

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: P838402

Luminaire Tested: HCSQ615D010-HM60525930-61SQMB

Issue Date: 5/21/2024



Test Information

Test Method: LM-79-2019
Report Number: P838402
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2309-166-4)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 5/21/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO COMMERCIAL
Catalog Number: HCSQ615D010-HM60525930-61SQMB
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, MATTE BLACK TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: -

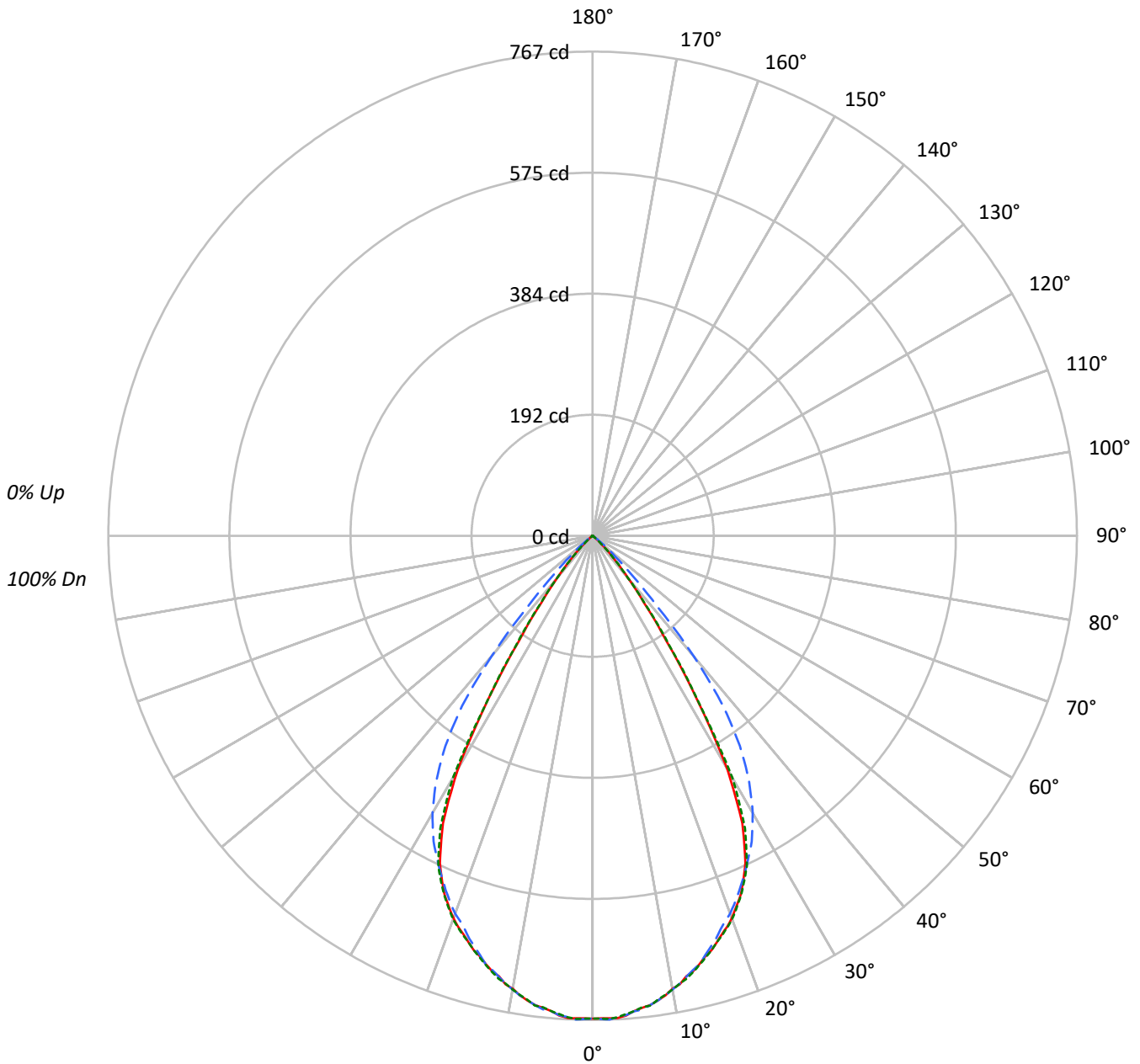
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 760.5 lumens
Efficiency: N/A
Efficacy: 54.3 lumens/watt
Spacing Criteria (0/90/45): 1 / 1.01 / 1.03
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

TEST NUMBER: P838402
CATALOG NUMBER: HCSQ615D010-HM60525930-61SQMB

Luminous Intensity Polar Plot





TEST NUMBER: P838402

CATALOG NUMBER: HCSQ615D010-HM60525930-61SQMB

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20										
RC	80					70					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	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	100	100	100	100		
	1	114	111	108	106	111	109	106	104	105	103	101	101	99	98	97	96	95	93	93	93	93	93	93		
	2	108	103	99	96	106	101	98	94	98	95	92	95	93	90	92	90	89	87	87	87	87	87	87		
	3	102	96	91	87	100	94	90	86	92	88	85	89	86	83	87	85	82	81	81	81	81	81	81		
	4	97	89	84	80	95	88	83	79	86	82	78	84	80	77	82	79	76	75	75	75	75	75	75		
	5	92	84	78	73	90	83	77	73	81	76	72	79	75	72	78	74	71	70	70	70	70	70	70		
	6	87	78	72	68	86	77	72	68	76	71	67	75	70	67	73	69	66	65	65	65	65	65	65		
	7	83	73	67	63	81	73	67	63	71	66	63	70	66	62	69	65	62	60	60	60	60	60	60		
	8	79	69	63	59	77	68	63	59	67	62	58	66	62	58	65	61	58	56	56	56	56	56	56		
	9	75	65	59	55	74	64	59	55	63	58	55	63	58	54	62	57	54	53	53	53	53	53	53		
	10	71	61	55	51	70	61	55	51	60	55	51	59	54	51	58	54	51	50	50	50	50	50	50		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	32938	32938	32938
5°	32661	32687	32661
10°	31846	31898	31898
15°	30747	30667	30832
20°	29530	29187	29613
25°	27193	27397	27459
30°	21194	25211	22000
35°	10749	21366	11138
40°	4890	13973	4890
45°	1894	5261	1857
50°	295	1668	295
55°	90	330	90
60°	52	52	52
65°	61	0	61
70°	0	0	76
75°	0	0	100
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 5261 cd/sqm



TEST NUMBER: P838402
 CATALOG NUMBER: HCSQ615D010-HM60525930-61SQMB

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.4	9.4
10°-20°	193.7	25.5
20°-30°	261.2	34.3
30°-40°	183.6	24.1
40°-50°	46.9	6.2
50°-60°	3.2	0.4
60°-70°	0.4	0.0
70°-80°	0.0	0.0
80°-90°	0.0	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°	526.3	69.2
0°-40°	709.9	93.4
0°-60°	760.1	99.9
0°-90°	760.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	760.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	765	765	765	765	765	
5°	756	757	756	757	756	71
15°	690	689	688	690	692	194
25°	572	574	577	579	578	256
35°	204	271	406	278	212	138
45°	31	47	86	47	30	27
55°	1	1	4	1	1	2
65°	1	1	0	1	1	1
75°	0	0	0	0	1	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



TEST NUMBER: P838402

CATALOG NUMBER: HCSQ615D010-HM60525930-61SQMB

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	765.0	765.0	765.0	765.0	765.0
1°	764.4	765.0	765.7	765.7	765.0
2°	765.0	763.2	766.9	765.0	765.7
3°	765.0	761.3	763.2	764.4	763.8
4°	761.9	759.5	761.3	760.7	759.5
5°	755.7	757.0	756.3	757.0	755.7
6°	752.0	753.2	754.5	752.6	750.8
7°	748.9	748.3	748.9	750.1	750.1
8°	743.3	744.5	743.3	743.9	742.1
9°	737.1	737.1	737.1	738.3	736.5
10°	728.4	731.5	729.6	730.9	729.6
11°	724.0	722.8	722.8	723.4	722.8
12°	713.5	714.7	714.1	715.3	717.2
13°	707.9	708.5	706.0	709.1	709.1
14°	699.2	698.5	699.8	699.2	700.4
15°	689.8	688.6	688.0	689.8	691.7
16°	683.0	679.9	678.0	680.5	683.0
17°	673.1	670.0	667.5	672.4	673.1
18°	663.1	661.9	655.7	661.9	665.0
19°	655.0	650.7	645.1	651.9	655.7
20°	644.5	640.8	637.0	640.8	646.3
22.5°	614.0	610.9	607.8	612.2	615.3
25°	572.4	574.3	576.7	578.6	578.0
27.5°	513.3	530.1	545.7	535.7	522.7
30°	426.3	468.6	507.1	475.4	442.5
32.5°	308.9	381.0	461.1	395.3	312.0
35°	204.5	271.0	406.5	277.8	211.9
37.5°	133.0	182.1	339.3	182.7	139.2
40°	87.0	118.7	248.6	121.2	87.0
42.5°	53.4	75.2	151.0	78.3	53.4
45°	31.1	46.6	86.4	47.2	30.5
47.5°	14.3	25.5	49.1	24.9	14.9
50°	4.4	11.2	24.9	11.2	4.4
52.5°	1.9	3.1	11.8	3.1	1.9
55°	1.2	1.2	4.4	1.2	1.2
57.5°	1.2	0.6	1.2	1.2	1.2
60°	0.6	0.6	0.6	0.6	0.6
62.5°	0.6	0.6	0.6	0.6	0.6
65°	0.6	0.6	0.0	0.6	0.6
67.5°	0.6	0.0	0.0	0.0	0.6
70°	0.0	0.0	0.0	0.0	0.6
72.5°	0.0	0.0	0.0	0.0	0.6
75°	0.0	0.0	0.0	0.0	0.6



TEST NUMBER: P838402

CATALOG NUMBER: HCSQ615D010-HM60525930-61SQMB

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
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°	0.0	0.0	0.0	0.0	0.0
80°	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



(END OF REPORT)