

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: P892863

Luminaire Tested: 2MB-5HL-RFLW-UNV-L840

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P892863
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-L840
Description: 5000 Lumen 2FT MICROBAY LINEAR BAY with REFLECTOR WITH WHITE FINISH, 80CRI, 4000K
Light Source: -
Ballast/Driver: -

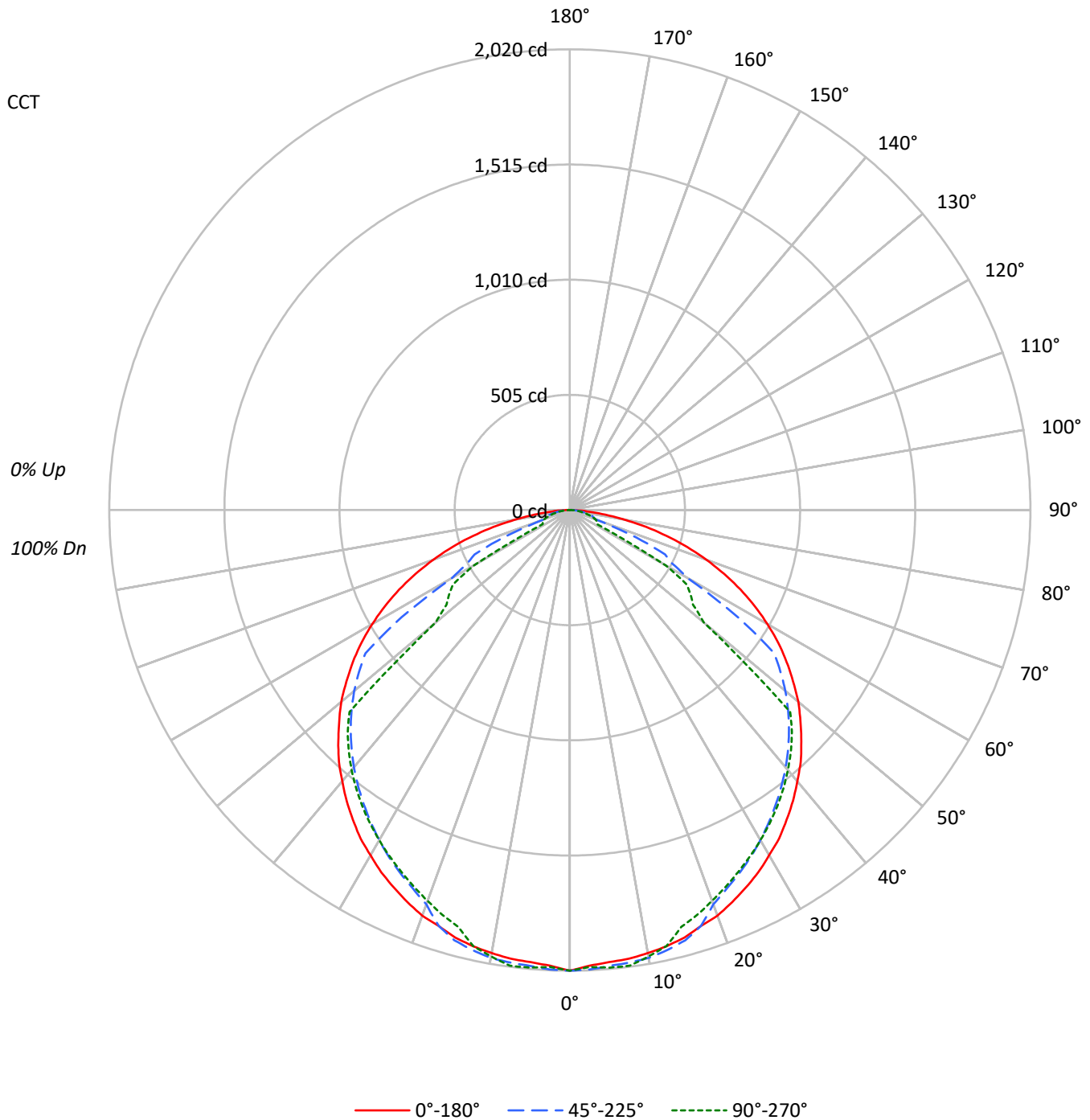
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5141.0 lumens
Efficiency: N/A
Efficacy: 152.6 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				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°	52733	52733	52733
5°	52153	52575	52785
10°	52303	52878	52698
15°	52458	52798	51128
20°	52586	51122	50677
25°	52610	50631	50401
30°	52709	50396	50396
35°	52844	50214	50546
40°	52915	50185	50730
45°	53017	50181	50860
50°	53159	50133	31161
55°	52851	49824	29395
60°	52252	31089	25408
65°	51003	28504	8062
70°	48686	9091	9091
75°	44354	10168	9008
80°	36324	10329	8269
85°	25732	10305	7549

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 50°
 Luminance: 53159 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	191.1	3.7
10°-20°	545.4	10.6
20°-30°	822.2	16.0
30°-40°	999.2	19.4
40°-50°	1052.5	20.5
50°-60°	826.5	16.1
60°-70°	465.1	9.0
70°-80°	193.6	3.8
80°-90°	45.2	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°	1558.8	30.3
0°-40°	2558.0	49.8
0°-60°	4437.0	86.3
0°-90°	5141.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5141.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2020	2020	2020	2020	2020	
5°	1990	2013	2006	2005	2014	190
15°	1941	1964	1953	1895	1892	548
25°	1826	1840	1758	1747	1750	843
35°	1658	1602	1576	1580	1586	1038
45°	1436	1356	1359	1375	1378	1108
55°	1161	1078	1095	641	646	1037
65°	826	759	461	125	130	814
75°	440	263	101	93	89	465
85°	86	38	34	29	25	109
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2019.8	2019.8	2019.8	2019.8	2019.8
2.5°	1999.2	2027.8	2016.4	2004.9	2004.9
5°	1990.0	2012.9	2006.1	2004.9	2014.1
7.5°	1984.3	2003.8	2001.5	2003.8	2015.2
10°	1972.9	1994.6	1994.6	1986.6	1987.8
12.5°	1959.1	1980.9	1976.3	1962.6	1958.0
15°	1940.8	1963.7	1953.4	1895.0	1891.6
17.5°	1912.2	1939.7	1912.2	1857.2	1860.7
20°	1892.7	1913.3	1840.0	1821.7	1824.0
22.5°	1860.7	1879.0	1797.7	1785.1	1787.4
25°	1826.3	1840.0	1757.6	1747.3	1749.6
27.5°	1790.8	1794.2	1716.4	1709.5	1711.8
30°	1748.4	1733.6	1671.7	1667.2	1671.7
32.5°	1708.4	1674.0	1623.6	1624.8	1630.5
35°	1658.0	1601.9	1575.5	1580.1	1585.9
37.5°	1607.6	1540.1	1525.2	1534.3	1538.9
40°	1552.6	1480.5	1472.5	1481.7	1488.5
42.5°	1498.8	1419.8	1417.5	1431.3	1434.7
45°	1435.9	1355.7	1359.1	1375.2	1377.5
47.5°	1371.7	1290.4	1298.5	1313.3	1311.0
50°	1308.8	1221.7	1234.3	1212.6	767.2
52.5°	1234.3	1150.7	1164.5	722.5	681.3
55°	1161.1	1077.5	1094.6	641.2	645.8
57.5°	1084.3	1000.7	874.8	603.4	608.0
60°	1000.7	922.9	595.4	564.5	486.6
62.5°	914.9	841.6	505.0	317.2	134.0
65°	825.6	759.1	461.4	124.8	130.5
67.5°	731.7	675.6	316.0	121.4	127.1
70°	637.8	524.4	119.1	116.8	119.1
72.5°	540.4	409.9	111.1	106.5	105.3
75°	439.7	263.4	100.8	92.7	89.3
77.5°	343.5	152.3	85.9	76.7	72.1
80°	241.6	77.9	68.7	58.4	55.0
82.5°	156.9	57.3	50.4	43.5	41.2
85°	85.9	37.8	34.4	28.6	25.2
87.5°	37.8	22.9	19.5	14.9	11.5
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	26.44	28.00	26.80	28.32	28.63	22.82	24.39	23.19	24.70	25.01
	3H	28.36	29.75	28.73	30.08	30.44	22.97	24.36	23.34	24.69	25.05
	4H	28.95	30.26	29.35	30.61	30.99	23.08	24.39	23.48	24.74	25.12
	6H	29.32	30.53	29.73	30.90	31.29	23.18	24.39	23.59	24.76	25.15
	8H	29.43	30.58	29.85	30.97	31.37	23.21	24.36	23.64	24.75	25.15
	12H	29.48	30.59	29.91	30.97	31.40	23.23	24.33	23.66	24.72	25.14
4H	2H	26.59	27.90	26.99	28.24	28.62	23.51	24.82	23.91	25.16	25.54
	3H	28.60	29.68	29.01	30.08	30.49	23.71	24.79	24.12	25.19	25.59
	4H	29.26	30.23	29.70	30.65	31.09	23.86	24.83	24.29	25.25	25.69
	6H	29.68	30.53	30.14	30.97	31.43	24.02	24.87	24.48	25.31	25.77
	8H	29.81	30.60	30.27	31.04	31.51	24.07	24.86	24.54	25.31	25.77
	12H	29.90	30.61	30.38	31.08	31.56	24.12	24.82	24.60	25.30	25.77
8H	4H	29.20	29.99	29.67	30.43	30.90	24.09	24.87	24.55	25.32	25.79
	6H	29.63	30.28	30.12	30.77	31.25	24.30	24.95	24.79	25.44	25.92
	8H	29.77	30.35	30.28	30.86	31.35	24.38	24.97	24.89	25.48	25.96
	12H	29.89	30.41	30.40	30.90	31.47	24.46	24.98	24.97	25.48	26.04
12H	4H	29.18	29.88	29.66	30.36	30.83	24.10	24.80	24.58	25.28	25.75
	6H	29.59	30.17	30.10	30.68	31.17	24.32	24.90	24.83	25.41	25.90
	8H	29.75	30.27	30.26	30.76	31.33	24.45	24.97	24.95	25.46	26.02