

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: P894800

Luminaire Tested: 8TMB-18HL-LVR-UNV-L850

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894800
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-L850
Description: 18000 Lumen 8FT MICROBAY LINEAR BAY with LOUVER, 80CRI, 5000K CCT
Light Source: -
Ballast/Driver: -

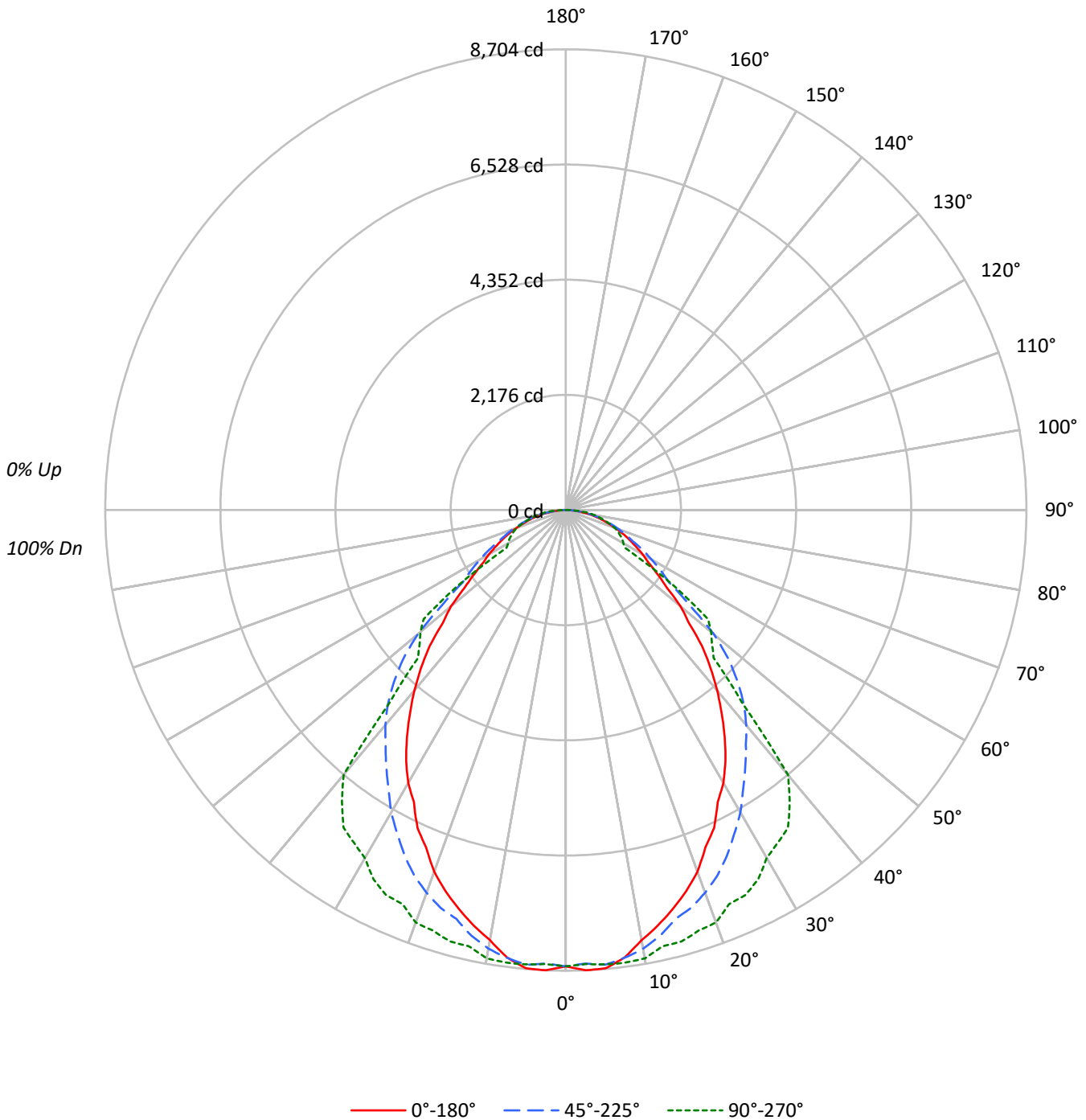
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18045.0 lumens
Efficiency: N/A
Efficacy: 133.9 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

TEST NUMBER: P894800
CATALOG NUMBER: 8TMB-18HL-LVR-UNV-L850

Luminous Intensity Polar Plot





TEST NUMBER: P894800

CATALOG NUMBER: 8TMB-18HL-LVR-UNV-L850

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	30587	30587	30587
5°	30957	30713	30695
10°	29737	30320	30986
15°	28672	29379	31006
20°	27465	29052	31317
25°	25949	28199	31430
30°	24386	27021	31108
35°	22678	25628	31715
40°	20603	24567	30243
45°	18256	23058	19831
50°	15624	20152	19789
55°	13093	14706	15395
60°	11912	13277	8911
65°	11159	11755	9522
70°	10269	11137	10190
75°	9648	10448	10378
80°	9001	9881	11122
85°	7731	8244	11855

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 23058 cd/sqm



TEST NUMBER: P894800
 CATALOG NUMBER: 8TMB-18HL-LVR-UNV-L850

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	819.2	4.5
10°-20°	2292.1	12.7
20°-30°	3340.5	18.5
30°-40°	3821.5	21.2
40°-50°	3269.1	18.1
50°-60°	2155.8	11.9
60°-70°	1303.3	7.2
70°-80°	797.3	4.4
80°-90°	246.3	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°	6451.7	35.8
0°-40°	10273.2	56.9
0°-60°	15698.1	87.0
0°-90°	18045.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	18045.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8621	8621	8621	8621	8621	
5°	8692	8684	8623	8606	8618	814
15°	7805	7897	7998	8509	8441	2194
25°	6628	6729	7203	7818	8028	3032
35°	5236	5499	5917	6846	7322	3262
45°	3638	3919	4595	4294	3952	2785
55°	2117	2236	2377	2818	2489	1925
65°	1329	1362	1400	1251	1134	1314
75°	704	722	762	798	757	743
85°	190	187	202	240	291	216
90°	0	0	0	0	0	



TEST NUMBER: P894800
 CATALOG NUMBER: 8TMB-18HL-LVR-UNV-L850

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	8620.7	8620.7	8620.7	8620.7	8620.7
2.5°	8704.2	8678.9	8575.1	8673.8	8585.2
5°	8691.6	8684.0	8623.2	8605.5	8618.1
7.5°	8524.5	8542.2	8532.1	8722.0	8625.7
10°	8253.6	8289.0	8415.6	8681.4	8600.4
12.5°	8040.9	8068.8	8238.4	8633.3	8443.5
15°	7805.4	7896.6	7997.9	8509.3	8440.9
17.5°	7552.3	7638.4	7878.9	8342.2	8334.6
20°	7273.8	7433.3	7694.1	8124.5	8294.1
22.5°	6896.5	7111.7	7478.9	8025.7	8058.6
25°	6628.2	6729.4	7202.9	7818.1	8028.2
27.5°	6220.6	6413.0	6896.5	7519.4	7866.2
30°	5952.2	6111.7	6595.3	7344.7	7592.8
32.5°	5615.5	5805.4	6238.3	7154.8	7453.5
35°	5235.7	5499.0	5916.7	6845.9	7321.9
37.5°	4835.7	5096.5	5590.1	6590.2	6949.7
40°	4448.3	4671.1	5304.1	6283.9	6529.4
42.5°	4050.8	4291.4	4977.5	5678.8	4911.6
45°	3638.2	3919.2	4595.2	4293.9	3952.1
47.5°	3149.5	3493.8	4172.4	3450.8	3744.5
50°	2830.5	3017.9	3650.8	3253.3	3585.0
52.5°	2407.7	2660.9	2931.8	3038.1	3387.5
55°	2116.6	2235.6	2377.3	2817.9	2488.7
57.5°	1848.2	1954.5	2119.1	1987.4	1326.6
60°	1678.6	1726.7	1871.0	1420.3	1255.8
62.5°	1486.1	1534.3	1640.6	1326.6	1205.1
65°	1329.2	1362.1	1400.1	1250.7	1134.2
67.5°	1162.1	1179.8	1220.3	1154.5	1065.9
70°	989.9	1015.2	1073.5	1055.7	982.3
72.5°	838.0	860.8	911.4	936.8	868.4
75°	703.8	721.6	762.1	797.5	757.0
77.5°	559.5	577.2	630.4	668.4	650.7
80°	440.5	443.1	483.6	521.5	544.3
82.5°	308.9	313.9	344.3	384.8	430.4
85°	189.9	187.4	202.5	240.5	291.2
87.5°	73.4	70.9	83.5	101.3	149.4
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P894800
 CATALOG NUMBER: 8TMB-18HL-LVR-UNV-L850

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	19.71	21.19	20.08	21.50	21.82	19.39	20.87	19.75	21.18	21.49
	3H	21.27	22.59	21.65	22.92	23.29	21.01	22.33	21.38	22.66	23.02
	4H	21.87	23.11	22.27	23.46	23.84	21.75	22.99	22.15	23.34	23.72
	6H	22.33	23.47	22.74	23.84	24.23	22.42	23.57	22.83	23.93	24.33
	8H	22.48	23.57	22.91	23.96	24.36	22.70	23.79	23.13	24.18	24.58
	12H	22.58	23.62	23.01	24.00	24.43	22.92	23.96	23.35	24.35	24.78
4H	2H	20.30	21.54	20.70	21.89	22.27	20.05	21.29	20.45	21.64	22.02
	3H	22.09	23.12	22.50	23.52	23.92	21.93	22.96	22.34	23.36	23.76
	4H	22.82	23.74	23.25	24.16	24.60	22.83	23.75	23.26	24.17	24.61
	6H	23.40	24.21	23.86	24.65	25.11	23.64	24.44	24.09	24.88	25.34
	8H	23.60	24.35	24.06	24.80	25.26	23.96	24.72	24.43	25.16	25.63
	12H	23.74	24.41	24.22	24.89	25.36	24.24	24.91	24.72	25.39	25.86
8H	4H	23.14	23.89	23.61	24.34	24.81	23.15	23.90	23.61	24.35	24.82
	6H	23.85	24.47	24.35	24.97	25.44	24.10	24.72	24.60	25.22	25.69
	8H	24.12	24.68	24.64	25.19	25.68	24.52	25.08	25.03	25.59	26.08
	12H	24.33	24.83	24.84	25.32	25.88	24.88	25.38	25.39	25.87	26.44
12H	4H	23.18	23.85	23.66	24.33	24.80	23.18	23.85	23.66	24.33	24.80
	6H	23.92	24.48	24.44	24.99	25.48	24.15	24.71	24.67	25.22	25.71
	8H	24.25	24.75	24.76	25.24	25.80	24.63	25.13	25.14	25.62	26.19