

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: P892941

Luminaire Tested: 2MB-SC3-ASMF-UNV-CC83-HI-5000K

Issue Date: 11/11/2024

**Test Information**

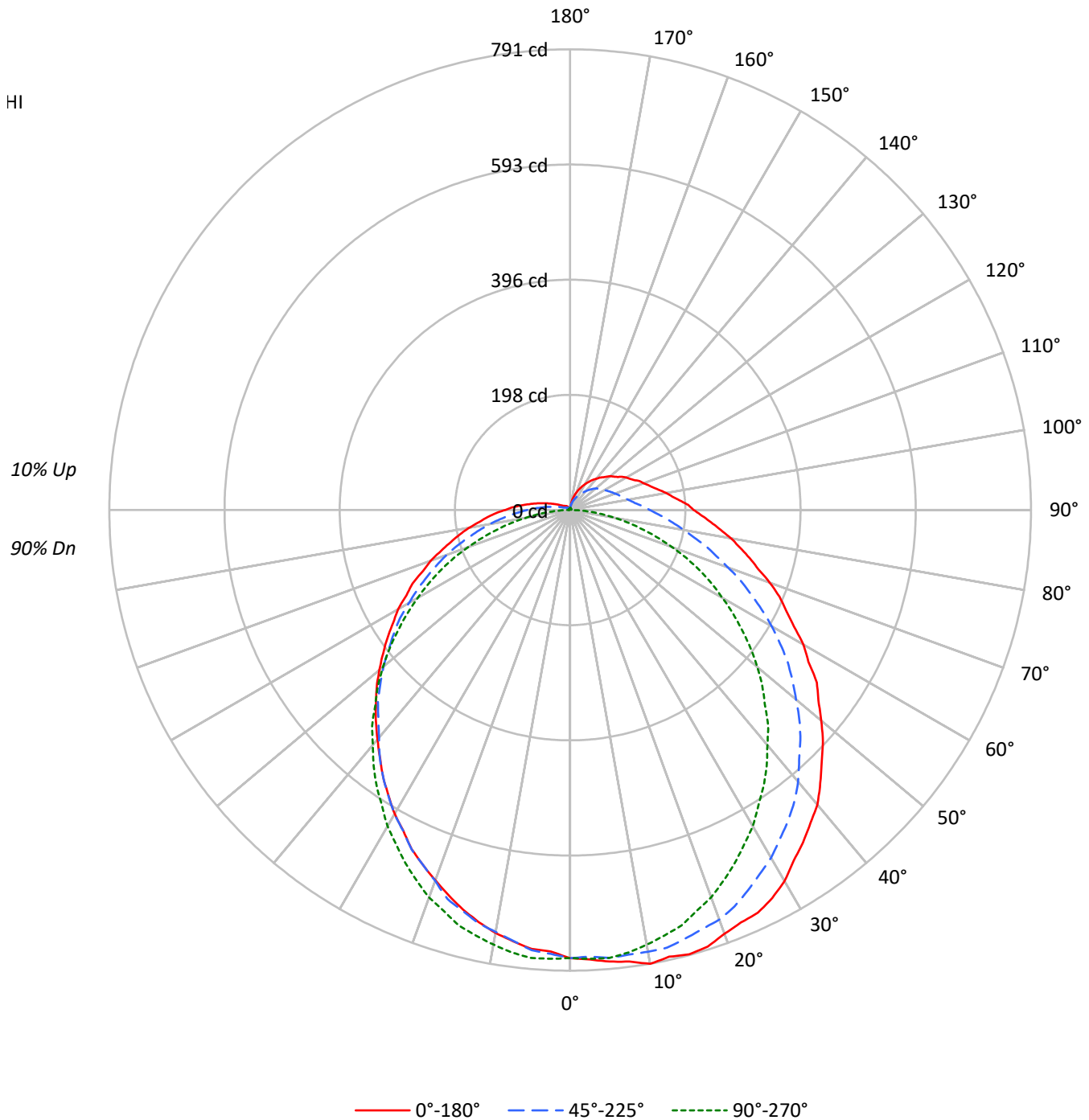
Test Method: LM-79-2019  
Report Number: P892941  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2407-185-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 2MB-SC3-ASMF-UNV-CC83-HI-5000K  
Description: Selectable 2FT MICROBAY LINEAR BAY with FROSTED ASYMMETRIC LENS, 80CRI, 5000K CCT, 1 lumen setting  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2645.0 lumens  
Efficiency: N/A  
Efficacy: 126.0 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): 21  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: 0.996  
Total Harmonic Distortion (THDi): 5.39961257980444  
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	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°	15753	15753	15753	15753	15753
5°	15908	15361	15241	15092	15466
10°	16270	15013	14549	14339	15163
15°	16462	14670	13902	13715	14803
20°	16493	14340	13168	12978	14412
25°	16741	13856	12393	12363	14107
30°	16788	13390	11658	11703	13742
35°	16685	12883	10884	11066	13398
40°	16767	12361	10091	10356	13055
45°	16637	11750	9308	9810	12834
50°	16673	11123	8558	9187	12662
55°	16930	10573	7695	8566	12532
60°	17069	9898	6814	7907	12595
65°	17465	9166	5918	7251	12737
70°	18606	8468	4851	6625	12973
75°	20417	7949	3709	5899	13547
80°	24344	7438	2484	5257	15263
85°	33114	7277	1245	4594	19470

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 90°  
 Luminance: 68695 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	73.0	2.8
10°-20°	209.2	7.9
20°-30°	315.5	11.9
30°-40°	378.6	14.3
40°-50°	394.3	14.9
50°-60°	365.5	13.8
60°-70°	301.0	11.4
70°-80°	217.1	8.2
80°-90°	137.8	5.2
90°-100°	85.0	3.2
100°-110°	56.7	2.1
110°-120°	40.3	1.5
120°-130°	29.6	1.1
130°-140°	20.3	0.8
140°-150°	12.4	0.5
150°-160°	6.1	0.2
160°-170°	2.2	0.1
170°-180°	0.4	0.0
0°-30°	597.7	22.6
0°-40°	976.3	36.9
0°-60°	1736.1	65.6
0°-90°	2392.0	90.4
90°-120°	182.0	6.9
90°-150°	244.2	9.2
90°-180°	253.0	9.6
0°-180°	2645.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	769	769	769	769	769	
5°	778	772	772	758	757	75
15°	790	762	738	712	710	223
25°	763	721	669	644	643	351
35°	697	652	579	560	560	437
45°	611	559	473	467	471	473
55°	517	456	360	369	383	459
65°	409	342	245	271	298	408
75°	319	242	129	180	212	338
85°	243	165	34	104	143	206
90°	212	137	3	74	111	117
95°	189	116	2	50	86	150
105°	148	91	2	20	45	158
115°	122	75	2	10	22	122
125°	99	63	3	8	12	90
135°	79	50	3	6	9	62
145°	61	35	3	4	6	38
155°	42	24	3	3	4	20
165°	24	14	3	2	2	7
175°	4	6	4	2	0	1
180°	2	2	2	2	2	



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CATALOG NUMBER: 2MB-SC3-ASMF-UNV-CC83-HI-5000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	769.3	769.3	769.3	769.3	769.3	769.3	769.3	769.3	769.3
2.5°	772.4	774.7	767.4	772.0	771.2	772.0	762.8	770.5	758.5
5°	778.2	779.3	772.0	774.7	772.0	765.5	758.5	755.9	756.6
7.5°	782.0	788.2	770.1	770.9	766.2	759.3	746.2	748.5	747.0
10°	791.2	784.3	770.1	766.6	757.8	750.5	735.5	736.6	737.4
12.5°	785.5	783.9	769.7	757.0	748.2	742.0	726.6	722.8	724.7
15°	789.7	783.2	762.0	752.0	738.5	727.8	712.4	709.7	710.1
17.5°	785.9	780.5	754.3	740.5	721.6	715.1	700.5	695.8	693.5
20°	774.3	771.6	748.5	724.7	707.8	695.1	677.4	674.7	676.6
22.5°	766.6	760.1	737.0	713.2	688.5	677.4	659.7	659.3	659.7
25°	762.8	754.3	721.2	696.2	668.9	658.9	643.5	637.8	642.8
27.5°	751.2	743.5	704.7	677.4	647.0	633.5	620.8	619.7	620.5
30°	735.9	720.9	689.7	656.2	627.0	613.1	602.8	595.1	602.4
32.5°	713.9	705.5	670.1	633.5	601.2	591.6	581.2	580.5	580.5
35°	697.0	690.8	651.6	613.5	578.9	565.8	559.7	557.0	559.7
37.5°	677.4	668.2	632.0	589.3	553.9	542.8	536.6	534.3	536.2
40°	660.5	643.5	608.9	564.3	526.6	516.6	510.1	512.4	514.3
42.5°	635.5	625.8	581.6	538.9	503.1	492.4	487.0	488.9	493.5
45°	610.8	602.0	558.9	512.4	472.7	467.0	466.6	465.4	471.2
47.5°	588.5	575.8	533.9	486.2	447.4	440.8	441.6	445.4	450.4
50°	562.8	547.8	506.2	458.1	419.3	415.0	418.1	420.8	427.4
52.5°	537.0	525.1	480.8	431.6	390.8	387.7	392.0	400.8	404.7
55°	517.0	495.4	455.8	400.4	360.4	360.8	369.3	374.3	382.7
57.5°	485.1	468.9	427.4	372.7	332.0	334.7	346.2	354.7	360.0
60°	462.4	442.0	399.7	343.1	302.0	306.2	319.3	332.0	341.2
62.5°	433.1	415.4	370.8	313.9	274.3	280.4	295.0	310.0	316.6
65°	409.3	389.3	342.3	284.6	245.4	252.7	270.8	287.7	298.5
67.5°	388.9	368.1	317.0	257.7	216.2	226.9	248.1	264.6	273.1
70°	364.7	340.4	288.1	227.7	185.8	198.5	225.4	244.6	254.3
72.5°	338.9	319.3	263.1	200.0	157.7	173.1	202.7	222.7	231.9
75°	318.9	297.0	242.0	172.3	129.2	147.7	179.6	202.3	211.6
77.5°	298.5	278.5	218.1	146.9	103.9	124.6	159.2	184.3	193.9
80°	280.4	257.3	198.1	126.2	77.3	101.9	140.0	164.6	175.8
82.5°	260.4	240.4	180.8	104.2	55.0	81.2	121.2	148.1	157.3
85°	242.7	221.9	164.6	86.9	33.8	62.7	103.9	131.6	142.7
87.5°	226.6	209.3	149.6	73.9	16.9	47.7	87.3	115.4	128.1
90°	211.9	192.3	136.9	61.9	3.1	34.6	73.9	101.5	111.2
92.5°	202.7	179.3	126.6	54.2	1.9	24.6	61.5	88.9	100.0
95°	188.9	168.1	115.8	48.5	1.9	16.5	49.6	76.2	85.8
97.5°	176.9	157.7	108.1	45.0	1.5	11.2	40.8	63.9	73.9
100°	167.7	149.6	101.2	41.9	1.9	8.1	32.3	54.2	63.1
102.5°	157.3	140.8	95.8	40.0	1.9	5.8	25.4	45.8	53.9
105°	148.1	133.5	90.8	38.1	1.9	5.0	20.4	37.7	45.0
107.5°	141.2	125.8	86.5	36.9	1.9	5.0	16.2	30.8	36.9
110°	134.2	119.6	82.3	35.8	1.9	4.6	12.7	25.4	30.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	129.6	113.9	78.5	34.6	2.3	4.6	10.4	21.2	25.4
115°	121.6	108.9	75.0	34.2	2.3	4.2	9.6	17.3	21.5
117.5°	115.8	104.2	71.5	33.1	2.3	4.2	9.2	14.2	17.3
120°	111.6	98.9	68.5	31.9	2.3	3.8	8.5	12.7	14.6
122.5°	106.2	93.9	65.8	31.2	2.3	3.8	8.1	11.9	13.1
125°	98.9	89.2	62.7	29.6	2.7	3.8	7.7	11.2	12.3
127.5°	94.2	85.0	60.4	27.7	2.7	3.5	7.3	10.4	11.5
130°	90.4	80.4	57.7	25.8	2.7	3.5	6.9	9.6	10.8
132.5°	84.6	75.8	53.9	24.2	2.7	3.1	6.2	8.8	10.0
135°	79.2	71.9	50.0	22.7	2.7	3.1	5.8	8.5	9.2
137.5°	75.8	68.1	46.5	21.2	2.7	2.7	5.4	7.7	8.5
140°	70.0	63.9	42.7	19.6	2.7	2.7	5.0	7.3	7.7
142.5°	65.8	59.6	39.2	18.1	2.7	2.7	4.6	6.5	7.3
145°	60.8	55.4	35.4	16.5	2.7	2.3	4.2	6.2	6.5
147.5°	56.2	50.4	32.3	15.4	2.7	2.3	3.8	5.4	5.8
150°	51.5	45.4	29.2	14.2	2.7	2.3	3.5	4.6	5.4
152.5°	46.5	39.2	26.2	13.1	2.7	2.3	3.1	4.2	4.6
155°	41.5	34.2	23.5	11.9	3.1	2.3	2.7	3.5	4.2
157.5°	37.3	29.6	20.8	10.8	3.1	1.9	2.7	3.1	3.5
160°	32.3	25.4	18.5	9.6	3.1	1.9	2.3	2.7	3.1
162.5°	28.5	21.2	16.2	8.8	3.1	1.9	2.3	2.3	2.7
165°	24.2	17.7	13.5	8.1	3.1	1.9	1.9	1.9	2.3
167.5°	19.6	13.8	11.2	7.3	3.1	1.9	1.9	1.5	1.9
170°	14.6	10.4	9.2	6.5	3.1	1.9	1.5	1.2	1.5
172.5°	6.5	8.1	7.3	5.8	3.5	1.9	1.5	1.2	0.8
175°	3.5	5.8	5.8	5.0	3.5	1.9	1.5	1.2	0.4
177.5°	2.7	3.5	4.2	4.2	3.5	2.3	1.5	0.8	0.4
180°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3



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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	19.91	21.39	20.42	21.89	22.43	18.79	20.27	19.29	20.77	21.31
	3H	22.00	23.35	22.52	23.86	24.44	20.63	21.97	21.14	22.48	23.07
	4H	22.95	24.22	23.49	24.75	25.35	21.35	22.62	21.89	23.15	23.75
	6H	23.87	25.06	24.42	25.60	26.21	21.95	23.14	22.50	23.68	24.29
	8H	24.30	25.44	24.86	26.00	26.62	22.18	23.32	22.75	23.88	24.50
	12H	24.72	25.81	25.29	26.37	27.02	22.38	23.48	22.96	24.03	24.68
4H	2H	20.39	21.67	20.93	22.20	22.79	19.36	20.63	19.90	21.16	21.76
	3H	22.71	23.80	23.26	24.37	24.98	21.38	22.47	21.94	23.04	23.66
	4H	23.82	24.82	24.40	25.40	26.05	22.21	23.21	22.79	23.79	24.44
	6H	24.93	25.81	25.52	26.41	27.08	22.94	23.82	23.53	24.42	25.08
	8H	25.46	26.29	26.06	26.89	27.57	23.23	24.06	23.83	24.66	25.33
	12H	25.99	26.74	26.61	27.37	28.05	23.49	24.24	24.11	24.88	25.56
8H	4H	24.07	24.90	24.67	25.50	26.18	22.56	23.39	23.16	23.99	24.66
	6H	25.36	26.06	25.98	26.70	27.38	23.41	24.11	24.04	24.76	25.44
	8H	26.03	26.66	26.67	27.31	28.00	23.79	24.42	24.43	25.07	25.77
	12H	26.73	27.29	27.37	27.94	28.69	24.15	24.71	24.79	25.35	26.11
12H	4H	24.09	24.84	24.71	25.47	26.15	22.63	23.38	23.24	24.01	24.69
	6H	25.41	26.04	26.05	26.69	27.39	23.52	24.16	24.16	24.81	25.50
	8H	26.15	26.71	26.79	27.36	28.11	23.97	24.53	24.61	25.17	25.93