

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: P838255

Luminaire Tested: HCSQ605D010-HM60525827-61SQH

Issue Date: 5/21/2024

Test Information

Test Method: LM-79-2019
Report Number: P838255
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: HCSQ605D010-HM60525827-61SQH
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, HAZE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT
Ballast/Driver: -

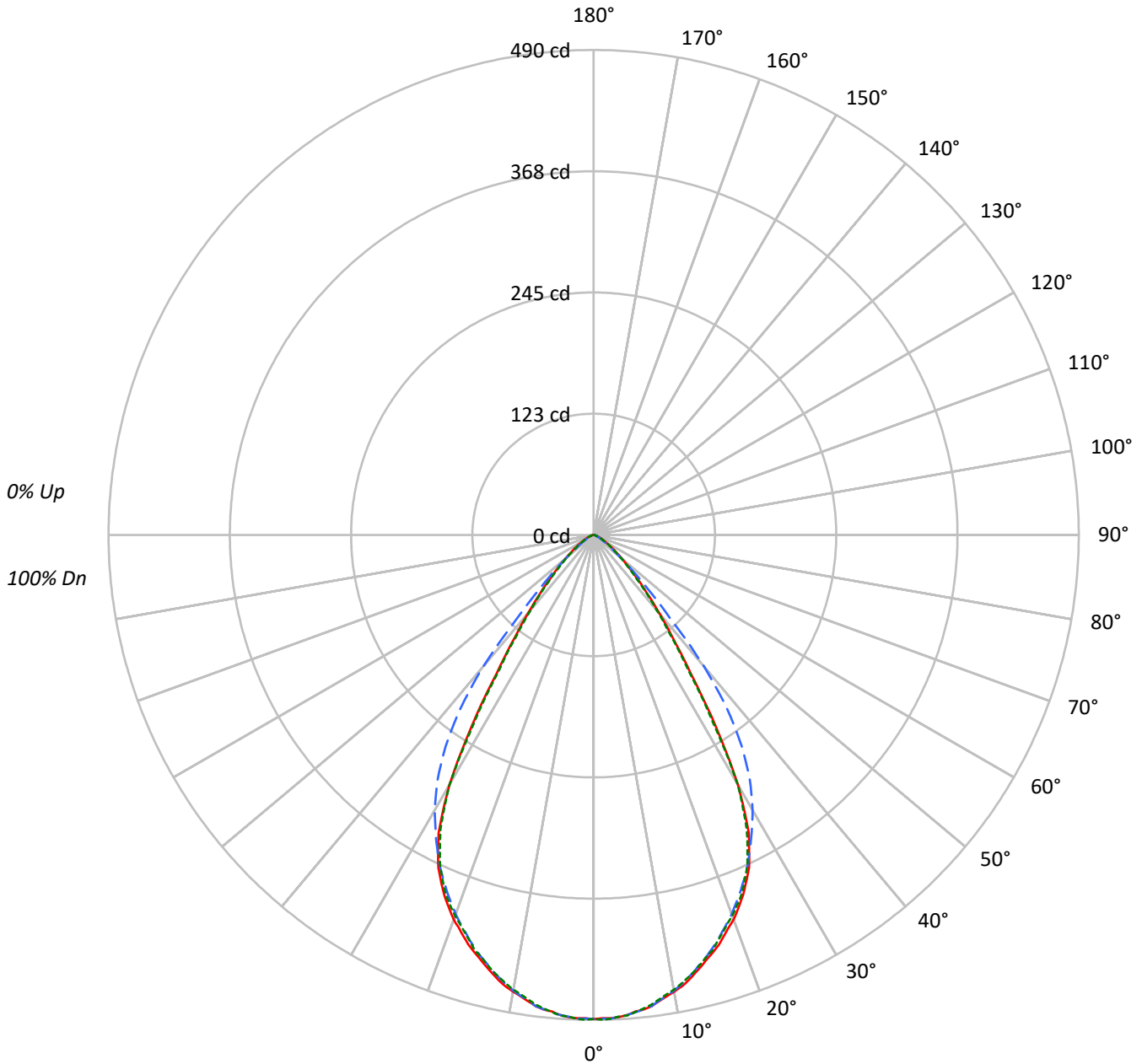
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 550.0 lumens
Efficiency: N/A
Efficacy: 91.7 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): 6
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: P838255
CATALOG NUMBER: HCSQ605D010-HM60525827-61SQH

Luminous Intensity Polar Plot





TEST NUMBER: P838255

CATALOG NUMBER: HCSQ605D010-HM60525827-61SQH

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			100																
1	113	110	107	105	110	108	105	103	104	102	100	100	98	97	97	95	94	92			92																
2	107	101	97	93	104	100	96	92	96	93	90	93	91	88	91	88	86	85			85																
3	101	94	88	84	99	92	87	83	90	85	82	87	84	81	85	82	79	78			78																
4	95	87	81	76	93	86	80	76	83	78	75	81	77	74	79	76	73	71			71																
5	90	80	74	69	88	79	74	69	78	72	68	76	71	68	74	70	67	66			66																
6	85	75	68	64	83	74	68	63	72	67	63	71	66	63	70	65	62	61			61																
7	80	70	63	59	78	69	63	59	68	62	58	67	62	58	65	61	58	56			56																
8	76	65	59	54	74	65	59	54	64	58	54	63	57	54	62	57	54	52			52																
9	72	61	55	51	70	61	55	50	60	54	50	59	54	50	58	53	50	48			48																
10	68	58	51	47	67	57	51	47	56	51	47	55	50	47	55	50	47	45			45																

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	21059	21059	21059
5°	20893	20927	20914
10°	20491	20443	20395
15°	19769	19657	19648
20°	18951	18680	18767
25°	17639	17487	17449
30°	14497	15954	14458
35°	8951	13703	8741
40°	5750	9712	5547
45°	3751	4707	3568
50°	2492	2344	2324
55°	1689	1224	1569
60°	1145	749	1051
65°	805	550	723
70°	516	415	478
75°	366	316	316
80°	273	198	198
85°	148	247	148

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 4707 cd/sqm



TEST NUMBER: P838255

CATALOG NUMBER: HCSQ605D010-HM60525827-61SQH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.7	8.3
10°-20°	124.0	22.5
20°-30°	167.3	30.4
30°-40°	130.6	23.7
40°-50°	54.7	9.9
50°-60°	18.6	3.4
60°-70°	6.6	1.2
70°-80°	2.2	0.4
80°-90°	0.4	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°	337.0	61.3
0°-40°	467.6	85.0
0°-60°	540.8	98.3
0°-90°	550.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	550.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	489	489	489	489	489	
5°	483	484	484	483	484	46
15°	444	442	441	440	441	125
25°	371	370	368	368	367	167
35°	170	200	261	200	166	112
45°	62	66	77	63	59	49
55°	22	21	16	20	21	21
65°	8	6	5	6	7	8
75°	2	2	2	2	2	2
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



TEST NUMBER: P838255

CATALOG NUMBER: HCSQ605D010-HM60525827-61SQH

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	489.1	489.1	489.1	489.1	489.1
1°	488.5	489.3	488.8	489.1	489.9
2°	488.5	488.5	489.1	488.8	489.1
3°	488.0	488.0	487.4	487.4	487.4
4°	486.3	486.3	486.3	485.8	486.9
5°	483.4	483.9	484.2	483.4	483.9
6°	482.3	482.5	482.0	481.7	481.2
7°	479.8	479.0	479.8	477.9	478.2
8°	475.8	475.8	475.2	474.7	474.1
9°	472.0	472.0	471.4	470.6	470.1
10°	468.7	467.9	467.6	466.8	466.5
11°	464.9	463.3	463.0	462.2	462.2
12°	460.3	459.5	457.6	457.3	457.3
13°	454.6	453.8	452.4	451.4	452.4
14°	449.2	448.6	446.2	447.0	446.7
15°	443.5	442.4	441.0	440.5	440.8
16°	438.3	436.4	434.5	434.8	436.4
17°	432.9	430.2	428.3	428.0	428.8
18°	426.1	424.0	421.0	422.1	422.1
19°	419.3	416.4	414.5	414.2	415.3
20°	413.6	409.0	407.7	407.4	409.6
22.5°	394.1	389.5	388.4	389.5	391.7
25°	371.3	369.7	368.1	368.1	367.3
27.5°	339.1	342.9	344.8	341.0	334.7
30°	291.6	307.6	320.9	305.7	290.8
32.5°	229.7	262.8	293.5	262.0	224.3
35°	170.3	199.9	260.7	199.6	166.3
37.5°	131.3	150.3	221.6	147.8	127.5
40°	102.3	113.4	172.8	112.0	98.7
42.5°	79.5	86.5	115.0	84.9	76.8
45°	61.6	65.9	77.3	62.9	58.6
47.5°	48.0	49.9	52.9	47.7	45.3
50°	37.2	37.2	35.0	35.8	34.7
52.5°	28.8	27.7	23.6	26.0	26.6
55°	22.5	20.6	16.3	19.5	20.9
57.5°	17.1	15.2	11.7	14.4	15.7
60°	13.3	11.4	8.7	10.8	12.2
62.5°	10.3	8.7	6.8	8.1	9.2
65°	7.9	6.5	5.4	6.2	7.1
67.5°	6.0	4.9	4.1	4.6	5.4
70°	4.1	3.8	3.3	3.5	3.8
72.5°	3.0	2.7	2.4	2.4	2.7
75°	2.2	1.9	1.9	1.9	1.9



TEST NUMBER: P838255

CATALOG NUMBER: HCSQ605D010-HM60525827-61SQH

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
82.5°	0.5	0.5	0.5	0.5	0.5
85°	0.3	0.3	0.5	0.3	0.3
87.5°	0.3	0.3	0.3	0.3	0.3
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°	1.4	1.4	1.4	1.4	1.4
80°	1.1	1.1	0.8	0.8	0.8

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

Scaled Data Report



(END OF REPORT)