

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: P892798

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

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P892798
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-077-7)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 2MB-5HL-ACL-UNV-L835
Description: 5000 Lumen 2FT MICROBAY LINEAR BAY with AISLE OPTICS WITH CLEAR LENS, 80CRI, 3500K (C)
Light Source: -
Ballast/Driver: -

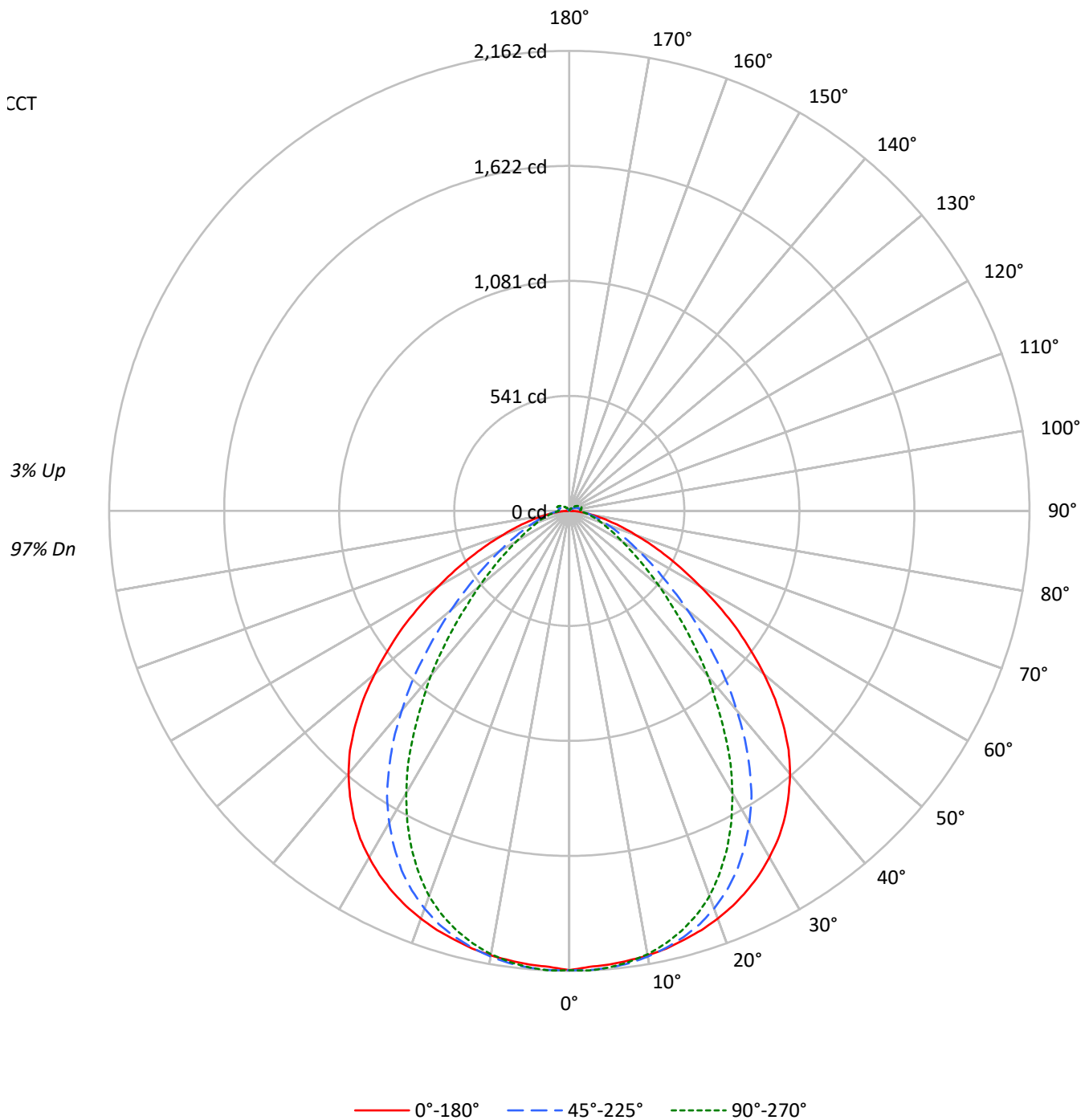
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4613.0 lumens
Efficiency: N/A
Efficacy: 136.9 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.09 / 1.19
Luminous Opening: Rectangular w/ Sides (W: 0.27' x L: 1.98' x H: 0.08')
CIE Type: Direct

Input Watts (W): 33.7
Input Voltage (V): 120
Input Current (Ain): 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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CATALOG NUMBER: 2MB-5HL-ACL-UNV-L835

Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				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	118	118	118	118	115	115	115	115	109	109	109	104	104	104	99	99	99	99	99	99	97
1	109	105	102	98	106	103	99	96	98	95	93	94	91	89	89	88	86	89	88	86	84
2	101	94	88	83	98	92	86	82	88	83	79	84	80	77	81	77	75	81	77	75	73
3	93	84	77	71	90	82	75	70	79	73	68	76	71	67	73	69	65	73	69	65	63
4	86	75	68	62	84	74	67	61	71	65	60	68	63	59	66	61	58	66	61	58	56
5	80	68	60	54	78	67	59	54	65	58	53	62	57	52	60	55	51	60	55	51	49
6	74	62	54	48	72	61	53	48	59	52	47	57	51	46	55	50	46	55	50	46	44
7	69	57	49	43	67	56	48	43	54	47	42	52	46	42	51	45	41	51	45	41	39
8	65	52	44	39	63	51	44	39	50	43	38	48	42	38	47	42	37	47	42	37	36
9	61	48	40	35	59	47	40	35	46	39	35	45	39	35	44	38	34	44	38	34	32
10	57	45	37	32	56	44	37	32	43	36	32	42	36	32	41	35	31	41	35	31	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	44194	44194	44194
5°	43832	43336	43089
10°	43782	42341	41689
15°	43732	41181	39933
20°	43767	39701	37679
25°	43687	37699	34541
30°	43408	34933	30678
35°	42837	31382	26065
40°	41658	26994	21435
45°	39499	22269	16721
50°	36222	17772	12800
55°	32133	13858	9853
60°	27162	10754	7587
65°	22447	8517	6141
70°	17907	6865	5133
75°	14181	5668	4407
80°	10728	4821	3790
85°	8011	4153	3326

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 39499 cd/sqm



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 CATALOG NUMBER: 2MB-5HL-ACL-UNV-L835

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	204.6	4.4
10°-20°	583.5	12.6
20°-30°	855.7	18.5
30°-40°	933.1	20.2
40°-50°	791.8	17.2
50°-60°	539.0	11.7
60°-70°	314.6	6.8
70°-80°	163.8	3.6
80°-90°	71.4	1.5
90°-100°	45.3	1.0
100°-110°	41.8	0.9
110°-120°	31.1	0.7
120°-130°	18.7	0.4
130°-140°	10.0	0.2
140°-150°	5.0	0.1
150°-160°	2.5	0.1
160°-170°	1.0	0.0
170°-180°	0.2	0.0
0°-30°	1643.7	35.6
0°-40°	2576.8	55.9
0°-60°	3907.5	84.7
0°-90°	4457.3	96.6
90°-120°	118.3	2.6
90°-150°	152.0	3.3
90°-180°	156.0	3.4
0°-180°	4613.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2158	2158	2158	2158	2158	
5°	2140	2150	2155	2156	2154	204
15°	2086	2092	2074	2055	2042	590
25°	1972	1944	1864	1791	1752	909
35°	1764	1674	1476	1328	1272	1101
45°	1421	1245	962	811	758	1092
55°	954	759	528	424	400	850
65°	505	399	271	224	212	506
75°	207	179	139	126	121	226
85°	50	60	68	67	65	54
90°	8	27	48	51	50	8
95°	15	30	50	54	53	11
105°	4	22	46	59	60	5
115°	4	14	35	50	53	3
125°	2	7	21	33	39	2
135°	2	5	13	20	24	1
145°	2	4	8	12	14	1
155°	2	3	5	8	8	1
165°	2	2	4	4	5	1
175°	2	2	3	3	2	0
180°	2	2	2	2	2	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2158.3	2158.3	2158.3	2158.3	2158.3
2.5°	2144.8	2154.7	2160.1	2163.7	2161.9
5°	2140.3	2150.2	2154.7	2156.5	2153.8
7.5°	2131.2	2142.1	2144.8	2143.0	2138.5
10°	2121.3	2130.3	2126.7	2122.2	2115.9
12.5°	2106.9	2113.2	2103.3	2093.4	2083.4
15°	2086.2	2091.6	2073.5	2054.6	2042.0
17.5°	2065.4	2063.6	2036.5	2005.9	1990.5
20°	2039.3	2029.3	1988.7	1944.5	1926.5
22.5°	2008.6	1991.5	1931.9	1872.4	1845.3
25°	1971.6	1943.6	1864.3	1791.2	1752.4
27.5°	1930.1	1890.4	1782.2	1691.1	1647.8
30°	1880.5	1826.4	1692.0	1580.2	1532.4
32.5°	1827.3	1757.9	1593.7	1453.9	1409.7
35°	1764.2	1674.0	1476.5	1328.5	1271.7
37.5°	1692.0	1577.5	1356.5	1194.1	1134.6
40°	1613.5	1475.5	1223.0	1060.7	1012.9
42.5°	1525.2	1367.3	1098.5	928.1	880.3
45°	1421.4	1244.7	962.4	810.8	758.5
47.5°	1312.3	1123.8	837.0	689.1	645.8
50°	1194.1	996.6	725.1	589.9	552.0
52.5°	1072.4	878.5	617.8	499.7	468.1
55°	954.2	759.4	527.6	423.9	399.6
57.5°	830.7	659.3	448.3	360.8	336.4
60°	711.6	558.3	377.0	304.9	285.9
62.5°	604.3	470.8	321.1	259.8	246.2
65°	505.1	398.7	270.6	223.7	212.0
67.5°	416.7	330.1	231.8	193.9	183.1
70°	333.7	269.7	193.9	166.9	159.6
72.5°	270.6	224.6	164.2	146.1	140.7
75°	207.4	178.6	138.9	126.3	120.9
77.5°	156.0	139.8	118.2	108.2	103.7
80°	112.7	108.2	99.2	93.8	89.3
82.5°	77.6	82.1	83.0	78.5	76.7
85°	50.5	60.4	68.5	66.7	64.9
87.5°	28.0	40.6	55.9	56.8	55.0
90°	8.1	27.1	47.8	51.4	50.5
92.5°	15.3	28.9	48.7	52.3	51.4
95°	15.3	29.8	49.6	54.1	53.2
97.5°	14.4	29.8	50.5	55.9	55.9
100°	7.2	28.9	50.5	57.7	57.7
102.5°	4.5	26.2	48.7	58.6	59.5
105°	4.5	22.5	46.0	58.6	59.5
107.5°	4.5	18.9	44.2	56.8	59.5
110°	3.6	16.2	41.5	54.1	57.7



TEST NUMBER: P892798

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	3.6	14.4	38.8	52.3	55.9
115°	3.6	13.5	35.2	49.6	53.2
117.5°	2.7	11.7	30.7	46.0	50.5
120°	2.7	9.9	27.1	42.4	46.9
122.5°	1.8	9.0	23.5	37.9	43.3
125°	1.8	7.2	20.7	33.4	38.8
127.5°	1.8	7.2	18.9	29.8	34.3
130°	1.8	6.3	16.2	26.2	29.8
132.5°	1.8	6.3	14.4	22.5	26.2
135°	1.8	5.4	12.6	19.8	23.5
137.5°	1.8	5.4	11.7	17.1	20.7
140°	1.8	4.5	9.9	15.3	18.0
142.5°	1.8	4.5	9.0	13.5	15.3
145°	1.8	3.6	8.1	11.7	13.5
147.5°	1.8	3.6	7.2	9.9	11.7
150°	1.8	3.6	7.2	9.0	9.9
152.5°	1.8	2.7	6.3	8.1	9.0
155°	1.8	2.7	5.4	8.1	8.1
157.5°	1.8	2.7	4.5	7.2	8.1
160°	1.8	2.7	4.5	6.3	7.2
162.5°	1.8	2.7	3.6	4.5	6.3
165°	1.8	1.8	3.6	4.5	5.4
167.5°	1.8	1.8	2.7	3.6	4.5
170°	1.8	1.8	2.7	2.7	2.7
172.5°	1.8	1.8	2.7	2.7	1.8
175°	1.8	1.8	2.7	2.7	1.8
177.5°	1.8	1.8	2.7	2.7	1.8
180°	1.8	1.8	1.8	1.8	1.8



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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	21.85	23.25	22.28	23.63	24.04	17.96	19.35	18.38	19.74	20.14
	3H	22.88	24.13	23.31	24.53	24.97	19.16	20.41	19.59	20.81	21.25
	4H	23.17	24.34	23.63	24.76	25.23	19.69	20.86	20.15	21.28	21.75
	6H	23.32	24.40	23.79	24.84	25.31	20.20	21.28	20.67	21.71	22.19
	8H	23.35	24.37	23.83	24.83	25.32	20.44	21.47	20.93	21.93	22.41
	12H	23.35	24.33	23.84	24.78	25.29	20.70	21.68	21.19	22.13	22.64
4H	2H	21.89	23.06	22.34	23.47	23.94	18.46	19.63	18.91	20.04	20.51
	3H	23.08	24.05	23.55	24.51	25.00	19.84	20.81	20.31	21.28	21.76
	4H	23.47	24.34	23.96	24.82	25.34	20.48	21.35	20.97	21.83	22.35
	6H	23.71	24.47	24.23	24.98	25.52	21.11	21.87	21.63	22.38	22.92
	8H	23.77	24.47	24.29	24.98	25.53	21.42	22.12	21.94	22.63	23.18
	12H	23.79	24.42	24.33	24.96	25.51	21.74	22.38	22.28	22.92	23.47
8H	4H	23.49	24.20	24.01	24.71	25.26	20.72	21.43	21.24	21.93	22.48
	6H	23.80	24.39	24.36	24.94	25.50	21.47	22.05	22.02	22.61	23.16
	8H	23.90	24.42	24.46	24.99	25.56	21.86	22.38	22.42	22.95	23.52
	12H	23.96	24.43	24.53	24.98	25.62	22.30	22.76	22.86	23.32	23.96
12H	4H	23.48	24.11	24.02	24.65	25.20	20.73	21.37	21.27	21.91	22.46
	6H	23.80	24.32	24.37	24.89	25.46	21.51	22.04	22.08	22.61	23.17
	8H	23.93	24.40	24.49	24.95	25.59	21.96	22.42	22.52	22.97	23.62