

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: P892772

Luminaire Tested: 2MB-4HL-RFLW-UNV-L950

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P892772
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-4HL-RFLW-UNV-L950
Description: 4000 Lumen 2FT MICROBAY LINEAR BAY with REFLECTOR WITH WHITE FINISH, 90CRI, 5000K
Light Source: -
Ballast/Driver: -

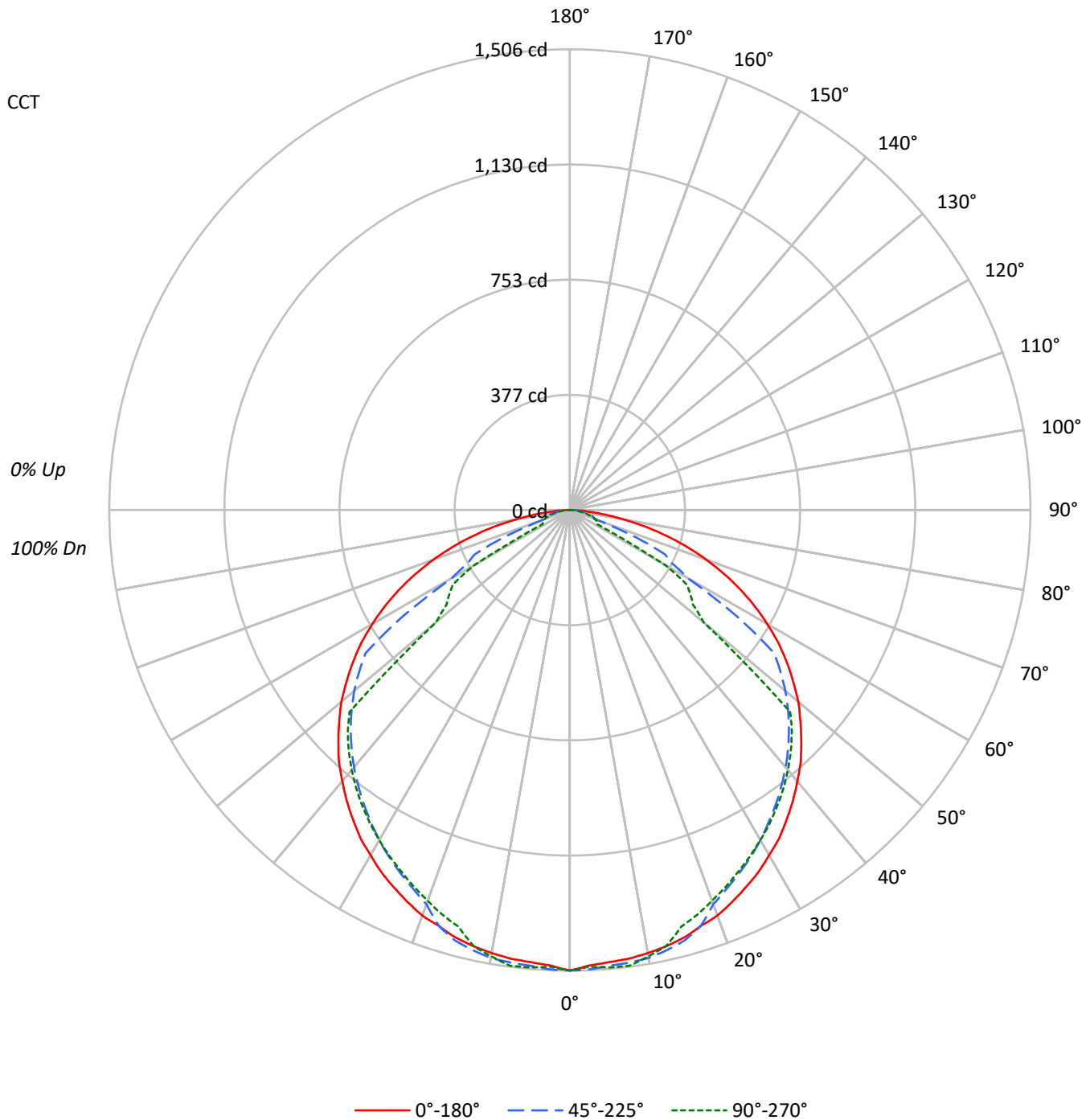
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3832.0 lumens
Efficiency: N/A
Efficacy: 138.8 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): 27.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: 6.5
Total Harmonic Distortion (THDi): 0.99
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	100	100	100	100
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86	86	86	86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73	73	73	73
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63	63	63	63
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	60	56	54	54	54	54
5	78	66	57	51	76	65	57	51	63	56	50	61	55	50	59	54	49	47	47	47	47
6	72	60	51	45	70	59	51	45	57	50	44	55	49	44	54	48	43	42	42	42	42
7	67	54	46	40	65	53	45	40	52	45	39	50	44	39	49	43	39	37	37	37	37
8	63	49	41	35	61	49	41	35	47	40	35	46	40	35	45	39	35	33	33	33	33
9	58	45	37	32	57	45	37	32	44	37	32	43	36	32	42	36	31	30	30	30	30
10	55	42	34	29	54	41	34	29	40	34	29	39	33	29	39	33	29	27	27	27	27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	39306	39306	39306
5°	38874	39188	39346
10°	38984	39416	39278
15°	39100	39354	38108
20°	39197	38105	37774
25°	39215	37740	37567
30°	39290	37566	37566
35°	39387	37430	37676
40°	39443	37408	37813
45°	39518	37406	37908
50°	39622	37367	23225
55°	39391	37138	21912
60°	38948	23173	18939
65°	38017	21251	6011
70°	36289	6779	6779
75°	33056	7576	6718
80°	27078	7698	6164
85°	19172	7669	5632

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 50°
 Luminance: 39622 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	142.5	3.7
10°-20°	406.6	10.6
20°-30°	612.9	16.0
30°-40°	744.8	19.4
40°-50°	784.5	20.5
50°-60°	616.1	16.1
60°-70°	346.7	9.0
70°-80°	144.3	3.8
80°-90°	33.7	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°	1161.9	30.3
0°-40°	1906.7	49.8
0°-60°	3307.2	86.3
0°-90°	3832.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3832.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1506	1506	1506	1506	1506	
5°	1483	1500	1495	1494	1501	141
15°	1447	1464	1456	1412	1410	408
25°	1361	1372	1310	1302	1304	628
35°	1236	1194	1174	1178	1182	774
45°	1070	1010	1013	1025	1027	826
55°	865	803	816	478	481	773
65°	615	566	344	93	97	607
75°	328	196	75	69	67	346
85°	64	28	26	21	19	81
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1505.5	1505.5	1505.5	1505.5	1505.5
2.5°	1490.2	1511.5	1503.0	1494.4	1494.4
5°	1483.3	1500.4	1495.3	1494.4	1501.3
7.5°	1479.1	1493.6	1491.9	1493.6	1502.1
10°	1470.5	1486.8	1486.8	1480.8	1481.6
12.5°	1460.3	1476.5	1473.1	1462.9	1459.4
15°	1446.6	1463.7	1456.0	1412.5	1409.9
17.5°	1425.3	1445.8	1425.3	1384.3	1386.9
20°	1410.8	1426.2	1371.5	1357.9	1359.6
22.5°	1386.9	1400.6	1340.0	1330.6	1332.3
25°	1361.3	1371.5	1310.1	1302.4	1304.1
27.5°	1334.8	1337.4	1279.4	1274.2	1275.9
30°	1303.3	1292.2	1246.1	1242.7	1246.1
32.5°	1273.4	1247.8	1210.2	1211.1	1215.3
35°	1235.8	1194.0	1174.4	1177.8	1182.1
37.5°	1198.3	1147.9	1136.8	1143.7	1147.1
40°	1157.3	1103.5	1097.6	1104.4	1109.5
42.5°	1117.2	1058.3	1056.6	1066.8	1069.4
45°	1070.3	1010.5	1013.1	1025.0	1026.7
47.5°	1022.5	961.9	967.8	978.9	977.2
50°	975.5	910.7	920.0	903.8	571.8
52.5°	920.0	857.7	868.0	538.5	507.8
55°	865.4	803.1	815.9	477.9	481.4
57.5°	808.2	745.9	652.1	449.8	453.2
60°	745.9	687.9	443.8	420.8	362.7
62.5°	681.9	627.3	376.4	236.4	99.9
65°	615.4	565.9	344.0	93.0	97.3
67.5°	545.4	503.6	235.6	90.5	94.7
70°	475.4	390.9	88.8	87.1	88.8
72.5°	402.8	305.5	82.8	79.4	78.5
75°	327.7	196.3	75.1	69.1	66.6
77.5°	256.0	113.5	64.0	57.2	53.8
80°	180.1	58.0	51.2	43.5	41.0
82.5°	116.9	42.7	37.6	32.4	30.7
85°	64.0	28.2	25.6	21.3	18.8
87.5°	28.2	17.1	14.5	11.1	8.5
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	25.42	26.98	25.78	27.29	27.61	21.80	23.37	22.17	23.68	23.99
	3H	27.33	28.73	27.71	29.06	29.42	21.95	23.34	22.32	23.67	24.03
	4H	27.93	29.24	28.33	29.59	29.97	22.06	23.37	22.46	23.72	24.10
	6H	28.30	29.51	28.71	29.88	30.27	22.16	23.37	22.57	23.74	24.13
	8H	28.40	29.56	28.83	29.95	30.35	22.19	23.34	22.62	23.73	24.13
	12H	28.46	29.56	28.89	29.95	30.38	22.21	23.31	22.64	23.70	24.12
4H	2H	25.56	26.88	25.96	27.22	27.60	22.49	23.80	22.89	24.14	24.52
	3H	27.58	28.66	27.99	29.06	29.46	22.69	23.77	23.10	24.17	24.57
	4H	28.24	29.21	28.67	29.63	30.07	22.84	23.81	23.27	24.23	24.67
	6H	28.66	29.50	29.12	29.95	30.41	23.00	23.85	23.46	24.29	24.75
	8H	28.79	29.58	29.25	30.02	30.49	23.05	23.84	23.52	24.29	24.75
	12H	28.88	29.59	29.36	30.06	30.53	23.10	23.80	23.58	24.28	24.75
8H	4H	28.18	28.97	28.64	29.41	29.88	23.07	23.85	23.53	24.30	24.77
	6H	28.61	29.26	29.10	29.75	30.22	23.28	23.93	23.77	24.42	24.89
	8H	28.75	29.33	29.26	29.84	30.33	23.36	23.95	23.87	24.46	24.94
	12H	28.87	29.39	29.38	29.88	30.44	23.44	23.96	23.95	24.46	25.02
12H	4H	28.16	28.86	28.64	29.34	29.81	23.08	23.78	23.56	24.26	24.73
	6H	28.57	29.15	29.08	29.66	30.15	23.30	23.88	23.81	24.39	24.88
	8H	28.73	29.25	29.24	29.74	30.31	23.43	23.94	23.93	24.44	25.00