

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: P894799

Luminaire Tested: 8TMB-18HL-LVR-UNV-L840

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894799
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-L840
Description: 18000 Lumen 8FT MICROBAY LINEAR BAY with LOUVER, 80CRI, 4000K CCT
Light Source: -
Ballast/Driver: -

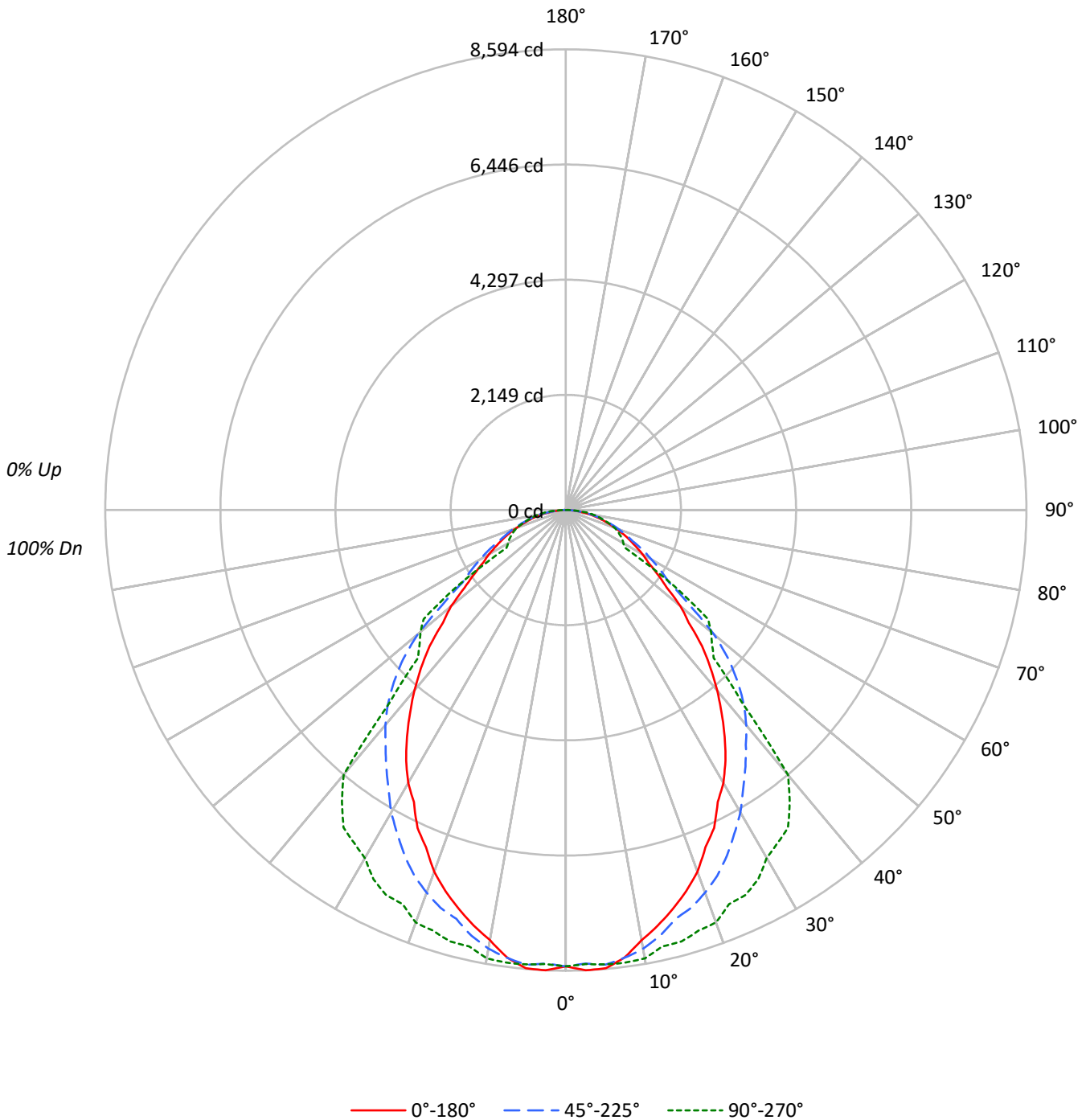
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17817.0 lumens
Efficiency: N/A
Efficacy: 132.2 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
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	100	
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	89	87	
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	77	75	
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	75	70	67	67	65	
4	86	76	68	62	84	74	67	61	72	66	60	70	64	60	68	63	59	59	57	
5	80	68	60	54	78	67	60	54	65	59	53	63	57	53	62	56	52	52	50	
6	74	62	54	48	73	61	54	48	60	53	48	58	52	47	56	51	47	47	45	
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	42	40	
8	65	52	44	39	63	52	44	39	50	43	39	49	43	38	48	42	38	38	36	
9	61	48	41	35	59	48	40	35	47	40	35	46	39	35	45	39	35	35	33	
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32	32	30	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	30201	30201	30201
5°	30566	30325	30307
10°	29361	29937	30595
15°	28309	29007	30614
20°	27118	28684	30922
25°	25621	27843	31033
30°	24078	26679	30715
35°	22392	25304	31314
40°	20343	24257	29861
45°	18025	22766	19581
50°	15427	19898	19539
55°	12927	14520	15201
60°	11761	13109	8799
65°	11018	11606	9402
70°	10140	10995	10062
75°	9526	10315	10246
80°	8888	9757	10983
85°	7633	8142	11704

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 22766 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	808.8	4.5
10°-20°	2263.1	12.7
20°-30°	3298.3	18.5
30°-40°	3773.2	21.2
40°-50°	3227.8	18.1
50°-60°	2128.6	11.9
60°-70°	1286.9	7.2
70°-80°	787.2	4.4
80°-90°	243.2	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°	6370.2	35.8
0°-40°	10143.4	56.9
0°-60°	15499.8	87.0
0°-90°	17817.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	17817.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8512	8512	8512	8512	8512	
5°	8582	8574	8514	8497	8509	804
15°	7707	7797	7897	8402	8334	2167
25°	6544	6644	7112	7719	7927	2994
35°	5170	5430	5842	6759	7229	3220
45°	3592	3870	4537	4240	3902	2750
55°	2090	2207	2347	2782	2457	1901
65°	1312	1345	1382	1235	1120	1297
75°	695	712	752	787	747	733
85°	188	185	200	238	288	213
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	8511.8	8511.8	8511.8	8511.8	8511.8
2.5°	8594.2	8569.3	8466.8	8564.3	8476.8
5°	8581.8	8574.3	8514.3	8496.8	8509.3
7.5°	8416.8	8434.3	8424.3	8611.7	8516.8
10°	8149.3	8184.3	8309.3	8571.8	8491.8
12.5°	7939.3	7966.8	8134.3	8524.3	8336.8
15°	7706.8	7796.8	7896.8	8401.8	8334.3
17.5°	7456.8	7541.8	7779.3	8236.8	8229.3
20°	7181.9	7339.4	7596.8	8021.8	8189.3
22.5°	6809.4	7021.9	7384.4	7924.3	7956.8
25°	6544.4	6644.4	7111.9	7719.3	7926.8
27.5°	6142.0	6331.9	6809.4	7424.4	7766.8
30°	5877.0	6034.5	6511.9	7251.9	7496.8
32.5°	5544.5	5732.0	6159.5	7064.4	7359.4
35°	5169.5	5429.5	5842.0	6759.4	7229.4
37.5°	4774.6	5032.1	5519.5	6506.9	6861.9
40°	4392.1	4612.1	5237.0	6204.5	6446.9
42.5°	3999.7	4237.1	4914.6	5607.0	4849.6
45°	3592.2	3869.7	4537.1	4239.6	3902.2
47.5°	3109.7	3449.7	4119.6	3407.2	3697.2
50°	2794.8	2979.7	3604.7	3212.2	3539.7
52.5°	2377.3	2627.3	2894.7	2999.7	3344.7
55°	2089.8	2207.3	2347.3	2782.3	2457.3
57.5°	1824.8	1929.8	2092.3	1962.3	1309.9
60°	1657.4	1704.9	1847.3	1402.4	1239.9
62.5°	1467.4	1514.9	1619.9	1309.9	1189.9
65°	1312.4	1344.9	1382.4	1234.9	1119.9
67.5°	1147.4	1164.9	1204.9	1139.9	1052.4
70°	977.4	1002.4	1059.9	1042.4	969.9
72.5°	827.4	849.9	899.9	924.9	857.4
75°	694.9	712.4	752.4	787.4	747.4
77.5°	552.5	570.0	622.4	659.9	642.4
80°	435.0	437.5	477.5	515.0	537.5
82.5°	305.0	310.0	340.0	380.0	425.0
85°	187.5	185.0	200.0	237.5	287.5
87.5°	72.5	70.0	82.5	100.0	147.5
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	19.67	21.15	20.03	21.46	21.77	19.34	20.82	19.71	21.14	21.45
	3H	21.23	22.55	21.60	22.88	23.24	20.96	22.29	21.34	22.61	22.98
	4H	21.83	23.07	22.23	23.42	23.80	21.71	22.95	22.11	23.30	23.68
	6H	22.28	23.43	22.70	23.80	24.19	22.38	23.52	22.79	23.89	24.28
	8H	22.44	23.53	22.86	23.92	24.32	22.66	23.75	23.08	24.14	24.54
	12H	22.53	23.58	22.96	23.96	24.39	22.88	23.92	23.31	24.30	24.73
4H	2H	20.26	21.50	20.66	21.85	22.23	20.00	21.25	20.41	21.59	21.97
	3H	22.05	23.08	22.46	23.48	23.88	21.89	22.92	22.30	23.32	23.72
	4H	22.78	23.70	23.21	24.12	24.56	22.79	23.71	23.22	24.13	24.57
	6H	23.36	24.16	23.82	24.61	25.07	23.59	24.40	24.05	24.84	25.30
	8H	23.56	24.31	24.02	24.75	25.22	23.92	24.67	24.38	25.12	25.59
	12H	23.69	24.37	24.18	24.85	25.32	24.19	24.87	24.68	25.34	25.82
8H	4H	23.10	23.85	23.56	24.29	24.76	23.11	23.86	23.57	24.30	24.77
	6H	23.81	24.43	24.30	24.92	25.40	24.06	24.68	24.55	25.17	25.65
	8H	24.08	24.64	24.59	25.15	25.64	24.47	25.03	24.99	25.54	26.03
	12H	24.29	24.78	24.80	25.28	25.84	24.84	25.34	25.35	25.83	26.40
12H	4H	23.14	23.81	23.62	24.29	24.76	23.13	23.80	23.61	24.28	24.75
	6H	23.88	24.44	24.39	24.95	25.44	24.11	24.67	24.62	25.18	25.67
	8H	24.21	24.70	24.72	25.20	25.76	24.59	25.08	25.10	25.58	26.14