

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: P838357

Luminaire Tested: HCSQ610D010-HM60525927-61SQMB

Issue Date: 5/21/2024

Test Information

Test Method: LM-79-2019
Report Number: P838357
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-HM60525927-61SQMB
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, MATTE BLACK TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: -

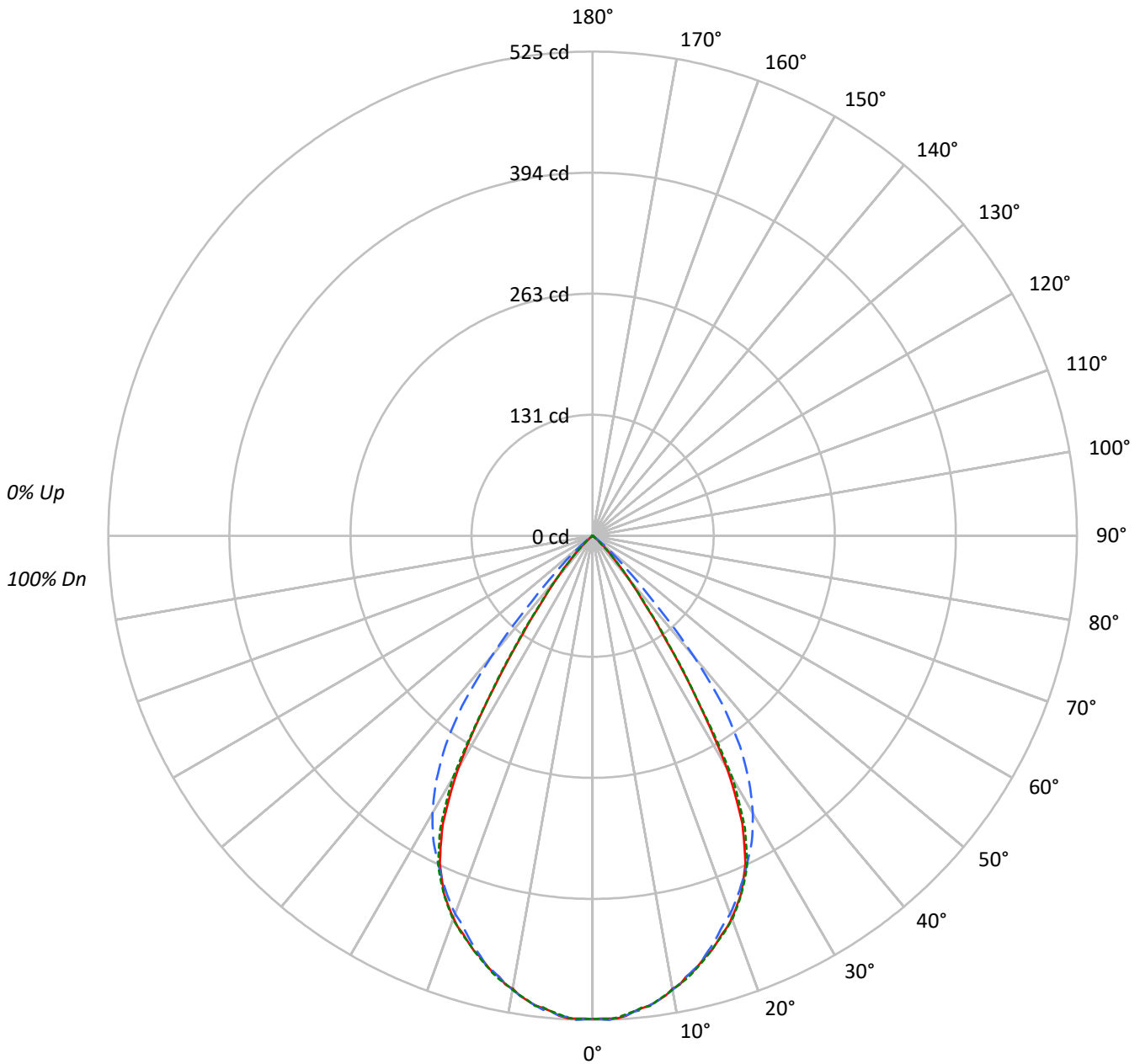
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 520.8 lumens
Efficiency: N/A
Efficacy: 52.6 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									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	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°	22557	22557	22557
5°	22366	22388	22366
10°	21807	21847	21847
15°	21057	20999	21115
20°	20220	19986	20279
25°	18623	18765	18803
30°	14517	17267	15064
35°	7359	14628	7627
40°	3350	9566	3350
45°	1297	3605	1273
50°	201	1139	201
55°	68	225	68
60°	34	34	34
65°	41	0	41
70°	0	0	50
75°	0	0	67
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 3605 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.9	9.4
10°-20°	132.7	25.5
20°-30°	178.8	34.3
30°-40°	125.7	24.1
40°-50°	32.1	6.2
50°-60°	2.2	0.4
60°-70°	0.3	0.0
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°	360.4	69.2
0°-40°	486.2	93.4
0°-60°	520.5	99.9
0°-90°	520.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	520.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	524	524	524	524	524	
5°	518	518	518	518	518	49
15°	472	472	471	472	474	133
25°	392	393	395	396	396	175
35°	140	186	278	190	145	94
45°	21	32	59	32	21	19
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°	523.9	523.9	523.9	523.9	523.9
1°	523.5	523.9	524.3	524.3	523.9
2°	523.9	522.6	525.2	523.9	524.3
3°	523.9	521.4	522.6	523.5	523.1
4°	521.8	520.1	521.4	520.9	520.1
5°	517.5	518.4	518.0	518.4	517.5
6°	515.0	515.8	516.7	515.4	514.1
7°	512.8	512.4	512.8	513.7	513.7
8°	509.0	509.9	509.0	509.4	508.2
9°	504.8	504.8	504.8	505.6	504.3
10°	498.8	500.9	499.7	500.5	499.7
11°	495.8	495.0	495.0	495.4	495.0
12°	488.6	489.4	489.0	489.9	491.1
13°	484.8	485.2	483.5	485.6	485.6
14°	478.8	478.4	479.2	478.8	479.7
15°	472.4	471.6	471.1	472.4	473.7
16°	467.7	465.6	464.3	466.0	467.7
17°	460.9	458.8	457.1	460.5	460.9
18°	454.1	453.3	449.0	453.3	455.4
19°	448.6	445.6	441.8	446.5	449.0
20°	441.3	438.8	436.2	438.8	442.6
22.5°	420.5	418.4	416.2	419.2	421.3
25°	392.0	393.3	395.0	396.2	395.8
27.5°	351.5	363.0	373.7	366.9	357.9
30°	292.0	320.9	347.3	325.6	303.0
32.5°	211.5	260.9	315.8	270.7	213.7
35°	140.0	185.6	278.3	190.2	145.1
37.5°	91.1	124.7	232.4	125.1	95.3
40°	59.6	81.3	170.2	83.0	59.6
42.5°	36.6	51.5	103.4	53.6	36.6
45°	21.3	31.9	59.2	32.3	20.9
47.5°	9.8	17.4	33.6	17.0	10.2
50°	3.0	7.7	17.0	7.7	3.0
52.5°	1.3	2.1	8.1	2.1	1.3
55°	0.9	0.9	3.0	0.9	0.9
57.5°	0.9	0.4	0.9	0.9	0.9
60°	0.4	0.4	0.4	0.4	0.4
62.5°	0.4	0.4	0.4	0.4	0.4
65°	0.4	0.4	0.0	0.4	0.4
67.5°	0.4	0.0	0.0	0.0	0.4
70°	0.0	0.0	0.0	0.0	0.4
72.5°	0.0	0.0	0.0	0.0	0.4
75°	0.0	0.0	0.0	0.0	0.4



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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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