

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: P894289

Luminaire Tested: 4MB-SC3-RFLW-UNV-CC93-HI-4000K

Issue Date: 11/11/2024

**Test Information**

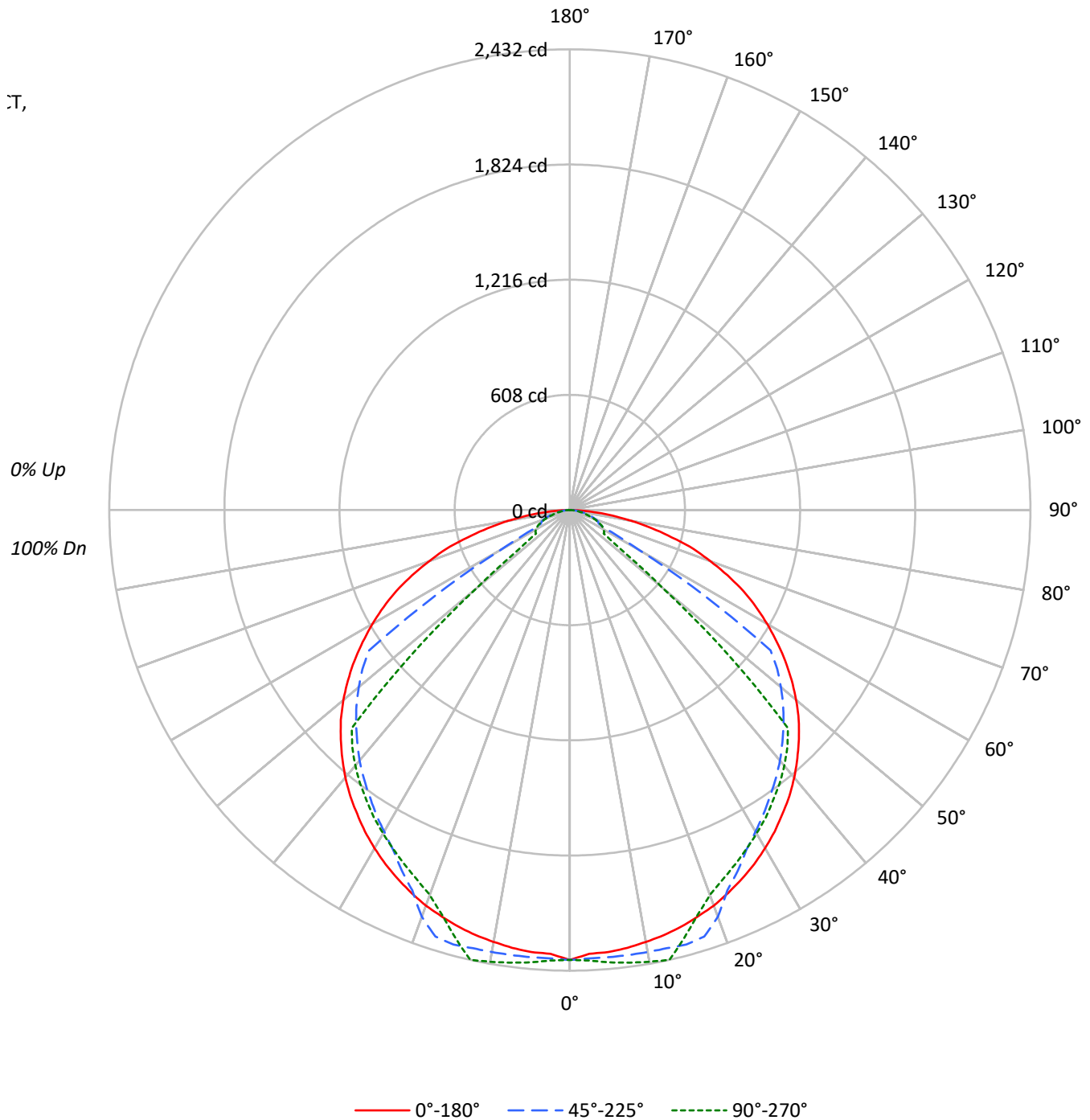
Test Method: LM-79-2019  
Report Number: P894289  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2408-210-3)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 4MB-SC3-RFLW-UNV-CC93-HI-4000K  
Description: Selectable 4FT MICROBAY LINEAR BAY with REFLECTOR WITH WHITE FINISH, 90CRI, 4000K CC  
HI lumen setting  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5792.0 lumens  
Efficiency: N/A  
Efficacy: 114.2 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): 50.7  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: 0.996  
Total Harmonic Distortion (THDi): 5.39961257980444  
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				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°	30837	30837	30837
5°	30529	30883	31239
10°	30523	31240	31923
15°	30606	31925	31411
20°	30709	31574	29880
25°	30785	30083	29576
30°	30911	29400	29563
35°	31040	29226	29657
40°	31252	29267	29867
45°	31407	29307	29907
50°	31524	29379	12929
55°	31443	29286	4933
60°	31260	11175	5376
65°	31045	5186	5521
70°	29985	5585	5171
75°	28010	5328	4510
80°	24639	4681	3866
85°	19473	4052	3248

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 50°  
 Luminance: 31524 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	226.8	3.9
10°-20°	658.5	11.4
20°-30°	982.6	17.0
30°-40°	1191.0	20.6
40°-50°	1219.5	21.1
50°-60°	811.0	14.0
60°-70°	462.2	8.0
70°-80°	194.2	3.4
80°-90°	46.3	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°	1867.9	32.2
0°-40°	3058.8	52.8
0°-60°	5089.3	87.9
0°-90°	5792.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5792.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2375	2375	2375	2375	2375	
5°	2342	2388	2369	2375	2397	223
15°	2277	2339	2375	2367	2337	643
25°	2149	2252	2100	2053	2064	991
35°	1958	1994	1844	1852	1871	1227
45°	1710	1607	1596	1615	1629	1319
55°	1389	1272	1294	283	218	1240
65°	1010	904	169	180	180	994
75°	558	117	106	93	90	593
85°	131	33	27	22	22	157
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2374.8	2374.8	2374.8	2374.8	2374.8
2.5°	2344.8	2393.8	2369.3	2372.0	2380.2
5°	2342.1	2388.4	2369.3	2374.8	2396.6
7.5°	2331.2	2380.2	2369.3	2385.7	2410.2
10°	2314.9	2372.0	2369.3	2396.6	2421.1
12.5°	2298.5	2355.7	2369.3	2410.2	2432.0
15°	2276.7	2339.4	2374.8	2366.6	2336.6
17.5°	2249.5	2323.0	2361.1	2244.0	2241.3
20°	2222.3	2301.2	2284.9	2173.2	2162.3
22.5°	2186.9	2279.4	2173.2	2097.0	2110.6
25°	2148.7	2252.2	2099.7	2053.4	2064.3
27.5°	2107.9	2225.0	2020.7	2004.4	2018.0
30°	2061.6	2186.9	1960.8	1955.4	1971.7
32.5°	2012.6	2113.3	1903.6	1906.3	1925.4
35°	1958.1	1993.5	1843.7	1851.9	1870.9
37.5°	1903.6	1881.8	1786.5	1800.1	1819.2
40°	1843.7	1794.7	1726.6	1740.2	1762.0
42.5°	1778.3	1702.1	1661.2	1680.3	1699.4
45°	1710.3	1606.8	1595.9	1614.9	1628.6
47.5°	1639.5	1525.1	1527.8	1541.4	1154.7
50°	1560.5	1443.4	1454.3	1007.6	640.0
52.5°	1476.1	1359.0	1380.7	561.0	324.1
55°	1388.9	1271.8	1293.6	283.2	217.9
57.5°	1296.3	1184.7	844.2	204.3	215.1
60°	1203.7	1092.1	430.3	201.5	207.0
62.5°	1108.4	999.5	204.3	193.4	196.1
65°	1010.4	904.2	168.8	179.7	179.7
67.5°	901.4	803.4	160.7	160.7	158.0
70°	789.8	667.2	147.1	138.9	136.2
72.5°	686.3	256.0	128.0	114.4	111.7
75°	558.3	117.1	106.2	92.6	89.9
77.5°	443.9	98.0	84.4	73.5	70.8
80°	329.5	76.3	62.6	54.5	51.7
82.5°	228.8	51.7	43.6	35.4	35.4
85°	130.7	32.7	27.2	21.8	21.8
87.5°	51.7	16.3	13.6	8.2	8.2
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	24.84	26.36	25.20	26.67	26.99	12.60	14.13	12.97	14.44	14.75
	3H	26.86	28.22	27.24	28.54	28.91	14.92	16.28	15.30	16.61	16.97
	4H	27.32	28.59	27.72	28.94	29.32	15.63	16.90	16.03	17.25	17.63
	6H	27.73	28.90	28.14	29.27	29.66	16.12	17.29	16.53	17.66	18.05
	8H	27.88	28.99	28.30	29.38	29.78	16.25	17.37	16.68	17.76	18.16
	12H	27.98	29.04	28.41	29.42	29.85	16.34	17.41	16.77	17.79	18.22
4H	2H	24.68	25.95	25.08	26.30	26.68	13.40	14.67	13.80	15.02	15.40
	3H	26.88	27.93	27.29	28.33	28.73	15.91	16.96	16.32	17.36	17.76
	4H	27.33	28.27	27.76	28.69	29.12	16.73	17.67	17.17	18.09	18.53
	6H	27.80	28.61	28.25	29.05	29.51	17.33	18.14	17.78	18.58	19.04
	8H	27.99	28.75	28.45	29.19	29.66	17.50	18.26	17.96	18.70	19.17
	12H	28.14	28.82	28.62	29.30	29.77	17.61	18.29	18.10	18.77	19.24
8H	4H	27.25	28.01	27.71	28.45	28.92	17.57	18.33	18.04	18.78	19.25
	6H	27.71	28.34	28.21	28.83	29.31	18.19	18.82	18.69	19.32	19.79
	8H	27.91	28.47	28.42	28.98	29.47	18.40	18.96	18.91	19.47	19.96
	12H	28.09	28.59	28.60	29.09	29.65	18.55	19.05	19.06	19.55	20.11
12H	4H	27.22	27.90	27.70	28.38	28.85	17.64	18.32	18.13	18.80	19.27
	6H	27.66	28.23	28.18	28.74	29.23	18.29	18.85	18.80	19.36	19.85
	8H	27.88	28.39	28.39	28.88	29.44	18.54	19.04	19.05	19.53	20.10