

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: P894914

Luminaire Tested: 8TMB-20HL-LVRF-UNV-L935

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894914
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-L935
Description: 20000 Lumen 8FT MICROBAY LINEAR BAY with LOUVER WITH FROSTED INLAY, 90CRI, 3500K (C)
Light Source: -
Ballast/Driver: -

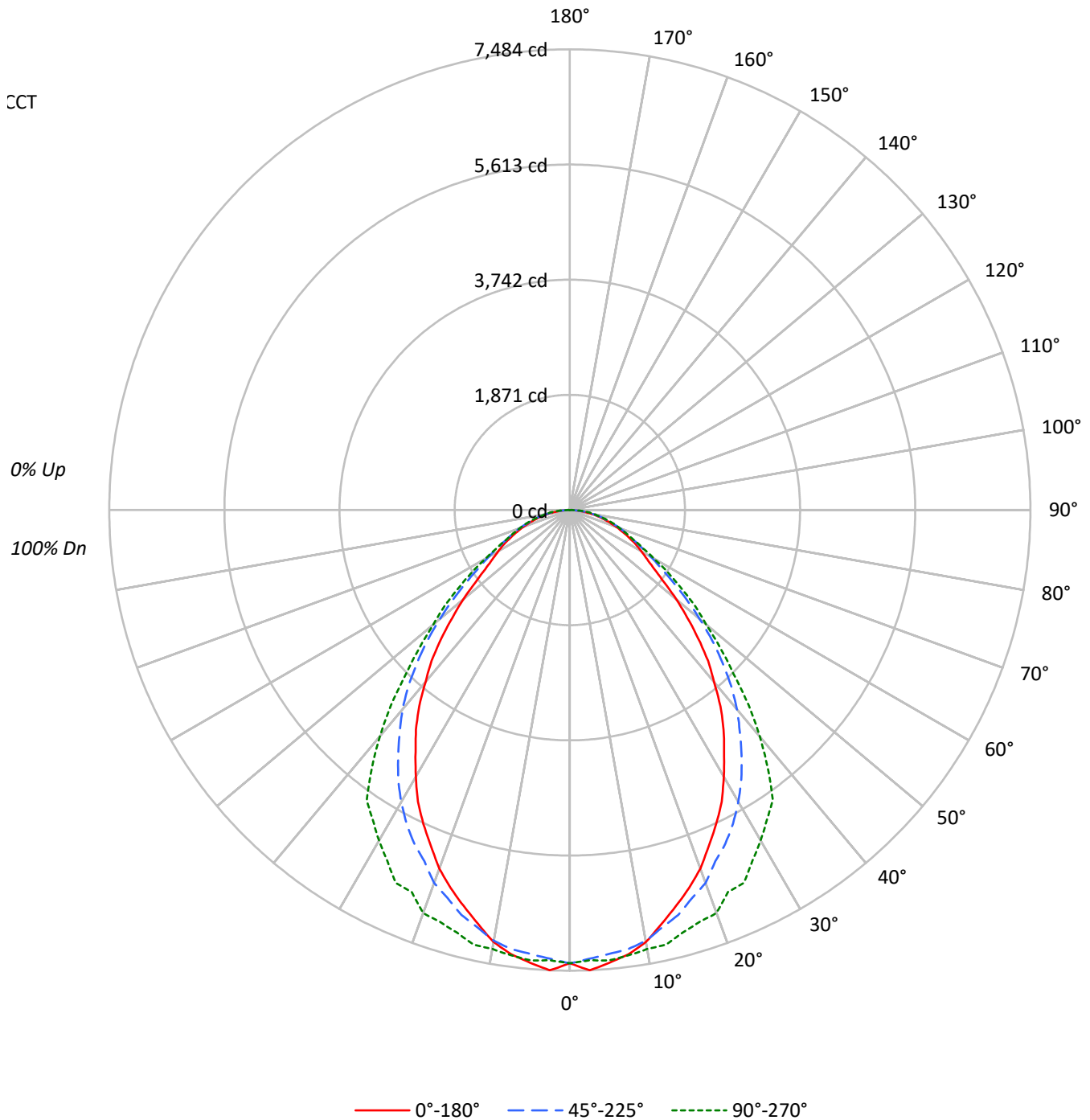
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14929.0 lumens
Efficiency: N/A
Efficacy: 103.0 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 (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	102	100	
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87	87	
2	102	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75	75	
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	75	70	67	65	65	
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	57	57	
5	80	68	60	54	78	67	60	54	65	59	53	63	58	53	62	57	52	50	50	
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	57	51	47	45	45	
7	70	57	49	43	68	56	49	43	55	48	43	53	47	42	52	46	42	40	40	
8	65	52	44	39	64	52	44	39	50	44	39	49	43	39	48	43	38	37	37	
9	61	48	41	36	60	48	40	35	47	40	35	46	40	35	45	39	35	33	33	
10	57	45	37	33	56	44	37	32	43	37	32	43	36	32	42	36	32	30	30	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	26125	26125	26125
5°	26295	25786	26154
10°	25679	25600	26092
15°	24467	25009	26092
20°	23405	24344	26305
25°	22035	23414	26171
30°	20499	22437	25404
35°	18878	21061	24913
40°	16883	19575	22246
45°	14801	17606	18865
50°	12490	15212	15965
55°	10362	12731	13617
60°	9528	10825	11231
65°	8926	9517	9591
70°	8312	9020	8952
75°	7755	8419	8720
80°	7241	7826	8365
85°	6094	6632	9229

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 18865 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	695.0	4.7
10°-20°	1938.6	13.0
20°-30°	2791.8	18.7
30°-40°	3082.2	20.6
40°-50°	2644.8	17.7
50°-60°	1801.7	12.1
60°-70°	1133.4	7.6
70°-80°	645.3	4.3
80°-90°	196.1	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°	5425.4	36.3
0°-40°	8507.6	57.0
0°-60°	12954.1	86.8
0°-90°	14929.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	14929.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7363	7363	7363	7363	7363	
5°	7383	7354	7240	7392	7343	697
15°	6661	6731	6808	7116	7103	1875
25°	5628	5741	5981	6463	6685	2585
35°	4358	4528	4862	5393	5752	2711
45°	2950	3146	3509	3720	3760	2273
55°	1675	1779	2058	2157	2201	1539
65°	1063	1081	1134	1189	1142	1056
75°	566	570	614	640	636	603
85°	150	154	163	194	227	172
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7362.9	7362.9	7362.9	7362.9	7362.9
2.5°	7484.0	7407.0	7296.9	7402.6	7321.1
5°	7382.7	7354.1	7239.7	7391.6	7343.1
7.5°	7279.3	7217.7	7197.8	7360.7	7296.9
10°	7127.4	7092.2	7105.4	7314.5	7241.9
12.5°	6887.5	6911.7	6942.5	7208.9	7230.9
15°	6660.8	6731.2	6808.2	7116.4	7103.2
17.5°	6438.4	6535.3	6607.9	7004.1	7015.2
20°	6198.5	6253.5	6447.2	6830.3	6966.7
22.5°	5901.4	6009.2	6176.5	6654.2	6715.8
25°	5628.4	5740.7	5980.6	6462.7	6685.0
27.5°	5342.3	5445.7	5742.9	6235.9	6425.2
30°	5003.3	5141.9	5476.5	5978.4	6200.7
32.5°	4664.3	4866.8	5188.2	5703.2	5960.8
35°	4358.3	4527.8	4862.4	5392.9	5751.7
37.5°	4019.3	4197.6	4536.6	5053.9	5282.8
40°	3645.1	3836.7	4226.3	4644.5	4803.0
42.5°	3323.8	3488.9	3880.7	4175.6	4301.1
45°	2949.6	3145.5	3508.7	3720.0	3759.6
47.5°	2588.6	2813.1	3138.9	3237.9	3315.0
50°	2262.8	2438.9	2755.9	2817.5	2892.3
52.5°	1930.4	2117.5	2394.9	2456.5	2566.6
55°	1675.1	1778.6	2058.1	2157.2	2201.2
57.5°	1488.0	1554.0	1752.1	1877.6	1890.8
60°	1342.7	1375.7	1525.4	1620.1	1582.6
62.5°	1208.4	1234.9	1309.7	1382.3	1333.9
65°	1063.2	1080.8	1133.6	1188.6	1142.4
67.5°	926.7	946.5	994.9	1034.6	994.9
70°	801.2	816.6	869.5	887.1	862.9
72.5°	684.6	691.2	735.2	766.0	750.6
75°	565.7	570.1	614.1	640.5	636.1
77.5°	457.8	464.4	501.9	526.1	512.9
80°	354.4	358.8	383.0	418.2	409.4
82.5°	248.7	257.5	272.9	303.8	328.0
85°	149.7	154.1	162.9	193.7	226.7
87.5°	57.2	61.6	66.0	81.4	107.9
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	18.79	20.27	19.16	20.58	20.90	20.15	21.63	20.52	21.94	22.26
	3H	20.37	21.69	20.75	22.02	22.39	21.44	22.76	21.82	23.09	23.45
	4H	20.98	22.22	21.38	22.57	22.95	21.99	23.23	22.39	23.58	23.96
	6H	21.45	22.59	21.86	22.96	23.35	22.44	23.59	22.86	23.96	24.35
	8H	21.60	22.69	22.03	23.08	23.48	22.63	23.72	23.06	24.11	24.51
	12H	21.70	22.74	22.13	23.13	23.56	22.79	23.83	23.22	24.21	24.64
4H	2H	19.40	20.65	19.80	20.99	21.37	20.52	21.76	20.92	22.11	22.49
	3H	21.21	22.24	21.62	22.64	23.04	22.07	23.10	22.49	23.50	23.91
	4H	21.93	22.86	22.37	23.27	23.71	22.78	23.70	23.21	24.12	24.56
	6H	22.53	23.33	22.99	23.78	24.24	23.39	24.19	23.85	24.64	25.10
	8H	22.73	23.48	23.20	23.93	24.40	23.63	24.39	24.10	24.83	25.30
	12H	22.87	23.54	23.35	24.02	24.49	23.85	24.52	24.33	25.00	25.47
8H	4H	22.26	23.01	22.72	23.46	23.92	23.01	23.76	23.48	24.21	24.68
	6H	22.98	23.60	23.48	24.10	24.57	23.76	24.38	24.25	24.87	25.35
	8H	23.26	23.82	23.77	24.33	24.82	24.09	24.65	24.60	25.16	25.65
	12H	23.47	23.97	23.98	24.46	25.02	24.39	24.89	24.90	25.38	25.95
12H	4H	22.30	22.97	22.78	23.45	23.92	23.03	23.70	23.51	24.18	24.65
	6H	23.05	23.61	23.57	24.12	24.61	23.79	24.35	24.31	24.86	25.35
	8H	23.39	23.88	23.90	24.37	24.94	24.18	24.68	24.69	25.17	25.74