

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: P894910

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

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894910
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2407-175-5)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 8TMB-20HL-LVRF-UNV-L835
Description: 20000 Lumen 8FT MICROBAY LINEAR BAY with LOUVER WITH FROSTED INLAY, 80CRI, 3500K (C)
Light Source: -
Ballast/Driver: -

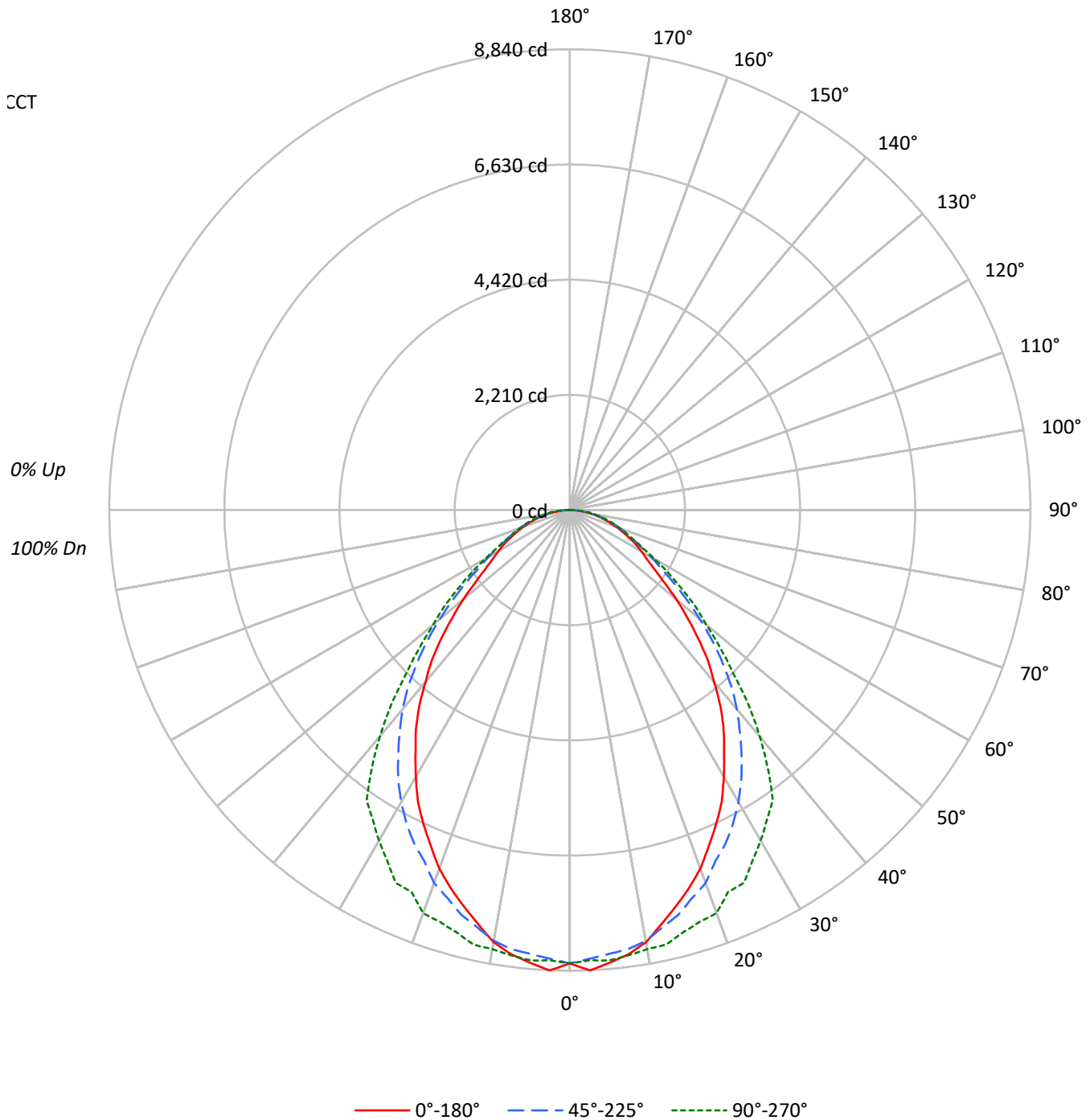
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17635.0 lumens
Efficiency: N/A
Efficacy: 121.6 lumens/watt
Spacing Criteria (0/90/45): 1.05 / 1.25 / 1.21
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 (Ain): 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

TEST NUMBER: P894910
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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	102	100
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	89	89	87
2	102	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	77	77	75
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	75	70	67	67	67	65
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	59	59	57
5	80	68	60	54	78	67	60	54	65	59	53	63	58	53	62	57	52	52	52	50
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	57	51	47	47	47	45
7	70	57	49	43	68	56	49	43	55	48	43	53	47	42	52	46	42	42	42	40
8	65	52	44	39	64	52	44	39	50	44	39	49	43	39	48	43	38	38	38	37
9	61	48	41	36	60	48	40	35	47	40	35	46	40	35	45	39	35	35	35	33
10	57	45	37	33	56	44	37	32	43	37	32	43	36	32	42	36	32	32	32	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	30860	30860	30860
5°	31061	30459	30894
10°	30334	30240	30821
15°	28902	29542	30822
20°	27647	28756	31073
25°	26029	27657	30915
30°	24214	26505	30009
35°	22300	24879	29429
40°	19944	23123	26278
45°	17483	20797	22285
50°	14755	17970	18859
55°	12240	15039	16085
60°	11255	12787	13266
65°	10544	11243	11330
70°	9819	10655	10574
75°	9160	9944	10301
80°	8553	9244	9881
85°	7198	7833	10902

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 22285 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	821.0	4.7
10°-20°	2290.0	13.0
20°-30°	3297.9	18.7
30°-40°	3640.9	20.6
40°-50°	3124.1	17.7
50°-60°	2128.3	12.1
60°-70°	1338.9	7.6
70°-80°	762.3	4.3
80°-90°	231.7	1.3
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°	6408.8	36.3
0°-40°	10049.7	57.0
0°-60°	15302.1	86.8
0°-90°	17635.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	17635.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8698	8698	8698	8698	8698	
5°	8721	8687	8552	8731	8674	823
15°	7868	7951	8042	8406	8391	2215
25°	6649	6781	7065	7634	7897	3053
35°	5148	5348	5744	6370	6794	3202
45°	3484	3716	4145	4394	4441	2685
55°	1979	2101	2431	2548	2600	1818
65°	1256	1277	1339	1404	1350	1248
75°	668	673	725	757	751	712
85°	177	182	192	229	268	203
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	8697.5	8697.5	8697.5	8697.5	8697.5
2.5°	8840.5	8749.5	8619.5	8744.3	8648.1
5°	8720.9	8687.1	8551.9	8731.3	8674.1
7.5°	8598.7	8525.9	8502.5	8694.9	8619.5
10°	8419.3	8377.7	8393.3	8640.3	8554.5
12.5°	8135.9	8164.5	8200.9	8515.5	8541.5
15°	7868.1	7951.3	8042.3	8406.3	8390.7
17.5°	7605.5	7719.9	7805.7	8273.7	8286.7
20°	7322.0	7387.0	7615.9	8068.3	8229.5
22.5°	6971.0	7098.4	7296.0	7860.3	7933.1
25°	6648.6	6781.2	7064.6	7634.1	7896.7
27.5°	6310.6	6432.8	6783.8	7366.2	7589.9
30°	5910.2	6074.0	6469.2	7062.0	7324.6
32.5°	5509.7	5748.9	6128.6	6737.0	7041.2
35°	5148.3	5348.5	5743.7	6370.4	6794.2
37.5°	4747.9	4958.5	5358.9	5970.0	6240.4
40°	4305.9	4532.1	4992.3	5486.3	5673.5
42.5°	3926.2	4121.2	4584.1	4932.5	5080.7
45°	3484.2	3715.6	4144.7	4394.3	4441.1
47.5°	3057.8	3323.0	3707.8	3824.8	3915.8
50°	2673.0	2881.0	3255.4	3328.2	3416.6
52.5°	2280.3	2501.4	2829.0	2901.8	3031.8
55°	1978.7	2100.9	2431.1	2548.2	2600.2
57.5°	1757.7	1835.7	2069.7	2217.9	2233.5
60°	1586.1	1625.1	1801.9	1913.7	1869.5
62.5°	1427.5	1458.7	1547.1	1632.9	1575.7
65°	1255.9	1276.7	1339.1	1404.1	1349.5
67.5°	1094.7	1118.1	1175.3	1222.1	1175.3
70°	946.5	964.7	1027.1	1047.9	1019.3
72.5°	808.6	816.4	868.5	904.9	886.7
75°	668.2	673.4	725.4	756.6	751.4
77.5°	540.8	548.6	592.8	621.4	605.8
80°	418.6	423.8	452.4	494.0	483.6
82.5°	293.8	304.2	322.4	358.8	387.4
85°	176.8	182.0	192.4	228.8	267.8
87.5°	67.6	72.8	78.0	96.2	127.4
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	19.37	20.85	19.73	21.16	21.48	20.73	22.21	21.10	22.52	22.84
	3H	20.95	22.27	21.33	22.60	22.96	22.02	23.34	22.39	23.67	24.03
	4H	21.55	22.80	21.96	23.15	23.52	22.57	23.81	22.97	24.16	24.54
	6H	22.03	23.17	22.44	23.54	23.93	23.02	24.17	23.43	24.54	24.93
	8H	22.18	23.27	22.61	23.66	24.06	23.21	24.30	23.64	24.69	25.09
	12H	22.28	23.32	22.71	23.71	24.13	23.36	24.41	23.79	24.79	25.22
4H	2H	19.98	21.22	20.38	21.57	21.95	21.10	22.34	21.50	22.69	23.07
	3H	21.79	22.82	22.20	23.22	23.62	22.65	23.68	23.06	24.08	24.48
	4H	22.51	23.44	22.94	23.85	24.29	23.36	24.28	23.79	24.70	25.14
	6H	23.11	23.91	23.57	24.36	24.82	23.97	24.77	24.42	25.21	25.68
	8H	23.31	24.06	23.77	24.51	24.97	24.21	24.97	24.68	25.41	25.88
	12H	23.45	24.12	23.93	24.60	25.07	24.43	25.10	24.91	25.58	26.05
8H	4H	22.84	23.59	23.30	24.03	24.50	23.59	24.34	24.05	24.79	25.26
	6H	23.56	24.18	24.06	24.68	25.15	24.33	24.96	24.83	25.45	25.93
	8H	23.84	24.40	24.35	24.91	25.40	24.67	25.23	25.18	25.74	26.23
	12H	24.05	24.55	24.56	25.04	25.60	24.97	25.47	25.48	25.96	26.53
12H	4H	22.88	23.55	23.36	24.03	24.50	23.60	24.28	24.09	24.76	25.23
	6H	23.63	24.19	24.14	24.70	25.19	24.37	24.93	24.89	25.44	25.93
	8H	23.97	24.46	24.48	24.95	25.52	24.76	25.26	25.27	25.75	26.31