

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: P894637

Luminaire Tested: 8TMB-14HL-RND-UNV-L830

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894637
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-14HL-RND-UNV-L830
Description: 14000 Lumen 8FT MICROBAY LINEAR BAY with ROUND FROSTED LENS, 80CRI, 3000K CCT
Light Source: -
Ballast/Driver: -

Summary

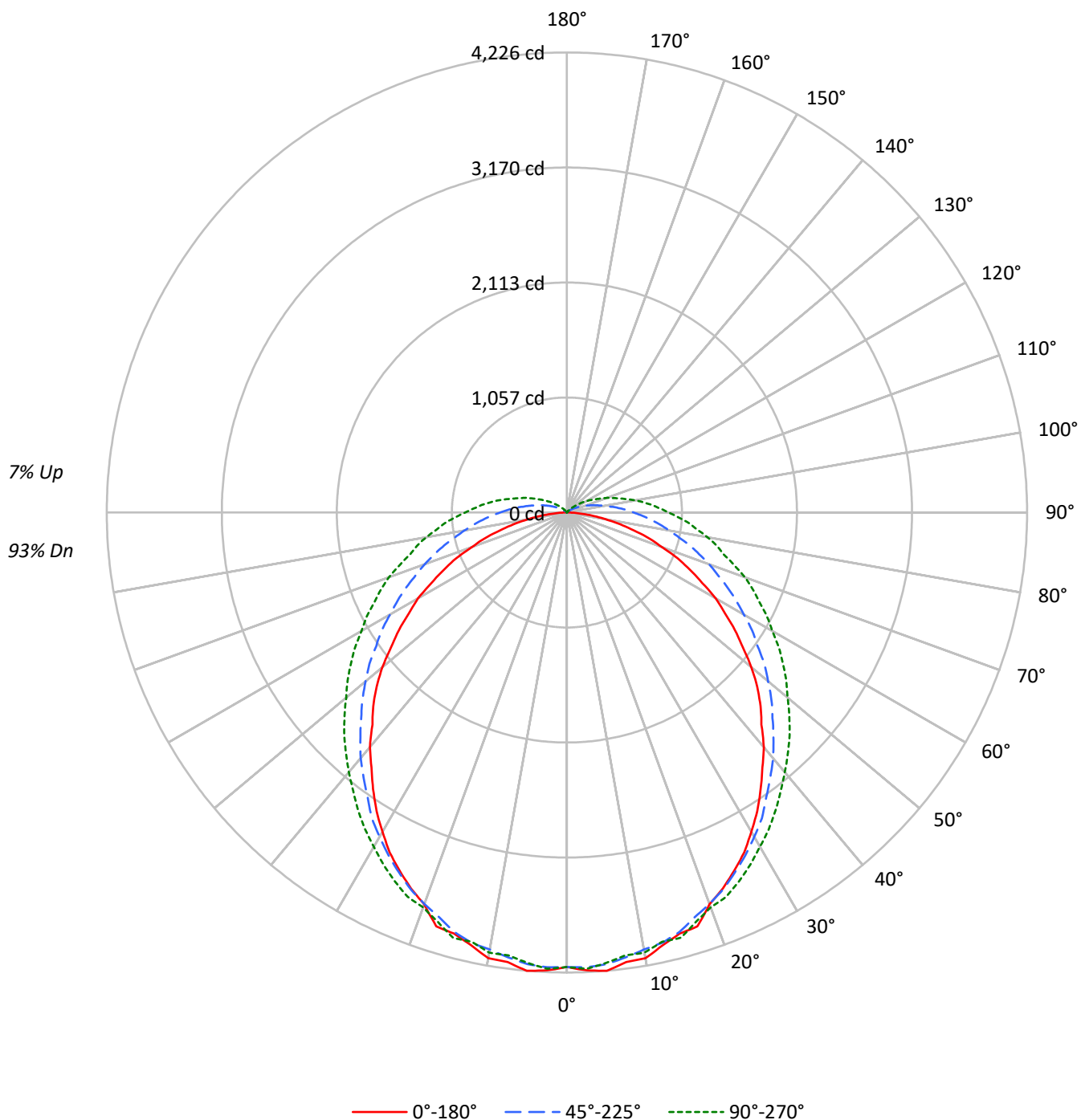
Lumens per Lamp: N/A
Luminaire Lumens: 13755.0 lumens
Efficiency: N/A
Efficacy: 132.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.35
Luminous Opening: Rectangular (W 0.38' x L: 7.98' x H: 0')
CIE Type: Direct

Input Watts (W): 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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	117	117	117	117	114	114	114	114	107	107	107	101	101	101	96	96	96
1	105	100	95	90	102	97	92	88	91	87	84	86	83	80	81	79	77
2	95	86	79	72	92	84	77	71	79	73	68	74	70	66	70	67	63
3	86	75	66	60	83	73	65	59	69	62	57	65	60	55	62	57	53
4	79	66	57	50	76	65	56	49	61	54	48	58	52	47	55	50	45
5	73	59	50	43	70	58	49	42	55	47	41	52	45	40	49	44	39
6	67	53	44	37	65	52	43	37	49	42	36	47	40	35	45	39	34
7	62	48	39	33	60	47	39	33	45	37	32	43	36	31	41	35	30
8	58	44	35	29	56	43	35	29	41	34	28	39	33	28	38	32	27
9	54	40	32	26	52	39	32	26	38	31	26	36	30	25	35	29	25
10	51	37	29	24	49	36	29	24	35	28	23	34	27	23	32	27	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14817	14817	14817
5°	15050	14832	14792
10°	14976	14687	14791
15°	14708	14659	14855
20°	14462	14448	14570
25°	14225	14284	14636
30°	13877	14095	14526
35°	13438	13826	14472
40°	13033	13644	14422
45°	12624	13401	14513
50°	12211	13318	14605
55°	11651	13223	14984
60°	11197	13312	15454
65°	10457	13665	16391
70°	9612	14427	18054
75°	8720	15975	20452
80°	7495	19515	26816
85°	6066	31575	45885

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 87.5°

Luminance: 83287 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	395.9	2.9
10°-20°	1127.1	8.2
20°-30°	1689.0	12.3
30°-40°	2007.1	14.6
40°-50°	2077.9	15.1
50°-60°	1925.6	14.0
60°-70°	1603.1	11.7
70°-80°	1189.9	8.7
80°-90°	787.0	5.7
90°-100°	478.9	3.5
100°-110°	268.5	2.0
110°-120°	132.2	1.0
120°-130°	53.8	0.4
130°-140°	15.6	0.1
140°-150°	2.2	0.0
150°-160°	0.6	0.0
160°-170°	0.4	0.0
170°-180°	0.2	0.0
0°-30°	3212.0	23.4
0°-40°	5219.1	37.9
0°-60°	9222.6	67.0
0°-90°	12802.6	93.1
90°-120°	879.6	6.4
90°-150°	951.2	6.9
90°-180°	952.0	6.9
0°-180°	13755.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4176	4176	4176	4176	4176	
5°	4226	4180	4164	4186	4153	399
15°	4004	3989	3991	3996	4044	1134
25°	3633	3630	3649	3719	3738	1672
35°	3102	3125	3192	3293	3341	1941
45°	2516	2552	2671	2837	2892	1938
55°	1884	1964	2138	2352	2422	1684
65°	1246	1362	1628	1866	1952	1237
75°	636	829	1165	1416	1492	681
85°	149	418	776	1051	1127	167
90°	8	271	613	858	934	11
95°	2	168	476	709	787	2
105°	2	55	258	438	499	2
115°	2	13	120	241	288	2
125°	2	4	44	111	141	2
135°	4	2	12	36	50	2
145°	4	2	0	4	6	2
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	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4175.9	4175.9	4175.9	4175.9	4175.9
2.5°	4210.3	4189.3	4181.6	4172.1	4195.0
5°	4225.6	4179.7	4164.4	4185.5	4153.0
7.5°	4166.4	4154.9	4122.4	4133.9	4103.3
10°	4156.8	4093.8	4076.6	4114.8	4105.2
12.5°	4070.8	4017.3	4047.9	4074.7	4038.4
15°	4004.0	3988.7	3990.6	3996.3	4044.1
17.5°	3986.8	3918.0	3898.9	3946.7	3942.8
20°	3830.1	3816.8	3826.3	3889.4	3858.8
22.5°	3738.4	3696.4	3748.0	3809.1	3822.5
25°	3633.4	3629.6	3648.7	3719.3	3738.4
27.5°	3522.6	3497.7	3549.3	3631.5	3646.8
30°	3387.0	3377.4	3440.4	3511.1	3545.5
32.5°	3253.2	3259.0	3331.6	3390.8	3450.0
35°	3102.3	3125.2	3192.1	3293.3	3341.1
37.5°	2949.5	2978.1	3067.9	3184.5	3224.6
40°	2813.9	2819.6	2945.7	3064.1	3113.8
42.5°	2643.8	2701.2	2808.1	2964.8	3003.0
45°	2515.9	2552.2	2670.6	2836.8	2892.2
47.5°	2370.7	2412.7	2548.3	2710.7	2769.9
50°	2212.1	2250.3	2412.7	2598.0	2645.8
52.5°	2036.4	2114.7	2284.7	2475.7	2538.8
55°	1883.5	1963.8	2137.6	2351.6	2422.3
57.5°	1719.3	1799.5	2017.3	2215.9	2307.6
60°	1577.9	1654.3	1875.9	2122.3	2177.7
62.5°	1402.2	1511.0	1751.7	1994.3	2072.7
65°	1245.5	1362.0	1627.6	1866.4	1952.3
67.5°	1102.2	1222.6	1499.6	1755.6	1849.2
70°	926.5	1085.0	1390.7	1642.9	1740.3
72.5°	796.6	955.1	1274.2	1524.4	1612.3
75°	636.1	829.1	1165.3	1415.5	1491.9
77.5°	502.4	710.6	1052.6	1333.4	1409.8
80°	366.8	603.7	955.1	1224.5	1312.4
82.5°	250.2	504.3	865.4	1123.3	1207.3
85°	149.0	418.4	775.6	1050.7	1127.1
87.5°	64.9	341.9	693.4	945.6	1023.9
90°	7.6	271.3	613.2	857.7	934.1
92.5°	1.9	217.8	542.5	779.4	853.9
95°	1.9	168.1	475.7	708.7	787.0
97.5°	1.9	129.9	408.8	636.1	710.6
100°	1.9	99.3	353.4	559.7	639.9
102.5°	1.9	74.5	299.9	496.7	565.4
105°	1.9	55.4	257.9	437.5	498.6
107.5°	1.9	40.1	215.9	382.1	443.2
110°	1.9	28.7	181.5	330.5	391.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	1.9	21.0	147.1	284.6	336.2
115°	1.9	13.4	120.3	240.7	288.5
117.5°	1.9	9.6	95.5	202.5	248.3
120°	1.9	7.6	76.4	168.1	208.2
122.5°	1.9	5.7	59.2	137.5	175.7
125°	1.9	3.8	43.9	110.8	141.4
127.5°	1.9	3.8	32.5	87.9	114.6
130°	1.9	1.9	22.9	66.9	89.8
132.5°	1.9	1.9	15.3	49.7	66.9
135°	3.8	1.9	11.5	36.3	49.7
137.5°	3.8	1.9	7.6	24.8	34.4
140°	3.8	1.9	3.8	15.3	21.0
142.5°	3.8	1.9	1.9	7.6	11.5
145°	3.8	1.9	0.0	3.8	5.7
147.5°	3.8	1.9	0.0	1.9	1.9
150°	3.8	1.9	0.0	0.0	0.0
152.5°	3.8	1.9	0.0	0.0	0.0
155°	3.8	3.8	0.0	0.0	0.0
157.5°	3.8	3.8	0.0	0.0	0.0
160°	3.8	3.8	0.0	0.0	0.0
162.5°	3.8	3.8	0.0	0.0	0.0
165°	5.7	3.8	0.0	0.0	0.0
167.5°	5.7	3.8	0.0	0.0	0.0
170°	5.7	3.8	0.0	0.0	0.0
172.5°	5.7	3.8	0.0	0.0	0.0
175°	5.7	3.8	0.0	0.0	0.0
177.5°	5.7	3.8	0.0	0.0	0.0
180°	1.9	1.9	1.9	1.9	1.9

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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	19.59	21.13	20.06	21.59	22.07	21.17	22.71	21.64	23.16	23.64
	3H	21.36	22.76	21.84	23.23	23.75	23.75	25.16	24.24	25.62	26.15
	4H	22.02	23.35	22.52	23.83	24.37	25.01	26.34	25.51	26.83	27.36
	6H	22.49	23.73	23.01	24.23	24.78	26.39	27.63	26.91	28.13	28.68
	8H	22.64	23.83	23.17	24.35	24.91	27.12	28.31	27.65	28.83	29.39
	12H	22.74	23.88	23.27	24.39	24.98	27.97	29.11	28.50	29.62	30.21
4H	2H	20.55	21.88	21.05	22.36	22.90	21.74	23.07	22.24	23.55	24.09
	3H	22.59	23.73	23.11	24.25	24.81	24.61	25.74	25.12	26.27	26.83
	4H	23.40	24.44	23.94	24.98	25.57	26.09	27.13	26.62	27.66	28.26
	6H	24.05	24.97	24.61	25.54	26.14	27.71	28.63	28.26	29.19	29.79
	8H	24.28	25.15	24.84	25.71	26.33	28.56	29.43	29.12	29.99	30.61
	12H	24.45	25.24	25.03	25.83	26.45	29.55	30.34	30.14	30.93	31.56
8H	4H	24.25	25.12	24.81	25.68	26.30	26.46	27.32	27.02	27.89	28.50
	6H	25.18	25.91	25.77	26.52	27.14	28.34	29.07	28.93	29.67	30.30
	8H	25.56	26.22	26.16	26.84	27.47	29.40	30.06	30.00	30.68	31.31
	12H	25.88	26.47	26.49	27.08	27.78	30.65	31.25	31.26	31.85	32.55
12H	4H	24.51	25.30	25.10	25.89	26.52	26.50	27.29	27.08	27.88	28.50
	6H	25.60	26.27	26.20	26.88	27.52	28.45	29.11	29.05	29.73	30.36
	8H	26.14	26.73	26.75	27.34	28.04	29.62	30.22	30.23	30.82	31.52