

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: P894271

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

Issue Date: 11/11/2024

**Test Information**

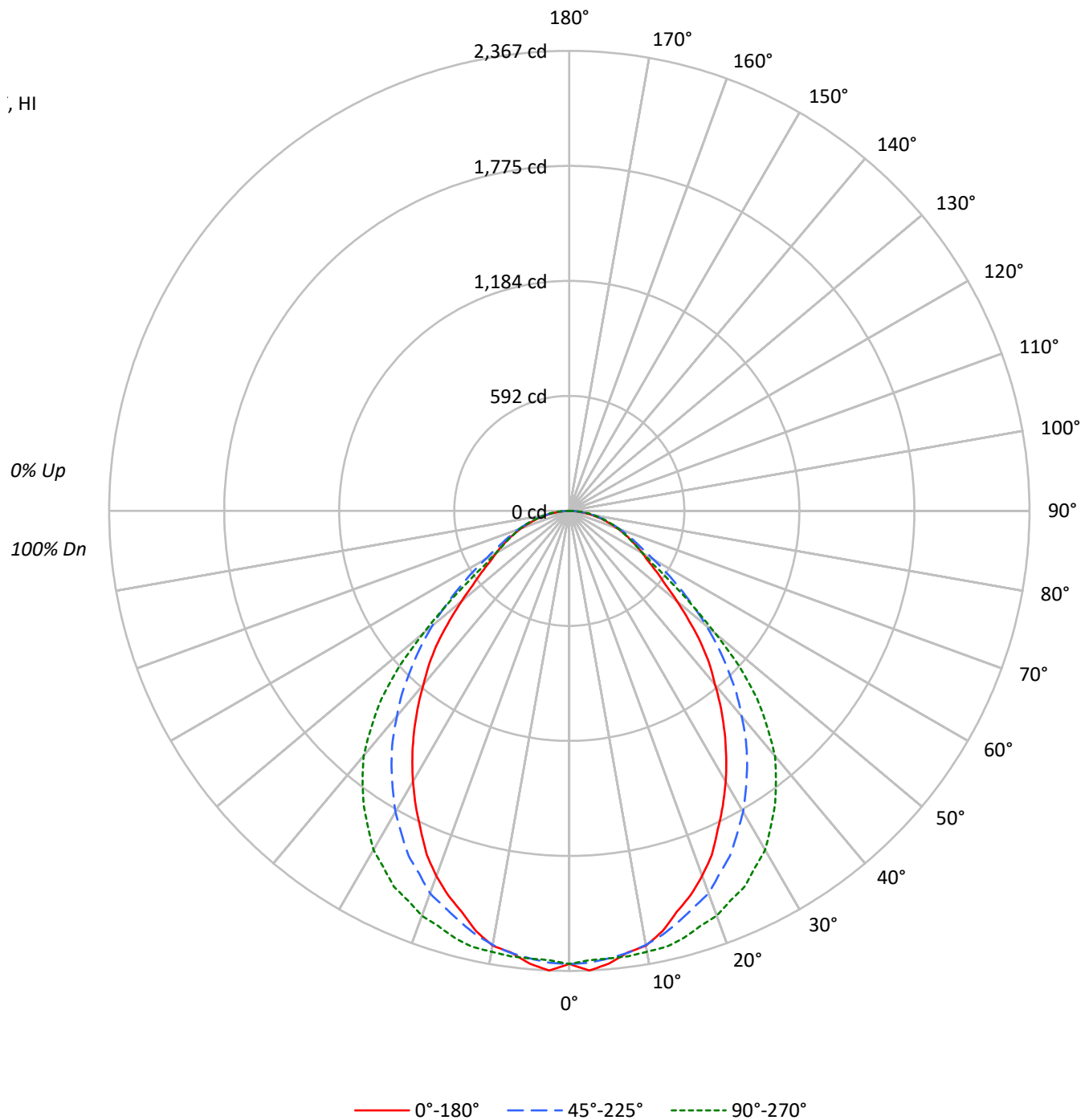
Test Method: LM-79-2019  
Report Number: P894271  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2407-175-7)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 4MB-SC3-LVRF-UNV-CC93-HI-4000K  
Description: Selectable 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: 4844.0 lumens  
Efficiency: N/A  
Efficacy: 95.5 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): 50.7  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: 0.996  
Total Harmonic Distortion (THDi): 5.39961257980444  
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°	16583	16583	16583
5°	16698	16508	16508
10°	16410	16384	16637
15°	15731	16097	16758
20°	15133	15858	16785
25°	14196	15367	16747
30°	13213	14687	16550
35°	12096	13854	16023
40°	10830	12811	15287
45°	9610	11598	13744
50°	7996	10209	10840
55°	6810	8600	7878
60°	6174	7106	6226
65°	5815	6224	5795
70°	5471	5775	5648
75°	5097	5498	5396
80°	4667	5064	5216
85°	4057	4449	5837

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 13744 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	220.7	4.6
10°-20°	620.9	12.8
20°-30°	901.7	18.6
30°-40°	1004.1	20.7
40°-50°	887.1	18.3
50°-60°	582.1	12.0
60°-70°	356.4	7.4
70°-80°	207.4	4.3
80°-90°	63.5	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°	1743.3	36.0
0°-40°	2747.4	56.7
0°-60°	4216.6	87.0
0°-90°	4844.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4844.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2331	2331	2331	2331	2331	
5°	2338	2339	2311	2334	2311	220
15°	2136	2160	2185	2271	2275	603
25°	1808	1852	1957	2082	2133	832
35°	1393	1468	1595	1764	1845	869
45°	955	1013	1153	1308	1366	731
55°	549	588	693	687	635	498
65°	345	352	370	359	344	343
75°	185	188	200	204	196	197
85°	50	52	54	62	72	56
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2330.7	2330.7	2330.7	2330.7	2330.7
2.5°	2367.1	2338.0	2327.1	2338.0	2313.7
5°	2338.0	2339.2	2311.3	2334.3	2311.3
7.5°	2291.9	2307.7	2294.4	2329.5	2311.3
10°	2271.3	2272.5	2267.7	2304.0	2302.8
12.5°	2214.4	2218.0	2231.3	2285.9	2298.0
15°	2135.6	2159.8	2185.3	2271.3	2275.0
17.5°	2073.8	2102.9	2136.8	2228.9	2239.8
20°	1998.6	2010.7	2094.4	2175.6	2216.8
22.5°	1915.0	1938.0	2019.2	2128.3	2169.5
25°	1808.3	1852.0	1957.4	2082.2	2133.2
27.5°	1710.2	1761.1	1870.1	2009.5	2068.9
30°	1608.3	1666.5	1787.7	1924.7	2014.4
32.5°	1502.9	1575.6	1690.8	1848.3	1927.1
35°	1392.6	1467.8	1595.0	1763.5	1844.7
37.5°	1282.3	1355.0	1493.2	1673.8	1746.5
40°	1166.0	1237.5	1379.3	1562.3	1645.9
42.5°	1065.4	1127.2	1272.6	1429.0	1506.5
45°	955.1	1013.2	1152.6	1307.8	1365.9
47.5°	833.9	901.7	1037.5	1164.7	1187.8
50°	722.4	792.7	922.3	996.3	979.3
52.5°	624.2	683.6	802.4	833.9	793.9
55°	549.0	587.8	693.3	687.2	635.1
57.5°	480.0	504.2	593.9	560.0	510.3
60°	433.9	444.8	499.4	467.8	437.5
62.5°	390.3	395.1	424.2	407.2	384.2
65°	345.4	351.5	369.7	358.8	344.2
67.5°	304.2	306.6	323.6	321.2	303.0
70°	263.0	266.6	277.6	282.4	271.5
72.5°	223.0	226.6	237.6	242.4	232.7
75°	185.4	187.9	200.0	203.6	196.3
77.5°	149.1	153.9	161.2	167.3	158.8
80°	113.9	116.4	123.6	130.9	127.3
82.5°	80.0	83.6	88.5	98.2	100.6
85°	49.7	52.1	54.5	61.8	71.5
87.5°	19.4	20.6	24.2	26.7	35.1
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	17.29	18.77	17.65	19.08	19.40	17.94	19.42	18.30	19.73	20.05
	3H	18.89	20.21	19.27	20.54	20.90	19.37	20.70	19.75	21.03	21.39
	4H	19.50	20.75	19.90	21.10	21.48	19.98	21.22	20.38	21.57	21.95
	6H	19.98	21.12	20.39	21.49	21.88	20.47	21.61	20.88	21.98	22.37
	8H	20.13	21.22	20.55	21.61	22.01	20.66	21.76	21.09	22.14	22.55
	12H	20.23	21.27	20.66	21.65	22.08	20.83	21.88	21.26	22.26	22.69
4H	2H	17.91	19.15	18.31	19.50	19.88	18.43	19.68	18.83	20.02	20.40
	3H	19.73	20.76	20.14	21.16	21.56	20.13	21.16	20.54	21.56	21.96
	4H	20.47	21.39	20.90	21.81	22.25	20.88	21.81	21.32	22.23	22.66
	6H	21.07	21.87	21.52	22.31	22.77	21.52	22.32	21.98	22.77	23.23
	8H	21.26	22.01	21.73	22.46	22.93	21.77	22.53	22.24	22.97	23.44
	12H	21.40	22.08	21.89	22.56	23.03	22.00	22.67	22.48	23.15	23.62
8H	4H	20.79	21.54	21.25	21.98	22.45	21.15	21.91	21.62	22.35	22.82
	6H	21.51	22.13	22.01	22.63	23.10	21.93	22.55	22.43	23.04	23.52
	8H	21.78	22.34	22.30	22.85	23.34	22.27	22.83	22.79	23.34	23.83
	12H	22.00	22.50	22.51	22.99	23.56	22.59	23.09	23.10	23.58	24.15
12H	4H	20.82	21.49	21.30	21.97	22.44	21.17	21.85	21.66	22.32	22.80
	6H	21.57	22.14	22.09	22.65	23.13	21.97	22.54	22.49	23.05	23.53
	8H	21.91	22.40	22.42	22.90	23.46	22.38	22.88	22.89	23.37	23.93