

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: P894841

Luminaire Tested: 8TMB-18HL-RNDU-UNV-L930

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894841
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-18HL-RNDU-UNV-L930
Description: 18000 Lumen 8FT MICROBAY LINEAR BAY with ROUND FROSTED LENS WITH UPLIGHT, 90CRI, CCT
Light Source: -
Ballast/Driver: -

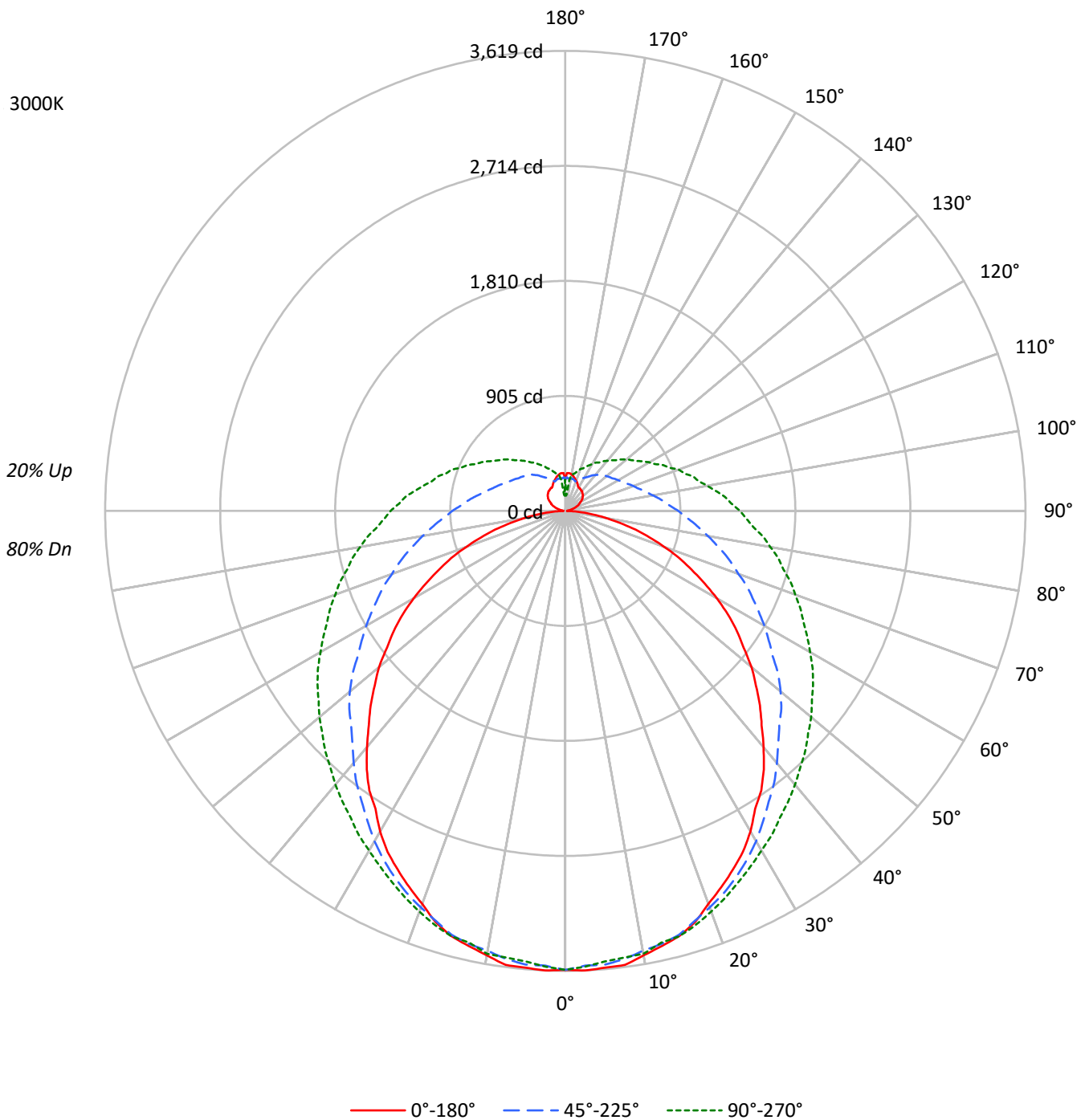
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15179.0 lumens
Efficiency: N/A
Efficacy: 112.6 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): 134.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 8.62
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°	12811	12811	12811
5°	12817	12322	12093
10°	12732	11814	11624
15°	12633	11440	11099
20°	12304	10922	10559
25°	12052	10463	10050
30°	11753	9961	9604
35°	11425	9413	9217
40°	10993	8945	8919
45°	10586	8498	8654
50°	10238	8227	8429
55°	9827	7797	8256
60°	9337	7531	8095
65°	8718	7296	7974
70°	8034	7111	7969
75°	7139	7056	7992
80°	5822	7048	8147
85°	4179	7245	8331

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 10586 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	341.8	2.3
10°-20°	976.7	6.4
20°-30°	1466.6	9.7
30°-40°	1761.2	11.6
40°-50°	1862.9	12.3
50°-60°	1795.3	11.8
60°-70°	1592.7	10.5
70°-80°	1306.2	8.6
80°-90°	1011.0	6.7
90°-100°	788.7	5.2
100°-110°	627.9	4.1
110°-120°	501.8	3.3
120°-130°	395.8	2.6
130°-140°	302.0	2.0
140°-150°	212.4	1.4
150°-160°	135.8	0.9
160°-170°	76.1	0.5
170°-180°	24.1	0.2
0°-30°	2785.2	18.3
0°-40°	4546.4	30.0
0°-60°	8204.5	54.1
0°-90°	12114.5	79.8
90°-120°	1918.4	12.6
90°-150°	2828.6	18.6
90°-180°	3065.0	20.2
0°-180°	15179.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3611	3611	3611	3611	3611	
5°	3607	3617	3582	3609	3558	343
15°	3463	3465	3453	3475	3465	973
25°	3116	3166	3179	3233	3223	1435
35°	2686	2726	2791	2906	2944	1674
45°	2165	2229	2381	2607	2670	1670
55°	1648	1731	1991	2262	2379	1470
65°	1096	1248	1626	1963	2066	1090
75°	572	822	1294	1644	1775	605
85°	133	501	1004	1365	1486	150
90°	14	398	888	1236	1373	14
95°	18	329	786	1129	1262	18
105°	61	267	628	923	1042	64
115°	117	260	521	753	850	113
125°	164	264	448	618	685	144
135°	192	256	402	523	563	149
145°	208	236	331	438	464	131
155°	230	242	273	343	384	106
165°	273	267	256	250	311	76
175°	299	289	256	210	133	28
180°	244	244	244	244	244	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3610.7	3610.7	3610.7	3610.7	3610.7
2.5°	3618.8	3630.9	3580.4	3610.7	3588.5
5°	3606.7	3616.8	3582.5	3608.7	3558.2
7.5°	3602.7	3598.6	3556.2	3590.5	3544.1
10°	3550.1	3564.3	3513.8	3560.2	3538.0
12.5°	3505.7	3534.0	3489.6	3525.9	3479.5
15°	3463.3	3465.3	3453.2	3475.4	3465.3
17.5°	3392.6	3410.8	3382.5	3433.0	3414.8
20°	3289.6	3346.2	3319.9	3366.4	3354.3
22.5°	3204.8	3233.1	3255.3	3307.8	3291.7
25°	3116.0	3166.5	3178.6	3233.1	3223.0
27.5°	3025.1	3047.3	3093.8	3152.3	3154.3
30°	2912.0	2936.2	3000.9	3067.5	3085.7
32.5°	2778.7	2855.5	2893.8	2994.8	3023.1
35°	2685.8	2726.2	2790.8	2906.0	2944.3
37.5°	2564.7	2611.1	2698.0	2833.3	2879.7
40°	2425.3	2494.0	2588.9	2756.5	2811.0
42.5°	2286.0	2366.8	2477.8	2673.7	2736.3
45°	2164.8	2229.4	2380.9	2607.1	2669.7
47.5°	2033.6	2112.3	2304.2	2520.2	2590.9
50°	1912.4	1993.2	2211.3	2439.5	2524.3
52.5°	1767.0	1859.9	2110.3	2346.6	2445.5
55°	1647.9	1730.6	1991.2	2261.8	2378.9
57.5°	1516.6	1609.5	1898.3	2199.2	2306.2
60°	1375.2	1492.4	1807.4	2120.4	2223.4
62.5°	1235.9	1375.2	1714.5	2043.7	2144.6
65°	1096.5	1248.0	1625.6	1962.9	2065.9
67.5°	971.3	1134.9	1544.9	1874.0	2001.2
70°	830.0	1025.9	1449.9	1791.2	1924.5
72.5°	696.7	926.9	1373.2	1724.6	1857.9
75°	571.5	821.9	1294.5	1643.8	1775.1
77.5°	446.3	723.0	1211.7	1571.1	1714.5
80°	327.1	642.2	1139.0	1500.4	1637.8
82.5°	226.2	571.5	1068.3	1441.9	1571.1
85°	133.3	500.8	1003.7	1365.1	1486.3
87.5°	60.6	444.3	937.0	1306.6	1425.7
90°	14.1	397.8	888.5	1235.9	1373.2
92.5°	14.1	361.5	830.0	1183.4	1308.6
95°	18.2	329.2	785.6	1128.9	1262.1
97.5°	24.2	304.9	745.2	1078.4	1195.5
100°	34.3	288.8	700.7	1019.8	1134.9
102.5°	46.4	276.7	660.4	967.3	1074.3
105°	60.6	266.6	628.0	922.9	1042.0
107.5°	74.7	262.5	595.7	880.5	981.4
110°	88.9	260.5	571.5	836.0	949.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	103.0	258.5	545.2	795.7	886.5
115°	117.1	260.5	521.0	753.2	850.2
117.5°	125.2	260.5	498.8	716.9	797.7
120°	137.3	262.5	482.6	678.5	763.3
122.5°	149.4	262.5	466.5	650.3	725.0
125°	163.6	264.5	448.3	617.9	684.6
127.5°	171.7	264.5	438.2	595.7	656.3
130°	179.7	262.5	424.1	567.5	630.1
132.5°	187.8	258.5	416.0	541.2	599.8
135°	191.8	256.5	401.9	523.0	563.4
137.5°	197.9	250.4	387.7	496.8	541.2
140°	204.0	248.4	367.5	476.6	515.0
142.5°	204.0	242.3	353.4	458.4	492.7
145°	208.0	236.3	331.2	438.2	464.5
147.5°	212.0	234.3	315.0	418.0	450.3
150°	212.0	232.2	300.9	395.8	426.1
152.5°	216.1	234.3	286.8	375.6	403.9
155°	230.2	242.3	272.6	343.3	383.7
157.5°	242.3	250.4	258.5	319.1	361.5
160°	252.4	256.5	246.4	294.8	351.4
162.5°	260.5	262.5	248.4	272.6	329.2
165°	272.6	266.6	256.5	250.4	311.0
167.5°	282.7	270.6	260.5	244.4	296.9
170°	290.8	278.7	256.5	230.2	290.8
172.5°	296.9	280.7	258.5	216.1	244.4
175°	298.9	288.8	256.5	210.0	133.3
177.5°	296.9	290.8	264.5	208.0	119.1
180°	244.4	244.4	244.4	244.4	244.4



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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	15.93	17.24	16.57	17.91	18.67	19.42	20.73	20.06	21.39	22.16
	3H	17.38	18.58	18.03	19.25	20.05	22.29	23.49	22.94	24.16	24.96
	4H	17.85	18.99	18.52	19.68	20.49	23.77	24.91	24.44	25.59	26.41
	6H	18.13	19.19	18.81	19.88	20.71	25.38	26.45	26.07	27.14	27.97
	8H	18.19	19.21	18.88	19.92	20.75	26.24	27.26	26.94	27.98	28.81
	12H	18.20	19.18	18.91	19.89	20.75	27.19	28.16	27.89	28.87	29.73
4H	2H	17.08	18.22	17.75	18.91	19.72	19.75	20.89	20.42	21.58	22.39
	3H	18.78	19.76	19.47	20.48	21.31	22.85	23.83	23.54	24.55	25.38
	4H	19.38	20.28	20.08	21.01	21.87	24.52	25.42	25.22	26.14	27.00
	6H	19.79	20.59	20.51	21.34	22.20	26.33	27.13	27.05	27.87	28.74
	8H	19.90	20.65	20.62	21.40	22.28	27.30	28.05	28.02	28.80	29.68
	12H	19.96	20.64	20.70	21.41	22.30	28.37	29.06	29.12	29.83	30.71
8H	4H	20.43	21.18	21.15	21.93	22.81	24.69	25.45	25.42	26.19	27.07
	6H	21.08	21.72	21.83	22.50	23.39	26.68	27.32	27.43	28.11	28.99
	8H	21.30	21.88	22.07	22.67	23.56	27.80	28.38	28.56	29.16	30.06
	12H	21.45	21.97	22.22	22.75	23.70	29.06	29.58	29.83	30.36	31.31
12H	4H	20.77	21.46	21.52	22.23	23.11	24.69	25.38	25.44	26.14	27.03
	6H	21.58	22.16	22.34	22.94	23.84	26.71	27.29	27.47	28.08	28.97
	8H	21.93	22.45	22.69	23.22	24.18	27.89	28.41	28.66	29.19	30.14