

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: P895031

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

Issue Date: 11/11/2024

**Test Information**

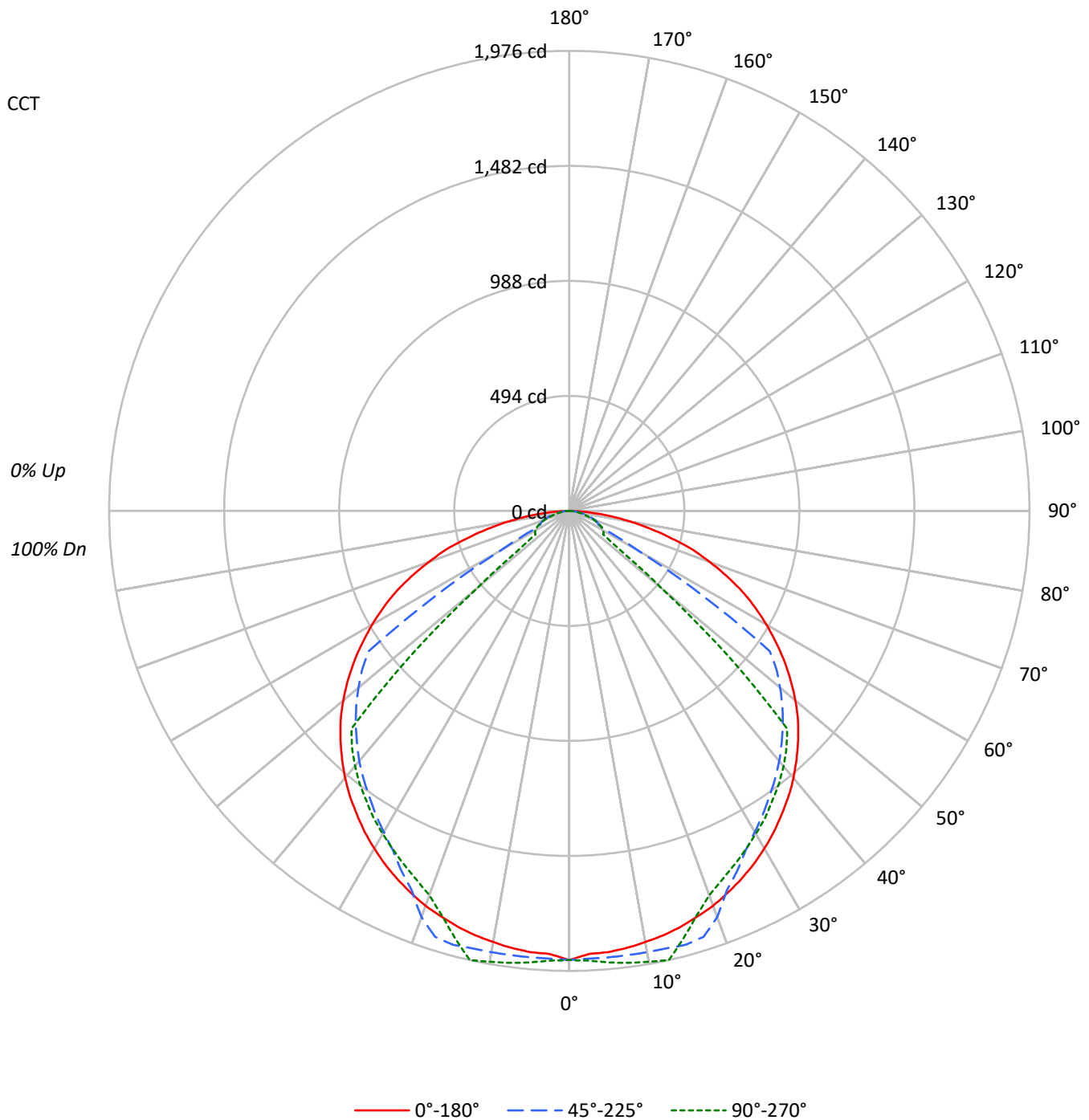
Test Method: LM-79-2019  
Report Number: P895031  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2408-210-3)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 8TMB-4SL-RFLW-UNV-L840  
Description: 4000 Lumen 8FT MICROBAY LINEAR BAY with REFLECTOR WITH WHITE FINISH, 80CRI, 4000K  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4705.0 lumens  
Efficiency: N/A  
Efficacy: 170.5 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°	12492	12492	12492
5°	12367	12511	12655
10°	12364	12656	12932
15°	12398	12932	12725
20°	12440	12790	12104
25°	12471	12186	11981
30°	12522	11910	11976
35°	12574	11839	12014
40°	12660	11856	12099
45°	12723	11872	12115
50°	12770	11900	5237
55°	12737	11863	1998
60°	12663	4526	2177
65°	12575	2102	2237
70°	12147	2262	2094
75°	11346	2159	1826
80°	9983	1898	1566
85°	7890	1642	1315

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 50°  
 Luminance: 12770 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	184.2	3.9
10°-20°	534.9	11.4
20°-30°	798.2	17.0
30°-40°	967.5	20.6
40°-50°	990.6	21.1
50°-60°	658.8	14.0
60°-70°	375.5	8.0
70°-80°	157.7	3.4
80°-90°	37.6	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°	1517.3	32.2
0°-40°	2484.8	52.8
0°-60°	4134.2	87.9
0°-90°	4705.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4705.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1929	1929	1929	1929	1929	
5°	1902	1940	1925	1929	1947	181
15°	1849	1900	1929	1922	1898	522
25°	1746	1830	1706	1668	1677	805
35°	1591	1619	1498	1504	1520	996
45°	1389	1305	1296	1312	1323	1072
55°	1128	1033	1051	230	177	1007
65°	821	734	137	146	146	808
75°	454	95	86	75	73	482
85°	106	26	22	18	18	127
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1929.1	1929.1	1929.1	1929.1	1929.1
2.5°	1904.8	1944.6	1924.7	1926.9	1933.5
5°	1902.5	1940.1	1924.7	1929.1	1946.8
7.5°	1893.7	1933.5	1924.7	1937.9	1957.8
10°	1880.4	1926.9	1924.7	1946.8	1966.7
12.5°	1867.1	1913.6	1924.7	1957.8	1975.5
15°	1849.4	1900.3	1929.1	1922.4	1898.1
17.5°	1827.3	1887.1	1918.0	1822.9	1820.7
20°	1805.2	1869.4	1856.1	1765.4	1756.5
22.5°	1776.4	1851.7	1765.4	1703.4	1714.5
25°	1745.5	1829.5	1705.6	1668.0	1676.9
27.5°	1712.3	1807.4	1641.5	1628.2	1639.3
30°	1674.7	1776.4	1592.8	1588.4	1601.7
32.5°	1634.9	1716.7	1546.4	1548.6	1564.1
35°	1590.6	1619.4	1497.7	1504.3	1519.8
37.5°	1546.4	1528.7	1451.2	1462.3	1477.8
40°	1497.7	1457.9	1402.6	1413.6	1431.3
42.5°	1444.6	1382.7	1349.5	1365.0	1380.4
45°	1389.3	1305.2	1296.4	1311.9	1322.9
47.5°	1331.8	1238.9	1241.1	1252.1	938.0
50°	1267.6	1172.5	1181.3	818.5	519.9
52.5°	1199.0	1103.9	1121.6	455.7	263.3
55°	1128.2	1033.1	1050.8	230.1	177.0
57.5°	1053.0	962.3	685.8	165.9	174.8
60°	977.8	887.1	349.5	163.7	168.1
62.5°	900.4	811.9	165.9	157.1	159.3
65°	820.7	734.5	137.2	146.0	146.0
67.5°	732.3	652.6	130.5	130.5	128.3
70°	641.6	542.0	119.5	112.8	110.6
72.5°	557.5	208.0	104.0	92.9	90.7
75°	453.5	95.1	86.3	75.2	73.0
77.5°	360.6	79.6	68.6	59.7	57.5
80°	267.7	61.9	50.9	44.2	42.0
82.5°	185.8	42.0	35.4	28.8	28.8
85°	106.2	26.5	22.1	17.7	17.7
87.5°	42.0	13.3	11.1	6.6	6.6
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	21.70	23.22	22.06	23.53	23.85	9.46	10.98	9.83	11.30	11.61
	3H	23.72	25.08	24.10	25.41	25.77	11.78	13.14	12.16	13.46	13.83
	4H	24.18	25.45	24.58	25.80	26.18	12.49	13.76	12.89	14.11	14.49
	6H	24.59	25.76	25.00	26.13	26.52	12.97	14.15	13.39	14.51	14.91
	8H	24.74	25.85	25.16	26.24	26.64	13.11	14.23	13.54	14.62	15.02
	12H	24.84	25.90	25.27	26.28	26.71	13.20	14.27	13.63	14.65	15.08
4H	2H	21.54	22.81	21.94	23.16	23.54	10.26	11.53	10.66	11.88	12.26
	3H	23.74	24.79	24.15	25.19	25.59	12.77	13.82	13.18	14.22	14.62
	4H	24.19	25.13	24.62	25.55	25.98	13.59	14.53	14.03	14.95	15.39
	6H	24.66	25.47	25.11	25.91	26.37	14.18	15.00	14.64	15.44	15.90
	8H	24.85	25.61	25.31	26.05	26.52	14.35	15.12	14.82	15.56	16.03
	12H	25.00	25.68	25.48	26.16	26.63	14.47	15.15	14.96	15.63	16.10
8H	4H	24.11	24.87	24.57	25.31	25.78	14.43	15.19	14.90	15.64	16.11
	6H	24.57	25.20	25.07	25.69	26.17	15.05	15.68	15.55	16.17	16.65
	8H	24.77	25.33	25.28	25.84	26.33	15.26	15.82	15.77	16.33	16.82
	12H	24.95	25.45	25.46	25.95	26.51	15.41	15.91	15.92	16.41	16.97
12H	4H	24.08	24.76	24.56	25.24	25.71	14.50	15.18	14.99	15.66	16.13
	6H	24.52	25.09	25.04	25.60	26.09	15.15	15.71	15.66	16.22	16.71
	8H	24.74	25.25	25.25	25.74	26.30	15.40	15.90	15.91	16.39	16.96