

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: P894836

Luminaire Tested: 8TMB-18HL-RND-UNV-L950

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894836
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2403-334-1)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 8TMB-18HL-RND-UNV-L950
Description: 18000 Lumen 8FT MICROBAY LINEAR BAY with ROUND FROSTED LENS, 90CRI, 5000K CCT
Light Source: -
Ballast/Driver: -

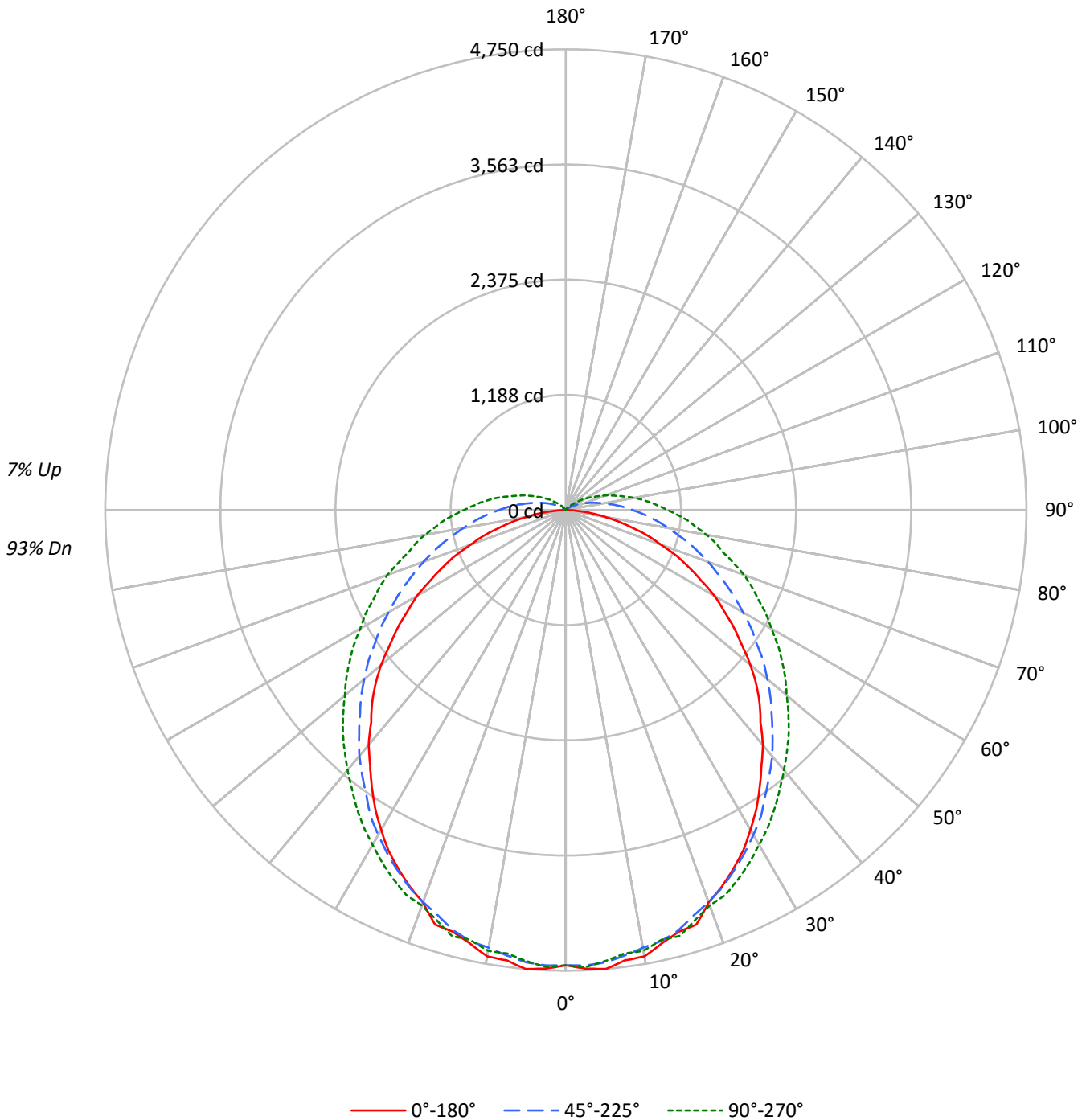
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15462.0 lumens
Efficiency: N/A
Efficacy: 114.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.35
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			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	117	117	117	117	114	114	114	114	107	107	107	101	101	101	96	96	96	93
1	105	100	95	90	102	97	92	88	91	87	84	86	83	80	81	79	77	74
2	95	86	79	72	92	84	77	71	79	73	68	74	70	66	70	67	63	60
3	86	75	66	60	83	73	65	59	69	62	57	65	60	55	62	57	53	50
4	79	66	57	50	76	65	56	49	61	54	48	58	52	47	55	50	45	43
5	73	59	50	43	70	58	49	42	55	47	41	52	45	40	49	44	39	37
6	67	53	44	37	65	52	43	37	49	42	36	47	40	35	45	39	34	32
7	62	48	39	33	60	47	39	33	45	37	32	43	36	31	41	35	30	28
8	58	44	35	29	56	43	35	29	41	34	28	39	33	28	38	32	27	25
9	54	40	32	26	52	39	32	26	38	31	26	36	30	25	35	29	25	23
10	51	37	29	24	49	36	29	24	35	28	23	34	27	23	32	27	22	21

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16655	16655	16655
5°	16918	16673	16627
10°	16835	16510	16626
15°	16533	16478	16699
20°	16257	16241	16378
25°	15990	16057	16452
30°	15599	15845	16329
35°	15105	15542	16268
40°	14651	15337	16212
45°	14191	15063	16313
50°	13726	14971	16417
55°	13098	14864	16844
60°	12587	14964	17372
65°	11755	15361	18425
70°	10805	16218	20294
75°	9803	17957	22991
80°	8424	21939	30143
85°	6819	35491	51576

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 87.5°
 Luminance: 93626 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	445.1	2.9
10°-20°	1266.9	8.2
20°-30°	1898.6	12.3
30°-40°	2256.2	14.6
40°-50°	2335.8	15.1
50°-60°	2164.6	14.0
60°-70°	1802.1	11.7
70°-80°	1337.5	8.7
80°-90°	884.7	5.7
90°-100°	538.3	3.5
100°-110°	301.8	2.0
110°-120°	148.6	1.0
120°-130°	60.5	0.4
130°-140°	17.5	0.1
140°-150°	2.5	0.0
150°-160°	0.6	0.0
160°-170°	0.5	0.0
170°-180°	0.2	0.0
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0°-30°	3610.6	23.4
0°-40°	5866.8	37.9
0°-60°	10367.1	67.0
0°-90°	14391.4	93.1
90°-120°	988.7	6.4
90°-150°	1069.3	6.9
90°-180°	1071.0	6.9
0°-180°	15462.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4694	4694	4694	4694	4694	
5°	4750	4698	4681	4705	4668	449
15°	4501	4484	4486	4492	4546	1275
25°	4084	4080	4102	4181	4202	1880
35°	3487	3513	3588	3702	3756	2182
45°	2828	2869	3002	3189	3251	2179
55°	2117	2208	2403	2643	2723	1893
65°	1400	1531	1830	2098	2195	1391
75°	715	932	1310	1591	1677	765
85°	168	470	872	1181	1267	188
90°	9	305	689	964	1050	13
95°	2	189	535	797	885	2
105°	2	62	290	492	560	2
115°	2	15	135	271	324	2
125°	2	4	49	124	159	2
135°	4	2	13	41	56	3
145°	4	2	0	4	6	3
155°	4	4	0	0	0	2
165°	6	4	0	0	0	2
175°	6	4	0	0	0	1
180°	2	2	2	2	2	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4694.1	4694.1	4694.1	4694.1	4694.1
2.5°	4732.8	4709.2	4700.6	4689.8	4715.6
5°	4750.0	4698.4	4681.2	4704.9	4668.4
7.5°	4683.4	4670.5	4634.0	4646.9	4612.5
10°	4672.7	4601.8	4582.5	4625.4	4614.7
12.5°	4576.0	4515.9	4550.3	4580.3	4539.5
15°	4500.9	4483.7	4485.8	4492.3	4546.0
17.5°	4481.5	4404.2	4382.8	4436.4	4432.2
20°	4305.5	4290.4	4301.2	4372.0	4337.7
22.5°	4202.4	4155.1	4213.1	4281.8	4296.9
25°	4084.3	4080.0	4101.5	4180.9	4202.4
27.5°	3959.7	3931.8	3989.8	4082.1	4099.3
30°	3807.3	3796.5	3867.4	3946.9	3985.5
32.5°	3657.0	3663.4	3745.0	3811.6	3878.1
35°	3487.3	3513.1	3588.2	3702.1	3755.7
37.5°	3315.5	3347.7	3448.7	3579.7	3624.7
40°	3163.1	3169.5	3311.2	3444.4	3500.2
42.5°	2971.9	3036.4	3156.6	3332.7	3375.7
45°	2828.1	2868.9	3002.0	3188.8	3251.1
47.5°	2664.9	2712.1	2864.6	3047.1	3113.7
50°	2486.6	2529.6	2712.1	2920.4	2974.1
52.5°	2289.1	2377.1	2568.2	2783.0	2853.8
55°	2117.3	2207.5	2402.9	2643.4	2722.9
57.5°	1932.6	2022.8	2267.6	2490.9	2594.0
60°	1773.7	1859.6	2108.7	2385.7	2448.0
62.5°	1576.2	1698.6	1969.1	2241.8	2329.9
65°	1400.1	1531.1	1829.6	2098.0	2194.6
67.5°	1239.0	1374.3	1685.7	1973.4	2078.6
70°	1041.5	1219.7	1563.3	1846.7	1956.2
72.5°	895.4	1073.7	1432.3	1713.6	1812.4
75°	715.1	932.0	1309.9	1591.2	1677.1
77.5°	564.8	798.8	1183.2	1498.9	1584.8
80°	412.3	678.6	1073.7	1376.5	1475.2
82.5°	281.3	566.9	972.8	1262.6	1357.1
85°	167.5	470.3	871.8	1181.0	1266.9
87.5°	73.0	384.4	779.5	1062.9	1151.0
90°	8.6	304.9	689.3	964.2	1050.1
92.5°	2.1	244.8	609.9	876.1	959.9
95°	2.1	189.0	534.7	796.7	884.7
97.5°	2.1	146.0	459.5	715.1	798.8
100°	2.1	111.7	397.3	629.2	719.4
102.5°	2.1	83.7	337.1	558.3	635.6
105°	2.1	62.3	289.9	491.7	560.5
107.5°	2.1	45.1	242.7	429.5	498.2
110°	2.1	32.2	204.0	371.5	440.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	2.1	23.6	165.3	320.0	377.9
115°	2.1	15.0	135.3	270.6	324.3
117.5°	2.1	10.7	107.4	227.6	279.2
120°	2.1	8.6	85.9	189.0	234.1
122.5°	2.1	6.4	66.6	154.6	197.6
125°	2.1	4.3	49.4	124.5	158.9
127.5°	2.1	4.3	36.5	98.8	128.8
130°	2.1	2.1	25.8	75.2	100.9
132.5°	2.1	2.1	17.2	55.8	75.2
135°	4.3	2.1	12.9	40.8	55.8
137.5°	4.3	2.1	8.6	27.9	38.7
140°	4.3	2.1	4.3	17.2	23.6
142.5°	4.3	2.1	2.1	8.6	12.9
145°	4.3	2.1	0.0	4.3	6.4
147.5°	4.3	2.1	0.0	2.1	2.1
150°	4.3	2.1	0.0	0.0	0.0
152.5°	4.3	2.1	0.0	0.0	0.0
155°	4.3	4.3	0.0	0.0	0.0
157.5°	4.3	4.3	0.0	0.0	0.0
160°	4.3	4.3	0.0	0.0	0.0
162.5°	4.3	4.3	0.0	0.0	0.0
165°	6.4	4.3	0.0	0.0	0.0
167.5°	6.4	4.3	0.0	0.0	0.0
170°	6.4	4.3	0.0	0.0	0.0
172.5°	6.4	4.3	0.0	0.0	0.0
175°	6.4	4.3	0.0	0.0	0.0
177.5°	6.4	4.3	0.0	0.0	0.0
180°	2.1	2.1	2.1	2.1	2.1



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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	20.00	21.54	20.47	21.99	22.48	21.57	23.11	22.04	23.57	24.05
	3H	21.77	23.17	22.25	23.63	24.16	24.16	25.56	24.64	26.03	26.55
	4H	22.42	23.75	22.92	24.23	24.77	25.42	26.75	25.92	27.23	27.77
	6H	22.90	24.14	23.41	24.64	25.19	26.80	28.04	27.32	28.54	29.09
	8H	23.05	24.24	23.58	24.76	25.32	27.53	28.72	28.06	29.24	29.80
	12H	23.15	24.29	23.68	24.80	25.39	28.37	29.51	28.91	30.03	30.62
4H	2H	20.96	22.29	21.46	22.77	23.31	22.15	23.48	22.65	23.96	24.50
	3H	23.00	24.13	23.51	24.66	25.22	25.01	26.15	25.53	26.68	27.24
	4H	23.81	24.85	24.35	25.39	25.98	26.49	27.53	27.03	28.07	28.66
	6H	24.46	25.38	25.01	25.94	26.55	28.11	29.03	28.67	29.59	30.20
	8H	24.69	25.55	25.25	26.12	26.73	28.97	29.84	29.53	30.40	31.02
	12H	24.86	25.64	25.44	26.23	26.86	29.96	30.75	30.54	31.34	31.96
8H	4H	24.66	25.52	25.22	26.09	26.71	26.86	27.73	27.42	28.29	28.91
	6H	25.58	26.32	26.17	26.92	27.55	28.74	29.48	29.33	30.08	30.71
	8H	25.96	26.63	26.57	27.24	27.88	29.80	30.47	30.41	31.08	31.72
	12H	26.29	26.88	26.89	27.48	28.19	31.06	31.65	31.66	32.26	32.96
12H	4H	24.92	25.71	25.50	26.30	26.92	26.91	27.69	27.49	28.28	28.91
	6H	26.01	26.67	26.61	27.29	27.92	28.85	29.52	29.46	30.13	30.77
	8H	26.55	27.14	27.15	27.74	28.45	30.03	30.62	30.63	31.22	31.93