

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: P893769

Luminaire Tested: 4MB-6SL-RFLW-UNV-L830

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893769
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: 4MB-6SL-RFLW-UNV-L830
Description: 6000 Lumen 4FT MICROBAY LINEAR BAY with REFLECTOR WITH WHITE FINISH, 80CRI, 3000K
Light Source: -
Ballast/Driver: -

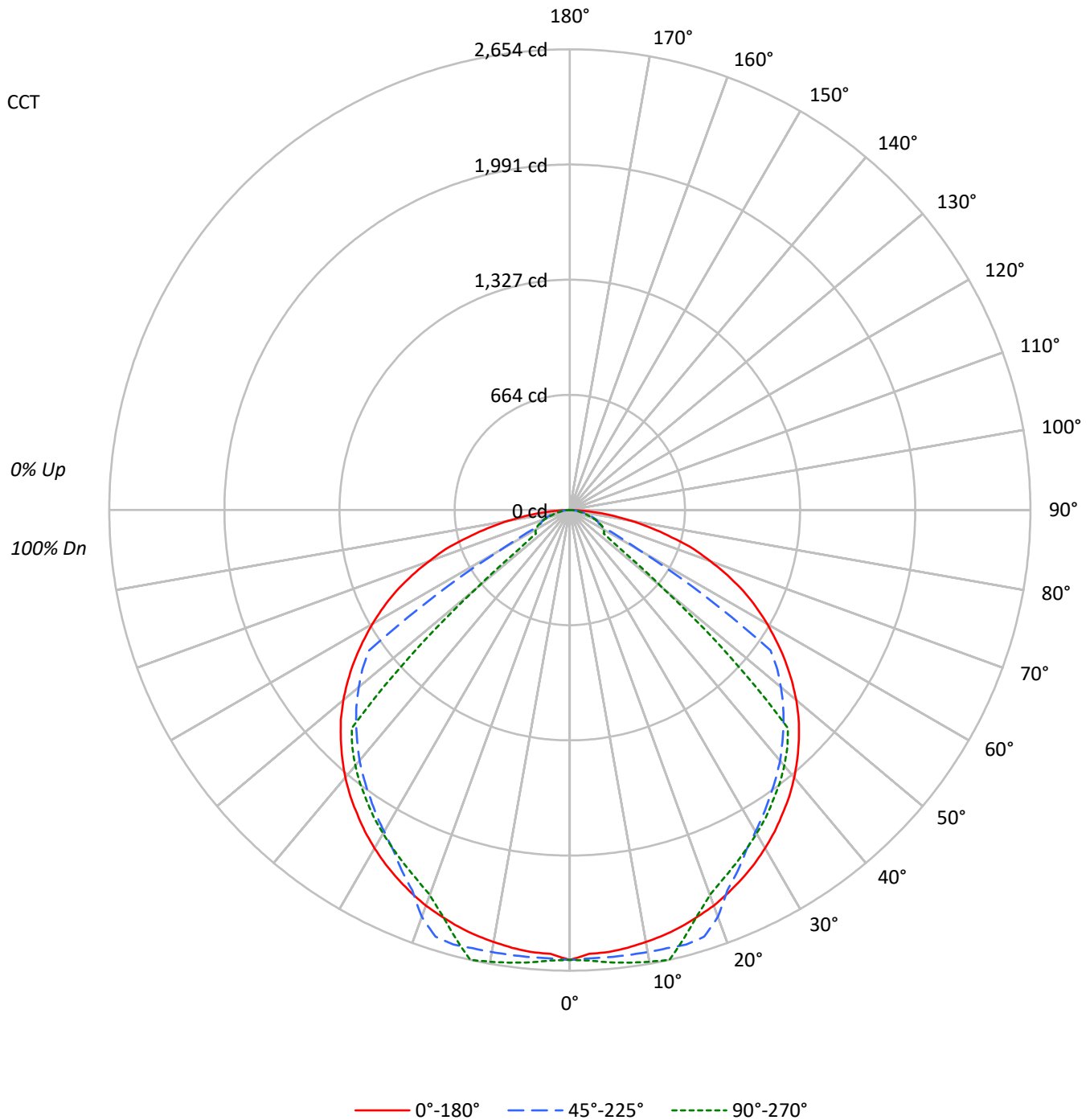
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6321.0 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: 3.98' x H: 0')
CIE Type: Direct

Input Watts (W): 44.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: 0.99
Total Harmonic Distortion (THDi): 4
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

TEST NUMBER: P893769
CATALOG NUMBER: 4MB-6SL-RFLW-UNV-L830

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°	33653	33653	33653
5°	33317	33704	34091
10°	33310	34093	34838
15°	33402	34841	34280
20°	33512	34458	32609
25°	33598	32831	32277
30°	33735	32085	32264
35°	33874	31896	32366
40°	34107	31940	32595
45°	34276	31982	32638
50°	34403	32061	14109
55°	34316	31959	5384
60°	34117	12196	5867
65°	33878	5663	6028
70°	32723	6094	5642
75°	30569	5815	4922
80°	26890	5115	4225
85°	21260	4425	3546

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 50°
 Luminance: 34403 cd/sqm



TEST NUMBER: P893769
 CATALOG NUMBER: 4MB-6SL-RFLW-UNV-L830

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	247.5	3.9
10°-20°	718.7	11.4
20°-30°	1072.3	17.0
30°-40°	1299.7	20.6
40°-50°	1330.9	21.1
50°-60°	885.0	14.0
60°-70°	504.5	8.0
70°-80°	211.9	3.4
80°-90°	50.5	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°	2038.5	32.2
0°-40°	3338.2	52.8
0°-60°	5554.1	87.9
0°-90°	6321.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6321.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2592	2592	2592	2592	2592	
5°	2556	2606	2586	2592	2615	243
15°	2485	2553	2592	2583	2550	702
25°	2345	2458	2292	2241	2253	1082
35°	2137	2176	2012	2021	2042	1339
45°	1866	1754	1742	1762	1777	1440
55°	1516	1388	1412	309	238	1354
65°	1103	987	184	196	196	1085
75°	609	128	116	101	98	647
85°	143	36	30	24	24	171
90°	0	0	0	0	0	



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CATALOG NUMBER: 4MB-6SL-RFLW-UNV-L830

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2591.7	2591.7	2591.7	2591.7	2591.7
2.5°	2559.0	2612.5	2585.7	2588.7	2597.6
5°	2556.0	2606.5	2585.7	2591.7	2615.4
7.5°	2544.1	2597.6	2585.7	2603.5	2630.3
10°	2526.3	2588.7	2585.7	2615.4	2642.2
12.5°	2508.4	2570.9	2585.7	2630.3	2654.1
15°	2484.7	2553.0	2591.7	2582.7	2550.0
17.5°	2454.9	2535.2	2576.8	2449.0	2446.0
20°	2425.2	2511.4	2493.6	2371.7	2359.8
22.5°	2386.6	2487.6	2371.7	2288.5	2303.4
25°	2345.0	2457.9	2291.5	2241.0	2252.8
27.5°	2300.4	2428.2	2205.3	2187.5	2202.3
30°	2249.9	2386.6	2139.9	2134.0	2151.8
32.5°	2196.4	2306.3	2077.5	2080.5	2101.3
35°	2136.9	2175.6	2012.1	2021.0	2041.8
37.5°	2077.5	2053.7	1949.7	1964.5	1985.4
40°	2012.1	1958.6	1884.3	1899.2	1922.9
42.5°	1940.8	1857.6	1813.0	1833.8	1854.6
45°	1866.5	1753.5	1741.6	1762.4	1777.3
47.5°	1789.2	1664.4	1667.3	1682.2	1260.2
50°	1703.0	1575.2	1587.1	1099.7	698.4
52.5°	1610.9	1483.1	1506.8	612.2	353.7
55°	1515.8	1388.0	1411.7	309.1	237.8
57.5°	1414.7	1292.9	921.3	222.9	234.8
60°	1313.7	1191.8	469.6	219.9	225.9
62.5°	1209.6	1090.8	222.9	211.0	214.0
65°	1102.6	986.7	184.3	196.2	196.2
67.5°	983.8	876.8	175.4	175.4	172.4
70°	861.9	728.2	160.5	151.6	148.6
72.5°	749.0	279.4	139.7	124.8	121.9
75°	609.3	127.8	115.9	101.1	98.1
77.5°	484.4	107.0	92.1	80.2	77.3
80°	359.6	83.2	68.4	59.4	56.5
82.5°	249.7	56.5	47.6	38.6	38.6
85°	142.7	35.7	29.7	23.8	23.8
87.5°	56.5	17.8	14.9	8.9	8.9
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	25.14	26.66	25.51	26.98	27.29	12.91	14.43	13.27	14.74	15.06
	3H	27.16	28.52	27.54	28.85	29.21	15.22	16.58	15.60	16.91	17.27
	4H	27.62	28.90	28.02	29.25	29.62	15.94	17.21	16.34	17.56	17.94
	6H	28.03	29.20	28.44	29.57	29.96	16.42	17.59	16.83	17.96	18.35
	8H	28.18	29.30	28.61	29.69	30.09	16.56	17.67	16.98	18.06	18.46
	12H	28.28	29.35	28.71	29.73	30.16	16.64	17.71	17.07	18.09	18.52
4H	2H	24.98	26.26	25.38	26.60	26.98	13.71	14.98	14.11	15.33	15.71
	3H	27.19	28.23	27.60	28.63	29.04	16.22	17.26	16.63	17.66	18.07
	4H	27.63	28.57	28.07	28.99	29.43	17.04	17.98	17.47	18.39	18.83
	6H	28.10	28.91	28.56	29.36	29.82	17.63	18.44	18.09	18.89	19.35
	8H	28.29	29.05	28.76	29.50	29.96	17.80	18.56	18.26	19.00	19.47
	12H	28.44	29.12	28.93	29.60	30.07	17.92	18.60	18.40	19.07	19.55
8H	4H	27.55	28.31	28.02	28.76	29.23	17.88	18.64	18.34	19.08	19.55
	6H	28.01	28.64	28.51	29.13	29.61	18.50	19.13	19.00	19.62	20.10
	8H	28.21	28.78	28.73	29.29	29.78	18.70	19.26	19.21	19.77	20.26
	12H	28.40	28.90	28.91	29.39	29.96	18.86	19.36	19.37	19.85	20.41
12H	4H	27.52	28.20	28.00	28.68	29.15	17.95	18.63	18.43	19.11	19.58
	6H	27.97	28.53	28.48	29.04	29.53	18.59	19.16	19.11	19.67	20.16
	8H	28.19	28.69	28.70	29.18	29.75	18.84	19.35	19.35	19.84	20.40