

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: P894535

Luminaire Tested: 8TMB-12SL-RFLW-UNV-L840

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894535
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-L840
Description: 12000 Lumen 8FT MICROBAY LINEAR BAY with REFLECTOR WITH WHITE FINISH, 80CRI, 4000K
Light Source: -
Ballast/Driver: -

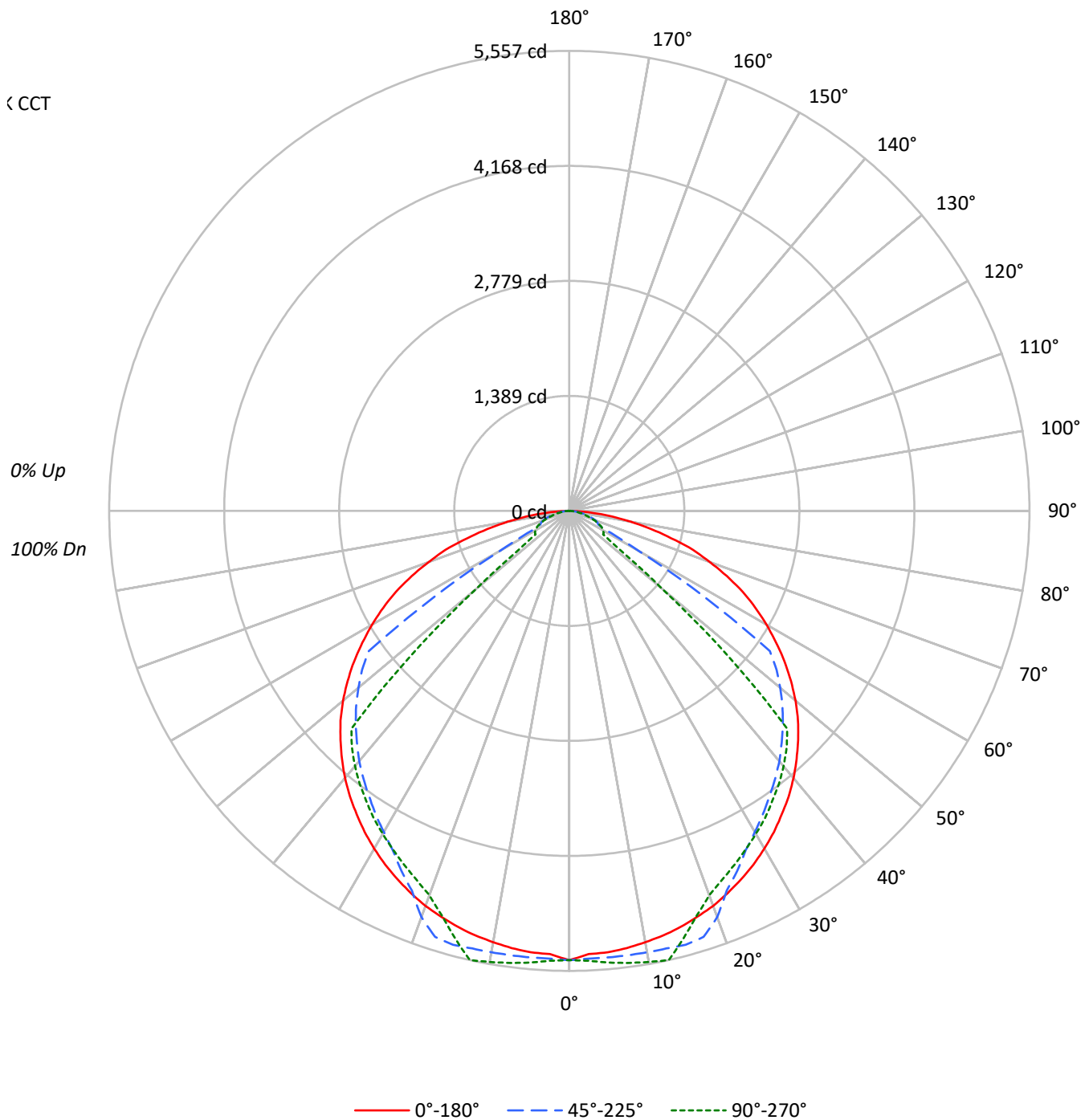
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13235.0 lumens
Efficiency: N/A
Efficacy: 149.0 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	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	99	108	104	101	98	100	97	94	96	94	92	92	91	89	89	89	89	87
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	79	77	77	77	77	75
3	93	84	76	70	91	82	75	70	79	73	69	77	72	67	74	70	66	66	66	66	64
4	86	75	67	61	84	74	66	60	71	65	59	69	63	59	67	62	58	58	58	58	56
5	79	67	59	53	77	66	58	53	64	57	52	62	56	51	61	55	51	51	51	51	49
6	73	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	45	45	45	43
7	68	55	47	41	67	55	47	41	53	46	41	52	45	41	50	45	40	40	40	40	38
8	64	51	43	37	62	50	42	37	49	42	37	48	41	37	46	41	36	36	36	36	35
9	60	47	39	33	58	46	39	33	45	38	33	44	38	33	43	37	33	33	33	33	31
10	56	43	35	30	55	43	35	30	42	35	30	41	34	30	40	34	30	30	30	30	28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	35139	35139	35139
5°	34788	35192	35596
10°	34780	35599	36376
15°	34876	36379	35794
20°	34993	35979	34049
25°	35081	34280	33702
30°	35224	33502	33688
35°	35370	33304	33796
40°	35613	33351	34035
45°	35788	33395	34079
50°	35922	33477	14732
55°	35830	33371	5620
60°	35623	12733	6124
65°	35374	5911	6293
70°	34168	6361	5890
75°	31917	6072	5139
80°	28080	5336	4408
85°	22193	4621	3700

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 50°
 Luminance: 35922 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	518.2	3.9
10°-20°	1504.7	11.4
20°-30°	2245.2	17.0
30°-40°	2721.4	20.6
40°-50°	2786.6	21.1
50°-60°	1853.1	14.0
60°-70°	1056.2	8.0
70°-80°	443.7	3.4
80°-90°	105.8	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°	4268.2	32.2
0°-40°	6989.6	52.8
0°-60°	11629.2	87.9
0°-90°	13235.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13235.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5426	5426	5426	5426	5426	
5°	5352	5458	5414	5426	5476	509
15°	5202	5346	5426	5408	5339	1469
25°	4910	5146	4798	4692	4717	2265
35°	4474	4555	4213	4232	4275	2803
45°	3908	3672	3647	3690	3721	3015
55°	3174	2906	2956	647	498	2834
65°	2309	2066	386	411	411	2272
75°	1276	268	243	212	205	1354
85°	299	75	62	50	50	358
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5426.5	5426.5	5426.5	5426.5	5426.5
2.5°	5358.0	5470.0	5414.0	5420.2	5438.9
5°	5351.8	5457.6	5414.0	5426.5	5476.2
7.5°	5326.9	5438.9	5414.0	5451.3	5507.4
10°	5289.5	5420.2	5414.0	5476.2	5532.2
12.5°	5252.2	5382.9	5414.0	5507.4	5557.1
15°	5202.4	5345.6	5426.5	5407.8	5339.3
17.5°	5140.2	5308.2	5395.3	5127.7	5121.5
20°	5078.0	5258.4	5221.1	4965.9	4941.1
22.5°	4997.1	5208.6	4965.9	4791.7	4822.8
25°	4909.9	5146.4	4797.9	4692.1	4717.0
27.5°	4816.6	5084.2	4617.5	4580.1	4611.2
30°	4710.8	4997.1	4480.6	4468.1	4505.4
32.5°	4598.8	4829.0	4349.9	4356.1	4399.7
35°	4474.3	4555.2	4213.0	4231.6	4275.2
37.5°	4349.9	4300.1	4082.3	4113.4	4157.0
40°	4213.0	4101.0	3945.4	3976.5	4026.3
42.5°	4063.6	3889.4	3796.0	3839.6	3883.1
45°	3908.0	3671.6	3646.7	3690.2	3721.4
47.5°	3746.2	3484.9	3491.1	3522.2	2638.5
50°	3565.8	3298.2	3323.1	2302.5	1462.4
52.5°	3372.9	3105.3	3155.1	1281.9	740.5
55°	3173.7	2906.1	2955.9	647.2	497.8
57.5°	2962.1	2707.0	1929.1	466.7	491.6
60°	2750.6	2495.4	983.2	460.5	472.9
62.5°	2532.8	2283.8	466.7	441.8	448.1
65°	2308.7	2066.0	385.8	410.7	410.7
67.5°	2059.8	1835.8	367.2	367.2	360.9
70°	1804.7	1524.6	336.0	317.4	311.1
72.5°	1568.2	585.0	292.5	261.4	255.1
75°	1275.7	267.6	242.7	211.6	205.4
77.5°	1014.3	224.0	192.9	168.0	161.8
80°	753.0	174.2	143.1	124.5	118.2
82.5°	522.7	118.2	99.6	80.9	80.9
85°	298.7	74.7	62.2	49.8	49.8
87.5°	118.2	37.3	31.1	18.7	18.7
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	25.29	26.81	25.66	27.13	27.44	13.06	14.58	13.42	14.89	15.21
	3H	27.31	28.67	27.69	29.00	29.36	15.37	16.73	15.75	17.06	17.42
	4H	27.77	29.05	28.17	29.40	29.77	16.09	17.36	16.49	17.71	18.08
	6H	28.18	29.35	28.59	29.72	30.11	16.57	17.74	16.98	18.11	18.50
	8H	28.33	29.45	28.76	29.84	30.24	16.71	17.82	17.13	18.21	18.61
	12H	28.43	29.50	28.86	29.88	30.31	16.79	17.86	17.22	18.24	18.67
4H	2H	25.13	26.41	25.53	26.75	27.13	13.86	15.13	14.26	15.48	15.85
	3H	27.34	28.38	27.75	28.78	29.19	16.37	17.41	16.78	17.81	18.22
	4H	27.78	28.72	28.22	29.14	29.58	17.19	18.13	17.62	18.54	18.98
	6H	28.25	29.06	28.71	29.51	29.97	17.78	18.59	18.24	19.04	19.50
	8H	28.44	29.20	28.91	29.65	30.11	17.95	18.71	18.41	19.15	19.62
	12H	28.59	29.27	29.08	29.75	30.22	18.07	18.75	18.55	19.22	19.70
8H	4H	27.70	28.46	28.17	28.91	29.38	18.03	18.79	18.49	19.23	19.70
	6H	28.16	28.79	28.66	29.28	29.76	18.65	19.28	19.15	19.77	20.25
	8H	28.36	28.93	28.88	29.44	29.93	18.85	19.41	19.36	19.92	20.41
	12H	28.55	29.05	29.06	29.54	30.11	19.01	19.51	19.52	20.00	20.56
12H	4H	27.67	28.35	28.15	28.83	29.30	18.10	18.78	18.58	19.25	19.73
	6H	28.12	28.68	28.63	29.19	29.68	18.74	19.31	19.26	19.82	20.31
	8H	28.34	28.84	28.85	29.33	29.90	18.99	19.50	19.50	19.99	20.55