

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: P894813

Luminaire Tested: 8TMB-18HL-LVRF-UNV-L830

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894813
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-18HL-LVRF-UNV-L830
Description: 18000 Lumen 8FT MICROBAY LINEAR BAY with LOUVER WITH FROSTED INLAY, 80CRI, 3000K (C
Light Source: -
Ballast/Driver: -

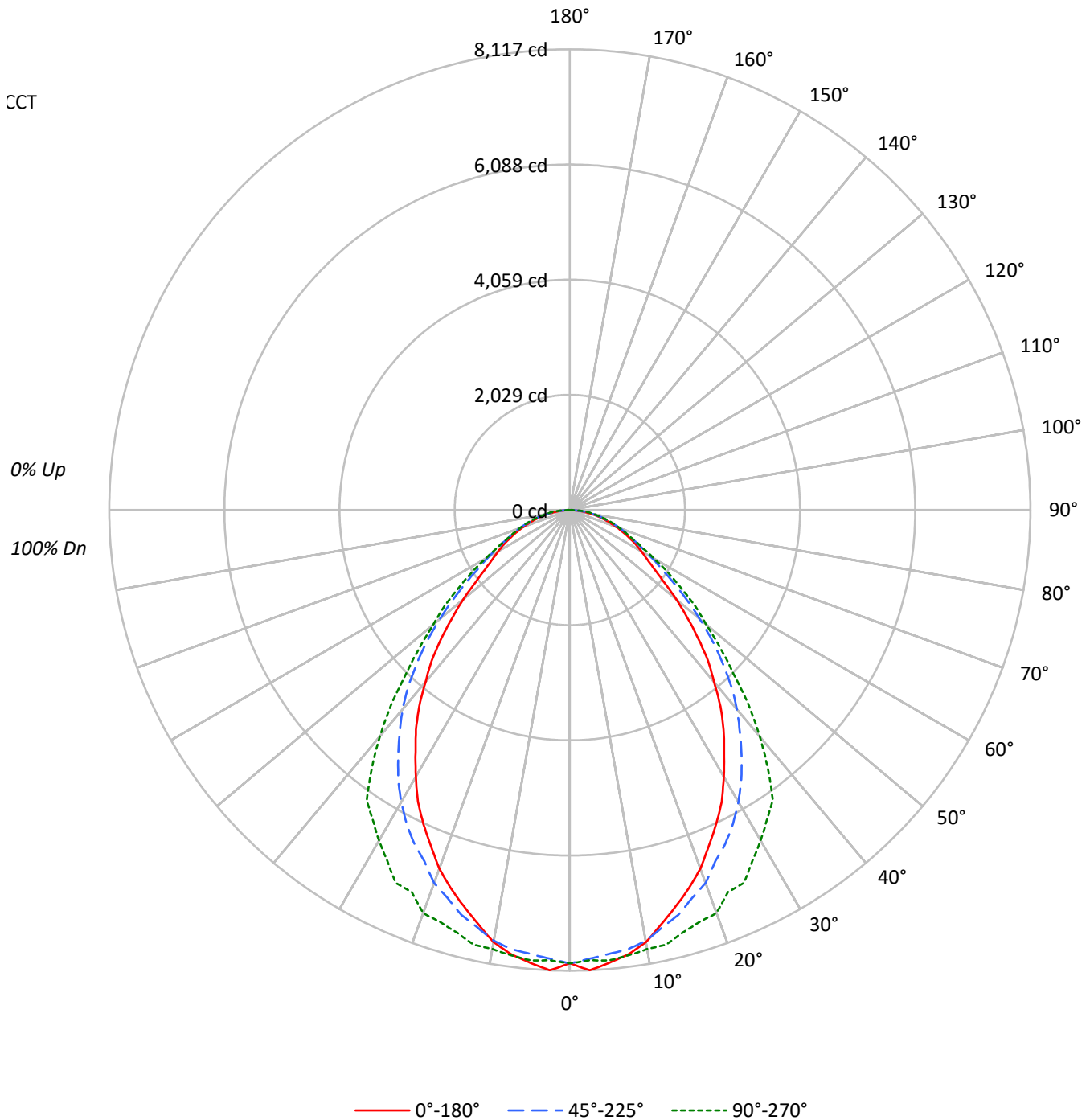
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16192.0 lumens
Efficiency: N/A
Efficacy: 120.1 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): 134.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 8.62
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	100	100	100
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87	87	87
2	102	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75	75	75
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	75	70	67	65	65	65
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	57	57	57
5	80	68	60	54	78	67	60	54	65	59	53	63	58	53	62	57	52	50	50	50
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	57	51	47	45	45	45
7	70	57	49	43	68	56	49	43	55	48	43	53	47	42	52	46	42	40	40	40
8	65	52	44	39	64	52	44	39	50	44	39	49	43	39	48	43	38	37	37	37
9	61	48	41	36	60	48	40	35	47	40	35	46	40	35	45	39	35	33	33	33
10	57	45	37	33	56	44	37	32	43	37	32	43	36	32	42	36	32	30	30	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	28335	28335	28335
5°	28520	27967	28367
10°	27852	27766	28299
15°	26537	27124	28299
20°	25385	26403	28531
25°	23899	25395	28385
30°	22233	24336	27554
35°	20475	22843	27021
40°	18312	21231	24128
45°	16053	19095	20461
50°	13547	16499	17316
55°	11239	13808	14768
60°	10334	11741	12181
65°	9681	10322	10403
70°	9015	9783	9709
75°	8412	9132	9459
80°	7854	8488	9074
85°	6607	7194	10011

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 20461 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	753.8	4.7
10°-20°	2102.6	13.0
20°-30°	3028.0	18.7
30°-40°	3343.0	20.6
40°-50°	2868.5	17.7
50°-60°	1954.1	12.1
60°-70°	1229.3	7.6
70°-80°	699.9	4.3
80°-90°	212.7	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°	5884.4	36.3
0°-40°	9227.4	57.0
0°-60°	14050.0	86.8
0°-90°	16192.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	16192.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7986	7986	7986	7986	7986	
5°	8007	7976	7852	8017	7964	756
15°	7224	7301	7384	7718	7704	2034
25°	6105	6226	6487	7009	7250	2803
35°	4727	4911	5274	5849	6238	2940
45°	3199	3412	3806	4035	4078	2465
55°	1817	1929	2232	2340	2387	1669
65°	1153	1172	1230	1289	1239	1146
75°	614	618	666	695	690	654
85°	162	167	177	210	246	187
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7985.8	7985.8	7985.8	7985.8	7985.8
2.5°	8117.2	8033.6	7914.2	8028.8	7940.5
5°	8007.3	7976.3	7852.1	8016.9	7964.4
7.5°	7895.1	7828.3	7806.8	7983.5	7914.2
10°	7730.4	7692.2	7706.5	7933.3	7854.5
12.5°	7470.2	7496.4	7529.9	7818.7	7842.6
15°	7224.3	7300.7	7384.2	7718.5	7704.1
17.5°	6983.1	7088.2	7167.0	7596.7	7608.6
20°	6722.9	6782.6	6992.7	7408.1	7556.1
22.5°	6400.6	6517.6	6699.0	7217.1	7283.9
25°	6104.6	6226.3	6486.6	7009.4	7250.5
27.5°	5794.2	5906.4	6228.7	6763.5	6968.8
30°	5426.6	5577.0	5939.8	6484.2	6725.3
32.5°	5058.9	5278.5	5627.1	6185.7	6465.1
35°	4727.0	4910.9	5273.8	5849.1	6238.3
37.5°	4359.4	4552.8	4920.4	5481.5	5729.8
40°	3953.5	4161.2	4583.8	5037.4	5209.3
42.5°	3605.0	3784.0	4209.0	4528.9	4665.0
45°	3199.1	3411.6	3805.5	4034.7	4077.7
47.5°	2807.6	3051.1	3404.4	3511.9	3595.4
50°	2454.2	2645.2	2989.0	3055.9	3137.0
52.5°	2093.7	2296.7	2597.5	2664.3	2783.7
55°	1816.8	1929.0	2232.2	2339.6	2387.4
57.5°	1613.9	1685.5	1900.4	2036.4	2050.8
60°	1456.3	1492.1	1654.5	1757.1	1716.5
62.5°	1310.7	1339.3	1420.5	1499.3	1446.8
65°	1153.1	1172.2	1229.5	1289.2	1239.1
67.5°	1005.1	1026.6	1079.1	1122.1	1079.1
70°	869.0	885.7	943.0	962.1	935.9
72.5°	742.5	749.6	797.4	830.8	814.1
75°	613.6	618.3	666.1	694.7	690.0
77.5°	496.6	503.7	544.3	570.6	556.3
80°	384.4	389.1	415.4	453.6	444.1
82.5°	269.8	279.3	296.0	329.5	355.7
85°	162.3	167.1	176.7	210.1	245.9
87.5°	62.1	66.8	71.6	88.3	117.0
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	19.07	20.55	19.44	20.87	21.18	20.43	21.91	20.80	22.23	22.54
	3H	20.65	21.98	21.03	22.31	22.67	21.72	23.04	22.10	23.37	23.74
	4H	21.26	22.50	21.66	22.85	23.23	22.27	23.51	22.67	23.86	24.24
	6H	21.73	22.88	22.14	23.24	23.63	22.73	23.87	23.14	24.24	24.63
	8H	21.88	22.98	22.31	23.37	23.77	22.91	24.00	23.34	24.39	24.79
	12H	21.98	23.03	22.41	23.41	23.84	23.07	24.11	23.50	24.49	24.92
4H	2H	19.69	20.93	20.09	21.28	21.66	20.80	22.04	21.20	22.39	22.77
	3H	21.49	22.52	21.90	22.92	23.32	22.36	23.39	22.77	23.79	24.19
	4H	22.21	23.14	22.65	23.56	24.00	23.06	23.99	23.49	24.40	24.84
	6H	22.81	23.62	23.27	24.06	24.52	23.67	24.47	24.13	24.92	25.38
	8H	23.01	23.77	23.48	24.21	24.68	23.92	24.67	24.38	25.11	25.58
	12H	23.15	23.82	23.64	24.30	24.77	24.13	24.80	24.61	25.28	25.75
8H	4H	22.54	23.29	23.00	23.74	24.21	23.29	24.05	23.76	24.49	24.96
	6H	23.26	23.89	23.76	24.38	24.86	24.04	24.66	24.54	25.15	25.63
	8H	23.54	24.10	24.06	24.61	25.10	24.37	24.93	24.88	25.44	25.93
	12H	23.75	24.25	24.26	24.74	25.31	24.68	25.17	25.19	25.66	26.23
12H	4H	22.58	23.25	23.06	23.73	24.20	23.31	23.98	23.79	24.46	24.93
	6H	23.33	23.89	23.85	24.40	24.89	24.08	24.64	24.59	25.15	25.64
	8H	23.67	24.16	24.18	24.66	25.22	24.46	24.96	24.98	25.45	26.02