

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: P894902

Luminaire Tested: 8TMB-20HL-LVRA-UNV-L835

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894902
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-077-26)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 8TMB-20HL-LVRA-UNV-L835
Description: 20000 Lumen 8FT MICROBAY LINEAR BAY with LOUVER WITH AISLE OPTIC, 80CRI, 3500K CCT
Light Source: -
Ballast/Driver: -

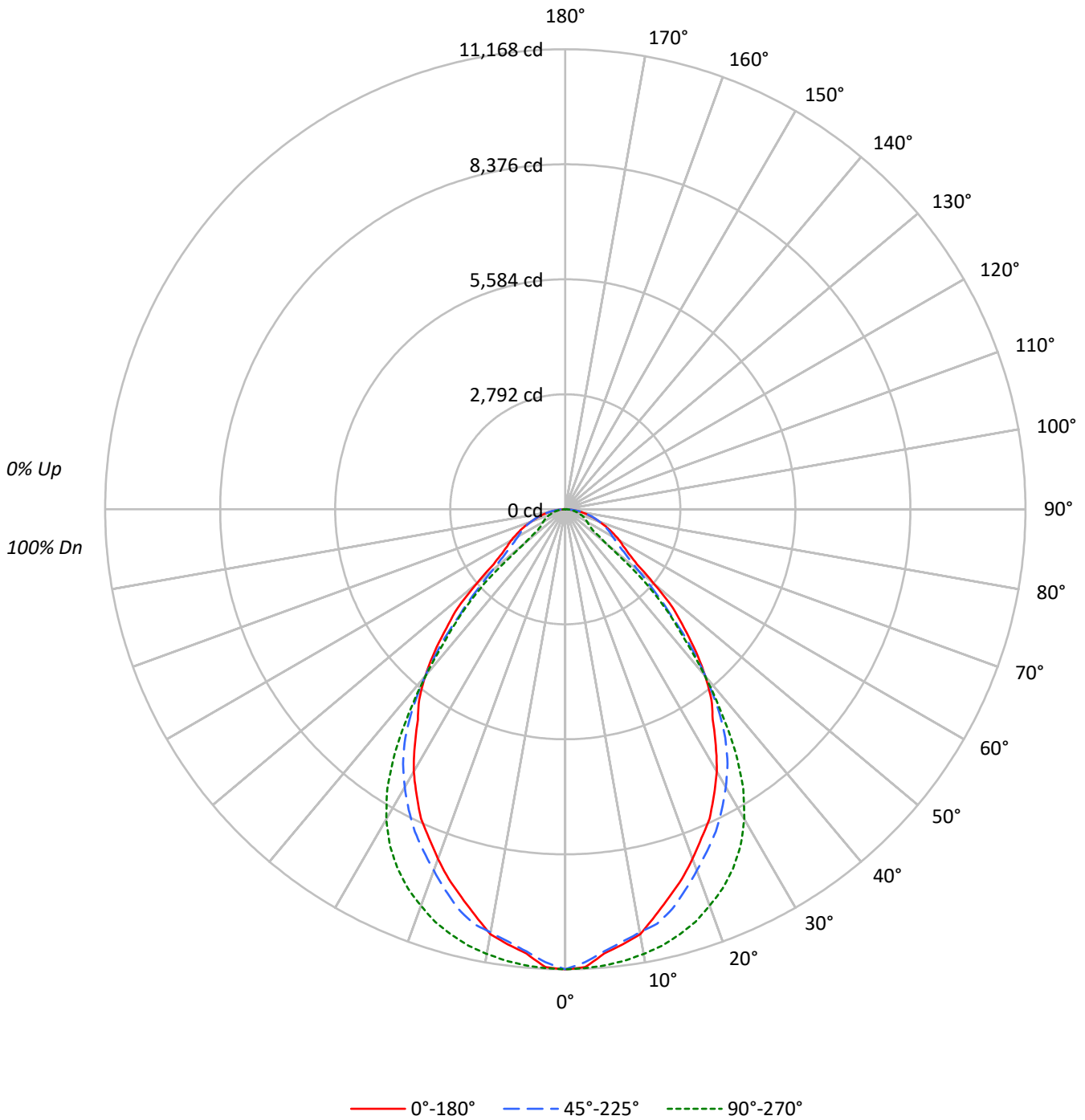
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18125.0 lumens
Efficiency: N/A
Efficacy: 125.0 lumens/watt
Spacing Criteria (0/90/45): 1.02 / 1.16 / 1.12
Luminous Opening: Rectangular (W 0.38' x L: 7.98' x H: 0')
CIE Type: Direct

Input Watts (W): 145
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: 0.997
Total Harmonic Distortion (THDi): 7.79
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	100	100	
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88	88	
2	103	96	91	86	101	95	90	85	91	87	83	88	85	82	85	82	80	78	78	
3	96	87	80	75	94	86	80	75	83	78	73	80	76	72	78	74	71	69	69	
4	89	79	72	66	87	78	71	66	76	70	65	73	68	64	71	67	63	62	62	
5	83	72	65	59	81	71	64	59	69	63	58	67	62	58	66	61	57	55	55	
6	78	66	59	53	76	65	58	53	64	57	53	62	57	52	61	56	52	50	50	
7	73	61	54	48	71	60	53	48	59	52	48	58	52	47	56	51	47	45	45	
8	68	57	49	44	67	56	49	44	55	48	44	53	48	43	52	47	43	41	41	
9	64	52	45	40	63	52	45	40	51	44	40	50	44	40	49	44	40	38	38	
10	61	49	42	37	60	48	42	37	47	41	37	47	41	37	46	40	37	35	35	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	39625	39625	39625
5°	38556	38382	39582
10°	37737	37571	39490
15°	35789	36889	39268
20°	34093	35245	38668
25°	32431	33816	37682
30°	30130	31922	35578
35°	27017	29336	31206
40°	24477	24530	24397
45°	20466	18126	17678
50°	15459	12758	7229
55°	11627	10203	4558
60°	10805	9395	4391
65°	10053	9376	4398
70°	9197	9197	4330
75°	8720	8957	4183
80°	8057	8469	4293
85°	7031	7381	4686

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 20942 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1031.6	5.7
10°-20°	2842.5	15.7
20°-30°	4030.7	22.2
30°-40°	4152.5	22.9
40°-50°	2900.4	16.0
50°-60°	1391.7	7.7
60°-70°	976.4	5.4
70°-80°	610.5	3.4
80°-90°	188.8	1.0
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°	7904.8	43.6
0°-40°	12057.2	66.5
0°-60°	16349.3	90.2
0°-90°	18125.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	18125.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	11168	11168	11168	11168	11168	
5°	10825	10811	10776	11058	11113	1025
15°	9743	9815	10042	10330	10690	2744
25°	8284	8367	8638	9222	9625	3788
35°	6237	6407	6773	6914	7204	3930
45°	4079	4174	3612	3428	3523	3142
55°	1880	1787	1649	1056	737	1761
65°	1197	1120	1117	849	524	1186
75°	636	628	653	564	305	670
85°	173	173	181	178	115	193
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	11167.9	11167.9	11167.9	11167.9	11167.9
2.5°	11124.7	11090.1	11006.7	11159.2	11147.7
5°	10825.3	10810.9	10776.4	11058.5	11113.2
7.5°	10655.5	10626.7	10586.4	10897.3	11049.8
10°	10474.2	10508.7	10428.1	10713.1	10960.6
12.5°	10100.0	10192.1	10301.5	10523.1	10851.2
15°	9743.1	9815.0	10042.4	10330.3	10690.1
17.5°	9409.2	9492.7	9688.4	10120.1	10503.0
20°	9029.3	9144.4	9334.4	9887.0	10241.0
22.5°	8637.8	8744.3	8983.2	9576.1	9970.5
25°	8283.8	8367.3	8637.8	9222.1	9625.1
27.5°	7814.6	7970.0	8226.2	8790.4	9213.5
30°	7354.1	7486.5	7791.6	8266.5	8683.9
32.5°	6798.6	6991.4	7328.2	7690.9	8039.1
35°	6237.3	6407.1	6772.7	6913.7	7204.4
37.5°	5828.6	5874.6	6081.9	6064.6	6228.7
40°	5284.6	5376.7	5296.1	5080.2	5267.3
42.5°	4697.4	4806.8	4481.5	4231.1	4297.3
45°	4078.6	4173.6	3612.3	3428.1	3523.1
47.5°	3543.2	3534.6	2912.9	2789.1	2656.7
50°	2800.6	2892.7	2311.3	2081.0	1309.6
52.5°	2187.5	2222.1	1905.4	1329.8	860.6
55°	1879.5	1787.4	1649.3	1056.3	736.8
57.5°	1669.4	1554.3	1462.2	981.5	673.5
60°	1522.6	1393.1	1324.0	932.6	618.8
62.5°	1355.7	1254.9	1229.0	889.4	569.9
65°	1197.4	1119.7	1116.8	849.1	523.9
67.5°	1039.1	995.9	1007.4	800.2	472.0
70°	886.5	877.9	886.5	736.8	417.4
72.5°	757.0	748.4	771.4	656.3	356.9
75°	636.1	627.5	653.4	564.1	305.1
77.5°	506.6	512.3	529.6	469.2	256.2
80°	394.3	394.3	414.5	368.4	210.1
82.5°	282.1	285.0	296.5	270.6	164.1
85°	172.7	172.7	181.3	178.5	115.1
87.5°	57.6	66.2	77.7	83.5	57.6
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	18.43	19.78	18.80	20.10	20.41	14.76	16.12	15.13	16.43	16.74
	3H	20.17	21.38	20.55	21.71	22.07	16.74	17.95	17.12	18.28	18.64
	4H	20.84	21.97	21.24	22.32	22.70	17.44	18.57	17.85	18.92	19.30
	6H	21.35	22.39	21.76	22.76	23.15	17.97	19.00	18.38	19.37	19.77
	8H	21.52	22.50	21.95	22.89	23.30	18.15	19.14	18.58	19.53	19.93
	12H	21.63	22.57	22.06	22.95	23.38	18.29	19.23	18.72	19.62	20.05
4H	2H	18.96	20.09	19.36	20.44	20.82	16.38	17.51	16.79	17.86	18.24
	3H	20.94	21.87	21.35	22.27	22.67	18.56	19.49	18.98	19.90	20.30
	4H	21.74	22.58	22.17	22.99	23.44	19.44	20.28	19.88	20.70	21.14
	6H	22.38	23.11	22.85	23.55	24.02	20.09	20.81	20.55	21.26	21.72
	8H	22.60	23.28	23.07	23.73	24.20	20.29	20.97	20.76	21.42	21.89
	12H	22.76	23.36	23.24	23.84	24.31	20.45	21.05	20.94	21.53	22.01
8H	4H	22.02	22.70	22.49	23.15	23.62	20.09	20.77	20.56	21.21	21.68
	6H	22.81	23.36	23.31	23.86	24.34	20.95	21.51	21.45	22.00	22.48
	8H	23.11	23.61	23.63	24.12	24.61	21.28	21.78	21.80	22.29	22.78
	12H	23.34	23.78	23.86	24.28	24.85	21.54	21.98	22.06	22.48	23.05
12H	4H	22.04	22.64	22.53	23.12	23.60	20.16	20.76	20.65	21.25	21.72
	6H	22.86	23.36	23.38	23.87	24.36	21.09	21.59	21.61	22.10	22.59
	8H	23.22	23.66	23.74	24.16	24.73	21.50	21.94	22.02	22.44	23.01