

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: P892758

Luminaire Tested: 2MB-4HL-LVRF-UNV-L835

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P892758
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-L835
Description: 4000 Lumen 2FT MICROBAY LINEAR BAY with LOUVER WITH FROSTED INLAY, 80CRI, 3500K C
Light Source: -
Ballast/Driver: -

Summary

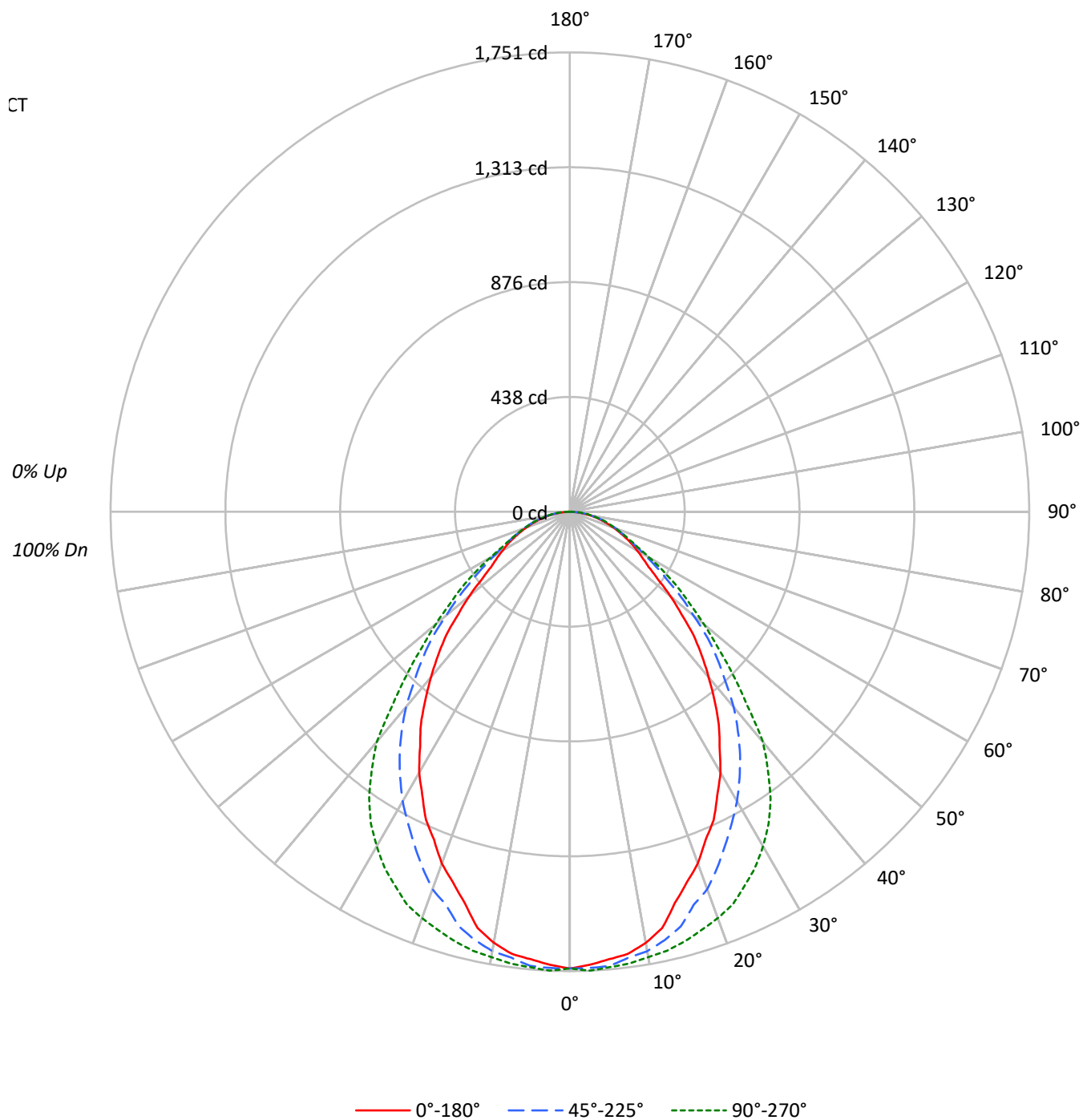
Lumens per Lamp: N/A
Luminaire Lumens: 3423.0 lumens
Efficiency: N/A
Efficacy: 124.0 lumens/watt
Spacing Criteria (0/90/45): 1.02 / 1.25 / 1.19
Luminous Opening: Rectangular (W 0.38' x L: 1.98' x H: 0')
CIE Type: Direct

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	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	110	106	102	99	108	104	101	98	100	97	94		96	94	92		92	91	89	87
2	102	95	89	84	99	93	87	83	89	85	81		86	82	79		83	80	77	75
3	94	85	77	72	92	83	76	71	80	75	70		78	73	69		75	71	68	66
4	87	76	68	62	85	75	68	62	73	66	61		70	65	60		68	63	60	58
5	81	69	61	55	79	68	60	55	66	59	54		64	58	54		62	57	53	51
6	75	63	55	49	73	62	54	49	60	53	48		59	53	48		57	52	48	46
7	70	58	50	44	68	57	49	44	55	48	43		54	48	43		53	47	43	41
8	65	53	45	40	64	52	45	40	51	44	39		50	44	39		49	43	39	37
9	61	49	41	36	60	48	41	36	47	41	36		46	40	36		45	40	36	34
10	58	45	38	33	57	45	38	33	44	37	33		43	37	33		42	37	33	31

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	24902	24902	24902
5°	24589	24949	25021
10°	24230	24703	25043
15°	22885	24220	25100
20°	21716	23307	25088
25°	20472	22120	24851
30°	18967	21051	24324
35°	17294	19760	23293
40°	15373	18150	21380
45°	13492	16112	17819
50°	11121	13725	14878
55°	9128	11338	12525
60°	8489	9422	9994
65°	7948	8374	8429
70°	7412	7830	7796
75°	6881	7434	7484
80°	6335	6887	7019
85°	5482	6040	7961

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 17819 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	164.2	4.8
10°-20°	457.9	13.4
20°-30°	654.5	19.1
30°-40°	714.0	20.9
40°-50°	601.4	17.6
50°-60°	400.6	11.7
60°-70°	247.2	7.2
70°-80°	140.1	4.1
80°-90°	43.2	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°	1276.5	37.3
0°-40°	1990.6	58.2
0°-60°	2992.5	87.4
0°-90°	3423.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3423.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1741	1741	1741	1741	1741	
5°	1712	1722	1737	1737	1742	162
15°	1545	1576	1635	1684	1695	436
25°	1297	1324	1401	1534	1574	593
35°	990	1034	1132	1264	1334	615
45°	667	704	796	849	881	510
55°	366	392	455	486	502	339
65°	235	237	247	257	249	233
75°	124	126	134	140	135	132
85°	33	35	37	43	48	38
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1740.7	1740.7	1740.7	1740.7	1740.7
2.5°	1728.2	1729.0	1740.7	1747.4	1750.8
5°	1712.3	1721.5	1737.4	1737.4	1742.4
7.5°	1699.8	1701.5	1714.0	1732.4	1736.6
10°	1668.0	1676.4	1700.6	1721.5	1724.0
12.5°	1625.4	1630.4	1672.2	1712.3	1713.2
15°	1545.2	1576.1	1635.4	1683.9	1694.8
17.5°	1481.7	1513.4	1570.3	1657.2	1671.4
20°	1426.5	1444.1	1531.0	1625.4	1648.0
22.5°	1353.0	1385.6	1468.3	1587.8	1621.2
25°	1297.0	1323.7	1401.4	1534.3	1574.4
27.5°	1217.6	1257.7	1337.1	1477.5	1529.3
30°	1148.2	1191.7	1274.4	1417.3	1472.5
32.5°	1062.2	1108.1	1203.4	1344.6	1410.6
35°	990.3	1033.7	1131.5	1264.4	1333.8
37.5°	905.0	954.4	1052.1	1176.6	1240.2
40°	823.2	864.9	971.9	1078.9	1144.9
42.5°	744.6	783.0	878.3	967.7	1000.3
45°	666.9	703.6	796.4	849.1	880.8
47.5°	576.6	622.6	712.8	738.7	763.0
50°	499.7	538.2	616.7	640.1	668.5
52.5°	423.7	463.0	534.8	554.1	576.6
55°	366.0	391.9	454.6	485.5	502.2
57.5°	329.3	337.6	389.4	417.8	425.4
60°	296.7	301.7	329.3	355.2	349.3
62.5°	266.6	269.1	283.3	302.5	290.8
65°	234.8	237.3	247.4	257.4	249.0
67.5°	205.6	207.2	215.6	223.1	215.6
70°	177.2	178.0	187.2	192.2	186.4
72.5°	149.6	150.4	159.6	165.5	158.8
75°	124.5	126.2	134.5	139.6	135.4
77.5°	100.3	102.8	108.6	113.7	107.0
80°	76.9	78.6	83.6	89.4	85.2
82.5°	56.0	56.8	60.2	66.0	67.7
85°	33.4	35.1	36.8	42.6	48.5
87.5°	13.4	15.0	15.9	18.4	25.9
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	18.19	19.65	18.55	19.97	20.28	19.70	21.16	20.06	21.47	21.79
	3H	19.79	21.10	20.17	21.43	21.79	20.91	22.22	21.29	22.55	22.91
	4H	20.40	21.63	20.80	21.98	22.36	21.43	22.66	21.83	23.01	23.39
	6H	20.87	22.00	21.28	22.37	22.76	21.84	22.98	22.26	23.34	23.74
	8H	21.03	22.11	21.46	22.50	22.90	22.01	23.09	22.44	23.48	23.88
	12H	21.13	22.17	21.57	22.55	22.98	22.16	23.19	22.59	23.57	24.00
4H	2H	18.80	20.03	19.20	20.38	20.76	20.04	21.27	20.44	21.62	22.00
	3H	20.62	21.63	21.03	22.03	22.44	21.52	22.54	21.94	22.94	23.34
	4H	21.35	22.26	21.79	22.68	23.12	22.20	23.11	22.63	23.53	23.97
	6H	21.95	22.74	22.41	23.19	23.65	22.77	23.56	23.23	24.00	24.47
	8H	22.16	22.90	22.62	23.34	23.81	22.99	23.74	23.46	24.18	24.65
	12H	22.30	22.96	22.78	23.44	23.91	23.20	23.86	23.68	24.34	24.81
8H	4H	21.67	22.41	22.14	22.86	23.33	22.43	23.17	22.89	23.61	24.08
	6H	22.40	23.01	22.89	23.50	23.98	23.13	23.74	23.63	24.24	24.71
	8H	22.68	23.23	23.20	23.74	24.23	23.44	23.99	23.96	24.51	24.99
	12H	22.90	23.39	23.41	23.88	24.45	23.74	24.23	24.25	24.72	25.29
12H	4H	21.71	22.37	22.19	22.85	23.32	22.44	23.10	22.92	23.58	24.05
	6H	22.46	23.01	22.98	23.53	24.01	23.17	23.72	23.68	24.23	24.72
	8H	22.81	23.29	23.32	23.79	24.35	23.54	24.03	24.05	24.52	25.09