

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: P894796

Luminaire Tested: 8TMB-18HL-FLTU-UNV-L950

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894796
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-L950
Description: 18000 Lumen 8FT MICROBAY LINEAR BAY with FLAT FROSTED LENS WITH UPLIGHT, 90CRI, 50
Light Source: -
Ballast/Driver: -

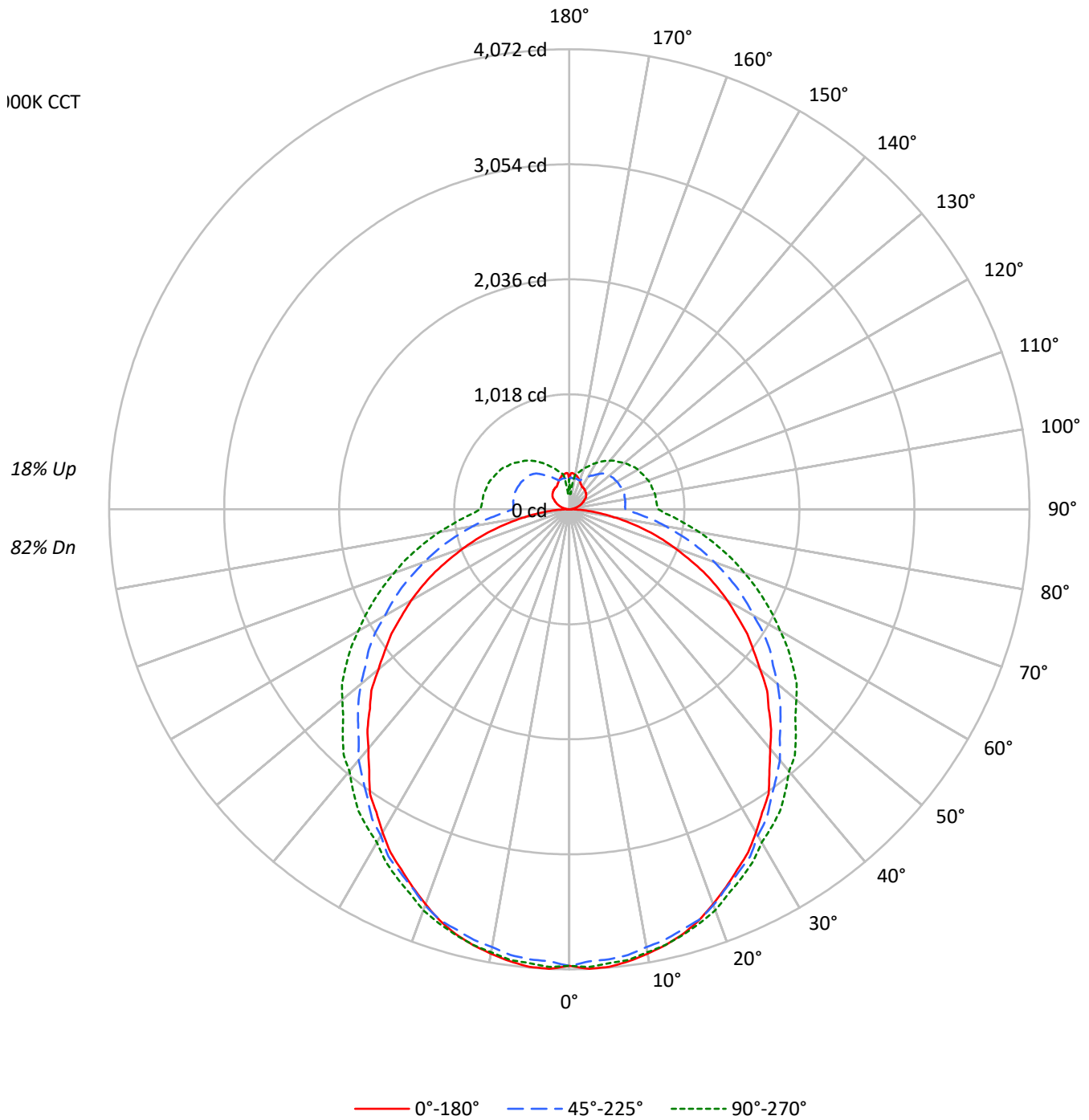
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15194.0 lumens
Efficiency: N/A
Efficacy: 112.7 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°	14340	14340	14340
5°	14446	13753	13707
10°	14325	13227	13080
15°	14194	12763	12484
20°	13912	12271	11891
25°	13605	11664	11236
30°	13331	11069	10600
35°	13081	10502	10191
40°	12536	10016	9600
45°	12202	9435	9189
50°	11806	8948	8756
55°	11462	8485	8369
60°	10964	7847	7850
65°	10398	7335	7361
70°	9520	6698	6829
75°	8611	6064	6323
80°	7071	5369	5811
85°	5318	4697	5332

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 12202 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	382.8	2.5
10°-20°	1093.2	7.2
20°-30°	1642.1	10.8
30°-40°	1968.1	13.0
40°-50°	2063.4	13.6
50°-60°	1935.6	12.7
60°-70°	1607.7	10.6
70°-80°	1149.5	7.6
80°-90°	681.7	4.5
90°-100°	500.1	3.3
100°-110°	492.7	3.2
110°-120°	459.6	3.0
120°-130°	403.3	2.7
130°-140°	324.8	2.1
140°-150°	233.1	1.5
150°-160°	148.1	1.0
160°-170°	82.1	0.5
170°-180°	25.9	0.2
0°-30°	3118.1	20.5
0°-40°	5086.2	33.5
0°-60°	9085.2	59.8
0°-90°	12524.2	82.4
90°-120°	1452.5	9.6
90°-150°	2413.7	15.9
90°-180°	2670.0	17.6
0°-180°	15194.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4042	4042	4042	4042	4042	
5°	4065	4056	3998	4018	4033	385
15°	3891	3868	3852	3880	3898	1095
25°	3518	3550	3543	3584	3603	1623
35°	3075	3086	3114	3204	3256	1909
45°	2495	2566	2644	2817	2835	1930
55°	1922	1984	2167	2343	2412	1710
65°	1308	1407	1634	1853	1907	1289
75°	689	848	1112	1342	1404	728
85°	170	372	651	870	951	186
90°	6	226	496	709	786	14
95°	19	236	496	700	773	20
105°	69	260	505	692	756	73
115°	125	281	494	657	722	123
125°	178	290	479	610	666	156
135°	206	279	444	552	597	160
145°	223	258	365	485	520	141
155°	245	258	298	376	425	113
165°	292	284	275	273	341	82
175°	322	309	277	230	140	30
180°	266	266	266	266	266	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4041.5	4041.5	4041.5	4041.5	4041.5
2.5°	4071.5	4039.3	4005.0	4056.5	4054.4
5°	4065.1	4056.5	3998.5	4017.8	4032.9
7.5°	4035.0	4013.6	3979.2	4026.4	4022.1
10°	3994.2	3968.5	3934.1	3962.0	3981.3
12.5°	3949.1	3927.7	3904.0	3934.1	3947.0
15°	3891.1	3867.5	3852.5	3880.4	3897.6
17.5°	3816.0	3809.5	3811.7	3813.8	3841.8
20°	3719.4	3723.6	3730.1	3768.7	3777.3
22.5°	3620.6	3644.2	3627.0	3687.1	3682.8
25°	3517.5	3549.7	3543.3	3584.1	3603.4
27.5°	3425.2	3427.3	3466.0	3523.9	3517.5
30°	3302.8	3339.3	3335.0	3405.8	3405.8
32.5°	3178.2	3231.9	3249.1	3311.3	3332.8
35°	3075.1	3085.9	3113.8	3204.0	3255.5
37.5°	2907.6	2959.2	3004.3	3122.4	3141.7
40°	2765.9	2817.4	2899.0	3036.5	3025.7
42.5°	2643.5	2697.2	2757.3	2916.2	2954.9
45°	2495.3	2566.2	2643.5	2817.4	2834.6
47.5°	2375.1	2430.9	2531.8	2690.7	2712.2
50°	2205.4	2295.6	2405.1	2589.8	2622.0
52.5°	2055.1	2132.4	2272.0	2463.1	2536.1
55°	1922.0	1984.2	2166.8	2342.9	2411.6
57.5°	1758.7	1844.6	2035.8	2231.2	2293.5
60°	1614.9	1698.6	1883.3	2106.6	2156.0
62.5°	1462.4	1561.2	1760.9	1977.8	2033.6
65°	1307.8	1406.6	1634.2	1853.2	1906.9
67.5°	1140.3	1262.7	1494.6	1722.2	1778.1
70°	983.5	1116.7	1365.8	1593.4	1649.2
72.5°	841.8	985.7	1239.1	1473.1	1533.3
75°	689.3	848.2	1112.4	1342.1	1404.4
77.5°	541.2	712.9	981.4	1213.3	1286.3
80°	397.3	586.2	867.6	1090.9	1168.2
82.5°	279.2	472.4	762.3	981.4	1052.2
85°	169.6	371.5	650.7	869.7	951.3
87.5°	75.2	287.8	562.6	779.5	852.5
90°	6.4	225.5	496.1	708.7	786.0
92.5°	12.9	229.8	493.9	700.1	777.4
95°	19.3	236.2	496.1	700.1	773.1
97.5°	27.9	244.8	500.4	700.1	770.9
100°	40.8	249.1	502.5	700.1	770.9
102.5°	53.7	255.5	500.4	689.3	762.3
105°	68.7	259.8	504.6	691.5	755.9
107.5°	83.7	264.1	504.6	680.7	753.7
110°	98.8	270.6	500.4	674.3	745.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	111.7	277.0	498.2	661.4	730.1
115°	124.6	281.3	493.9	657.1	721.5
117.5°	137.4	283.5	491.8	646.4	708.7
120°	148.2	287.8	487.5	633.5	702.2
122.5°	161.1	289.9	481.0	620.6	689.3
125°	178.2	289.9	478.9	609.9	665.7
127.5°	186.8	292.1	470.3	597.0	655.0
130°	195.4	285.6	466.0	582.0	637.8
132.5°	201.9	283.5	455.3	566.9	616.3
135°	206.2	279.2	444.5	551.9	597.0
137.5°	212.6	272.7	429.5	541.2	584.1
140°	216.9	268.4	408.0	519.7	562.6
142.5°	221.2	262.0	386.5	500.4	541.2
145°	223.3	257.7	365.1	485.3	519.7
147.5°	229.8	251.2	352.2	466.0	496.1
150°	227.6	247.0	332.9	442.4	472.4
152.5°	234.1	253.4	315.7	410.2	453.1
155°	244.8	257.7	298.5	375.8	425.2
157.5°	255.5	266.3	285.6	345.7	403.7
160°	270.6	270.6	270.6	322.1	386.5
162.5°	279.2	279.2	272.7	294.2	362.9
165°	292.1	283.5	274.9	272.7	341.4
167.5°	304.9	287.8	279.2	264.1	326.4
170°	307.1	294.2	277.0	249.1	315.7
172.5°	315.7	300.6	274.9	236.2	244.8
175°	322.1	309.2	277.0	229.8	139.6
177.5°	320.0	309.2	283.5	229.8	135.3
180°	266.3	266.3	266.3	266.3	266.3



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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	17.00	18.33	17.61	18.95	19.67	19.59	20.92	20.20	21.54	22.26
	3H	18.43	19.64	19.06	20.27	21.02	21.99	23.19	22.61	23.83	24.58
	4H	18.90	20.04	19.54	20.69	21.45	23.13	24.27	23.78	24.92	25.69
	6H	19.16	20.22	19.82	20.88	21.66	24.29	25.35	24.95	26.01	26.79
	8H	19.21	20.23	19.88	20.91	21.69	24.87	25.89	25.54	26.57	27.35
	12H	19.23	20.20	19.90	20.88	21.69	25.50	26.48	26.18	27.15	27.96
4H	2H	17.89	19.03	18.53	19.68	20.44	19.93	21.07	20.58	21.72	22.49
	3H	19.54	20.51	20.20	21.20	21.98	22.54	23.51	23.20	24.20	24.98
	4H	20.12	21.01	20.80	21.70	22.51	23.84	24.73	24.52	25.42	26.24
	6H	20.49	21.28	21.19	21.99	22.81	25.17	25.95	25.87	26.67	27.49
	8H	20.58	21.32	21.28	22.03	22.87	25.85	26.58	26.55	27.30	28.13
	12H	20.63	21.29	21.35	22.03	22.87	26.59	27.26	27.31	27.99	28.83
8H	4H	20.76	21.49	21.46	22.21	23.04	23.99	24.73	24.69	25.44	26.28
	6H	21.29	21.91	22.02	22.67	23.50	25.47	26.09	26.20	26.84	27.68
	8H	21.46	22.02	22.20	22.78	23.63	26.26	26.82	27.00	27.58	28.43
	12H	21.57	22.06	22.31	22.81	23.72	27.16	27.66	27.91	28.41	29.32
12H	4H	20.92	21.59	21.64	22.33	23.17	23.98	24.65	24.71	25.39	26.23
	6H	21.55	22.11	22.29	22.86	23.71	25.48	26.04	26.22	26.80	27.65
	8H	21.79	22.29	22.54	23.04	23.95	26.33	26.83	27.08	27.58	28.49