

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: P894827

Luminaire Tested: 8TMB-18HL-RFLW-UNV-L940

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894827
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-L940
Description: 18000 Lumen 8FT MICROBAY LINEAR BAY with REFLECTOR WITH WHITE FINISH, 90CRI, 4000K
Light Source: -
Ballast/Driver: -

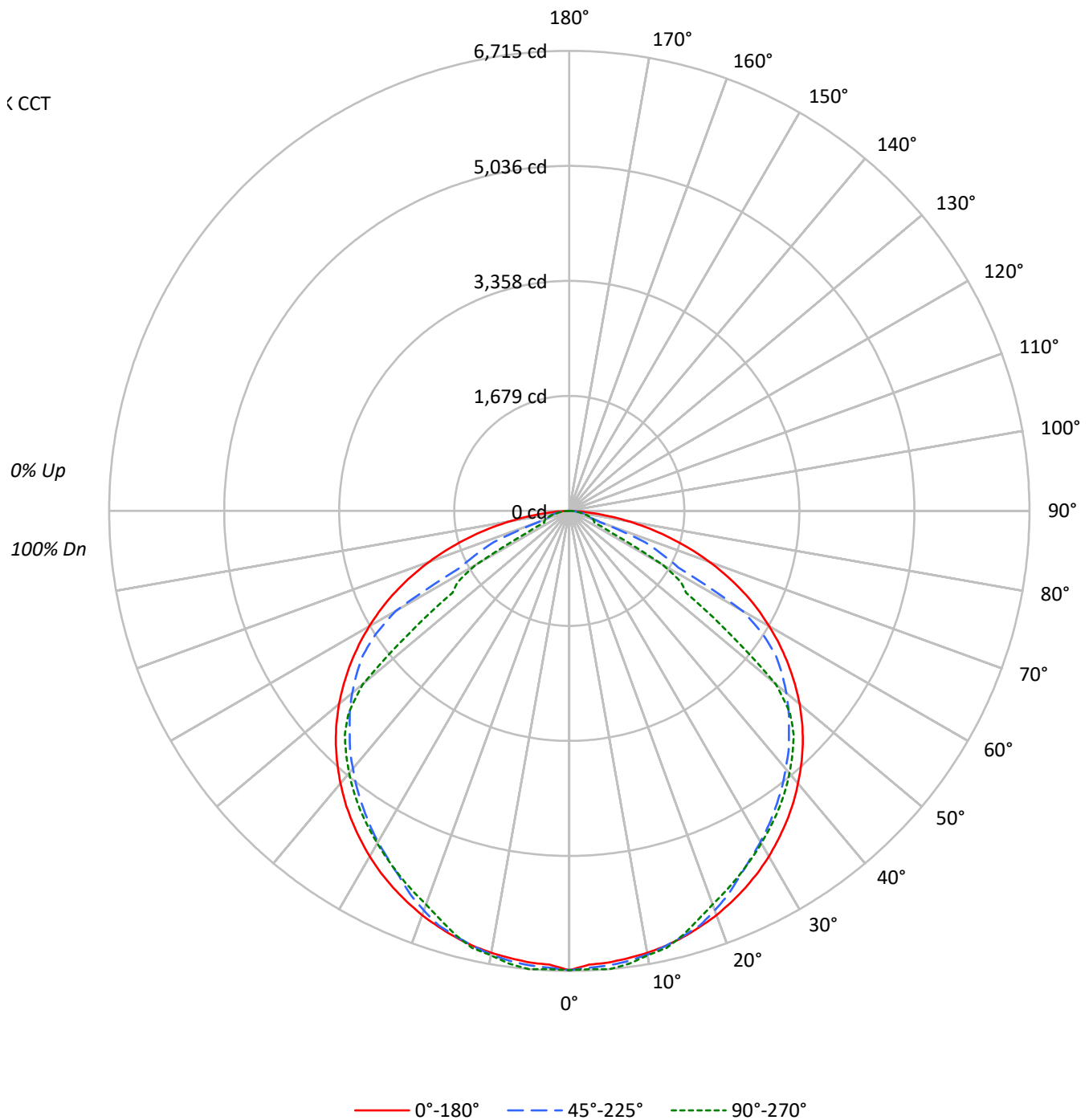
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17474.0 lumens
Efficiency: N/A
Efficacy: 129.6 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 (Ain): 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°	43404	43404	43404
5°	43005	43287	43650
10°	43068	43231	43312
15°	43162	43065	42969
20°	43271	42773	42118
25°	43389	42017	41928
30°	43554	41732	41902
35°	43711	41572	42079
40°	43895	41521	42255
45°	44131	41502	42428
50°	44198	41659	39640
55°	44003	41532	23506
60°	43630	37853	20385
65°	42916	22882	6172
70°	41219	9073	7079
75°	38192	7441	7236
80°	33043	7857	6779
85°	23478	7363	6449

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 50°
 Luminance: 44198 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	634.9	3.6
10°-20°	1818.2	10.4
20°-30°	2747.7	15.7
30°-40°	3352.4	19.2
40°-50°	3546.2	20.3
50°-60°	2937.2	16.8
60°-70°	1632.8	9.3
70°-80°	661.9	3.8
80°-90°	142.7	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°	5200.8	29.8
0°-40°	8553.2	48.9
0°-60°	15036.6	86.1
0°-90°	17474.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	17474.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6703	6703	6703	6703	6703	
5°	6616	6734	6659	6670	6715	629
15°	6438	6538	6424	6420	6410	1819
25°	6073	6116	5881	5844	5868	2801
35°	5530	5461	5259	5280	5323	3461
45°	4819	4571	4532	4588	4633	3715
55°	3898	3633	3679	2524	2082	3482
65°	2801	2568	1493	502	403	2762
75°	1526	851	297	293	289	1612
85°	316	105	99	91	87	397
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6702.8	6702.8	6702.8	6702.8	6702.8
2.5°	6630.5	6746.2	6673.9	6688.3	6694.5
5°	6616.0	6733.8	6659.4	6669.7	6715.2
7.5°	6585.0	6704.8	6626.3	6632.5	6667.7
10°	6549.9	6659.4	6574.7	6564.4	6587.1
12.5°	6502.4	6601.6	6502.4	6506.5	6535.5
15°	6438.4	6537.5	6423.9	6419.8	6409.5
17.5°	6362.0	6454.9	6343.4	6277.3	6254.5
20°	6279.3	6351.6	6207.0	6105.8	6112.0
22.5°	6180.2	6242.2	6060.4	5967.4	5994.3
25°	6072.8	6116.2	5880.7	5843.5	5868.3
27.5°	5955.0	5988.1	5725.8	5717.5	5738.2
30°	5824.9	5837.3	5581.2	5577.0	5603.9
32.5°	5680.3	5659.7	5426.3	5430.4	5465.5
35°	5529.5	5461.4	5258.9	5279.6	5323.0
37.5°	5370.5	5248.6	5093.7	5120.5	5168.1
40°	5192.8	5027.6	4911.9	4953.2	4998.7
42.5°	5011.1	4796.3	4736.4	4775.6	4819.0
45°	4819.0	4571.1	4531.9	4587.6	4633.1
47.5°	4610.4	4350.1	4343.9	4387.3	4366.6
50°	4387.3	4120.8	4135.3	4077.4	3934.9
52.5°	4147.7	3883.3	3912.2	3662.3	2960.0
55°	3897.7	3633.3	3678.8	2524.1	2082.1
57.5°	3641.6	3377.2	3348.3	1931.3	1929.2
60°	3368.9	3116.9	2922.8	1706.2	1574.0
62.5°	3094.2	2846.4	1795.0	1284.8	722.9
65°	2800.9	2567.5	1493.4	501.9	402.8
67.5°	2493.1	2284.5	1196.0	378.0	392.5
70°	2177.1	1991.2	479.2	365.6	373.9
72.5°	1854.9	1536.8	318.1	338.8	338.8
75°	1526.5	851.0	297.4	293.3	289.2
77.5°	1200.1	570.1	260.3	241.7	235.5
80°	886.1	204.5	210.7	188.0	181.8
82.5°	586.6	159.0	150.8	136.3	132.2
85°	316.0	105.3	99.1	90.9	86.8
87.5°	113.6	53.7	53.7	43.4	39.2
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	25.78	27.35	26.14	27.66	27.98	21.77	23.34	22.13	23.65	23.97
	3H	27.78	29.19	28.16	29.52	29.88	21.90	23.31	22.28	23.63	24.00
	4H	28.40	29.72	28.80	30.06	30.44	22.02	23.34	22.42	23.69	24.06
	6H	28.80	30.01	29.21	30.38	30.77	22.13	23.34	22.54	23.71	24.10
	8H	28.92	30.08	29.34	30.46	30.87	22.16	23.32	22.59	23.71	24.11
	12H	28.99	30.10	29.42	30.48	30.91	22.18	23.29	22.61	23.68	24.10
4H	2H	25.91	27.23	26.31	27.57	27.95	22.49	23.81	22.89	24.16	24.54
	3H	28.07	29.16	28.48	29.56	29.96	22.69	23.78	23.10	24.18	24.58
	4H	28.72	29.70	29.15	30.11	30.55	22.85	23.82	23.28	24.24	24.68
	6H	29.17	30.02	29.62	30.46	30.92	23.01	23.86	23.47	24.30	24.76
	8H	29.31	30.10	29.77	30.54	31.01	23.06	23.86	23.53	24.30	24.77
	12H	29.41	30.12	29.89	30.60	31.07	23.11	23.82	23.59	24.30	24.77
8H	4H	28.66	29.45	29.12	29.89	30.36	23.12	23.91	23.58	24.35	24.82
	6H	29.10	29.76	29.60	30.25	30.72	23.33	23.98	23.82	24.47	24.95
	8H	29.25	29.84	29.76	30.35	30.83	23.41	24.00	23.92	24.51	24.99
	12H	29.38	29.90	29.89	30.39	30.96	23.49	24.02	24.00	24.51	25.07
12H	4H	28.63	29.34	29.11	29.82	30.29	23.13	23.84	23.61	24.32	24.79
	6H	29.06	29.65	29.57	30.16	30.65	23.34	23.93	23.85	24.44	24.93
	8H	29.23	29.75	29.74	30.25	30.81	23.47	23.99	23.97	24.48	25.04