

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: P894636

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

Issue Date: 11/11/2024

**Test Information**

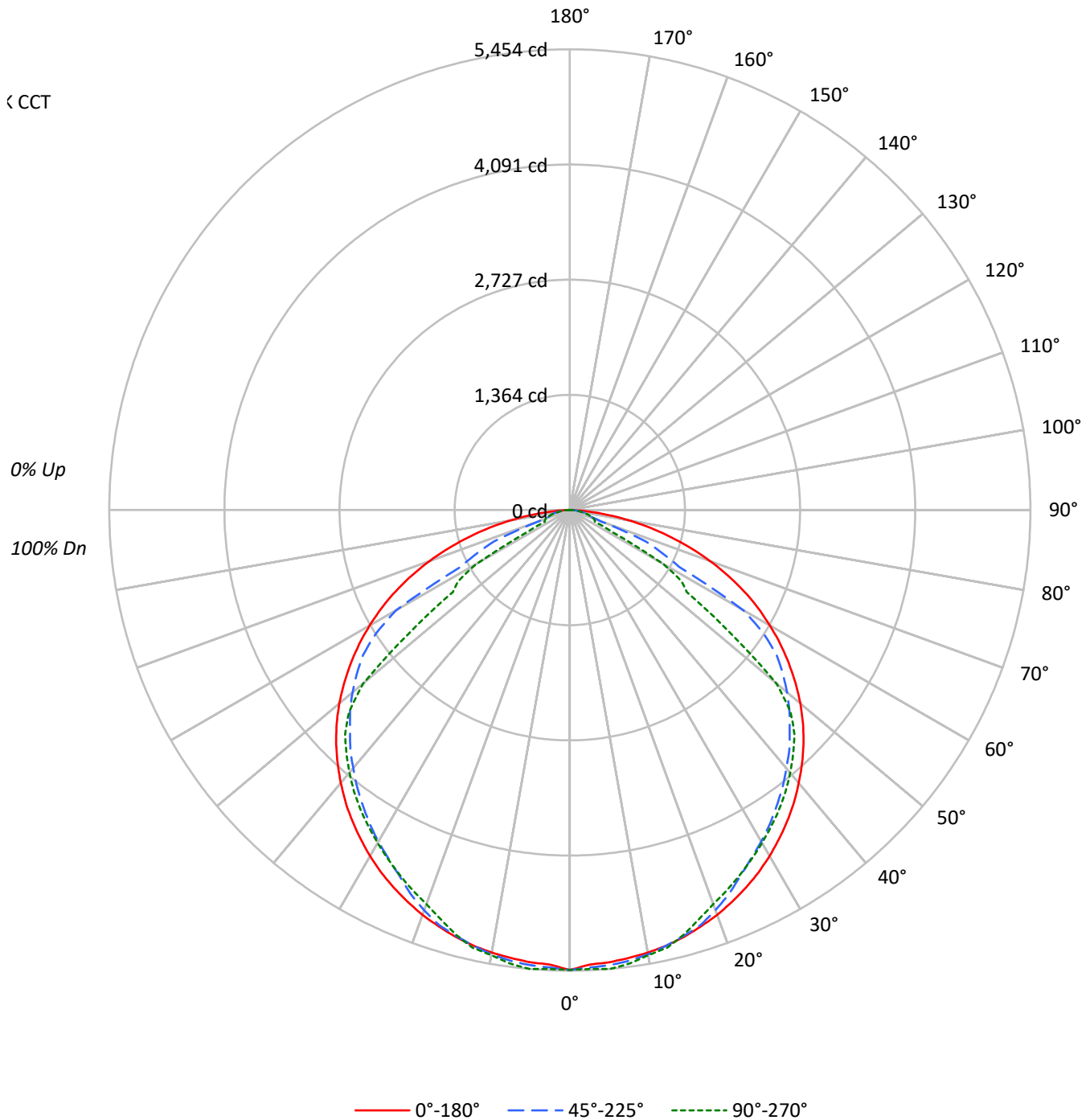
Test Method: LM-79-2019  
Report Number: P894636  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2408-210-7)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 8TMB-14HL-RFLW-UNV-L950  
Description: 14000 Lumen 8FT MICROBAY LINEAR BAY with REFLECTOR WITH WHITE FINISH, 90CRI, 5000K  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 14193.0 lumens  
Efficiency: N/A  
Efficacy: 137.0 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				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°	35254	35254	35254
5°	34931	35160	35454
10°	34981	35114	35180
15°	35058	34979	34900
20°	35146	34742	34210
25°	35242	34127	34055
30°	35376	33896	34034
35°	35504	33766	34178
40°	35653	33724	34320
45°	35844	33708	34461
50°	35899	33837	32198
55°	35742	33733	19093
60°	35439	30745	16556
65°	34858	18586	5013
70°	33479	7369	5750
75°	31019	6045	5877
80°	26838	6380	5504
85°	19072	5981	5238

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 50°  
 Luminance: 35899 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	515.7	3.6
10°-20°	1476.8	10.4
20°-30°	2231.7	15.7
30°-40°	2723.0	19.2
40°-50°	2880.4	20.3
50°-60°	2385.7	16.8
60°-70°	1326.2	9.3
70°-80°	537.6	3.8
80°-90°	115.9	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°	4224.3	29.8
0°-40°	6947.2	48.9
0°-60°	12213.3	86.1
0°-90°	14193.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	14193.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5444	5444	5444	5444	5444	
5°	5374	5469	5409	5417	5454	511
15°	5230	5310	5218	5214	5206	1477
25°	4932	4968	4776	4746	4766	2275
35°	4491	4436	4272	4288	4324	2812
45°	3914	3713	3681	3726	3763	3017
55°	3166	2951	2988	2050	1691	2829
65°	2275	2085	1213	408	327	2244
75°	1240	691	242	238	235	1309
85°	257	86	80	74	70	322
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	5444.2	5444.2	5444.2	5444.2	5444.2
2.5°	5385.5	5479.5	5420.7	5432.5	5437.5
5°	5373.8	5469.4	5409.0	5417.4	5454.3
7.5°	5348.6	5445.9	5382.2	5387.2	5415.7
10°	5320.1	5409.0	5340.2	5331.8	5350.3
12.5°	5281.5	5362.0	5281.5	5284.8	5308.3
15°	5229.5	5310.0	5217.7	5214.4	5206.0
17.5°	5167.4	5242.9	5152.3	5098.6	5080.2
20°	5100.3	5159.0	5041.6	4959.4	4964.4
22.5°	5019.8	5070.1	4922.5	4847.0	4868.8
25°	4932.5	4967.8	4776.5	4746.3	4766.4
27.5°	4836.9	4863.7	4650.7	4644.0	4660.7
30°	4731.2	4741.3	4533.2	4529.9	4551.7
32.5°	4613.8	4597.0	4407.4	4410.7	4439.3
35°	4491.3	4435.9	4271.5	4288.3	4323.5
37.5°	4362.1	4263.1	4137.3	4159.1	4197.7
40°	4217.8	4083.6	3989.6	4023.2	4060.1
42.5°	4070.2	3895.7	3847.0	3878.9	3914.1
45°	3914.1	3712.8	3680.9	3726.2	3763.1
47.5°	3744.7	3533.3	3528.3	3563.5	3546.7
50°	3563.5	3347.1	3358.8	3311.8	3196.1
52.5°	3368.9	3154.1	3177.6	2974.6	2404.2
55°	3165.9	2951.1	2988.0	2050.2	1691.2
57.5°	2957.8	2743.1	2719.6	1568.7	1567.0
60°	2736.4	2531.7	2374.0	1385.8	1278.4
62.5°	2513.2	2311.9	1457.9	1043.5	587.2
65°	2275.0	2085.4	1213.0	407.7	327.2
67.5°	2025.0	1855.6	971.4	307.0	318.8
70°	1768.3	1617.3	389.2	297.0	303.7
72.5°	1506.6	1248.2	258.4	275.1	275.1
75°	1239.8	691.2	241.6	238.2	234.9
77.5°	974.8	463.1	211.4	196.3	191.3
80°	719.7	166.1	171.1	152.7	147.6
82.5°	476.5	129.2	122.5	110.7	107.4
85°	256.7	85.6	80.5	73.8	70.5
87.5°	92.3	43.6	43.6	35.2	31.9
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	25.06	26.63	25.42	26.94	27.26	21.05	22.62	21.41	22.93	23.25
	3H	27.06	28.47	27.44	28.80	29.16	21.18	22.59	21.55	22.91	23.27
	4H	27.67	28.99	28.07	29.34	29.72	21.30	22.61	21.69	22.96	23.34
	6H	28.07	29.29	28.49	29.66	30.05	21.40	22.62	21.82	22.99	23.38
	8H	28.19	29.35	28.62	29.74	30.14	21.44	22.60	21.86	22.99	23.39
	12H	28.26	29.37	28.69	29.76	30.18	21.46	22.57	21.89	22.95	23.38
4H	2H	25.18	26.50	25.58	26.85	27.23	21.77	23.09	22.17	23.44	23.82
	3H	27.34	28.43	27.75	28.83	29.23	21.97	23.06	22.38	23.46	23.86
	4H	28.00	28.98	28.43	29.39	29.83	22.12	23.10	22.56	23.52	23.95
	6H	28.45	29.29	28.90	29.74	30.19	22.29	23.14	22.75	23.58	24.04
	8H	28.59	29.38	29.05	29.82	30.29	22.34	23.13	22.80	23.58	24.04
	12H	28.69	29.40	29.17	29.88	30.35	22.39	23.10	22.87	23.57	24.04
8H	4H	27.94	28.73	28.40	29.17	29.64	22.40	23.19	22.86	23.63	24.10
	6H	28.38	29.03	28.87	29.52	30.00	22.60	23.26	23.10	23.75	24.23
	8H	28.53	29.12	29.04	29.62	30.11	22.69	23.27	23.20	23.78	24.27
	12H	28.66	29.18	29.17	29.67	30.24	22.77	23.29	23.28	23.79	24.35
12H	4H	27.91	28.62	28.39	29.10	29.57	22.41	23.12	22.89	23.60	24.07
	6H	28.34	28.93	28.85	29.44	29.92	22.62	23.21	23.13	23.72	24.21
	8H	28.51	29.03	29.02	29.52	30.09	22.74	23.27	23.25	23.76	24.32