

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: P838282

Luminaire Tested: HCSQ605D010-HM60525930-61SQMB

Issue Date: 5/21/2024



Test Information

Test Method: LM-79-2019
Report Number: P838282
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: HCSQ605D010-HM60525930-61SQMB
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, MATTE BLACK TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: -

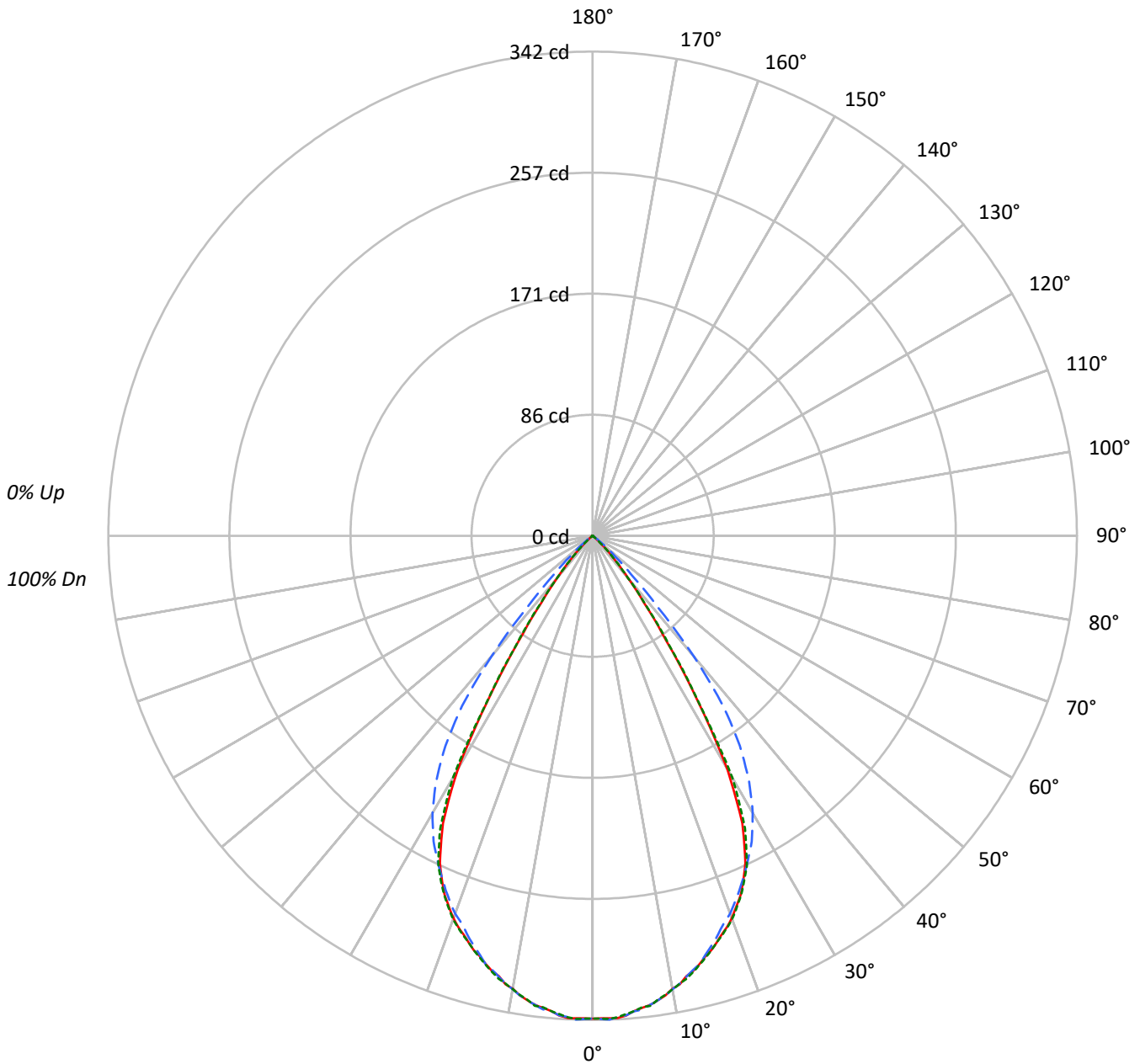
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 339.1 lumens
Efficiency: N/A
Efficacy: 56.5 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): 6
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°	14686	14686	14686
5°	14565	14574	14565
10°	14200	14222	14222
15°	13711	13675	13747
20°	13168	13013	13205
25°	12124	12219	12242
30°	9451	11241	9809
35°	4794	9524	4967
40°	2181	6228	2181
45°	846	2344	828
50°	127	744	127
55°	45	143	45
60°	26	26	26
65°	31	0	31
70°	0	0	38
75°	0	0	50
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 2344 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	31.9	9.4
10°-20°	86.4	25.5
20°-30°	116.4	34.3
30°-40°	81.9	24.1
40°-50°	20.9	6.2
50°-60°	1.5	0.4
60°-70°	0.2	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°	234.7	69.2
0°-40°	316.6	93.3
0°-60°	338.9	99.9
0°-90°	339.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	339.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	341	341	341	341	341	
5°	337	338	337	338	337	32
15°	308	307	307	308	308	87
25°	255	256	257	258	258	114
35°	91	121	181	124	94	61
45°	14	21	38	21	14	12
55°	1	1	2	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°	341.1	341.1	341.1	341.1	341.1
1°	340.8	341.1	341.4	341.4	341.1
2°	341.1	340.3	342.0	341.1	341.4
3°	341.1	339.5	340.3	340.8	340.6
4°	339.7	338.6	339.5	339.2	338.6
5°	337.0	337.5	337.2	337.5	337.0
6°	335.3	335.9	336.4	335.6	334.8
7°	333.9	333.6	333.9	334.5	334.5
8°	331.4	332.0	331.4	331.7	330.9
9°	328.7	328.7	328.7	329.2	328.4
10°	324.8	326.2	325.3	325.9	325.3
11°	322.8	322.3	322.3	322.6	322.3
12°	318.1	318.7	318.4	319.0	319.8
13°	315.6	315.9	314.8	316.2	316.2
14°	311.8	311.5	312.0	311.8	312.3
15°	307.6	307.0	306.8	307.6	308.4
16°	304.5	303.2	302.3	303.4	304.5
17°	300.1	298.7	297.6	299.8	300.1
18°	295.7	295.1	292.4	295.1	296.5
19°	292.1	290.1	287.6	290.7	292.4
20°	287.4	285.7	284.0	285.7	288.2
22.5°	273.8	272.4	271.0	273.0	274.3
25°	255.2	256.1	257.2	258.0	257.7
27.5°	228.9	236.4	243.3	238.9	233.1
30°	190.1	208.9	226.1	212.0	197.3
32.5°	137.7	169.9	205.6	176.2	139.1
35°	91.2	120.8	181.2	123.9	94.5
37.5°	59.3	81.2	151.3	81.5	62.1
40°	38.8	52.9	110.8	54.0	38.8
42.5°	23.8	33.5	67.3	34.9	23.8
45°	13.9	20.8	38.5	21.1	13.6
47.5°	6.4	11.4	21.9	11.1	6.7
50°	1.9	5.0	11.1	5.0	1.9
52.5°	0.8	1.4	5.3	1.4	0.8
55°	0.6	0.6	1.9	0.6	0.6
57.5°	0.6	0.3	0.6	0.6	0.6
60°	0.3	0.3	0.3	0.3	0.3
62.5°	0.3	0.3	0.3	0.3	0.3
65°	0.3	0.3	0.0	0.3	0.3
67.5°	0.3	0.0	0.0	0.0	0.3
70°	0.0	0.0	0.0	0.0	0.3
72.5°	0.0	0.0	0.0	0.0	0.3
75°	0.0	0.0	0.0	0.0	0.3



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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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