

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: P895032

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

Issue Date: 11/11/2024

**Test Information**

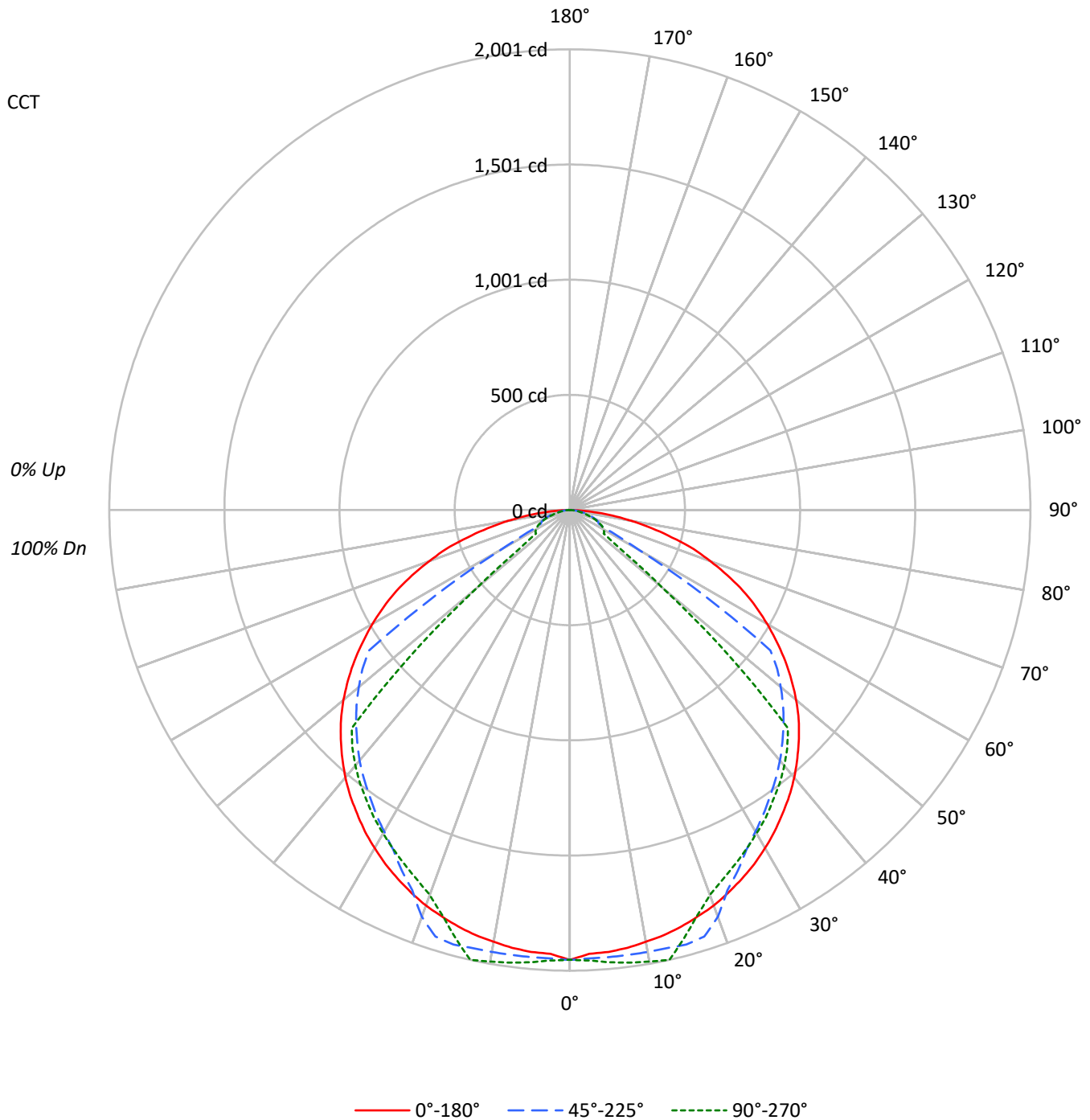
Test Method: LM-79-2019  
Report Number: P895032  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2408-210-3)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 8TMB-4SL-RFLW-UNV-L850  
Description: 4000 Lumen 8FT MICROBAY LINEAR BAY with REFLECTOR WITH WHITE FINISH, 80CRI, 5000K  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4765.0 lumens  
Efficiency: N/A  
Efficacy: 172.6 lumens/watt  
Spacing Criteria (0/90/45): 1.29 / 1.24 / 1.38  
Luminous Opening: Rectangular (W 0.21' 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	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	101	98	100	97	94	96	94	92	92	91	89	89	89	89	87
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	79	77	77	77	77	75
3	93	84	76	70	91	82	75	70	79	73	69	77	72	67	74	70	66	66	66	66	64
4	86	75	67	61	84	74	66	60	71	65	59	69	63	59	67	62	58	58	58	58	56
5	79	67	59	53	77	66	58	53	64	57	52	62	56	51	61	55	51	51	51	51	49
6	73	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	45	45	45	43
7	68	55	47	41	67	55	47	41	53	46	41	52	45	41	50	45	40	40	40	40	38
8	64	51	43	37	62	50	42	37	49	42	37	48	41	37	46	41	36	36	36	36	35
9	60	47	39	33	58	46	39	33	45	38	33	44	38	33	43	37	33	33	33	33	31
10	56	43	35	30	55	43	35	30	42	35	30	41	34	30	40	34	30	30	30	30	28

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

	0°	45°	90°
0°	12651	12651	12651
5°	12525	12670	12816
10°	12522	12817	13097
15°	12556	13097	12887
20°	12598	12954	12258
25°	12630	12342	12134
30°	12681	12061	12129
35°	12734	11990	12167
40°	12822	12008	12254
45°	12885	12023	12269
50°	12933	12053	5304
55°	12900	12014	2023
60°	12825	4585	2206
65°	12736	2128	2266
70°	12301	2291	2120
75°	11491	2187	1849
80°	10109	1920	1589
85°	7987	1664	1330

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 50°  
 Luminance: 12933 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	186.6	3.9
10°-20°	541.8	11.4
20°-30°	808.3	17.0
30°-40°	979.8	20.6
40°-50°	1003.3	21.1
50°-60°	667.2	14.0
60°-70°	380.3	8.0
70°-80°	159.8	3.4
80°-90°	38.1	0.8
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°	1536.7	32.2
0°-40°	2516.5	52.8
0°-60°	4186.9	87.9
0°-90°	4765.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4765.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1954	1954	1954	1954	1954	
5°	1927	1965	1949	1954	1972	183
15°	1873	1925	1954	1947	1922	529
25°	1768	1853	1727	1689	1698	816
35°	1611	1640	1517	1524	1539	1009
45°	1407	1322	1313	1329	1340	1085
55°	1143	1046	1064	233	179	1020
65°	831	744	139	148	148	818
75°	459	96	87	76	74	488
85°	108	27	22	18	18	129
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1953.7	1953.7	1953.7	1953.7	1953.7
2.5°	1929.0	1969.4	1949.2	1951.4	1958.2
5°	1926.8	1964.9	1949.2	1953.7	1971.6
7.5°	1917.8	1958.2	1949.2	1962.6	1982.8
10°	1904.4	1951.4	1949.2	1971.6	1991.8
12.5°	1891.0	1938.0	1949.2	1982.8	2000.7
15°	1873.0	1924.6	1953.7	1947.0	1922.3
17.5°	1850.6	1911.1	1942.5	1846.1	1843.9
20°	1828.2	1893.2	1879.8	1787.9	1778.9
22.5°	1799.1	1875.3	1787.9	1725.2	1736.4
25°	1767.7	1852.9	1727.4	1689.3	1698.3
27.5°	1734.1	1830.5	1662.4	1649.0	1660.2
30°	1696.0	1799.1	1613.1	1608.7	1622.1
32.5°	1655.7	1738.6	1566.1	1568.3	1584.0
35°	1610.9	1640.0	1516.8	1523.5	1539.2
37.5°	1566.1	1548.2	1469.7	1480.9	1496.6
40°	1516.8	1476.5	1420.5	1431.7	1449.6
42.5°	1463.0	1400.3	1366.7	1382.4	1398.1
45°	1407.0	1321.9	1312.9	1328.6	1339.8
47.5°	1348.8	1254.7	1256.9	1268.1	950.0
50°	1283.8	1187.4	1196.4	829.0	526.5
52.5°	1214.3	1118.0	1135.9	461.5	266.6
55°	1142.6	1046.3	1064.2	233.0	179.2
57.5°	1066.5	974.6	694.5	168.0	177.0
60°	990.3	898.4	354.0	165.8	170.3
62.5°	911.9	822.3	168.0	159.1	161.3
65°	831.2	743.8	138.9	147.9	147.9
67.5°	741.6	660.9	132.2	132.2	129.9
70°	649.7	548.9	121.0	114.3	112.0
72.5°	564.6	210.6	105.3	94.1	91.9
75°	459.3	96.3	87.4	76.2	73.9
77.5°	365.2	80.7	69.5	60.5	58.3
80°	271.1	62.7	51.5	44.8	42.6
82.5°	188.2	42.6	35.8	29.1	29.1
85°	107.5	26.9	22.4	17.9	17.9
87.5°	42.6	13.4	11.2	6.7	6.7
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	21.74	23.26	22.11	23.58	23.89	9.51	11.03	9.87	11.34	11.66
	3H	23.76	25.12	24.14	25.45	25.81	11.82	13.18	12.20	13.51	13.87
	4H	24.23	25.50	24.63	25.85	26.22	12.54	13.81	12.94	14.16	14.53
	6H	24.63	25.80	25.04	26.17	26.56	13.02	14.19	13.43	14.56	14.95
	8H	24.78	25.90	25.21	26.29	26.69	13.16	14.27	13.58	14.66	15.06
	12H	24.88	25.95	25.31	26.33	26.76	13.24	14.31	13.67	14.69	15.12
4H	2H	21.58	22.86	21.98	23.20	23.58	10.31	11.58	10.71	11.93	12.30
	3H	23.79	24.83	24.20	25.23	25.64	12.82	13.86	13.23	14.26	14.67
	4H	24.23	25.17	24.67	25.59	26.03	13.64	14.58	14.07	14.99	15.43
	6H	24.70	25.52	25.16	25.96	26.42	14.23	15.04	14.69	15.49	15.95
	8H	24.89	25.65	25.36	26.10	26.57	14.40	15.16	14.86	15.61	16.07
	12H	25.04	25.72	25.53	26.20	26.67	14.52	15.20	15.00	15.68	16.15
8H	4H	24.15	24.91	24.62	25.36	25.83	14.48	15.24	14.94	15.68	16.15
	6H	24.61	25.24	25.11	25.73	26.21	15.10	15.73	15.60	16.22	16.70
	8H	24.81	25.38	25.33	25.89	26.38	15.30	15.86	15.81	16.38	16.86
	12H	25.00	25.50	25.51	25.99	26.56	15.46	15.96	15.97	16.45	17.01
12H	4H	24.12	24.80	24.61	25.28	25.75	14.55	15.23	15.03	15.71	16.18
	6H	24.57	25.13	25.08	25.64	26.13	15.19	15.76	15.71	16.27	16.76
	8H	24.79	25.29	25.30	25.78	26.35	15.44	15.95	15.96	16.44	17.00