

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: P895256

Luminaire Tested: 8TMB-8SL-RFLW-UNV-L850

Issue Date: 11/11/2024

**Test Information**

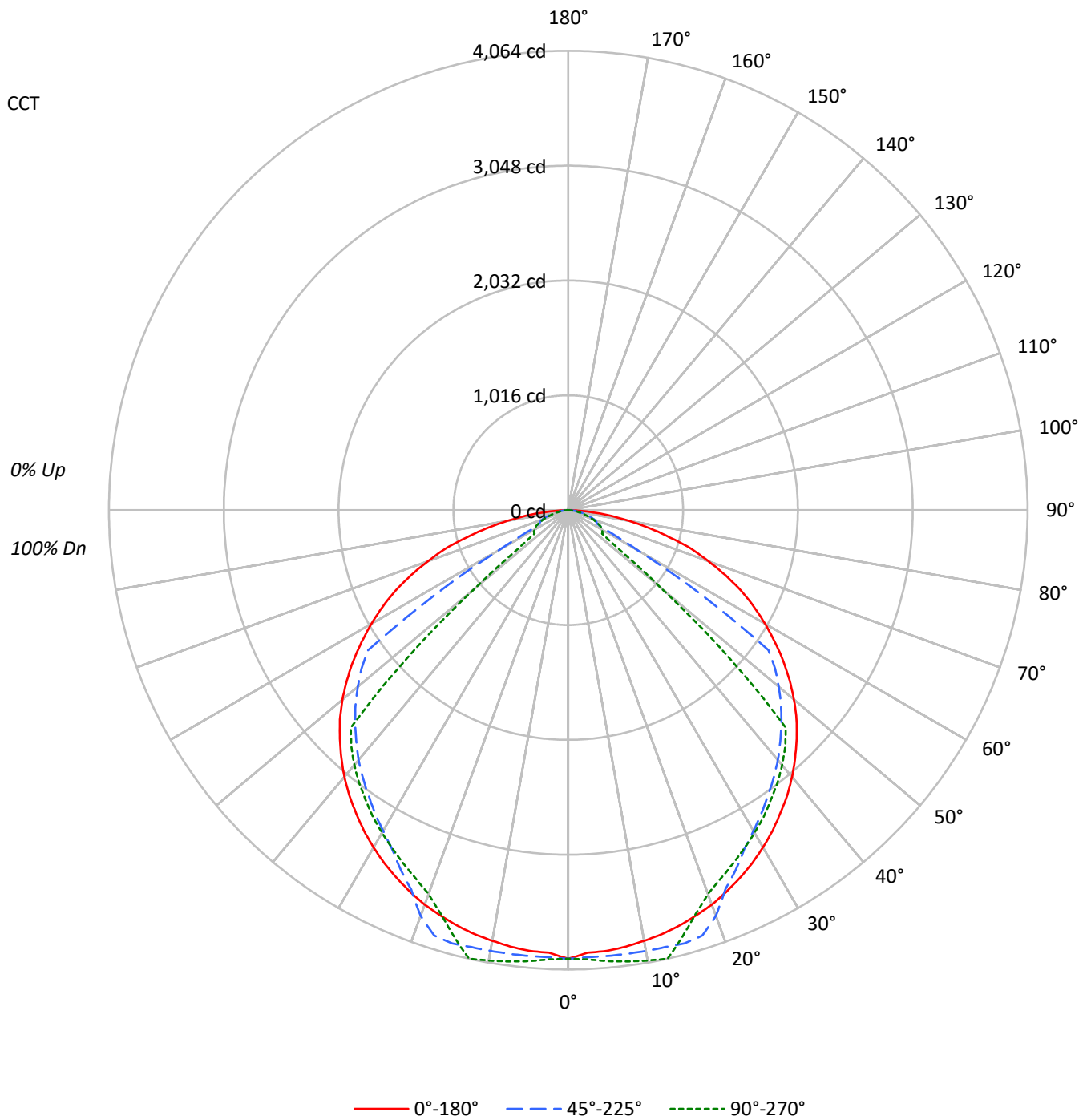
Test Method: LM-79-2019  
Report Number: P895256  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2408-210-3)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 8TMB-8SL-RFLW-UNV-L850  
Description: 8000 Lumen 8FT MICROBAY LINEAR BAY with REFLECTOR WITH WHITE FINISH, 80CRI, 5000K  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9679.0 lumens  
Efficiency: N/A  
Efficacy: 162.4 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): 59.6  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: 0.99  
Total Harmonic Distortion (THDi): 3.8  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT

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CATALOG NUMBER: 8TMB-8SL-RFLW-UNV-L850

### 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	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	102	102	102	102	102	102	102	102	102	102	102	102	102	
1	110	106	102	99	108	104	101	98	100	97	94	96	94	92	92	91	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	79	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	
3	93	84	76	70	91	82	75	70	79	73	69	77	72	67	74	70	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66
4	86	75	67	61	84	74	66	60	71	65	59	69	63	59	67	62	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	
5	79	67	59	53	77	66	58	53	64	57	52	62	56	51	61	55	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51
6	73	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45
7	68	55	47	41	67	55	47	41	53	46	41	52	45	41	50	45	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
8	64	51	43	37	62	50	42	37	49	42	37	48	41	37	46	41	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
9	60	47	39	33	58	46	39	33	45	38	33	44	38	33	43	37	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
10	56	43	35	30	55	43	35	30	42	35	30	41	34	30	40	34	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	25698	25698	25698
5°	25441	25737	26033
10°	25435	26034	26603
15°	25506	26604	26177
20°	25591	26312	24901
25°	25655	25070	24648
30°	25760	24501	24637
35°	25867	24356	24715
40°	26044	24390	24890
45°	26173	24423	24923
50°	26270	24482	10774
55°	26203	24405	4111
60°	26051	9313	4480
65°	25870	4324	4603
70°	24988	4654	4307
75°	23343	4441	3758
80°	20536	3904	3226
85°	16227	3381	2704

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 50°  
 Luminance: 26270 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	379.0	3.9
10°-20°	1100.4	11.4
20°-30°	1642.0	17.0
30°-40°	1990.2	20.6
40°-50°	2037.9	21.1
50°-60°	1355.2	14.0
60°-70°	772.4	8.0
70°-80°	324.5	3.4
80°-90°	77.4	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°	3121.4	32.2
0°-40°	5111.6	52.8
0°-60°	8504.7	87.9
0°-90°	9679.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9679.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3968	3968	3968	3968	3968	
5°	3914	3991	3959	3968	4005	372
15°	3805	3909	3968	3955	3905	1075
25°	3591	3764	3509	3431	3450	1657
35°	3272	3331	3081	3095	3126	2050
45°	2858	2685	2667	2699	2722	2205
55°	2321	2125	2162	473	364	2073
65°	1688	1511	282	300	300	1661
75°	933	196	178	155	150	991
85°	218	55	46	36	36	262
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3968.5	3968.5	3968.5	3968.5	3968.5
2.5°	3918.4	4000.3	3959.4	3963.9	3977.6
5°	3913.9	3991.2	3959.4	3968.5	4004.9
7.5°	3895.6	3977.6	3959.4	3986.7	4027.6
10°	3868.3	3963.9	3959.4	4004.9	4045.8
12.5°	3841.0	3936.6	3959.4	4027.6	4064.0
15°	3804.6	3909.3	3968.5	3954.8	3904.8
17.5°	3759.1	3882.0	3945.7	3750.0	3745.5
20°	3713.6	3845.6	3818.3	3631.7	3613.5
22.5°	3654.4	3809.2	3631.7	3504.3	3527.0
25°	3590.7	3763.7	3508.8	3431.4	3449.7
27.5°	3522.5	3718.2	3376.8	3349.5	3372.3
30°	3445.1	3654.4	3276.7	3267.6	3294.9
32.5°	3363.2	3531.6	3181.1	3185.7	3217.6
35°	3272.2	3331.3	3081.0	3094.7	3126.5
37.5°	3181.1	3144.7	2985.4	3008.2	3040.1
40°	3081.0	2999.1	2885.3	2908.1	2944.5
42.5°	2971.8	2844.4	2776.1	2808.0	2839.8
45°	2858.0	2685.1	2666.9	2698.7	2721.5
47.5°	2739.7	2548.6	2553.1	2575.9	1929.6
50°	2607.7	2412.0	2430.2	1683.9	1069.5
52.5°	2466.6	2270.9	2307.4	937.5	541.6
55°	2321.0	2125.3	2161.7	473.3	364.1
57.5°	2166.3	1979.7	1410.8	341.3	359.5
60°	2011.5	1824.9	719.1	336.8	345.9
62.5°	1852.3	1670.2	341.3	323.1	327.7
65°	1688.4	1510.9	282.2	300.4	300.4
67.5°	1506.4	1342.5	268.5	268.5	264.0
70°	1319.8	1115.0	245.8	232.1	227.5
72.5°	1146.8	427.8	213.9	191.1	186.6
75°	933.0	195.7	177.5	154.7	150.2
77.5°	741.8	163.8	141.1	122.9	118.3
80°	550.7	127.4	104.7	91.0	86.5
82.5°	382.3	86.5	72.8	59.2	59.2
85°	218.4	54.6	45.5	36.4	36.4
87.5°	86.5	27.3	22.8	13.7	13.7
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	24.20	25.73	24.57	26.04	26.35	11.97	13.49	12.33	13.80	14.12
	3H	26.22	27.58	26.60	27.91	28.27	14.28	15.64	14.66	15.97	16.33
	4H	26.69	27.96	27.09	28.31	28.69	15.00	16.27	15.40	16.62	17.00
	6H	27.09	28.27	27.51	28.63	29.03	15.48	16.65	15.89	17.02	17.41
	8H	27.24	28.36	27.67	28.75	29.15	15.62	16.74	16.05	17.13	17.53
	12H	27.34	28.41	27.77	28.79	29.22	15.71	16.77	16.14	17.16	17.59
4H	2H	24.05	25.32	24.45	25.67	26.05	12.77	14.04	13.17	14.39	14.77
	3H	26.25	27.30	26.66	27.70	28.10	15.28	16.33	15.69	16.73	17.13
	4H	26.70	27.64	27.13	28.05	28.49	16.10	17.04	16.53	17.45	17.89
	6H	27.16	27.98	27.62	28.42	28.88	16.69	17.51	17.15	17.95	18.41
	8H	27.35	28.12	27.82	28.56	29.03	16.86	17.62	17.33	18.07	18.53
	12H	27.51	28.19	27.99	28.66	29.14	16.98	17.66	17.46	18.14	18.61
8H	4H	26.62	27.38	27.08	27.82	28.29	16.94	17.70	17.40	18.14	18.61
	6H	27.08	27.70	27.57	28.20	28.67	17.56	18.19	18.06	18.68	19.16
	8H	27.27	27.84	27.79	28.35	28.84	17.76	18.33	18.28	18.84	19.33
	12H	27.46	27.96	27.97	28.45	29.02	17.92	18.42	18.43	18.91	19.48
12H	4H	26.58	27.26	27.07	27.74	28.21	17.01	17.69	17.49	18.17	18.64
	6H	27.03	27.59	27.54	28.10	28.59	17.65	18.22	18.17	18.73	19.22
	8H	27.25	27.75	27.76	28.24	28.81	17.91	18.41	18.42	18.90	19.47