

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: P894783

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

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894783
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-L840
Description: 18000 Lumen 8FT MICROBAY LINEAR BAY with FLAT FROSTED LENS, 80CRI, 4000K CCT
Light Source: -
Ballast/Driver: -

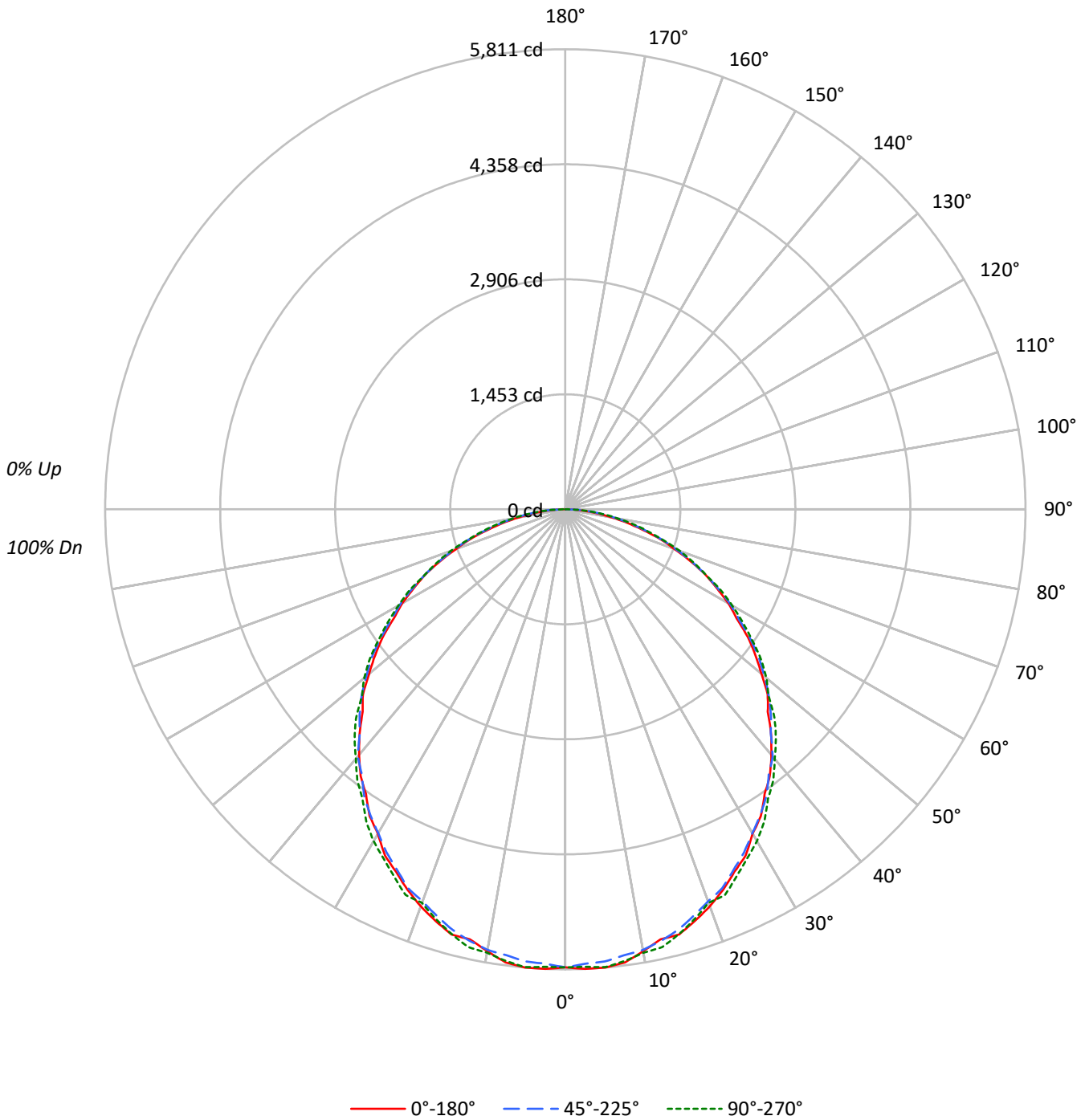
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16032.0 lumens
Efficiency: N/A
Efficacy: 118.9 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 (A_{in}): 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

TEST NUMBER: P894783
CATALOG NUMBER: 8TMB-18HL-FLT-UNV-L840

Luminous Intensity Polar Plot





TEST NUMBER: P894783

CATALOG NUMBER: 8TMB-18HL-FLT-UNV-L840

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°	20530	20530	20530
5°	20697	20421	20679
10°	20414	20360	20495
15°	20418	20207	20400
20°	20148	19903	19978
25°	19785	19677	20030
30°	19384	19354	19835
35°	19010	19173	19335
40°	18754	18870	19055
45°	18147	18423	18762
50°	17853	18115	18294
55°	17409	17626	17811
60°	16867	17115	17275
65°	16367	16430	16430
70°	15220	15583	15972
75°	14013	14562	14870
80°	12358	13431	13890
85°	11089	12413	13329

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 18762 cd/sqm



TEST NUMBER: P894783
 CATALOG NUMBER: 8TMB-18HL-FLT-UNV-L840

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	547.6	3.4
10°-20°	1560.8	9.7
20°-30°	2341.0	14.6
30°-40°	2780.4	17.3
40°-50°	2846.7	17.8
50°-60°	2550.5	15.9
60°-70°	1937.5	12.1
70°-80°	1128.5	7.0
80°-90°	338.9	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°	4449.5	27.8
0°-40°	7229.9	45.1
0°-60°	12627.1	78.8
0°-90°	16032.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	16032.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5786	5786	5786	5786	5786	
5°	5811	5788	5734	5768	5806	550
15°	5559	5596	5501	5524	5554	1560
25°	5054	5099	5026	5091	5116	2332
35°	4389	4486	4426	4444	4464	2759
45°	3617	3706	3672	3702	3739	2813
55°	2814	2857	2849	2882	2879	2507
65°	1950	1950	1957	1982	1957	1915
75°	1022	1040	1062	1095	1085	1088
85°	272	277	305	325	327	305
90°	0	0	0	0	0	



TEST NUMBER: P894783

CATALOG NUMBER: 8TMB-18HL-FLT-UNV-L840

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5786.0	5786.0	5786.0	5786.0	5786.0
2.5°	5811.0	5783.5	5746.0	5758.5	5783.5
5°	5811.0	5788.5	5733.5	5768.5	5806.0
7.5°	5773.5	5803.5	5683.5	5683.5	5753.5
10°	5666.0	5723.5	5651.0	5643.5	5688.5
12.5°	5563.6	5668.5	5583.6	5608.6	5663.5
15°	5558.6	5596.1	5501.1	5523.6	5553.6
17.5°	5451.1	5488.6	5386.1	5428.6	5428.6
20°	5336.1	5343.6	5271.1	5363.6	5291.1
22.5°	5203.7	5281.1	5181.2	5211.2	5273.6
25°	5053.7	5098.7	5026.2	5091.2	5116.2
27.5°	4931.2	4986.2	4886.2	4963.7	4971.2
30°	4731.3	4791.3	4723.8	4773.8	4841.3
32.5°	4596.3	4616.3	4581.3	4656.3	4676.3
35°	4388.9	4486.3	4426.4	4443.9	4463.9
37.5°	4243.9	4273.9	4221.4	4281.4	4313.9
40°	4049.0	4093.9	4074.0	4084.0	4113.9
42.5°	3846.5	3894.0	3841.5	3914.0	3936.5
45°	3616.6	3706.5	3671.6	3701.5	3739.0
47.5°	3466.6	3496.6	3486.6	3504.1	3479.1
50°	3234.2	3264.2	3281.7	3304.2	3314.1
52.5°	3026.7	3049.2	3081.7	3094.2	3116.7
55°	2814.3	2856.8	2849.3	2881.8	2879.3
57.5°	2566.8	2629.3	2609.3	2656.8	2656.8
60°	2376.9	2386.9	2411.9	2434.4	2434.4
62.5°	2156.9	2169.4	2181.9	2201.9	2216.9
65°	1949.5	1949.5	1957.0	1982.0	1957.0
67.5°	1709.6	1699.6	1724.6	1754.5	1752.0
70°	1467.1	1479.6	1502.1	1539.6	1539.6
72.5°	1259.7	1259.7	1284.7	1304.7	1302.2
75°	1022.2	1039.7	1062.2	1094.7	1084.7
77.5°	809.8	822.3	859.8	889.8	892.3
80°	604.8	617.3	657.3	687.3	679.8
82.5°	422.4	439.9	477.4	499.9	497.4
85°	272.4	277.4	304.9	324.9	327.4
87.5°	125.0	135.0	155.0	162.5	162.5
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P894783
 CATALOG NUMBER: 8TMB-18HL-FLT-UNV-L840

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	22.03	23.67	22.39	23.98	24.29	22.13	23.77	22.50	24.09	24.40
	3H	23.81	25.29	24.18	25.62	25.98	23.97	25.45	24.35	25.78	26.14
	4H	24.47	25.87	24.87	26.22	26.59	24.67	26.07	25.07	26.41	26.79
	6H	24.95	26.24	25.36	26.61	27.00	25.22	26.51	25.63	26.88	27.27
	8H	25.10	26.33	25.52	26.72	27.12	25.41	26.65	25.83	27.03	27.43
	12H	25.20	26.39	25.63	26.77	27.20	25.55	26.74	25.98	27.12	27.55
4H	2H	22.67	24.07	23.07	24.42	24.79	22.76	24.15	23.15	24.50	24.88
	3H	24.68	25.85	25.08	26.25	26.65	24.82	25.99	25.23	26.39	26.79
	4H	25.47	26.53	25.90	26.94	27.38	25.66	26.72	26.09	27.13	27.57
	6H	26.07	27.00	26.52	27.44	27.89	26.35	27.28	26.80	27.72	28.17
	8H	26.26	27.13	26.72	27.58	28.04	26.59	27.46	27.05	27.90	28.37
	12H	26.42	27.20	26.89	27.67	28.14	26.79	27.57	27.27	28.05	28.52
8H	4H	25.80	26.67	26.26	27.11	27.58	25.97	26.84	26.43	27.28	27.75
	6H	26.53	27.25	27.02	27.74	28.21	26.79	27.52	27.29	28.01	28.48
	8H	26.80	27.45	27.31	27.95	28.44	27.13	27.78	27.63	28.28	28.77
	12H	27.03	27.60	27.53	28.09	28.65	27.42	27.99	27.92	28.48	29.04
12H	4H	25.85	26.63	26.33	27.10	27.57	26.00	26.79	26.48	27.26	27.73
	6H	26.60	27.25	27.11	27.76	28.24	26.85	27.50	27.36	28.01	28.50
	8H	26.93	27.51	27.44	28.00	28.56	27.25	27.82	27.75	28.31	28.87