

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: P894787

Luminaire Tested: 8TMB-18HL-FLT-UNV-L940

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894787
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2403-334-4)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 8TMB-18HL-FLT-UNV-L940
Description: 18000 Lumen 8FT MICROBAY LINEAR BAY with FLAT FROSTED LENS, 90CRI, 4000K CCT
Light Source: -
Ballast/Driver: -

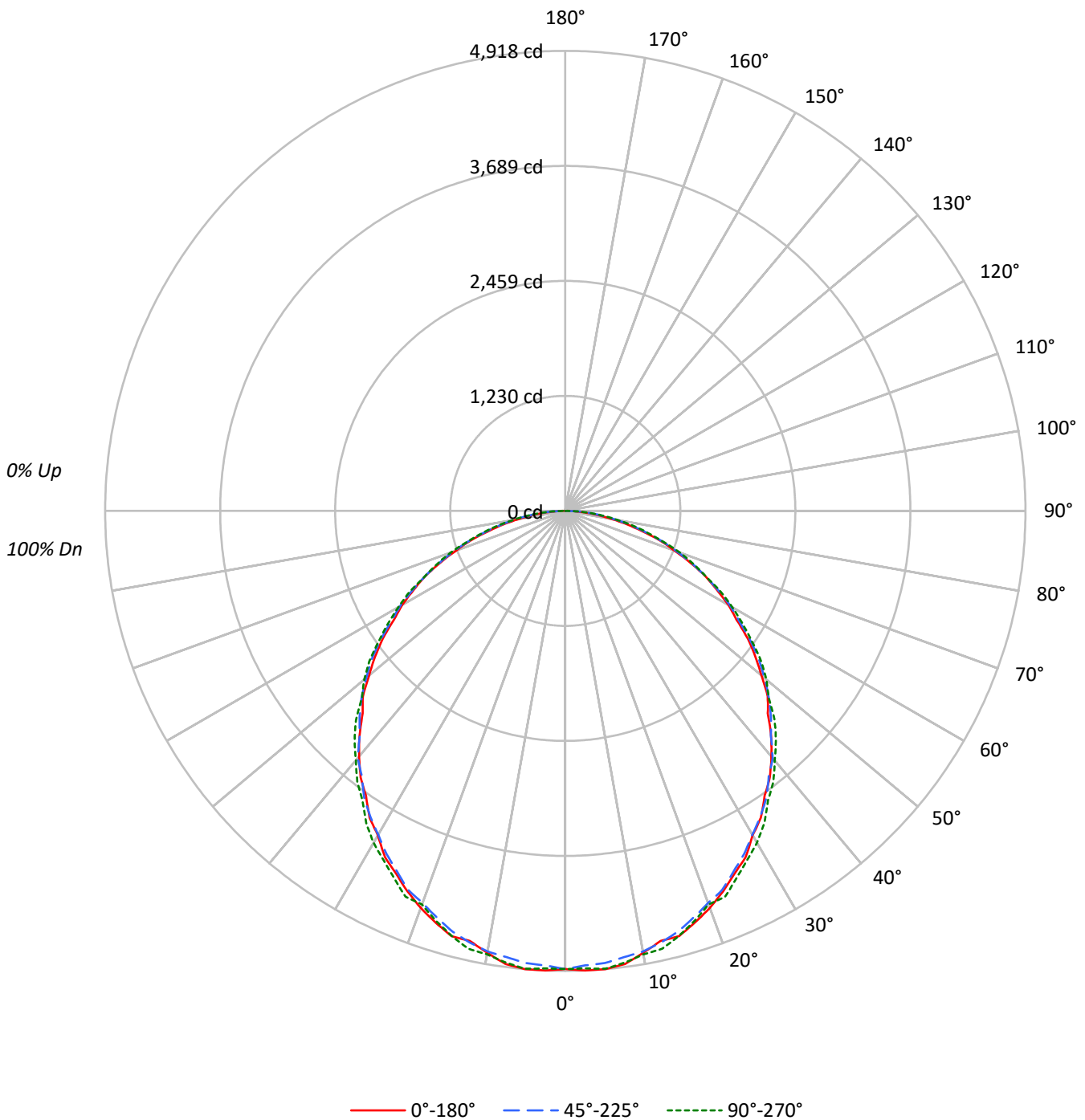
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13569.0 lumens
Efficiency: N/A
Efficacy: 100.7 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.24 / 1.34
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				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	109	104	99	96	106	102	98	94	97	94	91	93	91	88	90	88	86	86	86	86	84
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	72	72	72	70
3	90	79	71	65	88	78	70	64	75	68	63	72	67	62	69	65	61	61	61	61	59
4	82	70	62	55	80	69	61	54	67	59	54	64	58	53	62	57	52	52	52	52	50
5	76	63	54	47	74	62	53	47	60	52	46	58	51	46	56	50	45	45	45	45	43
6	70	57	48	41	68	56	47	41	54	46	41	52	45	40	51	45	40	40	40	40	38
7	65	51	43	36	63	51	42	36	49	41	36	48	41	36	46	40	35	35	35	35	33
8	60	47	38	33	59	46	38	32	45	37	32	44	37	32	42	36	32	32	32	32	30
9	57	43	35	29	55	42	35	29	41	34	29	40	34	29	39	33	29	29	29	29	27
10	53	40	32	27	52	39	32	26	38	31	26	37	31	26	36	30	26	26	26	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	17376	17376	17376
5°	17517	17284	17502
10°	17278	17232	17346
15°	17281	17103	17266
20°	17053	16845	16909
25°	16745	16654	16952
30°	16406	16380	16788
35°	16090	16227	16365
40°	15873	15971	16127
45°	15360	15593	15879
50°	15110	15332	15483
55°	14734	14918	15075
60°	14276	14486	14621
65°	13853	13906	13906
70°	12881	13189	13518
75°	11861	12324	12586
80°	10460	11367	11757
85°	9388	10507	11281

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 15879 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	463.5	3.4
10°-20°	1321.0	9.7
20°-30°	1981.4	14.6
30°-40°	2353.2	17.3
40°-50°	2409.4	17.8
50°-60°	2158.7	15.9
60°-70°	1639.9	12.1
70°-80°	955.1	7.0
80°-90°	286.8	2.1
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°	3765.9	27.8
0°-40°	6119.1	45.1
0°-60°	10687.2	78.8
0°-90°	13569.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13569.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4897	4897	4897	4897	4897	
5°	4918	4899	4853	4882	4914	466
15°	4705	4736	4656	4675	4700	1320
25°	4277	4315	4254	4309	4330	1974
35°	3715	3797	3746	3761	3778	2335
45°	3061	3137	3108	3133	3165	2381
55°	2382	2418	2412	2439	2437	2122
65°	1650	1650	1656	1678	1656	1620
75°	865	880	899	926	918	921
85°	231	235	258	275	277	258
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4897.1	4897.1	4897.1	4897.1	4897.1
2.5°	4918.3	4895.0	4863.3	4873.8	4895.0
5°	4918.3	4899.2	4852.7	4882.3	4914.0
7.5°	4886.5	4911.9	4810.4	4810.4	4869.6
10°	4795.6	4844.2	4782.9	4776.5	4814.6
12.5°	4708.8	4797.7	4725.8	4746.9	4793.5
15°	4704.6	4736.3	4656.0	4675.0	4700.4
17.5°	4613.6	4645.4	4558.6	4594.6	4594.6
20°	4516.3	4522.7	4461.3	4539.6	4478.3
22.5°	4404.2	4469.8	4385.2	4410.6	4463.5
25°	4277.3	4315.4	4254.0	4309.0	4330.2
27.5°	4173.6	4220.2	4135.6	4201.1	4207.5
30°	4004.4	4055.2	3998.1	4040.4	4097.5
32.5°	3890.2	3907.1	3877.5	3941.0	3957.9
35°	3714.6	3797.1	3746.3	3761.1	3778.1
37.5°	3591.9	3617.3	3572.9	3623.6	3651.1
40°	3426.9	3465.0	3448.1	3456.5	3481.9
42.5°	3255.6	3295.8	3251.3	3312.7	3331.7
45°	3061.0	3137.1	3107.5	3132.9	3164.6
47.5°	2934.0	2959.4	2951.0	2965.8	2944.6
50°	2737.3	2762.7	2777.5	2796.5	2805.0
52.5°	2561.7	2580.8	2608.3	2618.8	2637.9
55°	2381.9	2417.9	2411.5	2439.0	2436.9
57.5°	2172.5	2225.4	2208.5	2248.6	2248.6
60°	2011.7	2020.2	2041.3	2060.4	2060.4
62.5°	1825.6	1836.2	1846.7	1863.7	1876.3
65°	1650.0	1650.0	1656.3	1677.5	1656.3
67.5°	1446.9	1438.5	1459.6	1485.0	1482.9
70°	1241.7	1252.3	1271.3	1303.1	1303.1
72.5°	1066.2	1066.2	1087.3	1104.2	1102.1
75°	865.2	880.0	899.0	926.5	918.1
77.5°	685.4	696.0	727.7	753.1	755.2
80°	511.9	522.5	556.3	581.7	575.4
82.5°	357.5	372.3	404.0	423.1	421.0
85°	230.6	234.8	258.1	275.0	277.1
87.5°	105.8	114.2	131.2	137.5	137.5
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	21.45	23.09	21.81	23.40	23.72	21.55	23.19	21.92	23.51	23.82
	3H	23.23	24.71	23.61	25.04	25.40	23.39	24.87	23.77	25.20	25.56
	4H	23.89	25.29	24.29	25.64	26.01	24.09	25.49	24.49	25.83	26.21
	6H	24.37	25.66	24.78	26.03	26.42	24.64	25.93	25.05	26.30	26.69
	8H	24.52	25.75	24.94	26.14	26.54	24.83	26.07	25.25	26.46	26.85
	12H	24.62	25.81	25.05	26.19	26.62	24.97	26.16	25.40	26.54	26.97
4H	2H	22.09	23.49	22.49	23.84	24.21	22.18	23.57	22.57	23.92	24.30
	3H	24.10	25.27	24.50	25.67	26.07	24.24	25.41	24.65	25.81	26.21
	4H	24.89	25.95	25.32	26.36	26.80	25.08	26.14	25.51	26.55	26.99
	6H	25.49	26.42	25.94	26.86	27.31	25.77	26.70	26.22	27.14	27.59
	8H	25.68	26.55	26.14	27.00	27.46	26.01	26.88	26.47	27.32	27.79
	12H	25.84	26.62	26.32	27.09	27.56	26.21	26.99	26.69	27.47	27.94
8H	4H	25.22	26.09	25.68	26.54	27.00	25.39	26.26	25.85	26.70	27.17
	6H	25.95	26.67	26.44	27.16	27.63	26.21	26.94	26.71	27.43	27.90
	8H	26.22	26.87	26.73	27.38	27.86	26.55	27.20	27.05	27.70	28.19
	12H	26.45	27.02	26.95	27.51	28.07	26.84	27.41	27.34	27.90	28.46
12H	4H	25.27	26.05	25.75	26.52	26.99	25.42	26.21	25.90	26.68	27.15
	6H	26.02	26.67	26.53	27.18	27.66	26.27	26.93	26.78	27.43	27.92
	8H	26.35	26.93	26.86	27.42	27.98	26.67	27.25	27.17	27.74	28.29