

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: P893226

Luminaire Tested: 4MB-10HL-RNDU-UNV-L835

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893226
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: 4MB-10HL-RNDU-UNV-L835
Description: 10000 Lumen 4FT MICROBAY LINEAR BAY with ROUND FROSTED LENS WITH UPLIGHT, 80CRI, CCT
Light Source: -
Ballast/Driver: -

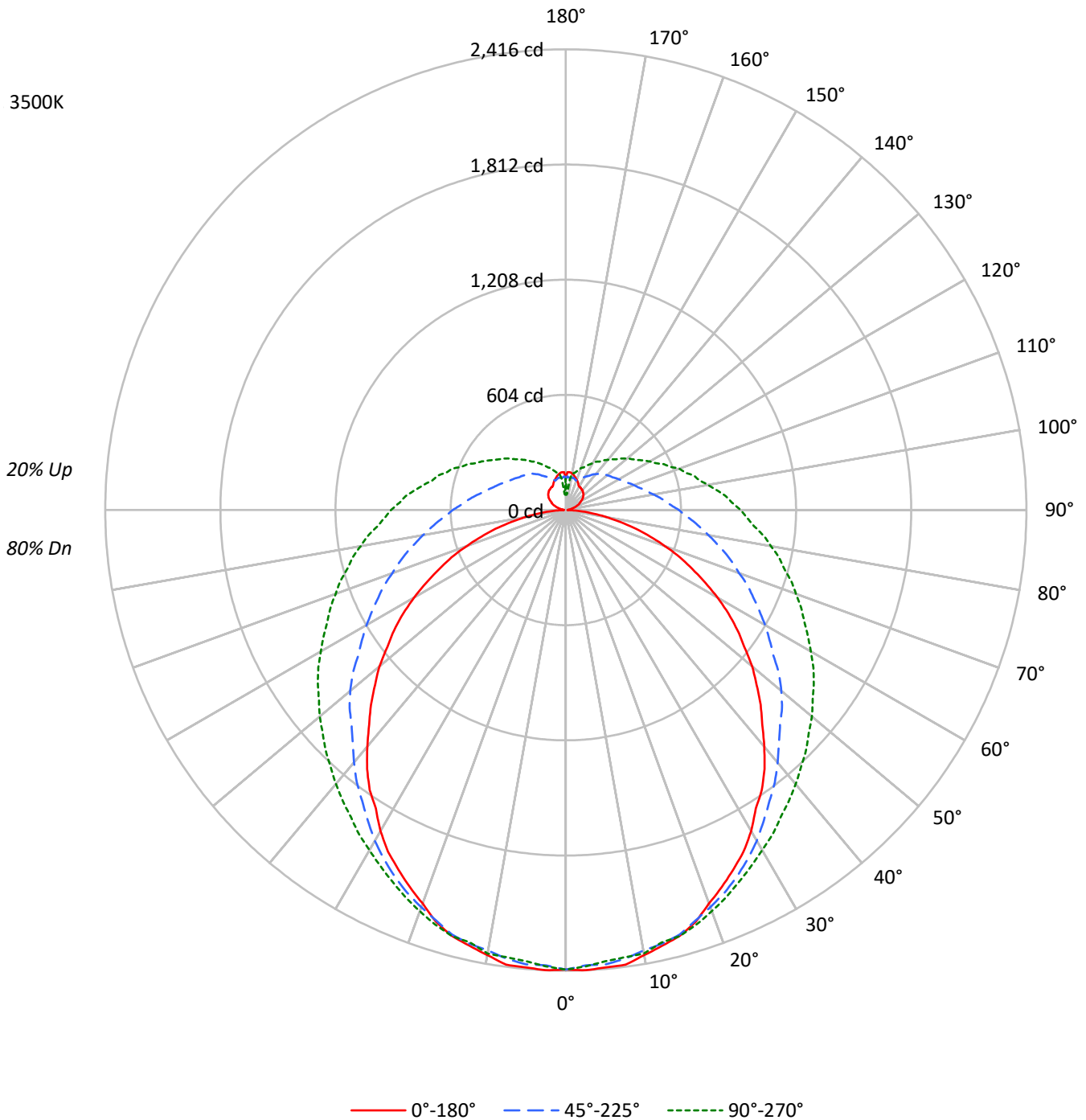
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10132.0 lumens
Efficiency: N/A
Efficacy: 134.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.38' x L: 3.98' x H: 0.21')
CIE Type: Semi-Direct

Input Watts (W): 75.5
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: 0.997
Total Harmonic Distortion (THDi): 7.45
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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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	228.2	2.3
10°-20°	652.0	6.4
20°-30°	979.0	9.7
30°-40°	1175.6	11.6
40°-50°	1243.5	12.3
50°-60°	1198.3	11.8
60°-70°	1063.1	10.5
70°-80°	871.9	8.6
80°-90°	674.8	6.7
90°-100°	526.5	5.2
100°-110°	419.1	4.1
110°-120°	335.0	3.3
120°-130°	264.2	2.6
130°-140°	201.6	2.0
140°-150°	141.8	1.4
150°-160°	90.6	0.9
160°-170°	50.8	0.5
170°-180°	16.1	0.2
0°-30°	1859.1	18.3
0°-40°	3034.7	30.0
0°-60°	5476.5	54.1
0°-90°	8086.4	79.8
90°-120°	1280.6	12.6
90°-150°	1888.1	18.6
90°-180°	2046.0	20.2
0°-180°	10132.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2410	2410	2410	2410	2410	
5°	2408	2414	2391	2409	2375	229
15°	2312	2313	2305	2320	2313	650
25°	2080	2114	2122	2158	2151	958
35°	1793	1820	1863	1940	1965	1118
45°	1445	1488	1589	1740	1782	1115
55°	1100	1155	1329	1510	1588	981
65°	732	833	1085	1310	1379	728
75°	382	549	864	1097	1185	404
85°	89	334	670	911	992	100
90°	9	266	593	825	917	9
95°	12	220	524	754	842	12
105°	40	178	419	616	696	43
115°	78	174	348	503	568	76
125°	109	177	299	412	457	96
135°	128	171	268	349	376	99
145°	139	158	221	292	310	87
155°	154	162	182	229	256	71
165°	182	178	171	167	208	51
175°	200	193	171	140	89	19
180°	163	163	163	163	163	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2410.2	2410.2	2410.2	2410.2	2410.2
2.5°	2415.6	2423.6	2389.9	2410.2	2395.3
5°	2407.5	2414.2	2391.3	2408.8	2375.1
7.5°	2404.8	2402.1	2373.8	2396.7	2365.7
10°	2369.7	2379.2	2345.5	2376.5	2361.6
12.5°	2340.1	2358.9	2329.3	2353.6	2322.5
15°	2311.8	2313.1	2305.0	2319.9	2313.1
17.5°	2264.6	2276.7	2257.8	2291.5	2279.4
20°	2195.8	2233.6	2216.1	2247.1	2239.0
22.5°	2139.2	2158.1	2172.9	2208.0	2197.2
25°	2079.9	2113.6	2121.7	2158.1	2151.4
27.5°	2019.3	2034.1	2065.1	2104.2	2105.5
30°	1943.8	1959.9	2003.1	2047.6	2059.7
32.5°	1854.8	1906.0	1931.6	1999.0	2017.9
35°	1792.8	1819.8	1862.9	1939.7	1965.3
37.5°	1711.9	1742.9	1800.9	1891.2	1922.2
40°	1618.9	1664.7	1728.1	1840.0	1876.4
42.5°	1525.9	1579.8	1654.0	1784.7	1826.5
45°	1445.0	1488.2	1589.3	1740.2	1782.0
47.5°	1357.4	1410.0	1538.0	1682.3	1729.4
50°	1276.5	1330.4	1476.0	1628.3	1685.0
52.5°	1179.5	1241.5	1408.6	1566.3	1632.4
55°	1099.9	1155.2	1329.1	1509.7	1587.9
57.5°	1012.3	1074.3	1267.1	1467.9	1539.4
60°	918.0	996.1	1206.4	1415.4	1484.1
62.5°	825.0	918.0	1144.4	1364.1	1431.5
65°	731.9	833.0	1085.1	1310.2	1379.0
67.5°	648.4	757.6	1031.2	1250.9	1335.8
70°	554.0	684.8	967.8	1195.6	1284.6
72.5°	465.0	618.7	916.6	1151.2	1240.1
75°	381.5	548.6	864.0	1097.2	1184.9
77.5°	297.9	482.6	808.8	1048.7	1144.4
80°	218.4	428.7	760.3	1001.5	1093.2
82.5°	151.0	381.5	713.1	962.4	1048.7
85°	89.0	334.3	669.9	911.2	992.1
87.5°	40.4	296.6	625.5	872.1	951.7
90°	9.4	265.5	593.1	825.0	916.6
92.5°	9.4	241.3	554.0	789.9	873.5
95°	12.1	219.7	524.4	753.5	842.5
97.5°	16.2	203.5	497.4	719.8	798.0
100°	22.9	192.8	467.7	680.7	757.6
102.5°	31.0	184.7	440.8	645.7	717.1
105°	40.4	177.9	419.2	616.0	695.6
107.5°	49.9	175.2	397.7	587.7	655.1
110°	59.3	173.9	381.5	558.1	633.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	68.7	172.5	364.0	531.1	591.8
115°	78.2	173.9	347.8	502.8	567.5
117.5°	83.6	173.9	332.9	478.5	532.4
120°	91.7	175.2	322.2	452.9	509.5
122.5°	99.7	175.2	311.4	434.0	483.9
125°	109.2	176.6	299.2	412.5	457.0
127.5°	114.6	176.6	292.5	397.7	438.1
130°	120.0	175.2	283.1	378.8	420.6
132.5°	125.4	172.5	277.7	361.3	400.3
135°	128.1	171.2	268.2	349.1	376.1
137.5°	132.1	167.1	258.8	331.6	361.3
140°	136.1	165.8	245.3	318.1	343.7
142.5°	136.1	161.8	235.9	306.0	328.9
145°	138.8	157.7	221.1	292.5	310.0
147.5°	141.5	156.4	210.3	279.0	300.6
150°	141.5	155.0	200.8	264.2	284.4
152.5°	144.2	156.4	191.4	250.7	269.6
155°	153.7	161.8	182.0	229.2	256.1
157.5°	161.8	167.1	172.5	213.0	241.3
160°	168.5	171.2	164.5	196.8	234.5
162.5°	173.9	175.2	165.8	182.0	219.7
165°	182.0	177.9	171.2	167.1	207.6
167.5°	188.7	180.6	173.9	163.1	198.2
170°	194.1	186.0	171.2	153.7	194.1
172.5°	198.2	187.4	172.5	144.2	163.1
175°	199.5	192.8	171.2	140.2	89.0
177.5°	198.2	194.1	176.6	138.8	79.5
180°	163.1	163.1	163.1	163.1	163.1



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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	16.92	18.23	17.56	18.89	19.66	20.33	21.64	20.97	22.30	23.07
	3H	18.37	19.57	19.02	20.24	21.04	23.16	24.36	23.81	25.03	25.83
	4H	18.84	19.98	19.51	20.67	21.48	24.61	25.75	25.28	26.44	27.25
	6H	19.12	20.18	19.80	20.88	21.70	26.17	27.24	26.86	27.93	28.76
	8H	19.18	20.20	19.87	20.91	21.74	26.99	28.01	27.68	28.72	29.55
	12H	19.20	20.18	19.90	20.88	21.74	27.87	28.85	28.57	29.56	30.42
4H	2H	18.05	19.20	18.73	19.88	20.69	20.66	21.81	21.34	22.49	23.30
	3H	19.76	20.74	20.44	21.46	22.29	23.73	24.71	24.42	25.43	26.26
	4H	20.36	21.26	21.06	21.98	22.84	25.37	26.27	26.07	27.00	27.85
	6H	20.77	21.57	21.49	22.31	23.18	27.13	27.93	27.85	28.68	29.54
	8H	20.88	21.63	21.60	22.38	23.26	28.06	28.81	28.78	29.56	30.44
	12H	20.94	21.62	21.68	22.39	23.28	29.07	29.76	29.82	30.53	31.41
8H	4H	21.39	22.14	22.11	22.88	23.77	25.55	26.30	26.27	27.05	27.93
	6H	22.03	22.68	22.79	23.46	24.34	27.49	28.13	28.24	28.92	29.80
	8H	22.26	22.84	23.02	23.63	24.52	28.57	29.15	29.34	29.94	30.83
	12H	22.41	22.93	23.18	23.71	24.66	29.77	30.29	30.54	31.07	32.02
12H	4H	21.72	22.40	22.46	23.17	24.06	25.55	26.23	26.29	27.00	27.89
	6H	22.52	23.10	23.29	23.89	24.78	27.52	28.10	28.29	28.89	29.79
	8H	22.87	23.39	23.64	24.17	25.12	28.67	29.19	29.44	29.96	30.92