

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: P894894

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

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894894
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2407-175-6)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 8TMB-20HL-LVR-UNV-L835
Description: 20000 Lumen 8FT MICROBAY LINEAR BAY with LOUVER, 80CRI, 3500K CCT
Light Source: -
Ballast/Driver: -

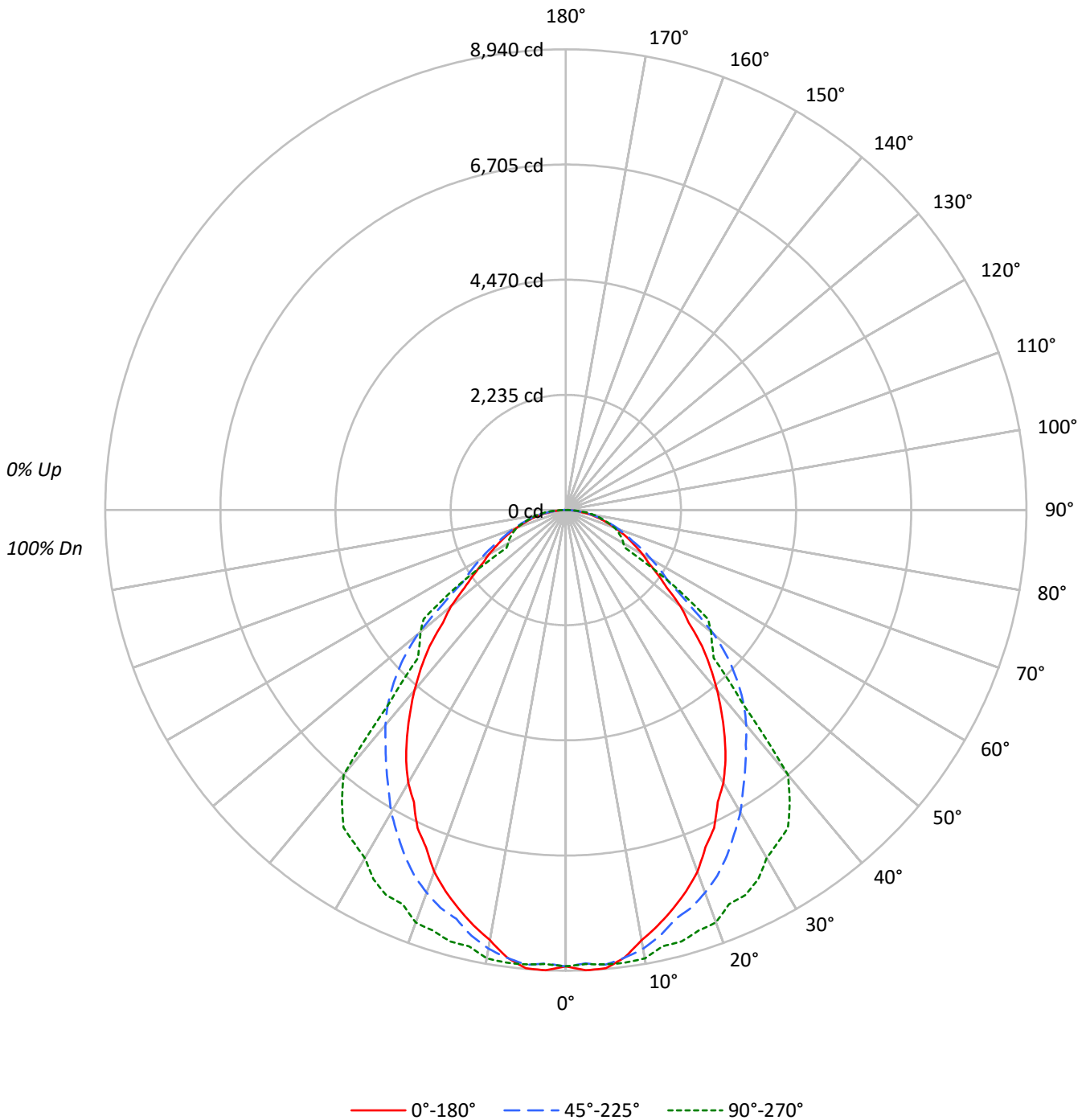
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18534.0 lumens
Efficiency: N/A
Efficacy: 127.8 lumens/watt
Spacing Criteria (0/90/45): 1.05 / 1.32 / 1.26
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: P894894
CATALOG NUMBER: 8TMB-20HL-LVR-UNV-L835

Luminous Intensity Polar Plot





TEST NUMBER: P894894

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

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
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	100	
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	89	87	
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	77	75	
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	75	70	67	67	65	
4	86	76	68	62	84	74	67	61	72	66	60	70	64	60	68	63	59	59	57	
5	80	68	60	54	78	67	60	54	65	59	53	63	57	53	62	56	52	52	50	
6	74	62	54	48	73	61	54	48	60	53	48	58	52	47	56	51	47	47	45	
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	42	40	
8	65	52	44	39	63	52	44	39	50	43	39	49	43	38	48	42	38	38	36	
9	61	48	41	35	59	48	40	35	47	40	35	46	39	35	45	39	35	35	33	
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32	32	30	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	31416	31416	31416
5°	31796	31546	31527
10°	30542	31142	31826
15°	29449	30175	31846
20°	28209	29839	32166
25°	26652	28963	32282
30°	25047	27753	31951
35°	23293	26323	32574
40°	21162	25233	31062
45°	18750	23683	20368
50°	16048	20698	20325
55°	13448	15105	15813
60°	12235	13637	9153
65°	11462	12073	9781
70°	10547	11438	10466
75°	9910	10730	10659
80°	9246	10149	11424
85°	7939	8468	12172

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 23683 cd/sqm



TEST NUMBER: P894894
 CATALOG NUMBER: 8TMB-20HL-LVR-UNV-L835

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	841.4	4.5
10°-20°	2354.2	12.7
20°-30°	3431.0	18.5
30°-40°	3925.0	21.2
40°-50°	3357.7	18.1
50°-60°	2214.2	11.9
60°-70°	1338.6	7.2
70°-80°	818.9	4.4
80°-90°	252.9	1.4
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°	6626.5	35.8
0°-40°	10551.6	56.9
0°-60°	16123.5	87.0
0°-90°	18534.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	18534.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8854	8854	8854	8854	8854	
5°	8927	8919	8857	8839	8852	837
15°	8017	8111	8215	8740	8670	2254
25°	6808	6912	7398	8030	8246	3114
35°	5378	5648	6077	7031	7520	3350
45°	3737	4025	4720	4410	4059	2861
55°	2174	2296	2442	2894	2556	1977
65°	1365	1399	1438	1285	1165	1349
75°	723	741	783	819	778	763
85°	195	192	208	247	299	221
90°	0	0	0	0	0	



TEST NUMBER: P894894

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

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	8854.3	8854.3	8854.3	8854.3	8854.3
2.5°	8940.1	8914.1	8807.5	8908.9	8817.9
5°	8927.1	8919.3	8856.9	8838.7	8851.7
7.5°	8755.5	8773.7	8763.3	8958.3	8859.5
10°	8477.2	8513.6	8643.7	8916.7	8833.5
12.5°	8258.8	8287.4	8461.6	8867.3	8672.3
15°	8017.0	8110.6	8214.6	8739.9	8669.7
17.5°	7756.9	7845.3	8092.4	8568.2	8560.4
20°	7470.9	7634.7	7902.6	8344.6	8518.8
22.5°	7083.4	7304.5	7681.5	8243.2	8277.0
25°	6807.8	6911.8	7398.1	8030.0	8245.8
27.5°	6389.1	6586.8	7083.4	7723.1	8079.4
30°	6113.5	6277.3	6774.0	7543.7	7798.5
32.5°	5767.6	5962.7	6407.3	7348.7	7655.5
35°	5377.6	5648.0	6077.1	7031.4	7520.3
37.5°	4966.7	5234.6	5741.6	6768.8	7138.0
40°	4568.9	4797.7	5447.8	6454.1	6706.4
42.5°	4160.6	4407.6	5112.3	5832.6	5044.7
45°	3736.7	4025.4	4719.7	4410.2	4059.2
47.5°	3234.9	3588.5	4285.4	3544.3	3846.0
50°	2907.2	3099.7	3749.7	3341.5	3682.1
52.5°	2473.0	2733.0	3011.2	3120.5	3479.3
55°	2173.9	2296.1	2441.8	2894.2	2556.2
57.5°	1898.3	2007.5	2176.5	2041.3	1362.6
60°	1724.1	1773.5	1921.7	1458.8	1289.8
62.5°	1526.4	1575.8	1685.0	1362.6	1237.8
65°	1365.2	1399.0	1438.0	1284.6	1165.0
67.5°	1193.6	1211.8	1253.4	1185.8	1094.8
70°	1016.7	1042.8	1102.6	1084.4	1008.9
72.5°	860.7	884.1	936.1	962.1	891.9
75°	722.9	741.1	782.7	819.1	777.5
77.5°	574.7	592.9	647.5	686.5	668.3
80°	452.5	455.1	496.7	535.7	559.1
82.5°	317.2	322.4	353.7	395.3	442.1
85°	195.0	192.4	208.0	247.0	299.0
87.5°	75.4	72.8	85.8	104.0	153.4
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P894894
 CATALOG NUMBER: 8TMB-20HL-LVR-UNV-L835

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	19.80	21.28	20.17	21.60	21.91	19.48	20.96	19.85	21.27	21.59
	3H	21.36	22.69	21.74	23.02	23.38	21.10	22.42	21.48	22.75	23.11
	4H	21.96	23.20	22.36	23.55	23.93	21.85	23.09	22.25	23.44	23.82
	6H	22.42	23.57	22.83	23.93	24.32	22.51	23.66	22.93	24.03	24.42
	8H	22.57	23.66	23.00	24.05	24.45	22.79	23.88	23.22	24.27	24.67
	12H	22.67	23.71	23.10	24.10	24.53	23.01	24.06	23.44	24.44	24.87
4H	2H	20.40	21.64	20.80	21.99	22.37	20.14	21.38	20.54	21.73	22.11
	3H	22.18	23.21	22.60	23.61	24.02	22.03	23.05	22.44	23.46	23.86
	4H	22.91	23.84	23.35	24.25	24.69	22.92	23.85	23.36	24.26	24.70
	6H	23.50	24.30	23.95	24.74	25.20	23.73	24.53	24.19	24.98	25.44
	8H	23.69	24.45	24.16	24.89	25.36	24.06	24.81	24.52	25.26	25.72
	12H	23.83	24.50	24.31	24.98	25.45	24.33	25.00	24.81	25.48	25.95
8H	4H	23.23	23.99	23.70	24.43	24.90	23.24	24.00	23.71	24.44	24.91
	6H	23.94	24.57	24.44	25.06	25.54	24.19	24.82	24.69	25.31	25.79
	8H	24.21	24.77	24.73	25.28	25.77	24.61	25.17	25.13	25.68	26.17
	12H	24.42	24.92	24.93	25.41	25.98	24.98	25.47	25.49	25.97	26.53
12H	4H	23.27	23.95	23.76	24.42	24.90	23.27	23.94	23.75	24.42	24.89
	6H	24.01	24.58	24.53	25.09	25.58	24.25	24.81	24.76	25.32	25.81
	8H	24.34	24.84	24.85	25.33	25.90	24.72	25.22	25.23	25.71	26.28