

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: P838398

Luminaire Tested: HCSQ615D010-HM60525927-61SQMW

Issue Date: 5/21/2024

Test Information

Test Method: LM-79-2019
Report Number: P838398
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: HCSQ615D010-HM60525927-61SQMW
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, MATTE WHITE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: -

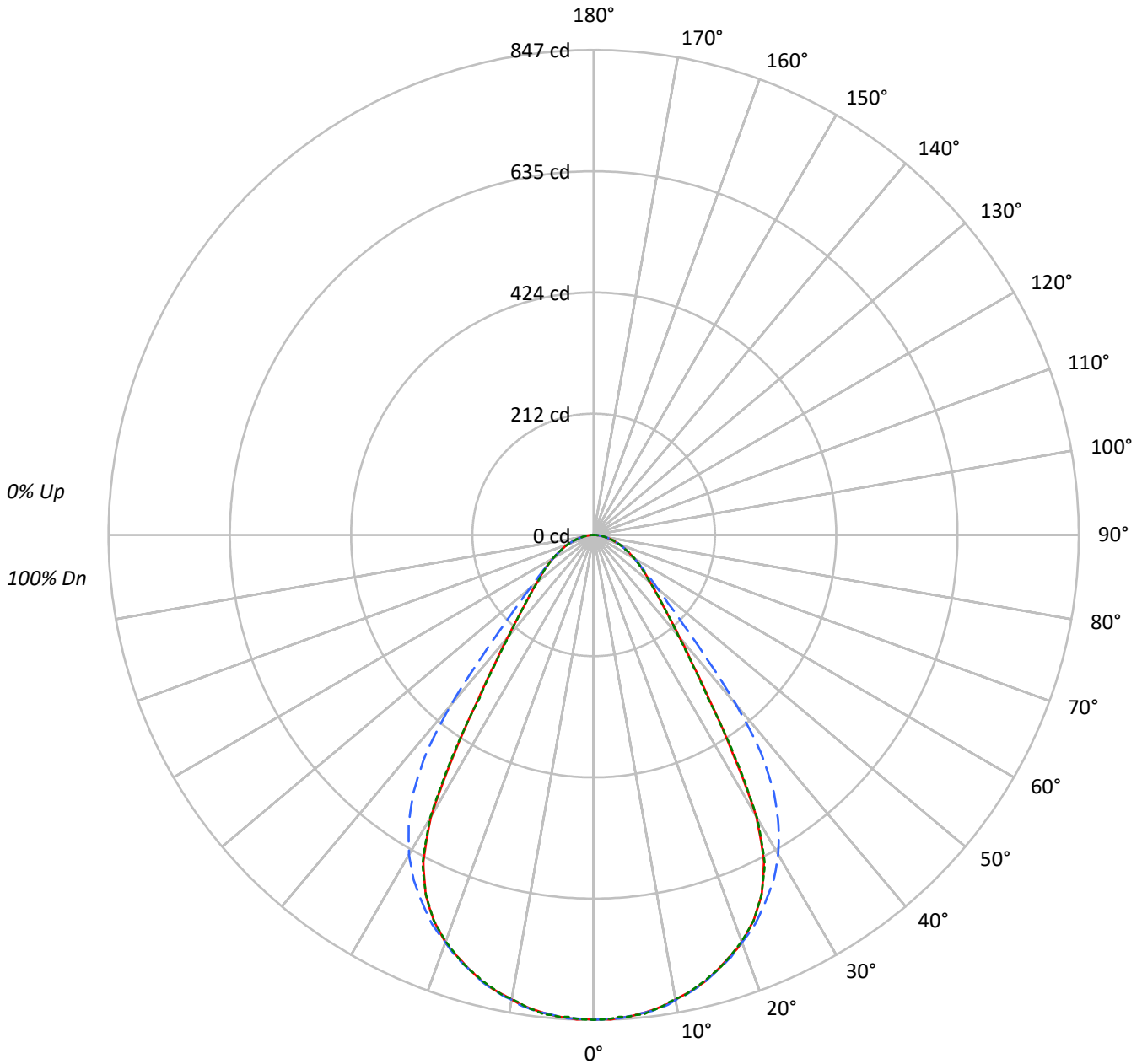
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1249.4 lumens
Efficiency: N/A
Efficacy: 89.2 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): 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

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Luminous Intensity Polar Plot





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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	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°	36468	36468	36468
5°	36378	36352	36378
10°	36021	36047	35968
15°	35486	35513	35432
20°	34685	34712	34607
25°	32955	33658	32927
30°	28219	32047	28398
35°	18544	28809	18260
40°	13107	21723	12877
45°	10163	13371	10236
50°	8641	9753	8560
55°	7777	7994	7777
60°	7035	7035	7035
65°	6449	6388	6388
70°	5891	5891	5967
75°	5506	5323	5423
80°	4835	4835	4835
85°	4100	4100	4100

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 13371 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.9	6.4
10°-20°	224.2	17.9
20°-30°	319.6	25.6
30°-40°	272.5	21.8
40°-50°	150.7	12.1
50°-60°	94.9	7.6
60°-70°	63.0	5.0
70°-80°	34.7	2.8
80°-90°	9.9	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°	623.7	49.9
0°-40°	896.1	71.7
0°-60°	1141.8	91.4
0°-90°	1249.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1249.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	847	847	847	847	847	
5°	842	843	841	840	842	80
15°	796	796	797	796	795	224
25°	694	702	708	701	693	313
35°	353	416	548	417	347	229
45°	167	183	220	182	168	132
55°	104	105	106	105	104	93
65°	63	64	63	63	63	63
75°	33	33	32	33	33	35
85°	8	8	8	9	8	10
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	847.0	847.0	847.0	847.0	847.0
1°	845.2	846.4	846.4	845.8	846.4
2°	847.0	845.2	845.2	845.2	845.8
3°	844.6	845.8	845.8	844.0	842.9
4°	844.0	843.5	843.5	845.2	844.0
5°	841.7	842.9	841.1	839.9	841.7
6°	839.3	839.9	839.3	839.9	841.7
7°	836.4	838.1	837.5	836.9	836.9
8°	832.8	835.2	834.0	834.0	833.4
9°	829.2	829.8	831.0	831.0	827.5
10°	823.9	825.7	824.5	825.1	822.7
11°	819.2	821.6	821.0	819.8	820.4
12°	815.0	816.2	815.6	813.9	814.5
13°	809.7	810.9	810.3	810.3	808.5
14°	803.8	802.6	804.4	803.2	802.6
15°	796.1	796.1	796.7	796.1	794.9
16°	789.0	789.6	789.6	789.0	789.6
17°	780.7	783.1	782.5	781.3	781.9
18°	773.0	774.8	775.4	774.8	773.0
19°	765.9	767.1	766.5	764.1	764.1
20°	757.0	757.6	757.6	756.4	755.3
22.5°	729.2	733.4	736.3	734.0	729.2
25°	693.7	702.0	708.5	701.4	693.1
27.5°	644.0	660.6	680.1	662.3	646.9
30°	567.6	605.5	644.6	609.1	571.2
32.5°	451.6	526.2	600.8	533.3	458.7
35°	352.8	416.1	548.1	416.7	347.4
37.5°	281.7	326.7	480.6	323.8	278.8
40°	233.2	263.4	386.5	262.2	229.1
42.5°	194.7	217.8	289.4	215.5	194.7
45°	166.9	182.9	219.6	181.7	168.1
47.5°	146.2	156.3	175.8	155.7	146.2
50°	129.0	135.0	145.6	134.4	127.8
52.5°	115.4	119.0	123.1	117.8	114.2
55°	103.6	105.4	106.5	104.8	103.6
57.5°	92.3	93.5	92.9	92.3	91.7
60°	81.7	82.3	81.7	82.3	81.7
62.5°	72.2	72.8	71.6	72.2	71.6
65°	63.3	63.9	62.7	63.3	62.7
67.5°	55.0	55.0	55.0	55.0	54.5
70°	46.8	47.4	46.8	47.4	47.4
72.5°	39.7	39.7	39.1	39.7	39.7
75°	33.1	32.6	32.0	32.6	32.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
82.5°	14.2	14.2	13.6	14.2	14.2
85°	8.3	8.3	8.3	8.9	8.3
87.5°	4.1	3.6	3.6	4.1	4.1
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



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Scaled Data Report





— 0°-180° - - 45°-225° - - - - 90°-270°

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77.5°	26.0	26.0	25.5	26.0	26.0
80°	19.5	20.1	19.5	20.1	19.5

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