

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: P892854

Luminaire Tested: 2MB-5HL-LVRF-UNV-L835

Issue Date: 11/11/2024

**Test Information**

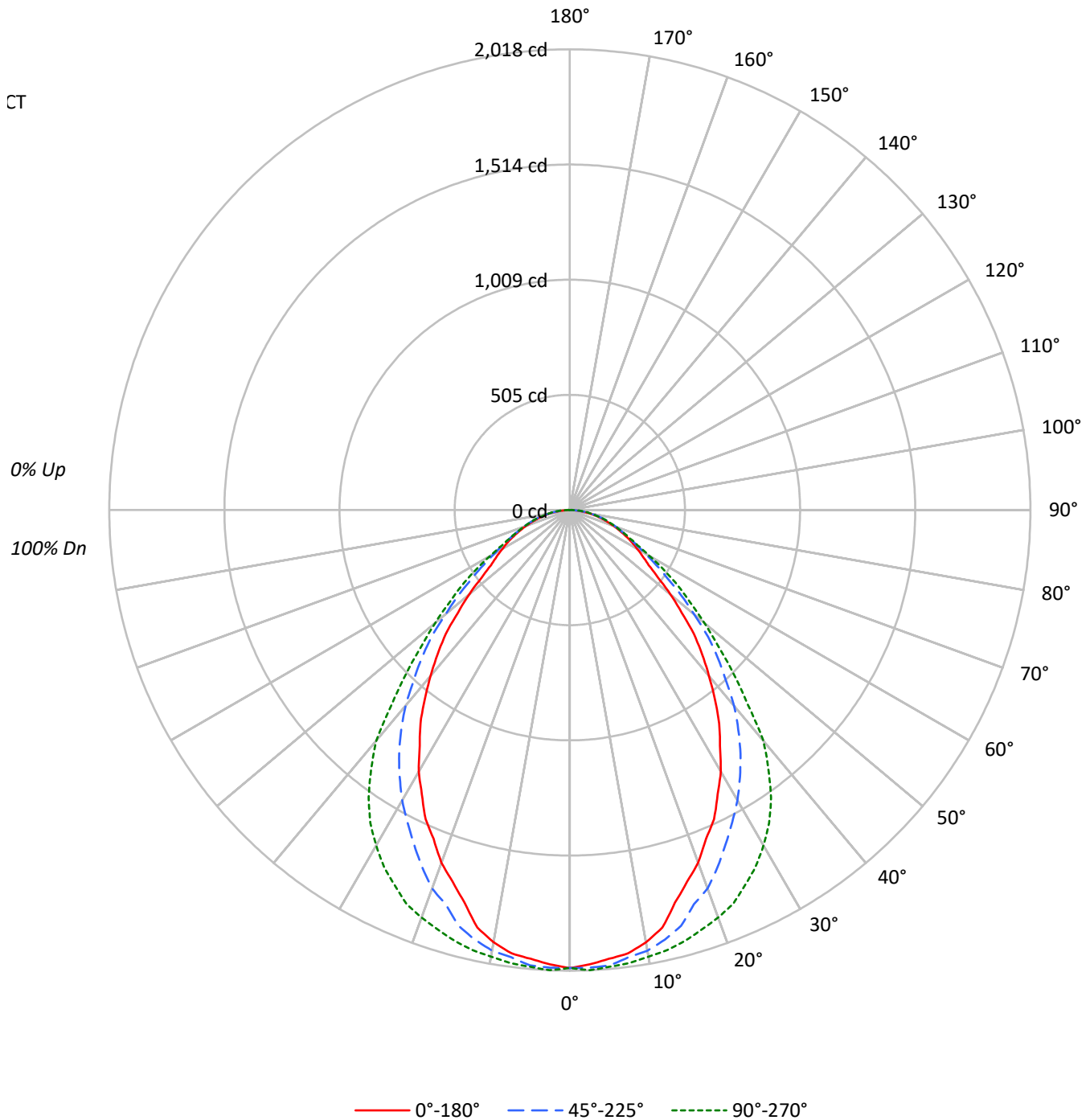
Test Method: LM-79-2019  
Report Number: P892854  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2407-175-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 2MB-5HL-LVRF-UNV-L835  
Description: 5000 Lumen 2FT MICROBAY LINEAR BAY with LOUVER WITH FROSTED INLAY, 80CRI, 3500K C  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3945.0 lumens  
Efficiency: N/A  
Efficacy: 117.1 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): 33.7  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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

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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°	28700	28700	28700
5°	28338	28753	28837
10°	27925	28471	28862
15°	26374	27914	28927
20°	25029	26860	28914
25°	23594	25495	28641
30°	21859	24262	28032
35°	19931	22775	26844
40°	17716	20917	24641
45°	15550	18570	20537
50°	12817	15819	17148
55°	10520	13067	14436
60°	9782	10858	11519
65°	9160	9651	9715
70°	8541	9022	8984
75°	7932	8573	8622
80°	7299	7933	8090
85°	6319	6959	9175

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 20537 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	189.2	4.8
10°-20°	527.7	13.4
20°-30°	754.3	19.1
30°-40°	822.9	20.9
40°-50°	693.1	17.6
50°-60°	461.7	11.7
60°-70°	284.9	7.2
70°-80°	161.4	4.1
80°-90°	49.8	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°	1471.2	37.3
0°-40°	2294.1	58.2
0°-60°	3448.9	87.4
0°-90°	3945.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3945.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2006	2006	2006	2006	2006	
5°	1973	1984	2002	2002	2008	187
15°	1781	1816	1885	1941	1953	502
25°	1495	1526	1615	1768	1814	683
35°	1141	1191	1304	1457	1537	709
45°	769	811	918	978	1015	587
55°	422	452	524	560	579	390
65°	271	274	285	297	287	269
75°	144	145	155	161	156	152
85°	38	40	42	49	56	44
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2006.2	2006.2	2006.2	2006.2	2006.2
2.5°	1991.7	1992.7	2006.2	2013.9	2017.7
5°	1973.4	1984.0	2002.3	2002.3	2008.1
7.5°	1959.0	1960.9	1975.4	1996.6	2001.4
10°	1922.4	1932.0	1960.0	1984.0	1986.9
12.5°	1873.3	1879.1	1927.2	1973.4	1974.4
15°	1780.8	1816.5	1884.8	1940.7	1953.2
17.5°	1707.6	1744.2	1809.7	1909.9	1926.3
20°	1644.1	1664.3	1764.4	1873.3	1899.3
22.5°	1559.3	1596.9	1692.2	1829.9	1868.5
25°	1494.8	1525.6	1615.2	1768.3	1814.5
27.5°	1403.3	1449.5	1541.0	1702.8	1762.5
30°	1323.3	1373.4	1468.8	1633.5	1697.0
32.5°	1224.1	1277.1	1386.9	1549.7	1625.8
35°	1141.3	1191.4	1304.1	1457.2	1537.1
37.5°	1043.1	1099.9	1212.6	1356.1	1429.3
40°	948.7	996.8	1120.1	1243.4	1319.5
42.5°	858.1	902.4	1012.2	1115.3	1152.9
45°	768.6	811.0	917.9	978.5	1015.1
47.5°	664.6	717.5	821.5	851.4	879.3
50°	575.9	620.3	710.8	737.8	770.5
52.5°	488.3	533.6	616.4	638.6	664.6
55°	421.8	451.7	523.9	559.6	578.8
57.5°	379.5	389.1	448.8	481.6	490.2
60°	341.9	347.7	379.5	409.3	402.6
62.5°	307.2	310.1	326.5	348.7	335.2
65°	270.6	273.5	285.1	296.6	287.0
67.5°	236.9	238.9	248.5	257.2	248.5
70°	204.2	205.1	215.7	221.5	214.8
72.5°	172.4	173.4	184.0	190.7	183.0
75°	143.5	145.4	155.1	160.8	156.0
77.5°	115.6	118.5	125.2	131.0	123.3
80°	88.6	90.5	96.3	103.1	98.2
82.5°	64.5	65.5	69.3	76.1	78.0
85°	38.5	40.5	42.4	49.1	55.9
87.5°	15.4	17.3	18.3	21.2	29.9
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	18.68	20.15	19.05	20.46	20.77	20.19	21.65	20.56	21.97	22.28
	3H	20.28	21.59	20.66	21.92	22.29	21.41	22.72	21.79	23.05	23.41
	4H	20.89	22.12	21.30	22.47	22.85	21.93	23.15	22.33	23.50	23.88
	6H	21.36	22.50	21.78	22.86	23.26	22.34	23.47	22.75	23.84	24.23
	8H	21.52	22.60	21.95	22.99	23.39	22.50	23.58	22.93	23.97	24.37
	12H	21.63	22.66	22.06	23.04	23.47	22.65	23.68	23.08	24.06	24.49
4H	2H	19.29	20.52	19.69	20.87	21.25	20.53	21.76	20.93	22.11	22.49
	3H	21.11	22.13	21.52	22.53	22.93	22.02	23.03	22.43	23.43	23.84
	4H	21.84	22.76	22.28	23.17	23.61	22.69	23.61	23.13	24.02	24.46
	6H	22.44	23.24	22.90	23.68	24.14	23.26	24.05	23.72	24.50	24.96
	8H	22.65	23.39	23.11	23.84	24.30	23.49	24.23	23.95	24.67	25.14
	12H	22.79	23.46	23.28	23.94	24.41	23.69	24.35	24.17	24.83	25.30
8H	4H	22.16	22.91	22.63	23.35	23.82	22.92	23.66	23.39	24.11	24.58
	6H	22.89	23.50	23.39	23.99	24.47	23.62	24.24	24.12	24.73	25.21
	8H	23.17	23.72	23.69	24.23	24.72	23.94	24.49	24.45	25.00	25.49
	12H	23.39	23.88	23.91	24.38	24.94	24.23	24.72	24.74	25.21	25.78
12H	4H	22.20	22.86	22.68	23.34	23.81	22.93	23.60	23.42	24.07	24.55
	6H	22.96	23.51	23.47	24.02	24.51	23.66	24.21	24.18	24.72	25.21
	8H	23.30	23.79	23.81	24.28	24.85	24.03	24.52	24.54	25.01	25.58