

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: P894604

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

Issue Date: 11/11/2024

**Test Information**

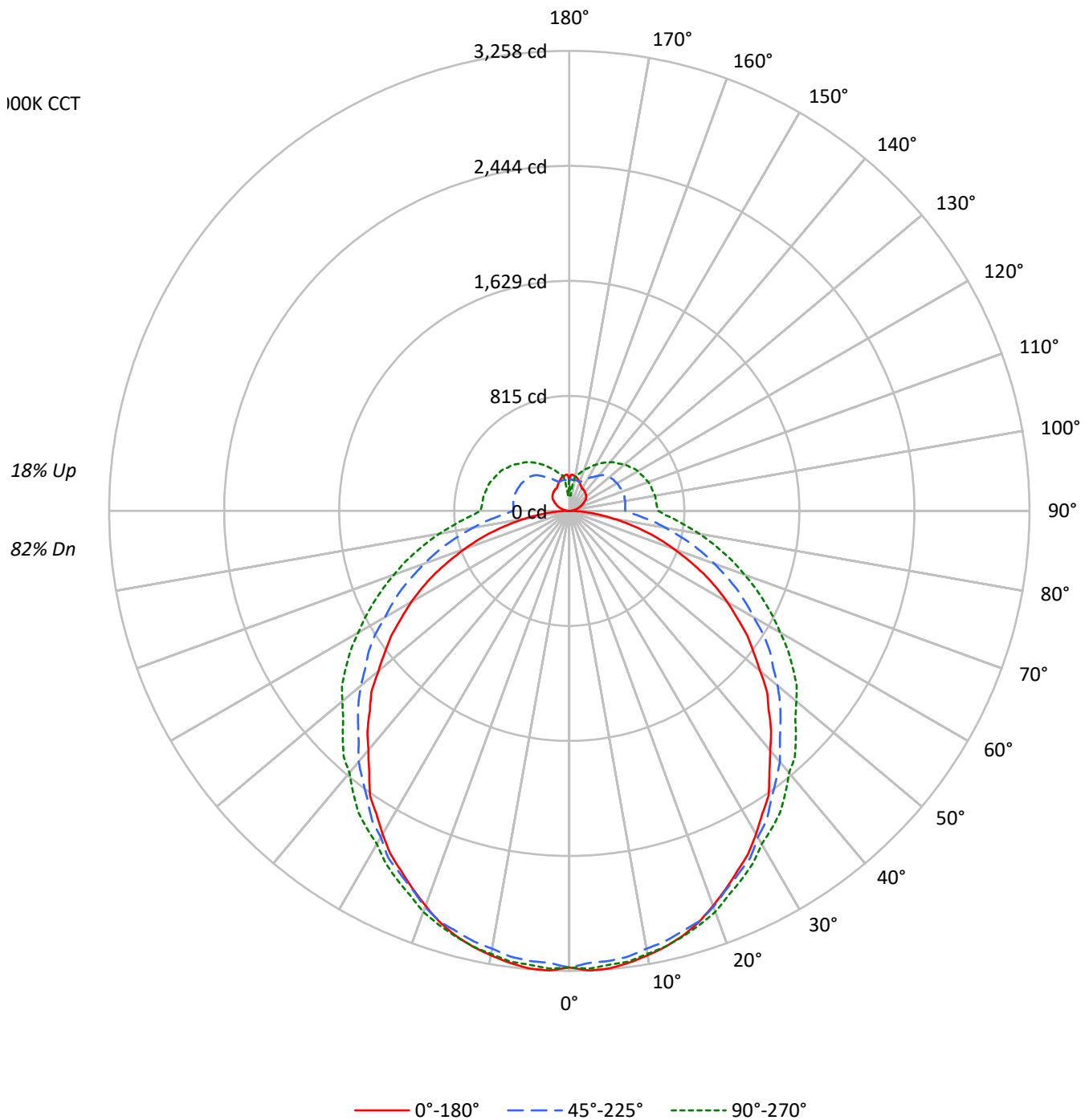
Test Method: LM-79-2019  
Report Number: P894604  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2403-334-6)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 8TMB-14HL-FLTU-UNV-L950  
Description: 14000 Lumen 8FT MICROBAY LINEAR BAY with FLAT FROSTED LENS WITH UPLIGHT, 90CRI, 50  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12157.0 lumens  
Efficiency: N/A  
Efficacy: 117.3 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°	11474	11474	11474
5°	11558	11004	10967
10°	11462	10583	10466
15°	11357	10212	9989
20°	11131	9818	9514
25°	10886	9332	8990
30°	10666	8857	8482
35°	10466	8403	8154
40°	10030	8014	7681
45°	9763	7549	7352
50°	9447	7159	7006
55°	9171	6789	6696
60°	8772	6279	6281
65°	8319	5869	5890
70°	7617	5360	5464
75°	6889	4851	5059
80°	5658	4296	4650
85°	4255	3758	4267

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 9763 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	306.3	2.5
10°-20°	874.7	7.2
20°-30°	1313.9	10.8
30°-40°	1574.7	13.0
40°-50°	1651.0	13.6
50°-60°	1548.8	12.7
60°-70°	1286.4	10.6
70°-80°	919.8	7.6
80°-90°	545.5	4.5
90°-100°	400.1	3.3
100°-110°	394.2	3.2
110°-120°	367.8	3.0
120°-130°	322.7	2.7
130°-140°	259.9	2.1
140°-150°	186.5	1.5
150°-160°	118.5	1.0
160°-170°	65.7	0.5
170°-180°	20.7	0.2
0°-30°	2494.9	20.5
0°-40°	4069.6	33.5
0°-60°	7269.3	59.8
0°-90°	10020.9	82.4
90°-120°	1162.1	9.6
90°-150°	1931.2	15.9
90°-180°	2136.0	17.6
0°-180°	12157.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3234	3234	3234	3234	3234	
5°	3253	3246	3199	3215	3227	308
15°	3113	3094	3082	3105	3118	876
25°	2814	2840	2835	2868	2883	1299
35°	2460	2469	2491	2564	2605	1527
45°	1996	2053	2115	2254	2268	1544
55°	1538	1588	1734	1875	1930	1368
65°	1046	1125	1308	1483	1526	1031
75°	552	679	890	1074	1124	583
85°	136	297	521	696	761	149
90°	5	180	397	567	629	11
95°	16	189	397	560	619	16
105°	55	208	404	553	605	58
115°	100	225	395	526	577	98
125°	143	232	383	488	533	125
135°	165	223	356	442	478	128
145°	179	206	292	388	416	113
155°	196	206	239	301	340	91
165°	234	227	220	218	273	66
175°	258	247	222	184	112	24
180°	213	213	213	213	213	



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CATALOG NUMBER: 8TMB-14HL-FLTU-UNV-L950

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3233.7	3233.7	3233.7	3233.7	3233.7
2.5°	3257.7	3231.9	3204.4	3245.7	3244.0
5°	3252.6	3245.7	3199.3	3214.8	3226.8
7.5°	3228.5	3211.3	3183.8	3221.6	3218.2
10°	3195.9	3175.2	3147.7	3170.1	3185.5
12.5°	3159.8	3142.6	3123.7	3147.7	3158.1
15°	3113.4	3094.5	3082.5	3104.8	3118.5
17.5°	3053.2	3048.1	3049.8	3051.5	3073.9
20°	2975.9	2979.4	2984.5	3015.4	3022.3
22.5°	2896.9	2915.8	2902.0	2950.2	2946.7
25°	2814.4	2840.2	2835.0	2867.7	2883.1
27.5°	2740.5	2742.2	2773.2	2819.6	2814.4
30°	2642.6	2671.8	2668.4	2725.1	2725.1
32.5°	2542.9	2585.9	2599.6	2649.5	2666.6
35°	2460.5	2469.1	2491.4	2563.6	2604.8
37.5°	2326.4	2367.7	2403.8	2498.3	2513.7
40°	2213.0	2254.3	2319.6	2429.5	2420.9
42.5°	2115.1	2158.1	2206.2	2333.3	2364.2
45°	1996.5	2053.3	2115.1	2254.3	2268.0
47.5°	1900.3	1945.0	2025.8	2152.9	2170.1
50°	1764.6	1836.8	1924.4	2072.2	2097.9
52.5°	1644.3	1706.2	1817.9	1970.8	2029.2
55°	1537.8	1587.6	1733.7	1874.6	1929.5
57.5°	1407.2	1475.9	1628.9	1785.2	1835.0
60°	1292.1	1359.1	1506.9	1685.6	1725.1
62.5°	1170.1	1249.1	1408.9	1582.5	1627.1
65°	1046.4	1125.4	1307.6	1482.8	1525.8
67.5°	912.4	1010.3	1195.9	1378.0	1422.7
70°	786.9	893.5	1092.8	1274.9	1319.6
72.5°	673.5	788.7	991.4	1178.7	1226.8
75°	551.5	678.7	890.0	1073.9	1123.7
77.5°	433.0	570.4	785.2	970.8	1029.2
80°	317.9	469.1	694.2	872.8	934.7
82.5°	223.4	378.0	610.0	785.2	841.9
85°	135.7	297.2	520.6	695.9	761.2
87.5°	60.1	230.2	450.2	623.7	682.1
90°	5.2	180.4	396.9	567.0	628.9
92.5°	10.3	183.8	395.2	560.1	622.0
95°	15.5	189.0	396.9	560.1	618.6
97.5°	22.3	195.9	400.3	560.1	616.8
100°	32.6	199.3	402.1	560.1	616.8
102.5°	43.0	204.5	400.3	551.5	610.0
105°	55.0	207.9	403.8	553.3	604.8
107.5°	67.0	211.3	403.8	544.7	603.1
110°	79.0	216.5	400.3	539.5	596.2



TEST NUMBER: P894604  
 CATALOG NUMBER: 8TMB-14HL-FLTU-UNV-L950

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	89.3	221.6	398.6	529.2	584.2
115°	99.7	225.1	395.2	525.8	577.3
117.5°	110.0	226.8	393.5	517.2	567.0
120°	118.6	230.2	390.0	506.9	561.9
122.5°	128.9	232.0	384.9	496.6	551.5
125°	142.6	232.0	383.2	488.0	532.6
127.5°	149.5	233.7	376.3	477.7	524.1
130°	156.4	228.5	372.8	465.6	510.3
132.5°	161.5	226.8	364.3	453.6	493.1
135°	164.9	223.4	355.7	441.6	477.7
137.5°	170.1	218.2	343.6	433.0	467.4
140°	173.5	214.8	326.5	415.8	450.2
142.5°	177.0	209.6	309.3	400.3	433.0
145°	178.7	206.2	292.1	388.3	415.8
147.5°	183.8	201.0	281.8	372.8	396.9
150°	182.1	197.6	266.3	353.9	378.0
152.5°	187.3	202.7	252.6	328.2	362.5
155°	195.9	206.2	238.8	300.7	340.2
157.5°	204.5	213.1	228.5	276.6	323.0
160°	216.5	216.5	216.5	257.7	309.3
162.5°	223.4	223.4	218.2	235.4	290.4
165°	233.7	226.8	219.9	218.2	273.2
167.5°	244.0	230.2	223.4	211.3	261.2
170°	245.7	235.4	221.6	199.3	252.6
172.5°	252.6	240.5	219.9	189.0	195.9
175°	257.7	247.4	221.6	183.8	111.7
177.5°	256.0	247.4	226.8	183.8	108.2
180°	213.1	213.1	213.1	213.1	213.1



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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	16.23	17.55	16.84	18.18	18.89	18.82	20.14	19.43	20.77	21.48
	3H	17.66	18.86	18.28	19.50	20.25	21.21	22.42	21.84	23.06	23.81
	4H	18.12	19.26	18.76	19.91	20.68	22.36	23.50	23.00	24.15	24.91
	6H	18.39	19.45	19.04	20.11	20.89	23.51	24.57	24.17	25.24	26.01
	8H	18.44	19.45	19.11	20.14	20.92	24.10	25.11	24.76	25.79	26.58
	12H	18.45	19.43	19.13	20.10	20.91	24.73	25.70	25.40	26.38	27.19
4H	2H	17.11	18.25	17.76	18.90	19.67	19.16	20.30	19.80	20.95	21.71
	3H	18.76	19.73	19.42	20.42	21.20	21.77	22.74	22.43	23.42	24.21
	4H	19.35	20.23	20.02	20.93	21.74	23.07	23.96	23.74	24.65	25.46
	6H	19.72	20.50	20.41	21.22	22.04	24.40	25.18	25.09	25.90	26.72
	8H	19.81	20.54	20.51	21.26	22.09	25.07	25.81	25.77	26.52	27.36
	12H	19.85	20.52	20.57	21.26	22.10	25.82	26.48	26.54	27.22	28.06
8H	4H	19.98	20.72	20.68	21.43	22.27	23.22	23.95	23.92	24.67	25.50
	6H	20.52	21.14	21.25	21.89	22.73	24.69	25.31	25.42	26.07	26.90
	8H	20.69	21.24	21.43	22.00	22.85	25.49	26.05	26.23	26.80	27.66
	12H	20.79	21.29	21.53	22.04	22.95	26.39	26.88	27.13	27.63	28.54
12H	4H	20.15	20.81	20.87	21.55	22.39	23.21	23.88	23.93	24.61	25.45
	6H	20.77	21.33	21.51	22.09	22.94	24.71	25.27	25.45	26.03	26.88
	8H	21.02	21.51	21.76	22.26	23.17	25.56	26.05	26.30	26.80	27.71