

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: P894906

Luminaire Tested: 8TMB-20HL-LVRA-UNV-L935

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894906
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-L935
Description: 20000 Lumen 8FT MICROBAY LINEAR BAY with LOUVER WITH AISLE OPTIC, 90CRI, 3500K CCT
Light Source: -
Ballast/Driver: -

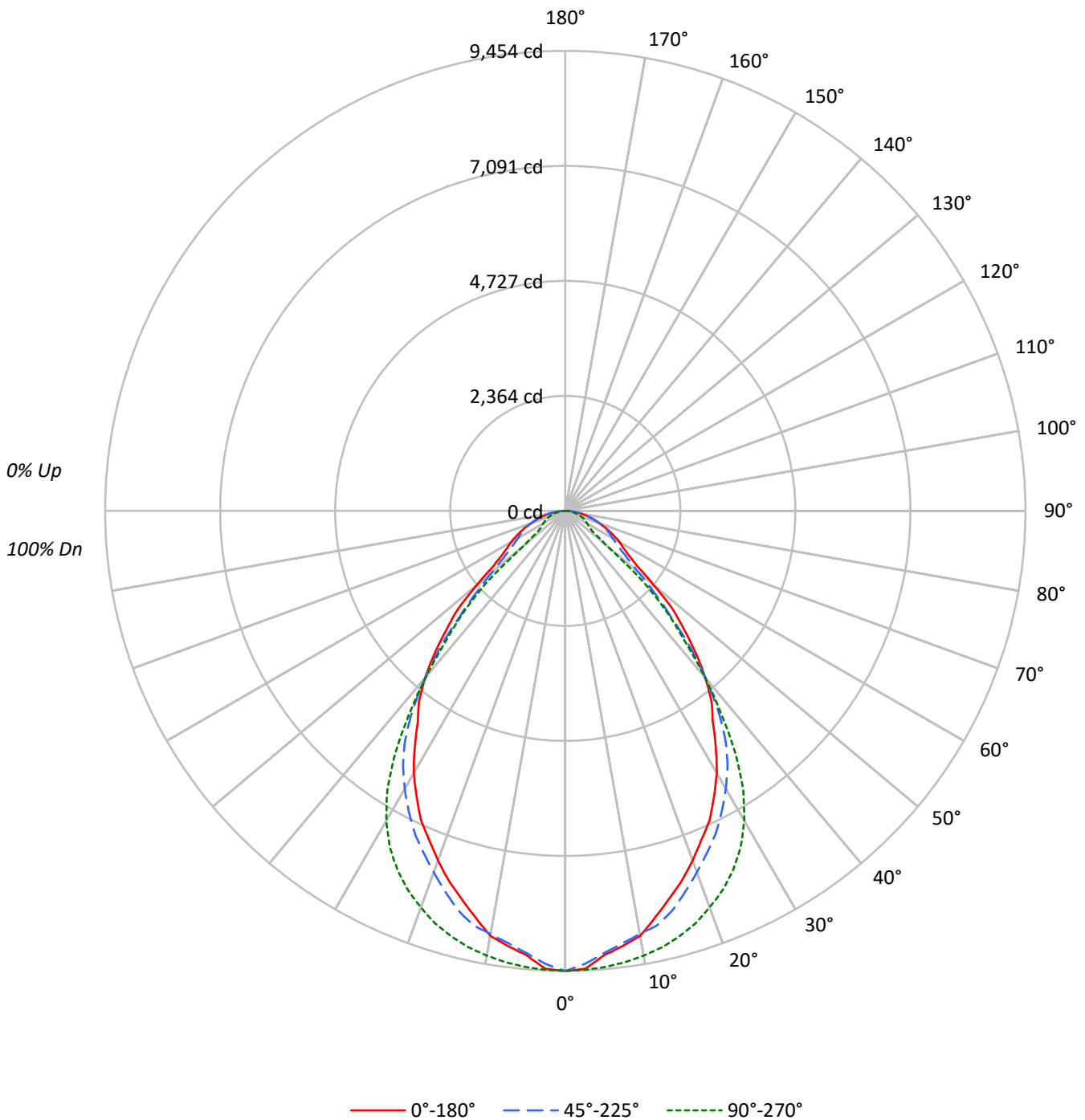
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15344.0 lumens
Efficiency: N/A
Efficacy: 105.8 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 (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			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	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	93	92	90	88
2	103	96	91	86	101	95	90	85	91	87	83	88	85	82	85	82	80	85	82	80	78
3	96	87	80	75	94	86	80	75	83	78	73	80	76	72	78	74	71	78	74	71	69
4	89	79	72	66	87	78	71	66	76	70	65	73	68	64	71	67	63	71	67	63	62
5	83	72	65	59	81	71	64	59	69	63	58	67	62	58	66	61	57	66	61	57	55
6	78	66	59	53	76	65	58	53	64	57	53	62	57	52	61	56	52	61	56	52	50
7	73	61	54	48	71	60	53	48	59	52	48	58	52	47	56	51	47	56	51	47	45
8	68	57	49	44	67	56	49	44	55	48	44	53	48	43	52	47	43	52	47	43	41
9	64	52	45	40	63	52	45	40	51	44	40	50	44	40	49	44	40	49	44	40	38
10	61	49	42	37	60	48	42	37	47	41	37	47	41	37	46	40	37	46	40	37	35

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	33545	33545	33545
5°	32641	32493	33508
10°	31947	31807	33431
15°	30298	31229	33243
20°	28862	29837	32735
25°	27455	28628	31900
30°	25507	27024	30119
35°	22871	24835	26418
40°	20721	20767	20653
45°	17326	15344	14966
50°	13087	10801	6120
55°	9843	8637	3859
60°	9147	7954	3718
65°	8511	7937	3723
70°	7786	7786	3665
75°	7382	7582	3541
80°	6821	7170	3635
85°	5952	6249	3969

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 17729 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	873.3	5.7
10°-20°	2406.3	15.7
20°-30°	3412.2	22.2
30°-40°	3515.3	22.9
40°-50°	2455.4	16.0
50°-60°	1178.2	7.7
60°-70°	826.6	5.4
70°-80°	516.8	3.4
80°-90°	159.8	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°	6691.9	43.6
0°-40°	10207.2	66.5
0°-60°	13840.8	90.2
0°-90°	15344.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	15344.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	9454	9454	9454	9454	9454	
5°	9164	9152	9123	9362	9408	867
15°	8248	8309	8502	8745	9050	2323
25°	7013	7083	7312	7807	8148	3207
35°	5280	5424	5734	5853	6099	3327
45°	3453	3533	3058	2902	2982	2660
55°	1591	1513	1396	894	624	1491
65°	1014	948	945	719	444	1004
75°	538	531	553	478	258	567
85°	146	146	154	151	98	163
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	9454.3	9454.3	9454.3	9454.3	9454.3
2.5°	9417.8	9388.5	9317.9	9447.0	9437.3
5°	9164.4	9152.2	9122.9	9361.7	9408.0
7.5°	9020.6	8996.2	8962.1	9225.3	9354.4
10°	8867.1	8896.3	8828.1	9069.3	9278.9
12.5°	8550.3	8628.3	8720.9	8908.5	9186.3
15°	8248.2	8309.1	8501.6	8745.2	9049.8
17.5°	7965.5	8036.2	8201.9	8567.4	8891.4
20°	7643.9	7741.3	7902.2	8370.0	8669.7
22.5°	7312.5	7402.6	7604.9	8106.8	8440.7
25°	7012.8	7083.4	7312.5	7807.1	8148.3
27.5°	6615.6	6747.2	6964.0	7441.6	7799.8
30°	6225.7	6337.8	6596.1	6998.1	7351.5
32.5°	5755.4	5918.7	6203.8	6510.8	6805.6
35°	5280.3	5424.1	5733.5	5852.9	6099.0
37.5°	4934.3	4973.3	5148.7	5134.1	5273.0
40°	4473.7	4551.7	4483.5	4300.7	4459.1
42.5°	3976.7	4069.3	3793.9	3581.9	3638.0
45°	3452.8	3533.2	3058.0	2902.1	2982.5
47.5°	2999.6	2992.2	2465.9	2361.1	2249.1
50°	2370.9	2448.9	1956.7	1761.7	1108.7
52.5°	1851.9	1881.1	1613.1	1125.7	728.6
55°	1591.2	1513.2	1396.2	894.3	623.8
57.5°	1413.3	1315.8	1237.8	830.9	570.2
60°	1289.0	1179.4	1120.9	789.5	523.9
62.5°	1147.7	1062.4	1040.5	752.9	482.5
65°	1013.7	947.9	945.4	718.8	443.5
67.5°	879.6	843.1	852.8	677.4	399.6
70°	750.5	743.2	750.5	623.8	353.3
72.5°	640.8	633.5	653.0	555.6	302.1
75°	538.5	531.2	553.1	477.6	258.3
77.5°	428.9	433.7	448.3	397.2	216.9
80°	333.8	333.8	350.9	311.9	177.9
82.5°	238.8	241.2	251.0	229.0	138.9
85°	146.2	146.2	153.5	151.1	97.5
87.5°	48.7	56.0	65.8	70.7	48.7
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	17.85	19.21	18.22	19.52	19.83	14.18	15.54	14.55	15.85	16.17
	3H	19.59	20.80	19.97	21.13	21.49	16.16	17.37	16.54	17.70	18.06
	4H	20.26	21.39	20.66	21.74	22.12	16.86	17.99	17.27	18.34	18.72
	6H	20.77	21.81	21.18	22.18	22.57	17.39	18.43	17.80	18.80	19.19
	8H	20.94	21.93	21.37	22.32	22.72	17.57	18.56	18.00	18.95	19.35
	12H	21.05	21.99	21.48	22.37	22.80	17.71	18.65	18.14	19.04	19.47
4H	2H	18.38	19.51	18.78	19.86	20.24	15.81	16.93	16.21	17.28	17.67
	3H	20.36	21.29	20.77	21.69	22.10	17.98	18.91	18.40	19.32	19.72
	4H	21.16	22.00	21.60	22.42	22.86	18.86	19.70	19.30	20.12	20.56
	6H	21.80	22.53	22.27	22.97	23.44	19.51	20.23	19.97	20.68	21.14
	8H	22.02	22.70	22.49	23.15	23.62	19.72	20.39	20.18	20.84	21.31
	12H	22.18	22.78	22.66	23.26	23.73	19.87	20.47	20.36	20.96	21.43
8H	4H	21.45	22.12	21.91	22.57	23.04	19.51	20.19	19.98	20.64	21.11
	6H	22.23	22.78	22.73	23.28	23.76	20.37	20.93	20.87	21.42	21.91
	8H	22.53	23.03	23.05	23.54	24.03	20.70	21.20	21.22	21.71	22.21
	12H	22.77	23.21	23.28	23.70	24.27	20.97	21.41	21.48	21.90	22.47
12H	4H	21.46	22.06	21.95	22.54	23.02	19.59	20.19	20.07	20.67	21.14
	6H	22.28	22.78	22.80	23.29	23.79	20.51	21.01	21.03	21.52	22.02
	8H	22.65	23.09	23.16	23.58	24.15	20.92	21.37	21.44	21.86	22.43