

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: P892865

Luminaire Tested: 2MB-5HL-RFLW-UNV-L930

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P892865
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2408-210-5)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 2MB-5HL-RFLW-UNV-L930
Description: 5000 Lumen 2FT MICROBAY LINEAR BAY with REFLECTOR WITH WHITE FINISH, 90CRI, 3000K
Light Source: -
Ballast/Driver: -

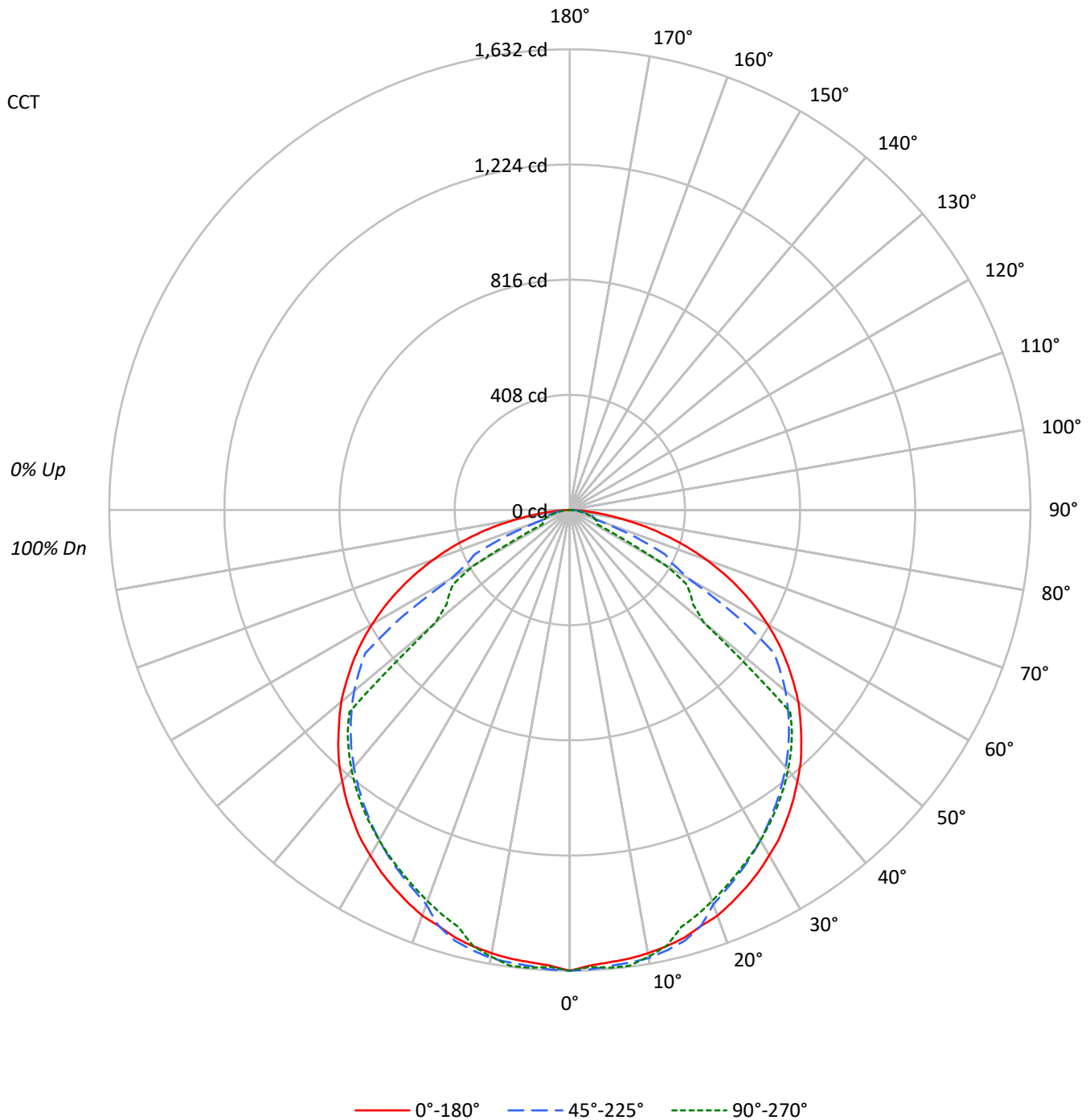
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4154.0 lumens
Efficiency: N/A
Efficacy: 123.3 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.24 / 1.38
Luminous Opening: Rectangular (W 0.21' x L: 1.98' x H: 0')
CIE Type: Direct

Input Watts (W): 33.7
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: 0.99
Total Harmonic Distortion (THDi): 4.5
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	98	107	103	100	97	99	96	94	95	93	91	92	90	88	88	88	88	86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	75	75	75	73
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	65	65	65	63
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	60	56	56	56	56	54
5	78	66	57	51	76	65	57	51	63	56	50	61	55	50	59	54	49	49	49	49	47
6	72	60	51	45	70	59	51	45	57	50	44	55	49	44	54	48	43	43	43	43	42
7	67	54	46	40	65	53	45	40	52	45	39	50	44	39	49	43	39	39	39	39	37
8	63	49	41	35	61	49	41	35	47	40	35	46	40	35	45	39	35	35	35	35	33
9	58	45	37	32	57	45	37	32	44	37	32	43	36	32	42	36	31	31	31	31	30
10	55	42	34	29	54	41	34	29	40	34	29	39	33	29	39	33	29	29	29	29	27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	42608	42608	42608
5°	42142	42480	42650
10°	42261	42727	42579
15°	42387	42662	41311
20°	42489	41308	40947
25°	42510	40912	40724
30°	42591	40722	40722
35°	42699	40576	40841
40°	42759	40550	40993
45°	42837	40548	41094
50°	42952	40511	25178
55°	42700	40261	23751
60°	42222	25121	20531
65°	41211	23037	6517
70°	39335	7343	7343
75°	35840	8211	7283
80°	29348	8344	6676
85°	20789	8328	6111

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 50°
 Luminance: 42952 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	154.4	3.7
10°-20°	440.7	10.6
20°-30°	664.4	16.0
30°-40°	807.3	19.4
40°-50°	850.4	20.5
50°-60°	667.8	16.1
60°-70°	375.8	9.0
70°-80°	156.5	3.8
80°-90°	36.6	0.9
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°	1259.6	30.3
0°-40°	2066.9	49.8
0°-60°	3585.2	86.3
0°-90°	4154.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4154.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1632	1632	1632	1632	1632	
5°	1608	1626	1621	1620	1627	153
15°	1568	1587	1578	1531	1528	442
25°	1476	1487	1420	1412	1414	681
35°	1340	1294	1273	1277	1281	839
45°	1160	1095	1098	1111	1113	895
55°	938	871	884	518	522	838
65°	667	613	373	101	106	658
75°	355	213	81	75	72	376
85°	69	30	28	23	20	88
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1632.0	1632.0	1632.0	1632.0	1632.0
2.5°	1615.4	1638.5	1629.3	1620.0	1620.0
5°	1608.0	1626.5	1620.9	1620.0	1627.4
7.5°	1603.4	1619.1	1617.2	1619.1	1628.3
10°	1594.1	1611.7	1611.7	1605.2	1606.1
12.5°	1583.0	1600.6	1596.9	1585.8	1582.1
15°	1568.2	1586.7	1578.4	1531.2	1528.4
17.5°	1545.1	1567.3	1545.1	1500.7	1503.4
20°	1529.3	1546.0	1486.8	1472.0	1473.8
22.5°	1503.4	1518.2	1452.6	1442.4	1444.2
25°	1475.7	1486.8	1420.2	1411.8	1413.7
27.5°	1447.0	1449.8	1386.9	1381.3	1383.2
30°	1412.8	1400.7	1350.8	1347.1	1350.8
32.5°	1380.4	1352.6	1311.9	1312.8	1317.5
35°	1339.7	1294.3	1273.1	1276.8	1281.4
37.5°	1299.0	1244.4	1232.4	1239.8	1243.5
40°	1254.6	1196.3	1189.8	1197.2	1202.8
42.5°	1211.1	1147.2	1145.4	1156.5	1159.3
45°	1160.2	1095.4	1098.2	1111.2	1113.0
47.5°	1108.4	1042.7	1049.2	1061.2	1059.3
50°	1057.5	987.2	997.4	979.8	619.9
52.5°	997.4	929.8	940.9	583.8	550.5
55°	938.1	870.6	884.5	518.1	521.8
57.5°	876.2	808.6	706.8	487.6	491.3
60°	808.6	745.7	481.1	456.1	393.2
62.5°	739.2	680.0	408.0	256.3	108.2
65°	667.1	613.4	372.9	100.8	105.5
67.5°	591.2	545.9	255.4	98.1	102.7
70°	515.3	423.7	96.2	94.4	96.2
72.5°	436.7	331.2	89.7	86.0	85.1
75°	355.3	212.8	81.4	74.9	72.2
77.5°	277.6	123.1	69.4	62.0	58.3
80°	195.2	62.9	55.5	47.2	44.4
82.5°	126.8	46.3	40.7	35.2	33.3
85°	69.4	30.5	27.8	23.1	20.4
87.5°	30.5	18.5	15.7	12.0	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	25.70	27.26	26.06	27.58	27.89	22.08	23.65	22.45	23.96	24.27
	3H	27.62	29.01	27.99	29.34	29.70	22.23	23.62	22.60	23.95	24.31
	4H	28.21	29.52	28.61	29.87	30.25	22.34	23.65	22.74	24.00	24.38
	6H	28.58	29.79	28.99	30.16	30.55	22.44	23.65	22.85	24.02	24.41
	8H	28.68	29.84	29.11	30.23	30.63	22.47	23.62	22.90	24.01	24.41
	12H	28.74	29.85	29.17	30.23	30.66	22.49	23.59	22.92	23.98	24.40
4H	2H	25.85	27.16	26.24	27.50	27.88	22.77	24.08	23.17	24.42	24.80
	3H	27.86	28.94	28.27	29.34	29.74	22.97	24.05	23.38	24.45	24.85
	4H	28.52	29.49	28.95	29.91	30.35	23.12	24.09	23.55	24.51	24.95
	6H	28.94	29.79	29.40	30.23	30.69	23.28	24.13	23.74	24.57	25.03
	8H	29.07	29.86	29.53	30.30	30.77	23.33	24.12	23.80	24.57	25.03
	12H	29.16	29.87	29.64	30.34	30.81	23.38	24.08	23.86	24.56	25.03
8H	4H	28.46	29.25	28.92	29.69	30.16	23.35	24.13	23.81	24.58	25.05
	6H	28.89	29.54	29.38	30.03	30.51	23.56	24.21	24.05	24.70	25.18
	8H	29.03	29.61	29.54	30.12	30.61	23.64	24.23	24.15	24.74	25.22
	12H	29.15	29.67	29.66	30.16	30.73	23.72	24.24	24.23	24.74	25.30
12H	4H	28.44	29.14	28.92	29.62	30.09	23.36	24.06	23.84	24.54	25.01
	6H	28.85	29.43	29.36	29.94	30.43	23.58	24.16	24.09	24.67	25.16
	8H	29.01	29.53	29.52	30.02	30.59	23.71	24.23	24.21	24.72	25.28