

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: P892744

Luminaire Tested: 2MB-4HL-LVR-UNV-L850

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P892744
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-4HL-LVR-UNV-L850
Description: 4000 Lumen 2FT MICROBAY LINEAR BAY with LOUVER, 80CRI, 5000K CCT
Light Source: -
Ballast/Driver: -

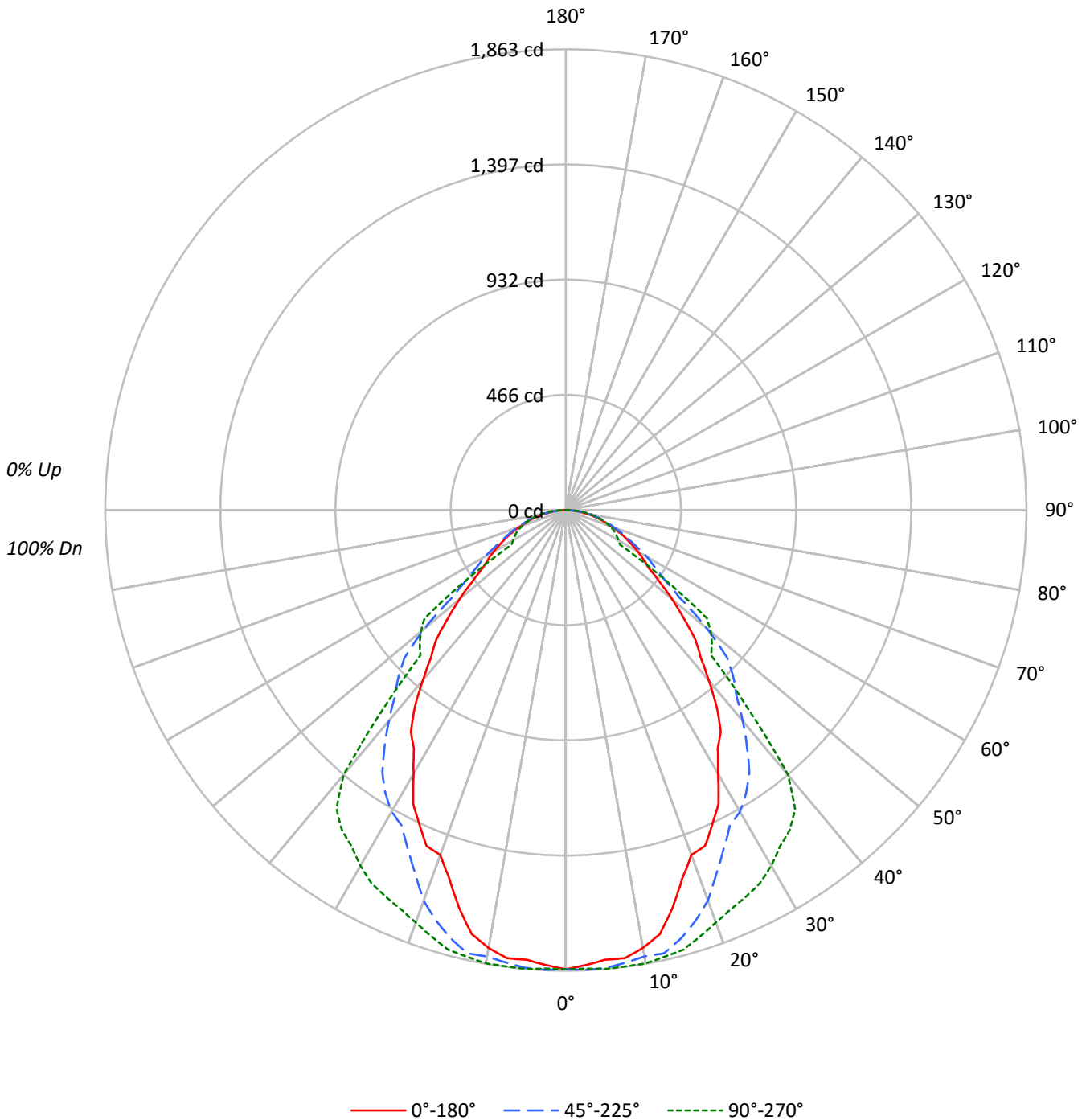
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3784.0 lumens
Efficiency: N/A
Efficacy: 137.1 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): 27.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: 6.5
Total Harmonic Distortion (THDi): 0.99
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	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°	26564	26564	26564
5°	26210	26690	26753
10°	26118	26628	27038
15°	24677	26577	27254
20°	22596	25579	27023
25°	22125	23858	27228
30°	20338	23270	27436
35°	19076	22591	27579
40°	16788	20792	26094
45°	14987	19398	16818
50°	12496	16625	17034
55°	10236	12054	11989
60°	9679	10838	7041
65°	8984	9431	7498
70°	8307	8821	7868
75°	7771	8401	8114
80°	7093	7818	8469
85°	6352	6779	9372

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 19398 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	176.5	4.7
10°-20°	496.8	13.1
20°-30°	716.6	18.9
30°-40°	812.8	21.5
40°-50°	676.9	17.9
50°-60°	437.5	11.6
60°-70°	259.4	6.9
70°-80°	158.1	4.2
80°-90°	49.4	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°	1389.9	36.7
0°-40°	2202.7	58.2
0°-60°	3317.1	87.7
0°-90°	3784.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3784.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1857	1857	1857	1857	1857	
5°	1825	1847	1859	1869	1863	174
15°	1666	1721	1794	1824	1840	465
25°	1402	1451	1512	1714	1725	641
35°	1092	1130	1294	1468	1579	672
45°	741	793	959	881	831	563
55°	410	450	483	581	481	382
65°	265	272	279	248	222	264
75°	141	144	152	160	147	149
85°	39	39	41	48	57	44
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1856.9	1856.9	1856.9	1856.9	1856.9
2.5°	1841.9	1858.6	1861.3	1876.2	1856.0
5°	1825.2	1847.2	1858.6	1869.2	1863.0
7.5°	1827.9	1840.2	1846.3	1864.8	1861.3
10°	1798.0	1822.6	1833.1	1855.1	1861.3
12.5°	1756.7	1788.3	1835.8	1831.4	1849.8
15°	1666.2	1720.7	1794.5	1823.5	1840.2
17.5°	1564.2	1624.9	1742.6	1811.2	1807.7
20°	1484.3	1530.0	1680.2	1776.9	1775.1
22.5°	1471.1	1481.6	1591.5	1753.2	1746.1
25°	1401.7	1450.9	1511.5	1713.6	1725.0
27.5°	1337.5	1381.4	1437.7	1663.5	1701.3
30°	1231.2	1306.7	1408.7	1609.9	1660.9
32.5°	1143.3	1216.2	1357.7	1544.0	1612.6
35°	1092.3	1130.1	1293.6	1467.6	1579.2
37.5°	1002.7	1073.0	1203.1	1377.9	1522.9
40°	899.0	979.8	1113.4	1298.8	1397.3
42.5°	806.7	871.8	1022.0	1149.4	1096.7
45°	740.8	792.7	958.8	881.4	831.3
47.5°	645.9	711.8	885.8	724.1	801.4
50°	561.5	618.7	747.0	684.6	765.4
52.5°	479.8	534.3	578.2	645.9	719.7
55°	410.4	449.9	483.3	580.9	480.7
57.5°	372.6	384.9	422.7	414.8	259.2
60°	338.3	343.6	378.8	280.3	246.1
62.5°	299.7	309.3	323.4	262.8	232.9
65°	265.4	272.4	278.6	247.8	221.5
67.5°	232.0	239.0	245.2	230.2	207.4
70°	198.6	203.0	210.9	207.4	188.1
72.5°	168.7	172.2	181.9	184.5	169.6
75°	140.6	144.1	152.0	159.9	146.8
77.5°	113.4	116.0	124.8	130.9	126.5
80°	86.1	90.5	94.9	102.8	102.8
82.5°	63.3	64.2	68.5	76.5	80.0
85°	38.7	38.7	41.3	47.5	57.1
87.5°	16.7	16.7	18.5	20.2	29.0
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	18.75	20.21	19.11	20.52	20.84	18.72	20.18	19.08	20.49	20.81
	3H	20.34	21.65	20.72	21.98	22.34	20.19	21.50	20.57	21.83	22.19
	4H	20.95	22.17	21.35	22.52	22.90	20.90	22.12	21.30	22.47	22.85
	6H	21.41	22.54	21.82	22.91	23.30	21.51	22.64	21.93	23.01	23.40
	8H	21.57	22.64	22.00	23.03	23.44	21.76	22.83	22.19	23.22	23.63
	12H	21.67	22.70	22.10	23.08	23.51	21.96	22.99	22.39	23.37	23.80
4H	2H	19.34	20.57	19.74	20.92	21.30	19.32	20.54	19.72	20.89	21.27
	3H	21.16	22.18	21.57	22.58	22.98	21.08	22.09	21.49	22.49	22.89
	4H	21.90	22.81	22.33	23.22	23.66	21.94	22.85	22.38	23.27	23.71
	6H	22.49	23.28	22.95	23.72	24.18	22.70	23.49	23.16	23.94	24.40
	8H	22.69	23.43	23.16	23.88	24.35	23.00	23.74	23.46	24.18	24.65
	12H	22.84	23.50	23.32	23.98	24.45	23.26	23.92	23.74	24.40	24.87
8H	4H	22.21	22.95	22.68	23.40	23.87	22.25	23.00	22.72	23.44	23.91
	6H	22.93	23.55	23.43	24.04	24.52	23.16	23.77	23.65	24.26	24.74
	8H	23.21	23.77	23.73	24.28	24.77	23.55	24.10	24.06	24.61	25.10
	12H	23.43	23.92	23.94	24.42	24.98	23.90	24.39	24.41	24.88	25.45
12H	4H	22.25	22.91	22.73	23.39	23.86	22.28	22.94	22.76	23.42	23.89
	6H	23.00	23.55	23.52	24.06	24.55	23.21	23.76	23.72	24.27	24.76
	8H	23.34	23.83	23.85	24.32	24.89	23.66	24.15	24.17	24.64	25.21