

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: P893650

Luminaire Tested: 4MB-5SL-LVRF-UNV-L835

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893650
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2407-175-7)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4MB-5SL-LVRF-UNV-L835
Description: 5000 Lumen 4FT MICROBAY LINEAR BAY with LOUVER WITH FROSTED INLAY, 80CRI, 3500K C
Light Source: -
Ballast/Driver: -

Summary

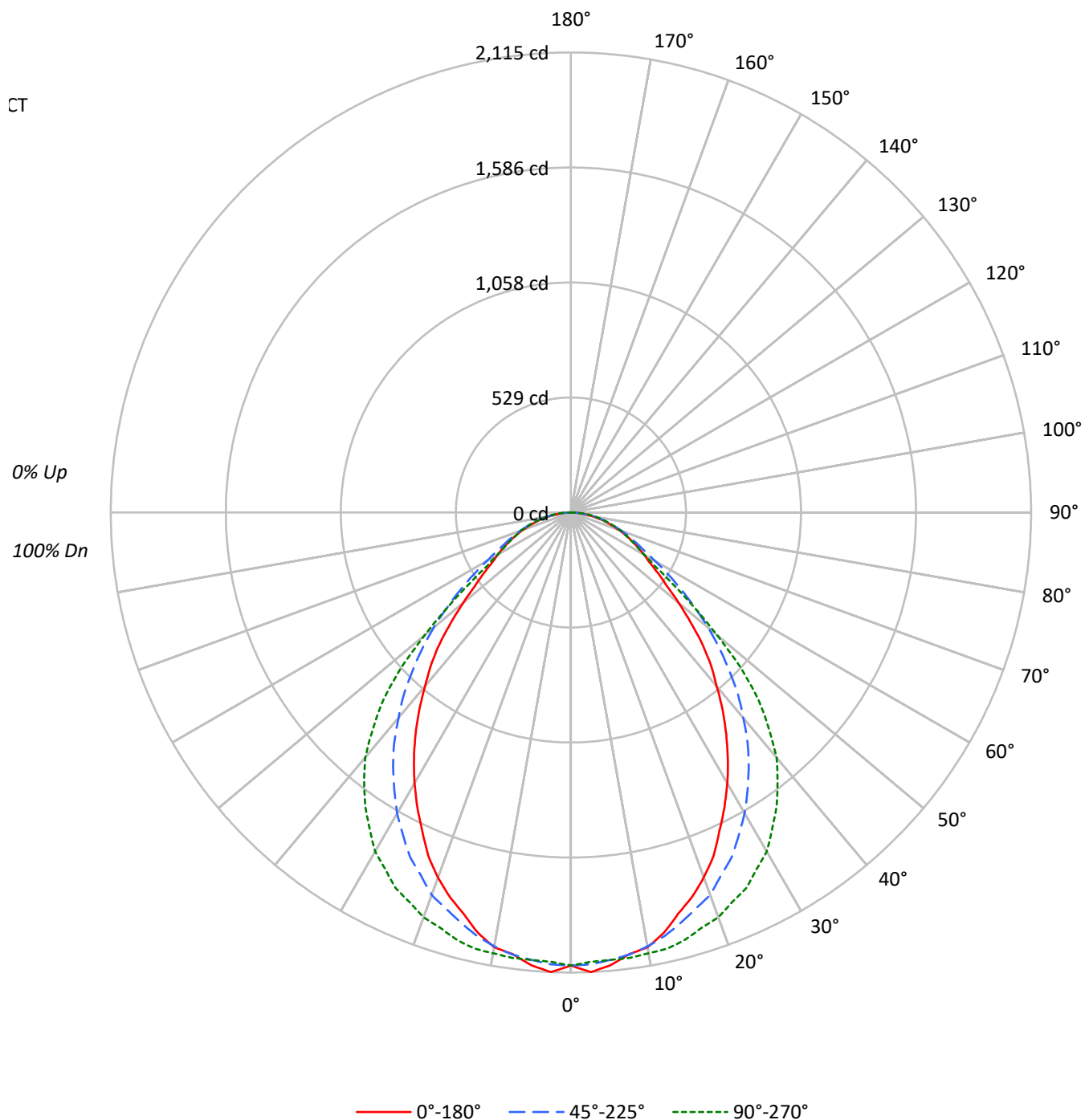
Lumens per Lamp: N/A
Luminaire Lumens: 4328.0 lumens
Efficiency: N/A
Efficacy: 123.7 lumens/watt
Spacing Criteria (0/90/45): 1.06 / 1.27 / 1.23
Luminous Opening: Rectangular (W 0.38' x L: 3.98' x H: 0')
CIE Type: Direct

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
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	110	106	102	99	108	104	100	97	100	97	94		96	93	91		92
2	102	94	88	83	99	92	87	82	89	84	80		86	82	79		83
3	94	84	77	71	91	83	76	70	80	74	69		77	72	68		75
4	87	76	68	62	84	74	67	61	72	66	60		70	64	60		68
5	80	68	60	54	78	67	60	54	65	59	53		63	58	53		62
6	75	62	54	48	73	61	54	48	60	53	48		58	52	47		56
7	69	57	49	43	68	56	48	43	55	48	43		53	47	42		52
8	65	52	44	39	63	52	44	39	50	44	39		49	43	38		48
9	61	48	41	35	60	48	40	35	47	40	35		46	39	35		45
10	57	45	37	32	56	44	37	32	43	37	32		42	36	32		42

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14816	14816	14816
5°	14919	14749	14749
10°	14662	14638	14865
15°	14055	14382	14972
20°	13521	14169	14996
25°	12684	13730	14962
30°	11806	13123	14787
35°	10808	12378	14316
40°	9676	11446	13659
45°	8586	10362	12280
50°	7144	9122	9685
55°	6086	7683	7038
60°	5517	6349	5563
65°	5195	5561	5177
70°	4889	5159	5047
75°	4555	4913	4822
80°	4171	4528	4659
85°	3625	3976	5217

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 12280 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	197.2	4.6
10°-20°	554.8	12.8
20°-30°	805.7	18.6
30°-40°	897.1	20.7
40°-50°	792.6	18.3
50°-60°	520.1	12.0
60°-70°	318.5	7.4
70°-80°	185.3	4.3
80°-90°	56.8	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°	1557.6	36.0
0°-40°	2454.7	56.7
0°-60°	3767.4	87.0
0°-90°	4328.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4328.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2082	2082	2082	2082	2082	
5°	2089	2090	2065	2086	2065	197
15°	1908	1930	1952	2029	2033	538
25°	1616	1655	1749	1860	1906	743
35°	1244	1311	1425	1576	1648	776
45°	853	905	1030	1168	1220	653
55°	491	525	619	614	567	445
65°	309	314	330	320	308	307
75°	166	168	179	182	175	176
85°	44	47	49	55	64	50
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2082.4	2082.4	2082.4	2082.4	2082.4
2.5°	2114.9	2088.9	2079.2	2088.9	2067.3
5°	2088.9	2090.0	2065.1	2085.7	2065.1
7.5°	2047.8	2061.9	2049.9	2081.4	2065.1
10°	2029.4	2030.5	2026.1	2058.6	2057.5
12.5°	1978.5	1981.7	1993.6	2042.4	2053.2
15°	1908.1	1929.7	1952.5	2029.4	2032.6
17.5°	1852.9	1878.8	1909.2	1991.5	2001.2
20°	1785.7	1796.5	1871.3	1943.8	1980.6
22.5°	1711.0	1731.6	1804.1	1901.6	1938.4
25°	1615.7	1654.7	1748.9	1860.4	1905.9
27.5°	1528.0	1573.5	1670.9	1795.5	1848.5
30°	1437.0	1489.0	1597.3	1719.7	1799.8
32.5°	1342.8	1407.8	1510.7	1651.4	1721.8
35°	1244.3	1311.4	1425.1	1575.6	1648.2
37.5°	1145.7	1210.7	1334.1	1495.5	1560.5
40°	1041.8	1105.7	1232.4	1395.9	1470.6
42.5°	951.9	1007.1	1137.1	1276.8	1346.1
45°	853.3	905.3	1029.8	1168.5	1220.4
47.5°	745.0	805.7	927.0	1040.7	1061.3
50°	645.4	708.2	824.1	890.2	875.0
52.5°	557.7	610.8	716.9	745.0	709.3
55°	490.6	525.2	619.4	614.0	567.4
57.5°	428.8	450.5	530.6	500.3	455.9
60°	387.7	397.4	446.2	418.0	390.9
62.5°	348.7	353.0	379.0	363.9	343.3
65°	308.6	314.0	330.3	320.5	307.5
67.5°	271.8	274.0	289.1	287.0	270.7
70°	235.0	238.2	248.0	252.3	242.6
72.5°	199.3	202.5	212.3	216.6	207.9
75°	165.7	167.9	178.7	181.9	175.4
77.5°	133.2	137.5	144.0	149.4	141.9
80°	101.8	104.0	110.5	117.0	113.7
82.5°	71.5	74.7	79.1	87.7	89.9
85°	44.4	46.6	48.7	55.2	63.9
87.5°	17.3	18.4	21.7	23.8	31.4
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	16.90	18.38	17.26	18.69	19.00	17.55	19.03	17.91	19.34	19.66
	3H	18.50	19.82	18.87	20.15	20.51	18.98	20.31	19.36	20.64	21.00
	4H	19.11	20.36	19.51	20.70	21.08	19.59	20.83	19.99	21.18	21.56
	6H	19.58	20.73	20.00	21.10	21.49	20.07	21.22	20.49	21.59	21.98
	8H	19.74	20.83	20.16	21.22	21.62	20.27	21.36	20.70	21.75	22.16
	12H	19.84	20.88	20.27	21.26	21.69	20.44	21.48	20.87	21.87	22.30
4H	2H	17.52	18.76	17.92	19.11	19.49	18.04	19.28	18.44	19.63	20.01
	3H	19.34	20.37	19.75	20.77	21.17	19.74	20.77	20.15	21.17	21.57
	4H	20.08	21.00	20.51	21.42	21.86	20.49	21.42	20.92	21.83	22.27
	6H	20.67	21.48	21.13	21.92	22.38	21.13	21.93	21.59	22.38	22.84
	8H	20.87	21.62	21.34	22.07	22.54	21.38	22.13	21.85	22.58	23.05
	12H	21.01	21.69	21.50	22.16	22.64	21.61	22.28	22.09	22.76	23.23
8H	4H	20.39	21.15	20.86	21.59	22.06	20.76	21.51	21.23	21.96	22.43
	6H	21.12	21.74	21.62	22.23	22.71	21.54	22.16	22.03	22.65	23.13
	8H	21.39	21.95	21.91	22.46	22.95	21.88	22.44	22.40	22.95	23.44
	12H	21.61	22.11	22.12	22.60	23.16	22.20	22.70	22.71	23.19	23.75
12H	4H	20.43	21.10	20.91	21.58	22.05	20.78	21.45	21.26	21.93	22.40
	6H	21.18	21.74	21.70	22.26	22.74	21.58	22.14	22.10	22.65	23.14
	8H	21.52	22.01	22.03	22.51	23.07	21.99	22.48	22.50	22.98	23.54