

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: P838408

Luminaire Tested: HCSQ615D010-HM60525935-61SQMW

Issue Date: 5/21/2024

Test Information

Test Method: LM-79-2019
Report Number: P838408
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-HM60525935-61SQMW
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, MATTE WHITE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: -

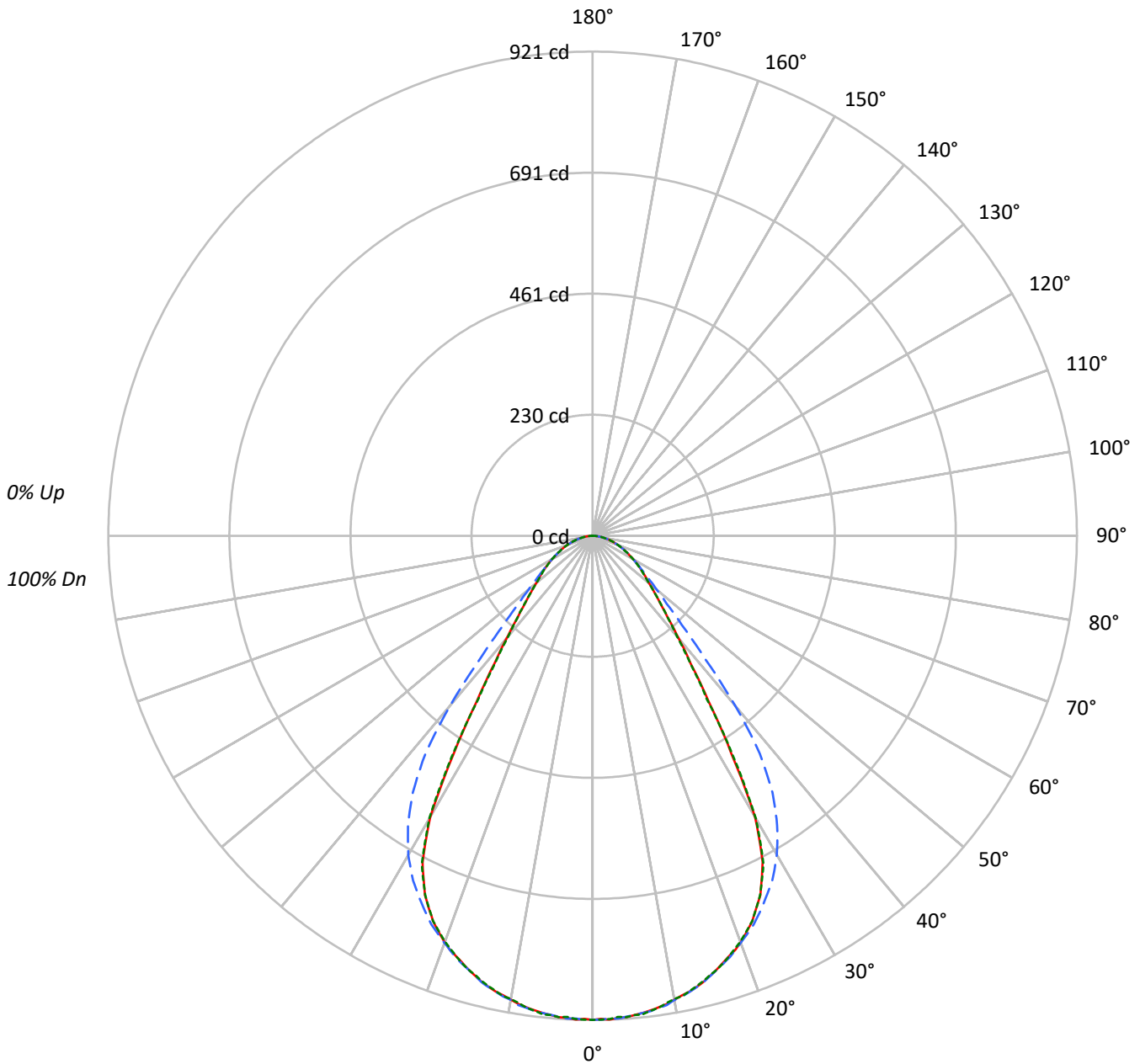
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1358.6 lumens
Efficiency: N/A
Efficacy: 97.0 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 (Ain): 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									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°	39654	39654	39654
5°	39559	39529	39559
10°	39169	39199	39116
15°	38588	38615	38530
20°	37718	37750	37631
25°	35834	36599	35806
30°	30690	34846	30879
35°	20162	31327	19858
40°	14254	23623	14001
45°	11052	14541	11131
50°	9398	10603	9311
55°	8452	8700	8452
60°	7647	7647	7647
65°	7019	6948	6948
70°	6395	6395	6483
75°	5989	5789	5889
80°	5256	5256	5256
85°	4446	4446	4446

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 14541 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.8	6.4
10°-20°	243.9	17.9
20°-30°	347.5	25.6
30°-40°	296.3	21.8
40°-50°	163.9	12.1
50°-60°	103.3	7.6
60°-70°	68.6	5.0
70°-80°	37.7	2.8
80°-90°	10.7	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°	678.2	49.9
0°-40°	974.5	71.7
0°-60°	1241.6	91.4
0°-90°	1358.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1358.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	921	921	921	921	921	
5°	915	916	915	913	915	87
15°	866	866	866	866	864	244
25°	754	763	770	763	754	341
35°	384	452	596	453	378	249
45°	182	199	239	198	183	144
55°	113	115	116	114	113	101
65°	69	70	68	69	68	69
75°	36	35	35	35	35	38
85°	9	9	9	10	9	11
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	921.0	921.0	921.0	921.0	921.0
1°	919.1	920.4	920.4	919.8	920.4
2°	921.0	919.1	919.1	919.1	919.8
3°	918.5	919.8	919.8	917.8	916.5
4°	917.8	917.2	917.2	919.1	917.8
5°	915.3	916.5	914.6	913.3	915.3
6°	912.7	913.3	912.7	913.3	915.3
7°	909.5	911.4	910.8	910.1	910.1
8°	905.6	908.2	906.9	906.9	906.2
9°	901.7	902.4	903.7	903.7	899.8
10°	895.9	897.9	896.6	897.2	894.7
11°	890.8	893.4	892.7	891.4	892.1
12°	886.3	887.6	886.9	885.0	885.6
13°	880.5	881.8	881.1	881.1	879.2
14°	874.1	872.8	874.7	873.4	872.8
15°	865.7	865.7	866.3	865.7	864.4
16°	858.0	858.6	858.6	858.0	858.6
17°	849.0	851.5	850.9	849.6	850.2
18°	840.6	842.5	843.2	842.5	840.6
19°	832.9	834.2	833.5	830.9	830.9
20°	823.2	823.9	823.9	822.6	821.3
22.5°	793.0	797.5	800.7	798.1	793.0
25°	754.3	763.4	770.4	762.7	753.7
27.5°	700.3	718.3	739.5	720.2	703.5
30°	617.3	658.4	700.9	662.3	621.1
32.5°	491.1	572.2	653.3	579.9	498.8
35°	383.6	452.5	596.0	453.1	377.8
37.5°	306.4	355.3	522.6	352.1	303.2
40°	253.6	286.4	420.3	285.1	249.1
42.5°	211.8	236.9	314.7	234.3	211.8
45°	181.5	198.9	238.8	197.6	182.8
47.5°	159.0	169.9	191.2	169.3	159.0
50°	140.3	146.7	158.3	146.1	139.0
52.5°	125.5	129.4	133.9	128.1	124.2
55°	112.6	114.6	115.9	113.9	112.6
57.5°	100.4	101.7	101.1	100.4	99.8
60°	88.8	89.5	88.8	89.5	88.8
62.5°	78.5	79.2	77.9	78.5	77.9
65°	68.9	69.5	68.2	68.9	68.2
67.5°	59.9	59.9	59.9	59.9	59.2
70°	50.8	51.5	50.8	51.5	51.5
72.5°	43.1	43.1	42.5	43.1	43.1
75°	36.0	35.4	34.8	35.4	35.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
82.5°	15.4	15.4	14.8	15.4	15.4
85°	9.0	9.0	9.0	9.7	9.0
87.5°	4.5	3.9	3.9	4.5	4.5
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°	28.3	28.3	27.7	28.3	28.3
80°	21.2	21.9	21.2	21.9	21.2

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Scaled Data Report



(END OF REPORT)