

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: P893175

Luminaire Tested: 4MB-10HL-FLT-UNV-L940

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893175
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-10HL-FLT-UNV-L940
Description: 10000 Lumen 4FT MICROBAY LINEAR BAY with FLAT FROSTED LENS, 90CRI, 4000K CCT
Light Source: -
Ballast/Driver: -

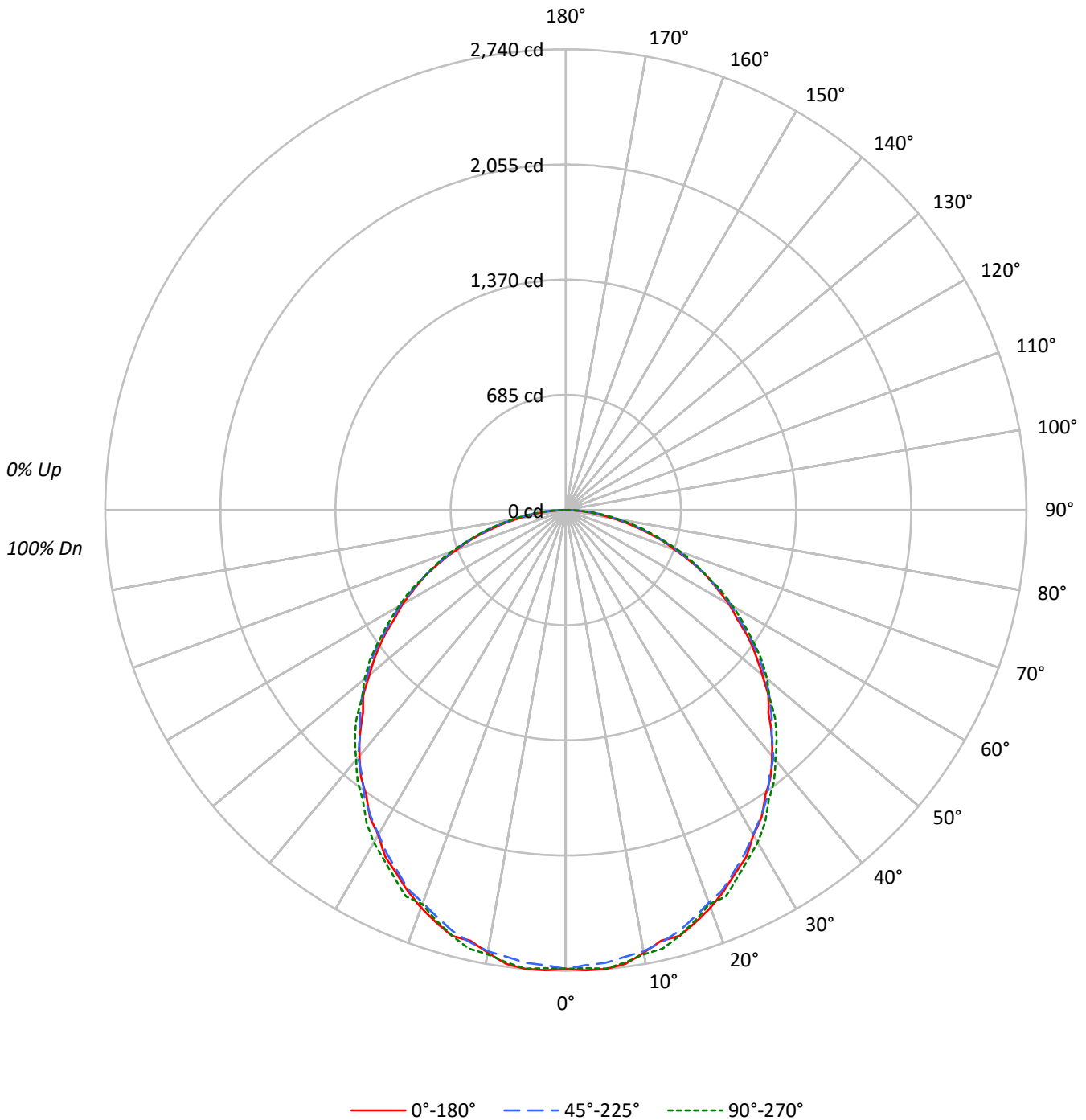
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7560.0 lumens
Efficiency: N/A
Efficacy: 100.1 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): 75.5
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: 0.997
Total Harmonic Distortion (THDi): 7.45
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°	19413	19413	19413
5°	19571	19310	19555
10°	19304	19253	19380
15°	19308	19108	19290
20°	19052	18820	18892
25°	18709	18607	18940
30°	18330	18300	18756
35°	17976	18130	18284
40°	17734	17843	18019
45°	17160	17421	17742
50°	16881	17129	17299
55°	16462	16667	16842
60°	15949	16184	16335
65°	15477	15536	15536
70°	14391	14735	15103
75°	13250	13770	14061
80°	11686	12702	13136
85°	10490	11739	12605

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 17742 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	258.2	3.4
10°-20°	736.0	9.7
20°-30°	1103.9	14.6
30°-40°	1311.1	17.3
40°-50°	1342.4	17.8
50°-60°	1202.7	15.9
60°-70°	913.6	12.1
70°-80°	532.1	7.0
80°-90°	159.8	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°	2098.2	27.8
0°-40°	3409.3	45.1
0°-60°	5954.4	78.8
0°-90°	7560.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7560.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2728	2728	2728	2728	2728	
5°	2740	2730	2704	2720	2738	259
15°	2621	2639	2594	2605	2619	736
25°	2383	2404	2370	2401	2413	1100
35°	2070	2116	2087	2096	2105	1301
45°	1705	1748	1731	1746	1763	1326
55°	1327	1347	1344	1359	1358	1182
65°	919	919	923	935	923	903
75°	482	490	501	516	512	513
85°	128	131	144	153	154	144
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2728.4	2728.4	2728.4	2728.4	2728.4
2.5°	2740.2	2727.3	2709.6	2715.5	2727.3
5°	2740.2	2729.6	2703.7	2720.2	2737.9
7.5°	2722.5	2736.7	2680.1	2680.1	2713.1
10°	2671.9	2699.0	2664.8	2661.3	2682.5
12.5°	2623.5	2673.0	2633.0	2644.8	2670.7
15°	2621.2	2638.9	2594.1	2604.7	2618.8
17.5°	2570.5	2588.2	2539.9	2559.9	2559.9
20°	2516.3	2519.8	2485.6	2529.3	2495.1
22.5°	2453.8	2490.4	2443.2	2457.4	2486.8
25°	2383.1	2404.3	2370.1	2400.8	2412.6
27.5°	2325.4	2351.3	2304.1	2340.7	2344.2
30°	2231.1	2259.4	2227.5	2251.1	2282.9
32.5°	2167.4	2176.9	2160.4	2195.7	2205.1
35°	2069.6	2115.6	2087.3	2095.5	2105.0
37.5°	2001.2	2015.4	1990.6	2018.9	2034.2
40°	1909.3	1930.5	1921.1	1925.8	1940.0
42.5°	1813.8	1836.2	1811.5	1845.7	1856.3
45°	1705.4	1747.8	1731.3	1745.5	1763.2
47.5°	1634.7	1648.8	1644.1	1652.4	1640.6
50°	1525.1	1539.2	1547.5	1558.1	1562.8
52.5°	1427.3	1437.9	1453.2	1459.1	1469.7
55°	1327.1	1347.1	1343.6	1358.9	1357.7
57.5°	1210.4	1239.9	1230.4	1252.8	1252.8
60°	1120.8	1125.6	1137.3	1147.9	1147.9
62.5°	1017.1	1023.0	1028.9	1038.3	1045.4
65°	919.3	919.3	922.8	934.6	922.8
67.5°	806.2	801.4	813.2	827.4	826.2
70°	691.8	697.7	708.3	726.0	726.0
72.5°	594.0	594.0	605.8	615.2	614.0
75°	482.0	490.3	500.9	516.2	511.5
77.5°	381.9	387.8	405.4	419.6	420.8
80°	285.2	291.1	310.0	324.1	320.6
82.5°	199.2	207.4	225.1	235.7	234.5
85°	128.5	130.8	143.8	153.2	154.4
87.5°	58.9	63.6	73.1	76.6	76.6
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	21.83	23.47	22.20	23.79	24.10	21.94	23.58	22.30	23.89	24.21
	3H	23.61	25.10	23.99	25.42	25.78	23.78	25.26	24.15	25.59	25.95
	4H	24.28	25.68	24.68	26.02	26.40	24.47	25.87	24.87	26.22	26.59
	6H	24.75	26.05	25.16	26.41	26.80	25.02	26.32	25.43	26.68	27.07
	8H	24.90	26.14	25.33	26.53	26.93	25.21	26.45	25.64	26.84	27.24
	12H	25.01	26.19	25.44	26.58	27.01	25.36	26.54	25.79	26.93	27.35
4H	2H	22.48	23.88	22.88	24.22	24.60	22.56	23.96	22.96	24.31	24.68
	3H	24.48	25.65	24.89	26.05	26.45	24.63	25.80	25.03	26.20	26.60
	4H	25.27	26.34	25.70	26.75	27.18	25.46	26.53	25.89	26.94	27.37
	6H	25.87	26.80	26.33	27.24	27.70	26.15	27.08	26.60	27.52	27.98
	8H	26.07	26.94	26.53	27.38	27.85	26.40	27.27	26.86	27.71	28.17
	12H	26.22	27.00	26.70	27.48	27.95	26.60	27.38	27.07	27.85	28.32
8H	4H	25.61	26.48	26.07	26.92	27.39	25.78	26.65	26.24	27.09	27.55
	6H	26.33	27.06	26.82	27.54	28.02	26.60	27.32	27.09	27.81	28.29
	8H	26.60	27.25	27.11	27.76	28.25	26.93	27.58	27.44	28.09	28.57
	12H	26.83	27.41	27.34	27.90	28.46	27.22	27.80	27.73	28.29	28.85
12H	4H	25.65	26.44	26.13	26.91	27.38	25.81	26.59	26.29	27.07	27.54
	6H	26.40	27.06	26.91	27.56	28.05	26.66	27.31	27.17	27.82	28.30
	8H	26.74	27.32	27.24	27.81	28.36	27.05	27.63	27.56	28.12	28.68