

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: P892837

Luminaire Tested: 2MB-5HL-LVR-UNV-L830

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P892837
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2407-175-2)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 2MB-5HL-LVR-UNV-L830
Description: 5000 Lumen 2FT MICROBAY LINEAR BAY with LOUVER, 80CRI, 3000K CCT
Light Source: -
Ballast/Driver: -

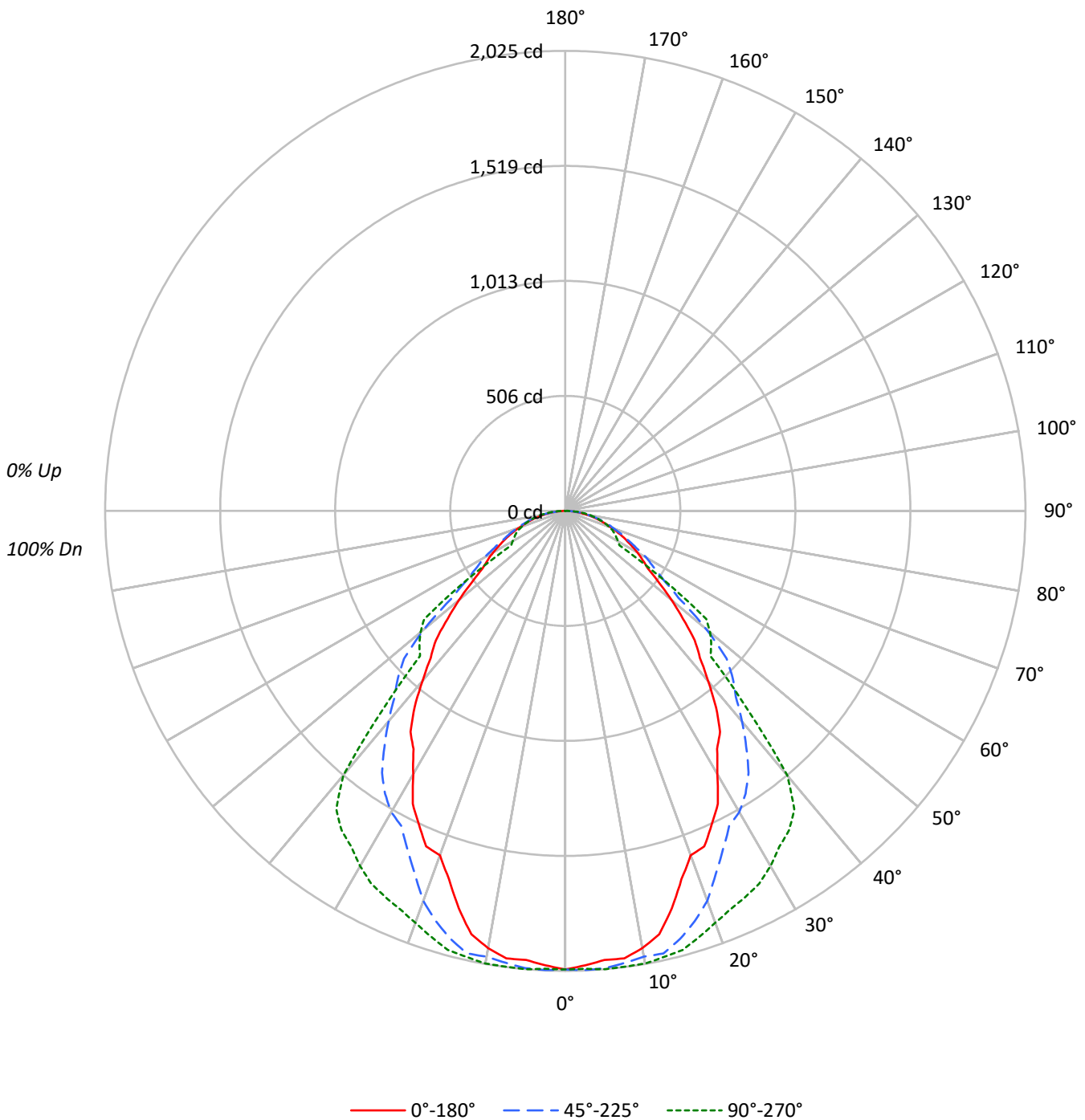
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4113.0 lumens
Efficiency: N/A
Efficacy: 122.0 lumens/watt
Spacing Criteria (0/90/45): 1.05 / 1.32 / 1.24
Luminous Opening: Rectangular (W 0.38' x L: 1.98' x H: 0')
CIE Type: Direct

Input Watts (W): 33.7
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: 0.99
Total Harmonic Distortion (THDi): 4.5
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

TEST NUMBER: P892837
CATALOG NUMBER: 2MB-5HL-LVR-UNV-L830

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	101	98	100	97	94	96	94	92	92	91	89	89	89	89	87
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	77	77	77	75
3	94	85	77	72	92	83	76	71	80	75	70	78	73	69	75	71	68	68	68	68	66
4	87	76	68	62	85	75	68	62	72	66	61	70	65	60	68	63	60	60	60	60	58
5	81	69	61	55	79	68	60	55	66	59	54	64	58	53	62	57	53	53	53	53	51
6	75	63	55	49	73	62	54	49	60	53	48	59	52	48	57	52	47	47	47	47	46
7	70	57	49	44	68	57	49	44	55	48	43	54	48	43	53	47	43	43	43	43	41
8	65	53	45	40	64	52	45	39	51	44	39	50	44	39	49	43	39	39	39	39	37
9	61	49	41	36	60	48	41	36	47	40	36	46	40	36	45	40	35	35	35	35	34
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	37	32	32	32	32	31

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	28873	28873	28873
5°	28489	29010	29079
10°	28389	28943	29388
15°	26821	28887	29623
20°	24560	27803	29374
25°	24047	25932	29596
30°	22105	25293	29821
35°	20735	24554	29977
40°	18249	22600	28361
45°	16290	21083	18281
50°	13585	18069	18516
55°	11126	13104	13032
60°	10520	11779	7653
65°	9766	10250	8148
70°	9030	9587	8549
75°	8446	9131	8816
80°	7711	8502	9210
85°	6894	7370	10193

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 21083 cd/sqm



TEST NUMBER: P892837
 CATALOG NUMBER: 2MB-5HL-LVR-UNV-L830

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	191.9	4.7
10°-20°	540.0	13.1
20°-30°	778.9	18.9
30°-40°	883.5	21.5
40°-50°	735.8	17.9
50°-60°	475.6	11.6
60°-70°	281.9	6.9
70°-80°	171.9	4.2
80°-90°	53.6	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°	1510.7	36.7
0°-40°	2394.2	58.2
0°-60°	3605.6	87.7
0°-90°	4113.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4113.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2018	2018	2018	2018	2018	
5°	1984	2008	2020	2032	2025	189
15°	1811	1870	1950	1982	2000	505
25°	1524	1577	1643	1863	1875	697
35°	1187	1228	1406	1595	1716	730
45°	805	862	1042	958	904	611
55°	446	489	525	631	522	415
65°	288	296	303	269	241	286
75°	153	157	165	174	160	162
85°	42	42	45	52	62	48
90°	0	0	0	0	0	



TEST NUMBER: P892837

CATALOG NUMBER: 2MB-5HL-LVR-UNV-L830

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2018.3	2018.3	2018.3	2018.3	2018.3
2.5°	2002.1	2020.2	2023.1	2039.3	2017.4
5°	1983.9	2007.8	2020.2	2031.7	2025.0
7.5°	1986.8	2000.2	2006.8	2026.9	2023.1
10°	1954.3	1981.1	1992.5	2016.4	2023.1
12.5°	1909.4	1943.8	1995.4	1990.6	2010.7
15°	1811.0	1870.3	1950.5	1982.0	2000.2
17.5°	1700.2	1766.1	1894.1	1968.6	1964.8
20°	1613.3	1663.0	1826.3	1931.4	1929.5
22.5°	1599.0	1610.4	1729.8	1905.6	1898.0
25°	1523.5	1577.0	1642.9	1862.6	1875.0
27.5°	1453.8	1501.6	1562.7	1808.2	1849.2
30°	1338.2	1420.4	1531.2	1749.9	1805.3
32.5°	1242.7	1322.0	1475.8	1678.3	1752.8
35°	1187.3	1228.4	1406.0	1595.2	1716.5
37.5°	1089.9	1166.3	1307.7	1497.7	1655.3
40°	977.2	1065.0	1210.2	1411.8	1518.7
42.5°	876.9	947.5	1110.9	1249.4	1192.1
45°	805.2	861.6	1042.1	958.1	903.6
47.5°	702.1	773.7	962.8	787.1	871.1
50°	610.4	672.5	811.9	744.1	832.0
52.5°	521.5	580.8	628.5	702.1	782.3
55°	446.1	489.1	525.4	631.4	522.5
57.5°	405.0	418.4	459.4	450.8	281.8
60°	367.7	373.5	411.7	304.7	267.5
62.5°	325.7	336.2	351.5	285.6	253.1
65°	288.5	296.1	302.8	269.4	240.7
67.5°	252.2	259.8	266.5	250.3	225.4
70°	215.9	220.6	229.2	225.4	204.4
72.5°	183.4	187.2	197.7	200.6	184.4
75°	152.8	156.7	165.2	173.8	159.5
77.5°	123.2	126.1	135.6	142.3	137.5
80°	93.6	98.4	103.2	111.8	111.8
82.5°	68.8	69.7	74.5	83.1	86.9
85°	42.0	42.0	44.9	51.6	62.1
87.5°	18.1	18.1	20.1	22.0	31.5
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	19.04	20.50	19.40	20.81	21.13	19.01	20.47	19.37	20.78	21.10
	3H	20.63	21.94	21.01	22.27	22.63	20.48	21.79	20.86	22.12	22.48
	4H	21.24	22.46	21.64	22.81	23.19	21.19	22.41	21.59	22.76	23.14
	6H	21.70	22.83	22.11	23.20	23.59	21.80	22.93	22.22	23.30	23.69
	8H	21.86	22.93	22.29	23.32	23.73	22.05	23.12	22.48	23.51	23.92
	12H	21.96	22.99	22.39	23.37	23.80	22.25	23.28	22.68	23.66	24.09
4H	2H	19.63	20.86	20.03	21.21	21.59	19.61	20.83	20.01	21.18	21.56
	3H	21.45	22.47	21.86	22.87	23.27	21.36	22.38	21.78	22.78	23.18
	4H	22.19	23.10	22.62	23.51	23.95	22.23	23.14	22.66	23.56	24.00
	6H	22.78	23.57	23.24	24.01	24.47	22.99	23.78	23.45	24.23	24.69
	8H	22.98	23.72	23.45	24.17	24.64	23.29	24.03	23.75	24.47	24.94
	12H	23.13	23.79	23.61	24.27	24.74	23.54	24.21	24.03	24.69	25.16
8H	4H	22.50	23.24	22.97	23.69	24.16	22.54	23.28	23.01	23.73	24.20
	6H	23.22	23.84	23.72	24.33	24.81	23.45	24.06	23.94	24.55	25.03
	8H	23.50	24.06	24.02	24.57	25.06	23.84	24.39	24.35	24.90	25.39
	12H	23.72	24.21	24.23	24.71	25.27	24.19	24.68	24.70	25.17	25.74
12H	4H	22.54	23.20	23.02	23.68	24.15	22.57	23.23	23.05	23.71	24.18
	6H	23.29	23.84	23.81	24.35	24.84	23.50	24.05	24.01	24.56	25.05
	8H	23.63	24.12	24.14	24.61	25.18	23.95	24.44	24.46	24.93	25.50