

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: P894643

Luminaire Tested: 8TMB-14HL-RND-UNV-L940

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894643
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2403-334-1)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 8TMB-14HL-RND-UNV-L940
Description: 14000 Lumen 8FT MICROBAY LINEAR BAY with ROUND FROSTED LENS, 90CRI, 4000K CCT
Light Source: -
Ballast/Driver: -

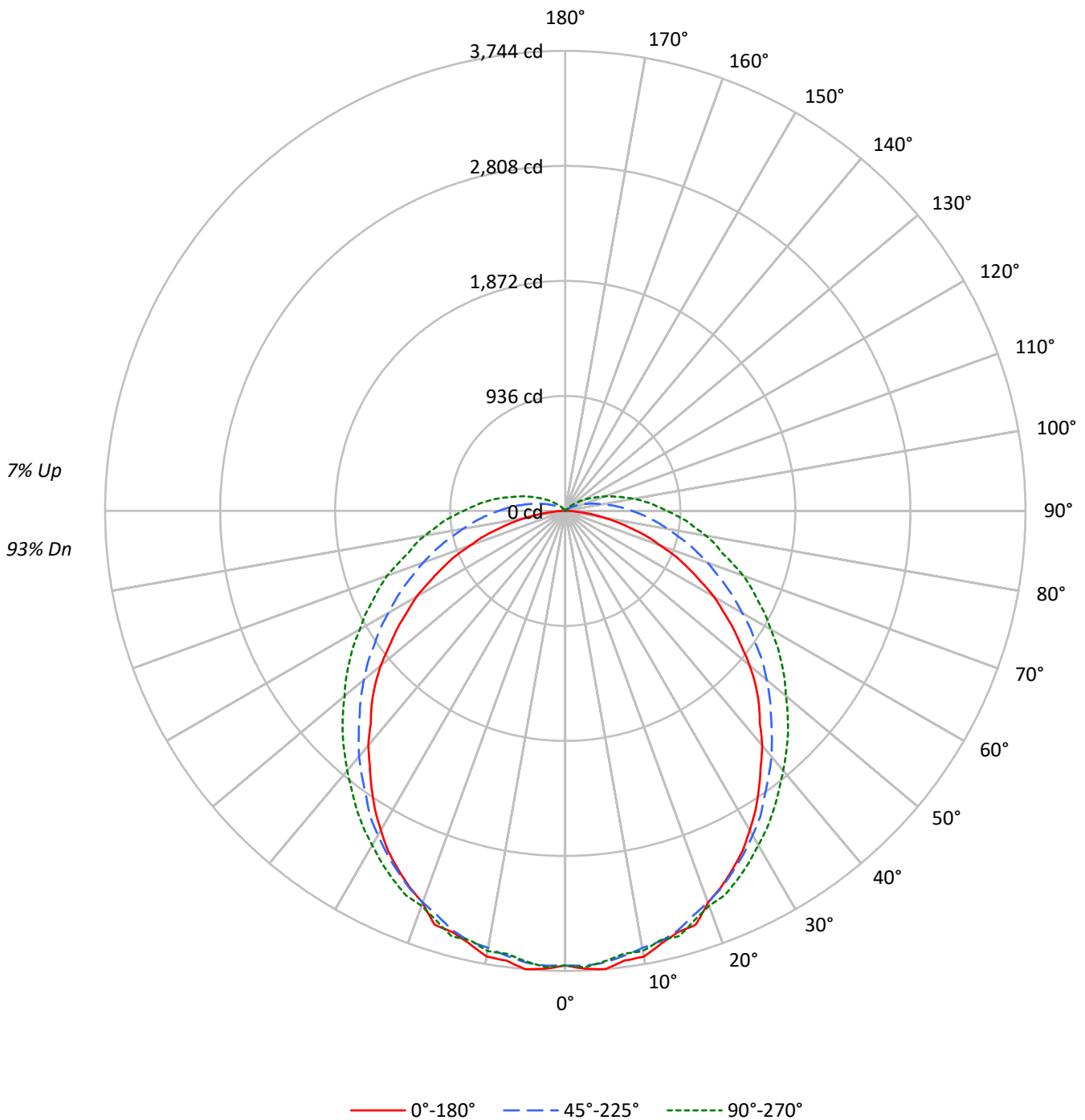
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12187.0 lumens
Efficiency: N/A
Efficacy: 117.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.35
Luminous Opening: Rectangular (W 0.38' x L: 7.98' x H: 0')
CIE Type: 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

TEST NUMBER: P894643
CATALOG NUMBER: 8TMB-14HL-RND-UNV-L940

Luminous Intensity Polar Plot





TEST NUMBER: P894643
 CATALOG NUMBER: 8TMB-14HL-RND-UNV-L940

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	117	117	117	117	114	114	114	114	107	107	107	101	101	101	96	96	96	96	96	96	93
1	105	100	95	90	102	97	92	88	91	87	84	86	83	80	81	79	77	77	77	77	74
2	95	86	79	72	92	84	77	71	79	73	68	74	70	66	70	67	63	63	63	63	60
3	86	75	66	60	83	73	65	59	69	62	57	65	60	55	62	57	53	53	53	53	50
4	79	66	57	50	76	65	56	49	61	54	48	58	52	47	55	50	45	45	45	45	43
5	73	59	50	43	70	58	49	42	55	47	41	52	45	40	49	44	39	39	39	39	37
6	67	53	44	37	65	52	43	37	49	42	36	47	40	35	45	39	34	34	34	34	32
7	62	48	39	33	60	47	39	33	45	37	32	43	36	31	41	35	30	30	30	30	28
8	58	44	35	29	56	43	35	29	41	34	28	39	33	28	38	32	27	27	27	27	25
9	54	40	32	26	52	39	32	26	38	31	26	36	30	25	35	29	25	25	25	25	23
10	51	37	29	24	49	36	29	24	35	28	23	34	27	23	32	27	22	22	22	22	21

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13128	13128	13128
5°	13335	13142	13106
10°	13269	13013	13104
15°	13031	12988	13162
20°	12813	12800	12909
25°	12603	12656	12967
30°	12295	12489	12870
35°	11906	12250	12822
40°	11547	12088	12778
45°	11185	11873	12858
50°	10818	11800	12940
55°	10323	11716	13276
60°	9921	11795	13692
65°	9265	12106	14523
70°	8516	12783	15996
75°	7726	14153	18122
80°	6641	17292	23759
85°	5374	27976	40653

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 87.5°
 Luminance: 73794 cd/sqm



TEST NUMBER: P894643
 CATALOG NUMBER: 8TMB-14HL-RND-UNV-L940

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	350.8	2.9
10°-20°	998.6	8.2
20°-30°	1496.4	12.3
30°-40°	1778.3	14.6
40°-50°	1841.0	15.1
50°-60°	1706.1	14.0
60°-70°	1420.4	11.7
70°-80°	1054.2	8.7
80°-90°	697.3	5.7
90°-100°	424.3	3.5
100°-110°	237.9	2.0
110°-120°	117.1	1.0
120°-130°	47.7	0.4
130°-140°	13.8	0.1
140°-150°	2.0	0.0
150°-160°	0.5	0.0
160°-170°	0.4	0.0
170°-180°	0.1	0.0
0°-30°	2845.8	23.4
0°-40°	4624.1	37.9
0°-60°	8171.3	67.0
0°-90°	11343.2	93.1
90°-120°	779.3	6.4
90°-150°	842.8	6.9
90°-180°	844.0	6.9
0°-180°	12187.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3700	3700	3700	3700	3700	
5°	3744	3703	3690	3708	3680	354
15°	3548	3534	3536	3541	3583	1005
25°	3219	3216	3233	3295	3312	1482
35°	2749	2769	2828	2918	2960	1720
45°	2229	2261	2366	2513	2562	1717
55°	1669	1740	1894	2084	2146	1492
65°	1104	1207	1442	1654	1730	1096
75°	564	735	1032	1254	1322	603
85°	132	371	687	931	999	148
90°	7	240	543	760	828	10
95°	2	149	421	628	697	1
105°	2	49	228	388	442	2
115°	2	12	107	213	256	2
125°	2	3	39	98	125	2
135°	3	2	10	32	44	2
145°	3	2	0	3	5	2
155°	3	3	0	0	0	2
165°	5	3	0	0	0	1
175°	5	3	0	0	0	0
180°	2	2	2	2	2	



TEST NUMBER: P894643

CATALOG NUMBER: 8TMB-14HL-RND-UNV-L940

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3699.9	3699.9	3699.9	3699.9	3699.9
2.5°	3730.3	3711.7	3704.9	3696.5	3716.8
5°	3743.9	3703.3	3689.7	3708.3	3679.6
7.5°	3691.4	3681.3	3652.5	3662.6	3635.6
10°	3682.9	3627.1	3611.9	3645.7	3637.2
12.5°	3606.8	3559.4	3586.5	3610.2	3578.0
15°	3547.5	3534.0	3535.7	3540.8	3583.1
17.5°	3532.3	3471.4	3454.5	3496.8	3493.4
20°	3393.5	3381.7	3390.1	3446.0	3418.9
22.5°	3312.3	3275.0	3320.7	3374.9	3386.8
25°	3219.2	3215.8	3232.7	3295.4	3312.3
27.5°	3121.0	3099.0	3144.7	3217.5	3231.0
30°	3000.9	2992.4	3048.2	3110.9	3141.3
32.5°	2882.4	2887.5	2951.8	3004.2	3056.7
35°	2748.7	2769.0	2828.2	2917.9	2960.2
37.5°	2613.3	2638.7	2718.2	2821.4	2857.0
40°	2493.1	2498.2	2609.9	2714.8	2758.8
42.5°	2342.5	2393.2	2488.0	2626.8	2660.7
45°	2229.1	2261.2	2366.2	2513.4	2562.5
47.5°	2100.4	2137.7	2257.8	2401.7	2454.2
50°	1959.9	1993.8	2137.7	2301.8	2344.2
52.5°	1804.2	1873.6	2024.3	2193.5	2249.4
55°	1668.8	1739.9	1893.9	2083.5	2146.1
57.5°	1523.3	1594.4	1787.3	1963.3	2044.6
60°	1398.0	1465.7	1662.1	1880.4	1929.5
62.5°	1242.3	1338.8	1552.1	1767.0	1836.4
65°	1103.5	1206.8	1442.0	1653.6	1729.8
67.5°	976.6	1083.2	1328.6	1555.4	1638.4
70°	820.9	961.4	1232.2	1455.6	1541.9
72.5°	705.8	846.3	1128.9	1350.6	1428.5
75°	563.6	734.6	1032.4	1254.2	1321.9
77.5°	445.1	629.6	932.6	1181.4	1249.1
80°	325.0	534.8	846.3	1084.9	1162.8
82.5°	221.7	446.8	766.7	995.2	1069.7
85°	132.0	370.7	687.2	930.9	998.6
87.5°	57.5	303.0	614.4	837.8	907.2
90°	6.8	240.3	543.3	759.9	827.6
92.5°	1.7	192.9	480.7	690.6	756.6
95°	1.7	148.9	421.4	627.9	697.3
97.5°	1.7	115.1	362.2	563.6	629.6
100°	1.7	88.0	313.1	495.9	567.0
102.5°	1.7	66.0	265.7	440.1	501.0
105°	1.7	49.1	228.5	387.6	441.8
107.5°	1.7	35.5	191.3	338.5	392.7
110°	1.7	25.4	160.8	292.8	347.0



TEST NUMBER: P894643

CATALOG NUMBER: 8TMB-14HL-RND-UNV-L940

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	1.7	18.6	130.3	252.2	297.9
115°	1.7	11.8	106.6	213.3	255.6
117.5°	1.7	8.5	84.6	179.4	220.0
120°	1.7	6.8	67.7	148.9	184.5
122.5°	1.7	5.1	52.5	121.9	155.7
125°	1.7	3.4	38.9	98.2	125.2
127.5°	1.7	3.4	28.8	77.9	101.6
130°	1.7	1.7	20.3	59.2	79.5
132.5°	1.7	1.7	13.5	44.0	59.2
135°	3.4	1.7	10.2	32.2	44.0
137.5°	3.4	1.7	6.8	22.0	30.5
140°	3.4	1.7	3.4	13.5	18.6
142.5°	3.4	1.7	1.7	6.8	10.2
145°	3.4	1.7	0.0	3.4	5.1
147.5°	3.4	1.7	0.0	1.7	1.7
150°	3.4	1.7	0.0	0.0	0.0
152.5°	3.4	1.7	0.0	0.0	0.0
155°	3.4	3.4	0.0	0.0	0.0
157.5°	3.4	3.4	0.0	0.0	0.0
160°	3.4	3.4	0.0	0.0	0.0
162.5°	3.4	3.4	0.0	0.0	0.0
165°	5.1	3.4	0.0	0.0	0.0
167.5°	5.1	3.4	0.0	0.0	0.0
170°	5.1	3.4	0.0	0.0	0.0
172.5°	5.1	3.4	0.0	0.0	0.0
175°	5.1	3.4	0.0	0.0	0.0
177.5°	5.1	3.4	0.0	0.0	0.0
180°	1.7	1.7	1.7	1.7	1.7



TEST NUMBER: P894643
 CATALOG NUMBER: 8TMB-14HL-RND-UNV-L940

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	19.17	20.71	19.64	21.17	21.65	20.75	22.29	21.22	22.74	23.22
	3H	20.94	22.34	21.42	22.81	23.33	23.33	24.74	23.82	25.20	25.73
	4H	21.59	22.93	22.10	23.41	23.95	24.59	25.92	25.09	26.41	26.94
	6H	22.07	23.31	22.59	23.81	24.36	25.97	27.21	26.49	27.71	28.26
	8H	22.22	23.41	22.75	23.93	24.49	26.70	27.89	27.23	28.41	28.97
	12H	22.32	23.46	22.85	23.97	24.56	27.55	28.69	28.08	29.20	29.79
4H	2H	20.13	21.46	20.63	21.94	22.48	21.32	22.65	21.82	23.13	23.67
	3H	22.17	23.31	22.69	23.83	24.39	24.19	25.32	24.70	25.85	26.41
	4H	22.98	24.02	23.52	24.56	25.15	25.67	26.71	26.20	27.24	27.84
	6H	23.63	24.55	24.19	25.12	25.72	27.29	28.21	27.84	28.77	29.37
	8H	23.86	24.73	24.42	25.29	25.91	28.14	29.01	28.70	29.57	30.19
	12H	24.03	24.82	24.61	25.41	26.03	29.13	29.92	29.72	30.51	31.13
8H	4H	23.83	24.70	24.39	25.26	25.88	26.04	26.90	26.60	27.47	28.08
	6H	24.76	25.49	25.35	26.10	26.72	27.91	28.65	28.51	29.25	29.88
	8H	25.14	25.80	25.74	26.42	27.05	28.98	29.64	29.58	30.26	30.89
	12H	25.46	26.05	26.06	26.66	27.36	30.23	30.83	30.84	31.43	32.13
12H	4H	24.09	24.88	24.68	25.47	26.10	26.08	26.87	26.66	27.46	28.08
	6H	25.18	25.85	25.78	26.46	27.10	28.03	28.69	28.63	29.31	29.94
	8H	25.72	26.31	26.32	26.92	27.62	29.20	29.79	29.81	30.40	31.10