

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: P894651

Luminaire Tested: 8TMB-14HL-RNDU-UNV-L940

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894651
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-L940
Description: 14000 Lumen 8FT MICROBAY LINEAR BAY with ROUND FROSTED LENS WITH UPLIGHT, 90CRI, CCT
Light Source: -
Ballast/Driver: -

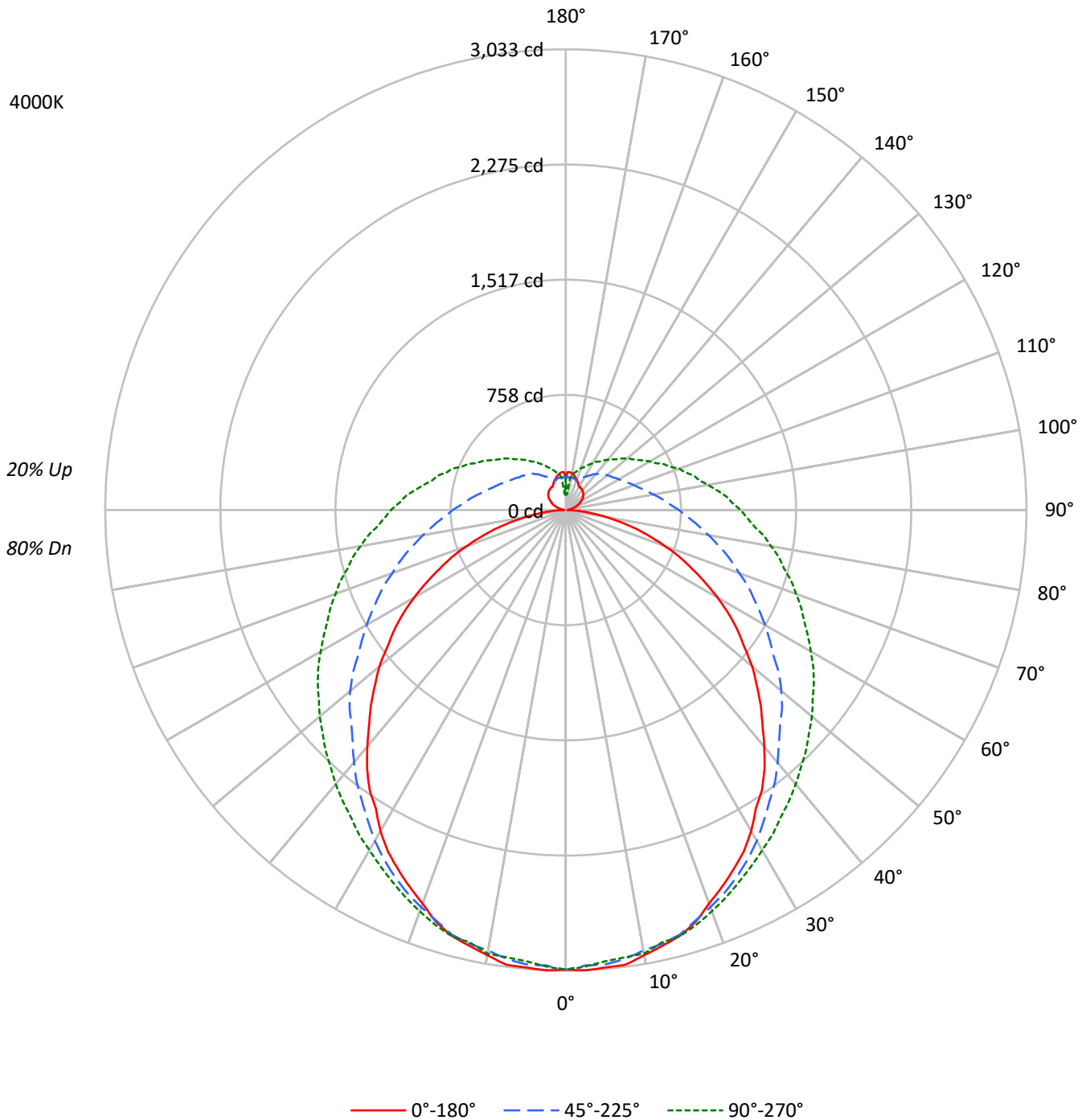
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12722.0 lumens
Efficiency: N/A
Efficacy: 122.8 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°	10738	10738	10738
5°	10742	10328	10136
10°	10671	9902	9742
15°	10588	9588	9303
20°	10313	9154	8850
25°	10101	8770	8423
30°	9851	8348	8049
35°	9576	7889	7725
40°	9213	7497	7475
45°	8873	7122	7253
50°	8580	6895	7065
55°	8236	6535	6919
60°	7825	6312	6785
65°	7307	6116	6684
70°	6733	5960	6679
75°	5984	5914	6698
80°	4880	5907	6829
85°	3502	6072	6982

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 8873 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	286.5	2.3
10°-20°	818.6	6.4
20°-30°	1229.2	9.7
30°-40°	1476.1	11.6
40°-50°	1561.3	12.3
50°-60°	1504.7	11.8
60°-70°	1334.9	10.5
70°-80°	1094.8	8.6
80°-90°	847.3	6.7
90°-100°	661.0	5.2
100°-110°	526.3	4.1
110°-120°	420.6	3.3
120°-130°	331.7	2.6
130°-140°	253.1	2.0
140°-150°	178.0	1.4
150°-160°	113.8	0.9
160°-170°	63.8	0.5
170°-180°	20.2	0.2
0°-30°	2334.4	18.3
0°-40°	3810.5	30.0
0°-60°	6876.5	54.1
0°-90°	10153.5	79.8
90°-120°	1607.9	12.6
90°-150°	2370.7	18.6
90°-180°	2568.0	20.2
0°-180°	12722.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3026	3026	3026	3026	3026	
5°	3023	3031	3003	3025	2982	288
15°	2903	2904	2894	2913	2904	816
25°	2612	2654	2664	2710	2701	1203
35°	2251	2285	2339	2436	2468	1403
45°	1814	1869	1996	2185	2238	1400
55°	1381	1450	1669	1896	1994	1232
65°	919	1046	1362	1645	1732	914
75°	479	689	1085	1378	1488	507
85°	112	420	841	1144	1246	126
90°	12	333	745	1036	1151	12
95°	15	276	658	946	1058	15
105°	51	223	526	774	873	54
115°	98	218	437	631	713	95
125°	137	222	376	518	574	121
135°	161	215	337	438	472	125
145°	174	198	278	367	389	109
155°	193	203	228	288	322	89
165°	228	223	215	210	261	64
175°	250	242	215	176	112	24
180°	205	205	205	205	205	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3026.3	3026.3	3026.3	3026.3	3026.3
2.5°	3033.0	3043.2	3000.9	3026.3	3007.6
5°	3022.9	3031.3	3002.6	3024.6	2982.3
7.5°	3019.5	3016.1	2980.6	3009.3	2970.4
10°	2975.5	2987.3	2945.0	2984.0	2965.3
12.5°	2938.3	2962.0	2924.7	2955.2	2916.3
15°	2902.7	2904.4	2894.2	2912.9	2904.4
17.5°	2843.5	2858.7	2835.0	2877.3	2862.1
20°	2757.2	2804.5	2782.5	2821.5	2811.3
22.5°	2686.1	2709.8	2728.4	2772.4	2758.8
25°	2611.6	2653.9	2664.1	2709.8	2701.3
27.5°	2535.4	2554.0	2593.0	2642.1	2643.8
30°	2440.6	2461.0	2515.1	2571.0	2586.2
32.5°	2328.9	2393.3	2425.4	2510.0	2533.7
35°	2251.1	2284.9	2339.1	2435.6	2467.7
37.5°	2149.5	2188.5	2261.2	2374.6	2413.6
40°	2032.7	2090.3	2169.8	2310.3	2356.0
42.5°	1916.0	1983.7	2076.8	2240.9	2293.4
45°	1814.4	1868.6	1995.5	2185.1	2237.5
47.5°	1704.4	1770.4	1931.2	2112.3	2171.5
50°	1602.8	1670.5	1853.3	2044.6	2115.7
52.5°	1481.0	1558.8	1768.7	1966.7	2049.7
55°	1381.1	1450.5	1668.8	1895.6	1993.8
57.5°	1271.1	1349.0	1591.0	1843.2	1932.9
60°	1152.6	1250.8	1514.8	1777.2	1863.5
62.5°	1035.8	1152.6	1437.0	1712.9	1797.5
65°	919.1	1046.0	1362.5	1645.2	1731.5
67.5°	814.1	951.2	1294.8	1570.7	1677.3
70°	695.6	859.8	1215.2	1501.3	1613.0
72.5°	583.9	776.9	1150.9	1445.4	1557.1
75°	479.0	688.9	1084.9	1377.7	1487.7
77.5°	374.1	605.9	1015.5	1316.8	1437.0
80°	274.2	538.2	954.6	1257.6	1372.7
82.5°	189.6	479.0	895.4	1208.5	1316.8
85°	111.7	419.8	841.2	1144.2	1245.7
87.5°	50.8	372.4	785.3	1095.1	1194.9
90°	11.8	333.4	744.7	1035.8	1150.9
92.5°	11.8	303.0	695.6	991.8	1096.8
95°	15.2	275.9	658.4	946.1	1057.8
97.5°	20.3	255.6	624.5	903.8	1002.0
100°	28.8	242.0	587.3	854.7	951.2
102.5°	38.9	231.9	553.5	810.7	900.4
105°	50.8	223.4	526.4	773.5	873.4
107.5°	62.6	220.0	499.3	737.9	822.6
110°	74.5	218.3	479.0	700.7	795.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	86.3	216.6	457.0	666.9	743.0
115°	98.2	218.3	436.7	631.3	712.6
117.5°	104.9	218.3	418.1	600.9	668.6
120°	115.1	220.0	404.5	568.7	639.8
122.5°	125.2	220.0	391.0	545.0	607.6
125°	137.1	221.7	375.7	517.9	573.8
127.5°	143.9	221.7	367.3	499.3	550.1
130°	150.6	220.0	355.4	475.6	528.1
132.5°	157.4	216.6	348.7	453.6	502.7
135°	160.8	215.0	336.8	438.4	472.2
137.5°	165.9	209.9	325.0	416.4	453.6
140°	170.9	208.2	308.0	399.4	431.6
142.5°	170.9	203.1	296.2	384.2	413.0
145°	174.3	198.0	277.6	367.3	389.3
147.5°	177.7	196.3	264.0	350.4	377.4
150°	177.7	194.6	252.2	331.7	357.1
152.5°	181.1	196.3	240.3	314.8	338.5
155°	192.9	203.1	228.5	287.7	321.6
157.5°	203.1	209.9	216.6	267.4	303.0
160°	211.6	215.0	206.5	247.1	294.5
162.5°	218.3	220.0	208.2	228.5	275.9
165°	228.5	223.4	215.0	209.9	260.7
167.5°	237.0	226.8	218.3	204.8	248.8
170°	243.7	233.6	215.0	192.9	243.7
172.5°	248.8	235.3	216.6	181.1	204.8
175°	250.5	242.0	215.0	176.0	111.7
177.5°	248.8	243.7	221.7	174.3	99.9
180°	204.8	204.8	204.8	204.8	204.8



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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	15.32	16.63	15.96	17.29	18.06	18.80	20.12	19.44	20.78	21.55
	3H	16.77	17.97	17.42	18.64	19.44	21.67	22.88	22.33	23.55	24.35
	4H	17.24	18.38	17.91	19.06	19.87	23.15	24.30	23.83	24.98	25.79
	6H	17.51	18.58	18.20	19.27	20.10	24.77	25.83	25.45	26.53	27.35
	8H	17.57	18.59	18.27	19.31	20.14	25.63	26.65	26.32	27.36	28.19
	12H	17.59	18.57	18.29	19.28	20.14	26.57	27.55	27.28	28.26	29.12
4H	2H	16.47	17.61	17.14	18.29	19.10	19.14	20.28	19.81	20.96	21.77
	3H	18.17	19.15	18.86	19.87	20.70	22.24	23.22	22.93	23.94	24.77
	4H	18.77	19.67	19.47	20.39	21.25	23.90	24.81	24.61	25.53	26.39
	6H	19.18	19.97	19.89	20.72	21.59	25.71	26.51	26.43	27.26	28.12
	8H	19.29	20.04	20.01	20.79	21.67	26.68	27.44	27.41	28.18	29.06
	12H	19.34	20.03	20.09	20.80	21.68	27.76	28.44	28.50	29.21	30.10
8H	4H	19.82	20.57	20.54	21.32	22.20	24.08	24.83	24.80	25.58	26.46
	6H	20.46	21.11	21.22	21.89	22.77	26.07	26.71	26.82	27.49	28.38
	8H	20.69	21.27	21.45	22.05	22.95	27.19	27.77	27.95	28.55	29.45
	12H	20.84	21.36	21.60	22.13	23.09	28.45	28.96	29.21	29.74	30.69
12H	4H	20.16	20.84	20.90	21.61	22.50	24.08	24.76	24.82	25.53	26.42
	6H	20.97	21.55	21.73	22.33	23.23	26.10	26.68	26.86	27.46	28.36
	8H	21.31	21.83	22.08	22.61	23.56	27.28	27.80	28.05	28.57	29.53