

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: P892839

Luminaire Tested: 2MB-5HL-LVR-UNV-L840

Issue Date: 11/11/2024

**Test Information**

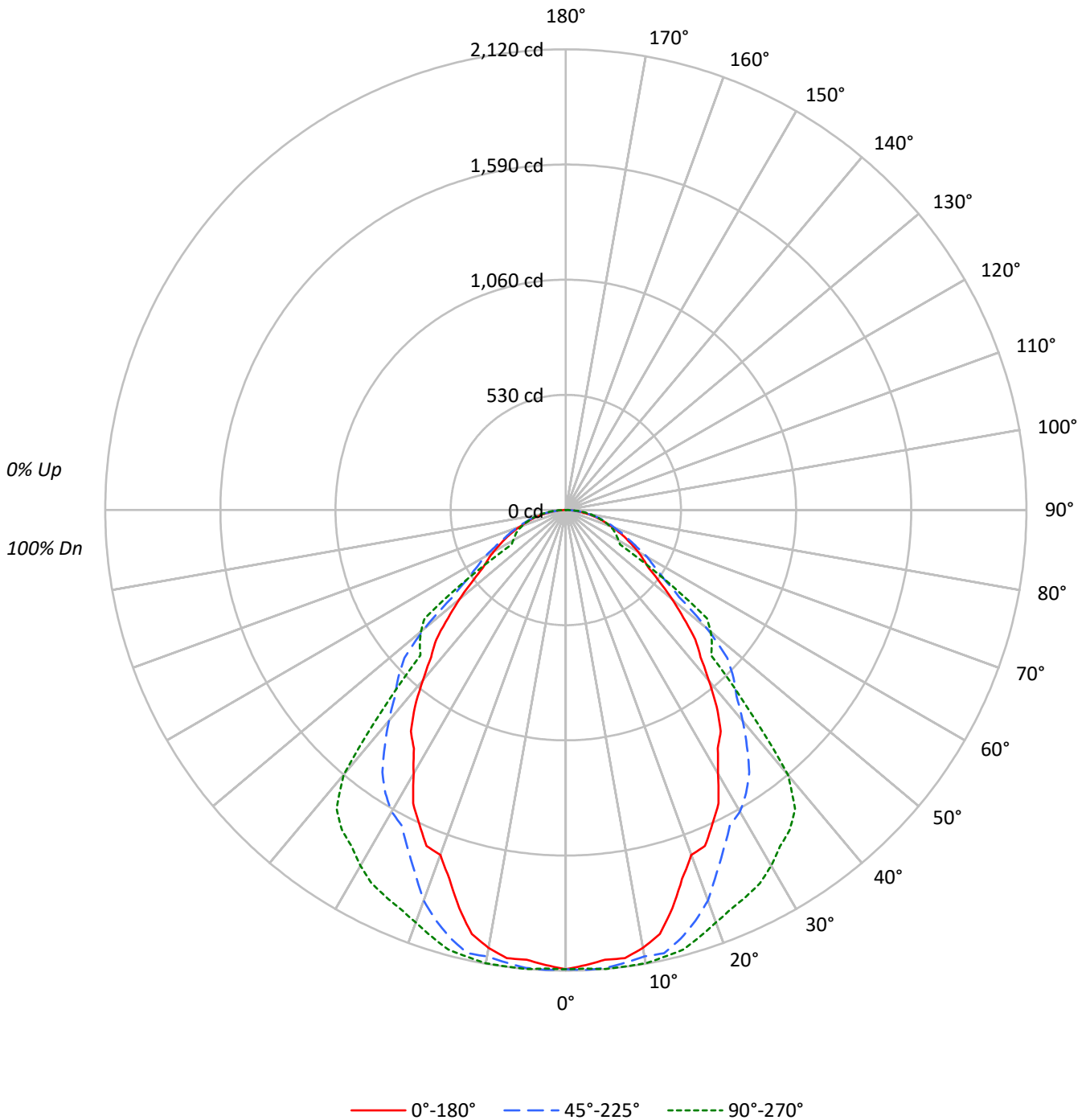
Test Method: LM-79-2019  
Report Number: P892839  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2407-175-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 2MB-5HL-LVR-UNV-L840  
Description: 5000 Lumen 2FT MICROBAY LINEAR BAY with LOUVER, 80CRI, 4000K CCT  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4306.0 lumens  
Efficiency: N/A  
Efficacy: 127.8 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<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	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°	30228	30228	30228
5°	29826	30372	30443
10°	29721	30302	30766
15°	28080	30242	31012
20°	25713	29108	30752
25°	25176	27149	30985
30°	23143	26479	31220
35°	21707	25707	31382
40°	19104	23661	29692
45°	17055	22072	19139
50°	14221	18917	19384
55°	11647	13717	13643
60°	11015	12331	8011
65°	10223	10730	8530
70°	9453	10038	8951
75°	8844	9562	9230
80°	8073	8897	9639
85°	7222	7714	10669

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 22072 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	200.9	4.7
10°-20°	565.3	13.1
20°-30°	815.4	18.9
30°-40°	924.9	21.5
40°-50°	770.3	17.9
50°-60°	497.9	11.6
60°-70°	295.2	6.9
70°-80°	179.9	4.2
80°-90°	56.2	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°	1581.6	36.7
0°-40°	2506.5	58.2
0°-60°	3774.7	87.7
0°-90°	4306.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4306.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2113	2113	2113	2113	2113	
5°	2077	2102	2115	2127	2120	198
15°	1896	1958	2042	2075	2094	529
25°	1595	1651	1720	1950	1963	729
35°	1243	1286	1472	1670	1797	765
45°	843	902	1091	1003	946	640
55°	467	512	550	661	547	435
65°	302	310	317	282	252	300
75°	160	164	173	182	167	170
85°	44	44	47	54	65	50
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2113	2113	2113	2113	2113
2.5°	2096	2115	2118	2135	2112
5°	2077	2102	2115	2127	2120
7.5°	2080	2094	2101	2122	2118
10°	2046	2074	2086	2111	2118
12.5°	1999	2035	2089	2084	2105
15°	1896	1958	2042	2075	2094
17.5°	1780	1849	1983	2061	2057
20°	1689	1741	1912	2022	2020
22.5°	1674	1686	1811	1995	1987
25°	1595	1651	1720	1950	1963
27.5°	1522	1572	1636	1893	1936
30°	1401	1487	1603	1832	1890
32.5°	1301	1384	1545	1757	1835
35°	1243	1286	1472	1670	1797
37.5°	1141	1221	1369	1568	1733
40°	1023	1115	1267	1478	1590
42.5°	918	992	1163	1308	1248
45°	843	902	1091	1003	946
47.5°	735	810	1008	824	912
50°	639	704	850	779	871
52.5°	546	608	658	735	819
55°	467	512	550	661	547
57.5°	424	438	481	472	295
60°	385	391	431	319	280
62.5°	341	352	368	299	265
65°	302	310	317	282	252
67.5°	264	272	279	262	236
70°	226	231	240	236	214
72.5°	192	196	207	210	193
75°	160	164	173	182	167
77.5°	129	132	142	149	144
80°	98	103	108	117	117
82.5°	72	73	78	87	91
85°	44	44	47	54	65
87.5°	19	19	21	23	33
90°	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	19.19	20.66	19.56	20.97	21.28	19.17	20.63	19.53	20.94	21.26
	3H	20.79	22.10	21.17	22.43	22.79	20.64	21.95	21.02	22.28	22.64
	4H	21.40	22.62	21.80	22.97	23.35	21.35	22.57	21.75	22.92	23.30
	6H	21.86	22.99	22.27	23.36	23.75	21.96	23.09	22.38	23.46	23.85
	8H	22.02	23.09	22.45	23.48	23.89	22.21	23.28	22.63	23.67	24.07
	12H	22.12	23.15	22.55	23.53	23.96	22.41	23.44	22.84	23.82	24.25
4H	2H	19.79	21.02	20.19	21.37	21.74	19.77	20.99	20.17	21.34	21.72
	3H	21.61	22.62	22.02	23.03	23.43	21.52	22.54	21.94	22.94	23.34
	4H	22.34	23.26	22.78	23.67	24.11	22.39	23.30	22.82	23.72	24.16
	6H	22.94	23.73	23.39	24.17	24.63	23.15	23.94	23.61	24.39	24.85
	8H	23.14	23.88	23.60	24.33	24.79	23.45	24.19	23.91	24.63	25.10
	12H	23.29	23.95	23.77	24.43	24.90	23.70	24.37	24.19	24.85	25.32
8H	4H	22.66	23.40	23.13	23.85	24.32	22.70	23.44	23.17	23.89	24.36
	6H	23.38	24.00	23.88	24.49	24.97	23.61	24.22	24.10	24.71	25.19
	8H	23.66	24.21	24.18	24.73	25.22	24.00	24.55	24.51	25.06	25.55
	12H	23.88	24.37	24.39	24.86	25.43	24.35	24.84	24.86	25.33	25.90
12H	4H	22.70	23.36	23.18	23.84	24.31	22.73	23.39	23.21	23.87	24.34
	6H	23.45	24.00	23.97	24.51	25.00	23.66	24.21	24.17	24.72	25.21
	8H	23.79	24.28	24.30	24.77	25.34	24.11	24.60	24.62	25.09	25.66