

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: P894642

Luminaire Tested: 8TMB-14HL-RND-UNV-L935

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894642
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-L935
Description: 14000 Lumen 8FT MICROBAY LINEAR BAY with ROUND FROSTED LENS, 90CRI, 3500K CCT
Light Source: -
Ballast/Driver: -

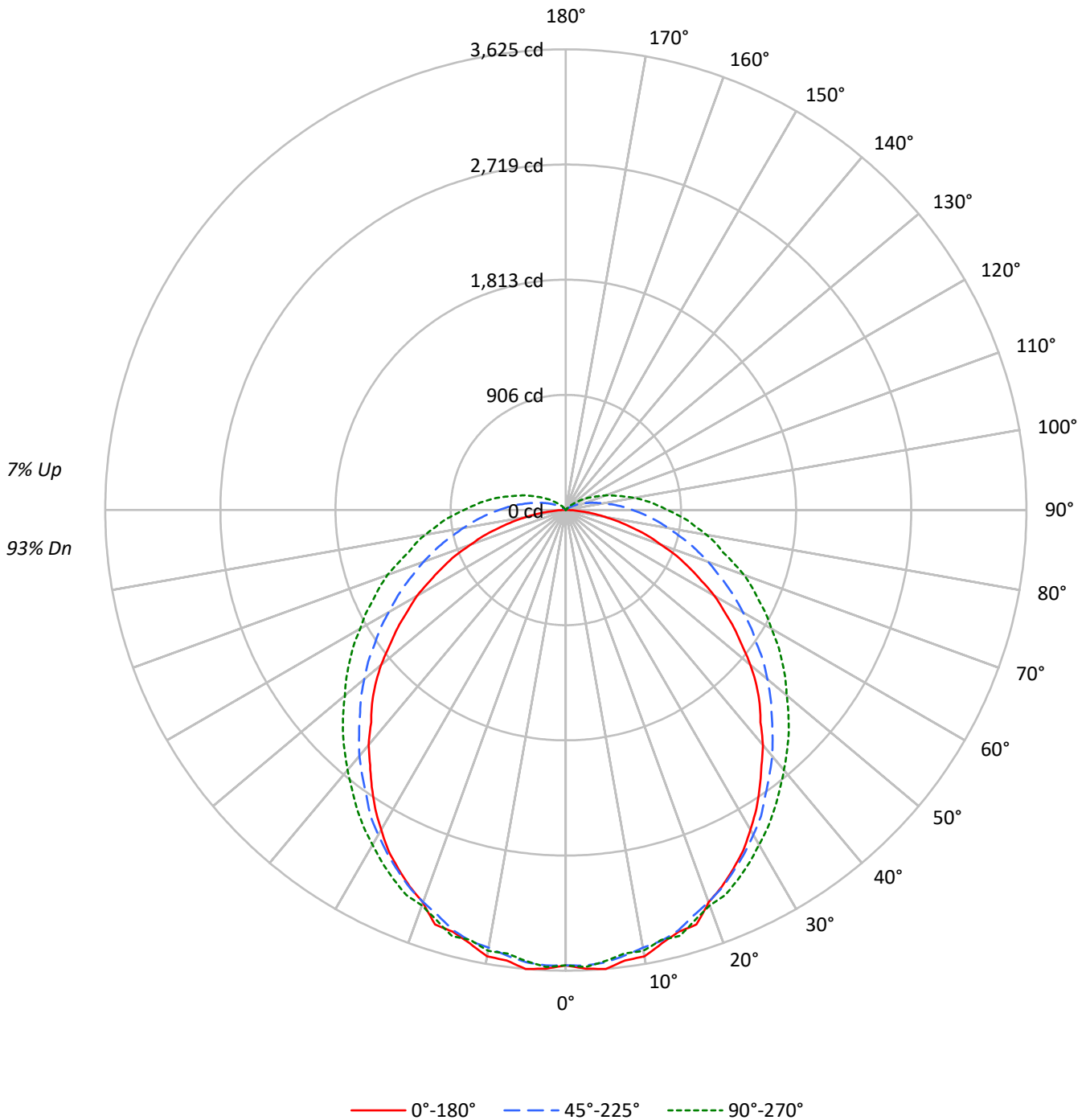
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11800.0 lumens
Efficiency: N/A
Efficacy: 113.9 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 (A_{in}): 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: P894642
CATALOG NUMBER: 8TMB-14HL-RND-UNV-L935

Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				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°	12711	12711	12711
5°	12911	12724	12689
10°	12848	12600	12688
15°	12617	12575	12744
20°	12407	12394	12499
25°	12203	12254	12556
30°	11904	12092	12462
35°	11528	11861	12415
40°	11181	11704	12372
45°	10830	11496	12450
50°	10475	11425	12529
55°	9995	11344	12854
60°	9606	11420	13257
65°	8971	11722	14061
70°	8245	12376	15487
75°	7481	13705	17546
80°	6428	16743	23003
85°	5203	27085	39363

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 87.5°
 Luminance: 71452 cd/sqm



TEST NUMBER: P894642
 CATALOG NUMBER: 8TMB-14HL-RND-UNV-L935

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	339.7	2.9
10°-20°	966.9	8.2
20°-30°	1448.9	12.3
30°-40°	1721.8	14.6
40°-50°	1782.6	15.1
50°-60°	1651.9	14.0
60°-70°	1375.3	11.7
70°-80°	1020.7	8.7
80°-90°	675.1	5.7
90°-100°	410.8	3.5
100°-110°	230.3	2.0
110°-120°	113.4	1.0
120°-130°	46.2	0.4
130°-140°	13.4	0.1
140°-150°	1.9	0.0
150°-160°	0.5	0.0
160°-170°	0.4	0.0
170°-180°	0.1	0.0
0°-30°	2755.5	23.4
0°-40°	4477.3	37.9
0°-60°	7911.8	67.0
0°-90°	10982.9	93.1
90°-120°	754.6	6.4
90°-150°	816.0	6.9
90°-180°	817.0	6.9
0°-180°	11800.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3582	3582	3582	3582	3582	
5°	3625	3586	3572	3591	3563	343
15°	3435	3422	3423	3428	3469	973
25°	3117	3114	3130	3191	3207	1435
35°	2661	2681	2738	2825	2866	1665
45°	2158	2189	2291	2434	2481	1663
55°	1616	1685	1834	2017	2078	1445
65°	1068	1168	1396	1601	1675	1061
75°	546	711	1000	1214	1280	584
85°	128	359	665	901	967	143
90°	7	233	526	736	801	10
95°	2	144	408	608	675	1
105°	2	48	221	375	428	2
115°	2	12	103	206	248	2
125°	2	3	38	95	121	1
135°	3	2	10	31	43	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	



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CATALOG NUMBER: 8TMB-14HL-RND-UNV-L935

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3582.4	3582.4	3582.4	3582.4	3582.4
2.5°	3611.9	3593.9	3587.3	3579.1	3598.8
5°	3625.0	3585.7	3572.5	3590.6	3562.7
7.5°	3574.2	3564.4	3536.5	3546.3	3520.1
10°	3566.0	3511.9	3497.2	3529.9	3521.7
12.5°	3492.2	3446.4	3472.6	3495.5	3464.4
15°	3434.9	3421.8	3423.4	3428.3	3469.3
17.5°	3420.1	3361.1	3344.8	3385.7	3382.4
20°	3285.8	3274.3	3282.5	3336.6	3310.3
22.5°	3207.1	3171.0	3215.3	3267.7	3279.2
25°	3117.0	3113.7	3130.1	3190.7	3207.1
27.5°	3021.9	3000.6	3044.9	3115.3	3128.4
30°	2905.6	2897.4	2951.4	3012.1	3041.6
32.5°	2790.8	2795.8	2858.0	2908.8	2959.6
35°	2661.4	2681.0	2738.4	2825.3	2866.2
37.5°	2530.3	2554.9	2631.9	2731.9	2766.3
40°	2413.9	2418.8	2527.0	2628.6	2671.2
42.5°	2268.1	2317.2	2409.0	2543.4	2576.2
45°	2158.3	2189.4	2291.0	2433.6	2481.1
47.5°	2033.7	2069.8	2186.1	2325.4	2376.2
50°	1897.7	1930.5	2069.8	2228.7	2269.7
52.5°	1746.9	1814.1	1960.0	2123.9	2177.9
55°	1615.8	1684.7	1833.8	2017.3	2078.0
57.5°	1474.9	1543.7	1730.6	1901.0	1979.7
60°	1353.6	1419.2	1609.3	1820.7	1868.2
62.5°	1202.9	1296.3	1502.8	1710.9	1778.1
65°	1068.5	1168.5	1396.2	1601.1	1674.8
67.5°	945.6	1048.8	1286.4	1506.0	1586.3
70°	794.8	930.8	1193.0	1409.4	1492.9
72.5°	683.4	819.4	1093.1	1307.7	1383.1
75°	545.7	711.2	999.7	1214.3	1279.9
77.5°	431.0	609.6	903.0	1143.9	1209.4
80°	314.6	517.9	819.4	1050.5	1125.8
82.5°	214.7	432.6	742.4	963.6	1035.7
85°	127.8	358.9	665.3	901.3	966.9
87.5°	55.7	293.3	594.9	811.2	878.4
90°	6.6	232.7	526.0	735.8	801.4
92.5°	1.6	186.8	465.4	668.6	732.5
95°	1.6	144.2	408.1	608.0	675.2
97.5°	1.6	111.4	350.7	545.7	609.6
100°	1.6	85.2	303.2	480.2	549.0
102.5°	1.6	63.9	257.3	426.1	485.1
105°	1.6	47.5	221.2	375.3	427.7
107.5°	1.6	34.4	185.2	327.8	380.2
110°	1.6	24.6	155.7	283.5	336.0



TEST NUMBER: P894642

CATALOG NUMBER: 8TMB-14HL-RND-UNV-L935

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	1.6	18.0	126.2	244.2	288.4
115°	1.6	11.5	103.2	206.5	247.5
117.5°	1.6	8.2	81.9	173.7	213.0
120°	1.6	6.6	65.6	144.2	178.6
122.5°	1.6	4.9	50.8	118.0	150.8
125°	1.6	3.3	37.7	95.0	121.3
127.5°	1.6	3.3	27.9	75.4	98.3
130°	1.6	1.6	19.7	57.4	77.0
132.5°	1.6	1.6	13.1	42.6	57.4
135°	3.3	1.6	9.8	31.1	42.6
137.5°	3.3	1.6	6.6	21.3	29.5
140°	3.3	1.6	3.3	13.1	18.0
142.5°	3.3	1.6	1.6	6.6	9.8
145°	3.3	1.6	0.0	3.3	4.9
147.5°	3.3	1.6	0.0	1.6	1.6
150°	3.3	1.6	0.0	0.0	0.0
152.5°	3.3	1.6	0.0	0.0	0.0
155°	3.3	3.3	0.0	0.0	0.0
157.5°	3.3	3.3	0.0	0.0	0.0
160°	3.3	3.3	0.0	0.0	0.0
162.5°	3.3	3.3	0.0	0.0	0.0
165°	4.9	3.3	0.0	0.0	0.0
167.5°	4.9	3.3	0.0	0.0	0.0
170°	4.9	3.3	0.0	0.0	0.0
172.5°	4.9	3.3	0.0	0.0	0.0
175°	4.9	3.3	0.0	0.0	0.0
177.5°	4.9	3.3	0.0	0.0	0.0
180°	1.6	1.6	1.6	1.6	1.6



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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	19.06	20.60	19.53	21.05	21.54	20.64	22.17	21.10	22.63	23.11
	3H	20.83	22.23	21.31	22.69	23.22	23.22	24.63	23.70	25.09	25.61
	4H	21.48	22.81	21.98	23.30	23.83	24.48	25.81	24.98	26.29	26.83
	6H	21.96	23.20	22.48	23.70	24.25	25.86	27.10	26.38	27.60	28.15
	8H	22.11	23.30	22.64	23.82	24.38	26.59	27.78	27.12	28.30	28.86
	12H	22.21	23.35	22.74	23.86	24.45	27.43	28.58	27.97	29.09	29.68
4H	2H	20.02	21.35	20.52	21.83	22.37	21.21	22.54	21.71	23.02	23.56
	3H	22.06	23.19	22.57	23.72	24.28	24.08	25.21	24.59	25.74	26.30
	4H	22.87	23.91	23.41	24.45	25.04	25.55	26.60	26.09	27.13	27.72
	6H	23.52	24.44	24.08	25.00	25.61	27.17	28.09	27.73	28.66	29.26
	8H	23.75	24.61	24.31	25.18	25.79	28.03	28.90	28.59	29.46	30.08
	12H	23.92	24.70	24.50	25.29	25.92	29.02	29.81	29.60	30.40	31.02
8H	4H	23.72	24.59	24.28	25.15	25.77	25.92	26.79	26.48	27.35	27.97
	6H	24.64	25.38	25.24	25.98	26.61	27.80	28.54	28.39	29.14	29.77
	8H	25.03	25.69	25.63	26.31	26.94	28.86	29.53	29.47	30.14	30.78
	12H	25.35	25.94	25.95	26.54	27.25	30.12	30.71	30.73	31.32	32.02
12H	4H	23.98	24.77	24.56	25.36	25.98	25.97	26.76	26.55	27.35	27.97
	6H	25.07	25.73	25.67	26.35	26.98	27.91	28.58	28.52	29.19	29.83
	8H	25.61	26.20	26.21	26.80	27.51	29.09	29.68	29.69	30.29	30.99