

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: P893186

Luminaire Tested: 4MB-10HL-LVR-UNV-L835

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893186
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2407-175-6)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4MB-10HL-LVR-UNV-L835
Description: 10000 Lumen 4FT MICROBAY LINEAR BAY with LOUVER, 80CRI, 3500K CCT
Light Source: -
Ballast/Driver: -

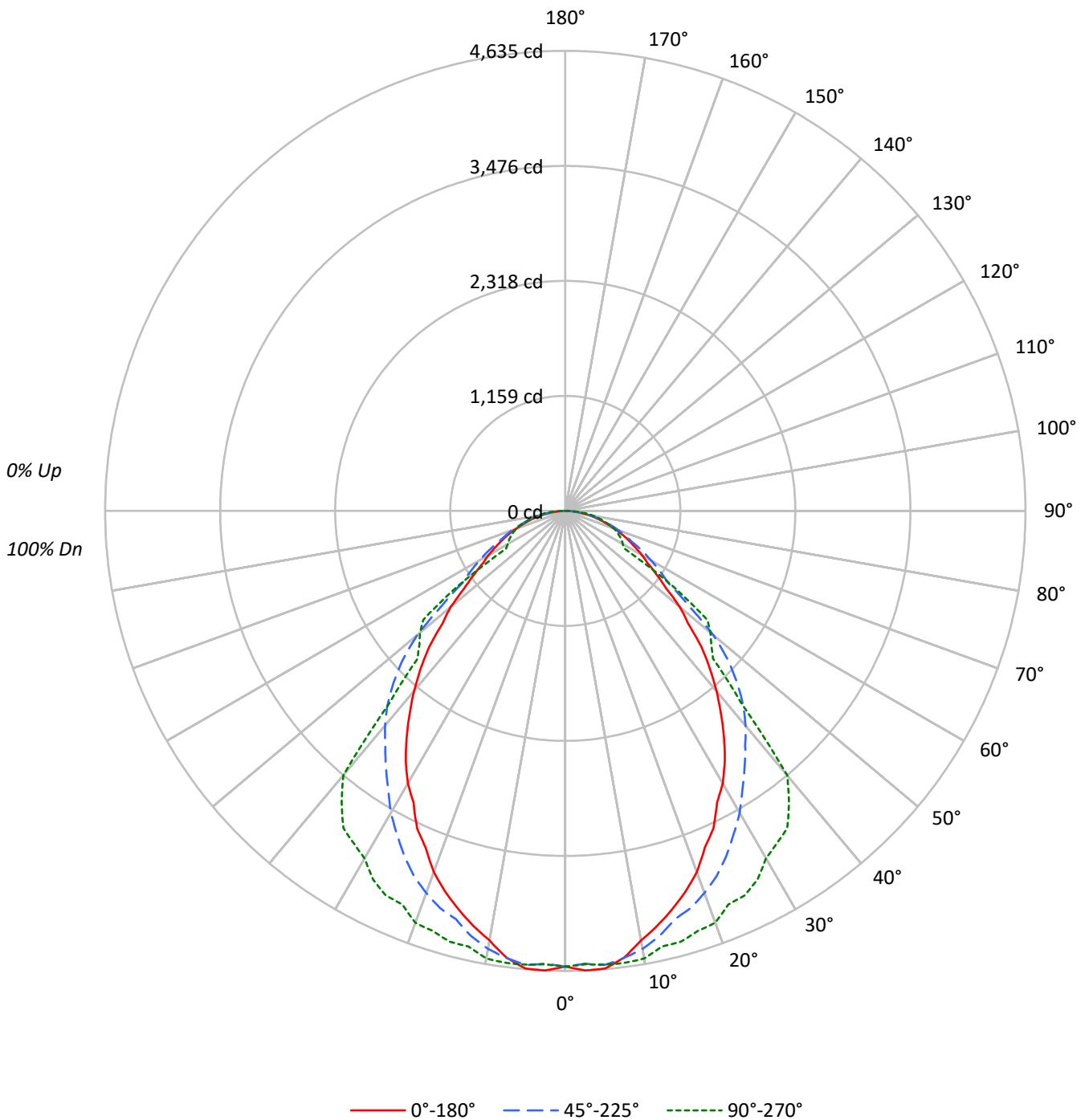
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9609.0 lumens
Efficiency: N/A
Efficacy: 127.3 lumens/watt
Spacing Criteria (0/90/45): 1.05 / 1.32 / 1.26
Luminous Opening: Rectangular (W 0.38' x L: 3.98' x H: 0')
CIE Type: Direct

Input Watts (W): 75.5
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: 0.997
Total Harmonic Distortion (THDi): 7.45
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
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	100	
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	89	87	
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	77	75	
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	75	70	67	67	65	
4	86	76	68	62	84	74	67	61	72	66	60	70	64	60	68	63	59	59	57	
5	80	68	60	54	78	67	60	54	65	59	53	63	57	53	62	56	52	52	50	
6	74	62	54	48	73	61	54	48	60	53	48	58	52	47	56	51	47	47	45	
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	42	40	
8	65	52	44	39	63	52	44	39	50	43	39	49	43	38	48	42	38	38	36	
9	61	48	41	35	59	48	40	35	47	40	35	46	39	35	45	39	35	35	33	
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32	32	30	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	32661	32661	32661
5°	33056	32796	32777
10°	31753	32376	33087
15°	30616	31371	33109
20°	29327	31022	33441
25°	27708	30111	33562
30°	26040	28854	33218
35°	24216	27366	33865
40°	22000	26233	32293
45°	19493	24621	21176
50°	16684	21519	21131
55°	13981	15703	16440
60°	12719	14177	9516
65°	11916	12551	10169
70°	10965	11891	10882
75°	10303	11156	11081
80°	9612	10551	11878
85°	8253	8808	12653

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 24621 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	436.2	4.5
10°-20°	1220.5	12.7
20°-30°	1778.8	18.5
30°-40°	2035.0	21.2
40°-50°	1740.8	18.1
50°-60°	1148.0	11.9
60°-70°	694.0	7.2
70°-80°	424.6	4.4
80°-90°	131.1	1.4
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°	3435.5	35.8
0°-40°	5470.5	56.9
0°-60°	8359.3	87.0
0°-90°	9609.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9609.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4590	4590	4590	4590	4590	
5°	4628	4624	4592	4582	4589	434
15°	4156	4205	4259	4531	4495	1168
25°	3530	3583	3836	4163	4275	1615
35°	2788	2928	3151	3646	3899	1737
45°	1937	2087	2447	2286	2104	1483
55°	1127	1190	1266	1500	1325	1025
65°	708	725	746	666	604	700
75°	375	384	406	425	403	396
85°	101	100	108	128	155	115
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4590.5	4590.5	4590.5	4590.5	4590.5
2.5°	4635.0	4621.5	4566.3	4618.8	4571.7
5°	4628.3	4624.2	4591.9	4582.4	4589.2
7.5°	4539.3	4548.7	4543.3	4644.5	4593.2
10°	4395.0	4413.9	4481.3	4622.9	4579.7
12.5°	4281.8	4296.6	4387.0	4597.3	4496.2
15°	4156.4	4205.0	4258.9	4531.2	4494.8
17.5°	4021.6	4067.4	4195.5	4442.2	4438.2
20°	3873.3	3958.2	4097.1	4326.3	4416.6
22.5°	3672.4	3787.0	3982.5	4273.7	4291.2
25°	3529.5	3583.4	3835.6	4163.2	4275.1
27.5°	3312.5	3414.9	3672.4	4004.1	4188.8
30°	3169.6	3254.5	3512.0	3911.1	4043.2
32.5°	2990.2	3091.4	3321.9	3809.9	3969.0
35°	2788.0	2928.2	3150.7	3645.5	3898.9
37.5°	2575.0	2713.9	2976.8	3509.3	3700.7
40°	2368.7	2487.4	2824.4	3346.2	3476.9
42.5°	2157.1	2285.2	2650.5	3024.0	2615.5
45°	1937.3	2087.0	2446.9	2286.5	2104.5
47.5°	1677.1	1860.5	2221.8	1837.6	1993.9
50°	1507.3	1607.0	1944.1	1732.4	1909.0
52.5°	1282.1	1416.9	1561.2	1617.8	1803.9
55°	1127.1	1190.4	1265.9	1500.5	1325.3
57.5°	984.2	1040.8	1128.4	1058.3	706.4
60°	893.8	919.5	996.3	756.3	668.7
62.5°	791.4	817.0	873.6	706.4	641.7
65°	707.8	725.3	745.5	666.0	604.0
67.5°	618.8	628.2	649.8	614.8	567.6
70°	527.1	540.6	571.6	562.2	523.1
72.5°	446.2	458.4	485.3	498.8	462.4
75°	374.8	384.2	405.8	424.7	403.1
77.5°	297.9	307.4	335.7	355.9	346.5
80°	234.6	235.9	257.5	277.7	289.9
82.5°	164.5	167.2	183.4	204.9	229.2
85°	101.1	99.8	107.9	128.1	155.0
87.5°	39.1	37.7	44.5	53.9	79.5
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	19.94	21.42	20.30	21.73	22.05	19.62	21.09	19.98	21.41	21.72
	3H	21.50	22.82	21.88	23.15	23.51	21.23	22.56	21.61	22.89	23.25
	4H	22.10	23.34	22.50	23.69	24.07	21.98	23.22	22.38	23.57	23.95
	6H	22.55	23.70	22.97	24.07	24.46	22.65	23.80	23.06	24.16	24.56
	8H	22.71	23.80	23.13	24.19	24.59	22.93	24.02	23.35	24.41	24.81
	12H	22.81	23.85	23.24	24.23	24.66	23.15	24.19	23.58	24.57	25.00
4H	2H	20.53	21.77	20.93	22.12	22.50	20.28	21.52	20.68	21.87	22.25
	3H	22.32	23.35	22.73	23.75	24.15	22.16	23.19	22.57	23.59	23.99
	4H	23.05	23.97	23.48	24.39	24.83	23.06	23.98	23.49	24.40	24.84
	6H	23.63	24.43	24.09	24.88	25.34	23.86	24.67	24.32	25.11	25.57
	8H	23.83	24.58	24.29	25.02	25.49	24.19	24.95	24.66	25.39	25.86
	12H	23.97	24.64	24.45	25.12	25.59	24.47	25.14	24.95	25.62	26.09
8H	4H	23.37	24.12	23.83	24.57	25.03	23.38	24.13	23.84	24.58	25.04
	6H	24.08	24.70	24.58	25.19	25.67	24.33	24.95	24.83	25.44	25.92
	8H	24.35	24.91	24.86	25.42	25.91	24.75	25.31	25.26	25.82	26.31
	12H	24.56	25.05	25.07	25.55	26.11	25.11	25.61	25.62	26.10	26.67
12H	4H	23.41	24.08	23.89	24.56	25.03	23.40	24.08	23.89	24.56	25.03
	6H	24.15	24.71	24.66	25.22	25.71	24.38	24.94	24.90	25.45	25.94
	8H	24.48	24.98	24.99	25.47	26.03	24.86	25.36	25.37	25.85	26.41