

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: P894631

Luminaire Tested: 8TMB-14HL-RFLW-UNV-L840

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894631
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2408-210-7)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 8TMB-14HL-RFLW-UNV-L840
Description: 14000 Lumen 8FT MICROBAY LINEAR BAY with REFLECTOR WITH WHITE FINISH, 80CRI, 4000K
Light Source: -
Ballast/Driver: -

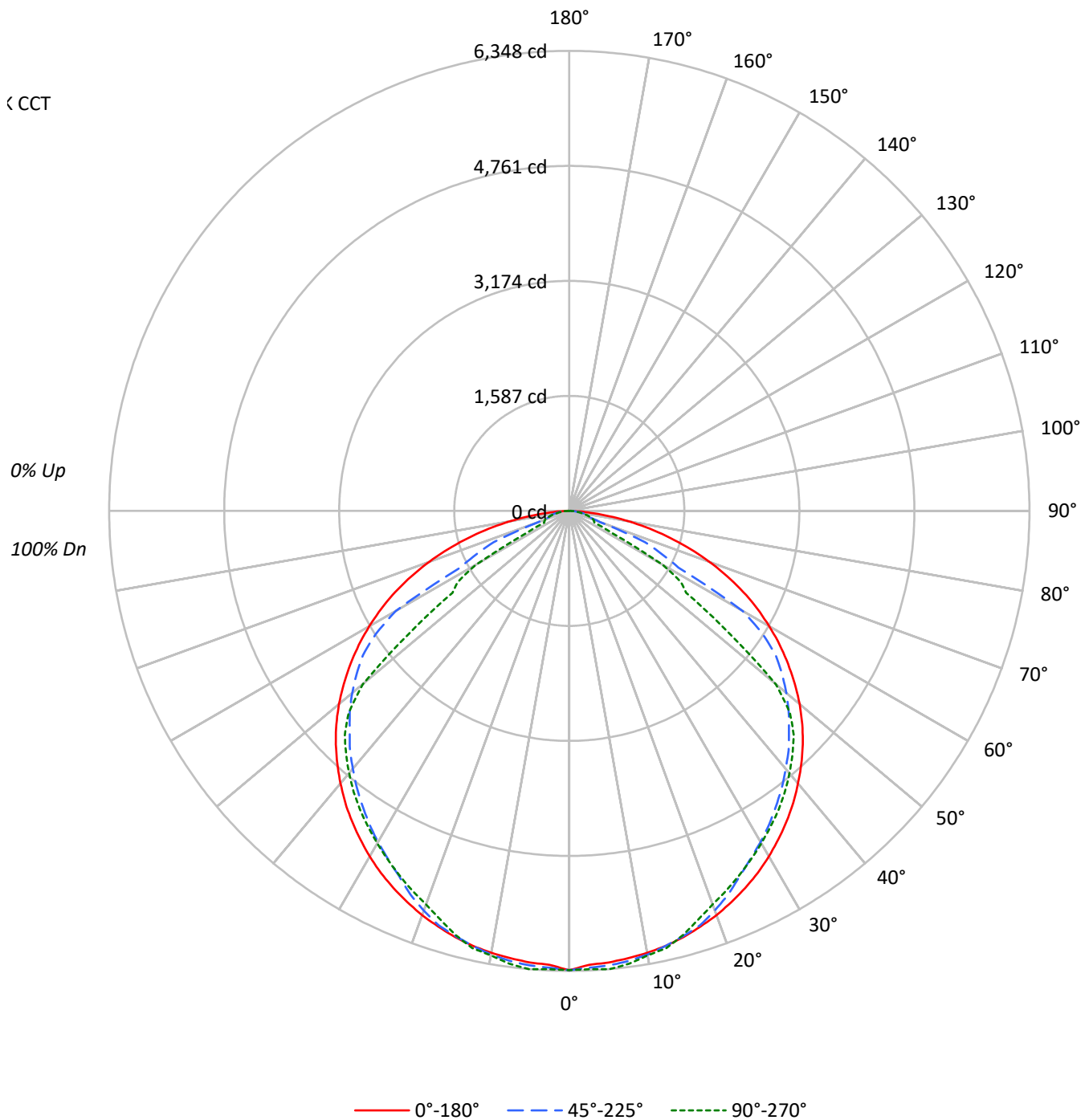
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16520.0 lumens
Efficiency: N/A
Efficacy: 159.5 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.25 / 1.38
Luminous Opening: Rectangular (W 0.21' 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

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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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	100
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86	86	86	86
2	101	93	87	82	98	91	85	81	88	83	79	85	81	77	82	78	75	73	73	73	73
3	92	82	75	69	90	81	74	68	78	72	67	75	70	66	73	68	65	62	62	62	62
4	85	73	65	59	82	72	64	58	70	63	57	67	61	57	65	60	56	54	54	54	54
5	78	66	57	51	76	65	56	50	62	55	50	61	54	49	59	53	49	47	47	47	47
6	72	59	51	44	70	58	50	44	56	49	44	55	48	43	53	48	43	41	41	41	41
7	67	54	45	39	65	53	45	39	51	44	39	50	43	39	49	43	38	36	36	36	36
8	62	49	41	35	61	48	40	35	47	40	35	46	39	35	45	39	34	32	32	32	32
9	58	45	37	32	57	44	37	31	43	36	31	42	36	31	41	35	31	29	29	29	29
10	54	42	34	29	53	41	34	29	40	33	28	39	33	28	38	32	28	26	26	26	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	41034	41034	41034
5°	40657	40924	41266
10°	40717	40871	40948
15°	40806	40714	40622
20°	40909	40438	39818
25°	41020	39723	39639
30°	41176	39453	39613
35°	41325	39302	39781
40°	41499	39255	39948
45°	41721	39235	40112
50°	41784	39384	37476
55°	41601	39264	22222
60°	41249	35786	19271
65°	40573	21633	5835
70°	38970	8577	6693
75°	36105	7035	6840
80°	31242	7428	6407
85°	22200	6962	6092

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 50°
 Luminance: 41784 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	600.2	3.6
10°-20°	1718.9	10.4
20°-30°	2597.6	15.7
30°-40°	3169.4	19.2
40°-50°	3352.6	20.3
50°-60°	2776.9	16.8
60°-70°	1543.7	9.3
70°-80°	625.7	3.8
80°-90°	134.9	0.8
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	4916.8	29.8
0°-40°	8086.2	48.9
0°-60°	14215.7	86.1
0°-90°	16520.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	16520.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6337	6337	6337	6337	6337	
5°	6255	6366	6296	6306	6348	595
15°	6087	6181	6073	6069	6060	1719
25°	5741	5782	5560	5524	5548	2648
35°	5228	5163	4972	4991	5032	3272
45°	4556	4322	4284	4337	4380	3512
55°	3685	3435	3478	2386	1968	3292
65°	2648	2427	1412	474	381	2611
75°	1443	805	281	277	273	1524
85°	299	100	94	86	82	375
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6336.8	6336.8	6336.8	6336.8	6336.8
2.5°	6268.5	6377.8	6309.5	6323.2	6329.0
5°	6254.8	6366.1	6295.8	6305.6	6348.5
7.5°	6225.5	6338.8	6264.6	6270.4	6303.6
10°	6192.3	6295.8	6215.8	6206.0	6227.5
12.5°	6147.4	6241.1	6147.4	6151.3	6178.7
15°	6086.9	6180.6	6073.2	6069.3	6059.5
17.5°	6014.6	6102.5	5997.0	5934.6	5913.1
20°	5936.5	6004.9	5868.2	5772.5	5778.3
22.5°	5842.8	5901.4	5729.5	5641.6	5667.0
25°	5741.2	5782.2	5559.6	5524.5	5547.9
27.5°	5629.9	5661.2	5413.2	5405.3	5424.9
30°	5506.9	5518.6	5276.5	5272.6	5297.9
32.5°	5370.2	5350.7	5130.0	5133.9	5167.1
35°	5227.6	5163.2	4971.8	4991.4	5032.4
37.5°	5077.3	4962.1	4815.6	4841.0	4885.9
40°	4909.3	4753.1	4643.8	4682.8	4725.8
42.5°	4737.5	4534.4	4477.8	4514.9	4555.9
45°	4555.9	4321.5	4284.4	4337.2	4380.1
47.5°	4358.6	4112.6	4106.7	4147.7	4128.2
50°	4147.7	3895.8	3909.5	3854.8	3720.1
52.5°	3921.2	3671.3	3698.6	3462.3	2798.4
55°	3684.9	3435.0	3477.9	2386.3	1968.4
57.5°	3442.8	3192.8	3165.5	1825.9	1823.9
60°	3185.0	2946.8	2763.2	1613.0	1488.0
62.5°	2925.3	2691.0	1697.0	1214.6	683.5
65°	2648.0	2427.3	1411.9	474.5	380.8
67.5°	2357.0	2159.8	1130.7	357.4	371.0
70°	2058.3	1882.5	453.0	345.6	353.5
72.5°	1753.6	1452.9	300.7	320.3	320.3
75°	1443.1	804.6	281.2	277.3	273.4
77.5°	1134.6	539.0	246.1	228.5	222.6
80°	837.8	193.3	199.2	177.7	171.8
82.5°	554.6	150.4	142.6	128.9	125.0
85°	298.8	99.6	93.7	85.9	82.0
87.5°	107.4	50.8	50.8	41.0	37.1
90°	0.0	0.0	0.0	0.0	0.0



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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	25.58	27.16	25.95	27.47	27.78	21.57	23.15	21.94	23.46	23.77
	3H	27.59	29.00	27.97	29.32	29.69	21.70	23.11	22.08	23.44	23.80
	4H	28.20	29.52	28.60	29.87	30.25	21.82	23.14	22.22	23.49	23.87
	6H	28.60	29.82	29.01	30.19	30.58	21.93	23.15	22.34	23.52	23.91
	8H	28.72	29.88	29.15	30.27	30.67	21.97	23.13	22.39	23.51	23.91
	12H	28.79	29.90	29.22	30.28	30.71	21.99	23.10	22.42	23.48	23.91
4H	2H	25.71	27.03	26.11	27.38	27.76	22.30	23.62	22.70	23.97	24.34
	3H	27.87	28.96	28.28	29.36	29.76	22.50	23.58	22.91	23.98	24.38
	4H	28.53	29.50	28.96	29.92	30.36	22.65	23.63	23.08	24.04	24.48
	6H	28.97	29.82	29.43	30.26	30.72	22.82	23.67	23.27	24.11	24.57
	8H	29.11	29.91	29.58	30.35	30.82	22.87	23.66	23.33	24.10	24.57
	12H	29.22	29.93	29.70	30.40	30.87	22.91	23.62	23.40	24.10	24.57
8H	4H	28.46	29.26	28.93	29.70	30.17	22.92	23.72	23.39	24.16	24.63
	6H	28.91	29.56	29.40	30.05	30.53	23.13	23.79	23.63	24.28	24.75
	8H	29.05	29.64	29.57	30.15	30.64	23.21	23.80	23.73	24.31	24.80
	12H	29.19	29.71	29.69	30.20	30.76	23.30	23.82	23.81	24.31	24.88
12H	4H	28.44	29.15	28.92	29.62	30.09	22.94	23.65	23.42	24.12	24.59
	6H	28.86	29.45	29.38	29.96	30.45	23.15	23.74	23.66	24.25	24.73
	8H	29.04	29.56	29.54	30.05	30.61	23.27	23.79	23.78	24.28	24.85