

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: P894644

Luminaire Tested: 8TMB-14HL-RND-UNV-L950

Issue Date: 11/11/2024

**Test Information**

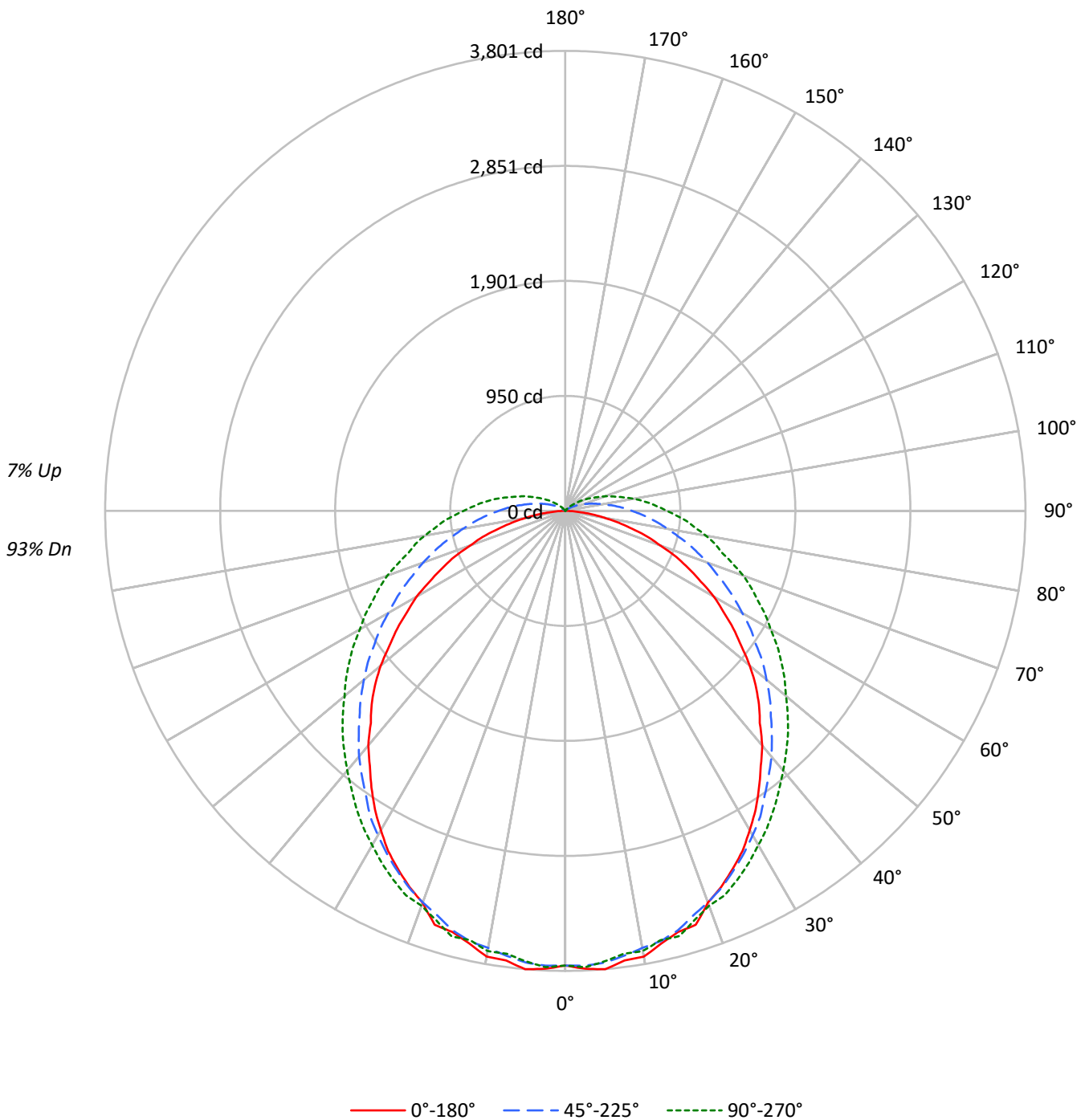
Test Method: LM-79-2019  
Report Number: P894644  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2403-334-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 8TMB-14HL-RND-UNV-L950  
Description: 14000 Lumen 8FT MICROBAY LINEAR BAY with ROUND FROSTED LENS, 90CRI, 5000K CCT  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12371.9 lumens  
Efficiency: N/A  
Efficacy: 119.4 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 (Ain): 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				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°	13327	13327	13327
5°	13537	13341	13304
10°	13471	13211	13304
15°	13229	13185	13362
20°	13008	12995	13105
25°	12794	12848	13164
30°	12481	12678	13065
35°	12087	12437	13017
40°	11723	12272	12972
45°	11355	12053	13053
50°	10983	11979	13136
55°	10480	11894	13477
60°	10072	11974	13900
65°	9406	12290	14743
70°	8645	12977	16239
75°	7844	14368	18396
80°	6741	17554	24119
85°	5455	28399	41272

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 87.5°  
 Luminance: 74917 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	356.1	2.9
10°-20°	1013.7	8.2
20°-30°	1519.2	12.3
30°-40°	1805.3	14.6
40°-50°	1869.0	15.1
50°-60°	1732.0	14.0
60°-70°	1442.0	11.7
70°-80°	1070.2	8.7
80°-90°	707.9	5.7
90°-100°	430.8	3.5
100°-110°	241.5	2.0
110°-120°	118.9	1.0
120°-130°	48.4	0.4
130°-140°	14.0	0.1
140°-150°	2.0	0.0
150°-160°	0.5	0.0
160°-170°	0.4	0.0
170°-180°	0.1	0.0
0°-30°	2889.0	23.4
0°-40°	4694.3	37.9
0°-60°	8295.3	67.0
0°-90°	11515.4	93.1
90°-120°	791.1	6.4
90°-150°	855.5	6.9
90°-180°	857.0	6.9
0°-180°	12371.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3756	3756	3756	3756	3756	
5°	3801	3760	3746	3765	3735	359
15°	3601	3588	3589	3594	3638	1020
25°	3268	3265	3282	3345	3363	1504
35°	2790	2811	2871	2962	3005	1746
45°	2263	2296	2402	2552	2601	1743
55°	1694	1766	1923	2115	2179	1515
65°	1120	1225	1464	1679	1756	1113
75°	572	746	1048	1273	1342	612
85°	134	376	698	945	1014	150
90°	7	244	552	772	840	10
95°	2	151	428	638	708	1
105°	2	50	232	394	448	2
115°	2	12	108	216	260	2
125°	2	3	40	100	127	2
135°	3	2	10	33	45	2
145°	3	2	0	3	5	2
155°	3	3	0	0	0	2
165°	5	3	0	0	0	1
175°	5	3	0	0	0	0
180°	2	2	2	2	2	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3756.0	3756.0	3756.0	3756.0	3756.0
2.5°	3787.0	3768.1	3761.2	3752.6	3773.2
5°	3800.7	3759.5	3745.7	3764.6	3735.4
7.5°	3747.4	3737.1	3707.9	3718.2	3690.7
10°	3738.9	3682.2	3666.7	3701.1	3692.5
12.5°	3661.5	3613.4	3640.9	3665.0	3632.3
15°	3601.4	3587.6	3589.4	3594.5	3637.5
17.5°	3585.9	3524.1	3506.9	3549.8	3546.4
20°	3445.0	3433.0	3441.6	3498.3	3470.8
22.5°	3362.6	3324.8	3371.2	3426.1	3438.2
25°	3268.1	3264.6	3281.8	3345.4	3362.6
27.5°	3168.4	3146.1	3192.5	3266.3	3280.1
30°	3046.4	3037.8	3094.5	3158.1	3189.0
32.5°	2926.1	2931.3	2996.6	3049.8	3103.1
35°	2790.4	2811.0	2871.2	2962.2	3005.2
37.5°	2652.9	2678.7	2759.5	2864.3	2900.4
40°	2530.9	2536.1	2649.5	2756.0	2800.7
42.5°	2378.0	2429.6	2525.8	2666.7	2701.0
45°	2262.9	2295.5	2402.1	2551.6	2601.4
47.5°	2132.3	2170.1	2292.1	2438.2	2491.4
50°	1989.7	2024.1	2170.1	2336.8	2379.7
52.5°	1831.6	1902.1	2055.0	2226.8	2283.5
55°	1694.2	1766.3	1922.7	2115.1	2178.7
57.5°	1546.4	1618.6	1814.4	1993.1	2075.6
60°	1419.3	1488.0	1687.3	1908.9	1958.8
62.5°	1261.2	1359.1	1575.6	1793.8	1864.3
65°	1120.3	1225.1	1463.9	1678.7	1756.0
67.5°	991.4	1099.7	1348.8	1579.0	1663.2
70°	833.3	976.0	1250.9	1477.7	1565.3
72.5°	716.5	859.1	1146.1	1371.1	1450.2
75°	572.2	745.7	1048.1	1273.2	1341.9
77.5°	451.9	639.2	946.7	1199.3	1268.0
80°	329.9	543.0	859.1	1101.4	1180.4
82.5°	225.1	453.6	778.4	1010.3	1085.9
85°	134.0	376.3	697.6	945.0	1013.8
87.5°	58.4	307.6	623.7	850.5	921.0
90°	6.9	244.0	551.5	771.5	840.2
92.5°	1.7	195.9	488.0	701.0	768.0
95°	1.7	151.2	427.8	637.5	707.9
97.5°	1.7	116.8	367.7	572.2	639.2
100°	1.7	89.3	317.9	503.4	575.6
102.5°	1.7	67.0	269.8	446.7	508.6
105°	1.7	49.8	232.0	393.5	448.5
107.5°	1.7	36.1	194.2	343.6	398.6
110°	1.7	25.8	163.2	297.3	352.2



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	1.7	18.9	132.3	256.0	302.4
115°	1.7	12.0	108.2	216.5	259.5
117.5°	1.7	8.6	85.9	182.1	223.4
120°	1.7	6.9	68.7	151.2	187.3
122.5°	1.7	5.2	53.3	123.7	158.1
125°	1.7	3.4	39.5	99.7	127.1
127.5°	1.7	3.4	29.2	79.0	103.1
130°	1.7	1.7	20.6	60.1	80.8
132.5°	1.7	1.7	13.7	44.7	60.1
135°	3.4	1.7	10.3	32.6	44.7
137.5°	3.4	1.7	6.9	22.3	30.9
140°	3.4	1.7	3.4	13.7	18.9
142.5°	3.4	1.7	1.7	6.9	10.3
145°	3.4	1.7	0.0	3.4	5.2
147.5°	3.4	1.7	0.0	1.7	1.7
150°	3.4	1.7	0.0	0.0	0.0
152.5°	3.4	1.7	0.0	0.0	0.0
155°	3.4	3.4	0.0	0.0	0.0
157.5°	3.4	3.4	0.0	0.0	0.0
160°	3.4	3.4	0.0	0.0	0.0
162.5°	3.4	3.4	0.0	0.0	0.0
165°	5.2	3.4	0.0	0.0	0.0
167.5°	5.2	3.4	0.0	0.0	0.0
170°	5.2	3.4	0.0	0.0	0.0
172.5°	5.2	3.4	0.0	0.0	0.0
175°	5.2	3.4	0.0	0.0	0.0
177.5°	5.2	3.4	0.0	0.0	0.0
180°	1.7	1.7	1.7	1.7	1.7



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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	19.23	20.76	19.70	21.22	21.70	20.80	22.34	21.27	22.79	23.28
	3H	20.99	22.39	21.47	22.86	23.38	23.39	24.79	23.87	25.25	25.78
	4H	21.65	22.98	22.15	23.46	24.00	24.64	25.98	25.15	26.46	26.99
	6H	22.13	23.37	22.64	23.86	24.41	26.03	27.27	26.54	27.76	28.32
	8H	22.27	23.46	22.80	23.98	24.54	26.76	27.94	27.28	28.46	29.02
	12H	22.37	23.51	22.91	24.03	24.62	27.60	28.74	28.13	29.25	29.84
4H	2H	20.18	21.51	20.69	22.00	22.53	21.37	22.70	21.87	23.19	23.72
	3H	22.22	23.36	22.74	23.88	24.44	24.24	25.38	24.75	25.90	26.46
	4H	23.04	24.08	23.57	24.61	25.20	25.72	26.76	26.25	27.30	27.89
	6H	23.69	24.61	24.24	25.17	25.77	27.34	28.26	27.89	28.82	29.43
	8H	23.91	24.78	24.47	25.34	25.96	28.19	29.06	28.75	29.62	30.24
	12H	24.08	24.87	24.66	25.46	26.08	29.19	29.97	29.77	30.56	31.19
8H	4H	23.88	24.75	24.44	25.31	25.93	26.09	26.96	26.65	27.52	28.14
	6H	24.81	25.54	25.40	26.15	26.77	27.97	28.70	28.56	29.31	29.93
	8H	25.19	25.86	25.79	26.47	27.11	29.03	29.69	29.63	30.31	30.94
	12H	25.51	26.11	26.12	26.71	27.41	30.28	30.88	30.89	31.48	32.18
12H	4H	24.15	24.93	24.73	25.52	26.15	26.13	26.92	26.71	27.51	28.13
	6H	25.23	25.90	25.84	26.51	27.15	28.08	28.74	28.68	29.36	30.00
	8H	25.77	26.37	26.38	26.97	27.67	29.25	29.85	29.86	30.45	31.15