

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: P838362

Luminaire Tested: HCSQ610D010-HM60525930-61SQMB

Issue Date: 5/21/2024



Test Information

Test Method: LM-79-2019
Report Number: P838362
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-HM60525930-61SQMB
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, MATTE BLACK TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: -

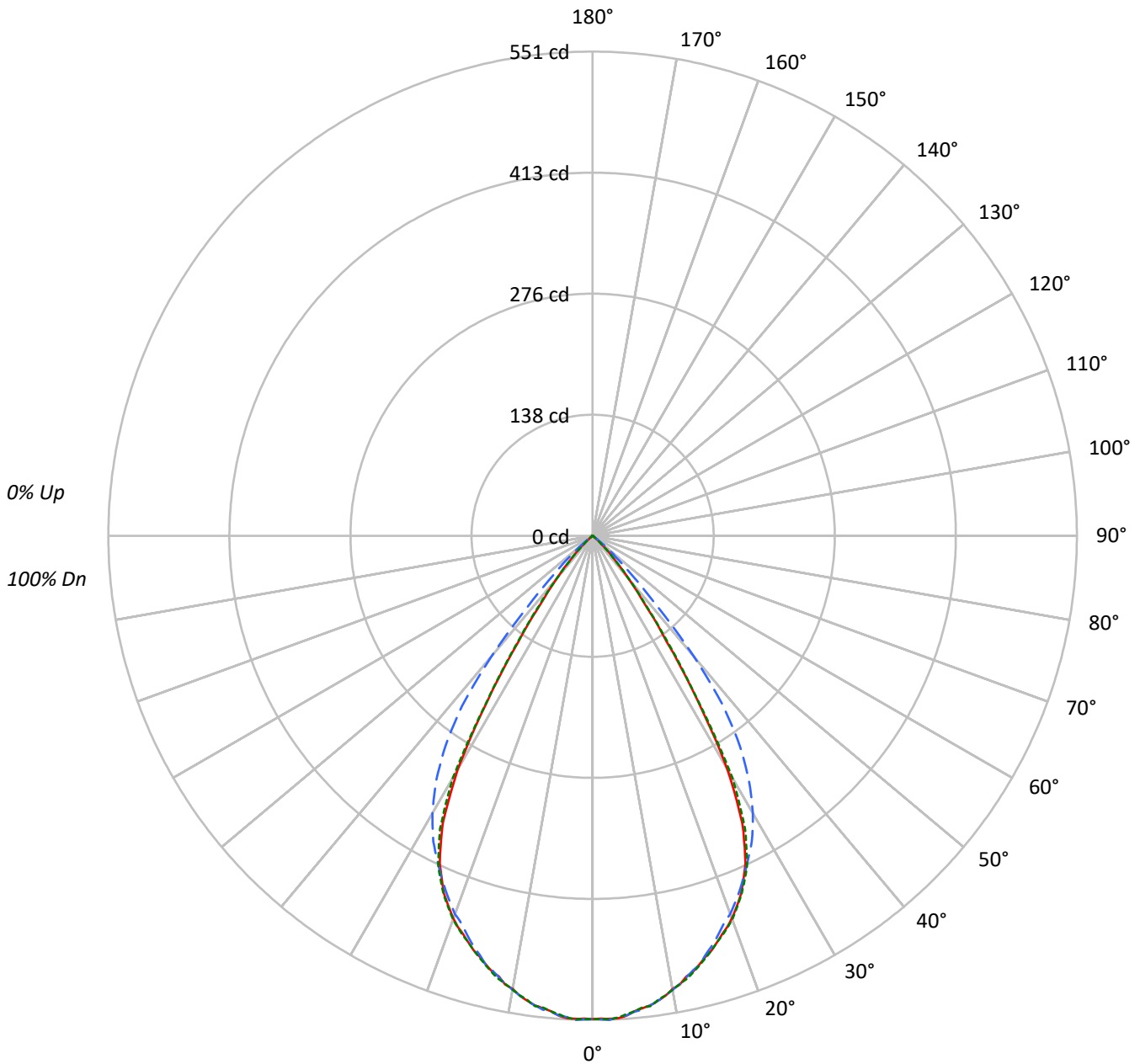
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 546.7 lumens
Efficiency: N/A
Efficacy: 55.2 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	114	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	84	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°	23681	23681	23681
5°	23481	23503	23481
10°	22896	22935	22935
15°	22109	22047	22167
20°	21228	20985	21292
25°	19549	19696	19739
30°	15238	18127	15815
35°	7727	15358	8010
40°	3518	10044	3518
45°	1358	3781	1333
50°	208	1199	208
55°	68	233	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: 3781 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.4	9.4
10°-20°	139.3	25.5
20°-30°	187.8	34.3
30°-40°	132.0	24.1
40°-50°	33.7	6.2
50°-60°	2.3	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°	378.4	69.2
0°-40°	510.4	93.4
0°-60°	546.4	99.9
0°-90°	546.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	546.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	550	550	550	550	550	
5°	543	544	544	544	543	51
15°	496	495	495	496	497	140
25°	412	413	415	416	416	184
35°	147	195	292	200	152	99
45°	22	34	62	34	22	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°	550.0	550.0	550.0	550.0	550.0
1°	549.6	550.0	550.5	550.5	550.0
2°	550.0	548.7	551.4	550.0	550.5
3°	550.0	547.3	548.7	549.6	549.1
4°	547.8	546.0	547.3	546.9	546.0
5°	543.3	544.2	543.8	544.2	543.3
6°	540.6	541.5	542.4	541.1	539.7
7°	538.4	538.0	538.4	539.3	539.3
8°	534.4	535.3	534.4	534.8	533.5
9°	529.9	529.9	529.9	530.8	529.5
10°	523.7	525.9	524.6	525.4	524.6
11°	520.5	519.6	519.6	520.1	519.6
12°	512.9	513.8	513.4	514.3	515.6
13°	508.9	509.4	507.6	509.8	509.8
14°	502.7	502.2	503.1	502.7	503.6
15°	496.0	495.1	494.6	496.0	497.3
16°	491.0	488.8	487.5	489.3	491.0
17°	483.9	481.7	479.9	483.4	483.9
18°	476.7	475.9	471.4	475.9	478.1
19°	470.9	467.8	463.8	468.7	471.4
20°	463.3	460.7	458.0	460.7	464.7
22.5°	441.4	439.2	437.0	440.1	442.3
25°	411.5	412.9	414.6	416.0	415.5
27.5°	369.1	381.1	392.3	385.2	375.8
30°	306.5	336.9	364.6	341.8	318.1
32.5°	222.1	273.9	331.5	284.2	224.3
35°	147.0	194.8	292.2	199.7	152.4
37.5°	95.6	130.9	244.0	131.4	100.1
40°	62.6	85.3	178.7	87.1	62.6
42.5°	38.4	54.1	108.6	56.3	38.4
45°	22.3	33.5	62.1	34.0	21.9
47.5°	10.3	18.3	35.3	17.9	10.7
50°	3.1	8.0	17.9	8.0	3.1
52.5°	1.3	2.2	8.5	2.2	1.3
55°	0.9	0.9	3.1	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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Scaled Data Report



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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