

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: P894688

Luminaire Tested: 8TMB-16HL-FLT-UNV-L850

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894688
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2403-334-4)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 8TMB-16HL-FLT-UNV-L850
Description: 16000 Lumen 8FT MICROBAY LINEAR BAY with FLAT FROSTED LENS, 80CRI, 5000K CCT
Light Source: -
Ballast/Driver: -

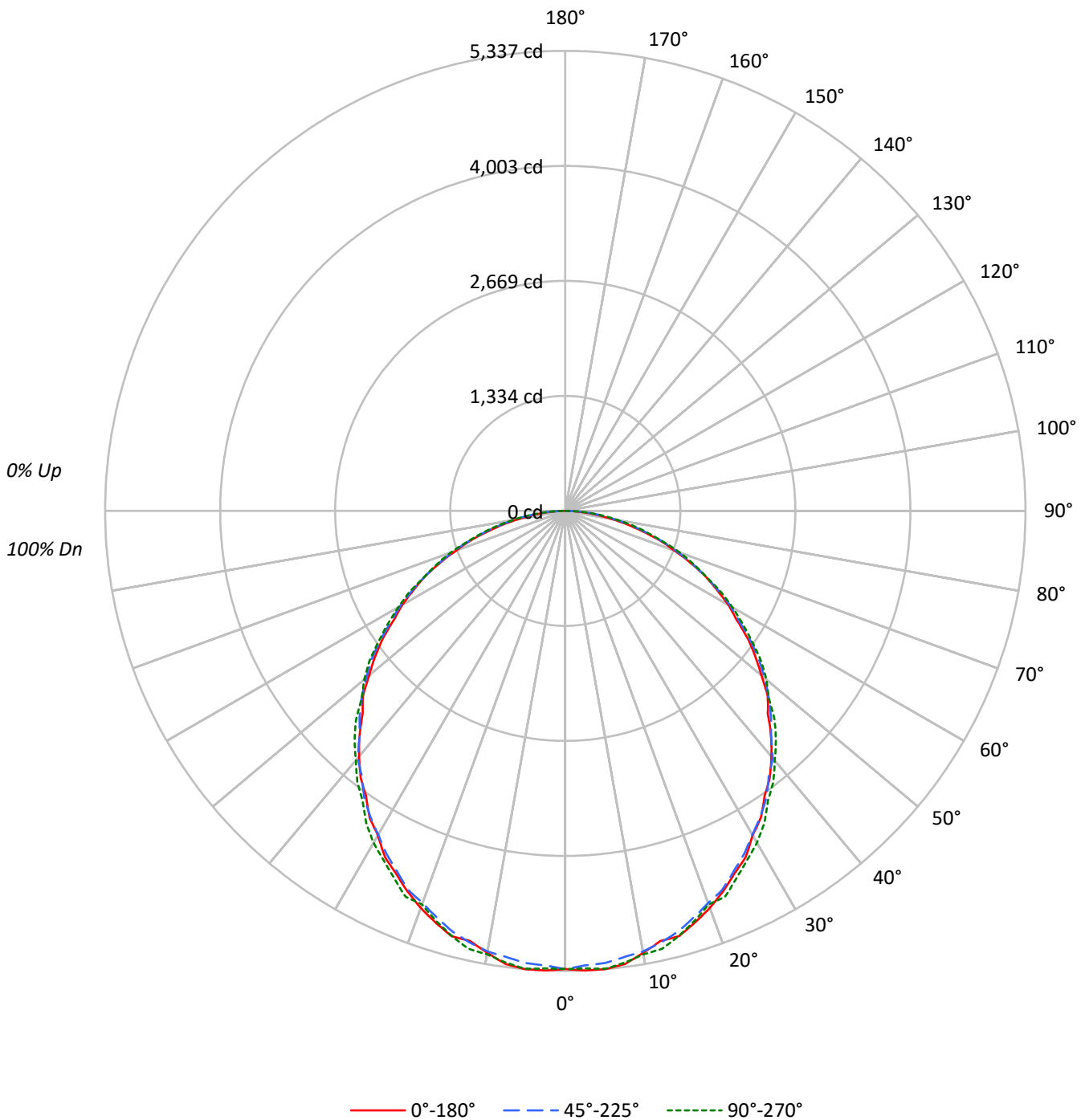
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14725.0 lumens
Efficiency: N/A
Efficacy: 127.2 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.24 / 1.34
Luminous Opening: Rectangular (W 0.38' x L: 7.98' x H: 0')
CIE Type: Direct

Input Watts (W): 115.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: 0.999
Total Harmonic Distortion (THDi): 4.23
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				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	109	104	99	96	106	102	98	94	97	94	91	93	91	88	90	88	86	86	86	86	84
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	72	72	72	70
3	90	79	71	65	88	78	70	64	75	68	63	72	67	62	69	65	61	61	61	61	59
4	82	70	62	55	80	69	61	54	67	59	54	64	58	53	62	57	52	52	52	52	50
5	76	63	54	47	74	62	53	47	60	52	46	58	51	46	56	50	45	45	45	45	43
6	70	57	48	41	68	56	47	41	54	46	41	52	45	40	51	45	40	40	40	40	38
7	65	51	43	36	63	51	42	36	49	41	36	48	41	36	46	40	35	35	35	35	33
8	60	47	38	33	59	46	38	32	45	37	32	44	37	32	42	36	32	32	32	32	30
9	57	43	35	29	55	42	35	29	41	34	29	40	34	29	39	33	29	29	29	29	27
10	53	40	32	27	52	39	32	26	38	31	26	37	31	26	36	30	26	26	26	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	18856	18856	18856
5°	19010	18756	18993
10°	18750	18700	18824
15°	18754	18560	18737
20°	18506	18280	18350
25°	18172	18073	18397
30°	17804	17776	18218
35°	17461	17610	17759
40°	17225	17331	17502
45°	16668	16921	17232
50°	16397	16638	16803
55°	15990	16189	16359
60°	15492	15720	15867
65°	15033	15091	15091
70°	13979	14313	14670
75°	12871	13374	13658
80°	11350	12335	12758
85°	10186	11403	12242

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 17232 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	503.0	3.4
10°-20°	1433.5	9.7
20°-30°	2150.2	14.6
30°-40°	2553.7	17.3
40°-50°	2614.6	17.8
50°-60°	2342.6	15.9
60°-70°	1779.6	12.1
70°-80°	1036.5	7.0
80°-90°	311.3	2.1
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°	4086.7	27.8
0°-40°	6640.5	45.1
0°-60°	11597.7	78.8
0°-90°	14725.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	14725.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5314	5314	5314	5314	5314	
5°	5337	5317	5266	5298	5333	505
15°	5105	5140	5053	5073	5101	1433
25°	4642	4683	4616	4676	4699	2142
35°	4031	4121	4066	4082	4100	2534
45°	3322	3404	3372	3400	3434	2583
55°	2585	2624	2617	2647	2644	2303
65°	1791	1791	1798	1820	1798	1758
75°	939	955	976	1006	996	1000
85°	250	255	280	298	301	280
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5314.3	5314.3	5314.3	5314.3	5314.3
2.5°	5337.3	5312.0	5277.6	5289.1	5312.0
5°	5337.3	5316.6	5266.1	5298.2	5332.7
7.5°	5302.8	5330.4	5220.2	5220.2	5284.5
10°	5204.1	5256.9	5190.3	5183.5	5224.8
12.5°	5110.0	5206.4	5128.4	5151.3	5201.8
15°	5105.4	5139.8	5052.6	5073.3	5100.8
17.5°	5006.7	5041.1	4947.0	4986.0	4986.0
20°	4901.1	4908.0	4841.4	4926.4	4859.8
22.5°	4779.4	4850.6	4758.8	4786.3	4843.7
25°	4641.7	4683.0	4616.4	4676.1	4699.1
27.5°	4529.2	4579.7	4487.9	4559.1	4565.9
30°	4345.6	4400.7	4338.7	4384.6	4446.6
32.5°	4221.6	4240.0	4207.8	4276.7	4295.1
35°	4031.1	4120.6	4065.5	4081.6	4099.9
37.5°	3897.9	3925.5	3877.3	3932.4	3962.2
40°	3718.9	3760.2	3741.8	3751.0	3778.6
42.5°	3532.9	3576.5	3528.3	3594.9	3615.6
45°	3321.7	3404.4	3372.2	3399.8	3434.2
47.5°	3184.0	3211.5	3202.4	3218.4	3195.5
50°	2970.5	2998.1	3014.1	3034.8	3044.0
52.5°	2780.0	2800.6	2830.5	2842.0	2862.6
55°	2584.8	2623.9	2617.0	2646.8	2644.5
57.5°	2357.6	2415.0	2396.6	2440.2	2440.2
60°	2183.1	2192.3	2215.3	2235.9	2235.9
62.5°	1981.1	1992.6	2004.1	2022.4	2036.2
65°	1790.6	1790.6	1797.5	1820.4	1797.5
67.5°	1570.2	1561.0	1584.0	1611.5	1609.2
70°	1347.5	1359.0	1379.7	1414.1	1414.1
72.5°	1157.0	1157.0	1179.9	1198.3	1196.0
75°	938.9	955.0	975.6	1005.5	996.3
77.5°	743.8	755.3	789.7	817.2	819.5
80°	555.5	567.0	603.7	631.3	624.4
82.5°	388.0	404.0	438.5	459.1	456.8
85°	250.2	254.8	280.1	298.4	300.7
87.5°	114.8	124.0	142.3	149.2	149.2
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	21.73	23.37	22.10	23.69	24.00	21.84	23.48	22.20	23.79	24.10
	3H	23.51	25.00	23.89	25.32	25.68	23.68	25.16	24.05	25.48	25.84
	4H	24.18	25.57	24.57	25.92	26.30	24.37	25.77	24.77	26.12	26.49
	6H	24.65	25.95	25.06	26.31	26.70	24.92	26.22	25.33	26.58	26.97
	8H	24.80	26.04	25.22	26.43	26.83	25.11	26.35	25.54	26.74	27.14
	12H	24.91	26.09	25.34	26.48	26.90	25.26	26.44	25.68	26.82	27.25
4H	2H	22.38	23.77	22.78	24.12	24.50	22.46	23.86	22.86	24.21	24.58
	3H	24.38	25.55	24.79	25.95	26.35	24.52	25.70	24.93	26.09	26.49
	4H	25.17	26.23	25.60	26.65	27.08	25.36	26.42	25.79	26.84	27.27
	6H	25.77	26.70	26.22	27.14	27.60	26.05	26.98	26.50	27.42	27.88
	8H	25.97	26.84	26.43	27.28	27.75	26.30	27.17	26.76	27.61	28.07
	12H	26.12	26.90	26.60	27.38	27.85	26.49	27.28	26.97	27.75	28.22
8H	4H	25.51	26.38	25.97	26.82	27.28	25.68	26.55	26.13	26.99	27.45
	6H	26.23	26.96	26.72	27.44	27.92	26.50	27.22	26.99	27.71	28.19
	8H	26.50	27.15	27.01	27.66	28.14	26.83	27.48	27.34	27.99	28.47
	12H	26.73	27.31	27.24	27.80	28.36	27.12	27.70	27.63	28.19	28.75
12H	4H	25.55	26.33	26.03	26.81	27.28	25.71	26.49	26.19	26.97	27.44
	6H	26.30	26.96	26.81	27.46	27.95	26.56	27.21	27.07	27.71	28.20
	8H	26.64	27.21	27.14	27.70	28.26	26.95	27.53	27.46	28.02	28.58