

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: P892945

Luminaire Tested: 2MB-SC3-ASMF-UNV-CC83-MID-3500K

Issue Date: 11/11/2024

**Test Information**

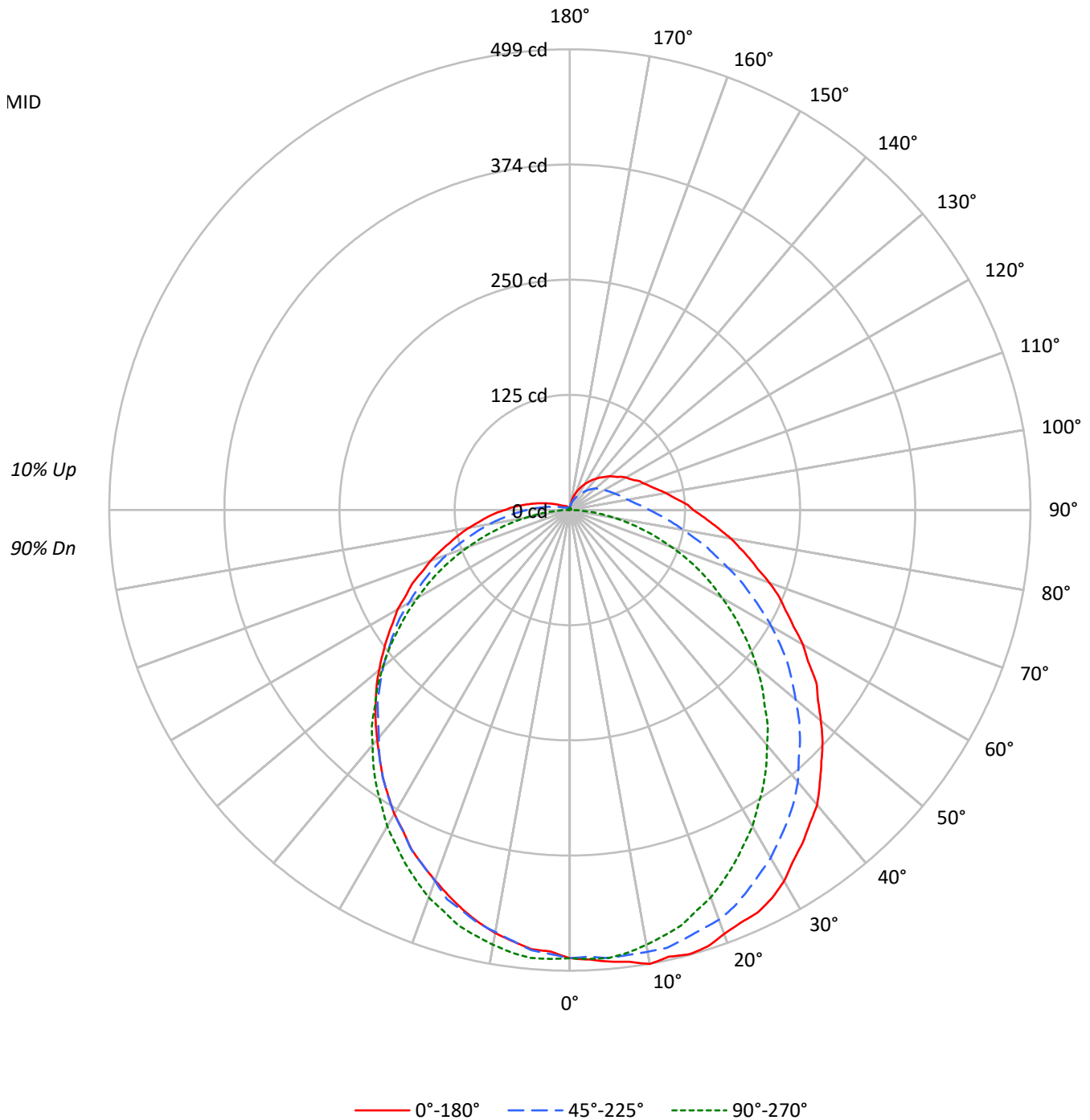
Test Method: LM-79-2019  
Report Number: P892945  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2407-185-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 2MB-SC3-ASMF-UNV-CC83-MID-3500K  
Description: Selectable 2FT MICROBAY LINEAR BAY with FROSTED ASYMMETRIC LENS, 80CRI, 3500K CCT, 1 lumen setting  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1669.0 lumens  
Efficiency: N/A  
Efficacy: 120.1 lumens/watt  
Spacing Criteria (0/90/45): 1.28 / 1.21 / 1.37  
Luminous Opening: Rectangular w/ Sides (W: 0.27' x L: 1.98' x H: 0.12')  
CIE Type: Direct  
  
Input Watts (W): 13.9  
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	117	117	117	117	113	113	113	113	106	106	106	99	99	99	93	93	93	93	93	93	90
1	105	99	95	90	101	96	92	88	90	87	83	85	82	79	79	77	75	75	75	75	72
2	95	86	79	72	91	83	76	71	78	72	68	73	69	65	69	65	62	62	62	62	59
3	86	75	66	60	83	73	65	58	68	62	56	64	59	54	60	56	52	52	52	52	49
4	79	66	57	50	76	64	56	49	61	53	48	57	51	46	54	49	44	44	44	44	42
5	72	59	50	43	69	57	49	42	54	47	41	51	45	40	48	43	38	38	38	38	36
6	67	53	44	37	64	52	43	37	49	41	36	46	40	35	44	38	34	34	34	34	31
7	62	48	39	33	59	47	38	32	44	37	32	42	36	31	40	34	30	30	30	30	28
8	57	44	35	29	55	43	35	29	41	33	28	39	32	27	37	31	27	27	27	27	25
9	54	40	32	26	52	39	31	26	37	30	25	36	29	25	34	28	24	24	24	24	22
10	50	37	29	24	49	36	29	23	34	28	23	33	27	22	31	26	22	22	22	22	20

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°	135°	180°
0°	9939	9939	9939	9939	9939
5°	10037	9692	9616	9523	9759
10°	10267	9473	9181	9048	9568
15°	10388	9256	8772	8654	9341
20°	10408	9049	8309	8188	9093
25°	10563	8743	7821	7802	8902
30°	10592	8449	7355	7383	8671
35°	10528	8130	6868	6983	8455
40°	10580	7800	6368	6533	8237
45°	10497	7415	5874	6189	8098
50°	10520	7018	5400	5796	7990
55°	10682	6671	4855	5405	7908
60°	10772	6246	4298	4990	7948
65°	11022	5784	3735	4576	8039
70°	11739	5343	3060	4179	8183
75°	12881	5016	2342	3725	8547
80°	15358	4694	1568	3319	9628
85°	20902	4594	788	2896	12279

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 90°  
 Luminance: 43343 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	46.1	2.8
10°-20°	132.0	7.9
20°-30°	199.1	11.9
30°-40°	238.9	14.3
40°-50°	248.8	14.9
50°-60°	230.6	13.8
60°-70°	189.9	11.4
70°-80°	137.0	8.2
80°-90°	87.0	5.2
90°-100°	53.6	3.2
100°-110°	35.7	2.1
110°-120°	25.5	1.5
120°-130°	18.7	1.1
130°-140°	12.8	0.8
140°-150°	7.8	0.5
150°-160°	3.9	0.2
160°-170°	1.4	0.1
170°-180°	0.2	0.0
0°-30°	377.1	22.6
0°-40°	616.1	36.9
0°-60°	1095.5	65.6
0°-90°	1509.4	90.4
90°-120°	114.8	6.9
90°-150°	154.1	9.2
90°-180°	160.0	9.6
0°-180°	1669.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	485	485	485	485	485	
5°	491	487	487	479	477	47
15°	498	481	466	450	448	140
25°	481	455	422	406	406	221
35°	440	411	365	353	353	276
45°	385	353	298	294	297	298
55°	326	288	227	233	242	290
65°	258	216	155	171	188	257
75°	201	153	82	113	134	213
85°	153	104	21	66	90	130
90°	134	86	2	47	70	74
95°	119	73	1	31	54	95
105°	93	57	1	13	28	100
115°	77	47	2	6	14	77
125°	62	40	2	5	8	57
135°	50	32	2	4	6	39
145°	38	22	2	3	4	24
155°	26	15	2	2	3	12
165°	15	8	2	1	2	4
175°	2	4	2	1	0	0
180°	2	2	2	2	2	



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CATALOG NUMBER: 2MB-SC3-ASMF-UNV-CC83-MID-3500K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	485.4	485.4	485.4	485.4	485.4	485.4	485.4	485.4	485.4
2.5°	487.4	488.8	484.2	487.1	486.7	487.1	481.3	486.2	478.6
5°	491.0	491.8	487.1	488.8	487.1	483.0	478.6	476.9	477.4
7.5°	493.5	497.3	485.9	486.4	483.5	479.1	470.9	472.3	471.4
10°	499.3	494.9	485.9	483.7	478.2	473.5	464.1	464.8	465.3
12.5°	495.6	494.7	485.7	477.7	472.1	468.2	458.5	456.1	457.3
15°	498.3	494.2	480.8	474.5	466.0	459.2	449.5	447.8	448.1
17.5°	495.9	492.5	476.0	467.2	455.3	451.2	442.0	439.1	437.6
20°	488.6	486.9	472.3	457.3	446.6	438.6	427.4	425.7	426.9
22.5°	483.7	479.6	465.1	450.0	434.5	427.4	416.3	416.0	416.3
25°	481.3	476.0	455.1	439.3	422.1	415.8	406.1	402.4	405.6
27.5°	474.0	469.2	444.7	427.4	408.3	399.8	391.8	391.0	391.5
30°	464.3	454.9	435.2	414.1	395.6	386.9	380.3	375.5	380.1
32.5°	450.5	445.1	422.8	399.8	379.4	373.3	366.8	366.3	366.3
35°	439.8	435.9	411.2	387.1	365.3	357.0	353.2	351.5	353.2
37.5°	427.4	421.6	398.8	371.8	349.5	342.5	338.6	337.1	338.4
40°	416.8	406.1	384.2	356.1	332.3	326.0	321.8	323.3	324.5
42.5°	401.0	394.9	367.0	340.1	317.5	310.7	307.3	308.5	311.4
45°	385.4	379.9	352.7	323.3	298.3	294.7	294.4	293.7	297.3
47.5°	371.4	363.4	336.9	306.8	282.3	278.2	278.6	281.1	284.2
50°	355.1	345.6	319.4	289.1	264.6	261.9	263.8	265.5	269.7
52.5°	338.8	331.3	303.4	272.3	246.6	244.7	247.3	252.9	255.3
55°	326.2	312.6	287.6	252.7	227.4	227.7	233.0	236.2	241.5
57.5°	306.1	295.9	269.7	235.2	209.5	211.2	218.4	223.8	227.2
60°	291.8	278.9	252.2	216.5	190.5	193.2	201.5	209.5	215.3
62.5°	273.3	262.1	234.0	198.1	173.1	176.9	186.2	195.6	199.8
65°	258.3	245.6	216.0	179.6	154.9	159.5	170.9	181.6	188.4
67.5°	245.4	232.3	200.0	162.6	136.4	143.2	156.6	167.0	172.3
70°	230.1	214.8	181.8	143.7	117.2	125.2	142.2	154.4	160.4
72.5°	213.8	201.5	166.0	126.2	99.5	109.2	127.9	140.5	146.4
75°	201.2	187.4	152.7	108.7	81.6	93.2	113.4	127.7	133.5
77.5°	188.4	175.7	137.6	92.7	65.5	78.6	100.5	116.3	122.3
80°	176.9	162.4	125.0	79.6	48.8	64.3	88.4	103.9	110.9
82.5°	164.3	151.7	114.1	65.8	34.7	51.2	76.5	93.4	99.3
85°	153.2	140.0	103.9	54.9	21.4	39.6	65.5	83.0	90.0
87.5°	143.0	132.0	94.4	46.6	10.7	30.1	55.1	72.8	80.8
90°	133.7	121.4	86.4	39.1	1.9	21.8	46.6	64.1	70.1
92.5°	127.9	113.1	79.9	34.2	1.2	15.5	38.8	56.1	63.1
95°	119.2	106.1	73.1	30.6	1.2	10.4	31.3	48.1	54.1
97.5°	111.7	99.5	68.2	28.4	1.0	7.0	25.7	40.3	46.6
100°	105.8	94.4	63.8	26.5	1.2	5.1	20.4	34.2	39.8
102.5°	99.3	88.8	60.4	25.2	1.2	3.6	16.0	28.9	34.0
105°	93.4	84.2	57.3	24.0	1.2	3.2	12.9	23.8	28.4
107.5°	89.1	79.4	54.6	23.3	1.2	3.2	10.2	19.4	23.3
110°	84.7	75.5	51.9	22.6	1.2	2.9	8.0	16.0	19.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	81.8	71.8	49.5	21.8	1.5	2.9	6.6	13.3	16.0
115°	76.7	68.7	47.3	21.6	1.5	2.7	6.1	10.9	13.6
117.5°	73.1	65.8	45.1	20.9	1.5	2.7	5.8	9.0	10.9
120°	70.4	62.4	43.2	20.1	1.5	2.4	5.3	8.0	9.2
122.5°	67.0	59.2	41.5	19.7	1.5	2.4	5.1	7.5	8.3
125°	62.4	56.3	39.6	18.7	1.7	2.4	4.9	7.0	7.8
127.5°	59.5	53.6	38.1	17.5	1.7	2.2	4.6	6.6	7.3
130°	57.0	50.7	36.4	16.3	1.7	2.2	4.4	6.1	6.8
132.5°	53.4	47.8	34.0	15.3	1.7	1.9	3.9	5.6	6.3
135°	50.0	45.4	31.6	14.3	1.7	1.9	3.6	5.3	5.8
137.5°	47.8	43.0	29.4	13.3	1.7	1.7	3.4	4.9	5.3
140°	44.2	40.3	26.9	12.4	1.7	1.7	3.2	4.6	4.9
142.5°	41.5	37.6	24.8	11.4	1.7	1.7	2.9	4.1	4.6
145°	38.3	35.0	22.3	10.4	1.7	1.5	2.7	3.9	4.1
147.5°	35.4	31.8	20.4	9.7	1.7	1.5	2.4	3.4	3.6
150°	32.5	28.6	18.4	9.0	1.7	1.5	2.2	2.9	3.4
152.5°	29.4	24.8	16.5	8.3	1.7	1.5	1.9	2.7	2.9
155°	26.2	21.6	14.8	7.5	1.9	1.5	1.7	2.2	2.7
157.5°	23.5	18.7	13.1	6.8	1.9	1.2	1.7	1.9	2.2
160°	20.4	16.0	11.7	6.1	1.9	1.2	1.5	1.7	1.9
162.5°	18.0	13.3	10.2	5.6	1.9	1.2	1.5	1.5	1.7
165°	15.3	11.2	8.5	5.1	1.9	1.2	1.2	1.2	1.5
167.5°	12.4	8.7	7.0	4.6	1.9	1.2	1.2	1.0	1.2
170°	9.2	6.6	5.8	4.1	1.9	1.2	1.0	0.7	1.0
172.5°	4.1	5.1	4.6	3.6	2.2	1.2	1.0	0.7	0.5
175°	2.2	3.6	3.6	3.2	2.2	1.2	1.0	0.7	0.2
177.5°	1.7	2.2	2.7	2.7	2.2	1.5	1.0	0.5	0.2
180°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5



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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	18.31	19.79	18.82	20.29	20.84	17.19	18.66	17.69	19.17	19.71
	3H	20.40	21.75	20.92	22.26	22.84	19.02	20.37	19.54	20.88	21.47
	4H	21.35	22.62	21.89	23.15	23.75	19.75	21.02	20.29	21.55	22.15
	6H	22.27	23.46	22.82	24.00	24.61	20.35	21.54	20.90	22.08	22.69
	8H	22.70	23.84	23.26	24.40	25.02	20.58	21.72	21.15	22.28	22.90
	12H	23.12	24.21	23.69	24.77	25.42	20.78	21.88	21.36	22.43	23.08
4H	2H	18.79	20.07	19.33	20.60	21.19	17.76	19.03	18.30	19.56	20.16
	3H	21.11	22.20	21.66	22.77	23.38	19.78	20.87	20.34	21.44	22.06
	4H	22.22	23.22	22.80	23.80	24.45	20.61	21.61	21.19	22.19	22.84
	6H	23.33	24.21	23.92	24.81	25.48	21.34	22.22	21.93	22.82	23.48
	8H	23.86	24.69	24.46	25.29	25.97	21.63	22.46	22.23	23.06	23.74
	12H	24.39	25.14	25.01	25.77	26.45	21.89	22.65	22.51	23.28	23.96
8H	4H	22.47	23.30	23.07	23.90	24.58	20.96	21.79	21.56	22.39	23.06
	6H	23.76	24.46	24.38	25.10	25.78	21.81	22.51	22.44	23.16	23.84
	8H	24.43	25.06	25.07	25.71	26.40	22.19	22.82	22.83	23.47	24.17
	12H	25.13	25.70	25.77	26.34	27.10	22.55	23.11	23.19	23.75	24.51
12H	4H	22.49	23.24	23.11	23.87	24.55	21.03	21.78	21.64	22.41	23.09
	6H	23.81	24.44	24.45	25.09	25.79	21.92	22.56	22.56	23.21	23.90
	8H	24.55	25.11	25.19	25.76	26.51	22.37	22.93	23.01	23.57	24.33