

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: P838484

Luminaire Tested: HCSQ625D010-HM60525935-61SQC

Issue Date: 5/21/2024

Test Information

Test Method: LM-79-2019
Report Number: P838484
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: HCSQ625D010-HM60525935-61SQC
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: -

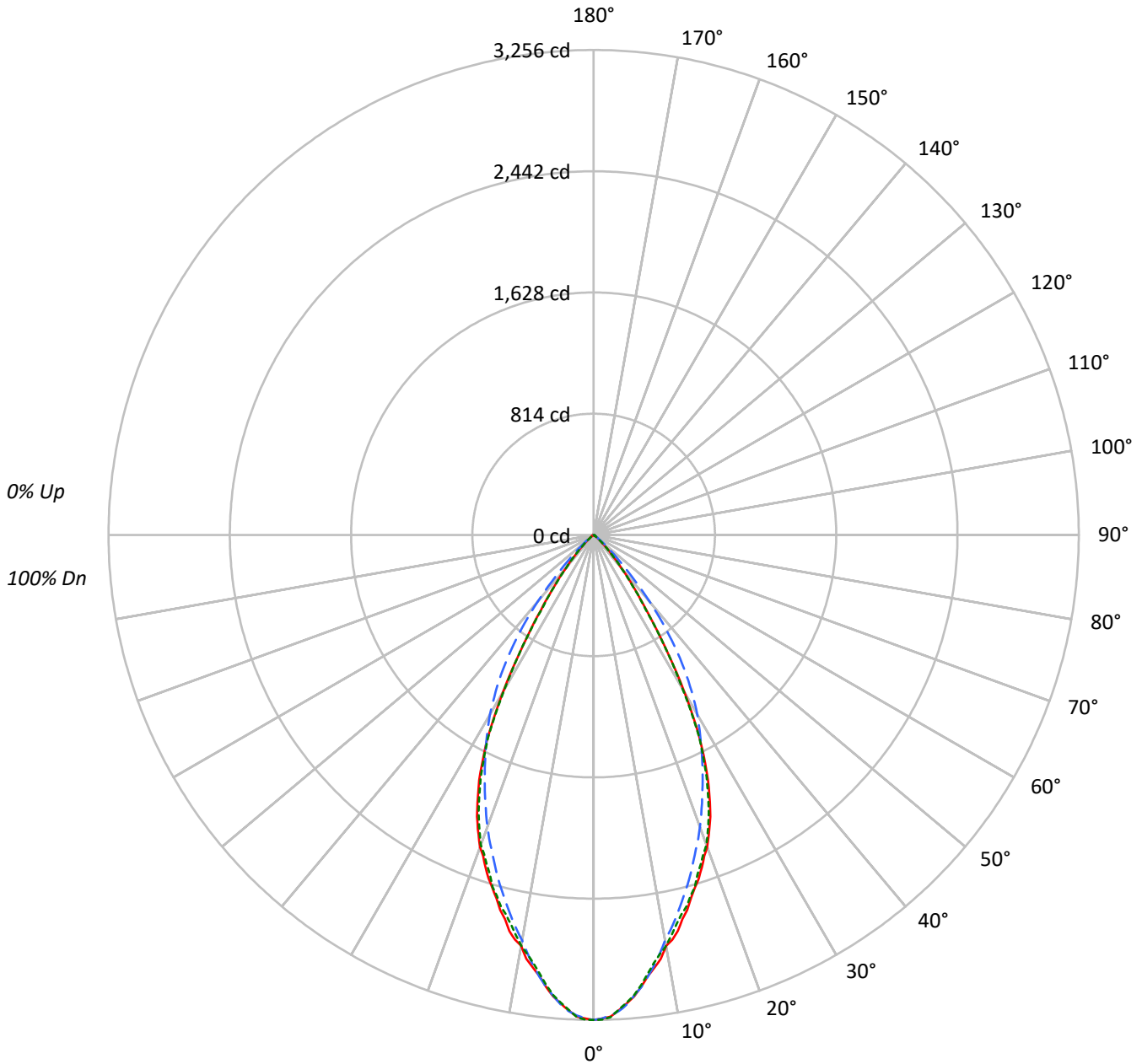
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2439.1 lumens
Efficiency: N/A
Efficacy: 88.1 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): 27.7
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

TEST NUMBER: P838484
CATALOG NUMBER: HCSQ625D010-HM60525935-61SQC

Luminous Intensity Polar Plot





TEST NUMBER: P838484

CATALOG NUMBER: HCSQ625D010-HM60525935-61SQC

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°	140202	140202	140202
5°	134488	134250	134065
10°	122490	120824	122394
15°	112568	108450	111891
20°	102158	95578	101461
25°	86339	82153	85151
30°	60455	69160	59426
35°	32472	53050	31842
40°	16075	32824	15957
45°	7021	13840	6887
50°	2257	5024	2257
55°	1141	1636	1058
60°	749	749	749
65°	550	550	550
70°	415	415	415
75°	366	366	366
80°	273	273	273
85°	543	543	543

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 13840 cd/sqm



TEST NUMBER: P838484
 CATALOG NUMBER: HCSQ625D010-HM60525935-61SQC

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	285.9	11.7
10°-20°	690.5	28.3
20°-30°	797.6	32.7
30°-40°	498.1	20.4
40°-50°	138.4	5.7
50°-60°	19.4	0.8
60°-70°	5.7	0.2
70°-80°	2.5	0.1
80°-90°	1.0	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°	1774.1	72.7
0°-40°	2272.2	93.2
0°-60°	2429.9	99.6
0°-90°	2439.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2439.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3256	3256	3256	3256	3256	
5°	3112	3103	3106	3102	3102	287
15°	2525	2478	2433	2471	2510	707
25°	1817	1764	1729	1763	1792	812
35°	618	762	1009	754	606	410
45°	115	147	227	146	113	100
55°	15	15	22	15	14	15
65°	5	5	5	5	5	6
75°	2	2	2	2	2	2
85°	1	1	1	1	1	1
90°	0	0	0	0	0	



TEST NUMBER: P838484

CATALOG NUMBER: HCSQ625D010-HM60525935-61SQC

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3256.3	3256.3	3256.3	3256.3	3256.3
1°	3246.5	3246.5	3246.5	3255.2	3255.2
2°	3236.7	3234.6	3229.1	3235.7	3238.9
3°	3196.5	3200.9	3203.0	3199.8	3192.2
4°	3155.2	3150.8	3162.8	3155.2	3148.6
5°	3111.7	3103.0	3106.2	3101.9	3101.9
6°	3050.8	3061.6	3052.9	3045.3	3041.0
7°	2984.4	2993.1	2987.7	2976.8	2969.2
8°	2932.2	2926.8	2918.1	2915.9	2902.8
9°	2882.2	2862.6	2843.0	2846.3	2849.6
10°	2801.7	2803.9	2763.6	2794.1	2799.5
11°	2768.0	2756.0	2702.7	2727.7	2736.4
12°	2719.0	2681.0	2635.3	2656.0	2672.3
13°	2648.3	2609.2	2567.9	2599.4	2615.7
14°	2595.1	2550.5	2498.3	2538.5	2572.2
15°	2525.4	2477.6	2433.0	2471.1	2510.2
16°	2464.5	2409.1	2364.5	2401.5	2460.2
17°	2411.2	2342.7	2288.3	2327.5	2384.1
18°	2349.3	2269.9	2219.8	2261.2	2325.3
19°	2280.7	2200.2	2155.7	2189.4	2263.3
20°	2229.6	2139.3	2086.0	2118.7	2214.4
22.5°	2046.9	1952.3	1903.3	1942.5	2018.6
25°	1817.4	1764.1	1729.3	1763.0	1792.4
27.5°	1545.5	1545.5	1557.5	1543.3	1534.6
30°	1216.0	1304.1	1391.1	1299.7	1195.3
32.5°	887.5	1028.9	1204.0	1047.4	886.4
35°	617.8	762.4	1009.3	753.7	605.8
37.5°	429.6	525.3	796.1	530.8	424.2
40°	286.0	352.4	584.0	358.9	283.9
42.5°	187.1	232.7	377.4	233.8	182.7
45°	115.3	146.8	227.3	145.7	113.1
47.5°	67.4	87.0	132.7	88.1	66.3
50°	33.7	51.1	75.0	50.0	33.7
52.5°	19.6	27.2	41.3	26.1	19.6
55°	15.2	15.2	21.8	15.2	14.1
57.5°	12.0	12.0	12.0	12.0	10.9
60°	8.7	9.8	8.7	8.7	8.7
62.5°	7.6	7.6	6.5	7.6	6.5
65°	5.4	5.4	5.4	5.4	5.4
67.5°	4.4	4.4	4.4	4.4	4.4
70°	3.3	3.3	3.3	3.3	3.3
72.5°	2.2	3.3	2.2	3.3	3.3
75°	2.2	2.2	2.2	2.2	2.2



TEST NUMBER: P838484

CATALOG NUMBER: HCSQ625D010-HM60525935-61SQC

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
82.5°	1.1	1.1	1.1	1.1	1.1
85°	1.1	1.1	1.1	1.1	1.1
87.5°	1.1	1.1	1.1	1.1	1.1
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



Report Generated By 670245859 / DESKTOP-T8S5UU9

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

Scaled Data Report





— 0°-180° - - 45°-225° - - - 90°-270°

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

Scaled Data Report



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

Scaled Data Report





77.5°	2.2	2.2	2.2	2.2	1.1
80°	1.1	1.1	1.1	1.1	1.1

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

Scaled Data Report



(END OF REPORT)