

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: P894646

Luminaire Tested: 8TMB-14HL-RNDU-UNV-L835

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894646
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2403-334-3)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 8TMB-14HL-RNDU-UNV-L835
Description: 14000 Lumen 8FT MICROBAY LINEAR BAY with ROUND FROSTED LENS WITH UPLIGHT, 80CRI, CCT
Light Source: -
Ballast/Driver: -

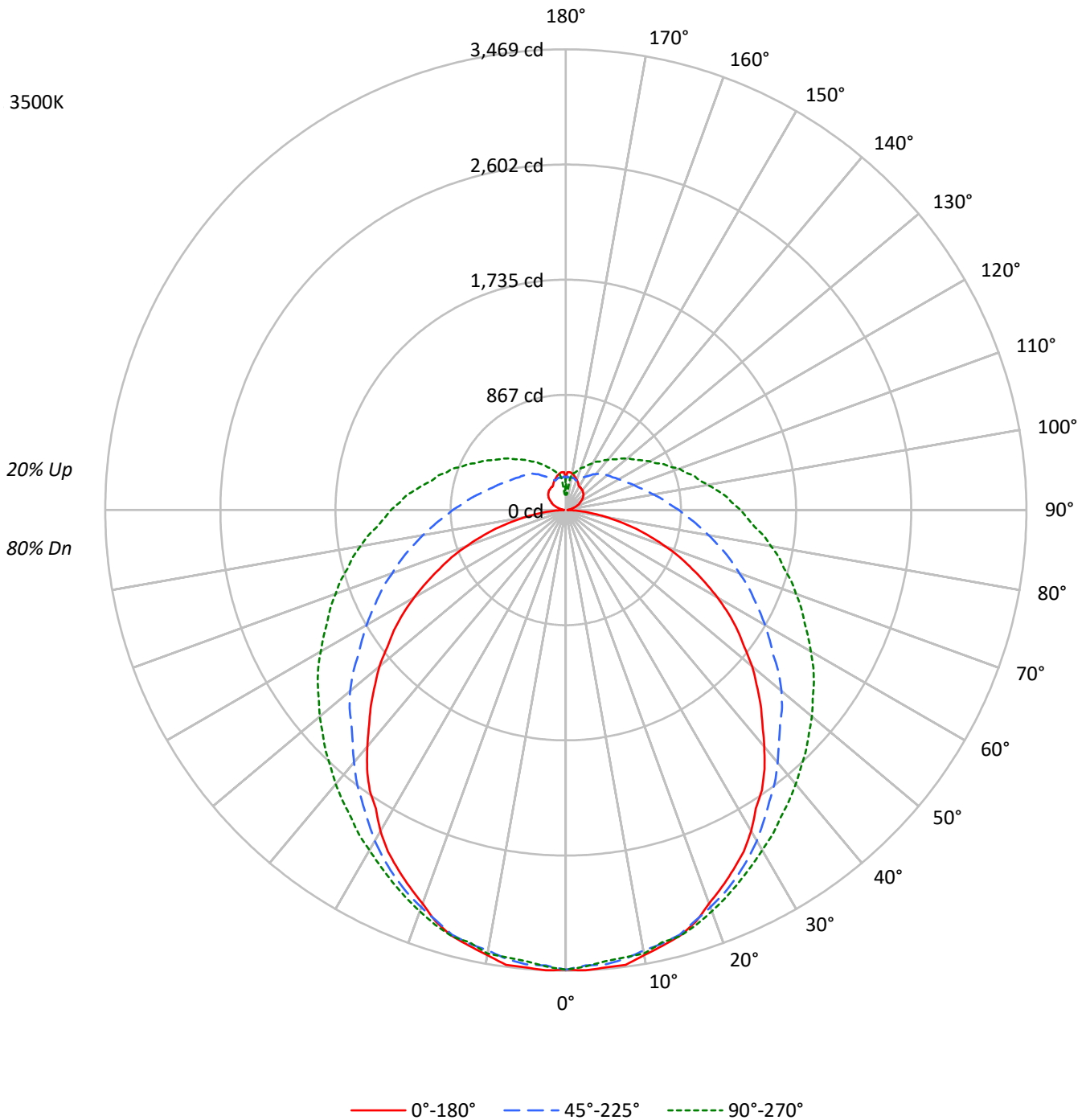
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14551.0 lumens
Efficiency: N/A
Efficacy: 140.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.38' x L: 7.98' x H: 0.21')
CIE Type: Semi-Direct

Input Watts (W): 103.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: 0.997
Total Harmonic Distortion (THDi): 5.03
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	114	114	114	114	109	109	109	109	100	100	100	91	91	91	83	83	83	83	83	80
1	102	96	91	86	97	92	87	83	84	80	77	76	73	71	69	67	65	65	65	61
2	92	82	75	68	87	79	72	66	72	66	61	66	61	57	60	56	53	53	53	49
3	83	72	63	56	79	69	61	54	63	56	51	57	52	47	52	48	44	44	44	41
4	76	63	54	47	72	60	52	45	55	48	43	51	45	40	46	41	37	37	37	34
5	69	56	47	40	66	54	45	39	49	42	37	45	39	34	41	36	32	32	32	29
6	64	50	41	35	61	48	40	34	44	37	32	41	35	30	38	32	28	28	28	26
7	59	46	37	30	56	44	35	30	40	33	28	37	31	26	34	29	25	25	25	23
8	55	41	33	27	52	40	32	26	37	30	25	34	28	24	31	26	22	22	22	20
9	51	38	30	24	49	37	29	23	34	27	22	31	25	21	29	24	20	20	20	18
10	48	35	27	22	46	34	26	21	31	25	20	29	23	19	27	22	18	18	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12281	12281	12281
5°	12286	11812	11593
10°	12205	11325	11143
15°	12111	10967	10640
20°	11795	10470	10122
25°	11554	10031	9634
30°	11267	9548	9207
35°	10952	9024	8836
40°	10538	8575	8550
45°	10149	8146	8296
50°	9814	7886	8080
55°	9421	7475	7914
60°	8950	7219	7760
65°	8357	6995	7644
70°	7701	6817	7639
75°	6844	6764	7661
80°	5581	6756	7810
85°	4007	6945	7986

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 10149 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	327.7	2.3
10°-20°	936.3	6.4
20°-30°	1406.0	9.7
30°-40°	1688.3	11.6
40°-50°	1785.8	12.3
50°-60°	1721.0	11.8
60°-70°	1526.8	10.5
70°-80°	1252.2	8.6
80°-90°	969.2	6.7
90°-100°	756.1	5.2
100°-110°	601.9	4.1
110°-120°	481.1	3.3
120°-130°	379.4	2.6
130°-140°	289.5	2.0
140°-150°	203.6	1.4
150°-160°	130.1	0.9
160°-170°	72.9	0.5
170°-180°	23.1	0.2
0°-30°	2670.0	18.3
0°-40°	4358.3	30.0
0°-60°	7865.1	54.1
0°-90°	11613.2	79.8
90°-120°	1839.1	12.6
90°-150°	2711.6	18.6
90°-180°	2938.0	20.2
0°-180°	14551.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3461	3461	3461	3461	3461	
5°	3458	3467	3434	3459	3411	329
15°	3320	3322	3310	3332	3322	933
25°	2987	3036	3047	3099	3090	1376
35°	2575	2613	2675	2786	2822	1605
45°	2075	2137	2282	2499	2559	1601
55°	1580	1659	1909	2168	2280	1409
65°	1051	1196	1558	1882	1980	1045
75°	548	788	1241	1576	1702	580
85°	128	480	962	1309	1425	144
90°	14	381	852	1185	1316	14
95°	17	316	753	1082	1210	17
105°	58	256	602	885	999	61
115°	112	250	500	722	815	109
125°	157	254	430	592	656	138
135°	184	246	385	501	540	143
145°	199	226	318	420	445	125
155°	221	232	261	329	368	102
165°	261	256	246	240	298	73
175°	286	277	246	201	128	27
180°	234	234	234	234	234	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3461.3	3461.3	3461.3	3461.3	3461.3
2.5°	3469.1	3480.7	3432.3	3461.3	3440.0
5°	3457.5	3467.2	3434.2	3459.4	3411.0
7.5°	3453.6	3449.7	3409.1	3442.0	3397.5
10°	3403.3	3416.8	3368.4	3412.9	3391.7
12.5°	3360.7	3387.8	3345.2	3380.0	3335.5
15°	3320.0	3322.0	3310.3	3331.6	3322.0
17.5°	3252.3	3269.7	3242.6	3291.0	3273.6
20°	3153.5	3207.7	3182.6	3227.1	3215.5
22.5°	3072.2	3099.3	3120.6	3171.0	3155.5
25°	2987.1	3035.5	3047.1	3099.3	3089.7
27.5°	2899.9	2921.2	2965.8	3021.9	3023.8
30°	2791.5	2814.8	2876.7	2940.6	2958.0
32.5°	2663.8	2737.3	2774.1	2870.9	2898.0
35°	2574.7	2613.4	2675.4	2785.7	2822.5
37.5°	2458.6	2503.1	2586.3	2716.0	2760.6
40°	2325.0	2390.8	2481.8	2642.5	2694.7
42.5°	2191.4	2268.8	2375.3	2563.1	2623.1
45°	2075.3	2137.2	2282.4	2499.2	2559.2
47.5°	1949.4	2024.9	2208.8	2416.0	2483.7
50°	1833.3	1910.7	2119.8	2338.5	2419.8
52.5°	1693.9	1782.9	2023.0	2249.5	2344.3
55°	1579.7	1659.0	1908.8	2168.2	2280.5
57.5°	1453.8	1542.9	1819.7	2108.2	2210.8
60°	1318.3	1430.6	1732.6	2032.7	2131.4
62.5°	1184.8	1318.3	1643.6	1959.1	2055.9
65°	1051.2	1196.4	1558.4	1881.7	1980.4
67.5°	931.2	1088.0	1480.9	1796.5	1918.5
70°	795.6	983.4	1390.0	1717.1	1844.9
72.5°	667.9	888.6	1316.4	1653.2	1781.0
75°	547.9	787.9	1240.9	1575.8	1701.6
77.5°	427.8	693.0	1161.5	1506.1	1643.6
80°	313.6	615.6	1091.8	1438.4	1570.0
82.5°	216.8	547.9	1024.1	1382.2	1506.1
85°	127.8	480.1	962.1	1308.7	1424.8
87.5°	58.1	425.9	898.2	1252.5	1366.7
90°	13.6	381.4	851.8	1184.8	1316.4
92.5°	13.6	346.5	795.6	1134.4	1254.4
95°	17.4	315.5	753.1	1082.2	1209.9
97.5°	23.2	292.3	714.3	1033.8	1146.0
100°	32.9	276.8	671.7	977.6	1088.0
102.5°	44.5	265.2	633.0	927.3	1029.9
105°	58.1	255.5	602.1	884.7	998.9
107.5°	71.6	251.7	571.1	844.0	940.8
110°	85.2	249.7	547.9	801.5	909.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	98.7	247.8	522.7	762.7	849.8
115°	112.3	249.7	499.5	722.1	815.0
117.5°	120.0	249.7	478.2	687.2	764.7
120°	131.6	251.7	462.7	650.5	731.8
122.5°	143.3	251.7	447.2	623.4	695.0
125°	156.8	253.6	429.8	592.4	656.3
127.5°	164.5	253.6	420.1	571.1	629.2
130°	172.3	251.7	406.5	544.0	604.0
132.5°	180.0	247.8	398.8	518.8	575.0
135°	183.9	245.9	385.2	501.4	540.1
137.5°	189.7	240.0	371.7	476.2	518.8
140°	195.5	238.1	352.3	456.9	493.6
142.5°	195.5	232.3	338.8	439.4	472.4
145°	199.4	226.5	317.5	420.1	445.3
147.5°	203.3	224.6	302.0	400.7	431.7
150°	203.3	222.6	288.4	379.4	408.5
152.5°	207.1	224.6	274.9	360.1	387.2
155°	220.7	232.3	261.3	329.1	367.8
157.5°	232.3	240.0	247.8	305.9	346.5
160°	242.0	245.9	236.2	282.6	336.8
162.5°	249.7	251.7	238.1	261.3	315.5
165°	261.3	255.5	245.9	240.0	298.1
167.5°	271.0	259.4	249.7	234.2	284.6
170°	278.8	267.2	245.9	220.7	278.8
172.5°	284.6	269.1	247.8	207.1	234.2
175°	286.5	276.8	245.9	201.3	127.8
177.5°	284.6	278.8	253.6	199.4	114.2
180°	234.2	234.2	234.2	234.2	234.2



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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	15.78	17.10	16.42	17.76	18.53	19.27	20.58	19.91	21.25	22.01
	3H	17.23	18.43	17.88	19.10	19.90	22.14	23.34	22.79	24.01	24.81
	4H	17.70	18.84	18.37	19.53	20.34	23.62	24.76	24.29	25.45	26.26
	6H	17.98	19.04	18.66	19.74	20.57	25.23	26.30	25.92	26.99	27.82
	8H	18.04	19.06	18.73	19.77	20.60	26.09	27.11	26.79	27.83	28.66
	12H	18.06	19.04	18.76	19.75	20.60	27.04	28.02	27.74	28.73	29.59
4H	2H	16.93	18.08	17.61	18.76	19.57	19.60	20.75	20.28	21.43	22.24
	3H	18.64	19.62	19.32	20.34	21.17	22.71	23.69	23.39	24.41	25.24
	4H	19.23	20.14	19.94	20.86	21.72	24.37	25.27	25.07	26.00	26.86
	6H	19.64	20.44	20.36	21.19	22.05	26.18	26.98	26.90	27.73	28.59
	8H	19.75	20.51	20.48	21.25	22.13	27.15	27.90	27.87	28.65	29.53
	12H	19.81	20.50	20.56	21.27	22.15	28.22	28.91	28.97	29.68	30.57
8H	4H	20.28	21.04	21.01	21.78	22.66	24.55	25.30	25.27	26.05	26.93
	6H	20.93	21.57	21.68	22.36	23.24	26.53	27.18	27.29	27.96	28.84
	8H	21.16	21.74	21.92	22.52	23.42	27.65	28.23	28.42	29.02	29.91
	12H	21.30	21.82	22.07	22.60	23.55	28.91	29.43	29.68	30.21	31.16
12H	4H	20.62	21.31	21.37	22.08	22.97	24.54	25.23	25.29	26.00	26.88
	6H	21.43	22.01	22.19	22.80	23.69	26.56	27.15	27.33	27.93	28.83
	8H	21.78	22.30	22.55	23.08	24.03	27.74	28.26	28.51	29.04	29.99