

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: P894623

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

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894623
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-L840
Description: 14000 Lumen 8FT MICROBAY LINEAR BAY with LOUVER WITH FROSTED INLAY, 80CRI, 4000K (C)
Light Source: -
Ballast/Driver: -

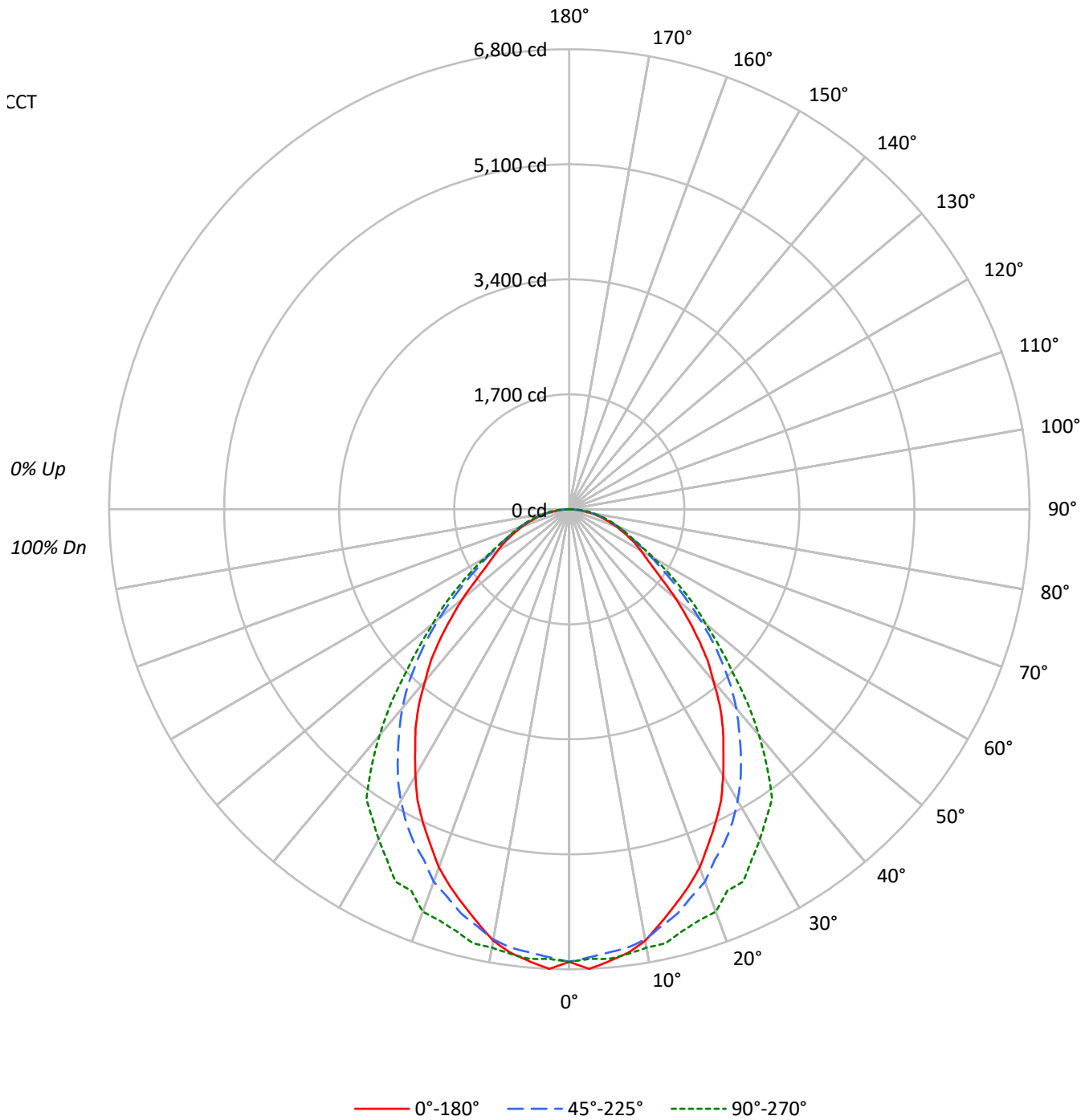
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13564.0 lumens
Efficiency: N/A
Efficacy: 130.9 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

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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
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°	23736	23736	23736
5°	23891	23428	23763
10°	23331	23259	23706
15°	22230	22722	23706
20°	21265	22118	23900
25°	20020	21273	23778
30°	18624	20386	23082
35°	17152	19136	22635
40°	15340	17785	20212
45°	13447	15996	17140
50°	11348	13821	14506
55°	9414	11567	12371
60°	8657	9835	10204
65°	8110	8647	8715
70°	7552	8196	8133
75°	7046	7650	7924
80°	6579	7111	7601
85°	5537	6025	8386

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 17140 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	631.4	4.7
10°-20°	1761.3	13.0
20°-30°	2536.6	18.7
30°-40°	2800.4	20.6
40°-50°	2403.0	17.7
50°-60°	1637.0	12.1
60°-70°	1029.8	7.6
70°-80°	586.3	4.3
80°-90°	178.2	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°	4929.3	36.3
0°-40°	7729.7	57.0
0°-60°	11769.7	86.8
0°-90°	13564.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13564.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6690	6690	6690	6690	6690	
5°	6708	6682	6578	6716	6672	633
15°	6052	6116	6186	6466	6454	1704
25°	5114	5216	5434	5872	6074	2348
35°	3960	4114	4418	4900	5226	2463
45°	2680	2858	3188	3380	3416	2065
55°	1522	1616	1870	1960	2000	1398
65°	966	982	1030	1080	1038	960
75°	514	518	558	582	578	548
85°	136	140	148	176	206	156
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6689.7	6689.7	6689.7	6689.7	6689.7
2.5°	6799.7	6729.7	6629.7	6725.7	6651.7
5°	6707.7	6681.7	6577.7	6715.7	6671.7
7.5°	6613.7	6557.7	6539.7	6687.7	6629.7
10°	6475.7	6443.7	6455.7	6645.7	6579.7
12.5°	6257.7	6279.7	6307.7	6549.7	6569.7
15°	6051.7	6115.7	6185.7	6465.7	6453.7
17.5°	5849.8	5937.8	6003.8	6363.7	6373.7
20°	5631.8	5681.8	5857.8	6205.7	6329.7
22.5°	5361.8	5459.8	5611.8	6045.7	6101.7
25°	5113.8	5215.8	5433.8	5871.8	6073.7
27.5°	4853.8	4947.8	5217.8	5665.8	5837.8
30°	4545.8	4671.8	4975.8	5431.8	5633.8
32.5°	4237.8	4421.8	4713.8	5181.8	5415.8
35°	3959.8	4113.8	4417.8	4899.8	5225.8
37.5°	3651.8	3813.8	4121.8	4591.8	4799.8
40°	3311.9	3485.9	3839.8	4219.8	4363.8
42.5°	3019.9	3169.9	3525.9	3793.8	3907.8
45°	2679.9	2857.9	3187.9	3379.9	3415.9
47.5°	2351.9	2555.9	2851.9	2941.9	3011.9
50°	2055.9	2215.9	2503.9	2559.9	2627.9
52.5°	1753.9	1923.9	2175.9	2231.9	2331.9
55°	1521.9	1615.9	1869.9	1959.9	1999.9
57.5°	1351.9	1411.9	1591.9	1705.9	1717.9
60°	1219.9	1249.9	1385.9	1471.9	1437.9
62.5°	1098.0	1122.0	1190.0	1255.9	1211.9
65°	966.0	982.0	1030.0	1080.0	1038.0
67.5°	842.0	860.0	904.0	940.0	904.0
70°	728.0	742.0	790.0	806.0	784.0
72.5°	622.0	628.0	668.0	696.0	682.0
75°	514.0	518.0	558.0	582.0	578.0
77.5°	416.0	422.0	456.0	478.0	466.0
80°	322.0	326.0	348.0	380.0	372.0
82.5°	226.0	234.0	248.0	276.0	298.0
85°	136.0	140.0	148.0	176.0	206.0
87.5°	52.0	56.0	60.0	74.0	98.0
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	18.46	19.94	18.82	20.25	20.56	19.82	21.30	20.18	21.61	21.93
	3H	20.04	21.36	20.41	21.69	22.05	21.10	22.43	21.48	22.76	23.12
	4H	20.64	21.88	21.04	22.23	22.61	21.66	22.90	22.06	23.25	23.63
	6H	21.11	22.26	21.53	22.63	23.02	22.11	23.26	22.52	23.62	24.02
	8H	21.27	22.36	21.70	22.75	23.15	22.30	23.39	22.72	23.78	24.18
	12H	21.37	22.41	21.80	22.79	23.22	22.45	23.50	22.88	23.88	24.31
4H	2H	19.07	20.31	19.47	20.66	21.04	20.19	21.43	20.59	21.78	22.16
	3H	20.88	21.90	21.29	22.31	22.71	21.74	22.77	22.15	23.17	23.57
	4H	21.60	22.53	22.03	22.94	23.38	22.45	23.37	22.88	23.79	24.23
	6H	22.20	23.00	22.65	23.44	23.91	23.05	23.86	23.51	24.30	24.76
	8H	22.40	23.15	22.86	23.60	24.06	23.30	24.05	23.77	24.50	24.97
	12H	22.54	23.21	23.02	23.69	24.16	23.52	24.19	24.00	24.67	25.14
8H	4H	21.93	22.68	22.39	23.12	23.59	22.68	23.43	23.14	23.88	24.34
	6H	22.65	23.27	23.15	23.76	24.24	23.42	24.05	23.92	24.54	25.02
	8H	22.93	23.49	23.44	24.00	24.49	23.75	24.31	24.27	24.82	25.31
	12H	23.14	23.63	23.65	24.13	24.69	24.06	24.56	24.57	25.05	25.61
12H	4H	21.96	22.64	22.45	23.11	23.59	22.69	23.36	23.18	23.84	24.32
	6H	22.72	23.28	23.23	23.79	24.28	23.46	24.02	23.98	24.53	25.02
	8H	23.05	23.55	23.56	24.04	24.61	23.85	24.35	24.36	24.84	25.40