

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: P838302

Luminaire Tested: HCSQ607D010-HM60525830-61SQMB

Issue Date: 5/21/2024

Test Information

Test Method: LM-79-2019
Report Number: P838302
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: HCSQ607D010-HM60525830-61SQMB
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, MATTE BLACK TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT
Ballast/Driver: -

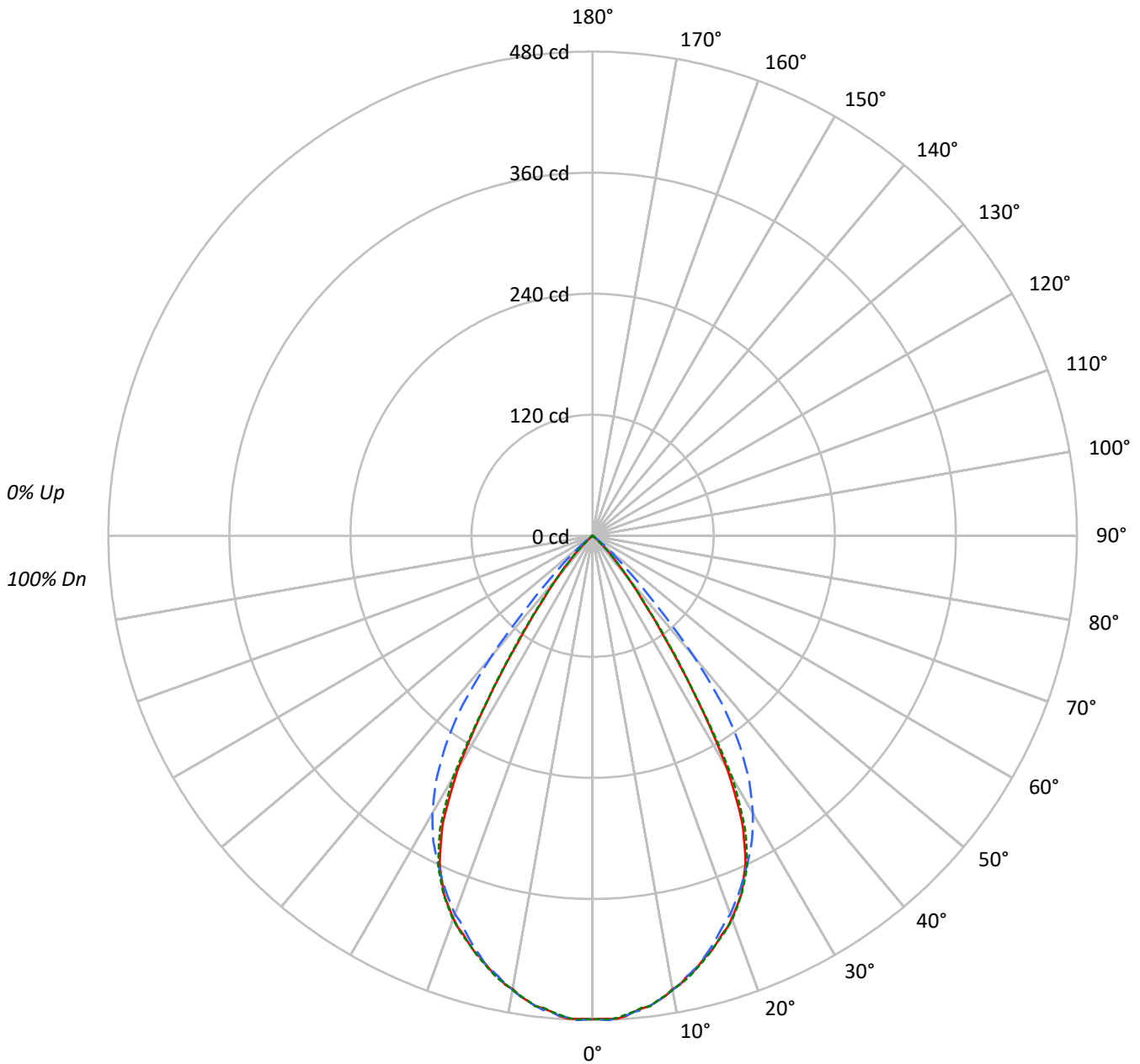
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 476.4 lumens
Efficiency: N/A
Efficacy: 59.6 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): 8
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	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°	20637	20637	20637
5°	20460	20478	20460
10°	19949	19984	19984
15°	19265	19212	19314
20°	18497	18286	18552
25°	17036	17164	17202
30°	13279	15795	13781
35°	6733	13382	6980
40°	3063	8751	3063
45°	1187	3294	1163
50°	181	1045	181
55°	60	203	60
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: 3294 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.8	9.4
10°-20°	121.4	25.5
20°-30°	163.6	34.3
30°-40°	115.0	24.1
40°-50°	29.4	6.2
50°-60°	2.0	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°	329.7	69.2
0°-40°	444.7	93.3
0°-60°	476.2	99.9
0°-90°	476.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	476.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	479	479	479	479	479	
5°	473	474	474	474	473	45
15°	432	431	431	432	433	122
25°	359	360	361	362	362	160
35°	128	170	255	174	133	86
45°	20	29	54	30	19	17
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°	479.3	479.3	479.3	479.3	479.3
1°	478.9	479.3	479.7	479.7	479.3
2°	479.3	478.1	480.4	479.3	479.7
3°	479.3	476.9	478.1	478.9	478.5
4°	477.3	475.8	476.9	476.6	475.8
5°	473.4	474.2	473.8	474.2	473.4
6°	471.1	471.9	472.7	471.5	470.3
7°	469.2	468.8	469.2	469.9	469.9
8°	465.6	466.4	465.6	466.0	464.9
9°	461.8	461.8	461.8	462.5	461.4
10°	456.3	458.3	457.1	457.9	457.1
11°	453.6	452.8	452.8	453.2	452.8
12°	447.0	447.7	447.4	448.1	449.3
13°	443.5	443.8	442.3	444.2	444.2
14°	438.0	437.6	438.4	438.0	438.8
15°	432.2	431.4	431.0	432.2	433.3
16°	427.9	425.9	424.8	426.3	427.9
17°	421.7	419.7	418.1	421.3	421.7
18°	415.4	414.6	410.8	414.6	416.6
19°	410.4	407.6	404.1	408.4	410.8
20°	403.7	401.4	399.1	401.4	404.9
22.5°	384.7	382.7	380.8	383.5	385.4
25°	358.6	359.7	361.3	362.5	362.1
27.5°	321.6	332.1	341.8	335.6	327.4
30°	267.1	293.6	317.7	297.8	277.2
32.5°	193.5	238.7	288.9	247.6	195.4
35°	128.1	169.8	254.6	174.0	132.8
37.5°	83.3	114.1	212.6	114.5	87.2
40°	54.5	74.4	155.7	75.9	54.5
42.5°	33.5	47.1	94.6	49.1	33.5
45°	19.5	29.2	54.1	29.6	19.1
47.5°	9.0	16.0	30.8	15.6	9.3
50°	2.7	7.0	15.6	7.0	2.7
52.5°	1.2	1.9	7.4	1.9	1.2
55°	0.8	0.8	2.7	0.8	0.8
57.5°	0.8	0.4	0.8	0.8	0.8
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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