

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: P894692

Luminaire Tested: 8TMB-16HL-FLT-UNV-L950

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894692
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-L950
Description: 16000 Lumen 8FT MICROBAY LINEAR BAY with FLAT FROSTED LENS, 90CRI, 5000K CCT
Light Source: -
Ballast/Driver: -

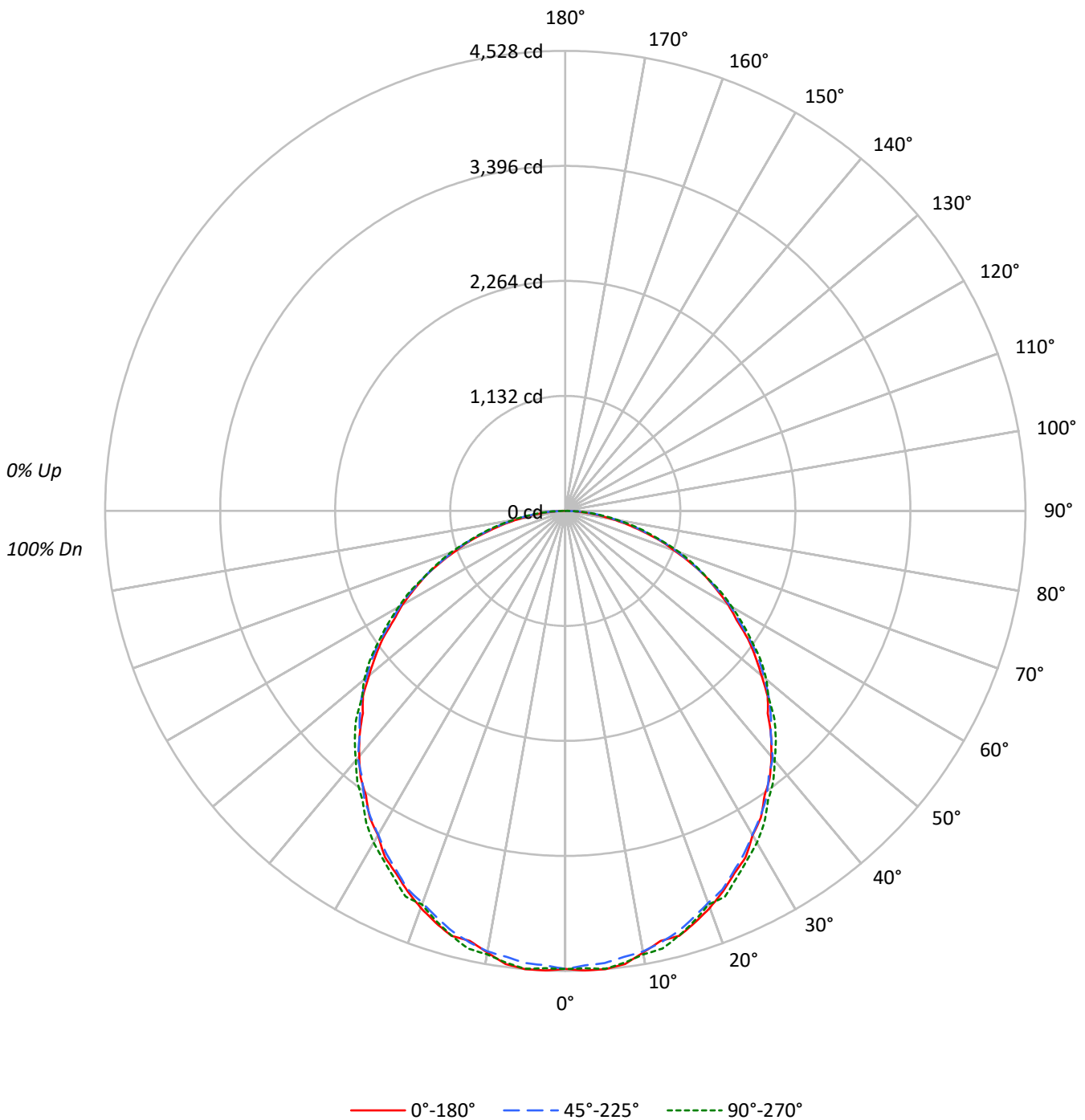
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12491.0 lumens
Efficiency: N/A
Efficacy: 107.9 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 (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	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°	15995	15995	15995
5°	16126	15911	16112
10°	15905	15863	15968
15°	15908	15744	15894
20°	15698	15507	15566
25°	15415	15331	15606
30°	15103	15079	15454
35°	14811	14938	15064
40°	14612	14702	14846
45°	14139	14354	14618
50°	13909	14113	14253
55°	13564	13732	13877
60°	13142	13335	13459
65°	12752	12802	12802
70°	11859	12141	12445
75°	10919	11346	11585
80°	9630	10464	10823
85°	8643	9673	10385

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 14618 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	426.7	3.4
10°-20°	1216.1	9.7
20°-30°	1824.0	14.6
30°-40°	2166.3	17.3
40°-50°	2218.0	17.8
50°-60°	1987.2	15.9
60°-70°	1509.6	12.1
70°-80°	879.2	7.0
80°-90°	264.1	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°	3466.7	27.8
0°-40°	5633.0	45.1
0°-60°	9838.1	78.8
0°-90°	12491.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12491.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4508	4508	4508	4508	4508	
5°	4528	4510	4467	4494	4524	429
15°	4331	4360	4286	4304	4327	1216
25°	3938	3972	3916	3967	3986	1817
35°	3420	3495	3449	3462	3478	2149
45°	2818	2888	2861	2884	2913	2192
55°	2193	2226	2220	2245	2243	1954
65°	1519	1519	1525	1544	1525	1492
75°	796	810	828	853	845	848
85°	212	216	238	253	255	238
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4508.1	4508.1	4508.1	4508.1	4508.1
2.5°	4527.5	4506.1	4476.9	4486.6	4506.1
5°	4527.5	4510.0	4467.2	4494.4	4523.6
7.5°	4498.3	4521.7	4428.2	4428.2	4482.7
10°	4414.6	4459.4	4402.9	4397.1	4432.1
12.5°	4334.7	4416.5	4350.3	4369.8	4412.6
15°	4330.8	4360.1	4286.1	4303.6	4327.0
17.5°	4247.1	4276.3	4196.5	4229.6	4229.6
20°	4157.5	4163.4	4106.9	4179.0	4122.5
22.5°	4054.3	4114.7	4036.8	4060.2	4108.9
25°	3937.5	3972.5	3916.1	3966.7	3986.2
27.5°	3842.1	3884.9	3807.0	3867.4	3873.2
30°	3686.3	3733.0	3680.4	3719.4	3772.0
32.5°	3581.1	3596.7	3569.4	3627.9	3643.4
35°	3419.5	3495.4	3448.7	3462.3	3477.9
37.5°	3306.6	3329.9	3289.0	3335.8	3361.1
40°	3154.7	3189.7	3174.1	3181.9	3205.3
42.5°	2996.9	3033.9	2993.0	3049.5	3067.0
45°	2817.8	2887.9	2860.6	2884.0	2913.2
47.5°	2700.9	2724.3	2716.5	2730.1	2710.7
50°	2519.8	2543.2	2556.8	2574.4	2582.1
52.5°	2358.2	2375.7	2401.0	2410.8	2428.3
55°	2192.7	2225.8	2219.9	2245.3	2243.3
57.5°	1999.9	2048.6	2033.0	2070.0	2070.0
60°	1851.9	1859.7	1879.2	1896.7	1896.7
62.5°	1680.5	1690.3	1700.0	1715.6	1727.3
65°	1518.9	1518.9	1524.8	1544.2	1524.8
67.5°	1332.0	1324.2	1343.7	1367.0	1365.1
70°	1143.1	1152.8	1170.3	1199.6	1199.6
72.5°	981.5	981.5	1000.9	1016.5	1014.6
75°	796.5	810.1	827.6	852.9	845.1
77.5°	630.9	640.7	669.9	693.2	695.2
80°	471.3	481.0	512.1	535.5	529.7
82.5°	329.1	342.7	371.9	389.5	387.5
85°	212.3	216.2	237.6	253.2	255.1
87.5°	97.4	105.2	120.7	126.6	126.6
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	21.16	22.80	21.53	23.11	23.43	21.27	22.90	21.63	23.22	23.53
	3H	22.94	24.42	23.32	24.75	25.11	23.10	24.59	23.48	24.91	25.27
	4H	23.61	25.00	24.00	25.35	25.73	23.80	25.20	24.20	25.55	25.92
	6H	24.08	25.38	24.49	25.74	26.13	24.35	25.65	24.76	26.01	26.40
	8H	24.23	25.47	24.65	25.86	26.25	24.54	25.78	24.96	26.17	26.57
	12H	24.34	25.52	24.76	25.90	26.33	24.68	25.87	25.11	26.25	26.68
4H	2H	21.81	23.20	22.20	23.55	23.93	21.89	23.29	22.29	23.63	24.01
	3H	23.81	24.98	24.22	25.38	25.78	23.95	25.13	24.36	25.52	25.92
	4H	24.60	25.66	25.03	26.08	26.51	24.79	25.85	25.22	26.27	26.70
	6H	25.20	26.13	25.65	26.57	27.02	25.48	26.41	25.93	26.85	27.30
	8H	25.40	26.27	25.86	26.71	27.17	25.72	26.60	26.18	27.04	27.50
	12H	25.55	26.33	26.03	26.81	27.28	25.92	26.71	26.40	27.18	27.65
8H	4H	24.94	25.81	25.39	26.25	26.71	25.10	25.97	25.56	26.42	26.88
	6H	25.66	26.38	26.15	26.87	27.35	25.93	26.65	26.42	27.14	27.61
	8H	25.93	26.58	26.44	27.09	27.57	26.26	26.91	26.77	27.42	27.90
	12H	26.16	26.74	26.67	27.23	27.79	26.55	27.12	27.05	27.61	28.17
12H	4H	24.98	25.76	25.46	26.24	26.71	25.14	25.92	25.62	26.39	26.86
	6H	25.73	26.38	26.24	26.89	27.37	25.99	26.64	26.49	27.14	27.63
	8H	26.07	26.64	26.57	27.13	27.69	26.38	26.96	26.89	27.45	28.01