

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: P894632

Luminaire Tested: 8TMB-14HL-RFLW-UNV-L850

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894632
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-L850
Description: 14000 Lumen 8FT MICROBAY LINEAR BAY with REFLECTOR WITH WHITE FINISH, 80CRI, 5000K
Light Source: -
Ballast/Driver: -

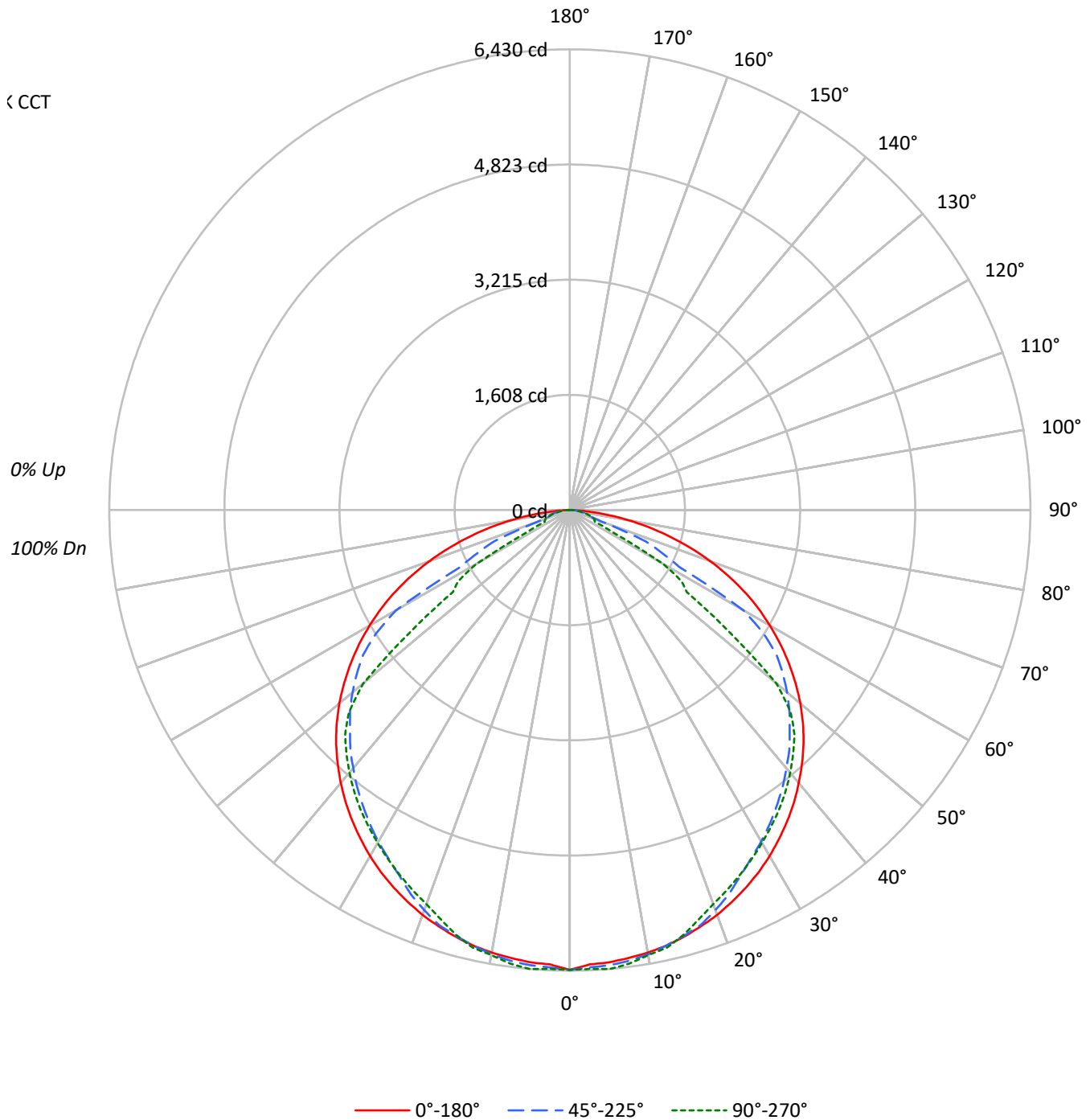
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16732.0 lumens
Efficiency: N/A
Efficacy: 161.5 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	102	102	102	100
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	88	88	88	86
2	101	93	87	82	98	91	85	81	88	83	79	85	81	77	82	78	75	75	75	75	73
3	92	82	75	69	90	81	74	68	78	72	67	75	70	66	73	68	65	65	65	65	62
4	85	73	65	59	82	72	64	58	70	63	57	67	61	57	65	60	56	56	56	56	54
5	78	66	57	51	76	65	56	50	62	55	50	61	54	49	59	53	49	49	49	49	47
6	72	59	51	44	70	58	50	44	56	49	44	55	48	43	53	48	43	43	43	43	41
7	67	54	45	39	65	53	45	39	51	44	39	50	43	39	49	43	38	38	38	38	36
8	62	49	41	35	61	48	40	35	47	40	35	46	39	35	45	39	34	34	34	34	32
9	58	45	37	32	57	44	37	31	43	36	31	42	36	31	41	35	31	31	31	31	29
10	54	42	34	29	53	41	34	29	40	33	28	39	33	28	38	32	28	28	28	28	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	41561	41561	41561
5°	41179	41449	41796
10°	41239	41395	41473
15°	41329	41236	41144
20°	41434	40957	40330
25°	41547	40233	40148
30°	41705	39960	40122
35°	41855	39807	40291
40°	42031	39757	40460
45°	42256	39739	40626
50°	42321	39890	37957
55°	42135	39769	22508
60°	41778	36246	19518
65°	41094	21911	5910
70°	39470	8688	6778
75°	36568	7125	6928
80°	31641	7522	6492
85°	22482	7051	6174

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 50°
 Luminance: 42321 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	608.0	3.6
10°-20°	1741.0	10.4
20°-30°	2631.0	15.7
30°-40°	3210.1	19.2
40°-50°	3395.6	20.3
50°-60°	2812.5	16.8
60°-70°	1563.5	9.3
70°-80°	633.8	3.8
80°-90°	136.6	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°	4979.9	29.8
0°-40°	8190.0	48.9
0°-60°	14398.1	86.1
0°-90°	16732.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	16732.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6418	6418	6418	6418	6418	
5°	6335	6448	6377	6386	6430	603
15°	6165	6260	6151	6147	6137	1741
25°	5815	5856	5631	5595	5619	2682
35°	5295	5230	5036	5055	5097	3314
45°	4614	4377	4339	4393	4436	3557
55°	3732	3479	3523	2417	1994	3335
65°	2682	2458	1430	481	386	2645
75°	1462	815	285	281	277	1543
85°	303	101	95	87	83	380
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6418.2	6418.2	6418.2	6418.2	6418.2
2.5°	6348.9	6459.7	6390.5	6404.3	6410.2
5°	6335.1	6447.8	6376.6	6386.5	6430.0
7.5°	6305.4	6420.1	6345.0	6350.9	6384.5
10°	6271.8	6376.6	6295.5	6285.6	6307.4
12.5°	6226.3	6321.2	6226.3	6230.3	6257.9
15°	6165.0	6259.9	6151.1	6147.2	6137.3
17.5°	6091.8	6180.8	6074.0	6010.7	5989.0
20°	6012.7	6081.9	5943.5	5846.6	5852.5
22.5°	5917.8	5977.1	5803.0	5714.0	5739.7
25°	5814.9	5856.4	5631.0	5595.4	5619.1
27.5°	5702.2	5733.8	5482.6	5474.7	5494.5
30°	5577.6	5589.4	5344.2	5340.2	5365.9
32.5°	5439.1	5419.3	5195.8	5199.8	5233.4
35°	5294.7	5229.5	5035.6	5055.4	5096.9
37.5°	5142.4	5025.7	4877.4	4903.1	4948.6
40°	4972.3	4814.1	4703.3	4742.9	4786.4
42.5°	4798.3	4592.6	4535.2	4572.8	4614.3
45°	4614.3	4377.0	4339.4	4392.8	4436.3
47.5°	4414.6	4165.4	4159.4	4201.0	4181.2
50°	4201.0	3945.8	3959.7	3904.3	3767.8
52.5°	3971.5	3718.4	3746.1	3506.7	2834.3
55°	3732.2	3479.1	3522.6	2416.9	1993.7
57.5°	3487.0	3233.8	3206.1	1849.3	1847.3
60°	3225.9	2984.6	2798.7	1633.7	1507.1
62.5°	2962.8	2725.5	1718.8	1230.2	692.3
65°	2682.0	2458.5	1430.0	480.6	385.7
67.5°	2387.3	2187.5	1145.2	361.9	375.8
70°	2084.7	1906.7	458.9	350.1	358.0
72.5°	1776.1	1471.5	304.6	324.4	324.4
75°	1461.6	814.9	284.8	280.9	276.9
77.5°	1149.1	545.9	249.2	231.4	225.5
80°	848.5	195.8	201.7	180.0	174.1
82.5°	561.7	152.3	144.4	130.5	126.6
85°	302.6	100.9	94.9	87.0	83.1
87.5°	108.8	51.4	51.4	41.5	37.6
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	25.63	27.20	25.99	27.51	27.83	21.62	23.19	21.98	23.50	23.82
	3H	27.63	29.04	28.01	29.37	29.73	21.75	23.16	22.13	23.48	23.85
	4H	28.25	29.56	28.64	29.91	30.29	21.87	23.19	22.27	23.53	23.91
	6H	28.65	29.86	29.06	30.23	30.62	21.98	23.19	22.39	23.56	23.95
	8H	28.76	29.92	29.19	30.31	30.71	22.01	23.17	22.44	23.56	23.96
	12H	28.84	29.94	29.27	30.33	30.76	22.03	23.14	22.46	23.53	23.95
4H	2H	25.76	27.08	26.16	27.42	27.80	22.34	23.66	22.74	24.01	24.39
	3H	27.92	29.01	28.33	29.40	29.81	22.54	23.63	22.95	24.03	24.43
	4H	28.57	29.55	29.00	29.96	30.40	22.69	23.67	23.13	24.09	24.53
	6H	29.02	29.87	29.47	30.31	30.77	22.86	23.71	23.32	24.15	24.61
	8H	29.16	29.95	29.62	30.39	30.86	22.91	23.71	23.38	24.15	24.62
	12H	29.26	29.97	29.74	30.45	30.92	22.96	23.67	23.44	24.15	24.62
8H	4H	28.51	29.30	28.97	29.74	30.21	22.97	23.76	23.43	24.20	24.67
	6H	28.95	29.61	29.45	30.10	30.57	23.17	23.83	23.67	24.32	24.80
	8H	29.10	29.69	29.61	30.20	30.68	23.26	23.85	23.77	24.36	24.84
	12H	29.23	29.75	29.74	30.24	30.81	23.34	23.87	23.85	24.36	24.92
12H	4H	28.48	29.19	28.96	29.67	30.14	22.98	23.69	23.46	24.17	24.64
	6H	28.91	29.50	29.42	30.01	30.50	23.19	23.78	23.70	24.29	24.78
	8H	29.08	29.60	29.59	30.09	30.66	23.31	23.84	23.82	24.33	24.89