

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: P894815

Luminaire Tested: 8TMB-18HL-LVRF-UNV-L840

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894815
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-18HL-LVRF-UNV-L840
Description: 18000 Lumen 8FT MICROBAY LINEAR BAY with LOUVER WITH FROSTED INLAY, 80CRI, 4000K (C)
Light Source: -
Ballast/Driver: -

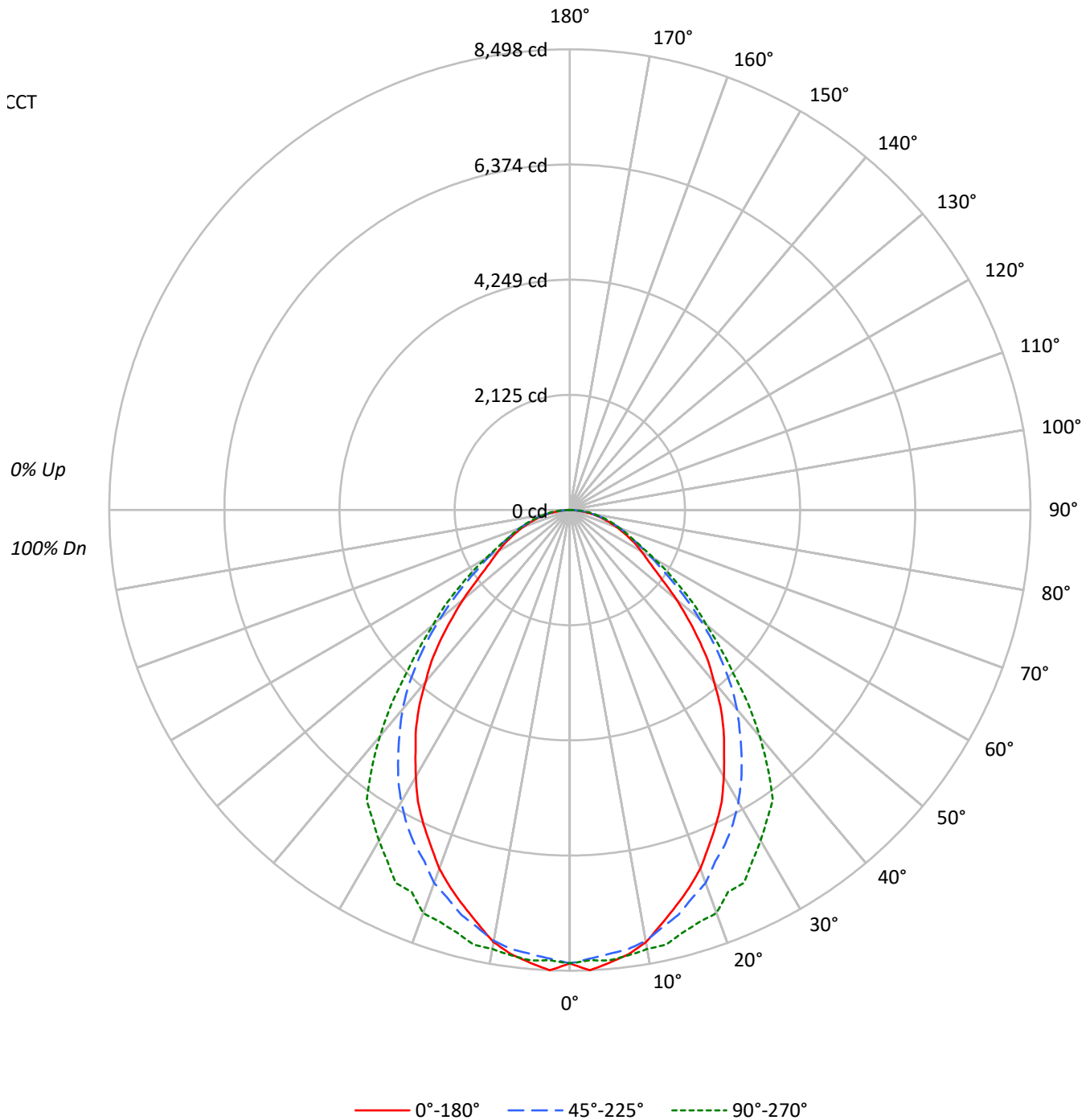
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16952.0 lumens
Efficiency: N/A
Efficacy: 125.8 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): 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
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°	29665	29665	29665
5°	29858	29280	29698
10°	29159	29069	29627
15°	27782	28398	29628
20°	26576	27643	29870
25°	25021	26586	29717
30°	23276	25478	28847
35°	21436	23915	28289
40°	19171	22228	25261
45°	16806	19992	21422
50°	14183	17273	18129
55°	11766	14457	15462
60°	10820	12291	12753
65°	10135	10807	10891
70°	9438	10242	10164
75°	8807	9559	9902
80°	8222	8886	9499
85°	6921	7531	10479

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 21422 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	789.2	4.7
10°-20°	2201.3	13.0
20°-30°	3170.2	18.7
30°-40°	3499.9	20.6
40°-50°	3003.1	17.7
50°-60°	2045.9	12.1
60°-70°	1287.0	7.6
70°-80°	732.7	4.3
80°-90°	222.7	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°	6160.6	36.3
0°-40°	9660.5	57.0
0°-60°	14709.5	86.8
0°-90°	16952.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	16952.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8361	8361	8361	8361	8361	
5°	8383	8351	8221	8393	8338	791
15°	7563	7643	7731	8081	8066	2129
25°	6391	6519	6791	7338	7591	2935
35°	4949	5141	5521	6124	6531	3078
45°	3349	3572	3984	4224	4269	2581
55°	1902	2020	2337	2450	2500	1748
65°	1207	1227	1287	1350	1297	1199
75°	642	647	697	727	722	685
85°	170	175	185	220	257	195
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	8360.7	8360.7	8360.7	8360.7	8360.7
2.5°	8498.1	8410.7	8285.7	8405.7	8313.2
5°	8383.2	8350.7	8220.7	8393.2	8338.2
7.5°	8265.7	8195.7	8173.2	8358.2	8285.7
10°	8093.2	8053.2	8068.2	8305.7	8223.2
12.5°	7820.8	7848.3	7883.3	8185.7	8210.7
15°	7563.3	7643.3	7730.8	8080.7	8065.7
17.5°	7310.9	7420.9	7503.4	7953.3	7965.8
20°	7038.5	7100.9	7320.9	7755.8	7910.8
22.5°	6701.0	6823.5	7013.5	7555.8	7625.8
25°	6391.1	6518.6	6791.0	7338.4	7590.8
27.5°	6066.2	6183.6	6521.1	7081.0	7295.9
30°	5681.3	5838.7	6218.6	6788.5	7041.0
32.5°	5296.3	5526.3	5891.2	6476.1	6768.5
35°	4948.9	5141.4	5521.3	6123.7	6531.1
37.5°	4564.0	4766.5	5151.4	5738.7	5998.7
40°	4139.1	4356.5	4799.0	5273.8	5453.8
42.5°	3774.2	3961.6	4406.5	4741.5	4883.9
45°	3349.3	3571.7	3984.1	4224.1	4269.1
47.5°	2939.4	3194.3	3564.2	3676.7	3764.2
50°	2569.4	2769.4	3129.3	3199.3	3284.3
52.5°	2192.0	2404.5	2719.4	2789.4	2914.4
55°	1902.1	2019.6	2337.0	2449.5	2499.5
57.5°	1689.6	1764.6	1989.6	2132.0	2147.0
60°	1524.7	1562.2	1732.1	1839.6	1797.1
62.5°	1372.2	1402.2	1487.2	1569.7	1514.7
65°	1207.2	1227.2	1287.2	1349.7	1297.2
67.5°	1052.3	1074.8	1129.8	1174.7	1129.8
70°	909.8	927.3	987.3	1007.3	979.8
72.5°	777.3	784.8	834.8	869.8	852.3
75°	642.4	647.4	697.3	727.3	722.3
77.5°	519.9	527.4	569.9	597.4	582.4
80°	402.4	407.4	434.9	474.9	464.9
82.5°	282.4	292.4	309.9	344.9	372.4
85°	170.0	175.0	185.0	220.0	257.4
87.5°	65.0	70.0	75.0	92.5	122.5
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	19.23	20.71	19.60	21.03	21.34	20.59	22.07	20.96	22.39	22.70
	3H	20.81	22.14	21.19	22.46	22.83	21.88	23.20	22.26	23.53	23.89
	4H	21.42	22.66	21.82	23.01	23.39	22.43	23.67	22.83	24.02	24.40
	6H	21.89	23.03	22.30	23.40	23.79	22.88	24.03	23.30	24.40	24.79
	8H	22.04	23.13	22.47	23.52	23.93	23.07	24.16	23.50	24.55	24.95
	12H	22.14	23.19	22.57	23.57	24.00	23.23	24.27	23.66	24.65	25.08
4H	2H	19.85	21.09	20.25	21.44	21.82	20.96	22.20	21.36	22.55	22.93
	3H	21.65	22.68	22.06	23.08	23.48	22.52	23.54	22.93	23.95	24.35
	4H	22.37	23.30	22.81	23.72	24.16	23.22	24.15	23.65	24.56	25.00
	6H	22.97	23.78	23.43	24.22	24.68	23.83	24.63	24.29	25.08	25.54
	8H	23.17	23.93	23.64	24.37	24.84	24.08	24.83	24.54	25.27	25.74
	12H	23.31	23.98	23.79	24.46	24.93	24.29	24.96	24.77	25.44	25.91
8H	4H	22.70	23.45	23.16	23.90	24.37	23.45	24.21	23.92	24.65	25.12
	6H	23.42	24.05	23.92	24.54	25.02	24.20	24.82	24.70	25.31	25.79
	8H	23.70	24.26	24.22	24.77	25.26	24.53	25.09	25.04	25.60	26.09
	12H	23.91	24.41	24.42	24.90	25.47	24.84	25.33	25.35	25.82	26.39
12H	4H	22.74	23.41	23.22	23.89	24.36	23.47	24.14	23.95	24.62	25.09
	6H	23.49	24.05	24.01	24.56	25.05	24.23	24.80	24.75	25.31	25.79
	8H	23.83	24.32	24.34	24.82	25.38	24.62	25.12	25.13	25.61	26.18