

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: P894905

Luminaire Tested: 8TMB-20HL-LVRA-UNV-L930

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894905
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-20HL-LVRA-UNV-L930
Description: 20000 Lumen 8FT MICROBAY LINEAR BAY with LOUVER WITH AISLE OPTIC, 90CRI, 3000K CCT
Light Source: -
Ballast/Driver: -

Summary

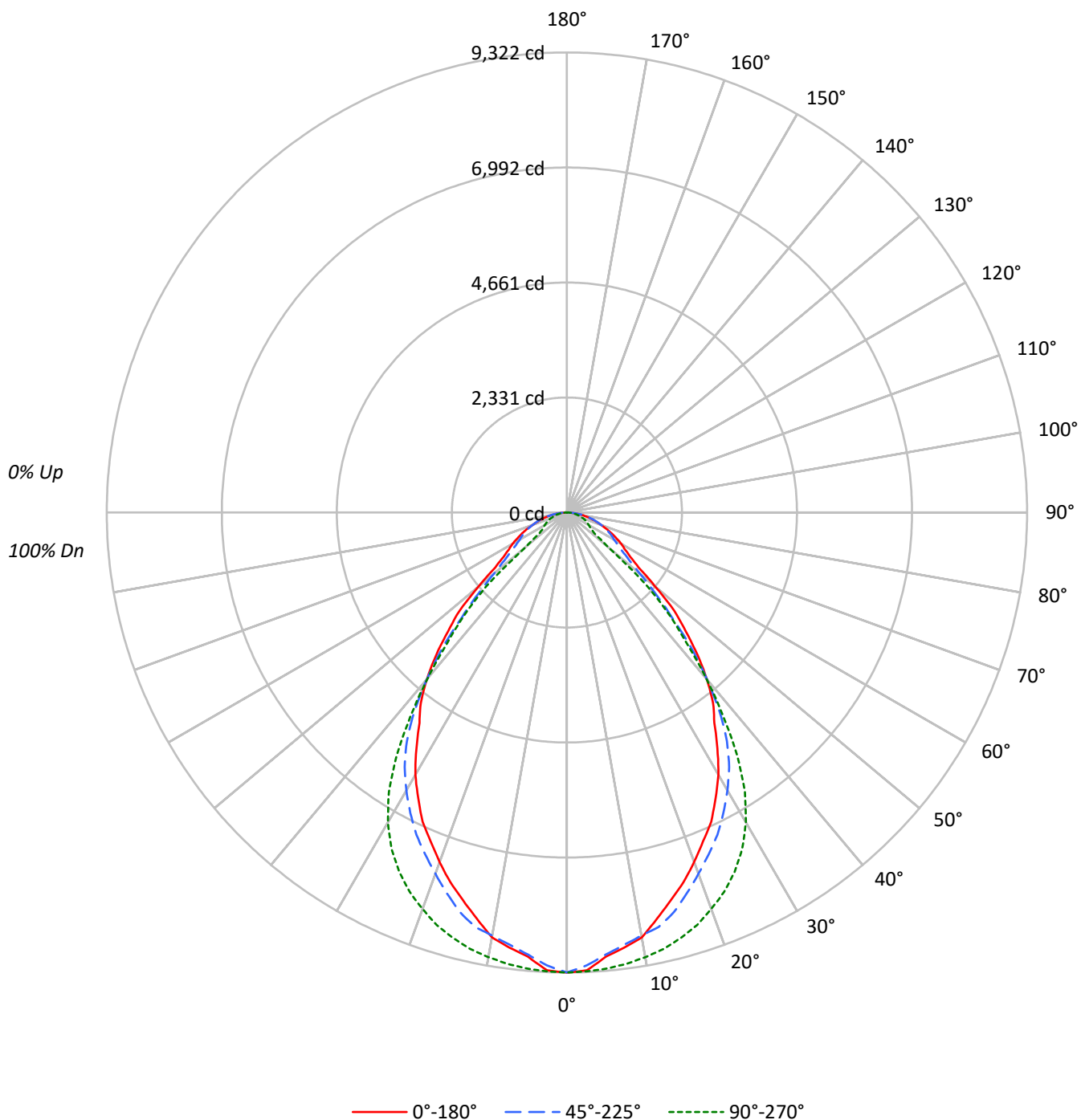
Lumens per Lamp: N/A
Luminaire Lumens: 15129.1 lumens
Efficiency: N/A
Efficacy: 104.3 lumens/watt
Spacing Criteria (0/90/45): 1.02 / 1.16 / 1.12
Luminous Opening: Rectangular (W 0.38' x L: 7.98' x H: 0')
CIE Type: Direct

Input Watts (W): 145
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: 0.997
Total Harmonic Distortion (THDi): 7.79
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
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	111	107	104	101	108	105	102	99	101	98	96		97	95	93		93
2	103	96	91	86	101	95	90	85	91	87	83		88	85	82		85
3	96	87	80	75	94	86	80	75	83	78	73		80	76	72		78
4	89	79	72	66	87	78	71	66	76	70	65		73	68	64		71
5	83	72	65	59	81	71	64	59	69	63	58		67	62	58		66
6	78	66	59	53	76	65	58	53	64	57	53		62	57	52		61
7	73	61	54	48	71	60	53	48	59	52	48		58	52	47		56
8	68	57	49	44	67	56	49	44	55	48	44		53	48	43		52
9	64	52	45	40	63	52	45	40	51	44	40		50	44	40		49
10	61	49	42	37	60	48	42	37	47	41	37		47	41	37		46

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	33075	33075	33075
5°	32183	32038	33039
10°	31499	31361	32962
15°	29873	30791	32777
20°	28458	29419	32277
25°	27070	28227	31453
30°	25150	26646	29697
35°	22551	24487	26048
40°	20431	20476	20364
45°	17083	15130	14756
50°	12904	10649	6034
55°	9705	8516	3804
60°	9019	7843	3665
65°	8391	7826	3671
70°	7677	7677	3614
75°	7279	7477	3492
80°	6724	7070	3584
85°	5870	6164	3912

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°

Vertical Angle: 45°

Luminance: 17481 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	861.1	5.7
10°-20°	2372.6	15.7
20°-30°	3364.4	22.2
30°-40°	3466.1	22.9
40°-50°	2421.0	16.0
50°-60°	1161.7	7.7
60°-70°	815.0	5.4
70°-80°	509.6	3.4
80°-90°	157.6	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°	6598.1	43.6
0°-40°	10064.2	66.5
0°-60°	13646.9	90.2
0°-90°	15129.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	15129.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	9322	9322	9322	9322	9322	
5°	9036	9024	8995	9231	9276	855
15°	8133	8193	8382	8623	8923	2290
25°	6914	6984	7210	7698	8034	3162
35°	5206	5348	5653	5771	6014	3281
45°	3404	3484	3015	2861	2941	2623
55°	1569	1492	1377	882	615	1470
65°	1000	935	932	709	437	990
75°	531	524	545	471	255	559
85°	144	144	151	149	96	161
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	9321.8	9321.8	9321.8	9321.8	9321.8
2.5°	9285.8	9257.0	9187.3	9314.6	9305.0
5°	9035.9	9023.9	8995.1	9230.6	9276.2
7.5°	8894.2	8870.2	8836.5	9096.0	9223.3
10°	8742.8	8771.7	8704.4	8942.2	9148.9
12.5°	8430.5	8507.4	8598.7	8783.7	9057.6
15°	8132.6	8192.7	8382.5	8622.7	8923.0
17.5°	7853.9	7923.6	8086.9	8447.3	8766.9
20°	7536.8	7632.9	7791.4	8252.7	8548.2
22.5°	7210.0	7298.9	7498.3	7993.2	8322.4
25°	6914.5	6984.2	7210.0	7697.7	8034.1
27.5°	6522.9	6652.6	6866.5	7337.4	7690.5
30°	6138.5	6249.0	6503.7	6900.1	7248.5
32.5°	5674.8	5835.8	6116.9	6419.6	6710.3
35°	5206.3	5348.0	5653.2	5770.9	6013.6
37.5°	4865.1	4903.6	5076.6	5062.1	5199.1
40°	4411.1	4487.9	4420.7	4240.5	4396.6
42.5°	3920.9	4012.2	3740.8	3531.7	3587.0
45°	3404.4	3483.7	3015.2	2861.4	2940.7
47.5°	2957.5	2950.3	2431.4	2328.1	2217.5
50°	2337.7	2414.6	1929.2	1737.0	1093.2
52.5°	1825.9	1854.8	1590.5	1110.0	718.4
55°	1568.9	1492.0	1376.7	881.7	615.0
57.5°	1393.5	1297.4	1220.5	819.3	562.2
60°	1270.9	1162.8	1105.2	778.4	516.5
62.5°	1131.6	1047.5	1025.9	742.4	475.7
65°	999.5	934.6	932.2	708.7	437.3
67.5°	867.3	831.3	840.9	667.9	394.0
70°	740.0	732.8	740.0	615.0	348.4
72.5°	631.9	624.7	643.9	547.8	297.9
75°	531.0	523.8	545.4	470.9	254.7
77.5°	422.8	427.7	442.1	391.6	213.8
80°	329.1	329.1	346.0	307.5	175.4
82.5°	235.4	237.9	247.5	225.8	136.9
85°	144.2	144.2	151.4	149.0	96.1
87.5°	48.1	55.3	64.9	69.7	48.1
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	17.80	19.16	18.17	19.47	19.78	14.14	15.49	14.50	15.80	16.12
	3H	19.54	20.75	19.92	21.08	21.44	16.11	17.32	16.49	17.65	18.01
	4H	20.21	21.34	20.61	21.69	22.07	16.82	17.94	17.22	18.29	18.68
	6H	20.72	21.76	21.13	22.13	22.52	17.34	18.38	17.75	18.75	19.14
	8H	20.89	21.88	21.32	22.27	22.67	17.52	18.51	17.95	18.90	19.30
	12H	21.00	21.94	21.43	22.33	22.76	17.66	18.61	18.09	18.99	19.42
4H	2H	18.33	19.46	18.74	19.81	20.19	15.76	16.88	16.16	17.24	17.62
	3H	20.31	21.24	20.72	21.64	22.05	17.94	18.87	18.35	19.27	19.67
	4H	21.11	21.95	21.55	22.37	22.81	18.82	19.65	19.25	20.07	20.51
	6H	21.76	22.48	22.22	22.93	23.39	19.46	20.18	19.92	20.63	21.09
	8H	21.98	22.65	22.44	23.10	23.57	19.67	20.34	20.13	20.79	21.26
	12H	22.13	22.73	22.61	23.21	23.68	19.82	20.42	20.31	20.91	21.38
8H	4H	21.40	22.07	21.86	22.52	22.99	19.46	20.14	19.93	20.59	21.06
	6H	22.18	22.74	22.68	23.23	23.71	20.33	20.88	20.83	21.38	21.86
	8H	22.48	22.98	23.00	23.49	23.99	20.65	21.15	21.17	21.67	22.16
	12H	22.72	23.16	23.23	23.65	24.22	20.92	21.36	21.43	21.85	22.42
12H	4H	21.41	22.01	21.90	22.50	22.97	19.54	20.14	20.02	20.62	21.09
	6H	22.23	22.73	22.75	23.25	23.74	20.46	20.96	20.98	21.48	21.97
	8H	22.60	23.04	23.11	23.53	24.10	20.88	21.32	21.39	21.81	22.38