

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: P893922

Luminaire Tested: 4MB-8HL-FLT-UNV-L835

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893922
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-L835
Description: 8000 Lumen 4FT MICROBAY LINEAR BAY with FLAT FROSTED LENS, 80CRI, 3500K CCT
Light Source: -
Ballast/Driver: -

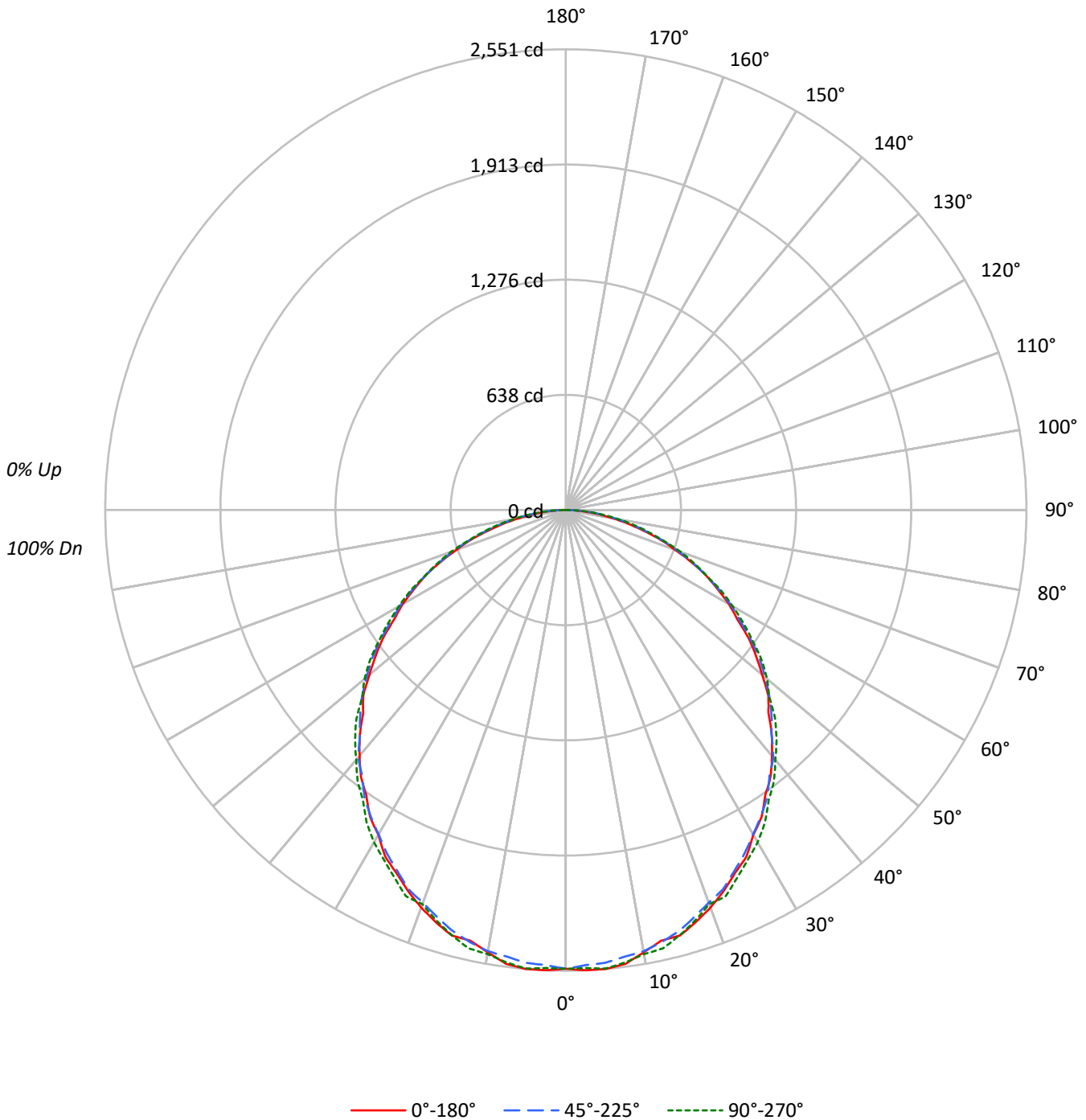
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7037.0 lumens
Efficiency: N/A
Efficacy: 121.5 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°	18070	18070	18070
5°	18218	17974	18202
10°	17968	17920	18039
15°	17972	17786	17956
20°	17734	17518	17585
25°	17414	17320	17630
30°	17062	17034	17458
35°	16732	16876	17018
40°	16507	16609	16772
45°	15973	16216	16514
50°	15714	15944	16102
55°	15323	15513	15677
60°	14846	15065	15205
65°	14406	14462	14462
70°	13397	13715	14059
75°	12335	12816	13088
80°	10878	11821	12227
85°	9764	10923	11731

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 16514 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	240.4	3.4
10°-20°	685.1	9.7
20°-30°	1027.6	14.6
30°-40°	1220.4	17.3
40°-50°	1249.5	17.8
50°-60°	1119.5	15.9
60°-70°	850.4	12.1
70°-80°	495.3	7.0
80°-90°	148.8	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°	1953.0	27.8
0°-40°	3173.4	45.1
0°-60°	5542.5	78.8
0°-90°	7037.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7037.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2540	2540	2540	2540	2540	
5°	2551	2541	2517	2532	2548	242
15°	2440	2456	2415	2424	2438	685
25°	2218	2238	2206	2235	2246	1024
35°	1926	1969	1943	1951	1959	1211
45°	1587	1627	1612	1625	1641	1235
55°	1235	1254	1251	1265	1264	1101
65°	856	856	859	870	859	840
75°	449	456	466	480	476	478
85°	120	122	134	143	144	134
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2539.7	2539.7	2539.7	2539.7	2539.7
2.5°	2550.7	2538.6	2522.1	2527.6	2538.6
5°	2550.7	2540.8	2516.6	2532.0	2548.5
7.5°	2534.2	2547.4	2494.7	2494.7	2525.4
10°	2487.0	2512.3	2480.4	2477.1	2496.9
12.5°	2442.0	2488.1	2450.8	2461.8	2485.9
15°	2439.8	2456.3	2414.6	2424.5	2437.7
17.5°	2392.7	2409.1	2364.2	2382.8	2382.8
20°	2342.2	2345.5	2313.7	2354.3	2322.5
22.5°	2284.1	2318.1	2274.2	2287.4	2314.8
25°	2218.2	2238.0	2206.2	2234.7	2245.7
27.5°	2164.5	2188.6	2144.7	2178.8	2182.0
30°	2076.7	2103.1	2073.4	2095.4	2125.0
32.5°	2017.5	2026.3	2010.9	2043.8	2052.6
35°	1926.4	1969.2	1942.9	1950.6	1959.3
37.5°	1862.8	1876.0	1852.9	1879.3	1893.5
40°	1777.2	1797.0	1788.2	1792.6	1805.8
42.5°	1688.4	1709.2	1686.2	1718.0	1727.9
45°	1587.4	1626.9	1611.6	1624.7	1641.2
47.5°	1521.6	1534.8	1530.4	1538.1	1527.1
50°	1419.6	1432.8	1440.4	1450.3	1454.7
52.5°	1328.5	1338.4	1352.7	1358.2	1368.0
55°	1235.3	1253.9	1250.6	1264.9	1263.8
57.5°	1126.7	1154.1	1145.3	1166.2	1166.2
60°	1043.3	1047.7	1058.7	1068.5	1068.5
62.5°	946.8	952.2	957.7	966.5	973.1
65°	855.7	855.7	859.0	870.0	859.0
67.5°	750.4	746.0	757.0	770.1	769.0
70°	644.0	649.5	659.3	675.8	675.8
72.5°	552.9	552.9	563.9	572.7	571.6
75°	448.7	456.4	466.2	480.5	476.1
77.5°	355.4	360.9	377.4	390.6	391.6
80°	265.5	271.0	288.5	301.7	298.4
82.5°	185.4	193.1	209.5	219.4	218.3
85°	119.6	121.8	133.8	142.6	143.7
87.5°	54.9	59.2	68.0	71.3	71.3
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	21.58	23.22	21.95	23.54	23.85	21.69	23.33	22.05	23.64	23.96
	3H	23.36	24.85	23.74	25.17	25.53	23.53	25.01	23.90	25.34	25.70
	4H	24.03	25.43	24.43	25.77	26.15	24.22	25.62	24.62	25.97	26.34
	6H	24.50	25.80	24.91	26.16	26.55	24.77	26.07	25.18	26.43	26.83
	8H	24.65	25.89	25.08	26.28	26.68	24.96	26.20	25.39	26.59	26.99
	12H	24.76	25.95	25.19	26.33	26.76	25.11	26.29	25.54	26.68	27.10
4H	2H	22.23	23.63	22.63	23.97	24.35	22.31	23.71	22.71	24.06	24.43
	3H	24.23	25.41	24.64	25.80	26.20	24.38	25.55	24.79	25.95	26.35
	4H	25.02	26.09	25.45	26.50	26.93	25.21	26.28	25.64	26.69	27.12
	6H	25.62	26.55	26.08	26.99	27.45	25.90	26.83	26.36	27.27	27.73
	8H	25.82	26.69	26.28	27.13	27.60	26.15	27.02	26.61	27.46	27.93
	12H	25.97	26.76	26.45	27.23	27.70	26.35	27.13	26.83	27.60	28.07
8H	4H	25.36	26.23	25.82	26.67	27.14	25.53	26.40	25.99	26.84	27.30
	6H	26.08	26.81	26.58	27.30	27.77	26.35	27.08	26.84	27.56	28.04
	8H	26.35	27.01	26.86	27.51	28.00	26.68	27.33	27.19	27.84	28.32
	12H	26.58	27.16	27.09	27.65	28.21	26.97	27.55	27.48	28.04	28.60
12H	4H	25.40	26.19	25.88	26.66	27.13	25.56	26.34	26.04	26.82	27.29
	6H	26.16	26.81	26.66	27.31	27.80	26.41	27.06	26.92	27.57	28.05
	8H	26.49	27.07	27.00	27.56	28.12	26.80	27.38	27.31	27.87	28.43