

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: HALO

Report Number: P295524

Luminaire Tested: **HU1124D9SMB-2700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P295524
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1904-227-8)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: HU1124D9SMB-2700K
Description: HALO HU11 UNDERCABINET LED FIXTURE
24-INCH, SELECTABLE CCT, MATTE BLACK FINISH
Light Source: (112) 90 CRI LEDS TUNED TO 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

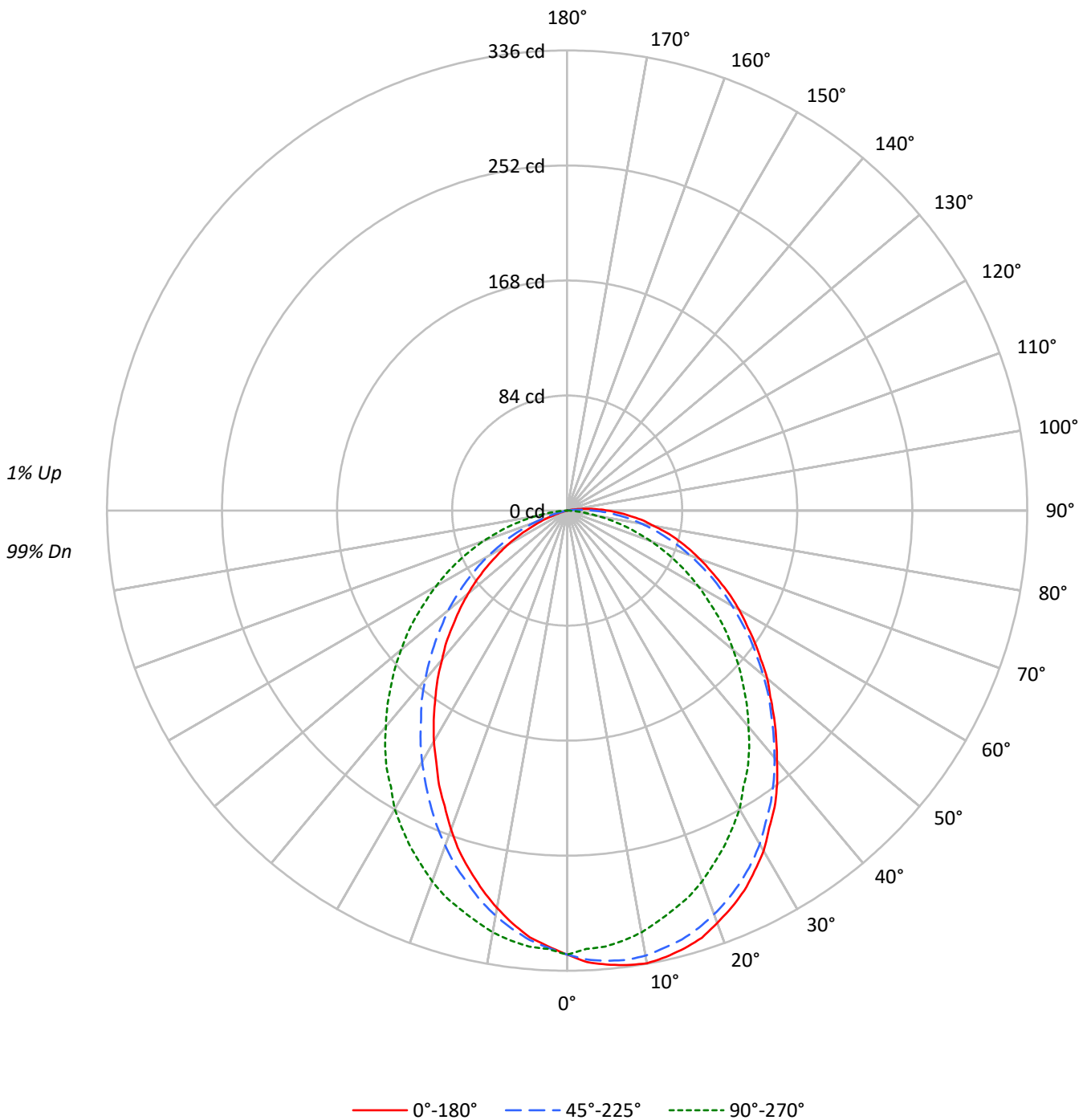
Lumens per Lamp: N/A
Luminaire Lumens: 775.0 lumens
Efficiency: N/A
Efficacy: 70.5 lumens/watt
Spacing Criteria (0/90/45): 1.12 / 1.16 / 1.25
Luminous Opening: Rectangular w/ Sides (W: 1.92' x L: 0.08' x H: 0.04')
CIE Type: Direct

Input Watts (W): 11
Input Voltage (V): 120
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: 25 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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	99
1	109	104	100	96	106	102	98	95	98	94	92	94	91	89	90	88	86	84
2	99	91	85	79	97	90	83	78	86	81	76	83	78	75	79	76	73	71
3	91	81	73	67	89	79	72	66	76	70	65	73	68	64	71	66	62	60
4	84	72	63	57	81	71	63	57	68	61	56	66	60	55	64	58	54	52
5	77	65	56	49	75	64	55	49	61	54	49	59	53	48	57	52	47	45
6	71	58	50	44	70	58	49	43	56	48	43	54	47	42	52	47	42	40
7	66	53	45	39	65	52	44	39	51	44	38	49	43	38	48	42	38	36
8	62	49	40	35	60	48	40	35	47	39	34	45	39	34	44	38	34	32
9	58	45	37	31	57	44	37	31	43	36	31	42	36	31	41	35	31	29
10	54	42	34	29	53	41	34	29	40	33	28	39	33	28	38	32	28	26

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	21848	21848	21848
5°	21570	21573	20274
10°	21111	21324	18533
15°	20359	20907	16778
20°	19440	20492	15041
25°	18458	19934	13338
30°	17331	19352	11745
35°	16099	18622	10225
40°	14774	17798	8806
45°	13572	16986	7453
50°	12528	16178	6202
55°	11440	15327	4901
60°	10473	14366	3648
65°	9465	13362	2278
70°	8550	12049	1029
75°	7622	10332	91
80°	6465	7912	0
85°	5377	4150	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	30.5	3.9
10°-20°	85.2	11.0
20°-30°	123.2	15.9
30°-40°	139.3	18.0
40°-50°	134.4	17.3
50°-60°	113.3	14.6
60°-70°	80.9	10.4
70°-80°	45.3	5.8
80°-90°	18.8	2.4
90°-100°	4.1	0.5
100°-110°	0.1	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°	238.9	30.8
0°-40°	378.1	48.8
0°-60°	625.8	80.7
0°-90°	770.8	99.5
90°-120°	4.2	0.5
90°-150°	4.2	0.5
90°-180°	4.0	0.5
0°-180°	775.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	324	324	324	324	324	
5°	333	330	320	315	313	32
15°	331	324	301	281	273	93
25°	306	299	271	236	221	141
35°	264	259	230	186	168	165
45°	214	211	182	136	117	165
55°	167	163	134	90	72	150
65°	123	117	88	46	30	122
75°	84	74	43	10	1	89
85°	47	36	7	0	0	42
90°	30	19	0	0	0	16
95°	15	6	0	0	0	10
105°	0	0	0	0	0	1
115°	0	0	0	0	0	0
125°	0	0	0	0	0	0
135°	0	0	0	0	0	0
145°	0	0	0	0	0	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	324.2	324.2	324.2	324.2	324.2	324.2	324.2	324.2	324.2
2.5°	330.0	330.0	328.1	324.2	320.4	320.4	319.5	319.5	318.5
5°	332.8	332.8	330.0	325.2	319.5	317.6	314.7	312.8	312.8
7.5°	334.7	334.7	330.9	324.2	316.6	312.8	308.0	305.2	304.2
10°	335.7	334.7	330.0	322.3	312.8	307.1	300.4	296.6	294.7
12.5°	333.8	332.8	327.1	318.5	307.1	300.4	291.8	286.1	284.2
15°	330.9	330.0	324.2	313.7	301.4	291.8	281.3	275.6	272.7
17.5°	327.1	325.2	319.5	309.0	295.6	284.2	271.8	263.2	261.3
20°	320.4	319.5	313.7	302.3	288.0	274.6	260.3	250.8	247.9
22.5°	313.7	313.7	307.1	295.6	279.4	264.2	248.9	238.4	233.6
25°	306.1	305.2	299.4	288.0	270.8	253.7	236.5	225.1	221.2
27.5°	296.6	295.6	290.9	279.4	261.3	243.2	224.1	212.7	206.9
30°	287.0	285.1	281.3	269.9	251.8	231.7	211.7	198.4	194.5
32.5°	274.6	274.6	269.9	259.4	239.4	219.3	199.3	185.0	181.2
35°	264.2	262.3	259.4	247.9	229.8	207.9	186.0	172.6	167.8
37.5°	251.8	251.8	247.9	237.5	218.4	195.5	174.5	159.3	155.4
40°	238.4	239.4	235.6	225.1	206.0	183.1	161.2	146.9	142.1
42.5°	226.0	226.0	223.2	213.6	194.5	170.7	148.8	134.5	130.6
45°	213.6	213.6	210.8	202.2	182.1	159.3	136.4	122.1	117.3
47.5°	201.2	202.2	199.3	189.8	170.7	146.9	124.0	110.6	105.9
50°	190.7	189.8	186.9	177.4	158.3	134.5	113.5	99.2	94.4
52.5°	178.3	178.3	174.5	165.9	146.9	123.0	101.1	87.7	83.0
55°	166.9	165.9	163.1	153.5	134.5	110.6	89.6	76.3	71.5
57.5°	155.4	154.5	150.7	142.1	122.1	98.2	78.2	65.8	60.1
60°	145.0	143.0	139.2	128.7	110.6	86.8	66.8	54.4	50.5
62.5°	134.5	132.6	127.8	117.3	99.2	75.3	55.3	43.9	40.1
65°	123.0	121.1	117.3	105.9	87.7	64.8	45.8	34.3	29.6
67.5°	112.5	111.6	105.9	95.4	76.3	53.4	35.3	23.8	21.0
70°	103.0	102.0	95.4	83.0	64.8	42.0	24.8	15.3	12.4
72.5°	93.5	91.5	84.9	72.5	53.4	32.4	16.2	7.6	5.7
75°	83.9	82.0	74.4	62.0	42.9	22.9	9.5	1.9	1.0
77.5°	74.4	72.5	64.8	51.5	32.4	14.3	2.9	0.0	0.0
80°	63.9	62.9	55.3	41.0	22.9	6.7	0.0	0.0	0.0
82.5°	56.3	53.4	45.8	32.4	14.3	1.9	0.0	0.0	0.0
85°	46.7	44.8	36.2	22.9	6.7	0.0	0.0	0.0	0.0
87.5°	38.1	35.3	27.7	14.3	1.9	0.0	0.0	0.0	0.0
90°	29.6	26.7	19.1	6.7	0.0	0.0	0.0	0.0	0.0
92.5°	21.9	20.0	11.4	2.9	0.0	0.0	0.0	0.0	0.0
95°	15.3	13.4	5.7	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	8.6	6.7	1.9	0.0	0.0	0.0	0.0	0.0	0.0
100°	3.8	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110°	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):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)