

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: P894810

Luminaire Tested: 8TMB-18HL-LVRA-UNV-L935

Issue Date: 11/11/2024

**Test Information**

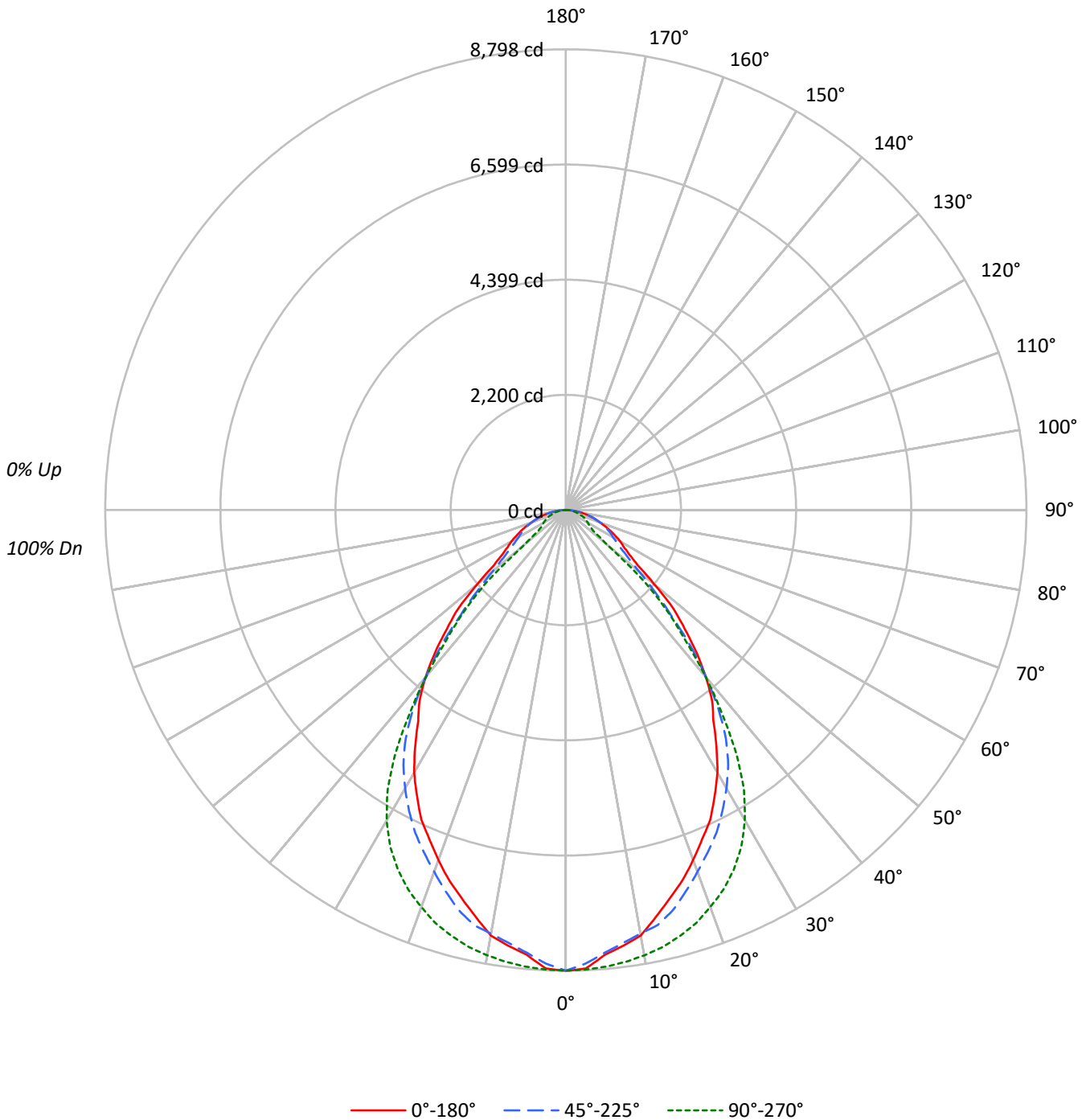
Test Method: LM-79-2019  
Report Number: P894810  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-077-26)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 8TMB-18HL-LVRA-UNV-L935  
Description: 18000 Lumen 8FT MICROBAY LINEAR BAY with LOUVER WITH AISLE OPTIC, 90CRI, 3500K CCT  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 14278.0 lumens  
Efficiency: N/A  
Efficacy: 105.9 lumens/watt  
Spacing Criteria (0/90/45): 1.02 / 1.16 / 1.12  
Luminous Opening: Rectangular (W 0.38' 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
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	100	
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	90	88	
2	103	96	91	86	101	95	90	85	91	87	83	88	85	82	85	82	80	80	78	
3	96	87	80	75	94	86	80	75	83	78	73	80	76	72	78	74	71	71	69	
4	89	79	72	66	87	78	71	66	76	70	65	73	68	64	71	67	63	63	62	
5	83	72	65	59	81	71	64	59	69	63	58	67	62	58	66	61	57	57	55	
6	78	66	59	53	76	65	58	53	64	57	53	62	57	52	61	56	52	52	50	
7	73	61	54	48	71	60	53	48	59	52	48	58	52	47	56	51	47	47	45	
8	68	57	49	44	67	56	49	44	55	48	44	53	48	43	52	47	43	43	41	
9	64	52	45	40	63	52	45	40	51	44	40	50	44	40	49	44	40	40	38	
10	61	49	42	37	60	48	42	37	47	41	37	47	41	37	46	40	37	37	35	

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

	0°	45°	90°
0°	31215	31215	31215
5°	30373	30236	31180
10°	29728	29597	31108
15°	28193	29059	30933
20°	26857	27765	30461
25°	25547	26639	29684
30°	23735	25147	28027
35°	21282	23109	24582
40°	19282	19324	19219
45°	16122	14279	13926
50°	12178	10050	5695
55°	9159	8037	3591
60°	8512	7401	3459
65°	7919	7386	3465
70°	7245	7245	3411
75°	6870	7056	3294
80°	6346	6671	3382
85°	5537	5813	3692

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 16497 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	812.6	5.7
10°-20°	2239.2	15.7
20°-30°	3175.2	22.2
30°-40°	3271.1	22.9
40°-50°	2284.8	16.0
50°-60°	1096.3	7.7
60°-70°	769.2	5.4
70°-80°	480.9	3.4
80°-90°	148.7	1.0
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°	6227.0	43.6
0°-40°	9498.1	66.5
0°-60°	12879.2	90.2
0°-90°	14278.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	14278.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	8798	8798	8798	8798	8798	
5°	8528	8516	8489	8711	8754	807
15°	7675	7732	7911	8138	8421	2161
25°	6526	6591	6804	7265	7582	2984
35°	4913	5047	5335	5446	5675	3096
45°	3213	3288	2846	2700	2775	2475
55°	1481	1408	1299	832	580	1387
65°	943	882	880	669	413	935
75°	501	494	515	444	240	528
85°	136	136	143	141	91	152
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	8797.5	8797.5	8797.5	8797.5	8797.5
2.5°	8763.5	8736.3	8670.5	8790.7	8781.6
5°	8527.7	8516.3	8489.1	8711.3	8754.4
7.5°	8393.9	8371.2	8339.5	8584.4	8704.5
10°	8251.1	8278.3	8214.8	8439.2	8634.2
12.5°	7956.3	8028.8	8115.0	8289.6	8548.1
15°	7675.1	7731.8	7910.9	8137.7	8421.1
17.5°	7412.1	7477.9	7632.1	7972.2	8273.7
20°	7112.8	7203.5	7353.2	7788.5	8067.4
22.5°	6804.5	6888.3	7076.5	7543.6	7854.3
25°	6525.6	6591.3	6804.5	7264.7	7582.2
27.5°	6156.0	6278.4	6480.2	6924.6	7257.9
30°	5793.2	5897.5	6137.8	6512.0	6840.7
32.5°	5355.6	5507.5	5772.8	6058.5	6332.8
35°	4913.4	5047.2	5335.2	5446.3	5675.3
37.5°	4591.5	4627.8	4791.0	4777.4	4906.6
40°	4162.9	4235.5	4172.0	4002.0	4149.3
42.5°	3700.4	3786.6	3530.3	3333.1	3385.2
45°	3212.9	3287.7	2845.6	2700.5	2775.3
47.5°	2791.2	2784.4	2294.6	2197.1	2092.8
50°	2206.2	2278.7	1820.7	1639.3	1031.7
52.5°	1723.2	1750.4	1501.0	1047.5	678.0
55°	1480.6	1408.1	1299.2	832.1	580.5
57.5°	1315.1	1224.4	1151.8	773.2	530.6
60°	1199.5	1097.4	1043.0	734.6	487.5
62.5°	1067.9	988.6	968.2	700.6	448.9
65°	943.2	882.0	879.7	668.9	412.7
67.5°	818.5	784.5	793.6	630.3	371.9
70°	698.4	691.6	698.4	580.5	328.8
72.5°	596.3	589.5	607.7	517.0	281.2
75°	501.1	494.3	514.7	444.4	240.3
77.5°	399.1	403.6	417.2	369.6	201.8
80°	310.6	310.6	326.5	290.2	165.5
82.5°	222.2	224.5	233.5	213.1	129.2
85°	136.0	136.0	142.8	140.6	90.7
87.5°	45.3	52.2	61.2	65.8	45.3
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	17.60	18.96	17.97	19.27	19.58	13.93	15.29	14.30	15.60	15.92
	3H	19.34	20.55	19.72	20.88	21.24	15.91	17.12	16.29	17.45	17.81
	4H	20.01	21.14	20.41	21.49	21.87	16.61	17.74	17.02	18.09	18.47
	6H	20.52	21.56	20.93	21.93	22.32	17.14	18.18	17.55	18.55	18.94
	8H	20.69	21.68	21.12	22.07	22.47	17.32	18.31	17.75	18.70	19.10
	12H	20.80	21.74	21.23	22.12	22.55	17.46	18.40	17.89	18.79	19.22
4H	2H	18.13	19.26	18.53	19.61	19.99	15.56	16.68	15.96	17.03	17.42
	3H	20.11	21.04	20.52	21.44	21.85	17.73	18.66	18.15	19.07	19.47
	4H	20.91	21.75	21.35	22.17	22.61	18.61	19.45	19.05	19.87	20.31
	6H	21.55	22.28	22.02	22.72	23.19	19.26	19.98	19.72	20.43	20.89
	8H	21.77	22.45	22.24	22.90	23.37	19.47	20.14	19.93	20.59	21.06
	12H	21.93	22.53	22.41	23.01	23.48	19.62	20.22	20.11	20.71	21.18
8H	4H	21.20	21.87	21.66	22.32	22.79	19.26	19.94	19.73	20.39	20.86
	6H	21.98	22.53	22.48	23.03	23.51	20.12	20.68	20.62	21.17	21.65
	8H	22.28	22.78	22.80	23.29	23.78	20.45	20.95	20.97	21.46	21.96
	12H	22.52	22.96	23.03	23.45	24.02	20.72	21.16	21.23	21.65	22.22
12H	4H	21.21	21.81	21.70	22.29	22.77	19.34	19.94	19.82	20.42	20.89
	6H	22.03	22.53	22.55	23.04	23.54	20.26	20.76	20.78	21.27	21.77
	8H	22.40	22.84	22.91	23.33	23.90	20.67	21.12	21.19	21.61	22.18