

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: P838383

Luminaire Tested: HCSQ615D010-HM60525830-61SQMW

Issue Date: 5/21/2024

Test Information

Test Method: LM-79-2019
Report Number: P838383
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-HM60525830-61SQMW
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, MATTE WHITE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT
Ballast/Driver: -

Summary

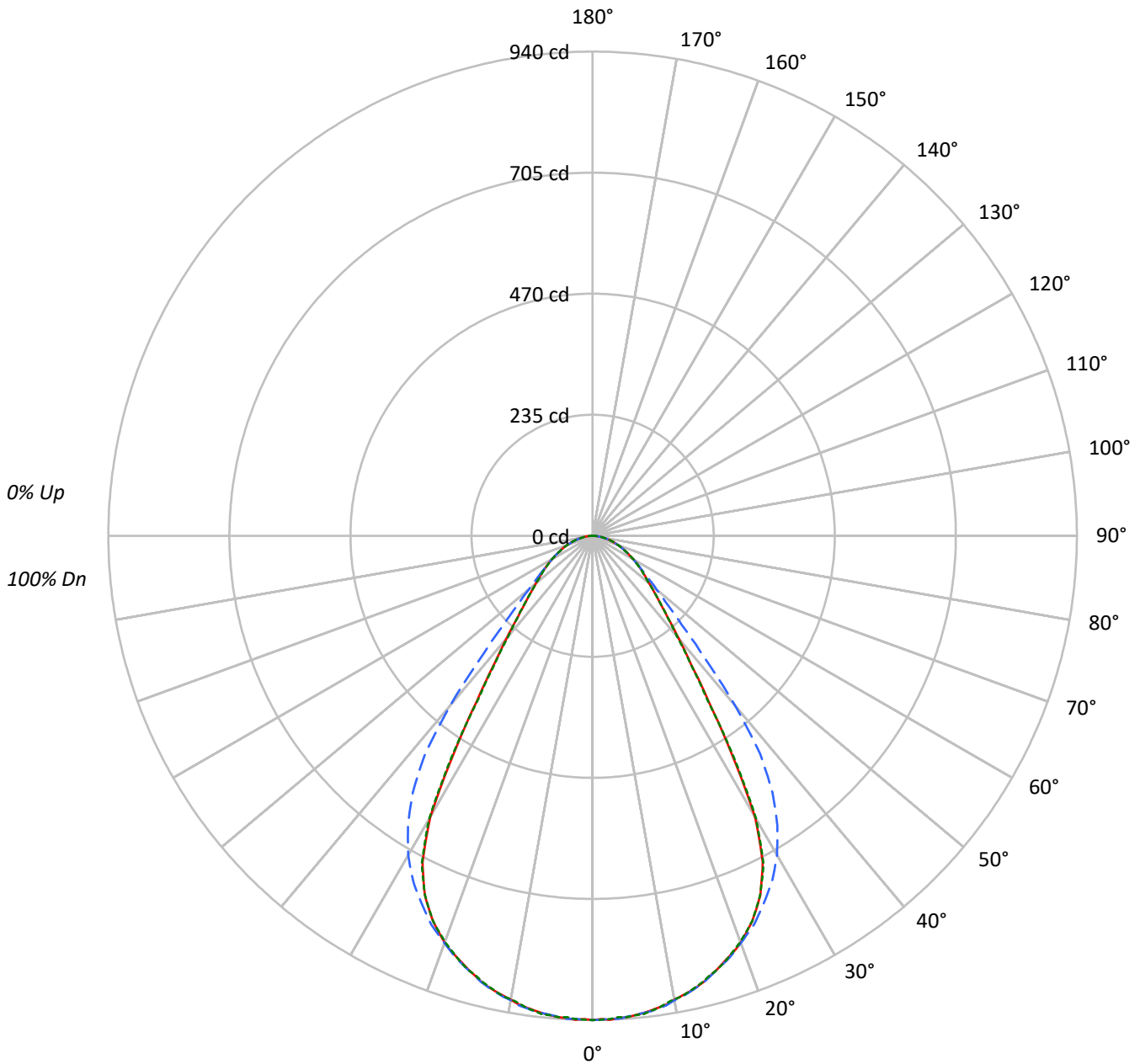
Lumens per Lamp: N/A
Luminaire Lumens: 1387.1 lumens
Efficiency: N/A
Efficacy: 99.1 lumens/watt
Spacing Criteria (0/90/45): 1.08 / 1.08 / 1.11
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
CIE Type: Direct

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°	40490	40490	40490
5°	40389	40363	40389
10°	39995	40026	39938
15°	39399	39431	39341
20°	38511	38543	38424
25°	36590	37369	36561
30°	31331	35582	31530
35°	20588	31984	20278
40°	14552	24118	14293
45°	11283	14845	11362
50°	9599	10831	9512
55°	8633	8880	8633
60°	7810	7810	7810
65°	7162	7101	7101
70°	6534	6534	6622
75°	6122	5906	6005
80°	5380	5380	5380
85°	4545	4545	4545

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 14845 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.7	6.4
10°-20°	249.0	17.9
20°-30°	354.8	25.6
30°-40°	302.5	21.8
40°-50°	167.4	12.1
50°-60°	105.4	7.6
60°-70°	70.0	5.0
70°-80°	38.4	2.8
80°-90°	10.9	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°	692.4	49.9
0°-40°	995.0	71.7
0°-60°	1267.7	91.4
0°-90°	1387.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1387.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	940	940	940	940	940	
5°	934	936	934	932	934	89
15°	884	884	885	884	883	249
25°	770	779	787	779	770	348
35°	392	462	608	463	386	255
45°	185	203	244	202	187	147
55°	115	117	118	116	115	103
65°	70	71	70	70	70	70
75°	37	36	36	36	36	39
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°	940.4	940.4	940.4	940.4	940.4
1°	938.5	939.8	939.8	939.1	939.8
2°	940.4	938.5	938.5	938.5	939.1
3°	937.8	939.1	939.1	937.1	935.8
4°	937.1	936.5	936.5	938.5	937.1
5°	934.5	935.8	933.9	932.5	934.5
6°	931.9	932.5	931.9	932.5	934.5
7°	928.6	930.6	929.9	929.3	929.3
8°	924.7	927.3	926.0	926.0	925.3
9°	920.7	921.4	922.7	922.7	918.7
10°	914.8	916.8	915.5	916.1	913.5
11°	909.5	912.2	911.5	910.2	910.9
12°	904.9	906.3	905.6	903.6	904.3
13°	899.0	900.3	899.7	899.7	897.7
14°	892.5	891.1	893.1	891.8	891.1
15°	883.9	883.9	884.6	883.9	882.6
16°	876.0	876.7	876.7	876.0	876.7
17°	866.8	869.4	868.8	867.5	868.1
18°	858.3	860.2	860.9	860.2	858.3
19°	850.4	851.7	851.0	848.4	848.4
20°	840.5	841.2	841.2	839.9	838.6
22.5°	809.6	814.2	817.5	814.9	809.6
25°	770.2	779.4	786.6	778.8	769.6
27.5°	715.0	733.4	755.1	735.4	718.3
30°	630.2	672.3	715.7	676.2	634.2
32.5°	501.4	584.2	667.0	592.1	509.3
35°	391.7	462.0	608.5	462.7	385.8
37.5°	312.8	362.8	533.6	359.5	309.5
40°	258.9	292.4	429.1	291.1	254.3
42.5°	216.2	241.8	321.4	239.2	216.2
45°	185.3	203.1	243.8	201.8	186.6
47.5°	162.3	173.5	195.2	172.8	162.3
50°	143.3	149.8	161.7	149.2	142.0
52.5°	128.2	132.1	136.7	130.8	126.8
55°	115.0	117.0	118.3	116.3	115.0
57.5°	102.5	103.8	103.2	102.5	101.9
60°	90.7	91.3	90.7	91.3	90.7
62.5°	80.2	80.8	79.5	80.2	79.5
65°	70.3	71.0	69.7	70.3	69.7
67.5°	61.1	61.1	61.1	61.1	60.5
70°	51.9	52.6	51.9	52.6	52.6
72.5°	44.0	44.0	43.4	44.0	44.0
75°	36.8	36.1	35.5	36.1	36.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
82.5°	15.8	15.8	15.1	15.8	15.8
85°	9.2	9.2	9.2	9.9	9.2
87.5°	4.6	3.9	3.9	4.6	4.6
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°	28.9	28.9	28.3	28.9	28.9
80°	21.7	22.3	21.7	22.3	21.7

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(END OF REPORT)