

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



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: P838306

Luminaire Tested: HCSQ607D010-HM60525835-61SQLWW

Issue Date: 5/21/2024

Test Information

Test Method: LM-79-2019
Report Number: P838306
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2309-166-5)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 5/21/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO COMMERCIAL
Catalog Number: HCSQ607D010-HM60525835-61SQLWW
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, LENSED WALLWASH TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT
Ballast/Driver: -

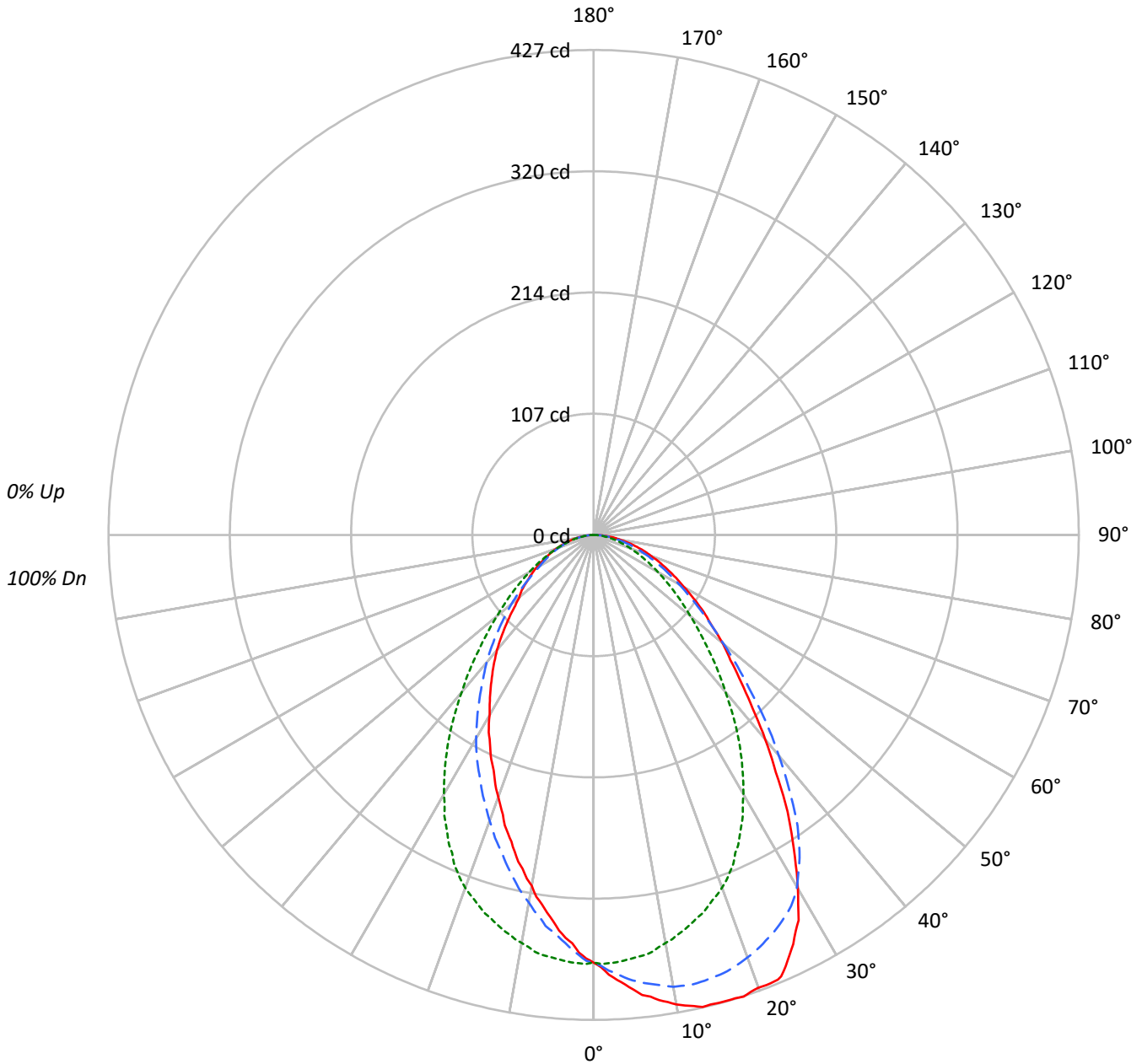
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 712.2 lumens
Efficiency: N/A
Efficacy: 89.0 lumens/watt
Spacing Criteria (0/90/45): 1.11 / 1.08 / 1.17
Luminous Opening: Rectangular (W 0.33' x L: 0.33' 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					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	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				
1	110	106	103	99	108	104	101	98	100	97	95	96	94	92	92	91	89	87				
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75				
3	94	85	78	72	92	83	77	71	80	75	70	78	73	69	75	71	68	66				
4	87	76	69	63	85	75	68	62	73	66	62	71	65	61	68	64	60	58				
5	81	69	61	55	79	68	61	55	66	60	55	64	59	54	63	58	53	51				
6	75	63	55	49	74	62	55	49	61	54	49	59	53	48	58	52	48	46				
7	70	58	50	44	69	57	50	44	56	49	44	54	48	44	53	48	43	42				
8	66	53	46	40	64	53	45	40	51	45	40	50	44	40	49	44	39	38				
9	62	49	42	37	60	49	42	37	48	41	36	47	41	36	46	40	36	34				
10	58	46	39	34	57	45	38	34	44	38	34	44	38	33	43	37	33	32				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	36483	36483	36483	36483	36483
5°	39093	38290	36428	34542	33997
10°	41296	39746	35895	32324	30859
15°	42785	40483	35062	29967	28062
20°	43732	40820	34082	27598	25320
25°	43622	40816	32195	25301	22928
30°	40237	40030	29498	23144	20482
35°	35195	37028	26420	20696	18555
40°	29731	32045	22839	18514	16731
45°	25140	26852	19550	16235	14646
50°	22305	22516	16774	14167	12886
55°	19947	19271	14508	12194	12127
60°	17806	16798	12652	10540	11412
65°	16367	14923	11003	9788	10453
70°	15069	13369	9715	9149	9715
75°	14186	11921	8459	8309	8908
80°	13054	10683	7420	7643	8089
85°	13005	9670	6225	6225	7225

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 40°
 Vertical Angle: 45°
 Luminance: 27072 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	35.5	5.0
10°-20°	99.0	13.9
20°-30°	141.2	19.8
30°-40°	145.5	20.4
40°-50°	117.2	16.5
50°-60°	82.8	11.6
60°-70°	53.7	7.5
70°-80°	28.8	4.0
80°-90°	8.3	1.2
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°	275.8	38.7
0°-40°	421.3	59.2
0°-60°	621.3	87.2
0°-90°	712.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	712.2	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	377	377	377	377	377	
5°	402	394	375	355	350	39
15°	427	404	350	299	280	121
25°	408	382	301	237	214	186
35°	298	313	223	175	157	185
45°	184	196	143	118	107	143
55°	118	114	86	72	72	106
65°	71	65	48	43	46	71
75°	38	32	23	22	24	40
85°	12	9	6	6	6	13
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
0°	376.6	376.6	376.6	376.6	376.6	376.6	376.6	376.6	376.6	376.6	376.6
1°	380.6	382.3	381.1	381.1	379.8	379.4	380.2	379.0	378.6	377.8	376.2
2°	387.5	386.3	385.9	386.3	383.9	383.9	382.7	380.2	379.0	377.4	373.0
3°	392.3	391.5	390.7	390.3	387.9	385.9	384.3	381.5	379.0	377.0	370.6
4°	396.8	396.8	396.0	394.4	391.9	389.5	386.3	383.1	379.4	375.8	367.3
5°	402.0	402.4	398.8	398.4	395.6	391.9	388.3	383.9	379.4	374.6	365.3
6°	407.3	405.2	404.4	401.6	397.6	394.4	389.9	385.1	379.0	373.4	360.9
7°	409.7	409.3	407.3	404.4	400.8	395.6	391.1	384.7	378.2	372.6	357.7
8°	413.7	413.7	411.3	407.7	402.4	397.6	391.9	384.3	377.8	370.6	353.2
9°	416.5	416.5	413.3	410.1	405.2	398.8	392.3	383.9	375.8	367.3	349.2
10°	419.8	419.0	416.5	411.7	407.7	400.4	392.3	383.5	374.6	364.9	345.2
11°	422.2	421.0	418.1	414.5	408.1	400.8	392.3	383.5	373.0	362.5	341.1
12°	424.2	423.4	419.8	415.3	408.9	401.6	391.9	381.9	370.2	359.3	335.9
13°	426.6	424.2	420.6	416.5	409.3	400.8	390.3	379.4	368.1	356.5	331.5
14°	426.2	425.8	422.6	416.9	408.9	400.0	389.9	377.0	365.3	353.2	326.2
15°	426.6	426.2	422.6	417.3	408.5	398.8	388.7	375.4	362.5	349.6	321.0
16°	426.6	426.6	421.8	416.5	408.1	397.6	386.3	373.8	359.7	346.8	316.5
17°	426.6	426.6	422.6	415.3	406.9	396.8	383.9	370.6	356.5	342.7	310.1
18°	427.4	426.2	421.0	414.9	405.2	394.8	382.3	368.1	353.6	338.3	305.6
19°	425.4	424.6	420.2	412.5	404.0	392.3	379.8	365.3	350.8	334.7	300.4
20°	424.2	425.4	419.4	411.3	401.6	390.3	377.4	362.5	346.8	330.6	295.2
21°	424.6	424.2	417.7	409.3	400.0	387.5	374.6	359.3	342.3	325.8	290.3
22.5°	423.8	422.6	415.7	406.5	395.2	383.9	369.8	354.0	335.9	317.3	281.1
23°	422.2	421.0	415.7	405.6	393.6	382.3	367.3	350.8	333.5	314.5	278.6
24°	415.7	415.3	412.9	402.8	391.5	379.0	364.5	345.6	326.2	306.5	272.6
25°	408.1	408.9	407.7	401.2	388.3	375.4	360.1	339.1	319.4	301.2	265.3
26°	400.8	400.8	400.0	397.6	385.1	371.4	353.6	331.5	312.5	293.6	257.7
27°	391.5	393.1	391.5	390.3	381.9	366.9	346.8	326.2	304.8	286.3	251.2
28°	384.3	384.3	383.5	381.5	378.6	361.7	339.5	318.6	297.6	279.8	244.0
29°	371.4	373.8	374.2	374.6	374.2	354.8	332.7	310.1	289.9	270.6	237.1
30°	359.7	362.1	363.7	366.5	366.9	348.8	324.6	303.2	282.7	263.7	231.1
32.5°	327.8	332.3	336.7	341.5	344.0	330.6	304.8	281.5	260.5	243.6	212.5
35°	297.6	298.8	303.6	314.9	317.3	308.9	281.5	259.3	239.5	223.4	195.2
37.5°	263.3	265.7	272.6	285.5	286.3	279.4	260.5	234.7	216.1	202.0	177.4
40°	235.1	236.3	241.1	252.0	255.6	251.2	234.7	211.3	194.4	180.6	160.5
42.5°	206.9	208.5	214.5	223.0	228.2	223.0	208.5	188.3	171.8	161.7	144.4
45°	183.5	185.5	191.1	196.0	197.6	194.4	181.5	164.9	153.2	142.7	129.4
47.5°	163.3	165.3	169.4	171.4	173.4	170.2	160.1	146.4	134.7	126.2	114.1
50°	148.0	147.6	150.4	151.2	151.2	147.6	139.1	127.8	118.1	111.3	101.2
52.5°	130.6	131.5	133.5	132.7	132.3	129.0	121.8	112.1	104.0	98.0	88.7
55°	118.1	116.9	118.1	117.3	115.7	112.5	106.0	98.0	91.1	85.9	77.4
57.5°	104.4	104.4	104.8	103.2	101.2	97.6	91.9	85.5	79.4	75.0	68.1
60°	91.9	92.7	92.3	90.7	88.7	84.7	80.2	73.8	68.5	65.3	58.9



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
67.5°	62.5	62.5	61.3	60.1	57.3	53.6	50.4	46.4	43.5	40.7	36.7
70°	53.2	54.0	52.4	50.4	48.4	46.0	42.3	39.1	36.3	34.3	31.0
72.5°	46.0	45.6	44.4	42.3	40.7	37.9	34.7	32.3	29.8	28.2	25.8
75°	37.9	37.9	36.7	35.1	33.1	30.6	28.2	26.2	24.2	22.6	21.4
77.5°	30.2	30.6	29.4	28.2	26.6	24.2	22.2	20.6	19.0	17.7	16.9
80°	23.4	23.8	22.6	21.8	19.8	18.5	16.9	15.3	14.1	13.3	12.9
82.5°	17.7	17.3	16.5	16.1	14.5	13.3	11.7	10.9	10.1	9.3	9.3
85°	11.7	11.3	10.9	10.5	9.3	8.1	7.7	6.9	6.0	5.6	5.6
87.5°	6.0	6.0	5.6	5.2	4.8	4.0	3.6	2.8	2.4	2.4	2.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	376.6	376.6	376.6
1°	375.0	373.4	373.0
2°	370.2	367.7	368.1
3°	365.7	362.9	360.1
4°	360.1	355.6	355.6
5°	355.2	350.8	349.6
6°	350.8	343.6	341.9
7°	346.8	337.9	335.1
8°	339.9	331.1	328.2
9°	335.1	325.4	322.6
10°	328.6	319.0	313.7
11°	323.4	312.5	308.5
12°	317.7	304.4	300.4
13°	311.3	297.6	295.2
14°	305.2	291.9	287.5
15°	298.8	285.1	279.8
16°	291.9	278.2	273.4
17°	286.3	271.0	267.3
18°	280.6	264.5	258.9
19°	273.8	258.5	252.0
20°	267.7	250.8	245.6
21°	261.3	245.2	239.5
22.5°	252.4	234.3	229.0
23°	249.6	231.1	225.4
24°	243.1	224.6	219.8
25°	236.7	219.8	214.5
26°	231.1	212.5	207.7
27°	225.4	206.9	201.6
28°	219.4	200.8	196.8
29°	213.3	194.4	190.3
30°	206.9	189.9	183.1
32.5°	190.7	175.4	169.8
35°	175.0	161.7	156.9
37.5°	159.7	148.8	144.4
40°	146.4	136.7	132.3
42.5°	132.7	123.8	119.4
45°	118.5	111.3	106.9
47.5°	105.6	99.6	94.8
50°	94.0	87.9	85.5
52.5°	82.7	78.6	79.8
55°	72.2	72.2	71.8
57.5°	62.1	64.9	65.3
60°	54.4	58.1	58.9



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
67.5°	37.5	39.5	40.3
70°	32.3	33.9	34.3
72.5°	27.4	28.6	29.4
75°	22.2	23.8	23.8
77.5°	18.1	19.0	19.4
80°	13.7	14.1	14.5
82.5°	9.7	10.1	10.5
85°	5.6	6.0	6.5
87.5°	2.4	2.4	2.4
90°	0.0	0.0	0.0

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Scaled Data Report





— 0°-180° - - 45°-225° - - - - 90°-270°

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62.5°	81.5	82.3	81.0	79.0	77.0	73.4	69.4	63.7	59.7	56.5	50.8
65°	71.4	71.8	71.0	69.0	66.9	63.3	59.3	54.4	51.2	48.0	43.1

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62.5°	48.8	51.6	52.0
65°	42.7	45.2	45.6

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(END OF REPORT)