

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: P894088

Luminaire Tested: 4MB-SC3-A-UNV-CC83-MID-4000K

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894088
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-077-16)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4MB-SC3-A-UNV-CC83-MID-4000K
Description: Selectable 4FT MICROBAY LINEAR BAY with AISLE OPTIC, 80CRI, 4000K CCT, MID lumen setting
Light Source: -
Ballast/Driver: -

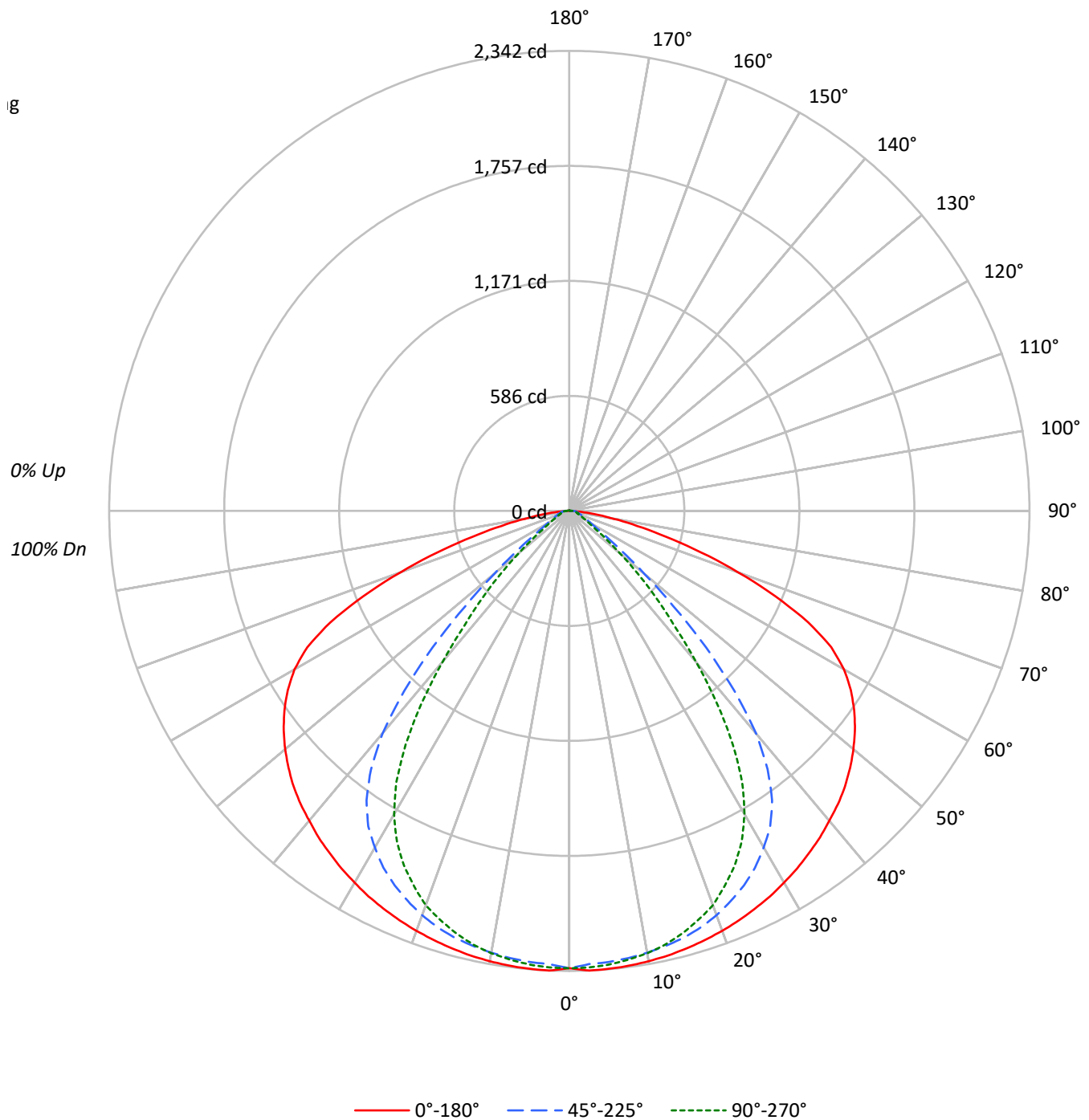
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4772.9 lumens
Efficiency: N/A
Efficacy: 142.5 lumens/watt
Spacing Criteria (0/90/45): 1.4 / 1.15 / 1.23
Luminous Opening: Rectangular (W 0.27' x L: 3.98' x H: 0')
CIE Type: Direct

Input Watts (W): 33.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: 0.9948
Total Harmonic Distortion (THDi): 5.65231997856897
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	111	107	103	100	108	105	102	99	100	98	96	97	95	93	93	91	90	93	91	90	88
2	103	96	90	85	100	94	89	84	91	86	82	87	84	81	84	81	79	84	81	79	77
3	95	86	79	74	93	85	78	73	82	76	72	79	74	71	77	73	69	77	73	69	67
4	88	78	70	65	86	77	70	64	74	68	63	72	67	62	70	65	62	70	65	62	60
5	82	71	63	57	80	70	62	57	68	61	56	66	60	56	64	59	55	64	59	55	53
6	76	64	56	51	74	63	56	51	62	55	50	60	54	50	59	53	49	59	53	49	47
7	71	59	51	46	69	58	51	45	57	50	45	55	49	45	54	49	45	54	49	45	43
8	66	54	47	41	65	54	46	41	52	46	41	51	45	41	50	44	40	50	44	40	39
9	62	50	43	38	61	50	42	37	48	42	37	47	41	37	46	41	37	46	41	37	35
10	59	46	39	34	57	46	39	34	45	39	34	44	38	34	43	38	34	43	38	34	32

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	23713	23713	23713
5°	23922	23566	23704
10°	24071	23619	23652
15°	24311	23721	23476
20°	24655	23740	23160
25°	25114	23637	22377
30°	25699	23267	20971
35°	26433	22371	18030
40°	27375	19648	13328
45°	28579	14178	8964
50°	29908	7920	5349
55°	31435	4094	2928
60°	32885	2664	2074
65°	32325	2188	1646
70°	27261	2013	1533
75°	20052	2054	1649
80°	13378	2416	2076
85°	7303	3914	3167

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 62.5°
 Luminance: 33165 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	221.1	4.6
10°-20°	638.9	13.4
20°-30°	971.9	20.4
30°-40°	1109.9	23.3
40°-50°	895.4	18.8
50°-60°	490.1	10.3
60°-70°	258.4	5.4
70°-80°	126.7	2.7
80°-90°	44.6	0.9
90°-100°	9.6	0.2
100°-110°	1.3	0.0
110°-120°	0.8	0.0
120°-130°	0.7	0.0
130°-140°	0.8	0.0
140°-150°	0.9	0.0
150°-160°	0.8	0.0
160°-170°	0.7	0.0
170°-180°	0.2	0.0
0°-30°	1831.8	38.4
0°-40°	2941.8	61.6
0°-60°	4327.3	90.7
0°-90°	4757.1	99.7
90°-120°	11.7	0.2
90°-150°	14.1	0.3
90°-180°	16.0	0.3
0°-180°	4772.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2328	2328	2328	2328	2328	
5°	2340	2333	2305	2326	2319	223
15°	2306	2292	2250	2246	2227	652
25°	2235	2203	2104	2032	1991	1033
35°	2126	2036	1799	1555	1450	1334
45°	1984	1705	984	673	622	1532
55°	1770	729	231	178	165	1580
65°	1341	168	91	73	68	1297
75°	510	95	52	44	42	563
85°	62	50	34	30	27	86
90°	3	26	21	18	17	4
95°	2	3	7	11	10	2
105°	1	0	1	1	1	1
115°	1	1	1	1	1	1
125°	1	1	1	1	1	1
135°	1	1	1	1	1	1
145°	1	1	1	2	1	1
155°	1	1	2	3	2	1
165°	1	2	3	3	3	0
175°	2	2	3	3	3	0
180°	3	3	3	3	3	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2328.4	2328.4	2328.4	2328.4	2328.4
2.5°	2342.5	2336.1	2309.7	2332.2	2325.8
5°	2340.0	2332.9	2305.2	2325.8	2318.7
7.5°	2335.4	2326.4	2296.1	2314.8	2303.9
10°	2327.7	2318.7	2283.9	2298.7	2287.1
12.5°	2318.7	2306.5	2267.8	2275.5	2260.7
15°	2305.8	2291.6	2249.8	2245.9	2226.6
17.5°	2291.6	2274.2	2223.3	2206.6	2183.4
20°	2274.9	2253.6	2190.5	2157.6	2137.0
22.5°	2256.2	2228.5	2149.3	2099.0	2066.8
25°	2234.9	2202.7	2103.5	2032.0	1991.4
27.5°	2212.4	2168.6	2048.1	1954.0	1899.3
30°	2185.3	2132.5	1978.5	1851.6	1783.3
32.5°	2158.3	2087.4	1903.8	1719.5	1638.4
35°	2126.1	2036.5	1799.4	1554.6	1450.2
37.5°	2095.8	1975.3	1658.3	1347.8	1235.7
40°	2059.1	1903.1	1477.9	1110.1	1002.5
42.5°	2024.3	1819.4	1244.1	880.7	787.3
45°	1984.3	1704.7	984.4	672.6	622.4
47.5°	1937.9	1548.2	715.8	500.6	469.0
50°	1887.7	1333.0	499.9	363.4	337.6
52.5°	1832.3	1042.4	336.9	252.6	238.4
55°	1770.4	728.7	230.6	178.5	164.9
57.5°	1698.9	474.2	167.5	134.7	125.6
60°	1614.5	302.8	130.8	106.9	101.8
62.5°	1503.7	212.6	107.6	88.3	83.8
65°	1341.4	168.2	90.8	73.4	68.3
67.5°	1135.8	142.4	78.0	61.8	58.6
70°	915.5	123.7	67.6	53.5	51.5
72.5°	703.5	108.2	58.6	47.7	46.4
75°	509.6	94.7	52.2	43.8	41.9
77.5°	353.1	81.8	46.4	39.3	38.0
80°	228.1	70.9	41.2	36.1	35.4
82.5°	130.8	59.3	37.4	34.8	34.1
85°	62.5	49.6	33.5	30.3	27.1
87.5°	20.0	36.7	26.4	23.2	20.6
90°	2.6	25.8	20.6	18.0	16.8
92.5°	2.6	14.2	14.8	14.8	14.2
95°	1.9	3.2	7.1	11.0	10.3
97.5°	1.9	1.3	4.5	7.7	7.7
100°	1.3	0.6	1.9	5.2	5.2
102.5°	1.3	0.6	0.6	3.2	3.2
105°	0.6	0.0	0.6	1.3	1.3
107.5°	0.6	0.6	0.6	1.3	0.6
110°	0.6	0.6	0.6	1.3	0.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.6	0.6	0.6	1.3	0.6
115°	0.6	0.6	0.6	1.3	0.6
117.5°	0.6	0.6	0.6	1.3	0.6
120°	0.6	0.6	0.6	1.3	0.6
122.5°	0.6	0.6	0.6	1.3	0.6
125°	0.6	0.6	0.6	1.3	0.6
127.5°	0.6	0.6	0.6	1.3	0.6
130°	0.6	0.6	1.3	1.3	0.6
132.5°	0.6	0.6	1.3	1.3	0.6
135°	0.6	0.6	1.3	1.3	0.6
137.5°	0.6	0.6	1.3	1.3	1.3
140°	1.3	0.6	1.3	1.3	1.3
142.5°	1.3	1.3	1.3	1.9	1.3
145°	1.3	1.3	1.3	1.9	1.3
147.5°	1.3	1.3	1.9	1.9	1.3
150°	1.3	1.3	1.9	1.9	1.3
152.5°	1.3	1.3	1.9	1.9	1.9
155°	1.3	1.3	1.9	2.6	1.9
157.5°	1.3	1.3	1.9	2.6	1.9
160°	1.3	1.9	2.6	2.6	1.9
162.5°	1.3	1.9	2.6	2.6	2.6
165°	1.3	1.9	2.6	2.6	2.6
167.5°	1.9	1.9	2.6	3.2	2.6
170°	1.9	1.9	2.6	3.2	2.6
172.5°	1.9	1.9	2.6	3.2	2.6
175°	1.9	1.9	2.6	3.2	2.6
177.5°	1.9	1.9	2.6	3.2	3.2
180°	2.6	2.6	2.6	2.6	2.6



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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	20.91	22.31	21.28	22.63	22.95	9.42	10.82	9.79	11.14	11.47
	3H	23.82	25.06	24.20	25.40	25.77	10.36	11.60	10.74	11.94	12.31
	4H	24.71	25.87	25.12	26.23	26.62	10.87	12.04	11.28	12.39	12.78
	6H	25.21	26.28	25.63	26.65	27.05	11.51	12.58	11.93	12.95	13.36
	8H	25.32	26.33	25.75	26.73	27.14	11.93	12.94	12.36	13.34	13.75
	12H	25.36	26.33	25.80	26.72	27.16	12.37	13.35	12.81	13.73	14.17
4H	2H	20.72	21.88	21.13	22.24	22.63	9.94	11.10	10.35	11.46	11.85
	3H	23.65	24.60	24.07	25.01	25.42	11.13	12.09	11.55	12.49	12.91
	4H	24.55	25.41	24.99	25.83	26.28	11.80	12.65	12.24	13.08	13.53
	6H	25.15	25.89	25.61	26.34	26.81	12.62	13.36	13.09	13.81	14.29
	8H	25.31	26.00	25.78	26.45	26.93	13.15	13.84	13.63	14.30	14.77
	12H	25.40	26.01	25.89	26.50	26.98	13.73	14.35	14.22	14.83	15.32
8H	4H	24.44	25.14	24.92	25.59	26.06	12.39	13.08	12.86	13.53	14.01
	6H	25.04	25.61	25.55	26.11	26.60	13.39	13.96	13.90	14.47	14.95
	8H	25.23	25.74	25.75	26.26	26.76	14.07	14.58	14.59	15.10	15.60
	12H	25.38	25.83	25.89	26.33	26.91	14.84	15.29	15.35	15.79	16.37
12H	4H	24.40	25.02	24.89	25.51	25.99	12.65	13.27	13.14	13.75	14.23
	6H	24.99	25.51	25.52	26.02	26.52	13.70	14.22	14.23	14.74	15.23
	8H	25.21	25.66	25.73	26.16	26.74	14.47	14.92	14.99	15.42	16.00