

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: P894641

Luminaire Tested: 8TMB-14HL-RND-UNV-L930

Issue Date: 11/11/2024

**Test Information**

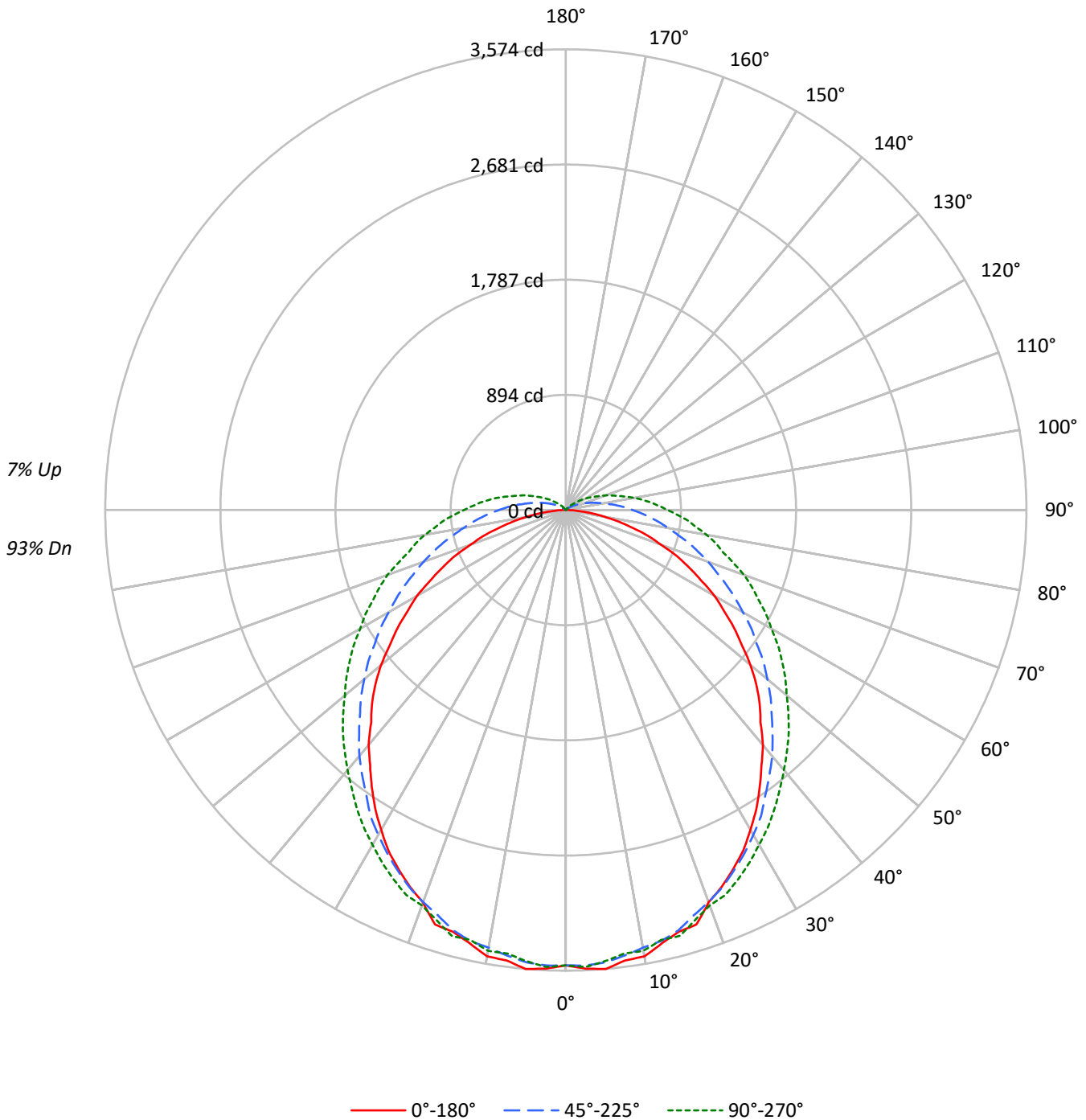
Test Method: LM-79-2019  
Report Number: P894641  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2403-334-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 8TMB-14HL-RND-UNV-L930  
Description: 14000 Lumen 8FT MICROBAY LINEAR BAY with ROUND FROSTED LENS, 90CRI, 3000K CCT  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11634.0 lumens  
Efficiency: N/A  
Efficacy: 112.3 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<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	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°	12532	12532	12532
5°	12729	12545	12511
10°	12667	12423	12510
15°	12440	12398	12565
20°	12232	12220	12324
25°	12031	12081	12379
30°	11737	11922	12286
35°	11365	11695	12240
40°	11024	11540	12198
45°	10677	11334	12275
50°	10328	11264	12352
55°	9855	11184	12673
60°	9471	11259	13071
65°	8845	11557	13864
70°	8129	12203	15270
75°	7375	13512	17299
80°	6338	16508	22681
85°	5129	26706	38809

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 87.5°  
 Luminance: 70443 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	334.9	2.9
10°-20°	953.3	8.2
20°-30°	1428.5	12.3
30°-40°	1697.6	14.6
40°-50°	1757.5	15.1
50°-60°	1628.7	14.0
60°-70°	1355.9	11.7
70°-80°	1006.4	8.7
80°-90°	665.6	5.7
90°-100°	405.1	3.5
100°-110°	227.1	2.0
110°-120°	111.8	1.0
120°-130°	45.5	0.4
130°-140°	13.2	0.1
140°-150°	1.9	0.0
150°-160°	0.5	0.0
160°-170°	0.4	0.0
170°-180°	0.1	0.0
0°-30°	2716.7	23.4
0°-40°	4414.3	37.9
0°-60°	7800.5	67.0
0°-90°	10828.5	93.1
90°-120°	743.9	6.4
90°-150°	804.5	6.9
90°-180°	806.0	6.9
0°-180°	11634.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3532	3532	3532	3532	3532	
5°	3574	3535	3522	3540	3513	338
15°	3387	3374	3375	3380	3420	959
25°	3073	3070	3086	3146	3162	1414
35°	2624	2643	2700	2786	2826	1642
45°	2128	2159	2259	2399	2446	1639
55°	1593	1661	1808	1989	2049	1425
65°	1054	1152	1377	1579	1651	1047
75°	538	701	986	1197	1262	576
85°	126	354	656	889	953	141
90°	6	229	519	726	790	10
95°	2	142	402	599	666	1
105°	2	47	218	370	422	2
115°	2	11	102	204	244	2
125°	2	3	37	94	120	1
135°	3	2	10	31	42	2
145°	3	2	0	3	5	2
155°	3	3	0	0	0	1
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°	3532.0	3532.0	3532.0	3532.0	3532.0
2.5°	3561.1	3543.3	3536.8	3528.8	3548.1
5°	3574.0	3535.2	3522.3	3540.1	3512.6
7.5°	3523.9	3514.2	3486.7	3496.4	3470.6
10°	3515.8	3462.5	3448.0	3480.3	3472.2
12.5°	3443.1	3397.9	3423.7	3446.4	3415.7
15°	3386.6	3373.6	3375.3	3380.1	3420.5
17.5°	3372.0	3313.9	3297.7	3338.1	3334.9
20°	3239.5	3228.2	3236.3	3289.6	3263.8
22.5°	3162.0	3126.4	3170.1	3221.8	3233.1
25°	3073.1	3069.9	3086.0	3145.8	3162.0
27.5°	2979.4	2958.4	3002.0	3071.5	3084.4
30°	2864.7	2856.6	2909.9	2969.7	2998.8
32.5°	2751.6	2756.4	2817.8	2867.9	2918.0
35°	2623.9	2643.3	2699.9	2785.5	2825.9
37.5°	2494.7	2518.9	2594.9	2693.4	2727.4
40°	2380.0	2384.8	2491.5	2591.6	2633.6
42.5°	2236.2	2284.6	2375.1	2507.6	2539.9
45°	2127.9	2158.6	2258.8	2399.4	2446.2
47.5°	2005.1	2040.7	2155.4	2292.7	2342.8
50°	1871.0	1903.3	2040.7	2197.4	2237.8
52.5°	1722.4	1788.6	1932.4	2094.0	2147.3
55°	1593.1	1661.0	1808.0	1989.0	2048.7
57.5°	1454.2	1522.0	1706.2	1874.2	1951.8
60°	1334.6	1399.2	1586.6	1795.1	1841.9
62.5°	1185.9	1278.0	1481.6	1686.8	1753.1
65°	1053.5	1152.0	1376.6	1578.6	1651.3
67.5°	932.3	1034.1	1268.3	1484.9	1564.0
70°	783.6	917.7	1176.3	1389.5	1471.9
72.5°	673.8	807.9	1077.7	1289.4	1363.7
75°	538.0	701.2	985.6	1197.3	1261.9
77.5°	424.9	601.1	890.3	1127.8	1192.4
80°	310.2	510.6	807.9	1035.7	1110.0
82.5°	211.7	426.6	731.9	950.0	1021.1
85°	126.0	353.8	656.0	888.7	953.3
87.5°	54.9	289.2	586.5	799.8	866.0
90°	6.5	229.4	518.6	725.5	790.1
92.5°	1.6	184.2	458.9	659.2	722.2
95°	1.6	142.2	402.3	599.4	665.7
97.5°	1.6	109.9	345.8	538.0	601.1
100°	1.6	84.0	298.9	473.4	541.3
102.5°	1.6	63.0	253.7	420.1	478.3
105°	1.6	46.9	218.1	370.0	421.7
107.5°	1.6	33.9	182.6	323.1	374.8
110°	1.6	24.2	153.5	279.5	331.2



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	1.6	17.8	124.4	240.7	284.4
115°	1.6	11.3	101.8	203.6	244.0
117.5°	1.6	8.1	80.8	171.3	210.0
120°	1.6	6.5	64.6	142.2	176.1
122.5°	1.6	4.8	50.1	116.3	148.6
125°	1.6	3.2	37.2	93.7	119.6
127.5°	1.6	3.2	27.5	74.3	96.9
130°	1.6	1.6	19.4	56.6	75.9
132.5°	1.6	1.6	12.9	42.0	56.6
135°	3.2	1.6	9.7	30.7	42.0
137.5°	3.2	1.6	6.5	21.0	29.1
140°	3.2	1.6	3.2	12.9	17.8
142.5°	3.2	1.6	1.6	6.5	9.7
145°	3.2	1.6	0.0	3.2	4.8
147.5°	3.2	1.6	0.0	1.6	1.6
150°	3.2	1.6	0.0	0.0	0.0
152.5°	3.2	1.6	0.0	0.0	0.0
155°	3.2	3.2	0.0	0.0	0.0
157.5°	3.2	3.2	0.0	0.0	0.0
160°	3.2	3.2	0.0	0.0	0.0
162.5°	3.2	3.2	0.0	0.0	0.0
165°	4.8	3.2	0.0	0.0	0.0
167.5°	4.8	3.2	0.0	0.0	0.0
170°	4.8	3.2	0.0	0.0	0.0
172.5°	4.8	3.2	0.0	0.0	0.0
175°	4.8	3.2	0.0	0.0	0.0
177.5°	4.8	3.2	0.0	0.0	0.0
180°	1.6	1.6	1.6	1.6	1.6



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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	19.01	20.55	19.48	21.01	21.49	20.59	22.12	21.06	22.58	23.06
	3H	20.78	22.18	21.26	22.65	23.17	23.17	24.58	23.65	25.04	25.56
	4H	21.43	22.76	21.93	23.25	23.78	24.43	25.76	24.93	26.24	26.78
	6H	21.91	23.15	22.43	23.65	24.20	25.81	27.05	26.33	27.55	28.10
	8H	22.06	23.25	22.59	23.77	24.33	26.54	27.73	27.07	28.25	28.81
	12H	22.16	23.30	22.69	23.81	24.40	27.39	28.53	27.92	29.04	29.63
4H	2H	19.97	21.30	20.47	21.78	22.32	21.16	22.49	21.66	22.97	23.51
	3H	22.01	23.15	22.52	23.67	24.23	24.03	25.16	24.54	25.69	26.25
	4H	22.82	23.86	23.36	24.40	24.99	25.50	26.55	26.04	27.08	27.67
	6H	23.47	24.39	24.03	24.95	25.56	27.12	28.04	27.68	28.61	29.21
	8H	23.70	24.57	24.26	25.13	25.75	27.98	28.85	28.54	29.41	30.03
	12H	23.87	24.66	24.45	25.25	25.87	28.97	29.76	29.55	30.35	30.97
8H	4H	23.67	24.54	24.23	25.10	25.72	25.88	26.74	26.44	27.30	27.92
	6H	24.59	25.33	25.19	25.93	26.56	27.75	28.49	28.35	29.09	29.72
	8H	24.98	25.64	25.58	26.26	26.89	28.81	29.48	29.42	30.09	30.73
	12H	25.30	25.89	25.90	26.50	27.20	30.07	30.67	30.68	31.27	31.97
12H	4H	23.93	24.72	24.51	25.31	25.93	25.92	26.71	26.50	27.30	27.92
	6H	25.02	25.68	25.62	26.30	26.94	27.86	28.53	28.47	29.15	29.78
	8H	25.56	26.15	26.16	26.76	27.46	29.04	29.63	29.64	30.24	30.94