

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: P894685

Luminaire Tested: 8TMB-16HL-FLT-UNV-L830

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894685
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-L830
Description: 16000 Lumen 8FT MICROBAY LINEAR BAY with FLAT FROSTED LENS, 80CRI, 3000K CCT
Light Source: -
Ballast/Driver: -

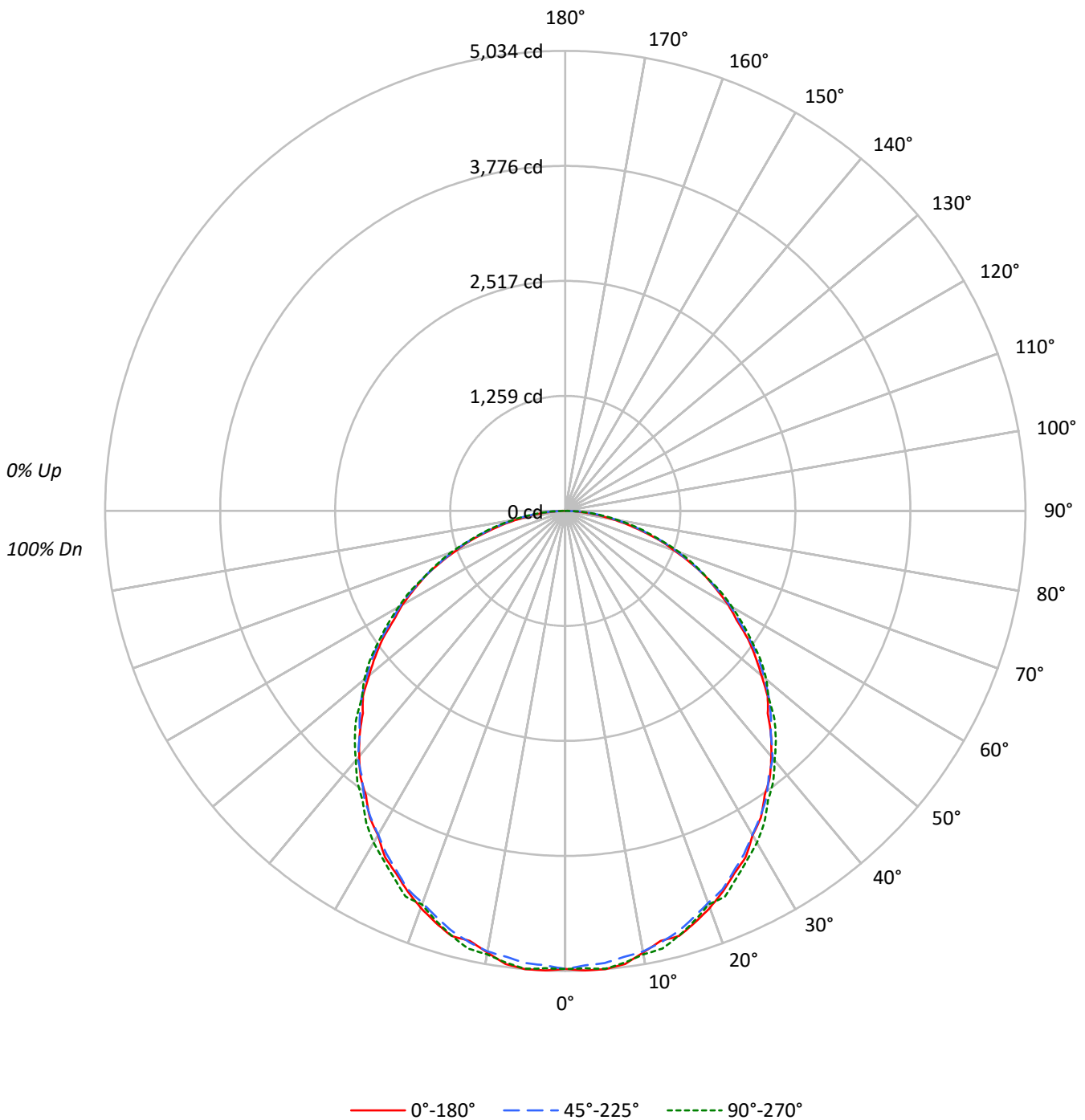
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13887.0 lumens
Efficiency: N/A
Efficacy: 119.9 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 (Ain): 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

TEST NUMBER: P894685
CATALOG NUMBER: 8TMB-16HL-FLT-UNV-L830

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°	17783	17783	17783
5°	17928	17689	17912
10°	17683	17636	17753
15°	17687	17504	17670
20°	17453	17240	17305
25°	17138	17044	17350
30°	16791	16764	17181
35°	16467	16607	16748
40°	16245	16345	16505
45°	15719	15958	16252
50°	15464	15691	15846
55°	15080	15268	15428
60°	14611	14826	14964
65°	14178	14232	14232
70°	13183	13498	13835
75°	12139	12614	12881
80°	10705	11634	12033
85°	9608	10752	11545

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 16252 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	474.4	3.4
10°-20°	1352.0	9.7
20°-30°	2027.8	14.6
30°-40°	2408.4	17.3
40°-50°	2465.8	17.8
50°-60°	2209.2	15.9
60°-70°	1678.3	12.1
70°-80°	977.5	7.0
80°-90°	293.6	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°	3854.2	27.8
0°-40°	6262.5	45.1
0°-60°	10937.6	78.8
0°-90°	13887.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13887.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5012	5012	5012	5012	5012	
5°	5034	5014	4966	4997	5029	477
15°	4815	4847	4765	4785	4810	1351
25°	4378	4416	4354	4410	4432	2020
35°	3802	3886	3834	3849	3867	2390
45°	3133	3211	3180	3206	3239	2436
55°	2438	2474	2468	2496	2494	2172
65°	1689	1689	1695	1717	1695	1658
75°	886	901	920	948	940	943
85°	236	240	264	281	284	264
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5011.9	5011.9	5011.9	5011.9	5011.9
2.5°	5033.5	5009.7	4977.2	4988.1	5009.7
5°	5033.5	5014.0	4966.4	4996.7	5029.2
7.5°	5001.0	5027.0	4923.1	4923.1	4983.7
10°	4908.0	4957.8	4895.0	4888.5	4927.4
12.5°	4819.2	4910.1	4836.5	4858.2	4905.8
15°	4814.9	4847.3	4765.1	4784.6	4810.5
17.5°	4721.8	4754.2	4665.5	4702.3	4702.3
20°	4622.2	4628.7	4565.9	4646.0	4583.2
22.5°	4507.4	4574.6	4488.0	4513.9	4568.1
25°	4377.5	4416.5	4353.7	4410.0	4431.7
27.5°	4271.5	4319.1	4232.5	4299.6	4306.1
30°	4098.3	4150.2	4091.8	4135.1	4193.5
32.5°	3981.4	3998.7	3968.4	4033.3	4050.6
35°	3801.7	3886.1	3834.1	3849.3	3866.6
37.5°	3676.1	3702.1	3656.6	3708.6	3736.7
40°	3507.2	3546.2	3528.9	3537.5	3563.5
42.5°	3331.9	3373.0	3327.5	3390.3	3409.8
45°	3132.7	3210.6	3180.3	3206.3	3238.8
47.5°	3002.8	3028.8	3020.1	3035.3	3013.6
50°	2801.5	2827.4	2842.6	2862.1	2870.7
52.5°	2621.8	2641.2	2669.4	2680.2	2699.7
55°	2437.7	2474.5	2468.1	2496.2	2494.0
57.5°	2223.4	2277.5	2260.2	2301.3	2301.3
60°	2058.9	2067.5	2089.2	2108.7	2108.7
62.5°	1868.4	1879.2	1890.0	1907.3	1920.3
65°	1688.7	1688.7	1695.2	1716.8	1695.2
67.5°	1480.8	1472.2	1493.8	1519.8	1517.6
70°	1270.8	1281.7	1301.1	1333.6	1333.6
72.5°	1091.1	1091.1	1112.8	1130.1	1127.9
75°	885.5	900.6	920.1	948.3	939.6
77.5°	701.4	712.3	744.7	770.7	772.9
80°	523.9	534.7	569.4	595.4	588.9
82.5°	365.9	381.0	413.5	433.0	430.8
85°	236.0	240.3	264.1	281.4	283.6
87.5°	108.2	116.9	134.2	140.7	140.7
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	21.53	23.17	21.89	23.48	23.80	21.63	23.27	22.00	23.59	23.90
	3H	23.31	24.79	23.69	25.12	25.48	23.47	24.95	23.85	25.28	25.64
	4H	23.97	25.37	24.37	25.72	26.09	24.17	25.57	24.57	25.91	26.29
	6H	24.45	25.74	24.86	26.11	26.50	24.72	26.01	25.13	26.38	26.77
	8H	24.60	25.84	25.02	26.22	26.62	24.91	26.15	25.33	26.54	26.93
	12H	24.70	25.89	25.13	26.27	26.70	25.05	26.24	25.48	26.62	27.05
4H	2H	22.17	23.57	22.57	23.92	24.29	22.26	23.65	22.65	24.00	24.38
	3H	24.18	25.35	24.59	25.75	26.15	24.32	25.49	24.73	25.89	26.29
	4H	24.97	26.03	25.40	26.44	26.88	25.16	26.22	25.59	26.63	27.07
	6H	25.57	26.50	26.02	26.94	27.39	25.85	26.78	26.30	27.22	27.67
	8H	25.76	26.64	26.22	27.08	27.54	26.09	26.96	26.55	27.41	27.87
	12H	25.92	26.70	26.40	27.17	27.64	26.29	27.07	26.77	27.55	28.02
8H	4H	25.30	26.17	25.76	26.62	27.08	25.47	26.34	25.93	26.78	27.25
	6H	26.03	26.75	26.52	27.24	27.71	26.29	27.02	26.79	27.51	27.98
	8H	26.30	26.95	26.81	27.46	27.94	26.63	27.28	27.14	27.78	28.27
	12H	26.53	27.10	27.03	27.59	28.15	26.92	27.49	27.42	27.98	28.54
12H	4H	25.35	26.13	25.83	26.61	27.07	25.50	26.29	25.98	26.76	27.23
	6H	26.10	26.75	26.61	27.26	27.74	26.35	27.01	26.86	27.51	28.00
	8H	26.43	27.01	26.94	27.50	28.06	26.75	27.33	27.26	27.82	28.38