

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: P166447

Luminaire Tested: **HU1009D940MB**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P166447  
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: HU1009D940MB  
Description: HALO HU10 LED UNDERCABINET FIXTURE  
9 INCH LENGTH WITH MATTE BLACK FINISH  
Light Source: (12) 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

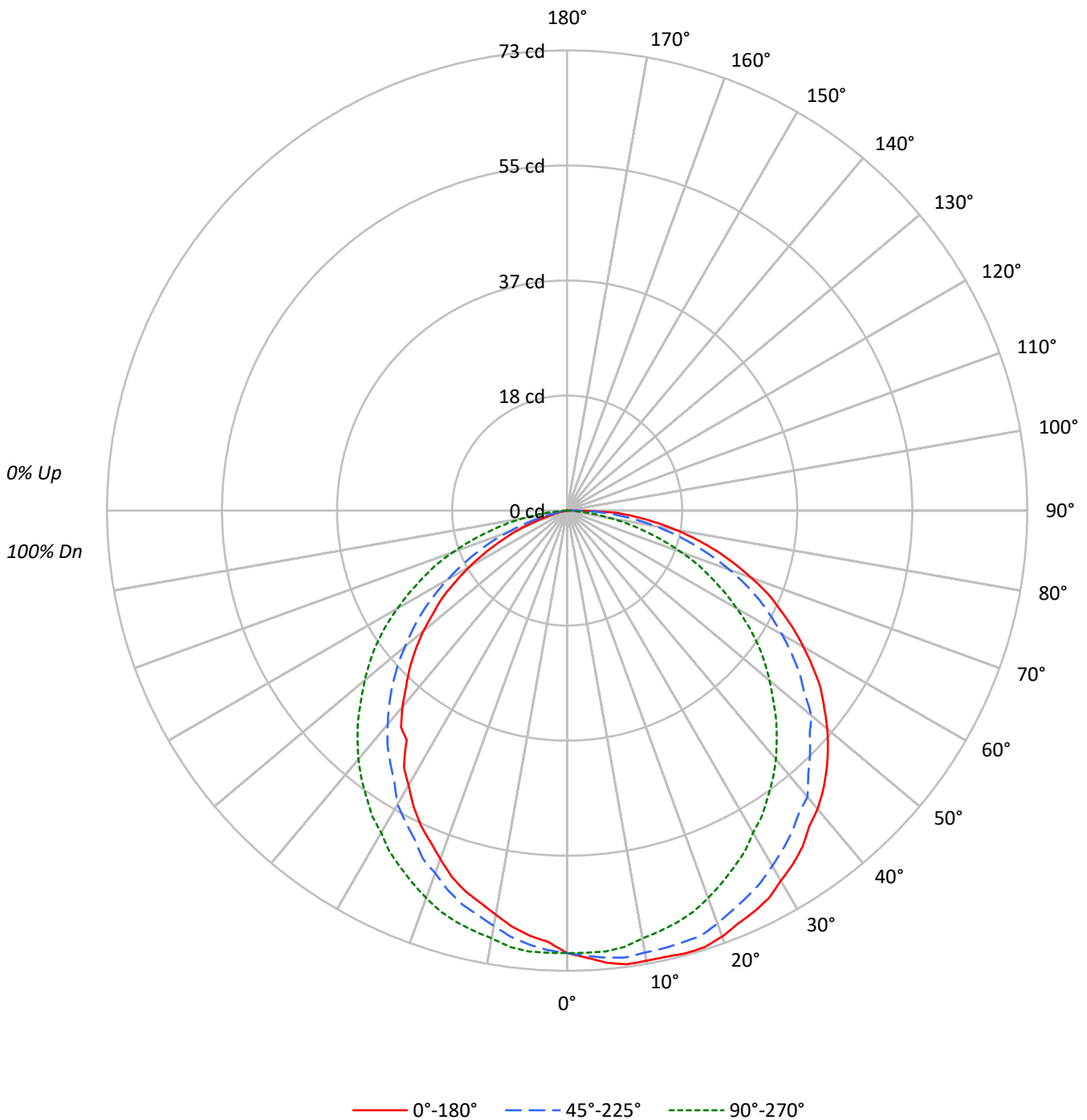
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 200.4 lumens  
Efficiency: N/A  
Efficacy: 54.2 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 (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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CATALOG NUMBER: HU1009D940MB

### 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°	9672	9672	9672
5°	9958	9709	9363
10°	10143	9639	9108
15°	10370	9642	8915
20°	10542	9589	8621
25°	10672	9501	8361
30°	10786	9386	8002
35°	10950	9335	7468
40°	11115	9263	7302
45°	11340	9138	6878
50°	11553	8981	6387
55°	11794	8864	5813
60°	11932	8570	4960
65°	12160	8215	3912
70°	12488	7734	2618
75°	12989	6867	1118
80°	13885	5633	0
85°	16915	3478	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	6.6	3.3
10°-20°	19.0	9.5
20°-30°	28.8	14.4
30°-40°	34.7	17.3
40°-50°	36.1	18.0
50°-60°	32.6	16.3
60°-70°	24.6	12.3
70°-80°	13.8	6.9
80°-90°	4.3	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°	54.5	27.2
0°-40°	89.1	44.5
0°-60°	157.8	78.7
0°-90°	200.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	200.4	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	70	70	70	70	70	
5°	72	71	70	69	68	7
15°	73	71	68	65	62	21
25°	70	68	62	57	55	32
35°	65	62	56	49	44	41
45°	58	54	47	39	35	45
55°	49	45	37	28	24	44
65°	37	34	25	16	12	37
75°	24	21	13	5	2	26
85°	11	8	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°	70.2	70.2	70.2	70.2	70.2	70.2	70.2	70.2	70.2
2.5°	71.0	70.7	70.7	70.3	70.2	69.7	69.8	68.4	68.5
5°	72.0	71.5	71.2	70.7	70.2	69.3	69.1	67.7	67.7
7.5°	72.6	72.1	71.5	70.7	69.8	68.7	68.2	66.6	66.6
10°	72.5	72.6	71.2	70.1	68.9	66.7	66.9	65.0	65.1
12.5°	72.5	72.0	71.1	69.8	68.3	66.6	65.7	63.7	63.7
15°	72.7	72.2	70.9	69.4	67.6	65.8	64.6	62.4	62.5
17.5°	72.6	72.0	70.7	68.7	66.7	64.5	63.1	60.9	60.9
20°	71.9	71.2	69.7	67.6	65.4	62.8	61.2	58.8	58.8
22.5°	70.9	70.3	68.6	66.3	64.0	61.2	59.8	56.9	56.8
25°	70.2	69.6	67.6	65.2	62.5	59.4	57.4	55.0	55.0
27.5°	69.3	68.6	66.5	63.9	61.0	57.8	55.6	52.9	52.8
30°	67.8	67.2	65.1	62.2	59.0	55.7	53.8	50.5	50.3
32.5°	66.6	65.9	63.7	60.6	57.5	53.9	51.0	48.4	48.2
35°	65.1	64.9	62.2	58.9	55.5	51.7	48.9	46.1	44.4
37.5°	63.1	62.9	60.4	57.2	53.6	49.6	46.8	43.7	43.3
40°	61.8	61.2	59.3	55.1	51.5	47.3	44.3	41.2	40.6
42.5°	60.1	59.8	56.6	53.0	49.2	45.0	41.8	38.7	37.8
45°	58.2	57.3	54.5	50.7	46.9	42.5	39.2	35.9	35.3
47.5°	56.1	55.2	52.2	48.5	44.3	40.1	36.5	33.5	32.6
50°	53.9	52.7	50.6	46.2	41.9	37.5	33.6	30.4	29.8
52.5°	51.4	50.4	47.4	43.6	39.5	34.8	30.8	27.6	26.8
55°	49.1	48.0	45.0	41.1	36.9	32.2	28.0	24.6	24.2
57.5°	46.2	45.2	42.2	38.4	34.1	29.3	25.0	21.8	21.0
60°	43.3	42.5	39.4	35.9	31.1	26.2	21.9	18.7	18.0
62.5°	40.4	39.3	36.5	32.4	28.2	23.2	18.9	15.7	14.9
65°	37.3	36.4	33.7	29.7	25.2	20.6	15.9	12.9	12.0
67.5°	34.5	33.4	30.6	26.6	22.5	17.6	13.1	10.3	9.3
70°	31.0	30.2	27.4	23.4	19.2	14.3	9.9	7.3	6.5
72.5°	27.7	26.8	24.1	20.3	16.1	11.5	7.2	5.0	4.0
75°	24.4	23.4	20.8	17.1	12.9	8.4	4.6	2.6	2.1
77.5°	20.9	20.1	17.5	14.0	10.1	5.7	2.5	1.1	0.7
80°	17.5	16.6	14.2	10.8	7.1	3.3	0.9	0.1	0.0
82.5°	14.0	13.3	11.0	8.1	4.5	1.4	0.1	0.1	0.1
85°	10.7	9.9	7.7	4.9	2.2	0.2	0.0	0.1	0.0
87.5°	7.5	6.9	4.8	2.7	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)