

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: P894819

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

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894819
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2407-175-5)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 8TMB-18HL-LVRF-UNV-L940
Description: 18000 Lumen 8FT MICROBAY LINEAR BAY with LOUVER WITH FROSTED INLAY, 90CRI, 4000K (C)
Light Source: -
Ballast/Driver: -

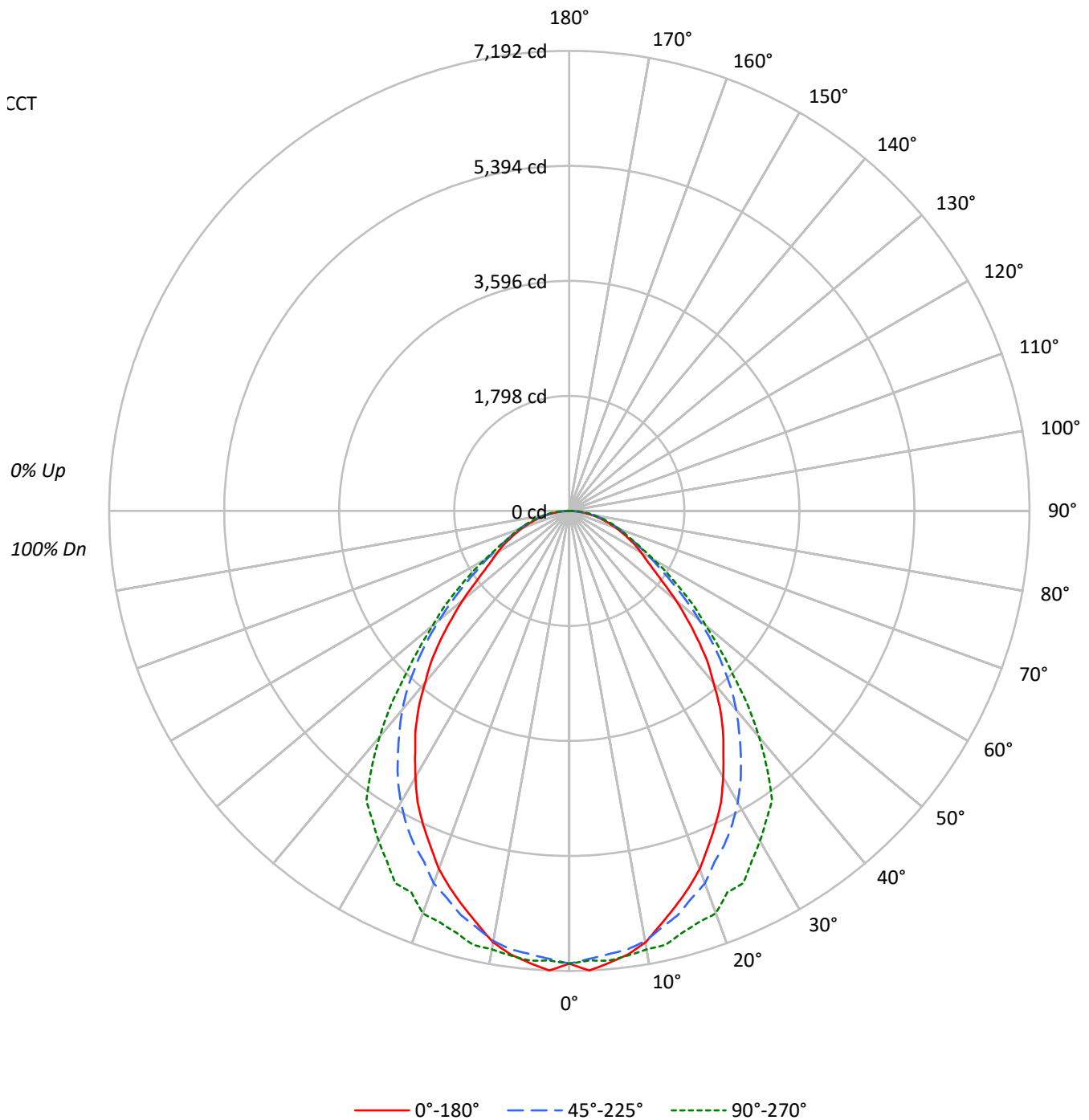
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14347.0 lumens
Efficiency: N/A
Efficacy: 106.4 lumens/watt
Spacing Criteria (0/90/45): 1.05 / 1.25 / 1.21
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

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	25106	25106	25106
5°	25270	24780	25134
10°	24678	24602	25075
15°	23513	24034	25075
20°	22492	23395	25280
25°	21176	22501	25151
30°	19699	21563	24414
35°	18142	20240	23942
40°	16225	18812	21379
45°	14224	16920	18129
50°	12004	14619	15343
55°	9958	12235	13086
60°	9157	10402	10793
65°	8578	9146	9218
70°	7988	8669	8602
75°	7452	8091	8380
80°	6959	7521	8040
85°	5854	6371	8871

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 18129 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	667.9	4.7
10°-20°	1863.0	13.0
20°-30°	2683.0	18.7
30°-40°	2962.1	20.6
40°-50°	2541.7	17.7
50°-60°	1731.5	12.1
60°-70°	1089.2	7.6
70°-80°	620.1	4.3
80°-90°	188.5	1.3
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°	5213.9	36.3
0°-40°	8176.0	57.0
0°-60°	12449.1	86.8
0°-90°	14347.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	14347.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7076	7076	7076	7076	7076	
5°	7095	7067	6957	7103	7057	670
15°	6401	6469	6543	6839	6826	1802
25°	5409	5517	5747	6211	6424	2484
35°	4188	4351	4673	5183	5527	2605
45°	2835	3023	3372	3575	3613	2184
55°	1610	1709	1978	2073	2115	1479
65°	1022	1039	1089	1142	1098	1015
75°	544	548	590	616	611	579
85°	144	148	156	186	218	165
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7075.9	7075.9	7075.9	7075.9	7075.9
2.5°	7192.2	7118.2	7012.4	7114.0	7035.7
5°	7094.9	7067.4	6957.4	7103.4	7056.9
7.5°	6995.5	6936.3	6917.2	7073.8	7012.4
10°	6849.6	6815.7	6828.4	7029.4	6959.6
12.5°	6619.0	6642.2	6671.9	6927.8	6949.0
15°	6401.1	6468.8	6542.8	6839.0	6826.3
17.5°	6187.4	6280.5	6350.3	6731.1	6741.7
20°	5956.9	6009.8	6195.9	6564.0	6695.1
22.5°	5671.3	5774.9	5935.7	6394.7	6454.0
25°	5409.0	5516.9	5747.4	6210.7	6424.4
27.5°	5134.0	5233.4	5519.0	5992.8	6174.8
30°	4808.2	4941.5	5263.0	5745.3	5959.0
32.5°	4482.5	4677.1	4985.9	5480.9	5728.4
35°	4188.4	4351.3	4672.8	5182.6	5527.4
37.5°	3862.7	4034.0	4359.8	4856.9	5076.9
40°	3503.0	3687.1	4061.5	4463.4	4615.7
42.5°	3194.2	3352.9	3729.4	4012.8	4133.4
45°	2834.6	3022.9	3371.9	3575.0	3613.0
47.5°	2487.7	2703.4	3016.5	3111.7	3185.7
50°	2174.6	2343.8	2648.4	2707.7	2779.6
52.5°	1855.2	2035.0	2301.5	2360.7	2466.5
55°	1609.8	1709.2	1977.9	2073.1	2115.4
57.5°	1430.0	1493.4	1683.8	1804.4	1817.1
60°	1290.4	1322.1	1465.9	1556.9	1520.9
62.5°	1161.3	1186.7	1258.6	1328.4	1281.9
65°	1021.7	1038.6	1089.4	1142.3	1097.9
67.5°	890.6	909.6	956.1	994.2	956.1
70°	770.0	784.8	835.6	852.5	829.2
72.5°	657.9	664.2	706.5	736.1	721.3
75°	543.6	547.9	590.2	615.6	611.3
77.5°	440.0	446.3	482.3	505.6	492.9
80°	340.6	344.8	368.1	401.9	393.5
82.5°	239.0	247.5	262.3	291.9	315.2
85°	143.8	148.1	156.5	186.2	217.9
87.5°	55.0	59.2	63.5	78.3	103.7
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	18.65	20.13	19.02	20.45	20.76	20.01	21.49	20.38	21.81	22.12
	3H	20.23	21.56	20.61	21.88	22.25	21.30	22.62	21.68	22.95	23.31
	4H	20.84	22.08	21.24	22.43	22.81	21.85	23.09	22.25	23.44	23.82
	6H	21.31	22.45	21.72	22.82	23.21	22.30	23.45	22.72	23.82	24.21
	8H	21.46	22.56	21.89	22.94	23.35	22.49	23.58	22.92	23.97	24.37
	12H	21.56	22.61	21.99	22.99	23.42	22.65	23.69	23.08	24.07	24.50
4H	2H	19.27	20.51	19.67	20.86	21.24	20.38	21.62	20.78	21.97	22.35
	3H	21.07	22.10	21.48	22.50	22.90	21.94	22.96	22.35	23.37	23.77
	4H	21.79	22.72	22.23	23.14	23.58	22.64	23.57	23.07	23.98	24.42
	6H	22.39	23.20	22.85	23.64	24.10	23.25	24.05	23.71	24.50	24.96
	8H	22.59	23.35	23.06	23.79	24.26	23.50	24.25	23.96	24.69	25.16
	12H	22.73	23.40	23.21	23.88	24.35	23.71	24.38	24.19	24.86	25.33
8H	4H	22.12	22.87	22.58	23.32	23.79	22.87	23.63	23.34	24.07	24.54
	6H	22.84	23.47	23.34	23.96	24.44	23.62	24.24	24.12	24.73	25.21
	8H	23.12	23.68	23.64	24.19	24.68	23.95	24.51	24.46	25.02	25.51
	12H	23.33	23.83	23.84	24.32	24.89	24.26	24.75	24.77	25.24	25.81
12H	4H	22.16	22.83	22.64	23.31	23.78	22.89	23.56	23.37	24.04	24.51
	6H	22.91	23.47	23.43	23.98	24.47	23.66	24.22	24.17	24.73	25.21
	8H	23.25	23.74	23.76	24.24	24.80	24.04	24.54	24.55	25.03	25.60