

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: P892760

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

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P892760
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2407-175-1)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 2MB-4HL-LVRF-UNV-L850
Description: 4000 Lumen 2FT MICROBAY LINEAR BAY with LOUVER WITH FROSTED INLAY, 80CRI, 5000K C
Light Source: -
Ballast/Driver: -

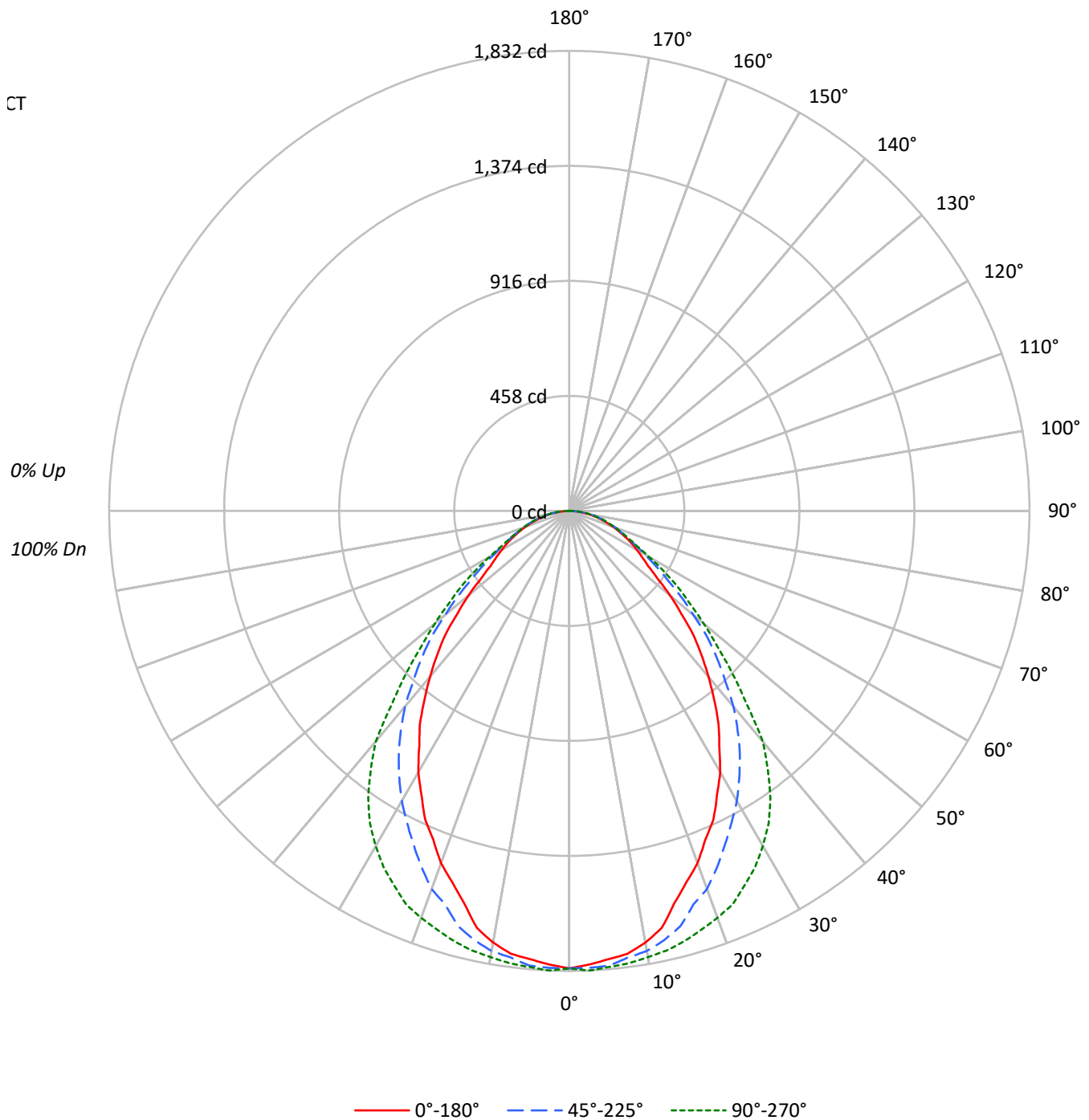
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3582.0 lumens
Efficiency: N/A
Efficacy: 129.8 lumens/watt
Spacing Criteria (0/90/45): 1.02 / 1.25 / 1.19
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 (Ain): 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	73	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	54	62	57	53	53	53	53	51
6	75	63	55	49	73	62	54	49	60	53	48	59	53	48	57	52	48	48	48	48	46
7	70	58	50	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	40	51	44	39	50	44	39	49	43	39	39	39	39	37
9	61	49	41	36	60	48	41	36	47	41	36	46	40	36	45	40	36	36	36	36	34
10	58	45	38	33	57	45	38	33	44	37	33	43	37	33	42	37	33	33	33	33	31

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	26059	26059	26059
5°	25732	26108	26183
10°	25355	25851	26207
15°	23948	25346	26266
20°	22726	24390	26253
25°	21423	23148	26006
30°	19849	22029	25453
35°	18098	20679	24374
40°	16086	18992	22374
45°	14119	16861	18647
50°	11640	14364	15570
55°	9552	11864	13109
60°	8881	9859	10457
65°	8317	8764	8821
70°	7755	8194	8156
75°	7202	7782	7832
80°	6632	7208	7348
85°	5745	6319	8322

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 18647 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	171.8	4.8
10°-20°	479.1	13.4
20°-30°	684.9	19.1
30°-40°	747.2	20.9
40°-50°	629.3	17.6
50°-60°	419.2	11.7
60°-70°	258.6	7.2
70°-80°	146.6	4.1
80°-90°	45.2	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°	1335.8	37.3
0°-40°	2083.0	58.2
0°-60°	3131.6	87.4
0°-90°	3582.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3582.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1822	1822	1822	1822	1822	
5°	1792	1802	1818	1818	1823	170
15°	1617	1649	1711	1762	1774	456
25°	1357	1385	1466	1606	1648	620
35°	1036	1082	1184	1323	1396	644
45°	698	736	833	888	922	533
55°	383	410	476	508	526	354
65°	246	248	259	269	261	244
75°	130	132	141	146	142	138
85°	35	37	38	45	51	40
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1821.6	1821.6	1821.6	1821.6	1821.6
2.5°	1808.5	1809.3	1821.6	1828.6	1832.1
5°	1791.9	1801.5	1818.1	1818.1	1823.3
7.5°	1778.7	1780.5	1793.6	1812.8	1817.2
10°	1745.5	1754.3	1779.6	1801.5	1804.1
12.5°	1700.9	1706.2	1749.9	1791.9	1792.7
15°	1617.0	1649.3	1711.4	1762.1	1773.5
17.5°	1550.5	1583.7	1643.2	1734.1	1749.0
20°	1492.8	1511.1	1602.1	1700.9	1724.5
22.5°	1415.8	1449.9	1536.5	1661.6	1696.5
25°	1357.2	1385.2	1466.5	1605.6	1647.6
27.5°	1274.2	1316.1	1399.2	1546.1	1600.3
30°	1201.6	1247.0	1333.6	1483.2	1540.9
32.5°	1111.5	1159.6	1259.3	1407.1	1476.2
35°	1036.3	1081.8	1184.1	1323.1	1395.7
37.5°	947.1	998.7	1101.0	1231.3	1297.8
40°	861.4	905.1	1017.0	1129.0	1198.1
42.5°	779.2	819.4	919.1	1012.7	1046.8
45°	697.9	736.3	833.4	888.5	921.7
47.5°	603.4	651.5	746.0	773.1	798.4
50°	523.0	563.2	645.4	669.9	699.6
52.5°	443.4	484.5	559.7	579.8	603.4
55°	383.0	410.1	475.7	508.1	525.6
57.5°	344.6	353.3	407.5	437.3	445.1
60°	310.4	315.7	344.6	371.7	365.5
62.5°	279.0	281.6	296.5	316.6	304.3
65°	245.7	248.4	258.9	269.3	260.6
67.5°	215.1	216.9	225.6	233.5	225.6
70°	185.4	186.3	195.9	201.1	195.0
72.5°	156.5	157.4	167.0	173.2	166.2
75°	130.3	132.1	140.8	146.0	141.7
77.5°	104.9	107.6	113.7	118.9	111.9
80°	80.5	82.2	87.5	93.6	89.2
82.5°	58.6	59.5	63.0	69.1	70.8
85°	35.0	36.7	38.5	44.6	50.7
87.5°	14.0	15.7	16.6	19.2	27.1
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	18.35	19.81	18.71	20.12	20.44	19.86	21.32	20.22	21.63	21.95
	3H	19.95	21.26	20.33	21.59	21.95	21.07	22.38	21.45	22.71	23.07
	4H	20.56	21.79	20.96	22.14	22.52	21.59	22.82	21.99	23.17	23.55
	6H	21.03	22.16	21.44	22.53	22.92	22.00	23.13	22.42	23.50	23.89
	8H	21.19	22.27	21.62	22.66	23.06	22.17	23.25	22.60	23.64	24.04
	12H	21.29	22.32	21.72	22.71	23.13	22.31	23.34	22.74	23.73	24.16
4H	2H	18.96	20.18	19.36	20.53	20.91	20.20	21.43	20.60	21.77	22.15
	3H	20.78	21.79	21.19	22.19	22.59	21.68	22.70	22.09	23.10	23.50
	4H	21.51	22.42	21.94	22.84	23.28	22.36	23.27	22.79	23.69	24.13
	6H	22.11	22.90	22.57	23.34	23.81	22.93	23.72	23.38	24.16	24.62
	8H	22.31	23.06	22.78	23.50	23.97	23.15	23.89	23.62	24.34	24.81
	12H	22.46	23.12	22.94	23.60	24.07	23.35	24.02	23.84	24.50	24.97
8H	4H	21.83	22.57	22.29	23.02	23.48	22.59	23.33	23.05	23.77	24.24
	6H	22.55	23.17	23.05	23.66	24.14	23.29	23.90	23.79	24.39	24.87
	8H	22.84	23.39	23.35	23.90	24.39	23.60	24.15	24.12	24.66	25.15
	12H	23.06	23.55	23.57	24.04	24.61	23.90	24.39	24.41	24.88	25.44
12H	4H	21.86	22.53	22.35	23.01	23.48	22.60	23.26	23.08	23.74	24.21
	6H	22.62	23.17	23.14	23.68	24.17	23.33	23.88	23.84	24.39	24.88
	8H	22.96	23.45	23.48	23.95	24.51	23.70	24.19	24.21	24.68	25.24