

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: P892949

Luminaire Tested: 2MB-SC3-ASMF-UNV-CC93-HI-4000K

Issue Date: 11/11/2024

**Test Information**

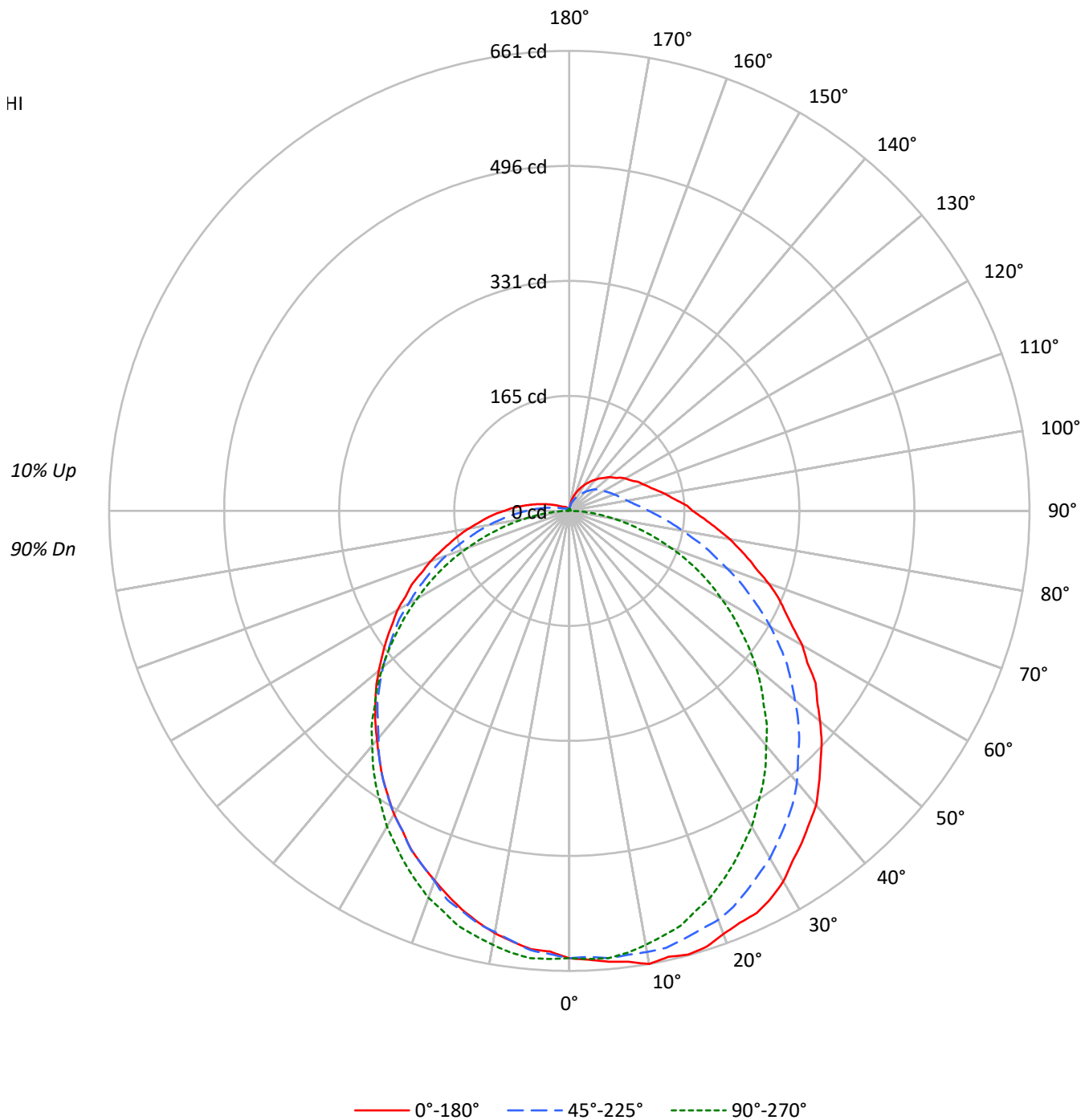
Test Method: LM-79-2019  
Report Number: P892949  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2407-185-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 2MB-SC3-ASMF-UNV-CC93-HI-4000K  
Description: Selectable 2FT MICROBAY LINEAR BAY with FROSTED ASYMMETRIC LENS, 90CRI, 4000K CCT, 1 lumen setting  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2210.0 lumens  
Efficiency: N/A  
Efficacy: 105.2 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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CATALOG NUMBER: 2MB-SC3-ASMF-UNV-CC93-HI-4000K

### 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°	13162	13162	13162	13162	13162
5°	13291	12834	12734	12611	12923
10°	13594	12543	12157	11980	12669
15°	13754	12258	11617	11459	12368
20°	13782	11982	11002	10844	12041
25°	13987	11577	10355	10330	11788
30°	14025	11188	9741	9777	11481
35°	13942	10764	9094	9245	11194
40°	14007	10329	8432	8652	10908
45°	13902	9818	7778	8197	10723
50°	13930	9294	7149	7677	10579
55°	14146	8836	6429	7156	10472
60°	14260	8269	5693	6607	10524
65°	14594	7659	4946	6060	10642
70°	15545	7075	4052	5534	10836
75°	17056	6642	3100	4930	11319
80°	20342	6214	2076	4393	12754
85°	27670	6084	1042	3838	16263

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 90°  
 Luminance: 57413 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	61.0	2.8
10°-20°	174.8	7.9
20°-30°	263.6	11.9
30°-40°	316.4	14.3
40°-50°	329.4	14.9
50°-60°	305.4	13.8
60°-70°	251.5	11.4
70°-80°	181.4	8.2
80°-90°	115.2	5.2
90°-100°	71.0	3.2
100°-110°	47.3	2.1
110°-120°	33.7	1.5
120°-130°	24.7	1.1
130°-140°	17.0	0.8
140°-150°	10.3	0.5
150°-160°	5.1	0.2
160°-170°	1.9	0.1
170°-180°	0.3	0.0
0°-30°	499.4	22.6
0°-40°	815.7	36.9
0°-60°	1450.6	65.6
0°-90°	1998.6	90.4
90°-120°	152.0	6.9
90°-150°	204.0	9.2
90°-180°	211.0	9.5
0°-180°	2210.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	643	643	643	643	643	
5°	650	645	645	634	632	62
15°	660	637	617	595	593	186
25°	637	603	559	538	537	293
35°	582	544	484	468	468	365
45°	510	467	395	390	394	395
55°	432	381	301	308	320	384
65°	342	286	205	226	249	341
75°	266	202	108	150	177	282
85°	203	138	28	87	119	172
90°	177	114	3	62	93	98
95°	158	97	2	42	72	125
105°	124	76	2	17	38	132
115°	102	63	2	8	18	102
125°	83	52	2	6	10	75
135°	66	42	2	5	8	52
145°	51	30	2	4	6	32
155°	35	20	3	2	4	16
165°	20	11	3	2	2	6
175°	3	5	3	1	0	1
180°	2	2	2	2	2	



TEST NUMBER: P892949

CATALOG NUMBER: 2MB-SC3-ASMF-UNV-CC93-HI-4000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	642.8	642.8	642.8	642.8	642.8	642.8	642.8	642.8	642.8
2.5°	645.4	647.3	641.2	645.0	644.4	645.0	637.3	643.8	633.8
5°	650.2	651.2	645.0	647.3	645.0	639.6	633.8	631.5	632.2
7.5°	653.4	658.5	643.4	644.1	640.2	634.4	623.5	625.4	624.2
10°	661.1	655.3	643.4	640.5	633.2	627.0	614.5	615.5	616.1
12.5°	656.3	655.0	643.1	632.5	625.1	620.0	607.1	603.9	605.5
15°	659.8	654.4	636.7	628.3	617.1	608.1	595.2	593.0	593.3
17.5°	656.6	652.1	630.3	618.7	602.9	597.5	585.3	581.4	579.5
20°	647.0	644.7	625.4	605.5	591.4	580.8	566.0	563.7	565.3
22.5°	640.5	635.1	615.8	595.9	575.3	566.0	551.2	550.9	551.2
25°	637.3	630.3	602.6	581.7	558.9	550.6	537.7	532.9	537.1
27.5°	627.7	621.3	588.8	566.0	540.6	529.3	518.7	517.8	518.4
30°	614.8	602.3	576.3	548.3	523.9	512.3	503.6	497.2	503.3
32.5°	596.5	589.4	559.9	529.3	502.3	494.3	485.6	485.0	485.0
35°	582.4	577.2	544.4	512.6	483.7	472.8	467.6	465.4	467.6
37.5°	566.0	558.3	528.1	492.4	462.8	453.5	448.3	446.4	448.0
40°	551.8	537.7	508.8	471.5	440.0	431.6	426.2	428.1	429.7
42.5°	530.9	522.9	486.0	450.3	420.4	411.4	406.9	408.5	412.4
45°	510.4	503.0	467.0	428.1	395.0	390.2	389.9	388.9	393.7
47.5°	491.7	481.1	446.1	406.2	373.8	368.3	369.0	372.2	376.4
50°	470.2	457.7	423.0	382.8	350.3	346.8	349.4	351.6	357.1
52.5°	448.7	438.7	401.7	360.6	326.5	324.0	327.5	334.9	338.1
55°	432.0	414.0	380.9	334.6	301.1	301.5	308.5	312.7	319.8
57.5°	405.3	391.8	357.1	311.4	277.4	279.6	289.3	296.3	300.8
60°	386.3	369.3	333.9	286.7	252.3	255.8	266.8	277.4	285.1
62.5°	361.9	347.1	309.8	262.3	229.2	234.3	246.5	259.0	264.5
65°	342.0	325.3	286.0	237.8	205.1	211.2	226.3	240.4	249.4
67.5°	324.9	307.6	264.8	215.3	180.6	189.6	207.3	221.1	228.2
70°	304.7	284.4	240.7	190.3	155.2	165.8	188.3	204.4	212.4
72.5°	283.2	266.8	219.8	167.1	131.8	144.6	169.4	186.1	193.8
75°	266.4	248.1	202.2	144.0	108.0	123.4	150.1	169.1	176.8
77.5°	249.4	232.7	182.2	122.8	86.8	104.1	133.1	153.9	162.0
80°	234.3	215.0	165.5	105.4	64.6	85.2	117.0	137.6	146.9
82.5°	217.6	200.9	151.1	87.1	46.0	67.8	101.2	123.7	131.5
85°	202.8	185.4	137.6	72.6	28.3	52.4	86.8	109.9	119.2
87.5°	189.3	174.8	125.0	61.7	14.1	39.9	73.0	96.4	107.0
90°	177.1	160.7	114.4	51.7	2.6	28.9	61.7	84.8	92.9
92.5°	169.4	149.8	105.7	45.3	1.6	20.6	51.4	74.2	83.6
95°	157.8	140.5	96.7	40.5	1.6	13.8	41.5	63.6	71.7
97.5°	147.8	131.8	90.3	37.6	1.3	9.3	34.1	53.4	61.7
100°	140.1	125.0	84.5	35.0	1.6	6.7	27.0	45.3	52.7
102.5°	131.5	117.6	80.0	33.4	1.6	4.8	21.2	38.2	45.0
105°	123.7	111.5	75.8	31.8	1.6	4.2	17.0	31.5	37.6
107.5°	118.0	105.1	72.3	30.9	1.6	4.2	13.5	25.7	30.9
110°	112.2	100.0	68.8	29.9	1.6	3.9	10.6	21.2	25.7



TEST NUMBER: P892949

CATALOG NUMBER: 2MB-SC3-ASM-F-UNV-CC93-HI-4000K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	108.3	95.1	65.6	28.9	1.9	3.9	8.7	17.7	21.2
115°	101.6	91.0	62.7	28.6	1.9	3.5	8.0	14.5	18.0
117.5°	96.7	87.1	59.8	27.6	1.9	3.5	7.7	11.9	14.5
120°	93.2	82.6	57.2	26.7	1.9	3.2	7.1	10.6	12.2
122.5°	88.7	78.4	55.0	26.0	1.9	3.2	6.7	10.0	10.9
125°	82.6	74.6	52.4	24.7	2.2	3.2	6.4	9.3	10.3
127.5°	78.7	71.0	50.5	23.1	2.2	2.9	6.1	8.7	9.6
130°	75.5	67.2	48.2	21.5	2.2	2.9	5.8	8.0	9.0
132.5°	70.7	63.3	45.0	20.2	2.2	2.6	5.1	7.4	8.4
135°	66.2	60.1	41.8	19.0	2.2	2.6	4.8	7.1	7.7
137.5°	63.3	56.9	38.9	17.7	2.2	2.2	4.5	6.4	7.1
140°	58.5	53.4	35.7	16.4	2.2	2.2	4.2	6.1	6.4
142.5°	55.0	49.8	32.8	15.1	2.2	2.2	3.9	5.5	6.1
145°	50.8	46.3	29.6	13.8	2.2	1.9	3.5	5.1	5.5
147.5°	46.9	42.1	27.0	12.9	2.2	1.9	3.2	4.5	4.8
150°	43.1	37.9	24.4	11.9	2.2	1.9	2.9	3.9	4.5
152.5°	38.9	32.8	21.9	10.9	2.2	1.9	2.6	3.5	3.9
155°	34.7	28.6	19.6	10.0	2.6	1.9	2.2	2.9	3.5
157.5°	31.2	24.7	17.4	9.0	2.6	1.6	2.2	2.6	2.9
160°	27.0	21.2	15.4	8.0	2.6	1.6	1.9	2.2	2.6
162.5°	23.8	17.7	13.5	7.4	2.6	1.6	1.9	1.9	2.2
165°	20.2	14.8	11.2	6.7	2.6	1.6	1.6	1.6	1.9
167.5°	16.4	11.6	9.3	6.1	2.6	1.6	1.6	1.3	1.6
170°	12.2	8.7	7.7	5.5	2.6	1.6	1.3	1.0	1.3
172.5°	5.5	6.7	6.1	4.8	2.9	1.6	1.3	1.0	0.6
175°	2.9	4.8	4.8	4.2	2.9	1.6	1.3	1.0	0.3
177.5°	2.2	2.9	3.5	3.5	2.9	1.9	1.3	0.6	0.3
180°	1.9	1.9	1.9	1.9	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	19.29	20.77	19.79	21.27	21.81	18.16	19.64	18.67	20.14	20.69
	3H	21.38	22.72	21.90	23.24	23.82	20.00	21.35	20.52	21.86	22.44
	4H	22.32	23.60	22.86	24.13	24.72	20.72	22.00	21.26	22.53	23.12
	6H	23.24	24.43	23.80	24.97	25.58	21.32	22.51	21.88	23.05	23.66
	8H	23.67	24.81	24.24	25.38	25.99	21.56	22.70	22.12	23.26	23.88
	12H	24.10	25.19	24.67	25.74	26.39	21.76	22.85	22.33	23.41	24.06
4H	2H	19.77	21.05	20.31	21.57	22.17	18.73	20.01	19.27	20.54	21.13
	3H	22.08	23.17	22.64	23.74	24.36	20.76	21.85	21.31	22.42	23.04
	4H	23.20	24.19	23.77	24.77	25.42	21.59	22.59	22.16	23.16	23.81
	6H	24.31	25.19	24.90	25.79	26.45	22.31	23.19	22.90	23.80	24.46
	8H	24.84	25.66	25.43	26.27	26.94	22.61	23.43	23.20	24.04	24.71
	12H	25.37	26.12	25.99	26.75	27.43	22.87	23.62	23.49	24.25	24.93
8H	4H	23.45	24.27	24.04	24.88	25.55	21.94	22.76	22.53	23.36	24.04
	6H	24.73	25.43	25.36	26.08	26.76	22.79	23.49	23.42	24.13	24.81
	8H	25.40	26.03	26.04	26.69	27.38	23.16	23.80	23.81	24.45	25.14
	12H	26.11	26.67	26.75	27.31	28.07	23.52	24.09	24.17	24.73	25.49
12H	4H	23.46	24.21	24.08	24.84	25.52	22.00	22.75	22.62	23.38	24.06
	6H	24.78	25.42	25.42	26.07	26.76	22.90	23.53	23.54	24.19	24.88
	8H	25.53	26.09	26.17	26.73	27.49	23.34	23.91	23.98	24.55	25.31