

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: P892838

Luminaire Tested: 2MB-5HL-LVR-UNV-L835

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P892838
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2407-175-2)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 2MB-5HL-LVR-UNV-L835
Description: 5000 Lumen 2FT MICROBAY LINEAR BAY with LOUVER, 80CRI, 3500K CCT
Light Source: -
Ballast/Driver: -

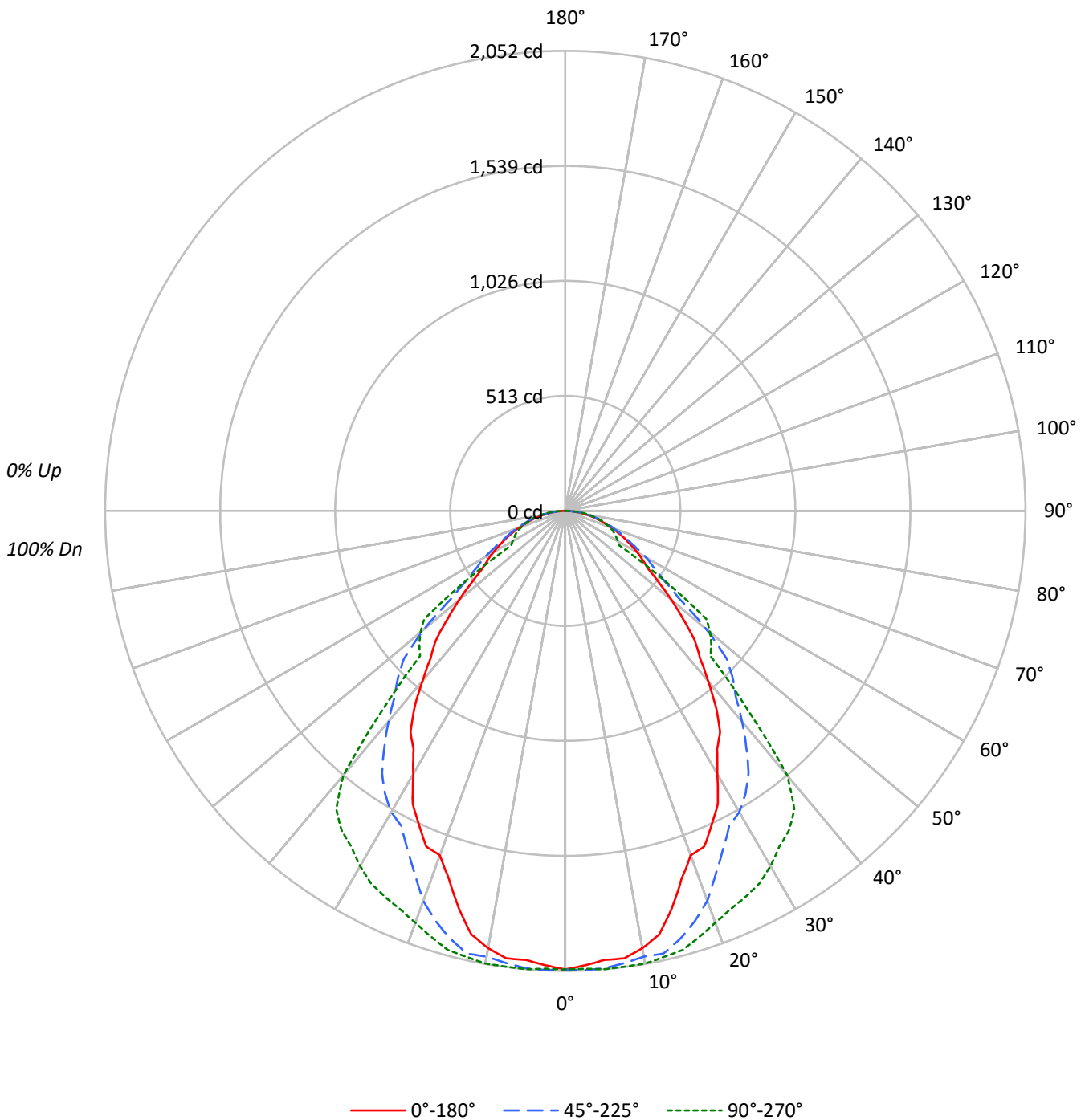
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4168.0 lumens
Efficiency: N/A
Efficacy: 123.7 lumens/watt
Spacing Criteria (0/90/45): 1.05 / 1.32 / 1.24
Luminous Opening: Rectangular (W 0.38' x L: 1.98' x H: 0')
CIE Type: Direct

Input Watts (W): 33.7
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: 0.99
Total Harmonic Distortion (THDi): 4.5
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

TEST NUMBER: P892838
CATALOG NUMBER: 2MB-5HL-LVR-UNV-L835

Luminous Intensity Polar Plot





TEST NUMBER: P892838

CATALOG NUMBER: 2MB-5HL-LVR-UNV-L835

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	101	98	100	97	94	96	94	92	92	91	89	89	89	89	87
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	77	77	77	75
3	94	85	77	72	92	83	76	71	80	75	70	78	73	69	75	71	68	68	68	68	66
4	87	76	68	62	85	75	68	62	72	66	61	70	65	60	68	63	60	60	60	60	58
5	81	69	61	55	79	68	60	55	66	59	54	64	58	53	62	57	53	53	53	53	51
6	75	63	55	49	73	62	54	49	60	53	48	59	52	48	57	52	47	47	47	47	46
7	70	57	49	44	68	57	49	44	55	48	43	54	48	43	53	47	43	43	43	43	41
8	65	53	45	40	64	52	45	39	51	44	39	50	44	39	49	43	39	39	39	39	37
9	61	49	41	36	60	48	41	36	47	40	36	46	40	36	45	40	35	35	35	35	34
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	37	32	32	32	32	31

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	29259	29259	29259
5°	28871	29398	29468
10°	28768	29331	29780
15°	27181	29274	30019
20°	24889	28174	29767
25°	24369	26279	29992
30°	22401	25630	30219
35°	21012	24882	30377
40°	18491	22902	28742
45°	16509	21364	18526
50°	13765	18312	18764
55°	11273	13279	13206
60°	10663	11937	7754
65°	9894	10385	8256
70°	9152	9716	8662
75°	8562	9258	8932
80°	7818	8609	9334
85°	6992	7468	10324

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 21364 cd/sqm



TEST NUMBER: P892838
 CATALOG NUMBER: 2MB-5HL-LVR-UNV-L835

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	194.4	4.7
10°-20°	547.2	13.1
20°-30°	789.3	18.9
30°-40°	895.3	21.5
40°-50°	745.6	17.9
50°-60°	481.9	11.6
60°-70°	285.7	6.9
70°-80°	174.2	4.2
80°-90°	54.4	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°	1530.9	36.7
0°-40°	2426.2	58.2
0°-60°	3653.8	87.7
0°-90°	4168.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4168.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2045	2045	2045	2045	2045	
5°	2010	2035	2047	2059	2052	192
15°	1835	1895	1977	2008	2027	512
25°	1544	1598	1665	1888	1900	706
35°	1203	1245	1425	1616	1739	740
45°	816	873	1056	971	916	620
55°	452	496	532	640	530	421
65°	292	300	307	273	244	290
75°	155	159	168	176	162	164
85°	43	43	46	52	63	48
90°	0	0	0	0	0	



TEST NUMBER: P892838

CATALOG NUMBER: 2MB-5HL-LVR-UNV-L835

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2045.3	2045.3	2045.3	2045.3	2045.3
2.5°	2028.8	2047.2	2050.1	2066.6	2044.3
5°	2010.5	2034.7	2047.2	2058.9	2052.1
7.5°	2013.4	2026.9	2033.7	2054.0	2050.1
10°	1980.4	2007.5	2019.2	2043.4	2050.1
12.5°	1935.0	1969.8	2022.1	2017.2	2037.6
15°	1835.3	1895.3	1976.6	2008.5	2026.9
17.5°	1723.0	1789.8	1919.5	1995.0	1991.1
20°	1634.9	1685.2	1850.7	1957.2	1955.3
22.5°	1620.4	1632.0	1753.0	1931.1	1923.3
25°	1543.9	1598.1	1664.9	1887.5	1900.1
27.5°	1473.2	1521.6	1583.6	1832.3	1874.0
30°	1356.1	1439.4	1551.6	1773.3	1829.4
32.5°	1259.3	1339.7	1495.5	1700.7	1776.2
35°	1203.2	1244.8	1424.8	1616.5	1739.4
37.5°	1104.4	1181.9	1325.1	1517.8	1677.5
40°	990.2	1079.3	1226.4	1430.6	1539.1
42.5°	888.6	960.2	1125.7	1266.1	1208.0
45°	816.0	873.1	1056.0	970.9	915.7
47.5°	711.5	784.0	975.7	797.6	882.8
50°	618.5	681.4	822.8	754.0	843.1
52.5°	528.5	588.5	636.9	711.5	792.8
55°	452.0	495.6	532.4	639.8	529.5
57.5°	410.4	424.0	465.6	456.9	285.5
60°	372.7	378.5	417.2	308.8	271.0
62.5°	330.1	340.7	356.2	289.4	256.5
65°	292.3	300.1	306.8	273.0	243.9
67.5°	255.5	263.3	270.1	253.6	228.4
70°	218.8	223.6	232.3	228.4	207.1
72.5°	185.8	189.7	200.4	203.3	186.8
75°	154.9	158.7	167.5	176.2	161.6
77.5°	124.9	127.8	137.5	144.2	139.4
80°	94.9	99.7	104.5	113.3	113.3
82.5°	69.7	70.7	75.5	84.2	88.1
85°	42.6	42.6	45.5	52.3	62.9
87.5°	18.4	18.4	20.3	22.3	31.9
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P892838
 CATALOG NUMBER: 2MB-5HL-LVR-UNV-L835

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	19.08	20.54	19.45	20.86	21.17	19.05	20.52	19.42	20.83	21.14
	3H	20.68	21.99	21.06	22.32	22.68	20.53	21.84	20.91	22.16	22.53
	4H	21.29	22.51	21.69	22.86	23.24	21.23	22.46	21.63	22.81	23.19
	6H	21.75	22.88	22.16	23.25	23.64	21.85	22.98	22.26	23.35	23.74
	8H	21.91	22.98	22.33	23.37	23.77	22.09	23.17	22.52	23.56	23.96
	12H	22.01	23.04	22.44	23.42	23.85	22.30	23.33	22.73	23.71	24.14
4H	2H	19.68	20.90	20.08	21.25	21.63	19.66	20.88	20.06	21.23	21.61
	3H	21.50	22.51	21.91	22.91	23.31	21.41	22.42	21.82	22.83	23.23
	4H	22.23	23.14	22.66	23.56	24.00	22.28	23.19	22.71	23.61	24.05
	6H	22.82	23.62	23.28	24.06	24.52	23.04	23.83	23.49	24.27	24.73
	8H	23.03	23.77	23.49	24.21	24.68	23.33	24.08	23.80	24.52	24.99
	12H	23.17	23.83	23.66	24.31	24.79	23.59	24.25	24.07	24.73	25.20
8H	4H	22.55	23.29	23.01	23.73	24.20	22.59	23.33	23.05	23.78	24.24
	6H	23.27	23.88	23.77	24.38	24.85	23.49	24.11	23.99	24.60	25.08
	8H	23.55	24.10	24.07	24.61	25.10	23.88	24.44	24.40	24.95	25.44
	12H	23.77	24.26	24.28	24.75	25.32	24.24	24.72	24.75	25.22	25.78
12H	4H	22.58	23.25	23.07	23.73	24.20	22.61	23.28	23.10	23.76	24.23
	6H	23.34	23.89	23.85	24.40	24.89	23.54	24.10	24.06	24.61	25.10
	8H	23.68	24.17	24.19	24.66	25.23	24.00	24.49	24.51	24.98	25.55