

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: P838410

Luminaire Tested: HCSQ615D010-HM60525940-61SQH

Issue Date: 5/21/2024

Test Information

Test Method: LM-79-2019
Report Number: P838410
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2309-166-2)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 5/21/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO COMMERCIAL
Catalog Number: HCSQ615D010-HM60525940-61SQH
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: -

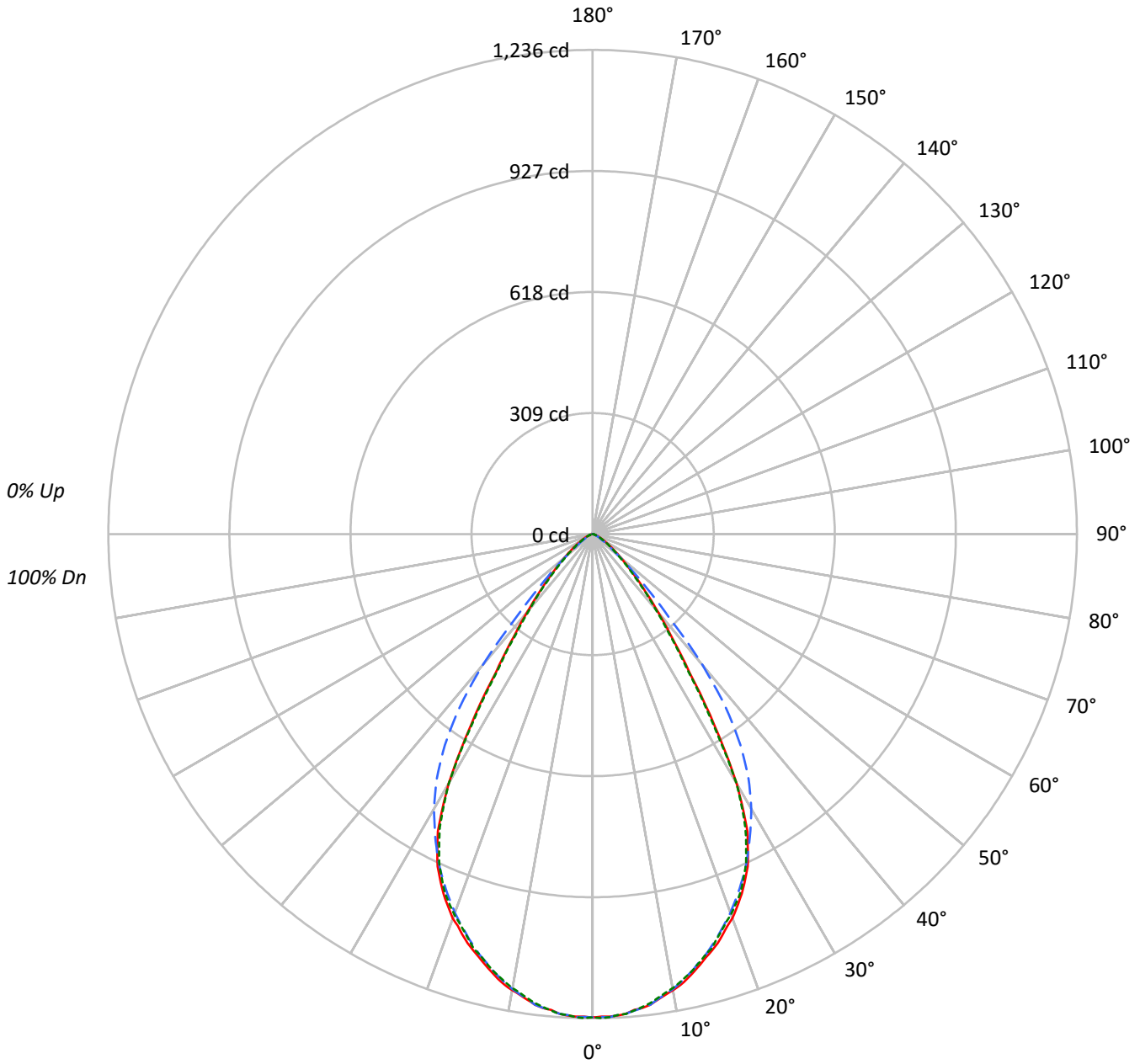
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1387.5 lumens
Efficiency: N/A
Efficacy: 99.1 lumens/watt
Spacing Criteria (0/90/45): 1.02 / 1.01 / 1.04
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 14
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	113	110	107	105	110	108	105	103	104	102	100	100	98	97	97	95	94	92																			
2	107	101	97	93	104	100	96	92	96	93	90	93	91	88	91	88	86	85																			
3	101	94	88	84	99	92	87	83	90	85	82	87	84	81	85	82	79	78																			
4	95	87	81	76	93	86	80	76	83	78	75	81	77	74	79	76	73	71																			
5	90	80	74	69	88	79	74	69	78	72	68	76	71	68	74	70	67	66																			
6	85	75	68	64	83	74	68	63	72	67	63	71	66	63	70	65	62	61																			
7	80	70	63	59	78	69	63	59	68	62	58	67	62	58	65	61	58	56																			
8	76	65	59	54	74	65	59	54	64	58	54	63	57	54	62	57	54	52																			
9	72	61	55	51	70	61	55	50	60	54	50	59	54	50	58	53	50	48																			
10	68	58	51	47	67	57	51	47	56	51	47	55	50	47	55	50	47	45																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	53118	53118	53118
5°	52698	52789	52759
10°	51694	51572	51454
15°	49865	49594	49562
20°	47812	47120	47340
25°	44499	44110	44015
30°	36571	40245	36467
35°	22586	34564	22044
40°	14501	24500	14001
45°	9456	11874	9000
50°	6276	5915	5868
55°	4264	3085	3956
60°	2885	1886	2652
65°	2017	1396	1813
70°	1297	1032	1209
75°	915	799	799
80°	669	521	521
85°	346	692	346

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 11874 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.2	8.3
10°-20°	312.7	22.5
20°-30°	422.1	30.4
30°-40°	329.5	23.7
40°-50°	138.0	9.9
50°-60°	46.8	3.4
60°-70°	16.7	1.2
70°-80°	5.4	0.4
80°-90°	1.1	0.1
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°	850.1	61.3
0°-40°	1179.5	85.0
0°-60°	1364.3	98.3
0°-90°	1387.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1387.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1234	1234	1234	1234	1234	
5°	1219	1221	1221	1219	1221	115
15°	1119	1116	1113	1111	1112	315
25°	937	933	928	928	926	421
35°	430	504	658	504	419	283
45°	155	166	195	159	148	125
55°	57	52	41	49	53	52
65°	20	16	14	16	18	20
75°	6	5	5	5	5	6
85°	1	1	1	1	1	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1233.7	1233.7	1233.7	1233.7	1233.7
1°	1232.3	1234.4	1233.0	1233.7	1235.8
2°	1232.3	1232.3	1233.7	1233.0	1233.7
3°	1231.0	1231.0	1229.6	1229.6	1229.6
4°	1226.9	1226.9	1226.9	1225.5	1228.2
5°	1219.3	1220.7	1221.4	1219.3	1220.7
6°	1216.6	1217.3	1215.9	1215.2	1213.9
7°	1210.4	1208.4	1210.4	1205.6	1206.3
8°	1200.2	1200.2	1198.8	1197.4	1196.1
9°	1190.6	1190.6	1189.2	1187.2	1185.8
10°	1182.4	1180.3	1179.6	1177.6	1176.9
11°	1172.8	1168.7	1168.0	1166.0	1166.0
12°	1161.2	1159.1	1154.3	1153.6	1153.6
13°	1146.8	1144.7	1141.3	1138.6	1141.3
14°	1133.1	1131.7	1125.6	1127.6	1127.0
15°	1118.7	1116.0	1112.6	1111.2	1111.9
16°	1105.7	1101.0	1096.2	1096.9	1101.0
17°	1092.1	1085.2	1080.4	1079.7	1081.8
18°	1075.0	1069.5	1062.0	1064.7	1064.7
19°	1057.8	1050.3	1045.5	1044.8	1047.6
20°	1043.5	1031.8	1028.4	1027.7	1033.2
22.5°	994.2	982.6	979.8	982.6	988.1
25°	936.7	932.6	928.5	928.5	926.5
27.5°	855.3	864.9	869.7	860.1	844.4
30°	735.6	775.9	809.5	771.1	733.5
32.5°	579.6	663.0	740.4	661.0	565.9
35°	429.7	504.3	657.6	503.6	419.4
37.5°	331.2	379.1	559.0	372.9	321.6
40°	258.0	286.0	435.9	282.6	249.1
42.5°	200.5	218.3	290.1	214.2	193.6
45°	155.3	166.3	195.0	158.7	147.8
47.5°	121.1	125.9	133.4	120.4	114.3
50°	93.7	93.7	88.3	90.3	87.6
52.5°	72.5	69.8	59.5	65.7	67.1
55°	56.8	52.0	41.1	49.3	52.7
57.5°	43.1	38.3	29.4	36.3	39.7
60°	33.5	28.7	21.9	27.4	30.8
62.5°	26.0	21.9	17.1	20.5	23.3
65°	19.8	16.4	13.7	15.7	17.8
67.5°	15.1	12.3	10.3	11.6	13.7
70°	10.3	9.6	8.2	8.9	9.6
72.5°	7.5	6.8	6.2	6.2	6.8
75°	5.5	4.8	4.8	4.8	4.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
82.5°	1.4	1.4	1.4	1.4	1.4
85°	0.7	0.7	1.4	0.7	0.7
87.5°	0.7	0.7	0.7	0.7	0.7
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°	3.4	3.4	3.4	3.4	3.4
80°	2.7	2.7	2.1	2.1	2.1

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(END OF REPORT)