

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: P893303

Luminaire Tested: 4MB-2SL-LVR-UNV-L940

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893303
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-2SL-LVR-UNV-L940
Description: 2000 Lumen 4FT MICROBAY LINEAR BAY with LOUVER, 90CRI, 4000K CCT
Light Source: -
Ballast/Driver: -

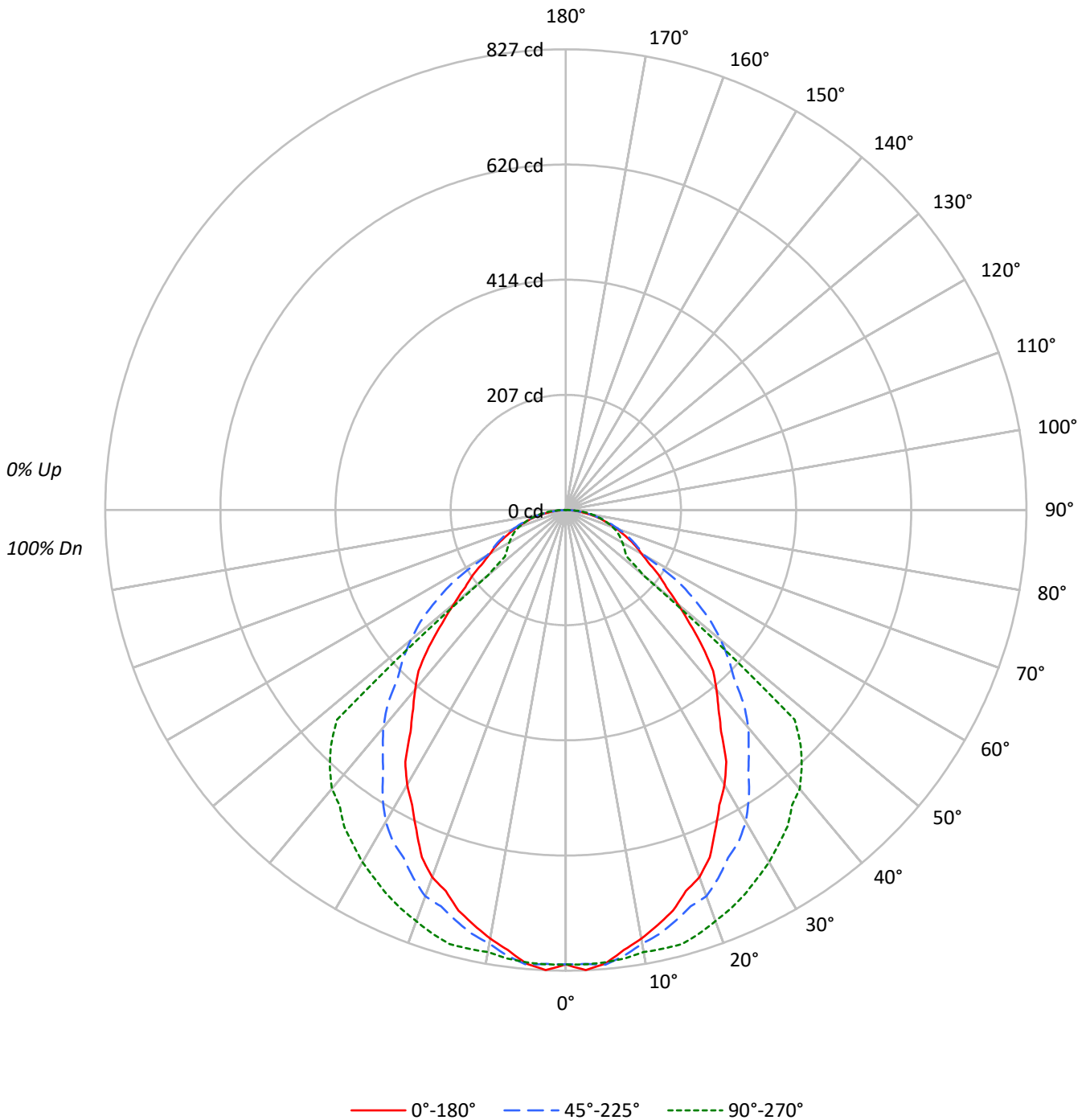
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1741.1 lumens
Efficiency: N/A
Efficacy: 126.2 lumens/watt
Spacing Criteria (0/90/45): 1.06 / 1.33 / 1.27
Luminous Opening: Rectangular (W 0.38' x L: 3.98' x H: 0')
CIE Type: Direct

Input Watts (W): 13.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 5.92
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

TEST NUMBER: P893303
CATALOG NUMBER: 4MB-2SL-LVR-UNV-L940

Luminous Intensity Polar Plot





TEST NUMBER: P893303

CATALOG NUMBER: 4MB-2SL-LVR-UNV-L940

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°	5804	5804	5804
5°	5836	5851	5821
10°	5645	5710	5822
15°	5482	5620	5942
20°	5310	5587	5947
25°	4982	5407	5973
30°	4680	5310	5997
35°	4220	4966	6026
40°	3908	4737	6068
45°	3497	4294	6000
50°	2901	4021	2016
55°	2528	3530	1613
60°	2236	2301	1672
65°	2126	2237	1774
70°	1993	2116	1872
75°	1856	1993	1924
80°	1692	1877	2016
85°	1494	1600	2180

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6000 cd/sqm



TEST NUMBER: P893303
 CATALOG NUMBER: 4MB-2SL-LVR-UNV-L940

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.4	4.4
10°-20°	217.7	12.5
20°-30°	320.2	18.4
30°-40°	366.2	21.0
40°-50°	346.8	19.9
50°-60°	191.1	11.0
60°-70°	122.7	7.0
70°-80°	75.7	4.3
80°-90°	23.3	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°	615.3	35.3
0°-40°	981.5	56.4
0°-60°	1519.4	87.3
0°-90°	1741.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1741.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	816	816	816	816	816	
5°	817	824	819	819	815	77
15°	744	753	763	803	807	209
25°	635	663	689	734	761	292
35°	486	528	572	655	694	307
45°	348	380	427	548	596	266
55°	204	214	285	147	130	182
65°	126	130	133	118	105	125
75°	68	69	72	76	70	72
85°	18	18	20	22	27	20
90°	0	0	0	0	0	



TEST NUMBER: P893303

CATALOG NUMBER: 4MB-2SL-LVR-UNV-L940

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	815.8	815.8	815.8	815.8	815.8
2.5°	826.7	828.8	815.4	815.0	816.3
5°	817.1	823.8	819.2	819.2	815.0
7.5°	796.7	807.9	806.7	816.3	811.7
10°	781.3	790.4	790.4	815.4	805.8
12.5°	762.9	773.3	779.2	805.4	806.7
15°	744.2	753.3	762.9	802.9	806.7
17.5°	717.1	733.8	745.8	785.0	797.1
20°	701.3	711.3	737.9	769.6	785.4
22.5°	675.0	689.6	715.4	750.8	774.2
25°	634.6	662.9	688.8	733.8	760.8
27.5°	597.1	618.3	671.7	719.2	745.0
30°	569.6	586.3	646.3	697.9	730.0
32.5°	536.3	563.3	612.1	677.1	711.3
35°	485.8	527.5	571.7	654.6	693.8
37.5°	450.4	479.2	539.2	631.3	667.5
40°	420.8	447.1	510.0	602.1	653.3
42.5°	391.3	412.5	473.3	580.4	627.1
45°	347.5	380.4	426.7	547.5	596.3
47.5°	301.7	336.7	396.3	519.6	557.1
50°	262.1	290.0	363.3	464.2	182.1
52.5°	227.5	253.3	328.3	167.9	137.5
55°	203.8	213.8	284.6	146.7	130.0
57.5°	175.4	191.7	238.8	139.6	123.3
60°	157.1	164.2	161.7	132.5	117.5
62.5°	142.5	147.5	146.7	125.4	110.8
65°	126.3	130.4	132.9	118.3	105.4
67.5°	110.0	113.8	117.5	109.6	97.9
70°	95.8	98.3	101.7	99.2	90.0
72.5°	81.3	84.2	86.3	88.3	79.6
75°	67.5	68.8	72.5	76.3	70.0
77.5°	55.0	56.3	58.8	62.9	59.6
80°	41.3	42.5	45.8	49.2	49.2
82.5°	29.2	30.0	32.1	36.7	38.8
85°	18.3	18.3	19.6	22.5	26.7
87.5°	7.1	7.1	8.3	10.0	13.3
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P893303
 CATALOG NUMBER: 4MB-2SL-LVR-UNV-L940

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	14.06	15.54	14.43	15.86	16.17	11.86	13.35	12.23	13.66	13.97
	3H	15.59	16.91	15.97	17.24	17.60	14.19	15.52	14.57	15.85	16.21
	4H	16.18	17.42	16.58	17.77	18.15	15.14	16.39	15.54	16.74	17.11
	6H	16.64	17.78	17.05	18.15	18.54	15.93	17.08	16.34	17.44	17.84
	8H	16.78	17.87	17.21	18.26	18.67	16.24	17.33	16.67	17.72	18.12
	12H	16.88	17.92	17.31	18.30	18.73	16.49	17.53	16.92	17.92	18.35
4H	2H	14.61	15.85	15.01	16.20	16.58	12.97	14.21	13.37	14.56	14.94
	3H	16.38	17.41	16.79	17.81	18.21	15.41	16.44	15.82	16.84	17.24
	4H	17.10	18.03	17.54	18.45	18.89	16.48	17.40	16.91	17.82	18.26
	6H	17.69	18.49	18.15	18.94	19.40	17.37	18.17	17.83	18.62	19.08
	8H	17.88	18.63	18.34	19.08	19.54	17.72	18.47	18.18	18.92	19.39
	12H	18.02	18.69	18.50	19.17	19.64	18.01	18.68	18.49	19.16	19.63
8H	4H	17.41	18.16	17.88	18.61	19.08	16.87	17.62	17.33	18.06	18.53
	6H	18.12	18.75	18.62	19.24	19.72	17.90	18.53	18.40	19.02	19.50
	8H	18.38	18.95	18.90	19.46	19.95	18.35	18.91	18.86	19.42	19.91
	12H	18.59	19.09	19.10	19.58	20.15	18.73	19.23	19.24	19.72	20.29
12H	4H	17.45	18.12	17.93	18.60	19.07	16.90	17.57	17.38	18.05	18.52
	6H	18.19	18.75	18.70	19.26	19.75	17.97	18.53	18.48	19.04	19.53
	8H	18.51	19.01	19.02	19.50	20.06	18.48	18.97	18.99	19.47	20.03