

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: P895024

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

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P895024
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2407-175-7)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 8TMB-4SL-LVRF-UNV-L850
Description: 4000 Lumen 8FT MICROBAY LINEAR BAY with LOUVER WITH FROSTED INLAY, 80CRI, 5000K C
Light Source: -
Ballast/Driver: -

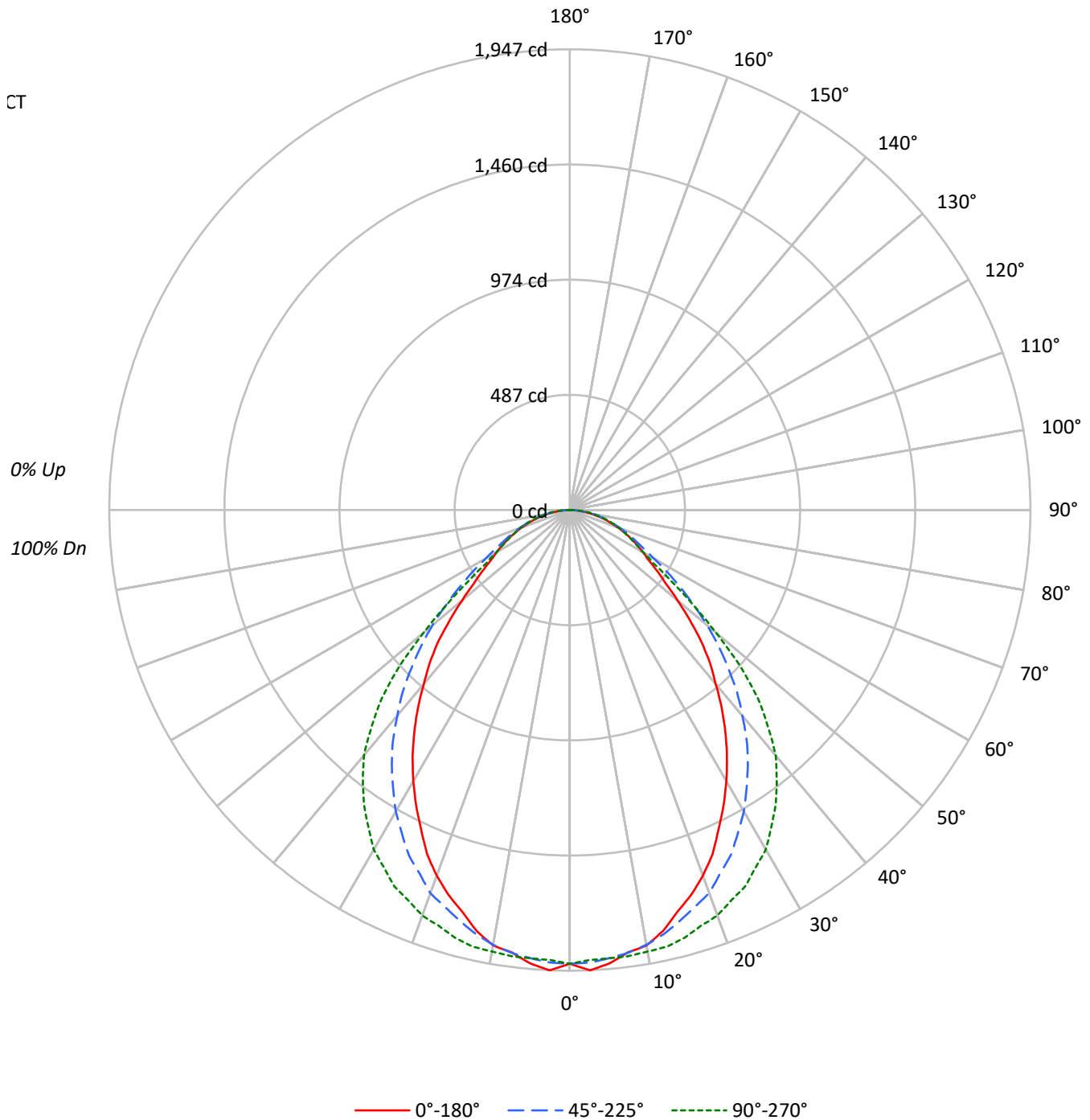
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3985.0 lumens
Efficiency: N/A
Efficacy: 144.4 lumens/watt
Spacing Criteria (0/90/45): 1.06 / 1.27 / 1.23
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	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	70	80	74	69	77	72	68	75	71	67	67	67	67	65
4	87	76	68	62	84	74	67	61	72	66	60	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	56	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	44	39	49	43	38	48	42	38	38	38	38	36
9	61	48	41	35	60	48	40	35	47	40	35	46	39	35	45	39	35	35	35	35	33
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32	32	32	32	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6803	6803	6803
5°	6851	6772	6772
10°	6732	6722	6826
15°	6454	6603	6875
20°	6208	6506	6886
25°	5824	6304	6870
30°	5421	6026	6790
35°	4963	5684	6573
40°	4443	5256	6271
45°	3943	4758	5639
50°	3280	4189	4447
55°	2794	3528	3232
60°	2533	2915	2554
65°	2386	2553	2378
70°	2245	2368	2317
75°	2092	2255	2214
80°	1915	2078	2139
85°	1665	1828	2394

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5639 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	181.5	4.6
10°-20°	510.8	12.8
20°-30°	741.8	18.6
30°-40°	826.0	20.7
40°-50°	729.8	18.3
50°-60°	478.9	12.0
60°-70°	293.2	7.4
70°-80°	170.6	4.3
80°-90°	52.3	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°	1434.2	36.0
0°-40°	2260.2	56.7
0°-60°	3468.9	87.0
0°-90°	3985.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3985.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1917	1917	1917	1917	1917	
5°	1923	1924	1901	1920	1901	181
15°	1757	1777	1798	1868	1872	496
25°	1488	1524	1610	1713	1755	684
35°	1146	1208	1312	1451	1518	715
45°	786	834	948	1076	1124	601
55°	452	484	570	565	522	410
65°	284	289	304	295	283	283
75°	153	154	164	168	162	162
85°	41	43	45	51	59	46
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1917.4	1917.4	1917.4	1917.4	1917.4
2.5°	1947.3	1923.4	1914.4	1923.4	1903.4
5°	1923.4	1924.4	1901.4	1920.4	1901.4
7.5°	1885.5	1898.5	1887.5	1916.4	1901.4
10°	1868.5	1869.5	1865.6	1895.5	1894.5
12.5°	1821.7	1824.7	1835.6	1880.5	1890.5
15°	1756.9	1776.8	1797.7	1868.5	1871.5
17.5°	1706.0	1729.9	1757.9	1833.6	1842.6
20°	1644.2	1654.2	1723.0	1789.8	1823.7
22.5°	1575.4	1594.3	1661.1	1750.9	1784.8
25°	1487.7	1523.5	1610.3	1713.0	1754.9
27.5°	1406.9	1448.8	1538.5	1653.2	1702.0
30°	1323.1	1371.0	1470.7	1583.4	1657.2
32.5°	1236.4	1296.2	1390.9	1520.6	1585.4
35°	1145.7	1207.5	1312.2	1450.8	1517.6
37.5°	1054.9	1114.7	1228.4	1377.0	1436.8
40°	959.2	1018.0	1134.7	1285.2	1354.0
42.5°	876.4	927.3	1046.9	1175.6	1239.4
45°	785.7	833.6	948.2	1075.9	1123.7
47.5°	686.0	741.8	853.5	958.2	977.1
50°	594.3	652.1	758.8	819.6	805.6
52.5°	513.5	562.4	660.1	686.0	653.1
55°	451.7	483.6	570.3	565.3	522.5
57.5°	394.8	414.8	488.6	460.7	419.8
60°	357.0	365.9	410.8	384.9	359.9
62.5°	321.1	325.1	349.0	335.0	316.1
65°	284.2	289.2	304.1	295.1	283.2
67.5°	250.3	252.3	266.2	264.2	249.3
70°	216.4	219.4	228.3	232.3	223.3
72.5°	183.5	186.5	195.4	199.4	191.4
75°	152.6	154.5	164.5	167.5	161.5
77.5°	122.6	126.6	132.6	137.6	130.6
80°	93.7	95.7	101.7	107.7	104.7
82.5°	65.8	68.8	72.8	80.8	82.8
85°	40.9	42.9	44.9	50.9	58.8
87.5°	16.0	17.0	19.9	21.9	28.9
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	14.19	15.67	14.56	15.99	16.30	14.84	16.32	15.21	16.64	16.95
	3H	15.79	17.12	16.17	17.45	17.81	16.28	17.60	16.66	17.93	18.30
	4H	16.41	17.65	16.81	18.00	18.38	16.88	18.13	17.28	18.48	18.85
	6H	16.88	18.03	17.29	18.39	18.79	17.37	18.52	17.78	18.88	19.28
	8H	17.03	18.12	17.46	18.51	18.91	17.57	18.66	18.00	19.05	19.45
	12H	17.13	18.18	17.56	18.56	18.99	17.74	18.78	18.17	19.16	19.59
4H	2H	14.81	16.06	15.21	16.40	16.78	15.34	16.58	15.74	16.93	17.31
	3H	16.63	17.66	17.04	18.06	18.46	17.03	18.06	17.45	18.46	18.87
	4H	17.37	18.30	17.81	18.71	19.15	17.79	18.71	18.22	19.13	19.57
	6H	17.97	18.77	18.43	19.22	19.68	18.42	19.23	18.88	19.67	20.13
	8H	18.17	18.92	18.63	19.36	19.83	18.68	19.43	19.14	19.88	20.34
	12H	18.31	18.98	18.79	19.46	19.93	18.90	19.57	19.38	20.05	20.52
8H	4H	17.69	18.44	18.15	18.89	19.36	18.06	18.81	18.52	19.25	19.72
	6H	18.41	19.04	18.91	19.53	20.01	18.83	19.46	19.33	19.95	20.43
	8H	18.69	19.25	19.20	19.76	20.25	19.18	19.74	19.69	20.25	20.74
	12H	18.91	19.40	19.42	19.89	20.46	19.50	19.99	20.01	20.48	21.05
12H	4H	17.73	18.40	18.21	18.88	19.35	18.08	18.75	18.56	19.23	19.70
	6H	18.48	19.04	18.99	19.55	20.04	18.88	19.44	19.39	19.95	20.44
	8H	18.81	19.31	19.32	19.80	20.37	19.28	19.78	19.79	20.27	20.84