

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: P894601

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

Issue Date: 11/11/2024

**Test Information**

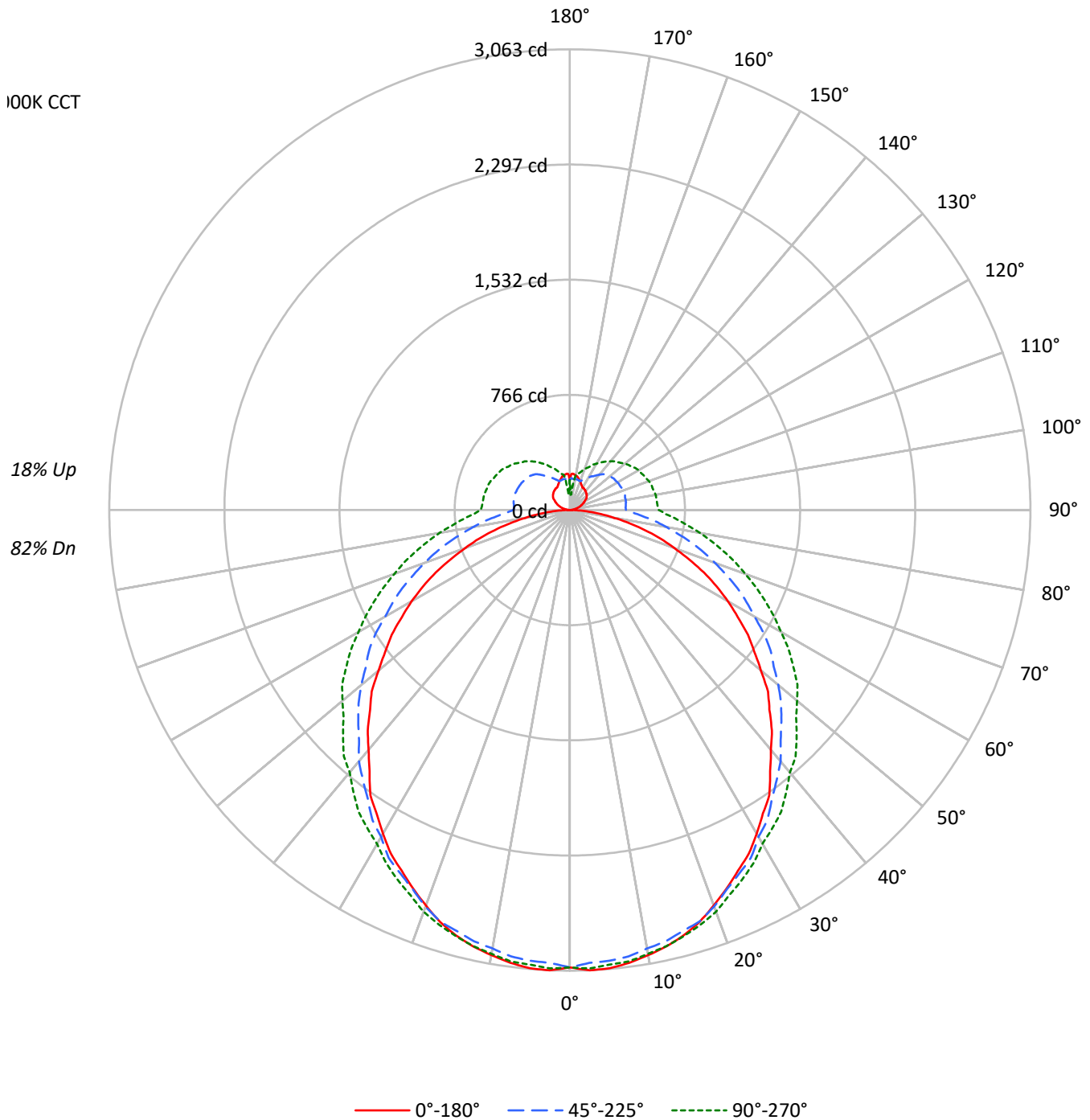
Test Method: LM-79-2019  
Report Number: P894601  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2403-334-6)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 8TMB-14HL-FLTU-UNV-L930  
Description: 14000 Lumen 8FT MICROBAY LINEAR BAY with FLAT FROSTED LENS WITH UPLIGHT, 90CRI, 30  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11432.0 lumens  
Efficiency: N/A  
Efficacy: 110.3 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.26 / 1.36  
Luminous Opening: Rectangular w/ Sides (W: 0.38' x L: 7.98' x H: 0.21')  
CIE Type: Semi-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	115	115	115	115	110	110	110	110	101	101	101	93	93	93	86	86	86	86	86	86	82
1	103	98	93	89	99	94	90	86	87	83	80	80	77	74	73	71	69	69	69	69	66
2	93	85	77	71	89	81	75	69	75	70	65	69	65	61	63	60	57	57	57	57	54
3	85	74	66	59	81	71	63	57	66	59	54	60	55	51	56	51	48	48	48	48	45
4	78	65	56	49	74	63	55	48	58	51	46	54	48	43	50	45	41	41	41	41	38
5	71	58	49	42	68	56	48	41	52	45	39	48	42	37	44	39	35	35	35	35	33
6	66	52	43	37	63	50	42	36	47	40	34	43	37	33	40	35	31	31	31	31	28
7	61	47	38	32	58	46	37	32	42	35	30	39	33	29	37	31	27	27	27	27	25
8	56	43	34	29	54	42	34	28	39	32	27	36	30	26	34	28	24	24	24	24	22
9	53	39	31	26	50	38	30	25	36	29	24	33	27	23	31	26	22	22	22	22	20
10	49	36	28	23	47	35	28	23	33	26	22	31	25	21	29	24	20	20	20	20	18

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

	0°	45°	90°
0°	10789	10789	10789
5°	10869	10348	10313
10°	10778	9952	9842
15°	10680	9603	9393
20°	10467	9233	8947
25°	10237	8776	8454
30°	10030	8328	7976
35°	9842	7902	7668
40°	9433	7536	7223
45°	9181	7099	6914
50°	8883	6732	6588
55°	8624	6384	6297
60°	8249	5904	5906
65°	7823	5519	5538
70°	7163	5040	5138
75°	6479	4563	4758
80°	5320	4039	4373
85°	4001	3534	4012

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 9181 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	288.0	2.5
10°-20°	822.5	7.2
20°-30°	1235.5	10.8
30°-40°	1480.8	13.0
40°-50°	1552.5	13.6
50°-60°	1456.4	12.7
60°-70°	1209.7	10.6
70°-80°	864.9	7.6
80°-90°	512.9	4.5
90°-100°	376.3	3.3
100°-110°	370.7	3.2
110°-120°	345.8	3.0
120°-130°	303.4	2.7
130°-140°	244.4	2.1
140°-150°	175.4	1.5
150°-160°	111.5	1.0
160°-170°	61.8	0.5
170°-180°	19.5	0.2
0°-30°	2346.1	20.5
0°-40°	3826.9	33.5
0°-60°	6835.7	59.8
0°-90°	9423.3	82.4
90°-120°	1092.8	9.6
90°-150°	1816.0	15.9
90°-180°	2009.0	17.6
0°-180°	11432.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3041	3041	3041	3041	3041	
5°	3059	3052	3008	3023	3034	290
15°	2928	2910	2899	2920	2933	824
25°	2647	2671	2666	2697	2711	1221
35°	2314	2322	2343	2411	2450	1436
45°	1878	1931	1989	2120	2133	1452
55°	1446	1493	1630	1763	1814	1287
65°	984	1058	1230	1394	1435	970
75°	519	638	837	1010	1057	548
85°	128	280	490	654	716	140
90°	5	170	373	533	591	10
95°	14	178	373	527	582	15
105°	52	196	380	520	569	55
115°	94	212	372	494	543	93
125°	134	218	360	459	501	117
135°	155	210	334	415	449	120
145°	168	194	275	365	391	106
155°	184	194	225	283	320	85
165°	220	213	207	205	257	62
175°	242	233	208	173	105	23
180°	200	200	200	200	200	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3040.8	3040.8	3040.8	3040.8	3040.8
2.5°	3063.4	3039.2	3013.3	3052.1	3050.5
5°	3058.6	3052.1	3008.5	3023.0	3034.3
7.5°	3036.0	3019.8	2994.0	3029.5	3026.3
10°	3005.3	2985.9	2960.0	2981.0	2995.6
12.5°	2971.3	2955.2	2937.4	2960.0	2969.7
15°	2927.7	2909.9	2898.6	2919.6	2932.6
17.5°	2871.2	2866.3	2867.9	2869.5	2890.5
20°	2798.5	2801.7	2806.5	2835.6	2842.1
22.5°	2724.1	2741.9	2729.0	2774.2	2771.0
25°	2646.6	2670.8	2666.0	2696.7	2711.2
27.5°	2577.1	2578.7	2607.8	2651.4	2646.6
30°	2485.0	2512.5	2509.2	2562.6	2562.6
32.5°	2391.3	2431.7	2444.6	2491.5	2507.6
35°	2313.7	2321.8	2342.8	2410.7	2449.5
37.5°	2187.7	2226.5	2260.4	2349.3	2363.8
40°	2081.1	2119.8	2181.2	2284.6	2276.6
42.5°	1989.0	2029.4	2074.6	2194.2	2223.2
45°	1877.5	1930.8	1989.0	2119.8	2132.8
47.5°	1787.0	1829.0	1905.0	2024.5	2040.7
50°	1659.4	1727.2	1809.6	1948.6	1972.8
52.5°	1546.3	1604.4	1709.4	1853.2	1908.2
55°	1446.1	1492.9	1630.3	1762.8	1814.5
57.5°	1323.3	1387.9	1531.7	1678.7	1725.6
60°	1215.0	1278.0	1417.0	1585.0	1622.2
62.5°	1100.3	1174.6	1324.9	1488.1	1530.1
65°	984.0	1058.3	1229.6	1394.4	1434.8
67.5°	858.0	950.1	1124.6	1295.8	1337.8
70°	740.0	840.2	1027.6	1198.9	1240.9
72.5°	633.4	741.6	932.3	1108.4	1153.6
75°	518.7	638.2	837.0	1009.8	1056.7
77.5°	407.2	536.4	738.4	912.9	967.8
80°	298.9	441.1	652.8	820.8	879.0
82.5°	210.0	355.5	573.6	738.4	791.7
85°	127.6	279.5	489.6	654.4	715.8
87.5°	56.6	216.5	423.3	586.5	641.4
90°	4.8	169.7	373.2	533.2	591.4
92.5°	9.7	172.9	371.6	526.7	584.9
95°	14.5	177.7	373.2	526.7	581.7
97.5°	21.0	184.2	376.5	526.7	580.0
100°	30.7	187.4	378.1	526.7	580.0
102.5°	40.4	192.3	376.5	518.7	573.6
105°	51.7	195.5	379.7	520.3	568.7
107.5°	63.0	198.7	379.7	512.2	567.1
110°	74.3	203.6	376.5	507.3	560.7



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	84.0	208.4	374.9	497.6	549.3
115°	93.7	211.7	371.6	494.4	542.9
117.5°	103.4	213.3	370.0	486.3	533.2
120°	111.5	216.5	366.8	476.6	528.3
122.5°	121.2	218.1	361.9	466.9	518.7
125°	134.1	218.1	360.3	458.9	500.9
127.5°	140.6	219.7	353.8	449.2	492.8
130°	147.0	214.9	350.6	437.9	479.9
132.5°	151.9	213.3	342.5	426.6	463.7
135°	155.1	210.0	334.5	415.2	449.2
137.5°	160.0	205.2	323.1	407.2	439.5
140°	163.2	202.0	307.0	391.0	423.3
142.5°	166.4	197.1	290.8	376.5	407.2
145°	168.0	193.9	274.7	365.2	391.0
147.5°	172.9	189.0	265.0	350.6	373.2
150°	171.3	185.8	250.4	332.8	355.5
152.5°	176.1	190.7	237.5	308.6	340.9
155°	184.2	193.9	224.6	282.8	319.9
157.5°	192.3	200.4	214.9	260.1	303.8
160°	203.6	203.6	203.6	242.4	290.8
162.5°	210.0	210.0	205.2	221.4	273.1
165°	219.7	213.3	206.8	205.2	256.9
167.5°	229.4	216.5	210.0	198.7	245.6
170°	231.0	221.4	208.4	187.4	237.5
172.5°	237.5	226.2	206.8	177.7	184.2
175°	242.4	232.7	208.4	172.9	105.0
177.5°	240.7	232.7	213.3	172.9	101.8
180°	200.4	200.4	200.4	200.4	200.4



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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	16.01	17.34	16.62	17.96	18.68	18.60	19.93	19.21	20.56	21.27
	3H	17.44	18.65	18.07	19.28	20.03	21.00	22.21	21.63	22.84	23.59
	4H	17.91	19.05	18.55	19.70	20.46	22.14	23.29	22.79	23.94	24.70
	6H	18.17	19.23	18.83	19.89	20.67	23.30	24.36	23.96	25.02	25.80
	8H	18.23	19.24	18.89	19.92	20.70	23.88	24.90	24.55	25.58	26.36
	12H	18.24	19.21	18.92	19.89	20.70	24.52	25.49	25.19	26.16	26.98
4H	2H	16.90	18.04	17.54	18.69	19.45	18.94	20.09	19.59	20.74	21.50
	3H	18.55	19.52	19.21	20.21	20.99	21.55	22.52	22.21	23.21	23.99
	4H	19.13	20.02	19.81	20.71	21.52	22.86	23.74	23.53	24.44	25.25
	6H	19.51	20.29	20.20	21.00	21.82	24.18	24.96	24.88	25.68	26.50
	8H	19.60	20.33	20.30	21.05	21.88	24.86	25.59	25.56	26.31	27.14
	12H	19.64	20.30	20.36	21.04	21.88	25.60	26.27	26.32	27.01	27.85
8H	4H	19.77	20.50	20.47	21.22	22.05	23.01	23.74	23.70	24.45	25.29
	6H	20.30	20.92	21.03	21.68	22.52	24.48	25.10	25.21	25.85	26.69
	8H	20.47	21.03	21.21	21.79	22.64	25.28	25.83	26.02	26.59	27.44
	12H	20.58	21.07	21.32	21.82	22.73	26.17	26.67	26.92	27.42	28.33
12H	4H	19.93	20.60	20.65	21.34	22.18	23.00	23.66	23.72	24.40	25.24
	6H	20.56	21.12	21.30	21.87	22.73	24.50	25.05	25.24	25.81	26.66
	8H	20.80	21.30	21.55	22.05	22.96	25.34	25.84	26.09	26.59	27.50