

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: P894723

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

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894723
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-16HL-LVRF-UNV-L940
Description: 16000 Lumen 8FT MICROBAY LINEAR BAY with LOUVER WITH FROSTED INLAY, 90CRI, 4000K (C)
Light Source: -
Ballast/Driver: -

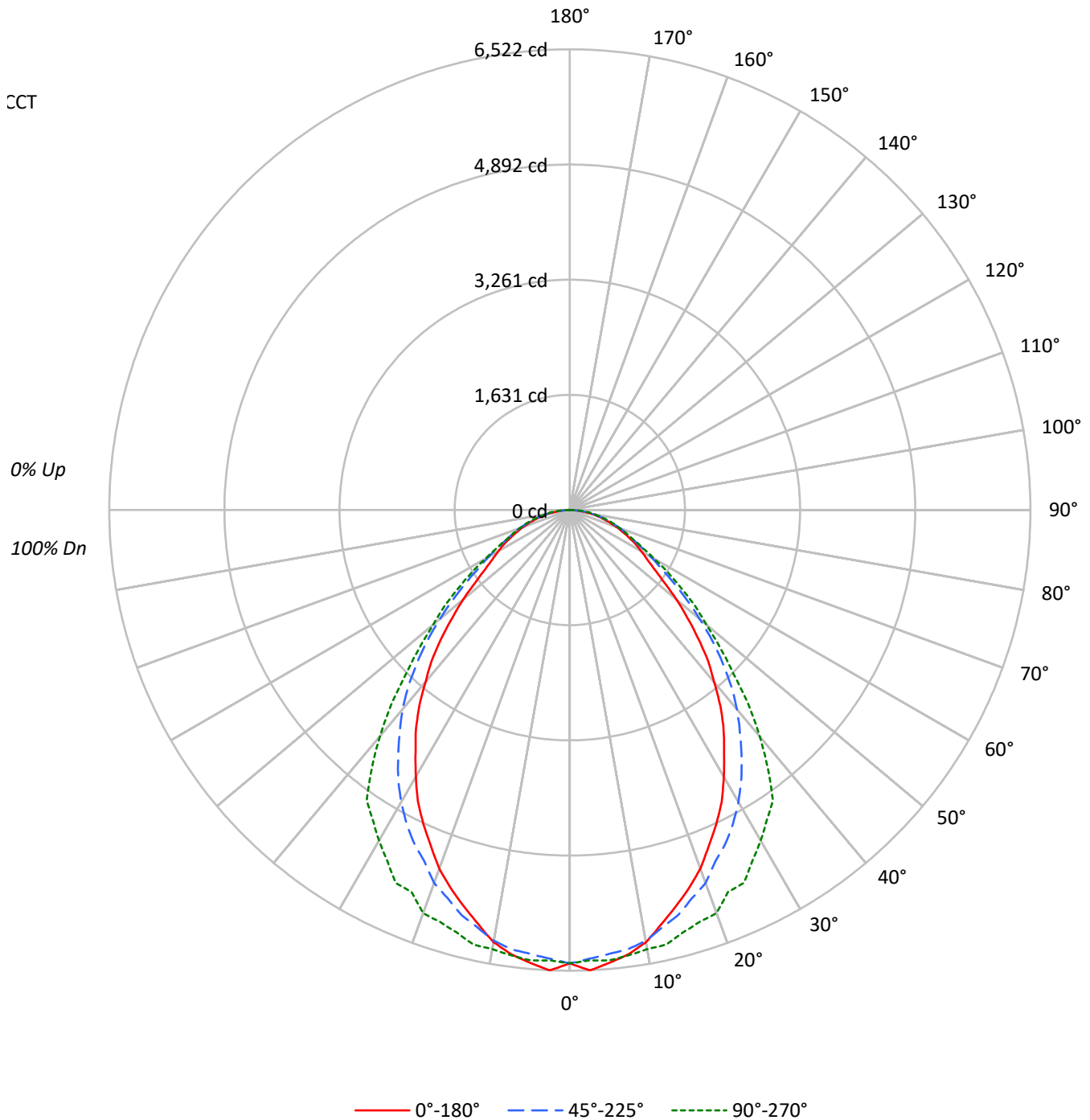
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13011.0 lumens
Efficiency: N/A
Efficacy: 112.4 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): 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	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	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	89	89	89	87
2	102	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	77	77	77	75
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	75	70	67	67	67	67	65
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	59	59	59	57
5	80	68	60	54	78	67	60	54	65	59	53	63	58	53	62	57	52	52	52	52	50
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	57	51	47	47	47	47	45
7	70	57	49	43	68	56	49	43	55	48	43	53	47	42	52	46	42	42	42	42	40
8	65	52	44	39	64	52	44	39	50	44	39	49	43	39	48	43	38	38	38	38	37
9	61	48	41	36	60	48	40	35	47	40	35	46	40	35	45	39	35	35	35	35	33
10	57	45	37	33	56	44	37	32	43	37	32	43	36	32	42	36	32	32	32	32	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	22768	22768	22768
5°	22917	22473	22794
10°	22380	22311	22740
15°	21324	21796	22740
20°	20398	21216	22926
25°	19204	20405	22809
30°	17865	19555	22141
35°	16453	18355	21712
40°	14714	17060	19388
45°	12899	15344	16441
50°	10886	13258	13915
55°	9031	11096	11867
60°	8304	9434	9788
65°	7779	8295	8359
70°	7244	7861	7801
75°	6759	7337	7600
80°	6312	6821	7290
85°	5309	5781	8044

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 16441 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	605.7	4.7
10°-20°	1689.5	13.0
20°-30°	2433.2	18.7
30°-40°	2686.2	20.6
40°-50°	2305.0	17.7
50°-60°	1570.2	12.1
60°-70°	987.8	7.6
70°-80°	562.4	4.3
80°-90°	171.0	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°	4728.4	36.3
0°-40°	7414.6	57.0
0°-60°	11289.8	86.8
0°-90°	13011.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13011.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6417	6417	6417	6417	6417	
5°	6434	6409	6310	6442	6400	607
15°	5805	5866	5934	6202	6191	1634
25°	4905	5003	5212	5632	5826	2253
35°	3798	3946	4238	4700	5013	2363
45°	2571	2741	3058	3242	3277	1981
55°	1460	1550	1794	1880	1918	1341
65°	927	942	988	1036	996	921
75°	493	497	535	558	554	525
85°	130	134	142	169	198	150
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6417.0	6417.0	6417.0	6417.0	6417.0
2.5°	6522.5	6455.4	6359.4	6451.5	6380.5
5°	6434.3	6409.3	6309.6	6441.9	6399.7
7.5°	6344.1	6290.4	6273.1	6415.1	6359.4
10°	6211.7	6181.0	6192.5	6374.8	6311.5
12.5°	6002.6	6023.7	6050.6	6282.7	6301.9
15°	5805.0	5866.4	5933.6	6202.1	6190.6
17.5°	5611.3	5695.7	5759.0	6104.3	6113.9
20°	5402.2	5450.1	5618.9	5952.7	6071.7
22.5°	5143.2	5237.2	5383.0	5799.3	5853.0
25°	4905.3	5003.1	5212.2	5632.4	5826.1
27.5°	4655.9	4746.1	5005.1	5434.8	5599.8
30°	4360.5	4481.3	4772.9	5210.3	5404.1
32.5°	4065.0	4241.5	4521.6	4970.5	5195.0
35°	3798.4	3946.1	4237.7	4700.0	5012.7
37.5°	3503.0	3658.4	3953.8	4404.6	4604.1
40°	3176.8	3343.7	3683.3	4047.8	4185.9
42.5°	2896.8	3040.6	3382.1	3639.2	3748.5
45°	2570.6	2741.4	3057.9	3242.1	3276.6
47.5°	2256.0	2451.7	2735.6	2821.9	2889.1
50°	1972.1	2125.6	2401.8	2455.5	2520.8
52.5°	1682.4	1845.5	2087.2	2140.9	2236.8
55°	1459.9	1550.1	1793.7	1880.0	1918.4
57.5°	1296.8	1354.4	1527.0	1636.4	1647.9
60°	1170.2	1199.0	1329.4	1411.9	1379.3
62.5°	1053.2	1076.2	1141.4	1204.7	1162.5
65°	926.6	941.9	988.0	1035.9	995.6
67.5°	807.6	824.9	867.1	901.6	867.1
70°	698.3	711.7	757.8	773.1	752.0
72.5°	596.6	602.4	640.7	667.6	654.2
75°	493.0	496.9	535.2	558.2	554.4
77.5°	399.0	404.8	437.4	458.5	447.0
80°	308.9	312.7	333.8	364.5	356.8
82.5°	216.8	224.5	237.9	264.7	285.8
85°	130.4	134.3	142.0	168.8	197.6
87.5°	49.9	53.7	57.6	71.0	94.0
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	18.31	19.79	18.68	20.11	20.42	19.67	21.15	20.04	21.47	21.78
	3H	19.89	21.22	20.27	21.55	21.91	20.96	22.28	21.34	22.61	22.98
	4H	20.50	21.74	20.90	22.09	22.47	21.51	22.75	21.91	23.10	23.48
	6H	20.97	22.12	21.38	22.48	22.87	21.97	23.11	22.38	23.48	23.87
	8H	21.13	22.22	21.55	22.61	23.01	22.15	23.24	22.58	23.63	24.03
	12H	21.22	22.27	21.65	22.65	23.08	22.31	23.35	22.74	23.73	24.16
4H	2H	18.93	20.17	19.33	20.52	20.90	20.04	21.28	20.44	21.63	22.01
	3H	20.73	21.76	21.14	22.16	22.56	21.60	22.63	22.01	23.03	23.43
	4H	21.45	22.38	21.89	22.80	23.24	22.30	23.23	22.73	23.64	24.08
	6H	22.05	22.86	22.51	23.30	23.76	22.91	23.71	23.37	24.16	24.62
	8H	22.25	23.01	22.72	23.45	23.92	23.16	23.91	23.62	24.35	24.82
	12H	22.39	23.06	22.88	23.54	24.02	23.37	24.04	23.85	24.52	24.99
8H	4H	21.78	22.53	22.24	22.98	23.45	22.53	23.29	23.00	23.73	24.20
	6H	22.50	23.13	23.00	23.62	24.10	23.28	23.90	23.78	24.39	24.87
	8H	22.78	23.34	23.30	23.85	24.34	23.61	24.17	24.12	24.68	25.17
	12H	22.99	23.49	23.50	23.98	24.55	23.92	24.41	24.43	24.90	25.47
12H	4H	21.82	22.49	22.30	22.97	23.44	22.55	23.22	23.03	23.70	24.17
	6H	22.57	23.13	23.09	23.64	24.13	23.32	23.88	23.83	24.39	24.88
	8H	22.91	23.40	23.42	23.90	24.46	23.70	24.20	24.22	24.69	25.26