

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: P894718

Luminaire Tested: 8TMB-16HL-LVRF-UNV-L835

Issue Date: 11/11/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P894718  
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-16HL-LVRF-UNV-L835  
Description: 16000 Lumen 8FT MICROBAY LINEAR BAY with LOUVER WITH FROSTED INLAY, 80CRI, 3500K (C)  
Light Source: -  
Ballast/Driver: -

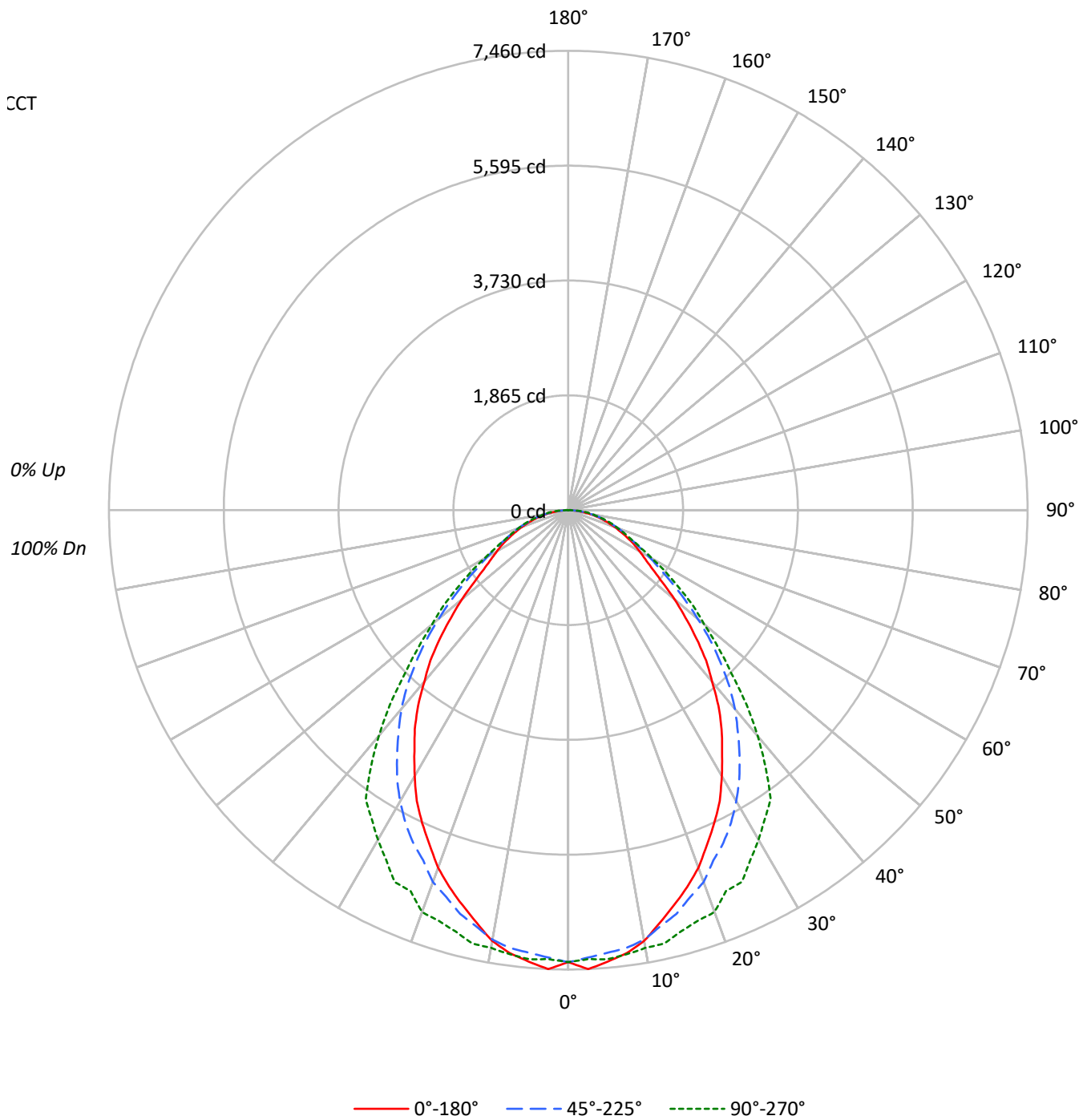
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 14881.0 lumens  
Efficiency: N/A  
Efficacy: 128.5 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): 115.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: 0.999  
Total Harmonic Distortion (THDi): 4.23  
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	100	
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87	87	
2	102	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75	75	
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	75	70	67	65	65	
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	57	57	
5	80	68	60	54	78	67	60	54	65	59	53	63	58	53	62	57	52	50	50	
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	57	51	47	45	45	
7	70	57	49	43	68	56	49	43	55	48	43	53	47	42	52	46	42	40	40	
8	65	52	44	39	64	52	44	39	50	44	39	49	43	39	48	43	38	37	37	
9	61	48	41	36	60	48	40	35	47	40	35	46	40	35	45	39	35	33	33	
10	57	45	37	33	56	44	37	32	43	37	32	43	36	32	42	36	32	30	30	

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

	0°	45°	90°
0°	26041	26041	26041
5°	26210	25703	26070
10°	25597	25518	26008
15°	24388	24928	26008
20°	23329	24265	26221
25°	21964	23338	26087
30°	20433	22365	25323
35°	18817	20994	24833
40°	16829	19512	22175
45°	14753	17549	18804
50°	12450	15163	15914
55°	10329	12691	13573
60°	9498	10790	11195
65°	8898	9487	9560
70°	8286	8991	8923
75°	7730	8393	8693
80°	7219	7801	8339
85°	6074	6611	9201

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 18804 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	692.8	4.7
10°-20°	1932.3	13.0
20°-30°	2782.9	18.7
30°-40°	3072.3	20.6
40°-50°	2636.3	17.7
50°-60°	1795.9	12.1
60°-70°	1129.8	7.6
70°-80°	643.2	4.3
80°-90°	195.5	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°	5408.0	36.3
0°-40°	8480.3	57.0
0°-60°	12912.4	86.8
0°-90°	14881.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	14881.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	7339	7339	7339	7339	7339	
5°	7359	7330	7216	7368	7320	695
15°	6639	6710	6786	7094	7080	1869
25°	5610	5722	5961	6442	6664	2576
35°	4344	4513	4847	5376	5733	2702
45°	2940	3135	3497	3708	3748	2265
55°	1670	1773	2052	2150	2194	1534
65°	1060	1077	1130	1185	1139	1053
75°	564	568	612	638	634	601
85°	149	154	162	193	226	172
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	7339.3	7339.3	7339.3	7339.3	7339.3
2.5°	7459.9	7383.1	7273.4	7378.8	7297.6
5°	7359.0	7330.5	7216.4	7367.8	7319.5
7.5°	7255.9	7194.5	7174.7	7337.1	7273.4
10°	7104.5	7069.4	7082.6	7291.0	7218.6
12.5°	6865.3	6889.5	6920.2	7185.7	7207.6
15°	6639.3	6709.6	6786.3	7093.5	7080.4
17.5°	6417.7	6514.3	6586.7	6981.6	6992.6
20°	6178.6	6233.4	6426.5	6808.3	6944.3
22.5°	5882.4	5989.9	6156.6	6632.8	6694.2
25°	5610.3	5722.2	5961.4	6441.9	6663.5
27.5°	5325.1	5428.2	5724.4	6215.9	6404.6
30°	4987.2	5125.4	5458.9	5959.2	6180.8
32.5°	4649.3	4851.2	5171.5	5684.9	5941.6
35°	4344.3	4513.3	4846.8	5375.5	5733.2
37.5°	4006.4	4184.1	4522.0	5037.7	5265.8
40°	3633.4	3824.3	4212.7	4629.6	4787.5
42.5°	3313.1	3477.6	3868.2	4162.2	4287.3
45°	2940.1	3135.4	3497.4	3708.0	3747.5
47.5°	2580.3	2804.1	3128.8	3227.5	3304.3
50°	2255.5	2431.1	2747.0	2808.4	2883.0
52.5°	1924.2	2110.7	2387.2	2448.6	2558.3
55°	1669.7	1772.8	2051.5	2150.2	2194.1
57.5°	1483.2	1549.0	1746.5	1871.6	1884.7
60°	1338.4	1371.3	1520.5	1614.9	1577.6
62.5°	1204.6	1230.9	1305.5	1377.9	1329.6
65°	1059.8	1077.3	1130.0	1184.8	1138.7
67.5°	923.7	943.5	991.7	1031.2	991.7
70°	798.7	814.0	866.7	884.2	860.1
72.5°	682.4	688.9	732.8	763.5	748.2
75°	563.9	568.3	612.2	638.5	634.1
77.5°	456.4	463.0	500.3	524.4	511.2
80°	353.3	357.6	381.8	416.9	408.1
82.5°	247.9	256.7	272.1	302.8	326.9
85°	149.2	153.6	162.4	193.1	226.0
87.5°	57.0	61.4	65.8	81.2	107.5
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	18.78	20.26	19.14	20.57	20.89	20.14	21.62	20.51	21.93	22.25
	3H	20.36	21.68	20.74	22.01	22.37	21.43	22.75	21.80	23.08	23.44
	4H	20.96	22.21	21.37	22.56	22.93	21.98	23.22	22.38	23.57	23.95
	6H	21.44	22.58	21.85	22.95	23.34	22.43	23.58	22.84	23.95	24.34
	8H	21.59	22.68	22.02	23.07	23.47	22.62	23.71	23.05	24.10	24.50
	12H	21.69	22.73	22.12	23.12	23.55	22.77	23.82	23.20	24.20	24.63
4H	2H	19.39	20.63	19.79	20.98	21.36	20.51	21.75	20.91	22.10	22.48
	3H	21.20	22.23	21.61	22.63	23.03	22.06	23.09	22.47	23.49	23.89
	4H	21.92	22.85	22.35	23.26	23.70	22.77	23.69	23.20	24.11	24.55
	6H	22.52	23.32	22.98	23.77	24.23	23.38	24.18	23.83	24.62	25.09
	8H	22.72	23.47	23.18	23.92	24.39	23.62	24.38	24.09	24.82	25.29
	12H	22.86	23.53	23.34	24.01	24.48	23.84	24.51	24.32	24.99	25.46
8H	4H	22.25	23.00	22.71	23.44	23.91	23.00	23.75	23.46	24.20	24.67
	6H	22.97	23.59	23.47	24.09	24.56	23.75	24.37	24.24	24.86	25.34
	8H	23.25	23.81	23.76	24.32	24.81	24.08	24.64	24.59	25.15	25.64
	12H	23.46	23.96	23.97	24.45	25.01	24.38	24.88	24.89	25.37	25.94
12H	4H	22.29	22.96	22.77	23.44	23.91	23.01	23.69	23.50	24.17	24.64
	6H	23.04	23.60	23.55	24.11	24.60	23.78	24.34	24.30	24.85	25.34
	8H	23.38	23.87	23.89	24.36	24.93	24.17	24.67	24.68	25.16	25.73