

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: P894598

Luminaire Tested: 8TMB-14HL-FLTU-UNV-L835

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894598
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-L835
Description: 14000 Lumen 8FT MICROBAY LINEAR BAY with FLAT FROSTED LENS WITH UPLIGHT, 80CRI, 35
Light Source: -
Ballast/Driver: -

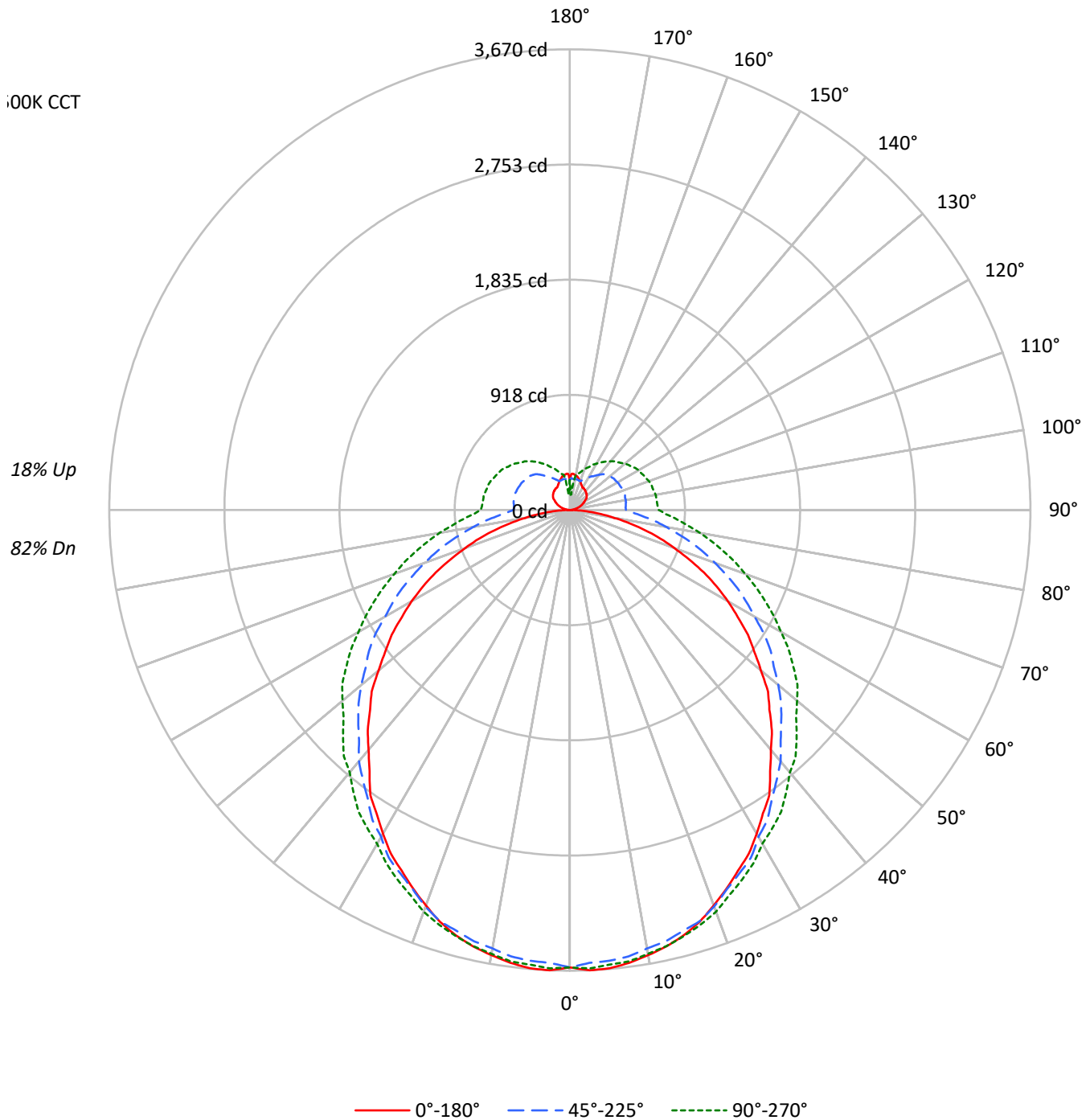
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13697.0 lumens
Efficiency: N/A
Efficacy: 132.2 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
RCR																				
0	115	115	115	115	110	110	110	110	101	101	101	93	93	93	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	
2	93	85	77	71	89	81	75	69	75	70	65	69	65	61	63	60	57	57	54	
3	85	74	66	59	81	71	63	57	66	59	54	60	55	51	56	51	48	48	45	
4	78	65	56	49	74	63	55	48	58	51	46	54	48	43	50	45	41	41	38	
5	71	58	49	42	68	56	48	41	52	45	39	48	42	37	44	39	35	35	33	
6	66	52	43	37	63	50	42	36	47	40	34	43	37	33	40	35	31	31	28	
7	61	47	38	32	58	46	37	32	42	35	30	39	33	29	37	31	27	27	25	
8	56	43	34	29	54	42	34	28	39	32	27	36	30	26	34	28	24	24	22	
9	53	39	31	26	50	38	30	25	36	29	24	33	27	23	31	26	22	22	20	
10	49	36	28	23	47	35	28	23	33	26	22	31	25	21	29	24	20	20	18	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12927	12927	12927
5°	13022	12398	12356
10°	12913	11924	11792
15°	12796	11506	11254
20°	12541	11062	10720
25°	12265	10515	10129
30°	12017	9979	9556
35°	11792	9468	9187
40°	11301	9029	8654
45°	11000	8505	8283
50°	10643	8066	7893
55°	10333	7649	7545
60°	9884	7074	7076
65°	9373	6612	6635
70°	8582	6038	6156
75°	7762	5466	5700
80°	6373	4840	5239
85°	4794	4234	4807

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 11000 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	345.1	2.5
10°-20°	985.5	7.2
20°-30°	1480.3	10.8
30°-40°	1774.2	13.0
40°-50°	1860.1	13.6
50°-60°	1744.9	12.7
60°-70°	1449.3	10.6
70°-80°	1036.3	7.6
80°-90°	614.6	4.5
90°-100°	450.8	3.3
100°-110°	444.2	3.2
110°-120°	414.3	3.0
120°-130°	363.6	2.7
130°-140°	292.8	2.1
140°-150°	210.1	1.5
150°-160°	133.5	1.0
160°-170°	74.0	0.5
170°-180°	23.3	0.2
0°-30°	2810.9	20.5
0°-40°	4585.1	33.5
0°-60°	8190.1	59.8
0°-90°	11290.3	82.4
90°-120°	1309.3	9.6
90°-150°	2175.9	15.9
90°-180°	2407.0	17.6
0°-180°	13697.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3643	3643	3643	3643	3643	
5°	3665	3657	3605	3622	3636	348
15°	3508	3486	3473	3498	3514	988
25°	3171	3200	3194	3231	3248	1463
35°	2772	2782	2807	2888	2935	1721
45°	2250	2313	2383	2540	2555	1740
55°	1733	1789	1953	2112	2174	1541
65°	1179	1268	1473	1671	1719	1162
75°	621	765	1003	1210	1266	657
85°	153	335	587	784	858	168
90°	6	203	447	639	708	12
95°	17	213	447	631	697	18
105°	62	234	455	623	681	66
115°	112	254	445	592	650	111
125°	161	261	432	550	600	141
135°	186	252	401	498	538	144
145°	201	232	329	438	468	127
155°	221	232	269	339	383	102
165°	263	256	248	246	308	74
175°	290	279	250	207	126	27
180°	240	240	240	240	240	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3643.3	3643.3	3643.3	3643.3	3643.3
2.5°	3670.4	3641.3	3610.4	3656.8	3654.9
5°	3664.6	3656.8	3604.6	3622.0	3635.5
7.5°	3637.5	3618.1	3587.1	3629.7	3625.9
10°	3600.7	3577.5	3546.5	3571.7	3589.1
12.5°	3560.0	3540.7	3519.4	3546.5	3558.1
15°	3507.8	3486.5	3472.9	3498.1	3513.6
17.5°	3440.0	3434.2	3436.1	3438.1	3463.2
20°	3352.9	3356.8	3362.6	3397.4	3405.2
22.5°	3263.9	3285.1	3269.7	3323.9	3320.0
25°	3170.9	3200.0	3194.2	3230.9	3248.4
27.5°	3087.7	3089.6	3124.5	3176.7	3170.9
30°	2977.3	3010.3	3006.4	3070.3	3070.3
32.5°	2865.1	2913.5	2929.0	2985.1	3004.4
35°	2772.1	2781.8	2807.0	2888.3	2934.8
37.5°	2621.1	2667.6	2708.3	2814.7	2832.2
40°	2493.4	2539.8	2613.4	2737.3	2727.6
42.5°	2383.0	2431.4	2485.6	2628.9	2663.7
45°	2249.5	2313.3	2383.0	2539.8	2555.3
47.5°	2141.1	2191.4	2282.4	2425.6	2445.0
50°	1988.1	2069.4	2168.2	2334.6	2363.7
52.5°	1852.6	1922.3	2048.1	2220.4	2286.2
55°	1732.6	1788.7	1953.3	2112.0	2174.0
57.5°	1585.5	1662.9	1835.2	2011.4	2067.5
60°	1455.8	1531.3	1697.7	1899.1	1943.6
62.5°	1318.3	1407.4	1587.4	1782.9	1833.3
65°	1178.9	1268.0	1473.2	1670.6	1719.0
67.5°	1027.9	1138.3	1347.4	1552.6	1602.9
70°	886.6	1006.6	1231.2	1436.4	1486.7
72.5°	758.9	888.6	1117.0	1328.0	1382.2
75°	621.4	764.7	1002.8	1209.9	1266.0
77.5°	487.8	642.7	884.7	1093.8	1159.6
80°	358.1	528.5	782.1	983.4	1053.1
82.5°	251.7	425.9	687.2	884.7	948.6
85°	152.9	334.9	586.6	784.0	857.6
87.5°	67.8	259.4	507.2	702.7	768.5
90°	5.8	203.3	447.2	638.8	708.5
92.5°	11.6	207.1	445.2	631.1	700.8
95°	17.4	212.9	447.2	631.1	696.9
97.5°	25.2	220.7	451.1	631.1	695.0
100°	36.8	224.6	453.0	631.1	695.0
102.5°	48.4	230.4	451.1	621.4	687.2
105°	61.9	234.2	454.9	623.3	681.4
107.5°	75.5	238.1	454.9	613.7	679.5
110°	89.0	243.9	451.1	607.9	671.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	100.7	249.7	449.1	596.2	658.2
115°	112.3	253.6	445.2	592.4	650.4
117.5°	123.9	255.5	443.3	582.7	638.8
120°	133.6	259.4	439.4	571.1	633.0
122.5°	145.2	261.3	433.6	559.5	621.4
125°	160.7	261.3	431.7	549.8	600.1
127.5°	168.4	263.3	424.0	538.2	590.4
130°	176.2	257.5	420.1	524.6	574.9
132.5°	182.0	255.5	410.4	511.1	555.6
135°	185.8	251.7	400.7	497.5	538.2
137.5°	191.6	245.9	387.2	487.8	526.6
140°	195.5	242.0	367.8	468.5	507.2
142.5°	199.4	236.2	348.5	451.1	487.8
145°	201.3	232.3	329.1	437.5	468.5
147.5°	207.1	226.5	317.5	420.1	447.2
150°	205.2	222.6	300.1	398.8	425.9
152.5°	211.0	228.4	284.6	369.7	408.5
155°	220.7	232.3	269.1	338.8	383.3
157.5°	230.4	240.0	257.5	311.7	363.9
160°	243.9	243.9	243.9	290.4	348.5
162.5°	251.7	251.7	245.9	265.2	327.2
165°	263.3	255.5	247.8	245.9	307.8
167.5°	274.9	259.4	251.7	238.1	294.3
170°	276.8	265.2	249.7	224.6	284.6
172.5°	284.6	271.0	247.8	212.9	220.7
175°	290.4	278.8	249.7	207.1	125.8
177.5°	288.4	278.8	255.5	207.1	122.0
180°	240.0	240.0	240.0	240.0	240.0



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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	16.64	17.96	17.25	18.59	19.31	19.23	20.56	19.84	21.18	21.90
	3H	18.07	19.28	18.70	19.91	20.66	21.63	22.83	22.25	23.47	24.22
	4H	18.54	19.68	19.18	20.33	21.09	22.77	23.91	23.41	24.56	25.33
	6H	18.80	19.86	19.46	20.52	21.30	23.93	24.99	24.59	25.65	26.43
	8H	18.85	19.87	19.52	20.55	21.33	24.51	25.53	25.18	26.21	26.99
	12H	18.87	19.84	19.54	20.52	21.33	25.14	26.12	25.82	26.79	27.60
4H	2H	17.53	18.67	18.17	19.32	20.08	19.57	20.71	20.22	21.36	22.13
	3H	19.18	20.15	19.84	20.84	21.62	22.18	23.15	22.84	23.84	24.62
	4H	19.76	20.65	20.44	21.34	22.15	23.48	24.37	24.16	25.06	25.88
	6H	20.13	20.92	20.83	21.63	22.45	24.81	25.59	25.51	26.31	27.13
	8H	20.22	20.96	20.92	21.67	22.51	25.49	26.22	26.19	26.94	27.77
	12H	20.27	20.93	20.99	21.67	22.51	26.23	26.90	26.95	27.63	28.47
8H	4H	20.40	21.13	21.10	21.85	22.68	23.63	24.37	24.33	25.08	25.92
	6H	20.93	21.55	21.66	22.31	23.14	25.11	25.73	25.84	26.48	27.32
	8H	21.10	21.66	21.84	22.42	23.27	25.90	26.46	26.64	27.22	28.07
	12H	21.21	21.70	21.95	22.45	23.36	26.80	27.30	27.55	28.05	28.96
12H	4H	20.56	21.23	21.28	21.97	22.81	23.62	24.29	24.35	25.03	25.87
	6H	21.19	21.74	21.93	22.50	23.35	25.12	25.68	25.86	26.44	27.29
	8H	21.43	21.93	22.18	22.68	23.59	25.97	26.47	26.72	27.22	28.13