

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: P894129

Luminaire Tested: 4MB-SC3-AOL-UNV-CC93-LOW-3500K

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894129
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-077-14)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4MB-SC3-AOL-UNV-CC93-LOW-3500K
Description: Selectable 4FT MICROBAY LINEAR BAY with AISLE OPTICS WITH CLEAR LENS NO UPLIGHT, 900
3500K CCT, LOW lumen setting
Light Source: -
Ballast/Driver: -

Summary

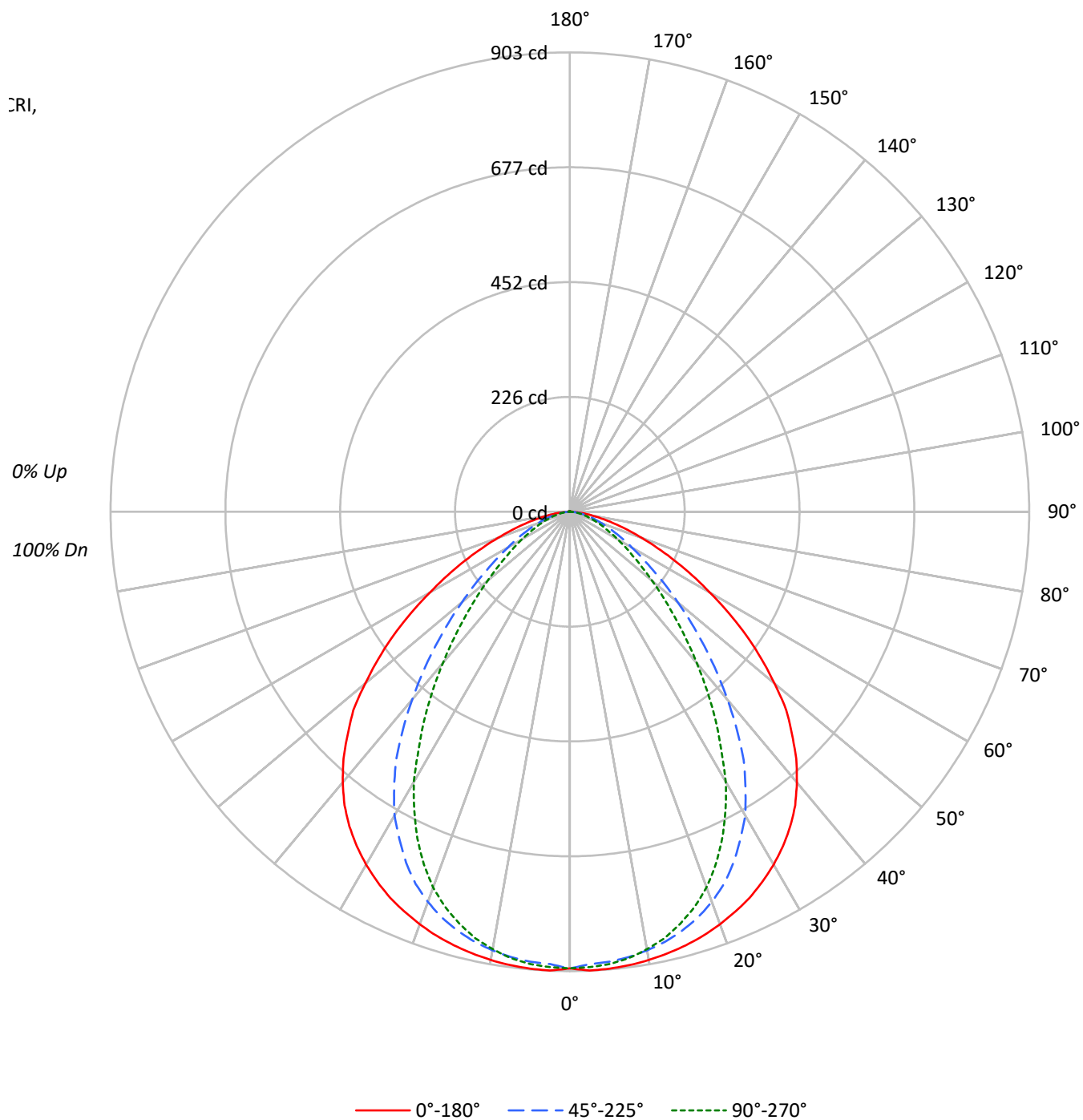
Lumens per Lamp: N/A
Luminaire Lumens: 1793.0 lumens
Efficiency: N/A
Efficacy: 107.4 lumens/watt
Spacing Criteria (0/90/45): 1.32 / 1.06 / 1.16
Luminous Opening: Rectangular (W 0.27' x L: 3.98' x H: 0')
CIE Type: Direct

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
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	111	107	103	100	108	104	101	98	100	98	95		96	94	92		93
2	102	95	89	85	100	93	88	84	90	85	82		87	83	80		84
3	94	85	78	73	92	84	77	72	81	75	71		78	73	70		76
4	87	77	69	63	85	76	68	63	73	67	62		71	66	61		69
5	81	70	62	56	79	69	61	55	66	60	55		65	59	54		63
6	75	63	55	50	74	63	55	49	61	54	49		59	53	49		58
7	70	58	50	45	69	57	50	44	56	49	44		54	48	44		53
8	66	53	46	40	64	53	45	40	51	45	40		50	44	40		49
9	62	49	42	37	60	49	42	37	48	41	36		47	41	36		46
10	58	46	38	34	57	45	38	33	44	38	33		43	37	33		43

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9141	9141	9141
5°	9215	9076	9123
10°	9252	9053	9029
15°	9300	8988	8840
20°	9351	8844	8516
25°	9403	8556	7965
30°	9420	8106	7212
35°	9389	7405	6204
40°	9232	6408	5156
45°	8889	5385	4172
50°	8318	4386	3341
55°	7516	3524	2679
60°	6481	2868	2218
65°	5485	2388	1824
70°	4478	2031	1548
75°	3585	1712	1318
80°	2792	1466	1132
85°	2162	1297	1028

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8889 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.0	4.7
10°-20°	241.9	13.5
20°-30°	352.5	19.7
30°-40°	380.0	21.2
40°-50°	318.6	17.8
50°-60°	215.7	12.0
60°-70°	123.0	6.9
70°-80°	56.3	3.1
80°-90°	14.7	0.8
90°-100°	1.8	0.1
100°-110°	1.2	0.1
110°-120°	0.7	0.0
120°-130°	0.4	0.0
130°-140°	0.4	0.0
140°-150°	0.3	0.0
150°-160°	0.3	0.0
160°-170°	0.2	0.0
170°-180°	0.1	0.0
0°-30°	679.4	37.9
0°-40°	1059.4	59.1
0°-60°	1593.7	88.9
0°-90°	1787.6	99.7
90°-120°	3.7	0.2
90°-150°	4.8	0.3
90°-180°	5.0	0.3
0°-180°	1793.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	898	898	898	898	898	
5°	901	899	888	895	892	86
15°	882	874	852	847	838	249
25°	837	815	761	726	709	386
35°	755	698	596	523	499	471
45°	617	515	374	308	290	475
55°	423	310	198	161	151	377
65°	228	158	99	80	76	227
75°	91	67	44	36	34	99
85°	18	16	11	9	9	22
90°	3	3	2	1	1	3
95°	4	2	1	1	1	3
105°	3	2	1	0	0	3
115°	1	1	0	0	0	1
125°	0	0	0	0	0	1
135°	0	0	0	0	0	0
145°	0	0	0	0	0	0
155°	0	0	0	1	1	0
165°	0	1	1	1	1	0
175°	1	1	1	1	1	0
180°	1	1	1	1	1	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	897.6	897.6	897.6	897.6	897.6
2.5°	902.7	900.4	890.1	898.6	896.0
5°	901.4	898.6	887.8	895.0	892.4
7.5°	898.9	895.3	883.2	888.6	885.2
10°	894.7	890.4	875.4	878.5	873.1
12.5°	889.1	883.7	865.9	865.1	858.7
15°	882.1	874.4	852.5	846.9	838.4
17.5°	873.6	863.8	836.6	825.2	814.9
20°	862.8	850.2	816.0	797.9	785.8
22.5°	850.5	833.5	792.0	763.2	750.0
25°	836.8	814.7	761.4	726.4	708.8
27.5°	819.8	792.0	725.8	680.5	662.5
30°	801.0	765.7	689.3	631.3	613.3
32.5°	779.7	735.6	642.7	578.3	553.1
35°	755.2	698.3	595.6	522.7	499.0
37.5°	727.6	659.4	539.2	466.6	442.6
40°	694.4	613.3	482.0	410.2	387.8
42.5°	658.6	566.5	427.2	356.6	337.3
45°	617.2	515.0	373.9	308.2	289.7
47.5°	577.3	462.9	323.9	263.9	248.7
50°	525.0	407.6	276.8	223.5	210.9
52.5°	474.0	356.4	236.6	191.1	179.2
55°	423.3	309.7	198.5	160.9	150.9
57.5°	369.7	264.2	167.1	136.2	129.5
60°	318.2	224.8	140.8	114.3	108.9
62.5°	271.1	188.5	119.2	96.6	91.4
65°	227.6	158.4	99.1	80.3	75.7
67.5°	186.4	130.3	82.7	66.9	63.6
70°	150.4	105.6	68.2	55.1	52.0
72.5°	119.2	84.5	54.6	45.1	41.7
75°	91.1	66.9	43.5	35.5	33.5
77.5°	68.0	50.5	33.5	27.3	25.7
80°	47.6	36.6	25.0	20.6	19.3
82.5°	32.4	25.2	17.5	14.4	13.6
85°	18.5	15.7	11.1	9.3	8.8
87.5°	9.5	8.2	5.9	4.4	3.9
90°	2.6	2.6	1.5	1.3	1.0
92.5°	4.1	2.3	1.5	1.0	0.8
95°	3.9	2.3	1.3	0.8	0.8
97.5°	3.6	2.3	1.0	0.8	0.5
100°	3.3	2.1	1.0	0.5	0.5
102.5°	3.1	2.1	1.0	0.5	0.5
105°	2.6	1.8	0.8	0.5	0.3
107.5°	2.3	1.5	0.8	0.5	0.3
110°	1.8	1.3	0.8	0.5	0.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	1.5	1.3	0.5	0.5	0.3
115°	1.3	1.0	0.5	0.3	0.3
117.5°	1.0	0.8	0.5	0.3	0.3
120°	0.8	0.8	0.5	0.3	0.3
122.5°	0.8	0.5	0.5	0.3	0.3
125°	0.5	0.5	0.5	0.3	0.3
127.5°	0.5	0.5	0.5	0.3	0.3
130°	0.5	0.5	0.5	0.3	0.3
132.5°	0.5	0.5	0.5	0.5	0.3
135°	0.3	0.5	0.5	0.5	0.3
137.5°	0.5	0.5	0.5	0.5	0.5
140°	0.5	0.5	0.5	0.5	0.5
142.5°	0.5	0.5	0.5	0.5	0.5
145°	0.5	0.5	0.5	0.5	0.5
147.5°	0.5	0.5	0.5	0.5	0.5
150°	0.5	0.5	0.5	0.5	0.5
152.5°	0.5	0.5	0.5	0.5	0.5
155°	0.5	0.5	0.5	0.8	0.8
157.5°	0.5	0.5	0.8	0.8	0.8
160°	0.5	0.5	0.8	0.8	0.8
162.5°	0.5	0.5	0.8	0.8	0.8
165°	0.5	0.8	0.8	0.8	0.8
167.5°	0.5	0.8	0.8	0.8	1.0
170°	0.5	0.8	0.8	1.0	1.0
172.5°	0.5	0.8	0.8	1.0	1.0
175°	0.8	0.8	0.8	1.0	1.0
177.5°	0.8	0.8	0.8	1.0	1.0
180°	0.8	0.8	0.8	0.8	0.8

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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	18.06	19.50	18.43	19.82	20.14	12.90	14.34	13.27	14.66	14.98
	3H	19.37	20.65	19.75	20.98	21.35	13.91	15.19	14.29	15.53	15.90
	4H	19.79	20.99	20.20	21.34	21.73	14.25	15.45	14.65	15.80	16.19
	6H	20.06	21.16	20.47	21.53	21.94	14.47	15.58	14.89	15.95	16.35
	8H	20.13	21.18	20.56	21.57	21.98	14.54	15.59	14.97	15.98	16.39
	12H	20.17	21.17	20.60	21.56	22.00	14.58	15.59	15.02	15.97	16.41
4H	2H	18.05	19.25	18.46	19.61	20.00	13.52	14.72	13.93	15.08	15.47
	3H	19.52	20.51	19.94	20.92	21.33	14.72	15.71	15.14	16.11	16.52
	4H	20.05	20.93	20.48	21.35	21.80	15.13	16.02	15.57	16.44	16.89
	6H	20.42	21.19	20.89	21.64	22.11	15.45	16.21	15.91	16.66	17.13
	8H	20.53	21.25	21.01	21.70	22.18	15.54	16.25	16.01	16.71	17.18
	12H	20.61	21.25	21.10	21.73	22.21	15.61	16.25	16.10	16.73	17.21
8H	4H	20.03	20.74	20.50	21.19	21.67	15.47	16.19	15.94	16.64	17.11
	6H	20.46	21.05	20.96	21.55	22.03	15.86	16.45	16.37	16.95	17.44
	8H	20.61	21.14	21.14	21.66	22.16	16.00	16.53	16.52	17.05	17.55
	12H	20.74	21.21	21.26	21.71	22.29	16.13	16.59	16.64	17.09	17.67
12H	4H	20.00	20.64	20.49	21.12	21.60	15.52	16.15	16.00	16.64	17.12
	6H	20.43	20.96	20.95	21.47	21.97	15.93	16.46	16.45	16.98	17.47
	8H	20.62	21.08	21.13	21.58	22.16	16.12	16.59	16.64	17.09	17.66