

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: P894834

Luminaire Tested: 8TMB-18HL-RND-UNV-L935

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894834
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2403-334-1)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 8TMB-18HL-RND-UNV-L935
Description: 18000 Lumen 8FT MICROBAY LINEAR BAY with ROUND FROSTED LENS, 90CRI, 3500K CCT
Light Source: -
Ballast/Driver: -

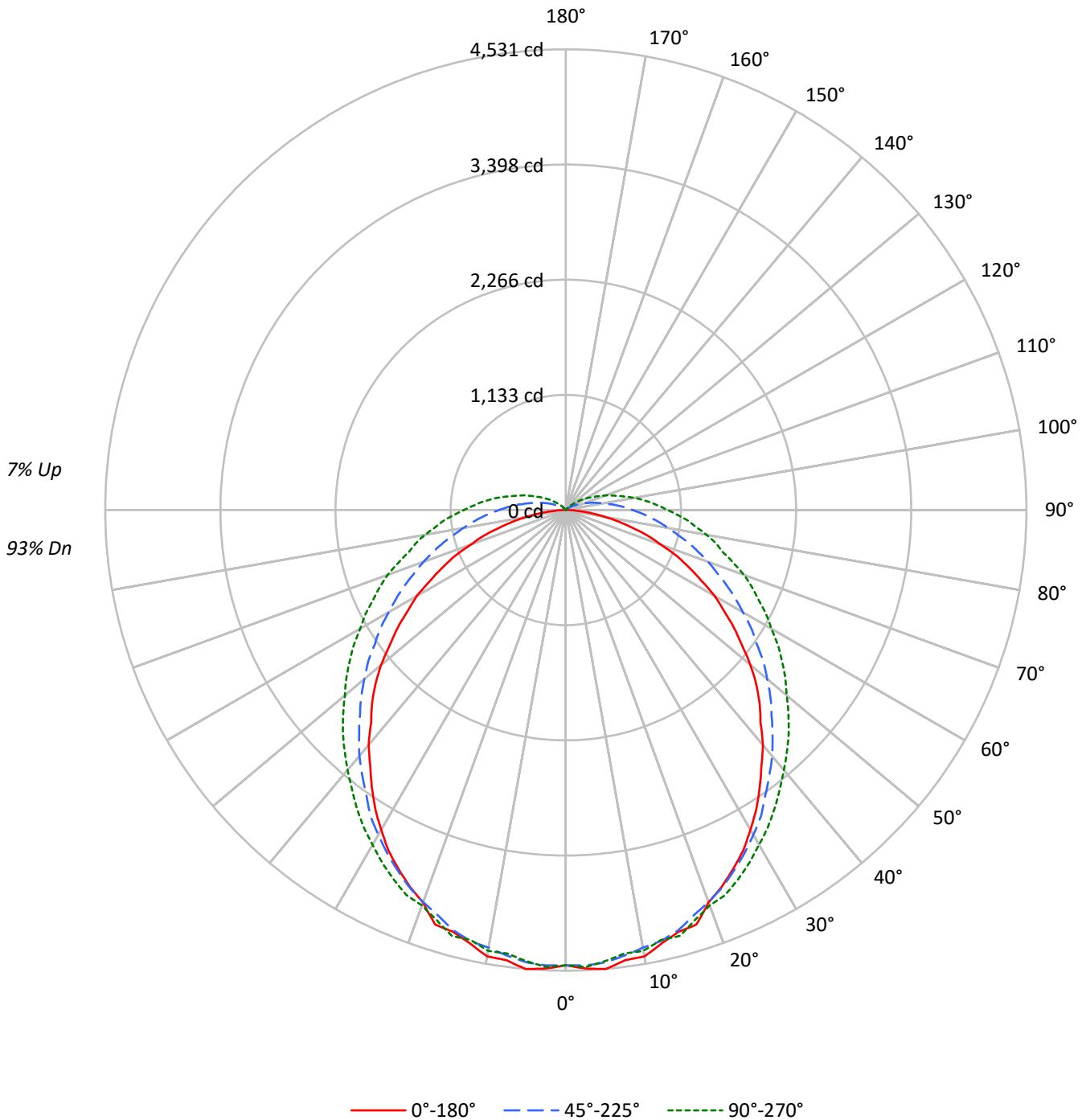
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14747.9 lumens
Efficiency: N/A
Efficacy: 109.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.35
Luminous Opening: Rectangular (W 0.38' x L: 7.98' x H: 0')
CIE Type: Direct

Input Watts (W): 134.8
Input Voltage (V): 120
Input Current (Ain): 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

TEST NUMBER: P894834
CATALOG NUMBER: 8TMB-18HL-RND-UNV-L935

Luminous Intensity Polar Plot





TEST NUMBER: P894834

CATALOG NUMBER: 8TMB-18HL-RND-UNV-L935

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	117	117	117	117	114	114	114	114	107	107	107	101	101	101	96	96	96	96	96	96	93
1	105	100	95	90	102	97	92	88	91	87	84	86	83	80	81	79	77	77	77	77	74
2	95	86	79	72	92	84	77	71	79	73	68	74	70	66	70	67	63	63	63	63	60
3	86	75	66	60	83	73	65	59	69	62	57	65	60	55	62	57	53	53	53	53	50
4	79	66	57	50	76	65	56	49	61	54	48	58	52	47	55	50	45	45	45	45	43
5	73	59	50	43	70	58	49	42	55	47	41	52	45	40	49	44	39	39	39	39	37
6	67	53	44	37	65	52	43	37	49	42	36	47	40	35	45	39	34	34	34	34	32
7	62	48	39	33	60	47	39	33	45	37	32	43	36	31	41	35	30	30	30	30	28
8	58	44	35	29	56	43	35	29	41	34	28	39	33	28	38	32	27	27	27	27	25
9	54	40	32	26	52	39	32	26	38	31	26	36	30	25	35	29	25	25	25	25	23
10	51	37	29	24	49	36	29	24	35	28	23	34	27	23	32	27	22	22	22	22	21

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15886	15886	15886
5°	16137	15903	15859
10°	16058	15748	15858
15°	15769	15717	15927
20°	15506	15490	15622
25°	15251	15316	15692
30°	14878	15113	15575
35°	14408	14824	15517
40°	13974	14628	15464
45°	13536	14368	15560
50°	13092	14279	15659
55°	12493	14178	16066
60°	12005	14273	16569
65°	11211	14651	17575
70°	10306	15469	19357
75°	9351	17128	21929
80°	8036	20925	28751
85°	6506	33855	49194

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 87.5°
 Luminance: 89298 cd/sqm



TEST NUMBER: P894834
 CATALOG NUMBER: 8TMB-18HL-RND-UNV-L935

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	424.5	2.9
10°-20°	1208.4	8.2
20°-30°	1810.9	12.3
30°-40°	2152.0	14.6
40°-50°	2227.9	15.1
50°-60°	2064.6	14.0
60°-70°	1718.9	11.7
70°-80°	1275.8	8.7
80°-90°	843.8	5.7
90°-100°	513.5	3.5
100°-110°	287.8	2.0
110°-120°	141.7	1.0
120°-130°	57.7	0.4
130°-140°	16.7	0.1
140°-150°	2.4	0.0
150°-160°	0.6	0.0
160°-170°	0.5	0.0
170°-180°	0.2	0.0
0°-30°	3443.9	23.4
0°-40°	5595.9	37.9
0°-60°	9888.4	67.0
0°-90°	13726.8	93.1
90°-120°	943.1	6.4
90°-150°	1019.8	6.9
90°-180°	1021.0	6.9
0°-180°	14747.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4477	4477	4477	4477	4477	
5°	4531	4482	4465	4488	4453	428
15°	4293	4277	4279	4285	4336	1216
25°	3896	3892	3912	3988	4008	1793
35°	3326	3351	3422	3531	3582	2081
45°	2698	2736	2863	3042	3101	2078
55°	2020	2106	2292	2521	2597	1806
65°	1335	1460	1745	2001	2093	1327
75°	682	889	1249	1518	1600	730
85°	160	449	832	1126	1208	179
90°	8	291	658	920	1002	12
95°	2	180	510	760	844	2
105°	2	59	276	469	535	2
115°	2	14	129	258	309	2
125°	2	4	47	119	152	2
135°	4	2	12	39	53	3
145°	4	2	0	4	6	3
155°	4	4	0	0	0	2
165°	6	4	0	0	0	1
175°	6	4	0	0	0	1
180°	2	2	2	2	2	



TEST NUMBER: P894834

CATALOG NUMBER: 8TMB-18HL-RND-UNV-L935

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4477.4	4477.4	4477.4	4477.4	4477.4
2.5°	4514.2	4491.7	4483.5	4473.3	4497.9
5°	4530.6	4481.5	4465.1	4487.6	4452.8
7.5°	4467.1	4454.8	4420.0	4432.3	4399.5
10°	4456.9	4389.3	4370.9	4411.8	4401.6
12.5°	4364.7	4307.4	4340.1	4368.8	4329.9
15°	4293.0	4276.6	4278.7	4284.8	4336.0
17.5°	4274.6	4200.9	4180.4	4231.6	4227.5
20°	4106.6	4092.3	4102.5	4170.1	4137.4
22.5°	4008.3	3963.3	4018.6	4084.1	4098.5
25°	3895.7	3891.6	3912.1	3987.8	4008.3
27.5°	3776.9	3750.3	3805.6	3893.6	3910.0
30°	3631.5	3621.2	3688.8	3764.6	3801.5
32.5°	3488.1	3494.2	3572.1	3635.6	3699.1
35°	3326.3	3350.9	3422.5	3531.1	3582.3
37.5°	3162.4	3193.1	3289.4	3414.4	3457.4
40°	3017.0	3023.1	3158.3	3285.3	3338.6
42.5°	2834.7	2896.2	3010.9	3178.8	3219.8
45°	2697.5	2736.4	2863.4	3041.6	3101.0
47.5°	2541.8	2586.9	2732.3	2906.4	2969.9
50°	2371.8	2412.8	2586.9	2785.6	2836.8
52.5°	2183.4	2267.4	2449.6	2654.5	2722.1
55°	2019.5	2105.6	2291.9	2521.3	2597.1
57.5°	1843.4	1929.4	2162.9	2375.9	2474.2
60°	1691.8	1773.7	2011.3	2275.6	2334.9
62.5°	1503.4	1620.1	1878.2	2138.3	2222.3
65°	1335.4	1460.4	1745.1	2001.1	2093.3
67.5°	1181.8	1310.8	1607.8	1882.3	1982.7
70°	993.4	1163.4	1491.1	1761.5	1865.9
72.5°	854.1	1024.1	1366.2	1634.5	1728.7
75°	682.1	888.9	1249.4	1517.7	1599.6
77.5°	538.7	761.9	1128.6	1429.6	1511.6
80°	393.3	647.2	1024.1	1312.9	1407.1
82.5°	268.3	540.7	927.8	1204.3	1294.5
85°	159.8	448.6	831.6	1126.5	1208.4
87.5°	69.6	366.6	743.5	1013.9	1097.8
90°	8.2	290.8	657.5	919.6	1001.6
92.5°	2.0	233.5	581.7	835.7	915.5
95°	2.0	180.2	510.0	759.9	843.9
97.5°	2.0	139.3	438.3	682.1	761.9
100°	2.0	106.5	378.9	600.1	686.1
102.5°	2.0	79.9	321.6	532.5	606.3
105°	2.0	59.4	276.5	469.0	534.6
107.5°	2.0	43.0	231.4	409.6	475.2
110°	2.0	30.7	194.6	354.3	419.9



TEST NUMBER: P894834

CATALOG NUMBER: 8TMB-18HL-RND-UNV-L935

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	2.0	22.5	157.7	305.2	360.5
115°	2.0	14.3	129.0	258.1	309.3
117.5°	2.0	10.2	102.4	217.1	266.3
120°	2.0	8.2	81.9	180.2	223.3
122.5°	2.0	6.1	63.5	147.5	188.4
125°	2.0	4.1	47.1	118.8	151.6
127.5°	2.0	4.1	34.8	94.2	122.9
130°	2.0	2.0	24.6	71.7	96.3
132.5°	2.0	2.0	16.4	53.3	71.7
135°	4.1	2.0	12.3	38.9	53.3
137.5°	4.1	2.0	8.2	26.6	36.9
140°	4.1	2.0	4.1	16.4	22.5
142.5°	4.1	2.0	2.0	8.2	12.3
145°	4.1	2.0	0.0	4.1	6.1
147.5°	4.1	2.0	0.0	2.0	2.0
150°	4.1	2.0	0.0	0.0	0.0
152.5°	4.1	2.0	0.0	0.0	0.0
155°	4.1	4.1	0.0	0.0	0.0
157.5°	4.1	4.1	0.0	0.0	0.0
160°	4.1	4.1	0.0	0.0	0.0
162.5°	4.1	4.1	0.0	0.0	0.0
165°	6.1	4.1	0.0	0.0	0.0
167.5°	6.1	4.1	0.0	0.0	0.0
170°	6.1	4.1	0.0	0.0	0.0
172.5°	6.1	4.1	0.0	0.0	0.0
175°	6.1	4.1	0.0	0.0	0.0
177.5°	6.1	4.1	0.0	0.0	0.0
180°	2.0	2.0	2.0	2.0	2.0



TEST NUMBER: P894834
 CATALOG NUMBER: 8TMB-18HL-RND-UNV-L935

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	19.84	21.37	20.31	21.83	22.31	21.41	22.95	21.88	23.40	23.89
	3H	21.60	23.00	22.08	23.47	23.99	24.00	25.40	24.48	25.86	26.39
	4H	22.26	23.59	22.76	24.07	24.61	25.25	26.59	25.76	27.07	27.61
	6H	22.74	23.98	23.25	24.47	25.03	26.64	27.88	27.15	28.37	28.93
	8H	22.88	24.07	23.41	24.59	25.15	27.37	28.56	27.89	29.07	29.63
	12H	22.98	24.12	23.52	24.64	25.23	28.21	29.35	28.74	29.86	30.45
4H	2H	20.79	22.12	21.30	22.61	23.14	21.98	23.31	22.49	23.80	24.33
	3H	22.83	23.97	23.35	24.49	25.05	24.85	25.99	25.37	26.51	27.07
	4H	23.65	24.69	24.18	25.22	25.81	26.33	27.37	26.86	27.91	28.50
	6H	24.30	25.22	24.85	25.78	26.38	27.95	28.87	28.50	29.43	30.04
	8H	24.52	25.39	25.08	25.95	26.57	28.80	29.67	29.36	30.23	30.85
	12H	24.69	25.48	25.27	26.07	26.69	29.80	30.58	30.38	31.17	31.80
8H	4H	24.49	25.36	25.05	25.92	26.54	26.70	27.57	27.26	28.13	28.75
	6H	25.42	26.15	26.01	26.76	27.38	28.58	29.31	29.17	29.92	30.54
	8H	25.80	26.47	26.40	27.08	27.72	29.64	30.30	30.24	30.92	31.55
	12H	26.12	26.72	26.73	27.32	28.02	30.89	31.49	31.50	32.09	32.80
12H	4H	24.76	25.54	25.34	26.13	26.76	26.74	27.53	27.32	28.12	28.74
	6H	25.84	26.51	26.45	27.12	27.76	28.69	29.35	29.29	29.97	30.61
	8H	26.38	26.98	26.99	27.58	28.28	29.86	30.46	30.47	31.06	31.76