

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: P895023

Luminaire Tested: 8TMB-4SL-LVRF-UNV-L840

Issue Date: 11/11/2024

**Test Information**

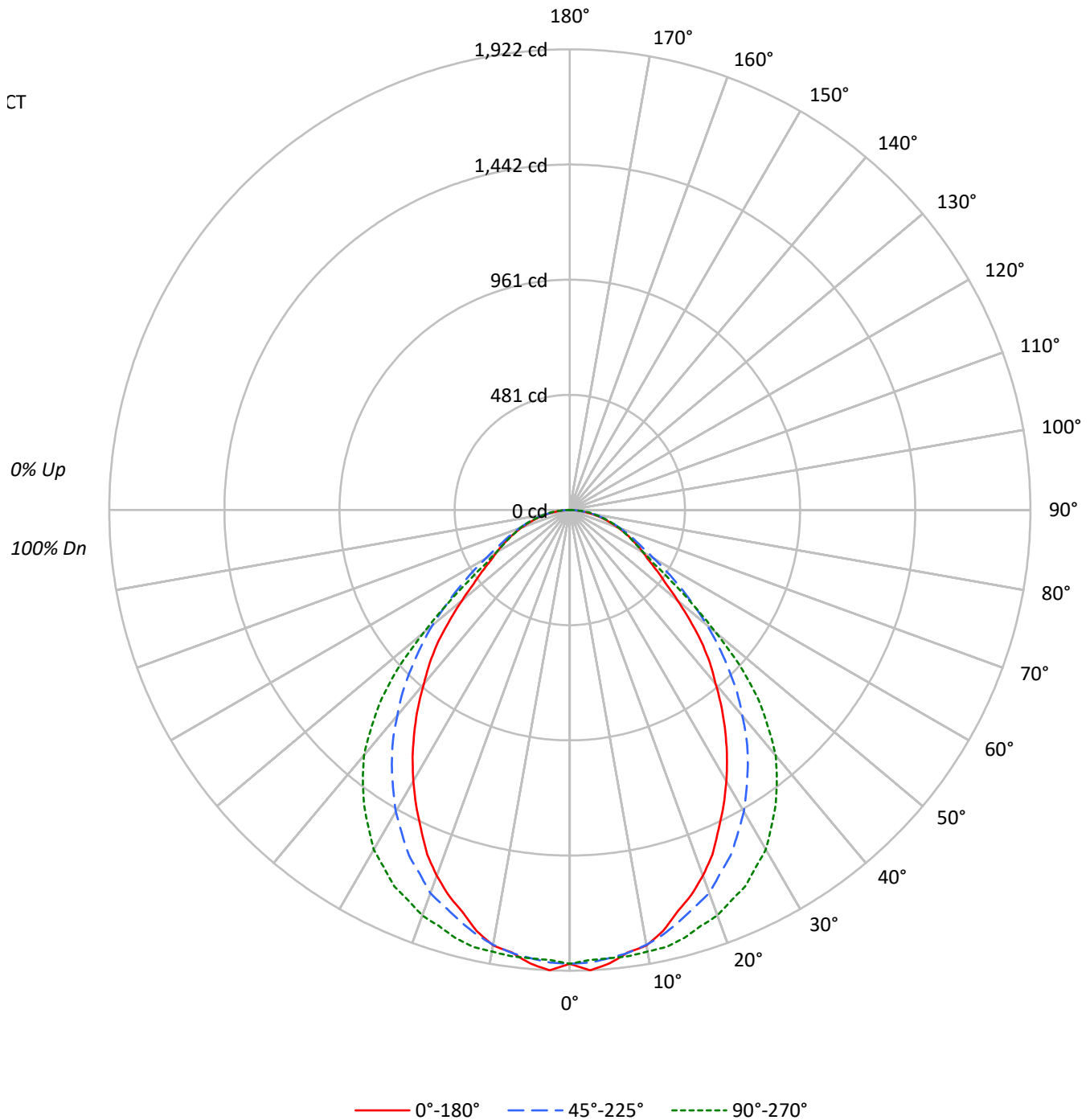
Test Method: LM-79-2019  
Report Number: P895023  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2407-175-7)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 8TMB-4SL-LVRF-UNV-L840  
Description: 4000 Lumen 8FT MICROBAY LINEAR BAY with LOUVER WITH FROSTED INLAY, 80CRI, 4000K C  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3934.0 lumens  
Efficiency: N/A  
Efficacy: 142.5 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°	6716	6716	6716
5°	6763	6686	6686
10°	6646	6635	6738
15°	6371	6519	6787
20°	6129	6422	6798
25°	5749	6224	6782
30°	5352	5948	6703
35°	4899	5611	6489
40°	4386	5188	6191
45°	3892	4697	5566
50°	3239	4135	4390
55°	2758	3483	3191
60°	2501	2878	2521
65°	2355	2520	2347
70°	2216	2338	2287
75°	2065	2226	2187
80°	1890	2051	2113
85°	1645	1803	2365

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5566 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	179.2	4.6
10°-20°	504.3	12.8
20°-30°	732.3	18.6
30°-40°	815.5	20.7
40°-50°	720.4	18.3
50°-60°	472.7	12.0
60°-70°	289.5	7.4
70°-80°	168.5	4.3
80°-90°	51.6	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°	1415.8	36.0
0°-40°	2231.3	56.7
0°-60°	3424.5	87.0
0°-90°	3934.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3934.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1893	1893	1893	1893	1893	
5°	1899	1900	1877	1896	1877	179
15°	1734	1754	1775	1845	1848	489
25°	1469	1504	1590	1691	1732	676
35°	1131	1192	1295	1432	1498	705
45°	776	823	936	1062	1109	593
55°	446	477	563	558	516	404
65°	280	286	300	291	280	279
75°	151	153	162	165	160	160
85°	40	42	44	50	58	46
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1892.9	1892.9	1892.9	1892.9	1892.9
2.5°	1922.4	1898.8	1889.9	1898.8	1879.1
5°	1898.8	1899.8	1877.1	1895.8	1877.1
7.5°	1861.4	1874.2	1863.3	1891.9	1877.1
10°	1844.6	1845.6	1841.7	1871.2	1870.2
12.5°	1798.4	1801.3	1812.1	1856.4	1866.3
15°	1734.4	1754.1	1774.7	1844.6	1847.6
17.5°	1684.2	1707.8	1735.4	1810.2	1819.0
20°	1623.2	1633.0	1700.9	1766.9	1800.3
22.5°	1555.2	1573.9	1639.9	1728.5	1761.9
25°	1468.6	1504.1	1589.7	1691.1	1732.4
27.5°	1388.9	1430.2	1518.8	1632.0	1680.2
30°	1306.2	1353.4	1451.9	1563.1	1636.0
32.5°	1220.6	1279.6	1373.1	1501.1	1565.1
35°	1131.0	1192.0	1295.4	1432.2	1498.1
37.5°	1041.4	1100.5	1212.7	1359.4	1418.4
40°	946.9	1005.0	1120.2	1268.8	1336.7
42.5°	865.2	915.4	1033.5	1160.5	1223.5
45°	775.6	822.9	936.1	1062.1	1109.3
47.5°	677.2	732.3	842.6	945.9	964.6
50°	586.7	643.7	749.1	809.1	795.3
52.5°	506.9	555.2	651.6	677.2	644.7
55°	445.9	477.4	563.0	558.1	515.8
57.5°	389.8	409.5	482.3	454.8	414.4
60°	352.4	361.2	405.5	380.0	355.3
62.5°	317.0	320.9	344.5	330.7	312.0
65°	280.5	285.5	300.2	291.4	279.5
67.5°	247.1	249.0	262.8	260.8	246.1
70°	213.6	216.6	225.4	229.3	220.5
72.5°	181.1	184.1	192.9	196.9	189.0
75°	150.6	152.6	162.4	165.4	159.5
77.5°	121.1	125.0	130.9	135.8	128.9
80°	92.5	94.5	100.4	106.3	103.4
82.5°	65.0	67.9	71.9	79.7	81.7
85°	40.4	42.3	44.3	50.2	58.1
87.5°	15.7	16.7	19.7	21.7	28.5
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	14.15	15.63	14.51	15.94	16.26	14.80	16.28	15.16	16.59	16.91
	3H	15.75	17.07	16.13	17.40	17.76	16.23	17.56	16.61	17.89	18.25
	4H	16.36	17.61	16.76	17.96	18.34	16.84	18.08	17.24	18.43	18.81
	6H	16.84	17.98	17.25	18.35	18.74	17.33	18.47	17.74	18.84	19.23
	8H	16.99	18.08	17.41	18.47	18.87	17.52	18.61	17.95	19.00	19.41
	12H	17.09	18.13	17.52	18.51	18.94	17.69	18.74	18.12	19.12	19.55
4H	2H	14.77	16.01	15.17	16.36	16.74	15.29	16.53	15.69	16.88	17.26
	3H	16.59	17.62	17.00	18.02	18.42	16.99	18.02	17.40	18.42	18.82
	4H	17.33	18.25	17.76	18.67	19.11	17.74	18.67	18.18	19.08	19.52
	6H	17.93	18.73	18.38	19.17	19.63	18.38	19.18	18.84	19.63	20.09
	8H	18.12	18.87	18.59	19.32	19.79	18.63	19.39	19.10	19.83	20.30
	12H	18.26	18.94	18.75	19.42	19.89	18.86	19.53	19.34	20.01	20.48
8H	4H	17.65	18.40	18.11	18.84	19.31	18.01	18.77	18.48	19.21	19.68
	6H	18.37	18.99	18.87	19.48	19.96	18.79	19.41	19.29	19.90	20.38
	8H	18.64	19.20	19.16	19.71	20.20	19.13	19.69	19.65	20.20	20.69
	12H	18.86	19.36	19.37	19.85	20.42	19.45	19.95	19.96	20.44	21.01
12H	4H	17.68	18.35	18.16	18.83	19.30	18.03	18.70	18.52	19.18	19.66
	6H	18.43	19.00	18.95	19.51	19.99	18.83	19.39	19.35	19.90	20.39
	8H	18.77	19.26	19.28	19.76	20.32	19.24	19.74	19.75	20.23	20.79