

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: P838388

Luminaire Tested: HCSQ615D010-HM60525835-61SQMW

Issue Date: 5/21/2024

Test Information

Test Method: LM-79-2019
Report Number: P838388
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-HM60525835-61SQMW
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, MATTE WHITE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT
Ballast/Driver: -

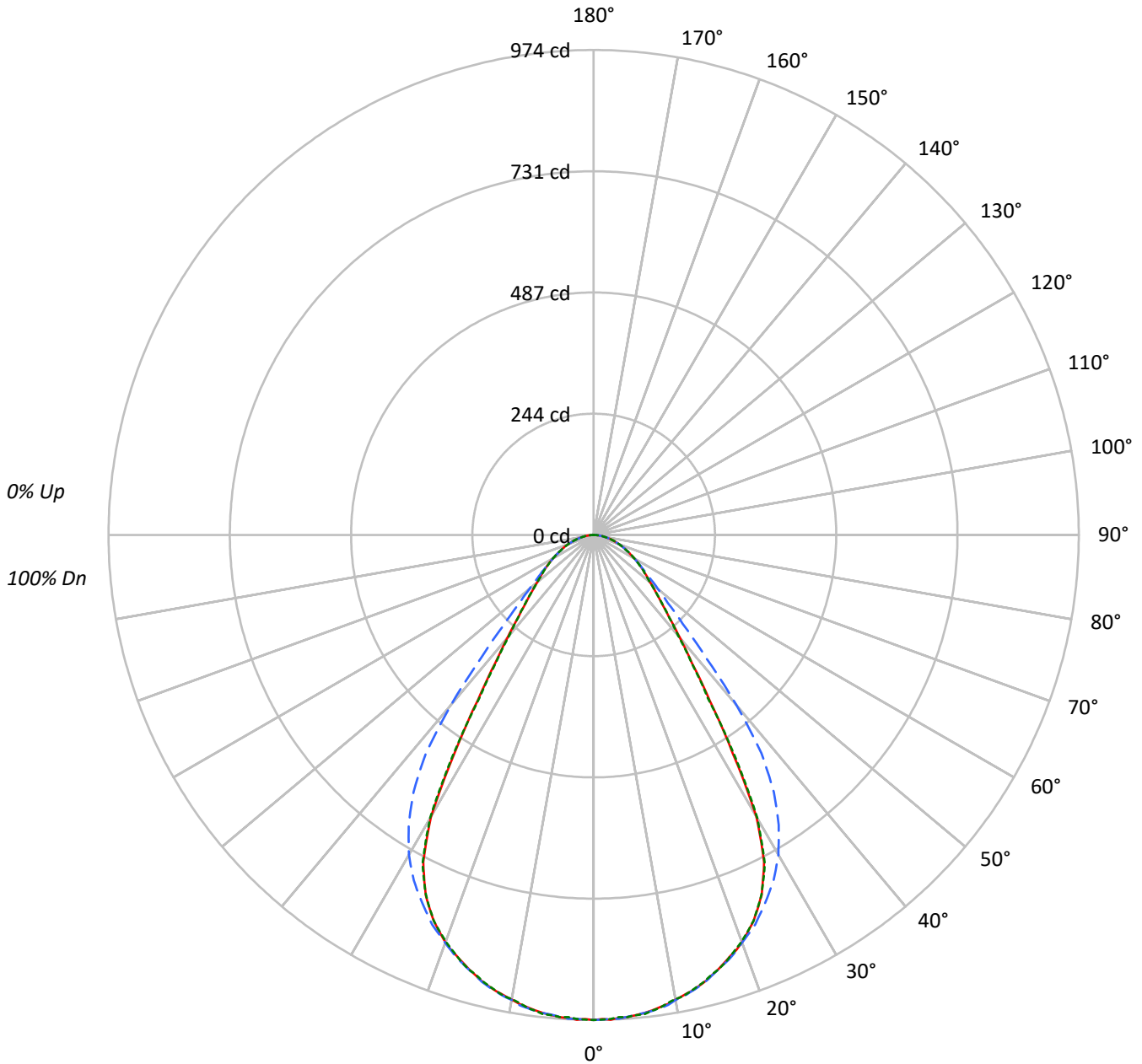
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1437.2 lumens
Efficiency: N/A
Efficacy: 102.7 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									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°	41949	41949	41949
5°	41846	41815	41846
10°	41438	41468	41376
15°	40821	40853	40759
20°	39899	39931	39807
25°	37910	38718	37877
30°	32465	36865	32664
35°	21329	33140	21009
40°	15080	24989	14810
45°	11691	15381	11776
50°	9940	11220	9853
55°	8948	9203	8948
60°	8094	8094	8094
65°	7427	7356	7356
70°	6773	6773	6861
75°	6338	6122	6222
80°	5579	5579	5579
85°	4693	4693	4693

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 15381 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.9	6.4
10°-20°	258.0	17.9
20°-30°	367.6	25.6
30°-40°	313.4	21.8
40°-50°	173.4	12.1
50°-60°	109.2	7.6
60°-70°	72.5	5.0
70°-80°	39.8	2.8
80°-90°	11.3	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°	717.4	49.9
0°-40°	1030.8	71.7
0°-60°	1313.5	91.4
0°-90°	1437.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1437.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	974	974	974	974	974	
5°	968	970	968	966	968	92
15°	916	916	916	916	914	258
25°	798	808	815	807	797	360
35°	406	479	630	479	400	264
45°	192	210	253	209	193	152
55°	119	121	123	120	119	107
65°	73	74	72	73	72	73
75°	38	37	37	37	37	40
85°	10	10	10	10	10	11
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	974.3	974.3	974.3	974.3	974.3
1°	972.3	973.7	973.7	973.0	973.7
2°	974.3	972.3	972.3	972.3	973.0
3°	971.6	973.0	973.0	970.9	969.6
4°	970.9	970.2	970.2	972.3	970.9
5°	968.2	969.6	967.5	966.2	968.2
6°	965.5	966.2	965.5	966.2	968.2
7°	962.1	964.1	963.4	962.8	962.8
8°	958.0	960.7	959.4	959.4	958.7
9°	953.9	954.6	955.9	955.9	951.9
10°	947.8	949.8	948.5	949.1	946.4
11°	942.3	945.1	944.4	943.0	943.7
12°	937.6	938.9	938.2	936.2	936.9
13°	931.4	932.8	932.1	932.1	930.1
14°	924.6	923.3	925.3	923.9	923.3
15°	915.8	915.8	916.5	915.8	914.4
16°	907.6	908.3	908.3	907.6	908.3
17°	898.1	900.8	900.1	898.8	899.4
18°	889.2	891.3	891.9	891.3	889.2
19°	881.1	882.4	881.7	879.0	879.0
20°	870.8	871.5	871.5	870.2	868.8
22.5°	838.8	843.6	847.0	844.3	838.8
25°	798.0	807.5	815.0	806.8	797.3
27.5°	740.8	759.9	782.3	761.9	744.2
30°	653.0	696.5	741.5	700.6	657.0
32.5°	519.5	605.3	691.1	613.5	527.7
35°	405.8	478.7	630.5	479.3	399.7
37.5°	324.1	375.8	552.9	372.4	320.7
40°	268.3	303.0	444.6	301.6	263.5
42.5°	224.0	250.6	332.9	247.8	224.0
45°	192.0	210.4	252.6	209.0	193.4
47.5°	168.2	179.8	202.2	179.1	168.2
50°	148.4	155.2	167.5	154.6	147.1
52.5°	132.8	136.9	141.6	135.5	131.4
55°	119.2	121.2	122.6	120.5	119.2
57.5°	106.2	107.6	106.9	106.2	105.5
60°	94.0	94.6	94.0	94.6	94.0
62.5°	83.1	83.7	82.4	83.1	82.4
65°	72.9	73.5	72.2	72.9	72.2
67.5°	63.3	63.3	63.3	63.3	62.6
70°	53.8	54.5	53.8	54.5	54.5
72.5°	45.6	45.6	44.9	45.6	45.6
75°	38.1	37.4	36.8	37.4	37.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
82.5°	16.3	16.3	15.7	16.3	16.3
85°	9.5	9.5	9.5	10.2	9.5
87.5°	4.8	4.1	4.1	4.8	4.8
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°	30.0	30.0	29.3	30.0	30.0
80°	22.5	23.1	22.5	23.1	22.5

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(END OF REPORT)