

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: P894878

Luminaire Tested: 8TMB-20HL-FLT-UNV-L835

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894878
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-L835
Description: 20000 Lumen 8FT MICROBAY LINEAR BAY with FLAT FROSTED LENS, 80CRI, 3500K CCT
Light Source: -
Ballast/Driver: -

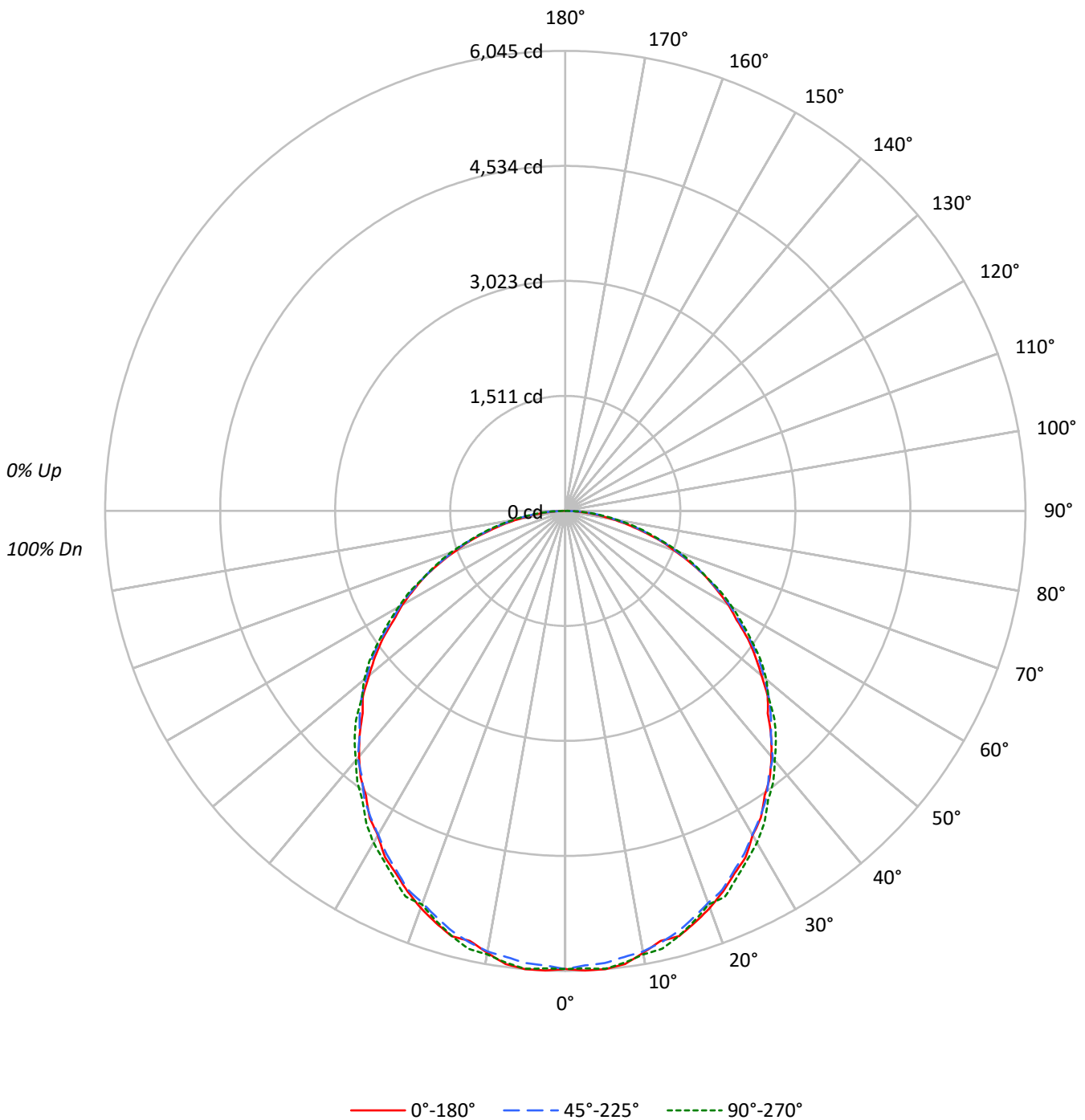
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16678.0 lumens
Efficiency: N/A
Efficacy: 115.0 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 (A_{in}): 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: P894878
CATALOG NUMBER: 8TMB-20HL-FLT-UNV-L835

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	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°	21357	21357	21357
5°	21531	21244	21513
10°	21237	21181	21321
15°	21241	21021	21222
20°	20960	20705	20783
25°	20582	20470	20836
30°	20165	20133	20634
35°	19776	19945	20114
40°	19509	19630	19823
45°	18879	19166	19518
50°	18572	18844	19031
55°	18111	18336	18529
60°	17547	17805	17971
65°	17027	17093	17093
70°	15833	16210	16615
75°	14578	15148	15469
80°	12856	13972	14450
85°	11537	12913	13866

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 19518 cd/sqm



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 CATALOG NUMBER: 8TMB-20HL-FLT-UNV-L835

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	569.7	3.4
10°-20°	1623.7	9.7
20°-30°	2435.3	14.6
30°-40°	2892.4	17.3
40°-50°	2961.4	17.8
50°-60°	2653.3	15.9
60°-70°	2015.6	12.1
70°-80°	1173.9	7.0
80°-90°	352.6	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°	4628.8	27.8
0°-40°	7521.2	45.1
0°-60°	13135.9	78.8
0°-90°	16678.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	16678.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6019	6019	6019	6019	6019	
5°	6045	6022	5965	6001	6040	572
15°	5783	5822	5723	5746	5777	1623
25°	5257	5304	5229	5296	5322	2426
35°	4566	4667	4605	4623	4644	2870
45°	3762	3856	3820	3851	3890	2926
55°	2928	2972	2964	2998	2995	2609
65°	2028	2028	2036	2062	2036	1992
75°	1063	1082	1105	1139	1128	1132
85°	283	289	317	338	341	318
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6019.2	6019.2	6019.2	6019.2	6019.2
2.5°	6045.2	6016.6	5977.6	5990.6	6016.6
5°	6045.2	6021.8	5964.6	6001.0	6040.0
7.5°	6006.2	6037.4	5912.6	5912.6	5985.4
10°	5894.4	5954.2	5878.8	5871.0	5917.8
12.5°	5787.8	5897.0	5808.6	5834.6	5891.8
15°	5782.6	5821.6	5722.7	5746.2	5777.4
17.5°	5670.7	5709.7	5603.1	5647.3	5647.3
20°	5551.1	5558.9	5483.5	5579.7	5504.3
22.5°	5413.3	5493.9	5389.9	5421.1	5486.1
25°	5257.3	5304.1	5228.7	5296.3	5322.3
27.5°	5129.9	5187.1	5083.1	5163.7	5171.5
30°	4921.9	4984.3	4914.1	4966.1	5036.3
32.5°	4781.5	4802.3	4765.9	4843.9	4864.7
35°	4565.7	4667.1	4604.7	4622.9	4643.7
37.5°	4414.9	4446.1	4391.5	4453.9	4487.7
40°	4212.1	4258.9	4238.1	4248.5	4279.7
42.5°	4001.5	4050.9	3996.3	4071.7	4095.1
45°	3762.3	3855.9	3819.5	3850.7	3889.7
47.5°	3606.3	3637.5	3627.1	3645.3	3619.3
50°	3364.5	3395.7	3413.9	3437.3	3447.7
52.5°	3148.7	3172.1	3205.9	3218.9	3242.3
55°	2927.7	2971.9	2964.1	2997.9	2995.3
57.5°	2670.3	2735.3	2714.5	2763.9	2763.9
60°	2472.7	2483.1	2509.1	2532.5	2532.5
62.5°	2243.9	2256.9	2269.9	2290.7	2306.3
65°	2028.1	2028.1	2035.9	2061.9	2035.9
67.5°	1778.4	1768.0	1794.0	1825.2	1822.6
70°	1526.2	1539.2	1562.6	1601.6	1601.6
72.5°	1310.4	1310.4	1336.4	1357.2	1354.6
75°	1063.4	1081.6	1105.0	1138.8	1128.4
77.5°	842.4	855.4	894.4	925.6	928.2
80°	629.2	642.2	683.8	715.0	707.2
82.5°	439.4	457.6	496.6	520.0	517.4
85°	283.4	288.6	317.2	338.0	340.6
87.5°	130.0	140.4	161.2	169.0	169.0
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	22.17	23.80	22.53	24.12	24.43	22.27	23.91	22.64	24.22	24.54
	3H	23.95	25.43	24.32	25.75	26.11	24.11	25.59	24.48	25.92	26.28
	4H	24.61	26.01	25.01	26.35	26.73	24.81	26.20	25.20	26.55	26.93
	6H	25.08	26.38	25.49	26.74	27.13	25.35	26.65	25.77	27.02	27.41
	8H	25.23	26.47	25.66	26.86	27.26	25.54	26.78	25.97	27.17	27.57
	12H	25.34	26.53	25.77	26.91	27.34	25.69	26.88	26.12	27.26	27.69
4H	2H	22.81	24.21	23.21	24.56	24.93	22.89	24.29	23.29	24.64	25.01
	3H	24.81	25.99	25.22	26.38	26.78	24.96	26.13	25.37	26.53	26.93
	4H	25.60	26.67	26.04	27.08	27.52	25.79	26.86	26.23	27.27	27.71
	6H	26.20	27.13	26.66	27.57	28.03	26.48	27.41	26.94	27.85	28.31
	8H	26.40	27.27	26.86	27.71	28.18	26.73	27.60	27.19	28.04	28.51
	12H	26.55	27.34	27.03	27.81	28.28	26.93	27.71	27.41	28.18	28.65
8H	4H	25.94	26.81	26.40	27.25	27.72	26.11	26.98	26.57	27.42	27.89
	6H	26.66	27.39	27.16	27.88	28.35	26.93	27.66	27.42	28.14	28.62
	8H	26.94	27.59	27.44	28.09	28.58	27.26	27.91	27.77	28.42	28.91
	12H	27.16	27.74	27.67	28.23	28.79	27.55	28.13	28.06	28.62	29.18
12H	4H	25.98	26.77	26.46	27.24	27.71	26.14	26.92	26.62	27.40	27.87
	6H	26.74	27.39	27.24	27.89	28.38	26.99	27.64	27.50	28.15	28.63
	8H	27.07	27.65	27.58	28.14	28.70	27.39	27.96	27.89	28.45	29.01