

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: P894105

Luminaire Tested: 4MB-SC3-ACL-UNV-CC83-MID-3500K

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894105
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-077-15)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4MB-SC3-ACL-UNV-CC83-MID-3500K
Description: Selectable 4FT MICROBAY LINEAR BAY with AISLE OPTICS WITH CLEAR LENS, 80CRI, 3500K CC
MID lumen setting
Light Source: -
Ballast/Driver: -

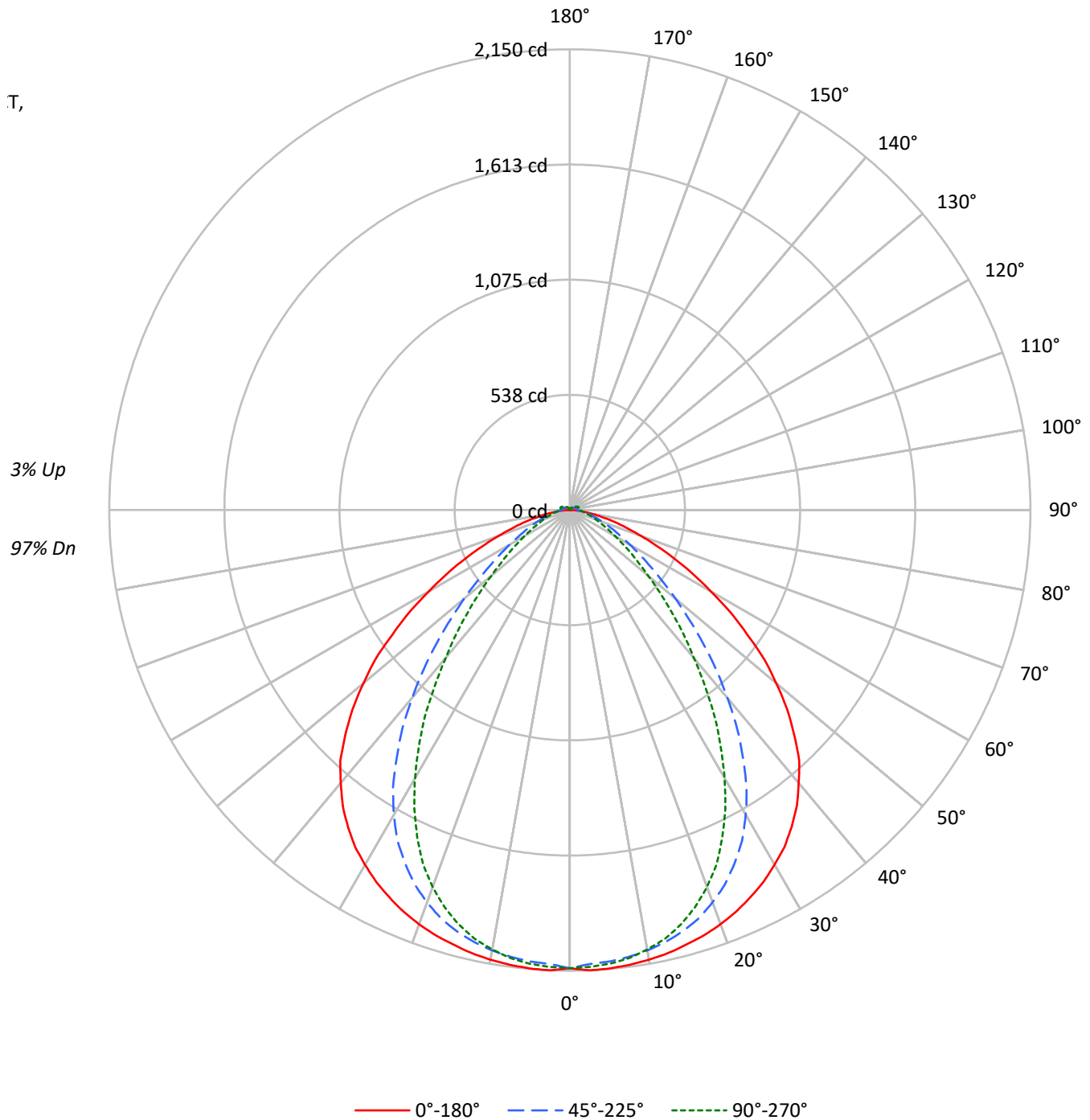
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4386.0 lumens
Efficiency: N/A
Efficacy: 130.9 lumens/watt
Spacing Criteria (0/90/45): 1.32 / 1.06 / 1.16
Luminous Opening: Rectangular w/ Sides (W: 0.27' x L: 3.98' x H: 0.08')
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				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	110	110	110	104	104	104	100	100	100	97				97
1	110	106	102	99	107	103	100	97	99	96	93	94	92	90	90	89	87	85				85
2	101	94	88	84	99	92	87	82	88	84	80	85	81	78	82	79	76	74				74
3	94	85	77	72	91	83	76	71	80	74	69	77	72	68	74	70	66	64				64
4	87	76	68	62	84	75	67	62	72	66	61	69	64	60	67	62	59	57				57
5	80	69	61	55	78	68	60	55	65	59	54	63	58	53	61	56	52	50				50
6	75	63	55	49	73	62	54	49	60	53	48	58	52	47	56	51	47	45				45
7	70	57	50	44	68	57	49	44	55	48	43	53	47	43	52	46	42	40				40
8	65	53	45	40	64	52	45	40	51	44	39	49	43	39	48	42	38	37				37
9	61	49	41	36	60	48	41	36	47	40	36	46	40	35	45	39	35	33				33
10	58	45	38	33	56	45	38	33	44	37	33	43	37	32	42	36	32	31				31

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	21775	21775	21775
5°	21913	21183	21150
10°	21952	20723	20408
15°	22018	20185	19479
20°	22125	19443	18207
25°	22190	18413	16515
30°	22213	16997	14389
35°	22117	15021	12036
40°	21725	12689	9472
45°	20889	10243	7345
50°	19446	7947	5511
55°	17409	6084	4215
60°	14956	4677	3210
65°	12472	3690	2552
70°	9976	2960	2086
75°	7945	2385	1775
80°	5819	1969	1554
85°	3998	1672	1430

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 20889 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	202.5	4.6
10°-20°	576.9	13.2
20°-30°	841.1	19.2
30°-40°	903.7	20.6
40°-50°	752.1	17.1
50°-60°	503.0	11.5
60°-70°	288.0	6.6
70°-80°	143.2	3.3
80°-90°	58.6	1.3
90°-100°	34.0	0.8
100°-110°	30.0	0.7
110°-120°	22.0	0.5
120°-130°	14.1	0.3
130°-140°	8.4	0.2
140°-150°	4.7	0.1
150°-160°	2.4	0.1
160°-170°	1.0	0.0
170°-180°	0.2	0.0
0°-30°	1620.5	36.9
0°-40°	2524.2	57.6
0°-60°	3779.3	86.2
0°-90°	4269.0	97.3
90°-120°	86.0	2.0
90°-150°	113.3	2.6
90°-180°	117.0	2.7
0°-180°	4386.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2138	2138	2138	2138	2138	
5°	2147	2141	2115	2132	2126	204
15°	2100	2086	2036	2021	2003	594
25°	1994	1947	1819	1728	1685	920
35°	1805	1674	1408	1235	1181	1127
45°	1481	1231	879	712	670	1138
55°	1010	728	458	362	344	905
65°	541	367	231	187	177	541
75°	218	158	114	101	98	233
85°	42	47	53	56	56	50
90°	6	20	36	43	44	6
95°	9	20	36	43	44	7
105°	6	16	32	42	44	7
115°	3	9	25	34	37	3
125°	2	6	17	25	27	1
135°	1	5	11	17	19	1
145°	1	4	8	11	13	1
155°	1	3	5	7	9	1
165°	2	2	4	4	6	1
175°	2	2	2	2	2	0
180°	2	2	2	2	2	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2138.1	2138.1	2138.1	2138.1	2138.1
2.5°	2150.5	2144.9	2120.6	2139.9	2134.3
5°	2147.4	2140.6	2115.0	2132.5	2125.6
7.5°	2140.6	2133.1	2103.8	2117.5	2110.0
10°	2130.6	2121.2	2087.5	2094.4	2082.6
12.5°	2118.1	2106.3	2064.5	2062.6	2049.5
15°	2100.0	2085.7	2035.8	2020.8	2002.7
17.5°	2081.3	2060.1	1999.0	1968.4	1943.5
20°	2057.0	2028.9	1948.5	1902.9	1871.7
22.5°	2028.9	1990.9	1891.7	1821.8	1789.4
25°	1994.0	1946.6	1819.3	1727.7	1684.6
27.5°	1956.6	1893.6	1740.8	1620.4	1571.1
30°	1911.7	1833.7	1642.8	1498.1	1445.1
32.5°	1864.3	1757.6	1535.6	1369.7	1311.7
35°	1805.0	1674.0	1408.3	1234.9	1180.7
37.5°	1740.8	1574.2	1282.3	1097.1	1036.0
40°	1662.8	1468.8	1143.9	960.5	900.0
42.5°	1585.5	1354.1	1011.0	837.0	784.6
45°	1480.7	1230.6	879.4	711.6	669.9
47.5°	1375.3	1098.3	753.4	610.0	568.8
50°	1258.0	968.6	643.0	512.1	477.8
52.5°	1143.9	847.6	542.6	432.9	403.5
55°	1009.8	728.5	458.4	362.4	343.7
57.5°	888.8	618.1	386.7	306.9	289.4
60°	760.9	523.9	323.7	259.5	243.2
62.5°	648.7	440.3	272.6	220.2	208.9
65°	540.8	366.7	230.8	187.1	177.1
67.5°	441.6	306.2	194.6	159.7	151.6
70°	354.3	248.2	164.0	136.0	130.4
72.5°	278.8	199.6	136.6	117.3	112.3
75°	217.7	158.4	114.1	101.0	97.9
77.5°	157.2	123.5	95.4	86.7	84.8
80°	111.0	93.6	78.6	74.8	73.6
82.5°	73.6	68.0	64.9	64.9	64.2
85°	42.4	47.4	53.0	55.5	56.1
87.5°	21.8	31.8	42.4	47.4	48.0
90°	6.2	20.0	36.2	43.0	44.3
92.5°	9.4	20.0	35.6	43.0	44.3
95°	9.4	20.0	35.6	43.0	44.3
97.5°	8.7	19.3	35.6	43.0	44.3
100°	8.1	18.1	34.9	43.0	44.3
102.5°	6.9	17.5	33.7	42.4	44.3
105°	6.2	16.2	31.8	41.8	43.7
107.5°	5.6	13.7	29.9	39.9	42.4
110°	4.4	11.9	28.7	38.0	41.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	3.7	10.6	26.8	36.2	39.3
115°	3.1	9.4	24.9	34.3	37.4
117.5°	2.5	8.7	22.5	31.8	34.9
120°	1.9	8.1	20.6	29.9	32.4
122.5°	1.9	7.5	18.1	27.4	29.9
125°	1.9	6.2	16.8	24.9	27.4
127.5°	1.2	5.6	15.0	22.5	24.9
130°	1.2	5.6	13.7	20.6	22.5
132.5°	1.2	5.0	12.5	18.7	20.6
135°	1.2	5.0	11.2	16.8	18.7
137.5°	1.2	4.4	10.0	15.6	17.5
140°	1.2	4.4	9.4	13.7	15.6
142.5°	1.2	3.7	8.1	13.1	14.3
145°	1.2	3.7	7.5	11.2	13.1
147.5°	1.2	3.7	6.9	10.6	11.9
150°	1.2	3.1	6.2	8.7	10.6
152.5°	1.2	3.1	5.6	8.1	10.0
155°	1.2	3.1	5.0	6.9	8.7
157.5°	1.2	3.1	5.0	6.2	7.5
160°	1.9	2.5	4.4	5.6	6.9
162.5°	1.9	2.5	3.7	5.0	6.2
165°	1.9	2.5	3.7	4.4	5.6
167.5°	1.9	2.5	3.1	3.7	4.4
170°	1.9	1.9	3.1	3.1	3.1
172.5°	1.9	1.9	2.5	3.1	2.5
175°	1.9	1.9	2.5	2.5	2.5
177.5°	1.9	1.9	2.5	2.5	2.5
180°	1.9	1.9	1.9	1.9	1.9



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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	19.44	20.83	19.85	21.20	21.58	14.73	16.13	15.14	16.50	16.88
	3H	20.53	21.77	20.96	22.16	22.59	15.87	17.12	16.30	17.50	17.93
	4H	20.84	22.00	21.28	22.41	22.85	16.37	17.54	16.82	17.94	18.39
	6H	20.98	22.06	21.44	22.48	22.94	16.88	17.95	17.33	18.37	18.83
	8H	21.00	22.02	21.48	22.47	22.93	17.13	18.15	17.61	18.60	19.07
	12H	21.00	21.97	21.47	22.41	22.90	17.43	18.40	17.91	18.84	19.34
4H	2H	19.42	20.58	19.87	20.99	21.44	15.23	16.39	15.68	16.80	17.25
	3H	20.66	21.62	21.11	22.07	22.54	16.55	17.51	17.00	17.96	18.43
	4H	21.04	21.91	21.52	22.37	22.88	17.14	18.00	17.62	18.47	18.98
	6H	21.27	22.02	21.78	22.52	23.04	17.76	18.51	18.26	19.00	19.53
	8H	21.31	22.02	21.82	22.51	23.04	18.08	18.78	18.59	19.28	19.81
	12H	21.33	21.95	21.85	22.48	23.01	18.45	19.08	18.98	19.61	20.14
8H	4H	21.03	21.73	21.54	22.22	22.76	17.38	18.08	17.89	18.57	19.11
	6H	21.31	21.89	21.85	22.43	22.97	18.10	18.68	18.64	19.22	19.76
	8H	21.38	21.90	21.94	22.46	23.01	18.51	19.03	19.07	19.59	20.14
	12H	21.42	21.89	21.98	22.43	23.05	19.00	19.46	19.55	20.00	20.63
12H	4H	21.01	21.63	21.53	22.16	22.69	17.39	18.02	17.92	18.55	19.08
	6H	21.29	21.81	21.84	22.36	22.92	18.14	18.66	18.70	19.22	19.77
	8H	21.39	21.85	21.95	22.39	23.02	18.60	19.06	19.15	19.60	20.23