

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: P838367

Luminaire Tested: HCSQ610D010-HM60525935-61SQMB

Issue Date: 5/21/2024

Test Information

Test Method: LM-79-2019
Report Number: P838367
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: HCSQ610D010-HM60525935-61SQMB
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, MATTE BLACK TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: -

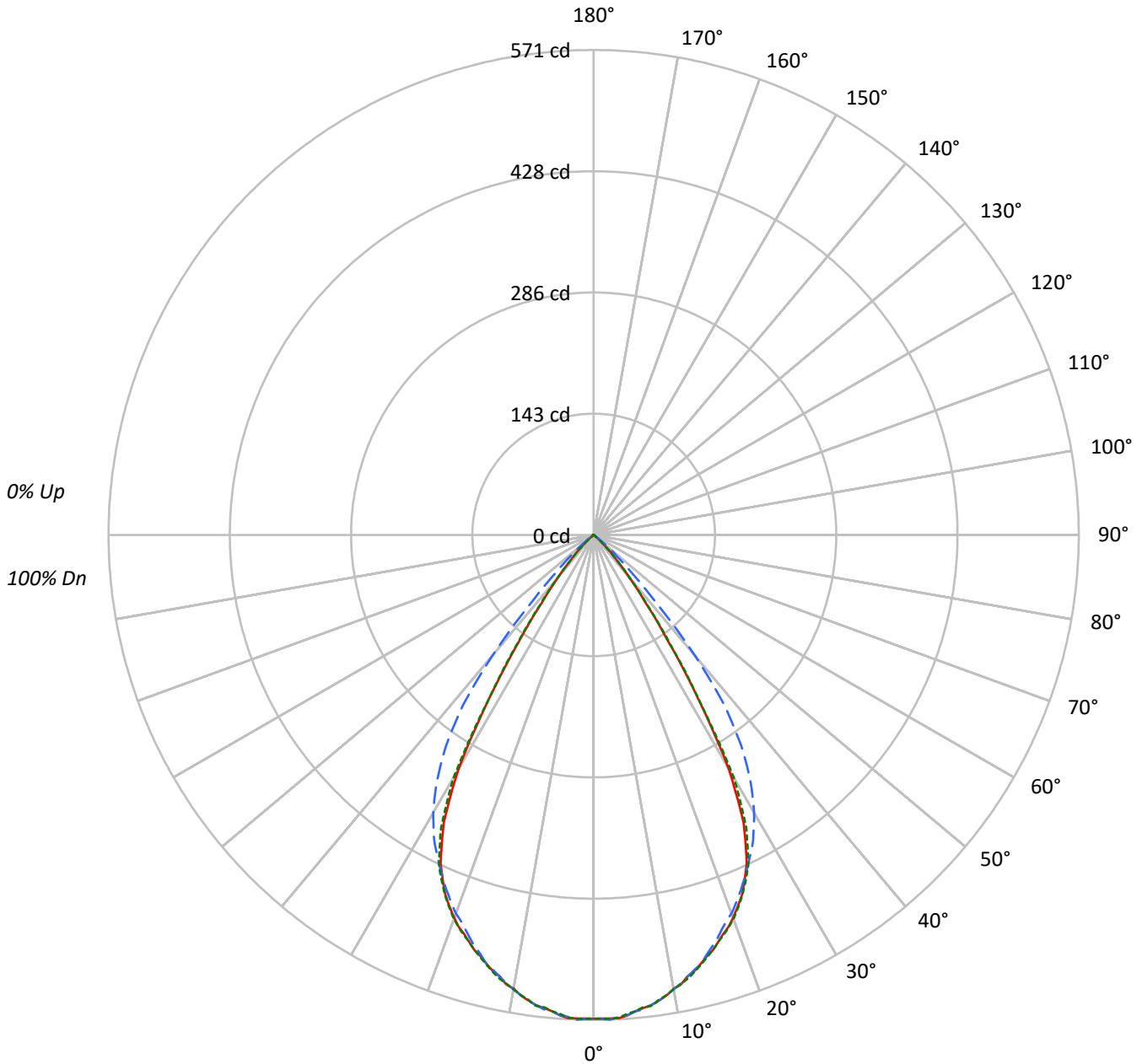
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 566.3 lumens
Efficiency: N/A
Efficacy: 57.2 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): 9.9
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	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	100	100	100	100		
	1	113	111	108	106	111	109	106	104	105	103	101	101	99	98	97	96	95	93	93	93	93	93	93		
	2	108	103	99	96	106	101	98	94	98	95	92	95	93	90	92	90	89	87	87	87	87	87	87		
	3	102	96	91	87	100	94	90	86	92	88	85	89	86	83	87	85	82	81	81	81	81	81	81		
	4	97	89	84	80	95	88	83	79	86	82	78	84	80	77	82	79	76	75	75	75	75	75	75		
	5	92	84	78	73	90	83	77	73	81	76	72	79	75	72	78	74	71	70	70	70	70	70	70		
	6	87	78	72	68	86	77	72	68	76	71	67	75	70	67	73	69	66	65	65	65	65	65	65		
	7	83	73	67	63	81	73	67	63	71	66	63	70	66	62	69	65	62	60	60	60	60	60	60		
	8	79	69	63	59	77	68	63	59	67	62	58	66	62	58	65	61	58	56	56	56	56	56	56		
	9	75	65	59	55	74	64	59	55	63	58	55	63	58	54	62	57	54	53	53	53	53	53	53		
	10	71	61	55	51	70	61	55	51	60	55	51	59	54	51	58	54	51	50	50	50	50	50	50		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	24529	24529	24529
5°	24324	24342	24324
10°	23714	23753	23753
15°	22898	22836	22960
20°	21988	21736	22053
25°	20247	20404	20447
30°	15785	18773	16382
35°	8005	15910	8294
40°	3642	10404	3642
45°	1407	3915	1382
50°	214	1239	214
55°	68	240	68
60°	43	43	43
65°	51	0	51
70°	0	0	63
75°	0	0	83
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 3915 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.2	9.4
10°-20°	144.3	25.5
20°-30°	194.5	34.3
30°-40°	136.7	24.1
40°-50°	34.9	6.2
50°-60°	2.4	0.4
60°-70°	0.3	0.1
70°-80°	0.0	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°	391.9	69.2
0°-40°	528.7	93.3
0°-60°	566.0	99.9
0°-90°	566.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	566.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	570	570	570	570	570	
5°	563	564	563	564	563	53
15°	514	513	512	514	515	145
25°	426	428	430	431	430	190
35°	152	202	303	207	158	102
45°	23	35	64	35	23	20
55°	1	1	3	1	1	1
65°	0	0	0	0	0	0
75°	0	0	0	0	0	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°	569.7	569.7	569.7	569.7	569.7
1°	569.3	569.7	570.2	570.2	569.7
2°	569.7	568.3	571.1	569.7	570.2
3°	569.7	566.9	568.3	569.3	568.8
4°	567.4	565.5	566.9	566.5	565.5
5°	562.8	563.7	563.2	563.7	562.8
6°	560.0	560.9	561.8	560.5	559.1
7°	557.7	557.2	557.7	558.6	558.6
8°	553.5	554.4	553.5	554.0	552.6
9°	548.9	548.9	548.9	549.8	548.4
10°	542.4	544.7	543.3	544.3	543.3
11°	539.2	538.2	538.2	538.7	538.2
12°	531.3	532.2	531.8	532.7	534.1
13°	527.1	527.6	525.7	528.1	528.1
14°	520.7	520.2	521.1	520.7	521.6
15°	513.7	512.8	512.3	513.7	515.1
16°	508.6	506.3	504.9	506.8	508.6
17°	501.2	498.9	497.1	500.8	501.2
18°	493.8	492.9	488.3	492.9	495.2
19°	487.8	484.6	480.4	485.5	488.3
20°	479.9	477.2	474.4	477.2	481.3
22.5°	457.3	454.9	452.6	455.9	458.2
25°	426.2	427.6	429.5	430.9	430.4
27.5°	382.3	394.8	406.3	398.9	389.2
30°	317.5	349.0	377.6	354.0	329.5
32.5°	230.0	283.7	343.4	294.3	232.3
35°	152.3	201.8	302.7	206.9	157.8
37.5°	99.0	135.6	252.7	136.1	103.7
40°	64.8	88.4	185.1	90.2	64.8
42.5°	39.8	56.0	112.5	58.3	39.8
45°	23.1	34.7	64.3	35.2	22.7
47.5°	10.6	19.0	36.6	18.5	11.1
50°	3.2	8.3	18.5	8.3	3.2
52.5°	1.4	2.3	8.8	2.3	1.4
55°	0.9	0.9	3.2	0.9	0.9
57.5°	0.9	0.5	0.9	0.9	0.9
60°	0.5	0.5	0.5	0.5	0.5
62.5°	0.5	0.5	0.5	0.5	0.5
65°	0.5	0.5	0.0	0.5	0.5
67.5°	0.5	0.0	0.0	0.0	0.5
70°	0.0	0.0	0.0	0.0	0.5
72.5°	0.0	0.0	0.0	0.0	0.5
75°	0.0	0.0	0.0	0.0	0.5



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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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