

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: P894821

Luminaire Tested: 8TMB-18HL-RFLW-UNV-L830

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894821
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2408-210-7)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 8TMB-18HL-RFLW-UNV-L830
Description: 18000 Lumen 8FT MICROBAY LINEAR BAY with REFLECTOR WITH WHITE FINISH, 80CRI, 3000K
Light Source: -
Ballast/Driver: -

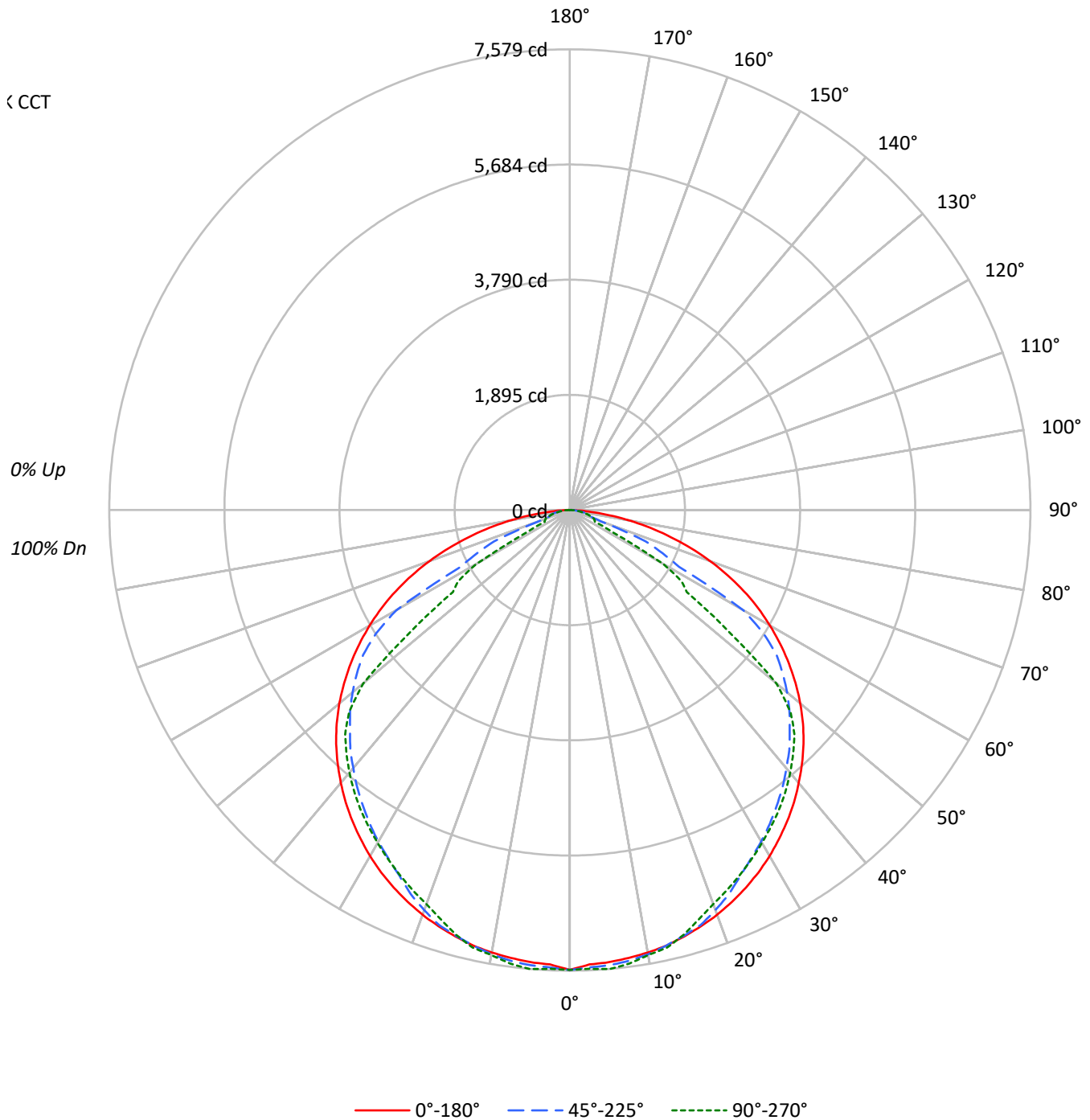
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19721.0 lumens
Efficiency: N/A
Efficacy: 146.3 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.25 / 1.38
Luminous Opening: Rectangular (W 0.21' x L: 7.98' x H: 0')
CIE Type: Direct

Input Watts (W): 134.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 8.62
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	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	102	102	100	
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	88	88	88	86	
2	101	93	87	82	98	91	85	81	88	83	79	85	81	77	82	78	75	75	75	75	73	
3	92	82	75	69	90	81	74	68	78	72	67	75	70	66	73	68	65	65	65	65	62	
4	85	73	65	59	82	72	64	58	70	63	57	67	61	57	65	60	56	56	56	56	54	
5	78	66	57	51	76	65	56	50	62	55	50	61	54	49	59	53	49	49	49	49	47	
6	72	59	51	44	70	58	50	44	56	49	44	55	48	43	53	48	43	43	43	43	41	
7	67	54	45	39	65	53	45	39	51	44	39	50	43	39	49	43	38	38	38	38	36	
8	62	49	41	35	61	48	40	35	47	40	35	46	39	35	45	39	34	34	34	34	32	
9	58	45	37	32	57	44	37	31	43	36	31	42	36	31	41	35	31	31	31	31	29	
10	54	42	34	29	53	41	34	29	40	33	28	39	33	28	38	32	28	28	28	28	26	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	48985	48985	48985
5°	48536	48853	49263
10°	48606	48790	48882
15°	48712	48603	48494
20°	48835	48273	47534
25°	48969	47420	47320
30°	49154	47098	47290
35°	49332	46918	47490
40°	49540	46861	47688
45°	49806	46838	47884
50°	49880	47015	44738
55°	49662	46872	26528
60°	49242	42720	23006
65°	48435	25824	6965
70°	46520	10239	7988
75°	43101	8399	8166
80°	37294	8868	7648
85°	26502	8314	7274

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 50°
 Luminance: 49880 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	716.6	3.6
10°-20°	2052.0	10.4
20°-30°	3101.0	15.7
30°-40°	3783.5	19.2
40°-50°	4002.2	20.3
50°-60°	3314.9	16.8
60°-70°	1842.8	9.3
70°-80°	747.0	3.8
80°-90°	161.1	0.8
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°	5869.5	29.8
0°-40°	9653.0	48.9
0°-60°	16970.2	86.1
0°-90°	19721.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	19721.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7565	7565	7565	7565	7565	
5°	7467	7600	7516	7527	7579	710
15°	7266	7378	7250	7245	7234	2052
25°	6854	6903	6637	6595	6623	3161
35°	6241	6164	5935	5958	6008	3907
45°	5439	5159	5115	5178	5229	4192
55°	4399	4101	4152	2849	2350	3930
65°	3161	2898	1685	566	455	3117
75°	1723	960	336	331	326	1819
85°	357	119	112	103	98	448
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7564.7	7564.7	7564.7	7564.7	7564.7
2.5°	7483.1	7613.6	7532.1	7548.4	7555.4
5°	7466.8	7599.7	7515.7	7527.4	7578.7
7.5°	7431.8	7567.0	7478.4	7485.4	7525.1
10°	7392.2	7515.7	7420.2	7408.5	7434.1
12.5°	7338.6	7450.5	7338.6	7343.2	7375.9
15°	7266.3	7378.2	7250.0	7245.3	7233.7
17.5°	7180.0	7284.9	7159.1	7084.5	7058.8
20°	7086.8	7168.4	7005.2	6891.0	6898.0
22.5°	6974.9	7044.8	6839.7	6734.8	6765.1
25°	6853.7	6902.6	6636.9	6594.9	6622.9
27.5°	6720.8	6758.1	6462.0	6452.7	6476.0
30°	6573.9	6587.9	6298.9	6294.2	6324.5
32.5°	6410.8	6387.4	6124.0	6128.7	6168.3
35°	6240.6	6163.6	5935.2	5958.5	6007.5
37.5°	6061.1	5923.5	5748.7	5779.0	5832.6
40°	5860.6	5674.1	5543.6	5590.2	5641.5
42.5°	5655.5	5413.0	5345.4	5389.7	5438.7
45°	5438.7	5158.9	5114.6	5177.6	5228.8
47.5°	5203.2	4909.5	4902.5	4951.4	4928.1
50°	4951.4	4650.7	4667.0	4601.8	4440.9
52.5°	4681.0	4382.6	4415.3	4133.2	3340.6
55°	4398.9	4100.6	4151.8	2848.7	2349.8
57.5°	4109.9	3811.5	3778.8	2179.7	2177.3
60°	3802.2	3517.8	3298.6	1925.6	1776.4
62.5°	3492.1	3212.4	2025.8	1450.0	815.9
65°	3161.1	2897.7	1685.4	566.5	454.6
67.5°	2813.7	2578.3	1349.8	426.6	442.9
70°	2457.1	2247.3	540.8	412.6	421.9
72.5°	2093.4	1734.4	359.0	382.3	382.3
75°	1722.7	960.4	335.7	331.0	326.4
77.5°	1354.4	643.4	293.7	272.7	265.8
80°	1000.1	230.8	237.8	212.1	205.1
82.5°	662.1	179.5	170.2	153.9	149.2
85°	356.7	118.9	111.9	102.6	97.9
87.5°	128.2	60.6	60.6	49.0	44.3
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	26.20	27.77	26.56	28.08	28.40	22.19	23.76	22.55	24.07	24.39
	3H	28.20	29.61	28.58	29.94	30.30	22.32	23.73	22.70	24.06	24.42
	4H	28.82	30.14	29.22	30.48	30.86	22.44	23.76	22.84	24.11	24.48
	6H	29.22	30.43	29.63	30.80	31.19	22.55	23.76	22.96	24.13	24.52
	8H	29.34	30.50	29.76	30.89	31.29	22.58	23.74	23.01	24.13	24.53
	12H	29.41	30.52	29.84	30.90	31.33	22.60	23.71	23.03	24.10	24.53
4H	2H	26.33	27.65	26.73	27.99	28.37	22.91	24.23	23.31	24.58	24.96
	3H	28.49	29.58	28.90	29.98	30.38	23.11	24.20	23.52	24.60	25.00
	4H	29.14	30.12	29.57	30.53	30.97	23.27	24.24	23.70	24.66	25.10
	6H	29.59	30.44	30.04	30.88	31.34	23.43	24.28	23.89	24.72	25.18
	8H	29.73	30.52	30.19	30.97	31.43	23.48	24.28	23.95	24.72	25.19
	12H	29.83	30.54	30.31	31.02	31.49	23.53	24.24	24.01	24.72	25.19
8H	4H	29.08	29.87	29.54	30.31	30.78	23.54	24.33	24.00	24.77	25.24
	6H	29.52	30.18	30.02	30.67	31.14	23.75	24.40	24.24	24.89	25.37
	8H	29.67	30.26	30.18	30.77	31.25	23.83	24.42	24.34	24.93	25.41
	12H	29.80	30.32	30.31	30.81	31.38	23.91	24.44	24.42	24.93	25.49
12H	4H	29.05	29.76	29.53	30.24	30.71	23.55	24.26	24.03	24.74	25.21
	6H	29.48	30.07	29.99	30.58	31.07	23.76	24.35	24.27	24.86	25.35
	8H	29.65	30.17	30.16	30.67	31.23	23.89	24.41	24.39	24.90	25.46