

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: P894591

Luminaire Tested: 8TMB-14HL-FLT-UNV-L840

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894591
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2403-334-4)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 8TMB-14HL-FLT-UNV-L840
Description: 14000 Lumen 8FT MICROBAY LINEAR BAY with FLAT FROSTED LENS, 80CRI, 4000K CCT
Light Source: -
Ballast/Driver: -

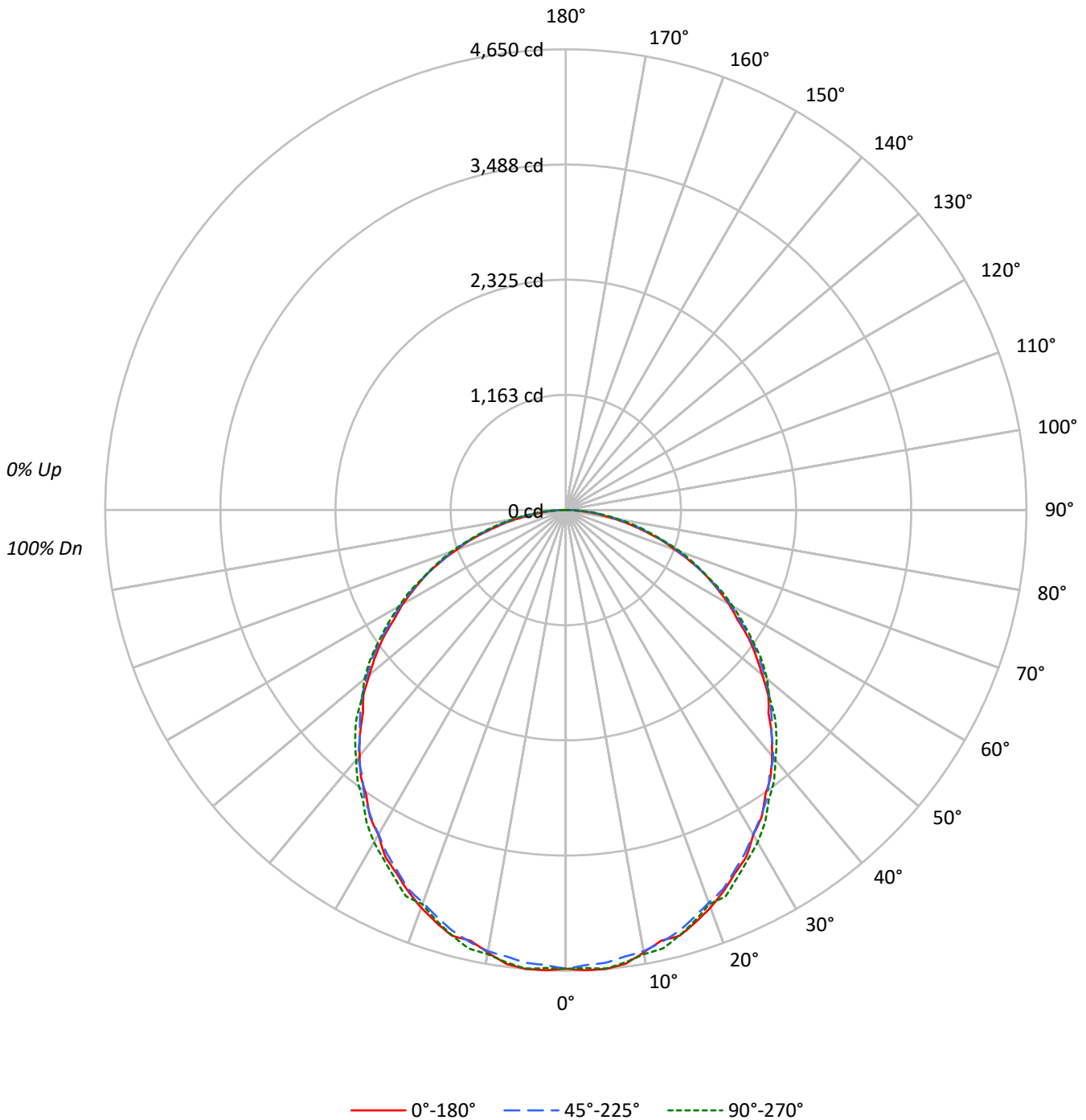
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12828.0 lumens
Efficiency: N/A
Efficacy: 123.8 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.24 / 1.34
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				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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	102	102	100
1	109	104	99	96	106	102	98	94	97	94	91	93	91	88	90	88	86	86	86	86	84
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	72	72	72	70
3	90	79	71	65	88	78	70	64	75	68	63	72	67	62	69	65	61	61	61	61	59
4	82	70	62	55	80	69	61	54	67	59	54	64	58	53	62	57	52	52	52	52	50
5	76	63	54	47	74	62	53	47	60	52	46	58	51	46	56	50	45	45	45	45	43
6	70	57	48	41	68	56	47	41	54	46	41	52	45	40	51	45	40	40	40	40	38
7	65	51	43	36	63	51	42	36	49	41	36	48	41	36	46	40	35	35	35	35	33
8	60	47	38	33	59	46	38	32	45	37	32	44	37	32	42	36	32	32	32	32	30
9	57	43	35	29	55	42	35	29	41	34	29	40	34	29	39	33	29	29	29	29	27
10	53	40	32	27	52	39	32	26	38	31	26	37	31	26	36	30	26	26	26	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16427	16427	16427
5°	16561	16340	16547
10°	16334	16291	16399
15°	16338	16169	16323
20°	16122	15925	15986
25°	15831	15745	16027
30°	15510	15486	15871
35°	15211	15341	15471
40°	15006	15099	15247
45°	14521	14741	15012
50°	14284	14494	14638
55°	13930	14103	14251
60°	13496	13695	13823
65°	13096	13147	13147
70°	12178	12469	12780
75°	11213	11651	11898
80°	9890	10748	11115
85°	8875	9933	10666

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 15012 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	438.2	3.4
10°-20°	1248.9	9.7
20°-30°	1873.2	14.6
30°-40°	2224.7	17.3
40°-50°	2277.8	17.8
50°-60°	2040.8	15.9
60°-70°	1550.3	12.1
70°-80°	903.0	7.0
80°-90°	271.2	2.1
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	3560.2	27.8
0°-40°	5785.0	45.1
0°-60°	10103.6	78.8
0°-90°	12828.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12828.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4630	4630	4630	4630	4630	
5°	4650	4632	4588	4616	4646	440
15°	4448	4478	4402	4420	4444	1248
25°	4044	4080	4022	4074	4094	1866
35°	3512	3590	3542	3556	3572	2207
45°	2894	2966	2938	2962	2992	2251
55°	2252	2286	2280	2306	2304	2006
65°	1560	1560	1566	1586	1566	1532
75°	818	832	850	876	868	871
85°	218	222	244	260	262	244
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4629.7	4629.7	4629.7	4629.7	4629.7
2.5°	4649.7	4627.7	4597.7	4607.7	4627.7
5°	4649.7	4631.7	4587.7	4615.7	4645.7
7.5°	4619.7	4643.7	4547.7	4547.7	4603.7
10°	4533.7	4579.7	4521.7	4515.7	4551.7
12.5°	4451.7	4535.7	4467.7	4487.7	4531.7
15°	4447.7	4477.7	4401.7	4419.7	4443.7
17.5°	4361.7	4391.7	4309.7	4343.7	4343.7
20°	4269.7	4275.7	4217.7	4291.7	4233.7
22.5°	4163.7	4225.7	4145.7	4169.7	4219.7
25°	4043.7	4079.7	4021.7	4073.7	4093.7
27.5°	3945.7	3989.7	3909.7	3971.7	3977.7
30°	3785.7	3833.7	3779.7	3819.7	3873.7
32.5°	3677.7	3693.7	3665.7	3725.7	3741.7
35°	3511.8	3589.7	3541.8	3555.8	3571.8
37.5°	3395.8	3419.8	3377.8	3425.8	3451.8
40°	3239.8	3275.8	3259.8	3267.8	3291.8
42.5°	3077.8	3115.8	3073.8	3131.8	3149.8
45°	2893.8	2965.8	2937.8	2961.8	2991.8
47.5°	2773.8	2797.8	2789.8	2803.8	2783.8
50°	2587.8	2611.8	2625.8	2643.8	2651.8
52.5°	2421.8	2439.8	2465.8	2475.8	2493.8
55°	2251.8	2285.8	2279.8	2305.8	2303.8
57.5°	2053.9	2103.9	2087.9	2125.9	2125.9
60°	1901.9	1909.9	1929.9	1947.9	1947.9
62.5°	1725.9	1735.9	1745.9	1761.9	1773.9
65°	1559.9	1559.9	1565.9	1585.9	1565.9
67.5°	1367.9	1359.9	1379.9	1403.9	1401.9
70°	1173.9	1183.9	1201.9	1231.9	1231.9
72.5°	1007.9	1007.9	1027.9	1043.9	1041.9
75°	817.9	831.9	849.9	875.9	867.9
77.5°	648.0	658.0	688.0	712.0	714.0
80°	484.0	494.0	526.0	550.0	544.0
82.5°	338.0	352.0	382.0	400.0	398.0
85°	218.0	222.0	244.0	260.0	262.0
87.5°	100.0	108.0	124.0	130.0	130.0
90°	0.0	0.0	0.0	0.0	0.0



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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	21.25	22.89	21.62	23.21	23.52	21.36	23.00	21.72	23.31	23.63
	3H	23.03	24.52	23.41	24.84	25.20	23.20	24.68	23.57	25.01	25.37
	4H	23.70	25.09	24.10	25.44	25.82	23.89	25.29	24.29	25.64	26.01
	6H	24.17	25.47	24.58	25.83	26.22	24.44	25.74	24.85	26.10	26.49
	8H	24.32	25.56	24.75	25.95	26.35	24.63	25.87	25.06	26.26	26.66
	12H	24.43	25.61	24.86	26.00	26.42	24.78	25.96	25.21	26.35	26.77
4H	2H	21.90	23.30	22.30	23.64	24.02	21.98	23.38	22.38	23.73	24.10
	3H	23.90	25.07	24.31	25.47	25.87	24.04	25.22	24.45	25.62	26.02
	4H	24.69	25.75	25.12	26.17	26.60	24.88	25.94	25.31	26.36	26.79
	6H	25.29	26.22	25.75	26.66	27.12	25.57	26.50	26.02	26.94	27.40
	8H	25.49	26.36	25.95	26.80	27.27	25.82	26.69	26.28	27.13	27.59
	12H	25.64	26.42	26.12	26.90	27.37	26.02	26.80	26.49	27.27	27.74
8H	4H	25.03	25.90	25.49	26.34	26.80	25.20	26.07	25.66	26.51	26.97
	6H	25.75	26.48	26.24	26.96	27.44	26.02	26.74	26.51	27.23	27.71
	8H	26.02	26.67	26.53	27.18	27.67	26.35	27.00	26.86	27.51	27.99
	12H	26.25	26.83	26.76	27.32	27.88	26.64	27.22	27.15	27.71	28.27
12H	4H	25.07	25.85	25.55	26.33	26.80	25.23	26.01	25.71	26.49	26.96
	6H	25.82	26.48	26.33	26.98	27.47	26.08	26.73	26.59	27.24	27.72
	8H	26.16	26.73	26.66	27.22	27.78	26.47	27.05	26.98	27.54	28.10