

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: P894277

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

Issue Date: 11/11/2024

**Test Information**

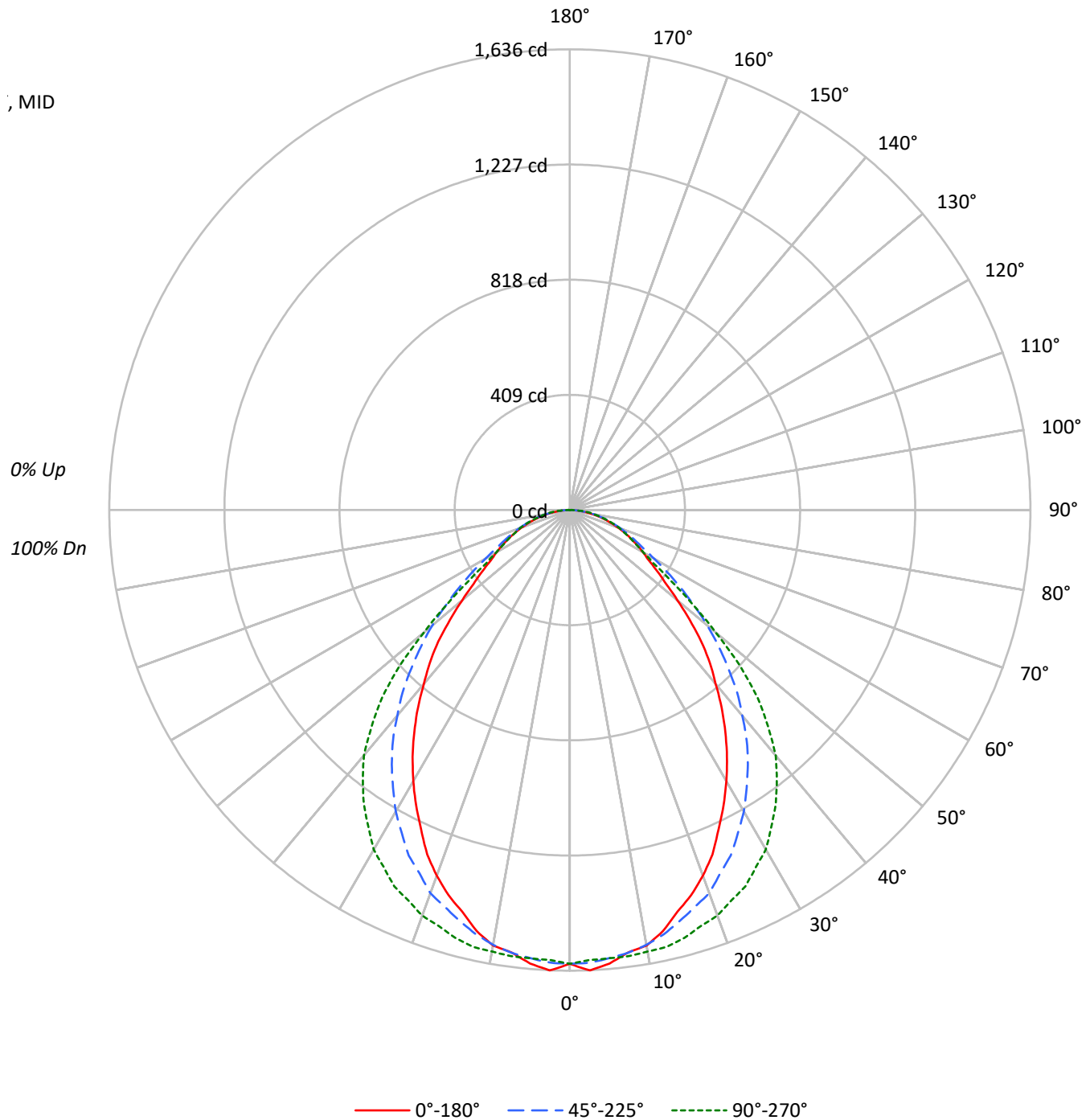
Test Method: LM-79-2019  
Report Number: P894277  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2407-175-7)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 4MB-SC3-LVRF-UNV-CC93-MID-4000K  
Description: Selectable 4FT MICROBAY LINEAR BAY with LOUVER WITH FROSTED INLAY, 90CRI, 4000K CCT  
lumen setting  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3349.0 lumens  
Efficiency: N/A  
Efficacy: 100.0 lumens/watt  
Spacing Criteria (0/90/45): 1.06 / 1.27 / 1.23  
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	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	70	80	74	69	77	72	68	75	71	67	67	67	67	65
4	87	76	68	62	84	74	67	61	72	66	60	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	56	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	44	39	49	43	38	48	42	38	38	38	38	36
9	61	48	41	35	60	48	40	35	47	40	35	46	39	35	45	39	35	35	35	35	33
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32	32	32	32	30

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

	0°	45°	90°
0°	11465	11465	11465
5°	11545	11413	11413
10°	11345	11327	11503
15°	10876	11129	11585
20°	10462	10964	11604
25°	9815	10624	11578
30°	9136	10155	11442
35°	8363	9578	11078
40°	7487	8857	10569
45°	6644	8019	9503
50°	5528	7059	7495
55°	4709	5946	5447
60°	4269	4912	4305
65°	4020	4303	4007
70°	3782	3992	3905
75°	3524	3802	3730
80°	3229	3503	3606
85°	2808	3078	4033

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 9503 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	152.6	4.6
10°-20°	429.3	12.8
20°-30°	623.4	18.6
30°-40°	694.2	20.7
40°-50°	613.3	18.3
50°-60°	402.4	12.0
60°-70°	246.4	7.4
70°-80°	143.4	4.3
80°-90°	43.9	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°	1205.3	36.0
0°-40°	1899.5	56.7
0°-60°	2915.2	87.0
0°-90°	3349.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3349.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1611	1611	1611	1611	1611	
5°	1616	1617	1598	1614	1598	152
15°	1476	1493	1511	1570	1573	417
25°	1250	1280	1353	1440	1475	575
35°	963	1015	1103	1219	1275	601
45°	660	700	797	904	944	505
55°	380	406	479	475	439	344
65°	239	243	256	248	238	237
75°	128	130	138	141	136	136
85°	34	36	38	43	49	39
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1611.4	1611.4	1611.4	1611.4	1611.4
2.5°	1636.5	1616.4	1608.9	1616.4	1599.7
5°	1616.4	1617.3	1598.0	1613.9	1598.0
7.5°	1584.6	1595.5	1586.2	1610.5	1598.0
10°	1570.3	1571.2	1567.8	1593.0	1592.1
12.5°	1530.9	1533.5	1542.7	1580.4	1588.8
15°	1476.5	1493.2	1510.8	1570.3	1572.8
17.5°	1433.7	1453.9	1477.3	1541.0	1548.5
20°	1381.8	1390.2	1448.0	1504.1	1532.6
22.5°	1324.0	1339.9	1396.0	1471.4	1499.9
25°	1250.2	1280.4	1353.3	1439.6	1474.8
27.5°	1182.4	1217.5	1293.0	1389.3	1430.4
30°	1112.0	1152.2	1236.0	1330.7	1392.7
32.5°	1039.1	1089.3	1168.9	1277.9	1332.3
35°	962.8	1014.8	1102.7	1219.2	1275.4
37.5°	886.6	936.8	1032.4	1157.2	1207.5
40°	806.1	855.6	953.6	1080.1	1137.9
42.5°	736.6	779.3	879.9	987.9	1041.6
45°	660.3	700.5	796.9	904.2	944.4
47.5°	576.5	623.4	717.3	805.3	821.2
50°	499.4	548.0	637.7	688.8	677.1
52.5°	431.5	472.6	554.7	576.5	548.9
55°	379.6	406.4	479.3	475.1	439.1
57.5°	331.8	348.6	410.6	387.1	352.8
60°	300.0	307.5	345.2	323.5	302.5
62.5°	269.8	273.2	293.3	281.6	265.6
65°	238.8	243.0	255.6	248.0	238.0
67.5°	210.3	212.0	223.7	222.1	209.5
70°	181.8	184.3	191.9	195.2	187.7
72.5°	154.2	156.7	164.2	167.6	160.9
75°	128.2	129.9	138.3	140.8	135.7
77.5°	103.1	106.4	111.4	115.6	109.8
80°	78.8	80.4	85.5	90.5	88.0
82.5°	55.3	57.8	61.2	67.9	69.6
85°	34.4	36.0	37.7	42.7	49.4
87.5°	13.4	14.2	16.8	18.4	24.3
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	16.00	17.49	16.37	17.80	18.11	16.66	18.14	17.02	18.45	18.77
	3H	17.61	18.93	17.98	19.26	19.62	18.09	19.42	18.47	19.75	20.11
	4H	18.22	19.46	18.62	19.81	20.19	18.70	19.94	19.10	20.29	20.67
	6H	18.69	19.84	19.11	20.21	20.60	19.18	20.33	19.60	20.70	21.09
	8H	18.85	19.94	19.27	20.33	20.73	19.38	20.47	19.81	20.86	21.26
	12H	18.95	19.99	19.38	20.37	20.80	19.55	20.59	19.98	20.98	21.40
4H	2H	16.63	17.87	17.03	18.22	18.60	17.15	18.39	17.55	18.74	19.12
	3H	18.45	19.48	18.86	19.88	20.28	18.85	19.88	19.26	20.28	20.68
	4H	19.19	20.11	19.62	20.53	20.97	19.60	20.53	20.03	20.94	21.38
	6H	19.78	20.59	20.24	21.03	21.49	20.24	21.04	20.69	21.48	21.95
	8H	19.98	20.73	20.44	21.18	21.65	20.49	21.24	20.96	21.69	22.16
	12H	20.12	20.79	20.60	21.27	21.74	20.72	21.39	21.20	21.87	22.34
8H	4H	19.50	20.26	19.97	20.70	21.17	19.87	20.62	20.34	21.07	21.54
	6H	20.23	20.85	20.73	21.34	21.82	20.65	21.27	21.14	21.76	22.24
	8H	20.50	21.06	21.02	21.57	22.06	20.99	21.55	21.51	22.06	22.55
	12H	20.72	21.22	21.23	21.71	22.27	21.31	21.81	21.82	22.30	22.86
12H	4H	19.54	20.21	20.02	20.69	21.16	19.89	20.56	20.37	21.04	21.51
	6H	20.29	20.85	20.81	21.36	21.85	20.69	21.25	21.21	21.76	22.25
	8H	20.63	21.12	21.14	21.61	22.18	21.10	21.59	21.61	22.09	22.65