

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: P838263

Luminaire Tested: HCSQ605D010-HM60525830-61SQMW

Issue Date: 5/21/2024

Test Information

Test Method: LM-79-2019
Report Number: P838263
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2309-166-3)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 5/21/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO COMMERCIAL
Catalog Number: HCSQ605D010-HM60525830-61SQMW
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, MATTE WHITE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT
Ballast/Driver: -

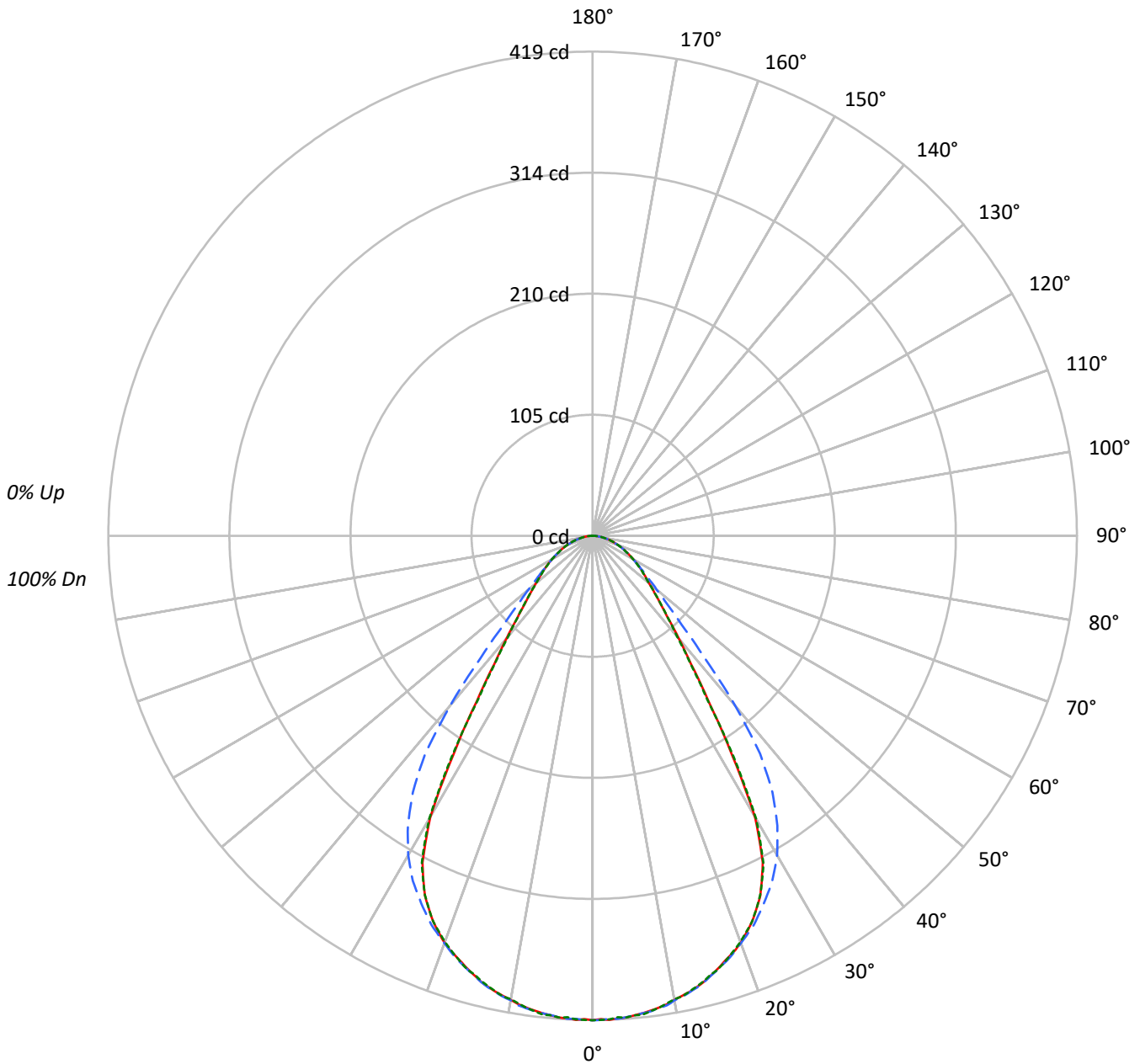
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 618.5 lumens
Efficiency: N/A
Efficacy: 103.1 lumens/watt
Spacing Criteria (0/90/45): 1.08 / 1.08 / 1.11
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: P838263
CATALOG NUMBER: HCSQ605D010-HM60525830-61SQMW

Luminous Intensity Polar Plot





TEST NUMBER: P838263

CATALOG NUMBER: HCSQ605D010-HM60525830-61SQMW

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	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89																			
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79																			
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71																			
4	91	81	74	69	89	80	73	68	77	72	67	75	70	67	73	69	66	64																			
5	85	74	67	62	83	73	66	61	71	65	61	70	64	60	68	63	60	58																			
6	80	69	61	56	78	68	61	56	66	60	55	64	59	55	63	58	54	53																			
7	75	63	56	51	73	63	56	51	61	55	51	60	54	50	59	54	50	48																			
8	70	59	52	47	69	58	51	47	57	51	46	56	50	46	55	50	46	44																			
9	66	55	48	43	65	54	48	43	53	47	43	52	47	43	51	46	43	41																			
10	63	51	45	40	62	51	44	40	50	44	40	49	44	40	48	43	40	38																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	18053	18053	18053
5°	18010	17997	18010
10°	17833	17846	17807
15°	17567	17580	17540
20°	17173	17187	17132
25°	16314	16665	16300
30°	13970	15865	14060
35°	9177	14260	9041
40°	6492	10752	6374
45°	5030	6619	5066
50°	4280	4829	4240
55°	3851	3956	3851
60°	3479	3479	3479
65°	3199	3168	3168
70°	2908	2908	2946
75°	2728	2628	2678
80°	2405	2405	2405
85°	2025	2025	2025

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 6619 cd/sqm



TEST NUMBER: P838263

CATALOG NUMBER: HCSQ605D010-HM60525830-61SQMW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.5	6.4
10°-20°	111.0	17.9
20°-30°	158.2	25.6
30°-40°	134.9	21.8
40°-50°	74.6	12.1
50°-60°	47.0	7.6
60°-70°	31.2	5.0
70°-80°	17.1	2.8
80°-90°	4.9	0.8
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°	308.8	49.9
0°-40°	443.6	71.7
0°-60°	565.3	91.4
0°-90°	618.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	618.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	419	419	419	419	419	
5°	417	417	416	416	417	40
15°	394	394	394	394	394	111
25°	343	348	351	347	343	155
35°	175	206	271	206	172	114
45°	83	90	109	90	83	66
55°	51	52	53	52	51	46
65°	31	32	31	31	31	31
75°	16	16	16	16	16	17
85°	4	4	4	4	4	5
90°	0	0	0	0	0	



TEST NUMBER: P838263

CATALOG NUMBER: HCSQ605D010-HM60525830-61SQMW

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	419.3	419.3	419.3	419.3	419.3
1°	418.4	419.0	419.0	418.7	419.0
2°	419.3	418.4	418.4	418.4	418.7
3°	418.2	418.7	418.7	417.9	417.3
4°	417.9	417.6	417.6	418.4	417.9
5°	416.7	417.3	416.4	415.8	416.7
6°	415.5	415.8	415.5	415.8	416.7
7°	414.0	414.9	414.6	414.3	414.3
8°	412.3	413.5	412.9	412.9	412.6
9°	410.5	410.8	411.4	411.4	409.7
10°	407.9	408.8	408.2	408.5	407.3
11°	405.6	406.7	406.4	405.8	406.1
12°	403.5	404.1	403.8	402.9	403.2
13°	400.9	401.4	401.2	401.2	400.3
14°	397.9	397.3	398.2	397.6	397.3
15°	394.1	394.1	394.4	394.1	393.5
16°	390.6	390.9	390.9	390.6	390.9
17°	386.5	387.7	387.4	386.8	387.1
18°	382.7	383.6	383.9	383.6	382.7
19°	379.2	379.8	379.5	378.3	378.3
20°	374.8	375.1	375.1	374.5	373.9
22.5°	361.0	363.1	364.5	363.4	361.0
25°	343.4	347.5	350.8	347.2	343.1
27.5°	318.8	327.0	336.7	327.9	320.3
30°	281.0	299.8	319.1	301.5	282.8
32.5°	223.6	260.5	297.4	264.0	227.1
35°	174.6	206.0	271.3	206.3	172.0
37.5°	139.5	161.8	237.9	160.3	138.0
40°	115.5	130.4	191.3	129.8	113.4
42.5°	96.4	107.8	143.3	106.7	96.4
45°	82.6	90.5	108.7	90.0	83.2
47.5°	72.4	77.4	87.0	77.1	72.4
50°	63.9	66.8	72.1	66.5	63.3
52.5°	57.1	58.9	60.9	58.3	56.6
55°	51.3	52.2	52.7	51.9	51.3
57.5°	45.7	46.3	46.0	45.7	45.4
60°	40.4	40.7	40.4	40.7	40.4
62.5°	35.7	36.0	35.5	35.7	35.5
65°	31.4	31.6	31.1	31.4	31.1
67.5°	27.3	27.3	27.3	27.3	27.0
70°	23.1	23.4	23.1	23.4	23.4
72.5°	19.6	19.6	19.3	19.6	19.6
75°	16.4	16.1	15.8	16.1	16.1



TEST NUMBER: P838263

CATALOG NUMBER: HCSQ605D010-HM60525830-61SQMW

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
82.5°	7.0	7.0	6.7	7.0	7.0
85°	4.1	4.1	4.1	4.4	4.1
87.5°	2.1	1.8	1.8	2.1	2.1
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



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

Scaled Data Report



77.5°	12.9	12.9	12.6	12.9	12.9
80°	9.7	10.0	9.7	10.0	9.7

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

Scaled Data Report



(END OF REPORT)