

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: P894807

Luminaire Tested: 8TMB-18HL-LVRA-UNV-L840

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894807
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-L840
Description: 18000 Lumen 8FT MICROBAY LINEAR BAY with LOUVER WITH AISLE OPTIC, 80CRI, 4000K CCT
Light Source: -
Ballast/Driver: -

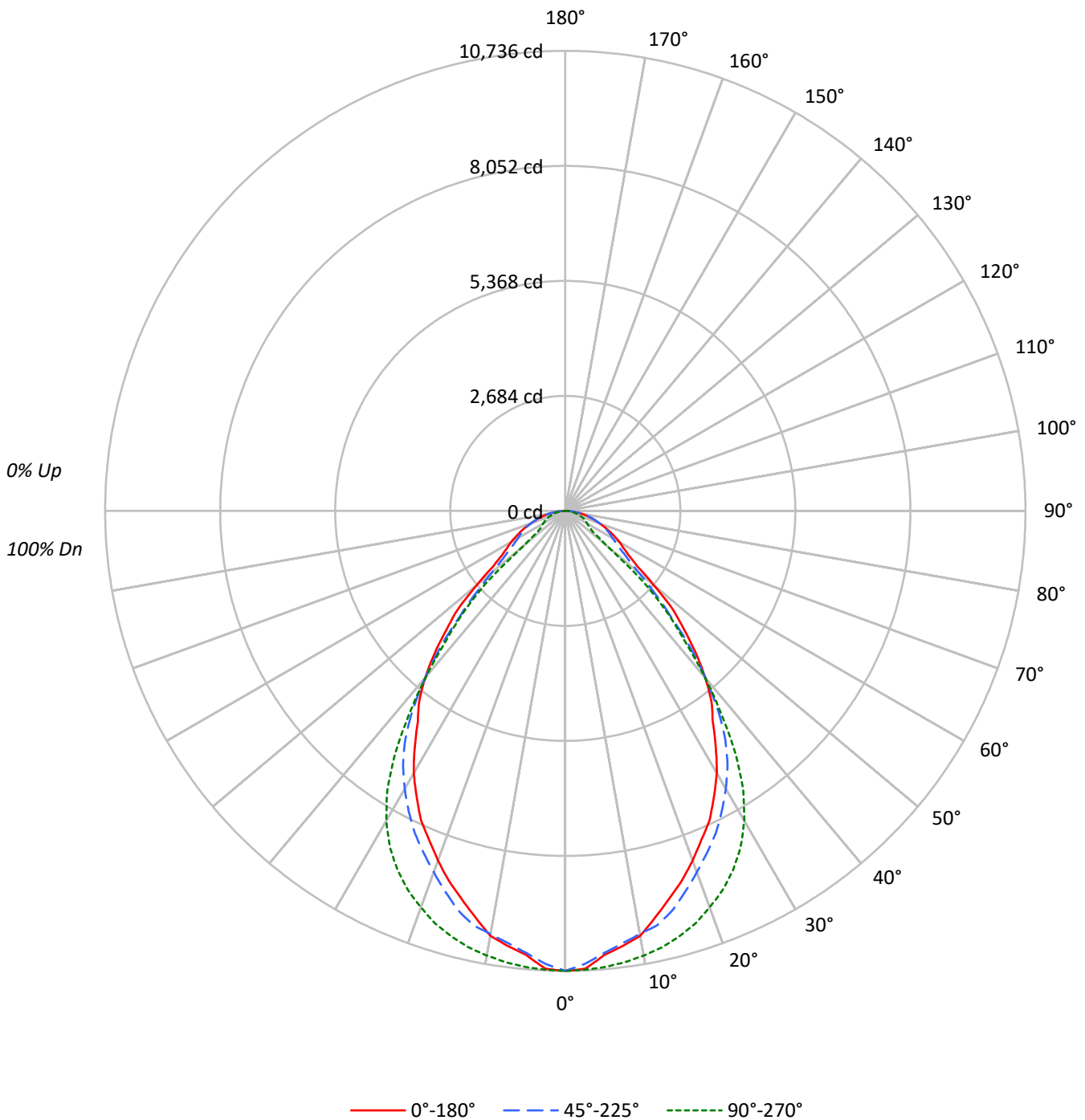
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17424.0 lumens
Efficiency: N/A
Efficacy: 129.3 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): 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
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°	38092	38092	38092
5°	37065	36898	38051
10°	36278	36118	37962
15°	34405	35462	37749
20°	32775	33882	37173
25°	31176	32508	36224
30°	28965	30688	34202
35°	25972	28201	29999
40°	23530	23582	23453
45°	19674	17425	16994
50°	14861	12265	6950
55°	11177	9808	4382
60°	10387	9032	4222
65°	9664	9014	4228
70°	8841	8841	4162
75°	8383	8611	4021
80°	7746	8140	4127
85°	6758	7096	4507

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 20132 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	991.7	5.7
10°-20°	2732.5	15.7
20°-30°	3874.8	22.2
30°-40°	3991.9	22.9
40°-50°	2788.2	16.0
50°-60°	1337.9	7.7
60°-70°	938.6	5.4
70°-80°	586.9	3.4
80°-90°	181.5	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°	7599.0	43.6
0°-40°	11590.9	66.5
0°-60°	15717.0	90.2
0°-90°	17424.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	17424.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	10736	10736	10736	10736	10736	
5°	10407	10393	10360	10631	10683	985
15°	9366	9435	9654	9931	10277	2637
25°	7963	8044	8304	8865	9253	3641
35°	5996	6159	6511	6646	6926	3778
45°	3921	4012	3473	3296	3387	3021
55°	1807	1718	1586	1016	708	1693
65°	1151	1076	1074	816	504	1140
75°	612	603	628	542	293	644
85°	166	166	174	172	111	186
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	10735.9	10735.9	10735.9	10735.9	10735.9
2.5°	10694.4	10661.2	10581.0	10727.6	10716.6
5°	10406.7	10392.8	10359.6	10630.8	10683.4
7.5°	10243.4	10215.7	10177.0	10475.8	10622.5
10°	10069.1	10102.3	10024.8	10298.7	10536.7
12.5°	9709.4	9797.9	9903.1	10116.1	10431.6
15°	9366.3	9435.4	9654.0	9930.7	10276.6
17.5°	9045.3	9125.5	9313.7	9728.7	10096.8
20°	8680.1	8790.7	8973.4	9504.6	9845.0
22.5°	8303.7	8406.1	8635.8	9205.8	9584.9
25°	7963.4	8043.6	8303.7	8865.4	9252.8
27.5°	7512.4	7661.8	7908.1	8450.4	8857.1
30°	7069.7	7196.9	7490.2	7946.8	8348.0
32.5°	6535.6	6721.0	7044.8	7393.4	7728.2
35°	5996.1	6159.3	6510.7	6646.3	6925.8
37.5°	5603.2	5647.4	5846.7	5830.1	5987.8
40°	5080.2	5168.7	5091.3	4883.7	5063.6
42.5°	4515.7	4620.9	4308.2	4067.5	4131.1
45°	3920.8	4012.1	3472.6	3295.5	3386.8
47.5°	3406.2	3397.9	2800.2	2681.2	2553.9
50°	2692.3	2780.8	2221.9	2000.5	1259.0
52.5°	2102.9	2136.1	1831.7	1278.4	827.3
55°	1806.8	1718.3	1585.5	1015.5	708.3
57.5°	1604.9	1494.2	1405.6	943.5	647.5
60°	1463.7	1339.2	1272.8	896.5	594.9
62.5°	1303.3	1206.4	1181.5	855.0	547.9
65°	1151.1	1076.4	1073.6	816.3	503.6
67.5°	998.9	957.4	968.4	769.2	453.8
70°	852.2	843.9	852.2	708.3	401.2
72.5°	727.7	719.4	741.6	630.9	343.1
75°	611.5	603.2	628.1	542.3	293.3
77.5°	487.0	492.5	509.1	451.0	246.3
80°	379.1	379.1	398.4	354.2	202.0
82.5°	271.2	273.9	285.0	260.1	157.7
85°	166.0	166.0	174.3	171.6	110.7
87.5°	55.3	63.6	74.7	80.2	55.3
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	18.29	19.65	18.66	19.96	20.27	14.63	15.98	14.99	16.29	16.61
	3H	20.03	21.24	20.41	21.57	21.93	16.60	17.81	16.98	18.14	18.50
	4H	20.70	21.83	21.11	22.18	22.56	17.31	18.43	17.71	18.78	19.17
	6H	21.21	22.25	21.62	22.62	23.01	17.83	18.87	18.24	19.24	19.63
	8H	21.38	22.37	21.81	22.76	23.16	18.01	19.00	18.44	19.39	19.79
	12H	21.49	22.43	21.92	22.82	23.25	18.15	19.10	18.59	19.48	19.91
4H	2H	18.82	19.95	19.23	20.30	20.68	16.25	17.38	16.65	17.73	18.11
	3H	20.80	21.73	21.21	22.13	22.54	18.43	19.36	18.84	19.76	20.16
	4H	21.60	22.44	22.04	22.86	23.30	19.31	20.14	19.74	20.56	21.00
	6H	22.25	22.97	22.71	23.42	23.88	19.95	20.67	20.41	21.12	21.58
	8H	22.47	23.14	22.93	23.59	24.06	20.16	20.83	20.63	21.28	21.75
	12H	22.62	23.22	23.11	23.70	24.18	20.32	20.92	20.80	21.40	21.87
8H	4H	21.89	22.56	22.35	23.01	23.48	19.95	20.63	20.42	21.08	21.55
	6H	22.67	23.23	23.17	23.72	24.20	20.82	21.37	21.32	21.87	22.35
	8H	22.97	23.47	23.49	23.99	24.48	21.14	21.64	21.66	22.16	22.65
	12H	23.21	23.65	23.72	24.14	24.71	21.41	21.85	21.92	22.34	22.91
12H	4H	21.90	22.50	22.39	22.99	23.46	20.03	20.63	20.51	21.11	21.58
	6H	22.72	23.22	23.24	23.74	24.23	20.95	21.45	21.47	21.97	22.46
	8H	23.09	23.53	23.60	24.02	24.59	21.37	21.81	21.88	22.30	22.87