

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: P893856

Luminaire Tested: 4MB-7HL-LVRA-UNV-L950

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893856
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-077-26)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4MB-7HL-LVRA-UNV-L950
Description: 7000 Lumen 4FT MICROBAY LINEAR BAY with LOUVER WITH AISLE OPTIC, 90CRI, 5000K CCT
Light Source: -
Ballast/Driver: -

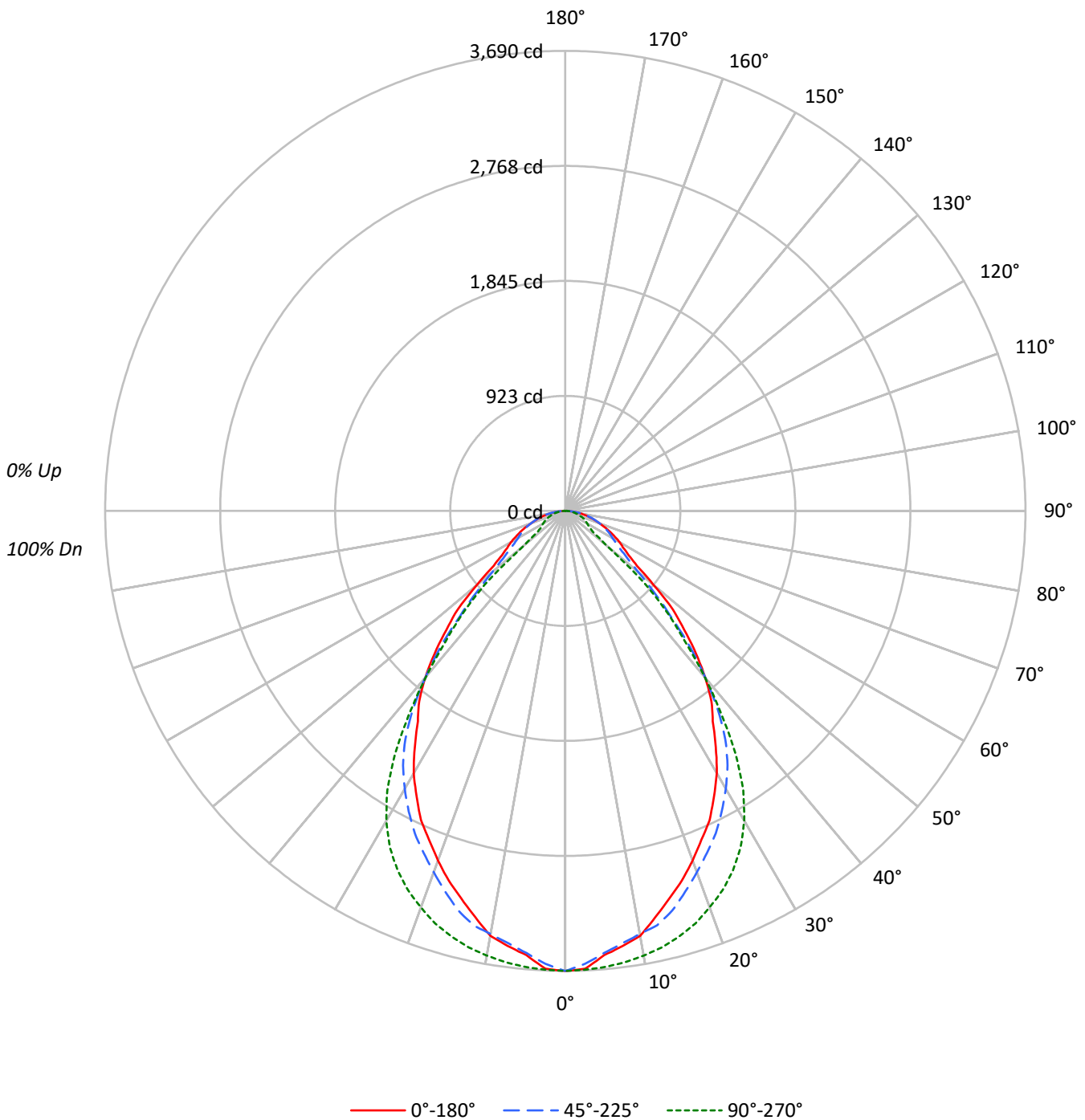
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5989.0 lumens
Efficiency: N/A
Efficacy: 115.6 lumens/watt
Spacing Criteria (0/90/45): 1.02 / 1.16 / 1.12
Luminous Opening: Rectangular (W 0.38' x L: 3.98' x H: 0')
CIE Type: Direct

Input Watts (W): 51.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: 0.99
Total Harmonic Distortion (THDi): 4
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
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	100	
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	90	88	
2	103	96	91	86	101	95	90	85	91	87	83	88	85	82	85	82	80	80	78	
3	96	87	80	75	94	86	80	75	83	78	73	80	76	72	78	74	71	71	69	
4	89	79	72	66	87	78	71	66	76	70	65	73	68	64	71	67	63	63	62	
5	83	72	65	59	81	71	64	59	69	63	58	67	62	58	66	61	57	57	55	
6	78	66	59	53	76	65	58	53	64	57	53	62	57	52	61	56	52	52	50	
7	73	61	54	48	71	60	53	48	59	52	48	58	52	47	56	51	47	47	45	
8	68	57	49	44	67	56	49	44	55	48	44	53	48	43	52	47	43	43	41	
9	64	52	45	40	63	52	45	40	51	44	40	50	44	40	49	44	40	40	38	
10	61	49	42	37	60	48	42	37	47	41	37	47	41	37	46	40	37	37	35	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	26256	26256	26256
5°	25548	25432	26227
10°	25005	24894	26166
15°	23714	24443	26019
20°	22590	23353	25622
25°	21488	22407	24968
30°	19964	21152	23574
35°	17901	19438	20677
40°	16219	16254	16166
45°	13561	12010	11713
50°	10243	8453	4790
55°	7705	6761	3021
60°	7159	6226	2910
65°	6660	6212	2914
70°	6093	6093	2869
75°	5778	5935	2771
80°	5339	5613	2844
85°	4661	4890	3102

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 13877 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	340.9	5.7
10°-20°	939.2	15.7
20°-30°	1331.9	22.2
30°-40°	1372.1	22.9
40°-50°	958.4	16.0
50°-60°	459.9	7.7
60°-70°	322.6	5.4
70°-80°	201.7	3.4
80°-90°	62.4	1.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	2612.0	43.6
0°-40°	3984.0	66.5
0°-60°	5402.3	90.2
0°-90°	5989.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5989.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3690	3690	3690	3690	3690	
5°	3577	3572	3561	3654	3672	339
15°	3219	3243	3318	3413	3532	907
25°	2737	2765	2854	3047	3180	1252
35°	2061	2117	2238	2284	2380	1299
45°	1348	1379	1194	1133	1164	1038
55°	621	591	545	349	244	582
65°	396	370	369	281	173	392
75°	210	207	216	186	101	221
85°	57	57	60	59	38	64
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3690.2	3690.2	3690.2	3690.2	3690.2
2.5°	3675.9	3664.5	3636.9	3687.3	3683.5
5°	3577.0	3572.2	3560.8	3654.0	3672.1
7.5°	3520.9	3511.4	3498.1	3600.8	3651.2
10°	3461.0	3472.4	3445.7	3539.9	3621.7
12.5°	3337.3	3367.8	3403.9	3477.1	3585.5
15°	3219.4	3243.2	3318.3	3413.4	3532.3
17.5°	3109.1	3136.6	3201.3	3344.0	3470.5
20°	2983.5	3021.6	3084.3	3266.9	3383.9
22.5°	2854.2	2889.4	2968.3	3164.2	3294.5
25°	2737.2	2764.8	2854.2	3047.2	3180.4
27.5°	2582.2	2633.5	2718.2	2904.6	3044.4
30°	2430.0	2473.7	2574.6	2731.5	2869.4
32.5°	2246.4	2310.2	2421.4	2541.3	2656.3
35°	2061.0	2117.1	2237.9	2284.5	2380.5
37.5°	1925.9	1941.1	2009.6	2003.9	2058.1
40°	1746.2	1776.6	1750.0	1678.6	1740.5
42.5°	1552.2	1588.3	1480.8	1398.1	1420.0
45°	1347.7	1379.1	1193.6	1132.7	1164.1
47.5°	1170.8	1167.9	962.5	921.6	877.8
50°	925.4	955.8	763.7	687.6	432.7
52.5°	722.8	734.2	629.6	439.4	284.4
55°	621.1	590.6	545.0	349.0	243.5
57.5°	551.6	513.6	483.1	324.3	222.6
60°	503.1	460.3	437.5	308.1	204.5
62.5°	448.0	414.7	406.1	293.9	188.3
65°	395.6	370.0	369.0	280.6	173.1
67.5°	343.3	329.1	332.9	264.4	156.0
70°	292.9	290.1	292.9	243.5	137.9
72.5°	250.1	247.3	254.9	216.8	117.9
75°	210.2	207.3	215.9	186.4	100.8
77.5°	167.4	169.3	175.0	155.0	84.6
80°	130.3	130.3	137.0	121.7	69.4
82.5°	93.2	94.2	98.0	89.4	54.2
85°	57.1	57.1	59.9	59.0	38.0
87.5°	19.0	21.9	25.7	27.6	19.0
90°	0.0	0.0	0.0	0.0	0.0



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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	17.00	18.35	17.37	18.67	18.98	13.33	14.69	13.70	15.00	15.31
	3H	18.74	19.95	19.12	20.28	20.64	15.31	16.52	15.69	16.85	17.21
	4H	19.41	20.54	19.81	20.89	21.27	16.01	17.14	16.42	17.49	17.87
	6H	19.92	20.96	20.33	21.33	21.72	16.54	17.57	16.95	17.94	18.34
	8H	20.09	21.07	20.52	21.46	21.87	16.72	17.71	17.15	18.10	18.50
	12H	20.20	21.14	20.63	21.52	21.95	16.86	17.80	17.29	18.19	18.62
4H	2H	17.53	18.66	17.93	19.01	19.39	14.95	16.08	15.36	16.43	16.81
	3H	19.51	20.44	19.92	20.84	21.24	17.13	18.06	17.55	18.47	18.87
	4H	20.31	21.15	20.74	21.56	22.01	18.01	18.85	18.45	19.27	19.71
	6H	20.95	21.68	21.42	22.12	22.59	18.66	19.38	19.12	19.82	20.29
	8H	21.17	21.85	21.64	22.30	22.77	18.86	19.54	19.33	19.99	20.46
	12H	21.33	21.93	21.81	22.41	22.88	19.02	19.62	19.51	20.10	20.58
8H	4H	20.59	21.27	21.06	21.72	22.19	18.66	19.34	19.13	19.78	20.25
	6H	21.38	21.93	21.88	22.43	22.91	19.52	20.08	20.02	20.57	21.05
	8H	21.68	22.18	22.20	22.69	23.18	19.85	20.35	20.37	20.86	21.35
	12H	21.91	22.36	22.43	22.85	23.42	20.11	20.55	20.63	21.05	21.62
12H	4H	20.61	21.21	21.10	21.69	22.17	18.73	19.33	19.22	19.82	20.29
	6H	21.43	21.93	21.95	22.44	22.93	19.66	20.16	20.18	20.67	21.16
	8H	21.79	22.24	22.31	22.73	23.30	20.07	20.51	20.59	21.01	21.58