

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: P892857

Luminaire Tested: 2MB-5HL-LVRF-UNV-L930

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P892857
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2407-175-1)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 2MB-5HL-LVRF-UNV-L930
Description: 5000 Lumen 2FT MICROBAY LINEAR BAY with LOUVER WITH FROSTED INLAY, 90CRI, 3000K C
Light Source: -
Ballast/Driver: -

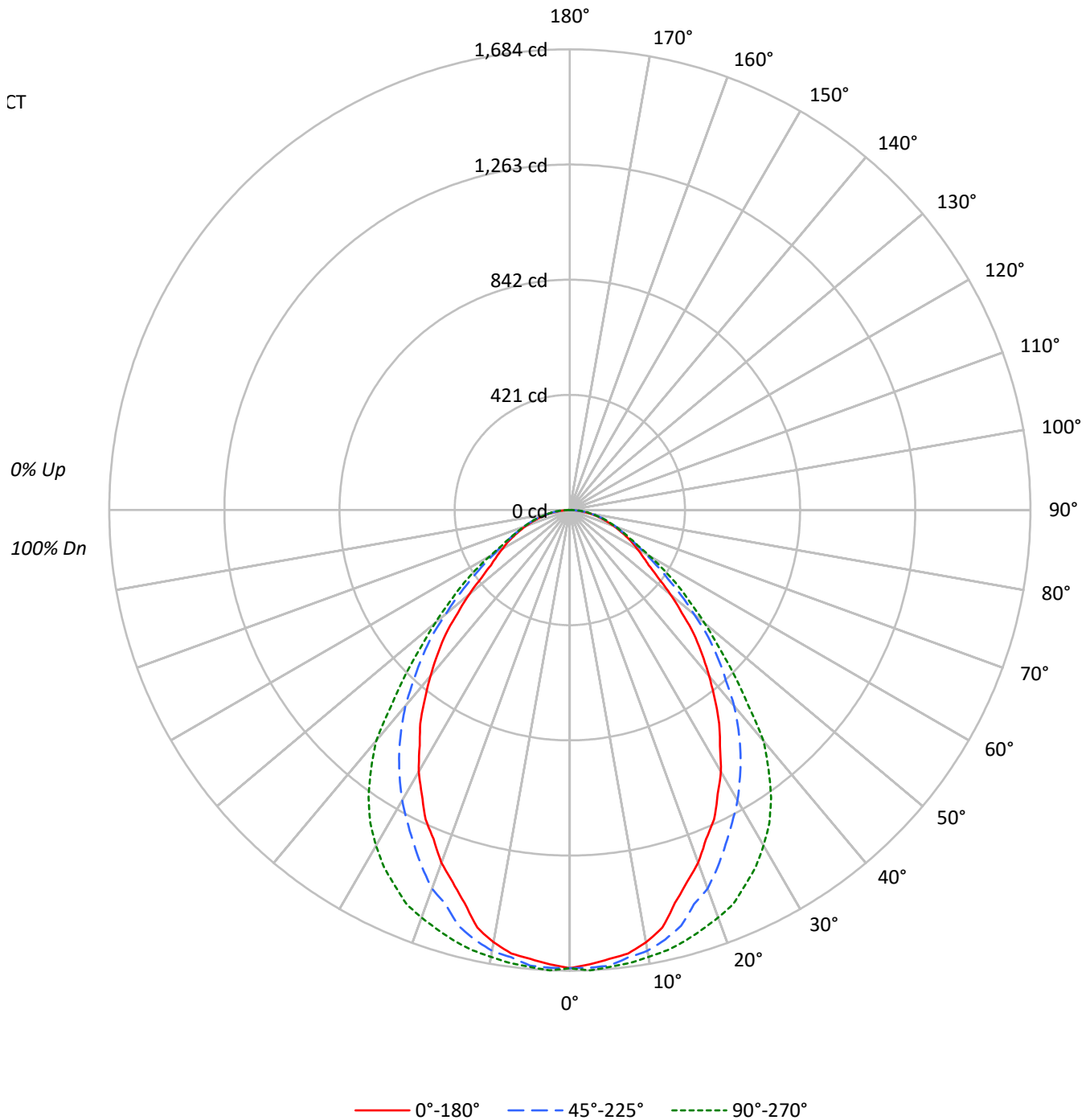
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3293.0 lumens
Efficiency: N/A
Efficacy: 97.7 lumens/watt
Spacing Criteria (0/90/45): 1.02 / 1.25 / 1.19
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

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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
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	110	106	102	99	108	104	101	98	100	97	94	96	94	92	92	91	89	87		
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75		
3	94	85	77	72	92	83	76	71	80	75	70	78	73	69	75	71	68	66		
4	87	76	68	62	85	75	68	62	73	66	61	70	65	60	68	63	60	58		
5	81	69	61	55	79	68	60	55	66	59	54	64	58	54	62	57	53	51		
6	75	63	55	49	73	62	54	49	60	53	48	59	53	48	57	52	48	46		
7	70	58	50	44	68	57	49	44	55	48	43	54	48	43	53	47	43	41		
8	65	53	45	40	64	52	45	40	51	44	39	50	44	39	49	43	39	37		
9	61	49	41	36	60	48	41	36	47	41	36	46	40	36	45	40	36	34		
10	58	45	38	33	57	45	38	33	44	37	33	43	37	33	42	37	33	31		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	23956	23956	23956
5°	23655	24002	24070
10°	23310	23765	24092
15°	22015	23301	24146
20°	20891	22421	24135
25°	19694	21280	23907
30°	18246	20252	23400
35°	16638	19009	22408
40°	14788	17461	20568
45°	12980	15501	17144
50°	10700	13204	14315
55°	8782	10907	12051
60°	8166	9064	9616
65°	7647	8056	8110
70°	7127	7533	7499
75°	6622	7152	7196
80°	6096	6624	6755
85°	5285	5810	7649

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 17144 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	157.9	4.8
10°-20°	440.5	13.4
20°-30°	629.6	19.1
30°-40°	686.9	20.9
40°-50°	578.6	17.6
50°-60°	385.4	11.7
60°-70°	237.8	7.2
70°-80°	134.8	4.1
80°-90°	41.6	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°	1228.0	37.3
0°-40°	1915.0	58.2
0°-60°	2878.9	87.4
0°-90°	3293.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3293.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1675	1675	1675	1675	1675	
5°	1647	1656	1671	1671	1676	156
15°	1486	1516	1573	1620	1630	419
25°	1248	1274	1348	1476	1515	570
35°	953	994	1088	1216	1283	592
45°	642	677	766	817	847	490
55°	352	377	437	467	483	326
65°	226	228	238	248	240	225
75°	120	121	129	134	130	127
85°	32	34	35	41	47	37
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1674.6	1674.6	1674.6	1674.6	1674.6
2.5°	1662.6	1663.4	1674.6	1681.1	1684.3
5°	1647.3	1656.1	1671.4	1671.4	1676.2
7.5°	1635.2	1636.8	1648.9	1666.6	1670.6
10°	1604.7	1612.7	1636.0	1656.1	1658.5
12.5°	1563.7	1568.5	1608.7	1647.3	1648.1
15°	1486.5	1516.2	1573.3	1620.0	1630.4
17.5°	1425.4	1455.9	1510.6	1594.2	1607.9
20°	1372.3	1389.2	1472.8	1563.7	1585.4
22.5°	1301.6	1332.9	1412.5	1527.5	1559.7
25°	1247.7	1273.5	1348.2	1476.0	1514.6
27.5°	1171.4	1209.9	1286.3	1421.4	1471.2
30°	1104.6	1146.4	1226.0	1363.5	1416.6
32.5°	1021.8	1066.0	1157.7	1293.6	1357.1
35°	952.7	994.5	1088.5	1216.4	1283.1
37.5°	870.7	918.1	1012.2	1132.0	1193.1
40°	791.9	832.1	935.0	1037.9	1101.4
42.5°	716.3	753.3	844.9	931.0	962.3
45°	641.6	676.9	766.2	816.8	847.4
47.5°	554.7	598.9	685.8	710.7	734.0
50°	480.8	517.7	593.3	615.8	643.2
52.5°	407.6	445.4	514.5	533.0	554.7
55°	352.1	377.1	437.3	467.1	483.2
57.5°	316.8	324.8	374.6	402.0	409.2
60°	285.4	290.2	316.8	341.7	336.1
62.5°	256.5	258.9	272.5	291.0	279.8
65°	225.9	228.3	238.0	247.6	239.6
67.5°	197.8	199.4	207.4	214.7	207.4
70°	170.4	171.2	180.1	184.9	179.3
72.5°	143.9	144.7	153.6	159.2	152.8
75°	119.8	121.4	129.4	134.3	130.2
77.5°	96.5	98.9	104.5	109.3	102.9
80°	74.0	75.6	80.4	86.0	82.0
82.5°	53.9	54.7	57.9	63.5	65.1
85°	32.2	33.8	35.4	41.0	46.6
87.5°	12.9	14.5	15.3	17.7	24.9
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	18.06	19.52	18.42	19.83	20.15	19.56	21.03	19.93	21.34	21.66
	3H	19.66	20.97	20.04	21.30	21.66	20.78	22.09	21.16	22.42	22.78
	4H	20.27	21.49	20.67	21.84	22.22	21.30	22.53	21.70	22.88	23.26
	6H	20.74	21.87	21.15	22.24	22.63	21.71	22.84	22.12	23.21	23.60
	8H	20.90	21.97	21.32	22.36	22.77	21.88	22.95	22.30	23.34	23.75
	12H	21.00	22.03	21.43	22.41	22.84	22.02	23.05	22.45	23.43	23.86
4H	2H	18.67	19.89	19.07	20.24	20.62	19.91	21.13	20.31	21.48	21.86
	3H	20.48	21.50	20.89	21.90	22.30	21.39	22.41	21.80	22.81	23.21
	4H	21.22	22.13	21.65	22.55	22.99	22.07	22.98	22.50	23.40	23.84
	6H	21.81	22.61	22.27	23.05	23.51	22.63	23.43	23.09	23.87	24.33
	8H	22.02	22.76	22.49	23.21	23.68	22.86	23.60	23.32	24.05	24.51
	12H	22.17	22.83	22.65	23.31	23.78	23.06	23.72	23.55	24.20	24.68
8H	4H	21.54	22.28	22.00	22.72	23.19	22.29	23.03	22.76	23.48	23.95
	6H	22.26	22.88	22.76	23.37	23.85	23.00	23.61	23.49	24.10	24.58
	8H	22.55	23.10	23.06	23.61	24.10	23.31	23.86	23.82	24.37	24.86
	12H	22.77	23.26	23.28	23.75	24.32	23.61	24.09	24.12	24.59	25.15
12H	4H	21.57	22.23	22.06	22.71	23.19	22.31	22.97	22.79	23.45	23.92
	6H	22.33	22.88	22.84	23.39	23.88	23.03	23.59	23.55	24.10	24.59
	8H	22.67	23.16	23.18	23.65	24.22	23.41	23.89	23.92	24.39	24.95