

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: P894916

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

Issue Date: 11/11/2024

**Test Information**

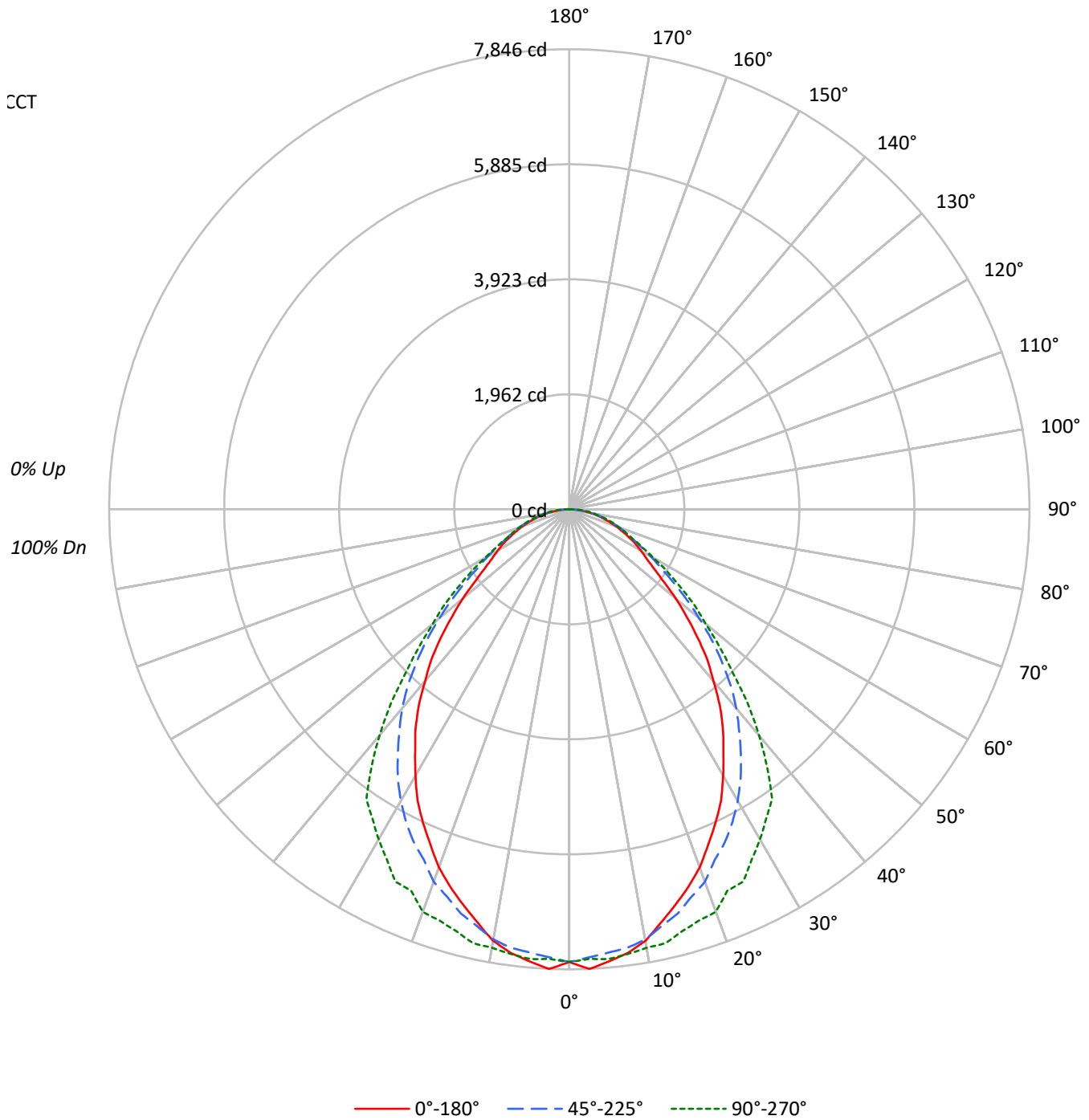
Test Method: LM-79-2019  
Report Number: P894916  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2407-175-5)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 8TMB-20HL-LVRF-UNV-L950  
Description: 20000 Lumen 8FT MICROBAY LINEAR BAY with LOUVER WITH FROSTED INLAY, 90CRI, 5000K (C  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 15652.0 lumens  
Efficiency: N/A  
Efficacy: 107.9 lumens/watt  
Spacing Criteria (0/90/45): 1.05 / 1.25 / 1.21  
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		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	102	102	100
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	89	89	87
2	102	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	77	77	75
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	75	70	67	67	67	65
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	59	59	57
5	80	68	60	54	78	67	60	54	65	59	53	63	58	53	62	57	52	52	52	50
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	57	51	47	47	47	45
7	70	57	49	43	68	56	49	43	55	48	43	53	47	42	52	46	42	42	42	40
8	65	52	44	39	64	52	44	39	50	44	39	49	43	39	48	43	38	38	38	37
9	61	48	41	36	60	48	40	35	47	40	35	46	40	35	45	39	35	35	35	33
10	57	45	37	33	56	44	37	32	43	37	32	43	36	32	42	36	32	32	32	30

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

	0°	45°	90°
0°	27390	27390	27390
5°	27569	27034	27420
10°	26923	26840	27355
15°	25652	26220	27356
20°	24538	25523	27579
25°	23102	24547	27439
30°	21491	23524	26635
35°	19792	22081	26120
40°	17701	20523	23324
45°	15517	18459	19779
50°	13095	15949	16739
55°	10864	13348	14276
60°	9989	11349	11775
65°	9359	9978	10055
70°	8714	9457	9384
75°	8131	8827	9142
80°	7593	8206	8770
85°	6387	6953	9677

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 19779 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	728.6	4.7
10°-20°	2032.5	13.0
20°-30°	2927.0	18.7
30°-40°	3231.5	20.6
40°-50°	2772.8	17.7
50°-60°	1889.0	12.1
60°-70°	1188.3	7.6
70°-80°	676.6	4.3
80°-90°	205.7	1.3
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°	5688.1	36.3
0°-40°	8919.6	57.0
0°-60°	13581.5	86.8
0°-90°	15652.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	15652.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	7720	7720	7720	7720	7720	
5°	7740	7710	7590	7750	7699	731
15°	6983	7057	7138	7461	7447	1966
25°	5901	6019	6270	6776	7009	2710
35°	4569	4747	5098	5654	6030	2842
45°	3092	3298	3679	3900	3942	2383
55°	1756	1865	2158	2262	2308	1614
65°	1115	1133	1188	1246	1198	1107
75°	593	598	644	672	667	632
85°	157	162	171	203	238	180
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	7719.5	7719.5	7719.5	7719.5	7719.5
2.5°	7846.4	7765.7	7650.3	7761.1	7675.7
5°	7740.3	7710.3	7590.3	7749.5	7698.7
7.5°	7631.8	7567.2	7546.4	7717.2	7650.3
10°	7472.6	7435.7	7449.5	7668.7	7592.6
12.5°	7221.0	7246.4	7278.7	7558.0	7581.1
15°	6983.3	7057.2	7138.0	7461.0	7447.2
17.5°	6750.3	6851.8	6927.9	7343.4	7354.9
20°	6498.7	6556.4	6759.5	7161.0	7304.1
22.5°	6187.2	6300.2	6475.6	6976.4	7041.0
25°	5901.0	6018.7	6270.2	6775.6	7008.7
27.5°	5601.0	5709.4	6021.0	6537.9	6736.4
30°	5245.6	5391.0	5741.8	6267.9	6501.0
32.5°	4890.2	5102.5	5439.4	5979.5	6249.5
35°	4569.4	4747.1	5097.9	5654.1	6030.2
37.5°	4214.0	4400.9	4756.3	5298.7	5538.7
40°	3821.7	4022.5	4430.9	4869.4	5035.6
42.5°	3484.7	3657.8	4068.6	4377.9	4509.4
45°	3092.4	3297.8	3678.6	3900.1	3941.7
47.5°	2713.9	2949.3	3290.9	3394.7	3475.5
50°	2372.4	2557.0	2889.3	2954.0	3032.4
52.5°	2023.9	2220.1	2510.9	2575.5	2690.9
55°	1756.2	1864.7	2157.8	2261.6	2307.8
57.5°	1560.1	1629.3	1837.0	1968.5	1982.4
60°	1407.7	1442.4	1599.3	1698.5	1659.3
62.5°	1267.0	1294.7	1373.1	1449.3	1398.5
65°	1114.7	1133.1	1188.5	1246.2	1197.7
67.5°	971.6	992.3	1043.1	1084.7	1043.1
70°	840.0	856.2	911.6	930.0	904.6
72.5°	717.7	724.6	770.8	803.1	787.0
75°	593.1	597.7	643.9	671.6	666.9
77.5°	480.0	486.9	526.2	551.6	537.7
80°	371.6	376.2	401.6	438.5	429.2
82.5°	260.8	270.0	286.2	318.5	343.9
85°	156.9	161.5	170.8	203.1	237.7
87.5°	60.0	64.6	69.2	85.4	113.1
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	18.96	20.43	19.32	20.75	21.06	20.32	21.80	20.68	22.11	22.42
	3H	20.53	21.86	20.91	22.19	22.55	21.60	22.93	21.98	23.25	23.62
	4H	21.14	22.38	21.54	22.73	23.11	22.16	23.40	22.56	23.75	24.13
	6H	21.61	22.76	22.02	23.12	23.52	22.61	23.75	23.02	24.12	24.51
	8H	21.77	22.86	22.19	23.25	23.65	22.79	23.88	23.22	24.27	24.68
	12H	21.87	22.91	22.30	23.29	23.72	22.95	23.99	23.38	24.38	24.80
4H	2H	19.57	20.81	19.97	21.16	21.54	20.68	21.92	21.08	22.27	22.65
	3H	21.37	22.40	21.78	22.80	23.20	22.24	23.27	22.65	23.67	24.07
	4H	22.10	23.02	22.53	23.44	23.88	22.94	23.87	23.38	24.29	24.72
	6H	22.69	23.50	23.15	23.94	24.40	23.55	24.36	24.01	24.80	25.26
	8H	22.90	23.65	23.36	24.09	24.56	23.80	24.55	24.26	25.00	25.46
	12H	23.03	23.71	23.52	24.19	24.66	24.01	24.68	24.50	25.16	25.64
8H	4H	22.42	23.18	22.89	23.62	24.09	23.18	23.93	23.64	24.37	24.84
	6H	23.15	23.77	23.64	24.26	24.74	23.92	24.54	24.42	25.04	25.51
	8H	23.42	23.98	23.94	24.49	24.98	24.25	24.81	24.77	25.32	25.81
	12H	23.64	24.13	24.15	24.62	25.19	24.56	25.05	25.07	25.55	26.11
12H	4H	22.46	23.13	22.94	23.61	24.08	23.19	23.86	23.67	24.34	24.81
	6H	23.21	23.77	23.73	24.29	24.77	23.96	24.52	24.47	25.03	25.52
	8H	23.55	24.05	24.06	24.54	25.10	24.35	24.84	24.86	25.34	25.90