

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: P894797

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

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894797
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2407-175-6)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 8TMB-18HL-LVR-UNV-L830
Description: 18000 Lumen 8FT MICROBAY LINEAR BAY with LOUVER, 80CRI, 3000K CCT
Light Source: -
Ballast/Driver: -

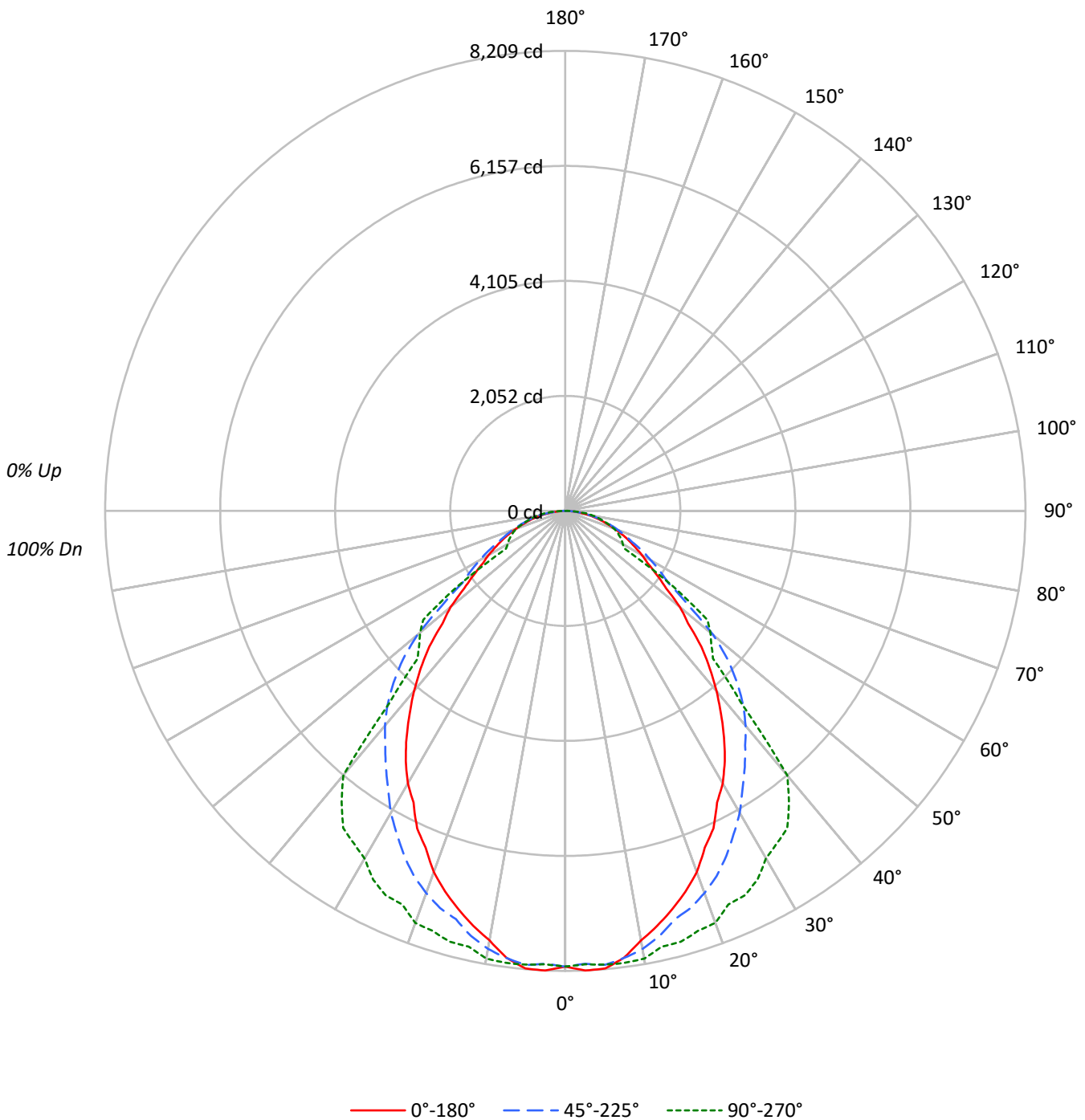
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17019.0 lumens
Efficiency: N/A
Efficacy: 126.3 lumens/watt
Spacing Criteria (0/90/45): 1.05 / 1.32 / 1.26
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 (A_{in}): 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	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	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	89	89	89	87
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	77	77	77	75
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	75	70	67	67	67	67	65
4	86	76	68	62	84	74	67	61	72	66	60	70	64	60	68	63	59	59	59	59	57
5	80	68	60	54	78	67	60	54	65	59	53	63	57	53	62	56	52	52	52	52	50
6	74	62	54	48	73	61	54	48	60	53	48	58	52	47	56	51	47	47	47	47	45
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	42	42	42	40
8	65	52	44	39	63	52	44	39	50	43	39	49	43	38	48	42	38	38	38	38	36
9	61	48	41	35	59	48	40	35	47	40	35	46	39	35	45	39	35	35	35	35	33
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32	32	32	32	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	28848	28848	28848
5°	29197	28967	28950
10°	28046	28596	29224
15°	27041	27708	29243
20°	25903	27400	29537
25°	24473	26595	29643
30°	23000	25485	29339
35°	21389	24171	29911
40°	19432	23170	28523
45°	17218	21747	18703
50°	14736	19006	18664
55°	12348	13870	14520
60°	11234	12522	8405
65°	10525	11086	8981
70°	9685	10503	9612
75°	9100	9853	9788
80°	8490	9319	10490
85°	7291	7776	11179

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 21747 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	772.6	4.5
10°-20°	2161.7	12.7
20°-30°	3150.5	18.5
30°-40°	3604.2	21.2
40°-50°	3083.2	18.1
50°-60°	2033.2	11.9
60°-70°	1229.2	7.2
70°-80°	752.0	4.4
80°-90°	232.3	1.4
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°	6084.9	35.8
0°-40°	9689.1	56.9
0°-60°	14805.5	87.0
0°-90°	17019.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	17019.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8130	8130	8130	8130	8130	
5°	8197	8190	8133	8116	8128	768
15°	7362	7448	7543	8026	7961	2069
25°	6251	6347	6793	7374	7572	2860
35°	4938	5186	5580	6457	6906	3076
45°	3431	3696	4334	4050	3727	2627
55°	1996	2108	2242	2658	2347	1816
65°	1254	1285	1320	1180	1070	1239
75°	664	680	719	752	714	701
85°	179	177	191	227	275	203
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	8130.5	8130.5	8130.5	8130.5	8130.5
2.5°	8209.3	8185.4	8087.5	8180.7	8097.1
5°	8197.4	8190.2	8132.9	8116.2	8128.1
7.5°	8039.8	8056.5	8047.0	8226.0	8135.3
10°	7784.3	7817.7	7937.1	8187.8	8111.4
12.5°	7583.7	7610.0	7770.0	8142.5	7963.4
15°	7361.6	7447.6	7543.1	8025.5	7961.0
17.5°	7122.9	7204.1	7430.9	7867.9	7860.7
20°	6860.2	7010.6	7256.6	7662.5	7822.5
22.5°	6504.4	6707.4	7053.6	7569.4	7600.4
25°	6251.3	6346.8	6793.3	7373.6	7571.8
27.5°	5866.9	6048.3	6504.4	7091.8	7419.0
30°	5613.8	5764.2	6220.3	6927.1	7161.1
32.5°	5296.2	5475.3	5883.6	6748.0	7029.7
35°	4938.0	5186.3	5580.3	6456.7	6905.6
37.5°	4560.7	4806.7	5272.3	6215.5	6554.6
40°	4195.4	4405.5	5002.5	5926.6	6158.2
42.5°	3820.5	4047.4	4694.5	5355.9	4632.4
45°	3431.3	3696.3	4333.9	4049.7	3727.4
47.5°	2970.4	3295.2	3935.1	3254.6	3531.6
50°	2669.6	2846.3	3443.2	3068.3	3381.2
52.5°	2270.8	2509.6	2765.1	2865.4	3194.9
55°	1996.2	2108.4	2242.2	2657.6	2347.2
57.5°	1743.1	1843.4	1998.6	1874.4	1251.2
60°	1583.1	1628.5	1764.6	1339.6	1184.4
62.5°	1401.7	1447.0	1547.3	1251.2	1136.6
65°	1253.6	1284.6	1320.5	1179.6	1069.7
67.5°	1096.0	1112.7	1150.9	1088.8	1005.3
70°	933.6	957.5	1012.4	995.7	926.5
72.5°	790.4	811.9	859.6	883.5	819.0
75°	663.8	680.5	718.7	752.2	714.0
77.5°	527.7	544.4	594.6	630.4	613.7
80°	415.5	417.9	456.1	491.9	513.4
82.5°	291.3	296.1	324.7	362.9	405.9
85°	179.1	176.7	191.0	226.8	274.6
87.5°	69.2	66.9	78.8	95.5	140.9
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	19.51	20.99	19.87	21.30	21.61	19.18	20.66	19.55	20.98	21.29
	3H	21.07	22.39	21.45	22.72	23.08	20.80	22.13	21.18	22.45	22.82
	4H	21.67	22.91	22.07	23.26	23.64	21.55	22.79	21.95	23.14	23.52
	6H	22.12	23.27	22.54	23.64	24.03	22.22	23.36	22.63	23.73	24.12
	8H	22.28	23.37	22.70	23.76	24.16	22.50	23.59	22.92	23.98	24.38
	12H	22.37	23.42	22.81	23.80	24.23	22.72	23.76	23.15	24.14	24.57
4H	2H	20.10	21.34	20.50	21.69	22.07	19.85	21.09	20.25	21.44	21.82
	3H	21.89	22.92	22.30	23.32	23.72	21.73	22.76	22.14	23.16	23.56
	4H	22.62	23.54	23.05	23.96	24.40	22.63	23.55	23.06	23.97	24.41
	6H	23.20	24.00	23.66	24.45	24.91	23.43	24.24	23.89	24.68	25.14
	8H	23.40	24.15	23.86	24.59	25.06	23.76	24.51	24.23	24.96	25.43
	12H	23.53	24.21	24.02	24.69	25.16	24.03	24.71	24.52	25.19	25.66
8H	4H	22.94	23.69	23.40	24.13	24.60	22.95	23.70	23.41	24.14	24.61
	6H	23.65	24.27	24.15	24.76	25.24	23.90	24.52	24.39	25.01	25.49
	8H	23.92	24.48	24.43	24.99	25.48	24.31	24.87	24.83	25.39	25.87
	12H	24.13	24.62	24.64	25.12	25.68	24.68	25.18	25.19	25.67	26.24
12H	4H	22.98	23.65	23.46	24.13	24.60	22.97	23.65	23.46	24.12	24.60
	6H	23.72	24.28	24.23	24.79	25.28	23.95	24.51	24.46	25.02	25.51
	8H	24.05	24.54	24.56	25.04	25.60	24.43	24.93	24.94	25.42	25.98