

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: P894842

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

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894842
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-18HL-RNDU-UNV-L935
Description: 18000 Lumen 8FT MICROBAY LINEAR BAY with ROUND FROSTED LENS WITH UPLIGHT, 90CRI, CCT
Light Source: -
Ballast/Driver: -

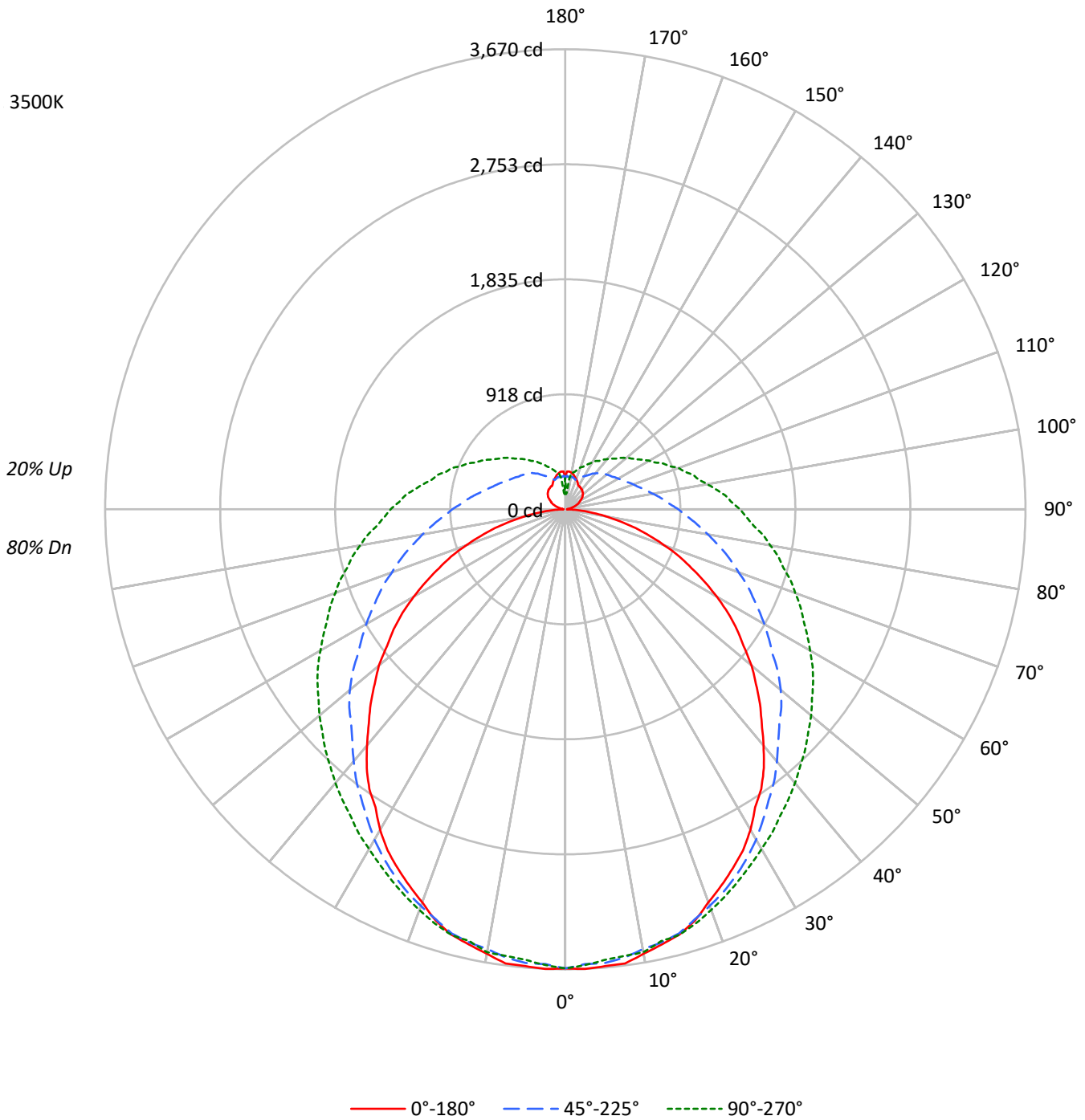
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15395.0 lumens
Efficiency: N/A
Efficacy: 114.2 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): 134.8
Input Voltage (V): 120
Input Current (A_{in}): 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: P894842
CATALOG NUMBER: 8TMB-18HL-RNDU-UNV-L935

Luminous Intensity Polar Plot





TEST NUMBER: P894842
 CATALOG NUMBER: 8TMB-18HL-RNDU-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	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°	12994	12994	12994
5°	12999	12497	12266
10°	12913	11982	11789
15°	12813	11603	11257
20°	12480	11077	10710
25°	12224	10612	10193
30°	11920	10102	9741
35°	11588	9547	9348
40°	11149	9072	9046
45°	10737	8619	8777
50°	10383	8343	8549
55°	9967	7908	8373
60°	9470	7638	8210
65°	8842	7401	8088
70°	8148	7212	8082
75°	7240	7157	8105
80°	5905	7148	8263
85°	4239	7348	8449

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 10737 cd/sqm



TEST NUMBER: P894842
 CATALOG NUMBER: 8TMB-18HL-RNDU-UNV-L935

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	346.7	2.3
10°-20°	990.6	6.4
20°-30°	1487.5	9.7
30°-40°	1786.3	11.6
40°-50°	1889.4	12.3
50°-60°	1820.8	11.8
60°-70°	1615.4	10.5
70°-80°	1324.8	8.6
80°-90°	1025.4	6.7
90°-100°	799.9	5.2
100°-110°	636.8	4.1
110°-120°	509.0	3.3
120°-130°	401.4	2.6
130°-140°	306.3	2.0
140°-150°	215.4	1.4
150°-160°	137.7	0.9
160°-170°	77.2	0.5
170°-180°	24.5	0.2
0°-30°	2824.8	18.3
0°-40°	4611.1	30.0
0°-60°	8321.3	54.1
0°-90°	12286.8	79.8
90°-120°	1945.7	12.6
90°-150°	2868.9	18.6
90°-180°	3108.0	20.2
0°-180°	15395.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3662	3662	3662	3662	3662	
5°	3658	3668	3633	3660	3609	348
15°	3513	3515	3502	3525	3515	987
25°	3160	3212	3224	3279	3269	1456
35°	2724	2765	2831	2947	2986	1698
45°	2196	2261	2415	2644	2708	1694
55°	1671	1755	2020	2294	2413	1491
65°	1112	1266	1649	1991	2095	1106
75°	580	834	1313	1667	1800	613
85°	135	508	1018	1385	1507	153
90°	14	404	901	1254	1393	14
95°	18	334	797	1145	1280	18
105°	61	270	637	936	1057	65
115°	119	264	528	764	862	115
125°	166	268	455	627	694	146
135°	195	260	408	530	571	151
145°	211	240	336	444	471	132
155°	234	246	276	348	389	107
165°	276	270	260	254	315	78
175°	303	293	260	213	135	29
180°	248	248	248	248	248	



TEST NUMBER: P894842

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

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3662.1	3662.1	3662.1	3662.1	3662.1
2.5°	3670.3	3682.6	3631.4	3662.1	3639.6
5°	3658.0	3668.3	3633.4	3660.1	3608.9
7.5°	3653.9	3649.8	3606.8	3641.6	3594.5
10°	3600.7	3615.0	3563.8	3610.9	3588.4
12.5°	3555.6	3584.3	3539.2	3576.1	3529.0
15°	3512.6	3514.6	3502.4	3524.9	3514.6
17.5°	3440.9	3459.3	3430.7	3481.9	3463.4
20°	3336.5	3393.8	3367.2	3414.3	3402.0
22.5°	3250.4	3279.1	3301.6	3354.9	3338.5
25°	3160.3	3211.5	3223.8	3279.1	3268.9
27.5°	3068.1	3090.7	3137.8	3197.2	3199.2
30°	2953.4	2978.0	3043.6	3111.2	3129.6
32.5°	2818.3	2896.1	2935.0	3037.4	3066.1
35°	2724.1	2765.0	2830.6	2947.3	2986.2
37.5°	2601.2	2648.3	2736.3	2873.6	2920.7
40°	2459.8	2529.5	2625.7	2795.7	2851.0
42.5°	2318.5	2400.4	2513.1	2711.8	2775.3
45°	2195.6	2261.2	2414.8	2644.2	2707.7
47.5°	2062.5	2142.4	2337.0	2556.1	2627.8
50°	1939.6	2021.5	2242.7	2474.2	2560.2
52.5°	1792.1	1886.4	2140.3	2380.0	2480.3
55°	1671.3	1755.3	2019.5	2293.9	2412.7
57.5°	1538.2	1632.4	1925.3	2230.4	2339.0
60°	1394.8	1513.6	1833.1	2150.6	2255.0
62.5°	1253.5	1394.8	1738.9	2072.7	2175.1
65°	1112.2	1265.8	1648.8	1990.8	2095.3
67.5°	985.2	1151.1	1566.8	1900.7	2029.7
70°	841.8	1040.5	1470.6	1816.7	1951.9
72.5°	706.6	940.1	1392.7	1749.1	1884.3
75°	579.6	833.6	1312.9	1667.2	1800.3
77.5°	452.6	733.2	1228.9	1593.5	1738.9
80°	331.8	651.3	1155.2	1521.8	1661.1
82.5°	229.4	579.6	1083.5	1462.4	1593.5
85°	135.2	507.9	1017.9	1384.6	1507.4
87.5°	61.4	450.6	950.3	1325.2	1446.0
90°	14.3	403.5	901.2	1253.5	1392.7
92.5°	14.3	366.6	841.8	1200.2	1327.2
95°	18.4	333.9	796.7	1144.9	1280.1
97.5°	24.6	309.3	755.8	1093.7	1212.5
100°	34.8	292.9	710.7	1034.3	1151.1
102.5°	47.1	280.6	669.7	981.1	1089.6
105°	61.4	270.4	637.0	936.0	1056.9
107.5°	75.8	266.3	604.2	893.0	995.4
110°	90.1	264.2	579.6	847.9	962.6



TEST NUMBER: P894842
 CATALOG NUMBER: 8TMB-18HL-RNDU-UNV-L935

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	104.5	262.2	553.0	807.0	899.1
115°	118.8	264.2	528.4	764.0	862.3
117.5°	127.0	264.2	505.9	727.1	809.0
120°	139.3	266.3	489.5	688.2	774.2
122.5°	151.6	266.3	473.1	659.5	735.3
125°	165.9	268.3	454.7	626.7	694.3
127.5°	174.1	268.3	444.5	604.2	665.7
130°	182.3	266.3	430.1	575.5	639.0
132.5°	190.5	262.2	421.9	548.9	608.3
135°	194.6	260.1	407.6	530.5	571.4
137.5°	200.7	254.0	393.2	503.8	548.9
140°	206.9	251.9	372.8	483.4	522.3
142.5°	206.9	245.8	358.4	464.9	499.8
145°	211.0	239.6	335.9	444.5	471.1
147.5°	215.1	237.6	319.5	424.0	456.7
150°	215.1	235.5	305.2	401.4	432.2
152.5°	219.2	237.6	290.8	381.0	409.6
155°	233.5	245.8	276.5	348.2	389.2
157.5°	245.8	254.0	262.2	323.6	366.6
160°	256.0	260.1	249.9	299.0	356.4
162.5°	264.2	266.3	251.9	276.5	333.9
165°	276.5	270.4	260.1	254.0	315.4
167.5°	286.7	274.5	264.2	247.8	301.1
170°	294.9	282.6	260.1	233.5	294.9
172.5°	301.1	284.7	262.2	219.2	247.8
175°	303.1	292.9	260.1	213.0	135.2
177.5°	301.1	294.9	268.3	211.0	120.8
180°	247.8	247.8	247.8	247.8	247.8



TEST NUMBER: P894842
 CATALOG NUMBER: 8TMB-18HL-RNDU-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	15.98	17.29	16.62	17.96	18.72	19.46	20.78	20.10	21.44	22.21
	3H	17.43	18.63	18.08	19.30	20.10	22.34	23.54	22.99	24.21	25.01
	4H	17.90	19.04	18.57	19.72	20.54	23.82	24.96	24.49	25.64	26.45
	6H	18.18	19.24	18.86	19.93	20.76	25.43	26.49	26.11	27.19	28.02
	8H	18.23	19.25	18.93	19.97	20.80	26.29	27.31	26.98	28.03	28.86
	12H	18.25	19.23	18.96	19.94	20.80	27.24	28.21	27.94	28.92	29.78
4H	2H	17.13	18.27	17.80	18.96	19.77	19.80	20.94	20.47	21.63	22.44
	3H	18.83	19.81	19.52	20.53	21.36	22.90	23.88	23.59	24.60	25.43
	4H	19.43	20.33	20.13	21.06	21.91	24.57	25.47	25.27	26.19	27.05
	6H	19.84	20.64	20.56	21.38	22.25	26.38	27.17	27.09	27.92	28.79
	8H	19.95	20.70	20.67	21.45	22.33	27.35	28.10	28.07	28.84	29.73
	12H	20.01	20.69	20.75	21.46	22.35	28.42	29.11	29.17	29.87	30.76
8H	4H	20.48	21.23	21.20	21.98	22.86	24.74	25.50	25.47	26.24	27.12
	6H	21.13	21.77	21.88	22.55	23.43	26.73	27.37	27.48	28.16	29.04
	8H	21.35	21.93	22.11	22.72	23.61	27.85	28.43	28.61	29.21	30.11
	12H	21.50	22.02	22.27	22.80	23.75	29.11	29.63	29.88	30.40	31.36
12H	4H	20.82	21.51	21.57	22.28	23.16	24.74	25.43	25.48	26.19	27.08
	6H	21.63	22.21	22.39	22.99	23.89	26.76	27.34	27.52	28.13	29.02
	8H	21.98	22.49	22.74	23.27	24.22	27.94	28.46	28.71	29.24	30.19