

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: P893937

Luminaire Tested: 4MB-8HL-LVR-UNV-L830

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893937
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2407-175-6)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4MB-8HL-LVR-UNV-L830
Description: 8000 Lumen 4FT MICROBAY LINEAR BAY with LOUVER, 80CRI, 3000K CCT
Light Source: -
Ballast/Driver: -

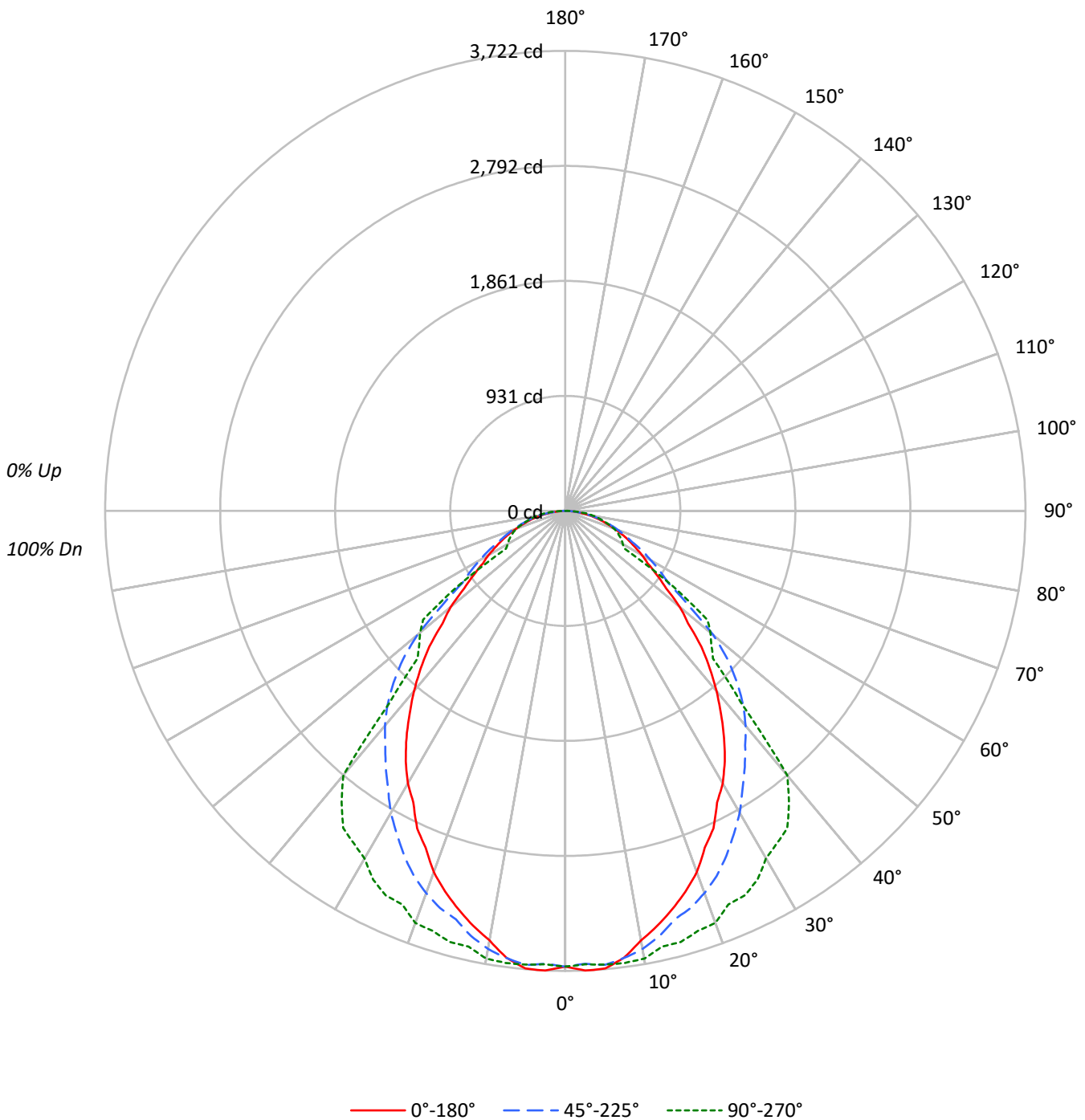
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7717.0 lumens
Efficiency: N/A
Efficacy: 133.3 lumens/watt
Spacing Criteria (0/90/45): 1.05 / 1.32 / 1.26
Luminous Opening: Rectangular (W 0.38' x L: 3.98' x H: 0')
CIE Type: Direct

Input Watts (W): 57.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: 0.999
Total Harmonic Distortion (THDi): 4.23
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	101	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	86	76	68	62	84	74	67	61	72	66	60	70	64	60	68	63	59	59	59	59	57
5	80	68	60	54	78	67	60	54	65	59	53	63	57	53	62	56	52	52	52	52	50
6	74	62	54	48	73	61	54	48	60	53	48	58	52	47	56	51	47	47	47	47	45
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	42	42	42	40
8	65	52	44	39	63	52	44	39	50	43	39	49	43	38	48	42	38	38	38	38	36
9	61	48	41	35	59	48	40	35	47	40	35	46	39	35	45	39	35	35	35	35	33
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32	32	32	32	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	26231	26231	26231
5°	26547	26338	26323
10°	25501	26002	26573
15°	24588	25194	26590
20°	23553	24914	26857
25°	22253	24182	26953
30°	20913	23172	26677
35°	19448	21978	27197
40°	17669	21068	25935
45°	15656	19773	17006
50°	13399	17282	16970
55°	11229	12612	13202
60°	10214	11385	7642
65°	9569	10079	8167
70°	8806	9551	8739
75°	8275	8959	8899
80°	7719	8473	9539
85°	6629	7070	10164

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 19773 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	350.3	4.5
10°-20°	980.2	12.7
20°-30°	1428.6	18.5
30°-40°	1634.3	21.2
40°-50°	1398.0	18.1
50°-60°	921.9	11.9
60°-70°	557.4	7.2
70°-80°	341.0	4.4
80°-90°	105.3	1.4
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°	2759.1	35.8
0°-40°	4393.4	56.9
0°-60°	6713.3	87.0
0°-90°	7717.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7717.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3687	3687	3687	3687	3687	
5°	3717	3714	3688	3680	3686	348
15°	3338	3377	3420	3639	3610	938
25°	2835	2878	3080	3343	3433	1297
35°	2239	2352	2530	2928	3131	1395
45°	1556	1676	1965	1836	1690	1191
55°	905	956	1017	1205	1064	823
65°	568	582	599	535	485	562
75°	301	309	326	341	324	318
85°	81	80	87	103	124	92
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3686.7	3686.7	3686.7	3686.7	3686.7
2.5°	3722.4	3711.6	3667.2	3709.4	3671.5
5°	3717.0	3713.7	3687.7	3680.2	3685.6
7.5°	3645.5	3653.1	3648.8	3730.0	3688.8
10°	3529.7	3544.8	3599.0	3712.6	3678.0
12.5°	3438.7	3450.6	3523.2	3692.1	3610.9
15°	3338.0	3377.0	3420.3	3639.0	3609.8
17.5°	3229.8	3266.6	3369.4	3567.6	3564.3
20°	3110.7	3178.9	3290.4	3474.4	3547.0
22.5°	2949.3	3041.4	3198.4	3432.2	3446.3
25°	2834.6	2877.9	3080.3	3343.4	3433.3
27.5°	2660.2	2742.5	2949.3	3215.7	3364.0
30°	2545.5	2613.7	2820.5	3141.0	3247.1
32.5°	2401.5	2482.7	2667.8	3059.8	3187.5
35°	2239.1	2351.7	2530.3	2927.7	3131.2
37.5°	2068.0	2179.5	2390.6	2818.3	2972.1
40°	1902.3	1997.6	2268.3	2687.3	2792.3
42.5°	1732.4	1835.2	2128.6	2428.5	2100.5
45°	1555.9	1676.0	1965.1	1836.3	1690.1
47.5°	1346.9	1494.2	1784.3	1475.7	1601.3
50°	1210.5	1290.6	1561.3	1391.3	1533.1
52.5°	1029.7	1137.9	1253.8	1299.3	1448.7
55°	905.2	956.0	1016.7	1205.1	1064.3
57.5°	790.4	835.9	906.2	849.9	567.3
60°	717.8	738.4	800.1	607.4	537.0
62.5°	635.6	656.1	701.6	567.3	515.4
65°	568.4	582.5	598.7	534.9	485.1
67.5°	497.0	504.5	521.9	493.7	455.8
70°	423.3	434.2	459.1	451.5	420.1
72.5°	358.4	368.1	389.8	400.6	371.4
75°	301.0	308.6	325.9	341.1	323.7
77.5°	239.3	246.9	269.6	285.8	278.3
80°	188.4	189.5	206.8	223.0	232.8
82.5°	132.1	134.3	147.2	164.6	184.1
85°	81.2	80.1	86.6	102.9	124.5
87.5°	31.4	30.3	35.7	43.3	63.9
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	19.18	20.66	19.54	20.97	21.28	18.85	20.33	19.22	20.65	20.96
	3H	20.74	22.06	21.11	22.39	22.75	20.47	21.80	20.85	22.12	22.49
	4H	21.34	22.58	21.74	22.93	23.31	21.22	22.46	21.62	22.81	23.19
	6H	21.79	22.94	22.21	23.31	23.70	21.89	23.03	22.30	23.40	23.79
	8H	21.95	23.04	22.37	23.43	23.83	22.17	23.26	22.59	23.65	24.05
	12H	22.04	23.09	22.48	23.47	23.90	22.39	23.43	22.82	23.81	24.24
4H	2H	19.77	21.01	20.17	21.36	21.74	19.51	20.76	19.92	21.10	21.48
	3H	21.56	22.59	21.97	22.99	23.39	21.40	22.43	21.81	22.83	23.23
	4H	22.29	23.21	22.72	23.63	24.07	22.30	23.22	22.73	23.64	24.08
	6H	22.87	23.67	23.33	24.12	24.58	23.10	23.91	23.56	24.35	24.81
	8H	23.07	23.82	23.53	24.26	24.73	23.43	24.18	23.90	24.63	25.10
	12H	23.20	23.88	23.69	24.36	24.83	23.70	24.38	24.19	24.85	25.33
8H	4H	22.61	23.36	23.07	23.80	24.27	22.62	23.37	23.08	23.81	24.28
	6H	23.32	23.94	23.81	24.43	24.91	23.57	24.19	24.06	24.68	25.16
	8H	23.59	24.15	24.10	24.66	25.15	23.98	24.54	24.50	25.06	25.54
	12H	23.80	24.29	24.31	24.79	25.35	24.35	24.85	24.86	25.34	25.91
12H	4H	22.65	23.32	23.13	23.80	24.27	22.64	23.31	23.12	23.79	24.27
	6H	23.39	23.95	23.90	24.46	24.95	23.62	24.18	24.13	24.69	25.18
	8H	23.72	24.21	24.23	24.71	25.27	24.10	24.59	24.61	25.09	25.65