

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: P893761

Luminaire Tested: 4MB-6SL-LVRF-UNV-L830

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893761
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2407-175-7)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4MB-6SL-LVRF-UNV-L830
Description: 6000 Lumen 4FT MICROBAY LINEAR BAY with LOUVER WITH FROSTED INLAY, 80CRI, 3000K C
Light Source: -
Ballast/Driver: -

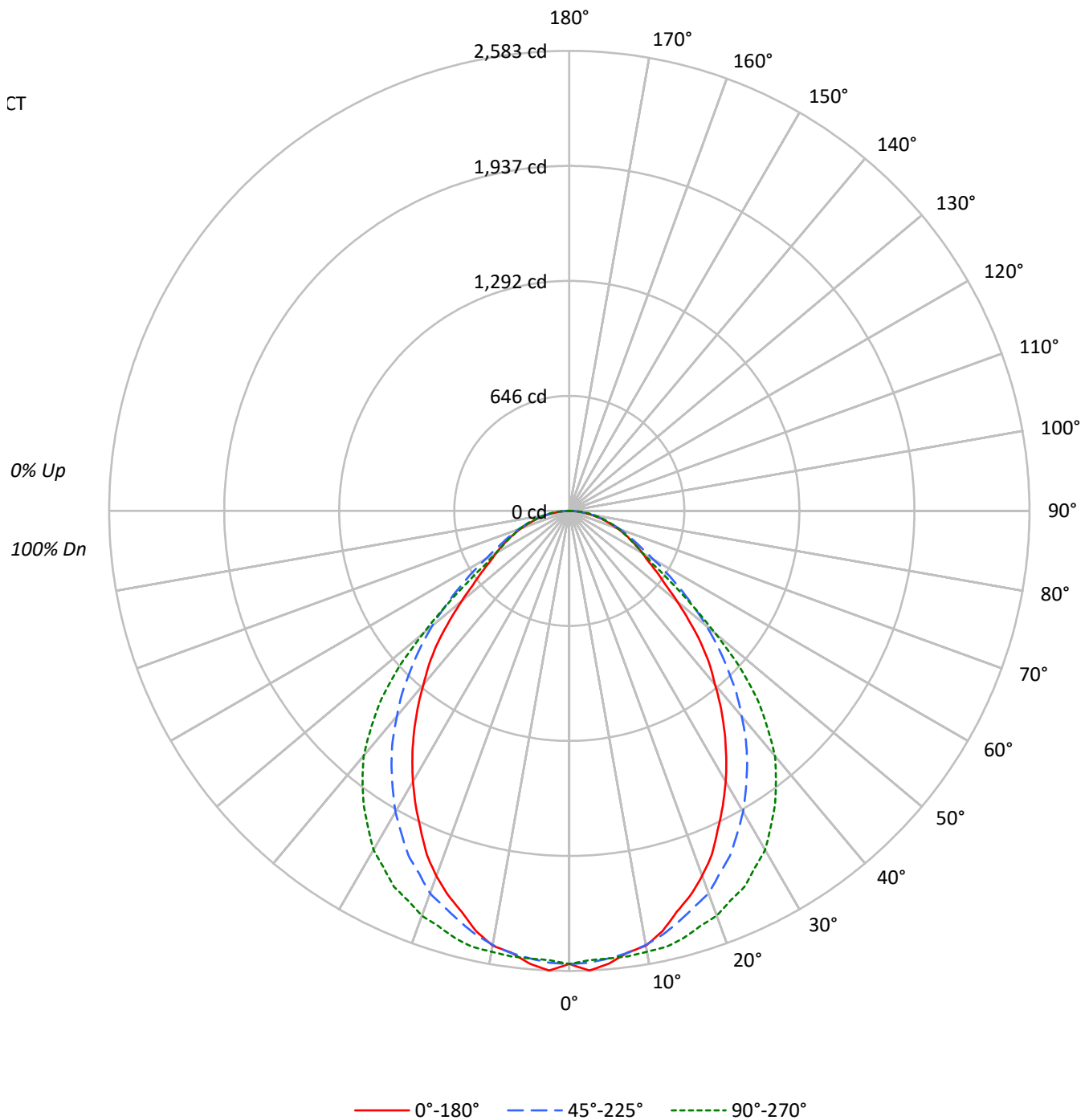
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5286.0 lumens
Efficiency: N/A
Efficacy: 119.1 lumens/watt
Spacing Criteria (0/90/45): 1.06 / 1.27 / 1.23
Luminous Opening: Rectangular (W 0.38' x L: 3.98' x H: 0')
CIE Type: Direct

Input Watts (W): 44.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: 0.99
Total Harmonic Distortion (THDi): 4
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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	102	102	100
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	89	89	89	87
2	102	94	88	83	99	92	87	82	89	84	80	86	82	79	83	80	77	77	77	77	75
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	75	71	67	67	67	67	65
4	87	76	68	62	84	74	67	61	72	66	60	70	64	60	68	63	59	59	59	59	57
5	80	68	60	54	78	67	60	54	65	59	53	63	58	53	62	56	52	52	52	52	50
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	56	51	47	47	47	47	45
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	42	42	42	40
8	65	52	44	39	63	52	44	39	50	44	39	49	43	38	48	42	38	38	38	38	36
9	61	48	41	35	60	48	40	35	47	40	35	46	39	35	45	39	35	35	35	35	33
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32	32	32	32	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	18096	18096	18096
5°	18222	18014	18014
10°	17907	17878	18156
15°	17166	17566	18286
20°	16514	17305	18317
25°	15491	16769	18274
30°	14419	16028	18060
35°	13200	15119	17485
40°	11818	13979	16682
45°	10487	12656	14999
50°	8726	11141	11829
55°	7432	9384	8596
60°	6738	7754	6795
65°	6345	6791	6323
70°	5970	6301	6164
75°	5564	5998	5891
80°	5093	5527	5691
85°	4425	4857	6368

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 14999 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	240.8	4.6
10°-20°	677.6	12.8
20°-30°	984.0	18.6
30°-40°	1095.7	20.7
40°-50°	968.0	18.3
50°-60°	635.2	12.0
60°-70°	389.0	7.4
70°-80°	226.3	4.3
80°-90°	69.3	1.3
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1902.4	36.0
0°-40°	2998.1	56.7
0°-60°	4601.4	87.0
0°-90°	5286.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5286.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2543	2543	2543	2543	2543	
5°	2551	2553	2522	2547	2522	241
15°	2330	2357	2385	2479	2482	658
25°	1973	2021	2136	2272	2328	908
35°	1520	1602	1741	1924	2013	948
45°	1042	1106	1258	1427	1491	797
55°	599	642	756	750	693	543
65°	377	384	403	392	376	375
75°	202	205	218	222	214	215
85°	54	57	60	68	78	61
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2543.4	2543.4	2543.4	2543.4	2543.4
2.5°	2583.1	2551.3	2539.4	2551.3	2524.9
5°	2551.3	2552.6	2522.2	2547.3	2522.2
7.5°	2501.1	2518.3	2503.7	2542.1	2522.2
10°	2478.6	2479.9	2474.6	2514.3	2513.0
12.5°	2416.4	2420.4	2434.9	2494.4	2507.7
15°	2330.4	2356.9	2384.7	2478.6	2482.5
17.5°	2263.0	2294.7	2331.8	2432.3	2444.2
20°	2181.0	2194.2	2285.5	2374.1	2419.1
22.5°	2089.7	2114.9	2203.5	2322.5	2367.5
25°	1973.3	2020.9	2136.0	2272.2	2327.8
27.5°	1866.2	1921.8	2040.8	2192.9	2257.7
30°	1755.1	1818.6	1950.9	2100.3	2198.2
32.5°	1640.0	1719.4	1845.0	2017.0	2103.0
35°	1519.7	1601.7	1740.6	1924.4	2013.0
37.5°	1399.3	1478.7	1629.5	1826.5	1905.9
40°	1272.4	1350.4	1505.1	1704.8	1796.1
42.5°	1162.6	1230.0	1388.7	1559.4	1644.0
45°	1042.2	1105.7	1257.8	1427.1	1490.6
47.5°	910.0	984.0	1132.2	1271.0	1296.2
50°	788.3	865.0	1006.5	1087.2	1068.7
52.5°	681.1	746.0	875.6	910.0	866.3
55°	599.1	641.5	756.5	749.9	693.0
57.5°	523.8	550.2	648.1	611.0	556.8
60°	473.5	485.4	544.9	510.5	477.5
62.5°	425.9	431.2	462.9	444.4	419.3
65°	376.9	383.6	403.4	391.5	375.6
67.5°	332.0	334.6	353.1	350.5	330.7
70°	287.0	291.0	302.9	308.2	296.3
72.5°	243.4	247.3	259.2	264.5	253.9
75°	202.4	205.0	218.2	222.2	214.3
77.5°	162.7	168.0	175.9	182.5	173.3
80°	124.3	127.0	134.9	142.8	138.9
82.5°	87.3	91.3	96.6	107.1	109.8
85°	54.2	56.9	59.5	67.5	78.0
87.5°	21.2	22.5	26.5	29.1	38.4
90°	0.0	0.0	0.0	0.0	0.0



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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	17.59	19.07	17.96	19.38	19.70	18.24	19.72	18.61	20.04	20.35
	3H	19.19	20.52	19.57	20.85	21.21	19.68	21.00	20.06	21.33	21.69
	4H	19.81	21.05	20.21	21.40	21.78	20.28	21.53	20.68	21.87	22.25
	6H	20.28	21.43	20.69	21.79	22.19	20.77	21.92	21.18	22.28	22.68
	8H	20.43	21.52	20.86	21.91	22.31	20.97	22.06	21.39	22.45	22.85
	12H	20.53	21.58	20.96	21.96	22.39	21.13	22.18	21.57	22.56	22.99
4H	2H	18.21	19.45	18.61	19.80	20.18	18.74	19.98	19.14	20.33	20.71
	3H	20.03	21.06	20.44	21.46	21.86	20.43	21.46	20.84	21.86	22.26
	4H	20.77	21.70	21.20	22.11	22.55	21.19	22.11	21.62	22.53	22.97
	6H	21.37	22.17	21.83	22.62	23.08	21.82	22.63	22.28	23.07	23.53
	8H	21.57	22.32	22.03	22.76	23.23	22.08	22.83	22.54	23.27	23.74
	12H	21.71	22.38	22.19	22.86	23.33	22.30	22.97	22.78	23.45	23.92
8H	4H	21.09	21.84	21.55	22.29	22.75	21.46	22.21	21.92	22.65	23.12
	6H	21.81	22.44	22.31	22.93	23.41	22.23	22.85	22.73	23.35	23.82
	8H	22.09	22.65	22.60	23.16	23.65	22.58	23.14	23.09	23.65	24.14
	12H	22.30	22.80	22.81	23.29	23.86	22.89	23.39	23.40	23.88	24.45
12H	4H	21.12	21.80	21.61	22.28	22.75	21.48	22.15	21.96	22.63	23.10
	6H	21.88	22.44	22.39	22.95	23.44	22.28	22.84	22.79	23.35	23.84
	8H	22.21	22.71	22.72	23.20	23.77	22.68	23.18	23.19	23.67	24.24