

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: P894781

Luminaire Tested: 8TMB-18HL-FLT-UNV-L830

Issue Date: 11/11/2024

**Test Information**

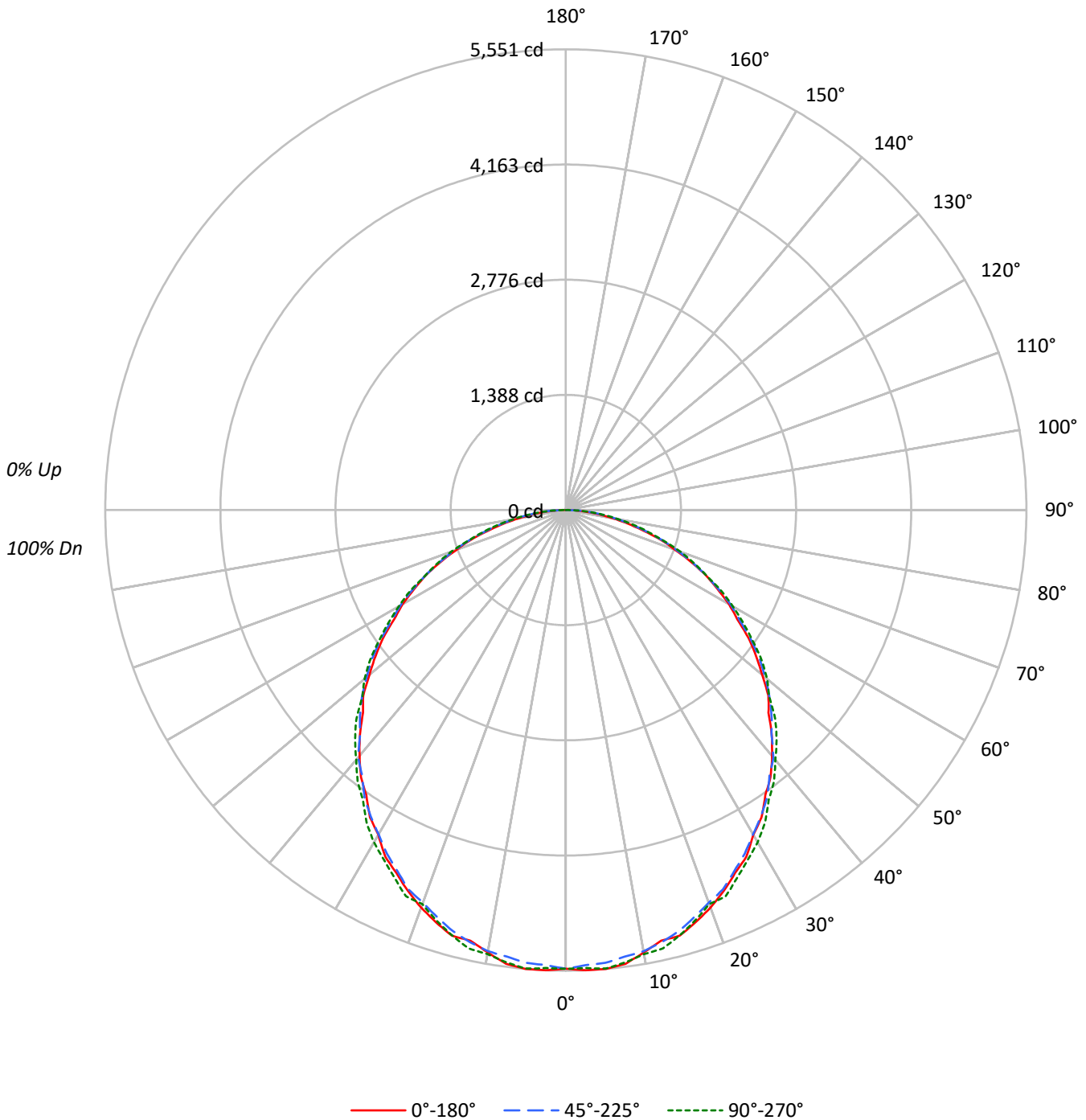
Test Method: LM-79-2019  
Report Number: P894781  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2403-334-4)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 8TMB-18HL-FLT-UNV-L830  
Description: 18000 Lumen 8FT MICROBAY LINEAR BAY with FLAT FROSTED LENS, 80CRI, 3000K CCT  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 15314.0 lumens  
Efficiency: N/A  
Efficacy: 113.6 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.24 / 1.34  
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 (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				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	109	104	99	96	106	102	98	94	97	94	91	93	91	88	90	88	86	86	86	86	84
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	72	72	72	70
3	90	79	71	65	88	78	70	64	75	68	63	72	67	62	69	65	61	61	61	61	59
4	82	70	62	55	80	69	61	54	67	59	54	64	58	53	62	57	52	52	52	52	50
5	76	63	54	47	74	62	53	47	60	52	46	58	51	46	56	50	45	45	45	45	43
6	70	57	48	41	68	56	47	41	54	46	41	52	45	40	51	45	40	40	40	40	38
7	65	51	43	36	63	51	42	36	49	41	36	48	41	36	46	40	35	35	35	35	33
8	60	47	38	33	59	46	38	32	45	37	32	44	37	32	42	36	32	32	32	32	30
9	57	43	35	29	55	42	35	29	41	34	29	40	34	29	39	33	29	29	29	29	27
10	53	40	32	27	52	39	32	26	38	31	26	37	31	26	36	30	26	26	26	26	24

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

	0°	45°	90°
0°	19610	19610	19610
5°	19770	19506	19753
10°	19500	19448	19577
15°	19504	19302	19486
20°	19246	19012	19084
25°	18899	18796	19133
30°	18516	18487	18946
35°	18159	18314	18469
40°	17914	18025	18201
45°	17335	17598	17922
50°	17053	17303	17474
55°	16629	16836	17013
60°	16111	16349	16502
65°	15634	15695	15695
70°	14538	14885	15257
75°	13387	13910	14204
80°	11806	12830	13269
85°	10593	11859	12734

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 17922 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	523.1	3.4
10°-20°	1490.9	9.7
20°-30°	2236.2	14.6
30°-40°	2655.9	17.3
40°-50°	2719.2	17.8
50°-60°	2436.3	15.9
60°-70°	1850.7	12.1
70°-80°	1078.0	7.0
80°-90°	323.7	2.1
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°	4250.2	27.8
0°-40°	6906.1	45.1
0°-60°	12061.6	78.8
0°-90°	15314.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	15314.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5527	5527	5527	5527	5527	
5°	5551	5529	5477	5510	5546	526
15°	5310	5345	5255	5276	5305	1490
25°	4827	4870	4801	4863	4887	2228
35°	4192	4285	4228	4245	4264	2635
45°	3455	3540	3507	3536	3572	2687
55°	2688	2729	2722	2753	2750	2395
65°	1862	1862	1869	1893	1869	1829
75°	976	993	1015	1046	1036	1040
85°	260	265	291	310	313	292
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	5526.9	5526.9	5526.9	5526.9	5526.9
2.5°	5550.8	5524.5	5488.7	5500.6	5524.5
5°	5550.8	5529.3	5476.7	5510.2	5546.0
7.5°	5514.9	5543.6	5429.0	5429.0	5495.8
10°	5412.3	5467.2	5398.0	5390.8	5433.8
12.5°	5314.4	5414.7	5333.5	5357.4	5409.9
15°	5309.6	5345.4	5254.7	5276.2	5304.9
17.5°	5207.0	5242.8	5144.9	5185.5	5185.5
20°	5097.1	5104.3	5035.1	5123.4	5054.2
22.5°	4970.6	5044.6	4949.1	4977.8	5037.5
25°	4827.4	4870.3	4801.1	4863.2	4887.1
27.5°	4710.4	4762.9	4667.4	4741.4	4748.6
30°	4519.4	4576.7	4512.2	4560.0	4624.4
32.5°	4390.5	4409.6	4376.1	4447.8	4466.9
35°	4192.3	4285.4	4228.1	4244.8	4263.9
37.5°	4053.8	4082.5	4032.4	4089.7	4120.7
40°	3867.6	3910.6	3891.5	3901.0	3929.7
42.5°	3674.2	3719.6	3669.5	3738.7	3760.2
45°	3454.6	3540.5	3507.1	3535.8	3571.6
47.5°	3311.4	3340.0	3330.5	3347.2	3323.3
50°	3089.3	3118.0	3134.7	3156.2	3165.7
52.5°	2891.2	2912.7	2943.7	2955.6	2977.1
55°	2688.2	2728.8	2721.7	2752.7	2750.3
57.5°	2451.9	2511.6	2492.5	2537.8	2537.8
60°	2270.4	2280.0	2303.9	2325.4	2325.4
62.5°	2060.3	2072.3	2084.2	2103.3	2117.6
65°	1862.2	1862.2	1869.4	1893.2	1869.4
67.5°	1633.0	1623.4	1647.3	1676.0	1673.6
70°	1401.4	1413.4	1434.8	1470.7	1470.7
72.5°	1203.3	1203.3	1227.1	1246.2	1243.8
75°	976.5	993.2	1014.7	1045.7	1036.1
77.5°	773.5	785.5	821.3	849.9	852.3
80°	577.8	589.7	627.9	656.5	649.4
82.5°	403.5	420.2	456.0	477.5	475.1
85°	260.2	265.0	291.3	310.4	312.8
87.5°	119.4	128.9	148.0	155.2	155.2
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	21.87	23.51	22.23	23.82	24.14	21.97	23.61	22.34	23.93	24.24
	3H	23.65	25.13	24.03	25.46	25.82	23.81	25.29	24.19	25.62	25.98
	4H	24.31	25.71	24.71	26.06	26.43	24.51	25.91	24.91	26.25	26.63
	6H	24.79	26.08	25.20	26.45	26.84	25.06	26.35	25.47	26.72	27.11
	8H	24.94	26.18	25.36	26.56	26.96	25.25	26.49	25.67	26.88	27.27
	12H	25.04	26.23	25.47	26.61	27.04	25.39	26.58	25.82	26.96	27.39
4H	2H	22.51	23.91	22.91	24.26	24.63	22.60	23.99	22.99	24.34	24.72
	3H	24.52	25.69	24.93	26.09	26.49	24.66	25.83	25.07	26.23	26.63
	4H	25.31	26.37	25.74	26.78	27.22	25.50	26.56	25.93	26.97	27.41
	6H	25.91	26.84	26.36	27.28	27.73	26.19	27.12	26.64	27.56	28.01
	8H	26.10	26.98	26.56	27.42	27.88	26.43	27.30	26.89	27.74	28.21
	12H	26.26	27.04	26.74	27.51	27.98	26.63	27.41	27.11	27.89	28.36
8H	4H	25.64	26.51	26.10	26.96	27.42	25.81	26.68	26.27	27.12	27.59
	6H	26.37	27.09	26.86	27.58	28.05	26.63	27.36	27.13	27.85	28.32
	8H	26.64	27.29	27.15	27.80	28.28	26.97	27.62	27.48	28.12	28.61
	12H	26.87	27.44	27.37	27.93	28.49	27.26	27.83	27.76	28.32	28.88
12H	4H	25.69	26.47	26.17	26.95	27.41	25.84	26.63	26.32	27.10	27.57
	6H	26.44	27.09	26.95	27.60	28.08	26.69	27.35	27.20	27.85	28.34
	8H	26.77	27.35	27.28	27.84	28.40	27.09	27.67	27.60	28.16	28.72