

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: P893635

Luminaire Tested: 4MB-5SL-LVR-UNV-L840

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893635
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2407-175-8)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4MB-5SL-LVR-UNV-L840
Description: 5000 Lumen 4FT MICROBAY LINEAR BAY with LOUVER, 80CRI, 4000K CCT
Light Source: -
Ballast/Driver: -

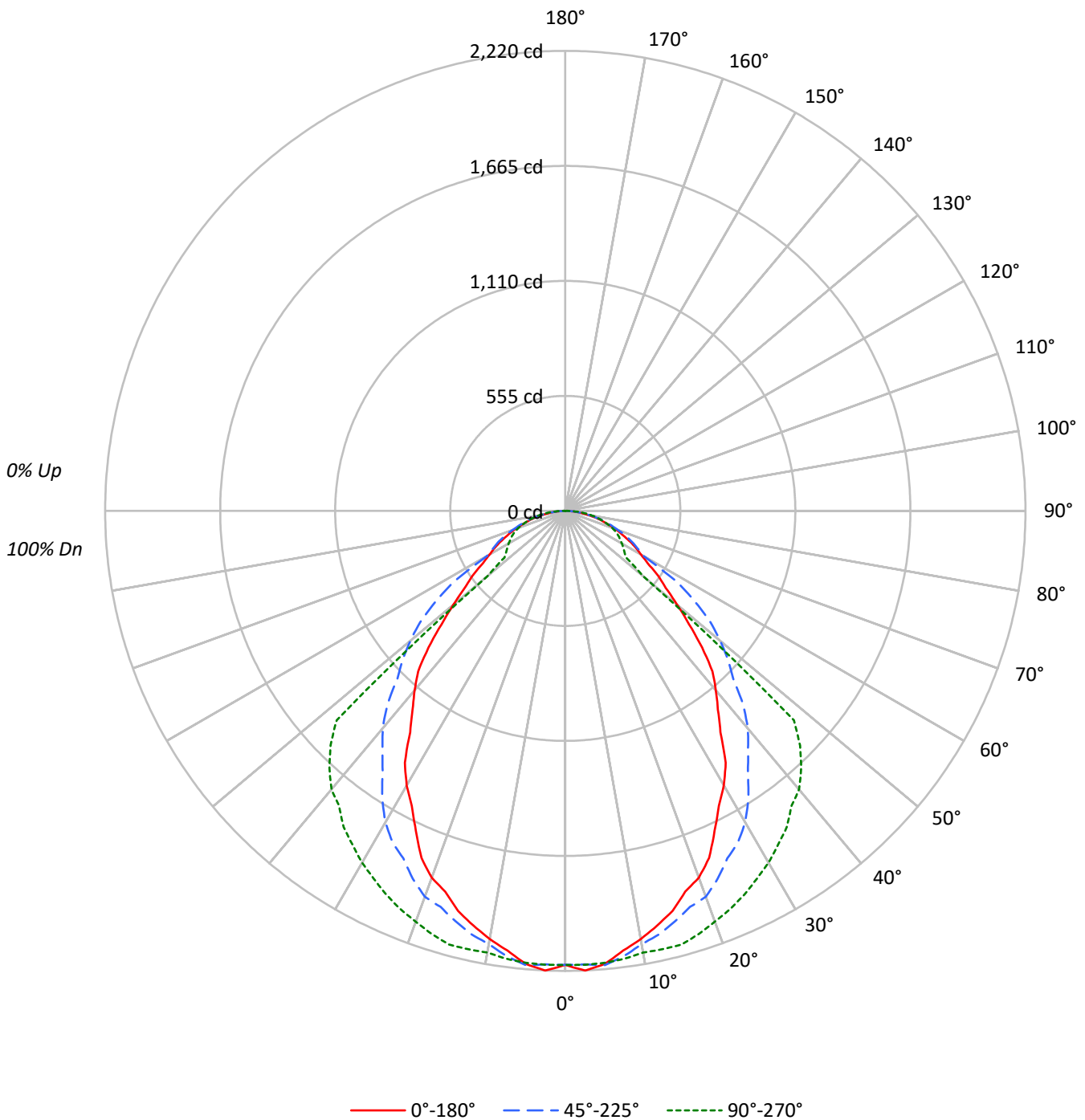
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4676.0 lumens
Efficiency: N/A
Efficacy: 133.6 lumens/watt
Spacing Criteria (0/90/45): 1.06 / 1.32 / 1.27
Luminous Opening: Rectangular (W 0.38' x L: 3.98' x H: 0')
CIE Type: Direct

Input Watts (W): 35
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 9.55
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				
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	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	89	89	89	87
2	102	94	88	83	99	92	87	82	89	84	80	86	82	79	83	80	77	77	77	77	75
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	67	67	67	65
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	59	59	59	57
5	80	68	60	54	78	67	60	54	65	59	53	63	58	53	62	57	52	52	52	52	50
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	56	51	47	47	47	47	45
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	42	42	42	40
8	65	52	44	39	63	52	44	39	50	43	39	49	43	38	48	42	38	38	38	38	36
9	61	48	40	35	59	48	40	35	47	40	35	45	39	35	44	39	35	35	35	35	33
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	41	36	32	32	32	32	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15590	15590	15590
5°	15674	15713	15634
10°	15160	15337	15637
15°	14722	15094	15959
20°	14260	15006	15972
25°	13380	14523	16043
30°	12568	14260	16108
35°	11334	13336	16184
40°	10498	12723	16298
45°	9391	11530	16113
50°	7791	10801	5413
55°	6788	9481	4332
60°	6004	6179	4491
65°	5709	6010	4766
70°	5355	5681	5028
75°	4984	5352	5168
80°	4540	5044	5413
85°	4016	4294	5845

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 16113 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	207.8	4.4
10°-20°	584.7	12.5
20°-30°	860.1	18.4
30°-40°	983.6	21.0
40°-50°	931.3	19.9
50°-60°	513.1	11.0
60°-70°	329.5	7.0
70°-80°	203.3	4.3
80°-90°	62.6	1.3
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°	1652.6	35.3
0°-40°	2636.2	56.4
0°-60°	4080.6	87.3
0°-90°	4676.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4676.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2191	2191	2191	2191	2191	
5°	2194	2212	2200	2200	2189	206
15°	1999	2023	2049	2156	2167	561
25°	1704	1780	1850	1971	2044	785
35°	1305	1417	1535	1758	1863	825
45°	933	1022	1146	1470	1601	714
55°	547	574	764	394	349	489
65°	339	350	357	318	283	336
75°	181	185	195	205	188	193
85°	49	49	53	60	72	55
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2191.2	2191.2	2191.2	2191.2	2191.2
2.5°	2220.3	2225.9	2190.1	2188.9	2192.3
5°	2194.5	2212.4	2200.1	2200.1	2188.9
7.5°	2139.7	2169.9	2166.6	2192.3	2180.0
10°	2098.3	2122.9	2122.9	2190.1	2164.3
12.5°	2049.1	2077.0	2092.7	2163.2	2166.6
15°	1998.7	2023.3	2049.1	2156.5	2166.6
17.5°	1926.0	1970.7	2003.2	2108.4	2140.8
20°	1883.4	1910.3	1981.9	2067.0	2109.5
22.5°	1812.9	1852.1	1921.5	2016.6	2079.3
25°	1704.4	1780.5	1849.9	1970.7	2043.5
27.5°	1603.7	1660.7	1804.0	1931.6	2000.9
30°	1529.8	1574.6	1735.7	1874.5	1960.6
32.5°	1440.3	1513.0	1643.9	1818.5	1910.3
35°	1304.9	1416.8	1535.4	1758.1	1863.3
37.5°	1209.7	1287.0	1448.1	1695.4	1792.8
40°	1130.3	1200.8	1369.8	1617.1	1754.7
42.5°	1050.8	1107.9	1271.3	1558.9	1684.2
45°	933.3	1021.7	1145.9	1470.5	1601.4
47.5°	810.2	904.2	1064.3	1395.5	1496.2
50°	703.9	778.9	975.8	1246.7	489.0
52.5°	611.0	680.4	881.8	451.0	369.3
55°	547.2	574.1	764.3	393.9	349.2
57.5°	471.1	514.8	641.2	374.9	331.3
60°	421.9	440.9	434.2	355.9	315.6
62.5°	382.7	396.2	393.9	336.8	297.7
65°	339.1	350.3	357.0	317.8	283.1
67.5°	295.4	305.5	315.6	294.3	263.0
70°	257.4	264.1	273.1	266.3	241.7
72.5°	218.2	226.1	231.7	237.2	213.7
75°	181.3	184.7	194.7	204.8	188.0
77.5°	147.7	151.1	157.8	169.0	160.0
80°	110.8	114.1	123.1	132.1	132.1
82.5°	78.3	80.6	86.2	98.5	104.1
85°	49.2	49.2	52.6	60.4	71.6
87.5°	19.0	19.0	22.4	26.9	35.8
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	17.49	18.98	17.86	19.29	19.60	15.30	16.78	15.66	17.09	17.41
	3H	19.02	20.35	19.40	20.67	21.04	17.63	18.95	18.00	19.28	19.64
	4H	19.61	20.85	20.01	21.20	21.58	18.58	19.82	18.98	20.17	20.55
	6H	20.07	21.22	20.48	21.58	21.98	19.36	20.51	19.77	20.87	21.27
	8H	20.21	21.30	20.64	21.69	22.10	19.67	20.76	20.10	21.15	21.56
	12H	20.31	21.35	20.74	21.74	22.17	19.92	20.97	20.35	21.35	21.78
4H	2H	18.04	19.29	18.44	19.64	20.02	16.40	17.64	16.80	17.99	18.37
	3H	19.82	20.84	20.23	21.24	21.65	18.84	19.87	19.26	20.27	20.68
	4H	20.54	21.46	20.97	21.88	22.32	19.91	20.84	20.34	21.25	21.69
	6H	21.12	21.93	21.58	22.37	22.83	20.80	21.60	21.26	22.05	22.51
	8H	21.31	22.06	21.77	22.51	22.98	21.15	21.90	21.62	22.35	22.82
	12H	21.45	22.12	21.93	22.60	23.07	21.44	22.11	21.92	22.59	23.06
8H	4H	20.84	21.60	21.31	22.04	22.51	20.30	21.05	20.76	21.50	21.96
	6H	21.55	22.18	22.05	22.67	23.15	21.33	21.96	21.83	22.45	22.93
	8H	21.82	22.38	22.33	22.89	23.38	21.78	22.34	22.29	22.85	23.34
	12H	22.02	22.52	22.53	23.02	23.58	22.16	22.66	22.67	23.15	23.72
12H	4H	20.88	21.55	21.36	22.03	22.50	20.33	21.01	20.82	21.48	21.96
	6H	21.62	22.18	22.13	22.69	23.18	21.40	21.96	21.91	22.47	22.96
	8H	21.94	22.44	22.45	22.93	23.50	21.91	22.41	22.42	22.90	23.46