

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: P894893

Luminaire Tested: 8TMB-20HL-LVR-UNV-L830

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894893
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-20HL-LVR-UNV-L830
Description: 20000 Lumen 8FT MICROBAY LINEAR BAY with LOUVER, 80CRI, 3000K CCT
Light Source: -
Ballast/Driver: -

Summary

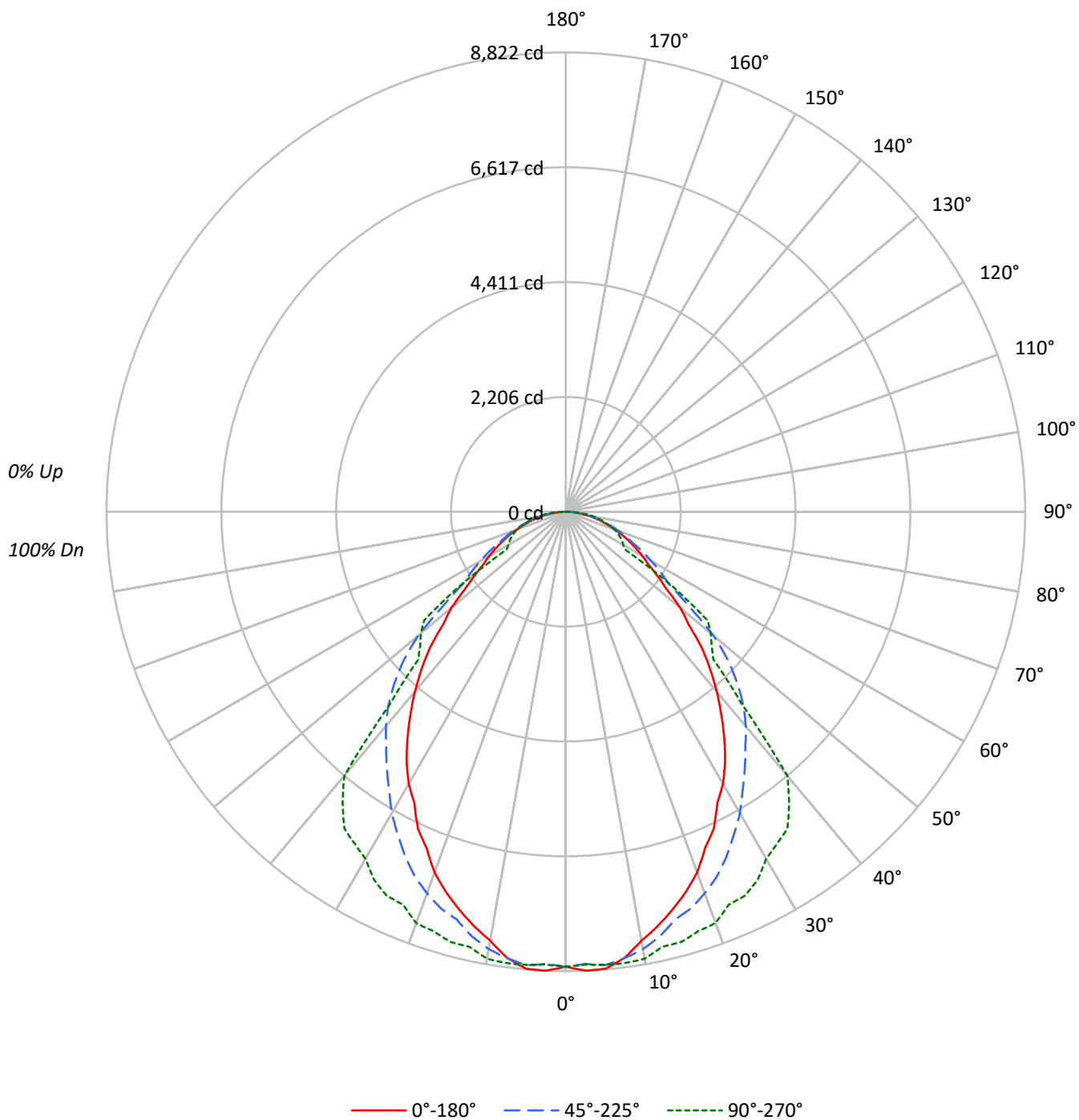
Lumens per Lamp: N/A
Luminaire Lumens: 18289.0 lumens
Efficiency: N/A
Efficacy: 126.1 lumens/watt
Spacing Criteria (0/90/45): 1.05 / 1.32 / 1.26
Luminous Opening: Rectangular (W 0.38' x L: 7.98' x H: 0')
CIE Type: Direct

Input Watts (W): 145
Input Voltage (V): 120
Input Current (A_{in}): 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	110	106	102	99	108	104	100	97	100	97	94		96	93	91		92
2	101	94	88	83	99	92	87	82	89	84	80		86	82	78		83
3	94	84	77	71	91	83	76	70	80	74	69		77	72	68		75
4	86	76	68	62	84	74	67	61	72	66	60		70	64	60		68
5	80	68	60	54	78	67	60	54	65	59	53		63	57	53		62
6	74	62	54	48	73	61	54	48	60	53	48		58	52	47		56
7	69	57	49	43	68	56	48	43	55	48	43		53	47	42		52
8	65	52	44	39	63	52	44	39	50	43	39		49	43	38		48
9	61	48	41	35	59	48	40	35	47	40	35		46	39	35		45
10	57	45	37	32	56	44	37	32	43	37	32		42	36	32		42

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	31001	31001	31001
5°	31375	31128	31110
10°	30139	30730	31405
15°	29059	29776	31425
20°	27836	29444	31741
25°	26300	28580	31855
30°	24716	27386	31528
35°	22985	25975	32143
40°	20882	24899	30652
45°	18502	23369	20099
50°	15836	20425	20057
55°	13270	14905	15604
60°	12073	13457	9031
65°	11311	11913	9652
70°	10408	11287	10328
75°	9779	10589	10518
80°	9123	10014	11273
85°	7837	8358	12014

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°

Vertical Angle: 45°

Luminance: 23369 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	830.3	4.5
10°-20°	2323.0	12.7
20°-30°	3385.6	18.5
30°-40°	3873.2	21.2
40°-50°	3313.3	18.1
50°-60°	2185.0	11.9
60°-70°	1320.9	7.2
70°-80°	808.1	4.4
80°-90°	249.6	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°	6538.9	35.8
0°-40°	10412.1	56.9
0°-60°	15910.4	87.0
0°-90°	18289.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	18289.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8737	8737	8737	8737	8737	
5°	8809	8801	8740	8722	8735	826
15°	7911	8003	8106	8624	8555	2224
25°	6718	6820	7300	7924	8137	3073
35°	5306	5573	5997	6938	7421	3306
45°	3687	3972	4657	4352	4006	2823
55°	2145	2266	2410	2856	2522	1951
65°	1347	1380	1419	1268	1150	1332
75°	713	731	772	808	767	753
85°	192	190	205	244	295	218
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	8737.2	8737.2	8737.2	8737.2	8737.2
2.5°	8821.9	8796.3	8691.1	8791.1	8701.3
5°	8809.1	8801.4	8739.8	8721.8	8734.7
7.5°	8639.7	8657.7	8647.4	8839.9	8742.4
10°	8365.2	8401.1	8529.4	8798.8	8716.7
12.5°	8149.6	8177.9	8349.8	8750.1	8557.6
15°	7911.0	8003.4	8106.0	8624.3	8555.1
17.5°	7654.4	7741.6	7985.4	8455.0	8447.3
20°	7372.1	7533.8	7798.1	8234.3	8406.2
22.5°	6989.8	7207.9	7580.0	8134.2	8167.6
25°	6717.8	6820.4	7300.3	7923.8	8136.8
27.5°	6304.7	6499.7	6989.8	7621.0	7972.6
30°	6032.7	6194.3	6684.4	7444.0	7695.4
32.5°	5691.4	5883.8	6322.6	7251.5	7554.3
35°	5306.5	5573.4	5996.8	6938.5	7420.9
37.5°	4901.1	5165.4	5665.7	6679.3	7043.7
40°	4508.5	4734.3	5375.8	6368.8	6617.7
42.5°	4105.6	4349.4	5044.8	5755.5	4978.0
45°	3687.3	3972.2	4657.3	4351.9	4005.5
47.5°	3192.1	3541.1	4228.8	3497.5	3795.1
50°	2868.8	3058.7	3700.2	3297.3	3633.5
52.5°	2440.3	2696.9	2971.4	3079.2	3433.3
55°	2145.2	2265.8	2409.5	2856.0	2522.4
57.5°	1873.2	1981.0	2147.7	2014.3	1344.6
60°	1701.3	1750.0	1896.3	1439.5	1272.7
62.5°	1506.2	1555.0	1662.8	1344.6	1221.4
65°	1347.2	1380.5	1419.0	1267.6	1149.6
67.5°	1177.8	1195.8	1236.8	1170.1	1080.3
70°	1003.3	1029.0	1088.0	1070.0	995.6
72.5°	849.3	872.4	923.8	949.4	880.1
75°	713.3	731.3	772.4	808.3	767.2
77.5°	567.1	585.0	638.9	677.4	659.5
80°	446.5	449.1	490.1	528.6	551.7
82.5°	313.1	318.2	349.0	390.0	436.2
85°	192.5	189.9	205.3	243.8	295.1
87.5°	74.4	71.8	84.7	102.6	151.4
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	19.76	21.24	20.12	21.55	21.86	19.43	20.91	19.80	21.23	21.54
	3H	21.32	22.64	21.70	22.97	23.33	21.05	22.38	21.43	22.70	23.07
	4H	21.92	23.16	22.32	23.51	23.89	21.80	23.04	22.20	23.39	23.77
	6H	22.37	23.52	22.79	23.89	24.28	22.47	23.61	22.88	23.98	24.37
	8H	22.53	23.62	22.95	24.01	24.41	22.75	23.84	23.17	24.23	24.63
	12H	22.63	23.67	23.06	24.05	24.48	22.97	24.01	23.40	24.39	24.82
4H	2H	20.35	21.59	20.75	21.94	22.32	20.10	21.34	20.50	21.69	22.07
	3H	22.14	23.17	22.55	23.57	23.97	21.98	23.01	22.39	23.41	23.81
	4H	22.87	23.79	23.30	24.21	24.65	22.88	23.80	23.31	24.22	24.66
	6H	23.45	24.25	23.91	24.70	25.16	23.68	24.49	24.14	24.93	25.39
	8H	23.65	24.40	24.11	24.84	25.31	24.01	24.76	24.48	25.21	25.68
	12H	23.78	24.46	24.27	24.94	25.41	24.28	24.96	24.77	25.44	25.91
8H	4H	23.19	23.94	23.65	24.39	24.85	23.20	23.95	23.66	24.39	24.86
	6H	23.90	24.52	24.40	25.01	25.49	24.15	24.77	24.64	25.26	25.74
	8H	24.17	24.73	24.68	25.24	25.73	24.56	25.12	25.08	25.64	26.12
	12H	24.38	24.87	24.89	25.37	25.93	24.93	25.43	25.44	25.92	26.49
12H	4H	23.23	23.90	23.71	24.38	24.85	23.22	23.90	23.71	24.37	24.85
	6H	23.97	24.53	24.48	25.04	25.53	24.20	24.76	24.71	25.27	25.76
	8H	24.30	24.79	24.81	25.29	25.85	24.68	25.18	25.19	25.67	26.23