

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: P894794

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

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894794
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-L935
Description: 18000 Lumen 8FT MICROBAY LINEAR BAY with FLAT FROSTED LENS WITH UPLIGHT, 90CRI, 35
Light Source: -
Ballast/Driver: -

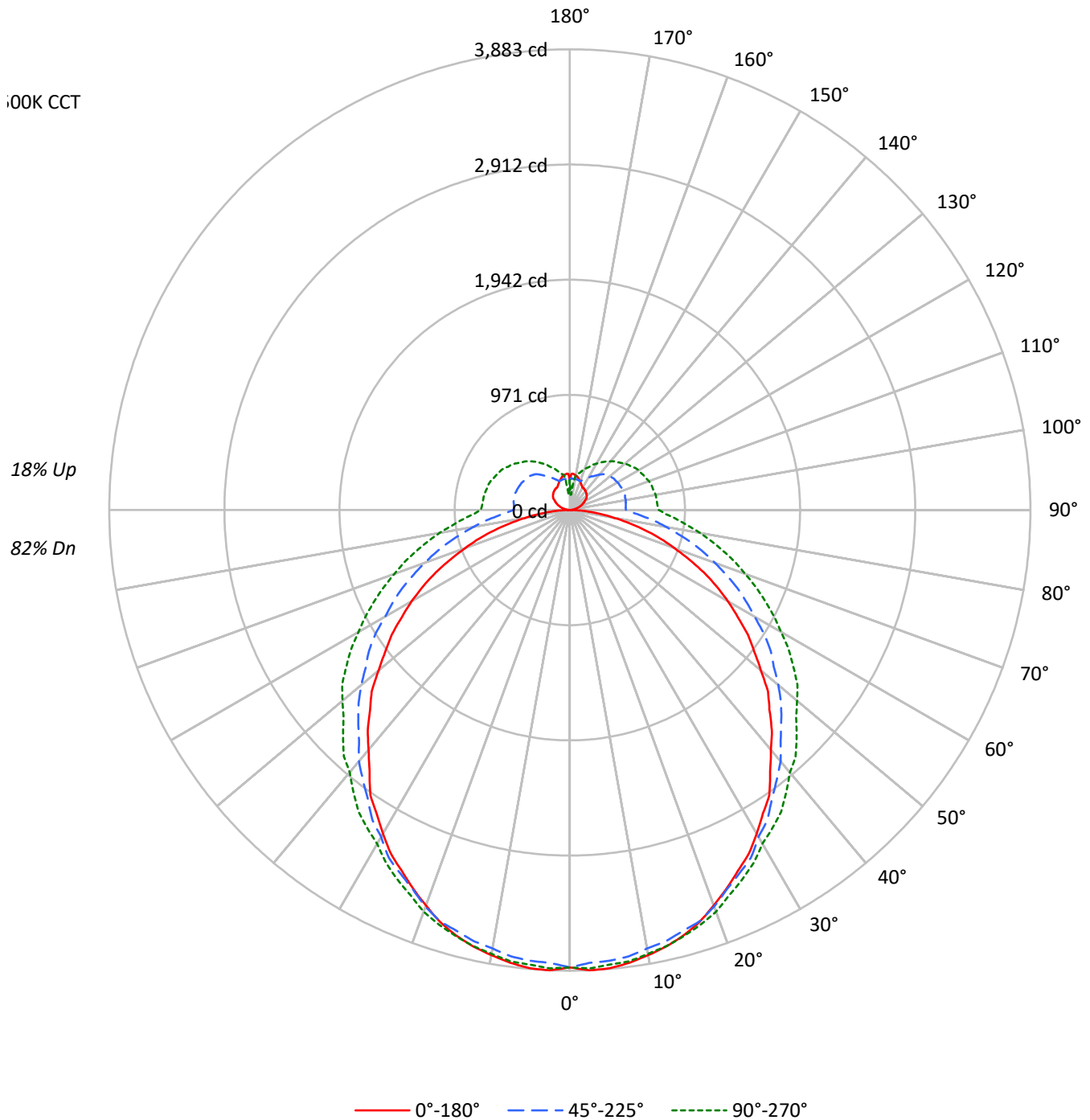
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14492.0 lumens
Efficiency: N/A
Efficacy: 107.5 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	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°	13677	13677	13677
5°	13778	13118	13074
10°	13663	12616	12476
15°	13538	12174	11907
20°	13269	11704	11342
25°	12977	11125	10717
30°	12715	10558	10111
35°	12476	10017	9720
40°	11957	9553	9157
45°	11639	8999	8764
50°	11261	8534	8351
55°	10932	8093	7982
60°	10457	7485	7487
65°	9917	6996	7020
70°	9081	6389	6513
75°	8213	5784	6031
80°	6743	5121	5543
85°	5073	4480	5086

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 11639 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	365.1	2.5
10°-20°	1042.7	7.2
20°-30°	1566.2	10.8
30°-40°	1877.2	13.0
40°-50°	1968.1	13.6
50°-60°	1846.2	12.7
60°-70°	1533.5	10.6
70°-80°	1096.4	7.6
80°-90°	650.2	4.5
90°-100°	477.0	3.3
100°-110°	469.9	3.2
110°-120°	438.4	3.0
120°-130°	384.7	2.7
130°-140°	309.8	2.1
140°-150°	222.3	1.5
150°-160°	141.3	1.0
160°-170°	78.3	0.5
170°-180°	24.7	0.2
0°-30°	2974.0	20.5
0°-40°	4851.2	33.5
0°-60°	8665.5	59.8
0°-90°	11945.6	82.4
90°-120°	1385.3	9.6
90°-150°	2302.1	15.9
90°-180°	2546.0	17.6
0°-180°	14492.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3855	3855	3855	3855	3855	
5°	3877	3869	3814	3832	3847	368
15°	3711	3689	3674	3701	3718	1045
25°	3355	3386	3380	3418	3437	1548
35°	2933	2943	2970	3056	3105	1820
45°	2380	2448	2521	2687	2704	1841
55°	1833	1893	2067	2235	2300	1631
65°	1247	1342	1559	1768	1819	1229
75°	658	809	1061	1280	1340	695
85°	162	354	621	830	907	178
90°	6	215	473	676	750	13
95°	18	225	473	668	737	19
105°	66	248	481	660	721	69
115°	119	268	471	627	688	117
125°	170	276	457	582	635	149
135°	197	266	424	526	569	152
145°	213	246	348	463	496	134
155°	234	246	285	358	406	108
165°	279	270	262	260	326	78
175°	307	295	264	219	133	29
180°	254	254	254	254	254	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3854.7	3854.7	3854.7	3854.7	3854.7
2.5°	3883.4	3852.7	3819.9	3869.1	3867.0
5°	3877.3	3869.1	3813.8	3832.2	3846.6
7.5°	3848.6	3828.1	3795.3	3840.4	3836.3
10°	3809.7	3785.1	3752.3	3779.0	3797.4
12.5°	3766.7	3746.2	3723.7	3752.3	3764.6
15°	3711.4	3688.8	3674.5	3701.1	3717.5
17.5°	3639.7	3633.5	3635.6	3637.6	3664.3
20°	3547.5	3551.6	3557.8	3594.6	3602.8
22.5°	3453.3	3475.8	3459.4	3516.8	3512.7
25°	3355.0	3385.7	3379.6	3418.5	3436.9
27.5°	3266.9	3269.0	3305.8	3361.1	3355.0
30°	3150.2	3185.0	3180.9	3248.5	3248.5
32.5°	3031.4	3082.6	3099.0	3158.4	3178.8
35°	2933.0	2943.3	2969.9	3055.9	3105.1
37.5°	2773.3	2822.4	2865.5	2978.1	2996.5
40°	2638.1	2687.3	2765.1	2896.2	2885.9
42.5°	2521.4	2572.6	2629.9	2781.5	2818.3
45°	2380.0	2447.6	2521.4	2687.3	2703.6
47.5°	2265.3	2318.6	2414.8	2566.4	2586.9
50°	2103.5	2189.5	2294.0	2470.1	2500.9
52.5°	1960.1	2033.9	2167.0	2349.3	2418.9
55°	1833.2	1892.6	2066.7	2234.6	2300.1
57.5°	1677.5	1759.4	1941.7	2128.1	2187.5
60°	1540.3	1620.1	1796.3	2009.3	2056.4
62.5°	1394.8	1489.1	1679.5	1886.4	1939.7
65°	1247.4	1341.6	1558.7	1767.6	1818.8
67.5°	1087.6	1204.4	1425.6	1642.7	1695.9
70°	938.1	1065.1	1302.7	1519.8	1573.0
72.5°	802.9	940.1	1181.8	1405.1	1462.4
75°	657.5	809.0	1061.0	1280.1	1339.5
77.5°	516.2	680.0	936.0	1157.2	1226.9
80°	378.9	559.2	827.5	1040.5	1114.2
82.5°	266.3	450.6	727.1	936.0	1003.6
85°	161.8	354.3	620.6	829.5	907.4
87.5°	71.7	274.5	536.6	743.5	813.1
90°	6.1	215.1	473.1	675.9	749.6
92.5°	12.3	219.2	471.1	667.7	741.5
95°	18.4	225.3	473.1	667.7	737.4
97.5°	26.6	233.5	477.2	667.7	735.3
100°	38.9	237.6	479.3	667.7	735.3
102.5°	51.2	243.7	477.2	657.5	727.1
105°	65.5	247.8	481.3	659.5	721.0
107.5°	79.9	251.9	481.3	649.3	718.9
110°	94.2	258.1	477.2	643.1	710.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	106.5	264.2	475.2	630.9	696.4
115°	118.8	268.3	471.1	626.8	688.2
117.5°	131.1	270.4	469.0	616.5	675.9
120°	141.3	274.5	464.9	604.2	669.8
122.5°	153.6	276.5	458.8	591.9	657.5
125°	170.0	276.5	456.8	581.7	634.9
127.5°	178.2	278.6	448.6	569.4	624.7
130°	186.4	272.4	444.5	555.1	608.3
132.5°	192.5	270.4	434.2	540.7	587.8
135°	196.6	266.3	424.0	526.4	569.4
137.5°	202.8	260.1	409.6	516.2	557.1
140°	206.9	256.0	389.2	495.7	536.6
142.5°	211.0	249.9	368.7	477.2	516.2
145°	213.0	245.8	348.2	462.9	495.7
147.5°	219.2	239.6	335.9	444.5	473.1
150°	217.1	235.5	317.5	421.9	450.6
152.5°	223.3	241.7	301.1	391.2	432.2
155°	233.5	245.8	284.7	358.4	405.5
157.5°	243.7	254.0	272.4	329.8	385.1
160°	258.1	258.1	258.1	307.2	368.7
162.5°	266.3	266.3	260.1	280.6	346.1
165°	278.6	270.4	262.2	260.1	325.7
167.5°	290.8	274.5	266.3	251.9	311.3
170°	292.9	280.6	264.2	237.6	301.1
172.5°	301.1	286.8	262.2	225.3	233.5
175°	307.2	294.9	264.2	219.2	133.1
177.5°	305.2	294.9	270.4	219.2	129.0
180°	254.0	254.0	254.0	254.0	254.0



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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	16.84	18.16	17.45	18.79	19.50	19.43	20.75	20.04	21.38	22.09
	3H	18.27	19.47	18.89	20.11	20.86	21.83	23.03	22.45	23.67	24.42
	4H	18.73	19.87	19.38	20.52	21.29	22.97	24.11	23.61	24.76	25.52
	6H	19.00	20.06	19.65	20.72	21.50	24.12	25.19	24.78	25.85	26.62
	8H	19.05	20.07	19.72	20.75	21.53	24.71	25.72	25.37	26.40	27.19
	12H	19.07	20.04	19.74	20.71	21.52	25.34	26.31	26.02	26.99	27.80
4H	2H	17.72	18.86	18.37	19.51	20.28	19.77	20.91	20.41	21.56	22.32
	3H	19.37	20.34	20.03	21.03	21.81	22.38	23.35	23.04	24.04	24.82
	4H	19.96	20.84	20.63	21.54	22.35	23.68	24.57	24.36	25.26	26.07
	6H	20.33	21.11	21.02	21.83	22.65	25.01	25.79	25.70	26.51	27.33
	8H	20.42	21.15	21.12	21.87	22.70	25.68	26.42	26.38	27.13	27.97
	12H	20.46	21.13	21.18	21.87	22.71	26.43	27.09	27.15	27.83	28.67
8H	4H	20.59	21.33	21.29	22.04	22.88	23.83	24.56	24.53	25.28	26.11
	6H	21.13	21.75	21.86	22.50	23.34	25.30	25.92	26.03	26.68	27.51
	8H	21.30	21.85	22.04	22.61	23.46	26.10	26.66	26.84	27.41	28.27
	12H	21.40	21.90	22.15	22.65	23.56	27.00	27.49	27.74	28.24	29.15
12H	4H	20.76	21.42	21.48	22.16	23.00	23.82	24.49	24.54	25.23	26.06
	6H	21.38	21.94	22.12	22.70	23.55	25.32	25.88	26.06	26.64	27.49
	8H	21.63	22.12	22.37	22.87	23.78	26.17	26.66	26.91	27.41	28.32