

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: P894901

Luminaire Tested: 8TMB-20HL-LVRA-UNV-L830

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894901
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-077-26)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 8TMB-20HL-LVRA-UNV-L830
Description: 20000 Lumen 8FT MICROBAY LINEAR BAY with LOUVER WITH AISLE OPTIC, 80CRI, 3000K CCT
Light Source: -
Ballast/Driver: -

Summary

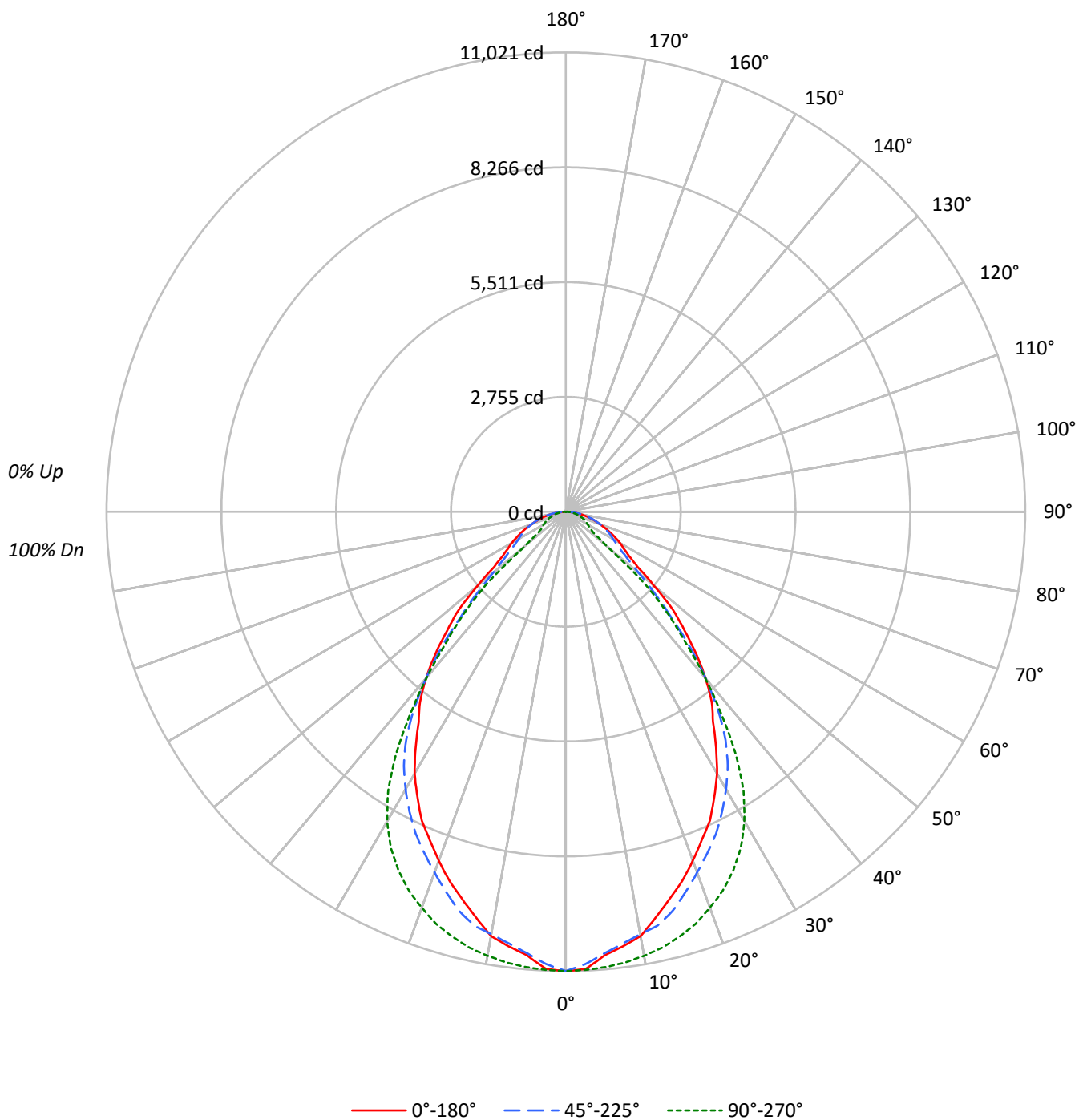
Lumens per Lamp: N/A
Luminaire Lumens: 17886.0 lumens
Efficiency: N/A
Efficacy: 123.4 lumens/watt
Spacing Criteria (0/90/45): 1.02 / 1.16 / 1.12
Luminous Opening: Rectangular (W 0.38' x L: 7.98' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P894901

CATALOG NUMBER: 8TMB-20HL-LVRA-UNV-L830

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
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	111	107	104	101	108	105	102	99	101	98	96		97	95	93		93
2	103	96	91	86	101	95	90	85	91	87	83		88	85	82		85
3	96	87	80	75	94	86	80	75	83	78	73		80	76	72		78
4	89	79	72	66	87	78	71	66	76	70	65		73	68	64		71
5	83	72	65	59	81	71	64	59	69	63	58		67	62	58		66
6	78	66	59	53	76	65	58	53	64	57	53		62	57	52		61
7	73	61	54	48	71	60	53	48	59	52	48		58	52	47		56
8	68	57	49	44	67	56	49	44	55	48	44		53	48	43		52
9	64	52	45	40	63	52	45	40	51	44	40		50	44	40		49
10	61	49	42	37	60	48	42	37	47	41	37		47	41	37		46

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	39103	39103	39103
5°	38048	37876	39060
10°	37240	37076	38969
15°	35317	36402	38750
20°	33644	34780	38159
25°	32003	33371	37185
30°	29733	31502	35109
35°	26661	28949	30794
40°	24154	24207	24075
45°	20196	17887	17445
50°	15255	12590	7134
55°	11474	10068	4498
60°	10662	9272	4334
65°	9920	9253	4340
70°	9075	9075	4273
75°	8605	8840	4128
80°	7950	8357	4236
85°	6937	7283	4625

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°

Vertical Angle: 45°

Luminance: 20666 cd/sqm

TEST NUMBER: P894901

CATALOG NUMBER: 8TMB-20HL-LVRA-UNV-L830

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1018.0	5.7
10°-20°	2805.0	15.7
20°-30°	3977.5	22.2
30°-40°	4097.7	22.9
40°-50°	2862.1	16.0
50°-60°	1373.4	7.7
60°-70°	963.5	5.4
70°-80°	602.4	3.4
80°-90°	186.3	1.0
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°	7800.5	43.6
0°-40°	11898.2	66.5
0°-60°	16133.8	90.2
0°-90°	17886.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	17886.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	11021	11021	11021	11021	11021	
5°	10683	10668	10634	10913	10967	1011
15°	9615	9686	9910	10194	10549	2707
25°	8175	8257	8524	9100	9498	3738
35°	6155	6323	6683	6822	7109	3879
45°	4025	4118	3565	3383	3477	3101
55°	1855	1764	1628	1042	727	1738
65°	1182	1105	1102	838	517	1171
75°	628	619	645	557	301	661
85°	170	170	179	176	114	190
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	11020.6	11020.6	11020.6	11020.6	11020.6
2.5°	10978.0	10943.9	10861.5	11012.1	11000.7
5°	10682.6	10668.4	10634.3	10912.7	10966.6
7.5°	10515.0	10486.6	10446.8	10753.6	10904.1
10°	10336.1	10370.2	10290.6	10571.8	10816.1
12.5°	9966.8	10057.7	10165.6	10384.4	10708.2
15°	9614.6	9685.6	9910.0	10194.0	10549.1
17.5°	9285.1	9367.5	9560.6	9986.7	10364.5
20°	8910.2	9023.8	9211.3	9756.6	10106.0
22.5°	8523.9	8629.0	8864.8	9449.9	9839.0
25°	8174.6	8256.9	8523.9	9100.5	9498.2
27.5°	7711.6	7865.0	8117.7	8674.5	9092.0
30°	7257.1	7387.8	7688.9	8157.5	8569.4
32.5°	6708.9	6899.2	7231.6	7589.4	7933.1
35°	6155.1	6322.6	6683.4	6822.5	7109.4
37.5°	5751.7	5797.2	6001.7	5984.6	6146.5
40°	5214.9	5305.8	5226.3	5013.2	5197.9
42.5°	4635.5	4743.4	4422.4	4175.3	4240.7
45°	4024.8	4118.5	3564.7	3382.9	3476.6
47.5°	3496.5	3488.0	2874.4	2752.3	2621.7
50°	2763.7	2854.6	2280.8	2053.6	1292.4
52.5°	2158.7	2192.8	1880.3	1312.2	849.3
55°	1854.8	1763.9	1627.5	1042.4	727.1
57.5°	1647.4	1533.8	1442.9	968.6	664.6
60°	1502.5	1374.7	1306.6	920.3	610.7
62.5°	1337.8	1238.4	1212.8	877.7	562.4
65°	1181.6	1104.9	1102.1	837.9	516.9
67.5°	1025.4	982.8	994.1	789.6	465.8
70°	874.8	866.3	874.8	727.1	411.9
72.5°	747.0	738.5	761.2	647.6	352.2
75°	627.7	619.2	644.8	556.7	301.1
77.5°	499.9	505.6	522.6	463.0	252.8
80°	389.1	389.1	409.0	363.6	207.3
82.5°	278.4	281.2	292.6	267.0	161.9
85°	170.4	170.4	178.9	176.1	113.6
87.5°	56.8	65.3	76.7	82.4	56.8
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	18.38	19.74	18.75	20.05	20.37	14.72	16.07	15.08	16.38	16.70
	3H	20.12	21.33	20.50	21.66	22.02	16.69	17.90	17.07	18.23	18.59
	4H	20.79	21.92	21.20	22.27	22.65	17.40	18.52	17.80	18.88	19.26
	6H	21.30	22.34	21.72	22.71	23.10	17.92	18.96	18.33	19.33	19.72
	8H	21.47	22.46	21.90	22.85	23.25	18.11	19.09	18.53	19.48	19.89
	12H	21.58	22.52	22.01	22.91	23.34	18.24	19.19	18.68	19.57	20.00
4H	2H	18.91	20.04	19.32	20.39	20.77	16.34	17.47	16.74	17.82	18.20
	3H	20.89	21.82	21.30	22.23	22.63	18.52	19.45	18.93	19.85	20.25
	4H	21.69	22.53	22.13	22.95	23.39	19.40	20.23	19.83	20.65	21.09
	6H	22.34	23.06	22.80	23.51	23.97	20.04	20.76	20.50	21.21	21.67
	8H	22.56	23.23	23.03	23.68	24.15	20.25	20.92	20.72	21.37	21.84
	12H	22.71	23.31	23.20	23.79	24.27	20.41	21.01	20.89	21.49	21.96
8H	4H	21.98	22.65	22.45	23.10	23.57	20.05	20.72	20.51	21.17	21.64
	6H	22.76	23.32	23.26	23.81	24.29	20.91	21.46	21.41	21.96	22.44
	8H	23.06	23.56	23.58	24.08	24.57	21.23	21.73	21.75	22.25	22.74
	12H	23.30	23.74	23.81	24.23	24.80	21.50	21.94	22.01	22.43	23.00
12H	4H	22.00	22.60	22.48	23.08	23.55	20.12	20.72	20.60	21.20	21.67
	6H	22.81	23.31	23.33	23.83	24.32	21.04	21.54	21.56	22.06	22.55
	8H	23.18	23.62	23.69	24.11	24.68	21.46	21.90	21.97	22.39	22.96