

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: P894173

Luminaire Tested: 4MB-SC3-ASYMR-UNV-CC83-HI-5000K

Issue Date: 11/11/2024

**Test Information**

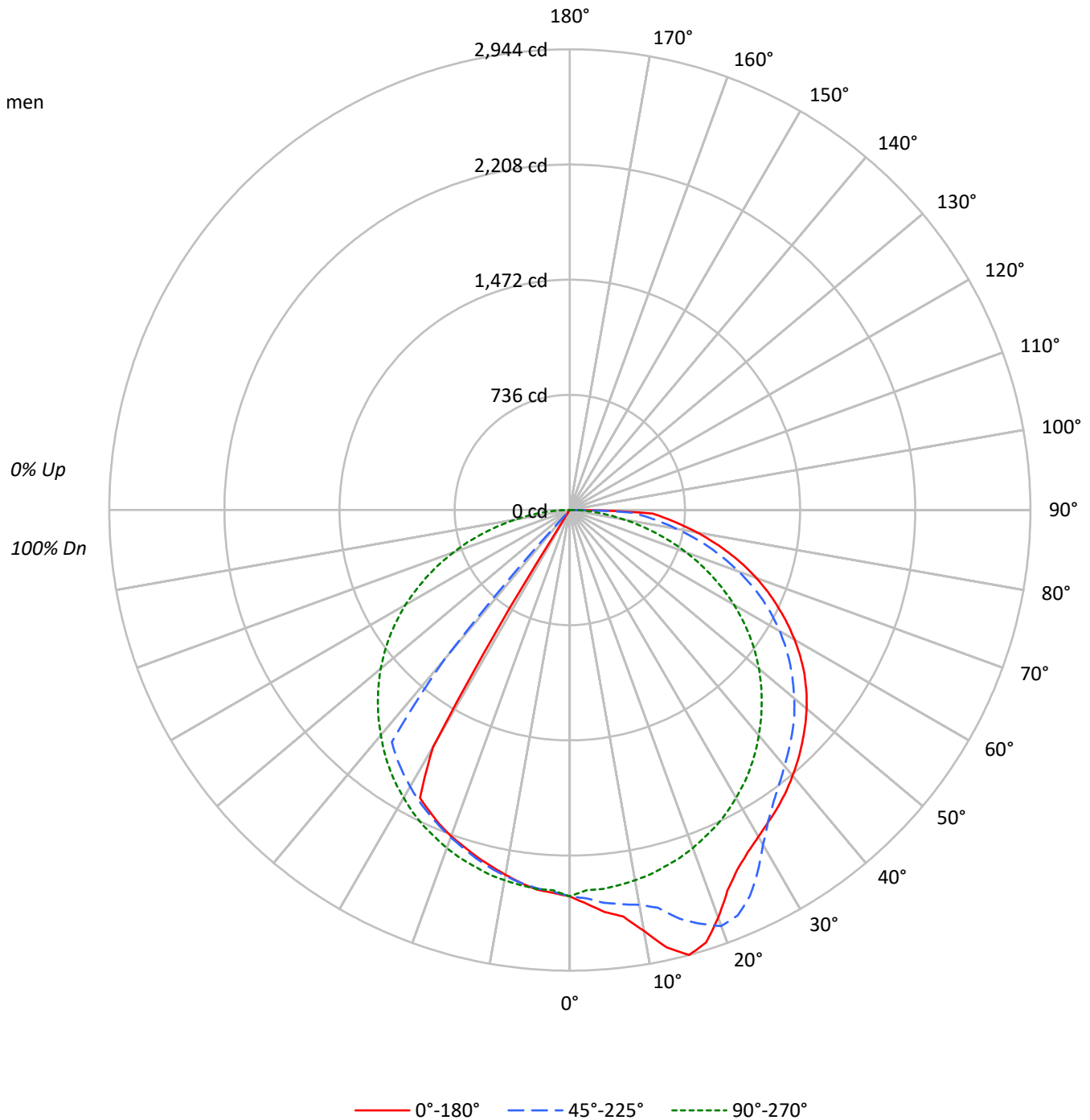
Test Method: LM-79-2019  
Report Number: P894173  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2410-248-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 4MB-SC3-ASYMR-UNV-CC83-HI-5000K  
Description: Selectable 4FT MICROBAY LINEAR BAY with ASYMMERIC REFLECTOR, 80CRI, 5000K CCT, HI luv setting  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6679.0 lumens  
Efficiency: N/A  
Efficacy: 131.7 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.28 / 1.25  
Luminous Opening: Rectangular (W 0.21' x L: 3.98' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 50.7  
Input Voltage (V):  
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	108	103	99	95	105	101	97	93	97	93	90	93	90	87	89	87	85	85	85	85	83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	71	71	71	69
3	90	79	71	65	88	78	70	64	75	68	63	72	67	62	70	65	61	61	61	61	59
4	83	71	62	55	80	69	61	55	67	60	54	65	58	53	62	57	53	53	53	53	50
5	76	63	55	48	74	62	54	48	60	53	47	58	52	47	56	51	46	46	46	46	44
6	71	57	48	42	69	56	48	42	55	47	42	53	46	41	51	45	41	41	41	41	39
7	66	52	44	37	64	51	43	37	50	42	37	48	42	37	47	41	36	36	36	36	35
8	61	48	39	34	60	47	39	33	46	38	33	45	38	33	43	37	33	33	33	33	31
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	30	30	30	28
10	54	41	33	28	53	40	33	28	39	32	27	38	32	27	37	32	27	27	27	27	26

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

	0°	45°	90°	135°	180°
0°	32055	32055	32055	32055	32055
5°	33615	32841	31679	31625	31734
10°	36016	33780	31673	31299	31207
15°	39571	36341	31684	31000	30848
20°	38313	39094	31767	30752	30653
25°	36300	39015	31844	30648	30426
30°	36144	37035	31841	30611	26202
35°	36756	36015	31892	30615	358
40°	37555	36188	31851	21114	239
45°	38582	36920	31857	389	156
50°	39930	37843	31875	285	57
55°	41449	38921	31783	192	32
60°	43108	40243	31504	73	36
65°	45135	41833	30931	86	86
70°	48148	43585	29951	106	106
75°	52704	46393	28657	286	140
80°	61849	51911	26539	426	209
85°	92059	72884	24851	626	417

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 87.5°  
 Luminance: 157835 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	236.6	3.5
10°-20°	706.3	10.6
20°-30°	1085.7	16.3
30°-40°	1163.5	17.4
40°-50°	1056.7	15.8
50°-60°	963.9	14.4
60°-70°	717.1	10.7
70°-80°	504.7	7.6
80°-90°	244.5	3.7
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°	2028.5	30.4
0°-40°	3192.1	47.8
0°-60°	5212.7	78.0
0°-90°	6679.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6679.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2469	2469	2469	2469	2469	
5°	2579	2520	2430	2426	2435	250
15°	2944	2703	2357	2306	2295	813
25°	2534	2723	2223	2139	2124	1178
35°	2319	2272	2012	1931	23	1452
45°	2101	2010	1735	21	8	1623
55°	1831	1719	1404	8	1	1635
65°	1469	1362	1007	3	3	1454
75°	1050	925	571	6	3	1108
85°	618	489	167	4	3	621
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	2468.6	2468.6	2468.6	2468.6	2468.6	2468.6	2468.6	2468.6	2468.6
2.5°	2519.5	2491.2	2484.1	2503.9	2431.8	2479.9	2440.3	2448.8	2448.8
5°	2578.9	2539.3	2519.5	2513.8	2430.4	2462.9	2426.2	2426.2	2434.6
7.5°	2619.9	2576.0	2540.7	2526.5	2417.7	2446.0	2403.5	2403.5	2403.5
10°	2731.5	2649.5	2561.9	2536.4	2402.1	2423.3	2373.8	2376.7	2366.8
12.5°	2863.0	2789.5	2602.9	2532.2	2385.2	2395.1	2342.7	2341.3	2330.0
15°	2943.6	2888.5	2703.3	2526.5	2356.9	2365.4	2306.0	2301.7	2294.7
17.5°	2898.4	2889.9	2772.6	2522.3	2331.4	2324.4	2265.0	2260.7	2255.1
20°	2772.6	2793.8	2829.1	2513.8	2298.9	2284.8	2225.4	2222.6	2218.3
22.5°	2632.6	2653.8	2803.7	2528.0	2259.3	2242.4	2183.0	2180.1	2174.5
25°	2533.6	2533.6	2723.1	2561.9	2222.6	2191.5	2139.1	2134.9	2123.6
27.5°	2464.3	2451.6	2602.9	2600.1	2175.9	2140.6	2092.5	2088.2	2074.1
30°	2410.6	2389.4	2470.0	2618.4	2123.6	2085.4	2041.6	2037.4	1747.5
32.5°	2362.5	2339.9	2358.3	2634.0	2071.3	2026.0	1987.9	1418.1	62.2
35°	2318.7	2293.3	2272.0	2622.7	2011.9	1966.7	1931.3	41.0	22.6
37.5°	2269.2	2249.4	2201.4	2563.3	1948.3	1903.0	1869.1	22.6	19.8
40°	2215.5	2197.1	2134.9	2475.6	1879.0	1840.8	1245.6	19.8	14.1
42.5°	2160.4	2146.2	2072.7	2348.4	1809.7	1771.5	39.6	15.6	11.3
45°	2101.0	2088.2	2010.5	2194.3	1734.8	1699.4	21.2	11.3	8.5
47.5°	2040.2	2021.8	1945.5	2028.9	1658.4	1623.1	18.4	8.5	5.7
50°	1976.6	1956.8	1873.3	1883.2	1577.9	1542.5	14.1	5.7	2.8
52.5°	1905.9	1881.8	1797.0	1751.8	1493.0	1460.5	11.3	2.8	1.4
55°	1830.9	1804.1	1719.2	1637.2	1403.9	1367.2	8.5	2.8	1.4
57.5°	1747.5	1717.8	1637.2	1528.4	1309.2	924.7	5.7	2.8	1.4
60°	1659.9	1630.2	1549.6	1426.6	1213.1	63.6	2.8	2.8	1.4
62.5°	1566.5	1535.4	1457.7	1323.4	1109.9	52.3	2.8	2.8	2.8
65°	1469.0	1432.2	1361.5	1217.3	1006.7	43.8	2.8	2.8	2.8
67.5°	1371.4	1324.8	1258.3	1108.5	900.6	36.8	2.8	2.8	2.8
70°	1268.2	1217.3	1148.0	998.2	788.9	29.7	2.8	2.8	2.8
72.5°	1162.2	1112.7	1037.8	886.5	684.3	22.6	2.8	2.8	2.8
75°	1050.5	1005.2	924.7	774.8	571.2	17.0	5.7	2.8	2.8
77.5°	934.6	899.2	808.7	660.3	460.9	11.3	5.7	2.8	2.8
80°	827.1	787.5	694.2	544.3	354.9	8.5	5.7	4.2	2.8
82.5°	716.8	681.5	588.2	438.3	254.5	7.1	5.7	4.2	2.8
85°	617.9	583.9	489.2	342.2	166.8	5.7	4.2	4.2	2.8
87.5°	530.2	499.1	405.8	250.3	94.7	4.2	4.2	4.2	2.8
90°	0.0	0.0	0.0	0.0	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	26.58	28.19	26.94	28.51	28.82	22.01	23.63	22.38	23.94	24.25
	3H	29.03	30.49	29.40	30.82	31.18	22.65	24.12	23.03	24.44	24.81
	4H	30.15	31.53	30.55	31.88	32.26	22.80	24.18	23.20	24.53	24.90
	6H	31.24	32.53	31.65	32.89	33.28	22.84	24.12	23.25	24.49	24.88
	8H	31.77	33.00	32.20	33.39	33.79	22.83	24.06	23.25	24.44	24.84
	12H	32.34	33.52	32.77	33.90	34.33	22.81	23.99	23.24	24.37	24.80
4H	2H	27.24	28.62	27.63	28.97	29.34	23.14	24.52	23.54	24.87	25.24
	3H	29.92	31.09	30.33	31.49	31.89	24.48	25.65	24.89	26.05	26.45
	4H	31.22	32.28	31.65	32.70	33.13	25.02	26.08	25.45	26.49	26.93
	6H	32.50	33.44	32.95	33.88	34.33	25.29	26.23	25.74	26.67	27.12
	8H	33.13	34.01	33.59	34.45	34.91	25.33	26.21	25.79	26.65	27.11
	12H	33.82	34.61	34.29	35.08	35.55	25.34	26.13	25.82	26.61	27.07
8H	4H	31.58	32.46	32.04	32.90	33.37	25.96	26.84	26.42	27.28	27.75
	6H	33.07	33.80	33.56	34.29	34.76	26.55	27.29	27.05	27.78	28.25
	8H	33.85	34.51	34.36	35.02	35.50	26.73	27.40	27.24	27.90	28.39
	12H	34.74	35.33	35.25	35.82	36.38	26.83	27.43	27.34	27.91	28.47
12H	4H	31.62	32.42	32.10	32.89	33.36	26.18	26.97	26.66	27.45	27.92
	6H	33.15	33.82	33.66	34.33	34.81	26.90	27.57	27.41	28.07	28.56
	8H	34.03	34.63	34.54	35.12	35.67	27.22	27.81	27.72	28.30	28.86