

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: METALUX

Report Number: P894616

Luminaire Tested: 8TMB-14HL-LVRA-UNV-L850

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894616
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-077-26)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 8TMB-14HL-LVRA-UNV-L850
Description: 14000 Lumen 8FT MICROBAY LINEAR BAY with LOUVER WITH AISLE OPTIC, 80CRI, 5000K CCT
Light Source: -
Ballast/Driver: -

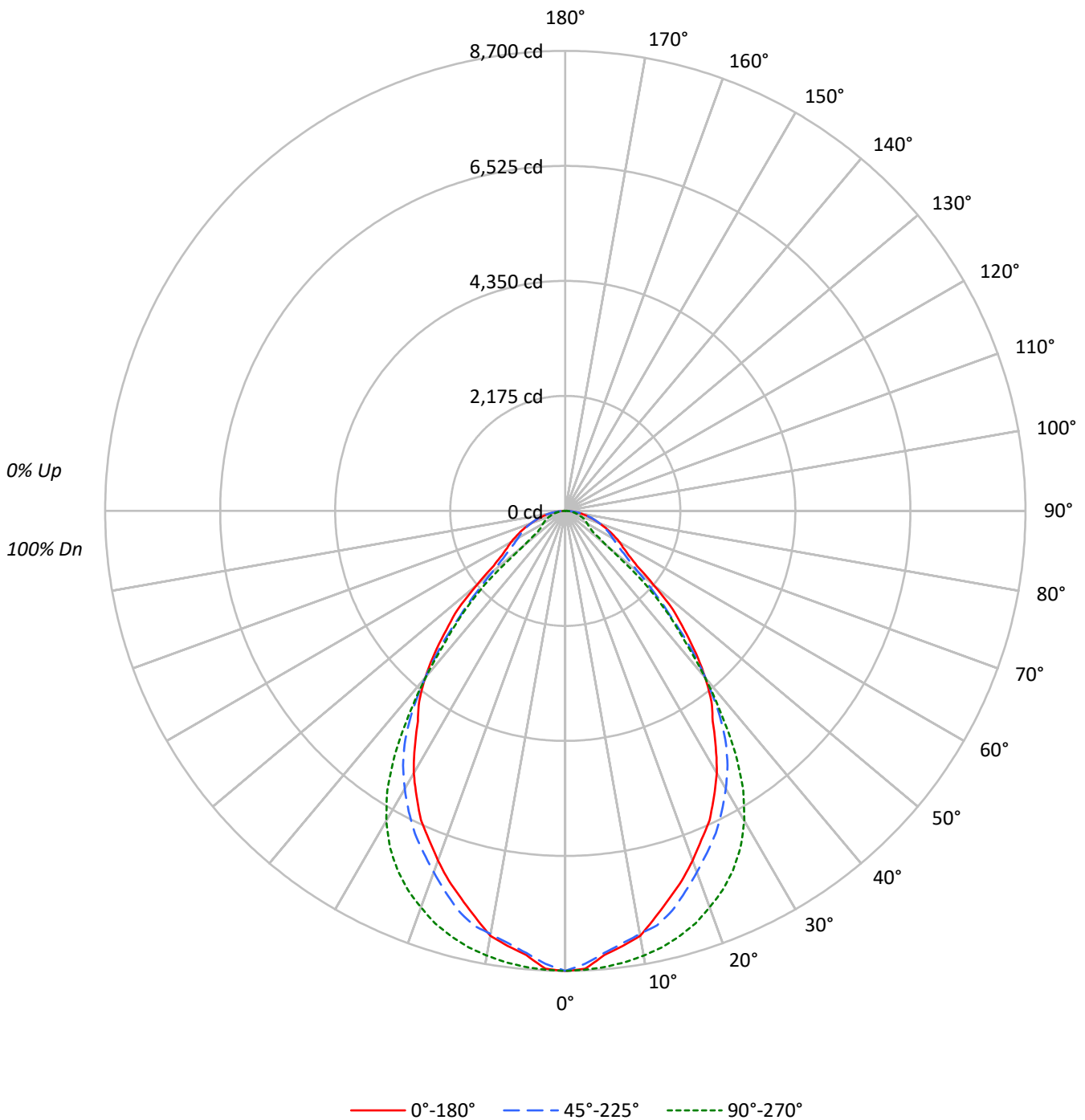
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14120.0 lumens
Efficiency: N/A
Efficacy: 136.3 lumens/watt
Spacing Criteria (0/90/45): 1.02 / 1.16 / 1.12
Luminous Opening: Rectangular (W 0.38' x L: 7.98' x H: 0')
CIE Type: Direct

Input Watts (W): 103.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: 0.997
Total Harmonic Distortion (THDi): 5.03
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 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	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88	88	88
2	103	96	91	86	101	95	90	85	91	87	83	88	85	82	85	82	80	78	78	78
3	96	87	80	75	94	86	80	75	83	78	73	80	76	72	78	74	71	69	69	69
4	89	79	72	66	87	78	71	66	76	70	65	73	68	64	71	67	63	62	62	62
5	83	72	65	59	81	71	64	59	69	63	58	67	62	58	66	61	57	55	55	55
6	78	66	59	53	76	65	58	53	64	57	53	62	57	52	61	56	52	50	50	50
7	73	61	54	48	71	60	53	48	59	52	48	58	52	47	56	51	47	45	45	45
8	68	57	49	44	67	56	49	44	55	48	44	53	48	43	52	47	43	41	41	41
9	64	52	45	40	63	52	45	40	51	44	40	50	44	40	49	44	40	38	38	38
10	61	49	42	37	60	48	42	37	47	41	37	47	41	37	46	40	37	35	35	35

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	30869	30869	30869
5°	30037	29901	30835
10°	29398	29269	30764
15°	27881	28738	30591
20°	26560	27457	30124
25°	25265	26344	29355
30°	23472	24869	27716
35°	21047	22853	24310
40°	19068	19110	19006
45°	15943	14121	13772
50°	12043	9939	5631
55°	9058	7948	3551
60°	8418	7320	3421
65°	7831	7304	3426
70°	7164	7164	3373
75°	6793	6978	3259
80°	6277	6598	3345
85°	5476	5752	3652

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 16314 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	803.7	5.7
10°-20°	2214.4	15.7
20°-30°	3140.0	22.2
30°-40°	3234.9	22.9
40°-50°	2259.5	16.0
50°-60°	1084.2	7.7
60°-70°	760.6	5.4
70°-80°	475.6	3.4
80°-90°	147.1	1.0
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°	6158.1	43.6
0°-40°	9393.0	66.5
0°-60°	12736.7	90.2
0°-90°	14120.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	14120.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8700	8700	8700	8700	8700	
5°	8433	8422	8395	8615	8658	798
15°	7590	7646	7823	8048	8328	2137
25°	6453	6518	6729	7184	7498	2951
35°	4859	4991	5276	5386	5612	3062
45°	3177	3251	2814	2671	2745	2448
55°	1464	1392	1285	823	574	1372
65°	933	872	870	662	408	924
75°	496	489	509	440	238	522
85°	134	134	141	139	90	150
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	8700.1	8700.1	8700.1	8700.1	8700.1
2.5°	8666.5	8639.6	8574.6	8693.4	8684.4
5°	8433.3	8422.1	8395.2	8614.9	8657.5
7.5°	8301.0	8278.6	8247.2	8489.4	8608.2
10°	8159.7	8186.7	8123.9	8345.9	8538.7
12.5°	7868.2	7940.0	8025.2	8197.9	8453.5
15°	7590.2	7646.3	7823.4	8047.6	8327.9
17.5°	7330.1	7395.1	7547.6	7883.9	8182.2
20°	7034.1	7123.8	7271.8	7702.3	7978.1
22.5°	6729.2	6812.1	6998.2	7460.1	7767.3
25°	6453.4	6518.4	6729.2	7184.3	7498.3
27.5°	6087.9	6208.9	6408.5	6848.0	7177.6
30°	5729.1	5832.2	6069.9	6439.9	6765.0
32.5°	5296.3	5446.6	5708.9	5991.4	6262.8
35°	4859.1	4991.4	5276.1	5386.0	5612.5
37.5°	4540.7	4576.5	4738.0	4724.5	4852.3
40°	4116.9	4188.6	4125.8	3957.7	4103.4
42.5°	3659.4	3744.6	3491.3	3296.2	3347.8
45°	3177.3	3251.3	2814.1	2670.6	2744.6
47.5°	2760.3	2753.6	2269.2	2172.8	2069.6
50°	2181.8	2253.5	1800.6	1621.2	1020.2
52.5°	1704.2	1731.1	1484.4	1035.9	670.4
55°	1464.2	1392.5	1284.8	822.9	574.0
57.5°	1300.5	1210.8	1139.1	764.6	524.7
60°	1186.2	1085.3	1031.5	726.5	482.1
62.5°	1056.1	977.6	957.5	692.9	444.0
65°	932.8	872.3	870.0	661.5	408.1
67.5°	809.5	775.8	784.8	623.4	367.7
70°	690.6	683.9	690.6	574.0	325.1
72.5°	589.7	583.0	600.9	511.2	278.0
75°	495.5	488.8	509.0	439.5	237.7
77.5°	394.6	399.1	412.6	365.5	199.6
80°	307.2	307.2	322.9	287.0	163.7
82.5°	219.7	222.0	231.0	210.8	127.8
85°	134.5	134.5	141.3	139.0	89.7
87.5°	44.8	51.6	60.5	65.0	44.8
90°	0.0	0.0	0.0	0.0	0.0



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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	17.56	18.92	17.93	19.23	19.54	13.90	15.25	14.26	15.56	15.88
	3H	19.30	20.51	19.68	20.84	21.20	15.87	17.08	16.25	17.41	17.77
	4H	19.97	21.10	20.37	21.45	21.83	16.58	17.70	16.98	18.05	18.44
	6H	20.48	21.52	20.89	21.89	22.28	17.10	18.14	17.51	18.51	18.90
	8H	20.65	21.64	21.08	22.03	22.43	17.28	18.27	17.71	18.66	19.06
	12H	20.76	21.70	21.19	22.09	22.52	17.42	18.37	17.86	18.75	19.18
4H	2H	18.09	19.22	18.50	19.57	19.95	15.52	16.64	15.92	16.99	17.38
	3H	20.07	21.00	20.48	21.40	21.81	17.70	18.63	18.11	19.03	19.43
	4H	20.87	21.71	21.31	22.13	22.57	18.58	19.41	19.01	19.83	20.27
	6H	21.52	22.24	21.98	22.69	23.15	19.22	19.94	19.68	20.39	20.85
	8H	21.74	22.41	22.20	22.86	23.33	19.43	20.10	19.89	20.55	21.02
	12H	21.89	22.49	22.37	22.97	23.44	19.58	20.18	20.07	20.67	21.14
8H	4H	21.16	21.83	21.62	22.28	22.75	19.22	19.90	19.69	20.35	20.82
	6H	21.94	22.50	22.44	22.99	23.47	20.09	20.64	20.59	21.14	21.62
	8H	22.24	22.74	22.76	23.25	23.75	20.41	20.91	20.93	21.43	21.92
	12H	22.48	22.92	22.99	23.41	23.98	20.68	21.12	21.19	21.61	22.18
12H	4H	21.17	21.77	21.66	22.26	22.73	19.30	19.90	19.78	20.38	20.85
	6H	21.99	22.49	22.51	23.01	23.50	20.22	20.72	20.74	21.24	21.73
	8H	22.36	22.80	22.87	23.29	23.86	20.64	21.08	21.15	21.57	22.14