

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: P166446

Luminaire Tested: **HU1009D930MB**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P166446
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25786)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: HU1009D930MB
Description: HALO HU10 LED UNDERCABINET FIXTURE
9 INCH LENGTH WITH MATTE BLACK FINISH
Light Source: (12) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

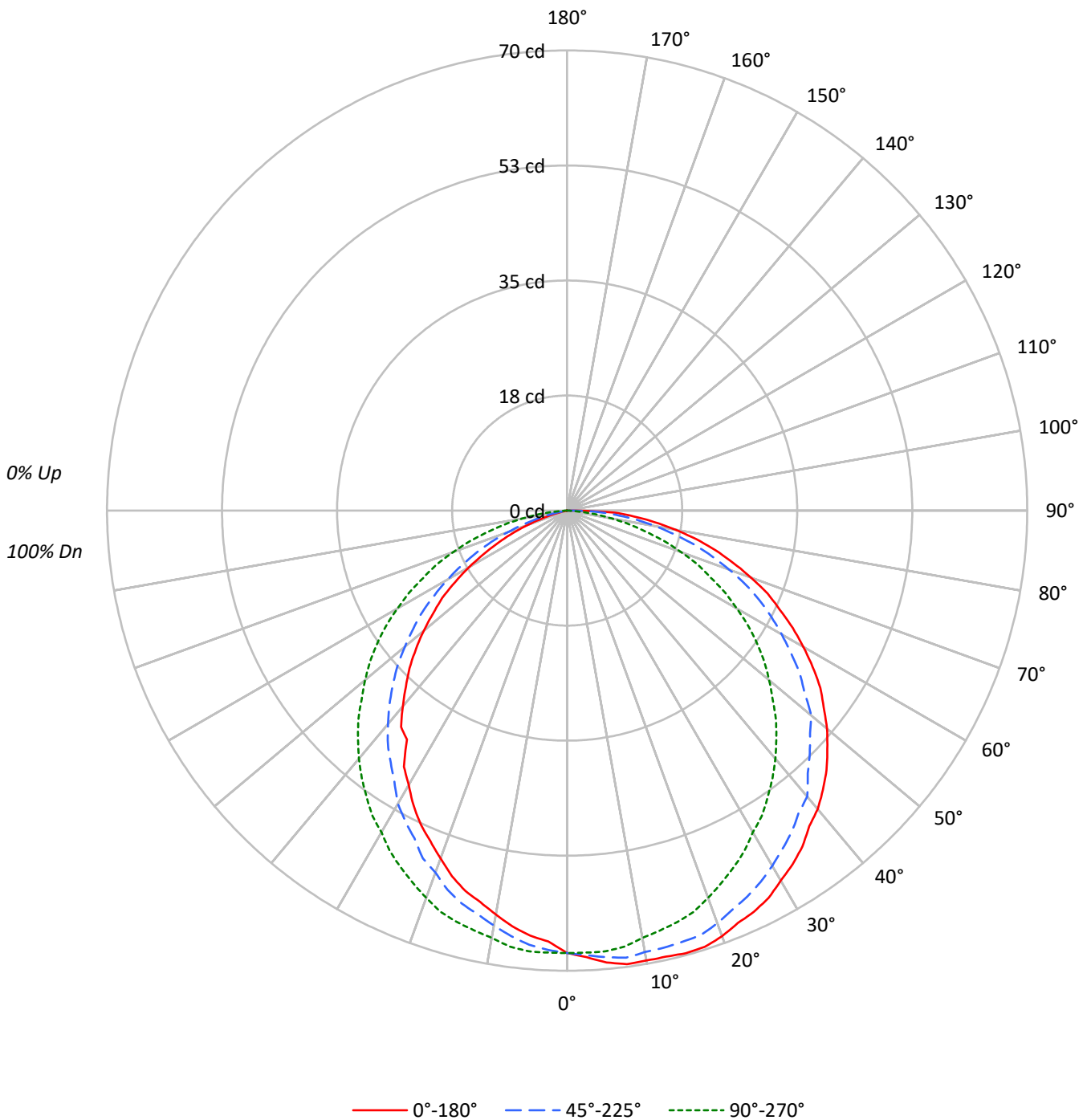
Lumens per Lamp: N/A
Luminaire Lumens: 192.0 lumens
Efficiency: N/A
Efficacy: 51.9 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.38
Luminous Opening: Rectangular (W 0.75' x L: 0.1' x H: 0')
CIE Type: Direct

Input Watts (W): 3.7
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: 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	100
1	109	104	99	96	106	102	98	94	97	94	91	93	91	88	90	88	86	83
2	99	90	83	78	96	88	82	77	85	80	75	82	77	73	79	75	72	69
3	90	79	71	64	87	78	70	64	75	68	63	72	66	62	69	65	61	58
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52	50
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	39	32	26	51	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	9272	9272	9272
5°	9543	9308	8976
10°	9723	9234	8730
15°	9942	9243	8544
20°	10102	9193	8255
25°	10231	9106	8011
30°	10341	8989	7668
35°	10495	8948	7148
40°	10665	8867	6996
45°	10872	8749	6605
50°	11060	8595	6109
55°	11290	8479	5573
60°	11436	8212	4740
65°	11639	7857	3749
70°	11964	7412	2538
75°	12457	6548	1065
80°	13250	5395	0
85°	16124	3320	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	6.4	3.3
10°-20°	18.2	9.5
20°-30°	27.6	14.4
30°-40°	33.2	17.3
40°-50°	34.6	18.0
50°-60°	31.2	16.3
60°-70°	23.6	12.3
70°-80°	13.2	6.9
80°-90°	4.1	2.1
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°	52.2	27.2
0°-40°	85.4	44.5
0°-60°	151.2	78.7
0°-90°	192.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	192.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	67	67	67	67	67	
5°	69	68	67	66	65	7
15°	70	68	65	62	60	20
25°	67	65	60	55	53	31
35°	62	60	53	47	42	39
45°	56	52	45	38	34	43
55°	47	43	35	27	23	42
65°	36	32	24	15	12	35
75°	23	20	12	4	2	25
85°	10	7	2	0	0	11
90°	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°	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3
2.5°	68.0	67.7	67.7	67.4	67.3	66.8	66.9	65.5	65.6
5°	69.0	68.6	68.2	67.7	67.3	66.4	66.3	64.9	64.9
7.5°	69.6	69.1	68.6	67.7	66.9	65.8	65.3	63.8	63.8
10°	69.5	69.6	68.2	67.2	66.0	64.0	64.1	62.3	62.4
12.5°	69.5	69.0	68.1	66.9	65.4	63.8	62.9	61.0	61.0
15°	69.7	69.2	67.9	66.5	64.8	63.0	61.9	59.8	59.9
17.5°	69.6	69.0	67.7	65.8	64.0	61.8	60.5	58.3	58.3
20°	68.9	68.2	66.8	64.8	62.7	60.2	58.6	56.3	56.3
22.5°	67.9	67.4	65.7	63.5	61.3	58.6	57.3	54.5	54.4
25°	67.3	66.7	64.8	62.5	59.9	57.0	55.0	52.7	52.7
27.5°	66.4	65.7	63.7	61.2	58.4	55.4	53.3	50.7	50.6
30°	65.0	64.4	62.4	59.6	56.5	53.4	51.5	48.4	48.2
32.5°	63.8	63.1	61.0	58.1	55.1	51.6	48.9	46.4	46.2
35°	62.4	62.2	59.6	56.4	53.2	49.5	46.8	44.2	42.5
37.5°	60.5	60.3	57.9	54.8	51.3	47.5	44.8	41.9	41.5
40°	59.3	58.6	56.8	52.8	49.3	45.4	42.4	39.5	38.9
42.5°	57.6	57.3	54.2	50.8	47.1	43.2	40.0	37.1	36.3
45°	55.8	54.9	52.2	48.6	44.9	40.8	37.5	34.4	33.9
47.5°	53.7	52.9	50.1	46.5	42.4	38.5	35.0	32.1	31.2
50°	51.6	50.5	48.5	44.3	40.1	35.9	32.2	29.2	28.5
52.5°	49.2	48.3	45.5	41.8	37.8	33.3	29.5	26.4	25.7
55°	47.0	46.0	43.2	39.4	35.3	30.8	26.9	23.6	23.2
57.5°	44.3	43.3	40.4	36.8	32.7	28.1	23.9	20.9	20.2
60°	41.5	40.8	37.7	34.4	29.8	25.1	21.0	17.9	17.2
62.5°	38.7	37.6	35.0	31.0	27.1	22.3	18.1	15.0	14.3
65°	35.7	34.9	32.3	28.4	24.1	19.8	15.3	12.3	11.5
67.5°	33.0	32.0	29.4	25.5	21.5	16.8	12.5	9.8	8.9
70°	29.7	28.9	26.2	22.5	18.4	13.7	9.5	7.0	6.3
72.5°	26.5	25.7	23.1	19.4	15.5	11.0	6.9	4.8	3.9
75°	23.4	22.5	20.0	16.4	12.3	8.0	4.4	2.5	2.0
77.5°	20.1	19.2	16.7	13.4	9.7	5.4	2.4	1.0	0.6
80°	16.7	15.9	13.6	10.3	6.8	3.1	0.8	0.1	0.0
82.5°	13.4	12.7	10.6	7.7	4.3	1.4	0.1	0.1	0.1
85°	10.2	9.5	7.4	4.7	2.1	0.2	0.0	0.1	0.0
87.5°	7.2	6.6	4.6	2.6	0.5	0.0	0.1	0.1	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)