

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: P894624

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

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894624
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2407-175-5)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 8TMB-14HL-LVRF-UNV-L850
Description: 14000 Lumen 8FT MICROBAY LINEAR BAY with LOUVER WITH FROSTED INLAY, 80CRI, 5000K (C)
Light Source: -
Ballast/Driver: -

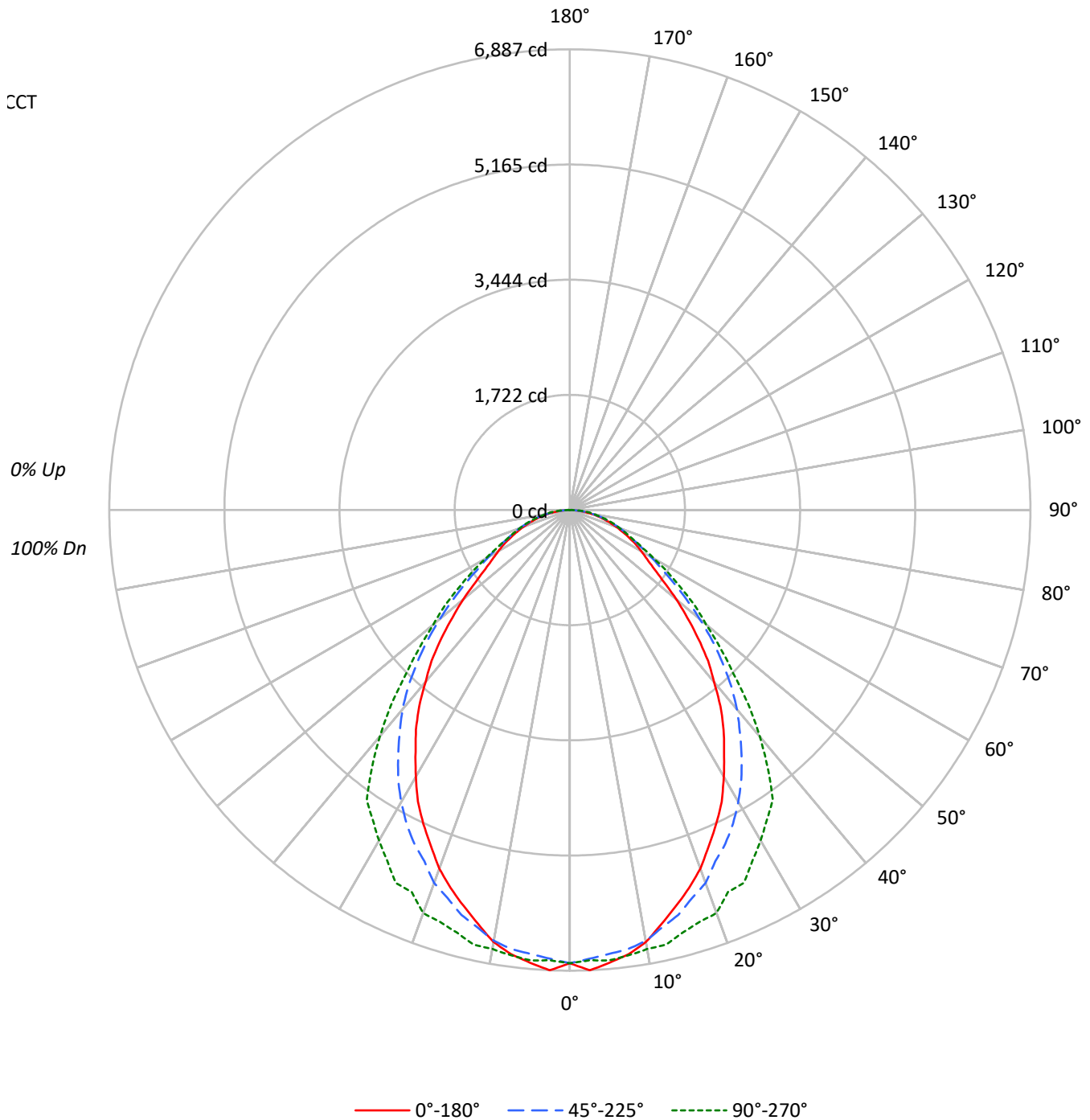
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13738.0 lumens
Efficiency: N/A
Efficacy: 132.6 lumens/watt
Spacing Criteria (0/90/45): 1.05 / 1.25 / 1.21
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 (Ain): 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

TEST NUMBER: P894624
CATALOG NUMBER: 8TMB-14HL-LVRF-UNV-L850

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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	100	
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87	87	
2	102	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75	75	
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	75	70	67	65	65	
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	57	57	
5	80	68	60	54	78	67	60	54	65	59	53	63	58	53	62	57	52	50	50	
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	57	51	47	45	45	
7	70	57	49	43	68	56	49	43	55	48	43	53	47	42	52	46	42	40	40	
8	65	52	44	39	64	52	44	39	50	44	39	49	43	39	48	43	38	37	37	
9	61	48	41	36	60	48	40	35	47	40	35	46	40	35	45	39	35	33	33	
10	57	45	37	33	56	44	37	32	43	37	32	43	36	32	42	36	32	30	30	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	24040	24040	24040
5°	24197	23728	24067
10°	23631	23557	24010
15°	22515	23014	24011
20°	21537	22402	24207
25°	20277	21546	24083
30°	18863	20647	23378
35°	17372	19381	22926
40°	15536	18013	20471
45°	13620	16202	17360
50°	11494	13999	14692
55°	9536	11716	12530
60°	8768	9961	10335
65°	8214	8758	8826
70°	7649	8300	8237
75°	7137	7747	8025
80°	6663	7201	7699
85°	5606	6102	8492

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 17360 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	639.5	4.7
10°-20°	1783.9	13.0
20°-30°	2569.1	18.7
30°-40°	2836.3	20.6
40°-50°	2433.8	17.7
50°-60°	1658.0	12.1
60°-70°	1043.0	7.6
70°-80°	593.8	4.3
80°-90°	180.5	1.3
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°	4992.6	36.3
0°-40°	7828.9	57.0
0°-60°	11920.7	86.8
0°-90°	13738.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13738.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6776	6776	6776	6776	6776	
5°	6794	6767	6662	6802	6757	641
15°	6129	6194	6265	6549	6536	1726
25°	5179	5283	5504	5947	6152	2379
35°	4011	4167	4474	4963	5293	2495
45°	2714	2894	3229	3423	3460	2091
55°	1542	1637	1894	1985	2026	1416
65°	978	995	1043	1094	1051	972
75°	521	525	565	589	585	555
85°	138	142	150	178	209	158
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6775.5	6775.5	6775.5	6775.5	6775.5
2.5°	6886.9	6816.1	6714.8	6812.0	6737.1
5°	6793.8	6767.4	6662.1	6801.9	6757.3
7.5°	6698.6	6641.9	6623.6	6773.5	6714.8
10°	6558.8	6526.4	6538.5	6731.0	6664.1
12.5°	6338.0	6360.3	6388.7	6633.7	6654.0
15°	6129.4	6194.2	6265.1	6548.7	6536.5
17.5°	5924.8	6013.9	6080.8	6445.4	6455.5
20°	5704.0	5754.7	5932.9	6285.4	6410.9
22.5°	5430.6	5529.8	5683.8	6123.3	6180.0
25°	5179.4	5282.7	5503.5	5947.1	6151.7
27.5°	4916.1	5011.3	5284.7	5738.4	5912.6
30°	4604.1	4731.7	5039.6	5501.5	5706.0
32.5°	4292.2	4478.5	4774.3	5248.3	5485.2
35°	4010.6	4166.6	4474.5	4962.7	5292.8
37.5°	3698.7	3862.8	4174.7	4650.7	4861.4
40°	3354.3	3530.6	3889.1	4274.0	4419.8
42.5°	3058.6	3210.5	3571.1	3842.5	3958.0
45°	2714.3	2894.5	3228.8	3423.2	3459.7
47.5°	2382.1	2588.7	2888.5	2979.6	3050.5
50°	2082.3	2244.3	2536.0	2592.7	2661.6
52.5°	1776.4	1948.6	2203.8	2260.5	2361.8
55°	1541.5	1636.7	1893.9	1985.1	2025.6
57.5°	1369.3	1430.1	1612.4	1727.8	1740.0
60°	1235.6	1266.0	1403.7	1490.8	1456.4
62.5°	1112.0	1136.3	1205.2	1272.1	1227.5
65°	978.4	994.6	1043.2	1093.8	1051.3
67.5°	852.8	871.0	915.6	952.0	915.6
70°	737.3	751.5	800.1	816.3	794.0
72.5°	630.0	636.0	676.5	704.9	690.7
75°	520.6	524.6	565.1	589.4	585.4
77.5°	421.3	427.4	461.8	484.1	472.0
80°	326.1	330.2	352.4	384.9	376.8
82.5°	228.9	237.0	251.2	279.5	301.8
85°	137.7	141.8	149.9	178.3	208.6
87.5°	52.7	56.7	60.8	74.9	99.3
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	18.50	19.98	18.87	20.30	20.61	19.86	21.34	20.23	21.66	21.97
	3H	20.08	21.41	20.46	21.73	22.10	21.15	22.47	21.53	22.80	23.16
	4H	20.69	21.93	21.09	22.28	22.66	21.70	22.94	22.10	23.29	23.67
	6H	21.16	22.30	21.57	22.67	23.06	22.15	23.30	22.57	23.67	24.06
	8H	21.31	22.40	21.74	22.79	23.20	22.34	23.43	22.77	23.82	24.22
	12H	21.41	22.46	21.84	22.84	23.27	22.50	23.54	22.93	23.92	24.35
4H	2H	19.12	20.36	19.52	20.71	21.09	20.23	21.47	20.63	21.82	22.20
	3H	20.92	21.95	21.33	22.35	22.75	21.79	22.81	22.20	23.21	23.62
	4H	21.64	22.57	22.08	22.99	23.43	22.49	23.42	22.92	23.83	24.27
	6H	22.24	23.05	22.70	23.49	23.95	23.10	23.90	23.56	24.35	24.81
	8H	22.44	23.19	22.91	23.64	24.11	23.34	24.10	23.81	24.54	25.01
	12H	22.58	23.25	23.06	23.73	24.20	23.56	24.23	24.04	24.71	25.18
8H	4H	21.97	22.72	22.43	23.17	23.63	22.72	23.48	23.19	23.92	24.39
	6H	22.69	23.32	23.19	23.81	24.29	23.47	24.09	23.96	24.58	25.06
	8H	22.97	23.53	23.49	24.04	24.53	23.80	24.36	24.31	24.87	25.36
	12H	23.18	23.68	23.69	24.17	24.74	24.10	24.60	24.62	25.09	25.66
12H	4H	22.01	22.68	22.49	23.16	23.63	22.74	23.41	23.22	23.89	24.36
	6H	22.76	23.32	23.28	23.83	24.32	23.50	24.06	24.02	24.58	25.06
	8H	23.10	23.59	23.61	24.09	24.65	23.89	24.39	24.40	24.88	25.45