

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: P893925

Luminaire Tested: 4MB-8HL-FLT-UNV-L930

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893925
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-L930
Description: 8000 Lumen 4FT MICROBAY LINEAR BAY with FLAT FROSTED LENS, 90CRI, 3000K CCT
Light Source: -
Ballast/Driver: -

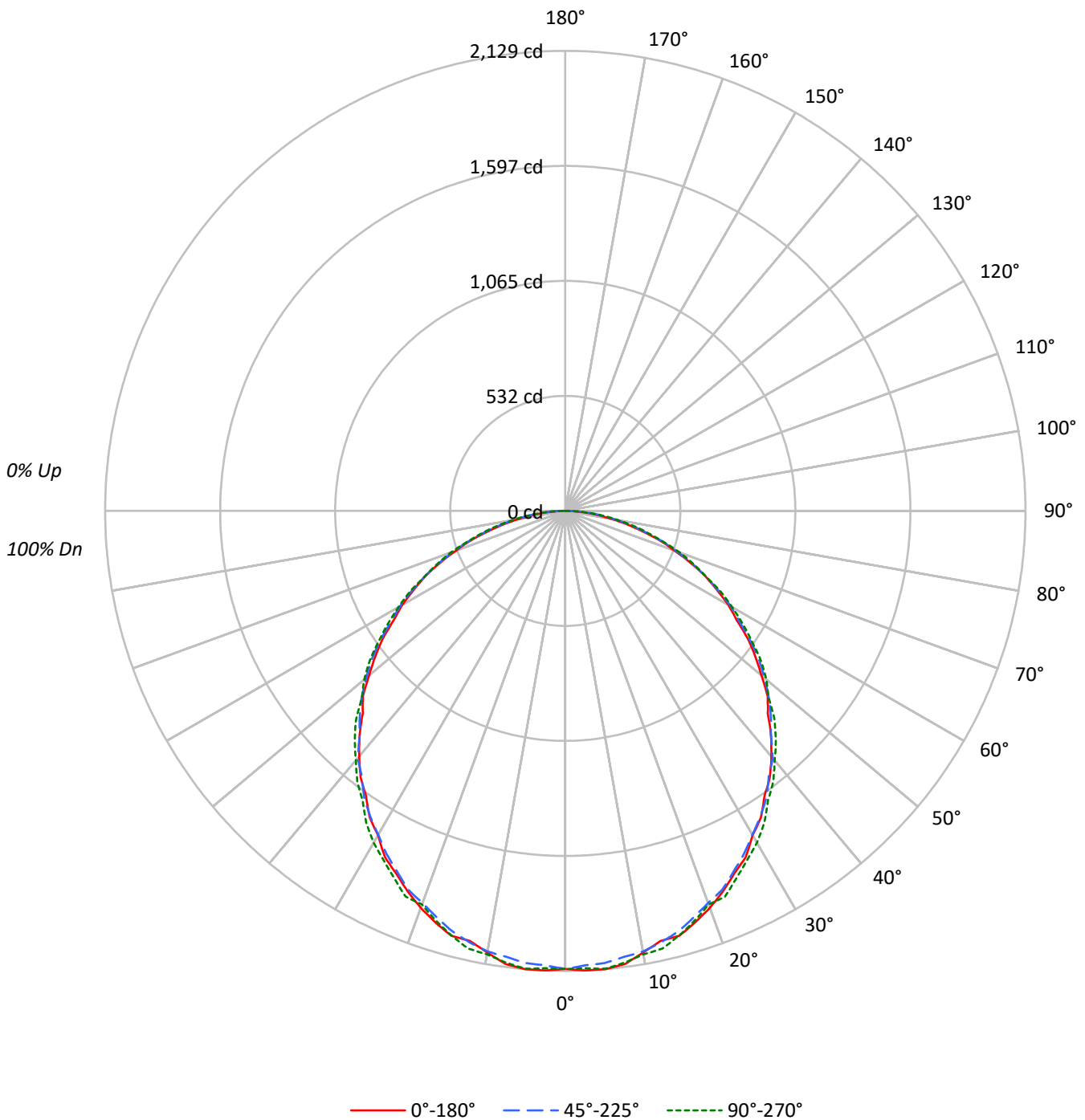
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5873.0 lumens
Efficiency: N/A
Efficacy: 101.4 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°	15081	15081	15081
5°	15204	15001	15191
10°	14996	14956	15056
15°	14999	14844	14985
20°	14801	14621	14676
25°	14534	14455	14713
30°	14239	14217	14571
35°	13965	14084	14203
40°	13777	13861	13998
45°	13331	13534	13782
50°	13115	13307	13439
55°	12789	12948	13084
60°	12390	12572	12690
65°	12024	12069	12069
70°	11182	11448	11733
75°	10295	10696	10925
80°	9080	9866	10202
85°	8147	9119	9788

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 13782 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	200.6	3.4
10°-20°	571.8	9.7
20°-30°	857.6	14.6
30°-40°	1018.5	17.3
40°-50°	1042.8	17.8
50°-60°	934.3	15.9
60°-70°	709.8	12.1
70°-80°	413.4	7.0
80°-90°	124.1	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°	1630.0	27.8
0°-40°	2648.5	45.1
0°-60°	4625.7	78.8
0°-90°	5873.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5873.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2120	2120	2120	2120	2120	
5°	2129	2120	2100	2113	2127	202
15°	2036	2050	2015	2024	2034	572
25°	1851	1868	1841	1865	1874	854
35°	1608	1644	1622	1628	1635	1011
45°	1325	1358	1345	1356	1370	1030
55°	1031	1046	1044	1056	1055	919
65°	714	714	717	726	717	701
75°	374	381	389	401	397	399
85°	100	102	112	119	120	112
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2119.6	2119.6	2119.6	2119.6	2119.6
2.5°	2128.7	2118.7	2104.9	2109.5	2118.7
5°	2128.7	2120.5	2100.4	2113.2	2126.9
7.5°	2115.0	2126.0	2082.1	2082.1	2107.7
10°	2075.6	2096.7	2070.1	2067.4	2083.9
12.5°	2038.1	2076.6	2045.4	2054.6	2074.7
15°	2036.3	2050.0	2015.2	2023.5	2034.4
17.5°	1996.9	2010.6	1973.1	1988.7	1988.7
20°	1954.8	1957.5	1931.0	1964.9	1938.3
22.5°	1906.3	1934.6	1898.0	1909.0	1931.9
25°	1851.3	1867.8	1841.3	1865.1	1874.2
27.5°	1806.5	1826.6	1790.0	1818.4	1821.1
30°	1733.2	1755.2	1730.5	1748.8	1773.5
32.5°	1683.8	1691.1	1678.3	1705.7	1713.1
35°	1607.8	1643.5	1621.5	1627.9	1635.2
37.5°	1554.7	1565.7	1546.4	1568.4	1580.3
40°	1483.3	1499.7	1492.4	1496.1	1507.1
42.5°	1409.1	1426.5	1407.3	1433.8	1442.1
45°	1324.9	1357.8	1345.0	1356.0	1369.7
47.5°	1269.9	1280.9	1277.2	1283.7	1274.5
50°	1184.8	1195.8	1202.2	1210.4	1214.1
52.5°	1108.8	1117.0	1128.9	1133.5	1141.7
55°	1031.0	1046.5	1043.8	1055.7	1054.8
57.5°	940.3	963.2	955.9	973.3	973.3
60°	870.7	874.4	883.5	891.8	891.8
62.5°	790.2	794.7	799.3	806.6	812.1
65°	714.2	714.2	716.9	726.1	716.9
67.5°	626.3	622.6	631.8	642.7	641.8
70°	537.5	542.0	550.3	564.0	564.0
72.5°	461.5	461.5	470.6	477.9	477.0
75°	374.5	380.9	389.1	401.0	397.4
77.5°	296.7	301.2	315.0	325.9	326.9
80°	221.6	226.2	240.8	251.8	249.0
82.5°	154.7	161.1	174.9	183.1	182.2
85°	99.8	101.6	111.7	119.0	119.9
87.5°	45.8	49.4	56.8	59.5	59.5
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	20.96	22.59	21.32	22.91	23.22	21.06	22.70	21.43	23.01	23.33
	3H	22.74	24.22	23.11	24.55	24.91	22.90	24.38	23.28	24.71	25.07
	4H	23.40	24.80	23.80	25.15	25.52	23.60	24.99	23.99	25.34	25.72
	6H	23.87	25.17	24.29	25.54	25.93	24.15	25.44	24.56	25.81	26.20
	8H	24.02	25.26	24.45	25.65	26.05	24.34	25.57	24.76	25.96	26.36
	12H	24.13	25.32	24.56	25.70	26.13	24.48	25.67	24.91	26.05	26.48
4H	2H	21.60	23.00	22.00	23.35	23.72	21.68	23.08	22.08	23.43	23.80
	3H	23.60	24.78	24.01	25.17	25.57	23.75	24.92	24.16	25.32	25.72
	4H	24.40	25.46	24.83	25.87	26.31	24.59	25.65	25.02	26.06	26.50
	6H	25.00	25.92	25.45	26.37	26.82	25.27	26.20	25.73	26.64	27.10
	8H	25.19	26.06	25.65	26.50	26.97	25.52	26.39	25.98	26.83	27.30
	12H	25.34	26.13	25.82	26.60	27.07	25.72	26.50	26.20	26.98	27.44
8H	4H	24.73	25.60	25.19	26.04	26.51	24.90	25.77	25.36	26.21	26.68
	6H	25.46	26.18	25.95	26.67	27.14	25.72	26.45	26.21	26.93	27.41
	8H	25.73	26.38	26.24	26.88	27.37	26.05	26.71	26.56	27.21	27.70
	12H	25.95	26.53	26.46	27.02	27.58	26.34	26.92	26.85	27.41	27.97
12H	4H	24.77	25.56	25.25	26.03	26.50	24.93	25.72	25.41	26.19	26.66
	6H	25.53	26.18	26.04	26.69	27.17	25.78	26.43	26.29	26.94	27.42
	8H	25.86	26.44	26.37	26.93	27.49	26.18	26.75	26.68	27.24	27.80