

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: P894629

Luminaire Tested: 8TMB-14HL-RFLW-UNV-L830

Issue Date: 11/11/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P894629  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2408-210-7)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 8TMB-14HL-RFLW-UNV-L830  
Description: 14000 Lumen 8FT MICROBAY LINEAR BAY with REFLECTOR WITH WHITE FINISH, 80CRI, 3000K  
Light Source: -  
Ballast/Driver: -

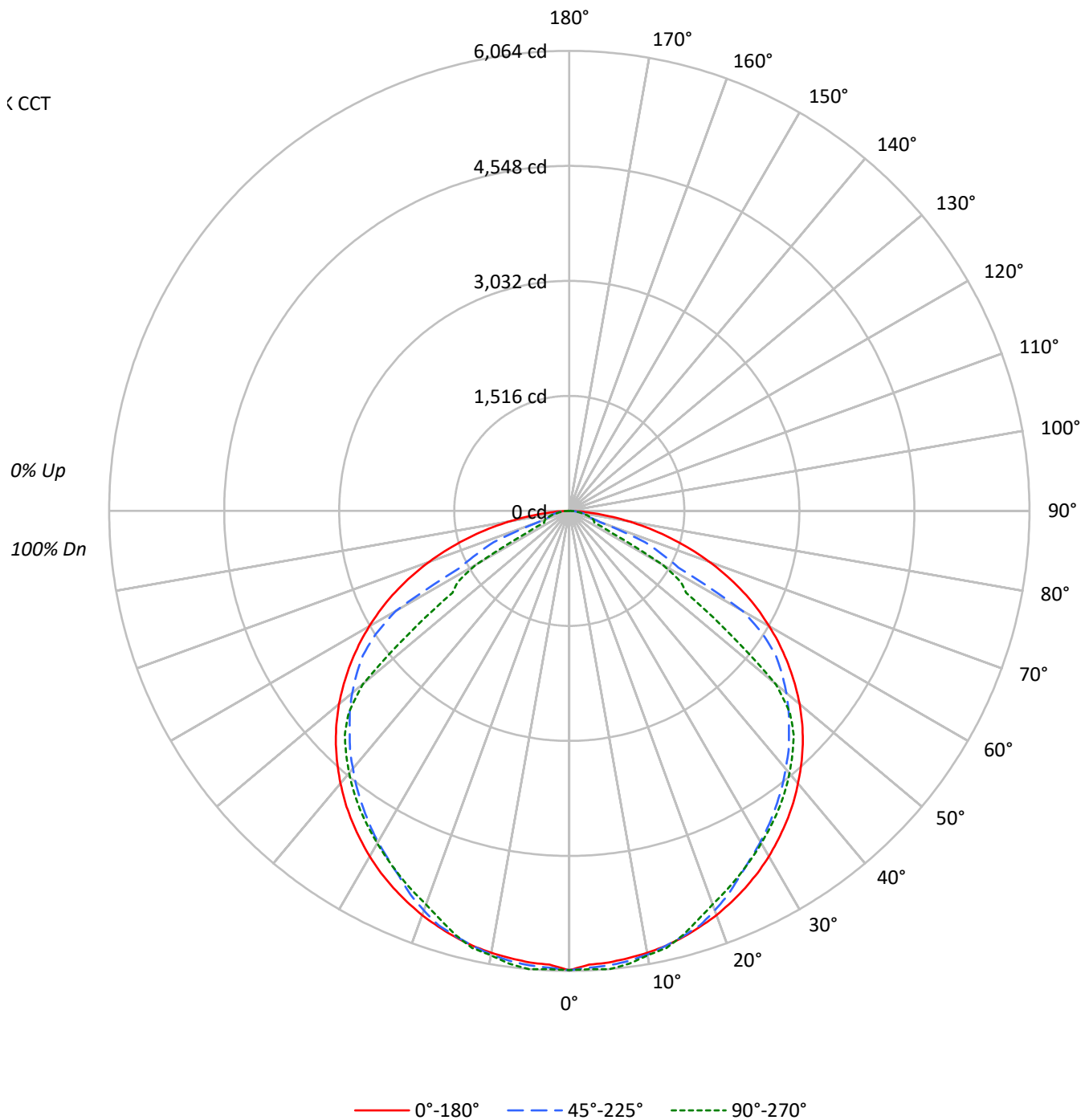
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 15780.0 lumens  
Efficiency: N/A  
Efficacy: 152.3 lumens/watt  
Spacing Criteria (0/90/45): 1.29 / 1.25 / 1.38  
Luminous Opening: Rectangular (W 0.21' 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				
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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	102	102	100
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	88	88	88	86
2	101	93	87	82	98	91	85	81	88	83	79	85	81	77	82	78	75	75	75	75	73
3	92	82	75	69	90	81	74	68	78	72	67	75	70	66	73	68	65	65	65	65	62
4	85	73	65	59	82	72	64	58	70	63	57	67	61	57	65	60	56	56	56	56	54
5	78	66	57	51	76	65	56	50	62	55	50	61	54	49	59	53	49	49	49	49	47
6	72	59	51	44	70	58	50	44	56	49	44	55	48	43	53	48	43	43	43	43	41
7	67	54	45	39	65	53	45	39	51	44	39	50	43	39	49	43	38	38	38	38	36
8	62	49	41	35	61	48	40	35	47	40	35	46	39	35	45	39	34	34	34	34	32
9	58	45	37	32	57	44	37	31	43	36	31	42	36	31	41	35	31	31	31	31	29
10	54	42	34	29	53	41	34	29	40	33	28	39	33	28	38	32	28	28	28	28	26

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

	0°	45°	90°
0°	39196	39196	39196
5°	38836	39091	39418
10°	38893	39040	39113
15°	38978	38891	38803
20°	39076	38626	38035
25°	39183	37944	37864
30°	39332	37686	37839
35°	39474	37542	37999
40°	39640	37495	38158
45°	39852	37478	38315
50°	39913	37620	35797
55°	39738	37505	21227
60°	39401	34183	18408
65°	38756	20664	5573
70°	37224	8194	6392
75°	34489	6720	6533
80°	29840	7096	6119
85°	21204	6650	5817

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 50°  
 Luminance: 39913 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	573.4	3.6
10°-20°	1641.9	10.4
20°-30°	2481.3	15.7
30°-40°	3027.4	19.2
40°-50°	3202.4	20.3
50°-60°	2652.5	16.8
60°-70°	1474.5	9.3
70°-80°	597.7	3.8
80°-90°	128.9	0.8
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°	4696.6	29.8
0°-40°	7724.0	48.9
0°-60°	13578.9	86.1
0°-90°	15780.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	15780.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	6053	6053	6053	6053	6053	
5°	5975	6081	6014	6023	6064	568
15°	5814	5904	5801	5797	5788	1642
25°	5484	5523	5311	5277	5299	2530
35°	4994	4932	4749	4768	4807	3126
45°	4352	4128	4092	4143	4184	3355
55°	3520	3281	3322	2279	1880	3145
65°	2529	2319	1349	453	364	2494
75°	1378	768	269	265	261	1456
85°	285	95	90	82	78	358
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	6053.0	6053.0	6053.0	6053.0	6053.0
2.5°	5987.7	6092.2	6026.9	6039.9	6045.5
5°	5974.6	6081.0	6013.8	6023.1	6064.2
7.5°	5946.7	6054.8	5984.0	5989.6	6021.3
10°	5914.9	6013.8	5937.3	5928.0	5948.5
12.5°	5872.0	5961.6	5872.0	5875.8	5901.9
15°	5814.2	5903.8	5801.2	5797.4	5788.1
17.5°	5745.2	5829.1	5728.4	5668.7	5648.2
20°	5670.6	5735.9	5605.3	5513.9	5519.5
22.5°	5581.1	5637.0	5472.9	5388.9	5413.2
25°	5484.1	5523.2	5310.6	5277.0	5299.4
27.5°	5377.7	5407.6	5170.7	5163.2	5181.9
30°	5260.2	5271.4	5040.1	5036.4	5060.6
32.5°	5129.6	5111.0	4900.2	4903.9	4935.6
35°	4993.5	4931.9	4749.1	4767.8	4806.9
37.5°	4849.8	4739.8	4599.9	4624.1	4667.0
40°	4689.4	4540.2	4435.7	4473.0	4514.1
42.5°	4525.3	4331.3	4277.2	4312.6	4351.8
45°	4351.8	4128.0	4092.5	4142.9	4183.9
47.5°	4163.4	3928.4	3922.8	3962.0	3943.3
50°	3962.0	3721.3	3734.4	3682.2	3553.4
52.5°	3745.6	3506.8	3532.9	3307.2	2673.0
55°	3519.9	3281.1	3322.1	2279.4	1880.2
57.5°	3288.6	3049.8	3023.7	1744.1	1742.2
60°	3042.3	2814.8	2639.4	1540.8	1421.4
62.5°	2794.3	2570.4	1621.0	1160.2	652.9
65°	2529.4	2318.6	1348.6	453.3	363.7
67.5°	2251.4	2063.0	1080.0	341.4	354.4
70°	1966.1	1798.2	432.8	330.2	337.6
72.5°	1675.1	1387.8	287.3	305.9	305.9
75°	1378.5	768.5	268.6	264.9	261.1
77.5°	1083.8	514.8	235.0	218.2	212.6
80°	800.2	184.7	190.3	169.7	164.1
82.5°	529.8	143.6	136.2	123.1	119.4
85°	285.4	95.1	89.5	82.1	78.3
87.5°	102.6	48.5	48.5	39.2	35.4
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	25.42	27.00	25.79	27.31	27.62	21.41	22.99	21.78	23.30	23.61
	3H	27.43	28.84	27.81	29.16	29.53	21.55	22.95	21.92	23.28	23.64
	4H	28.04	29.36	28.44	29.71	30.09	21.66	22.98	22.06	23.33	23.71
	6H	28.44	29.66	28.85	30.03	30.42	21.77	22.99	22.18	23.36	23.75
	8H	28.56	29.72	28.99	30.11	30.51	21.81	22.97	22.23	23.36	23.76
	12H	28.63	29.74	29.06	30.12	30.55	21.83	22.94	22.26	23.32	23.75
4H	2H	25.55	26.87	25.95	27.22	27.60	22.14	23.46	22.54	23.81	24.18
	3H	27.71	28.80	28.12	29.20	29.60	22.34	23.43	22.75	23.82	24.23
	4H	28.37	29.34	28.80	29.76	30.20	22.49	23.47	22.92	23.88	24.32
	6H	28.81	29.66	29.27	30.10	30.56	22.66	23.51	23.11	23.95	24.41
	8H	28.95	29.75	29.42	30.19	30.66	22.71	23.50	23.17	23.95	24.41
	12H	29.06	29.77	29.54	30.24	30.72	22.76	23.46	23.24	23.94	24.41
8H	4H	28.30	29.10	28.77	29.54	30.01	22.76	23.56	23.23	24.00	24.47
	6H	28.75	29.40	29.24	29.89	30.37	22.97	23.63	23.47	24.12	24.59
	8H	28.89	29.48	29.41	29.99	30.48	23.05	23.64	23.57	24.15	24.64
	12H	29.03	29.55	29.53	30.04	30.60	23.14	23.66	23.65	24.15	24.72
12H	4H	28.28	28.99	28.76	29.46	29.93	22.78	23.49	23.26	23.96	24.43
	6H	28.70	29.29	29.22	29.80	30.29	22.99	23.58	23.50	24.09	24.57
	8H	28.88	29.40	29.39	29.89	30.45	23.11	23.63	23.62	24.13	24.69