

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: P894715

Luminaire Tested: 8TMB-16HL-LVRA-UNV-L940

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894715
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-L940
Description: 16000 Lumen 8FT MICROBAY LINEAR BAY with LOUVER WITH AISLE OPTIC, 90CRI, 4000K CCT
Light Source: -
Ballast/Driver: -

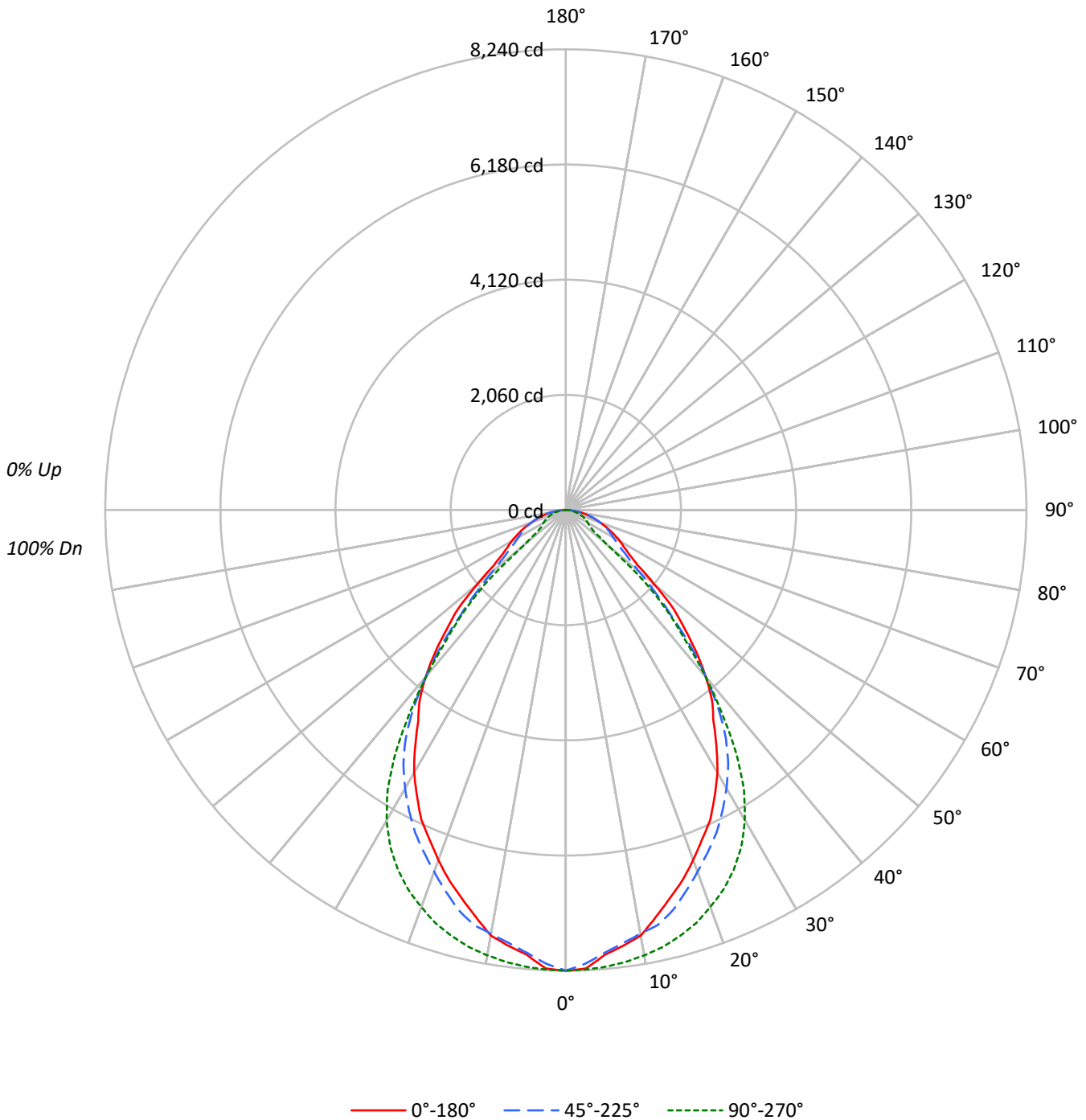
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13373.0 lumens
Efficiency: N/A
Efficacy: 115.5 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 (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			
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	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	90	88	
2	103	96	91	86	101	95	90	85	91	87	83	88	85	82	85	82	80	80	78	
3	96	87	80	75	94	86	80	75	83	78	73	80	76	72	78	74	71	71	69	
4	89	79	72	66	87	78	71	66	76	70	65	73	68	64	71	67	63	63	62	
5	83	72	65	59	81	71	64	59	69	63	58	67	62	58	66	61	57	57	55	
6	78	66	59	53	76	65	58	53	64	57	53	62	57	52	61	56	52	52	50	
7	73	61	54	48	71	60	53	48	59	52	48	58	52	47	56	51	47	47	45	
8	68	57	49	44	67	56	49	44	55	48	44	53	48	43	52	47	43	43	41	
9	64	52	45	40	63	52	45	40	51	44	40	50	44	40	49	44	40	40	38	
10	61	49	42	37	60	48	42	37	47	41	37	47	41	37	46	40	37	37	35	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	29236	29236	29236
5°	28448	28319	29204
10°	27843	27721	29136
15°	26406	27217	28972
20°	25155	26005	28530
25°	23928	24951	27802
30°	22231	23553	26250
35°	19933	21644	23024
40°	18060	18099	18000
45°	15100	13373	13043
50°	11406	9413	5334
55°	8579	7528	3363
60°	7972	6932	3240
65°	7418	6918	3245
70°	6786	6786	3194
75°	6434	6609	3086
80°	5944	6248	3167
85°	5186	5447	3456

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 15451 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	761.1	5.7
10°-20°	2097.2	15.7
20°-30°	2973.9	22.2
30°-40°	3063.8	22.9
40°-50°	2140.0	16.0
50°-60°	1026.8	7.7
60°-70°	720.4	5.4
70°-80°	450.4	3.4
80°-90°	139.3	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°	5832.3	43.6
0°-40°	8896.1	66.5
0°-60°	12062.9	90.2
0°-90°	13373.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13373.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8240	8240	8240	8240	8240	
5°	7987	7976	7951	8159	8200	756
15°	7189	7242	7410	7622	7887	2024
25°	6112	6174	6373	6804	7102	2795
35°	4602	4727	4997	5101	5316	2900
45°	3009	3079	2665	2529	2599	2318
55°	1387	1319	1217	779	544	1300
65°	884	826	824	626	386	875
75°	469	463	482	416	225	494
85°	127	127	134	132	85	142
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	8239.9	8239.9	8239.9	8239.9	8239.9
2.5°	8208.0	8182.5	8120.9	8233.5	8225.0
5°	7987.2	7976.5	7951.1	8159.2	8199.5
7.5°	7861.9	7840.6	7810.9	8040.2	8152.8
10°	7728.1	7753.6	7694.1	7904.3	8087.0
12.5°	7452.0	7519.9	7600.6	7764.2	8006.3
15°	7188.7	7241.7	7409.5	7621.9	7887.3
17.5°	6942.3	7003.9	7148.3	7466.9	7749.3
20°	6662.0	6746.9	6887.1	7294.8	7556.0
22.5°	6373.2	6451.7	6628.0	7065.5	7356.4
25°	6111.9	6173.5	6373.2	6804.3	7101.6
27.5°	5765.8	5880.5	6069.5	6485.7	6797.9
30°	5426.0	5523.7	5748.8	6099.2	6407.1
32.5°	5016.1	5158.4	5406.9	5674.5	5931.4
35°	4602.0	4727.3	4997.0	5101.1	5315.6
37.5°	4300.4	4334.4	4487.3	4474.6	4595.6
40°	3899.1	3967.0	3907.6	3748.3	3886.3
42.5°	3465.8	3546.5	3306.6	3121.8	3170.7
45°	3009.3	3079.3	2665.2	2529.3	2599.4
47.5°	2614.2	2607.9	2149.2	2057.8	1960.2
50°	2066.3	2134.3	1705.3	1535.4	966.3
52.5°	1614.0	1639.5	1405.9	981.1	635.0
55°	1386.8	1318.8	1216.9	779.4	543.7
57.5°	1231.7	1146.8	1078.8	724.2	496.9
60°	1123.4	1027.9	976.9	688.1	456.6
62.5°	1000.3	925.9	906.8	656.2	420.5
65°	883.5	826.1	824.0	626.5	386.5
67.5°	766.6	734.8	743.3	590.4	348.3
70°	654.1	647.7	654.1	543.7	307.9
72.5°	558.5	552.2	569.1	484.2	263.3
75°	469.3	463.0	482.1	416.2	225.1
77.5°	373.8	378.0	390.8	346.2	189.0
80°	290.9	290.9	305.8	271.8	155.0
82.5°	208.1	210.2	218.7	199.6	121.0
85°	127.4	127.4	133.8	131.7	84.9
87.5°	42.5	48.8	57.3	61.6	42.5
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	17.37	18.73	17.74	19.04	19.36	13.71	15.06	14.07	15.37	15.69
	3H	19.11	20.32	19.49	20.65	21.01	15.68	16.89	16.06	17.22	17.58
	4H	19.78	20.91	20.19	21.26	21.64	16.39	17.51	16.79	17.86	18.25
	6H	20.29	21.33	20.70	21.70	22.09	16.91	17.95	17.32	18.32	18.71
	8H	20.46	21.45	20.89	21.84	22.24	17.09	18.08	17.52	18.47	18.88
	12H	20.57	21.51	21.00	21.90	22.33	17.23	18.18	17.67	18.56	18.99
4H	2H	17.90	19.03	18.31	19.38	19.76	15.33	16.46	15.73	16.81	17.19
	3H	19.88	20.81	20.29	21.22	21.62	17.51	18.44	17.92	18.84	19.24
	4H	20.68	21.52	21.12	21.94	22.38	18.39	19.22	18.82	19.64	20.08
	6H	21.33	22.05	21.79	22.50	22.96	19.03	19.75	19.49	20.20	20.66
	8H	21.55	22.22	22.01	22.67	23.14	19.24	19.91	19.71	20.36	20.83
	12H	21.70	22.30	22.19	22.78	23.26	19.40	20.00	19.88	20.48	20.95
8H	4H	20.97	21.64	21.44	22.09	22.56	19.04	19.71	19.50	20.16	20.63
	6H	21.75	22.31	22.25	22.80	23.28	19.90	20.45	20.40	20.95	21.43
	8H	22.05	22.55	22.57	23.07	23.56	20.22	20.72	20.74	21.24	21.73
	12H	22.29	22.73	22.80	23.22	23.79	20.49	20.93	21.00	21.42	21.99
12H	4H	20.98	21.59	21.47	22.07	22.54	19.11	19.71	19.59	20.19	20.66
	6H	21.80	22.30	22.32	22.82	23.31	20.03	20.53	20.55	21.05	21.54
	8H	22.17	22.61	22.68	23.10	23.67	20.45	20.89	20.96	21.38	21.95