

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: P894258

Luminaire Tested: 4MB-SC3-LVRA-UNV-CC93-MID-3500K

Issue Date: 11/11/2024

**Test Information**

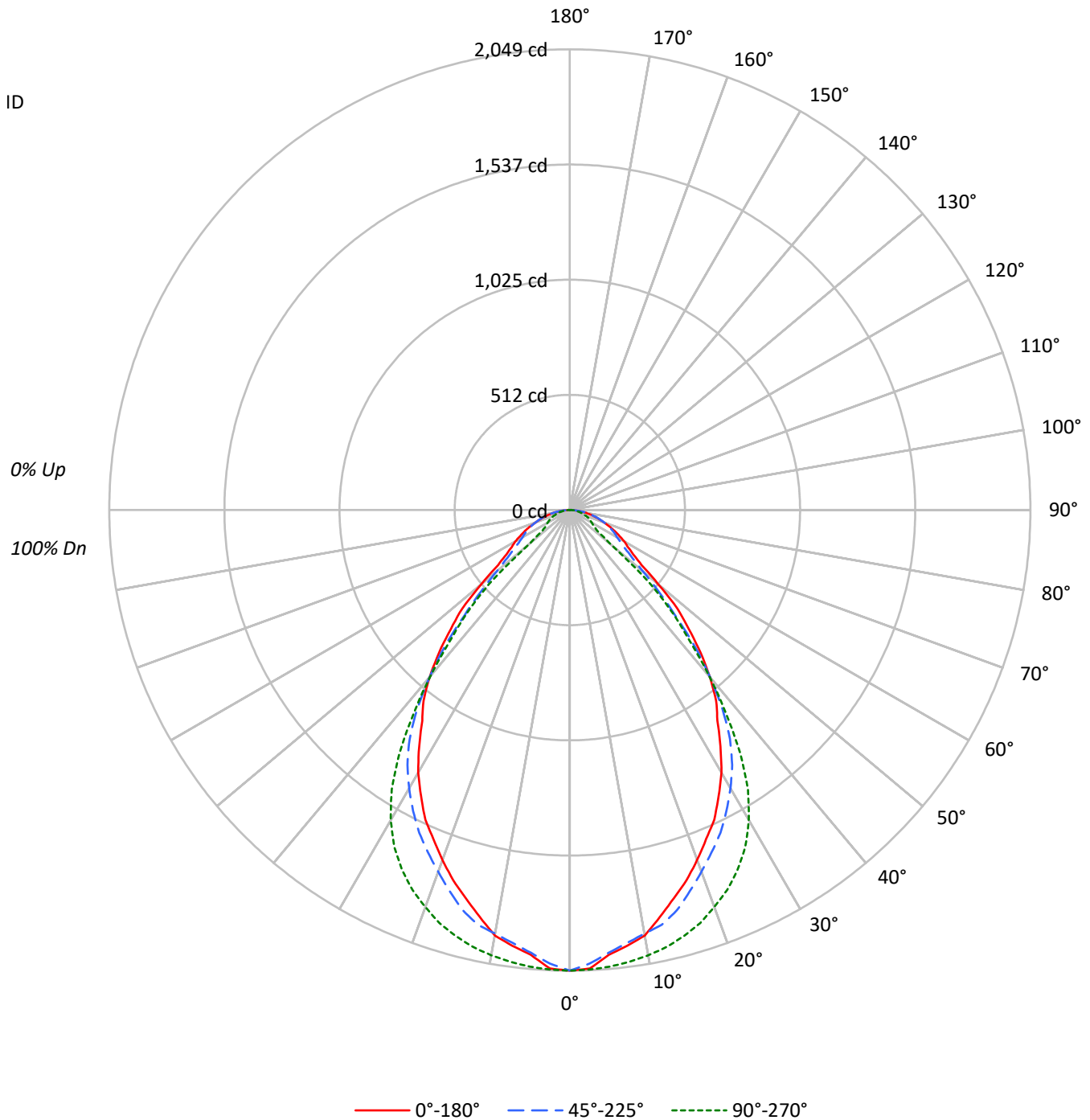
Test Method: LM-79-2019  
Report Number: P894258  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-077-26)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 4MB-SC3-LVRA-UNV-CC93-MID-3500K  
Description: Selectable 4FT MICROBAY LINEAR BAY with LOUVER WITH AISLE OPTIC, 90CRI, 3500K CCT, MI lumen setting  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3325.0 lumens  
Efficiency: N/A  
Efficacy: 99.3 lumens/watt  
Spacing Criteria (0/90/45): 1.02 / 1.16 / 1.12  
Luminous Opening: Rectangular (W 0.38' x L: 3.98' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 33.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: 0.9948  
Total Harmonic Distortion (THDi): 5.65231997856897  
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	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	90	90	90	88
2	103	96	91	86	101	95	90	85	91	87	83	88	85	82	85	82	80	80	80	80	78
3	96	87	80	75	94	86	80	75	83	78	73	80	76	72	78	74	71	71	71	71	69
4	89	79	72	66	87	78	71	66	76	70	65	73	68	64	71	67	63	63	63	63	62
5	83	72	65	59	81	71	64	59	69	63	58	67	62	58	66	61	57	57	57	57	55
6	78	66	59	53	76	65	58	53	64	57	53	62	57	52	61	56	52	52	52	52	50
7	73	61	54	48	71	60	53	48	59	52	48	58	52	47	56	51	47	47	47	47	45
8	68	57	49	44	67	56	49	44	55	48	44	53	48	43	52	47	43	43	43	43	41
9	64	52	45	40	63	52	45	40	51	44	40	50	44	40	49	44	40	40	40	40	38
10	61	49	42	37	60	48	42	37	47	41	37	47	41	37	46	40	37	37	37	37	35

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	14576	14576	14576
5°	14184	14119	14561
10°	13882	13821	14527
15°	13166	13570	14445
20°	12542	12966	14225
25°	11930	12440	13862
30°	11084	11744	13088
35°	9938	10791	11479
40°	9004	9024	8975
45°	7528	6668	6503
50°	5687	4693	2659
55°	4277	3754	1677
60°	3974	3456	1615
65°	3699	3450	1618
70°	3383	3383	1593
75°	3208	3296	1539
80°	2962	3114	1577
85°	2588	2718	1723

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 7704 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	189.2	5.7
10°-20°	521.4	15.7
20°-30°	739.4	22.2
30°-40°	761.8	22.9
40°-50°	532.1	16.0
50°-60°	255.3	7.7
60°-70°	179.1	5.4
70°-80°	112.0	3.4
80°-90°	34.6	1.0
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°	1450.1	43.6
0°-40°	2211.9	66.5
0°-60°	2999.3	90.2
0°-90°	3325.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3325.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2049	2049	2049	2049	2049	
5°	1986	1983	1977	2029	2039	188
15°	1787	1801	1842	1895	1961	503
25°	1520	1535	1585	1692	1766	695
35°	1144	1175	1242	1268	1322	721
45°	748	766	663	629	646	576
55°	345	328	303	194	135	323
65°	220	205	205	156	96	218
75°	117	115	120	104	56	123
85°	32	32	33	33	21	35
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2048.7	2048.7	2048.7	2048.7	2048.7
2.5°	2040.8	2034.5	2019.2	2047.1	2045.0
5°	1985.9	1983.2	1976.9	2028.7	2038.7
7.5°	1954.7	1949.5	1942.1	1999.1	2027.1
10°	1921.5	1927.8	1913.0	1965.3	2010.7
12.5°	1852.8	1869.7	1889.8	1930.4	1990.6
15°	1787.4	1800.6	1842.3	1895.1	1961.1
17.5°	1726.1	1741.4	1777.3	1856.5	1926.8
20°	1656.4	1677.5	1712.4	1813.8	1878.7
22.5°	1584.6	1604.1	1648.0	1756.7	1829.1
25°	1519.6	1535.0	1584.6	1691.8	1765.7
27.5°	1433.6	1462.1	1509.1	1612.6	1690.2
30°	1349.1	1373.4	1429.4	1516.5	1593.0
32.5°	1247.2	1282.6	1344.3	1410.9	1474.8
35°	1144.2	1175.4	1242.4	1268.3	1321.6
37.5°	1069.2	1077.7	1115.7	1112.5	1142.6
40°	969.4	986.3	971.6	932.0	966.3
42.5°	861.7	881.8	822.1	776.2	788.3
45°	748.2	765.6	662.7	628.9	646.3
47.5°	650.0	648.4	534.4	511.7	487.4
50°	513.8	530.7	424.0	381.8	240.2
52.5°	401.3	407.6	349.6	243.9	157.9
55°	344.8	327.9	302.6	193.8	135.2
57.5°	306.3	285.1	268.2	180.1	123.6
60°	279.3	255.6	242.9	171.1	113.5
62.5°	248.7	230.2	225.5	163.2	104.5
65°	219.7	205.4	204.9	155.8	96.1
67.5°	190.6	182.7	184.8	146.8	86.6
70°	162.6	161.0	162.6	135.2	76.6
72.5°	138.9	137.3	141.5	120.4	65.5
75°	116.7	115.1	119.9	103.5	56.0
77.5°	92.9	94.0	97.2	86.1	47.0
80°	72.3	72.3	76.0	67.6	38.5
82.5°	51.7	52.3	54.4	49.6	30.1
85°	31.7	31.7	33.3	32.7	21.1
87.5°	10.6	12.1	14.3	15.3	10.6
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	14.96	16.31	15.32	16.62	16.94	11.29	12.64	11.66	12.96	13.27
	3H	16.69	17.90	17.07	18.23	18.59	13.27	14.47	13.65	14.80	15.17
	4H	17.37	18.49	17.77	18.84	19.23	13.97	15.10	14.37	15.45	15.83
	6H	17.87	18.91	18.29	19.28	19.67	14.49	15.53	14.91	15.90	16.29
	8H	18.04	19.03	18.47	19.42	19.82	14.68	15.66	15.11	16.05	16.46
	12H	18.15	19.10	18.58	19.48	19.91	14.82	15.76	15.25	16.14	16.57
4H	2H	15.49	16.61	15.89	16.96	17.35	12.91	14.04	13.31	14.39	14.77
	3H	17.46	18.39	17.88	18.80	19.20	15.09	16.02	15.50	16.42	16.83
	4H	18.27	19.10	18.70	19.52	19.96	15.97	16.80	16.40	17.22	17.67
	6H	18.91	19.63	19.37	20.08	20.54	16.61	17.34	17.07	17.78	18.25
	8H	19.13	19.80	19.60	20.25	20.72	16.82	17.50	17.29	17.94	18.41
	12H	19.28	19.88	19.77	20.36	20.84	16.98	17.58	17.46	18.06	18.53
8H	4H	18.55	19.23	19.02	19.67	20.14	16.62	17.29	17.09	17.74	18.21
	6H	19.33	19.89	19.83	20.38	20.86	17.48	18.03	17.98	18.53	19.01
	8H	19.63	20.13	20.15	20.65	21.14	17.81	18.31	18.33	18.82	19.31
	12H	19.87	20.31	20.38	20.80	21.37	18.07	18.51	18.58	19.00	19.57
12H	4H	18.57	19.17	19.05	19.65	20.12	16.69	17.29	17.18	17.77	18.25
	6H	19.38	19.88	19.90	20.40	20.89	17.62	18.12	18.14	18.63	19.12
	8H	19.75	20.19	20.26	20.68	21.25	18.03	18.47	18.54	18.96	19.53