

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: P838372

Luminaire Tested: HCSQ610D010-HM60525940-61SQMB

Issue Date: 5/21/2024

Test Information

Test Method: LM-79-2019
Report Number: P838372
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-HM60525940-61SQMB
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, MATTE BLACK TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: -

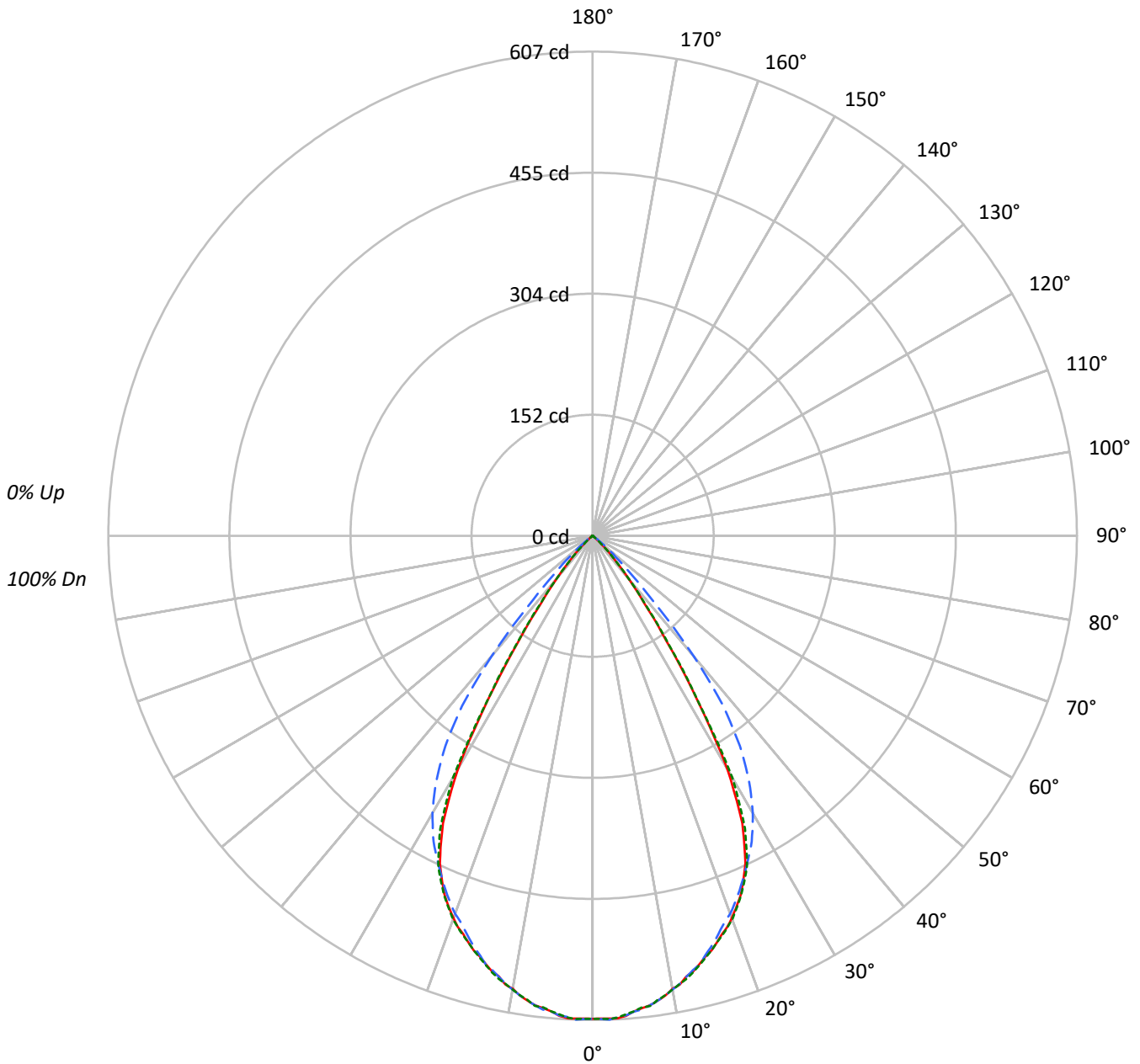
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 602.1 lumens
Efficiency: N/A
Efficacy: 60.8 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								
1	114	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°	26079	26079	26079
5°	25859	25880	25859
10°	25209	25253	25253
15°	24342	24280	24409
20°	23377	23106	23446
25°	21525	21692	21739
30°	16779	19961	17416
35°	8510	16914	8820
40°	3873	11061	3873
45°	1498	4165	1467
50°	228	1320	228
55°	75	255	75
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: 4165 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.6	9.4
10°-20°	153.4	25.5
20°-30°	206.8	34.3
30°-40°	145.4	24.1
40°-50°	37.1	6.2
50°-60°	2.6	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°	416.7	69.2
0°-40°	562.0	93.3
0°-60°	601.7	99.9
0°-90°	602.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	602.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	606	606	606	606	606	
5°	598	599	599	599	598	57
15°	546	545	545	546	548	154
25°	453	455	457	458	458	202
35°	162	214	322	220	168	109
45°	25	37	68	37	24	21
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°	605.7	605.7	605.7	605.7	605.7
1°	605.2	605.7	606.2	606.2	605.7
2°	605.7	604.2	607.1	605.7	606.2
3°	605.7	602.7	604.2	605.2	604.7
4°	603.2	601.2	602.7	602.2	601.2
5°	598.3	599.3	598.8	599.3	598.3
6°	595.3	596.3	597.3	595.8	594.4
7°	592.9	592.4	592.9	593.9	593.9
8°	588.4	589.4	588.4	588.9	587.5
9°	583.5	583.5	583.5	584.5	583.0
10°	576.6	579.1	577.6	578.6	577.6
11°	573.2	572.2	572.2	572.7	572.2
12°	564.8	565.8	565.3	566.3	567.8
13°	560.4	560.9	558.9	561.4	561.4
14°	553.5	553.0	554.0	553.5	554.5
15°	546.1	545.2	544.7	546.1	547.6
16°	540.7	538.3	536.8	538.8	540.7
17°	532.9	530.4	528.4	532.4	532.9
18°	525.0	524.0	519.1	524.0	526.5
19°	518.6	515.1	510.7	516.1	519.1
20°	510.2	507.3	504.3	507.3	511.7
22.5°	486.1	483.6	481.2	484.6	487.1
25°	453.1	454.6	456.6	458.1	457.6
27.5°	406.4	419.7	432.0	424.1	413.8
30°	337.5	371.0	401.5	376.4	350.3
32.5°	244.5	301.6	365.1	312.9	247.0
35°	161.9	214.5	321.8	219.9	167.8
37.5°	105.3	144.2	268.6	144.7	110.2
40°	68.9	94.0	196.8	95.9	68.9
42.5°	42.3	59.5	119.6	62.0	42.3
45°	24.6	36.9	68.4	37.4	24.1
47.5°	11.3	20.2	38.9	19.7	11.8
50°	3.4	8.9	19.7	8.9	3.4
52.5°	1.5	2.5	9.3	2.5	1.5
55°	1.0	1.0	3.4	1.0	1.0
57.5°	1.0	0.5	1.0	1.0	1.0
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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