

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: P895021

Luminaire Tested: 8TMB-4SL-LVRF-UNV-L830

Issue Date: 11/11/2024

**Test Information**

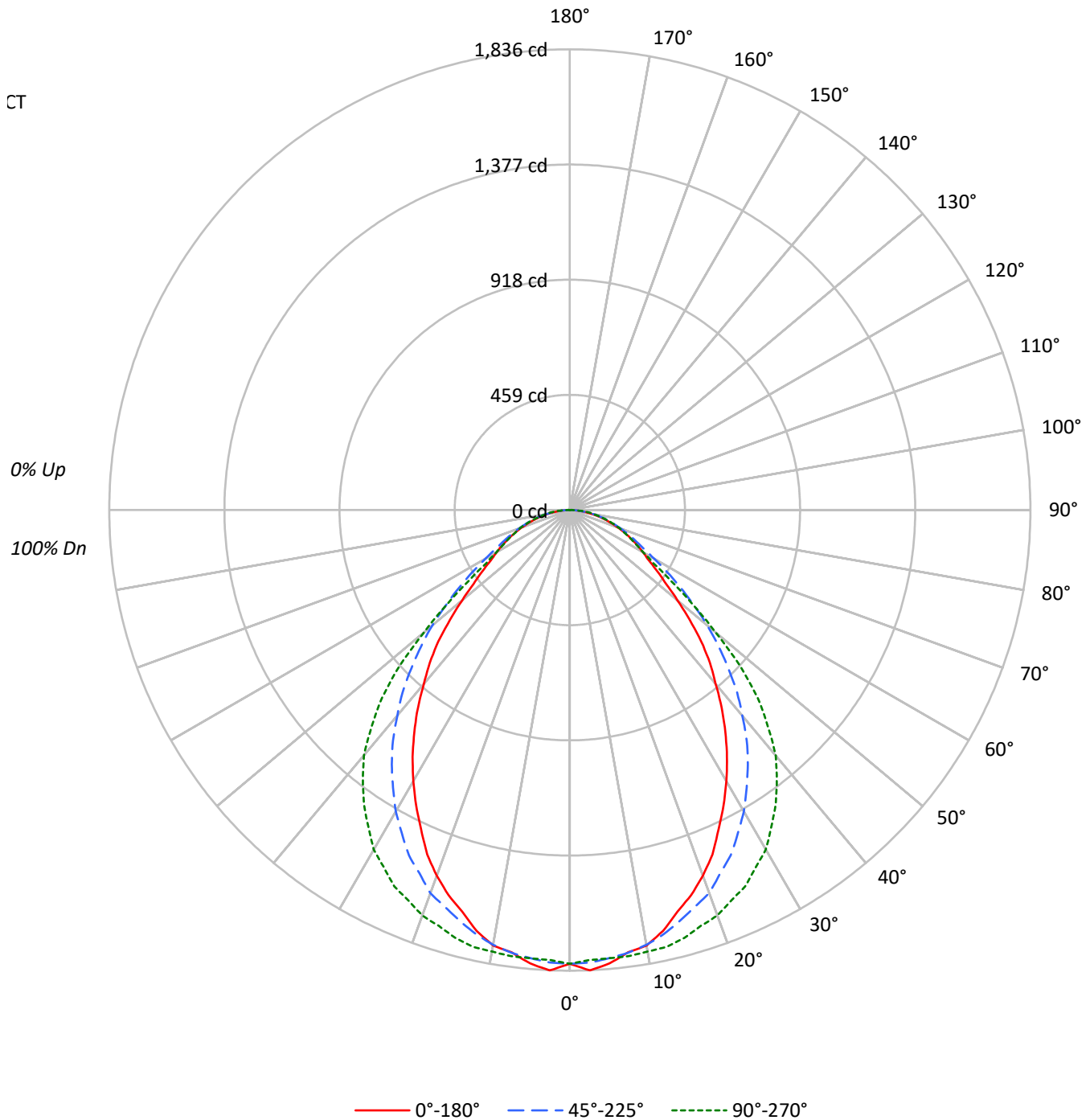
Test Method: LM-79-2019  
Report Number: P895021  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2407-175-7)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 8TMB-4SL-LVRF-UNV-L830  
Description: 4000 Lumen 8FT MICROBAY LINEAR BAY with LOUVER WITH FROSTED INLAY, 80CRI, 3000K C  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3758.0 lumens  
Efficiency: N/A  
Efficacy: 136.2 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<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	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°	6416	6416	6416
5°	6460	6386	6386
10°	6349	6339	6437
15°	6086	6227	6483
20°	5854	6135	6494
25°	5492	5945	6479
30°	5112	5682	6403
35°	4680	5360	6199
40°	4190	4956	5914
45°	3718	4487	5317
50°	3093	3950	4194
55°	2635	3327	3048
60°	2389	2749	2408
65°	2250	2408	2242
70°	2116	2234	2185
75°	1973	2126	2088
80°	1806	1960	2017
85°	1571	1722	2259

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5317 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	171.2	4.6
10°-20°	481.7	12.8
20°-30°	699.6	18.6
30°-40°	779.0	20.7
40°-50°	688.2	18.3
50°-60°	451.6	12.0
60°-70°	276.5	7.4
70°-80°	160.9	4.3
80°-90°	49.3	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°	1352.5	36.0
0°-40°	2131.4	56.7
0°-60°	3271.2	87.0
0°-90°	3758.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3758.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1808	1808	1808	1808	1808	
5°	1814	1815	1793	1811	1793	171
15°	1657	1676	1695	1762	1765	467
25°	1403	1437	1519	1615	1655	646
35°	1080	1139	1237	1368	1431	674
45°	741	786	894	1015	1060	567
55°	426	456	538	533	493	386
65°	268	273	287	278	267	266
75°	144	146	155	158	152	153
85°	39	40	42	48	56	43
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1808.2	1808.2	1808.2	1808.2	1808.2
2.5°	1836.4	1813.8	1805.4	1813.8	1795.0
5°	1813.8	1814.8	1793.1	1811.0	1793.1
7.5°	1778.1	1790.3	1780.0	1807.2	1793.1
10°	1762.1	1763.0	1759.3	1787.5	1786.6
12.5°	1717.9	1720.7	1731.1	1773.4	1782.8
15°	1656.8	1675.6	1695.3	1762.1	1764.9
17.5°	1608.8	1631.4	1657.7	1729.2	1737.7
20°	1550.5	1559.9	1624.8	1687.8	1719.8
22.5°	1485.7	1503.5	1566.5	1651.1	1683.1
25°	1402.9	1436.8	1518.6	1615.4	1654.9
27.5°	1326.7	1366.2	1450.9	1559.0	1605.1
30°	1247.8	1292.9	1386.9	1493.2	1562.8
32.5°	1166.0	1222.4	1311.7	1433.9	1495.1
35°	1080.4	1138.7	1237.4	1368.1	1431.1
37.5°	994.8	1051.2	1158.4	1298.5	1355.0
40°	904.6	960.0	1070.0	1212.0	1276.9
42.5°	826.5	874.5	987.3	1108.6	1168.8
45°	740.9	786.1	894.2	1014.6	1059.7
47.5°	646.9	699.6	804.9	903.6	921.5
50°	560.4	614.9	715.6	772.9	759.8
52.5°	484.2	530.3	622.5	646.9	615.9
55°	426.0	456.0	537.8	533.1	492.7
57.5°	372.4	391.2	460.7	434.4	395.9
60°	336.6	345.1	387.4	363.0	339.4
62.5°	302.8	306.5	329.1	315.9	298.1
65°	268.0	272.7	286.8	278.3	267.0
67.5°	236.0	237.9	251.1	249.2	235.1
70°	204.0	206.9	215.3	219.1	210.6
72.5°	173.0	175.8	184.3	188.1	180.5
75°	143.9	145.7	155.1	158.0	152.3
77.5°	115.7	119.4	125.1	129.8	123.2
80°	88.4	90.3	95.9	101.6	98.7
82.5°	62.1	64.9	68.6	76.2	78.0
85°	38.6	40.4	42.3	48.0	55.5
87.5°	15.0	16.0	18.8	20.7	27.3
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	13.99	15.47	14.35	15.78	16.10	14.64	16.12	15.00	16.43	16.75
	3H	15.59	16.91	15.97	17.24	17.61	16.08	17.40	16.45	17.73	18.09
	4H	16.21	17.45	16.61	17.80	18.18	16.68	17.92	17.08	18.27	18.65
	6H	16.68	17.82	17.09	18.19	18.58	17.17	18.31	17.58	18.68	19.07
	8H	16.83	17.92	17.26	18.31	18.71	17.36	18.46	17.79	18.85	19.25
	12H	16.93	17.97	17.36	18.36	18.78	17.53	18.58	17.96	18.96	19.39
4H	2H	14.61	15.85	15.01	16.20	16.58	15.13	16.38	15.53	16.72	17.10
	3H	16.43	17.46	16.84	17.86	18.26	16.83	17.86	17.24	18.26	18.66
	4H	17.17	18.09	17.60	18.51	18.95	17.58	18.51	18.02	18.93	19.37
	6H	17.77	18.57	18.22	19.01	19.48	18.22	19.02	18.68	19.47	19.93
	8H	17.96	18.72	18.43	19.16	19.63	18.47	19.23	18.94	19.67	20.14
	12H	18.11	18.78	18.59	19.26	19.73	18.70	19.37	19.18	19.85	20.32
8H	4H	17.49	18.24	17.95	18.68	19.15	17.85	18.61	18.32	19.05	19.52
	6H	18.21	18.83	18.71	19.33	19.80	18.63	19.25	19.13	19.74	20.22
	8H	18.48	19.04	19.00	19.55	20.04	18.97	19.53	19.49	20.04	20.53
	12H	18.70	19.20	19.21	19.69	20.26	19.29	19.79	19.80	20.28	20.85
12H	4H	17.52	18.19	18.00	18.67	19.14	17.87	18.55	18.36	19.02	19.50
	6H	18.28	18.84	18.79	19.35	19.84	18.67	19.24	19.19	19.75	20.24
	8H	18.61	19.11	19.12	19.60	20.16	19.08	19.58	19.59	20.07	20.64