

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: P295521

Luminaire Tested: **HU1118D9SMB-2700K**

Issue Date: 3/3/2020

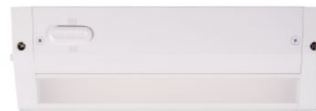
Test Information

Test Method: LM-79-08
Report Number: P295521
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1904-227-5)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: HU1118D9SMB-2700K
Description: HALO HU11 UNDERCABINET LED FIXTURE
18-INCH, SELECTABLE CCT, MATTE BLACK FINISH
Light Source: (84) 90 CRI LEDS TUNED TO 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

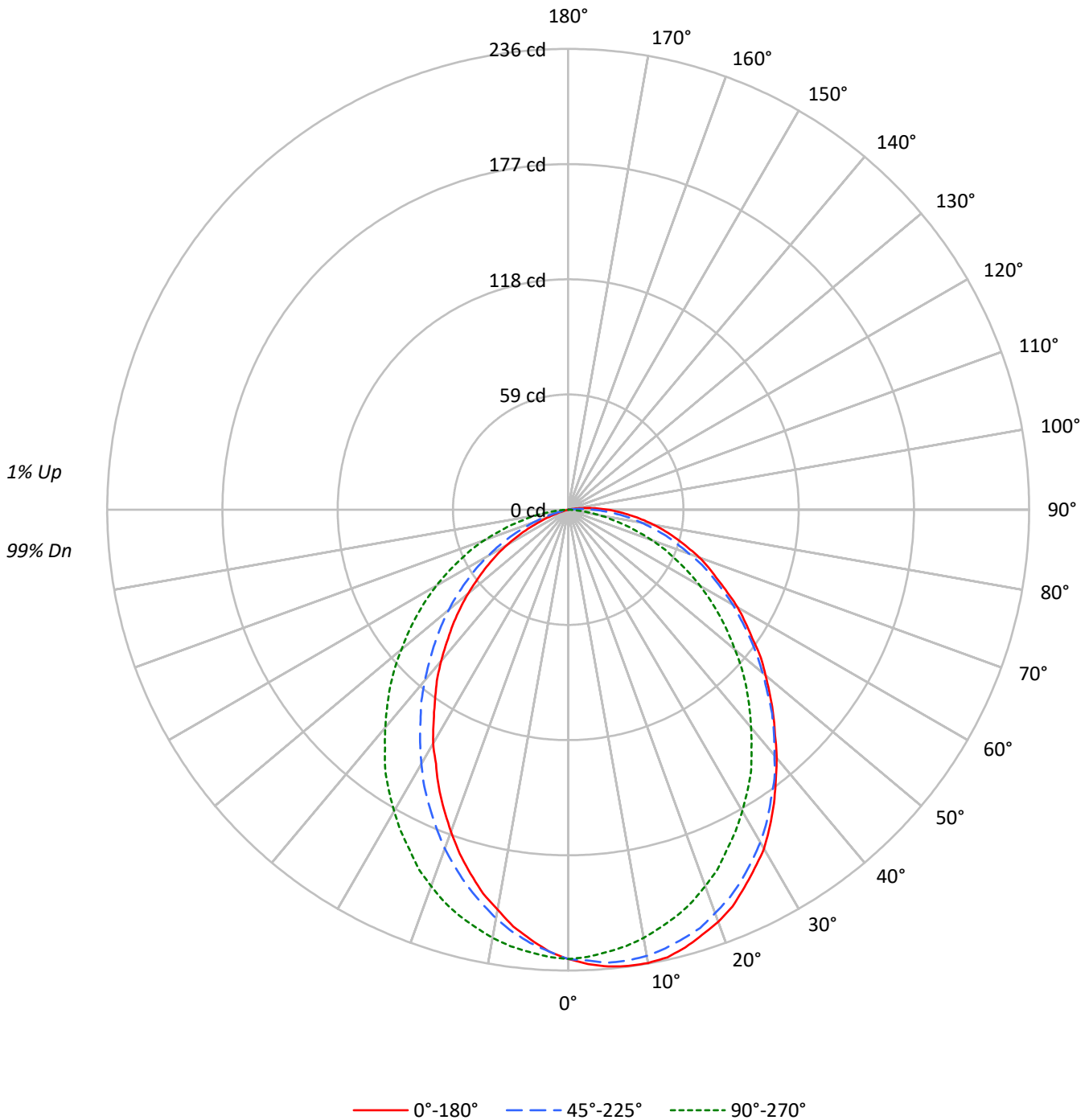
Lumens per Lamp: N/A
Luminaire Lumens: 545.0 lumens
Efficiency: N/A
Efficacy: 68.1 lumens/watt
Spacing Criteria (0/90/45): 1.11 / 1.16 / 1.25
Luminous Opening: Rectangular w/ Sides (W: 1.29' x L: 0.08' x H: 0.04')
CIE Type: Direct

Input Watts (W): 8
Input Voltage (V): 120
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: 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	100	92	85	79	97	90	84	78	86	81	76		83	78	75		80	76	73	71
3	91	81	73	67	89	79	72	66	76	70	65		73	68	64		71	66	63	60
4	84	72	64	57	81	71	63	57	68	61	56		66	60	55		64	58	54	52
5	77	65	56	50	75	64	55	49	61	54	49		59	53	48		58	52	48	46
6	72	59	50	44	70	58	49	43	56	48	43		54	48	43		52	47	42	40
7	67	53	45	39	65	53	44	39	51	44	38		49	43	38		48	42	38	36
8	62	49	41	35	60	48	40	35	47	40	34		46	39	34		44	38	34	32
9	58	45	37	32	57	44	37	31	43	36	31		42	36	31		41	35	31	29
10	55	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°	23010	23010	23010
5°	22582	22763	21245
10°	21995	22486	19400
15°	21181	22099	17620
20°	20222	21573	15792
25°	19094	20882	14030
30°	17966	20201	12392
35°	16610	19495	10742
40°	15274	18519	9306
45°	14001	17673	7872
50°	12848	16689	6512
55°	11707	15783	5187
60°	10739	14775	3880
65°	9637	13544	2432
70°	8807	12220	1146
75°	7752	10242	121
80°	6681	8130	0
85°	5399	3856	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	21.6	4.0
10°-20°	60.2	11.0
20°-30°	87.0	16.0
30°-40°	98.2	18.0
40°-50°	94.5	17.3
50°-60°	79.5	14.6
60°-70°	56.7	10.4
70°-80°	31.6	5.8
80°-90°	13.0	2.4
90°-100°	2.8	0.5
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°	168.8	31.0
0°-40°	266.9	49.0
0°-60°	440.9	80.9
0°-90°	542.2	99.5
90°-120°	2.8	0.5
90°-150°	2.8	0.5
90°-180°	3.0	0.6
0°-180°	545.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	230	230	230	230	230	
5°	235	233	227	223	221	22
15°	232	227	215	200	193	65
25°	213	210	192	168	157	98
35°	184	181	163	132	119	115
45°	148	148	129	96	84	115
55°	115	113	95	63	51	104
65°	84	82	61	32	21	84
75°	58	52	30	6	1	61
85°	32	25	5	0	0	29
90°	20	13	0	0	0	11
95°	10	4	0	0	0	7
105°	0	0	0	0	0	0
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°	230.1	230.1	230.1	230.1	230.1	230.1	230.1	230.1	230.1
2.5°	232.9	232.0	231.1	231.1	229.2	228.3	226.4	226.4	226.4
5°	234.8	234.8	232.9	231.1	227.4	226.4	222.7	221.8	220.9
7.5°	235.7	234.8	232.9	230.1	225.5	222.7	218.1	215.3	215.3
10°	235.7	234.8	232.0	228.3	222.7	218.1	212.5	209.7	207.9
12.5°	234.8	233.9	230.1	226.4	219.0	213.4	206.0	202.3	201.4
15°	232.0	231.1	227.4	222.7	215.3	207.9	199.5	194.9	193.0
17.5°	228.3	228.3	224.6	219.0	210.7	201.4	192.1	186.5	184.7
20°	224.6	223.7	219.9	214.4	205.1	194.9	184.7	178.2	175.4
22.5°	219.9	219.0	215.3	208.8	199.5	188.4	176.3	168.9	166.1
25°	213.4	213.4	209.7	203.2	192.1	181.0	168.0	159.6	156.8
27.5°	206.9	206.9	203.2	196.7	185.6	172.6	159.6	150.3	146.6
30°	200.5	200.5	196.7	190.2	178.2	165.2	150.3	140.1	138.3
32.5°	192.1	192.1	189.3	182.8	170.8	155.9	141.1	131.8	128.1
35°	183.7	183.7	181.0	174.5	163.3	147.6	131.8	122.5	118.8
37.5°	174.5	175.4	173.5	167.0	154.1	139.2	123.4	113.2	110.4
40°	166.1	166.1	164.3	158.7	145.7	129.9	114.1	104.9	101.2
42.5°	156.8	157.8	155.9	150.3	137.3	121.6	104.9	95.6	91.9
45°	148.5	148.5	147.6	142.0	129.0	112.3	96.5	87.2	83.5
47.5°	140.1	140.1	138.3	133.6	120.6	103.9	88.2	78.9	75.2
50°	131.8	131.8	129.9	124.4	111.4	95.6	79.8	70.5	66.8
52.5°	124.4	123.4	121.6	116.0	103.0	86.3	71.5	62.2	58.5
55°	115.1	115.1	113.2	108.6	94.7	78.9	63.1	54.8	51.0
57.5°	107.6	107.6	104.9	99.3	86.3	69.6	55.7	46.4	43.6
60°	100.2	99.3	97.4	90.9	78.0	62.2	47.3	39.0	36.2
62.5°	91.9	91.9	89.1	82.6	69.6	53.8	39.9	31.6	28.8
65°	84.4	84.4	81.7	74.2	61.2	45.5	32.5	24.1	21.3
67.5°	78.0	77.0	74.2	65.9	53.8	38.0	25.1	17.6	14.8
70°	71.5	70.5	65.9	58.5	45.5	30.6	18.6	11.1	9.3
72.5°	64.0	63.1	58.5	51.0	37.1	23.2	12.1	6.5	4.6
75°	57.5	55.7	52.0	42.7	29.7	16.7	6.5	1.9	0.9
77.5°	51.0	49.2	44.5	36.2	22.3	10.2	2.8	0.0	0.0
80°	44.5	43.6	38.0	28.8	16.7	4.6	0.0	0.0	0.0
82.5°	38.0	37.1	31.6	22.3	10.2	0.9	0.0	0.0	0.0
85°	31.6	30.6	25.1	15.8	4.6	0.0	0.0	0.0	0.0
87.5°	26.0	24.1	18.6	10.2	1.9	0.0	0.0	0.0	0.0
90°	20.4	18.6	13.0	5.6	0.0	0.0	0.0	0.0	0.0
92.5°	14.8	13.0	8.4	1.9	0.0	0.0	0.0	0.0	0.0
95°	10.2	8.4	3.7	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	5.6	4.6	0.9	0.0	0.0	0.0	0.0	0.0	0.0
100°	1.9	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	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)