

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: P894738

Luminaire Tested: 8TMB-16HL-RND-UNV-L935

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894738
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2403-334-1)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 8TMB-16HL-RND-UNV-L935
Description: 16000 Lumen 8FT MICROBAY LINEAR BAY with ROUND FROSTED LENS, 90CRI, 3500K CCT
Light Source: -
Ballast/Driver: -

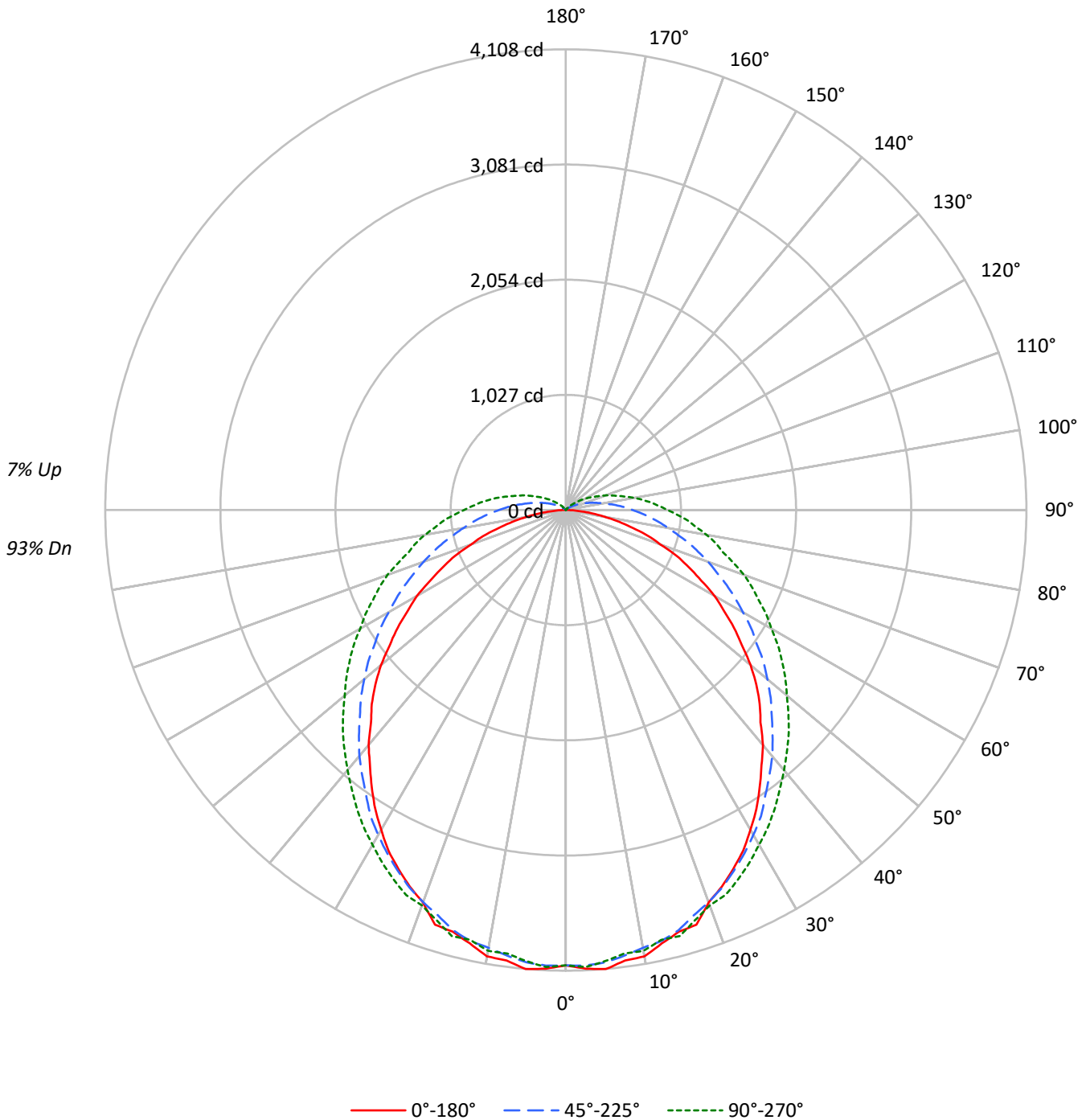
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13374.0 lumens
Efficiency: N/A
Efficacy: 115.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.35
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				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	117	117	117	117	114	114	114	114	107	107	107	101	101	101	96	96	96	96	96	96	93
1	105	100	95	90	102	97	92	88	91	87	84	86	83	80	81	79	77	77	77	77	74
2	95	86	79	72	92	84	77	71	79	73	68	74	70	66	70	67	63	63	63	63	60
3	86	75	66	60	83	73	65	59	69	62	57	65	60	55	62	57	53	53	53	53	50
4	79	66	57	50	76	65	56	49	61	54	48	58	52	47	55	50	45	45	45	45	43
5	73	59	50	43	70	58	49	42	55	47	41	52	45	40	49	44	39	39	39	39	37
6	67	53	44	37	65	52	43	37	49	42	36	47	40	35	45	39	34	34	34	34	32
7	62	48	39	33	60	47	39	33	45	37	32	43	36	31	41	35	30	30	30	30	28
8	58	44	35	29	56	43	35	29	41	34	28	39	33	28	38	32	27	27	27	27	25
9	54	40	32	26	52	39	32	26	38	31	26	36	30	25	35	29	25	25	25	25	23
10	51	37	29	24	49	36	29	24	35	28	23	34	27	23	32	27	22	22	22	22	21

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14406	14406	14406
5°	14633	14422	14382
10°	14562	14281	14381
15°	14301	14253	14444
20°	14061	14047	14167
25°	13830	13889	14230
30°	13492	13705	14124
35°	13065	13444	14071
40°	12672	13266	14023
45°	12275	13029	14111
50°	11872	12949	14200
55°	11329	12857	14569
60°	10887	12943	15026
65°	10167	13286	15937
70°	9345	14028	17554
75°	8479	15532	19886
80°	7286	18976	26072
85°	5899	30700	44614

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 87.5°
 Luminance: 80985 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	385.0	2.9
10°-20°	1095.8	8.2
20°-30°	1642.2	12.3
30°-40°	1951.5	14.6
40°-50°	2020.4	15.1
50°-60°	1872.3	14.0
60°-70°	1558.7	11.7
70°-80°	1156.9	8.7
80°-90°	765.2	5.7
90°-100°	465.6	3.5
100°-110°	261.0	2.0
110°-120°	128.5	1.0
120°-130°	52.3	0.4
130°-140°	15.2	0.1
140°-150°	2.2	0.0
150°-160°	0.6	0.0
160°-170°	0.4	0.0
170°-180°	0.2	0.0
0°-30°	3123.0	23.4
0°-40°	5074.5	37.9
0°-60°	8967.1	67.0
0°-90°	12448.0	93.1
90°-120°	855.2	6.4
90°-150°	924.9	6.9
90°-180°	926.0	6.9
0°-180°	13374.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4060	4060	4060	4060	4060	
5°	4108	4064	4049	4070	4038	388
15°	3893	3878	3880	3886	3932	1103
25°	3533	3529	3548	3616	3635	1626
35°	3016	3039	3104	3202	3249	1887
45°	2446	2482	2597	2758	2812	1885
55°	1831	1909	2078	2286	2355	1638
65°	1211	1324	1582	1815	1898	1203
75°	618	806	1133	1376	1451	662
85°	145	407	754	1022	1096	163
90°	7	264	596	834	908	11
95°	2	163	462	689	765	2
105°	2	54	251	425	485	2
115°	2	13	117	234	280	2
125°	2	4	43	108	137	2
135°	4	2	11	35	48	2
145°	4	2	0	4	6	2
155°	4	4	0	0	0	2
165°	6	4	0	0	0	1
175°	6	4	0	0	0	1
180°	2	2	2	2	2	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4060.2	4060.2	4060.2	4060.2	4060.2
2.5°	4093.7	4073.2	4065.8	4056.5	4078.8
5°	4108.5	4063.9	4049.1	4069.5	4037.9
7.5°	4050.9	4039.8	4008.2	4019.4	3989.7
10°	4041.7	3980.4	3963.7	4000.8	3991.5
12.5°	3958.1	3906.1	3935.8	3961.8	3926.5
15°	3893.1	3878.2	3880.1	3885.6	3932.1
17.5°	3876.4	3809.5	3790.9	3837.3	3833.6
20°	3724.0	3711.0	3720.3	3781.6	3751.9
22.5°	3634.9	3594.0	3644.2	3703.6	3716.6
25°	3532.7	3529.0	3547.6	3616.3	3634.9
27.5°	3425.0	3400.9	3451.0	3530.9	3545.7
30°	3293.1	3283.8	3345.1	3413.9	3447.3
32.5°	3163.1	3168.7	3239.3	3296.9	3354.4
35°	3016.4	3038.7	3103.7	3202.1	3248.6
37.5°	2867.8	2895.7	2983.0	3096.3	3135.3
40°	2735.9	2741.5	2864.1	2979.2	3027.5
42.5°	2570.6	2626.3	2730.3	2882.7	2919.8
45°	2446.2	2481.5	2596.6	2758.2	2812.1
47.5°	2305.0	2345.9	2477.7	2635.6	2693.2
50°	2150.8	2188.0	2345.9	2526.0	2572.5
52.5°	1980.0	2056.1	2221.4	2407.2	2468.5
55°	1831.4	1909.4	2078.4	2286.4	2355.2
57.5°	1671.6	1749.7	1961.4	2154.6	2243.7
60°	1534.2	1608.5	1823.9	2063.5	2117.4
62.5°	1363.3	1469.2	1703.2	1939.1	2015.3
65°	1211.0	1324.3	1582.5	1814.7	1898.2
67.5°	1071.7	1188.7	1458.0	1706.9	1797.9
70°	900.8	1055.0	1352.2	1597.3	1692.1
72.5°	774.5	928.7	1238.9	1482.2	1567.6
75°	618.5	806.1	1133.0	1376.3	1450.6
77.5°	488.5	690.9	1023.4	1296.5	1370.7
80°	356.6	586.9	928.7	1190.6	1276.0
82.5°	243.3	490.3	841.4	1092.1	1173.9
85°	144.9	406.8	754.1	1021.6	1095.9
87.5°	63.2	332.5	674.2	919.4	995.6
90°	7.4	263.7	596.2	834.0	908.3
92.5°	1.9	211.7	527.5	757.8	830.2
95°	1.9	163.4	462.5	689.1	765.2
97.5°	1.9	126.3	397.5	618.5	690.9
100°	1.9	96.6	343.6	544.2	622.2
102.5°	1.9	72.4	291.6	482.9	549.8
105°	1.9	53.9	250.7	425.3	484.8
107.5°	1.9	39.0	209.9	371.5	430.9
110°	1.9	27.9	176.5	321.3	380.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	1.9	20.4	143.0	276.7	326.9
115°	1.9	13.0	117.0	234.0	280.5
117.5°	1.9	9.3	92.9	196.9	241.5
120°	1.9	7.4	74.3	163.4	202.5
122.5°	1.9	5.6	57.6	133.7	170.9
125°	1.9	3.7	42.7	107.7	137.4
127.5°	1.9	3.7	31.6	85.4	111.4
130°	1.9	1.9	22.3	65.0	87.3
132.5°	1.9	1.9	14.9	48.3	65.0
135°	3.7	1.9	11.1	35.3	48.3
137.5°	3.7	1.9	7.4	24.1	33.4
140°	3.7	1.9	3.7	14.9	20.4
142.5°	3.7	1.9	1.9	7.4	11.1
145°	3.7	1.9	0.0	3.7	5.6
147.5°	3.7	1.9	0.0	1.9	1.9
150°	3.7	1.9	0.0	0.0	0.0
152.5°	3.7	1.9	0.0	0.0	0.0
155°	3.7	3.7	0.0	0.0	0.0
157.5°	3.7	3.7	0.0	0.0	0.0
160°	3.7	3.7	0.0	0.0	0.0
162.5°	3.7	3.7	0.0	0.0	0.0
165°	5.6	3.7	0.0	0.0	0.0
167.5°	5.6	3.7	0.0	0.0	0.0
170°	5.6	3.7	0.0	0.0	0.0
172.5°	5.6	3.7	0.0	0.0	0.0
175°	5.6	3.7	0.0	0.0	0.0
177.5°	5.6	3.7	0.0	0.0	0.0
180°	1.9	1.9	1.9	1.9	1.9



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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	19.50	21.04	19.97	21.49	21.97	21.07	22.61	21.54	23.06	23.55
	3H	21.26	22.66	21.74	23.13	23.65	23.66	25.06	24.14	25.53	26.05
	4H	21.92	23.25	22.42	23.73	24.27	24.91	26.25	25.42	26.73	27.27
	6H	22.40	23.64	22.91	24.13	24.69	26.30	27.54	26.81	28.03	28.59
	8H	22.54	23.73	23.07	24.25	24.81	27.03	28.22	27.55	28.73	29.29
	12H	22.64	23.78	23.18	24.30	24.89	27.87	29.01	28.40	29.52	30.11
4H	2H	20.45	21.78	20.96	22.27	22.80	21.64	22.97	22.15	23.46	23.99
	3H	22.49	23.63	23.01	24.15	24.72	24.51	25.65	25.03	26.17	26.73
	4H	23.31	24.35	23.84	24.88	25.48	25.99	27.03	26.52	27.57	28.16
	6H	23.96	24.88	24.51	25.44	26.04	27.61	28.53	28.16	29.09	29.70
	8H	24.18	25.05	24.74	25.61	26.23	28.46	29.33	29.02	29.89	30.51
	12H	24.35	25.14	24.93	25.73	26.35	29.46	30.24	30.04	30.83	31.46
8H	4H	24.15	25.02	24.71	25.58	26.20	26.36	27.23	26.92	27.79	28.41
	6H	25.08	25.81	25.67	26.42	27.04	28.24	28.97	28.83	29.58	30.20
	8H	25.46	26.13	26.06	26.74	27.38	29.30	29.96	29.90	30.58	31.21
	12H	25.78	26.38	26.39	26.98	27.68	30.56	31.15	31.16	31.75	32.46
12H	4H	24.42	25.20	25.00	25.79	26.42	26.40	27.19	26.98	27.78	28.40
	6H	25.50	26.17	26.11	26.78	27.42	28.35	29.02	28.95	29.63	30.27
	8H	26.04	26.64	26.65	27.24	27.94	29.52	30.12	30.13	30.72	31.42