

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: P894533

Luminaire Tested: 8TMB-12SL-RFLW-UNV-L830

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894533
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-L830
Description: 12000 Lumen 8FT MICROBAY LINEAR BAY with REFLECTOR WITH WHITE FINISH, 80CRI, 3000K
Light Source: -
Ballast/Driver: -

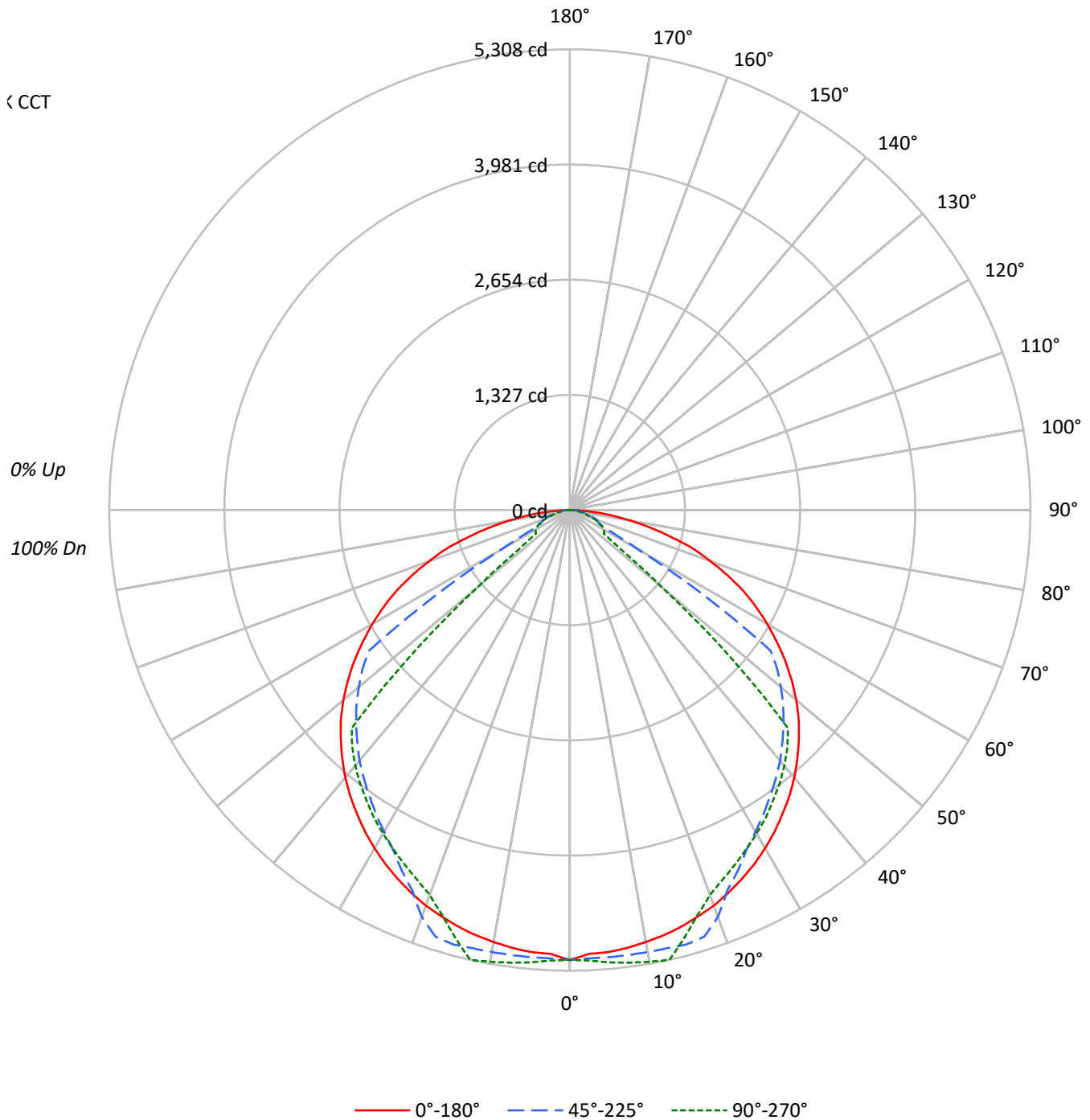
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12642.0 lumens
Efficiency: N/A
Efficacy: 142.4 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°	33564	33564	33564
5°	33229	33615	34002
10°	33222	34004	34747
15°	33314	34748	34190
20°	33424	34367	32524
25°	33509	32745	32193
30°	33645	32001	32179
35°	33785	31812	32281
40°	34017	31856	32510
45°	34185	31899	32552
50°	34312	31977	14072
55°	34224	31876	5368
60°	34026	12163	5851
65°	33790	5646	6011
70°	32637	6077	5627
75°	30488	5799	4909
80°	26819	5098	4210
85°	21197	4413	3537

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 50°
 Luminance: 34312 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	495.0	3.9
10°-20°	1437.3	11.4
20°-30°	2144.6	17.0
30°-40°	2599.5	20.6
40°-50°	2661.7	21.1
50°-60°	1770.1	14.0
60°-70°	1008.9	8.0
70°-80°	423.9	3.4
80°-90°	101.0	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°	4076.9	32.2
0°-40°	6676.4	52.8
0°-60°	11108.2	87.9
0°-90°	12642.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12642.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5183	5183	5183	5183	5183	
5°	5112	5213	5171	5183	5231	486
15°	4969	5106	5183	5166	5100	1404
25°	4690	4916	4583	4482	4506	2164
35°	4274	4351	4024	4042	4084	2677
45°	3733	3507	3483	3525	3555	2880
55°	3032	2776	2824	618	476	2707
65°	2205	1974	368	392	392	2170
75°	1219	256	232	202	196	1294
85°	285	71	59	48	48	342
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5183.3	5183.3	5183.3	5183.3	5183.3
2.5°	5117.9	5224.9	5171.4	5177.4	5195.2
5°	5112.0	5213.0	5171.4	5183.3	5230.9
7.5°	5088.2	5195.2	5171.4	5207.1	5260.6
10°	5052.5	5177.4	5171.4	5230.9	5284.4
12.5°	5016.9	5141.7	5171.4	5260.6	5308.1
15°	4969.3	5106.0	5183.3	5165.5	5100.1
17.5°	4909.9	5070.4	5153.6	4898.0	4892.1
20°	4850.4	5022.8	4987.2	4743.4	4719.7
22.5°	4773.2	4975.3	4743.4	4577.0	4606.7
25°	4690.0	4915.8	4583.0	4481.9	4505.7
27.5°	4600.8	4856.4	4410.6	4374.9	4404.6
30°	4499.7	4773.2	4279.8	4267.9	4303.6
32.5°	4392.7	4612.7	4155.0	4160.9	4202.5
35°	4273.9	4351.1	4024.2	4042.0	4083.6
37.5°	4155.0	4107.4	3899.4	3929.1	3970.7
40°	4024.2	3917.2	3768.6	3798.3	3845.9
42.5°	3881.5	3715.1	3625.9	3667.6	3709.2
45°	3732.9	3507.1	3483.3	3524.9	3554.6
47.5°	3578.4	3328.7	3334.7	3364.4	2520.3
50°	3406.0	3150.4	3174.2	2199.3	1396.9
52.5°	3221.7	2966.1	3013.7	1224.5	707.4
55°	3031.5	2775.9	2823.5	618.2	475.5
57.5°	2829.4	2585.7	1842.7	445.8	469.6
60°	2627.3	2383.6	939.2	439.9	451.8
62.5°	2419.3	2181.5	445.8	422.0	428.0
65°	2205.3	1973.5	368.5	392.3	392.3
67.5°	1967.5	1753.5	350.7	350.7	344.8
70°	1723.8	1456.3	321.0	303.2	297.2
72.5°	1497.9	558.8	279.4	249.7	243.7
75°	1218.6	255.6	231.8	202.1	196.2
77.5°	968.9	214.0	184.3	160.5	154.5
80°	719.2	166.4	136.7	118.9	112.9
82.5°	499.3	112.9	95.1	77.3	77.3
85°	285.3	71.3	59.4	47.6	47.6
87.5°	112.9	35.7	29.7	17.8	17.8
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	25.13	26.65	25.50	26.97	27.28	12.90	14.42	13.26	14.73	15.05
	3H	27.15	28.51	27.53	28.84	29.20	15.21	16.57	15.59	16.90	17.26
	4H	27.62	28.89	28.02	29.24	29.61	15.93	17.20	16.33	17.55	17.93
	6H	28.02	29.19	28.43	29.56	29.95	16.41	17.58	16.82	17.95	18.34
	8H	28.17	29.29	28.60	29.68	30.08	16.55	17.66	16.97	18.05	18.45
	12H	28.27	29.34	28.70	29.72	30.15	16.63	17.70	17.07	18.08	18.51
4H	2H	24.97	26.25	25.37	26.59	26.97	13.70	14.97	14.10	15.32	15.70
	3H	27.18	28.22	27.59	28.62	29.03	16.21	17.25	16.62	17.65	18.06
	4H	27.62	28.56	28.06	28.98	29.42	17.03	17.97	17.46	18.38	18.82
	6H	28.09	28.91	28.55	29.35	29.81	17.62	18.43	18.08	18.88	19.34
	8H	28.28	29.04	28.75	29.49	29.96	17.79	18.55	18.25	19.00	19.46
	12H	28.43	29.11	28.92	29.59	30.06	17.91	18.59	18.39	19.07	19.54
8H	4H	27.54	28.30	28.01	28.75	29.22	17.87	18.63	18.33	19.07	19.54
	6H	28.00	28.63	28.50	29.12	29.60	18.49	19.12	18.99	19.61	20.09
	8H	28.20	28.77	28.72	29.28	29.77	18.69	19.25	19.20	19.77	20.25
	12H	28.39	28.89	28.90	29.38	29.95	18.85	19.35	19.36	19.84	20.41
12H	4H	27.51	28.19	28.00	28.67	29.14	17.94	18.62	18.42	19.10	19.57
	6H	27.96	28.52	28.47	29.03	29.52	18.58	19.15	19.10	19.66	20.15
	8H	28.18	28.68	28.69	29.17	29.74	18.84	19.34	19.35	19.83	20.39