

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: P894798

Luminaire Tested: 8TMB-18HL-LVR-UNV-L835

Issue Date: 11/11/2024

**Test Information**

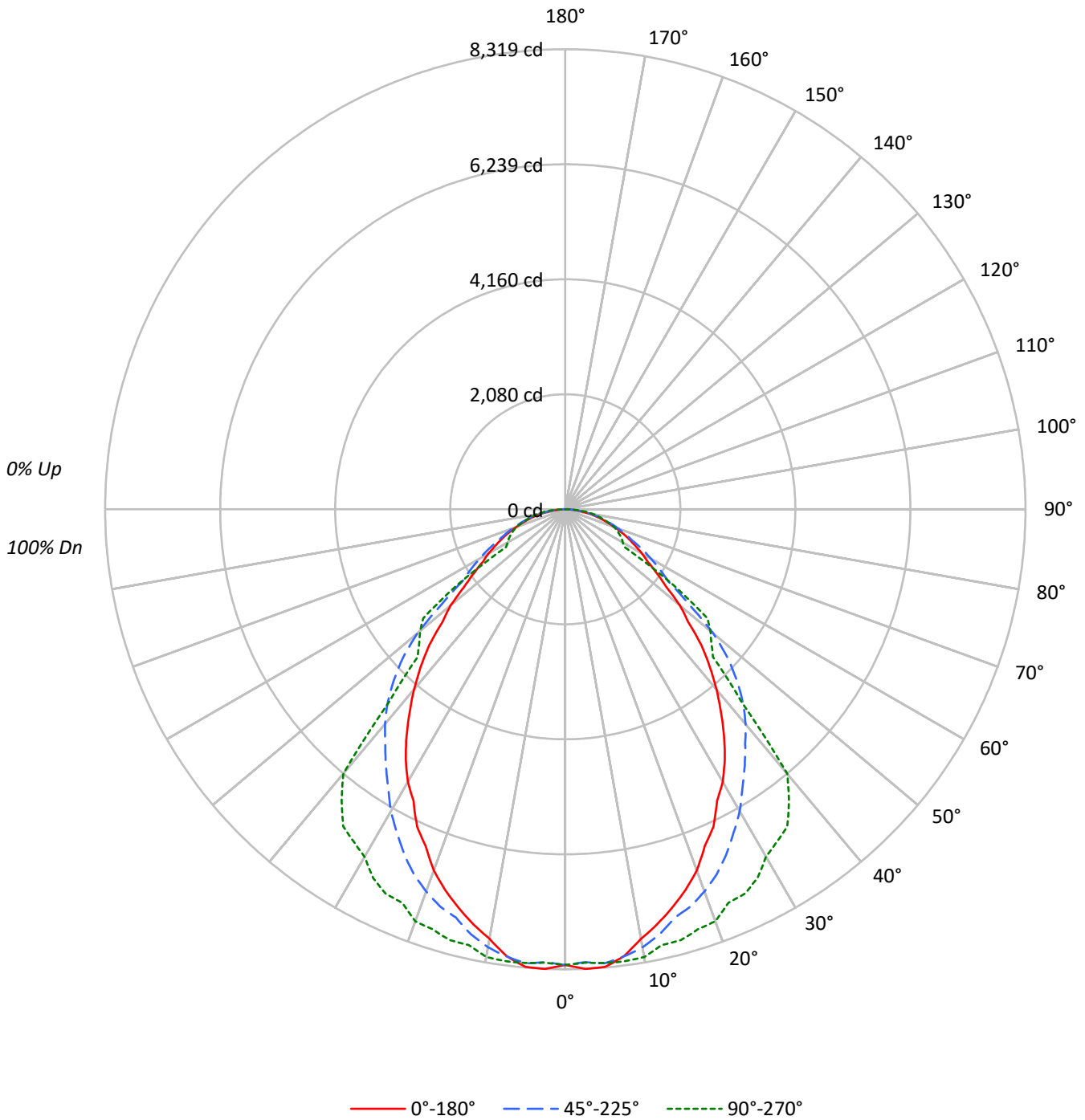
Test Method: LM-79-2019  
Report Number: P894798  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2407-175-6)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 8TMB-18HL-LVR-UNV-L835  
Description: 18000 Lumen 8FT MICROBAY LINEAR BAY with LOUVER, 80CRI, 3500K CCT  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 17247.0 lumens  
Efficiency: N/A  
Efficacy: 127.9 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): 134.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: 0.996  
Total Harmonic Distortion (THDi): 8.62  
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°	29235	29235	29235
5°	29588	29355	29338
10°	28422	28979	29616
15°	27404	28079	29635
20°	26250	27767	29932
25°	24801	26952	30040
30°	23308	25826	29732
35°	21676	24495	30312
40°	19692	23481	28905
45°	17448	22038	18954
50°	14933	19261	18913
55°	12514	14056	14715
60°	11385	12690	8517
65°	10666	11235	9102
70°	9815	10644	9740
75°	9222	9986	9918
80°	8602	9444	10631
85°	7389	7882	11330

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 22038 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	783.0	4.5
10°-20°	2190.7	12.7
20°-30°	3192.8	18.5
30°-40°	3652.5	21.2
40°-50°	3124.5	18.1
50°-60°	2060.5	11.9
60°-70°	1245.7	7.2
70°-80°	762.0	4.4
80°-90°	235.4	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°	6166.4	35.8
0°-40°	9818.9	56.9
0°-60°	15003.9	87.0
0°-90°	17247.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	17247.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	8239	8239	8239	8239	8239	
5°	8307	8300	8242	8225	8237	778
15°	7460	7547	7644	8133	8068	2097
25°	6335	6432	6884	7472	7673	2898
35°	5004	5256	5655	6543	6998	3117
45°	3477	3746	4392	4104	3777	2662
55°	2023	2137	2272	2693	2379	1840
65°	1270	1302	1338	1195	1084	1256
75°	673	690	728	762	724	710
85°	182	179	194	230	278	206
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	8239.4	8239.4	8239.4	8239.4	8239.4
2.5°	8319.3	8295.1	8195.9	8290.3	8205.6
5°	8307.2	8299.9	8241.9	8224.9	8237.0
7.5°	8147.5	8164.4	8154.8	8336.2	8244.3
10°	7888.6	7922.5	8043.4	8297.5	8220.1
12.5°	7685.3	7711.9	7874.1	8251.5	8070.1
15°	7460.3	7547.4	7644.2	8133.0	8067.6
17.5°	7218.3	7300.6	7530.4	7973.3	7966.0
20°	6952.1	7104.6	7353.8	7765.2	7927.3
22.5°	6591.6	6797.2	7148.1	7670.8	7702.3
25°	6335.1	6431.9	6884.4	7472.4	7673.2
27.5°	5945.5	6129.4	6591.6	7186.8	7518.3
30°	5689.0	5841.4	6303.6	7019.9	7257.0
32.5°	5367.1	5548.6	5962.4	6838.4	7123.9
35°	5004.2	5255.8	5655.1	6543.2	6998.1
37.5°	4621.8	4871.1	5342.9	6298.8	6642.4
40°	4251.6	4464.5	5069.5	6006.0	6240.7
42.5°	3871.7	4101.6	4757.3	5427.6	4694.4
45°	3477.3	3745.9	4392.0	4104.0	3777.3
47.5°	3010.2	3339.3	3987.8	3298.2	3578.9
50°	2705.3	2884.4	3489.4	3109.5	3426.4
52.5°	2301.2	2543.2	2802.1	2903.8	3237.7
55°	2023.0	2136.7	2272.2	2693.2	2378.7
57.5°	1766.5	1868.1	2025.4	1899.5	1268.0
60°	1604.3	1650.3	1788.2	1357.5	1200.2
62.5°	1420.4	1466.4	1568.0	1268.0	1151.8
65°	1270.4	1301.9	1338.2	1195.4	1084.1
67.5°	1110.7	1127.6	1166.3	1103.4	1018.7
70°	946.1	970.3	1026.0	1009.1	938.9
72.5°	801.0	822.7	871.1	895.3	830.0
75°	672.7	689.6	728.4	762.2	723.5
77.5°	534.8	551.7	602.5	638.8	621.9
80°	421.0	423.5	462.2	498.5	520.3
82.5°	295.2	300.1	329.1	367.8	411.4
85°	181.5	179.1	193.6	229.9	278.3
87.5°	70.2	67.8	79.9	96.8	142.8
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	19.55	21.03	19.92	21.35	21.66	19.23	20.71	19.60	21.02	21.34
	3H	21.11	22.44	21.49	22.77	23.13	20.85	22.17	21.23	22.50	22.86
	4H	21.71	22.95	22.11	23.30	23.68	21.60	22.84	22.00	23.19	23.57
	6H	22.17	23.31	22.58	23.68	24.07	22.26	23.41	22.68	23.78	24.17
	8H	22.32	23.41	22.75	23.80	24.20	22.54	23.63	22.97	24.02	24.42
	12H	22.42	23.46	22.85	23.85	24.28	22.76	23.81	23.19	24.19	24.62
4H	2H	20.15	21.39	20.55	21.74	22.12	19.89	21.13	20.29	21.48	21.86
	3H	21.93	22.96	22.35	23.36	23.77	21.78	22.80	22.19	23.20	23.61
	4H	22.66	23.59	23.10	24.00	24.44	22.67	23.60	23.11	24.01	24.45
	6H	23.24	24.05	23.70	24.49	24.95	23.48	24.28	23.94	24.73	25.19
	8H	23.44	24.19	23.91	24.64	25.11	23.81	24.56	24.27	25.00	25.47
	12H	23.58	24.25	24.06	24.73	25.20	24.08	24.75	24.56	25.23	25.70
8H	4H	22.98	23.74	23.45	24.18	24.65	22.99	23.75	23.46	24.19	24.66
	6H	23.69	24.32	24.19	24.81	25.29	23.94	24.57	24.44	25.06	25.54
	8H	23.96	24.52	24.48	25.03	25.52	24.36	24.92	24.88	25.43	25.92
	12H	24.17	24.67	24.68	25.16	25.73	24.73	25.22	25.24	25.72	26.28
12H	4H	23.02	23.70	23.51	24.17	24.65	23.02	23.69	23.50	24.17	24.64
	6H	23.76	24.33	24.28	24.84	25.32	24.00	24.56	24.51	25.07	25.56
	8H	24.09	24.59	24.60	25.08	25.65	24.47	24.97	24.98	25.46	26.03