

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: P894828

Luminaire Tested: 8TMB-18HL-RFLW-UNV-L950

Issue Date: 11/11/2024

**Test Information**

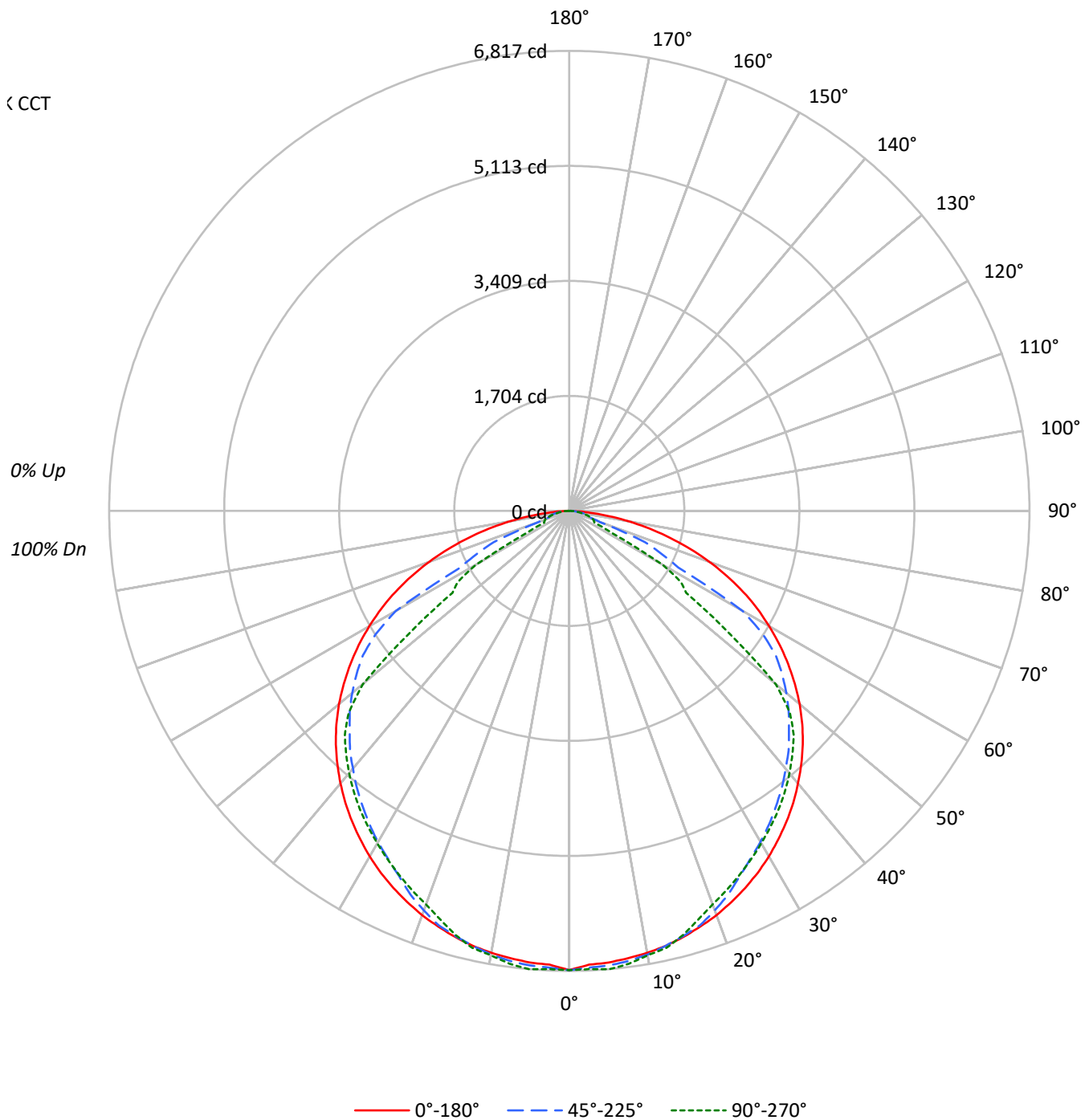
Test Method: LM-79-2019  
Report Number: P894828  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2408-210-7)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 8TMB-18HL-RFLW-UNV-L950  
Description: 18000 Lumen 8FT MICROBAY LINEAR BAY with REFLECTOR WITH WHITE FINISH, 90CRI, 5000K  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 17739.0 lumens  
Efficiency: N/A  
Efficacy: 131.6 lumens/watt  
Spacing Criteria (0/90/45): 1.29 / 1.25 / 1.38  
Luminous Opening: Rectangular (W 0.21' x L: 7.98' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 134.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: 0.996  
Total Harmonic Distortion (THDi): 8.62  
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	98	107	103	100	97	99	96	94	95	93	91	92	90	88	88	88	88	86
2	101	93	87	82	98	91	85	81	88	83	79	85	81	77	82	78	75	75	75	75	73
3	92	82	75	69	90	81	74	68	78	72	67	75	70	66	73	68	65	65	65	65	62
4	85	73	65	59	82	72	64	58	70	63	57	67	61	57	65	60	56	56	56	56	54
5	78	66	57	51	76	65	56	50	62	55	50	61	54	49	59	53	49	49	49	49	47
6	72	59	51	44	70	58	50	44	56	49	44	55	48	43	53	48	43	43	43	43	41
7	67	54	45	39	65	53	45	39	51	44	39	50	43	39	49	43	38	38	38	38	36
8	62	49	41	35	61	48	40	35	47	40	35	46	39	35	45	39	34	34	34	34	32
9	58	45	37	32	57	44	37	31	43	36	31	42	36	31	41	35	31	31	31	31	29
10	54	42	34	29	53	41	34	29	40	33	28	39	33	28	38	32	28	28	28	28	26

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

	0°	45°	90°
0°	44062	44062	44062
5°	43658	43944	44312
10°	43721	43886	43969
15°	43817	43718	43620
20°	43928	43422	42757
25°	44047	42654	42564
30°	44214	42364	42537
35°	44374	42203	42717
40°	44561	42151	42895
45°	44800	42131	43071
50°	44868	42291	40242
55°	44671	42162	23863
60°	44292	38427	20693
65°	43567	23230	6265
70°	41844	9211	7185
75°	38770	7556	7346
80°	33547	7976	6880
85°	23835	7482	6546

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 50°  
 Luminance: 44868 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	644.5	3.6
10°-20°	1845.8	10.4
20°-30°	2789.3	15.7
30°-40°	3403.3	19.2
40°-50°	3600.0	20.3
50°-60°	2981.8	16.8
60°-70°	1657.6	9.3
70°-80°	671.9	3.8
80°-90°	144.9	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°	5279.6	29.8
0°-40°	8682.9	48.9
0°-60°	15264.7	86.1
0°-90°	17739.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	17739.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	6804	6804	6804	6804	6804	
5°	6716	6836	6760	6771	6817	639
15°	6536	6637	6521	6517	6507	1846
25°	6165	6209	5970	5932	5957	2844
35°	5613	5544	5339	5360	5404	3514
45°	4892	4640	4601	4657	4703	3771
55°	3957	3688	3735	2562	2114	3535
65°	2843	2606	1516	510	409	2804
75°	1550	864	302	298	294	1636
85°	321	107	101	92	88	403
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	6804.4	6804.4	6804.4	6804.4	6804.4
2.5°	6731.0	6848.5	6775.1	6789.7	6796.0
5°	6716.4	6835.9	6760.4	6770.9	6817.0
7.5°	6684.9	6806.5	6726.8	6733.1	6768.8
10°	6649.3	6760.4	6674.4	6663.9	6687.0
12.5°	6601.0	6701.7	6601.0	6605.2	6634.6
15°	6536.0	6636.7	6521.3	6517.1	6506.7
17.5°	6458.4	6552.8	6439.6	6372.5	6349.4
20°	6374.6	6448.0	6301.2	6198.4	6204.7
22.5°	6273.9	6336.8	6152.3	6057.9	6085.2
25°	6164.9	6208.9	5969.9	5932.1	5957.3
27.5°	6045.3	6078.9	5812.6	5804.2	5825.2
30°	5913.2	5925.8	5665.8	5661.6	5688.9
32.5°	5766.5	5745.5	5508.5	5512.7	5548.4
35°	5613.4	5544.2	5338.7	5359.7	5403.7
37.5°	5451.9	5328.2	5170.9	5198.2	5246.4
40°	5271.6	5103.8	4986.4	5028.4	5074.5
42.5°	5087.1	4869.0	4808.2	4848.0	4892.1
45°	4892.1	4640.4	4600.6	4657.2	4703.3
47.5°	4680.3	4416.1	4409.8	4453.8	4432.8
50°	4453.8	4183.3	4198.0	4139.3	3994.6
52.5°	4210.6	3942.2	3971.5	3717.8	3004.9
55°	3956.8	3688.4	3734.6	2562.4	2113.7
57.5°	3696.8	3428.4	3399.1	1960.6	1958.5
60°	3420.0	3164.2	2967.1	1732.0	1597.8
62.5°	3141.1	2889.5	1822.2	1304.3	733.9
65°	2843.4	2606.4	1516.1	509.5	408.9
67.5°	2531.0	2319.2	1214.1	383.7	398.4
70°	2210.1	2021.4	486.5	371.2	379.5
72.5°	1883.0	1560.1	322.9	343.9	343.9
75°	1549.6	863.9	302.0	297.8	293.6
77.5°	1218.3	578.7	264.2	245.3	239.0
80°	899.6	207.6	213.9	190.8	184.5
82.5°	595.5	161.5	153.1	138.4	134.2
85°	320.8	106.9	100.7	92.3	88.1
87.5°	115.3	54.5	54.5	44.0	39.8
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	25.83	27.40	26.20	27.72	28.03	21.82	23.39	22.19	23.71	24.02
	3H	27.84	29.24	28.21	29.57	29.93	21.95	23.36	22.33	23.69	24.05
	4H	28.45	29.77	28.85	30.12	30.49	22.07	23.39	22.47	23.74	24.12
	6H	28.85	30.07	29.26	30.43	30.82	22.18	23.40	22.59	23.76	24.15
	8H	28.97	30.13	29.39	30.52	30.92	22.21	23.37	22.64	23.76	24.16
	12H	29.04	30.15	29.47	30.53	30.96	22.24	23.35	22.67	23.73	24.16
4H	2H	25.96	27.28	26.36	27.63	28.00	22.55	23.86	22.94	24.21	24.59
	3H	28.12	29.21	28.53	29.61	30.01	22.74	23.83	23.15	24.23	24.63
	4H	28.77	29.75	29.21	30.17	30.60	22.90	23.88	23.33	24.29	24.73
	6H	29.22	30.07	29.68	30.51	30.97	23.06	23.91	23.52	24.35	24.81
	8H	29.36	30.15	29.82	30.60	31.06	23.12	23.91	23.58	24.35	24.82
	12H	29.46	30.17	29.95	30.65	31.12	23.16	23.87	23.64	24.35	24.82
8H	4H	28.71	29.50	29.17	29.95	30.41	23.17	23.96	23.63	24.41	24.87
	6H	29.15	29.81	29.65	30.30	30.78	23.38	24.03	23.87	24.52	25.00
	8H	29.30	29.89	29.81	30.40	30.89	23.46	24.05	23.97	24.56	25.05
	12H	29.43	29.96	29.94	30.45	31.01	23.55	24.07	24.06	24.56	25.12
12H	4H	28.68	29.39	29.17	29.87	30.34	23.18	23.89	23.67	24.37	24.84
	6H	29.11	29.70	29.62	30.21	30.70	23.39	23.98	23.91	24.49	24.98
	8H	29.28	29.81	29.79	30.30	30.86	23.52	24.04	24.03	24.53	25.10