

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: P894259

Luminaire Tested: 4MB-SC3-LVRA-UNV-CC93-MID-4000K

Issue Date: 11/11/2024

**Test Information**

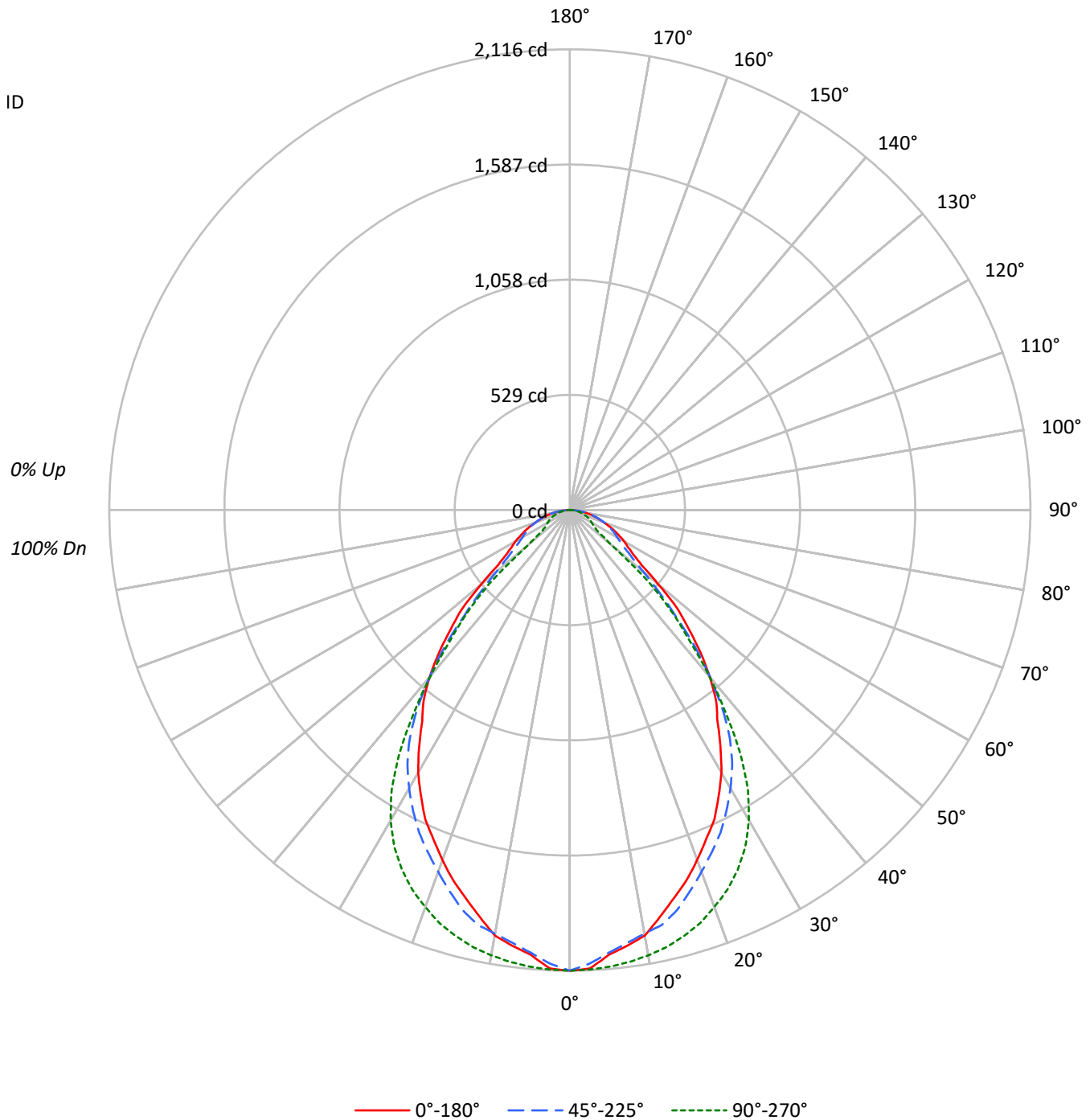
Test Method: LM-79-2019  
Report Number: P894259  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-077-26)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 4MB-SC3-LVRA-UNV-CC93-MID-4000K  
Description: Selectable 4FT MICROBAY LINEAR BAY with LOUVER WITH AISLE OPTIC, 90CRI, 4000K CCT, MI lumen setting  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3434.0 lumens  
Efficiency: N/A  
Efficacy: 102.5 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°	15055	15055	15055
5°	14649	14582	15038
10°	14338	14274	15003
15°	13597	14015	14919
20°	12953	13390	14691
25°	12321	12847	14316
30°	11447	12128	13517
35°	10264	11146	11856
40°	9299	9320	9269
45°	7775	6887	6716
50°	5873	4847	2746
55°	4417	3876	1732
60°	4105	3570	1668
65°	3820	3562	1672
70°	3495	3495	1646
75°	3313	3403	1589
80°	3061	3216	1631
85°	2669	2808	1780

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 7956 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	195.4	5.7
10°-20°	538.5	15.7
20°-30°	763.7	22.2
30°-40°	786.7	22.9
40°-50°	549.5	16.0
50°-60°	263.7	7.7
60°-70°	185.0	5.4
70°-80°	115.7	3.4
80°-90°	35.8	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°	1497.6	43.6
0°-40°	2284.4	66.5
0°-60°	3097.6	90.2
0°-90°	3434.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3434.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2116	2116	2116	2116	2116	
5°	2051	2048	2042	2095	2106	194
15°	1846	1860	1903	1957	2025	520
25°	1570	1585	1636	1747	1824	718
35°	1182	1214	1283	1310	1365	745
45°	773	791	684	650	668	595
55°	356	339	312	200	140	334
65°	227	212	212	161	99	225
75°	120	119	124	107	58	127
85°	33	33	34	34	22	37
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2115.9	2115.9	2115.9	2115.9	2115.9
2.5°	2107.7	2101.2	2085.3	2114.2	2112.1
5°	2051.0	2048.3	2041.7	2095.2	2105.5
7.5°	2018.8	2013.4	2005.7	2064.6	2093.5
10°	1984.5	1991.0	1975.7	2029.7	2076.6
12.5°	1913.6	1931.0	1951.7	1993.7	2055.9
15°	1845.9	1859.6	1902.7	1957.2	2025.4
17.5°	1782.7	1798.5	1835.6	1917.4	1989.9
20°	1710.7	1732.5	1768.5	1873.2	1940.3
22.5°	1636.5	1656.7	1702.0	1814.3	1889.0
25°	1569.5	1585.3	1636.5	1747.2	1823.6
27.5°	1480.6	1510.0	1558.6	1665.4	1745.6
30°	1393.3	1418.4	1476.2	1566.2	1645.3
32.5°	1288.1	1324.6	1388.4	1457.1	1523.1
35°	1181.7	1213.9	1283.2	1309.9	1365.0
37.5°	1104.3	1113.0	1152.3	1149.0	1180.1
40°	1001.2	1018.7	1003.4	962.5	998.0
42.5°	890.0	910.7	849.1	801.6	814.2
45°	772.7	790.7	684.4	649.5	667.5
47.5°	671.3	669.7	551.9	528.4	503.3
50°	530.6	548.1	437.9	394.3	248.1
52.5°	414.5	421.0	361.0	251.9	163.1
55°	356.1	338.7	312.5	200.1	139.6
57.5°	316.3	294.5	277.0	186.0	127.6
60°	288.5	263.9	250.9	176.7	117.2
62.5°	256.9	237.8	232.9	168.5	108.0
65°	226.9	212.1	211.6	160.9	99.3
67.5°	196.9	188.7	190.9	151.6	89.4
70°	168.0	166.3	168.0	139.6	79.1
72.5°	143.4	141.8	146.1	124.3	67.6
75°	120.5	118.9	123.8	106.9	57.8
77.5°	96.0	97.1	100.3	88.9	48.5
80°	74.7	74.7	78.5	69.8	39.8
82.5°	53.4	54.0	56.2	51.3	31.1
85°	32.7	32.7	34.4	33.8	21.8
87.5°	10.9	12.5	14.7	15.8	10.9
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	15.07	16.42	15.43	16.73	17.05	11.40	12.75	11.77	13.07	13.38
	3H	16.81	18.01	17.19	18.34	18.71	13.38	14.58	13.76	14.91	15.28
	4H	17.48	18.61	17.88	18.96	19.34	14.08	15.21	14.48	15.56	15.94
	6H	17.99	19.02	18.40	19.39	19.79	14.60	15.64	15.02	16.01	16.41
	8H	18.16	19.14	18.59	19.53	19.94	14.79	15.77	15.22	16.17	16.57
	12H	18.27	19.21	18.70	19.59	20.02	14.93	15.87	15.36	16.25	16.68
4H	2H	15.60	16.73	16.00	17.08	17.46	13.02	14.15	13.43	14.50	14.88
	3H	17.58	18.51	17.99	18.91	19.31	15.20	16.13	15.61	16.53	16.94
	4H	18.38	19.21	18.81	19.63	20.07	16.08	16.92	16.52	17.33	17.78
	6H	19.02	19.75	19.48	20.19	20.66	16.72	17.45	17.18	17.89	18.36
	8H	19.24	19.92	19.71	20.36	20.83	16.93	17.61	17.40	18.06	18.53
	12H	19.39	19.99	19.88	20.48	20.95	17.09	17.69	17.58	18.17	18.65
8H	4H	18.66	19.34	19.13	19.79	20.26	16.73	17.41	17.20	17.85	18.32
	6H	19.45	20.00	19.95	20.50	20.98	17.59	18.15	18.09	18.64	19.12
	8H	19.75	20.25	20.27	20.76	21.25	17.92	18.42	18.44	18.93	19.42
	12H	19.98	20.42	20.50	20.92	21.49	18.18	18.62	18.70	19.12	19.69
12H	4H	18.68	19.28	19.16	19.76	20.23	16.80	17.40	17.29	17.88	18.36
	6H	19.50	20.00	20.02	20.51	21.00	17.73	18.23	18.25	18.74	19.23
	8H	19.86	20.30	20.38	20.80	21.37	18.14	18.58	18.66	19.08	19.65