

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: P893926

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

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893926
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-L935
Description: 8000 Lumen 4FT MICROBAY LINEAR BAY with FLAT FROSTED LENS, 90CRI, 3500K CCT
Light Source: -
Ballast/Driver: -

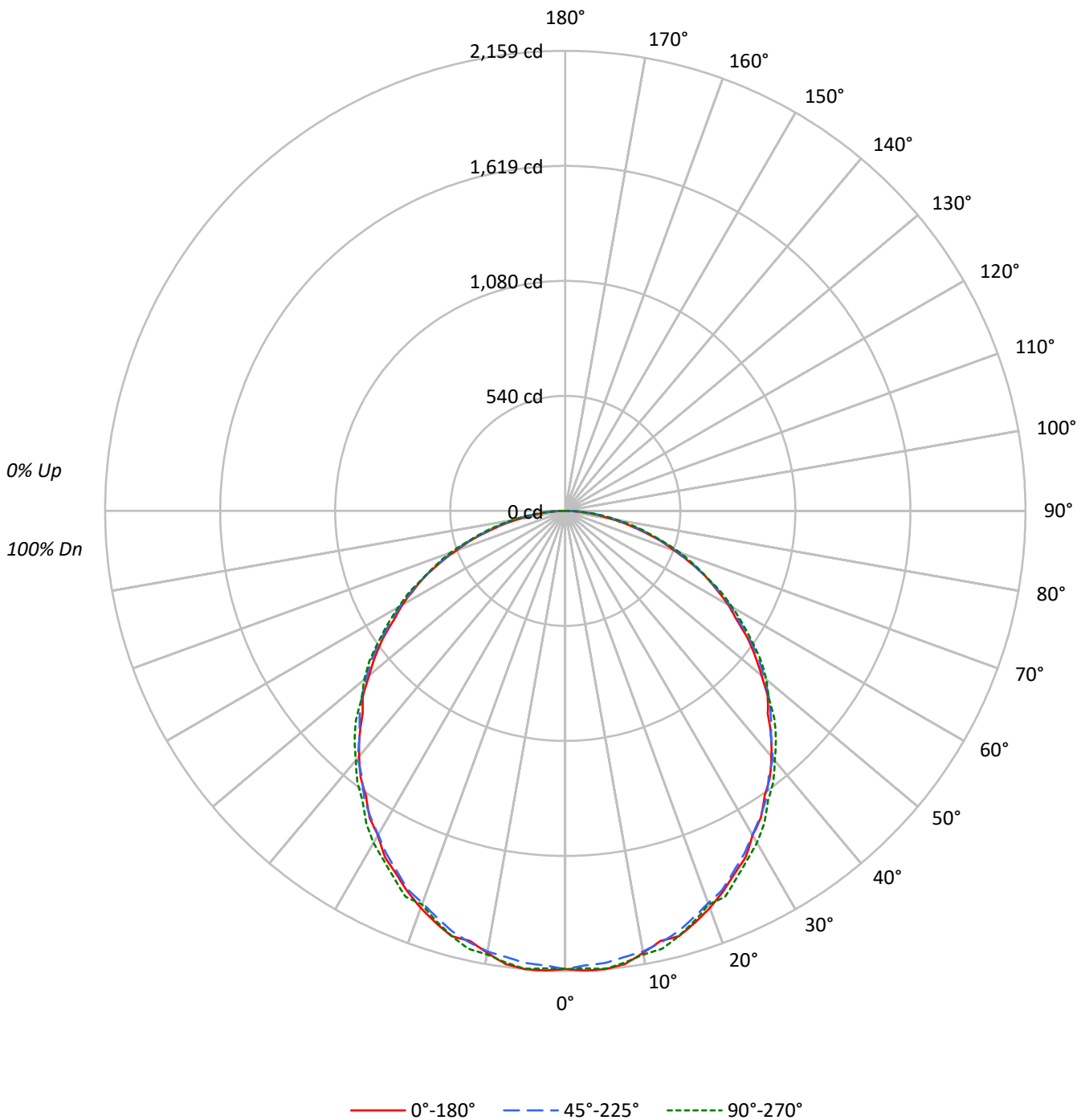
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5957.0 lumens
Efficiency: N/A
Efficacy: 102.9 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°	15297	15297	15297
5°	15421	15216	15408
10°	15210	15171	15271
15°	15214	15056	15200
20°	15012	14830	14886
25°	14742	14662	14924
30°	14443	14420	14779
35°	14165	14286	14406
40°	13974	14060	14198
45°	13521	13727	13979
50°	13302	13498	13630
55°	12972	13133	13270
60°	12568	12753	12871
65°	12196	12243	12243
70°	11340	11610	11901
75°	10441	10850	11079
80°	9207	10006	10350
85°	8262	9249	9935

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 13979 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	203.5	3.4
10°-20°	579.9	9.7
20°-30°	869.9	14.6
30°-40°	1033.1	17.3
40°-50°	1057.8	17.8
50°-60°	947.7	15.9
60°-70°	719.9	12.1
70°-80°	419.3	7.0
80°-90°	125.9	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°	1653.3	27.8
0°-40°	2686.4	45.1
0°-60°	4691.8	78.8
0°-90°	5957.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5957.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2150	2150	2150	2150	2150	
5°	2159	2151	2130	2143	2157	204
15°	2065	2079	2044	2052	2064	580
25°	1878	1894	1868	1892	1901	867
35°	1631	1667	1645	1651	1659	1025
45°	1344	1377	1364	1375	1389	1045
55°	1046	1062	1059	1071	1070	932
65°	724	724	727	736	727	711
75°	380	386	395	407	403	404
85°	101	103	113	121	122	113
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2149.9	2149.9	2149.9	2149.9	2149.9
2.5°	2159.2	2149.0	2135.0	2139.7	2149.0
5°	2159.2	2150.8	2130.4	2143.4	2157.3
7.5°	2145.3	2156.4	2111.8	2111.8	2137.8
10°	2105.3	2126.7	2099.8	2097.0	2113.7
12.5°	2067.3	2106.3	2074.7	2084.0	2104.4
15°	2065.4	2079.3	2044.0	2052.4	2063.5
17.5°	2025.5	2039.4	2001.3	2017.1	2017.1
20°	1982.7	1985.5	1958.6	1993.0	1966.0
22.5°	1933.5	1962.3	1925.2	1936.3	1959.5
25°	1877.8	1894.5	1867.6	1891.7	1901.0
27.5°	1832.3	1852.7	1815.6	1844.4	1847.2
30°	1758.0	1780.3	1755.2	1773.8	1798.9
32.5°	1707.9	1715.3	1702.3	1730.1	1737.6
35°	1630.8	1667.0	1644.7	1651.2	1658.6
37.5°	1576.9	1588.1	1568.5	1590.8	1602.9
40°	1504.5	1521.2	1513.8	1517.5	1528.6
42.5°	1429.2	1446.9	1427.4	1454.3	1462.7
45°	1343.8	1377.2	1364.2	1375.4	1389.3
47.5°	1288.1	1299.2	1295.5	1302.0	1292.7
50°	1201.7	1212.9	1219.4	1227.7	1231.4
52.5°	1124.6	1133.0	1145.1	1149.7	1158.1
55°	1045.7	1061.5	1058.7	1070.8	1069.8
57.5°	953.8	977.0	969.5	987.2	987.2
60°	883.2	886.9	896.2	904.5	904.5
62.5°	801.5	806.1	810.7	818.2	823.7
65°	724.4	724.4	727.2	736.4	727.2
67.5°	635.2	631.5	640.8	651.9	651.0
70°	545.1	549.8	558.1	572.1	572.1
72.5°	468.1	468.1	477.3	484.8	483.8
75°	379.8	386.3	394.7	406.8	403.0
77.5°	300.9	305.5	319.5	330.6	331.5
80°	224.7	229.4	244.2	255.4	252.6
82.5°	156.9	163.4	177.4	185.7	184.8
85°	101.2	103.1	113.3	120.7	121.7
87.5°	46.4	50.1	57.6	60.4	60.4
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	21.01	22.64	21.37	22.96	23.27	21.11	22.75	21.48	23.06	23.38
	3H	22.79	24.27	23.16	24.59	24.95	22.95	24.43	23.33	24.76	25.12
	4H	23.45	24.85	23.85	25.19	25.57	23.65	25.04	24.04	25.39	25.77
	6H	23.92	25.22	24.33	25.58	25.97	24.20	25.49	24.61	25.86	26.25
	8H	24.07	25.31	24.50	25.70	26.10	24.39	25.62	24.81	26.01	26.41
	12H	24.18	25.37	24.61	25.75	26.18	24.53	25.72	24.96	26.10	26.53
4H	2H	21.65	23.05	22.05	23.40	23.77	21.73	23.13	22.13	23.48	23.85
	3H	23.65	24.83	24.06	25.22	25.62	23.80	24.97	24.21	25.37	25.77
	4H	24.44	25.51	24.88	25.92	26.36	24.63	25.70	25.07	26.11	26.55
	6H	25.04	25.97	25.50	26.41	26.87	25.32	26.25	25.78	26.69	27.15
	8H	25.24	26.11	25.70	26.55	27.02	25.57	26.44	26.03	26.88	27.35
	12H	25.39	26.18	25.87	26.65	27.12	25.77	26.55	26.25	27.03	27.49
8H	4H	24.78	25.65	25.24	26.09	26.56	24.95	25.82	25.41	26.26	26.73
	6H	25.50	26.23	26.00	26.72	27.19	25.77	26.50	26.26	26.98	27.46
	8H	25.78	26.43	26.28	26.93	27.42	26.10	26.75	26.61	27.26	27.75
	12H	26.00	26.58	26.51	27.07	27.63	26.39	26.97	26.90	27.46	28.02
12H	4H	24.82	25.61	25.30	26.08	26.55	24.98	25.76	25.46	26.24	26.71
	6H	25.58	26.23	26.08	26.73	27.22	25.83	26.48	26.34	26.99	27.47
	8H	25.91	26.49	26.42	26.98	27.54	26.23	26.80	26.73	27.29	27.85