

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: P895007

Luminaire Tested: 8TMB-4SL-LVR-UNV-L840

Issue Date: 11/11/2024

**Test Information**

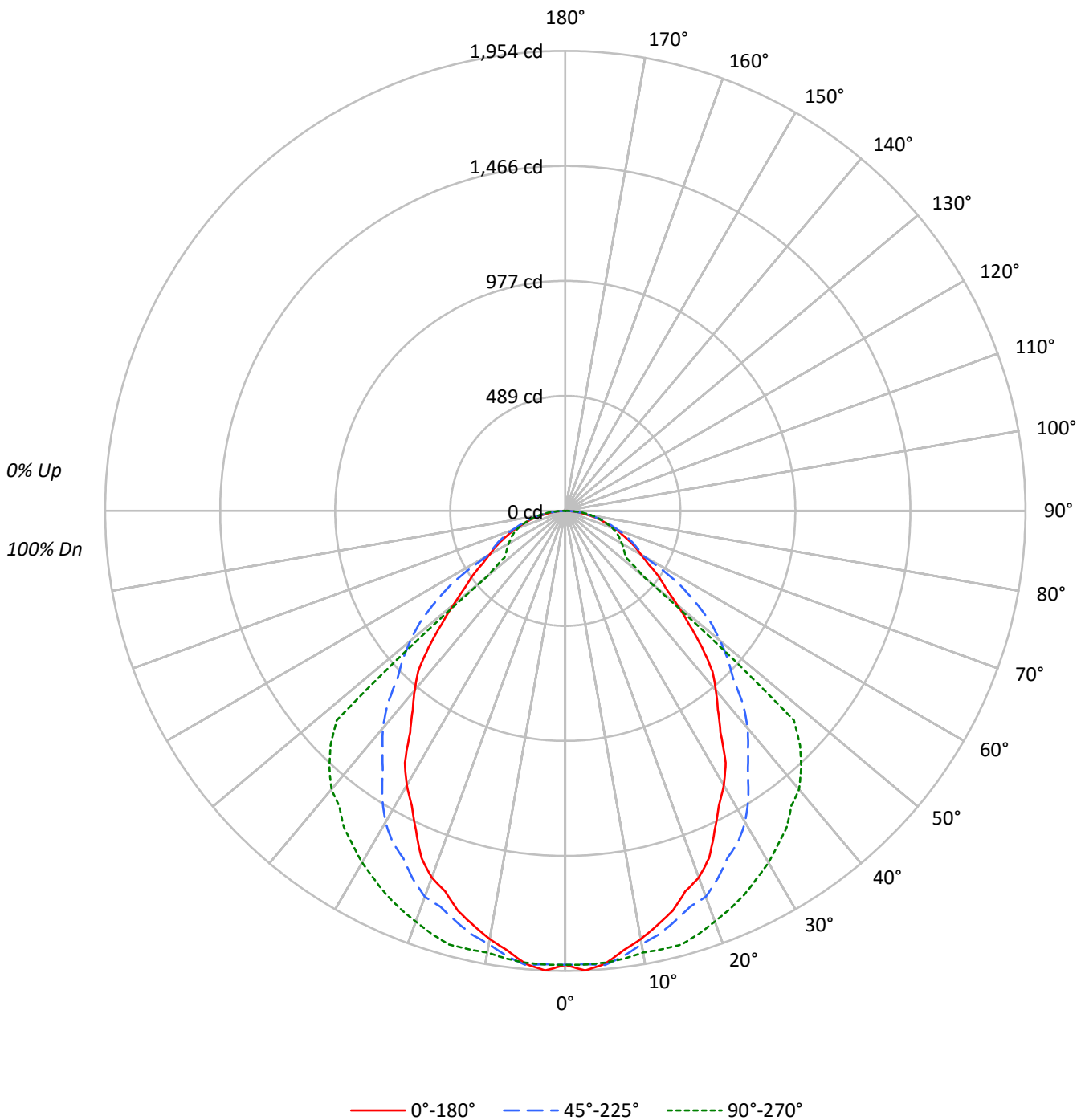
Test Method: LM-79-2019  
Report Number: P895007  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2407-175-8)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 8TMB-4SL-LVR-UNV-L840  
Description: 4000 Lumen 8FT MICROBAY LINEAR BAY with LOUVER, 80CRI, 4000K CCT  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4115.0 lumens  
Efficiency: N/A  
Efficacy: 149.1 lumens/watt  
Spacing Criteria (0/90/45): 1.06 / 1.32 / 1.27  
Luminous Opening: Rectangular (W 0.38' x L: 7.98' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 27.6  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: 0.99  
Total Harmonic Distortion (THDi): 4.5  
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
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	100	
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87	87	
2	102	94	88	83	99	92	87	82	89	84	80	86	82	79	83	80	77	75	75	
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	65	65	
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	57	57	
5	80	68	60	54	78	67	60	54	65	59	53	63	58	53	62	57	52	50	50	
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	56	51	47	45	45	
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	40	40	
8	65	52	44	39	63	52	44	39	50	43	39	49	43	38	48	42	38	36	36	
9	61	48	40	35	59	48	40	35	47	40	35	45	39	35	44	39	35	33	33	
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	41	36	32	30	30	

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

	0°	45°	90°
0°	6842	6842	6842
5°	6879	6896	6861
10°	6653	6731	6862
15°	6461	6624	7004
20°	6258	6585	7009
25°	5872	6373	7040
30°	5516	6258	7069
35°	4974	5853	7102
40°	4607	5583	7152
45°	4121	5060	7072
50°	3420	4741	2376
55°	2979	4161	1901
60°	2635	2711	1971
65°	2505	2638	2092
70°	2350	2493	2207
75°	2187	2350	2269
80°	1992	2213	2374
85°	1763	1885	2565

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 7072 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	182.9	4.4
10°-20°	514.5	12.5
20°-30°	756.9	18.4
30°-40°	865.6	21.0
40°-50°	819.6	19.9
50°-60°	451.6	11.0
60°-70°	289.9	7.0
70°-80°	178.9	4.3
80°-90°	55.1	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°	1454.3	35.3
0°-40°	2319.9	56.4
0°-60°	3591.1	87.3
0°-90°	4115.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4115.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1928	1928	1928	1928	1928	
5°	1931	1947	1936	1936	1926	181
15°	1759	1781	1803	1898	1907	494
25°	1500	1567	1628	1734	1798	691
35°	1148	1247	1351	1547	1640	726
45°	821	899	1008	1294	1409	628
55°	482	505	673	347	307	431
65°	298	308	314	280	249	295
75°	160	162	171	180	166	170
85°	43	43	46	53	63	48
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1928.3	1928.3	1928.3	1928.3	1928.3
2.5°	1953.9	1958.8	1927.3	1926.3	1929.3
5°	1931.3	1947.0	1936.2	1936.2	1926.3
7.5°	1883.0	1909.6	1906.6	1929.3	1918.4
10°	1846.6	1868.2	1868.2	1927.3	1904.7
12.5°	1803.2	1827.8	1841.6	1903.7	1906.6
15°	1758.9	1780.6	1803.2	1897.8	1906.6
17.5°	1694.9	1734.3	1762.8	1855.4	1884.0
20°	1657.5	1681.1	1744.1	1819.0	1856.4
22.5°	1595.4	1629.9	1691.0	1774.7	1829.8
25°	1499.9	1566.9	1627.9	1734.3	1798.3
27.5°	1411.3	1461.5	1587.5	1699.8	1760.9
30°	1346.3	1385.7	1527.5	1649.6	1725.4
32.5°	1267.5	1331.5	1446.7	1600.3	1681.1
35°	1148.3	1246.8	1351.2	1547.2	1639.7
37.5°	1064.6	1132.6	1274.4	1492.0	1577.7
40°	994.7	1056.7	1205.4	1423.1	1544.2
42.5°	924.8	975.0	1118.8	1371.9	1482.2
45°	821.3	899.1	1008.5	1294.1	1409.3
47.5°	713.0	795.7	936.6	1228.1	1316.7
50°	619.5	685.4	858.8	1097.1	430.4
52.5°	537.7	598.8	776.0	396.9	325.0
55°	481.6	505.2	672.6	346.7	307.3
57.5°	414.6	453.0	564.3	329.9	291.5
60°	371.3	388.0	382.1	313.2	277.7
62.5°	336.8	348.6	346.7	296.4	262.0
65°	298.4	308.3	314.2	279.7	249.2
67.5°	260.0	268.9	277.7	259.0	231.4
70°	226.5	232.4	240.3	234.4	212.7
72.5°	192.0	198.9	203.9	208.8	188.1
75°	159.5	162.5	171.4	180.2	165.5
77.5°	130.0	133.0	138.9	148.7	140.8
80°	97.5	100.5	108.3	116.2	116.2
82.5°	68.9	70.9	75.8	86.7	91.6
85°	43.3	43.3	46.3	53.2	63.0
87.5°	16.7	16.7	19.7	23.6	31.5
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	14.63	16.11	15.00	16.43	16.74	12.43	13.92	12.80	14.23	14.54
	3H	16.16	17.48	16.54	17.81	18.17	14.76	16.09	15.14	16.42	16.78
	4H	16.75	17.99	17.15	18.34	18.72	15.71	16.96	16.11	17.31	17.69
	6H	17.21	18.35	17.62	18.72	19.11	16.50	17.65	16.91	18.01	18.41
	8H	17.35	18.44	17.78	18.83	19.23	16.81	17.90	17.24	18.29	18.69
	12H	17.45	18.49	17.88	18.87	19.30	17.06	18.10	17.49	18.49	18.91
4H	2H	15.18	16.42	15.58	16.77	17.15	13.54	14.78	13.94	15.13	15.51
	3H	16.95	17.98	17.36	18.38	18.78	15.98	17.01	16.39	17.41	17.81
	4H	17.67	18.60	18.11	19.02	19.46	17.05	17.98	17.48	18.39	18.83
	6H	18.26	19.06	18.72	19.51	19.97	17.94	18.74	18.40	19.19	19.65
	8H	18.45	19.20	18.91	19.65	20.11	18.29	19.04	18.75	19.49	19.95
	12H	18.59	19.26	19.07	19.74	20.21	18.58	19.25	19.06	19.73	20.20
8H	4H	17.98	18.73	18.45	19.18	19.65	17.44	18.19	17.90	18.63	19.10
	6H	18.69	19.32	19.19	19.81	20.29	18.47	19.10	18.97	19.59	20.07
	8H	18.95	19.52	19.47	20.03	20.52	18.92	19.48	19.43	19.99	20.48
	12H	19.16	19.66	19.67	20.15	20.72	19.30	19.80	19.81	20.29	20.86
12H	4H	18.02	18.69	18.50	19.17	19.64	17.47	18.14	17.95	18.62	19.10
	6H	18.76	19.32	19.27	19.83	20.32	18.54	19.10	19.05	19.61	20.10
	8H	19.08	19.58	19.59	20.07	20.63	19.04	19.54	19.55	20.04	20.60