

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: P894898

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

Issue Date: 11/11/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P894898  
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-L935  
Description: 20000 Lumen 8FT MICROBAY LINEAR BAY with LOUVER, 90CRI, 3500K CCT  
Light Source: -  
Ballast/Driver: -

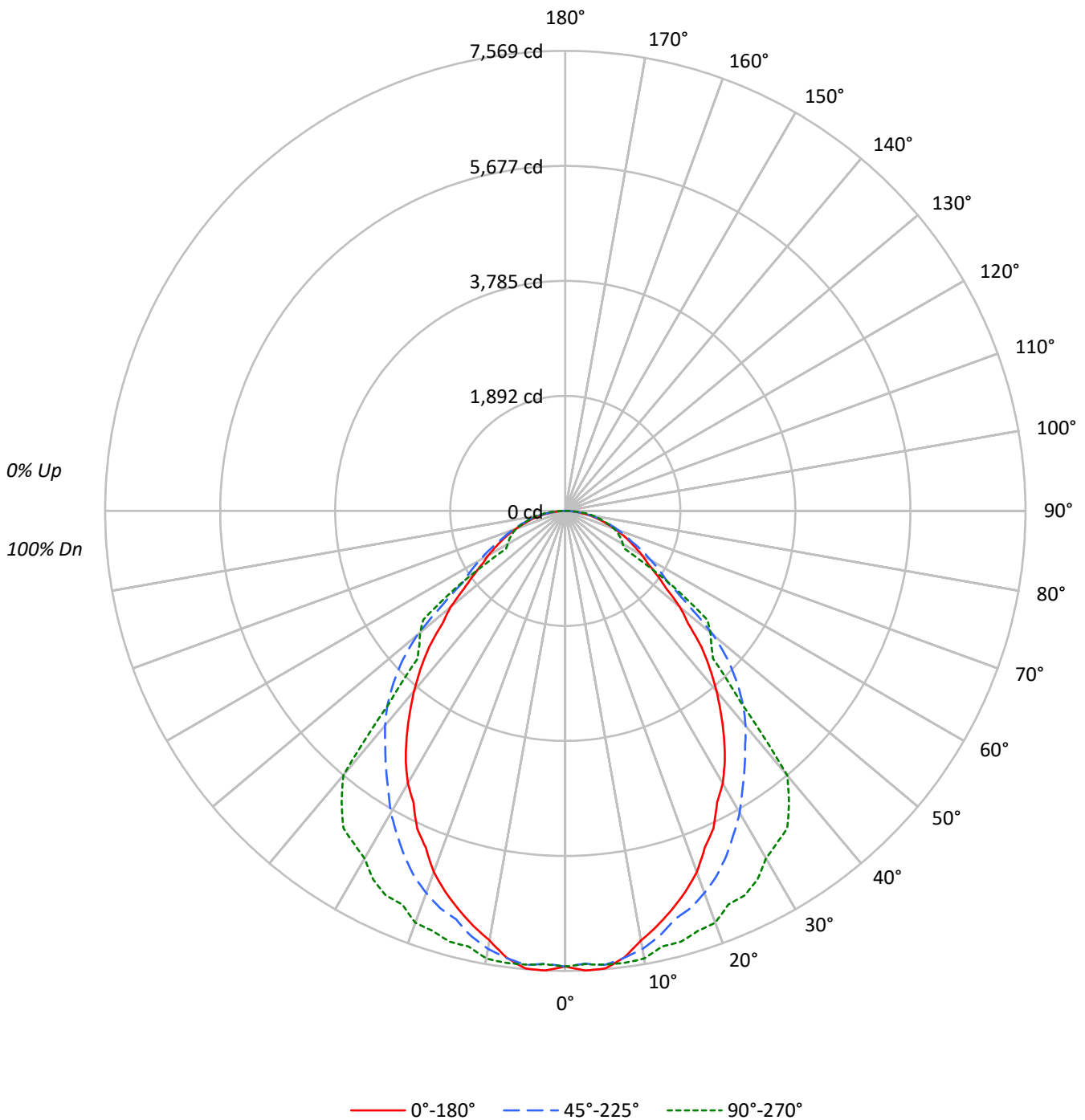
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 15691.0 lumens  
Efficiency: N/A  
Efficacy: 108.2 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<sub>in</sub>): 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	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	89	89	89	87
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	77	77	77	75
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	75	70	67	67	67	67	65
4	86	76	68	62	84	74	67	61	72	66	60	70	64	60	68	63	59	59	59	59	57
5	80	68	60	54	78	67	60	54	65	59	53	63	57	53	62	56	52	52	52	52	50
6	74	62	54	48	73	61	54	48	60	53	48	58	52	47	56	51	47	47	47	47	45
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	42	42	42	40
8	65	52	44	39	63	52	44	39	50	43	39	49	43	38	48	42	38	38	38	38	36
9	61	48	41	35	59	48	40	35	47	40	35	46	39	35	45	39	35	35	35	35	33
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32	32	32	32	30

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	26597	26597	26597
5°	26918	26707	26691
10°	25857	26365	26944
15°	24931	25546	26961
20°	23882	25262	27232
25°	22564	24520	27330
30°	21205	23496	27050
35°	19720	22285	27577
40°	17916	21362	26298
45°	15874	20050	17244
50°	13586	17524	17207
55°	11385	12788	13387
60°	10358	11545	7748
65°	9704	10221	8281
70°	8930	9683	8862
75°	8390	9085	9023
80°	7828	8592	9671
85°	6721	7169	10308

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 20050 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	712.3	4.5
10°-20°	1993.1	12.7
20°-30°	2904.7	18.5
30°-40°	3323.0	21.2
40°-50°	2842.6	18.1
50°-60°	1874.6	11.9
60°-70°	1133.3	7.2
70°-80°	693.3	4.4
80°-90°	214.1	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°	5610.1	35.8
0°-40°	8933.0	56.9
0°-60°	13650.3	87.0
0°-90°	15691.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	15691.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	7496	7496	7496	7496	7496	
5°	7558	7551	7498	7483	7494	708
15°	6787	6866	6954	7399	7340	1908
25°	5764	5852	6263	6798	6981	2636
35°	4553	4782	5145	5953	6367	2836
45°	3164	3408	3996	3734	3436	2422
55°	1840	1944	2067	2450	2164	1674
65°	1156	1184	1217	1088	986	1142
75°	612	627	663	694	658	646
85°	165	163	176	209	253	187
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	7496.1	7496.1	7496.1	7496.1	7496.1
2.5°	7568.7	7546.7	7456.5	7542.3	7465.3
5°	7557.7	7551.1	7498.3	7482.9	7493.9
7.5°	7412.4	7427.9	7419.0	7584.2	7500.5
10°	7176.9	7207.7	7317.8	7548.9	7478.5
12.5°	6992.0	7016.2	7163.7	7507.1	7342.0
15°	6787.2	6866.5	6954.5	7399.2	7339.8
17.5°	6567.1	6641.9	6851.1	7253.9	7247.3
20°	6324.9	6463.6	6690.3	7064.6	7212.1
22.5°	5996.9	6184.0	6503.2	6978.7	7007.4
25°	5763.5	5851.6	6263.3	6798.2	6980.9
27.5°	5409.1	5576.4	5996.9	6538.4	6840.1
30°	5175.7	5314.4	5734.9	6386.5	6602.3
32.5°	4882.9	5048.0	5424.5	6221.4	6481.2
35°	4552.7	4781.7	5144.9	5952.8	6366.7
37.5°	4204.9	4431.6	4860.9	5730.5	6043.1
40°	3868.0	4061.8	4612.1	5464.1	5677.7
42.5°	3522.4	3731.5	4328.1	4938.0	4270.9
45°	3163.6	3407.9	3995.7	3733.7	3436.5
47.5°	2738.7	3038.1	3628.1	3000.6	3256.0
50°	2461.3	2624.2	3174.6	2828.9	3117.3
52.5°	2093.6	2313.8	2549.3	2641.8	2945.6
55°	1840.5	1943.9	2067.2	2450.3	2164.1
57.5°	1607.1	1699.6	1842.7	1728.2	1153.6
60°	1459.6	1501.4	1626.9	1235.0	1091.9
62.5°	1292.3	1334.1	1426.6	1153.6	1047.9
65°	1155.8	1184.4	1217.4	1087.5	986.3
67.5°	1010.5	1025.9	1061.1	1003.9	926.8
70°	860.8	882.8	933.4	918.0	854.2
72.5°	728.7	748.5	792.5	814.6	755.1
75°	612.0	627.4	662.7	693.5	658.2
77.5°	486.5	501.9	548.2	581.2	565.8
80°	383.1	385.3	420.5	453.5	473.3
82.5°	268.6	273.0	299.4	334.6	374.3
85°	165.1	162.9	176.1	209.1	253.2
87.5°	63.8	61.6	72.6	88.1	129.9
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	19.23	20.70	19.59	21.02	21.33	18.90	20.38	19.27	20.69	21.01
	3H	20.78	22.11	21.16	22.44	22.80	20.52	21.84	20.90	22.17	22.53
	4H	21.38	22.63	21.78	22.97	23.35	21.27	22.51	21.67	22.86	23.24
	6H	21.84	22.99	22.25	23.35	23.75	21.94	23.08	22.35	23.45	23.84
	8H	21.99	23.08	22.42	23.47	23.88	22.21	23.30	22.64	23.69	24.10
	12H	22.09	23.14	22.52	23.52	23.95	22.43	23.48	22.87	23.86	24.29
4H	2H	19.82	21.06	20.22	21.41	21.79	19.56	20.80	19.96	21.15	21.53
	3H	21.61	22.63	22.02	23.04	23.44	21.45	22.48	21.86	22.88	23.28
	4H	22.33	23.26	22.77	23.68	24.11	22.34	23.27	22.78	23.69	24.12
	6H	22.92	23.72	23.37	24.16	24.63	23.15	23.95	23.61	24.40	24.86
	8H	23.11	23.87	23.58	24.31	24.78	23.48	24.23	23.94	24.68	25.14
	12H	23.25	23.92	23.74	24.40	24.88	23.75	24.42	24.23	24.90	25.37
8H	4H	22.66	23.41	23.12	23.85	24.32	22.66	23.42	23.13	23.86	24.33
	6H	23.37	23.99	23.86	24.48	24.96	23.61	24.24	24.11	24.73	25.21
	8H	23.63	24.20	24.15	24.71	25.20	24.03	24.59	24.55	25.10	25.59
	12H	23.84	24.34	24.35	24.83	25.40	24.40	24.90	24.91	25.39	25.95
12H	4H	22.69	23.37	23.18	23.85	24.32	22.69	23.36	23.17	23.84	24.31
	6H	23.44	24.00	23.95	24.51	25.00	23.67	24.23	24.18	24.74	25.23
	8H	23.76	24.26	24.27	24.75	25.32	24.15	24.64	24.66	25.14	25.70