

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: P893862

Luminaire Tested: 4MB-7HL-LVRF-UNV-L935

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893862
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2407-175-5)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4MB-7HL-LVRF-UNV-L935
Description: 7000 Lumen 4FT MICROBAY LINEAR BAY with LOUVER WITH FROSTED INLAY, 90CRI, 3500K C
Light Source: -
Ballast/Driver: -

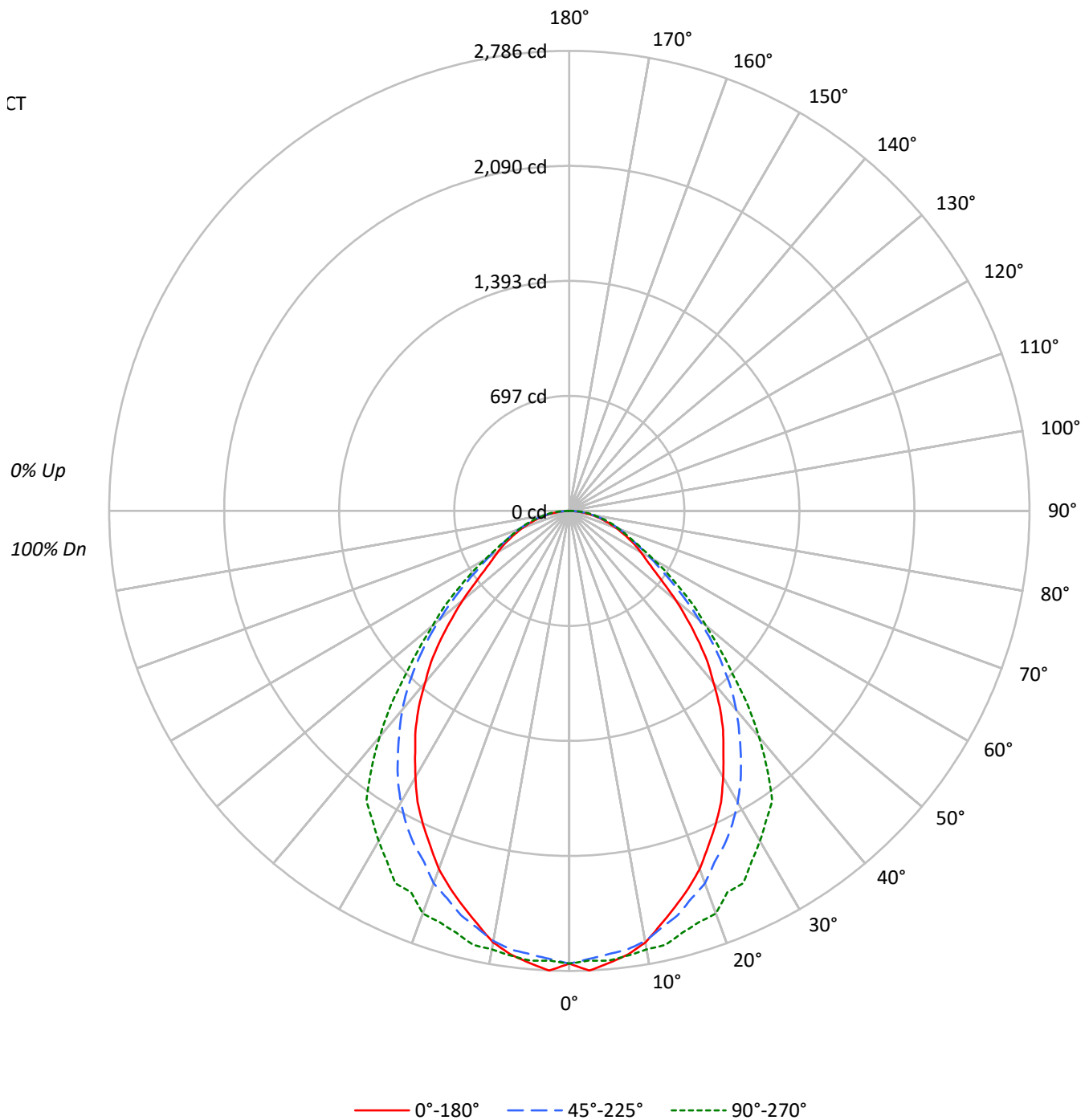
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5558.0 lumens
Efficiency: N/A
Efficacy: 107.3 lumens/watt
Spacing Criteria (0/90/45): 1.05 / 1.25 / 1.21
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	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	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	89	89	89	87
2	102	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	77	77	77	75
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	75	70	67	67	67	67	65
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	59	59	59	57
5	80	68	60	54	78	67	60	54	65	59	53	63	58	53	62	57	52	52	52	52	50
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	57	51	47	47	47	47	45
7	70	57	49	43	68	56	49	43	55	48	43	53	47	42	52	46	42	42	42	42	40
8	65	52	44	39	64	52	44	39	50	44	39	49	43	39	48	43	38	38	38	38	37
9	61	48	41	36	60	48	40	35	47	40	35	46	40	35	45	39	35	35	35	35	33
10	57	45	37	33	56	44	37	32	43	37	32	43	36	32	42	36	32	32	32	32	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	19504	19504	19504
5°	19631	19250	19525
10°	19171	19112	19479
15°	18266	18671	19479
20°	17473	18174	19639
25°	16450	17479	19538
30°	15303	16751	18966
35°	14094	15723	18599
40°	12605	14614	16608
45°	11049	13144	14084
50°	9324	11357	11919
55°	7736	9504	10166
60°	7114	8081	8384
65°	6663	7105	7160
70°	6205	6734	6682
75°	5789	6284	6510
80°	5404	5843	6244
85°	4547	4947	6890

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 14084 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	258.7	4.7
10°-20°	721.7	13.0
20°-30°	1039.4	18.7
30°-40°	1147.5	20.6
40°-50°	984.6	17.7
50°-60°	670.8	12.1
60°-70°	422.0	7.6
70°-80°	240.2	4.3
80°-90°	73.0	1.3
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°	2019.8	36.3
0°-40°	3167.3	57.0
0°-60°	4822.7	86.8
0°-90°	5558.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5558.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2741	2741	2741	2741	2741	
5°	2749	2738	2695	2752	2734	259
15°	2480	2506	2535	2649	2644	698
25°	2095	2137	2226	2406	2489	962
35°	1623	1686	1810	2008	2141	1009
45°	1098	1171	1306	1385	1400	846
55°	624	662	766	803	820	573
65°	396	402	422	442	425	393
75°	211	212	229	238	237	224
85°	56	57	61	72	84	64
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2741.2	2741.2	2741.2	2741.2	2741.2
2.5°	2786.3	2757.6	2716.6	2755.9	2725.6
5°	2748.6	2737.9	2695.3	2751.8	2733.8
7.5°	2710.0	2687.1	2679.7	2740.4	2716.6
10°	2653.5	2640.4	2645.3	2723.2	2696.1
12.5°	2564.2	2573.2	2584.7	2683.8	2692.0
15°	2479.8	2506.0	2534.7	2649.4	2644.5
17.5°	2397.0	2433.1	2460.1	2607.6	2611.7
20°	2307.7	2328.2	2400.3	2542.9	2593.7
22.5°	2197.0	2237.2	2299.5	2477.3	2500.3
25°	2095.4	2137.2	2226.5	2406.0	2488.8
27.5°	1988.9	2027.4	2138.0	2321.6	2392.1
30°	1862.7	1914.3	2038.9	2225.7	2308.5
32.5°	1736.5	1811.9	1931.5	2123.3	2219.2
35°	1622.6	1685.7	1810.2	2007.7	2141.3
37.5°	1496.4	1562.8	1689.0	1881.5	1966.8
40°	1357.1	1428.4	1573.4	1729.1	1788.1
42.5°	1237.4	1298.9	1444.8	1554.6	1601.3
45°	1098.1	1171.0	1306.3	1384.9	1399.7
47.5°	963.7	1047.3	1168.6	1205.5	1234.1
50°	842.4	908.0	1026.0	1048.9	1076.8
52.5°	718.7	788.3	891.6	914.5	955.5
55°	623.6	662.1	766.2	803.1	819.5
57.5°	554.0	578.6	652.3	699.0	703.9
60°	499.9	512.2	567.9	603.1	589.2
62.5°	449.9	459.7	487.6	514.6	496.6
65°	395.8	402.4	422.0	442.5	425.3
67.5°	345.0	352.4	370.4	385.2	370.4
70°	298.3	304.0	323.7	330.3	321.2
72.5°	254.9	257.3	273.7	285.2	279.4
75°	210.6	212.2	228.6	238.5	236.8
77.5°	170.5	172.9	186.8	195.9	190.9
80°	131.9	133.6	142.6	155.7	152.4
82.5°	92.6	95.9	101.6	113.1	122.1
85°	55.7	57.4	60.6	72.1	84.4
87.5°	21.3	22.9	24.6	30.3	40.2
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	17.78	19.26	18.14	19.57	19.88	19.14	20.62	19.50	20.93	21.24
	3H	19.35	20.68	19.73	21.01	21.37	20.42	21.75	20.80	22.07	22.44
	4H	19.96	21.20	20.36	21.55	21.93	20.98	22.22	21.38	22.57	22.95
	6H	20.43	21.58	20.84	21.94	22.34	21.43	22.57	21.84	22.94	23.33
	8H	20.59	21.68	21.01	22.07	22.47	21.61	22.70	22.04	23.09	23.50
	12H	20.69	21.73	21.12	22.11	22.54	21.77	22.81	22.20	23.20	23.62
4H	2H	18.39	19.63	18.79	19.98	20.36	19.50	20.74	19.90	21.09	21.47
	3H	20.19	21.22	20.60	21.62	22.02	21.06	22.09	21.47	22.49	22.89
	4H	20.92	21.84	21.35	22.26	22.70	21.76	22.69	22.20	23.11	23.54
	6H	21.51	22.32	21.97	22.76	23.22	22.37	23.18	22.83	23.62	24.08
	8H	21.72	22.47	22.18	22.91	23.38	22.62	23.37	23.08	23.82	24.28
	12H	21.85	22.53	22.34	23.01	23.48	22.83	23.50	23.32	23.98	24.46
8H	4H	21.24	22.00	21.71	22.44	22.91	22.00	22.75	22.46	23.19	23.66
	6H	21.97	22.59	22.46	23.08	23.56	22.74	23.36	23.24	23.86	24.33
	8H	22.24	22.80	22.76	23.31	23.80	23.07	23.63	23.59	24.14	24.63
	12H	22.46	22.95	22.97	23.44	24.01	23.38	23.87	23.89	24.37	24.93
12H	4H	21.28	21.95	21.76	22.43	22.90	22.01	22.68	22.49	23.16	23.63
	6H	22.03	22.60	22.55	23.11	23.59	22.78	23.34	23.29	23.85	24.34
	8H	22.37	22.87	22.88	23.36	23.92	23.17	23.66	23.68	24.16	24.72