

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: P893771

Luminaire Tested: 4MB-6SL-RFLW-UNV-L840

Issue Date: 11/11/2024

**Test Information**

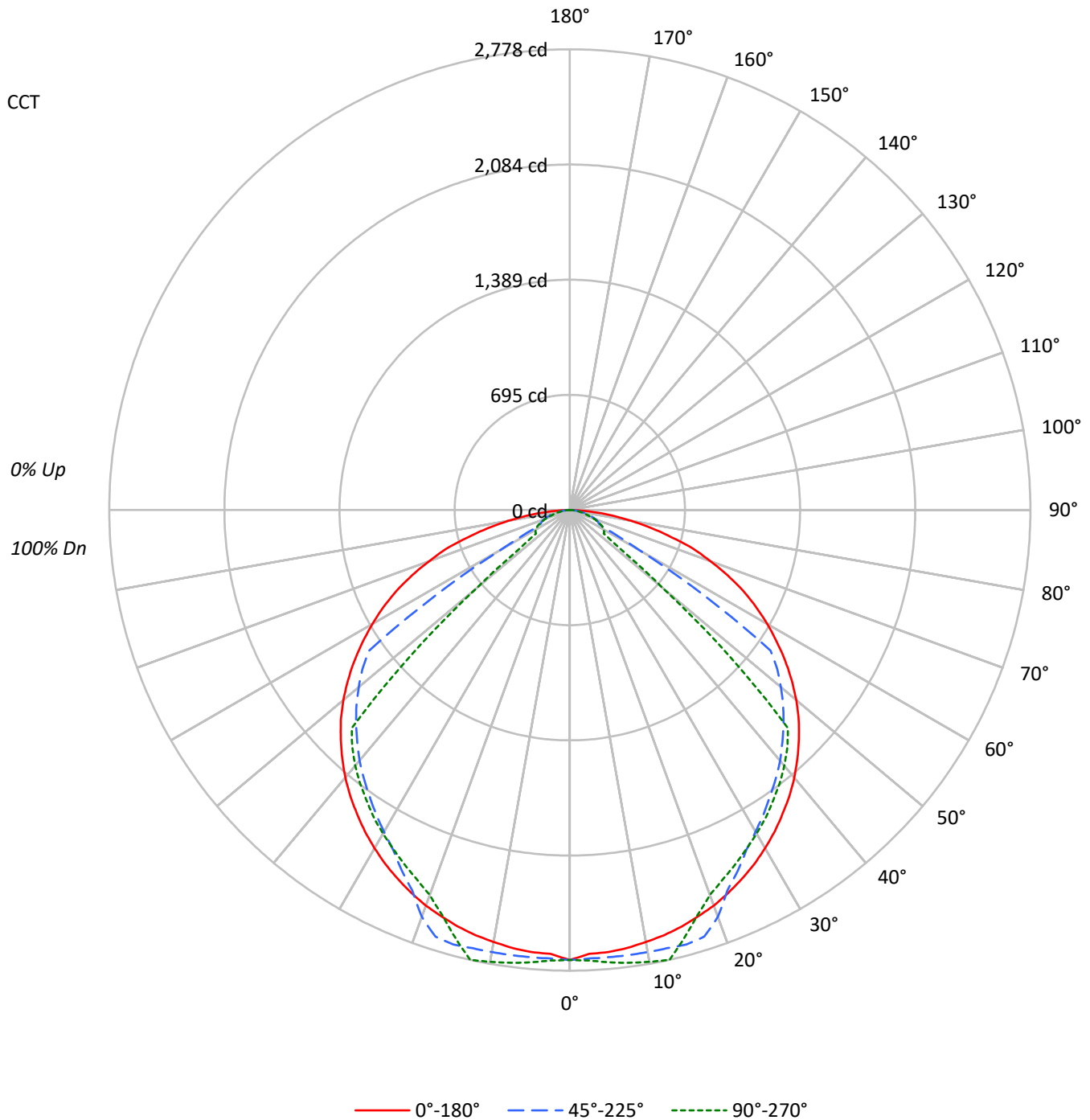
Test Method: LM-79-2019  
Report Number: P893771  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2408-210-3)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 4MB-6SL-RFLW-UNV-L840  
Description: 6000 Lumen 4FT MICROBAY LINEAR BAY with REFLECTOR WITH WHITE FINISH, 80CRI, 4000K  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6617.0 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: 3.98' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 44.4  
Input Voltage (V): 120  
Input Current (Ain): 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

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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°	35229	35229	35229
5°	34877	35282	35688
10°	34870	35690	36469
15°	34966	36471	35886
20°	35082	36070	34136
25°	35171	34369	33788
30°	35314	33588	33775
35°	35461	33389	33882
40°	35703	33435	34122
45°	35881	33481	34166
50°	36015	33562	14769
55°	35921	33456	5635
60°	35714	12767	6142
65°	35466	5927	6308
70°	34257	6378	5907
75°	31999	6086	5153
80°	28154	5354	4419
85°	22244	4633	3710

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 50°  
 Luminance: 36015 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	259.1	3.9
10°-20°	752.3	11.4
20°-30°	1122.5	17.0
30°-40°	1360.6	20.6
40°-50°	1393.2	21.1
50°-60°	926.5	14.0
60°-70°	528.1	8.0
70°-80°	221.9	3.4
80°-90°	52.9	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°	2133.9	32.2
0°-40°	3494.5	52.8
0°-60°	5814.2	87.9
0°-90°	6617.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6617.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2713	2713	2713	2713	2713	
5°	2676	2729	2707	2713	2738	254
15°	2601	2673	2713	2704	2670	735
25°	2455	2573	2399	2346	2358	1132
35°	2237	2277	2106	2116	2137	1401
45°	1954	1836	1823	1845	1860	1507
55°	1587	1453	1478	324	249	1417
65°	1154	1033	193	205	205	1136
75°	638	134	121	106	103	677
85°	149	37	31	25	25	179
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2713.0	2713.0	2713.0	2713.0	2713.0
2.5°	2678.8	2734.8	2706.8	2709.9	2719.2
5°	2675.7	2728.6	2706.8	2713.0	2737.9
7.5°	2663.2	2719.2	2706.8	2725.5	2753.5
10°	2644.6	2709.9	2706.8	2737.9	2765.9
12.5°	2625.9	2691.2	2706.8	2753.5	2778.4
15°	2601.0	2672.6	2713.0	2703.7	2669.5
17.5°	2569.9	2653.9	2697.5	2563.7	2560.6
20°	2538.8	2629.0	2610.3	2482.8	2470.3
22.5°	2498.3	2604.1	2482.8	2395.7	2411.2
25°	2454.8	2573.0	2398.8	2345.9	2358.3
27.5°	2408.1	2541.9	2308.6	2289.9	2305.4
30°	2355.2	2498.3	2240.1	2233.9	2252.6
32.5°	2299.2	2414.3	2174.8	2177.9	2199.7
35°	2237.0	2277.4	2106.3	2115.7	2137.4
37.5°	2174.8	2149.9	2041.0	2056.5	2078.3
40°	2106.3	2050.3	1972.5	1988.1	2013.0
42.5°	2031.7	1944.5	1897.9	1919.6	1941.4
45°	1953.9	1835.6	1823.2	1845.0	1860.5
47.5°	1873.0	1742.3	1745.4	1761.0	1319.2
50°	1782.8	1649.0	1661.4	1151.2	731.1
52.5°	1686.3	1552.5	1577.4	640.9	370.2
55°	1586.7	1453.0	1477.8	323.6	248.9
57.5°	1481.0	1353.4	964.5	233.3	245.8
60°	1375.2	1247.6	491.6	230.2	236.5
62.5°	1266.3	1141.8	233.3	220.9	224.0
65°	1154.3	1032.9	192.9	205.3	205.3
67.5°	1029.8	917.8	183.6	183.6	180.5
70°	902.3	762.3	168.0	158.7	155.6
72.5°	784.0	292.5	146.2	130.7	127.6
75°	637.8	133.8	121.3	105.8	102.7
77.5°	507.1	112.0	96.4	84.0	80.9
80°	376.5	87.1	71.6	62.2	59.1
82.5°	261.3	59.1	49.8	40.4	40.4
85°	149.3	37.3	31.1	24.9	24.9
87.5°	59.1	18.7	15.6	9.3	9.3
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	25.30	26.82	25.67	27.14	27.45	13.07	14.59	13.43	14.90	15.21
	3H	27.32	28.68	27.70	29.01	29.37	15.38	16.74	15.76	17.07	17.43
	4H	27.78	29.06	28.18	29.40	29.78	16.09	17.37	16.49	17.72	18.09
	6H	28.19	29.36	28.60	29.73	30.12	16.58	17.75	16.99	18.12	18.51
	8H	28.34	29.45	28.77	29.84	30.25	16.72	17.83	17.14	18.22	18.62
	12H	28.44	29.50	28.87	29.89	30.32	16.80	17.87	17.23	18.25	18.68
4H	2H	25.14	26.41	25.54	26.76	27.14	13.86	15.14	14.26	15.48	15.86
	3H	27.35	28.39	27.76	28.79	29.19	16.38	17.42	16.79	17.82	18.22
	4H	27.79	28.73	28.23	29.15	29.59	17.20	18.14	17.63	18.55	18.99
	6H	28.26	29.07	28.72	29.52	29.98	17.79	18.60	18.25	19.05	19.51
	8H	28.45	29.21	28.91	29.66	30.12	17.96	18.72	18.42	19.16	19.63
	12H	28.60	29.28	29.08	29.76	30.23	18.08	18.75	18.56	19.23	19.70
8H	4H	27.71	28.47	28.18	28.92	29.38	18.03	18.80	18.50	19.24	19.71
	6H	28.17	28.80	28.67	29.29	29.77	18.66	19.29	19.15	19.78	20.26
	8H	28.37	28.94	28.89	29.45	29.93	18.86	19.42	19.37	19.93	20.42
	12H	28.56	29.06	29.07	29.55	30.11	19.01	19.52	19.52	20.01	20.57
12H	4H	27.68	28.36	28.16	28.84	29.31	18.11	18.78	18.59	19.26	19.74
	6H	28.12	28.69	28.64	29.20	29.69	18.75	19.32	19.26	19.83	20.31
	8H	28.35	28.85	28.86	29.34	29.91	19.00	19.50	19.51	20.00	20.56