

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: P894709

Luminaire Tested: 8TMB-16HL-LVRA-UNV-L830

Issue Date: 11/11/2024

**Test Information**

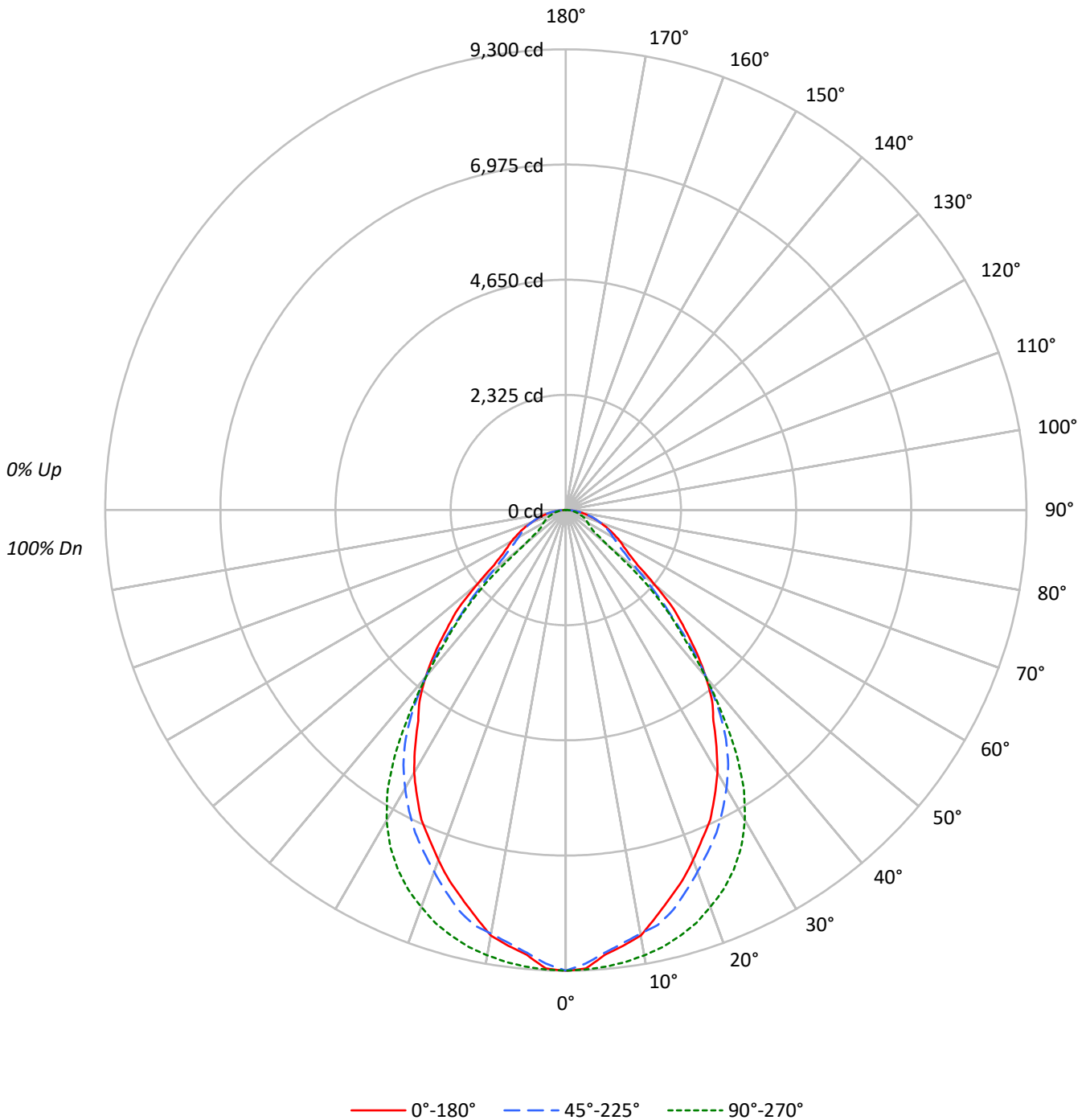
Test Method: LM-79-2019  
Report Number: P894709  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-077-26)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 8TMB-16HL-LVRA-UNV-L830  
Description: 16000 Lumen 8FT MICROBAY LINEAR BAY with LOUVER WITH AISLE OPTIC, 80CRI, 3000K CCT  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 15093.0 lumens  
Efficiency: N/A  
Efficacy: 130.3 lumens/watt  
Spacing Criteria (0/90/45): 1.02 / 1.16 / 1.12  
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 (A<sub>in</sub>): 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	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	90	88	
2	103	96	91	86	101	95	90	85	91	87	83	88	85	82	85	82	80	80	78	
3	96	87	80	75	94	86	80	75	83	78	73	80	76	72	78	74	71	71	69	
4	89	79	72	66	87	78	71	66	76	70	65	73	68	64	71	67	63	63	62	
5	83	72	65	59	81	71	64	59	69	63	58	67	62	58	66	61	57	57	55	
6	78	66	59	53	76	65	58	53	64	57	53	62	57	52	61	56	52	52	50	
7	73	61	54	48	71	60	53	48	59	52	48	58	52	47	56	51	47	47	45	
8	68	57	49	44	67	56	49	44	55	48	44	53	48	43	52	47	43	43	41	
9	64	52	45	40	63	52	45	40	51	44	40	50	44	40	49	44	40	40	38	
10	61	49	42	37	60	48	42	37	47	41	37	47	41	37	46	40	37	37	35	

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

	0°	45°	90°
0°	32997	32997	32997
5°	32106	31962	32960
10°	31424	31286	32884
15°	29802	30718	32699
20°	28390	29349	32200
25°	27006	28160	31378
30°	25090	26582	29626
35°	22497	24428	25985
40°	20383	20427	20316
45°	17042	15094	14721
50°	12873	10624	6020
55°	9682	8496	3796
60°	8997	7824	3657
65°	8371	7808	3662
70°	7658	7658	3605
75°	7262	7459	3483
80°	6710	7051	3576
85°	5854	6147	3904

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 17439 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	859.0	5.7
10°-20°	2367.0	15.7
20°-30°	3356.4	22.2
30°-40°	3457.8	22.9
40°-50°	2415.2	16.0
50°-60°	1158.9	7.7
60°-70°	813.1	5.4
70°-80°	508.4	3.4
80°-90°	157.2	1.0
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°	6582.4	43.6
0°-40°	10040.3	66.5
0°-60°	13614.4	90.2
0°-90°	15093.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	15093.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	9300	9300	9300	9300	9300	
5°	9014	9002	8974	9209	9254	853
15°	8113	8173	8362	8602	8902	2285
25°	6898	6968	7193	7679	8015	3154
35°	5194	5335	5640	5757	5999	3273
45°	3396	3475	3008	2855	2934	2617
55°	1565	1488	1373	880	614	1467
65°	997	932	930	707	436	988
75°	530	522	544	470	254	558
85°	144	144	151	149	96	161
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	9299.7	9299.7	9299.7	9299.7	9299.7
2.5°	9263.7	9235.0	9165.4	9292.5	9282.9
5°	9014.4	9002.5	8973.7	9208.6	9254.1
7.5°	8873.0	8849.1	8815.5	9074.4	9201.4
10°	8722.0	8750.8	8683.7	8921.0	9127.1
12.5°	8410.4	8487.1	8578.2	8762.8	9036.0
15°	8113.2	8173.2	8362.5	8602.2	8901.8
17.5°	7835.2	7904.7	8067.7	8427.2	8746.0
20°	7518.8	7614.7	7772.9	8233.1	8527.9
22.5°	7192.9	7281.5	7480.5	7974.2	8302.6
25°	6898.1	6967.6	7192.9	7679.4	8015.0
27.5°	6507.4	6636.8	6850.1	7319.9	7672.2
30°	6123.9	6234.1	6488.2	6883.7	7231.2
32.5°	5661.3	5821.9	6102.3	6404.3	6694.3
35°	5193.9	5335.3	5639.7	5757.2	5999.2
37.5°	4853.6	4891.9	5064.5	5050.1	5186.7
40°	4400.6	4477.3	4410.2	4230.4	4386.2
42.5°	3911.6	4002.7	3731.9	3523.3	3578.5
45°	3396.3	3475.4	3008.0	2854.6	2933.7
47.5°	2950.5	2943.3	2425.6	2322.5	2212.3
50°	2332.1	2408.8	1924.6	1732.9	1090.6
52.5°	1821.6	1850.3	1586.7	1107.3	716.6
55°	1565.1	1488.4	1373.4	879.6	613.6
57.5°	1390.2	1294.3	1217.6	817.3	560.9
60°	1267.9	1160.1	1102.5	776.6	515.3
62.5°	1128.9	1045.0	1023.4	740.6	474.6
65°	997.1	932.4	930.0	707.1	436.2
67.5°	865.3	829.3	838.9	666.3	393.1
70°	738.2	731.0	738.2	613.6	347.5
72.5°	630.4	623.2	642.3	546.5	297.2
75°	529.7	522.5	544.1	469.8	254.1
77.5°	421.8	426.6	441.0	390.7	213.3
80°	328.4	328.4	345.1	306.8	175.0
82.5°	234.9	237.3	246.9	225.3	136.6
85°	143.8	143.8	151.0	148.6	95.9
87.5°	47.9	55.1	64.7	69.5	47.9
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	17.79	19.15	18.16	19.46	19.78	14.13	15.48	14.49	15.79	16.11
	3H	19.53	20.74	19.91	21.07	21.43	16.10	17.31	16.48	17.64	18.00
	4H	20.20	21.33	20.61	21.68	22.06	16.81	17.93	17.21	18.29	18.67
	6H	20.71	21.75	21.13	22.12	22.51	17.33	18.37	17.74	18.74	19.13
	8H	20.88	21.87	21.31	22.26	22.66	17.52	18.50	17.94	18.89	19.30
	12H	20.99	21.93	21.42	22.32	22.75	17.65	18.60	18.09	18.98	19.41
4H	2H	18.32	19.45	18.73	19.80	20.19	15.75	16.88	16.15	17.23	17.61
	3H	20.30	21.23	20.71	21.64	22.04	17.93	18.86	18.34	19.26	19.66
	4H	21.10	21.94	21.54	22.36	22.80	18.81	19.64	19.24	20.06	20.50
	6H	21.75	22.47	22.21	22.92	23.38	19.45	20.17	19.91	20.62	21.08
	8H	21.97	22.64	22.44	23.09	23.56	19.66	20.34	20.13	20.78	21.25
	12H	22.12	22.72	22.61	23.20	23.68	19.82	20.42	20.30	20.90	21.37
8H	4H	21.39	22.06	21.86	22.51	22.98	19.46	20.13	19.92	20.58	21.05
	6H	22.17	22.73	22.67	23.22	23.70	20.32	20.87	20.82	21.37	21.85
	8H	22.47	22.97	22.99	23.49	23.98	20.64	21.14	21.16	21.66	22.15
	12H	22.71	23.15	23.22	23.64	24.21	20.91	21.35	21.42	21.84	22.41
12H	4H	21.41	22.01	21.89	22.49	22.96	19.53	20.13	20.01	20.61	21.08
	6H	22.22	22.72	22.74	23.24	23.73	20.45	20.95	20.97	21.47	21.96
	8H	22.59	23.03	23.10	23.52	24.09	20.87	21.31	21.38	21.80	22.37