

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: P893940

Luminaire Tested: 4MB-8HL-LVR-UNV-L850

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893940
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-L850
Description: 8000 Lumen 4FT MICROBAY LINEAR BAY with LOUVER, 80CRI, 5000K CCT
Light Source: -
Ballast/Driver: -

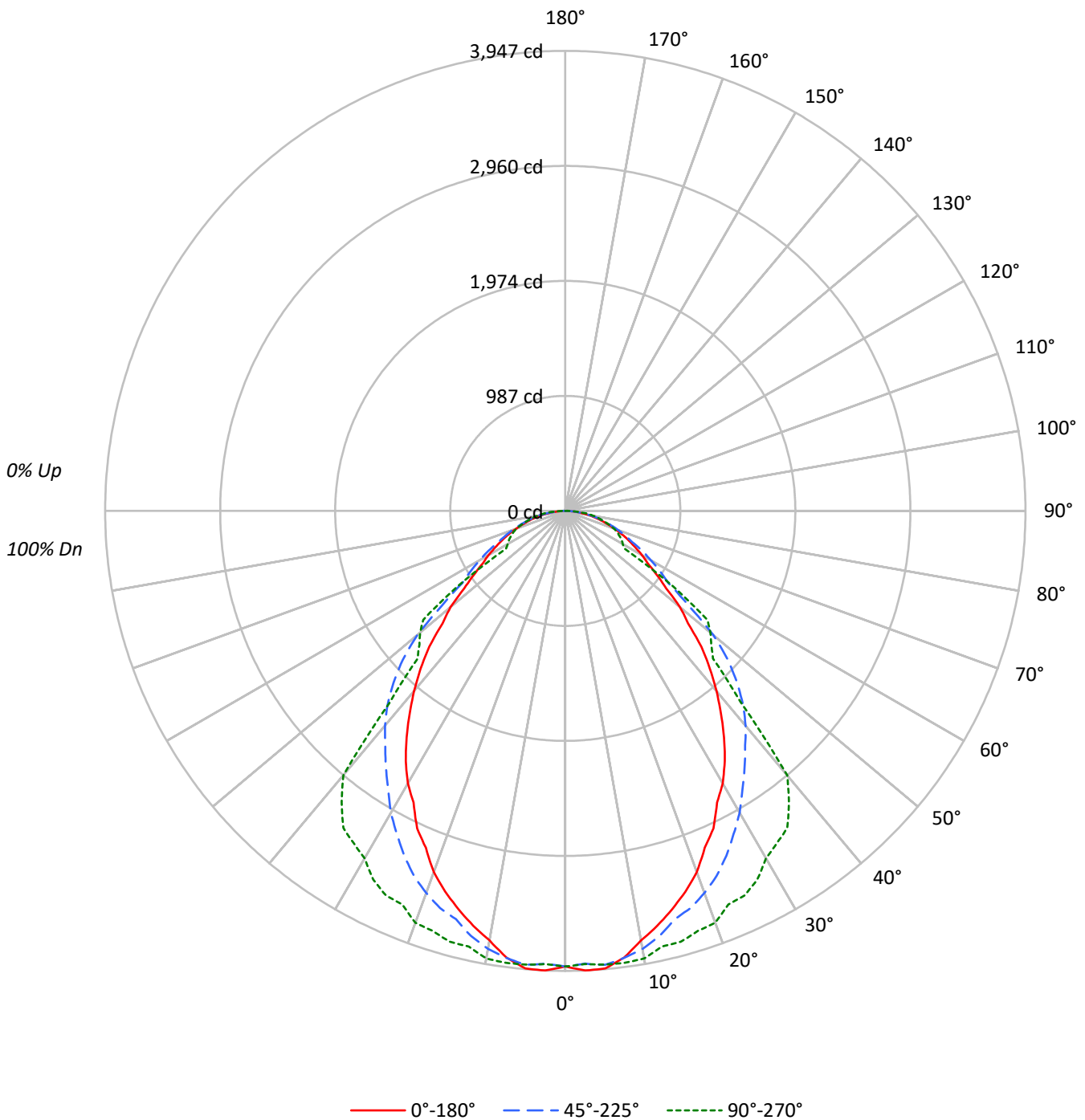
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8182.0 lumens
Efficiency: N/A
Efficacy: 141.3 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 (A_{in}): 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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CATALOG NUMBER: 4MB-8HL-LVR-UNV-L850

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°	27811	27811	27811
5°	28147	27926	27909
10°	27038	27568	28174
15°	26070	26712	28192
20°	24972	26415	28475
25°	23594	25639	28577
30°	22173	24568	28284
35°	20620	23302	28836
40°	18734	22338	27498
45°	16598	20964	18031
50°	14206	18324	17993
55°	11905	13371	13997
60°	10830	12071	8103
65°	10147	10687	8659
70°	9338	10125	9266
75°	8772	9498	9435
80°	8182	8986	10112
85°	7029	7494	10776

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 20964 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	371.4	4.5
10°-20°	1039.3	12.7
20°-30°	1514.6	18.5
30°-40°	1732.7	21.2
40°-50°	1482.3	18.1
50°-60°	977.5	11.9
60°-70°	590.9	7.2
70°-80°	361.5	4.4
80°-90°	111.7	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°	2925.3	35.8
0°-40°	4658.1	56.9
0°-60°	7117.8	87.0
0°-90°	8182.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8182.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3909	3909	3909	3909	3909	
5°	3941	3938	3910	3902	3908	369
15°	3539	3580	3626	3858	3827	995
25°	3005	3051	3266	3545	3640	1375
35°	2374	2493	2683	3104	3320	1479
45°	1650	1777	2084	1947	1792	1263
55°	960	1014	1078	1278	1128	873
65°	603	618	635	567	514	596
75°	319	327	346	362	343	337
85°	86	85	92	109	132	98
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3908.8	3908.8	3908.8	3908.8	3908.8
2.5°	3946.7	3935.2	3888.1	3932.9	3892.7
5°	3940.9	3937.5	3910.0	3901.9	3907.7
7.5°	3865.2	3873.2	3868.6	3954.7	3911.1
10°	3742.4	3758.4	3815.8	3936.4	3899.6
12.5°	3645.9	3658.6	3735.5	3914.5	3828.4
15°	3539.2	3580.5	3626.4	3858.3	3827.3
17.5°	3424.4	3463.4	3572.5	3782.5	3779.1
20°	3298.1	3370.4	3488.7	3683.8	3760.7
22.5°	3127.0	3224.6	3391.1	3639.0	3654.0
25°	3005.4	3051.3	3265.9	3544.9	3640.2
27.5°	2820.5	2907.8	3127.0	3409.4	3566.7
30°	2698.9	2771.2	2990.4	3330.2	3442.7
32.5°	2546.2	2632.3	2828.6	3244.1	3379.6
35°	2374.0	2493.4	2682.8	3104.1	3319.9
37.5°	2192.6	2310.8	2534.7	2988.1	3151.2
40°	2017.0	2118.0	2405.0	2849.2	2960.6
42.5°	1836.7	1945.8	2256.9	2574.9	2227.0
45°	1649.6	1777.0	2083.5	1946.9	1792.0
47.5°	1428.1	1584.2	1891.8	1564.7	1697.8
50°	1283.4	1368.4	1655.4	1475.1	1625.5
52.5°	1091.7	1206.5	1329.3	1377.6	1536.0
55°	959.7	1013.6	1077.9	1277.7	1128.4
57.5°	838.0	886.2	960.8	901.1	601.5
60°	761.1	782.9	848.3	644.0	569.4
62.5°	673.9	695.7	743.9	601.5	546.4
65°	602.7	617.6	634.8	567.1	514.3
67.5°	526.9	534.9	553.3	523.5	483.3
70°	448.9	460.3	486.7	478.7	445.4
72.5°	380.0	390.3	413.3	424.7	393.8
75°	319.1	327.2	345.5	361.6	343.2
77.5°	253.7	261.7	285.8	303.1	295.0
80°	199.7	200.9	219.3	236.5	246.8
82.5°	140.1	142.3	156.1	174.5	195.2
85°	86.1	84.9	91.8	109.1	132.0
87.5°	33.3	32.1	37.9	45.9	67.7
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	19.38	20.86	19.74	21.17	21.49	19.06	20.54	19.42	20.85	21.16
	3H	20.94	22.26	21.32	22.59	22.95	20.67	22.00	21.05	22.33	22.69
	4H	21.54	22.78	21.94	23.13	23.51	21.42	22.66	21.82	23.01	23.39
	6H	22.00	23.14	22.41	23.51	23.90	22.09	23.24	22.50	23.60	24.00
	8H	22.15	23.24	22.58	23.63	24.03	22.37	23.46	22.80	23.85	24.25
	12H	22.25	23.29	22.68	23.67	24.10	22.59	23.63	23.02	24.02	24.44
4H	2H	19.97	21.21	20.37	21.56	21.94	19.72	20.96	20.12	21.31	21.69
	3H	21.76	22.79	22.17	23.19	23.59	21.60	22.63	22.01	23.03	23.43
	4H	22.49	23.41	22.92	23.83	24.27	22.50	23.42	22.93	23.84	24.28
	6H	23.07	23.88	23.53	24.32	24.78	23.31	24.11	23.76	24.55	25.01
	8H	23.27	24.02	23.73	24.47	24.93	23.63	24.39	24.10	24.83	25.30
	12H	23.41	24.08	23.89	24.56	25.03	23.91	24.58	24.39	25.06	25.53
8H	4H	22.81	23.56	23.27	24.01	24.48	22.82	23.57	23.28	24.02	24.49
	6H	23.52	24.14	24.02	24.64	25.11	23.77	24.39	24.27	24.88	25.36
	8H	23.79	24.35	24.30	24.86	25.35	24.19	24.75	24.70	25.26	25.75
	12H	24.00	24.50	24.51	24.99	25.55	24.55	25.05	25.06	25.54	26.11
12H	4H	22.85	23.52	23.33	24.00	24.47	22.85	23.52	23.33	24.00	24.47
	6H	23.59	24.15	24.11	24.66	25.15	23.82	24.38	24.34	24.89	25.38
	8H	23.92	24.42	24.43	24.91	25.47	24.30	24.80	24.81	25.29	25.86