

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: P894795

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

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894795
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2403-334-6)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 8TMB-18HL-FLTU-UNV-L940
Description: 18000 Lumen 8FT MICROBAY LINEAR BAY with FLAT FROSTED LENS WITH UPLIGHT, 90CRI, 40
Light Source: -
Ballast/Driver: -

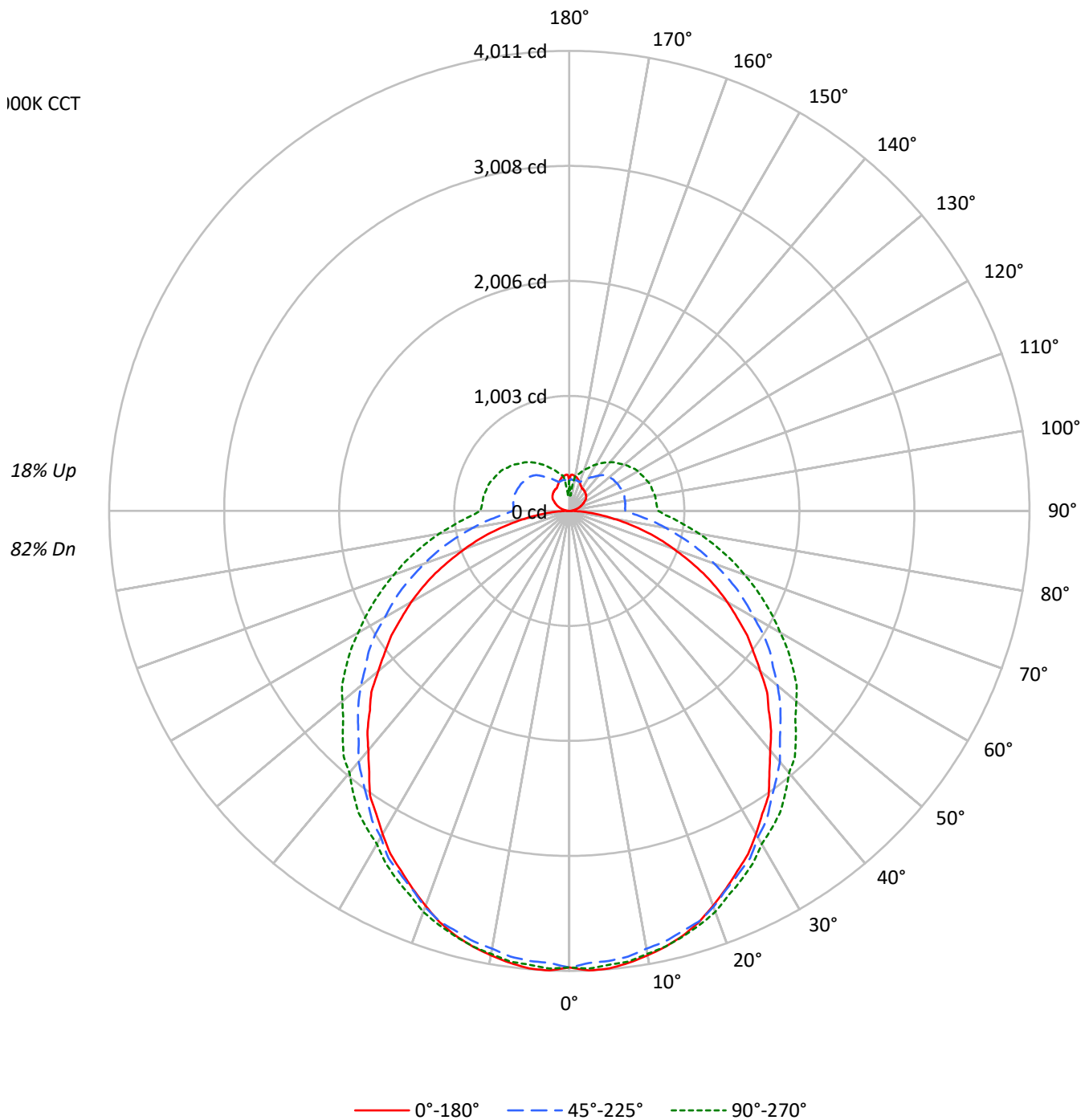
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14967.0 lumens
Efficiency: N/A
Efficacy: 111.0 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.26 / 1.36
Luminous Opening: Rectangular w/ Sides (W: 0.38' x L: 7.98' x H: 0.21')
CIE Type: Semi-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	0
RCR																					
0	115	115	115	115	110	110	110	110	101	101	101	93	93	93	86	86	86	86	86	86	82
1	103	98	93	89	99	94	90	86	87	83	80	80	77	74	73	71	69	69	69	69	66
2	93	85	77	71	89	81	75	69	75	70	65	69	65	61	63	60	57	57	57	57	54
3	85	74	66	59	81	71	63	57	66	59	54	60	55	51	56	51	48	48	48	48	45
4	78	65	56	49	74	63	55	48	58	51	46	54	48	43	50	45	41	41	41	41	38
5	71	58	49	42	68	56	48	41	52	45	39	48	42	37	44	39	35	35	35	35	33
6	66	52	43	37	63	50	42	36	47	40	34	43	37	33	40	35	31	31	31	31	28
7	61	47	38	32	58	46	37	32	42	35	30	39	33	29	37	31	27	27	27	27	25
8	56	43	34	29	54	42	34	28	39	32	27	36	30	26	34	28	24	24	24	24	22
9	53	39	31	26	50	38	30	25	36	29	24	33	27	23	31	26	22	22	22	22	20
10	49	36	28	23	47	35	28	23	33	26	22	31	25	21	29	24	20	20	20	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14125	14125	14125
5°	14230	13548	13502
10°	14111	13030	12885
15°	13982	12572	12298
20°	13704	12088	11713
25°	13402	11490	11068
30°	13131	10904	10442
35°	12885	10346	10039
40°	12349	9866	9457
45°	12020	9294	9052
50°	11630	8814	8625
55°	11290	8358	8244
60°	10800	7730	7733
65°	10242	7226	7251
70°	9378	6598	6727
75°	8482	5973	6228
80°	6964	5288	5725
85°	5239	4627	5253

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 12020 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	377.1	2.5
10°-20°	1076.8	7.2
20°-30°	1617.6	10.8
30°-40°	1938.7	13.0
40°-50°	2032.6	13.6
50°-60°	1906.7	12.7
60°-70°	1583.7	10.6
70°-80°	1132.4	7.6
80°-90°	671.6	4.5
90°-100°	492.6	3.3
100°-110°	485.4	3.2
110°-120°	452.8	3.0
120°-130°	397.3	2.7
130°-140°	319.9	2.1
140°-150°	229.6	1.5
150°-160°	145.9	1.0
160°-170°	80.9	0.5
170°-180°	25.5	0.2
0°-30°	3071.5	20.5
0°-40°	5010.2	33.5
0°-60°	8949.5	59.8
0°-90°	12337.1	82.4
90°-120°	1430.7	9.6
90°-150°	2377.6	15.9
90°-180°	2630.0	17.6
0°-180°	14967.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3981	3981	3981	3981	3981	
5°	4004	3996	3939	3958	3973	380
15°	3833	3810	3795	3822	3839	1079
25°	3465	3497	3490	3530	3550	1599
35°	3029	3040	3067	3156	3207	1880
45°	2458	2528	2604	2775	2792	1901
55°	1893	1955	2134	2308	2376	1684
65°	1288	1386	1610	1826	1878	1270
75°	679	836	1096	1322	1383	717
85°	167	366	641	857	937	183
90°	6	222	489	698	774	14
95°	19	233	489	690	762	20
105°	68	256	497	681	745	72
115°	123	277	486	647	711	121
125°	176	286	472	601	656	154
135°	203	275	438	544	588	157
145°	220	254	360	478	512	139
155°	241	254	294	370	419	112
165°	288	279	271	269	336	81
175°	317	305	273	226	138	30
180°	262	262	262	262	262	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3981.1	3981.1	3981.1	3981.1	3981.1
2.5°	4010.7	3979.0	3945.1	3995.9	3993.8
5°	4004.4	3995.9	3938.8	3957.8	3972.6
7.5°	3974.7	3953.6	3919.7	3966.3	3962.1
10°	3934.6	3909.2	3875.3	3902.8	3921.9
12.5°	3890.1	3869.0	3845.7	3875.3	3888.0
15°	3833.0	3809.7	3794.9	3822.4	3839.4
17.5°	3759.0	3752.6	3754.7	3756.9	3784.4
20°	3663.8	3668.0	3674.4	3712.4	3720.9
22.5°	3566.5	3589.8	3572.8	3632.1	3627.8
25°	3464.9	3496.7	3490.3	3530.5	3549.6
27.5°	3374.0	3376.1	3414.2	3471.3	3464.9
30°	3253.4	3289.4	3285.1	3354.9	3354.9
32.5°	3130.7	3183.6	3200.5	3261.9	3283.0
35°	3029.2	3039.8	3067.3	3156.1	3206.9
37.5°	2864.2	2915.0	2959.4	3075.7	3094.8
40°	2724.6	2775.3	2855.7	2991.1	2980.5
42.5°	2604.0	2656.9	2716.1	2872.6	2910.7
45°	2458.0	2527.8	2604.0	2775.3	2792.3
47.5°	2339.6	2394.6	2494.0	2650.5	2671.7
50°	2172.5	2261.3	2369.2	2551.1	2582.8
52.5°	2024.4	2100.5	2238.0	2426.3	2498.2
55°	1893.2	1954.6	2134.4	2307.8	2375.5
57.5°	1732.5	1817.1	2005.4	2197.8	2259.2
60°	1590.7	1673.2	1855.2	2075.2	2123.8
62.5°	1440.6	1537.9	1734.6	1948.2	2003.2
65°	1288.2	1385.6	1609.8	1825.5	1878.4
67.5°	1123.3	1243.8	1472.3	1696.5	1751.5
70°	968.8	1100.0	1345.4	1569.6	1624.6
72.5°	829.2	970.9	1220.6	1451.1	1510.4
75°	679.0	835.6	1095.8	1322.1	1383.4
77.5°	533.1	702.3	966.7	1195.2	1267.1
80°	391.3	577.5	854.6	1074.6	1150.8
82.5°	275.0	465.4	750.9	966.7	1036.5
85°	167.1	366.0	641.0	856.7	937.1
87.5°	74.0	283.5	554.2	767.9	839.8
90°	6.3	222.1	488.6	698.1	774.2
92.5°	12.7	226.3	486.5	689.6	765.8
95°	19.0	232.7	488.6	689.6	761.5
97.5°	27.5	241.1	492.9	689.6	759.4
100°	40.2	245.4	495.0	689.6	759.4
102.5°	52.9	251.7	492.9	679.0	750.9
105°	67.7	256.0	497.1	681.1	744.6
107.5°	82.5	260.2	497.1	670.6	742.5
110°	97.3	266.5	492.9	664.2	734.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	110.0	272.9	490.8	651.5	719.2
115°	122.7	277.1	486.5	647.3	710.8
117.5°	135.4	279.2	484.4	636.7	698.1
120°	146.0	283.5	480.2	624.0	691.7
122.5°	158.7	285.6	473.8	611.3	679.0
125°	175.6	285.6	471.7	600.8	655.8
127.5°	184.0	287.7	463.3	588.1	645.2
130°	192.5	281.3	459.0	573.3	628.3
132.5°	198.8	279.2	448.5	558.5	607.1
135°	203.1	275.0	437.9	543.6	588.1
137.5°	209.4	268.6	423.1	533.1	575.4
140°	213.7	264.4	401.9	511.9	554.2
142.5°	217.9	258.1	380.8	492.9	533.1
145°	220.0	253.8	359.6	478.1	511.9
147.5°	226.3	247.5	346.9	459.0	488.6
150°	224.2	243.3	327.9	435.8	465.4
152.5°	230.6	249.6	311.0	404.0	446.3
155°	241.1	253.8	294.0	370.2	418.8
157.5°	251.7	262.3	281.3	340.6	397.7
160°	266.5	266.5	266.5	317.3	380.8
162.5°	275.0	275.0	268.6	289.8	357.5
165°	287.7	279.2	270.8	268.6	336.3
167.5°	300.4	283.5	275.0	260.2	321.5
170°	302.5	289.8	272.9	245.4	311.0
172.5°	311.0	296.1	270.8	232.7	241.1
175°	317.3	304.6	272.9	226.3	137.5
177.5°	315.2	304.6	279.2	226.3	133.3
180°	262.3	262.3	262.3	262.3	262.3



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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	16.95	18.27	17.56	18.90	19.62	19.54	20.86	20.15	21.49	22.21
	3H	18.38	19.58	19.00	20.22	20.97	21.94	23.14	22.56	23.78	24.53
	4H	18.84	19.99	19.49	20.64	21.40	23.08	24.22	23.72	24.87	25.63
	6H	19.11	20.17	19.77	20.83	21.61	24.24	25.30	24.89	25.96	26.74
	8H	19.16	20.18	19.83	20.86	21.64	24.82	25.83	25.49	26.52	27.30
	12H	19.18	20.15	19.85	20.83	21.64	25.45	26.42	26.13	27.10	27.91
4H	2H	17.83	18.98	18.48	19.63	20.39	19.88	21.02	20.53	21.67	22.43
	3H	19.49	20.46	20.15	21.14	21.93	22.49	23.46	23.15	24.15	24.93
	4H	20.07	20.96	20.74	21.65	22.46	23.79	24.68	24.47	25.37	26.18
	6H	20.44	21.22	21.14	21.94	22.76	25.12	25.90	25.81	26.62	27.44
	8H	20.53	21.27	21.23	21.98	22.82	25.80	26.53	26.49	27.24	28.08
	12H	20.57	21.24	21.30	21.98	22.82	26.54	27.20	27.26	27.94	28.78
8H	4H	20.71	21.44	21.41	22.16	22.99	23.94	24.68	24.64	25.39	26.22
	6H	21.24	21.86	21.97	22.62	23.45	25.41	26.03	26.14	26.79	27.63
	8H	21.41	21.97	22.15	22.72	23.58	26.21	26.77	26.95	27.53	28.38
	12H	21.51	22.01	22.26	22.76	23.67	27.11	27.61	27.85	28.36	29.27
12H	4H	20.87	21.54	21.59	22.27	23.11	23.93	24.60	24.65	25.34	26.18
	6H	21.49	22.05	22.24	22.81	23.66	25.43	25.99	26.17	26.75	27.60
	8H	21.74	22.24	22.48	22.99	23.90	26.28	26.78	27.02	27.53	28.44