

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: P895016

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

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P895016
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-077-26)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 8TMB-4SL-LVRA-UNV-L850
Description: 4000 Lumen 8FT MICROBAY LINEAR BAY with LOUVER WITH AISLE OPTIC, 80CRI, 5000K CCT
Light Source: -
Ballast/Driver: -

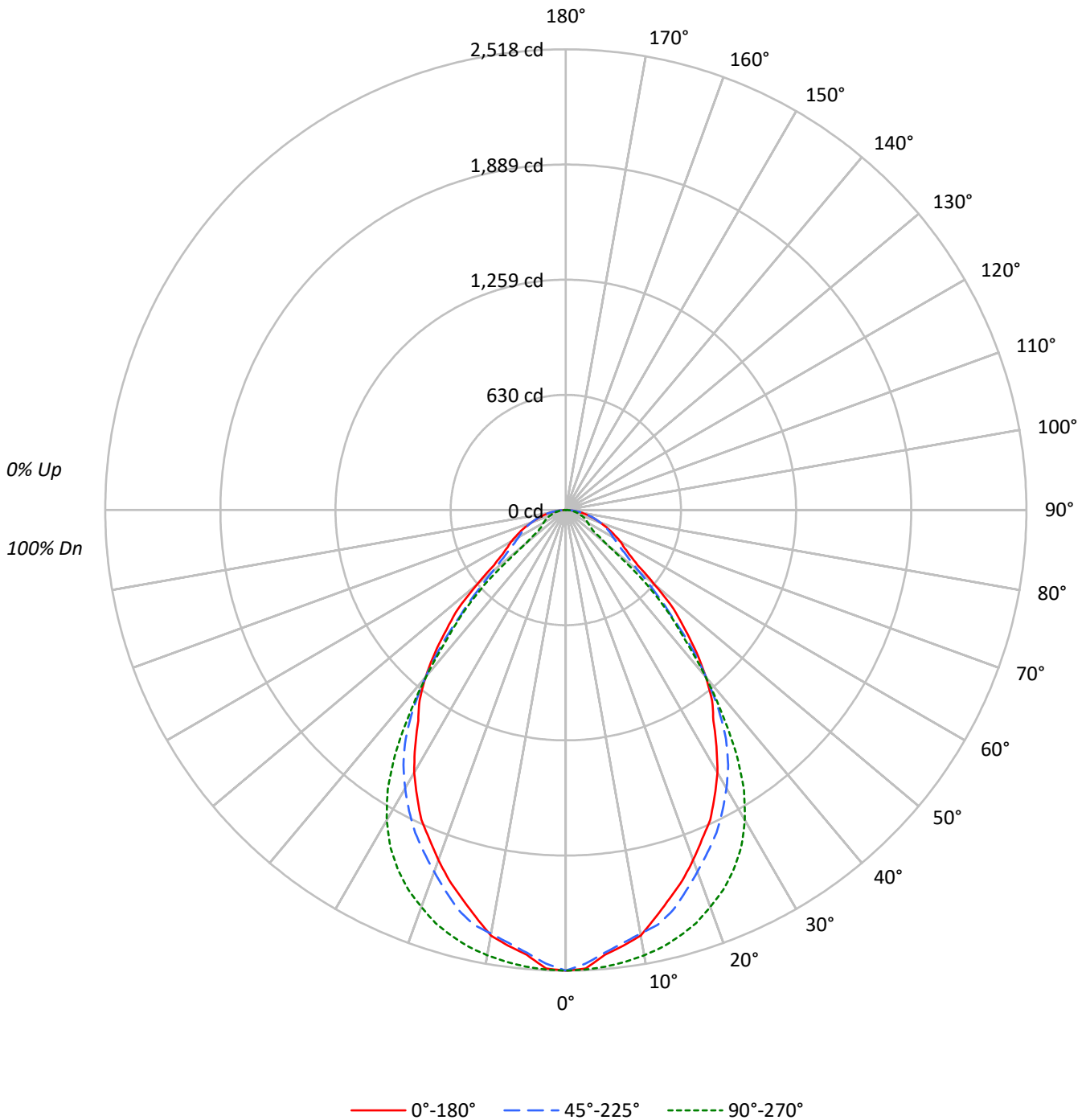
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4086.0 lumens
Efficiency: N/A
Efficacy: 148.0 lumens/watt
Spacing Criteria (0/90/45): 1.02 / 1.16 / 1.12
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_{in}): 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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88
2	103	96	91	86	101	95	90	85	91	87	83	88	85	82	85	82	80	78
3	96	87	80	75	94	86	80	75	83	78	73	80	76	72	78	74	71	69
4	89	79	72	66	87	78	71	66	76	70	65	73	68	64	71	67	63	62
5	83	72	65	59	81	71	64	59	69	63	58	67	62	58	66	61	57	55
6	78	66	59	53	76	65	58	53	64	57	53	62	57	52	61	56	52	50
7	73	61	54	48	71	60	53	48	59	52	48	58	52	47	56	51	47	45
8	68	57	49	44	67	56	49	44	55	48	44	53	48	43	52	47	43	41
9	64	52	45	40	63	52	45	40	51	44	40	50	44	40	49	44	40	38
10	61	49	42	37	60	48	42	37	47	41	37	47	41	37	46	40	37	35

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8933	8933	8933
5°	8692	8653	8923
10°	8507	8470	8902
15°	8068	8316	8852
20°	7686	7946	8717
25°	7311	7624	8495
30°	6792	7196	8020
35°	6090	6613	7035
40°	5518	5530	5500
45°	4614	4086	3985
50°	3485	2876	1629
55°	2621	2300	1027
60°	2436	2118	990
65°	2266	2114	992
70°	2074	2074	976
75°	1966	2019	943
80°	1816	1908	969
85°	1584	1665	1058

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 4721 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	232.6	5.7
10°-20°	640.8	15.7
20°-30°	908.7	22.2
30°-40°	936.1	22.9
40°-50°	653.8	16.0
50°-60°	313.7	7.7
60°-70°	220.1	5.4
70°-80°	137.6	3.4
80°-90°	42.6	1.0
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°	1782.0	43.6
0°-40°	2718.1	66.5
0°-60°	3685.7	90.2
0°-90°	4086.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4086.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2518	2518	2518	2518	2518	
5°	2440	2437	2429	2493	2505	231
15°	2196	2213	2264	2329	2410	619
25°	1868	1886	1947	2079	2170	854
35°	1406	1444	1527	1559	1624	886
45°	920	941	814	773	794	708
55°	424	403	372	238	166	397
65°	270	252	252	191	118	267
75°	143	142	147	127	69	151
85°	39	39	41	40	26	44
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2517.6	2517.6	2517.6	2517.6	2517.6
2.5°	2507.9	2500.1	2481.3	2515.7	2513.1
5°	2440.4	2437.2	2429.4	2493.0	2505.3
7.5°	2402.1	2395.6	2386.5	2456.6	2491.0
10°	2361.2	2369.0	2350.9	2415.1	2470.9
12.5°	2276.9	2297.7	2322.3	2372.3	2446.2
15°	2196.4	2212.7	2263.9	2328.8	2409.9
17.5°	2121.2	2140.0	2184.1	2281.4	2367.7
20°	2035.5	2061.5	2104.3	2228.9	2308.7
22.5°	1947.3	1971.3	2025.1	2158.8	2247.7
25°	1867.5	1886.3	1947.3	2079.0	2169.8
27.5°	1761.7	1796.7	1854.5	1981.7	2077.0
30°	1657.9	1687.7	1756.5	1863.6	1957.6
32.5°	1532.6	1576.1	1652.0	1733.8	1812.3
35°	1406.1	1444.4	1526.8	1558.6	1624.1
37.5°	1314.0	1324.3	1371.1	1367.2	1404.2
40°	1191.3	1212.1	1193.9	1145.3	1187.4
42.5°	1059.0	1083.6	1010.3	953.8	968.8
45°	919.5	940.9	814.3	772.8	794.2
47.5°	798.8	796.8	656.7	628.8	598.9
50°	631.4	652.1	521.0	469.1	295.2
52.5°	493.1	500.9	429.6	299.8	194.0
55°	423.7	402.9	371.8	238.1	166.1
57.5°	376.3	350.4	329.6	221.3	151.8
60°	343.3	314.1	298.5	210.2	139.5
62.5°	305.6	282.9	277.1	200.5	128.5
65°	269.9	252.4	251.8	191.4	118.1
67.5°	234.2	224.5	227.1	180.4	106.4
70°	199.9	197.9	199.9	166.1	94.1
72.5°	170.7	168.7	173.9	147.9	80.5
75°	143.4	141.5	147.3	127.2	68.8
77.5°	114.2	115.5	119.4	105.8	57.7
80°	88.9	88.9	93.4	83.1	47.4
82.5°	63.6	64.2	66.8	61.0	37.0
85°	38.9	38.9	40.9	40.2	26.0
87.5°	13.0	14.9	17.5	18.8	13.0
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	13.25	14.61	13.62	14.92	15.24	9.59	10.94	9.95	11.25	11.57
	3H	14.99	16.20	15.37	16.53	16.89	11.56	12.77	11.94	13.10	13.46
	4H	15.66	16.79	16.07	17.14	17.52	12.27	13.40	12.67	13.75	14.13
	6H	16.17	17.21	16.59	17.58	17.97	12.79	13.83	13.21	14.20	14.59
	8H	16.34	17.33	16.77	17.72	18.12	12.98	13.96	13.41	14.35	14.76
	12H	16.45	17.39	16.88	17.78	18.21	13.12	14.06	13.55	14.44	14.87
4H	2H	13.79	14.91	14.19	15.26	15.65	11.21	12.34	11.61	12.69	13.07
	3H	15.76	16.69	16.17	17.10	17.50	13.39	14.32	13.80	14.72	15.12
	4H	16.56	17.40	17.00	17.82	18.26	14.27	15.10	14.70	15.52	15.96
	6H	17.21	17.93	17.67	18.38	18.84	14.91	15.63	15.37	16.08	16.54
	8H	17.43	18.10	17.90	18.55	19.02	15.12	15.80	15.59	16.24	16.71
	12H	17.58	18.18	18.07	18.66	19.14	15.28	15.88	15.76	16.36	16.83
8H	4H	16.85	17.53	17.32	17.97	18.44	14.92	15.59	15.38	16.04	16.51
	6H	17.63	18.19	18.13	18.68	19.16	15.78	16.33	16.28	16.83	17.31
	8H	17.93	18.43	18.45	18.95	19.44	16.11	16.60	16.63	17.12	17.61
	12H	18.17	18.61	18.68	19.10	19.67	16.37	16.81	16.88	17.30	17.87
12H	4H	16.87	17.47	17.35	17.95	18.42	14.99	15.59	15.47	16.07	16.54
	6H	17.68	18.18	18.20	18.70	19.19	15.91	16.41	16.43	16.93	17.42
	8H	18.05	18.49	18.56	18.98	19.55	16.33	16.77	16.84	17.26	17.83