

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: P894793

Luminaire Tested: 8TMB-18HL-FLTU-UNV-L930

Issue Date: 11/11/2024

**Test Information**

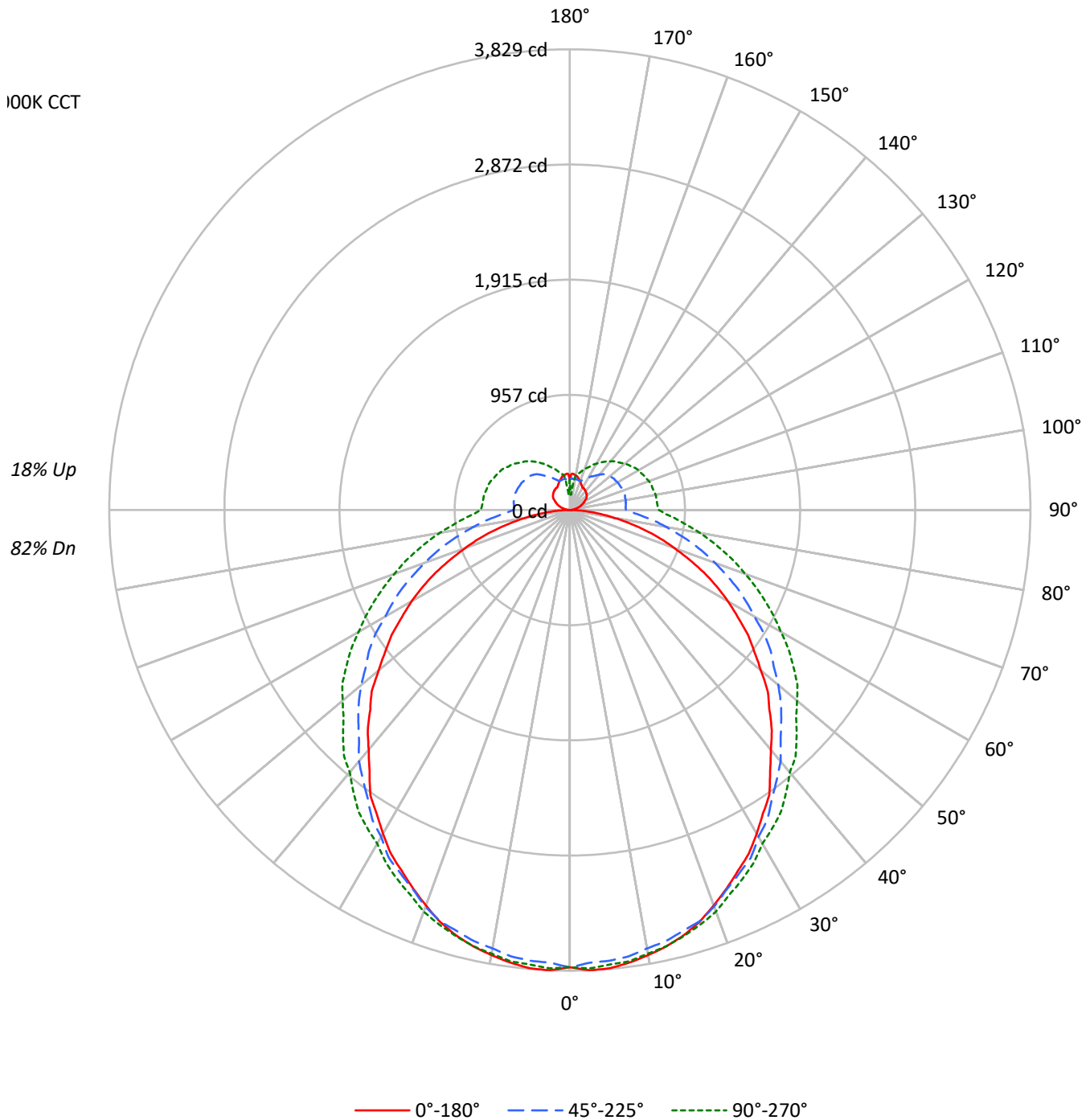
Test Method: LM-79-2019  
Report Number: P894793  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2403-334-6)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 8TMB-18HL-FLTU-UNV-L930  
Description: 18000 Lumen 8FT MICROBAY LINEAR BAY with FLAT FROSTED LENS WITH UPLIGHT, 90CRI, 30  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 14288.0 lumens  
Efficiency: N/A  
Efficacy: 106.0 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.26 / 1.36  
Luminous Opening: Rectangular w/ Sides (W: 0.38' x L: 7.98' x H: 0.21')  
CIE Type: Semi-Direct  
  
Input Watts (W): 134.8  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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	115	115	115	115	110	110	110	110	101	101	101	93	93	93	86	86	86	86	86	86	82
1	103	98	93	89	99	94	90	86	87	83	80	80	77	74	73	71	69	69	69	69	66
2	93	85	77	71	89	81	75	69	75	70	65	69	65	61	63	60	57	57	57	57	54
3	85	74	66	59	81	71	63	57	66	59	54	60	55	51	56	51	48	48	48	48	45
4	78	65	56	49	74	63	55	48	58	51	46	54	48	43	50	45	41	41	41	41	38
5	71	58	49	42	68	56	48	41	52	45	39	48	42	37	44	39	35	35	35	35	33
6	66	52	43	37	63	50	42	36	47	40	34	43	37	33	40	35	31	31	31	31	28
7	61	47	38	32	58	46	37	32	42	35	30	39	33	29	37	31	27	27	27	27	25
8	56	43	34	29	54	42	34	28	39	32	27	36	30	26	34	28	24	24	24	24	22
9	53	39	31	26	50	38	30	25	36	29	24	33	27	23	31	26	22	22	22	22	20
10	49	36	28	23	47	35	28	23	33	26	22	31	25	21	29	24	20	20	20	20	18

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

	0°	45°	90°
0°	13485	13485	13485
5°	13584	12933	12889
10°	13471	12439	12300
15°	13348	12002	11740
20°	13082	11540	11182
25°	12794	10968	10566
30°	12536	10409	9968
35°	12301	9876	9583
40°	11789	9419	9028
45°	11475	8872	8641
50°	11102	8414	8234
55°	10778	7979	7870
60°	10310	7379	7382
65°	9777	6898	6922
70°	8953	6299	6422
75°	8097	5702	5946
80°	6649	5048	5465
85°	5001	4417	5014

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 11475 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	360.0	2.5
10°-20°	1028.0	7.2
20°-30°	1544.2	10.8
30°-40°	1850.7	13.0
40°-50°	1940.3	13.6
50°-60°	1820.2	12.7
60°-70°	1511.9	10.6
70°-80°	1081.0	7.6
80°-90°	641.1	4.5
90°-100°	470.3	3.3
100°-110°	463.3	3.2
110°-120°	432.2	3.0
120°-130°	379.3	2.7
130°-140°	305.4	2.1
140°-150°	219.2	1.5
150°-160°	139.3	1.0
160°-170°	77.2	0.5
170°-180°	24.3	0.2
0°-30°	2932.2	20.5
0°-40°	4782.9	33.5
0°-60°	8543.5	59.8
0°-90°	11777.5	82.4
90°-120°	1365.8	9.6
90°-150°	2269.7	15.9
90°-180°	2511.0	17.6
0°-180°	14288.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3800	3800	3800	3800	3800	
5°	3823	3815	3760	3778	3792	363
15°	3659	3637	3623	3649	3665	1030
25°	3308	3338	3332	3370	3388	1526
35°	2892	2902	2928	3013	3061	1795
45°	2346	2413	2486	2649	2666	1815
55°	1807	1866	2038	2203	2268	1608
65°	1230	1323	1537	1743	1793	1212
75°	648	798	1046	1262	1321	685
85°	160	349	612	818	895	175
90°	6	212	466	666	739	13
95°	18	222	466	658	727	19
105°	65	244	475	650	711	68
115°	117	264	464	618	678	116
125°	168	273	450	574	626	147
135°	194	262	418	519	561	150
145°	210	242	343	456	489	132
155°	230	242	281	353	400	106
165°	275	267	258	256	321	77
175°	303	291	260	216	131	28
180°	250	250	250	250	250	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3800.5	3800.5	3800.5	3800.5	3800.5
2.5°	3828.8	3798.5	3766.2	3814.6	3812.6
5°	3822.7	3814.6	3760.1	3778.3	3792.4
7.5°	3794.4	3774.2	3741.9	3786.3	3782.3
10°	3756.1	3731.8	3699.5	3725.8	3743.9
12.5°	3713.6	3693.5	3671.2	3699.5	3711.6
15°	3659.1	3636.9	3622.8	3649.0	3665.2
17.5°	3588.4	3582.4	3584.4	3586.4	3612.7
20°	3497.6	3501.6	3507.7	3544.0	3552.1
22.5°	3404.7	3426.9	3410.7	3467.3	3463.2
25°	3307.8	3338.0	3332.0	3370.4	3388.5
27.5°	3220.9	3222.9	3259.3	3313.8	3307.8
30°	3105.8	3140.1	3136.1	3202.7	3202.7
32.5°	2988.7	3039.2	3055.3	3113.9	3134.1
35°	2891.8	2901.9	2928.1	3012.9	3061.4
37.5°	2734.2	2782.7	2825.1	2936.2	2954.4
40°	2601.0	2649.4	2726.2	2855.4	2845.3
42.5°	2485.9	2536.3	2592.9	2742.3	2778.7
45°	2346.5	2413.2	2485.9	2649.4	2665.6
47.5°	2233.4	2285.9	2380.9	2530.3	2550.5
50°	2073.9	2158.7	2261.7	2435.4	2465.7
52.5°	1932.6	2005.2	2136.5	2316.2	2384.9
55°	1807.3	1865.9	2037.6	2203.1	2267.8
57.5°	1653.9	1734.7	1914.4	2098.1	2156.7
60°	1518.6	1597.3	1771.0	1981.0	2027.5
62.5°	1375.2	1468.1	1655.9	1859.9	1912.4
65°	1229.8	1322.7	1536.8	1742.7	1793.2
67.5°	1072.3	1187.4	1405.5	1619.5	1672.1
70°	924.9	1050.1	1284.3	1498.4	1550.9
72.5°	791.6	926.9	1165.2	1385.3	1441.8
75°	648.2	797.7	1046.0	1262.1	1320.7
77.5°	508.9	670.4	922.9	1141.0	1209.6
80°	373.6	551.3	815.8	1025.8	1098.5
82.5°	262.5	444.3	716.9	922.9	989.5
85°	159.5	349.4	611.9	817.9	894.6
87.5°	70.7	270.6	529.1	733.0	801.7
90°	6.1	212.0	466.5	666.4	739.1
92.5°	12.1	216.1	464.5	658.3	731.0
95°	18.2	222.1	466.5	658.3	727.0
97.5°	26.3	230.2	470.5	658.3	725.0
100°	38.4	234.2	472.5	658.3	725.0
102.5°	50.5	240.3	470.5	648.2	716.9
105°	64.6	244.3	474.6	650.2	710.8
107.5°	78.8	248.4	474.6	640.1	708.8
110°	92.9	254.4	470.5	634.1	700.7



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	105.0	260.5	468.5	622.0	686.6
115°	117.1	264.5	464.5	617.9	678.5
117.5°	129.2	266.6	462.4	607.8	666.4
120°	139.3	270.6	458.4	595.7	660.3
122.5°	151.5	272.6	452.3	583.6	648.2
125°	167.6	272.6	450.3	573.5	626.0
127.5°	175.7	274.6	442.2	561.4	615.9
130°	183.8	268.6	438.2	547.3	599.8
132.5°	189.8	266.6	428.1	533.1	579.6
135°	193.9	262.5	418.0	519.0	561.4
137.5°	199.9	256.5	403.9	508.9	549.3
140°	204.0	252.4	383.7	488.7	529.1
142.5°	208.0	246.4	363.5	470.5	508.9
145°	210.0	242.3	343.3	456.4	488.7
147.5°	216.1	236.3	331.2	438.2	466.5
150°	214.1	232.2	313.0	416.0	444.3
152.5°	220.1	238.3	296.8	385.7	426.1
155°	230.2	242.3	280.7	353.4	399.8
157.5°	240.3	250.4	268.6	325.1	379.6
160°	254.4	254.4	254.4	302.9	363.5
162.5°	262.5	262.5	256.5	276.7	341.3
165°	274.6	266.6	258.5	256.5	321.1
167.5°	286.8	270.6	262.5	248.4	306.9
170°	288.8	276.7	260.5	234.2	296.8
172.5°	296.8	282.7	258.5	222.1	230.2
175°	302.9	290.8	260.5	216.1	131.3
177.5°	300.9	290.8	266.6	216.1	127.2
180°	250.4	250.4	250.4	250.4	250.4



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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	16.79	18.11	17.40	18.74	19.45	19.38	20.70	19.99	21.33	22.05
	3H	18.22	19.42	18.84	20.06	20.81	21.78	22.98	22.40	23.62	24.37
	4H	18.68	19.82	19.33	20.47	21.24	22.92	24.06	23.56	24.71	25.47
	6H	18.95	20.01	19.61	20.67	21.45	24.07	25.14	24.73	25.80	26.57
	8H	19.00	20.02	19.67	20.70	21.48	24.66	25.67	25.33	26.35	27.14
	12H	19.02	19.99	19.69	20.66	21.48	25.29	26.26	25.97	26.94	27.75
4H	2H	17.67	18.81	18.32	19.46	20.23	19.72	20.86	20.36	21.51	22.27
	3H	19.33	20.30	19.98	20.98	21.77	22.33	23.30	22.99	23.99	24.77
	4H	19.91	20.80	20.58	21.49	22.30	23.63	24.52	24.31	25.21	26.02
	6H	20.28	21.06	20.97	21.78	22.60	24.96	25.74	25.65	26.46	27.28
	8H	20.37	21.11	21.07	21.82	22.65	25.63	26.37	26.33	27.08	27.92
	12H	20.41	21.08	21.13	21.82	22.66	26.38	27.04	27.10	27.78	28.62
8H	4H	20.55	21.28	21.24	21.99	22.83	23.78	24.51	24.48	25.23	26.06
	6H	21.08	21.70	21.81	22.45	23.29	25.25	25.87	25.98	26.63	27.46
	8H	21.25	21.81	21.99	22.56	23.41	26.05	26.61	26.79	27.37	28.22
	12H	21.35	21.85	22.10	22.60	23.51	26.95	27.45	27.69	28.19	29.10
12H	4H	20.71	21.37	21.43	22.11	22.95	23.77	24.44	24.49	25.18	26.02
	6H	21.33	21.89	22.07	22.65	23.50	25.27	25.83	26.01	26.59	27.44
	8H	21.58	22.08	22.32	22.82	23.73	26.12	26.62	26.86	27.36	28.27