

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: P893958

Luminaire Tested: 4MB-8HL-LVRF-UNV-L935

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893958
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-8HL-LVRF-UNV-L935
Description: 8000 Lumen 4FT MICROBAY LINEAR BAY with LOUVER WITH FROSTED INLAY, 90CRI, 3500K C
Light Source: -
Ballast/Driver: -

Summary

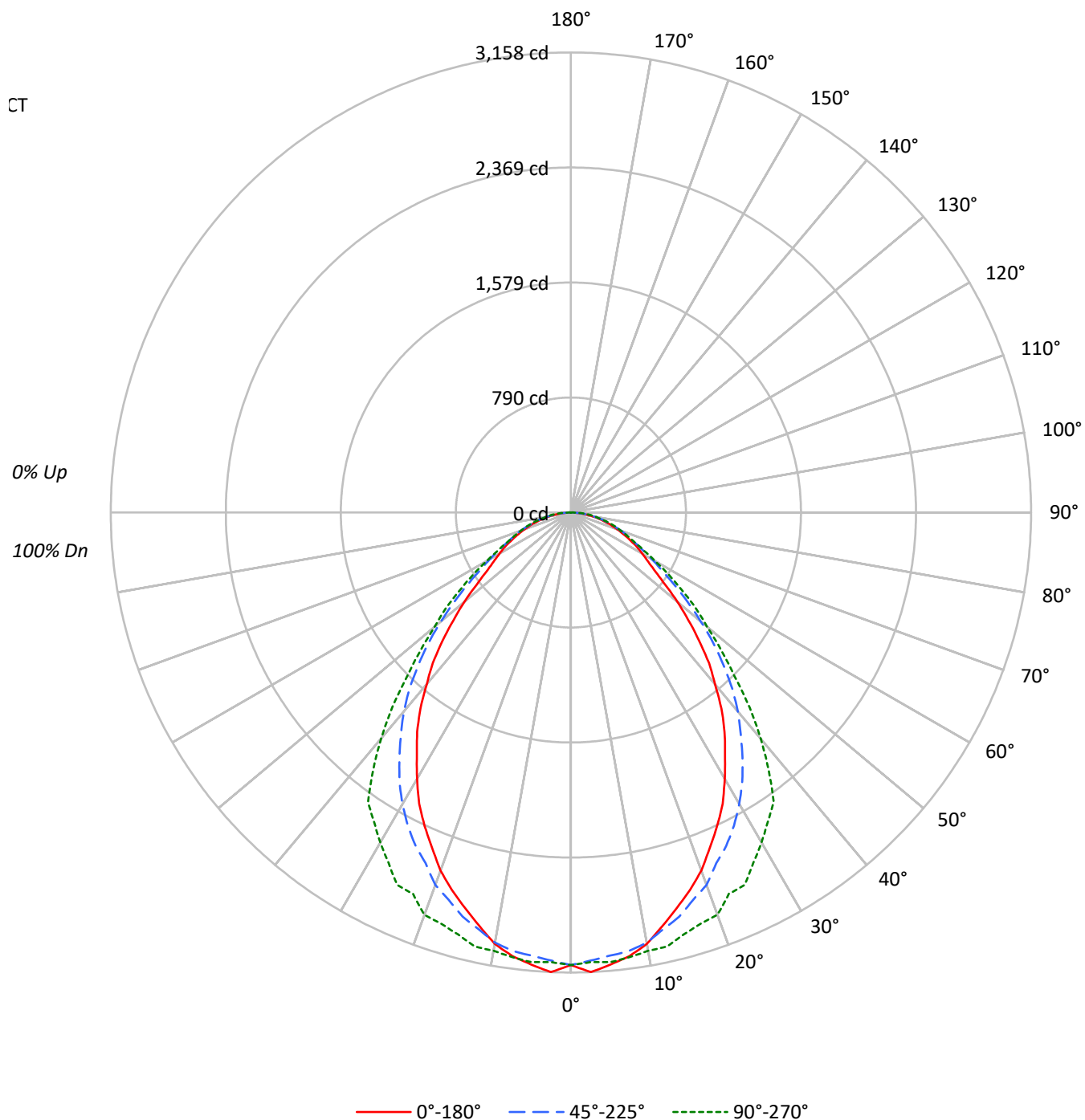
Lumens per Lamp: N/A
Luminaire Lumens: 6299.0 lumens
Efficiency: N/A
Efficacy: 108.8 lumens/watt
Spacing Criteria (0/90/45): 1.05 / 1.25 / 1.21
Luminous Opening: Rectangular (W 0.38' x L: 3.98' x H: 0')
CIE Type: Direct

Input Watts (W): 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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CATALOG NUMBER: 4MB-8HL-LVRF-UNV-L935

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
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	110	106	102	99	108	104	100	97	100	97	94		96	93	91		92
2	102	94	88	83	99	92	87	82	89	84	80		86	82	78		83
3	94	84	77	71	91	83	76	70	80	74	69		77	72	68		75
4	87	76	68	62	84	74	67	61	72	66	61		70	64	60		68
5	80	68	60	54	78	67	60	54	65	59	53		63	58	53		62
6	75	62	54	48	73	61	54	48	60	53	48		58	52	47		57
7	70	57	49	43	68	56	49	43	55	48	43		53	47	42		52
8	65	52	44	39	64	52	44	39	50	44	39		49	43	39		48
9	61	48	41	36	60	48	40	35	47	40	35		46	40	35		45
10	57	45	37	33	56	44	37	32	43	37	32		43	36	32		42

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	22103	22103	22103
5°	22248	21816	22129
10°	21727	21660	22076
15°	20701	21160	22077
20°	19802	20597	22257
25°	18643	19810	22143
30°	17343	18984	21495
35°	15972	17820	21079
40°	14285	16562	18822
45°	12522	14896	15962
50°	10568	12871	13509
55°	8768	10772	11520
60°	8061	9158	9503
65°	7552	8052	8115
70°	7033	7633	7574
75°	6562	7123	7378
80°	6126	6621	7076
85°	5159	5608	7813

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 15962 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	293.2	4.7
10°-20°	817.9	13.0
20°-30°	1178.0	18.7
30°-40°	1300.5	20.6
40°-50°	1115.9	17.7
50°-60°	760.2	12.1
60°-70°	478.2	7.6
70°-80°	272.3	4.3
80°-90°	82.8	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°	2289.1	36.3
0°-40°	3589.6	57.0
0°-60°	5465.7	86.8
0°-90°	6299.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6299.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3107	3107	3107	3107	3107	
5°	3115	3103	3055	3119	3098	294
15°	2810	2840	2873	3003	2997	791
25°	2375	2422	2523	2727	2821	1091
35°	1839	1910	2052	2275	2427	1144
45°	1244	1327	1480	1570	1586	959
55°	707	750	868	910	929	649
65°	449	456	478	502	482	446
75°	239	240	259	270	268	254
85°	63	65	69	82	96	73
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3106.6	3106.6	3106.6	3106.6	3106.6
2.5°	3157.7	3125.2	3078.8	3123.4	3089.0
5°	3115.0	3102.9	3054.6	3118.7	3098.3
7.5°	3071.4	3045.4	3037.0	3105.7	3078.8
10°	3007.3	2992.4	2998.0	3086.2	3055.6
12.5°	2906.0	2916.3	2929.3	3041.6	3050.9
15°	2810.4	2840.1	2872.6	3002.6	2997.1
17.5°	2716.6	2757.4	2788.1	2955.3	2959.9
20°	2615.3	2638.6	2720.3	2881.9	2939.5
22.5°	2490.0	2535.5	2606.1	2807.6	2833.6
25°	2374.8	2422.2	2523.4	2726.8	2820.6
27.5°	2254.1	2297.7	2423.1	2631.1	2711.0
30°	2111.0	2169.5	2310.7	2522.5	2616.3
32.5°	1968.0	2053.5	2189.0	2406.4	2515.0
35°	1838.9	1910.4	2051.6	2275.4	2426.8
37.5°	1695.9	1771.1	1914.1	2132.4	2229.0
40°	1538.0	1618.8	1783.2	1959.6	2026.5
42.5°	1402.4	1472.1	1637.4	1761.8	1814.8
45°	1244.5	1327.2	1480.4	1569.6	1586.3
47.5°	1092.2	1186.9	1324.4	1366.2	1398.7
50°	954.7	1029.0	1162.8	1188.8	1220.4
52.5°	814.5	893.5	1010.5	1036.5	1082.9
55°	706.8	750.4	868.4	910.2	928.7
57.5°	627.8	655.7	739.3	792.2	797.8
60°	566.5	580.5	643.6	683.6	667.8
62.5°	509.9	521.0	552.6	583.3	562.8
65°	448.6	456.0	478.3	501.5	482.0
67.5°	391.0	399.4	419.8	436.5	419.8
70°	338.1	344.6	366.9	374.3	364.1
72.5°	288.8	291.6	310.2	323.2	316.7
75°	238.7	240.5	259.1	270.3	268.4
77.5°	193.2	196.0	211.8	222.0	216.4
80°	149.5	151.4	161.6	176.5	172.7
82.5°	104.9	108.7	115.2	128.2	138.4
85°	63.2	65.0	68.7	81.7	95.7
87.5°	24.1	26.0	27.9	34.4	45.5
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	18.21	19.69	18.58	20.00	20.32	19.57	21.05	19.94	21.36	21.68
	3H	19.79	21.11	20.17	21.44	21.80	20.86	22.18	21.23	22.51	22.87
	4H	20.40	21.64	20.80	21.99	22.37	21.41	22.65	21.81	23.00	23.38
	6H	20.87	22.01	21.28	22.38	22.77	21.86	23.01	22.28	23.38	23.77
	8H	21.02	22.11	21.45	22.50	22.90	22.05	23.14	22.48	23.53	23.93
	12H	21.12	22.16	21.55	22.55	22.98	22.20	23.25	22.64	23.63	24.06
4H	2H	18.82	20.06	19.22	20.41	20.79	19.94	21.18	20.34	21.53	21.91
	3H	20.63	21.66	21.04	22.06	22.46	21.49	22.52	21.90	22.92	23.32
	4H	21.35	22.28	21.78	22.69	23.13	22.20	23.12	22.63	23.54	23.98
	6H	21.95	22.75	22.41	23.20	23.66	22.81	23.61	23.27	24.06	24.52
	8H	22.15	22.90	22.61	23.35	23.82	23.05	23.81	23.52	24.25	24.72
	12H	22.29	22.96	22.77	23.44	23.91	23.27	23.94	23.75	24.42	24.89
8H	4H	21.68	22.43	22.14	22.87	23.34	22.43	23.18	22.90	23.63	24.10
	6H	22.40	23.02	22.90	23.52	23.99	23.18	23.80	23.67	24.29	24.77
	8H	22.68	23.24	23.19	23.75	24.24	23.51	24.07	24.02	24.58	25.07
	12H	22.89	23.39	23.40	23.88	24.44	23.81	24.31	24.32	24.80	25.37
12H	4H	21.72	22.39	22.20	22.87	23.34	22.45	23.12	22.93	23.60	24.07
	6H	22.47	23.03	22.98	23.54	24.03	23.21	23.77	23.73	24.28	24.77
	8H	22.81	23.30	23.32	23.79	24.36	23.60	24.10	24.11	24.59	25.16