

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: P894689

Luminaire Tested: 8TMB-16HL-FLT-UNV-L930

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894689
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-L930
Description: 16000 Lumen 8FT MICROBAY LINEAR BAY with FLAT FROSTED LENS, 90CRI, 3000K CCT
Light Source: -
Ballast/Driver: -

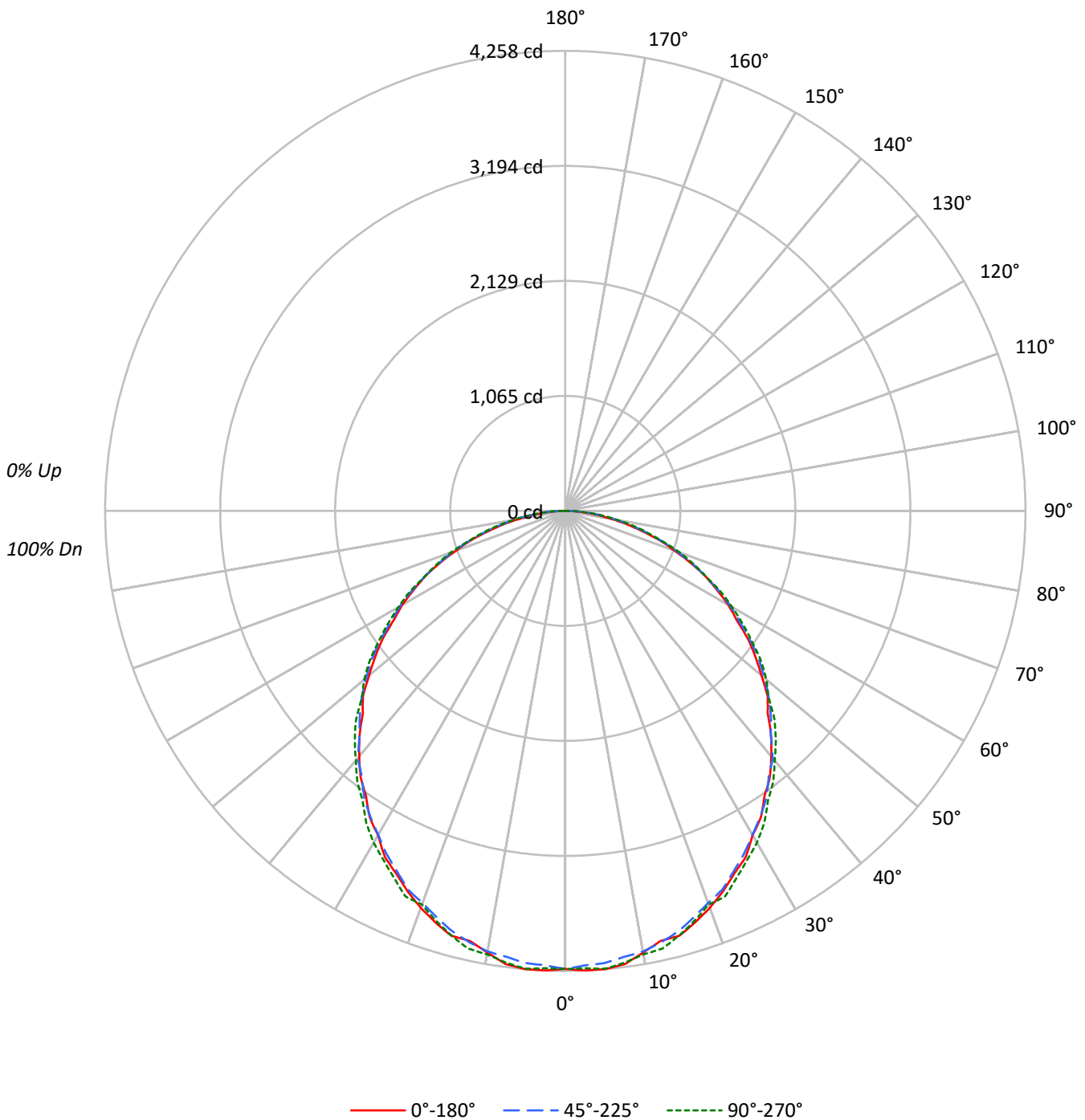
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11746.0 lumens
Efficiency: N/A
Efficacy: 101.4 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 (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	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°	15041	15041	15041
5°	15164	14962	15151
10°	14957	14917	15016
15°	14960	14805	14946
20°	14762	14582	14637
25°	14495	14417	14675
30°	14202	14179	14532
35°	13928	14047	14166
40°	13740	13825	13961
45°	13296	13498	13746
50°	13079	13272	13403
55°	12755	12913	13049
60°	12358	12540	12657
65°	11991	12038	12038
70°	11151	11417	11702
75°	10268	10670	10894
80°	9054	9840	10178
85°	8126	9095	9766

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 13746 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	401.2	3.4
10°-20°	1143.5	9.7
20°-30°	1715.2	14.6
30°-40°	2037.1	17.3
40°-50°	2085.7	17.8
50°-60°	1868.6	15.9
60°-70°	1419.5	12.1
70°-80°	826.8	7.0
80°-90°	248.3	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°	3260.0	27.8
0°-40°	5297.0	45.1
0°-60°	9251.3	78.8
0°-90°	11746.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11746.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4239	4239	4239	4239	4239	
5°	4258	4241	4201	4226	4254	403
15°	4072	4100	4030	4047	4069	1143
25°	3703	3736	3682	3730	3748	1709
35°	3216	3287	3243	3256	3270	2021
45°	2650	2716	2690	2712	2739	2061
55°	2062	2093	2088	2111	2110	1837
65°	1428	1428	1434	1452	1434	1403
75°	749	762	778	802	795	797
85°	200	203	223	238	240	224
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4239.2	4239.2	4239.2	4239.2	4239.2
2.5°	4257.5	4237.3	4209.9	4219.0	4237.3
5°	4257.5	4241.0	4200.7	4226.4	4253.8
7.5°	4230.0	4252.0	4164.1	4164.1	4215.4
10°	4151.3	4193.4	4140.3	4134.8	4167.8
12.5°	4076.2	4153.1	4090.9	4109.2	4149.5
15°	4072.5	4100.0	4030.4	4046.9	4068.9
17.5°	3993.8	4021.3	3946.2	3977.3	3977.3
20°	3909.6	3915.1	3862.0	3929.7	3876.6
22.5°	3812.5	3869.3	3796.0	3818.0	3863.8
25°	3702.6	3735.6	3682.5	3730.1	3748.4
27.5°	3612.9	3653.2	3580.0	3636.7	3642.2
30°	3466.4	3510.4	3460.9	3497.6	3547.0
32.5°	3367.5	3382.2	3356.6	3411.5	3426.1
35°	3215.5	3287.0	3243.0	3255.8	3270.5
37.5°	3109.3	3131.3	3092.9	3136.8	3160.6
40°	2966.5	2999.5	2984.8	2992.1	3014.1
42.5°	2818.2	2853.0	2814.5	2867.6	2884.1
45°	2649.7	2715.6	2690.0	2712.0	2739.4
47.5°	2539.8	2561.8	2554.5	2567.3	2549.0
50°	2369.5	2391.5	2404.3	2420.8	2428.1
52.5°	2217.6	2234.0	2257.8	2267.0	2283.5
55°	2061.9	2093.0	2087.5	2111.3	2109.5
57.5°	1880.6	1926.4	1911.8	1946.5	1946.5
60°	1741.5	1748.8	1767.1	1783.6	1783.6
62.5°	1580.3	1589.5	1598.6	1613.3	1624.3
65°	1428.3	1428.3	1433.8	1452.1	1433.8
67.5°	1252.5	1245.2	1263.5	1285.5	1283.7
70°	1074.9	1084.1	1100.5	1128.0	1128.0
72.5°	922.9	922.9	941.2	955.9	954.0
75°	749.0	761.8	778.3	802.1	794.7
77.5°	593.3	602.5	629.9	651.9	653.7
80°	443.1	452.3	481.6	503.6	498.1
82.5°	309.5	322.3	349.8	366.2	364.4
85°	199.6	203.3	223.4	238.1	239.9
87.5°	91.6	98.9	113.5	119.0	119.0
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	20.95	22.59	21.31	22.90	23.21	21.05	22.69	21.42	23.00	23.32
	3H	22.73	24.21	23.10	24.54	24.90	22.89	24.37	23.27	24.70	25.06
	4H	23.39	24.79	23.79	25.14	25.51	23.59	24.98	23.99	25.33	25.71
	6H	23.87	25.16	24.28	25.53	25.92	24.14	25.43	24.55	25.80	26.19
	8H	24.02	25.25	24.44	25.64	26.04	24.33	25.57	24.75	25.95	26.35
	12H	24.12	25.31	24.55	25.69	26.12	24.47	25.66	24.90	26.04	26.47
4H	2H	21.59	22.99	21.99	23.34	23.71	21.67	23.07	22.07	23.42	23.79
	3H	23.59	24.77	24.00	25.16	25.56	23.74	24.91	24.15	25.31	25.71
	4H	24.39	25.45	24.82	25.86	26.30	24.58	25.64	25.01	26.05	26.49
	6H	24.99	25.92	25.44	26.36	26.81	25.27	26.19	25.72	26.64	27.09
	8H	25.18	26.05	25.64	26.50	26.96	25.51	26.38	25.97	26.82	27.29
	12H	25.33	26.12	25.81	26.59	27.06	25.71	26.49	26.19	26.97	27.44
8H	4H	24.72	25.59	25.18	26.03	26.50	24.89	25.76	25.35	26.20	26.67
	6H	25.45	26.17	25.94	26.66	27.13	25.71	26.44	26.21	26.93	27.40
	8H	25.72	26.37	26.23	26.87	27.36	26.05	26.70	26.55	27.20	27.69
	12H	25.95	26.52	26.45	27.01	27.57	26.33	26.91	26.84	27.40	27.96
12H	4H	24.77	25.55	25.25	26.02	26.49	24.92	25.71	25.40	26.18	26.65
	6H	25.52	26.17	26.03	26.68	27.16	25.77	26.42	26.28	26.93	27.41
	8H	25.85	26.43	26.36	26.92	27.48	26.17	26.74	26.67	27.23	27.79