

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: P894805

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

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894805
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-077-26)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 8TMB-18HL-LVRA-UNV-L830
Description: 18000 Lumen 8FT MICROBAY LINEAR BAY with LOUVER WITH AISLE OPTIC, 80CRI, 3000K CCT
Light Source: -
Ballast/Driver: -

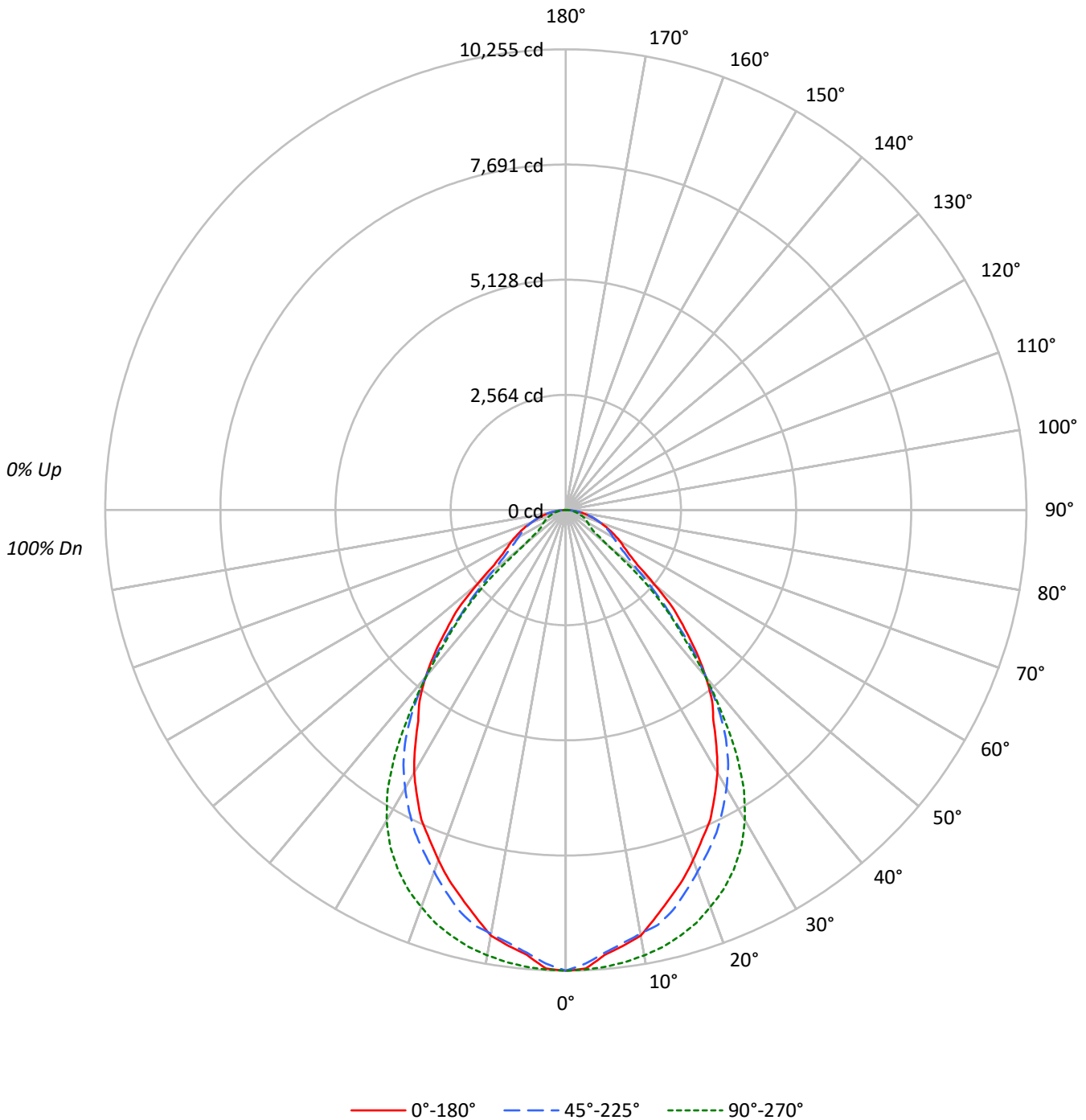
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16643.0 lumens
Efficiency: N/A
Efficacy: 123.5 lumens/watt
Spacing Criteria (0/90/45): 1.02 / 1.16 / 1.12
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	102	102	100
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	90	90	88
2	103	96	91	86	101	95	90	85	91	87	83	88	85	82	85	82	80	80	80	78
3	96	87	80	75	94	86	80	75	83	78	73	80	76	72	78	74	71	71	71	69
4	89	79	72	66	87	78	71	66	76	70	65	73	68	64	71	67	63	63	63	62
5	83	72	65	59	81	71	64	59	69	63	58	67	62	58	66	61	57	57	57	55
6	78	66	59	53	76	65	58	53	64	57	53	62	57	52	61	56	52	52	52	50
7	73	61	54	48	71	60	53	48	59	52	48	58	52	47	56	51	47	47	47	45
8	68	57	49	44	67	56	49	44	55	48	44	53	48	43	52	47	43	43	43	41
9	64	52	45	40	63	52	45	40	51	44	40	50	44	40	49	44	40	40	40	38
10	61	49	42	37	60	48	42	37	47	41	37	47	41	37	46	40	37	37	37	35

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	36385	36385	36385
5°	35404	35244	36345
10°	34652	34499	36261
15°	32863	33873	36057
20°	31306	32363	35507
25°	29779	31051	34601
30°	27666	29312	32669
35°	24808	26937	28654
40°	22476	22525	22402
45°	18792	16644	16233
50°	14195	11715	6638
55°	10676	9368	4185
60°	9921	8628	4032
65°	9231	8610	4038
70°	8444	8444	3975
75°	8007	8225	3841
80°	7399	7777	3942
85°	6457	6778	4303

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 19230 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	947.3	5.7
10°-20°	2610.1	15.7
20°-30°	3701.1	22.2
30°-40°	3812.9	22.9
40°-50°	2663.2	16.0
50°-60°	1277.9	7.7
60°-70°	896.5	5.4
70°-80°	560.6	3.4
80°-90°	173.4	1.0
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°	7258.4	43.6
0°-40°	11071.4	66.5
0°-60°	15012.5	90.2
0°-90°	16643.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	16643.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	10255	10255	10255	10255	10255	
5°	9940	9927	9895	10154	10204	941
15°	8946	9012	9221	9486	9816	2519
25°	7606	7683	7932	8468	8838	3478
35°	5727	5883	6219	6348	6615	3609
45°	3745	3832	3317	3148	3235	2885
55°	1726	1641	1514	970	677	1617
65°	1100	1028	1026	780	481	1089
75°	584	576	600	518	280	615
85°	159	159	166	164	106	177
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	10254.7	10254.7	10254.7	10254.7	10254.7
2.5°	10215.1	10183.3	10106.7	10246.8	10236.2
5°	9940.2	9927.0	9895.3	10154.3	10204.5
7.5°	9784.3	9757.8	9720.8	10006.3	10146.3
10°	9617.8	9649.5	9575.5	9837.1	10064.4
12.5°	9274.2	9358.7	9459.2	9662.7	9964.0
15°	8946.4	9012.5	9221.3	9485.6	9816.0
17.5°	8639.9	8716.5	8896.2	9292.7	9644.2
20°	8291.0	8396.7	8571.1	9078.6	9403.7
22.5°	7931.5	8029.3	8248.7	8793.1	9155.2
25°	7606.5	7683.1	7931.5	8468.1	8838.1
27.5°	7175.7	7318.4	7553.6	8071.6	8460.1
30°	6752.8	6874.4	7154.5	7590.6	7973.8
32.5°	6242.7	6419.8	6729.0	7062.0	7381.8
35°	5727.3	5883.2	6218.9	6348.4	6615.3
37.5°	5352.0	5394.3	5584.6	5568.7	5719.4
40°	4852.5	4937.1	4863.1	4664.8	4836.6
42.5°	4313.3	4413.8	4115.1	3885.2	3945.9
45°	3745.1	3832.3	3316.9	3147.8	3235.0
47.5°	3253.5	3245.6	2674.7	2561.0	2439.5
50°	2571.6	2656.2	2122.3	1910.9	1202.5
52.5°	2008.7	2040.4	1749.6	1221.1	790.2
55°	1725.9	1641.3	1514.4	970.0	676.6
57.5°	1532.9	1427.2	1342.6	901.3	618.5
60°	1398.1	1279.2	1215.8	856.3	568.2
62.5°	1244.8	1152.3	1128.5	816.7	523.3
65°	1099.5	1028.1	1025.5	779.7	481.0
67.5°	954.1	914.5	925.0	734.7	433.4
70°	814.0	806.1	814.0	676.6	383.2
72.5°	695.1	687.2	708.3	602.6	327.7
75°	584.1	576.2	600.0	518.0	280.2
77.5°	465.2	470.4	486.3	430.8	235.2
80°	362.1	362.1	380.6	338.3	192.9
82.5°	259.0	261.7	272.2	248.4	150.6
85°	158.6	158.6	166.5	163.9	105.7
87.5°	52.9	60.8	71.4	76.6	52.9
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	18.13	19.49	18.50	19.80	20.12	14.47	15.82	14.83	16.13	16.45
	3H	19.87	21.08	20.25	21.41	21.77	16.44	17.65	16.82	17.98	18.34
	4H	20.54	21.67	20.95	22.02	22.40	17.15	18.27	17.55	18.62	19.01
	6H	21.05	22.09	21.47	22.46	22.85	17.67	18.71	18.08	19.08	19.47
	8H	21.22	22.21	21.65	22.60	23.00	17.85	18.84	18.28	19.23	19.64
	12H	21.33	22.27	21.76	22.66	23.09	17.99	18.94	18.43	19.32	19.75
4H	2H	18.66	19.79	19.07	20.14	20.52	16.09	17.22	16.49	17.57	17.95
	3H	20.64	21.57	21.05	21.98	22.38	18.27	19.20	18.68	19.60	20.00
	4H	21.44	22.28	21.88	22.70	23.14	19.15	19.98	19.58	20.40	20.84
	6H	22.09	22.81	22.55	23.26	23.72	19.79	20.51	20.25	20.96	21.42
	8H	22.31	22.98	22.77	23.43	23.90	20.00	20.67	20.47	21.12	21.59
	12H	22.46	23.06	22.95	23.54	24.02	20.16	20.76	20.64	21.24	21.71
8H	4H	21.73	22.40	22.20	22.85	23.32	19.80	20.47	20.26	20.92	21.39
	6H	22.51	23.07	23.01	23.56	24.04	20.66	21.21	21.16	21.71	22.19
	8H	22.81	23.31	23.33	23.83	24.32	20.98	21.48	21.50	22.00	22.49
	12H	23.05	23.49	23.56	23.98	24.55	21.25	21.69	21.76	22.18	22.75
12H	4H	21.74	22.35	22.23	22.83	23.30	19.87	20.47	20.35	20.95	21.42
	6H	22.56	23.06	23.08	23.58	24.07	20.79	21.29	21.31	21.81	22.30
	8H	22.93	23.37	23.44	23.86	24.43	21.21	21.65	21.72	22.14	22.71