

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: P838266

Luminaire Tested: HCSQ605D010-HM60525835-61SQLWW

Issue Date: 5/21/2024

Test Information

Test Method: LM-79-2019
Report Number: P838266
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: HCSQ605D010-HM60525835-61SQLWW
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, LENSED WALLWASH TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT
Ballast/Driver: -

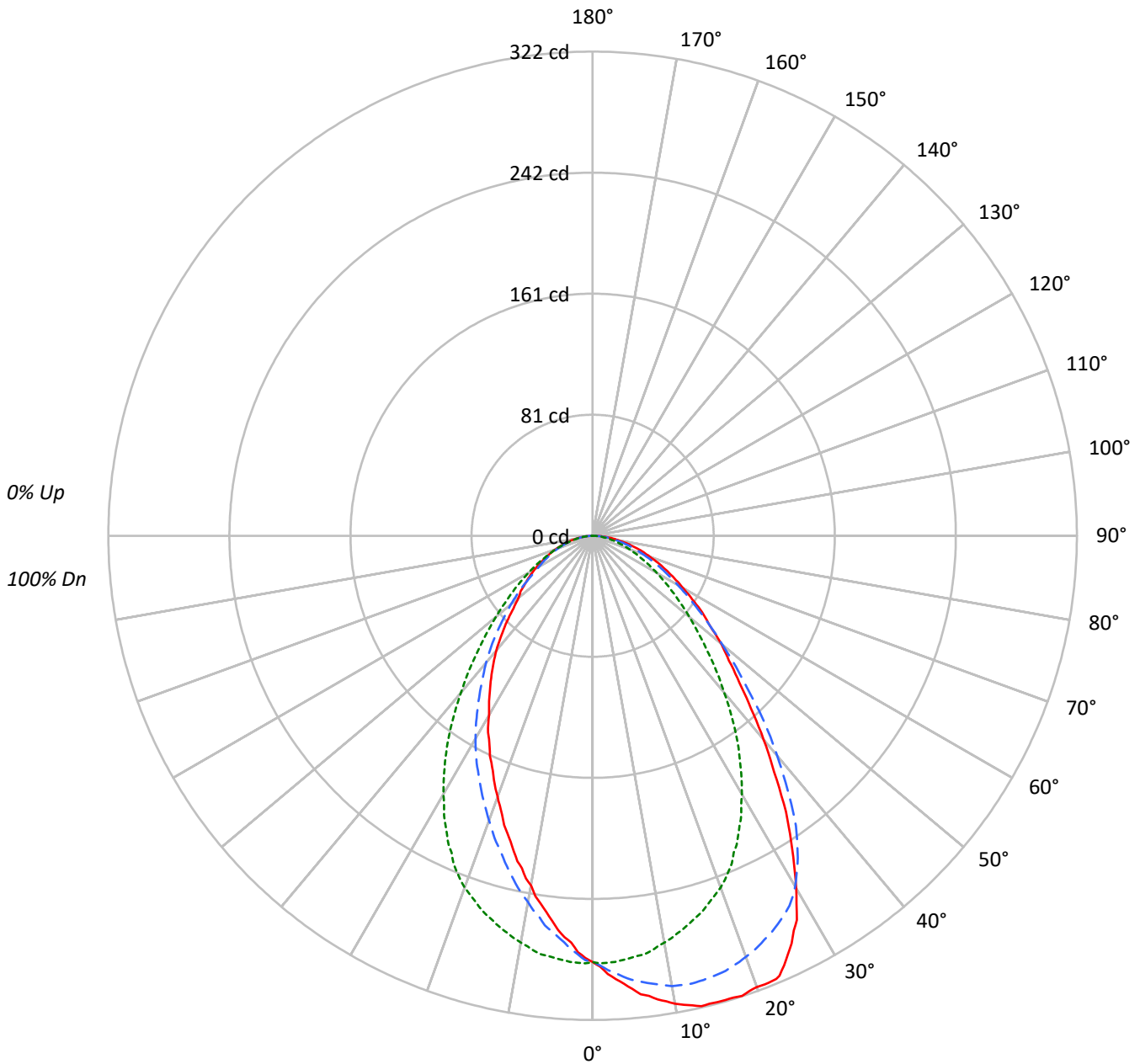
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 536.1 lumens
Efficiency: N/A
Efficacy: 89.3 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): 6
Input Voltage (V): NR
Input Current (Ain): 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	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			
1	110	106	103	99	108	104	101	98	100	97	95	96	94	92	92	91	89	87					87			
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75					75			
3	94	85	78	72	92	83	77	71	80	75	70	78	73	69	75	71	68	66					66			
4	87	76	69	63	85	75	68	62	73	66	62	71	65	61	68	64	60	58					58			
5	81	69	61	55	79	68	61	55	66	60	55	64	59	54	63	58	53	51					51			
6	75	63	55	49	74	62	55	49	61	54	49	59	53	48	58	52	48	46					46			
7	70	58	50	44	69	57	50	44	56	49	44	54	48	44	53	48	43	42					42			
8	66	53	46	40	64	53	45	40	51	45	40	50	44	40	49	44	39	38					38			
9	62	49	42	37	60	49	42	37	48	41	36	47	41	36	46	40	36	34					34			
10	58	46	39	34	57	45	38	34	44	38	34	44	38	33	43	37	33	32					32			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	27464	27464	27464	27464	27464
5°	29426	28824	27423	26003	25595
10°	31085	29919	27022	24337	23225
15°	32204	30474	26397	22556	21122
20°	32917	30727	25660	20773	19052
25°	32837	30726	24232	19048	17263
30°	30281	30136	22205	17417	15415
35°	26491	27875	19892	15575	13967
40°	22384	24123	17199	13936	12596
45°	18920	20208	14714	12221	11015
50°	16789	16947	12630	10655	9691
55°	15015	14508	10928	9171	9120
60°	13408	12642	9533	7944	8583
65°	12309	11244	8275	7381	7862
70°	11358	10055	7308	6883	7308
75°	10667	8983	6363	6251	6700
80°	9819	8061	5579	5746	6081
85°	9781	7280	4668	4668	5446

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 40°
 Vertical Angle: 45°
 Luminance: 20372 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	26.7	5.0
10°-20°	74.5	13.9
20°-30°	106.3	19.8
30°-40°	109.6	20.4
40°-50°	88.2	16.5
50°-60°	62.4	11.6
60°-70°	40.4	7.5
70°-80°	21.7	4.1
80°-90°	6.3	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°	207.6	38.7
0°-40°	317.1	59.2
0°-60°	467.7	87.2
0°-90°	536.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	536.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	284	284	284	284	284	
5°	303	296	282	267	263	29
15°	321	304	263	225	211	91
25°	307	287	227	178	162	140
35°	224	236	168	132	118	139
45°	138	148	107	89	80	108
55°	89	86	65	54	54	80
65°	54	49	36	32	34	54
75°	28	24	17	17	18	30
85°	9	7	4	4	5	10
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°	283.5	283.5	283.5	283.5	283.5	283.5	283.5	283.5	283.5	283.5	283.5
1°	286.5	287.7	286.8	286.8	285.9	285.6	286.2	285.3	285.0	284.4	283.2
2°	291.7	290.8	290.5	290.8	289.0	289.0	288.0	286.2	285.3	284.1	280.8
3°	295.3	294.7	294.1	293.8	292.0	290.5	289.3	287.1	285.3	283.8	278.9
4°	298.7	298.7	298.1	296.8	295.0	293.2	290.8	288.4	285.6	282.9	276.5
5°	302.6	302.9	300.2	299.9	297.8	295.0	292.3	289.0	285.6	282.0	275.0
6°	306.6	305.0	304.4	302.3	299.3	296.8	293.5	289.9	285.3	281.1	271.7
7°	308.4	308.1	306.6	304.4	301.7	297.8	294.4	289.6	284.7	280.5	269.2
8°	311.4	311.4	309.6	306.9	302.9	299.3	295.0	289.3	284.4	278.9	265.9
9°	313.5	313.5	311.1	308.7	305.0	300.2	295.3	289.0	282.9	276.5	262.9
10°	316.0	315.4	313.5	309.9	306.9	301.4	295.3	288.7	282.0	274.7	259.8
11°	317.8	316.9	314.8	312.0	307.2	301.7	295.3	288.7	280.8	272.9	256.8
12°	319.3	318.7	316.0	312.6	307.8	302.3	295.0	287.4	278.6	270.4	252.8
13°	321.1	319.3	316.6	313.5	308.1	301.7	293.8	285.6	277.1	268.3	249.5
14°	320.8	320.5	318.1	313.8	307.8	301.1	293.5	283.8	275.0	265.9	245.6
15°	321.1	320.8	318.1	314.1	307.5	300.2	292.6	282.6	272.9	263.2	241.6
16°	321.1	321.1	317.5	313.5	307.2	299.3	290.8	281.4	270.7	261.0	238.3
17°	321.1	321.1	318.1	312.6	306.3	298.7	289.0	278.9	268.3	258.0	233.4
18°	321.7	320.8	316.9	312.3	305.0	297.2	287.7	277.1	266.2	254.7	230.1
19°	320.2	319.6	316.3	310.5	304.1	295.3	285.9	275.0	264.1	251.9	226.1
20°	319.3	320.2	315.7	309.6	302.3	293.8	284.1	272.9	261.0	248.9	222.2
21°	319.6	319.3	314.5	308.1	301.1	291.7	282.0	270.4	257.7	245.2	218.5
22.5°	319.0	318.1	312.9	306.0	297.5	289.0	278.3	266.5	252.8	238.9	211.6
23°	317.8	316.9	312.9	305.3	296.2	287.7	276.5	264.1	251.0	236.8	209.7
24°	312.9	312.6	310.8	303.2	294.7	285.3	274.4	260.1	245.6	230.7	205.2
25°	307.2	307.8	306.9	302.0	292.3	282.6	271.0	255.3	240.4	226.7	199.7
26°	301.7	301.7	301.1	299.3	289.9	279.5	266.2	249.5	235.2	221.0	194.0
27°	294.7	295.9	294.7	293.8	287.4	276.2	261.0	245.6	229.5	215.5	189.1
28°	289.3	289.3	288.7	287.1	285.0	272.3	255.6	239.8	224.0	210.6	183.6
29°	279.5	281.4	281.7	282.0	281.7	267.1	250.4	233.4	218.2	203.7	178.5
30°	270.7	272.6	273.8	275.9	276.2	262.6	244.3	228.3	212.8	198.5	173.9
32.5°	246.8	250.1	253.4	257.1	258.9	248.9	229.5	211.9	196.1	183.3	160.0
35°	224.0	224.9	228.6	237.1	238.9	232.5	211.9	195.2	180.3	168.2	146.9
37.5°	198.2	200.0	205.2	214.9	215.5	210.3	196.1	176.7	162.7	152.1	133.6
40°	177.0	177.9	181.5	189.7	192.4	189.1	176.7	159.0	146.3	136.0	120.8
42.5°	155.7	156.9	161.5	167.9	171.8	167.9	156.9	141.7	129.3	121.7	108.7
45°	138.1	139.6	143.9	147.5	148.7	146.3	136.6	124.1	115.3	107.4	97.4
47.5°	122.9	124.4	127.5	129.0	130.5	128.1	120.5	110.2	101.4	95.0	85.9
50°	111.4	111.1	113.2	113.8	113.8	111.1	104.7	96.2	88.9	83.8	76.2
52.5°	98.3	98.9	100.5	99.9	99.6	97.1	91.7	84.4	78.3	73.8	66.8
55°	88.9	88.0	88.9	88.3	87.1	84.7	79.8	73.8	68.6	64.7	58.3
57.5°	78.6	78.6	78.9	77.7	76.2	73.5	69.2	64.3	59.8	56.5	51.3
60°	69.2	69.8	69.5	68.3	66.8	63.7	60.4	55.5	51.6	49.2	44.3



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
67.5°	47.0	47.0	46.1	45.2	43.1	40.4	37.9	34.9	32.8	30.7	27.6
70°	40.1	40.7	39.5	37.9	36.4	34.6	31.9	29.4	27.3	25.8	23.4
72.5°	34.6	34.3	33.4	31.9	30.7	28.5	26.1	24.3	22.5	21.2	19.4
75°	28.5	28.5	27.6	26.4	24.9	23.1	21.2	19.7	18.2	17.0	16.1
77.5°	22.8	23.1	22.2	21.2	20.0	18.2	16.7	15.5	14.3	13.4	12.7
80°	17.6	17.9	17.0	16.4	14.9	14.0	12.7	11.5	10.6	10.0	9.7
82.5°	13.4	13.1	12.4	12.1	10.9	10.0	8.8	8.2	7.6	7.0	7.0
85°	8.8	8.5	8.2	7.9	7.0	6.1	5.8	5.2	4.6	4.2	4.2
87.5°	4.6	4.6	4.2	3.9	3.6	3.0	2.7	2.1	1.8	1.8	1.8
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°	283.5	283.5	283.5
1°	282.3	281.1	280.8
2°	278.6	276.8	277.1
3°	275.3	273.2	271.0
4°	271.0	267.7	267.7
5°	267.4	264.1	263.2
6°	264.1	258.6	257.4
7°	261.0	254.4	252.2
8°	255.9	249.2	247.1
9°	252.2	244.9	242.8
10°	247.4	240.1	236.1
11°	243.4	235.2	232.2
12°	239.2	229.2	226.1
13°	234.3	224.0	222.2
14°	229.8	219.8	216.4
15°	224.9	214.6	210.6
16°	219.8	209.4	205.8
17°	215.5	204.0	201.2
18°	211.3	199.1	194.9
19°	206.1	194.6	189.7
20°	201.5	188.8	184.8
21°	196.7	184.5	180.3
22.5°	190.0	176.3	172.4
23°	187.9	173.9	169.7
24°	183.0	169.1	165.4
25°	178.2	165.4	161.5
26°	173.9	160.0	156.3
27°	169.7	155.7	151.8
28°	165.1	151.2	148.1
29°	160.6	146.3	143.3
30°	155.7	143.0	137.8
32.5°	143.6	132.0	127.8
35°	131.7	121.7	118.1
37.5°	120.2	112.0	108.7
40°	110.2	102.9	99.6
42.5°	99.9	93.2	89.8
45°	89.2	83.8	80.4
47.5°	79.5	75.0	71.3
50°	70.7	66.2	64.3
52.5°	62.2	59.2	60.1
55°	54.3	54.3	54.0
57.5°	46.7	48.9	49.2
60°	41.0	43.7	44.3



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
67.5°	28.2	29.7	30.4
70°	24.3	25.5	25.8
72.5°	20.6	21.6	22.2
75°	16.7	17.9	17.9
77.5°	13.7	14.3	14.6
80°	10.3	10.6	10.9
82.5°	7.3	7.6	7.9
85°	4.2	4.6	4.9
87.5°	1.8	1.8	1.8
90°	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



Report Generated By 670245859 / DESKTOP-T8S5UU9

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Scaled Data Report





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

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62.5°	61.3	61.9	61.0	59.5	58.0	55.2	52.2	48.0	44.9	42.5	38.2
65°	53.7	54.0	53.4	51.9	50.4	47.7	44.6	41.0	38.5	36.1	32.5

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62.5°	36.7	38.9	39.2
65°	32.2	34.0	34.3

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(END OF REPORT)