

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: P894811

Luminaire Tested: 8TMB-18HL-LVRA-UNV-L940

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894811
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-18HL-LVRA-UNV-L940
Description: 18000 Lumen 8FT MICROBAY LINEAR BAY with LOUVER WITH AISLE OPTIC, 90CRI, 4000K CCT
Light Source: -
Ballast/Driver: -

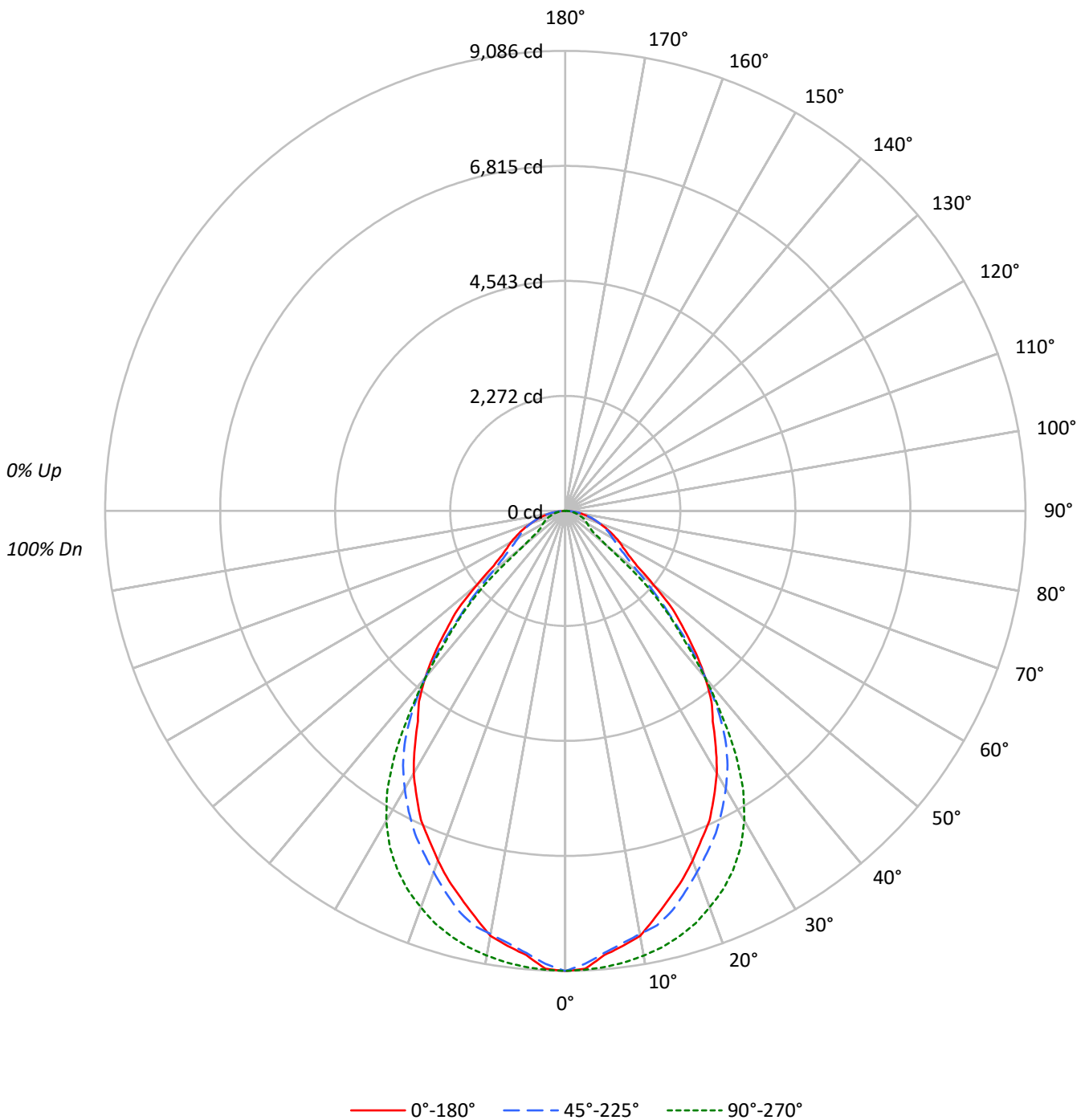
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14747.0 lumens
Efficiency: N/A
Efficacy: 109.4 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): 134.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 8.62
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	0
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	102	102	100
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	93	92	90	88
2	103	96	91	86	101	95	90	85	91	87	83	88	85	82	85	82	80	85	82	80	78
3	96	87	80	75	94	86	80	75	83	78	73	80	76	72	78	74	71	78	74	71	69
4	89	79	72	66	87	78	71	66	76	70	65	73	68	64	71	67	63	71	67	63	62
5	83	72	65	59	81	71	64	59	69	63	58	67	62	58	66	61	57	66	61	57	55
6	78	66	59	53	76	65	58	53	64	57	53	62	57	52	61	56	52	61	56	52	50
7	73	61	54	48	71	60	53	48	59	52	48	58	52	47	56	51	47	56	51	47	45
8	68	57	49	44	67	56	49	44	55	48	44	53	48	43	52	47	43	52	47	43	41
9	64	52	45	40	63	52	45	40	51	44	40	50	44	40	49	44	40	49	44	40	38
10	61	49	42	37	60	48	42	37	47	41	37	47	41	37	46	40	37	46	40	37	35

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	32240	32240	32240
5°	31371	31229	32205
10°	30704	30569	32130
15°	29119	30014	31949
20°	27739	28676	31462
25°	26386	27514	30659
30°	24515	25973	28947
35°	21981	23868	25390
40°	19915	19958	19850
45°	16651	14748	14384
50°	12578	10380	5882
55°	9460	8301	3708
60°	8792	7645	3573
65°	8179	7628	3578
70°	7483	7483	3523
75°	7096	7288	3403
80°	6555	6890	3494
85°	5720	6005	3815

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 17039 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	839.3	5.7
10°-20°	2312.7	15.7
20°-30°	3279.5	22.2
30°-40°	3378.6	22.9
40°-50°	2359.8	16.0
50°-60°	1132.3	7.7
60°-70°	794.4	5.4
70°-80°	496.7	3.4
80°-90°	153.6	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°	6431.5	43.6
0°-40°	9810.1	66.5
0°-60°	13302.3	90.2
0°-90°	14747.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	14747.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	9086	9086	9086	9086	9086	
5°	8808	8796	8768	8998	9042	834
15°	7927	7986	8171	8405	8698	2232
25°	6740	6808	7028	7503	7831	3082
35°	5075	5213	5510	5625	5862	3198
45°	3318	3396	2939	2789	2866	2557
55°	1529	1454	1342	860	600	1433
65°	974	911	909	691	426	965
75°	518	510	532	459	248	545
85°	140	140	148	145	94	157
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	9086.5	9086.5	9086.5	9086.5	9086.5
2.5°	9051.3	9023.2	8955.3	9079.4	9070.1
5°	8807.8	8796.1	8768.0	8997.5	9042.0
7.5°	8669.6	8646.2	8613.4	8866.3	8990.5
10°	8522.1	8550.2	8484.6	8716.5	8917.9
12.5°	8217.6	8292.6	8381.6	8561.9	8828.9
15°	7927.2	7985.8	8170.8	8405.0	8697.7
17.5°	7655.6	7723.5	7882.8	8234.0	8545.5
20°	7346.5	7440.1	7594.7	8044.3	8332.4
22.5°	7028.0	7114.6	7309.0	7791.4	8112.3
25°	6739.9	6807.8	7028.0	7503.4	7831.2
27.5°	6358.2	6484.7	6693.1	7152.1	7496.3
30°	5983.5	6091.2	6339.5	6725.9	7065.4
32.5°	5531.5	5688.4	5962.4	6257.5	6540.9
35°	5074.8	5213.0	5510.4	5625.2	5861.7
37.5°	4742.3	4779.8	4948.4	4934.3	5067.8
40°	4299.7	4374.6	4309.0	4133.4	4285.6
42.5°	3821.9	3910.9	3646.3	3442.6	3496.4
45°	3318.4	3395.7	2939.1	2789.2	2866.5
47.5°	2882.8	2875.8	2370.0	2269.3	2161.6
50°	2278.6	2353.6	1880.5	1693.2	1065.6
52.5°	1779.8	1807.9	1550.3	1081.9	700.2
55°	1529.2	1454.3	1341.9	859.5	599.5
57.5°	1358.3	1264.6	1189.7	798.6	548.0
60°	1238.9	1133.5	1077.3	758.8	503.5
62.5°	1103.0	1021.1	1000.0	723.6	463.7
65°	974.2	911.0	908.6	690.9	426.2
67.5°	845.4	810.3	819.7	651.0	384.1
70°	721.3	714.3	721.3	599.5	339.6
72.5°	615.9	608.9	627.6	533.9	290.4
75°	517.6	510.5	531.6	459.0	248.2
77.5°	412.2	416.9	430.9	381.7	208.4
80°	320.8	320.8	337.2	299.8	171.0
82.5°	229.5	231.8	241.2	220.1	133.5
85°	140.5	140.5	147.5	145.2	93.7
87.5°	46.8	53.9	63.2	67.9	46.8
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	17.71	19.07	18.08	19.38	19.70	14.05	15.40	14.41	15.71	16.03
	3H	19.45	20.66	19.83	20.99	21.35	16.02	17.23	16.40	17.56	17.92
	4H	20.12	21.25	20.53	21.60	21.98	16.73	17.85	17.13	18.20	18.59
	6H	20.63	21.67	21.04	22.04	22.43	17.25	18.29	17.66	18.66	19.05
	8H	20.80	21.79	21.23	22.18	22.58	17.43	18.42	17.86	18.81	19.22
	12H	20.91	21.85	21.34	22.24	22.67	17.57	18.52	18.01	18.90	19.33
4H	2H	18.24	19.37	18.65	19.72	20.10	15.67	16.80	16.07	17.15	17.53
	3H	20.22	21.15	20.63	21.55	21.96	17.85	18.78	18.26	19.18	19.58
	4H	21.02	21.86	21.46	22.28	22.72	18.73	19.56	19.16	19.98	20.42
	6H	21.67	22.39	22.13	22.84	23.30	19.37	20.09	19.83	20.54	21.00
	8H	21.89	22.56	22.35	23.01	23.48	19.58	20.25	20.05	20.70	21.17
	12H	22.04	22.64	22.53	23.12	23.60	19.74	20.34	20.22	20.82	21.29
8H	4H	21.31	21.98	21.78	22.43	22.90	19.37	20.05	19.84	20.50	20.97
	6H	22.09	22.65	22.59	23.14	23.62	20.24	20.79	20.74	21.29	21.77
	8H	22.39	22.89	22.91	23.41	23.90	20.56	21.06	21.08	21.58	22.07
	12H	22.63	23.07	23.14	23.56	24.13	20.83	21.27	21.34	21.76	22.33
12H	4H	21.32	21.92	21.81	22.41	22.88	19.45	20.05	19.93	20.53	21.00
	6H	22.14	22.64	22.66	23.16	23.65	20.37	20.87	20.89	21.39	21.88
	8H	22.51	22.95	23.02	23.44	24.01	20.79	21.23	21.30	21.72	22.29