

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: P894711

Luminaire Tested: 8TMB-16HL-LVRA-UNV-L840

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894711
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-077-26)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 8TMB-16HL-LVRA-UNV-L840
Description: 16000 Lumen 8FT MICROBAY LINEAR BAY with LOUVER WITH AISLE OPTIC, 80CRI, 4000K CCT
Light Source: -
Ballast/Driver: -

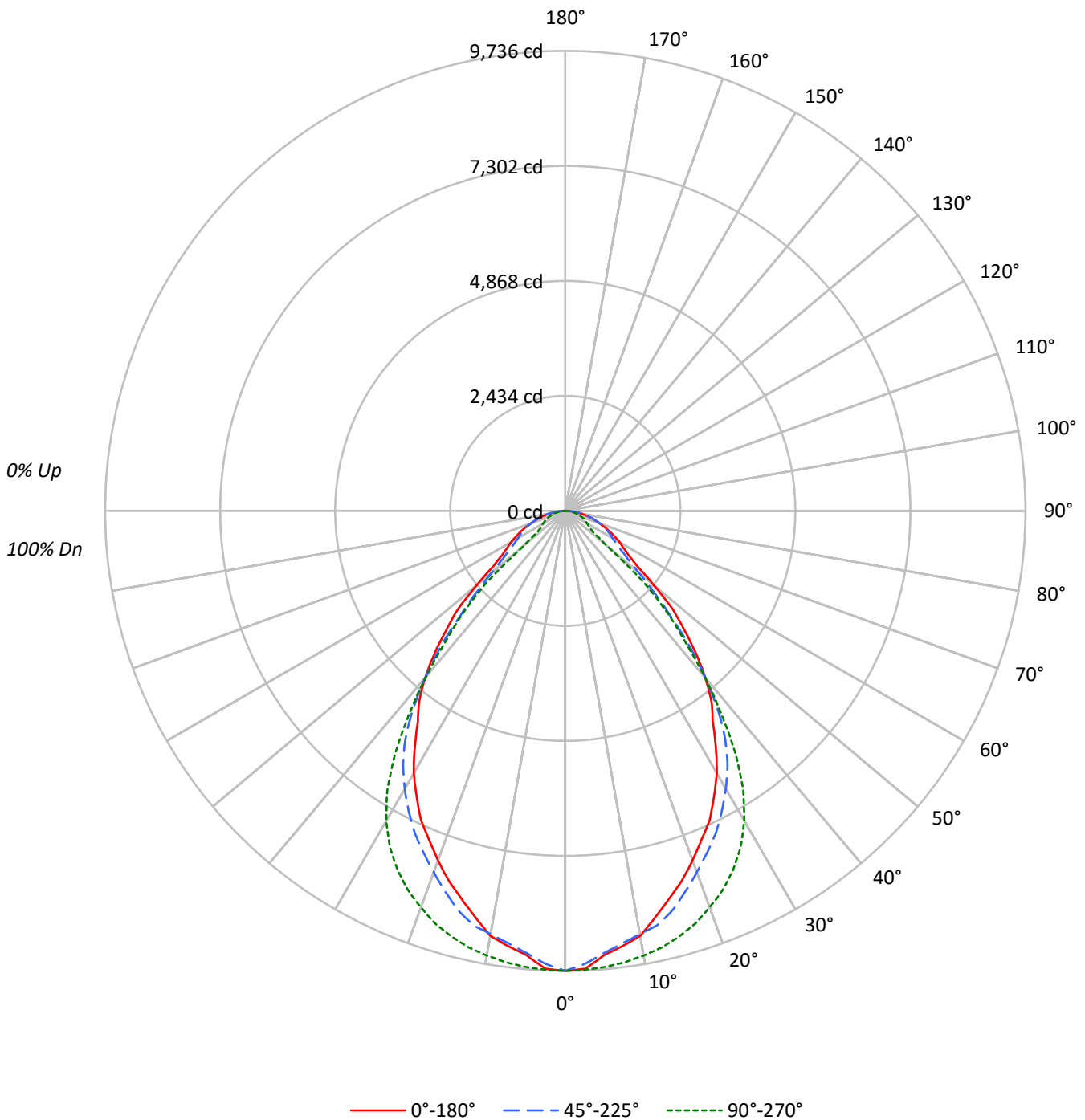
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15801.0 lumens
Efficiency: N/A
Efficacy: 136.5 lumens/watt
Spacing Criteria (0/90/45): 1.02 / 1.16 / 1.12
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

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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	100		
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88		
2	103	96	91	86	101	95	90	85	91	87	83	88	85	82	85	82	80	78		
3	96	87	80	75	94	86	80	75	83	78	73	80	76	72	78	74	71	69		
4	89	79	72	66	87	78	71	66	76	70	65	73	68	64	71	67	63	62		
5	83	72	65	59	81	71	64	59	69	63	58	67	62	58	66	61	57	55		
6	78	66	59	53	76	65	58	53	64	57	53	62	57	52	61	56	52	50		
7	73	61	54	48	71	60	53	48	59	52	48	58	52	47	56	51	47	45		
8	68	57	49	44	67	56	49	44	55	48	44	53	48	43	52	47	43	41		
9	64	52	45	40	63	52	45	40	51	44	40	50	44	40	49	44	40	38		
10	61	49	42	37	60	48	42	37	47	41	37	47	41	37	46	40	37	35		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	34544	34544	34544
5°	33613	33461	34506
10°	32899	32754	34426
15°	31200	32159	34233
20°	29722	30726	33710
25°	28272	29481	32850
30°	26266	27829	31016
35°	23553	25574	27205
40°	21339	21385	21269
45°	17841	15802	15411
50°	13477	11122	6302
55°	10136	8894	3974
60°	9420	8191	3828
65°	8763	8174	3834
70°	8018	8018	3774
75°	7602	7809	3647
80°	7025	7382	3743
85°	6131	6436	4087

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 18257 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	899.3	5.7
10°-20°	2478.0	15.7
20°-30°	3513.9	22.2
30°-40°	3620.0	22.9
40°-50°	2528.5	16.0
50°-60°	1213.3	7.7
60°-70°	851.2	5.4
70°-80°	532.2	3.4
80°-90°	164.6	1.0
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°	6891.2	43.6
0°-40°	10511.2	66.5
0°-60°	14253.0	90.2
0°-90°	15801.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	15801.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	9736	9736	9736	9736	9736	
5°	9437	9425	9395	9641	9688	893
15°	8494	8557	8755	9006	9319	2392
25°	7222	7294	7530	8040	8391	3302
35°	5438	5586	5904	6027	6281	3426
45°	3556	3638	3149	2988	3071	2739
55°	1638	1558	1438	921	642	1535
65°	1044	976	974	740	457	1034
75°	554	547	570	492	266	584
85°	151	151	158	156	100	168
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	9735.9	9735.9	9735.9	9735.9	9735.9
2.5°	9698.3	9668.2	9595.4	9728.4	9718.3
5°	9437.3	9424.8	9394.6	9640.6	9688.2
7.5°	9289.3	9264.2	9229.0	9500.0	9633.0
10°	9131.2	9161.3	9091.0	9339.4	9555.2
12.5°	8805.0	8885.3	8980.6	9173.8	9459.9
15°	8493.8	8556.6	8754.8	9005.7	9319.4
17.5°	8202.8	8275.5	8446.1	8822.5	9156.3
20°	7871.5	7971.9	8137.5	8619.3	8927.9
22.5°	7530.3	7623.1	7831.4	8348.3	8692.1
25°	7221.6	7294.4	7530.3	8039.6	8390.9
27.5°	6812.6	6948.1	7171.4	7663.3	8032.1
30°	6411.1	6526.6	6792.5	7206.6	7570.4
32.5°	5926.9	6095.0	6388.6	6704.7	7008.3
35°	5437.6	5585.6	5904.3	6027.2	6280.7
37.5°	5081.2	5121.4	5302.1	5287.0	5430.0
40°	4607.0	4687.3	4617.0	4428.8	4591.9
42.5°	4095.1	4190.5	3906.9	3688.6	3746.3
45°	3555.6	3638.4	3149.1	2988.5	3071.3
47.5°	3088.9	3081.4	2539.4	2431.5	2316.0
50°	2441.5	2521.8	2014.9	1814.2	1141.7
52.5°	1907.0	1937.1	1661.1	1159.3	750.3
55°	1638.5	1558.2	1437.8	920.9	642.4
57.5°	1455.4	1355.0	1274.7	855.7	587.2
60°	1327.4	1214.5	1154.3	813.0	539.5
62.5°	1181.9	1094.0	1071.5	775.4	496.8
65°	1043.8	976.1	973.6	740.2	456.7
67.5°	905.8	868.2	878.2	697.6	411.5
70°	772.9	765.3	772.9	642.4	363.8
72.5°	659.9	652.4	672.5	572.1	311.1
75°	554.5	547.0	569.6	491.8	266.0
77.5°	441.6	446.6	461.7	409.0	223.3
80°	343.8	343.8	361.3	321.2	183.2
82.5°	245.9	248.4	258.5	235.9	143.0
85°	150.6	150.6	158.1	155.6	100.4
87.5°	50.2	57.7	67.7	72.8	50.2
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	17.95	19.31	18.32	19.62	19.94	14.29	15.64	14.65	15.95	16.27
	3H	19.69	20.90	20.07	21.23	21.59	16.26	17.47	16.64	17.80	18.16
	4H	20.36	21.49	20.77	21.84	22.22	16.97	18.09	17.37	18.44	18.83
	6H	20.87	21.91	21.28	22.28	22.67	17.49	18.53	17.90	18.90	19.29
	8H	21.04	22.03	21.47	22.42	22.82	17.67	18.66	18.10	19.05	19.45
	12H	21.15	22.09	21.58	22.48	22.91	17.81	18.76	18.25	19.14	19.57
4H	2H	18.48	19.61	18.89	19.96	20.34	15.91	17.04	16.31	17.39	17.77
	3H	20.46	21.39	20.87	21.79	22.20	18.09	19.02	18.50	19.42	19.82
	4H	21.26	22.10	21.70	22.52	22.96	18.97	19.80	19.40	20.22	20.66
	6H	21.91	22.63	22.37	23.08	23.54	19.61	20.33	20.07	20.78	21.24
	8H	22.13	22.80	22.59	23.25	23.72	19.82	20.49	20.29	20.94	21.41
	12H	22.28	22.88	22.77	23.36	23.84	19.98	20.58	20.46	21.06	21.53
8H	4H	21.55	22.22	22.02	22.67	23.14	19.61	20.29	20.08	20.74	21.21
	6H	22.33	22.89	22.83	23.38	23.86	20.48	21.03	20.98	21.53	22.01
	8H	22.63	23.13	23.15	23.65	24.14	20.80	21.30	21.32	21.82	22.31
	12H	22.87	23.31	23.38	23.80	24.37	21.07	21.51	21.58	22.00	22.57
12H	4H	21.56	22.16	22.05	22.65	23.12	19.69	20.29	20.17	20.77	21.24
	6H	22.38	22.88	22.90	23.40	23.89	20.61	21.11	21.13	21.63	22.12
	8H	22.75	23.19	23.26	23.68	24.25	21.03	21.47	21.54	21.96	22.53