

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: P894806

Luminaire Tested: 8TMB-18HL-LVRA-UNV-L835

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894806
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-L835
Description: 18000 Lumen 8FT MICROBAY LINEAR BAY with LOUVER WITH AISLE OPTIC, 80CRI, 3500K CCT
Light Source: -
Ballast/Driver: -

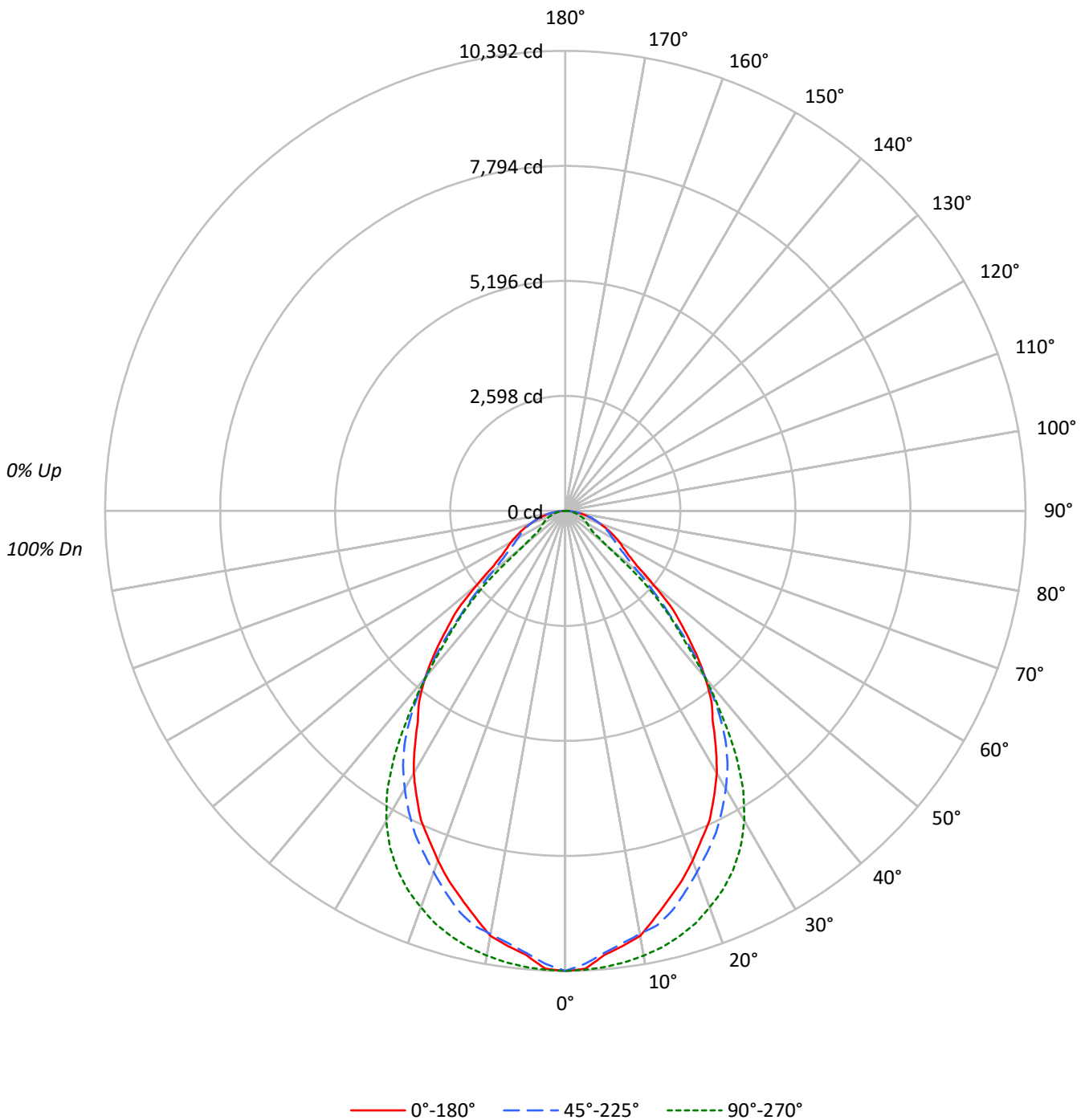
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16866.0 lumens
Efficiency: N/A
Efficacy: 125.1 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	90	90	90	88
2	103	96	91	86	101	95	90	85	91	87	83	88	85	82	85	82	80	80	80	80	78
3	96	87	80	75	94	86	80	75	83	78	73	80	76	72	78	74	71	71	71	71	69
4	89	79	72	66	87	78	71	66	76	70	65	73	68	64	71	67	63	63	63	63	62
5	83	72	65	59	81	71	64	59	69	63	58	67	62	58	66	61	57	57	57	57	55
6	78	66	59	53	76	65	58	53	64	57	53	62	57	52	61	56	52	52	52	52	50
7	73	61	54	48	71	60	53	48	59	52	48	58	52	47	56	51	47	47	47	47	45
8	68	57	49	44	67	56	49	44	55	48	44	53	48	43	52	47	43	43	43	43	41
9	64	52	45	40	63	52	45	40	51	44	40	50	44	40	49	44	40	40	40	40	38
10	61	49	42	37	60	48	42	37	47	41	37	47	41	37	46	40	37	37	37	37	35

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	36873	36873	36873
5°	35878	35716	36832
10°	35116	34962	36747
15°	33303	34327	36540
20°	31725	32797	35983
25°	30178	31467	35064
30°	28037	29705	33107
35°	25140	27298	29038
40°	22777	22826	22702
45°	19044	16867	16450
50°	14385	11872	6727
55°	10819	9494	4242
60°	10055	8743	4087
65°	9354	8725	4093
70°	8558	8558	4029
75°	8114	8335	3892
80°	7497	7881	3995
85°	6542	6868	4360

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 19488 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	959.9	5.7
10°-20°	2645.0	15.7
20°-30°	3750.7	22.2
30°-40°	3864.0	22.9
40°-50°	2698.9	16.0
50°-60°	1295.0	7.7
60°-70°	908.6	5.4
70°-80°	568.1	3.4
80°-90°	175.7	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°	7355.7	43.6
0°-40°	11219.7	66.5
0°-60°	15213.7	90.2
0°-90°	16866.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	16866.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	10392	10392	10392	10392	10392	
5°	10073	10060	10028	10290	10341	953
15°	9066	9133	9345	9613	9948	2553
25°	7708	7786	8038	8582	8956	3525
35°	5804	5962	6302	6434	6704	3657
45°	3795	3884	3361	3190	3278	2924
55°	1749	1663	1535	983	686	1639
65°	1114	1042	1039	790	488	1104
75°	592	584	608	525	284	623
85°	161	161	169	166	107	180
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	10392.1	10392.1	10392.1	10392.1	10392.1
2.5°	10351.9	10319.8	10242.1	10384.1	10373.4
5°	10073.4	10060.0	10027.9	10290.3	10341.2
7.5°	9915.4	9888.6	9851.1	10140.3	10282.3
10°	9746.6	9778.8	9703.8	9968.9	10199.3
12.5°	9398.4	9484.1	9585.9	9792.2	10097.5
15°	9066.3	9133.3	9344.9	9612.7	9947.5
17.5°	8755.6	8833.3	9015.4	9417.2	9773.4
20°	8402.1	8509.2	8686.0	9200.2	9529.7
22.5°	8037.8	8136.9	8359.2	8911.0	9277.9
25°	7708.4	7786.0	8037.8	8581.5	8956.5
27.5°	7271.8	7416.4	7654.8	8179.8	8573.5
30°	6843.3	6966.5	7250.4	7692.3	8080.7
32.5°	6326.3	6505.8	6819.2	7156.6	7480.7
35°	5804.0	5962.1	6302.2	6433.5	6704.0
37.5°	5423.7	5466.6	5659.4	5643.3	5796.0
40°	4917.5	5003.2	4928.2	4727.3	4901.4
42.5°	4371.1	4472.9	4170.2	3937.2	3998.8
45°	3795.3	3883.7	3361.4	3189.9	3278.3
47.5°	3297.1	3289.0	2710.5	2595.3	2472.1
50°	2606.1	2691.8	2150.7	1936.5	1218.7
52.5°	2035.6	2067.7	1773.1	1237.4	800.8
55°	1749.0	1663.3	1534.7	983.0	685.7
57.5°	1553.5	1446.3	1360.6	913.3	626.7
60°	1416.9	1296.3	1232.1	867.8	575.9
62.5°	1261.5	1167.8	1143.7	827.6	530.3
65°	1114.2	1041.9	1039.2	790.1	487.5
67.5°	966.9	926.7	937.4	744.6	439.3
70°	824.9	816.9	824.9	685.7	388.4
72.5°	704.4	696.4	717.8	610.7	332.1
75°	591.9	583.9	608.0	525.0	283.9
77.5°	471.4	476.8	492.8	436.6	238.4
80°	366.9	366.9	385.7	342.8	195.5
82.5°	262.5	265.2	275.9	251.8	152.7
85°	160.7	160.7	168.7	166.1	107.1
87.5°	53.6	61.6	72.3	77.7	53.6
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	18.18	19.53	18.55	19.85	20.16	14.51	15.87	14.88	16.18	16.49
	3H	19.92	21.13	20.30	21.46	21.82	16.49	17.70	16.87	18.03	18.39
	4H	20.59	21.72	20.99	22.07	22.45	17.19	18.32	17.60	18.67	19.05
	6H	21.10	22.14	21.51	22.50	22.90	17.72	18.75	18.13	19.12	19.52
	8H	21.27	22.25	21.70	22.64	23.05	17.90	18.89	18.33	19.28	19.68
	12H	21.38	22.32	21.81	22.70	23.13	18.04	18.98	18.47	19.37	19.80
4H	2H	18.71	19.84	19.11	20.19	20.57	16.13	17.26	16.54	17.61	17.99
	3H	20.69	21.62	21.10	22.02	22.42	18.31	19.24	18.73	19.65	20.05
	4H	21.49	22.33	21.92	22.74	23.19	19.19	20.03	19.63	20.45	20.89
	6H	22.13	22.86	22.59	23.30	23.77	19.84	20.56	20.30	21.01	21.47
	8H	22.35	23.03	22.82	23.48	23.95	20.04	20.72	20.51	21.17	21.64
	12H	22.51	23.11	22.99	23.59	24.06	20.20	20.80	20.69	21.28	21.76
8H	4H	21.77	22.45	22.24	22.90	23.37	19.84	20.52	20.31	20.96	21.43
	6H	22.56	23.11	23.06	23.61	24.09	20.70	21.26	21.20	21.75	22.23
	8H	22.86	23.36	23.38	23.87	24.36	21.03	21.53	21.55	22.04	22.53
	12H	23.09	23.53	23.61	24.03	24.60	21.29	21.73	21.81	22.23	22.80
12H	4H	21.79	22.39	22.28	22.87	23.35	19.91	20.51	20.40	21.00	21.47
	6H	22.61	23.11	23.13	23.62	24.11	20.84	21.34	21.36	21.85	22.34
	8H	22.97	23.41	23.49	23.91	24.48	21.25	21.69	21.77	22.19	22.76