

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: P894536

Luminaire Tested: 8TMB-12SL-RFLW-UNV-L850

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894536
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2408-210-3)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 8TMB-12SL-RFLW-UNV-L850
Description: 12000 Lumen 8FT MICROBAY LINEAR BAY with REFLECTOR WITH WHITE FINISH, 80CRI, 5000K
Light Source: -
Ballast/Driver: -

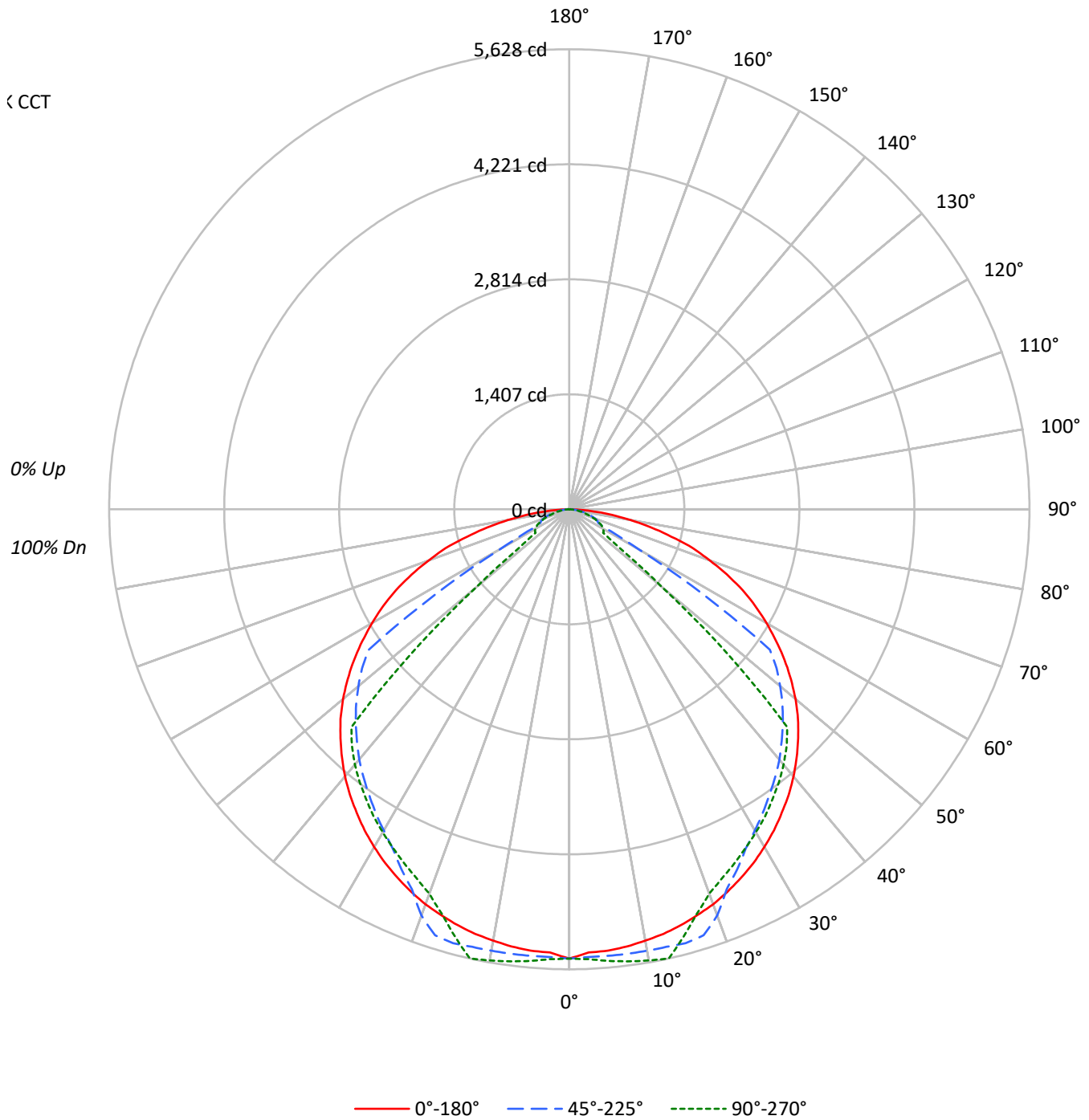
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13405.0 lumens
Efficiency: N/A
Efficacy: 151.0 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.24 / 1.38
Luminous Opening: Rectangular (W 0.21' x L: 7.98' x H: 0')
CIE Type: Direct

Input Watts (W): 88.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 5.53
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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	102	100
1	110	106	102	99	108	104	101	98	100	97	94	96	94	92	92	91	89	89	89	87
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	79	77	77	77	75
3	93	84	76	70	91	82	75	70	79	73	69	77	72	67	74	70	66	66	66	64
4	86	75	67	61	84	74	66	60	71	65	59	69	63	59	67	62	58	58	58	56
5	79	67	59	53	77	66	58	53	64	57	52	62	56	51	61	55	51	51	51	49
6	73	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	45	45	43
7	68	55	47	41	67	55	47	41	53	46	41	52	45	41	50	45	40	40	40	38
8	64	51	43	37	62	50	42	37	49	42	37	48	41	37	46	41	36	36	36	35
9	60	47	39	33	58	46	39	33	45	38	33	44	38	33	43	37	33	33	33	31
10	56	43	35	30	55	43	35	30	42	35	30	41	34	30	40	34	30	30	30	28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	35590	35590	35590
5°	35234	35644	36054
10°	35227	36056	36844
15°	35324	36846	36254
20°	35442	36441	34486
25°	35531	34721	34135
30°	35676	33932	34121
35°	35824	33732	34230
40°	36070	33779	34472
45°	36248	33824	34517
50°	36383	33907	14922
55°	36290	33800	5692
60°	36080	12898	6203
65°	35829	5988	6374
70°	34606	6445	5966
75°	32327	6150	5204
80°	28442	5407	4467
85°	22475	4681	3745

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 50°
 Luminance: 36383 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	524.9	3.9
10°-20°	1524.1	11.4
20°-30°	2274.0	17.0
30°-40°	2756.4	20.6
40°-50°	2822.4	21.1
50°-60°	1876.9	14.0
60°-70°	1069.8	8.0
70°-80°	449.4	3.4
80°-90°	107.1	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°	4323.0	32.2
0°-40°	7079.4	52.8
0°-60°	11778.6	87.9
0°-90°	13405.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13405.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5496	5496	5496	5496	5496	
5°	5420	5528	5484	5496	5547	516
15°	5269	5414	5496	5477	5408	1488
25°	4973	5212	4860	4752	4778	2294
35°	4532	4614	4267	4286	4330	2839
45°	3958	3719	3694	3738	3769	3054
55°	3214	2944	2994	656	504	2870
65°	2338	2093	391	416	416	2301
75°	1292	271	246	214	208	1372
85°	302	76	63	50	50	363
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5496.2	5496.2	5496.2	5496.2	5496.2
2.5°	5426.8	5540.3	5483.5	5489.8	5508.8
5°	5420.5	5527.7	5483.5	5496.2	5546.6
7.5°	5395.3	5508.8	5483.5	5521.4	5578.1
10°	5357.5	5489.8	5483.5	5546.6	5603.3
12.5°	5319.7	5452.0	5483.5	5578.1	5628.5
15°	5269.2	5414.2	5496.2	5477.2	5407.9
17.5°	5206.2	5376.4	5464.6	5193.6	5187.3
20°	5143.2	5326.0	5288.2	5029.7	5004.5
22.5°	5061.3	5275.6	5029.7	4853.3	4884.8
25°	4973.0	5212.5	4859.6	4752.4	4777.6
27.5°	4878.5	5149.5	4676.8	4639.0	4670.5
30°	4771.3	5061.3	4538.1	4525.5	4563.3
32.5°	4657.9	4891.1	4405.7	4412.0	4456.2
35°	4531.8	4613.7	4267.1	4286.0	4330.1
37.5°	4405.7	4355.3	4134.7	4166.2	4210.4
40°	4267.1	4153.6	3996.1	4027.6	4078.0
42.5°	4115.8	3939.3	3844.8	3888.9	3933.0
45°	3958.2	3718.7	3693.5	3737.6	3769.2
47.5°	3794.4	3529.6	3535.9	3567.5	2672.4
50°	3611.6	3340.6	3365.8	2332.1	1481.2
52.5°	3416.2	3145.2	3195.6	1298.4	750.0
55°	3214.5	2943.5	2993.9	655.5	504.2
57.5°	3000.2	2741.8	1953.9	472.7	497.9
60°	2785.9	2527.5	995.9	466.4	479.0
62.5°	2565.3	2313.2	472.7	447.5	453.8
65°	2338.4	2092.6	390.8	416.0	416.0
67.5°	2086.3	1859.4	371.9	371.9	365.6
70°	1827.8	1544.2	340.4	321.4	315.1
72.5°	1588.3	592.5	296.2	264.7	258.4
75°	1292.1	271.0	245.8	214.3	208.0
77.5°	1027.4	226.9	195.4	170.2	163.9
80°	762.7	176.5	145.0	126.1	119.8
82.5°	529.4	119.8	100.8	81.9	81.9
85°	302.5	75.6	63.0	50.4	50.4
87.5°	119.8	37.8	31.5	18.9	18.9
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	25.34	26.86	25.70	27.17	27.49	13.10	14.62	13.47	14.94	15.25
	3H	27.36	28.72	27.73	29.04	29.40	15.42	16.78	15.79	17.10	17.46
	4H	27.82	29.09	28.22	29.44	29.82	16.13	17.40	16.53	17.75	18.13
	6H	28.23	29.40	28.64	29.77	30.16	16.61	17.79	17.03	18.15	18.54
	8H	28.37	29.49	28.80	29.88	30.28	16.75	17.87	17.18	18.26	18.66
	12H	28.47	29.54	28.90	29.92	30.35	16.84	17.91	17.27	18.29	18.72
4H	2H	25.18	26.45	25.58	26.80	27.18	13.90	15.17	14.30	15.52	15.90
	3H	27.38	28.43	27.79	28.83	29.23	16.41	17.46	16.82	17.86	18.26
	4H	27.83	28.77	28.26	29.18	29.62	17.23	18.17	17.66	18.59	19.03
	6H	28.29	29.11	28.75	29.55	30.01	17.82	18.64	18.28	19.08	19.54
	8H	28.49	29.25	28.95	29.69	30.16	17.99	18.75	18.46	19.20	19.67
	12H	28.64	29.32	29.12	29.80	30.27	18.11	18.79	18.59	19.27	19.74
8H	4H	27.75	28.51	28.21	28.95	29.42	18.07	18.83	18.53	19.28	19.74
	6H	28.21	28.84	28.70	29.33	29.80	18.69	19.32	19.19	19.81	20.29
	8H	28.41	28.97	28.92	29.48	29.97	18.89	19.46	19.41	19.97	20.46
	12H	28.59	29.09	29.10	29.58	30.15	19.05	19.55	19.56	20.04	20.61
12H	4H	27.72	28.40	28.20	28.87	29.35	18.14	18.82	18.62	19.30	19.77
	6H	28.16	28.73	28.67	29.24	29.72	18.79	19.35	19.30	19.86	20.35
	8H	28.38	28.88	28.89	29.38	29.94	19.04	19.54	19.55	20.03	20.60