

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: P894181

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

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894181
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2410-248-1)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4MB-SC3-ASYMR-UNV-CC93-HI-4000K
Description: Selectable 4FT MICROBAY LINEAR BAY with ASYMMERIC REFLECTOR, 90CRI, 4000K CCT, HI luv setting
Light Source: -
Ballast/Driver: -

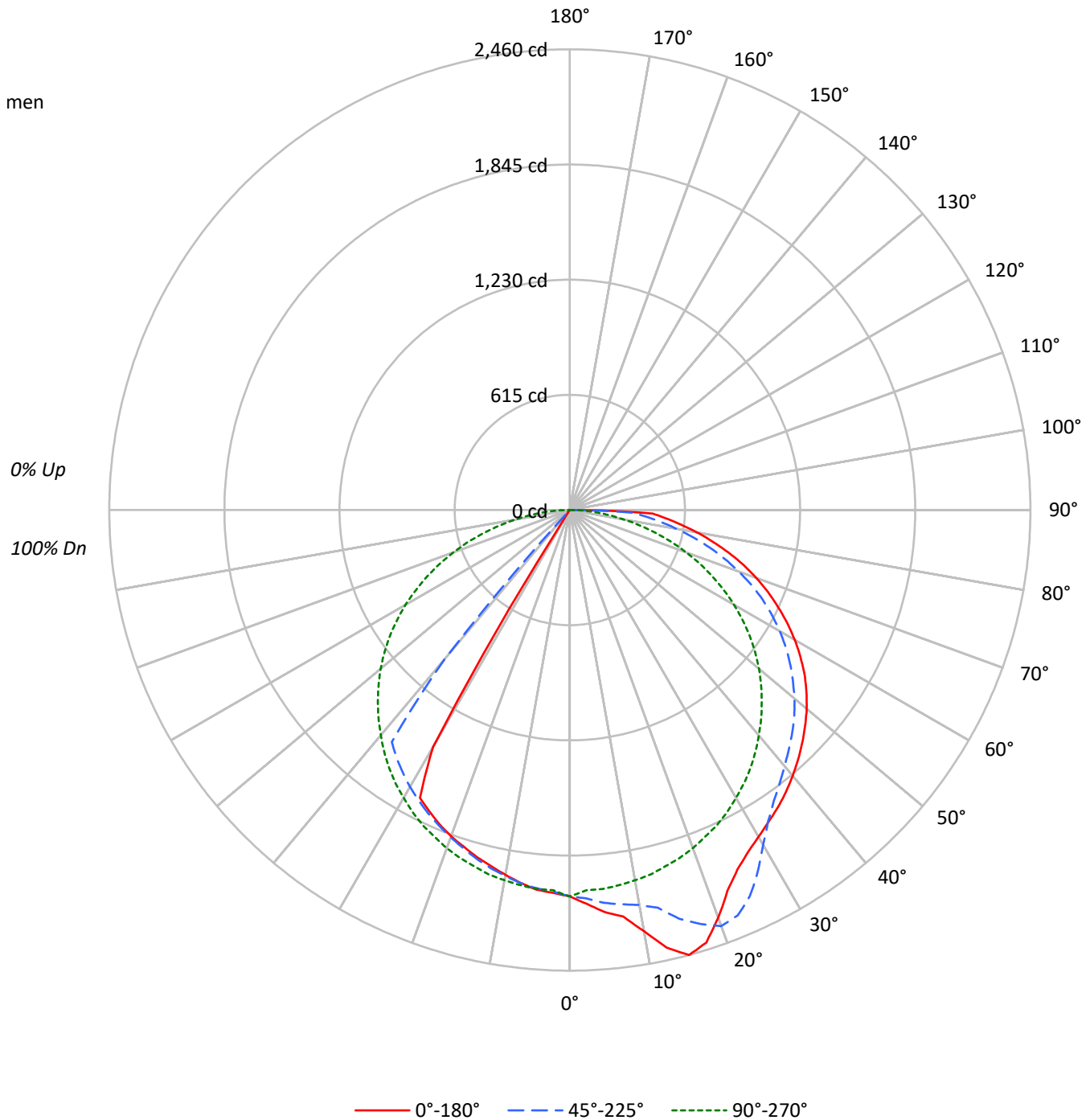
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5582.0 lumens
Efficiency: N/A
Efficacy: 110.1 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.28 / 1.25
Luminous Opening: Rectangular (W 0.21' x L: 3.98' x H: 0')
CIE Type: Direct

Input Watts (W): 50.7
Input Voltage (V):
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				
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	100	100	100	100
1	108	103	99	95	105	101	97	93	97	93	90	93	90	87	89	87	85	83	83	83	83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69	69	69	69
3	90	79	71	65	88	78	70	64	75	68	63	72	67	62	70	65	61	59	59	59	59
4	83	71	62	55	80	69	61	55	67	60	54	65	58	53	62	57	53	50	50	50	50
5	76	63	55	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44	44	44	44
6	71	57	48	42	69	56	48	42	55	47	42	53	46	41	51	45	41	39	39	39	39
7	66	52	44	37	64	51	43	37	50	42	37	48	42	37	47	41	36	35	35	35	35
8	61	48	39	34	60	47	39	33	46	38	33	45	38	33	43	37	33	31	31	31	31
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28	28	28	28
10	54	41	33	28	53	40	33	28	39	32	27	38	32	27	37	32	27	26	26	26	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	26790	26790	26790	26790	26790
5°	28094	27447	26476	26430	26523
10°	30101	28231	26471	26160	26081
15°	33071	30372	26480	25908	25781
20°	32020	32672	26549	25701	25619
25°	30338	32606	26613	25615	25428
30°	30208	30952	26611	25584	21899
35°	30719	30101	26655	25586	300
40°	31386	30245	26620	17646	200
45°	32245	30856	26625	325	130
50°	33370	31629	26639	238	48
55°	34642	32530	26564	161	27
60°	36026	33634	26329	62	31
65°	37721	34962	25849	74	74
70°	40240	36428	25031	91	91
75°	44045	38772	23951	236	120
80°	51694	43386	22179	351	179
85°	76937	60906	20769	521	358

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 87.5°
 Luminance: 131907 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	197.7	3.5
10°-20°	590.3	10.6
20°-30°	907.4	16.3
30°-40°	972.4	17.4
40°-50°	883.2	15.8
50°-60°	805.6	14.4
60°-70°	599.3	10.7
70°-80°	421.8	7.6
80°-90°	204.3	3.7
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°	1695.4	30.4
0°-40°	2667.8	47.8
0°-60°	4356.5	78.0
0°-90°	5582.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5582.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2063	2063	2063	2063	2063	
5°	2155	2106	2031	2028	2035	209
15°	2460	2259	1970	1927	1918	679
25°	2118	2276	1858	1788	1775	985
35°	1938	1899	1682	1614	19	1214
45°	1756	1680	1450	18	7	1357
55°	1530	1437	1173	7	1	1367
65°	1228	1138	841	2	2	1216
75°	878	773	477	5	2	926
85°	516	409	139	4	2	519
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	2063.1	2063.1	2063.1	2063.1	2063.1	2063.1	2063.1	2063.1	2063.1
2.5°	2105.7	2082.0	2076.1	2092.7	2032.4	2072.6	2039.5	2046.6	2046.6
5°	2155.3	2122.2	2105.7	2100.9	2031.2	2058.4	2027.7	2027.7	2034.8
7.5°	2189.6	2152.9	2123.4	2111.6	2020.6	2044.2	2008.8	2008.8	2008.8
10°	2282.9	2214.4	2141.1	2119.8	2007.6	2025.3	1984.0	1986.3	1978.0
12.5°	2392.8	2331.3	2175.4	2116.3	1993.4	2001.7	1958.0	1956.8	1947.3
15°	2460.1	2414.1	2259.3	2111.6	1969.8	1976.9	1927.2	1923.7	1917.8
17.5°	2422.3	2415.2	2317.2	2108.0	1948.5	1942.6	1893.0	1889.4	1884.7
20°	2317.2	2334.9	2364.4	2100.9	1921.3	1909.5	1859.9	1857.5	1854.0
22.5°	2200.2	2217.9	2343.2	2112.7	1888.2	1874.1	1824.4	1822.1	1817.3
25°	2117.5	2117.5	2275.8	2141.1	1857.5	1831.5	1787.8	1784.3	1774.8
27.5°	2059.6	2048.9	2175.4	2173.0	1818.5	1789.0	1748.8	1745.3	1733.4
30°	2014.7	1996.9	2064.3	2188.4	1774.8	1742.9	1706.3	1702.7	1460.5
32.5°	1974.5	1955.6	1971.0	2201.4	1731.1	1693.3	1661.4	1185.2	52.0
35°	1937.9	1916.6	1898.9	2191.9	1681.5	1643.6	1614.1	34.3	18.9
37.5°	1896.5	1880.0	1839.8	2142.3	1628.3	1590.5	1562.1	18.9	16.5
40°	1851.6	1836.2	1784.3	2069.0	1570.4	1538.5	1041.0	16.5	11.8
42.5°	1805.5	1793.7	1732.3	1962.7	1512.5	1480.6	33.1	13.0	9.5
45°	1755.9	1745.3	1680.3	1833.9	1449.9	1420.3	17.7	9.5	7.1
47.5°	1705.1	1689.7	1625.9	1695.6	1386.0	1356.5	15.4	7.1	4.7
50°	1651.9	1635.4	1565.7	1573.9	1318.7	1289.2	11.8	4.7	2.4
52.5°	1592.8	1572.7	1501.8	1464.0	1247.8	1220.6	9.5	2.4	1.2
55°	1530.2	1507.8	1436.9	1368.3	1173.4	1142.6	7.1	2.4	1.2
57.5°	1460.5	1435.7	1368.3	1277.3	1094.2	772.8	4.7	2.4	1.2
60°	1387.2	1362.4	1295.1	1192.3	1013.8	53.2	2.4	2.4	1.2
62.5°	1309.2	1283.2	1218.3	1106.0	927.6	43.7	2.4	2.4	2.4
65°	1227.7	1197.0	1137.9	1017.4	841.3	36.6	2.4	2.4	2.4
67.5°	1146.2	1107.2	1051.6	926.4	752.7	30.7	2.4	2.4	2.4
70°	1059.9	1017.4	959.5	834.2	659.3	24.8	2.4	2.4	2.4
72.5°	971.3	929.9	867.3	740.9	571.9	18.9	2.4	2.4	2.4
75°	877.9	840.1	772.8	647.5	477.4	14.2	4.7	2.4	2.4
77.5°	781.1	751.5	675.9	551.8	385.2	9.5	4.7	2.4	2.4
80°	691.3	658.2	580.2	454.9	296.6	7.1	4.7	3.5	2.4
82.5°	599.1	569.5	491.6	366.3	212.7	5.9	4.7	3.5	2.4
85°	516.4	488.0	408.8	286.0	139.4	4.7	3.5	3.5	2.4
87.5°	443.1	417.1	339.1	209.1	79.2	3.5	3.5	3.5	2.4
90°	0.0	0.0	0.0	0.0	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	25.96	27.57	26.32	27.88	28.20	21.39	23.00	21.75	23.32	23.63
	3H	28.40	29.87	28.78	30.19	30.55	22.03	23.49	22.41	23.82	24.18
	4H	29.53	30.91	29.92	31.26	31.63	22.18	23.56	22.57	23.91	24.28
	6H	30.62	31.90	31.03	32.27	32.66	22.22	23.50	22.63	23.86	24.26
	8H	31.15	32.38	31.57	32.77	33.16	22.20	23.43	22.63	23.82	24.22
	12H	31.72	32.90	32.15	33.28	33.71	22.19	23.36	22.61	23.75	24.17
4H	2H	26.61	28.00	27.01	28.34	28.72	22.52	23.90	22.91	24.25	24.62
	3H	29.30	30.47	29.71	30.87	31.27	23.86	25.03	24.27	25.42	25.82
	4H	30.60	31.66	31.03	32.07	32.51	24.39	25.46	24.82	25.87	26.30
	6H	31.88	32.81	32.33	33.25	33.71	24.67	25.60	25.12	26.04	26.50
	8H	32.51	33.38	32.96	33.82	34.29	24.71	25.58	25.16	26.02	26.49
	12H	33.19	33.98	33.67	34.46	34.93	24.72	25.51	25.20	25.98	26.45
8H	4H	30.96	31.84	31.42	32.28	32.74	25.34	26.22	25.80	26.66	27.12
	6H	32.44	33.18	32.94	33.67	34.14	25.93	26.67	26.42	27.15	27.63
	8H	33.23	33.89	33.73	34.40	34.88	26.11	26.77	26.62	27.28	27.76
	12H	34.12	34.71	34.62	35.20	35.76	26.21	26.80	26.72	27.29	27.85
12H	4H	31.00	31.79	31.48	32.27	32.74	25.56	26.35	26.04	26.82	27.29
	6H	32.53	33.20	33.04	33.70	34.19	26.28	26.95	26.79	27.45	27.94
	8H	33.41	34.00	33.92	34.49	35.05	26.59	27.18	27.10	27.67	28.23