

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: P894592

Luminaire Tested: 8TMB-14HL-FLT-UNV-L850

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894592
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-L850
Description: 14000 Lumen 8FT MICROBAY LINEAR BAY with FLAT FROSTED LENS, 80CRI, 5000K CCT
Light Source: -
Ballast/Driver: -

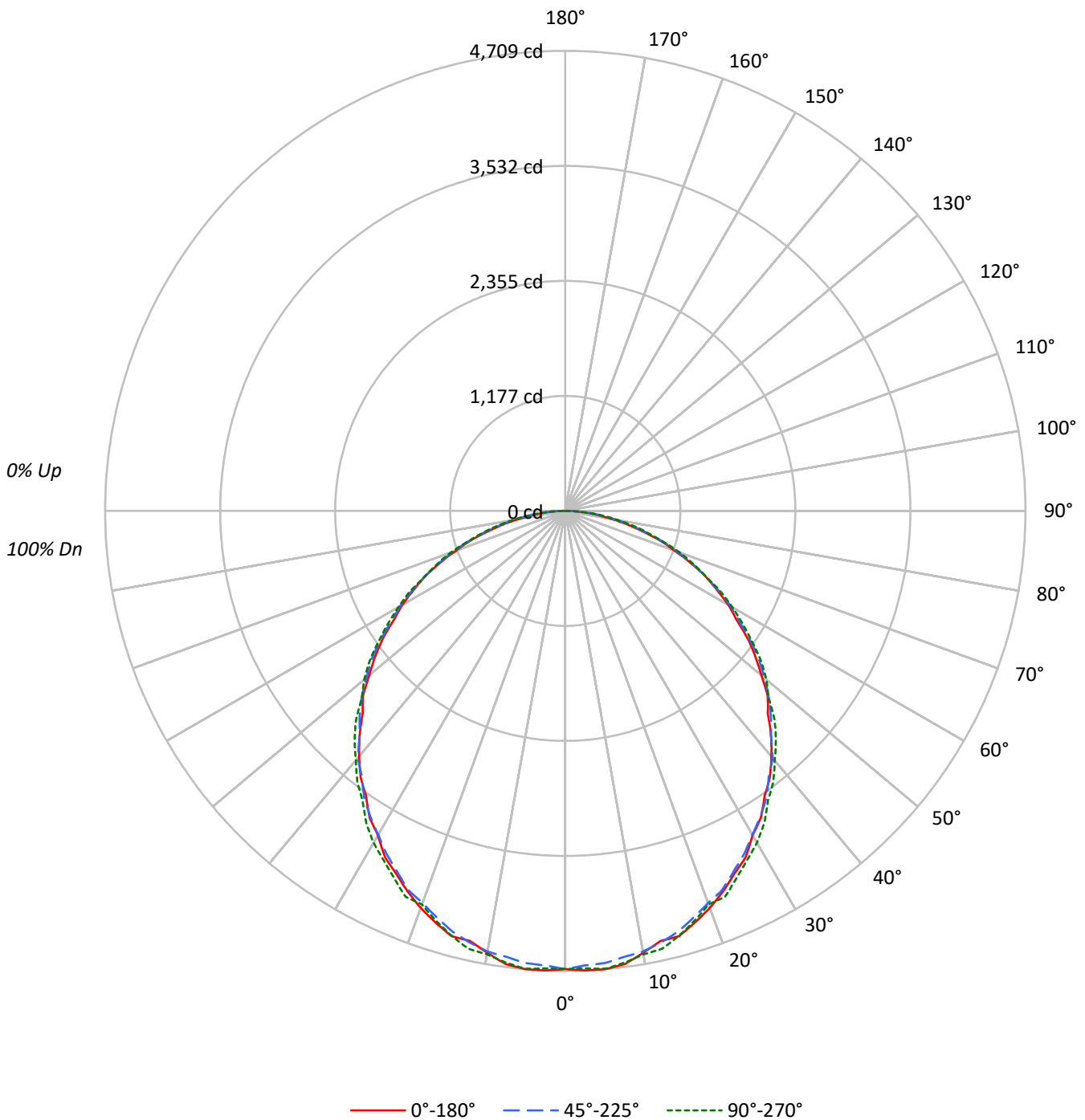
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12992.0 lumens
Efficiency: N/A
Efficacy: 125.4 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°	16637	16637	16637
5°	16772	16549	16758
10°	16543	16499	16609
15°	16547	16376	16532
20°	16328	16129	16190
25°	16033	15946	16232
30°	15708	15684	16074
35°	15406	15537	15669
40°	15198	15291	15442
45°	14706	14930	15204
50°	14467	14680	14825
55°	14108	14283	14434
60°	13669	13870	14000
65°	13263	13315	13315
70°	12334	12628	12944
75°	11356	11801	12050
80°	10016	10885	11256
85°	8989	10060	10800

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 15204 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	443.8	3.4
10°-20°	1264.8	9.7
20°-30°	1897.1	14.6
30°-40°	2253.2	17.3
40°-50°	2306.9	17.8
50°-60°	2066.9	15.9
60°-70°	1570.1	12.1
70°-80°	914.5	7.0
80°-90°	274.7	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°	3605.8	27.8
0°-40°	5858.9	45.1
0°-60°	10232.7	78.8
0°-90°	12992.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12992.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4689	4689	4689	4689	4689	
5°	4709	4691	4646	4675	4705	446
15°	4505	4535	4458	4476	4500	1264
25°	4095	4132	4073	4126	4146	1890
35°	3557	3636	3587	3601	3617	2236
45°	2931	3004	2975	3000	3030	2279
55°	2281	2315	2309	2335	2333	2032
65°	1580	1580	1586	1606	1586	1551
75°	828	843	861	887	879	882
85°	221	225	247	263	265	247
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4688.9	4688.9	4688.9	4688.9	4688.9
2.5°	4709.1	4686.8	4656.5	4666.6	4686.8
5°	4709.1	4690.9	4646.3	4674.7	4705.1
7.5°	4678.7	4703.0	4605.8	4605.8	4662.5
10°	4591.6	4638.2	4579.5	4573.4	4609.9
12.5°	4508.6	4593.7	4524.8	4545.1	4589.6
15°	4504.6	4534.9	4458.0	4476.2	4500.5
17.5°	4417.5	4447.8	4364.8	4399.2	4399.2
20°	4324.3	4330.4	4271.6	4346.6	4287.8
22.5°	4216.9	4279.7	4198.7	4223.0	4273.7
25°	4095.4	4131.9	4073.1	4125.8	4146.1
27.5°	3996.2	4040.7	3959.7	4022.5	4028.6
30°	3834.1	3882.7	3828.1	3868.6	3923.3
32.5°	3724.8	3741.0	3712.6	3773.4	3789.6
35°	3556.7	3635.6	3587.0	3601.2	3617.4
37.5°	3439.2	3463.5	3420.9	3469.6	3495.9
40°	3281.2	3317.7	3301.4	3309.5	3333.9
42.5°	3117.1	3155.6	3113.1	3171.8	3190.0
45°	2930.8	3003.7	2975.4	2999.7	3030.0
47.5°	2809.3	2833.6	2825.5	2839.6	2819.4
50°	2620.9	2645.2	2659.4	2677.6	2685.7
52.5°	2452.8	2471.0	2497.4	2507.5	2525.7
55°	2280.6	2315.1	2309.0	2335.3	2333.3
57.5°	2080.1	2130.7	2114.5	2153.0	2153.0
60°	1926.2	1934.3	1954.5	1972.8	1972.8
62.5°	1747.9	1758.1	1768.2	1784.4	1796.6
65°	1579.8	1579.8	1585.9	1606.2	1585.9
67.5°	1385.4	1377.3	1397.5	1421.9	1419.8
70°	1188.9	1199.1	1217.3	1247.7	1247.7
72.5°	1020.8	1020.8	1041.1	1057.3	1055.2
75°	828.4	842.6	860.8	887.1	879.0
77.5°	656.2	666.4	696.7	721.1	723.1
80°	490.2	500.3	532.7	557.0	550.9
82.5°	342.3	356.5	386.9	405.1	403.1
85°	220.8	224.8	247.1	263.3	265.3
87.5°	101.3	109.4	125.6	131.7	131.7
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	21.30	22.94	21.66	23.25	23.56	21.40	23.04	21.77	23.36	23.67
	3H	23.08	24.56	23.45	24.89	25.25	23.24	24.72	23.62	25.05	25.41
	4H	23.74	25.14	24.14	25.49	25.86	23.94	25.33	24.34	25.68	26.06
	6H	24.22	25.51	24.63	25.88	26.27	24.49	25.78	24.90	26.15	26.54
	8H	24.37	25.60	24.79	25.99	26.39	24.68	25.92	25.10	26.30	26.70
	12H	24.47	25.66	24.90	26.04	26.47	24.82	26.01	25.25	26.39	26.82
4H	2H	21.94	23.34	22.34	23.69	24.06	22.03	23.42	22.42	23.77	24.15
	3H	23.94	25.12	24.35	25.52	25.91	24.09	25.26	24.50	25.66	26.06
	4H	24.74	25.80	25.17	26.21	26.65	24.93	25.99	25.36	26.40	26.84
	6H	25.34	26.27	25.79	26.71	27.16	25.62	26.55	26.07	26.99	27.44
	8H	25.53	26.40	25.99	26.85	27.31	25.86	26.73	26.32	27.17	27.64
	12H	25.69	26.47	26.16	26.94	27.41	26.06	26.84	26.54	27.32	27.79
8H	4H	25.07	25.94	25.53	26.38	26.85	25.24	26.11	25.70	26.55	27.02
	6H	25.80	26.52	26.29	27.01	27.48	26.06	26.79	26.56	27.28	27.75
	8H	26.07	26.72	26.58	27.22	27.71	26.40	27.05	26.90	27.55	28.04
	12H	26.30	26.87	26.80	27.36	27.92	26.69	27.26	27.19	27.75	28.31
12H	4H	25.12	25.90	25.60	26.37	26.84	25.27	26.06	25.75	26.53	27.00
	6H	25.87	26.52	26.38	27.03	27.51	26.12	26.77	26.63	27.28	27.77
	8H	26.20	26.78	26.71	27.27	27.83	26.52	27.09	27.02	27.58	28.14