

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: P894844

Luminaire Tested: 8TMB-18HL-RNDU-UNV-L950

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894844
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-L950
Description: 18000 Lumen 8FT MICROBAY LINEAR BAY with ROUND FROSTED LENS WITH UPLIGHT, 90CRI, CCT
Light Source: -
Ballast/Driver: -

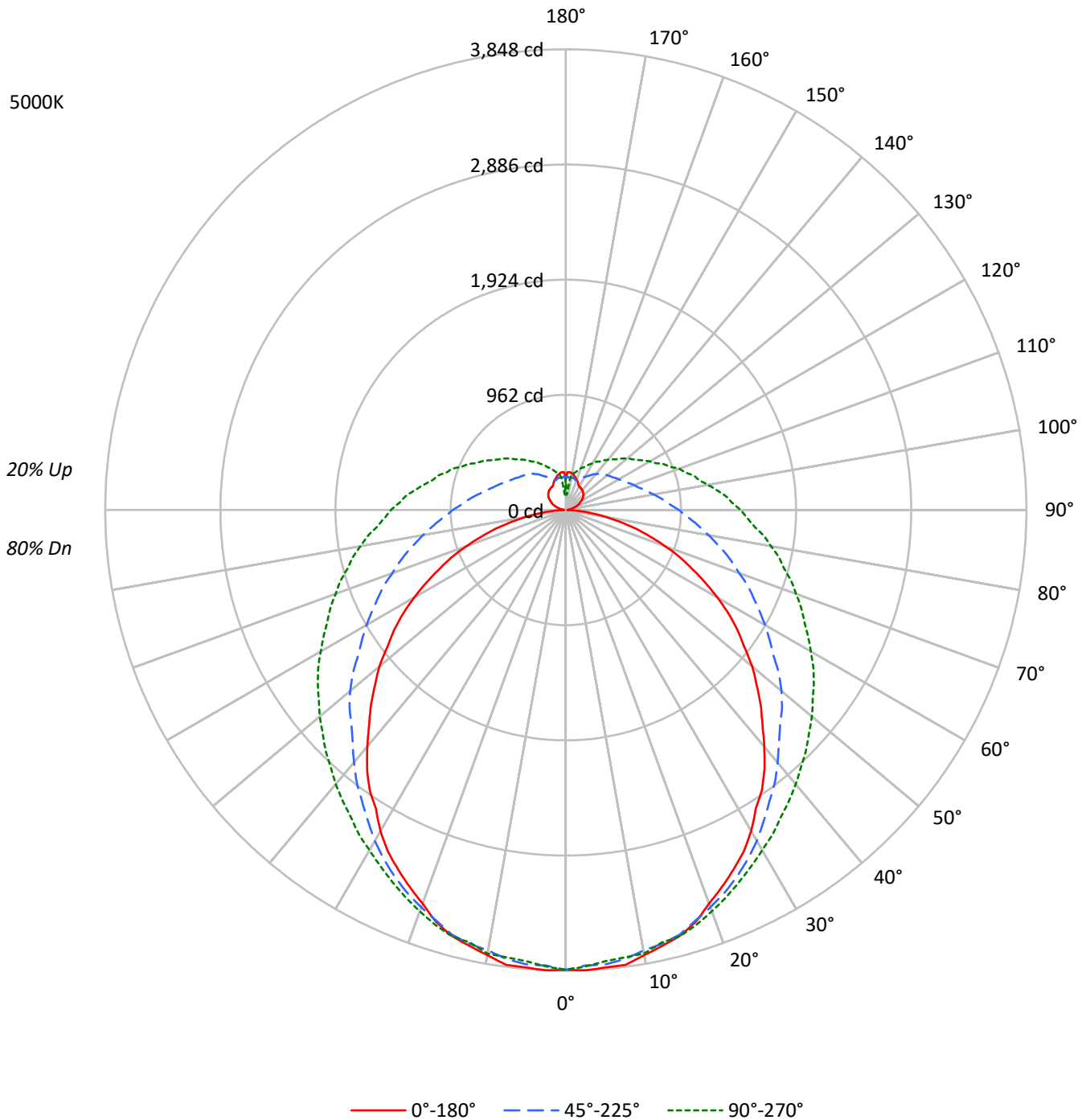
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16141.0 lumens
Efficiency: N/A
Efficacy: 119.7 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

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CATALOG NUMBER: 8TMB-18HL-RNDU-UNV-L950

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	114	114	114	114	109	109	109	109	100	100	100	91	91	91	83	83	83	80		
1	102	96	91	86	97	92	87	83	84	80	77	76	73	71	69	67	65	61		
2	92	82	75	68	87	79	72	66	72	66	61	66	61	57	60	56	53	49		
3	83	72	63	56	79	69	61	54	63	56	51	57	52	47	52	48	44	41		
4	76	63	54	47	72	60	52	45	55	48	43	51	45	40	46	41	37	34		
5	69	56	47	40	66	54	45	39	49	42	37	45	39	34	41	36	32	29		
6	64	50	41	35	61	48	40	34	44	37	32	41	35	30	38	32	28	26		
7	59	46	37	30	56	44	35	30	40	33	28	37	31	26	34	29	25	23		
8	55	41	33	27	52	40	32	26	37	30	25	34	28	24	31	26	22	20		
9	51	38	30	24	49	37	29	23	34	27	22	31	25	21	29	24	20	18		
10	48	35	27	22	46	34	26	21	31	25	20	29	23	19	27	22	18	16		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13623	13623	13623
5°	13629	13103	12860
10°	13539	12563	12361
15°	13434	12166	11803
20°	13084	11614	11228
25°	12816	11126	10687
30°	12498	10592	10212
35°	12149	10010	9801
40°	11689	9512	9485
45°	11257	9036	9203
50°	10887	8748	8964
55°	10450	8291	8779
60°	9929	8008	8608
65°	9270	7759	8480
70°	8543	7562	8474
75°	7591	7503	8498
80°	6192	7494	8663
85°	4443	7704	8859

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 11257 cd/sqm



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 CATALOG NUMBER: 8TMB-18HL-RNDU-UNV-L950

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	363.5	2.3
10°-20°	1038.6	6.4
20°-30°	1559.6	9.7
30°-40°	1872.8	11.6
40°-50°	1980.9	12.3
50°-60°	1909.0	11.8
60°-70°	1693.7	10.5
70°-80°	1389.0	8.6
80°-90°	1075.0	6.7
90°-100°	838.7	5.2
100°-110°	667.7	4.1
110°-120°	533.6	3.3
120°-130°	420.9	2.6
130°-140°	321.2	2.0
140°-150°	225.8	1.4
150°-160°	144.4	0.9
160°-170°	80.9	0.5
170°-180°	25.6	0.2
0°-30°	2961.7	18.3
0°-40°	4834.5	30.0
0°-60°	8724.5	54.1
0°-90°	12882.2	79.8
90°-120°	2040.0	12.6
90°-150°	3007.9	18.6
90°-180°	3259.0	20.2
0°-180°	16141.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3840	3840	3840	3840	3840	
5°	3835	3846	3810	3837	3784	365
15°	3683	3685	3672	3696	3685	1035
25°	3314	3367	3380	3438	3427	1526
35°	2856	2899	2968	3090	3131	1781
45°	2302	2371	2532	2772	2839	1776
55°	1752	1840	2117	2405	2530	1563
65°	1166	1327	1729	2087	2197	1159
75°	608	874	1376	1748	1888	643
85°	142	533	1067	1452	1580	160
90°	15	423	945	1314	1460	15
95°	19	350	835	1200	1342	19
105°	64	284	668	981	1108	68
115°	124	277	554	801	904	121
125°	174	281	477	657	728	153
135°	204	273	427	556	599	158
145°	221	251	352	466	494	139
155°	245	258	290	365	408	113
165°	290	284	273	266	331	81
175°	318	307	273	223	142	30
180°	260	260	260	260	260	



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CATALOG NUMBER: 8TMB-18HL-RNDU-UNV-L950

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3839.6	3839.6	3839.6	3839.6	3839.6
2.5°	3848.2	3861.0	3807.4	3839.6	3815.9
5°	3835.3	3846.0	3809.5	3837.4	3783.7
7.5°	3831.0	3826.7	3781.6	3818.1	3768.7
10°	3775.1	3790.2	3736.5	3785.9	3762.3
12.5°	3727.9	3758.0	3710.7	3749.4	3700.0
15°	3682.8	3685.0	3672.1	3695.7	3685.0
17.5°	3607.6	3627.0	3596.9	3650.6	3631.3
20°	3498.1	3558.3	3530.3	3579.7	3566.8
22.5°	3407.9	3438.0	3461.6	3517.5	3500.3
25°	3313.5	3367.1	3380.0	3438.0	3427.3
27.5°	3216.8	3240.4	3289.8	3352.1	3354.3
30°	3096.6	3122.3	3191.1	3261.9	3281.2
32.5°	2954.8	3036.4	3077.2	3184.6	3214.7
35°	2856.1	2899.0	2967.7	3090.1	3130.9
37.5°	2727.2	2776.6	2868.9	3012.8	3062.2
40°	2579.0	2652.1	2753.0	2931.2	2989.2
42.5°	2430.9	2516.8	2634.9	2843.2	2909.7
45°	2302.0	2370.7	2531.8	2772.3	2838.9
47.5°	2162.4	2246.2	2450.2	2680.0	2755.1
50°	2033.6	2119.5	2351.4	2594.1	2684.3
52.5°	1879.0	1977.8	2244.0	2495.3	2600.5
55°	1752.3	1840.3	2117.3	2405.1	2529.6
57.5°	1612.7	1711.5	2018.6	2338.5	2452.3
60°	1462.4	1586.9	1921.9	2254.8	2364.3
62.5°	1314.2	1462.4	1823.2	2173.2	2280.5
65°	1166.0	1327.1	1728.7	2087.3	2196.8
67.5°	1032.9	1206.8	1642.8	1992.8	2128.1
70°	882.6	1090.9	1541.8	1904.8	2046.5
72.5°	740.9	985.7	1460.2	1833.9	1975.6
75°	607.7	874.0	1376.5	1748.0	1887.6
77.5°	474.6	768.8	1288.4	1670.7	1823.2
80°	347.9	682.9	1211.1	1595.5	1741.5
82.5°	240.5	607.7	1136.0	1533.3	1670.7
85°	141.7	532.6	1067.3	1451.6	1580.5
87.5°	64.4	472.4	996.4	1389.4	1516.1
90°	15.0	423.0	944.9	1314.2	1460.2
92.5°	15.0	384.4	882.6	1258.4	1391.5
95°	19.3	350.0	835.3	1200.4	1342.1
97.5°	25.8	324.3	792.4	1146.7	1271.3
100°	36.5	307.1	745.2	1084.4	1206.8
102.5°	49.4	294.2	702.2	1028.6	1142.4
105°	64.4	283.5	667.8	981.4	1108.1
107.5°	79.5	279.2	633.5	936.3	1043.6
110°	94.5	277.0	607.7	889.0	1009.3



TEST NUMBER: P894844
 CATALOG NUMBER: 8TMB-18HL-RNDU-UNV-L950

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	109.5	274.9	579.8	846.1	942.7
115°	124.5	277.0	554.0	801.0	904.1
117.5°	133.1	277.0	530.4	762.3	848.2
120°	146.0	279.2	513.2	721.5	811.7
122.5°	158.9	279.2	496.1	691.5	770.9
125°	173.9	281.3	476.7	657.1	728.0
127.5°	182.5	281.3	466.0	633.5	697.9
130°	191.1	279.2	451.0	603.4	670.0
132.5°	199.7	274.9	442.4	575.5	637.8
135°	204.0	272.7	427.3	556.2	599.1
137.5°	210.4	266.3	412.3	528.3	575.5
140°	216.9	264.1	390.8	506.8	547.6
142.5°	216.9	257.7	375.8	487.5	524.0
145°	221.2	251.2	352.2	466.0	493.9
147.5°	225.5	249.1	335.0	444.5	478.9
150°	225.5	247.0	320.0	420.9	453.1
152.5°	229.8	249.1	304.9	399.4	429.5
155°	244.8	257.7	289.9	365.1	408.0
157.5°	257.7	266.3	274.9	339.3	384.4
160°	268.4	272.7	262.0	313.5	373.6
162.5°	277.0	279.2	264.1	289.9	350.0
165°	289.9	283.5	272.7	266.3	330.7
167.5°	300.6	287.8	277.0	259.8	315.7
170°	309.2	296.3	272.7	244.8	309.2
172.5°	315.7	298.5	274.9	229.8	259.8
175°	317.8	307.1	272.7	223.3	141.7
177.5°	315.7	309.2	281.3	221.2	126.7
180°	259.8	259.8	259.8	259.8	259.8



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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	16.14	17.46	16.78	18.12	18.89	19.63	20.94	20.27	21.61	22.37
	3H	17.59	18.79	18.24	19.46	20.26	22.50	23.70	23.15	24.37	25.17
	4H	18.06	19.20	18.73	19.89	20.70	23.98	25.12	24.65	25.81	26.62
	6H	18.34	19.40	19.02	20.10	20.93	25.59	26.66	26.28	27.35	28.18
	8H	18.40	19.42	19.09	20.14	20.96	26.45	27.47	27.15	28.19	29.02
	12H	18.42	19.40	19.12	20.11	20.97	27.40	28.38	28.10	29.09	29.95
4H	2H	17.29	18.44	17.97	19.12	19.93	19.96	21.11	20.64	21.79	22.60
	3H	19.00	19.98	19.68	20.70	21.53	23.07	24.05	23.75	24.77	25.60
	4H	19.59	20.50	20.30	21.22	22.08	24.73	25.63	25.43	26.36	27.22
	6H	20.00	20.80	20.72	21.55	22.41	26.54	27.34	27.26	28.09	28.95
	8H	20.11	20.87	20.84	21.61	22.49	27.51	28.26	28.23	29.01	29.89
	12H	20.17	20.86	20.92	21.63	22.51	28.58	29.27	29.33	30.04	30.93
8H	4H	20.64	21.40	21.37	22.14	23.02	24.91	25.66	25.63	26.41	27.29
	6H	21.29	21.93	22.04	22.72	23.60	26.89	27.54	27.65	28.32	29.20
	8H	21.52	22.10	22.28	22.88	23.78	28.01	28.59	28.78	29.38	30.27
	12H	21.66	22.18	22.43	22.96	23.91	29.27	29.79	30.04	30.57	31.52
12H	4H	20.98	21.67	21.73	22.44	23.33	24.90	25.59	25.65	26.36	27.24
	6H	21.79	22.37	22.56	23.16	24.05	26.92	27.51	27.69	28.29	29.19
	8H	22.14	22.66	22.91	23.44	24.39	28.10	28.62	28.87	29.40	30.35