

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: P166458

Luminaire Tested: **HU1048D930MB**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P166458
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25790)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: HU1048D930MB
Description: HALO HU10 LED UNDERCABINET FIXTURE
48 INCH LENGTH WITH MATTE BLACK FINISH
Light Source: (72) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

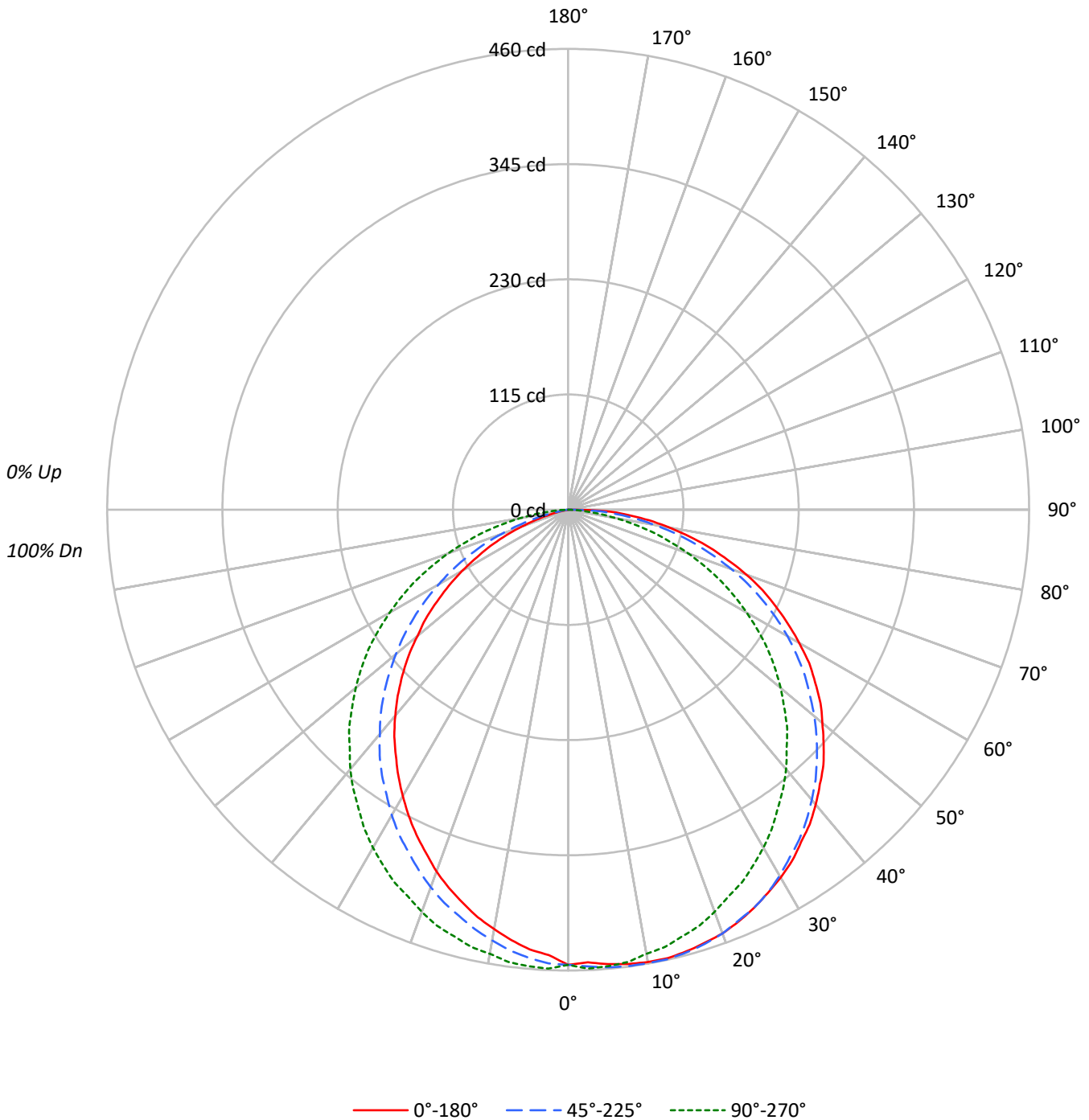
Lumens per Lamp: N/A
Luminaire Lumens: 1300.7 lumens
Efficiency: N/A
Efficacy: 60.5 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.27 / 1.39
Luminous Opening: Rectangular (W 4' x L: 0.1' x H: 0')
CIE Type: Direct

Input Watts (W): 21.5
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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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	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	69
3	90	79	71	65	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	41	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	30	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	11736	11736	11736
5°	11809	11861	11428
10°	12027	11807	11151
15°	12206	11786	10866
20°	12374	11744	10565
25°	12502	11698	10210
30°	12648	11622	9844
35°	12779	11495	9452
40°	12960	11412	9051
45°	13163	11293	8545
50°	13307	11124	7889
55°	13548	10958	7197
60°	13759	10628	6314
65°	13980	10275	5232
70°	14275	9623	3709
75°	14593	8754	1876
80°	15234	7141	149
85°	17636	4654	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.0	3.3
10°-20°	123.3	9.5
20°-30°	186.9	14.4
30°-40°	225.5	17.3
40°-50°	234.3	18.0
50°-60°	212.1	16.3
60°-70°	160.4	12.3
70°-80°	89.2	6.9
80°-90°	26.0	2.0
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°	353.2	27.2
0°-40°	578.7	44.5
0°-60°	1025.1	78.8
0°-90°	1300.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1300.7	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	454	454	454	454	454	
5°	455	458	457	449	441	44
15°	456	457	441	420	406	129
25°	439	439	410	377	358	202
35°	405	402	364	324	300	254
45°	360	351	309	260	234	277
55°	301	288	243	188	160	269
65°	229	214	168	111	86	226
75°	146	130	88	36	19	154
85°	60	47	16	0	0	63
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°	454.3	454.3	454.3	454.3	454.3	454.3	454.3	454.3	454.3
2.5°	452.2	456.4	456.4	456.4	458.5	452.2	453.3	446.0	444.9
5°	455.4	460.6	458.5	456.4	457.4	448.0	449.1	439.7	440.7
7.5°	457.4	463.7	459.5	456.4	455.4	443.9	443.9	432.4	433.4
10°	458.5	463.7	459.5	455.4	450.1	439.7	436.6	425.1	425.1
12.5°	458.5	462.7	459.5	452.2	447.0	432.4	429.2	416.7	416.7
15°	456.4	464.8	457.4	448.0	440.7	425.1	419.8	408.4	406.3
17.5°	453.3	462.7	454.3	443.9	435.5	417.8	411.5	399.0	395.8
20°	450.1	458.5	450.1	437.6	427.2	408.4	401.0	386.4	384.3
22.5°	444.9	453.3	443.9	430.3	417.8	397.9	389.6	373.9	370.8
25°	438.6	448.0	438.6	423.0	410.4	387.5	377.0	362.4	358.2
27.5°	431.3	439.7	431.3	413.6	400.0	377.0	365.5	348.8	344.6
30°	424.0	432.4	421.9	404.2	389.6	364.5	352.0	334.2	330.0
32.5°	415.7	424.0	411.5	393.7	378.1	353.0	337.3	320.6	315.4
35°	405.2	412.5	402.1	382.2	364.5	338.4	323.8	305.0	299.7
37.5°	395.8	402.1	390.6	370.8	352.0	325.8	309.1	289.3	285.1
40°	384.3	391.6	378.1	358.2	338.4	310.2	292.4	272.6	268.4
42.5°	371.8	379.1	365.5	343.6	322.7	296.6	276.8	255.9	251.7
45°	360.3	365.5	350.9	330.0	309.1	280.9	260.1	239.2	233.9
47.5°	345.7	350.9	336.3	315.4	292.4	264.2	242.3	221.4	216.2
50°	331.1	336.3	320.6	299.7	276.8	248.6	224.5	203.7	196.3
52.5°	317.5	320.6	303.9	284.1	260.1	230.8	206.8	184.9	179.6
55°	300.8	303.9	288.3	267.4	243.3	214.1	188.0	167.1	159.8
57.5°	285.1	287.2	270.5	249.6	224.5	195.3	169.2	147.3	141.0
60°	266.3	267.4	252.7	230.8	205.7	176.5	149.3	127.4	122.2
62.5°	247.5	248.6	233.9	212.0	186.9	157.7	130.5	109.7	102.4
65°	228.7	228.7	214.1	192.2	168.1	137.9	110.7	90.9	85.6
67.5°	209.9	207.8	194.3	172.3	147.3	118.0	90.9	72.1	66.8
70°	189.0	186.9	173.4	151.4	127.4	98.2	71.0	54.3	49.1
72.5°	167.1	166.1	151.4	130.5	106.5	78.3	52.2	37.6	33.4
75°	146.2	144.1	130.5	109.7	87.7	58.5	35.5	23.0	18.8
77.5°	124.3	122.2	109.7	88.8	66.8	40.7	20.9	10.4	7.3
80°	102.4	100.3	87.7	68.9	48.0	24.0	8.4	2.1	1.0
82.5°	81.5	79.4	66.8	49.1	30.3	11.5	1.0	0.0	0.0
85°	59.5	57.4	47.0	30.3	15.7	2.1	0.0	0.0	0.0
87.5°	40.7	38.6	28.2	15.7	5.2	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)