

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: P893924

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

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893924
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2403-334-4)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4MB-8HL-FLT-UNV-L850
Description: 8000 Lumen 4FT MICROBAY LINEAR BAY with FLAT FROSTED LENS, 80CRI, 5000K CCT
Light Source: -
Ballast/Driver: -

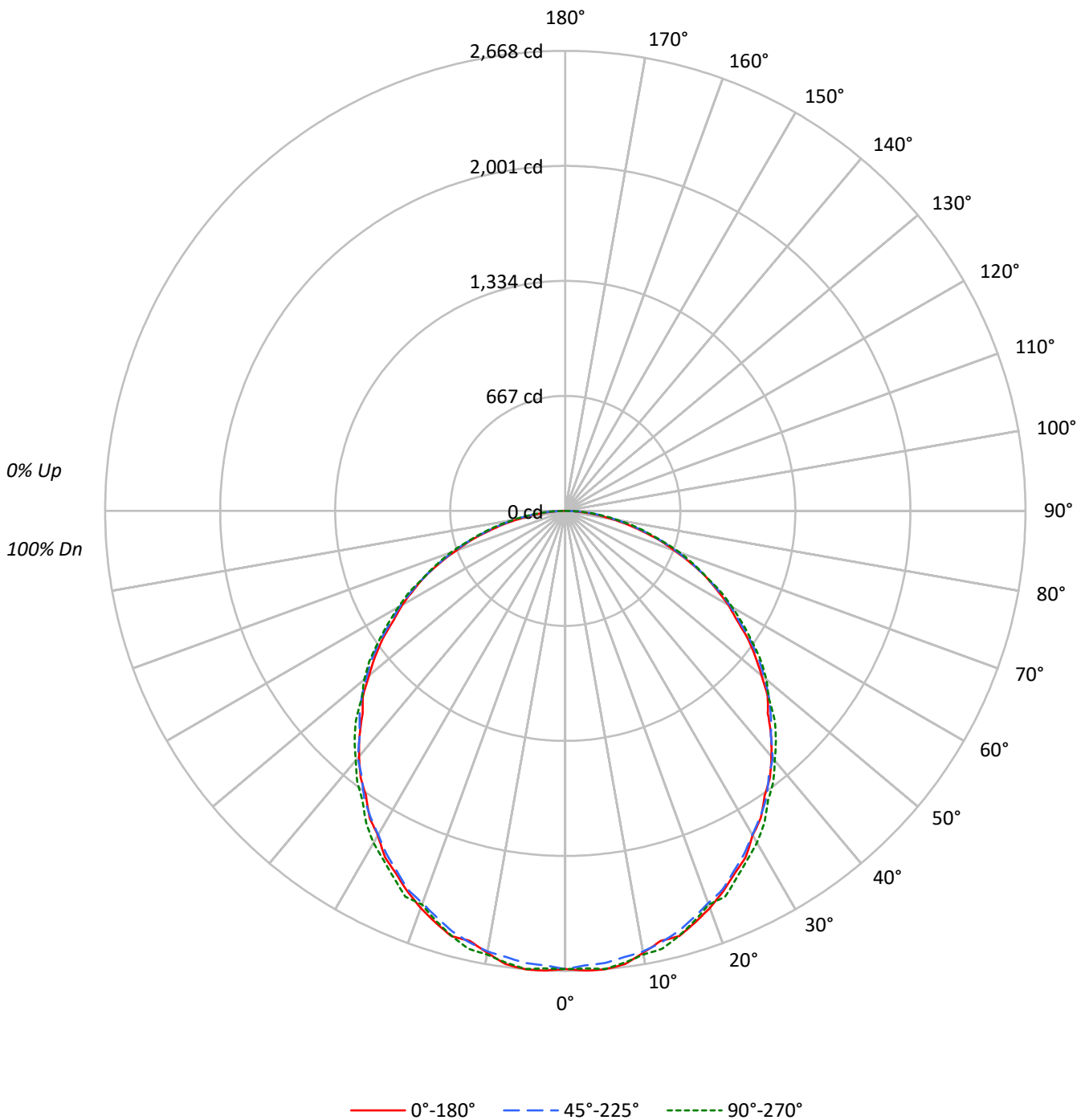
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7362.0 lumens
Efficiency: N/A
Efficacy: 127.2 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.24 / 1.34
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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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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	102	102	100
1	109	104	99	96	106	102	98	94	97	94	91	93	91	88	90	88	86	86	86	86	84
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	72	72	72	70
3	90	79	71	65	88	78	70	64	75	68	63	72	67	62	69	65	61	61	61	61	59
4	82	70	62	55	80	69	61	54	67	59	54	64	58	53	62	57	52	52	52	52	50
5	76	63	54	47	74	62	53	47	60	52	46	58	51	46	56	50	45	45	45	45	43
6	70	57	48	41	68	56	47	41	54	46	41	52	45	40	51	45	40	40	40	40	38
7	65	51	43	36	63	51	42	36	49	41	36	48	41	36	46	40	35	35	35	35	33
8	60	47	38	33	59	46	38	32	45	37	32	44	37	32	42	36	32	32	32	32	30
9	57	43	35	29	55	42	35	29	41	34	29	40	34	29	39	33	29	29	29	29	27
10	53	40	32	27	52	39	32	26	38	31	26	37	31	26	36	30	26	26	26	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	18905	18905	18905
5°	19059	18805	19042
10°	18798	18748	18873
15°	18802	18607	18785
20°	18554	18327	18397
25°	18219	18120	18444
30°	17849	17821	18264
35°	17505	17655	17804
40°	17269	17376	17546
45°	16711	16965	17277
50°	16440	16681	16846
55°	16030	16230	16401
60°	15532	15761	15908
65°	15071	15130	15130
70°	14015	14350	14708
75°	12904	13410	13693
80°	11378	12370	12792
85°	10213	11429	12278

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 17277 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	251.5	3.4
10°-20°	716.7	9.7
20°-30°	1075.0	14.6
30°-40°	1276.8	17.3
40°-50°	1307.2	17.8
50°-60°	1171.2	15.9
60°-70°	889.7	12.1
70°-80°	518.2	7.0
80°-90°	155.6	2.1
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°	2043.2	27.8
0°-40°	3320.0	45.1
0°-60°	5798.4	78.8
0°-90°	7362.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7362.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2657	2657	2657	2657	2657	
5°	2668	2658	2633	2649	2666	253
15°	2552	2570	2526	2536	2550	716
25°	2321	2341	2308	2338	2349	1071
35°	2015	2060	2033	2041	2050	1267
45°	1661	1702	1686	1700	1717	1292
55°	1292	1312	1308	1323	1322	1151
65°	895	895	899	910	899	879
75°	469	478	488	503	498	500
85°	125	127	140	149	150	140
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2657.0	2657.0	2657.0	2657.0	2657.0
2.5°	2668.5	2655.8	2638.6	2644.4	2655.8
5°	2668.5	2658.1	2632.9	2648.9	2666.2
7.5°	2651.2	2665.0	2609.9	2609.9	2642.1
10°	2601.9	2628.3	2595.0	2591.6	2612.2
12.5°	2554.8	2603.0	2564.0	2575.5	2600.7
15°	2552.5	2569.7	2526.1	2536.5	2550.2
17.5°	2503.2	2520.4	2473.3	2492.9	2492.9
20°	2450.4	2453.8	2420.5	2463.0	2429.7
22.5°	2389.6	2425.1	2379.2	2393.0	2421.7
25°	2320.7	2341.4	2308.1	2337.9	2349.4
27.5°	2264.5	2289.7	2243.8	2279.4	2282.8
30°	2172.6	2200.2	2169.2	2192.1	2223.1
32.5°	2110.7	2119.8	2103.8	2138.2	2147.4
35°	2015.4	2060.2	2032.6	2040.6	2049.8
37.5°	1948.8	1962.6	1938.5	1966.0	1981.0
40°	1859.3	1880.0	1870.8	1875.4	1889.1
42.5°	1766.3	1788.2	1764.0	1797.3	1807.7
45°	1660.8	1702.1	1686.0	1699.8	1717.0
47.5°	1591.9	1605.7	1601.1	1609.1	1597.6
50°	1485.2	1498.9	1507.0	1517.3	1521.9
52.5°	1389.9	1400.2	1415.1	1420.9	1431.2
55°	1292.3	1311.8	1308.4	1323.3	1322.2
57.5°	1178.7	1207.4	1198.2	1220.0	1220.0
60°	1091.5	1096.1	1107.6	1117.9	1117.9
62.5°	990.5	996.2	1002.0	1011.1	1018.0
65°	895.2	895.2	898.7	910.1	898.7
67.5°	785.0	780.5	791.9	805.7	804.6
70°	673.7	679.5	689.8	707.0	707.0
72.5°	578.5	578.5	589.9	599.1	598.0
75°	469.4	477.5	487.8	502.7	498.1
77.5°	371.9	377.6	394.8	408.6	409.7
80°	277.7	283.5	301.9	315.6	312.2
82.5°	194.0	202.0	219.2	229.5	228.4
85°	125.1	127.4	140.0	149.2	150.4
87.5°	57.4	62.0	71.2	74.6	74.6
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	21.74	23.38	22.11	23.69	24.01	21.85	23.48	22.21	23.80	24.11
	3H	23.52	25.00	23.90	25.33	25.69	23.68	25.17	24.06	25.49	25.85
	4H	24.19	25.58	24.58	25.93	26.31	24.38	25.78	24.78	26.13	26.50
	6H	24.66	25.96	25.07	26.32	26.71	24.93	26.23	25.34	26.59	26.98
	8H	24.81	26.05	25.23	26.44	26.84	25.12	26.36	25.55	26.75	27.15
	12H	24.92	26.10	25.35	26.48	26.91	25.26	26.45	25.69	26.83	27.26
4H	2H	22.39	23.78	22.78	24.13	24.51	22.47	23.87	22.87	24.21	24.59
	3H	24.39	25.56	24.80	25.96	26.36	24.53	25.71	24.94	26.10	26.50
	4H	25.18	26.24	25.61	26.66	27.09	25.37	26.43	25.80	26.85	27.28
	6H	25.78	26.71	26.23	27.15	27.61	26.06	26.99	26.51	27.43	27.88
	8H	25.98	26.85	26.44	27.29	27.75	26.31	27.18	26.76	27.62	28.08
	12H	26.13	26.91	26.61	27.39	27.86	26.50	27.29	26.98	27.76	28.23
8H	4H	25.52	26.39	25.98	26.83	27.29	25.68	26.55	26.14	27.00	27.46
	6H	26.24	26.97	26.73	27.45	27.93	26.51	27.23	27.00	27.72	28.19
	8H	26.51	27.16	27.02	27.67	28.15	26.84	27.49	27.35	28.00	28.48
	12H	26.74	27.32	27.25	27.81	28.37	27.13	27.71	27.63	28.20	28.76
12H	4H	25.56	26.34	26.04	26.82	27.29	25.72	26.50	26.20	26.98	27.44
	6H	26.31	26.96	26.82	27.47	27.96	26.57	27.22	27.07	27.72	28.21
	8H	26.65	27.22	27.15	27.71	28.27	26.96	27.54	27.47	28.03	28.59