

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: P838314

Luminaire Tested: HCSQ607D010-HM60525927-61SQC

Issue Date: 5/21/2024

Test Information

Test Method: LM-79-2019
Report Number: P838314
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: HCSQ607D010-HM60525927-61SQC
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: -

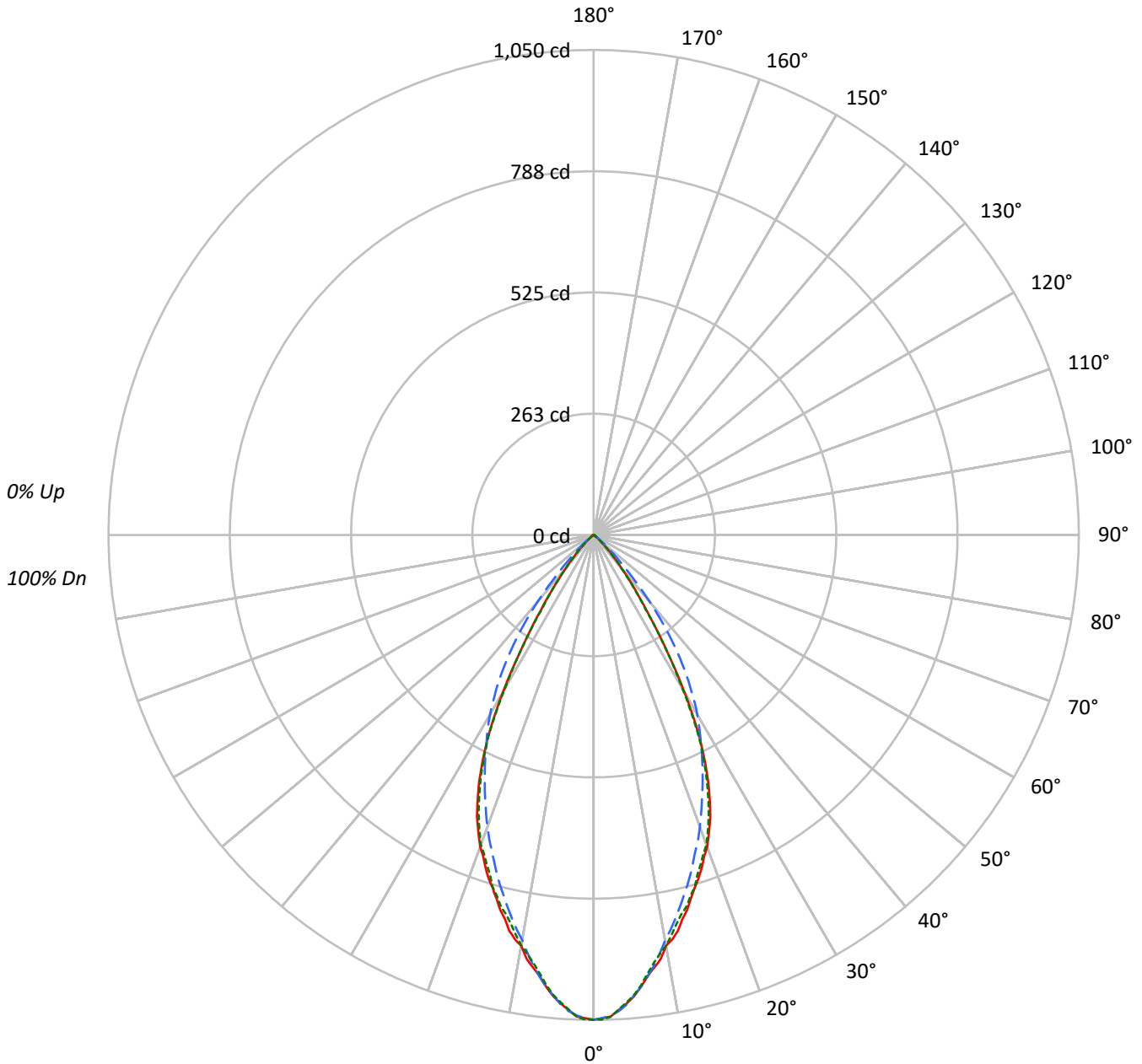
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 786.4 lumens
Efficiency: N/A
Efficacy: 98.3 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): 8
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: P838314
CATALOG NUMBER: HCSQ607D010-HM60525927-61SQC

Luminous Intensity Polar Plot





TEST NUMBER: P838314

CATALOG NUMBER: HCSQ607D010-HM60525927-61SQC

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	92	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	63	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°	45200	45200	45200
5°	43358	43281	43220
10°	39488	38954	39457
15°	36293	34964	36074
20°	32935	30813	32710
25°	27834	26485	27449
30°	19489	22298	19156
35°	10470	17103	10265
40°	5182	10583	5143
45°	2265	4463	2222
50°	730	1621	730
55°	368	525	345
60°	241	241	241
65°	183	183	183
70°	138	138	138
75°	116	116	116
80°	99	99	99
85°	198	198	198

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 4463 cd/sqm



TEST NUMBER: P838314

CATALOG NUMBER: HCSQ607D010-HM60525927-61SQC

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.2	11.7
10°-20°	222.6	28.3
20°-30°	257.1	32.7
30°-40°	160.6	20.4
40°-50°	44.6	5.7
50°-60°	6.2	0.8
60°-70°	1.9	0.2
70°-80°	0.8	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°	571.9	72.7
0°-40°	732.5	93.1
0°-60°	783.4	99.6
0°-90°	786.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	786.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1050	1050	1050	1050	1050	
5°	1003	1000	1001	1000	1000	92
15°	814	799	784	797	809	228
25°	586	569	558	568	578	262
35°	199	246	325	243	195	132
45°	37	47	73	47	36	32
55°	5	5	7	5	5	5
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	



TEST NUMBER: P838314

CATALOG NUMBER: HCSQ607D010-HM60525927-61SQC

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1049.8	1049.8	1049.8	1049.8	1049.8
1°	1046.6	1046.6	1046.6	1049.5	1049.5
2°	1043.5	1042.8	1041.0	1043.1	1044.2
3°	1030.5	1031.9	1032.6	1031.6	1029.1
4°	1017.2	1015.8	1019.6	1017.2	1015.1
5°	1003.2	1000.4	1001.4	1000.0	1000.0
6°	983.5	987.0	984.2	981.8	980.4
7°	962.1	964.9	963.2	959.7	957.2
8°	945.3	943.6	940.8	940.1	935.8
9°	929.2	922.9	916.6	917.6	918.7
10°	903.2	903.9	891.0	900.8	902.5
11°	892.4	888.5	871.3	879.4	882.2
12°	876.6	864.3	849.6	856.3	861.5
13°	853.8	841.2	827.9	838.0	843.3
14°	836.6	822.2	805.4	818.4	829.3
15°	814.2	798.7	784.4	796.6	809.3
16°	794.5	776.7	762.3	774.2	793.1
17°	777.4	755.3	737.7	750.4	768.6
18°	757.4	731.8	715.6	729.0	749.7
19°	735.3	709.3	695.0	705.8	729.7
20°	718.8	689.7	672.5	683.0	713.9
22.5°	659.9	629.4	613.6	626.2	650.8
25°	585.9	568.7	557.5	568.4	577.8
27.5°	498.3	498.3	502.1	497.6	494.7
30°	392.0	420.4	448.5	419.0	385.3
32.5°	286.1	331.7	388.2	337.7	285.8
35°	199.2	245.8	325.4	243.0	195.3
37.5°	138.5	169.4	256.7	171.1	136.7
40°	92.2	113.6	188.3	115.7	91.5
42.5°	60.3	75.0	121.7	75.4	58.9
45°	37.2	47.3	73.3	47.0	36.5
47.5°	21.7	28.1	42.8	28.4	21.4
50°	10.9	16.5	24.2	16.1	10.9
52.5°	6.3	8.8	13.3	8.4	6.3
55°	4.9	4.9	7.0	4.9	4.6
57.5°	3.9	3.9	3.9	3.9	3.5
60°	2.8	3.2	2.8	2.8	2.8
62.5°	2.5	2.5	2.1	2.5	2.1
65°	1.8	1.8	1.8	1.8	1.8
67.5°	1.4	1.4	1.4	1.4	1.4
70°	1.1	1.1	1.1	1.1	1.1
72.5°	0.7	1.1	0.7	1.1	1.1
75°	0.7	0.7	0.7	0.7	0.7



TEST NUMBER: P838314

CATALOG NUMBER: HCSQ607D010-HM60525927-61SQC

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



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°	0.7	0.7	0.7	0.7	0.4
80°	0.4	0.4	0.4	0.4	0.4

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

Scaled Data Report



(END OF REPORT)