

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: P895008

Luminaire Tested: 8TMB-4SL-LVR-UNV-L850

Issue Date: 11/11/2024

**Test Information**

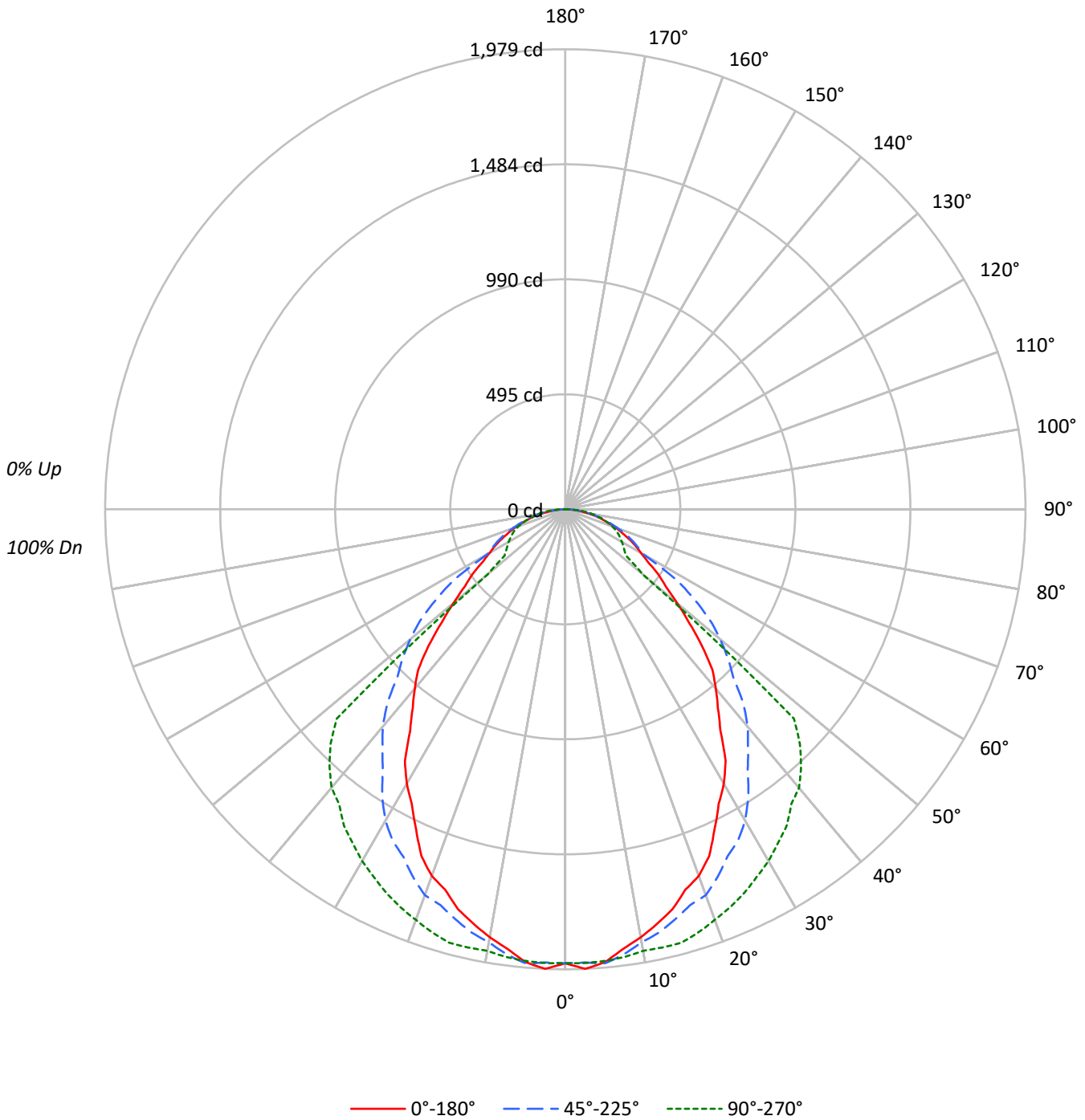
Test Method: LM-79-2019  
Report Number: P895008  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2407-175-8)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 8TMB-4SL-LVR-UNV-L850  
Description: 4000 Lumen 8FT MICROBAY LINEAR BAY with LOUVER, 80CRI, 5000K CCT  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4167.0 lumens  
Efficiency: N/A  
Efficacy: 151.0 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 (Ain): 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	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	71	80	74	69	77	72	68	75	71	67	67	67	67	65
4	87	76	68	62	84	74	67	61	72	66	61	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	57	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	43	39	49	43	38	48	42	38	38	38	38	36
9	61	48	40	35	59	48	40	35	47	40	35	45	39	35	44	39	35	35	35	35	33
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	41	36	32	32	32	32	30

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

	0°	45°	90°
0°	6928	6928	6928
5°	6966	6983	6948
10°	6737	6816	6949
15°	6543	6707	7092
20°	6337	6669	7098
25°	5946	6454	7129
30°	5585	6337	7158
35°	5037	5927	7192
40°	4665	5654	7243
45°	4173	5124	7161
50°	3463	4800	2406
55°	3017	4213	1924
60°	2668	2746	1995
65°	2537	2671	2118
70°	2380	2524	2235
75°	2215	2379	2296
80°	2017	2241	2405
85°	1787	1909	2597

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 7161 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	185.2	4.4
10°-20°	521.0	12.5
20°-30°	766.4	18.4
30°-40°	876.5	21.0
40°-50°	830.0	19.9
50°-60°	457.3	11.0
60°-70°	293.6	7.0
70°-80°	181.2	4.3
80°-90°	55.8	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°	1472.7	35.3
0°-40°	2349.2	56.4
0°-60°	3636.4	87.3
0°-90°	4167.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4167.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1953	1953	1953	1953	1953	
5°	1956	1972	1961	1961	1951	183
15°	1781	1803	1826	1922	1931	500
25°	1519	1587	1648	1756	1821	699
35°	1163	1262	1368	1567	1660	735
45°	832	910	1021	1310	1427	636
55°	488	512	681	351	311	436
65°	302	312	318	283	252	299
75°	162	165	174	182	168	172
85°	44	44	47	54	64	49
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1952.7	1952.7	1952.7	1952.7	1952.7
2.5°	1978.6	1983.6	1951.7	1950.7	1953.7
5°	1955.7	1971.6	1960.6	1960.6	1950.7
7.5°	1906.8	1933.7	1930.7	1953.7	1942.7
10°	1869.9	1891.8	1891.8	1951.7	1928.7
12.5°	1826.0	1850.9	1864.9	1927.7	1930.7
15°	1781.1	1803.1	1826.0	1921.7	1930.7
17.5°	1716.3	1756.2	1785.1	1878.9	1907.8
20°	1678.4	1702.3	1766.2	1842.0	1879.9
22.5°	1615.6	1650.5	1712.3	1797.1	1852.9
25°	1518.8	1586.7	1648.5	1756.2	1821.0
27.5°	1429.1	1480.0	1607.6	1721.3	1783.1
30°	1363.3	1403.2	1546.8	1670.4	1747.2
32.5°	1283.5	1348.3	1465.0	1620.6	1702.3
35°	1162.8	1262.5	1368.3	1566.7	1660.5
37.5°	1078.1	1146.9	1290.5	1510.9	1597.6
40°	1007.2	1070.1	1220.7	1441.1	1563.7
42.5°	936.4	987.3	1132.9	1389.2	1500.9
45°	831.7	910.5	1021.2	1310.4	1427.1
47.5°	722.0	805.8	948.4	1243.6	1333.4
50°	627.3	694.1	869.6	1111.0	435.8
52.5°	544.5	606.3	785.9	401.9	329.1
55°	487.7	511.6	681.1	351.0	311.1
57.5°	419.9	458.7	571.4	334.1	295.2
60°	376.0	392.9	386.9	317.1	281.2
62.5°	341.1	353.0	351.0	300.2	265.3
65°	302.2	312.1	318.1	283.2	252.3
67.5°	263.3	272.3	281.2	262.3	234.4
70°	229.4	235.4	243.3	237.4	215.4
72.5°	194.5	201.4	206.4	211.4	190.5
75°	161.6	164.6	173.5	182.5	167.5
77.5°	131.6	134.6	140.6	150.6	142.6
80°	98.7	101.7	109.7	117.7	117.7
82.5°	69.8	71.8	76.8	87.8	92.7
85°	43.9	43.9	46.9	53.9	63.8
87.5°	17.0	17.0	19.9	23.9	31.9
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	14.67	16.16	15.04	16.47	16.79	12.48	13.96	12.84	14.27	14.59
	3H	16.20	17.53	16.58	17.86	18.22	14.81	16.14	15.19	16.46	16.83
	4H	16.79	18.04	17.19	18.39	18.77	15.76	17.00	16.16	17.35	17.73
	6H	17.25	18.40	17.66	18.77	19.16	16.54	17.69	16.96	18.06	18.45
	8H	17.39	18.49	17.82	18.88	19.28	16.85	17.95	17.28	18.34	18.74
	12H	17.49	18.54	17.92	18.92	19.35	17.10	18.15	17.53	18.53	18.96
4H	2H	15.23	16.47	15.63	16.82	17.20	13.58	14.82	13.98	15.17	15.55
	3H	17.00	18.03	17.41	18.43	18.83	16.03	17.06	16.44	17.46	17.86
	4H	17.72	18.64	18.15	19.06	19.50	17.09	18.02	17.53	18.44	18.87
	6H	18.30	19.11	18.76	19.55	20.01	17.98	18.79	18.44	19.23	19.69
	8H	18.49	19.25	18.96	19.69	20.16	18.33	19.09	18.80	19.53	20.00
	12H	18.63	19.30	19.11	19.78	20.25	18.62	19.29	19.10	19.77	20.24
8H	4H	18.02	18.78	18.49	19.22	19.69	17.48	18.23	17.94	18.68	19.15
	6H	18.74	19.36	19.23	19.85	20.33	18.52	19.14	19.01	19.63	20.11
	8H	19.00	19.56	19.51	20.07	20.56	18.96	19.52	19.48	20.03	20.52
	12H	19.21	19.71	19.72	20.20	20.76	19.35	19.84	19.86	20.34	20.90
12H	4H	18.06	18.73	18.54	19.21	19.68	17.51	18.19	18.00	18.67	19.14
	6H	18.80	19.36	19.32	19.87	20.36	18.58	19.14	19.09	19.65	20.14
	8H	19.12	19.62	19.63	20.11	20.68	19.09	19.59	19.60	20.08	20.64