

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: P894652

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

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894652
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2403-334-3)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 8TMB-14HL-RNDU-UNV-L950
Description: 14000 Lumen 8FT MICROBAY LINEAR BAY with ROUND FROSTED LENS WITH UPLIGHT, 90CRI, CCT
Light Source: -
Ballast/Driver: -

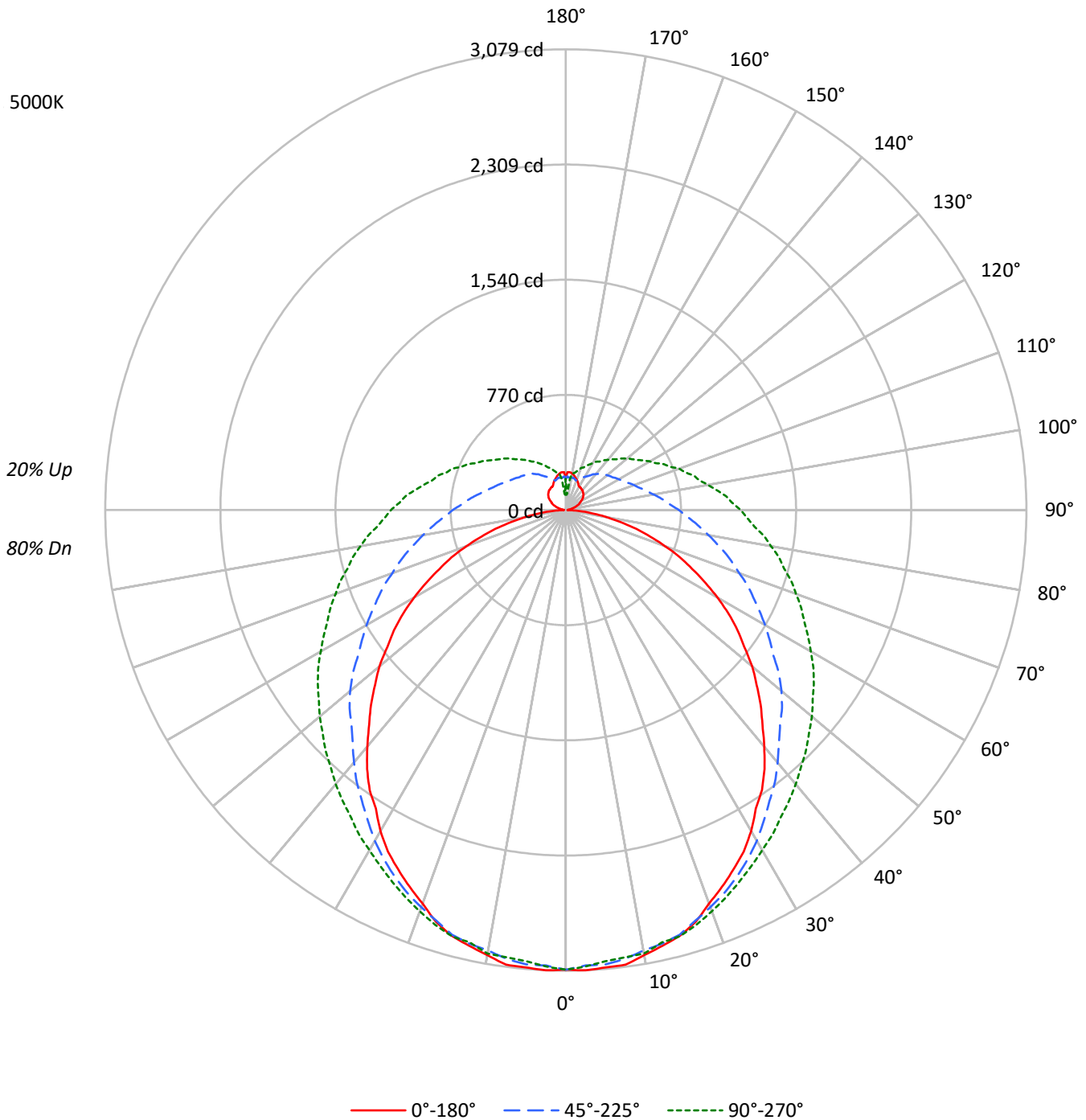
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12915.1 lumens
Efficiency: N/A
Efficacy: 124.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37
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_{in}): 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	114	114	114	114	109	109	109	109	100	100	100	91	91	91	83	83	83	83	83	83	80
1	102	96	91	86	97	92	87	83	84	80	77	76	73	71	69	67	65	65	65	65	61
2	92	82	75	68	87	79	72	66	72	66	61	66	61	57	60	56	53	53	53	53	49
3	83	72	63	56	79	69	61	54	63	56	51	57	52	47	52	48	44	44	44	44	41
4	76	63	54	47	72	60	52	45	55	48	43	51	45	40	46	41	37	37	37	37	34
5	69	56	47	40	66	54	45	39	49	42	37	45	39	34	41	36	32	32	32	32	29
6	64	50	41	35	61	48	40	34	44	37	32	41	35	30	38	32	28	28	28	28	26
7	59	46	37	30	56	44	35	30	40	33	28	37	31	26	34	29	25	25	25	25	23
8	55	41	33	27	52	40	32	26	37	30	25	34	28	24	31	26	22	22	22	22	20
9	51	38	30	24	49	37	29	23	34	27	22	31	25	21	29	24	20	20	20	20	18
10	48	35	27	22	46	34	26	21	31	25	20	29	23	19	27	22	18	18	18	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10901	10901	10901
5°	10905	10484	10290
10°	10833	10052	9890
15°	10749	9734	9444
20°	10469	9293	8984
25°	10254	8903	8551
30°	10000	8475	8171
35°	9721	8009	7842
40°	9353	7611	7589
45°	9007	7230	7363
50°	8711	7000	7172
55°	8362	6634	7024
60°	7944	6408	6888
65°	7418	6208	6785
70°	6836	6051	6780
75°	6075	6004	6800
80°	4955	5997	6932
85°	3555	6165	7088

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 9007 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	290.8	2.3
10°-20°	831.1	6.4
20°-30°	1247.9	9.7
30°-40°	1498.5	11.6
40°-50°	1585.0	12.3
50°-60°	1527.5	11.8
60°-70°	1355.2	10.5
70°-80°	1111.4	8.6
80°-90°	860.2	6.7
90°-100°	671.1	5.2
100°-110°	534.3	4.1
110°-120°	427.0	3.3
120°-130°	336.8	2.6
130°-140°	257.0	2.0
140°-150°	180.7	1.4
150°-160°	115.5	0.9
160°-170°	64.7	0.5
170°-180°	20.5	0.2
0°-30°	2369.8	18.3
0°-40°	3868.3	30.0
0°-60°	6980.8	54.1
0°-90°	10307.6	79.8
90°-120°	1632.3	12.6
90°-150°	2406.7	18.6
90°-180°	2608.0	20.2
0°-180°	12915.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3072	3072	3072	3072	3072	
5°	3069	3077	3048	3070	3028	292
15°	2947	2948	2938	2957	2948	828
25°	2651	2694	2704	2751	2742	1221
35°	2285	2320	2375	2472	2505	1425
45°	1842	1897	2026	2218	2272	1421
55°	1402	1472	1694	1924	2024	1251
65°	933	1062	1383	1670	1758	927
75°	486	699	1101	1399	1510	514
85°	113	426	854	1162	1265	128
90°	12	338	756	1052	1168	12
95°	16	280	668	960	1074	15
105°	52	227	534	785	887	55
115°	100	222	443	641	723	97
125°	139	225	381	526	582	122
135°	163	218	342	445	479	127
145°	177	201	282	373	395	111
155°	196	206	232	292	326	90
165°	232	227	218	213	265	65
175°	254	246	218	179	113	24
180°	208	208	208	208	208	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3072.2	3072.2	3072.2	3072.2	3072.2
2.5°	3079.1	3089.4	3046.4	3072.2	3053.3
5°	3068.7	3077.3	3048.1	3070.5	3027.5
7.5°	3065.3	3061.9	3025.8	3055.0	3015.5
10°	3020.6	3032.7	2989.7	3029.2	3010.3
12.5°	2982.8	3006.9	2969.1	3000.0	2960.5
15°	2946.7	2948.5	2938.2	2957.1	2948.5
17.5°	2886.6	2902.1	2878.0	2921.0	2905.5
20°	2799.0	2847.1	2824.8	2864.3	2854.0
22.5°	2726.8	2750.9	2769.8	2814.4	2800.7
25°	2651.2	2694.2	2704.5	2750.9	2742.3
27.5°	2573.9	2592.8	2632.3	2682.1	2683.9
30°	2477.7	2498.3	2553.3	2610.0	2625.4
32.5°	2364.3	2429.6	2462.2	2548.1	2572.2
35°	2285.2	2319.6	2374.6	2472.5	2505.2
37.5°	2182.1	2221.7	2295.5	2410.7	2450.2
40°	2063.6	2122.0	2202.8	2345.4	2391.8
42.5°	1945.0	2013.8	2108.3	2274.9	2328.2
45°	1841.9	1896.9	2025.8	2218.2	2271.5
47.5°	1730.2	1797.3	1960.5	2144.3	2204.5
50°	1627.2	1695.9	1881.5	2075.6	2147.8
52.5°	1503.4	1582.5	1795.5	1996.6	2080.8
55°	1402.1	1472.5	1694.2	1924.4	2024.1
57.5°	1290.4	1369.4	1615.1	1871.1	1962.2
60°	1170.1	1269.8	1537.8	1804.1	1891.8
62.5°	1051.6	1170.1	1458.8	1738.8	1824.7
65°	933.0	1061.9	1383.2	1670.1	1757.7
67.5°	826.5	965.6	1314.4	1594.5	1702.8
70°	706.2	872.9	1233.7	1524.1	1637.5
72.5°	592.8	788.7	1168.4	1467.4	1580.8
75°	486.3	699.3	1101.4	1398.6	1510.3
77.5°	379.7	615.1	1030.9	1336.8	1458.8
80°	278.4	546.4	969.1	1276.6	1393.5
82.5°	192.4	486.3	908.9	1226.8	1336.8
85°	113.4	426.1	854.0	1161.5	1264.6
87.5°	51.5	378.0	797.3	1111.7	1213.1
90°	12.0	338.5	756.0	1051.6	1168.4
92.5°	12.0	307.6	706.2	1006.9	1113.4
95°	15.5	280.1	668.4	960.5	1073.9
97.5°	20.6	259.5	634.0	917.5	1017.2
100°	29.2	245.7	596.2	867.7	965.6
102.5°	39.5	235.4	561.9	823.0	914.1
105°	51.5	226.8	534.4	785.2	886.6
107.5°	63.6	223.4	506.9	749.1	835.1
110°	75.6	221.7	486.3	711.3	807.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	87.6	219.9	463.9	677.0	754.3
115°	99.7	221.7	443.3	640.9	723.4
117.5°	106.5	221.7	424.4	610.0	678.7
120°	116.8	223.4	410.7	577.3	649.5
122.5°	127.1	223.4	396.9	553.3	616.8
125°	139.2	225.1	381.4	525.8	582.5
127.5°	146.0	225.1	372.9	506.9	558.4
130°	152.9	223.4	360.8	482.8	536.1
132.5°	159.8	219.9	354.0	460.5	510.3
135°	163.2	218.2	341.9	445.0	479.4
137.5°	168.4	213.1	329.9	422.7	460.5
140°	173.5	211.3	312.7	405.5	438.1
142.5°	173.5	206.2	300.7	390.0	419.2
145°	177.0	201.0	281.8	372.9	395.2
147.5°	180.4	199.3	268.0	355.7	383.2
150°	180.4	197.6	256.0	336.8	362.5
152.5°	183.8	199.3	244.0	319.6	343.6
155°	195.9	206.2	232.0	292.1	326.5
157.5°	206.2	213.1	219.9	271.5	307.6
160°	214.8	218.2	209.6	250.9	299.0
162.5°	221.7	223.4	211.3	232.0	280.1
165°	232.0	226.8	218.2	213.1	264.6
167.5°	240.6	230.2	221.7	207.9	252.6
170°	247.4	237.1	218.2	195.9	247.4
172.5°	252.6	238.8	219.9	183.8	207.9
175°	254.3	245.7	218.2	178.7	113.4
177.5°	252.6	247.4	225.1	177.0	101.4
180°	207.9	207.9	207.9	207.9	207.9



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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	15.37	16.68	16.01	17.34	18.11	18.85	20.17	19.49	20.83	21.60
	3H	16.82	18.02	17.47	18.69	19.49	21.73	22.93	22.38	23.60	24.40
	4H	17.29	18.43	17.96	19.11	19.92	23.21	24.35	23.88	25.03	25.84
	6H	17.57	18.63	18.25	19.32	20.15	24.82	25.88	25.50	26.58	27.41
	8H	17.62	18.64	18.32	19.36	20.19	25.68	26.70	26.37	27.42	28.24
	12H	17.64	18.62	18.35	19.33	20.19	26.63	27.60	27.33	28.31	29.17
4H	2H	16.52	17.66	17.19	18.35	19.16	19.19	20.33	19.86	21.01	21.83
	3H	18.22	19.20	18.91	19.92	20.75	22.29	23.27	22.98	23.99	24.82
	4H	18.82	19.72	19.52	20.45	21.30	23.96	24.86	24.66	25.58	26.44
	6H	19.23	20.03	19.95	20.77	21.64	25.77	26.56	26.48	27.31	28.18
	8H	19.34	20.09	20.06	20.84	21.72	26.74	27.49	27.46	28.23	29.11
	12H	19.40	20.08	20.14	20.85	21.74	27.81	28.50	28.56	29.26	30.15
8H	4H	19.87	20.62	20.59	21.37	22.25	24.13	24.89	24.86	25.63	26.51
	6H	20.51	21.16	21.27	21.94	22.82	26.12	26.76	26.87	27.55	28.43
	8H	20.74	21.32	21.50	22.11	23.00	27.24	27.82	28.00	28.60	29.50
	12H	20.89	21.41	21.66	22.19	23.14	28.50	29.02	29.27	29.79	30.75
12H	4H	20.21	20.90	20.96	21.66	22.55	24.13	24.82	24.87	25.58	26.47
	6H	21.02	21.60	21.78	22.38	23.28	26.15	26.73	26.91	27.52	28.41
	8H	21.37	21.88	22.13	22.66	23.61	27.33	27.85	28.10	28.63	29.58