

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: P894615

Luminaire Tested: 8TMB-14HL-LVRA-UNV-L840

Issue Date: 11/11/2024

**Test Information**

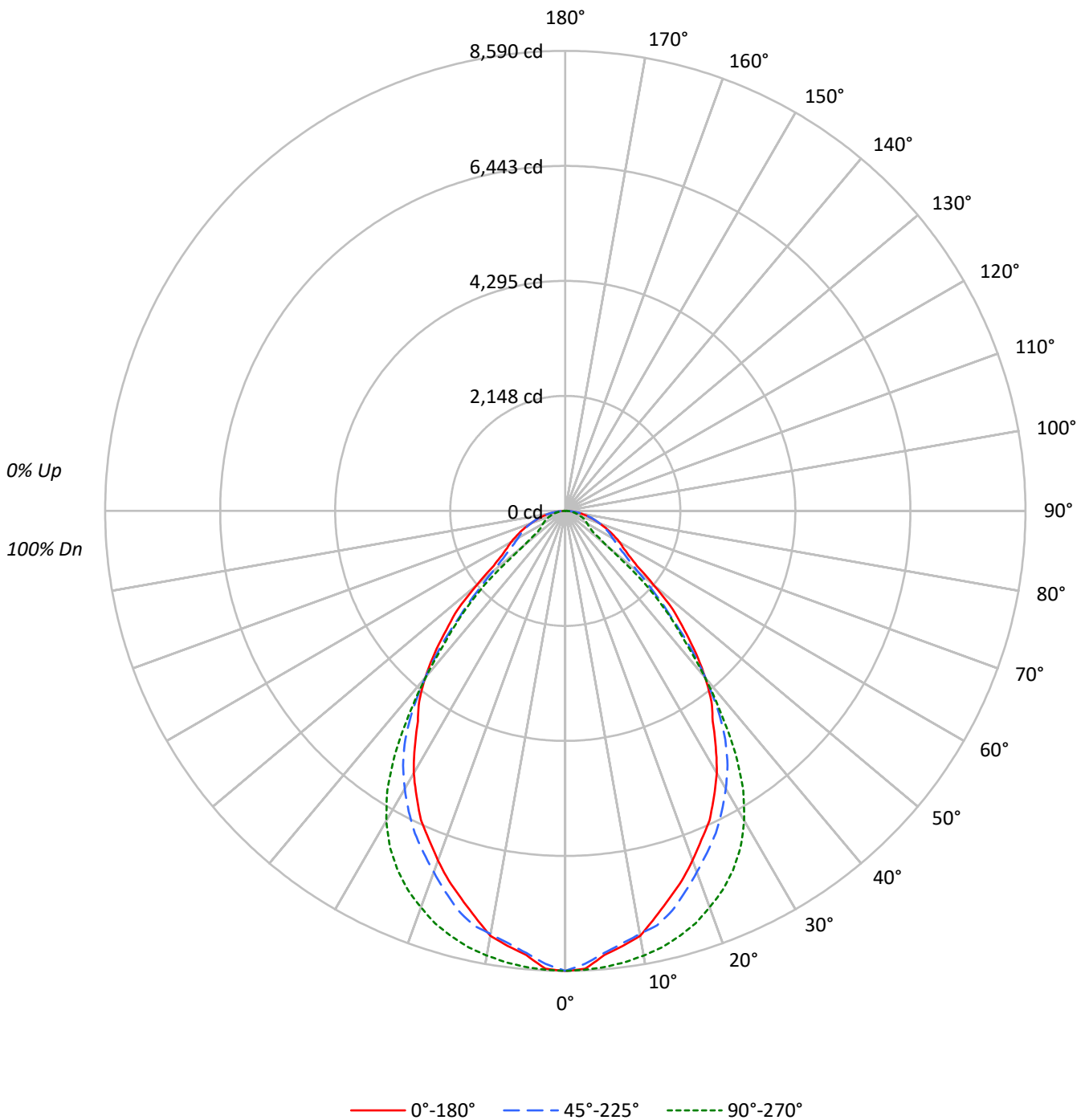
Test Method: LM-79-2019  
Report Number: P894615  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-077-26)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 8TMB-14HL-LVRA-UNV-L840  
Description: 14000 Lumen 8FT MICROBAY LINEAR BAY with LOUVER WITH AISLE OPTIC, 80CRI, 4000K CCT  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 13941.0 lumens  
Efficiency: N/A  
Efficacy: 134.6 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): 103.6  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88	88	
2	103	96	91	86	101	95	90	85	91	87	83	88	85	82	85	82	80	78	78	
3	96	87	80	75	94	86	80	75	83	78	73	80	76	72	78	74	71	69	69	
4	89	79	72	66	87	78	71	66	76	70	65	73	68	64	71	67	63	62	62	
5	83	72	65	59	81	71	64	59	69	63	58	67	62	58	66	61	57	55	55	
6	78	66	59	53	76	65	58	53	64	57	53	62	57	52	61	56	52	50	50	
7	73	61	54	48	71	60	53	48	59	52	48	58	52	47	56	51	47	45	45	
8	68	57	49	44	67	56	49	44	55	48	44	53	48	43	52	47	43	41	41	
9	64	52	45	40	63	52	45	40	51	44	40	50	44	40	49	44	40	38	38	
10	61	49	42	37	60	48	42	37	47	41	37	47	41	37	46	40	37	35	35	

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	30478	30478	30478
5°	29656	29522	30445
10°	29026	28898	30374
15°	27528	28373	30203
20°	26223	27109	29742
25°	24944	26010	28983
30°	23175	24554	27365
35°	20780	22564	24002
40°	18827	18867	18765
45°	15741	13942	13597
50°	11890	9813	5560
55°	8943	7848	3506
60°	8310	7227	3378
65°	7732	7212	3383
70°	7074	7074	3330
75°	6708	6890	3217
80°	6197	6514	3302
85°	5406	5679	3607

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 16108 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	793.5	5.7
10°-20°	2186.3	15.7
20°-30°	3100.2	22.2
30°-40°	3193.9	22.9
40°-50°	2230.8	16.0
50°-60°	1070.4	7.7
60°-70°	751.0	5.4
70°-80°	469.6	3.4
80°-90°	145.2	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°	6080.0	43.6
0°-40°	9273.9	66.5
0°-60°	12575.2	90.2
0°-90°	13941.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13941.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	8590	8590	8590	8590	8590	
5°	8326	8315	8289	8506	8548	788
15°	7494	7549	7724	7946	8222	2110
25°	6372	6436	6644	7093	7403	2913
35°	4798	4928	5209	5318	5541	3023
45°	3137	3210	2778	2637	2710	2417
55°	1446	1375	1269	812	567	1355
65°	921	861	859	653	403	912
75°	489	483	503	434	235	515
85°	133	133	140	137	89	148
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	8589.9	8589.9	8589.9	8589.9	8589.9
2.5°	8556.6	8530.1	8465.9	8583.2	8574.4
5°	8326.4	8315.3	8288.8	8505.7	8547.8
7.5°	8195.8	8173.6	8142.6	8381.7	8499.1
10°	8056.3	8082.9	8020.9	8240.1	8430.5
12.5°	7768.5	7839.3	7923.5	8093.9	8346.3
15°	7494.0	7549.3	7724.2	7945.6	8222.3
17.5°	7237.2	7301.4	7451.9	7784.0	8078.4
20°	6944.9	7033.5	7179.6	7604.7	7877.0
22.5°	6643.9	6725.8	6909.5	7365.6	7668.9
25°	6371.5	6435.7	6643.9	7093.3	7403.2
27.5°	6010.7	6130.2	6327.3	6761.2	7086.6
30°	5656.5	5758.3	5993.0	6358.3	6679.3
32.5°	5229.2	5377.5	5636.5	5915.5	6183.4
35°	4797.5	4928.1	5209.3	5317.7	5541.3
37.5°	4483.1	4518.5	4677.9	4664.6	4790.8
40°	4064.7	4135.5	4073.5	3907.5	4051.4
42.5°	3613.1	3697.2	3447.0	3254.4	3305.3
45°	3137.1	3210.1	2778.4	2636.7	2709.8
47.5°	2725.3	2718.6	2240.4	2145.2	2043.4
50°	2154.1	2224.9	1777.7	1600.6	1007.3
52.5°	1682.5	1709.1	1465.6	1022.8	661.9
55°	1445.7	1374.8	1268.6	812.5	566.8
57.5°	1284.0	1195.5	1124.7	754.9	518.0
60°	1171.1	1071.5	1018.4	717.3	476.0
62.5°	1042.7	965.3	945.3	684.1	438.3
65°	921.0	861.2	859.0	653.1	402.9
67.5°	799.2	766.0	774.9	615.5	363.1
70°	681.9	675.2	681.9	566.8	321.0
72.5°	582.3	575.6	593.3	504.8	274.5
75°	489.3	482.6	502.6	433.9	234.7
77.5°	389.6	394.1	407.4	360.9	197.0
80°	303.3	303.3	318.8	283.4	161.6
82.5°	217.0	219.2	228.0	208.1	126.2
85°	132.8	132.8	139.5	137.3	88.6
87.5°	44.3	50.9	59.8	64.2	44.3
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	17.52	18.87	17.88	19.18	19.50	13.85	15.20	14.22	15.52	15.83
	3H	19.26	20.46	19.64	20.79	21.16	15.83	17.03	16.21	17.36	17.73
	4H	19.93	21.06	20.33	21.41	21.79	16.53	17.66	16.93	18.01	18.39
	6H	20.44	21.47	20.85	21.84	22.24	17.05	18.09	17.47	18.46	18.86
	8H	20.61	21.59	21.04	21.98	22.39	17.24	18.22	17.67	18.62	19.02
	12H	20.72	21.66	21.15	22.04	22.47	17.38	18.32	17.81	18.70	19.13
4H	2H	18.05	19.18	18.45	19.53	19.91	15.47	16.60	15.87	16.95	17.33
	3H	20.03	20.96	20.44	21.36	21.76	17.65	18.58	18.06	18.98	19.39
	4H	20.83	21.66	21.26	22.08	22.52	18.53	19.37	18.97	19.78	20.23
	6H	21.47	22.20	21.93	22.64	23.11	19.17	19.90	19.64	20.34	20.81
	8H	21.69	22.37	22.16	22.81	23.28	19.38	20.06	19.85	20.51	20.98
	12H	21.85	22.45	22.33	22.93	23.40	19.54	20.14	20.03	20.62	21.10
8H	4H	21.11	21.79	21.58	22.24	22.71	19.18	19.86	19.65	20.30	20.77
	6H	21.90	22.45	22.40	22.95	23.43	20.04	20.60	20.54	21.09	21.57
	8H	22.20	22.70	22.72	23.21	23.70	20.37	20.87	20.89	21.38	21.87
	12H	22.43	22.87	22.95	23.37	23.94	20.63	21.07	21.15	21.57	22.14
12H	4H	21.13	21.73	21.61	22.21	22.68	19.25	19.85	19.74	20.33	20.81
	6H	21.95	22.45	22.47	22.96	23.45	20.18	20.68	20.70	21.19	21.68
	8H	22.31	22.75	22.83	23.25	23.82	20.59	21.03	21.11	21.53	22.10