

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: P893826

Luminaire Tested: 4MB-7HL-FLT-UNV-L835

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893826
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-7HL-FLT-UNV-L835
Description: 7000 Lumen 4FT MICROBAY LINEAR BAY with FLAT FROSTED LENS, 80CRI, 3500K CCT
Light Source: -
Ballast/Driver: -

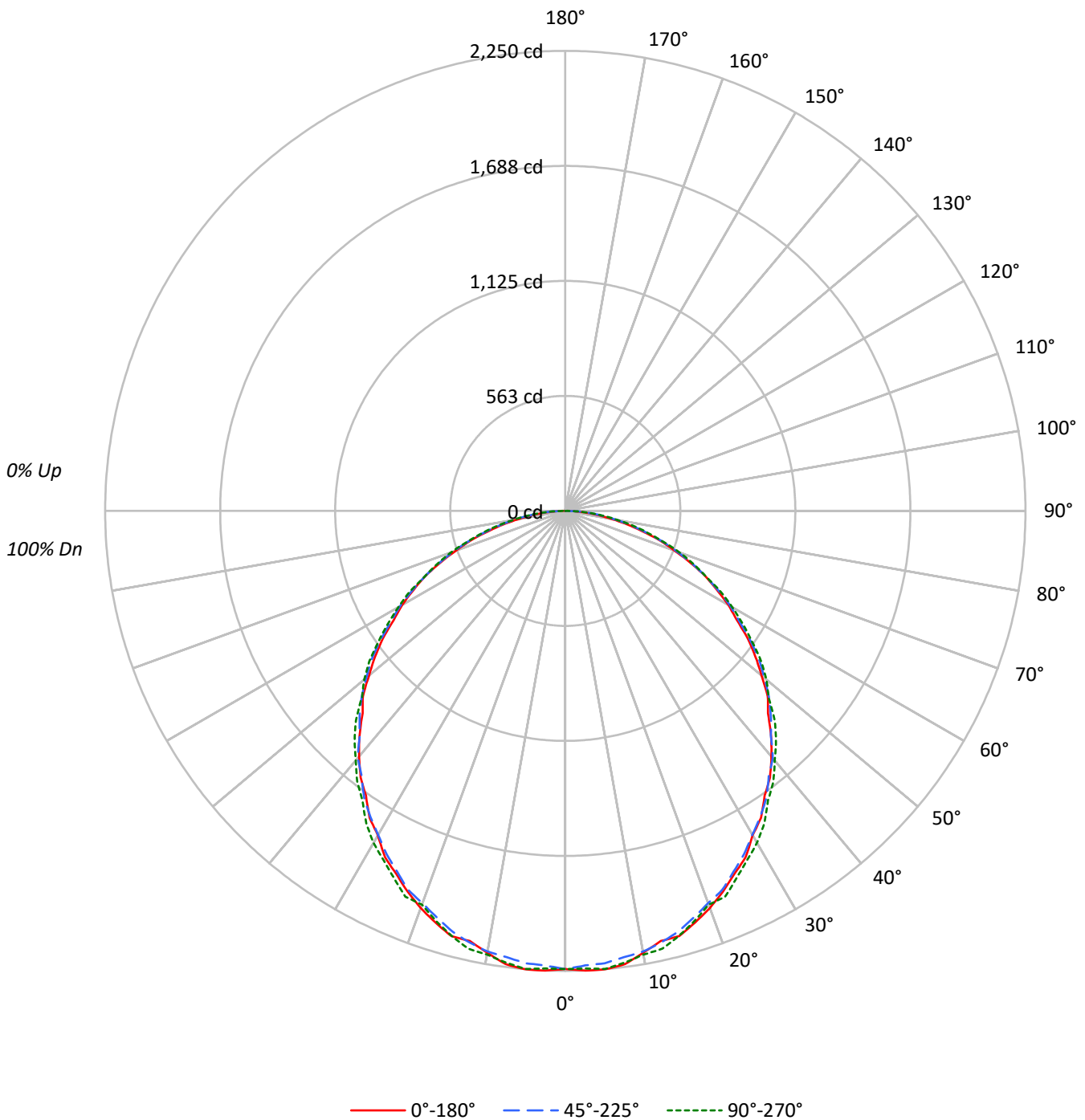
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6209.0 lumens
Efficiency: N/A
Efficacy: 119.9 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): 51.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: 0.99
Total Harmonic Distortion (THDi): 4
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°	15944	15944	15944
5°	16073	15859	16060
10°	15854	15812	15917
15°	15857	15693	15843
20°	15648	15457	15516
25°	15365	15282	15555
30°	15054	15031	15404
35°	14764	14890	15016
40°	14564	14655	14799
45°	14094	14307	14571
50°	13865	14068	14207
55°	13520	13688	13832
60°	13099	13292	13416
65°	12711	12760	12760
70°	11820	12103	12405
75°	10883	11309	11549
80°	9596	10432	10788
85°	8613	9641	10351

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 14571 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	212.1	3.4
10°-20°	604.5	9.7
20°-30°	906.7	14.6
30°-40°	1076.8	17.3
40°-50°	1102.5	17.8
50°-60°	987.8	15.9
60°-70°	750.4	12.1
70°-80°	437.1	7.0
80°-90°	131.3	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°	1723.2	27.8
0°-40°	2800.0	45.1
0°-60°	4890.3	78.8
0°-90°	6209.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6209.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2241	2241	2241	2241	2241	
5°	2250	2242	2220	2234	2249	213
15°	2153	2167	2130	2139	2151	604
25°	1957	1975	1947	1972	1981	903
35°	1700	1738	1714	1721	1729	1068
45°	1401	1436	1422	1434	1448	1089
55°	1090	1106	1104	1116	1115	971
65°	755	755	758	768	758	741
75°	396	403	411	424	420	421
85°	106	107	118	126	127	118
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2240.9	2240.9	2240.9	2240.9	2240.9
2.5°	2250.5	2239.9	2225.4	2230.2	2239.9
5°	2250.5	2241.8	2220.5	2234.1	2248.6
7.5°	2236.0	2247.6	2201.2	2201.2	2228.3
10°	2194.4	2216.7	2188.6	2185.7	2203.1
12.5°	2154.7	2195.4	2162.4	2172.1	2193.4
15°	2152.8	2167.3	2130.5	2139.2	2150.8
17.5°	2111.1	2125.7	2086.0	2102.4	2102.4
20°	2066.6	2069.5	2041.5	2077.3	2049.2
22.5°	2015.3	2045.3	2006.6	2018.2	2042.4
25°	1957.2	1974.7	1946.6	1971.8	1981.4
27.5°	1909.8	1931.1	1892.4	1922.4	1925.3
30°	1832.4	1855.6	1829.5	1848.8	1875.0
32.5°	1780.1	1787.8	1774.3	1803.3	1811.1
35°	1699.8	1737.5	1714.3	1721.1	1728.8
37.5°	1643.6	1655.2	1634.9	1658.1	1670.7
40°	1568.1	1585.5	1577.8	1581.7	1593.3
42.5°	1489.7	1508.1	1487.8	1515.8	1524.6
45°	1400.7	1435.5	1421.9	1433.6	1448.1
47.5°	1342.6	1354.2	1350.3	1357.1	1347.4
50°	1252.6	1264.2	1270.9	1279.7	1283.5
52.5°	1172.2	1180.9	1193.5	1198.3	1207.1
55°	1089.9	1106.4	1103.5	1116.1	1115.1
57.5°	994.1	1018.3	1010.6	1029.0	1029.0
60°	920.5	924.4	934.1	942.8	942.8
62.5°	835.4	840.2	845.0	852.8	858.6
65°	755.0	755.0	757.9	767.6	757.9
67.5°	662.1	658.2	667.9	679.5	678.5
70°	568.2	573.0	581.8	596.3	596.3
72.5°	487.9	487.9	497.5	505.3	504.3
75°	395.9	402.7	411.4	424.0	420.1
77.5°	313.6	318.5	333.0	344.6	345.6
80°	234.2	239.1	254.6	266.2	263.3
82.5°	163.6	170.4	184.9	193.6	192.6
85°	105.5	107.4	118.1	125.8	126.8
87.5°	48.4	52.3	60.0	62.9	62.9
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	21.15	22.79	21.51	23.10	23.42	21.26	22.89	21.62	23.21	23.52
	3H	22.93	24.41	23.31	24.74	25.10	23.09	24.58	23.47	24.90	25.26
	4H	23.59	24.99	23.99	25.34	25.71	23.79	25.19	24.19	25.53	25.91
	6H	24.07	25.36	24.48	25.73	26.12	24.34	25.64	24.75	26.00	26.39
	8H	24.22	25.46	24.64	25.84	26.24	24.53	25.77	24.95	26.16	26.56
	12H	24.32	25.51	24.75	25.89	26.32	24.67	25.86	25.10	26.24	26.67
4H	2H	21.79	23.19	22.19	23.54	23.91	21.88	23.27	22.28	23.62	24.00
	3H	23.80	24.97	24.21	25.37	25.77	23.94	25.11	24.35	25.51	25.91
	4H	24.59	25.65	25.02	26.06	26.50	24.78	25.84	25.21	26.25	26.69
	6H	25.19	26.12	25.64	26.56	27.01	25.47	26.40	25.92	26.84	27.29
	8H	25.39	26.26	25.84	26.70	27.16	25.71	26.58	26.17	27.03	27.49
	12H	25.54	26.32	26.02	26.80	27.26	25.91	26.69	26.39	27.17	27.64
8H	4H	24.92	25.79	25.38	26.24	26.70	25.09	25.96	25.55	26.40	26.87
	6H	25.65	26.37	26.14	26.86	27.34	25.92	26.64	26.41	27.13	27.60
	8H	25.92	26.57	26.43	27.08	27.56	26.25	26.90	26.76	27.40	27.89
	12H	26.15	26.72	26.65	27.21	27.77	26.54	27.11	27.04	27.60	28.16
12H	4H	24.97	25.75	25.45	26.23	26.69	25.13	25.91	25.61	26.38	26.85
	6H	25.72	26.37	26.23	26.88	27.36	25.97	26.63	26.48	27.13	27.62
	8H	26.05	26.63	26.56	27.12	27.68	26.37	26.95	26.88	27.44	28.00