

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: P894597

Luminaire Tested: 8TMB-14HL-FLTU-UNV-L830

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894597
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-14HL-FLTU-UNV-L830
Description: 14000 Lumen 8FT MICROBAY LINEAR BAY with FLAT FROSTED LENS WITH UPLIGHT, 80CRI, 30
Light Source: -
Ballast/Driver: -

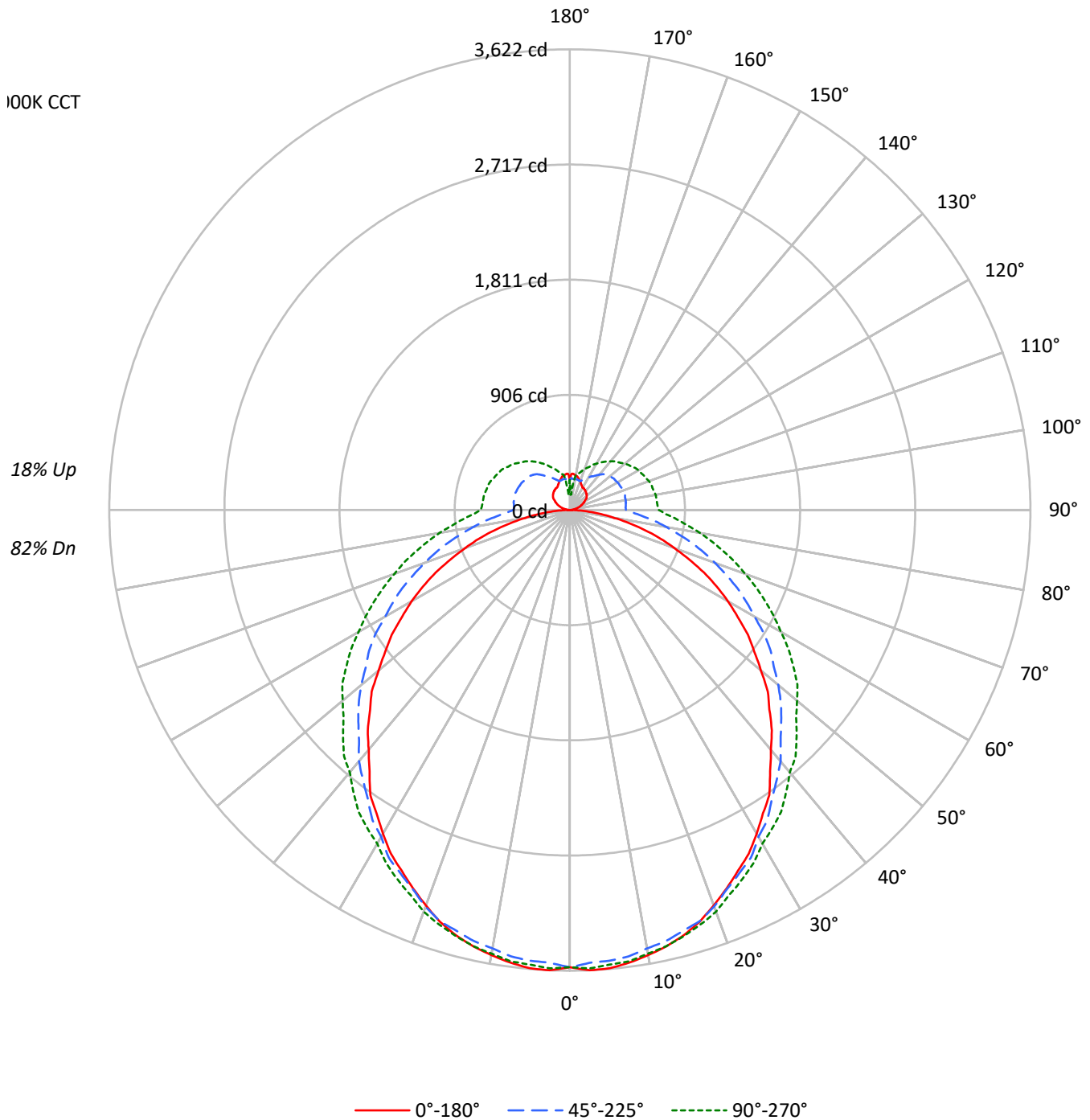
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13516.0 lumens
Efficiency: N/A
Efficacy: 130.5 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): 103.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: 0.997
Total Harmonic Distortion (THDi): 5.03
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°	12756	12756	12756
5°	12850	12234	12193
10°	12743	11766	11636
15°	12626	11354	11105
20°	12375	10916	10578
25°	12102	10376	9995
30°	11858	9847	9430
35°	11636	9342	9066
40°	11152	8910	8540
45°	10855	8393	8174
50°	10503	7959	7789
55°	10196	7548	7445
60°	9753	6981	6983
65°	9250	6525	6548
70°	8469	5958	6075
75°	7660	5394	5625
80°	6290	4776	5170
85°	4731	4178	4744

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 10855 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	340.5	2.5
10°-20°	972.4	7.2
20°-30°	1460.8	10.8
30°-40°	1750.7	13.0
40°-50°	1835.5	13.6
50°-60°	1721.9	12.7
60°-70°	1430.2	10.6
70°-80°	1022.6	7.6
80°-90°	606.5	4.5
90°-100°	444.9	3.3
100°-110°	438.3	3.2
110°-120°	408.9	3.0
120°-130°	358.8	2.7
130°-140°	288.9	2.1
140°-150°	207.4	1.5
150°-160°	131.8	1.0
160°-170°	73.0	0.5
170°-180°	23.0	0.2
0°-30°	2773.7	20.5
0°-40°	4524.5	33.5
0°-60°	8081.9	59.8
0°-90°	11141.1	82.4
90°-120°	1292.0	9.6
90°-150°	2147.1	15.9
90°-180°	2375.0	17.6
0°-180°	13516.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3595	3595	3595	3595	3595	
5°	3616	3608	3557	3574	3588	343
15°	3461	3440	3427	3452	3467	974
25°	3129	3158	3152	3188	3205	1444
35°	2736	2745	2770	2850	2896	1698
45°	2220	2283	2352	2506	2522	1717
55°	1710	1765	1928	2084	2145	1521
65°	1163	1251	1454	1649	1696	1146
75°	613	755	990	1194	1249	648
85°	151	330	579	774	846	166
90°	6	201	441	630	699	12
95°	17	210	441	623	688	18
105°	61	231	449	615	672	65
115°	111	250	439	584	642	109
125°	159	258	426	542	592	139
135°	183	248	395	491	531	142
145°	199	229	325	432	462	125
155°	218	229	266	334	378	101
165°	260	252	244	243	304	73
175°	286	275	246	204	124	27
180°	237	237	237	237	237	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3595.1	3595.1	3595.1	3595.1	3595.1
2.5°	3621.9	3593.2	3562.7	3608.5	3606.6
5°	3616.1	3608.5	3556.9	3574.1	3587.5
7.5°	3589.4	3570.3	3539.7	3581.8	3577.9
10°	3553.1	3530.2	3499.6	3524.5	3541.6
12.5°	3513.0	3493.9	3472.9	3499.6	3511.1
15°	3461.4	3440.4	3427.0	3451.9	3467.1
17.5°	3394.6	3388.8	3390.7	3392.6	3417.5
20°	3308.6	3312.4	3318.1	3352.5	3360.2
22.5°	3220.7	3241.7	3226.5	3279.9	3276.1
25°	3129.0	3157.7	3152.0	3188.2	3205.4
27.5°	3046.9	3048.8	3083.2	3134.8	3129.0
30°	2938.0	2970.5	2966.7	3029.7	3029.7
32.5°	2827.2	2875.0	2890.2	2945.6	2964.7
35°	2735.5	2745.1	2769.9	2850.1	2896.0
37.5°	2586.5	2632.4	2672.5	2777.5	2794.7
40°	2460.4	2506.3	2578.9	2701.1	2691.6
42.5°	2351.5	2399.3	2452.8	2594.2	2628.5
45°	2219.7	2282.8	2351.5	2506.3	2521.6
47.5°	2112.8	2162.4	2252.2	2393.6	2412.7
50°	1961.9	2042.1	2139.5	2303.8	2332.4
52.5°	1828.1	1896.9	2021.1	2191.1	2256.0
55°	1709.7	1765.1	1927.5	2084.1	2145.2
57.5°	1564.5	1640.9	1810.9	1984.8	2040.2
60°	1436.5	1511.0	1675.3	1874.0	1917.9
62.5°	1300.9	1388.8	1566.4	1759.4	1809.0
65°	1163.4	1251.2	1453.7	1648.6	1696.3
67.5°	1014.4	1123.2	1329.6	1532.0	1581.7
70°	874.9	993.3	1214.9	1417.4	1467.1
72.5°	748.8	876.8	1102.2	1310.4	1363.9
75°	613.2	754.6	989.5	1193.9	1249.3
77.5°	481.4	634.2	873.0	1079.3	1144.3
80°	353.4	521.5	771.8	970.4	1039.2
82.5°	248.3	420.3	678.1	873.0	936.0
85°	150.9	330.5	578.8	773.7	846.3
87.5°	66.9	256.0	500.5	693.4	758.4
90°	5.7	200.6	441.3	630.4	699.2
92.5°	11.5	204.4	439.4	622.7	691.5
95°	17.2	210.1	441.3	622.7	687.7
97.5°	24.8	217.8	445.1	622.7	685.8
100°	36.3	221.6	447.0	622.7	685.8
102.5°	47.8	227.3	445.1	613.2	678.1
105°	61.1	231.1	448.9	615.1	672.4
107.5°	74.5	235.0	448.9	605.6	670.5
110°	87.9	240.7	445.1	599.8	662.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	99.3	246.4	443.2	588.4	649.5
115°	110.8	250.2	439.4	584.5	641.9
117.5°	122.3	252.2	437.5	575.0	630.4
120°	131.8	256.0	433.6	563.5	624.7
122.5°	143.3	257.9	427.9	552.1	613.2
125°	158.6	257.9	426.0	542.5	592.2
127.5°	166.2	259.8	418.4	531.1	582.6
130°	173.8	254.1	414.5	517.7	567.4
132.5°	179.6	252.2	405.0	504.3	548.2
135°	183.4	248.3	395.4	490.9	531.1
137.5°	189.1	242.6	382.1	481.4	519.6
140°	192.9	238.8	363.0	462.3	500.5
142.5°	196.8	233.1	343.8	445.1	481.4
145°	198.7	229.2	324.7	431.7	462.3
147.5°	204.4	223.5	313.3	414.5	441.3
150°	202.5	219.7	296.1	393.5	420.3
152.5°	208.2	225.4	280.8	364.9	403.1
155°	217.8	229.2	265.5	334.3	378.2
157.5°	227.3	236.9	254.1	307.6	359.1
160°	240.7	240.7	240.7	286.5	343.8
162.5°	248.3	248.3	242.6	261.7	322.8
165°	259.8	252.2	244.5	242.6	303.7
167.5°	271.3	256.0	248.3	235.0	290.4
170°	273.2	261.7	246.4	221.6	280.8
172.5°	280.8	267.4	244.5	210.1	217.8
175°	286.5	275.1	246.4	204.4	124.2
177.5°	284.6	275.1	252.2	204.4	120.3
180°	236.9	236.9	236.9	236.9	236.9



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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	16.59	17.92	17.21	18.55	19.26	19.18	20.51	19.80	21.14	21.85
	3H	18.02	19.23	18.65	19.87	20.62	21.58	22.79	22.21	23.42	24.17
	4H	18.49	19.63	19.13	20.28	21.04	22.73	23.87	23.37	24.52	25.28
	6H	18.75	19.82	19.41	20.48	21.25	23.88	24.94	24.54	25.60	26.38
	8H	18.81	19.82	19.48	20.51	21.29	24.46	25.48	25.13	26.16	26.94
	12H	18.82	19.80	19.50	20.47	21.28	25.10	26.07	25.77	26.75	27.56
4H	2H	17.48	18.62	18.13	19.27	20.03	19.53	20.67	20.17	21.32	22.08
	3H	19.13	20.10	19.79	20.79	21.57	22.14	23.11	22.79	23.79	24.58
	4H	19.71	20.60	20.39	21.29	22.11	23.44	24.33	24.11	25.02	25.83
	6H	20.09	20.87	20.78	21.59	22.41	24.77	25.55	25.46	26.26	27.08
	8H	20.18	20.91	20.88	21.63	22.46	25.44	26.18	26.14	26.89	27.72
	12H	20.22	20.89	20.94	21.62	22.46	26.18	26.85	26.90	27.59	28.43
8H	4H	20.35	21.09	21.05	21.80	22.63	23.59	24.32	24.29	25.04	25.87
	6H	20.89	21.51	21.61	22.26	23.10	25.06	25.68	25.79	26.43	27.27
	8H	21.05	21.61	21.80	22.37	23.22	25.86	26.41	26.60	27.17	28.02
	12H	21.16	21.65	21.90	22.40	23.31	26.76	27.25	27.50	28.00	28.91
12H	4H	20.52	21.18	21.24	21.92	22.76	23.58	24.24	24.30	24.98	25.82
	6H	21.14	21.70	21.88	22.46	23.31	25.08	25.64	25.82	26.39	27.24
	8H	21.39	21.88	22.13	22.63	23.54	25.93	26.42	26.67	27.17	28.08