

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: P894645

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

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894645
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2403-334-3)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 8TMB-14HL-RNDU-UNV-L830
Description: 14000 Lumen 8FT MICROBAY LINEAR BAY with ROUND FROSTED LENS WITH UPLIGHT, 80CRI, CCT
Light Source: -
Ballast/Driver: -

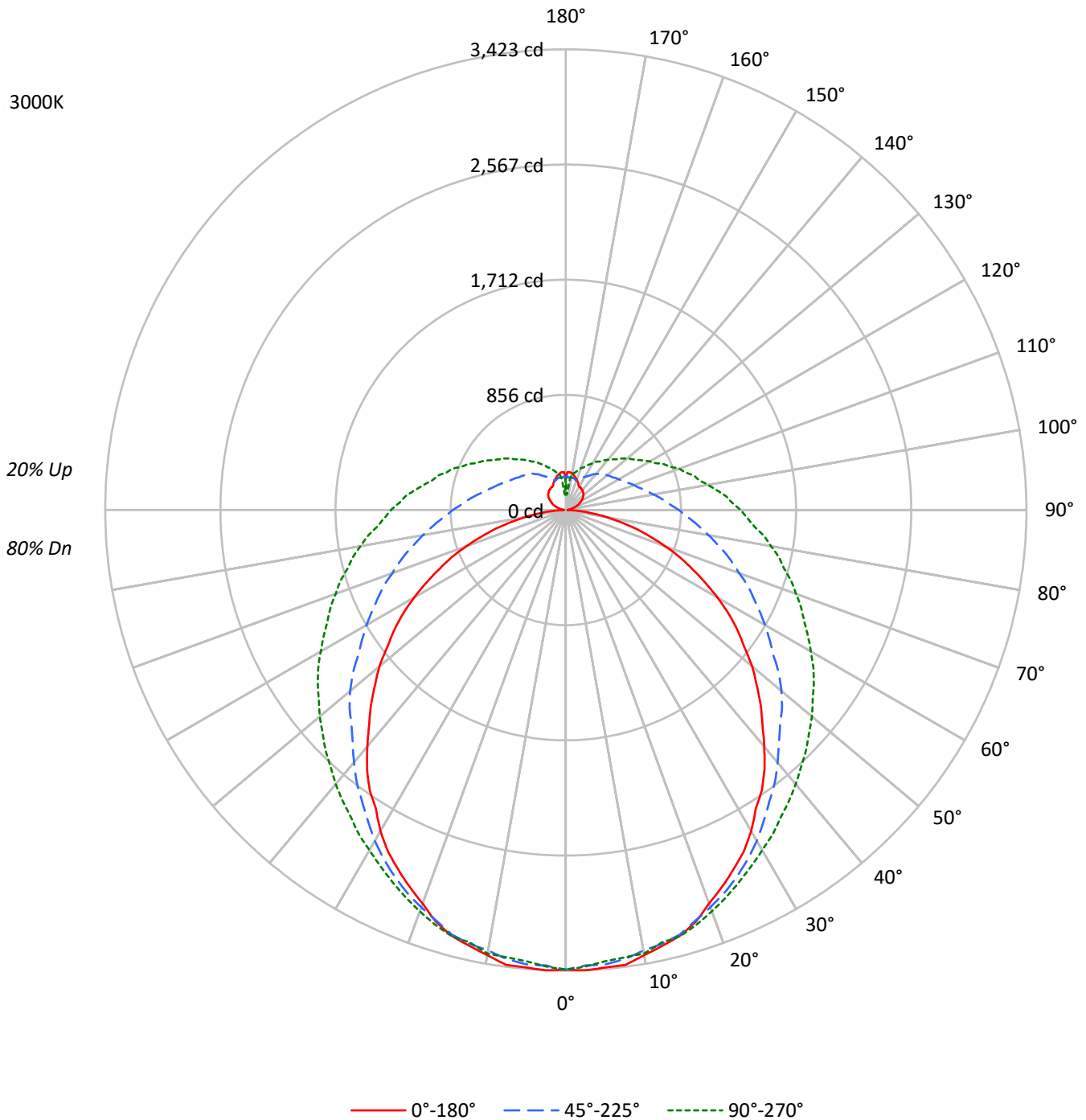
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14358.0 lumens
Efficiency: N/A
Efficacy: 138.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37
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 (Ain): 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	114	114	114	114	109	109	109	109	100	100	100	91	91	91	83	83	83	83	83	83	80
1	102	96	91	86	97	92	87	83	84	80	77	76	73	71	69	67	65	65	65	65	61
2	92	82	75	68	87	79	72	66	72	66	61	66	61	57	60	56	53	53	53	53	49
3	83	72	63	56	79	69	61	54	63	56	51	57	52	47	52	48	44	44	44	44	41
4	76	63	54	47	72	60	52	45	55	48	43	51	45	40	46	41	37	37	37	37	34
5	69	56	47	40	66	54	45	39	49	42	37	45	39	34	41	36	32	32	32	32	29
6	64	50	41	35	61	48	40	34	44	37	32	41	35	30	38	32	28	28	28	28	26
7	59	46	37	30	56	44	35	30	40	33	28	37	31	26	34	29	25	25	25	25	23
8	55	41	33	27	52	40	32	26	37	30	25	34	28	24	31	26	22	22	22	22	20
9	51	38	30	24	49	37	29	23	34	27	22	31	25	21	29	24	20	20	20	20	18
10	48	35	27	22	46	34	26	21	31	25	20	29	23	19	27	22	18	18	18	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12118	12118	12118
5°	12123	11656	11440
10°	12043	11175	10995
15°	11950	10821	10499
20°	11639	10331	9988
25°	11400	9898	9506
30°	11118	9422	9085
35°	10807	8904	8719
40°	10398	8461	8437
45°	10014	8038	8186
50°	9684	7782	7973
55°	9295	7376	7809
60°	8831	7124	7657
65°	8246	6902	7543
70°	7600	6726	7538
75°	6753	6674	7560
80°	5508	6667	7707
85°	3954	6853	7880

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 10014 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	323.3	2.3
10°-20°	923.9	6.4
20°-30°	1387.3	9.7
30°-40°	1665.9	11.6
40°-50°	1762.1	12.3
50°-60°	1698.2	11.8
60°-70°	1506.6	10.5
70°-80°	1235.6	8.6
80°-90°	956.3	6.7
90°-100°	746.1	5.2
100°-110°	593.9	4.1
110°-120°	474.7	3.3
120°-130°	374.4	2.6
130°-140°	285.7	2.0
140°-150°	200.9	1.4
150°-160°	128.4	0.9
160°-170°	72.0	0.5
170°-180°	22.8	0.2
0°-30°	2634.5	18.3
0°-40°	4300.5	30.0
0°-60°	7760.8	54.1
0°-90°	11459.2	79.8
90°-120°	1814.7	12.6
90°-150°	2675.6	18.6
90°-180°	2899.0	20.2
0°-180°	14358.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3415	3415	3415	3415	3415	
5°	3412	3421	3389	3414	3366	325
15°	3276	3278	3266	3288	3278	920
25°	2947	2995	3007	3058	3049	1358
35°	2541	2579	2640	2749	2785	1584
45°	2048	2109	2252	2466	2525	1580
55°	1559	1637	1884	2139	2250	1391
65°	1037	1180	1538	1857	1954	1031
75°	541	778	1224	1555	1679	572
85°	126	474	949	1291	1406	142
90°	13	376	840	1169	1299	13
95°	17	311	743	1068	1194	17
105°	57	252	594	873	986	61
115°	111	246	493	712	804	107
125°	155	250	424	584	648	136
135°	182	243	380	495	533	141
145°	197	224	313	414	439	123
155°	218	229	258	325	363	100
165°	258	252	243	237	294	72
175°	283	273	243	199	126	27
180°	231	231	231	231	231	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3415.4	3415.4	3415.4	3415.4	3415.4
2.5°	3423.1	3434.5	3386.8	3415.4	3394.4
5°	3411.6	3421.2	3388.7	3413.5	3365.8
7.5°	3407.8	3404.0	3363.9	3396.3	3352.4
10°	3358.1	3371.5	3323.7	3367.7	3346.7
12.5°	3316.1	3342.8	3300.8	3335.2	3291.3
15°	3276.0	3277.9	3266.4	3287.5	3277.9
17.5°	3209.1	3226.3	3199.6	3247.3	3230.1
20°	3111.7	3165.2	3140.4	3184.3	3172.8
22.5°	3031.5	3058.2	3079.2	3128.9	3113.6
25°	2947.4	2995.2	3006.7	3058.2	3048.7
27.5°	2861.5	2882.5	2926.4	2981.8	2983.7
30°	2754.5	2777.4	2838.6	2901.6	2918.8
32.5°	2628.4	2701.0	2737.3	2832.8	2859.6
35°	2540.6	2578.8	2639.9	2748.8	2785.1
37.5°	2426.0	2469.9	2552.0	2680.0	2723.9
40°	2294.1	2359.1	2448.9	2607.4	2659.0
42.5°	2162.3	2238.8	2343.8	2529.1	2588.3
45°	2047.7	2108.9	2252.1	2466.1	2525.3
47.5°	1923.6	1998.1	2179.5	2383.9	2450.8
50°	1809.0	1885.4	2091.7	2307.5	2387.7
52.5°	1671.4	1759.3	1996.2	2219.6	2313.2
55°	1558.7	1637.0	1883.5	2139.4	2250.2
57.5°	1434.6	1522.4	1795.6	2080.2	2181.4
60°	1300.8	1411.6	1709.6	2005.7	2103.1
62.5°	1169.0	1300.8	1621.8	1933.1	2028.6
65°	1037.2	1180.5	1537.7	1856.7	1954.1
67.5°	918.8	1073.5	1461.3	1772.7	1893.0
70°	785.1	970.4	1371.5	1694.3	1820.4
72.5°	659.0	876.8	1298.9	1631.3	1757.4
75°	540.6	777.5	1224.4	1554.9	1679.1
77.5°	422.2	683.9	1146.1	1486.1	1621.8
80°	309.5	607.4	1077.4	1419.3	1549.2
82.5°	213.9	540.6	1010.5	1363.9	1486.1
85°	126.1	473.7	949.4	1291.3	1405.9
87.5°	57.3	420.2	886.3	1235.9	1348.6
90°	13.4	376.3	840.5	1169.0	1298.9
92.5°	13.4	341.9	785.1	1119.4	1237.8
95°	17.2	311.4	743.1	1067.8	1193.9
97.5°	22.9	288.4	704.9	1020.0	1130.8
100°	32.5	273.2	662.8	964.6	1073.5
102.5°	43.9	261.7	624.6	915.0	1016.2
105°	57.3	252.1	594.1	873.0	985.7
107.5°	70.7	248.3	563.5	832.8	928.4
110°	84.0	246.4	540.6	790.8	897.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	97.4	244.5	515.8	752.6	838.6
115°	110.8	246.4	492.8	712.5	804.2
117.5°	118.4	246.4	471.8	678.1	754.5
120°	129.9	248.3	456.5	641.8	722.1
122.5°	141.4	248.3	441.3	615.1	685.8
125°	154.7	250.2	424.1	584.5	647.6
127.5°	162.4	250.2	414.5	563.5	620.8
130°	170.0	248.3	401.1	536.8	596.0
132.5°	177.6	244.5	393.5	511.9	567.3
135°	181.5	242.6	380.1	494.7	532.9
137.5°	187.2	236.9	366.8	469.9	511.9
140°	192.9	235.0	347.7	450.8	487.1
142.5°	192.9	229.2	334.3	433.6	466.1
145°	196.8	223.5	313.3	414.5	439.3
147.5°	200.6	221.6	298.0	395.4	426.0
150°	200.6	219.7	284.6	374.4	403.1
152.5°	204.4	221.6	271.2	355.3	382.0
155°	217.8	229.2	257.9	324.7	362.9
157.5°	229.2	236.9	244.5	301.8	341.9
160°	238.8	242.6	233.0	278.9	332.4
162.5°	246.4	248.3	235.0	257.9	311.4
165°	257.9	252.1	242.6	236.9	294.2
167.5°	267.4	256.0	246.4	231.1	280.8
170°	275.1	263.6	242.6	217.8	275.1
172.5°	280.8	265.5	244.5	204.4	231.1
175°	282.7	273.2	242.6	198.7	126.1
177.5°	280.8	275.1	250.2	196.8	112.7
180°	231.1	231.1	231.1	231.1	231.1



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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	15.74	17.05	16.38	17.71	18.48	19.22	20.54	19.86	21.20	21.97
	3H	17.19	18.39	17.84	19.06	19.86	22.09	23.30	22.75	23.97	24.77
	4H	17.66	18.80	18.33	19.48	20.29	23.58	24.72	24.25	25.40	26.21
	6H	17.93	19.00	18.62	19.69	20.52	25.19	26.25	25.87	26.95	27.77
	8H	17.99	19.01	18.69	19.73	20.56	26.05	27.07	26.74	27.78	28.61
	12H	18.01	18.99	18.71	19.70	20.56	26.99	27.97	27.70	28.68	29.54
4H	2H	16.89	18.03	17.56	18.71	19.52	19.56	20.70	20.23	21.38	22.19
	3H	18.59	19.57	19.28	20.29	21.12	22.66	23.64	23.35	24.36	25.19
	4H	19.19	20.09	19.89	20.81	21.67	24.32	25.23	25.03	25.95	26.81
	6H	19.60	20.39	20.31	21.14	22.01	26.13	26.93	26.85	27.68	28.55
	8H	19.71	20.46	20.43	21.21	22.09	27.10	27.86	27.83	28.60	29.48
	12H	19.76	20.45	20.51	21.22	22.11	28.18	28.86	28.92	29.63	30.52
8H	4H	20.24	20.99	20.96	21.74	22.62	24.50	25.25	25.23	26.00	26.88
	6H	20.88	21.53	21.64	22.31	23.19	26.49	27.13	27.24	27.91	28.80
	8H	21.11	21.69	21.87	22.47	23.37	27.61	28.19	28.37	28.97	29.87
	12H	21.26	21.78	22.02	22.55	23.51	28.87	29.38	29.63	30.16	31.11
12H	4H	20.58	21.26	21.32	22.03	22.92	24.50	25.18	25.24	25.95	26.84
	6H	21.39	21.97	22.15	22.75	23.65	26.52	27.10	27.28	27.88	28.78
	8H	21.73	22.25	22.50	23.03	23.98	27.70	28.22	28.47	28.99	29.95