

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: P838334

Luminaire Tested: HCSQ610D010-HM60525827-61SQC

Issue Date: 5/21/2024

Test Information

Test Method: LM-79-2019
Report Number: P838334
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-HM60525827-61SQC
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT
Ballast/Driver: -

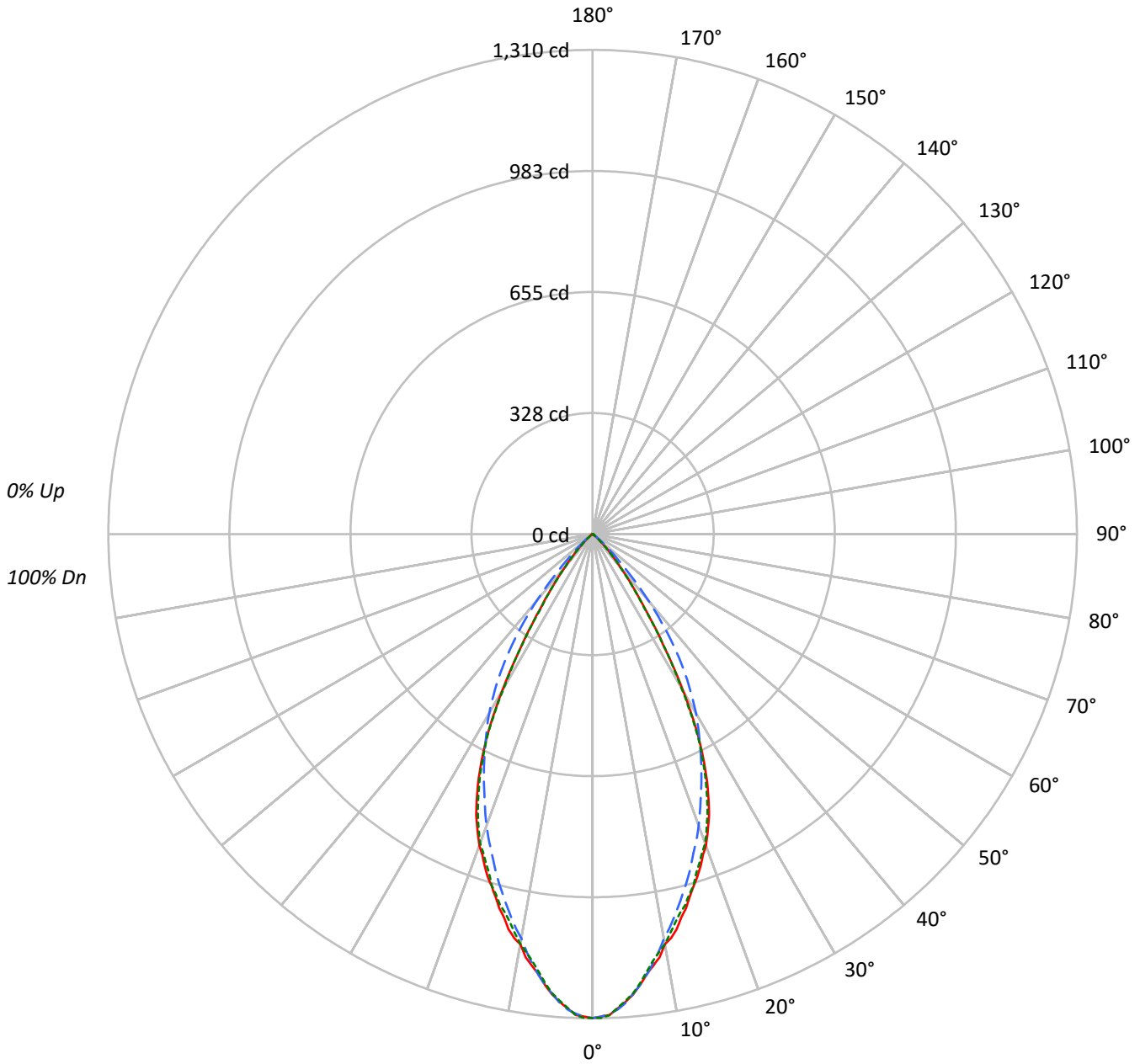
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 980.8 lumens
Efficiency: N/A
Efficacy: 99.1 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°	56381	56381	56381
5°	54086	53991	53913
10°	49259	48590	49220
15°	45270	43612	44998
20°	41081	38437	40802
25°	34723	33036	34243
30°	24311	27811	23899
35°	13056	21335	12804
40°	6464	13203	6419
45°	2825	5565	2770
50°	911	2023	911
55°	458	653	428
60°	301	301	301
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: 5565 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.0	11.7
10°-20°	277.7	28.3
20°-30°	320.8	32.7
30°-40°	200.3	20.4
40°-50°	55.7	5.7
50°-60°	7.8	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°	713.4	72.7
0°-40°	913.8	93.2
0°-60°	977.2	99.6
0°-90°	980.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	980.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1310	1310	1310	1310	1310	
5°	1251	1248	1249	1247	1247	115
15°	1016	996	978	994	1010	284
25°	731	709	695	709	721	326
35°	248	307	406	303	244	165
45°	46	59	91	59	46	40
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°	1309.5	1309.5	1309.5	1309.5	1309.5
1°	1305.6	1305.6	1305.6	1309.1	1309.1
2°	1301.7	1300.8	1298.6	1301.2	1302.5
3°	1285.5	1287.2	1288.1	1286.8	1283.7
4°	1268.9	1267.1	1271.9	1268.9	1266.2
5°	1251.4	1247.9	1249.2	1247.4	1247.4
6°	1226.9	1231.2	1227.8	1224.7	1222.9
7°	1200.2	1203.7	1201.5	1197.1	1194.1
8°	1179.2	1177.0	1173.5	1172.6	1167.4
9°	1159.1	1151.2	1143.3	1144.6	1146.0
10°	1126.7	1127.6	1111.4	1123.7	1125.8
11°	1113.2	1108.3	1086.9	1097.0	1100.5
12°	1093.5	1078.2	1059.8	1068.1	1074.7
13°	1065.0	1049.3	1032.7	1045.4	1051.9
14°	1043.6	1025.7	1004.7	1020.9	1034.4
15°	1015.6	996.4	978.4	993.7	1009.5
16°	991.1	968.8	950.9	965.8	989.4
17°	969.7	942.1	920.3	936.0	958.8
18°	944.8	912.8	892.7	909.3	935.1
19°	917.2	884.8	866.9	880.5	910.2
20°	896.6	860.3	838.9	852.0	890.5
22.5°	823.2	785.1	765.4	781.2	811.8
25°	730.9	709.4	695.4	709.0	720.8
27.5°	621.5	621.5	626.3	620.7	617.2
30°	489.0	524.4	559.4	522.7	480.7
32.5°	356.9	413.8	484.2	421.2	356.5
35°	248.4	306.6	405.9	303.1	243.6
37.5°	172.8	211.3	320.2	213.4	170.6
40°	115.0	141.7	234.9	144.3	114.2
42.5°	75.2	93.6	151.8	94.0	73.5
45°	46.4	59.0	91.4	58.6	45.5
47.5°	27.1	35.0	53.4	35.4	26.7
50°	13.6	20.6	30.2	20.1	13.6
52.5°	7.9	10.9	16.6	10.5	7.9
55°	6.1	6.1	8.7	6.1	5.7
57.5°	4.8	4.8	4.8	4.8	4.4
60°	3.5	3.9	3.5	3.5	3.5
62.5°	3.1	3.1	2.6	3.1	2.6
65°	2.2	2.2	2.2	2.2	2.2
67.5°	1.7	1.7	1.7	1.7	1.7
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

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	0.4
80°	0.4	0.4	0.4	0.4	0.4

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