

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: P894884

Luminaire Tested: 8TMB-20HL-FLT-UNV-L950

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894884
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-20HL-FLT-UNV-L950
Description: 20000 Lumen 8FT MICROBAY LINEAR BAY with FLAT FROSTED LENS, 90CRI, 5000K CCT
Light Source: -
Ballast/Driver: -

Summary

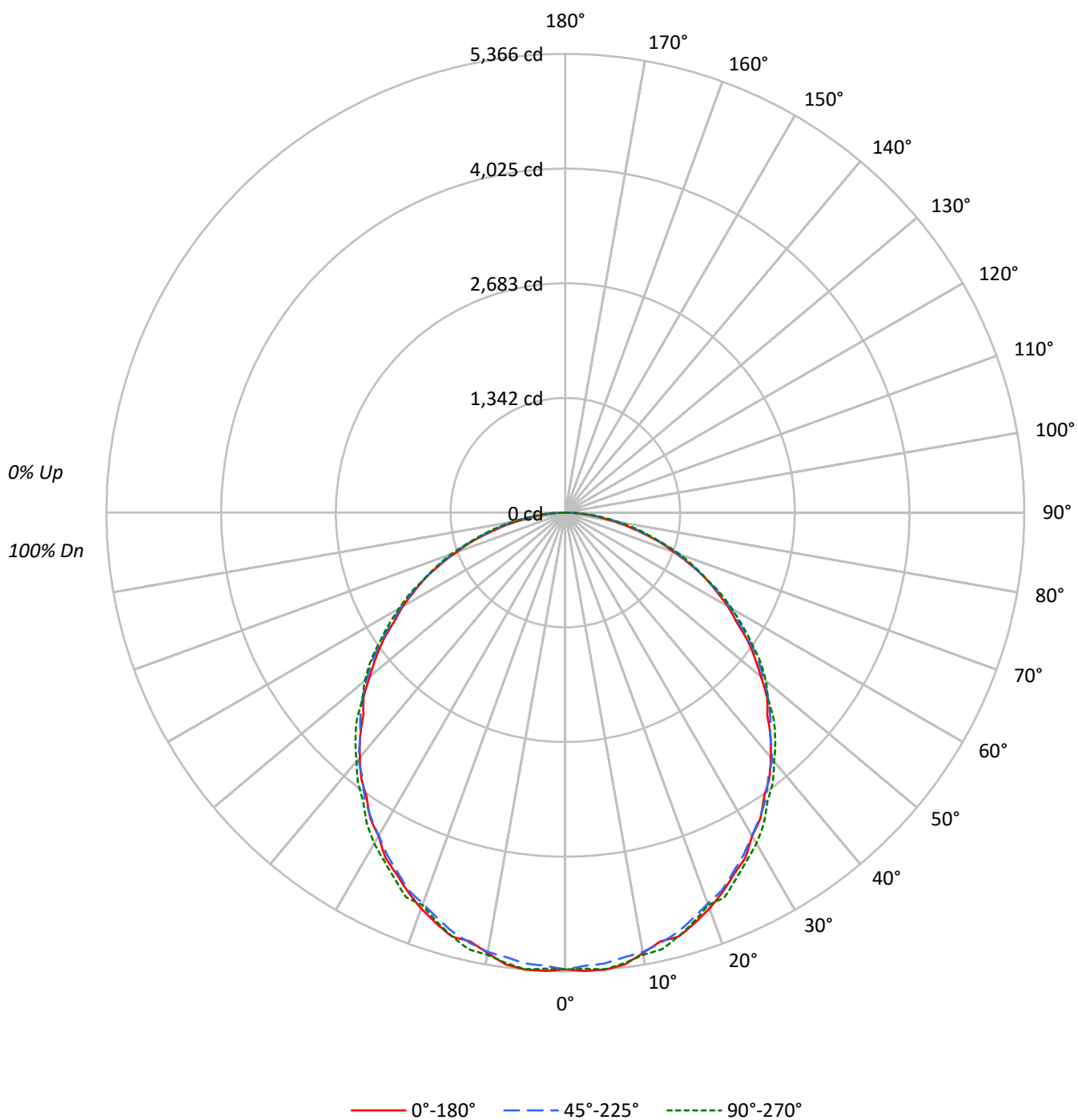
Lumens per Lamp: N/A
Luminaire Lumens: 14803.0 lumens
Efficiency: N/A
Efficacy: 102.1 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.24 / 1.34
Luminous Opening: Rectangular (W 0.38' x L: 7.98' x H: 0')
CIE Type: Direct

Input Watts (W): 145
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: 0.997
Total Harmonic Distortion (THDi): 7.79
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	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	109	104	99	96	106	102	98	94	97	94	91		93	91	88		90	88	86	84
2	99	90	84	78	96	89	82	77	85	80	75		82	77	73		79	75	72	70
3	90	79	71	65	88	78	70	64	75	68	63		72	67	62		69	65	61	59
4	82	70	62	55	80	69	61	54	67	59	54		64	58	53		62	57	52	50
5	76	63	54	47	74	62	53	47	60	52	46		58	51	46		56	50	45	43
6	70	57	48	41	68	56	47	41	54	46	41		52	45	40		51	45	40	38
7	65	51	43	36	63	51	42	36	49	41	36		48	41	36		46	40	35	33
8	60	47	38	33	59	46	38	32	45	37	32		44	37	32		42	36	32	30
9	57	43	35	29	55	42	35	29	41	34	29		40	34	29		39	33	29	27
10	53	40	32	27	52	39	32	26	38	31	26		37	31	26		36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	18956	18956	18956
5°	19110	18856	19094
10°	18849	18799	18924
15°	18853	18658	18836
20°	18604	18377	18447
25°	18268	18169	18494
30°	17898	17870	18314
35°	17553	17703	17853
40°	17316	17423	17594
45°	16756	17011	17324
50°	16484	16726	16892
55°	16074	16274	16445
60°	15574	15803	15951
65°	15113	15171	15171
70°	14054	14389	14748
75°	12940	13446	13731
80°	11412	12401	12826
85°	10239	11460	12307

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 17324 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	505.7	3.4
10°-20°	1441.1	9.7
20°-30°	2161.6	14.6
30°-40°	2567.2	17.3
40°-50°	2628.5	17.8
50°-60°	2355.0	15.9
60°-70°	1789.0	12.1
70°-80°	1042.0	7.0
80°-90°	312.9	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°	4108.4	27.8
0°-40°	6675.6	45.1
0°-60°	11659.1	78.8
0°-90°	14803.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	14803.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5342	5342	5342	5342	5342	
5°	5366	5345	5294	5326	5361	508
15°	5132	5167	5079	5100	5128	1441
25°	4666	4708	4641	4701	4724	2153
35°	4052	4142	4087	4103	4122	2547
45°	3339	3422	3390	3418	3452	2597
55°	2598	2638	2631	2661	2658	2315
65°	1800	1800	1807	1830	1807	1768
75°	944	960	981	1011	1002	1005
85°	252	256	282	300	302	282
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5342.5	5342.5	5342.5	5342.5	5342.5
2.5°	5365.5	5340.2	5305.5	5317.1	5340.2
5°	5365.5	5344.8	5294.0	5326.3	5360.9
7.5°	5330.9	5358.6	5247.8	5247.8	5312.5
10°	5231.7	5284.8	5217.8	5210.9	5252.5
12.5°	5137.1	5234.0	5155.5	5178.6	5229.4
15°	5132.5	5167.1	5079.4	5100.1	5127.8
17.5°	5033.2	5067.8	4973.2	5012.5	5012.5
20°	4927.1	4934.0	4867.1	4952.5	4885.5
22.5°	4804.8	4876.3	4784.0	4811.7	4869.4
25°	4666.3	4707.8	4640.9	4700.9	4724.0
27.5°	4553.2	4604.0	4511.7	4583.2	4590.1
30°	4368.6	4424.0	4361.7	4407.8	4470.1
32.5°	4244.0	4262.4	4230.1	4299.4	4317.8
35°	4052.4	4142.4	4087.0	4103.2	4121.7
37.5°	3918.6	3946.3	3897.8	3953.2	3983.2
40°	3738.6	3780.1	3761.6	3770.9	3798.6
42.5°	3551.6	3595.5	3547.0	3614.0	3634.7
45°	3339.3	3422.4	3390.1	3417.8	3452.4
47.5°	3200.9	3228.6	3219.3	3235.5	3212.4
50°	2986.2	3013.9	3030.1	3050.9	3060.1
52.5°	2794.7	2815.5	2845.5	2857.0	2877.8
55°	2598.5	2637.8	2630.8	2660.8	2658.5
57.5°	2370.1	2427.8	2409.3	2453.1	2453.1
60°	2194.7	2203.9	2227.0	2247.8	2247.8
62.5°	1991.6	2003.1	2014.7	2033.1	2047.0
65°	1800.1	1800.1	1807.0	1830.1	1807.0
67.5°	1578.5	1569.3	1592.4	1620.0	1617.7
70°	1354.7	1366.2	1387.0	1421.6	1421.6
72.5°	1163.1	1163.1	1186.2	1204.7	1202.3
75°	943.9	960.0	980.8	1010.8	1001.6
77.5°	747.7	759.3	793.9	821.6	823.9
80°	558.5	570.0	606.9	634.6	627.7
82.5°	390.0	406.2	440.8	461.6	459.2
85°	251.5	256.2	281.5	300.0	302.3
87.5°	115.4	124.6	143.1	150.0	150.0
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	21.75	23.39	22.12	23.70	24.02	21.86	23.49	22.22	23.81	24.12
	3H	23.53	25.01	23.91	25.34	25.70	23.69	25.18	24.07	25.50	25.86
	4H	24.19	25.59	24.59	25.94	26.32	24.39	25.79	24.79	26.14	26.51
	6H	24.67	25.97	25.08	26.33	26.72	24.94	26.24	25.35	26.60	26.99
	8H	24.82	26.06	25.24	26.45	26.84	25.13	26.37	25.55	26.76	27.16
	12H	24.93	26.11	25.35	26.49	26.92	25.27	26.46	25.70	26.84	27.27
4H	2H	22.40	23.79	22.79	24.14	24.52	22.48	23.88	22.88	24.22	24.60
	3H	24.40	25.57	24.81	25.97	26.37	24.54	25.72	24.95	26.11	26.51
	4H	25.19	26.25	25.62	26.67	27.10	25.38	26.44	25.81	26.86	27.29
	6H	25.79	26.72	26.24	27.16	27.61	26.07	27.00	26.52	27.44	27.89
	8H	25.99	26.86	26.45	27.30	27.76	26.31	27.19	26.77	27.63	28.09
	12H	26.14	26.92	26.62	27.40	27.87	26.51	27.30	26.99	27.77	28.24
8H	4H	25.53	26.40	25.98	26.84	27.30	25.69	26.56	26.15	27.01	27.47
	6H	26.25	26.97	26.74	27.46	27.94	26.52	27.24	27.01	27.73	28.20
	8H	26.52	27.17	27.03	27.68	28.16	26.85	27.50	27.36	28.01	28.49
	12H	26.75	27.33	27.26	27.82	28.38	27.14	27.71	27.64	28.20	28.76
12H	4H	25.57	26.35	26.05	26.83	27.30	25.73	26.51	26.21	26.98	27.45
	6H	26.32	26.97	26.83	27.48	27.96	26.58	27.23	27.08	27.73	28.22
	8H	26.66	27.23	27.16	27.72	28.28	26.97	27.55	27.48	28.04	28.60