

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: P838352

Luminaire Tested: HCSQ610D010-HM60525840-61SQMB

Issue Date: 5/21/2024



Test Information

Test Method: LM-79-2019
Report Number: P838352
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-HM60525840-61SQMB
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, MATTE BLACK TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT
Ballast/Driver: -

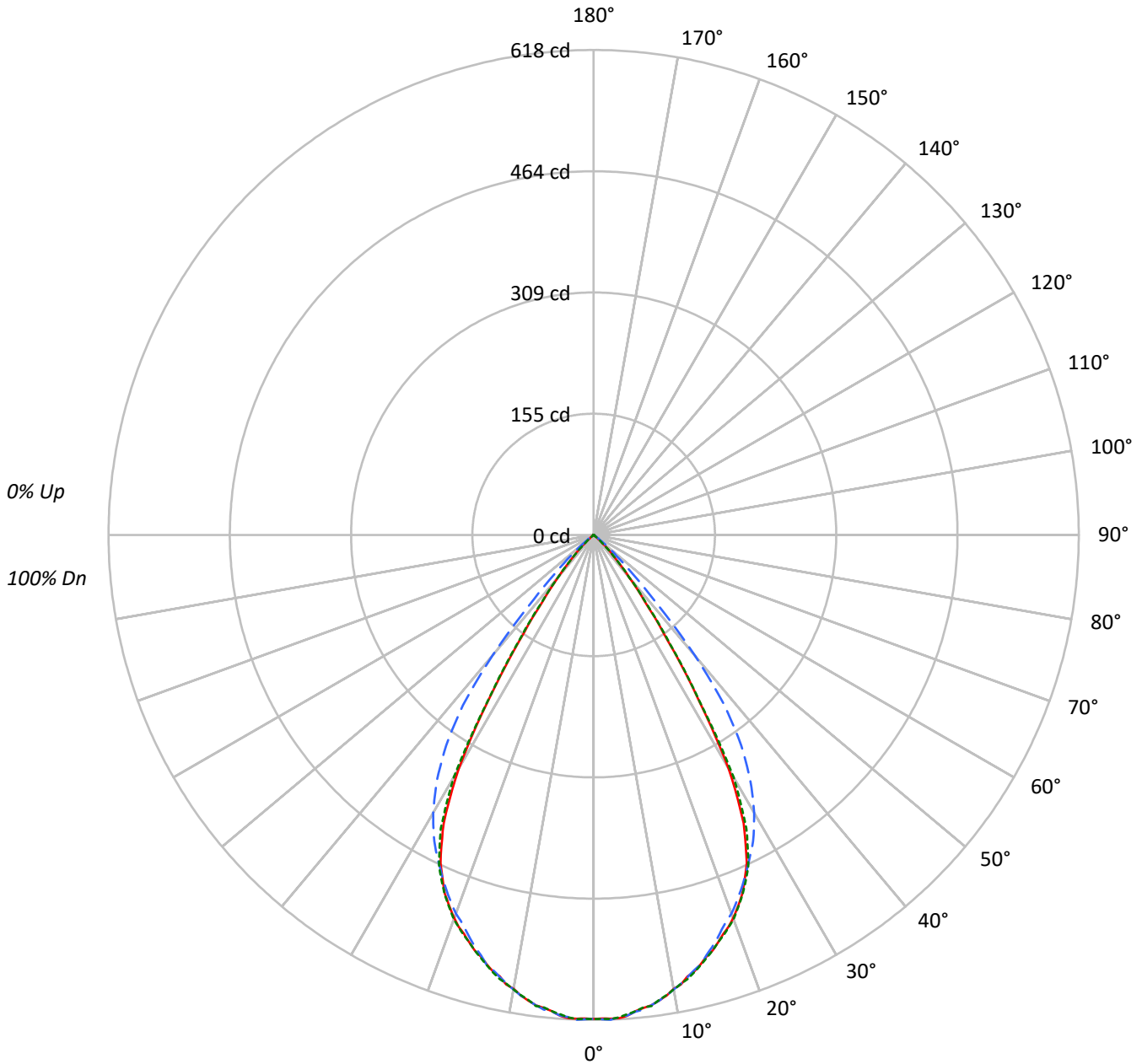
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 613.1 lumens
Efficiency: N/A
Efficacy: 61.9 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 (Ain): 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	114	111	108	106	111	109	106	104	105	103	101	101	99	98	97	96	95	93					93			
2	108	103	99	96	106	101	98	94	98	95	92	95	93	90	92	90	89	87					87			
3	102	96	91	87	100	94	90	86	92	88	85	89	86	83	87	85	82	81					81			
4	97	89	84	80	95	88	83	79	86	82	78	84	80	77	82	79	76	75					75			
5	92	84	78	73	90	83	77	73	81	76	72	79	75	72	78	74	71	70					70			
6	87	78	72	68	86	77	72	68	76	71	67	75	70	67	73	69	66	65					65			
7	83	73	67	63	81	73	67	63	71	66	63	70	66	62	69	65	62	60					60			
8	79	69	63	59	77	68	63	59	67	62	58	66	62	58	65	61	58	56					56			
9	75	65	59	55	74	64	59	55	63	58	55	63	58	54	62	57	54	53					53			
10	71	61	55	51	70	61	55	51	60	55	51	59	54	51	58	54	51	50					50			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	26557	26557	26557
5°	26334	26356	26334
10°	25672	25716	25716
15°	24792	24725	24859
20°	23807	23533	23876
25°	21924	22091	22138
30°	17088	20329	17739
35°	8662	17224	8983
40°	3940	11264	3940
45°	1528	4238	1498
50°	234	1340	234
55°	75	263	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: 4238 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.6	9.4
10°-20°	156.2	25.5
20°-30°	210.5	34.3
30°-40°	148.0	24.1
40°-50°	37.8	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°	424.3	69.2
0°-40°	572.4	93.4
0°-60°	612.8	99.9
0°-90°	613.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	613.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	617	617	617	617	617	
5°	609	610	610	610	609	58
15°	556	555	555	556	558	157
25°	462	463	465	466	466	206
35°	165	218	328	224	171	111
45°	25	38	70	38	25	22
55°	1	1	4	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°	616.8	616.8	616.8	616.8	616.8
1°	616.3	616.8	617.3	617.3	616.8
2°	616.8	615.3	618.3	616.8	617.3
3°	616.8	613.8	615.3	616.3	615.8
4°	614.3	612.3	613.8	613.3	612.3
5°	609.3	610.3	609.8	610.3	609.3
6°	606.3	607.3	608.3	606.8	605.3
7°	603.8	603.3	603.8	604.8	604.8
8°	599.3	600.3	599.3	599.8	598.3
9°	594.2	594.2	594.2	595.3	593.7
10°	587.2	589.7	588.2	589.2	588.2
11°	583.7	582.7	582.7	583.2	582.7
12°	575.2	576.2	575.7	576.7	578.2
13°	570.7	571.2	569.2	571.7	571.7
14°	563.7	563.2	564.2	563.7	564.7
15°	556.2	555.2	554.7	556.2	557.7
16°	550.7	548.2	546.6	548.7	550.7
17°	542.6	540.1	538.1	542.1	542.6
18°	534.6	533.6	528.6	533.6	536.1
19°	528.1	524.6	520.1	525.6	528.6
20°	519.6	516.6	513.6	516.6	521.1
22.5°	495.0	492.5	490.0	493.5	496.0
25°	461.5	463.0	465.0	466.5	466.0
27.5°	413.9	427.4	439.9	431.9	421.4
30°	343.7	377.8	408.9	383.3	356.8
32.5°	249.0	307.1	371.8	318.7	251.5
35°	164.8	218.5	327.7	224.0	170.9
37.5°	107.2	146.8	273.6	147.3	112.2
40°	70.1	95.7	200.4	97.7	70.1
42.5°	43.1	60.6	121.8	63.1	43.1
45°	25.1	37.6	69.6	38.1	24.6
47.5°	11.5	20.5	39.6	20.0	12.0
50°	3.5	9.0	20.0	9.0	3.5
52.5°	1.5	2.5	9.5	2.5	1.5
55°	1.0	1.0	3.5	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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