

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: P894650

Luminaire Tested: 8TMB-14HL-RNDU-UNV-L935

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894650
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-L935
Description: 14000 Lumen 8FT MICROBAY LINEAR BAY with ROUND FROSTED LENS WITH UPLIGHT, 90CRI, CCT
Light Source: -
Ballast/Driver: -

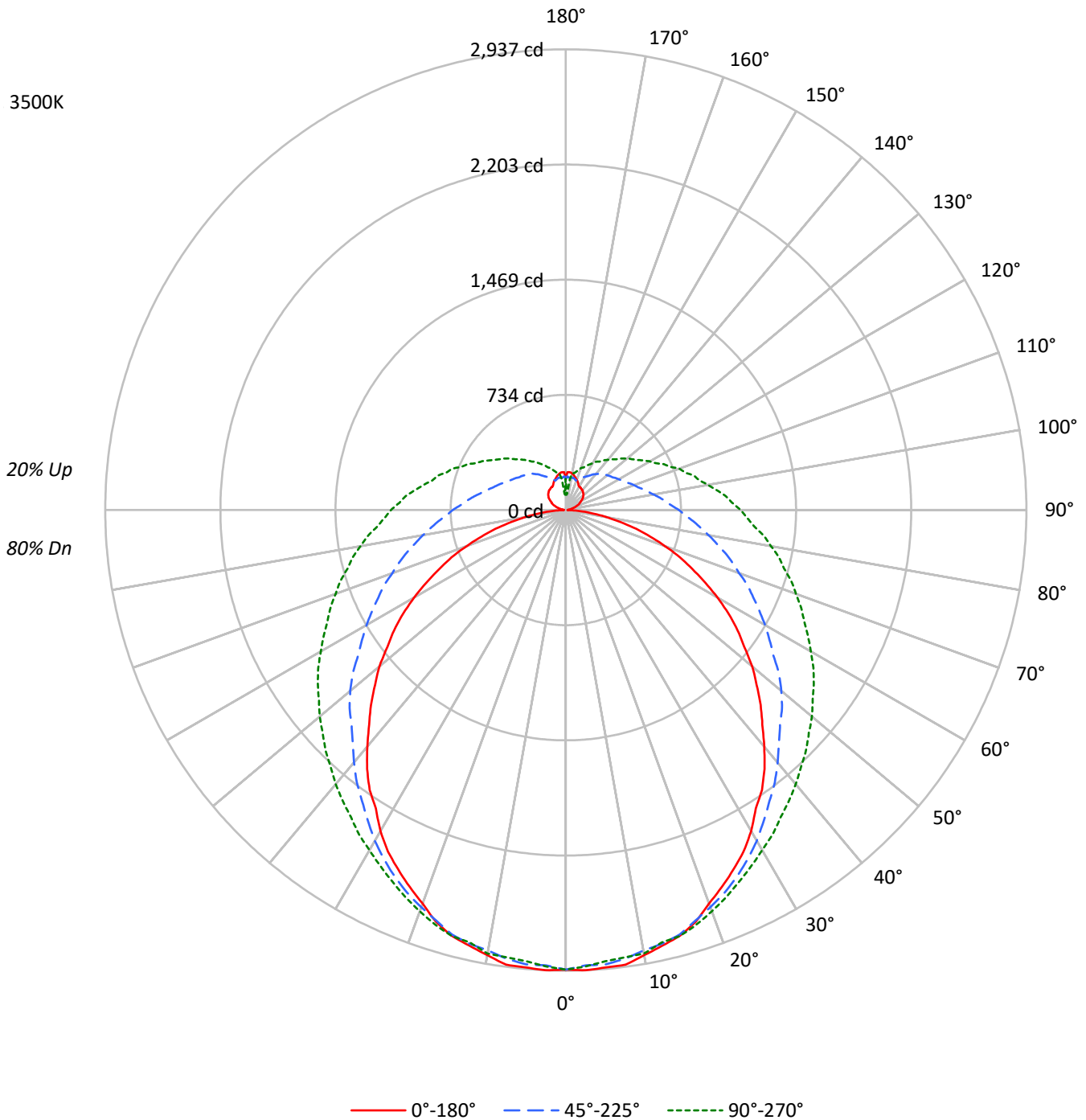
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12318.0 lumens
Efficiency: N/A
Efficacy: 118.9 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 (A_{in}): 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°	10397	10397	10397
5°	10401	9999	9814
10°	10332	9587	9433
15°	10252	9284	9008
20°	9985	8863	8569
25°	9781	8491	8156
30°	9538	8083	7794
35°	9271	7639	7480
40°	8921	7259	7238
45°	8591	6896	7023
50°	8308	6676	6841
55°	7975	6328	6699
60°	7577	6111	6569
65°	7075	5921	6471
70°	6519	5771	6467
75°	5794	5726	6485
80°	4725	5720	6612
85°	3392	5880	6761

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 8591 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	277.4	2.3
10°-20°	792.6	6.4
20°-30°	1190.2	9.7
30°-40°	1429.2	11.6
40°-50°	1511.8	12.3
50°-60°	1456.9	11.8
60°-70°	1292.5	10.5
70°-80°	1060.0	8.6
80°-90°	820.4	6.7
90°-100°	640.0	5.2
100°-110°	509.6	4.1
110°-120°	407.2	3.3
120°-130°	321.2	2.6
130°-140°	245.1	2.0
140°-150°	172.3	1.4
150°-160°	110.2	0.9
160°-170°	61.7	0.5
170°-180°	19.6	0.2
0°-30°	2260.2	18.3
0°-40°	3689.5	30.0
0°-60°	6658.1	54.1
0°-90°	9831.1	79.8
90°-120°	1556.8	12.6
90°-150°	2295.4	18.6
90°-180°	2487.0	20.2
0°-180°	12318.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2930	2930	2930	2930	2930	
5°	2927	2935	2907	2928	2888	278
15°	2810	2812	2802	2820	2812	790
25°	2529	2570	2580	2624	2616	1165
35°	2180	2212	2265	2358	2389	1359
45°	1757	1809	1932	2116	2166	1355
55°	1337	1404	1616	1836	1930	1193
65°	890	1013	1319	1593	1676	885
75°	464	667	1050	1334	1440	491
85°	108	406	814	1108	1206	122
90°	12	323	721	1003	1114	11
95°	15	267	638	916	1024	15
105°	49	216	510	749	846	52
115°	95	211	423	611	690	92
125°	133	215	364	502	556	117
135°	156	208	326	424	457	121
145°	169	192	269	356	377	106
155°	187	197	221	279	311	86
165°	221	216	208	203	252	62
175°	242	234	208	170	108	23
180°	198	198	198	198	198	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2930.2	2930.2	2930.2	2930.2	2930.2
2.5°	2936.7	2946.6	2905.6	2930.2	2912.1
5°	2926.9	2935.1	2907.2	2928.5	2887.6
7.5°	2923.6	2920.3	2885.9	2913.8	2876.1
10°	2881.0	2892.5	2851.5	2889.2	2871.2
12.5°	2844.9	2867.9	2831.8	2861.3	2823.6
15°	2810.5	2812.2	2802.3	2820.4	2812.2
17.5°	2753.2	2767.9	2745.0	2786.0	2771.2
20°	2669.6	2715.5	2694.2	2731.9	2722.0
22.5°	2600.8	2623.7	2641.7	2684.3	2671.2
25°	2528.7	2569.6	2579.5	2623.7	2615.5
27.5°	2454.9	2472.9	2510.6	2558.2	2559.8
30°	2363.1	2382.8	2435.2	2489.3	2504.1
32.5°	2255.0	2317.3	2348.4	2430.3	2453.3
35°	2179.6	2212.4	2264.8	2358.2	2389.4
37.5°	2081.3	2119.0	2189.4	2299.2	2336.9
40°	1968.2	2023.9	2100.9	2237.0	2281.2
42.5°	1855.1	1920.7	2010.8	2169.8	2220.6
45°	1756.8	1809.2	1932.1	2115.7	2166.5
47.5°	1650.3	1714.2	1869.9	2045.2	2102.6
50°	1551.9	1617.5	1794.5	1979.7	2048.5
52.5°	1433.9	1509.3	1712.5	1904.3	1984.6
55°	1337.3	1404.4	1615.9	1835.5	1930.5
57.5°	1230.7	1306.1	1540.5	1784.6	1871.5
60°	1116.0	1211.1	1466.7	1720.7	1804.3
62.5°	1002.9	1116.0	1391.3	1658.5	1740.4
65°	889.9	1012.8	1319.2	1592.9	1676.5
67.5°	788.3	921.0	1253.7	1520.8	1624.0
70°	673.5	832.5	1176.7	1453.6	1561.8
72.5°	565.4	752.2	1114.4	1399.5	1507.7
75°	463.8	667.0	1050.5	1334.0	1440.5
77.5°	362.2	586.7	983.3	1275.0	1391.3
80°	265.5	521.1	924.3	1217.6	1329.1
82.5°	183.5	463.8	866.9	1170.1	1275.0
85°	108.2	406.4	814.5	1107.8	1206.2
87.5°	49.2	360.5	760.4	1060.3	1157.0
90°	11.5	322.8	721.1	1002.9	1114.4
92.5°	11.5	293.3	673.5	960.3	1061.9
95°	14.7	267.1	637.5	916.1	1024.2
97.5°	19.7	247.5	604.7	875.1	970.2
100°	27.9	234.3	568.7	827.6	921.0
102.5°	37.7	224.5	535.9	785.0	871.8
105°	49.2	216.3	509.7	748.9	845.6
107.5°	60.6	213.0	483.4	714.5	796.5
110°	72.1	211.4	463.8	678.5	770.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	83.6	209.8	442.5	645.7	719.4
115°	95.1	211.4	422.8	611.3	689.9
117.5°	101.6	211.4	404.8	581.8	647.3
120°	111.4	213.0	391.7	550.6	619.5
122.5°	121.3	213.0	378.6	527.7	588.3
125°	132.7	214.7	363.8	501.5	555.6
127.5°	139.3	214.7	355.6	483.4	532.6
130°	145.9	213.0	344.1	460.5	511.3
132.5°	152.4	209.8	337.6	439.2	486.7
135°	155.7	208.1	326.1	424.4	457.2
137.5°	160.6	203.2	314.6	403.1	439.2
140°	165.5	201.6	298.3	386.8	417.9
142.5°	165.5	196.7	286.8	372.0	399.9
145°	168.8	191.7	268.8	355.6	376.9
147.5°	172.1	190.1	255.7	339.2	365.5
150°	172.1	188.5	244.2	321.2	345.8
152.5°	175.4	190.1	232.7	304.8	327.8
155°	186.8	196.7	221.2	278.6	311.4
157.5°	196.7	203.2	209.8	258.9	293.3
160°	204.8	208.1	199.9	239.3	285.2
162.5°	211.4	213.0	201.6	221.2	267.1
165°	221.2	216.3	208.1	203.2	252.4
167.5°	229.4	219.6	211.4	198.3	240.9
170°	236.0	226.2	208.1	186.8	236.0
172.5°	240.9	227.8	209.8	175.4	198.3
175°	242.5	234.3	208.1	170.4	108.2
177.5°	240.9	236.0	214.7	168.8	96.7
180°	198.3	198.3	198.3	198.3	198.3



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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	15.20	16.52	15.84	17.18	17.95	18.69	20.00	19.33	20.67	21.43
	3H	16.65	17.85	17.31	18.53	19.33	21.56	22.76	22.21	23.44	24.23
	4H	17.12	18.27	17.79	18.95	19.76	23.04	24.18	23.71	24.87	25.68
	6H	17.40	18.47	18.09	19.16	19.99	24.66	25.72	25.34	26.41	27.24
	8H	17.46	18.48	18.15	19.20	20.03	25.51	26.54	26.21	27.25	28.08
	12H	17.48	18.46	18.18	19.17	20.03	26.46	27.44	27.16	28.15	29.01
4H	2H	16.36	17.50	17.03	18.18	18.99	19.02	20.17	19.70	20.85	21.66
	3H	18.06	19.04	18.74	19.76	20.59	22.13	23.11	22.81	23.83	24.66
	4H	18.66	19.56	19.36	20.28	21.14	23.79	24.69	24.49	25.42	26.28
	6H	19.06	19.86	19.78	20.61	21.48	25.60	26.40	26.32	27.15	28.01
	8H	19.18	19.93	19.90	20.67	21.55	26.57	27.32	27.30	28.07	28.95
	12H	19.23	19.92	19.98	20.69	21.57	27.65	28.33	28.39	29.10	29.99
8H	4H	19.71	20.46	20.43	21.20	22.08	23.97	24.72	24.69	25.47	26.35
	6H	20.35	20.99	21.10	21.78	22.66	25.95	26.60	26.71	27.38	28.26
	8H	20.58	21.16	21.34	21.94	22.84	27.07	27.65	27.84	28.44	29.33
	12H	20.72	21.24	21.49	22.02	22.97	28.33	28.85	29.10	29.63	30.58
12H	4H	20.05	20.73	20.79	21.50	22.39	23.96	24.65	24.71	25.42	26.30
	6H	20.85	21.43	21.62	22.22	23.11	25.99	26.57	26.75	27.35	28.25
	8H	21.20	21.72	21.97	22.50	23.45	27.17	27.68	27.93	28.46	29.41