

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: P894702

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

Issue Date: 11/11/2024

**Test Information**

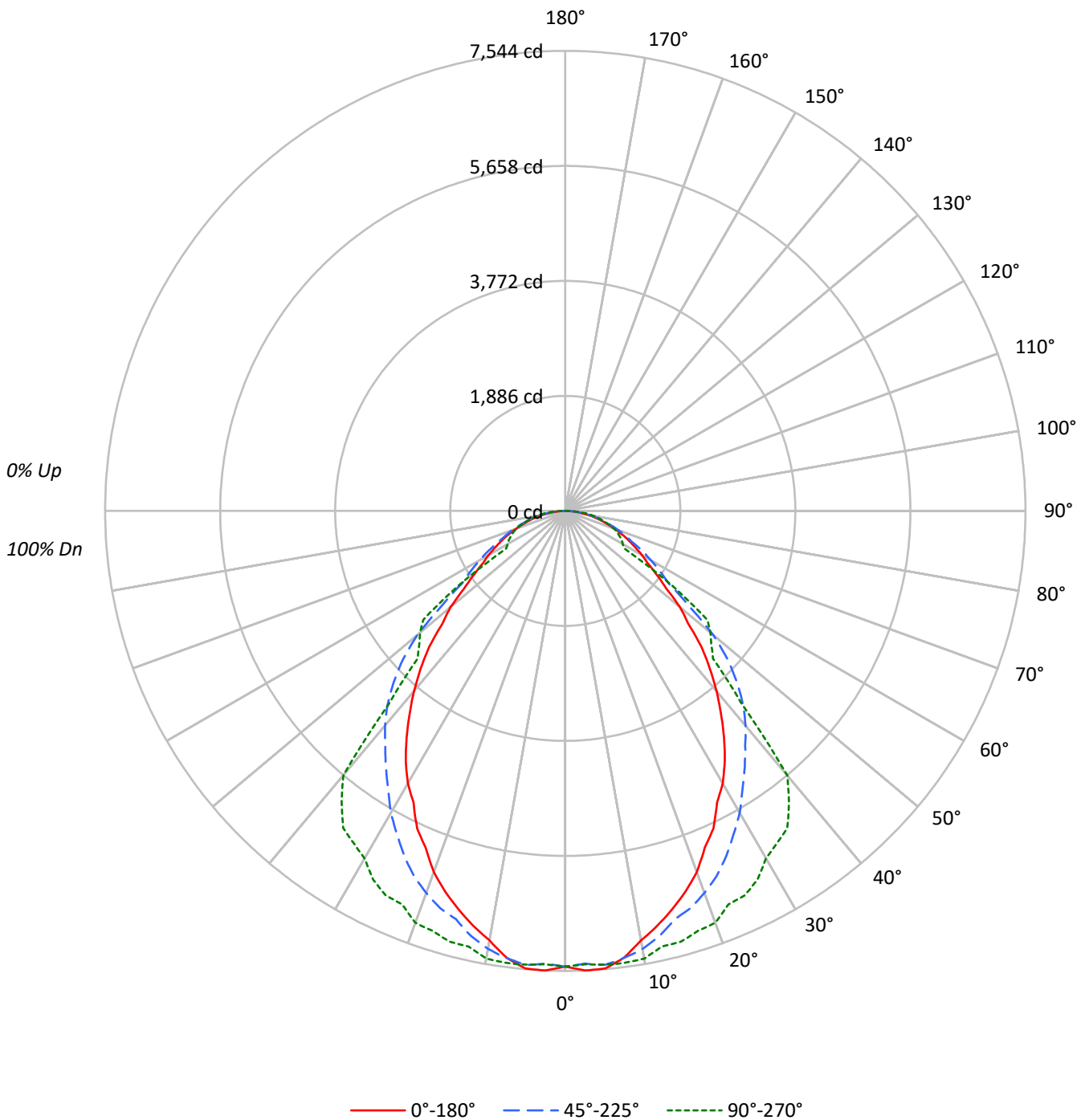
Test Method: LM-79-2019  
Report Number: P894702  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2407-175-6)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 8TMB-16HL-LVR-UNV-L835  
Description: 16000 Lumen 8FT MICROBAY LINEAR BAY with LOUVER, 80CRI, 3500K CCT  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 15640.0 lumens  
Efficiency: N/A  
Efficacy: 135.1 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): 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	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°	26511	26511	26511
5°	26831	26620	26604
10°	25773	26279	26857
15°	24851	25463	26873
20°	23804	25180	27143
25°	22491	24441	27241
30°	21136	23420	26962
35°	19656	22213	27488
40°	17858	21293	26212
45°	15823	19984	17188
50°	13542	17466	17151
55°	11348	12746	13343
60°	10324	11507	7724
65°	9672	10188	8254
70°	8901	9652	8832
75°	8362	9055	8994
80°	7801	8563	9640
85°	6701	7145	10271

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 19984 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	710.0	4.5
10°-20°	1986.6	12.7
20°-30°	2895.3	18.5
30°-40°	3312.2	21.2
40°-50°	2833.4	18.1
50°-60°	1868.5	11.9
60°-70°	1129.6	7.2
70°-80°	691.0	4.4
80°-90°	213.4	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°	5591.8	35.8
0°-40°	8904.0	56.9
0°-60°	13605.9	87.0
0°-90°	15640.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	15640.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	7472	7472	7472	7472	7472	
5°	7533	7527	7474	7459	7470	706
15°	6765	6844	6932	7375	7316	1902
25°	5745	5833	6243	6776	6958	2628
35°	4538	4766	5128	5934	6346	2827
45°	3153	3397	3983	3722	3425	2414
55°	1834	1938	2060	2442	2157	1669
65°	1152	1181	1214	1084	983	1139
75°	610	625	660	691	656	644
85°	165	162	176	208	252	187
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	7471.7	7471.7	7471.7	7471.7	7471.7
2.5°	7544.1	7522.2	7432.2	7517.8	7441.0
5°	7533.2	7526.6	7473.9	7458.6	7469.5
7.5°	7388.3	7403.7	7394.9	7559.5	7476.1
10°	7153.6	7184.3	7294.0	7524.4	7454.2
12.5°	6969.2	6993.4	7140.4	7482.7	7318.1
15°	6765.2	6844.2	6931.9	7375.2	7315.9
17.5°	6545.7	6620.3	6828.8	7230.4	7223.8
20°	6304.3	6442.6	6668.6	7041.6	7188.7
22.5°	5977.4	6163.9	6482.1	6956.1	6984.6
25°	5744.8	5832.6	6242.9	6776.1	6958.3
27.5°	5391.5	5558.3	5977.4	6517.2	6817.8
30°	5158.9	5297.1	5716.3	6365.8	6580.8
32.5°	4867.0	5031.6	5406.9	6201.2	6460.1
35°	4537.9	4766.1	5128.2	5933.5	6346.0
37.5°	4191.2	4417.2	4845.1	5711.9	6023.5
40°	3855.5	4048.6	4597.1	5446.4	5659.2
42.5°	3510.9	3719.4	4314.1	4921.9	4257.0
45°	3153.3	3396.8	3982.7	3721.6	3425.4
47.5°	2729.8	3028.2	3616.3	2990.9	3245.4
50°	2453.3	2615.7	3164.2	2819.7	3107.2
52.5°	2086.8	2306.3	2541.0	2633.2	2936.0
55°	1834.5	1937.6	2060.5	2442.3	2157.0
57.5°	1601.9	1694.0	1836.7	1722.6	1149.8
60°	1454.8	1496.5	1621.6	1231.0	1088.4
62.5°	1288.1	1329.8	1421.9	1149.8	1044.5
65°	1152.0	1180.6	1213.5	1084.0	983.1
67.5°	1007.2	1022.6	1057.7	1000.6	923.8
70°	858.0	879.9	930.4	915.0	851.4
72.5°	726.3	746.1	790.0	811.9	752.7
75°	610.0	625.4	660.5	691.2	656.1
77.5°	484.9	500.3	546.4	579.3	563.9
80°	381.8	384.0	419.1	452.0	471.8
82.5°	267.7	272.1	298.4	333.5	373.0
85°	164.6	162.4	175.5	208.5	252.3
87.5°	63.6	61.4	72.4	87.8	129.5
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	19.21	20.69	19.58	21.01	21.32	18.89	20.37	19.26	20.68	21.00
	3H	20.77	22.10	21.15	22.43	22.79	20.51	21.83	20.89	22.16	22.52
	4H	21.37	22.61	21.77	22.96	23.34	21.26	22.50	21.66	22.85	23.23
	6H	21.83	22.98	22.24	23.34	23.73	21.93	23.07	22.34	23.44	23.83
	8H	21.98	23.07	22.41	23.46	23.86	22.20	23.29	22.63	23.68	24.08
	12H	22.08	23.12	22.51	23.51	23.94	22.42	23.47	22.85	23.85	24.28
4H	2H	19.81	21.05	20.21	21.40	21.78	19.55	20.79	19.95	21.14	21.52
	3H	21.60	22.62	22.01	23.02	23.43	21.44	22.46	21.85	22.87	23.27
	4H	22.32	23.25	22.76	23.66	24.10	22.33	23.26	22.77	23.67	24.11
	6H	22.91	23.71	23.36	24.15	24.61	23.14	23.94	23.60	24.39	24.85
	8H	23.10	23.86	23.57	24.30	24.77	23.47	24.22	23.93	24.67	25.13
	12H	23.24	23.91	23.72	24.39	24.86	23.74	24.41	24.22	24.89	25.36
8H	4H	22.64	23.40	23.11	23.84	24.31	22.65	23.41	23.12	23.85	24.32
	6H	23.35	23.98	23.85	24.47	24.95	23.60	24.23	24.10	24.72	25.20
	8H	23.62	24.18	24.14	24.69	25.18	24.02	24.58	24.54	25.09	25.58
	12H	23.83	24.33	24.34	24.82	25.39	24.39	24.88	24.90	25.38	25.94
12H	4H	22.68	23.36	23.17	23.83	24.31	22.68	23.35	23.16	23.83	24.30
	6H	23.42	23.99	23.94	24.50	24.99	23.66	24.22	24.17	24.73	25.22
	8H	23.75	24.25	24.26	24.74	25.31	24.13	24.63	24.64	25.12	25.69