

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: P894638

Luminaire Tested: 8TMB-14HL-RND-UNV-L835

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894638
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-14HL-RND-UNV-L835
Description: 14000 Lumen 8FT MICROBAY LINEAR BAY with ROUND FROSTED LENS, 80CRI, 3500K CCT
Light Source: -
Ballast/Driver: -

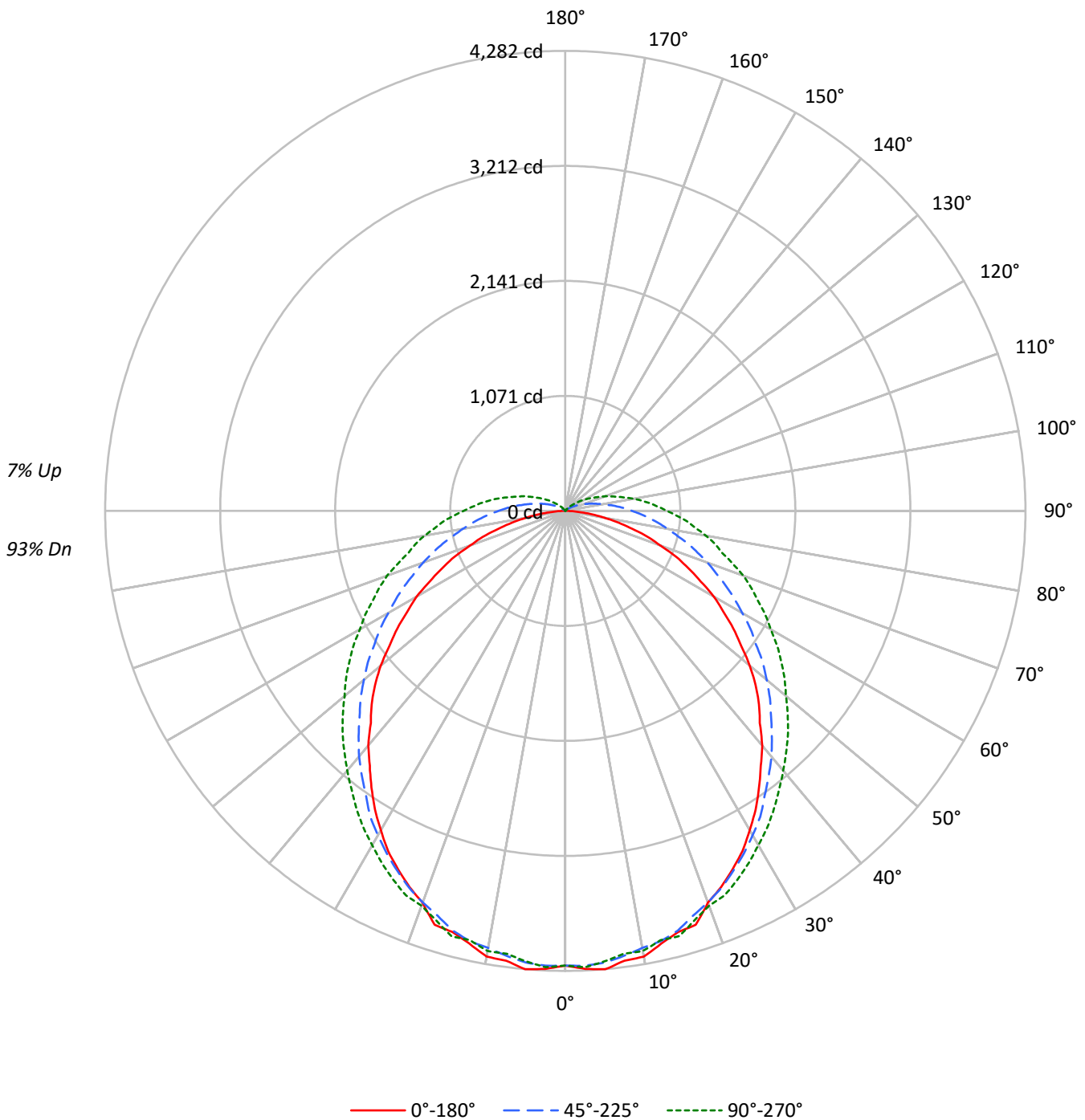
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13939.0 lumens
Efficiency: N/A
Efficacy: 134.5 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): 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	0
RCR																					
0	117	117	117	117	114	114	114	114	107	107	107	101	101	101	96	96	96	96	96	96	93
1	105	100	95	90	102	97	92	88	91	87	84	86	83	80	81	79	77	77	77	77	74
2	95	86	79	72	92	84	77	71	79	73	68	74	70	66	70	67	63	63	63	63	60
3	86	75	66	60	83	73	65	59	69	62	57	65	60	55	62	57	53	53	53	53	50
4	79	66	57	50	76	65	56	49	61	54	48	58	52	47	55	50	45	45	45	45	43
5	73	59	50	43	70	58	49	42	55	47	41	52	45	40	49	44	39	39	39	39	37
6	67	53	44	37	65	52	43	37	49	42	36	47	40	35	45	39	34	34	34	34	32
7	62	48	39	33	60	47	39	33	45	37	32	43	36	31	41	35	30	30	30	30	28
8	58	44	35	29	56	43	35	29	41	34	28	39	33	28	38	32	27	27	27	27	25
9	54	40	32	26	52	39	32	26	38	31	26	36	30	25	35	29	25	25	25	25	23
10	51	37	29	24	49	36	29	24	35	28	23	34	27	23	32	27	22	22	22	22	21

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15015	15015	15015
5°	15252	15031	14989
10°	15177	14884	14988
15°	14904	14855	15054
20°	14656	14641	14765
25°	14415	14475	14832
30°	14062	14284	14720
35°	13617	14011	14666
40°	13207	13826	14615
45°	12793	13580	14707
50°	12374	13496	14799
55°	11807	13400	15185
60°	11347	13490	15661
65°	10597	13847	16610
70°	9740	14620	18296
75°	8837	16189	20727
80°	7595	19777	27174
85°	6147	31998	46499

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 87.5°
 Luminance: 84402 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	401.2	2.9
10°-20°	1142.1	8.2
20°-30°	1711.6	12.3
30°-40°	2034.0	14.6
40°-50°	2105.7	15.1
50°-60°	1951.4	14.0
60°-70°	1624.6	11.7
70°-80°	1205.8	8.7
80°-90°	797.5	5.7
90°-100°	485.3	3.5
100°-110°	272.1	2.0
110°-120°	134.0	1.0
120°-130°	54.5	0.4
130°-140°	15.8	0.1
140°-150°	2.3	0.0
150°-160°	0.6	0.0
160°-170°	0.5	0.0
170°-180°	0.2	0.0
0°-30°	3254.9	23.4
0°-40°	5288.9	37.9
0°-60°	9346.0	67.0
0°-90°	12973.9	93.1
90°-120°	891.3	6.4
90°-150°	963.9	6.9
90°-180°	965.0	6.9
0°-180°	13939.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4232	4232	4232	4232	4232	
5°	4282	4236	4220	4241	4208	405
15°	4058	4042	4044	4050	4098	1149
25°	3682	3678	3698	3769	3788	1695
35°	3144	3167	3235	3337	3386	1967
45°	2550	2586	2706	2875	2931	1964
55°	1909	1990	2166	2383	2455	1707
65°	1262	1380	1649	1891	1978	1254
75°	645	840	1181	1434	1512	690
85°	151	424	786	1065	1142	169
90°	8	275	621	869	947	11
95°	2	170	482	718	798	2
105°	2	56	261	443	505	2
115°	2	14	122	244	292	2
125°	2	4	44	112	143	2
135°	4	2	12	37	50	2
145°	4	2	0	4	6	2
155°	4	4	0	0	0	2
165°	6	4	0	0	0	1
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°	4231.8	4231.8	4231.8	4231.8	4231.8
2.5°	4266.6	4245.3	4237.6	4227.9	4251.1
5°	4282.1	4235.6	4220.1	4241.4	4208.5
7.5°	4222.1	4210.5	4177.6	4189.2	4158.2
10°	4212.4	4148.5	4131.1	4169.8	4160.1
12.5°	4125.3	4071.1	4102.1	4129.2	4092.4
15°	4057.5	4042.1	4044.0	4049.8	4098.2
17.5°	4040.1	3970.4	3951.1	3999.5	3995.6
20°	3881.4	3867.8	3877.5	3941.4	3910.4
22.5°	3788.5	3745.9	3798.1	3860.1	3873.6
25°	3682.0	3678.1	3697.5	3769.1	3788.5
27.5°	3569.7	3544.5	3596.8	3680.0	3695.5
30°	3432.3	3422.6	3486.5	3558.1	3592.9
32.5°	3296.7	3302.6	3376.1	3436.1	3496.1
35°	3143.8	3167.0	3234.8	3337.4	3385.8
37.5°	2988.9	3018.0	3109.0	3227.1	3267.7
40°	2851.5	2857.3	2985.1	3105.1	3155.4
42.5°	2679.2	2737.3	2845.7	3004.4	3043.2
45°	2549.5	2586.3	2706.3	2874.7	2930.9
47.5°	2402.4	2445.0	2582.4	2747.0	2807.0
50°	2241.7	2280.4	2445.0	2632.8	2681.1
52.5°	2063.6	2143.0	2315.3	2508.9	2572.7
55°	1908.7	1990.1	2166.2	2383.0	2454.7
57.5°	1742.3	1823.6	2044.3	2245.6	2338.5
60°	1599.0	1676.4	1901.0	2150.7	2206.9
62.5°	1420.9	1531.3	1775.2	2021.0	2100.4
65°	1262.2	1380.3	1649.3	1891.3	1978.4
67.5°	1117.0	1238.9	1519.6	1779.0	1873.9
70°	938.9	1099.6	1409.3	1664.8	1763.6
72.5°	807.2	967.9	1291.2	1544.8	1633.9
75°	644.6	840.2	1180.9	1434.5	1511.9
77.5°	509.1	720.1	1066.7	1351.2	1428.7
80°	371.7	611.7	967.9	1240.9	1329.9
82.5°	253.6	511.1	876.9	1138.3	1223.5
85°	151.0	424.0	786.0	1064.7	1142.2
87.5°	65.8	346.5	702.7	958.2	1037.6
90°	7.7	274.9	621.4	869.2	946.6
92.5°	1.9	220.7	549.8	789.8	865.3
95°	1.9	170.4	482.0	718.2	797.6
97.5°	1.9	131.6	414.3	644.6	720.1
100°	1.9	100.7	358.1	567.2	648.5
102.5°	1.9	75.5	303.9	503.3	573.0
105°	1.9	56.1	261.3	443.3	505.3
107.5°	1.9	40.7	218.8	387.2	449.1
110°	1.9	29.0	183.9	334.9	396.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	1.9	21.3	149.1	288.4	340.7
115°	1.9	13.6	122.0	243.9	292.3
117.5°	1.9	9.7	96.8	205.2	251.7
120°	1.9	7.7	77.4	170.4	211.0
122.5°	1.9	5.8	60.0	139.4	178.1
125°	1.9	3.9	44.5	112.3	143.3
127.5°	1.9	3.9	32.9	89.0	116.2
130°	1.9	1.9	23.2	67.8	91.0
132.5°	1.9	1.9	15.5	50.3	67.8
135°	3.9	1.9	11.6	36.8	50.3
137.5°	3.9	1.9	7.7	25.2	34.8
140°	3.9	1.9	3.9	15.5	21.3
142.5°	3.9	1.9	1.9	7.7	11.6
145°	3.9	1.9	0.0	3.9	5.8
147.5°	3.9	1.9	0.0	1.9	1.9
150°	3.9	1.9	0.0	0.0	0.0
152.5°	3.9	1.9	0.0	0.0	0.0
155°	3.9	3.9	0.0	0.0	0.0
157.5°	3.9	3.9	0.0	0.0	0.0
160°	3.9	3.9	0.0	0.0	0.0
162.5°	3.9	3.9	0.0	0.0	0.0
165°	5.8	3.9	0.0	0.0	0.0
167.5°	5.8	3.9	0.0	0.0	0.0
170°	5.8	3.9	0.0	0.0	0.0
172.5°	5.8	3.9	0.0	0.0	0.0
175°	5.8	3.9	0.0	0.0	0.0
177.5°	5.8	3.9	0.0	0.0	0.0
180°	1.9	1.9	1.9	1.9	1.9



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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	19.64	21.18	20.11	21.63	22.12	21.21	22.75	21.68	23.21	23.69
	3H	21.41	22.81	21.89	23.27	23.80	23.80	25.20	24.28	25.67	26.19
	4H	22.06	23.39	22.56	23.87	24.41	25.06	26.39	25.56	26.87	27.41
	6H	22.54	23.78	23.05	24.28	24.83	26.44	27.68	26.96	28.18	28.73
	8H	22.69	23.88	23.22	24.40	24.96	27.17	28.36	27.70	28.88	29.44
	12H	22.79	23.93	23.32	24.44	25.03	28.01	29.15	28.55	29.67	30.26
4H	2H	20.60	21.93	21.10	22.41	22.95	21.79	23.12	22.29	23.60	24.14
	3H	22.64	23.77	23.15	24.30	24.86	24.65	25.79	25.17	26.32	26.88
	4H	23.45	24.49	23.98	25.03	25.62	26.13	27.17	26.67	27.71	28.30
	6H	24.10	25.02	24.65	25.58	26.19	27.75	28.67	28.31	29.23	29.84
	8H	24.33	25.19	24.89	25.76	26.37	28.61	29.48	29.17	30.04	30.66
	12H	24.50	25.28	25.08	25.87	26.50	29.60	30.39	30.18	30.98	31.60
8H	4H	24.30	25.16	24.86	25.73	26.35	26.50	27.37	27.06	27.93	28.55
	6H	25.22	25.96	25.81	26.56	27.19	28.38	29.12	28.97	29.72	30.35
	8H	25.60	26.27	26.21	26.88	27.52	29.44	30.11	30.05	30.72	31.36
	12H	25.93	26.52	26.53	27.12	27.83	30.70	31.29	31.30	31.90	32.60
12H	4H	24.56	25.35	25.14	25.94	26.56	26.55	27.33	27.13	27.92	28.55
	6H	25.65	26.31	26.25	26.93	27.56	28.49	29.16	29.10	29.77	30.41
	8H	26.19	26.78	26.79	27.38	28.09	29.67	30.26	30.27	30.86	31.57