

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: P295525

Luminaire Tested: **HU1124D9SMB-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P295525
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-3000K
Description: HALO HU11 UNDERCABINET LED FIXTURE
24-INCH, SELECTABLE CCT, MATTE BLACK FINISH
Light Source: (112) 90 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

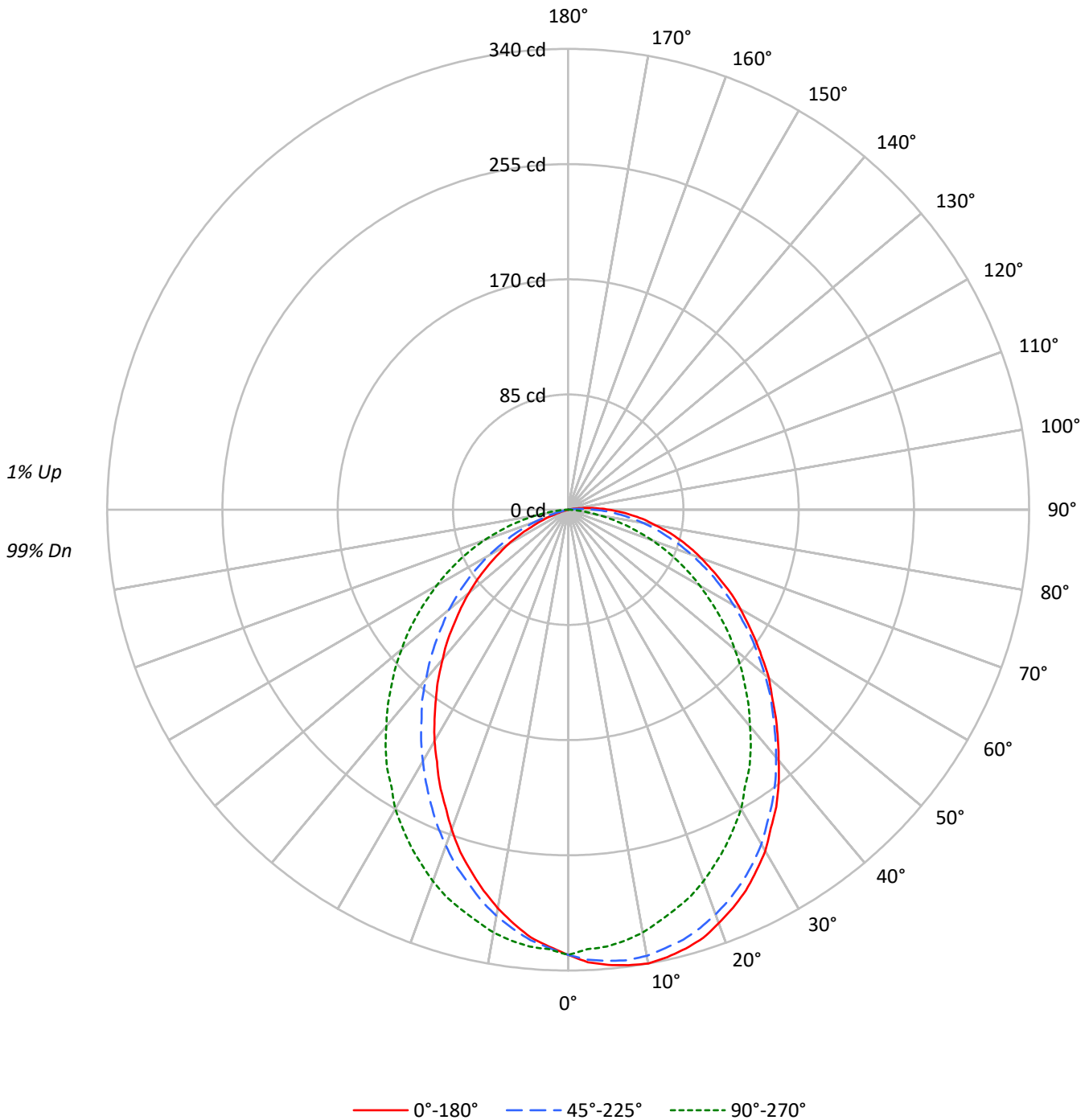
Lumens per Lamp: N/A
Luminaire Lumens: 785.0 lumens
Efficiency: N/A
Efficacy: 71.4 lumens/watt
Spacing Criteria (0/90/45): 1.12 / 1.16 / 1.25
Luminous Opening: Rectangular w/ Sides (W: 1.92' x L: 0.08' x H: 0.04')
CIE Type: Direct

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									
RC	80									70									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	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°	22131	22131	22131
5°	21849	21850	20533
10°	21382	21596	18772
15°	20624	21170	17000
20°	19695	20756	15235
25°	18699	20192	13513
30°	17560	19597	11902
35°	16306	18865	10359
40°	14966	18023	8918
45°	13749	17210	7548
50°	12692	16382	6281
55°	11584	15521	4963
60°	10603	14561	3698
65°	9588	13545	2301
70°	8658	12216	1046
75°	7722	10477	91
80°	6546	8016	0
85°	5447	4212	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	30.9	3.9
10°-20°	86.3	11.0
20°-30°	124.8	15.9
30°-40°	141.1	18.0
40°-50°	136.1	17.3
50°-60°	114.7	14.6
60°-70°	81.9	10.4
70°-80°	45.9	5.8
80°-90°	19.0	2.4
90°-100°	4.2	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°	242.0	30.8
0°-40°	383.0	48.8
0°-60°	633.9	80.7
0°-90°	780.7	99.5
90°-120°	4.2	0.5
90°-150°	4.2	0.5
90°-180°	4.0	0.5
0°-180°	785.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	328	328	328	328	328	
5°	337	334	324	319	317	32
15°	335	328	305	285	276	95
25°	310	303	274	240	224	143
35°	268	263	233	188	170	167
45°	216	214	184	138	119	167
55°	169	165	136	91	72	151
65°	125	119	89	46	30	124
75°	85	75	44	10	1	90
85°	47	37	7	0	0	42
90°	30	19	0	0	0	17
95°	16	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



TEST NUMBER: P295525

CATALOG NUMBER: HU1124D9SMB-3000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	328.4	328.4	328.4	328.4	328.4	328.4	328.4	328.4	328.4
2.5°	334.2	334.2	332.3	328.4	324.6	324.6	323.6	323.6	322.6
5°	337.1	337.1	334.2	329.4	323.6	321.7	318.8	316.8	316.8
7.5°	339.0	339.0	335.2	328.4	320.7	316.8	312.0	309.1	308.1
10°	340.0	339.0	334.2	326.5	316.8	311.0	304.3	300.4	298.5
12.5°	338.1	337.1	331.3	322.6	311.0	304.3	295.6	289.8	287.9
15°	335.2	334.2	328.4	317.8	305.2	295.6	285.0	279.2	276.3
17.5°	331.3	329.4	323.6	313.0	299.4	287.9	275.3	266.6	264.7
20°	324.6	323.6	317.8	306.2	291.7	278.2	263.7	254.0	251.1
22.5°	317.8	317.8	311.0	299.4	283.0	267.6	252.1	241.5	236.7
25°	310.1	309.1	303.3	291.7	274.3	256.9	239.6	228.0	224.1
27.5°	300.4	299.4	294.6	283.0	264.7	246.3	227.0	215.4	209.6
30°	290.8	288.8	285.0	273.4	255.0	234.7	214.4	200.9	197.1
32.5°	278.2	278.2	273.4	262.7	242.5	222.2	201.9	187.4	183.5
35°	267.6	265.6	262.7	251.1	232.8	210.6	188.4	174.8	170.0
37.5°	255.0	255.0	251.1	240.5	221.2	198.0	176.8	161.3	157.4
40°	241.5	242.5	238.6	228.0	208.6	185.5	163.2	148.8	143.9
42.5°	228.9	228.9	226.0	216.4	197.1	172.9	150.7	136.2	132.3
45°	216.4	216.4	213.5	204.8	184.5	161.3	138.1	123.6	118.8
47.5°	203.8	204.8	201.9	192.2	172.9	148.8	125.6	112.1	107.2
50°	193.2	192.2	189.3	179.7	160.3	136.2	114.9	100.5	95.6
52.5°	180.6	180.6	176.8	168.1	148.8	124.6	102.4	88.9	84.0
55°	169.0	168.1	165.2	155.5	136.2	112.1	90.8	77.3	72.4
57.5°	157.4	156.5	152.6	143.9	123.6	99.5	79.2	66.7	60.9
60°	146.8	144.9	141.0	130.4	112.1	87.9	67.6	55.1	51.2
62.5°	136.2	134.3	129.4	118.8	100.5	76.3	56.0	44.4	40.6
65°	124.6	122.7	118.8	107.2	88.9	65.7	46.4	34.8	29.9
67.5°	114.0	113.0	107.2	96.6	77.3	54.1	35.7	24.1	21.3
70°	104.3	103.4	96.6	84.0	65.7	42.5	25.1	15.5	12.6
72.5°	94.7	92.7	86.0	73.4	54.1	32.8	16.4	7.7	5.8
75°	85.0	83.1	75.3	62.8	43.5	23.2	9.7	1.9	1.0
77.5°	75.3	73.4	65.7	52.2	32.8	14.5	2.9	0.0	0.0
80°	64.7	63.8	56.0	41.5	23.2	6.8	0.0	0.0	0.0
82.5°	57.0	54.1	46.4	32.8	14.5	1.9	0.0	0.0	0.0
85°	47.3	45.4	36.7	23.2	6.8	0.0	0.0	0.0	0.0
87.5°	38.6	35.7	28.0	14.5	1.9	0.0	0.0	0.0	0.0
90°	29.9	27.0	19.3	6.8	0.0	0.0	0.0	0.0	0.0
92.5°	22.2	20.3	11.6	2.9	0.0	0.0	0.0	0.0	0.0
95°	15.5	13.5	5.8	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	8.7	6.8	1.9	0.0	0.0	0.0	0.0	0.0	0.0
100°	3.9	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)