

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: P838403

Luminaire Tested: HCSQ615D010-HM60525930-61SQMW

Issue Date: 5/21/2024



Test Information

Test Method: LM-79-2019
Report Number: P838403
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-HM60525930-61SQMW
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, MATTE WHITE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: -

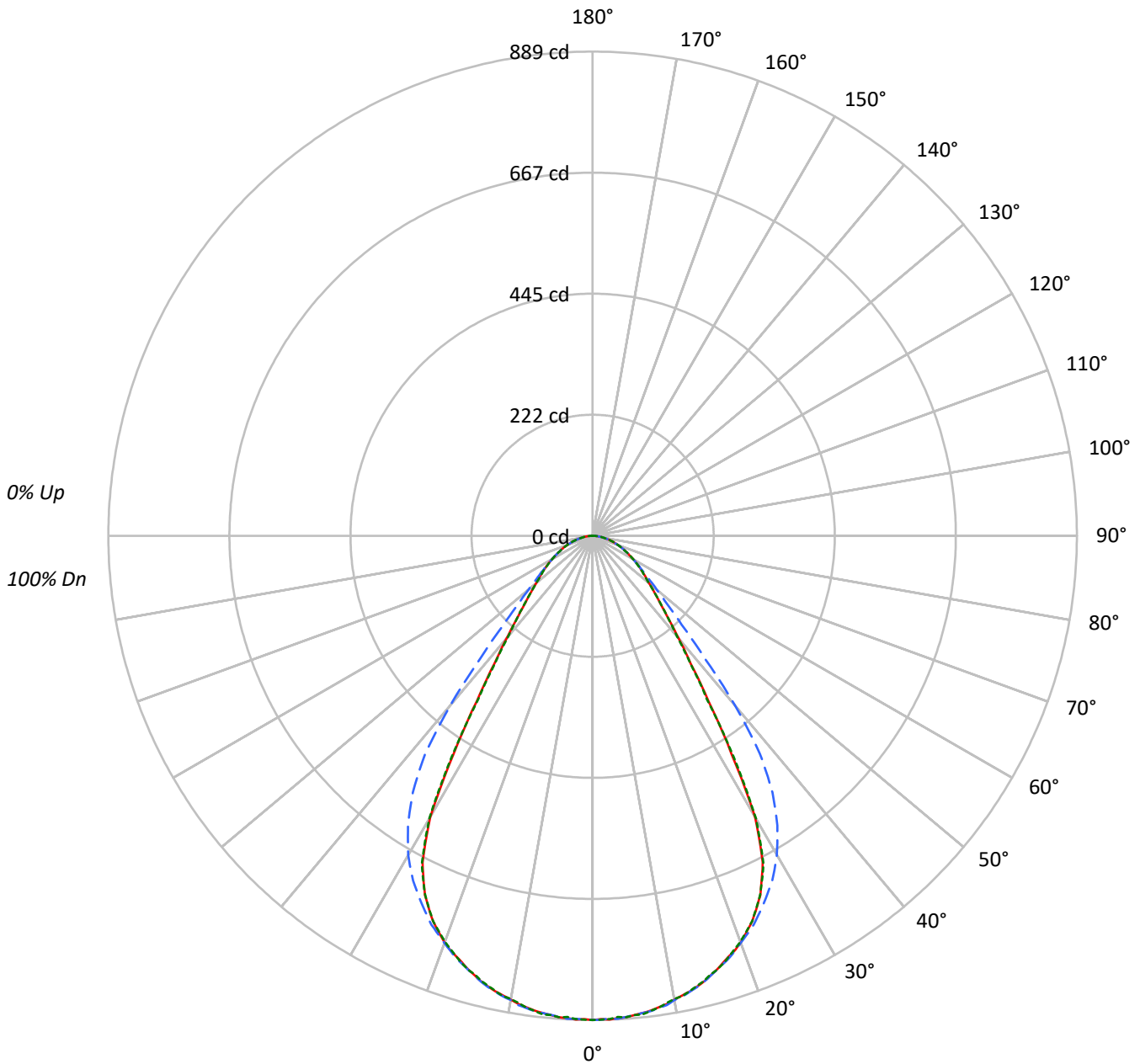
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1311.6 lumens
Efficiency: N/A
Efficacy: 93.7 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					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	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89					89			
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79					79			
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71					71			
4	91	81	74	69	89	80	73	68	77	72	67	75	70	67	73	69	66	64					64			
5	85	74	67	62	83	73	66	61	71	65	61	70	64	60	68	63	60	58					58			
6	80	69	61	56	78	68	61	56	66	60	55	64	59	55	63	58	54	53					53			
7	75	63	56	51	73	63	56	51	61	55	51	60	54	50	59	54	50	48					48			
8	70	59	52	47	69	58	51	47	57	51	46	56	50	46	55	50	46	44					44			
9	66	55	48	43	65	54	48	43	53	47	43	52	47	43	51	46	43	41					41			
10	63	51	45	40	62	51	44	40	50	44	40	49	44	40	48	43	40	38					38			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	38285	38285	38285
5°	38189	38163	38189
10°	37818	37844	37761
15°	37255	37282	37197
20°	36417	36444	36330
25°	34599	35335	34571
30°	29626	33643	29810
35°	19469	30244	19174
40°	13759	22808	13517
45°	10668	14035	10747
50°	9076	10242	8989
55°	8160	8400	8160
60°	7388	7388	7388
65°	6775	6714	6714
70°	6181	6181	6257
75°	5789	5590	5689
80°	5083	5083	5083
85°	4298	4298	4298

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 14035 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.8	6.4
10°-20°	235.4	17.9
20°-30°	335.5	25.6
30°-40°	286.0	21.8
40°-50°	158.3	12.1
50°-60°	99.7	7.6
60°-70°	66.2	5.0
70°-80°	36.4	2.8
80°-90°	10.3	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°	654.7	49.9
0°-40°	940.8	71.7
0°-60°	1198.7	91.4
0°-90°	1311.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1311.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	889	889	889	889	889	
5°	884	885	883	882	884	84
15°	836	836	836	836	834	235
25°	728	737	744	736	728	329
35°	370	437	575	438	365	241
45°	175	192	230	191	176	139
55°	109	111	112	110	109	98
65°	66	67	66	66	66	66
75°	35	34	34	34	34	37
85°	9	9	9	9	9	10
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	889.2	889.2	889.2	889.2	889.2
1°	887.4	888.6	888.6	888.0	888.6
2°	889.2	887.4	887.4	887.4	888.0
3°	886.7	888.0	888.0	886.1	884.9
4°	886.1	885.5	885.5	887.4	886.1
5°	883.6	884.9	883.0	881.8	883.6
6°	881.1	881.8	881.1	881.8	883.6
7°	878.0	879.9	879.3	878.7	878.7
8°	874.3	876.8	875.5	875.5	874.9
9°	870.6	871.2	872.4	872.4	868.7
10°	865.0	866.8	865.6	866.2	863.7
11°	860.0	862.5	861.9	860.6	861.3
12°	855.7	856.9	856.3	854.4	855.0
13°	850.1	851.3	850.7	850.7	848.8
14°	843.9	842.6	844.5	843.2	842.6
15°	835.8	835.8	836.4	835.8	834.5
16°	828.3	828.9	828.9	828.3	828.9
17°	819.6	822.1	821.5	820.2	820.9
18°	811.5	813.4	814.0	813.4	811.5
19°	804.1	805.3	804.7	802.2	802.2
20°	794.8	795.4	795.4	794.1	792.9
22.5°	765.6	769.9	773.0	770.5	765.6
25°	728.3	737.0	743.8	736.4	727.7
27.5°	676.1	693.5	714.0	695.3	679.2
30°	595.9	635.7	676.7	639.4	599.6
32.5°	474.1	552.4	630.7	559.9	481.6
35°	370.4	436.8	575.4	437.5	364.8
37.5°	295.8	343.0	504.6	339.9	292.7
40°	244.8	276.5	405.8	275.3	240.5
42.5°	204.4	228.7	303.9	226.2	204.4
45°	175.2	192.0	230.5	190.8	176.5
47.5°	153.5	164.0	184.6	163.4	153.5
50°	135.5	141.7	152.9	141.1	134.2
52.5°	121.2	124.9	129.3	123.7	119.9
55°	108.7	110.6	111.9	110.0	108.7
57.5°	96.9	98.2	97.6	96.9	96.3
60°	85.8	86.4	85.8	86.4	85.8
62.5°	75.8	76.4	75.2	75.8	75.2
65°	66.5	67.1	65.9	66.5	65.9
67.5°	57.8	57.8	57.8	57.8	57.2
70°	49.1	49.7	49.1	49.7	49.7
72.5°	41.6	41.6	41.0	41.6	41.6
75°	34.8	34.2	33.6	34.2	34.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
82.5°	14.9	14.9	14.3	14.9	14.9
85°	8.7	8.7	8.7	9.3	8.7
87.5°	4.3	3.7	3.7	4.3	4.3
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°	27.3	27.3	26.7	27.3	27.3
80°	20.5	21.1	20.5	21.1	20.5

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(END OF REPORT)