

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: P894790

Luminaire Tested: 8TMB-18HL-FLTU-UNV-L835

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894790
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-L835
Description: 18000 Lumen 8FT MICROBAY LINEAR BAY with FLAT FROSTED LENS WITH UPLIGHT, 80CRI, 35
Light Source: -
Ballast/Driver: -

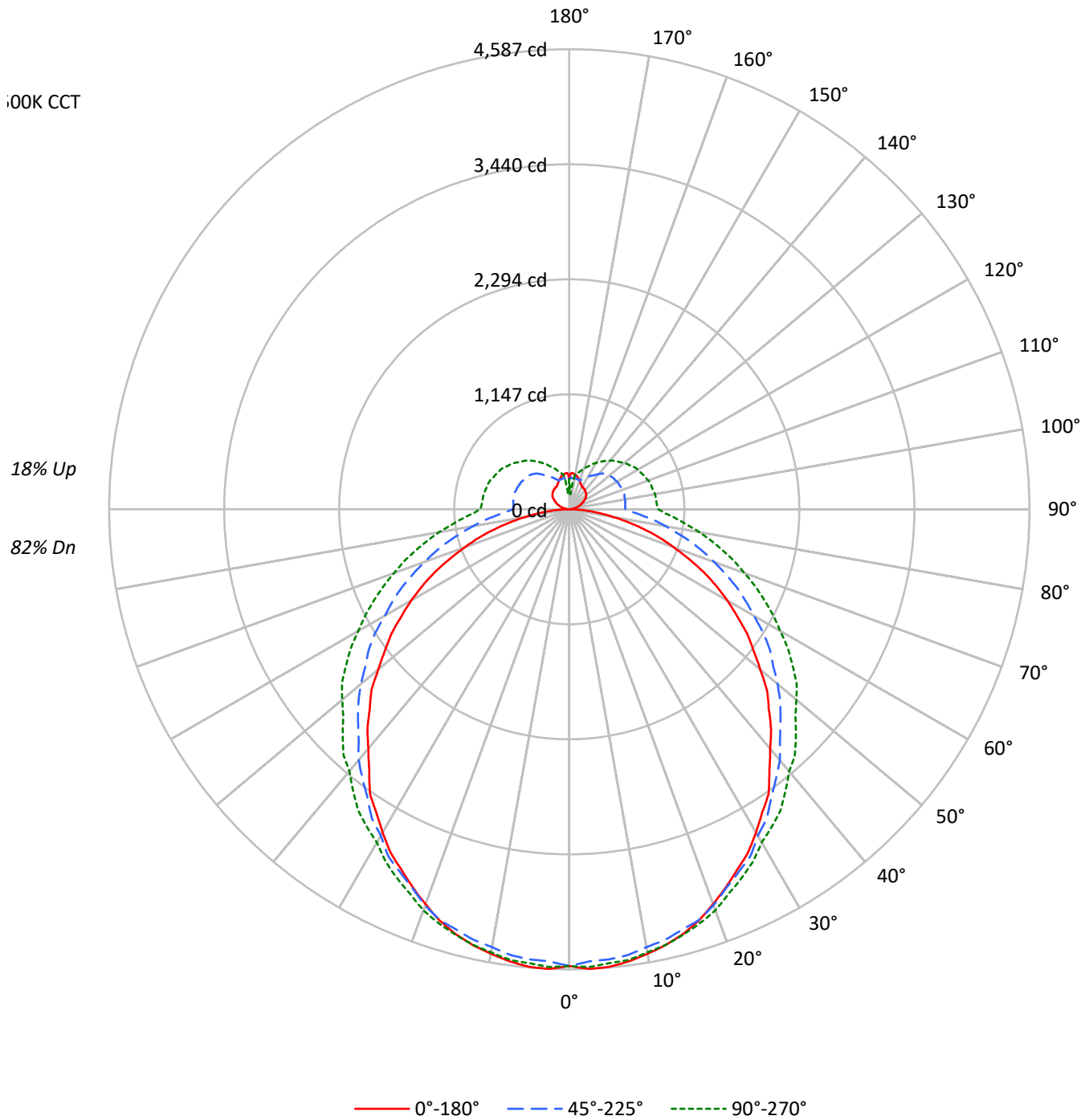
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17118.0 lumens
Efficiency: N/A
Efficacy: 127.0 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_{in}): 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	115	115	115	115	110	110	110	110	101	101	101	93	93	93	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	66	66
2	93	85	77	71	89	81	75	69	75	70	65	69	65	61	63	60	57	57	54	54
3	85	74	66	59	81	71	63	57	66	59	54	60	55	51	56	51	48	48	45	45
4	78	65	56	49	74	63	55	48	58	51	46	54	48	43	50	45	41	41	38	38
5	71	58	49	42	68	56	48	41	52	45	39	48	42	37	44	39	35	35	33	33
6	66	52	43	37	63	50	42	36	47	40	34	43	37	33	40	35	31	31	28	28
7	61	47	38	32	58	46	37	32	42	35	30	39	33	29	37	31	27	27	25	25
8	56	43	34	29	54	42	34	28	39	32	27	36	30	26	34	28	24	24	22	22
9	53	39	31	26	50	38	30	25	36	29	24	33	27	23	31	26	22	22	20	20
10	49	36	28	23	47	35	28	23	33	26	22	31	25	21	29	24	20	20	18	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16155	16155	16155
5°	16275	15494	15443
10°	16139	14902	14737
15°	15992	14379	14065
20°	15673	13825	13397
25°	15328	13141	12659
30°	15019	12471	11943
35°	14737	11832	11482
40°	14124	11284	10816
45°	13748	10629	10352
50°	13301	10081	9864
55°	12913	9559	9429
60°	12352	8841	8844
65°	11714	8264	8293
70°	10726	7546	7694
75°	9701	6831	7124
80°	7966	6048	6547
85°	5992	5292	6008

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 13748 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	431.3	2.5
10°-20°	1231.6	7.2
20°-30°	1850.0	10.8
30°-40°	2217.3	13.0
40°-50°	2324.7	13.6
50°-60°	2180.7	12.7
60°-70°	1811.3	10.6
70°-80°	1295.1	7.6
80°-90°	768.1	4.5
90°-100°	563.4	3.3
100°-110°	555.1	3.2
110°-120°	517.8	3.0
120°-130°	454.4	2.7
130°-140°	365.9	2.1
140°-150°	262.6	1.5
150°-160°	166.9	1.0
160°-170°	92.5	0.5
170°-180°	29.1	0.2
0°-30°	3512.9	20.5
0°-40°	5730.3	33.5
0°-60°	10235.7	59.8
0°-90°	14110.2	82.4
90°-120°	1636.4	9.6
90°-150°	2719.3	15.9
90°-180°	3008.0	17.6
0°-180°	17118.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4553	4553	4553	4553	4553	
5°	4580	4570	4505	4527	4544	434
15°	4384	4357	4340	4372	4391	1234
25°	3963	3999	3992	4038	4060	1829
35°	3464	3477	3508	3610	3668	2150
45°	2811	2891	2978	3174	3194	2175
55°	2165	2236	2441	2640	2717	1926
65°	1473	1585	1841	2088	2148	1452
75°	777	956	1253	1512	1582	821
85°	191	418	733	980	1072	210
90°	7	254	559	798	886	16
95°	22	266	559	789	871	23
105°	77	293	568	779	852	82
115°	140	317	556	740	813	139
125°	201	327	540	687	750	176
135°	232	314	501	622	673	180
145°	252	290	411	547	586	158
155°	276	290	336	423	479	128
165°	329	319	310	307	385	92
175°	363	348	312	259	157	34
180°	300	300	300	300	300	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4553.2	4553.2	4553.2	4553.2	4553.2
2.5°	4587.1	4550.8	4512.1	4570.2	4567.8
5°	4579.9	4570.2	4504.8	4526.6	4543.6
7.5°	4546.0	4521.8	4483.1	4536.3	4531.5
10°	4500.0	4471.0	4432.3	4463.7	4485.5
12.5°	4449.2	4425.0	4398.4	4432.3	4446.8
15°	4383.9	4357.3	4340.3	4371.8	4391.1
17.5°	4299.2	4291.9	4294.4	4296.8	4328.2
20°	4190.3	4195.2	4202.4	4246.0	4255.7
22.5°	4079.0	4105.7	4086.3	4154.0	4149.2
25°	3962.9	3999.2	3991.9	4037.9	4059.7
27.5°	3858.9	3861.3	3904.8	3970.2	3962.9
30°	3721.0	3762.1	3757.3	3837.1	3837.1
32.5°	3580.7	3641.1	3660.5	3730.7	3754.8
35°	3464.5	3476.6	3508.1	3609.7	3667.8
37.5°	3275.8	3333.9	3384.7	3517.8	3539.5
40°	3116.1	3174.2	3266.1	3421.0	3408.9
42.5°	2978.2	3038.7	3106.5	3285.5	3329.0
45°	2811.3	2891.1	2978.2	3174.2	3193.6
47.5°	2675.8	2738.7	2852.4	3031.5	3055.7
50°	2484.7	2586.3	2709.7	2917.7	2954.0
52.5°	2315.3	2402.4	2559.7	2775.0	2857.3
55°	2165.3	2235.5	2441.1	2639.5	2716.9
57.5°	1981.5	2078.2	2293.6	2513.7	2583.9
60°	1819.4	1913.7	2121.8	2373.4	2429.0
62.5°	1647.6	1758.9	1983.9	2228.2	2291.1
65°	1473.4	1584.7	1841.1	2087.9	2148.4
67.5°	1284.7	1422.6	1683.9	1940.3	2003.2
70°	1108.1	1258.1	1538.7	1795.2	1858.1
72.5°	948.4	1110.5	1396.0	1659.7	1727.4
75°	776.6	955.6	1253.2	1512.1	1582.3
77.5°	609.7	803.2	1105.6	1366.9	1449.2
80°	447.6	660.5	977.4	1229.0	1316.1
82.5°	314.5	532.3	858.9	1105.6	1185.5
85°	191.1	418.5	733.1	979.8	1071.8
87.5°	84.7	324.2	633.9	878.2	960.5
90°	7.3	254.0	558.9	798.4	885.5
92.5°	14.5	258.9	556.5	788.7	875.8
95°	21.8	266.1	558.9	788.7	871.0
97.5°	31.5	275.8	563.7	788.7	868.6
100°	46.0	280.6	566.1	788.7	868.6
102.5°	60.5	287.9	563.7	776.6	858.9
105°	77.4	292.7	568.5	779.0	851.6
107.5°	94.4	297.6	568.5	766.9	849.2
110°	111.3	304.8	563.7	759.7	839.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	125.8	312.1	561.3	745.2	822.6
115°	140.3	316.9	556.5	740.3	812.9
117.5°	154.8	319.4	554.0	728.2	798.4
120°	166.9	324.2	549.2	713.7	791.1
122.5°	181.5	326.6	541.9	699.2	776.6
125°	200.8	326.6	539.5	687.1	750.0
127.5°	210.5	329.0	529.8	672.6	737.9
130°	220.2	321.8	525.0	655.6	718.6
132.5°	227.4	319.4	512.9	638.7	694.4
135°	232.3	314.5	500.8	621.8	672.6
137.5°	239.5	307.3	483.9	609.7	658.1
140°	244.4	302.4	459.7	585.5	633.9
142.5°	249.2	295.2	435.5	563.7	609.7
145°	251.6	290.3	411.3	546.8	585.5
147.5°	258.9	283.1	396.8	525.0	558.9
150°	256.5	278.2	375.0	498.4	532.3
152.5°	263.7	285.5	355.6	462.1	510.5
155°	275.8	290.3	336.3	423.4	479.0
157.5°	287.9	300.0	321.8	389.5	454.8
160°	304.8	304.8	304.8	362.9	435.5
162.5°	314.5	314.5	307.3	331.5	408.9
165°	329.0	319.4	309.7	307.3	384.7
167.5°	343.5	324.2	314.5	297.6	367.7
170°	346.0	331.5	312.1	280.6	355.6
172.5°	355.6	338.7	309.7	266.1	275.8
175°	362.9	348.4	312.1	258.9	157.3
177.5°	360.5	348.4	319.4	258.9	152.4
180°	300.0	300.0	300.0	300.0	300.0



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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	17.41	18.74	18.03	19.37	20.08	20.01	21.33	20.62	21.96	22.67
	3H	18.85	20.05	19.47	20.69	21.44	22.40	23.61	23.03	24.25	25.00
	4H	19.31	20.45	19.95	21.10	21.86	23.55	24.69	24.19	25.34	26.10
	6H	19.58	20.64	20.23	21.30	22.08	24.70	25.76	25.36	26.42	27.20
	8H	19.63	20.64	20.30	21.33	22.11	25.28	26.30	25.95	26.98	27.76
	12H	19.64	20.62	20.32	21.29	22.10	25.92	26.89	26.59	27.57	28.38
4H	2H	18.30	19.44	18.95	20.09	20.85	20.35	21.49	20.99	22.14	22.90
	3H	19.95	20.92	20.61	21.61	22.39	22.96	23.93	23.61	24.61	25.40
	4H	20.53	21.42	21.21	22.11	22.93	24.26	25.15	24.93	25.84	26.65
	6H	20.91	21.69	21.60	22.41	23.23	25.59	26.37	26.28	27.08	27.90
	8H	21.00	21.73	21.70	22.45	23.28	26.26	27.00	26.96	27.71	28.55
	12H	21.04	21.71	21.76	22.45	23.29	27.00	27.67	27.72	28.41	29.25
8H	4H	21.17	21.91	21.87	22.62	23.46	24.41	25.14	25.11	25.86	26.69
	6H	21.71	22.33	22.44	23.08	23.92	25.88	26.50	26.61	27.26	28.09
	8H	21.88	22.43	22.62	23.19	24.04	26.68	27.24	27.42	27.99	28.84
	12H	21.98	22.48	22.72	23.22	24.13	27.58	28.07	28.32	28.82	29.73
12H	4H	21.34	22.00	22.06	22.74	23.58	24.40	25.07	25.12	25.80	26.64
	6H	21.96	22.52	22.70	23.28	24.13	25.90	26.46	26.64	27.21	28.07
	8H	22.21	22.70	22.95	23.45	24.36	26.75	27.24	27.49	27.99	28.90