

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: P838382

Luminaire Tested: HCSQ615D010-HM60525830-61SQMB

Issue Date: 5/21/2024

Test Information

Test Method: LM-79-2019
Report Number: P838382
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-HM60525830-61SQMB
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, MATTE BLACK TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT
Ballast/Driver: -

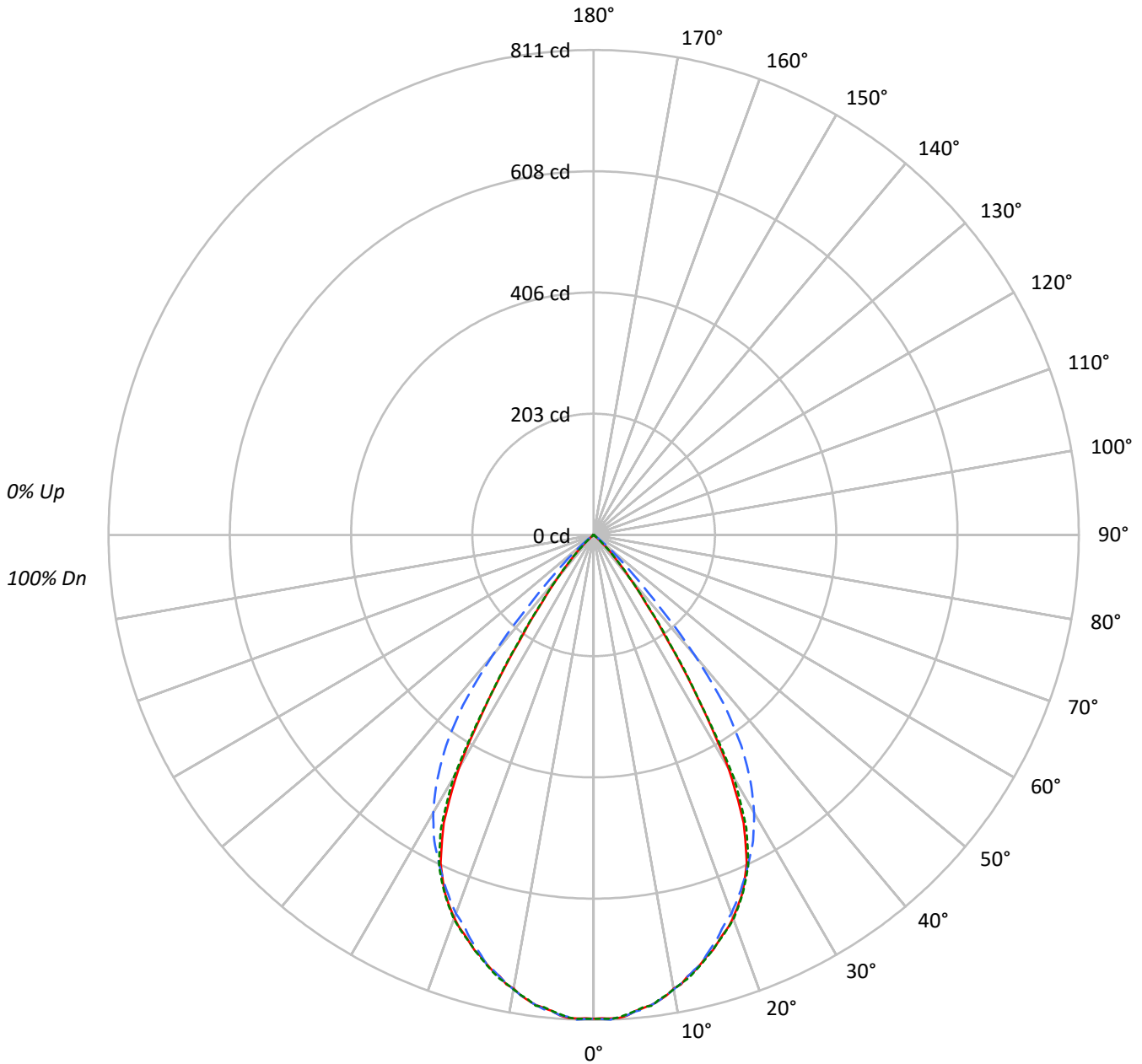
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 804.3 lumens
Efficiency: N/A
Efficacy: 57.5 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

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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	113	111	108	106	111	109	106	104	105	103	101	101	99	98	97	96	95	93																			
2	108	103	99	96	106	101	98	94	98	95	92	95	93	90	92	90	89	87																			
3	102	96	91	87	100	94	90	86	92	88	85	89	86	83	87	85	82	81																			
4	97	89	84	80	95	88	83	79	86	82	78	84	80	77	82	79	76	75																			
5	92	84	78	73	90	83	77	73	81	76	72	79	75	72	78	74	71	70																			
6	87	78	72	68	86	77	72	68	76	71	67	75	70	67	73	69	66	65																			
7	83	73	67	63	81	73	67	63	71	66	63	70	66	62	69	65	62	60																			
8	79	69	63	59	77	68	63	59	67	62	58	66	62	58	65	61	58	56																			
9	75	65	59	55	74	64	59	55	63	58	55	63	58	54	62	57	54	53																			
10	71	61	55	51	70	61	55	51	60	55	51	59	54	51	58	54	51	50																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	34836	34836	34836
5°	34542	34572	34542
10°	33677	33734	33734
15°	32522	32432	32606
20°	31230	30868	31322
25°	28761	28979	29041
30°	22417	26663	23267
35°	11364	22596	11779
40°	5171	14776	5171
45°	2003	5565	1961
50°	308	1762	308
55°	98	345	98
60°	60	60	60
65°	71	0	71
70°	0	0	88
75°	0	0	116
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 5565 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.5	9.4
10°-20°	204.9	25.5
20°-30°	276.2	34.3
30°-40°	194.2	24.1
40°-50°	49.6	6.2
50°-60°	3.4	0.4
60°-70°	0.4	0.1
70°-80°	0.1	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°	556.6	69.2
0°-40°	750.8	93.3
0°-60°	803.8	99.9
0°-90°	804.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	804.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	809	809	809	809	809	
5°	799	801	800	801	799	76
15°	730	728	728	730	732	205
25°	605	607	610	612	611	271
35°	216	287	430	294	224	146
45°	33	49	91	50	32	29
55°	1	1	5	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	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	809.1	809.1	809.1	809.1	809.1
1°	808.4	809.1	809.8	809.8	809.1
2°	809.1	807.1	811.1	809.1	809.8
3°	809.1	805.2	807.1	808.4	807.8
4°	805.8	803.2	805.2	804.5	803.2
5°	799.2	800.6	799.9	800.6	799.2
6°	795.3	796.6	797.9	796.0	794.0
7°	792.0	791.4	792.0	793.3	793.3
8°	786.1	787.4	786.1	786.8	784.8
9°	779.5	779.5	779.5	780.8	778.9
10°	770.3	773.6	771.6	773.0	771.6
11°	765.7	764.4	764.4	765.1	764.4
12°	754.6	755.9	755.2	756.5	758.5
13°	748.6	749.3	746.7	750.0	750.0
14°	739.4	738.8	740.1	739.4	740.7
15°	729.6	728.3	727.6	729.6	731.5
16°	722.3	719.1	717.1	719.7	722.3
17°	711.8	708.5	705.9	711.2	711.8
18°	701.3	700.0	693.4	700.0	703.3
19°	692.8	688.2	682.3	689.5	693.4
20°	681.6	677.7	673.7	677.7	683.6
22.5°	649.4	646.1	642.8	647.4	650.7
25°	605.4	607.3	610.0	611.9	611.3
27.5°	542.9	560.7	577.1	566.6	552.8
30°	450.9	495.6	536.3	502.8	468.0
32.5°	326.7	402.9	487.7	418.0	330.0
35°	216.2	286.6	429.9	293.8	224.1
37.5°	140.7	192.6	358.9	193.2	147.2
40°	92.0	125.5	262.9	128.2	92.0
42.5°	56.5	79.5	159.7	82.8	56.5
45°	32.9	49.3	91.4	50.0	32.2
47.5°	15.1	26.9	51.9	26.3	15.8
50°	4.6	11.8	26.3	11.8	4.6
52.5°	2.0	3.3	12.5	3.3	2.0
55°	1.3	1.3	4.6	1.3	1.3
57.5°	1.3	0.7	1.3	1.3	1.3
60°	0.7	0.7	0.7	0.7	0.7
62.5°	0.7	0.7	0.7	0.7	0.7
65°	0.7	0.7	0.0	0.7	0.7
67.5°	0.7	0.0	0.0	0.0	0.7
70°	0.0	0.0	0.0	0.0	0.7
72.5°	0.0	0.0	0.0	0.0	0.7
75°	0.0	0.0	0.0	0.0	0.7



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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



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Scaled Data Report





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

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77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0

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Scaled Data Report



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