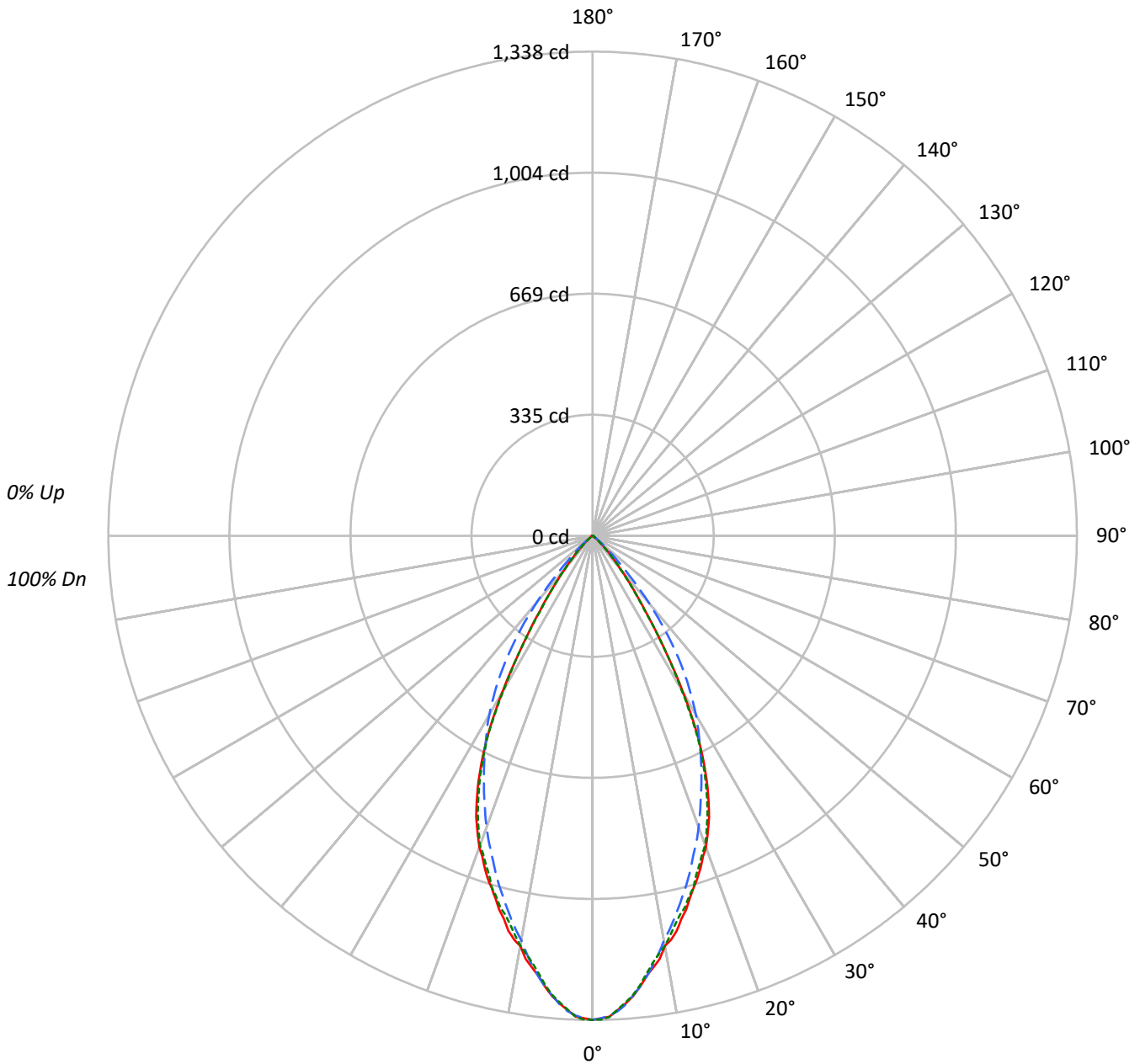
Lumens per Lamp: N/A
Luminaire Lumens: 1001.9 lumens
Efficiency: N/A
Efficacy: 101.2 lumens/watt
Spacing Criteria (0/90/45): 0.82 / 0.81 / 0.85
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
CIE Type: Direct

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	97	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	78	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°	57591	57591	57591
5°	55244	55149	55071
10°	50317	49635	50278
15°	46242	44548	45965
20°	41966	39262	41677
25°	35468	33749	34979
30°	24833	28408	24411
35°	13340	21792	13082
40°	6604	13484	6554
45°	2886	5687	2831
50°	931	2063	931
55°	473	668	435
60°	310	310	310
65°	224	224	224
70°	164	164	164
75°	150	150	150
80°	99	99	99
85°	198	198	198

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 5687 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.5	11.7
10°-20°	283.6	28.3
20°-30°	327.7	32.7
30°-40°	204.6	20.4
40°-50°	56.9	5.7
50°-60°	8.0	0.8
60°-70°	2.3	0.2
70°-80°	1.0	0.1
80°-90°	0.4	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°	728.8	72.7
0°-40°	933.4	93.2
0°-60°	998.2	99.6
0°-90°	1001.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1001.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1338	1338	1338	1338	1338	
5°	1278	1275	1276	1274	1274	118
15°	1037	1018	999	1015	1031	291
25°	747	725	710	724	736	333
35°	254	313	415	310	249	169
45°	47	60	93	60	46	41
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°	1337.6	1337.6	1337.6	1337.6	1337.6
1°	1333.6	1333.6	1333.6	1337.2	1337.2
2°	1329.6	1328.7	1326.5	1329.2	1330.5
3°	1313.1	1314.9	1315.8	1314.4	1311.3
4°	1296.1	1294.3	1299.2	1296.1	1293.4
5°	1278.2	1274.7	1276.0	1274.2	1274.2
6°	1253.2	1257.7	1254.1	1251.0	1249.2
7°	1226.0	1229.5	1227.3	1222.8	1219.7
8°	1204.5	1202.3	1198.7	1197.8	1192.4
9°	1184.0	1175.9	1167.9	1169.2	1170.6
10°	1150.9	1151.8	1135.3	1147.8	1150.0
11°	1137.0	1132.1	1110.2	1120.5	1124.1
12°	1116.9	1101.3	1082.5	1091.0	1097.7
13°	1087.9	1071.8	1054.8	1067.8	1074.5
14°	1066.0	1047.7	1026.2	1042.8	1056.6
15°	1037.4	1017.8	999.4	1015.1	1031.2
16°	1012.4	989.6	971.3	986.5	1010.6
17°	990.5	962.4	940.0	956.1	979.3
18°	965.0	932.4	911.9	928.8	955.2
19°	936.9	903.8	885.5	899.4	929.7
20°	915.9	878.8	856.9	870.3	909.6
22.5°	840.8	802.0	781.9	797.9	829.2
25°	746.6	724.7	710.4	724.2	736.3
27.5°	634.9	634.9	639.8	634.0	630.4
30°	499.5	535.7	571.4	533.9	491.0
32.5°	364.6	422.7	494.6	430.2	364.1
35°	253.8	313.2	414.6	309.6	248.9
37.5°	176.5	215.8	327.0	218.0	174.2
40°	117.5	144.8	239.9	147.4	116.6
42.5°	76.8	95.6	155.0	96.1	75.1
45°	47.4	60.3	93.4	59.9	46.5
47.5°	27.7	35.7	54.5	36.2	27.3
50°	13.9	21.0	30.8	20.6	13.9
52.5°	8.0	11.2	17.0	10.7	8.0
55°	6.3	6.3	8.9	6.3	5.8
57.5°	4.9	4.9	4.9	4.9	4.5
60°	3.6	4.0	3.6	3.6	3.6
62.5°	3.1	3.1	2.7	3.1	2.7
65°	2.2	2.2	2.2	2.2	2.2
67.5°	1.8	1.8	1.8	1.8	1.8
70°	1.3	1.3	1.3	1.3	1.3
72.5°	0.9	1.3	0.9	1.3	1.3
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°	0.4	0.4	0.4	0.4	0.4
85°	0.4	0.4	0.4	0.4	0.4
87.5°	0.4	0.4	0.4	0.4	0.4
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°	0.9	0.9	0.9	0.9	0.4
80°	0.4	0.4	0.4	0.4	0.4

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(END OF REPORT)