

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: P893411

Luminaire Tested: 4MB-3SL-LVR-UNV-L840

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893411
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-3SL-LVR-UNV-L840
Description: 3000 Lumen 4FT MICROBAY LINEAR BAY with LOUVER, 80CRI, 4000K CCT
Light Source: -
Ballast/Driver: -

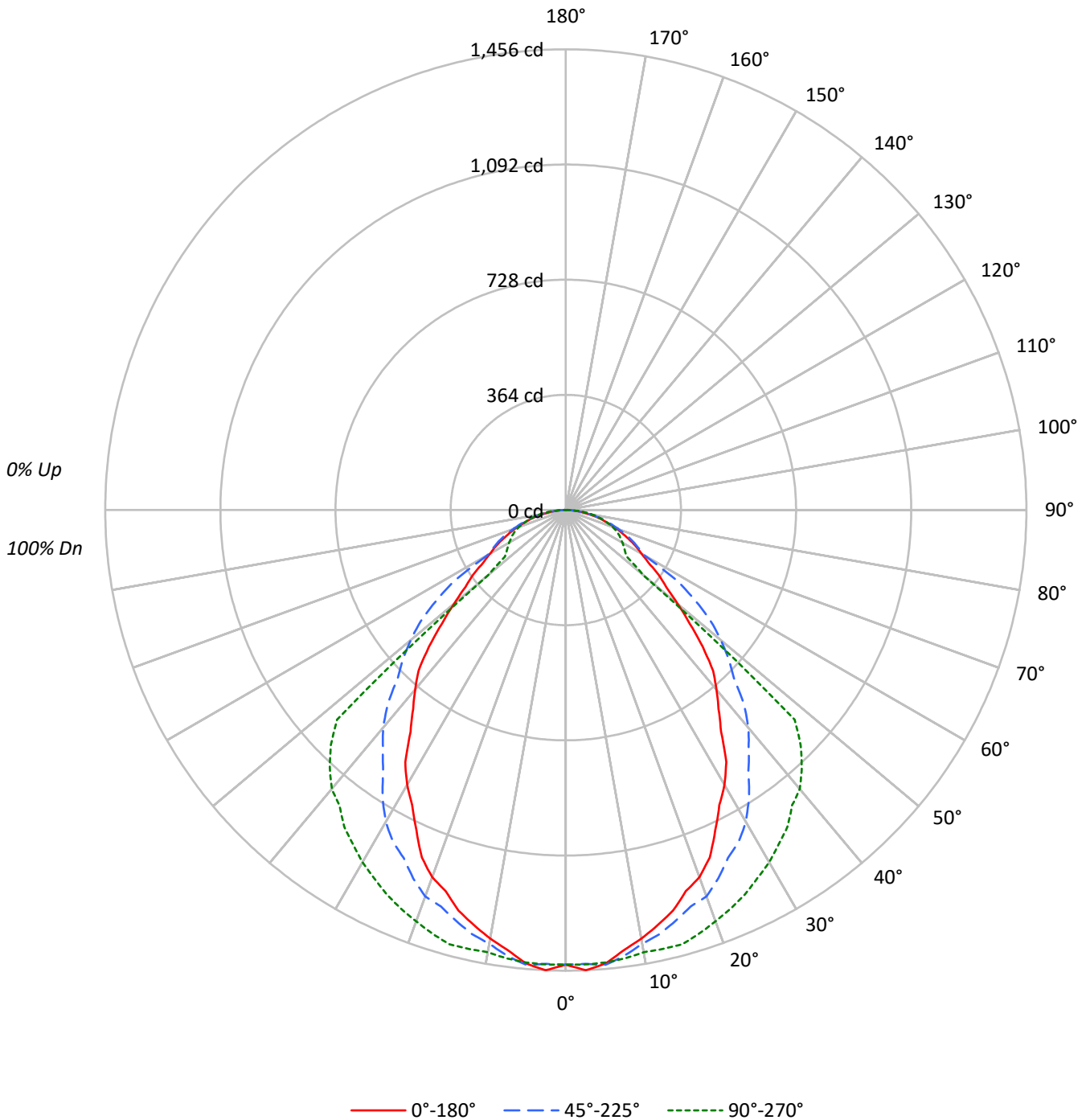
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3066.0 lumens
Efficiency: N/A
Efficacy: 145.3 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): 21.1
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: 0.99
Total Harmonic Distortion (THDi): 5.2
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°	10222	10222	10222
5°	10277	10303	10251
10°	9940	10057	10253
15°	9653	9896	10464
20°	9350	9839	10473
25°	8773	9522	10519
30°	8241	9350	10562
35°	7432	8744	10611
40°	6883	8342	10687
45°	6158	7561	10565
50°	5108	7083	3550
55°	4451	6217	2839
60°	3936	4051	2944
65°	3743	3941	3125
70°	3512	3724	3297
75°	3269	3511	3390
80°	2975	3307	3548
85°	2637	2816	3837

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 10565 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.3	4.4
10°-20°	383.4	12.5
20°-30°	563.9	18.4
30°-40°	644.9	21.0
40°-50°	610.7	19.9
50°-60°	336.4	11.0
60°-70°	216.0	7.0
70°-80°	133.3	4.3
80°-90°	41.0	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°	1083.6	35.3
0°-40°	1728.5	56.4
0°-60°	2675.6	87.3
0°-90°	3066.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3066.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1437	1437	1437	1437	1437	
5°	1439	1451	1443	1443	1435	135
15°	1310	1327	1344	1414	1421	368
25°	1118	1167	1213	1292	1340	515
35°	856	929	1007	1153	1222	541
45°	612	670	751	964	1050	468
55°	359	376	501	258	229	321
65°	222	230	234	208	186	220
75°	119	121	128	134	123	126
85°	32	32	34	40	47	36
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1436.7	1436.7	1436.7	1436.7	1436.7
2.5°	1455.8	1459.5	1436.0	1435.3	1437.5
5°	1438.9	1450.7	1442.6	1442.6	1435.3
7.5°	1403.0	1422.8	1420.6	1437.5	1429.4
10°	1375.8	1392.0	1392.0	1436.0	1419.1
12.5°	1343.5	1361.9	1372.2	1418.4	1420.6
15°	1310.5	1326.7	1343.5	1414.0	1420.6
17.5°	1262.8	1292.2	1313.5	1382.4	1403.7
20°	1234.9	1252.6	1299.5	1355.3	1383.2
22.5°	1188.7	1214.4	1259.9	1322.3	1363.4
25°	1117.5	1167.4	1212.9	1292.2	1339.9
27.5°	1051.5	1088.9	1182.8	1266.5	1312.0
30°	1003.1	1032.4	1138.1	1229.1	1285.6
32.5°	944.4	992.1	1077.9	1192.4	1252.6
35°	855.6	929.0	1006.7	1152.8	1221.7
37.5°	793.2	843.8	949.5	1111.7	1175.5
40°	741.1	787.3	898.1	1060.3	1150.6
42.5°	689.0	726.4	833.6	1022.1	1104.3
45°	612.0	669.9	751.4	964.2	1050.0
47.5°	531.3	592.9	697.8	915.0	981.1
50°	461.5	510.7	639.9	817.4	320.7
52.5°	400.6	446.1	578.2	295.7	242.1
55°	358.8	376.4	501.2	258.3	228.9
57.5°	308.9	337.5	420.5	245.8	217.2
60°	276.6	289.1	284.7	233.3	206.9
62.5°	251.0	259.8	258.3	220.9	195.2
65°	222.3	229.7	234.1	208.4	185.6
67.5°	193.7	200.3	206.9	193.0	172.4
70°	168.8	173.2	179.0	174.6	158.5
72.5°	143.1	148.2	151.9	155.6	140.2
75°	118.9	121.1	127.7	134.3	123.3
77.5°	96.9	99.1	103.5	110.8	104.9
80°	72.6	74.8	80.7	86.6	86.6
82.5°	51.4	52.8	56.5	64.6	68.2
85°	32.3	32.3	34.5	39.6	47.0
87.5°	12.5	12.5	14.7	17.6	23.5
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	16.03	17.51	16.39	17.82	18.14	13.83	15.31	14.19	15.62	15.94
	3H	17.55	18.88	17.93	19.21	19.57	16.16	17.49	16.54	17.81	18.18
	4H	18.14	19.39	18.55	19.74	20.12	17.11	18.35	17.51	18.70	19.08
	6H	18.60	19.75	19.01	20.12	20.51	17.89	19.04	18.31	19.41	19.80
	8H	18.75	19.84	19.17	20.23	20.63	18.21	19.30	18.63	19.69	20.09
	12H	18.84	19.89	19.27	20.27	20.70	18.45	19.50	18.88	19.88	20.31
4H	2H	16.58	17.82	16.98	18.17	18.55	14.93	16.18	15.33	16.53	16.90
	3H	18.35	19.38	18.76	19.78	20.18	17.38	18.41	17.79	18.81	19.21
	4H	19.07	19.99	19.50	20.41	20.85	18.44	19.37	18.88	19.79	20.23
	6H	19.65	20.46	20.11	20.90	21.36	19.33	20.14	19.79	20.58	21.04
	8H	19.84	20.60	20.31	21.04	21.51	19.68	20.44	20.15	20.88	21.35
	12H	19.98	20.65	20.46	21.13	21.60	19.97	20.65	20.46	21.12	21.60
8H	4H	19.38	20.13	19.84	20.57	21.04	18.83	19.58	19.30	20.03	20.50
	6H	20.09	20.71	20.59	21.20	21.68	19.87	20.49	20.36	20.98	21.46
	8H	20.35	20.91	20.86	21.42	21.91	20.31	20.87	20.83	21.38	21.87
	12H	20.56	21.06	21.07	21.55	22.11	20.70	21.20	21.21	21.69	22.25
12H	4H	19.41	20.09	19.90	20.56	21.04	18.87	19.54	19.35	20.02	20.49
	6H	20.15	20.71	20.67	21.23	21.71	19.93	20.49	20.45	21.00	21.49
	8H	20.47	20.97	20.98	21.46	22.03	20.44	20.94	20.95	21.43	22.00