

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: P894900

Luminaire Tested: 8TMB-20HL-LVR-UNV-L950

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894900
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-L950
Description: 20000 Lumen 8FT MICROBAY LINEAR BAY with LOUVER, 90CRI, 5000K CCT
Light Source: -
Ballast/Driver: -

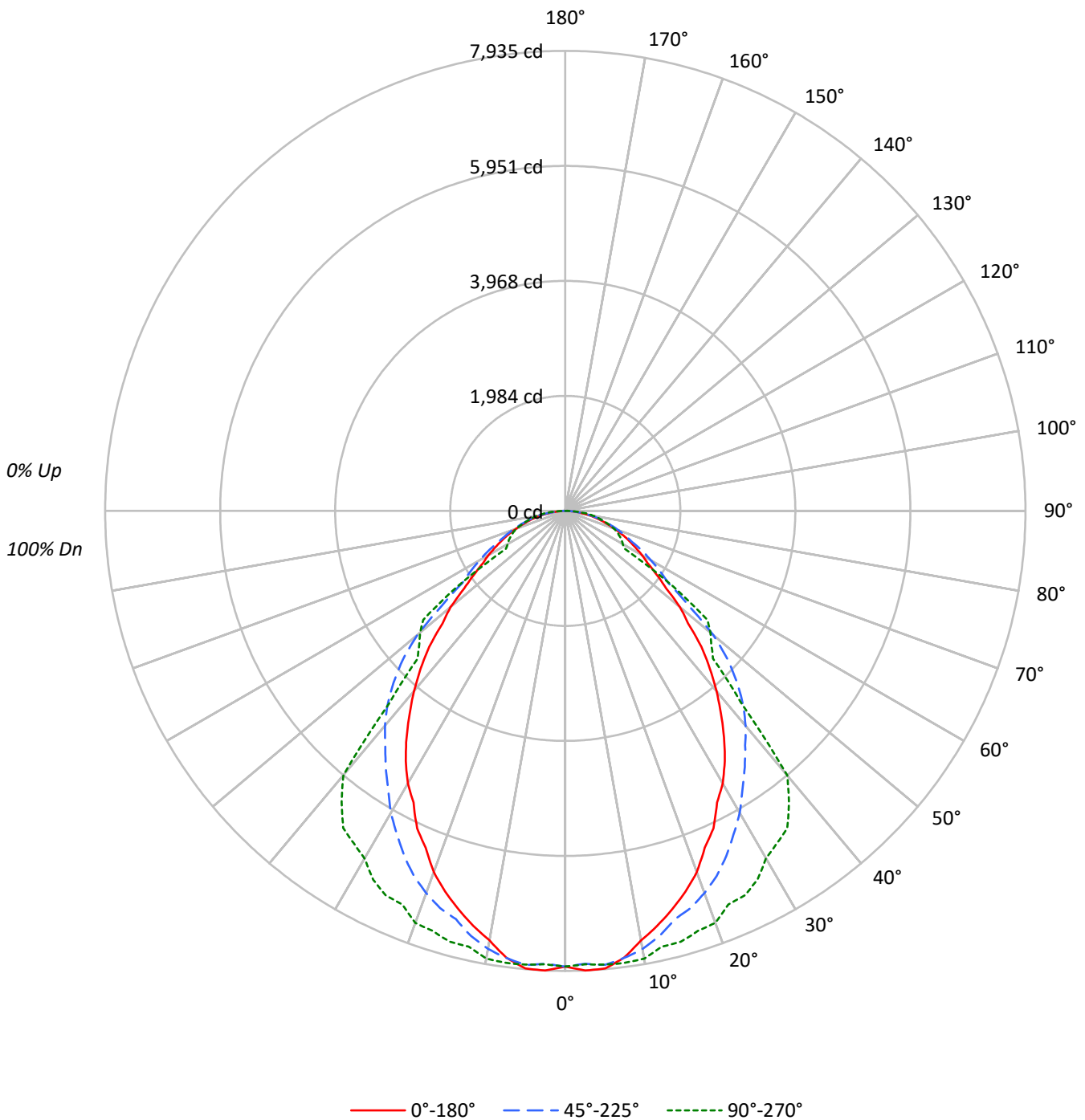
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16451.0 lumens
Efficiency: N/A
Efficacy: 113.5 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		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	100	100	100
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87	87	87
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75	75	75
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	75	70	67	65	65	65
4	86	76	68	62	84	74	67	61	72	66	60	70	64	60	68	63	59	57	57	57
5	80	68	60	54	78	67	60	54	65	59	53	63	57	53	62	56	52	50	50	50
6	74	62	54	48	73	61	54	48	60	53	48	58	52	47	56	51	47	45	45	45
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	40	40	40
8	65	52	44	39	63	52	44	39	50	43	39	49	43	38	48	42	38	36	36	36
9	61	48	41	35	59	48	40	35	47	40	35	46	39	35	45	39	35	33	33	33
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32	30	30	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	27886	27886	27886
5°	28222	28000	27984
10°	27110	27642	28249
15°	26139	26783	28267
20°	25039	26485	28551
25°	23657	25708	28654
30°	22232	24634	28360
35°	20675	23364	28913
40°	18784	22397	27571
45°	16643	21021	18079
50°	14244	18372	18041
55°	11936	13407	14035
60°	10859	12104	8124
65°	10174	10716	8681
70°	9363	10152	9291
75°	8797	9524	9461
80°	8206	9009	10139
85°	7047	7519	10805

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 21021 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	746.8	4.5
10°-20°	2089.6	12.7
20°-30°	3045.4	18.5
30°-40°	3483.9	21.2
40°-50°	2980.3	18.1
50°-60°	1965.4	11.9
60°-70°	1188.2	7.2
70°-80°	726.9	4.4
80°-90°	224.5	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°	5881.8	35.8
0°-40°	9365.7	56.9
0°-60°	14311.4	87.0
0°-90°	16451.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	16451.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7859	7859	7859	7859	7859	
5°	7924	7917	7862	7845	7857	743
15°	7116	7199	7291	7758	7695	2000
25°	6043	6135	6567	7128	7319	2764
35°	4773	5013	5394	6241	6675	2974
45°	3317	3573	4189	3915	3603	2539
55°	1930	2038	2167	2569	2269	1755
65°	1212	1242	1276	1140	1034	1198
75°	642	658	695	727	690	677
85°	173	171	185	219	265	197
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7859.2	7859.2	7859.2	7859.2	7859.2
2.5°	7935.3	7912.3	7817.6	7907.6	7826.9
5°	7923.8	7916.9	7861.5	7845.3	7856.9
7.5°	7771.5	7787.6	7778.4	7951.5	7863.8
10°	7524.5	7556.8	7672.2	7914.6	7840.7
12.5°	7330.6	7356.0	7510.6	7870.7	7697.6
15°	7116.0	7199.0	7291.4	7757.6	7695.3
17.5°	6885.1	6963.6	7182.9	7605.3	7598.4
20°	6631.3	6776.7	7014.4	7406.8	7561.4
22.5°	6287.3	6483.5	6818.2	7316.8	7346.8
25°	6042.7	6135.0	6566.6	7127.5	7319.1
27.5°	5671.1	5846.5	6287.3	6855.1	7171.4
30°	5426.4	5571.8	6012.7	6695.9	6922.1
32.5°	5119.4	5292.5	5687.2	6522.8	6795.1
35°	4773.2	5013.3	5394.1	6241.2	6675.1
37.5°	4408.5	4646.3	5096.3	6008.1	6335.8
40°	4055.4	4258.5	4835.5	5728.8	5952.7
42.5°	3693.0	3912.3	4537.8	5177.1	4477.8
45°	3316.8	3573.0	4189.3	3914.6	3603.0
47.5°	2871.3	3185.2	3803.8	3146.0	3413.7
50°	2580.5	2751.3	3328.3	2965.9	3268.3
52.5°	2195.0	2425.8	2672.8	2769.8	3088.3
55°	1929.6	2038.1	2167.3	2568.9	2268.9
57.5°	1684.9	1781.9	1931.9	1811.9	1209.5
60°	1530.3	1574.1	1705.7	1294.9	1144.8
62.5°	1354.9	1398.7	1495.7	1209.5	1098.7
65°	1211.8	1241.8	1276.4	1140.2	1034.0
67.5°	1059.4	1075.6	1112.5	1052.5	971.7
70°	902.5	925.6	978.6	962.5	895.6
72.5°	764.0	784.8	830.9	854.0	791.7
75°	641.7	657.8	694.7	727.1	690.1
77.5°	510.1	526.3	574.7	609.3	593.2
80°	401.6	403.9	440.9	475.5	496.2
82.5°	281.6	286.2	313.9	350.8	392.4
85°	173.1	170.8	184.7	219.3	265.4
87.5°	66.9	64.6	76.2	92.3	136.2
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	19.39	20.87	19.75	21.18	21.50	19.07	20.55	19.43	20.86	21.17
	3H	20.95	22.27	21.33	22.60	22.96	20.68	22.01	21.06	22.34	22.70
	4H	21.55	22.79	21.95	23.14	23.52	21.43	22.67	21.83	23.02	23.40
	6H	22.01	23.15	22.42	23.52	23.91	22.10	23.25	22.51	23.61	24.01
	8H	22.16	23.25	22.59	23.64	24.04	22.38	23.47	22.81	23.86	24.26
	12H	22.26	23.30	22.69	23.68	24.11	22.60	23.64	23.03	24.02	24.45
4H	2H	19.98	21.22	20.38	21.57	21.95	19.73	20.97	20.13	21.32	21.70
	3H	21.77	22.80	22.18	23.20	23.60	21.61	22.64	22.02	23.04	23.44
	4H	22.50	23.42	22.93	23.84	24.28	22.51	23.43	22.94	23.85	24.29
	6H	23.08	23.89	23.54	24.33	24.79	23.31	24.12	23.77	24.56	25.02
	8H	23.28	24.03	23.74	24.48	24.94	23.64	24.40	24.11	24.84	25.31
	12H	23.42	24.09	23.90	24.57	25.04	23.92	24.59	24.40	25.07	25.54
8H	4H	22.82	23.57	23.28	24.02	24.49	22.83	23.58	23.29	24.03	24.49
	6H	23.53	24.15	24.03	24.65	25.12	23.78	24.40	24.28	24.89	25.37
	8H	23.80	24.36	24.31	24.87	25.36	24.20	24.76	24.71	25.27	25.76
	12H	24.01	24.51	24.52	25.00	25.56	24.56	25.06	25.07	25.55	26.12
12H	4H	22.86	23.53	23.34	24.01	24.48	22.85	23.53	23.34	24.01	24.48
	6H	23.60	24.16	24.11	24.67	25.16	23.83	24.39	24.35	24.90	25.39
	8H	23.93	24.43	24.44	24.92	25.48	24.31	24.81	24.82	25.30	25.87