

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: P894087

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

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894087
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-3500K
Description: Selectable 4FT MICROBAY LINEAR BAY with AISLE OPTIC, 80CRI, 3500K CCT, MID lumen setting
Light Source: -
Ballast/Driver: -

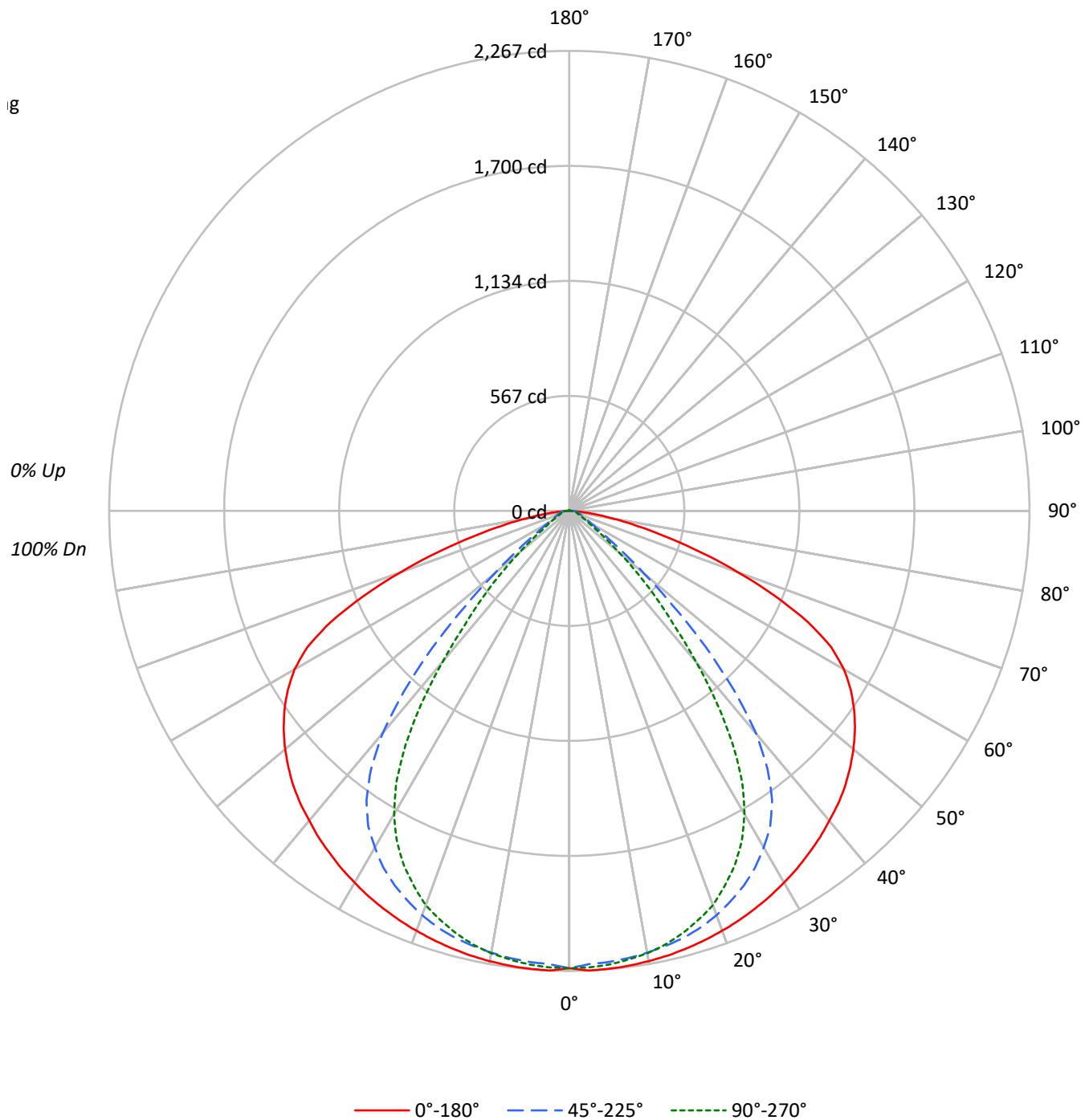
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4619.9 lumens
Efficiency: N/A
Efficacy: 137.9 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°	22952	22952	22952
5°	23154	22811	22945
10°	23300	22862	22894
15°	23532	22959	22723
20°	23865	22979	22418
25°	24309	22880	21661
30°	24875	22521	20298
35°	25585	21654	17452
40°	26497	19019	12900
45°	27663	13724	8676
50°	28950	7667	5178
55°	30428	3965	2834
60°	31832	2579	2006
65°	31289	2118	1593
70°	26385	1950	1486
75°	19411	1987	1594
80°	12950	2340	2012
85°	7069	3786	3061

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 62.5°
 Luminance: 32102 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	214.0	4.6
10°-20°	618.4	13.4
20°-30°	940.7	20.4
30°-40°	1074.4	23.3
40°-50°	866.7	18.8
50°-60°	474.4	10.3
60°-70°	250.1	5.4
70°-80°	122.6	2.7
80°-90°	43.2	0.9
90°-100°	9.3	0.2
100°-110°	1.3	0.0
110°-120°	0.7	0.0
120°-130°	0.7	0.0
130°-140°	0.7	0.0
140°-150°	0.9	0.0
150°-160°	0.8	0.0
160°-170°	0.6	0.0
170°-180°	0.2	0.0
0°-30°	1773.1	38.4
0°-40°	2847.5	61.6
0°-60°	4188.6	90.7
0°-90°	4604.6	99.7
90°-120°	11.3	0.2
90°-150°	13.6	0.3
90°-180°	15.0	0.3
0°-180°	4619.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2254	2254	2254	2254	2254	
5°	2265	2258	2231	2251	2244	216
15°	2232	2218	2178	2174	2155	632
25°	2163	2132	2036	1967	1928	999
35°	2058	1971	1742	1505	1404	1291
45°	1921	1650	953	651	602	1482
55°	1714	705	223	173	160	1529
65°	1298	163	88	71	66	1256
75°	493	92	50	42	40	545
85°	60	48	32	29	26	83
90°	2	25	20	18	16	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	2	2	1
165°	1	2	2	2	2	0
175°	2	2	2	3	2	0
180°	2	2	2	2	2	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2253.7	2253.7	2253.7	2253.7	2253.7
2.5°	2267.4	2261.2	2235.6	2257.5	2251.2
5°	2264.9	2258.1	2231.3	2251.2	2244.4
7.5°	2260.6	2251.9	2222.5	2240.6	2230.0
10°	2253.1	2244.4	2210.7	2225.0	2213.8
12.5°	2244.4	2232.5	2195.1	2202.6	2188.2
15°	2231.9	2218.2	2177.6	2173.9	2155.2
17.5°	2218.2	2201.3	2152.1	2135.9	2113.4
20°	2202.0	2181.4	2120.3	2088.5	2068.5
22.5°	2183.9	2157.1	2080.4	2031.7	2000.5
25°	2163.3	2132.1	2036.1	1966.9	1927.6
27.5°	2141.5	2099.1	1982.5	1891.4	1838.4
30°	2115.3	2064.1	1915.1	1792.3	1726.1
32.5°	2089.1	2020.5	1842.8	1664.4	1585.8
35°	2057.9	1971.2	1741.7	1504.8	1403.7
37.5°	2028.6	1912.0	1605.2	1304.6	1196.1
40°	1993.1	1842.1	1430.6	1074.5	970.3
42.5°	1959.4	1761.1	1204.2	852.5	762.0
45°	1920.7	1650.1	952.9	651.0	602.4
47.5°	1875.8	1498.5	692.8	484.5	454.0
50°	1827.2	1290.2	483.9	351.7	326.8
52.5°	1773.5	1009.0	326.1	244.5	230.7
55°	1713.7	705.3	223.3	172.7	159.6
57.5°	1644.5	459.0	162.1	130.3	121.6
60°	1562.8	293.1	126.6	103.5	98.5
62.5°	1455.5	205.8	104.1	85.4	81.1
65°	1298.4	162.8	87.9	71.1	66.1
67.5°	1099.4	137.8	75.5	59.9	56.7
70°	886.1	119.7	65.5	51.8	49.9
72.5°	681.0	104.8	56.7	46.1	44.9
75°	493.3	91.7	50.5	42.4	40.5
77.5°	341.7	79.2	44.9	38.0	36.8
80°	220.8	68.6	39.9	34.9	34.3
82.5°	126.6	57.4	36.2	33.7	33.1
85°	60.5	48.0	32.4	29.3	26.2
87.5°	19.3	35.5	25.6	22.4	20.0
90°	2.5	24.9	20.0	17.5	16.2
92.5°	2.5	13.7	14.3	14.3	13.7
95°	1.9	3.1	6.9	10.6	10.0
97.5°	1.9	1.2	4.4	7.5	7.5
100°	1.2	0.6	1.9	5.0	5.0
102.5°	1.2	0.6	0.6	3.1	3.1
105°	0.6	0.0	0.6	1.2	1.2
107.5°	0.6	0.6	0.6	1.2	0.6
110°	0.6	0.6	0.6	1.2	0.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.6	0.6	0.6	1.2	0.6
115°	0.6	0.6	0.6	1.2	0.6
117.5°	0.6	0.6	0.6	1.2	0.6
120°	0.6	0.6	0.6	1.2	0.6
122.5°	0.6	0.6	0.6	1.2	0.6
125°	0.6	0.6	0.6	1.2	0.6
127.5°	0.6	0.6	0.6	1.2	0.6
130°	0.6	0.6	1.2	1.2	0.6
132.5°	0.6	0.6	1.2	1.2	0.6
135°	0.6	0.6	1.2	1.2	0.6
137.5°	0.6	0.6	1.2	1.2	1.2
140°	1.2	0.6	1.2	1.2	1.2
142.5°	1.2	1.2	1.2	1.9	1.2
145°	1.2	1.2	1.2	1.9	1.2
147.5°	1.2	1.2	1.9	1.9	1.2
150°	1.2	1.2	1.9	1.9	1.2
152.5°	1.2	1.2	1.9	1.9	1.9
155°	1.2	1.2	1.9	2.5	1.9
157.5°	1.2	1.2	1.9	2.5	1.9
160°	1.2	1.9	2.5	2.5	1.9
162.5°	1.2	1.9	2.5	2.5	2.5
165°	1.2	1.9	2.5	2.5	2.5
167.5°	1.9	1.9	2.5	3.1	2.5
170°	1.9	1.9	2.5	3.1	2.5
172.5°	1.9	1.9	2.5	3.1	2.5
175°	1.9	1.9	2.5	3.1	2.5
177.5°	1.9	1.9	2.5	3.1	3.1
180°	2.5	2.5	2.5	2.5	2.5



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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	20.79	22.19	21.16	22.51	22.84	9.31	10.70	9.68	11.03	11.35
	3H	23.70	24.95	24.09	25.28	25.66	10.24	11.49	10.63	11.82	12.19
	4H	24.60	25.76	25.00	26.12	26.51	10.76	11.92	11.17	12.28	12.67
	6H	25.09	26.16	25.51	26.54	26.94	11.39	12.46	11.81	12.84	13.24
	8H	25.21	26.22	25.64	26.62	27.03	11.81	12.83	12.25	13.23	13.64
	12H	25.25	26.22	25.69	26.61	27.05	12.26	13.23	12.70	13.62	14.06
4H	2H	20.61	21.77	21.01	22.13	22.52	9.82	10.99	10.23	11.34	11.73
	3H	23.54	24.49	23.96	24.90	25.31	11.02	11.97	11.44	12.38	12.79
	4H	24.44	25.29	24.88	25.72	26.17	11.68	12.54	12.12	12.96	13.41
	6H	25.03	25.77	25.50	26.22	26.70	12.51	13.25	12.97	13.70	14.17
	8H	25.19	25.89	25.67	26.34	26.82	13.04	13.73	13.51	14.18	14.66
	12H	25.29	25.90	25.78	26.39	26.87	13.62	14.23	14.11	14.72	15.20
8H	4H	24.33	25.02	24.80	25.47	25.95	12.28	12.97	12.75	13.42	13.90
	6H	24.93	25.50	25.43	26.00	26.49	13.28	13.85	13.79	14.35	14.84
	8H	25.12	25.63	25.64	26.15	26.65	13.96	14.47	14.48	14.99	15.49
	12H	25.26	25.72	25.78	26.22	26.79	14.72	15.18	15.24	15.68	16.25
12H	4H	24.29	24.91	24.78	25.39	25.87	12.54	13.15	13.03	13.64	14.12
	6H	24.88	25.39	25.40	25.91	26.41	13.59	14.10	14.11	14.62	15.12
	8H	25.09	25.55	25.61	26.05	26.63	14.35	14.81	14.87	15.31	15.89