

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: P894716

Luminaire Tested: 8TMB-16HL-LVRA-UNV-L950

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894716
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-L950
Description: 16000 Lumen 8FT MICROBAY LINEAR BAY with LOUVER WITH AISLE OPTIC, 90CRI, 5000K CCT
Light Source: -
Ballast/Driver: -

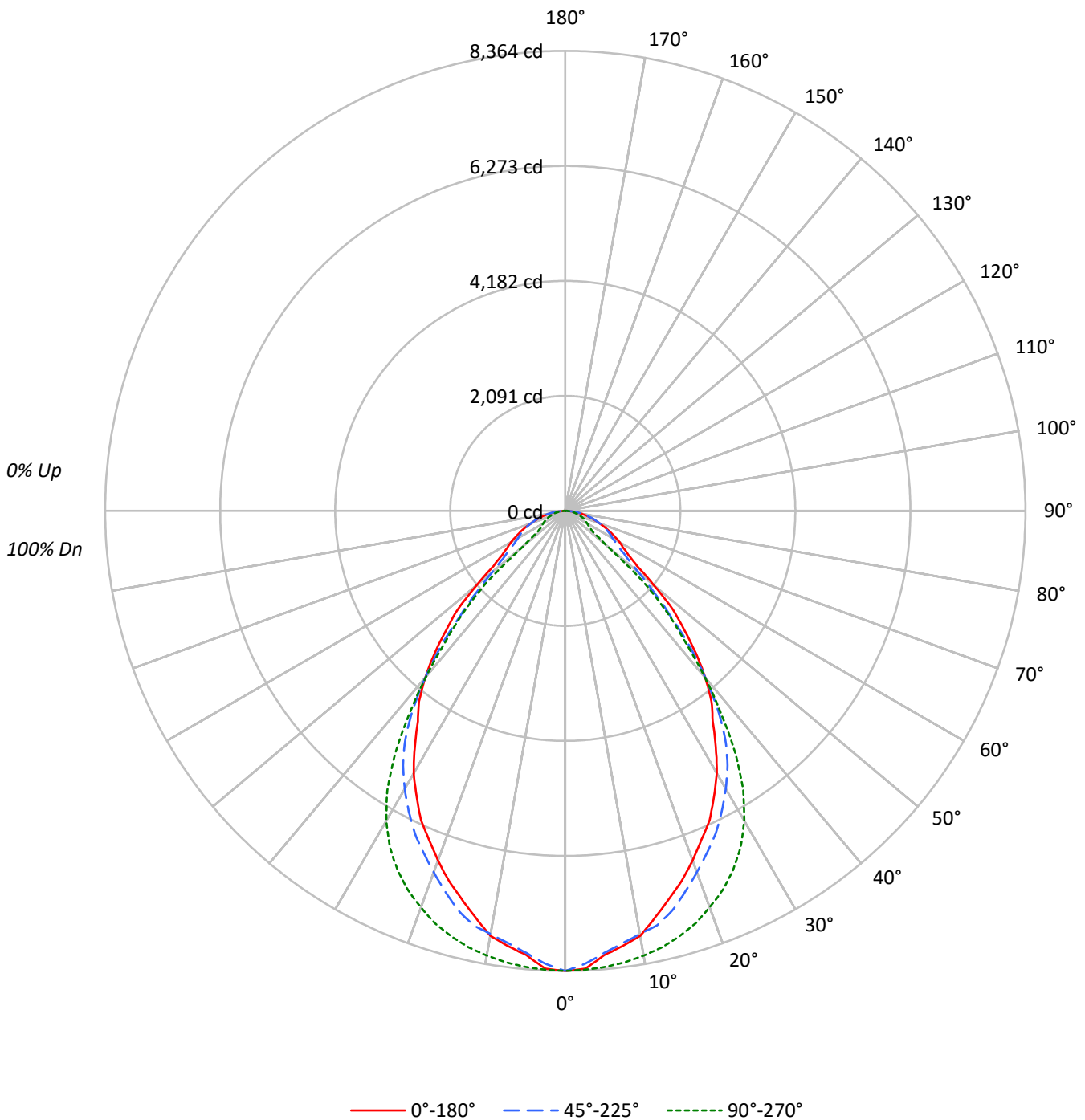
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13575.0 lumens
Efficiency: N/A
Efficacy: 117.2 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 (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	100	100	
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88	88	
2	103	96	91	86	101	95	90	85	91	87	83	88	85	82	85	82	80	78	78	
3	96	87	80	75	94	86	80	75	83	78	73	80	76	72	78	74	71	69	69	
4	89	79	72	66	87	78	71	66	76	70	65	73	68	64	71	67	63	62	62	
5	83	72	65	59	81	71	64	59	69	63	58	67	62	58	66	61	57	55	55	
6	78	66	59	53	76	65	58	53	64	57	53	62	57	52	61	56	52	50	50	
7	73	61	54	48	71	60	53	48	59	52	48	58	52	47	56	51	47	45	45	
8	68	57	49	44	67	56	49	44	55	48	44	53	48	43	52	47	43	41	41	
9	64	52	45	40	63	52	45	40	51	44	40	50	44	40	49	44	40	38	38	
10	61	49	42	37	60	48	42	37	47	41	37	47	41	37	46	40	37	35	35	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	29678	29678	29678
5°	28877	28747	29645
10°	28264	28140	29576
15°	26805	27628	29410
20°	25535	26397	28961
25°	24289	25327	28222
30°	22566	23909	26647
35°	20234	21971	23372
40°	18333	18372	18272
45°	15328	13576	13240
50°	11579	9556	5414
55°	8708	7641	3414
60°	8093	7037	3289
65°	7529	7022	3294
70°	6888	6888	3243
75°	6531	6709	3132
80°	6034	6342	3216
85°	5264	5528	3509

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 15685 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	772.6	5.7
10°-20°	2128.9	15.7
20°-30°	3018.8	22.2
30°-40°	3110.1	22.9
40°-50°	2172.3	16.0
50°-60°	1042.3	7.7
60°-70°	731.3	5.4
70°-80°	457.2	3.4
80°-90°	141.4	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°	5920.4	43.6
0°-40°	9030.5	66.5
0°-60°	12245.1	90.2
0°-90°	13575.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13575.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8364	8364	8364	8364	8364	
5°	8108	8097	8071	8282	8323	767
15°	7297	7351	7521	7737	8006	2055
25°	6204	6267	6469	6907	7209	2837
35°	4672	4799	5072	5178	5396	2944
45°	3055	3126	2706	2568	2639	2353
55°	1408	1339	1235	791	552	1319
65°	897	839	836	636	392	889
75°	476	470	489	422	228	502
85°	129	129	136	134	86	145
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	8364.3	8364.3	8364.3	8364.3	8364.3
2.5°	8332.0	8306.1	8243.6	8357.9	8349.2
5°	8107.8	8097.0	8071.2	8282.4	8323.4
7.5°	7980.6	7959.1	7928.9	8161.7	8276.0
10°	7844.8	7870.7	7810.3	8023.7	8209.1
12.5°	7564.6	7633.5	7715.5	7881.4	8127.2
15°	7297.2	7351.1	7521.4	7737.0	8006.5
17.5°	7047.2	7109.7	7256.3	7579.6	7866.4
20°	6762.6	6848.8	6991.1	7405.0	7670.2
22.5°	6469.4	6549.2	6728.1	7172.2	7467.5
25°	6204.3	6266.8	6469.4	6907.0	7208.9
27.5°	5852.9	5969.3	6161.2	6583.7	6900.6
30°	5508.0	5607.1	5835.6	6191.3	6503.9
32.5°	5091.9	5236.3	5488.6	5760.2	6021.0
35°	4671.5	4798.7	5072.5	5178.1	5395.9
37.5°	4365.4	4399.9	4555.1	4542.2	4665.1
40°	3958.0	4027.0	3966.6	3804.9	3945.0
42.5°	3518.2	3600.1	3356.5	3169.0	3218.5
45°	3054.7	3125.8	2705.5	2567.5	2638.6
47.5°	2653.7	2647.3	2181.6	2088.9	1989.8
50°	2097.6	2166.5	1731.1	1558.6	980.9
52.5°	1638.4	1664.2	1427.1	996.0	644.6
55°	1407.7	1338.7	1235.2	791.2	551.9
57.5°	1250.3	1164.1	1095.1	735.1	504.4
60°	1140.4	1043.4	991.6	698.5	463.5
62.5°	1015.4	939.9	920.5	666.1	426.8
65°	896.8	838.6	836.4	635.9	392.3
67.5°	778.2	745.9	754.5	599.3	353.5
70°	664.0	657.5	664.0	551.9	312.6
72.5°	567.0	560.5	577.7	491.5	267.3
75°	476.4	470.0	489.4	422.5	228.5
77.5°	379.4	383.7	396.7	351.4	191.9
80°	295.3	295.3	310.4	275.9	157.4
82.5°	211.3	213.4	222.0	202.6	122.9
85°	129.3	129.3	135.8	133.7	86.2
87.5°	43.1	49.6	58.2	62.5	43.1
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	17.43	18.78	17.79	19.09	19.41	13.76	15.11	14.12	15.42	15.74
	3H	19.16	20.37	19.54	20.70	21.07	15.73	16.94	16.11	17.27	17.63
	4H	19.84	20.96	20.24	21.31	21.70	16.44	17.57	16.84	17.92	18.30
	6H	20.34	21.38	20.76	21.75	22.14	16.96	18.00	17.38	18.37	18.76
	8H	20.51	21.50	20.94	21.89	22.29	17.15	18.13	17.58	18.52	18.93
	12H	20.62	21.57	21.06	21.95	22.38	17.29	18.23	17.72	18.61	19.04
4H	2H	17.96	19.08	18.36	19.43	19.82	15.38	16.51	15.78	16.86	17.24
	3H	19.93	20.86	20.35	21.27	21.67	17.56	18.49	17.97	18.89	19.29
	4H	20.74	21.57	21.17	21.99	22.43	18.44	19.27	18.87	19.69	20.13
	6H	21.38	22.10	21.84	22.55	23.01	19.08	19.81	19.54	20.25	20.72
	8H	21.60	22.28	22.07	22.72	23.19	19.29	19.97	19.76	20.41	20.88
	12H	21.75	22.35	22.24	22.83	23.31	19.45	20.05	19.93	20.53	21.00
8H	4H	21.02	21.70	21.49	22.14	22.61	19.09	19.76	19.55	20.21	20.68
	6H	21.80	22.36	22.30	22.85	23.33	19.95	20.50	20.45	21.00	21.48
	8H	22.11	22.60	22.62	23.12	23.61	20.28	20.78	20.80	21.29	21.78
	12H	22.34	22.78	22.85	23.27	23.84	20.54	20.98	21.05	21.47	22.04
12H	4H	21.04	21.64	21.52	22.12	22.59	19.16	19.76	19.64	20.24	20.71
	6H	21.86	22.36	22.38	22.87	23.36	20.09	20.59	20.61	21.10	21.59
	8H	22.22	22.66	22.73	23.15	23.72	20.50	20.94	21.01	21.43	22.00