

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: P894694

Luminaire Tested: 8TMB-16HL-FLTU-UNV-L835

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894694
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-16HL-FLTU-UNV-L835
Description: 16000 Lumen 8FT MICROBAY LINEAR BAY with FLAT FROSTED LENS WITH UPLIGHT, 80CRI, 35
Light Source: -
Ballast/Driver: -

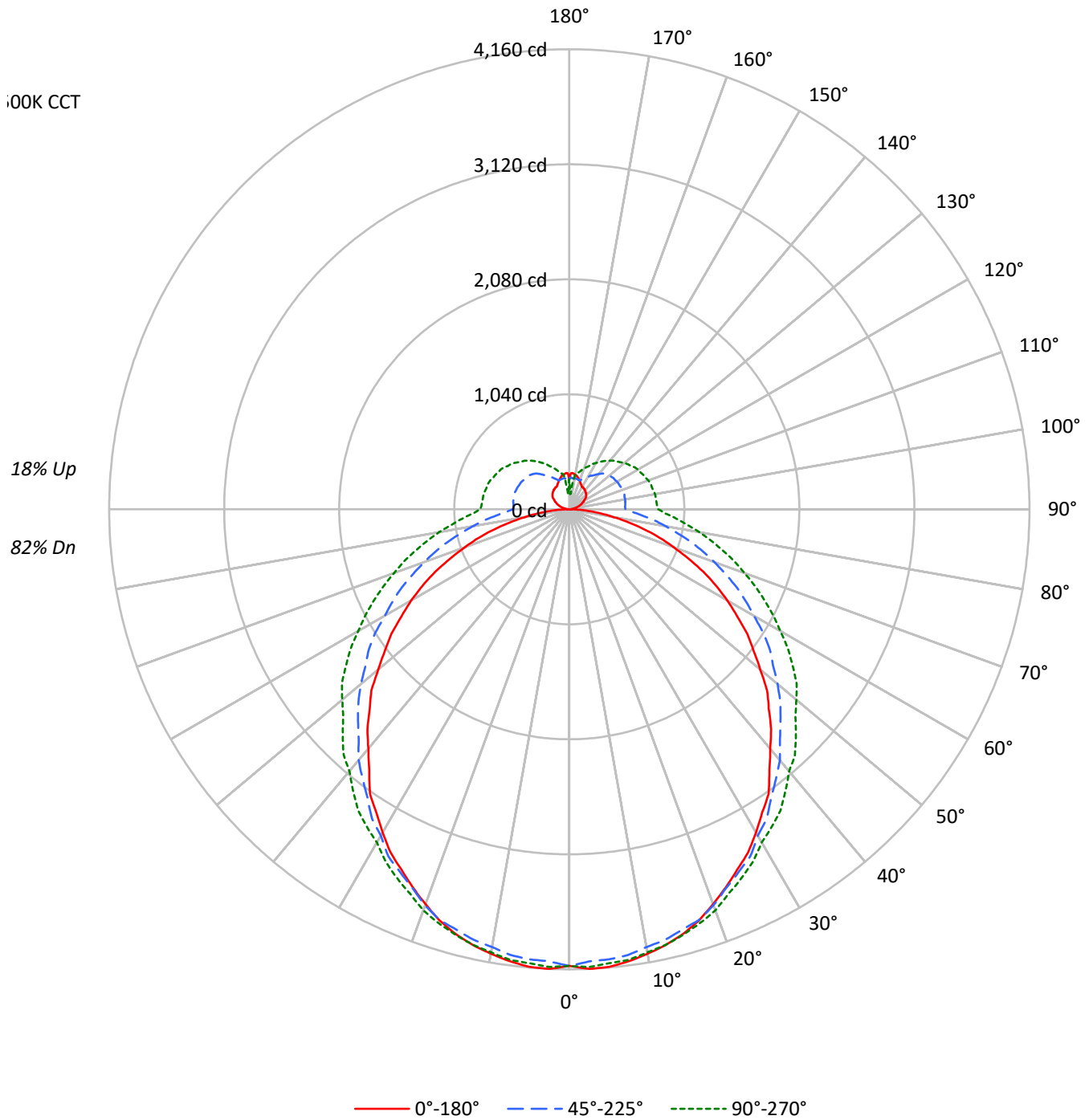
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15524.0 lumens
Efficiency: N/A
Efficacy: 134.1 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): 115.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: 0.999
Total Harmonic Distortion (THDi): 4.23
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°	14651	14651	14651
5°	14759	14052	14005
10°	14636	13514	13365
15°	14502	13041	12755
20°	14214	12538	12149
25°	13901	11917	11480
30°	13620	11310	10831
35°	13365	10730	10412
40°	12809	10234	9809
45°	12467	9640	9388
50°	12063	9142	8946
55°	11711	8669	8551
60°	11202	8018	8020
65°	10623	7494	7520
70°	9727	6844	6977
75°	8798	6195	6460
80°	7224	5485	5938
85°	5434	4799	5448

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 12467 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	391.1	2.5
10°-20°	1116.9	7.2
20°-30°	1677.8	10.8
30°-40°	2010.8	13.0
40°-50°	2108.2	13.6
50°-60°	1977.7	12.7
60°-70°	1642.7	10.6
70°-80°	1174.5	7.6
80°-90°	696.5	4.5
90°-100°	511.0	3.3
100°-110°	503.4	3.2
110°-120°	469.6	3.0
120°-130°	412.1	2.7
130°-140°	331.8	2.1
140°-150°	238.2	1.5
150°-160°	151.4	1.0
160°-170°	83.9	0.5
170°-180°	26.4	0.2
0°-30°	3185.8	20.5
0°-40°	5196.7	33.5
0°-60°	9282.6	59.8
0°-90°	12796.2	82.4
90°-120°	1484.0	9.6
90°-150°	2466.1	15.9
90°-180°	2728.0	17.6
0°-180°	15524.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4129	4129	4129	4129	4129	
5°	4153	4145	4085	4105	4120	394
15°	3976	3952	3936	3965	3982	1119
25°	3594	3627	3620	3662	3682	1658
35°	3142	3153	3181	3274	3326	1950
45°	2550	2622	2701	2879	2896	1972
55°	1964	2027	2214	2394	2464	1747
65°	1336	1437	1670	1894	1948	1317
75°	704	867	1136	1371	1435	744
85°	173	380	665	889	972	190
90°	7	230	507	724	803	14
95°	20	241	507	715	790	21
105°	70	266	516	706	772	74
115°	127	287	505	671	737	126
125°	182	296	489	623	680	160
135°	211	285	454	564	610	163
145°	228	263	373	496	531	144
155°	250	263	305	384	434	116
165°	298	290	281	279	349	84
175°	329	316	283	235	143	31
180°	272	272	272	272	272	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4129.2	4129.2	4129.2	4129.2	4129.2
2.5°	4160.0	4127.1	4091.9	4144.6	4142.4
5°	4153.4	4144.6	4085.4	4105.1	4120.5
7.5°	4122.7	4100.7	4065.6	4113.9	4109.5
10°	4081.0	4054.6	4019.5	4048.1	4067.8
12.5°	4034.9	4013.0	3988.8	4019.5	4032.7
15°	3975.7	3951.5	3936.2	3964.7	3982.2
17.5°	3898.9	3892.3	3894.5	3896.7	3925.2
20°	3800.1	3804.5	3811.1	3850.6	3859.4
22.5°	3699.2	3723.3	3705.8	3767.2	3762.8
25°	3593.9	3626.8	3620.2	3661.9	3681.7
27.5°	3499.5	3501.7	3541.2	3600.5	3593.9
30°	3374.5	3411.8	3407.4	3479.8	3479.8
32.5°	3247.2	3302.1	3319.6	3383.3	3405.2
35°	3141.9	3152.9	3181.4	3273.6	3326.2
37.5°	2970.8	3023.4	3069.5	3190.2	3209.9
40°	2826.0	2878.6	2962.0	3102.4	3091.5
42.5°	2700.9	2755.8	2817.2	2979.6	3019.0
45°	2549.5	2621.9	2700.9	2878.6	2896.2
47.5°	2426.6	2483.7	2586.8	2749.2	2771.1
50°	2253.3	2345.5	2457.4	2646.1	2679.0
52.5°	2099.7	2178.7	2321.3	2516.6	2591.2
55°	1963.7	2027.3	2213.8	2393.7	2463.9
57.5°	1796.9	1884.7	2080.0	2279.6	2343.3
60°	1649.9	1735.5	1924.2	2152.4	2202.9
62.5°	1494.2	1595.1	1799.1	2020.7	2077.8
65°	1336.2	1437.1	1669.7	1893.5	1948.3
67.5°	1165.1	1290.1	1527.1	1759.6	1816.7
70°	1004.9	1140.9	1395.4	1628.0	1685.0
72.5°	860.1	1007.1	1266.0	1505.1	1566.6
75°	704.3	866.7	1136.5	1371.3	1434.9
77.5°	552.9	728.4	1002.7	1239.7	1314.3
80°	405.9	599.0	886.4	1114.6	1193.6
82.5°	285.2	482.7	778.9	1002.7	1075.1
85°	173.3	379.6	664.8	888.6	972.0
87.5°	76.8	294.0	574.8	796.4	871.0
90°	6.6	230.4	506.8	724.0	803.0
92.5°	13.2	234.8	504.6	715.3	794.3
95°	19.7	241.3	506.8	715.3	789.9
97.5°	28.5	250.1	511.2	715.3	787.7
100°	41.7	254.5	513.4	715.3	787.7
102.5°	54.9	261.1	511.2	704.3	778.9
105°	70.2	265.5	515.6	706.5	772.3
107.5°	85.6	269.9	515.6	695.5	770.1
110°	100.9	276.5	511.2	688.9	761.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	114.1	283.0	509.0	675.8	746.0
115°	127.3	287.4	504.6	671.4	737.2
117.5°	140.4	289.6	502.4	660.4	724.0
120°	151.4	294.0	498.1	647.3	717.5
122.5°	164.6	296.2	491.5	634.1	704.3
125°	182.1	296.2	489.3	623.1	680.2
127.5°	190.9	298.4	480.5	610.0	669.2
130°	199.7	291.8	476.1	594.6	651.6
132.5°	206.2	289.6	465.1	579.2	629.7
135°	210.6	285.2	454.2	563.9	610.0
137.5°	217.2	278.6	438.8	552.9	596.8
140°	221.6	274.3	416.9	531.0	574.8
142.5°	226.0	267.7	394.9	511.2	552.9
145°	228.2	263.3	373.0	495.9	531.0
147.5°	234.8	256.7	359.8	476.1	506.8
150°	232.6	252.3	340.1	452.0	482.7
152.5°	239.2	258.9	322.5	419.1	462.9
155°	250.1	263.3	305.0	384.0	434.4
157.5°	261.1	272.1	291.8	353.2	412.5
160°	276.5	276.5	276.5	329.1	394.9
162.5°	285.2	285.2	278.6	300.6	370.8
165°	298.4	289.6	280.8	278.6	348.9
167.5°	311.6	294.0	285.2	269.9	333.5
170°	313.8	300.6	283.0	254.5	322.5
172.5°	322.5	307.2	280.8	241.3	250.1
175°	329.1	315.9	283.0	234.8	142.6
177.5°	326.9	315.9	289.6	234.8	138.2
180°	272.1	272.1	272.1	272.1	272.1



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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	17.08	18.40	17.69	19.03	19.74	19.67	20.99	20.28	21.62	22.33
	3H	18.51	19.71	19.13	20.35	21.10	22.06	23.27	22.69	23.91	24.66
	4H	18.97	20.11	19.61	20.76	21.52	23.21	24.35	23.85	25.00	25.76
	6H	19.24	20.30	19.89	20.96	21.74	24.36	25.42	25.02	26.08	26.86
	8H	19.29	20.30	19.96	20.99	21.77	24.95	25.96	25.61	26.64	27.42
	12H	19.30	20.28	19.98	20.95	21.76	25.58	26.55	26.25	27.23	28.04
4H	2H	17.96	19.10	18.61	19.75	20.52	20.01	21.15	20.65	21.80	22.56
	3H	19.61	20.58	20.27	21.27	22.05	22.62	23.59	23.28	24.27	25.06
	4H	20.19	21.08	20.87	21.78	22.59	23.92	24.81	24.59	25.50	26.31
	6H	20.57	21.35	21.26	22.07	22.89	25.25	26.03	25.94	26.74	27.57
	8H	20.66	21.39	21.36	22.11	22.94	25.92	26.66	26.62	27.37	28.21
	12H	20.70	21.37	21.42	22.11	22.95	26.66	27.33	27.39	28.07	28.91
8H	4H	20.83	21.57	21.53	22.28	23.12	24.07	24.80	24.77	25.52	26.35
	6H	21.37	21.99	22.10	22.74	23.58	25.54	26.16	26.27	26.92	27.75
	8H	21.54	22.09	22.28	22.85	23.70	26.34	26.90	27.08	27.65	28.50
	12H	21.64	22.14	22.38	22.88	23.80	27.24	27.73	27.98	28.48	29.39
12H	4H	21.00	21.66	21.72	22.40	23.24	24.06	24.73	24.78	25.46	26.30
	6H	21.62	22.18	22.36	22.94	23.79	25.56	26.12	26.30	26.87	27.73
	8H	21.87	22.36	22.61	23.11	24.02	26.41	26.90	27.15	27.65	28.56