

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: P894292

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

Issue Date: 11/11/2024

**Test Information**

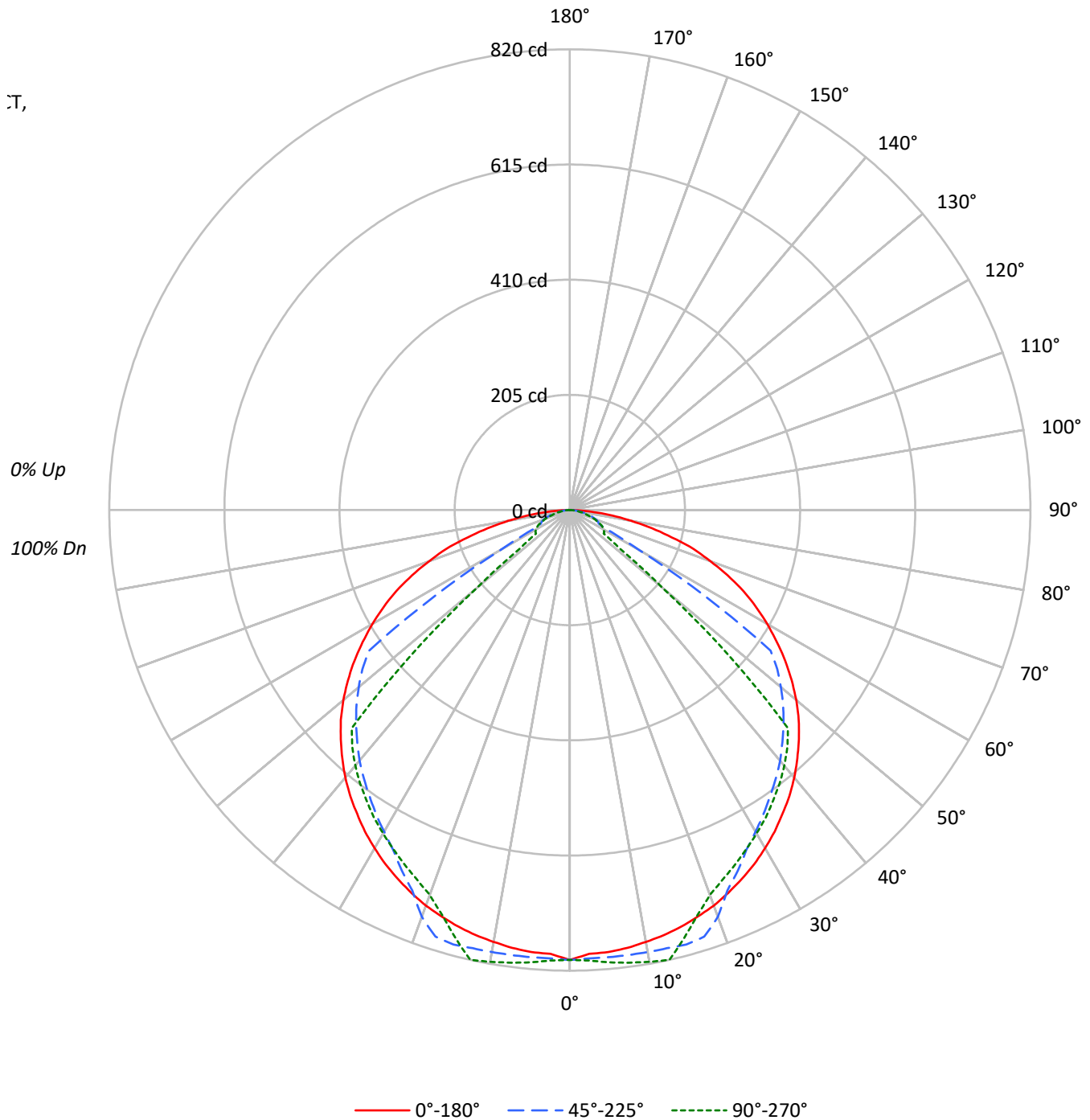
Test Method: LM-79-2019  
Report Number: P894292  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2408-210-3)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 4MB-SC3-RFLW-UNV-CC93-LOW-4000K  
Description: Selectable 4FT MICROBAY LINEAR BAY with REFLECTOR WITH WHITE FINISH, 90CRI, 4000K CC  
LOW lumen setting  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1953.0 lumens  
Efficiency: N/A  
Efficacy: 116.9 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): 16.7  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: 0.9915  
Total Harmonic Distortion (THDi): 6.67573310469889  
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°	10397	10397	10397
5°	10293	10413	10533
10°	10291	10534	10765
15°	10320	10764	10592
20°	10354	10646	10075
25°	10380	10144	9973
30°	10422	9914	9968
35°	10465	9855	10001
40°	10538	9869	10070
45°	10590	9881	10083
50°	10630	9907	4359
55°	10602	9875	1664
60°	10541	3768	1813
65°	10468	1748	1862
70°	10110	1883	1743
75°	9442	1796	1520
80°	8308	1578	1301
85°	6570	1371	1088

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 50°  
 Luminance: 10630 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	76.5	3.9
10°-20°	222.0	11.4
20°-30°	331.3	17.0
30°-40°	401.6	20.6
40°-50°	411.2	21.1
50°-60°	273.5	14.0
60°-70°	155.9	8.0
70°-80°	65.5	3.4
80°-90°	15.6	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°	629.8	32.2
0°-40°	1031.4	52.8
0°-60°	1716.1	87.9
0°-90°	1953.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1953.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	801	801	801	801	801	
5°	790	805	799	801	808	75
15°	768	789	801	798	788	217
25°	724	759	708	692	696	334
35°	660	672	622	624	631	414
45°	577	542	538	544	549	445
55°	468	429	436	96	74	418
65°	341	305	57	61	61	335
75°	188	40	36	31	30	200
85°	44	11	9	7	7	53
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	800.7	800.7	800.7	800.7	800.7
2.5°	790.6	807.2	798.9	799.8	802.6
5°	789.7	805.3	798.9	800.7	808.1
7.5°	786.1	802.6	798.9	804.4	812.7
10°	780.5	799.8	798.9	808.1	816.4
12.5°	775.0	794.3	798.9	812.7	820.0
15°	767.7	788.8	800.7	798.0	787.9
17.5°	758.5	783.3	796.2	756.7	755.7
20°	749.3	776.0	770.4	732.8	729.1
22.5°	737.4	768.6	732.8	707.1	711.7
25°	724.5	759.4	708.0	692.4	696.1
27.5°	710.8	750.2	681.4	675.9	680.4
30°	695.1	737.4	661.2	659.3	664.8
32.5°	678.6	712.6	641.9	642.8	649.2
35°	660.2	672.2	621.7	624.4	630.9
37.5°	641.9	634.5	602.4	607.0	613.4
40°	621.7	605.2	582.2	586.8	594.1
42.5°	599.6	573.9	560.2	566.6	573.0
45°	576.7	541.8	538.1	544.5	549.1
47.5°	552.8	514.2	515.2	519.7	389.4
50°	526.2	486.7	490.4	339.8	215.8
52.5°	497.7	458.2	465.6	189.2	109.3
55°	468.3	428.8	436.2	95.5	73.5
57.5°	437.1	399.5	284.7	68.9	72.5
60°	405.9	368.2	145.1	68.0	69.8
62.5°	373.7	337.0	68.9	65.2	66.1
65°	340.7	304.9	56.9	60.6	60.6
67.5°	304.0	270.9	54.2	54.2	53.3
70°	266.3	225.0	49.6	46.8	45.9
72.5°	231.4	86.3	43.2	38.6	37.6
75°	188.2	39.5	35.8	31.2	30.3
77.5°	149.7	33.1	28.5	24.8	23.9
80°	111.1	25.7	21.1	18.4	17.4
82.5°	77.1	17.4	14.7	11.9	11.9
85°	44.1	11.0	9.2	7.3	7.3
87.5°	17.4	5.5	4.6	2.8	2.8
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	21.06	22.58	21.43	22.90	23.21	8.83	10.35	9.19	10.66	10.98
	3H	23.08	24.44	23.46	24.77	25.13	11.14	12.50	11.52	12.83	13.19
	4H	23.54	24.82	23.94	25.16	25.54	11.86	13.13	12.26	13.48	13.85
	6H	23.95	25.12	24.36	25.49	25.88	12.34	13.51	12.75	13.88	14.27
	8H	24.10	25.22	24.53	25.61	26.01	12.48	13.59	12.90	13.98	14.38
	12H	24.20	25.27	24.63	25.65	26.08	12.56	13.63	12.99	14.01	14.44
4H	2H	20.90	22.17	21.30	22.52	22.90	9.63	10.90	10.03	11.25	11.62
	3H	23.11	24.15	23.52	24.55	24.96	12.14	13.18	12.55	13.58	13.99
	4H	23.55	24.49	23.99	24.91	25.35	12.96	13.90	13.39	14.31	14.75
	6H	24.02	24.83	24.48	25.28	25.74	13.55	14.36	14.01	14.81	15.27
	8H	24.21	24.97	24.67	25.42	25.88	13.72	14.48	14.18	14.92	15.39
	12H	24.36	25.04	24.85	25.52	25.99	13.83	14.51	14.32	14.99	15.46
8H	4H	23.47	24.23	23.94	24.68	25.15	13.80	14.56	14.26	15.00	15.47
	6H	23.93	24.56	24.43	25.05	25.53	14.42	15.05	14.92	15.54	16.02
	8H	24.13	24.70	24.65	25.21	25.70	14.62	15.18	15.13	15.69	16.18
	12H	24.32	24.82	24.83	25.31	25.87	14.77	15.27	15.28	15.77	16.33
12H	4H	23.44	24.12	23.92	24.60	25.07	13.87	14.55	14.35	15.02	15.50
	6H	23.89	24.45	24.40	24.96	25.45	14.51	15.08	15.03	15.59	16.08
	8H	24.11	24.61	24.62	25.10	25.67	14.76	15.26	15.27	15.76	16.32