

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: P894814

Luminaire Tested: 8TMB-18HL-LVRF-UNV-L835

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894814
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2407-175-5)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 8TMB-18HL-LVRF-UNV-L835
Description: 18000 Lumen 8FT MICROBAY LINEAR BAY with LOUVER WITH FROSTED INLAY, 80CRI, 3500K (C)
Light Source: -
Ballast/Driver: -

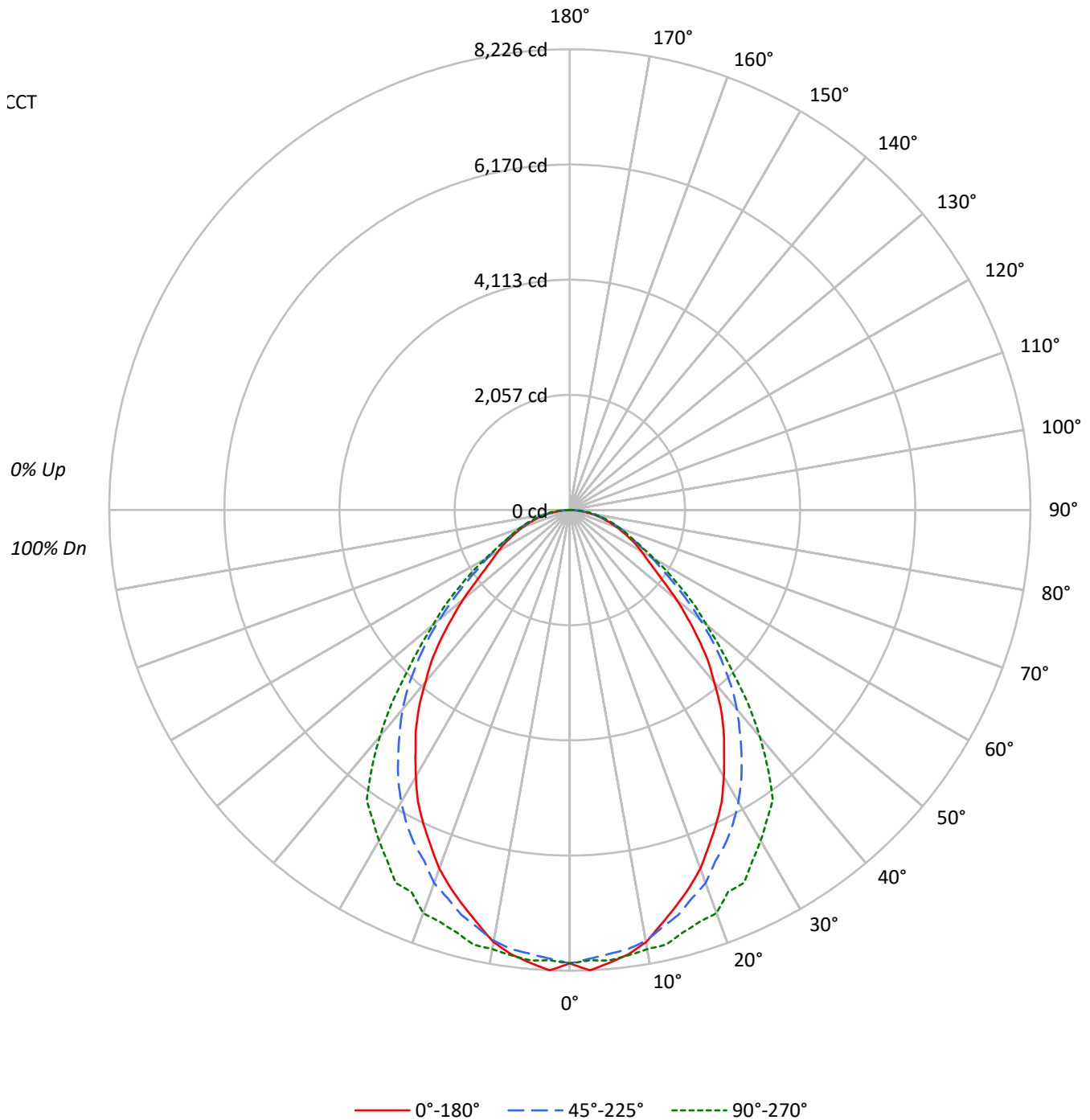
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16410.0 lumens
Efficiency: N/A
Efficacy: 121.7 lumens/watt
Spacing Criteria (0/90/45): 1.05 / 1.25 / 1.21
Luminous Opening: Rectangular (W 0.38' x L: 7.98' x H: 0')
CIE Type: Direct

Input Watts (W): 134.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 8.62
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

TEST NUMBER: P894814
CATALOG NUMBER: 8TMB-18HL-LVRF-UNV-L835

Luminous Intensity Polar Plot





TEST NUMBER: P894814

CATALOG NUMBER: 8TMB-18HL-LVRF-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	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	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	89	89	89	87
2	102	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	77	77	77	75
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	75	70	67	67	67	67	65
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	59	59	59	57
5	80	68	60	54	78	67	60	54	65	59	53	63	58	53	62	57	52	52	52	52	50
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	57	51	47	47	47	47	45
7	70	57	49	43	68	56	49	43	55	48	43	53	47	42	52	46	42	42	42	42	40
8	65	52	44	39	64	52	44	39	50	44	39	49	43	39	48	43	38	38	38	38	37
9	61	48	41	36	60	48	40	35	47	40	35	46	40	35	45	39	35	35	35	35	33
10	57	45	37	33	56	44	37	32	43	37	32	43	36	32	42	36	32	32	32	32	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	28716	28716	28716
5°	28903	28344	28749
10°	28227	28140	28680
15°	26894	27490	28681
20°	25726	26759	28915
25°	24221	25736	28767
30°	22532	24663	27925
35°	20751	23151	27385
40°	18559	21517	24453
45°	16269	19352	20737
50°	13730	16721	17549
55°	11390	13995	14967
60°	10473	11898	12345
65°	9811	10462	10542
70°	9136	9914	9840
75°	8524	9255	9585
80°	7959	8602	9195
85°	6697	7287	10145

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 20737 cd/sqm



TEST NUMBER: P894814
 CATALOG NUMBER: 8TMB-18HL-LVRF-UNV-L835

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	763.9	4.7
10°-20°	2130.9	13.0
20°-30°	3068.8	18.7
30°-40°	3388.0	20.6
40°-50°	2907.1	17.7
50°-60°	1980.5	12.1
60°-70°	1245.9	7.6
70°-80°	709.3	4.3
80°-90°	215.6	1.3
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°	5963.6	36.3
0°-40°	9351.6	57.0
0°-60°	14239.2	86.8
0°-90°	16410.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	16410.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8093	8093	8093	8093	8093	
5°	8115	8084	7958	8125	8072	766
15°	7322	7399	7484	7822	7808	2061
25°	6187	6310	6574	7104	7348	2841
35°	4791	4977	5345	5928	6322	2980
45°	3242	3458	3857	4089	4133	2498
55°	1841	1955	2262	2371	2420	1692
65°	1169	1188	1246	1307	1256	1161
75°	622	627	675	704	699	663
85°	164	169	179	213	249	189
90°	0	0	0	0	0	



TEST NUMBER: P894814

CATALOG NUMBER: 8TMB-18HL-LVRF-UNV-L835

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	8093.4	8093.4	8093.4	8093.4	8093.4
2.5°	8226.4	8141.8	8020.8	8136.9	8047.4
5°	8115.1	8083.7	7957.9	8124.8	8071.6
7.5°	8001.4	7933.7	7911.9	8090.9	8020.8
10°	7834.5	7795.8	7810.3	8040.1	7960.3
12.5°	7570.7	7597.4	7631.2	7924.0	7948.2
15°	7321.5	7399.0	7483.6	7822.4	7807.9
17.5°	7077.2	7183.6	7263.5	7699.0	7711.1
20°	6813.4	6873.9	7086.8	7507.8	7657.8
22.5°	6486.8	6605.3	6789.2	7314.3	7382.0
25°	6186.8	6310.2	6573.9	7103.8	7348.1
27.5°	5872.2	5985.9	6312.6	6854.6	7062.6
30°	5499.6	5652.0	6019.8	6571.5	6815.8
32.5°	5127.0	5349.6	5702.9	6269.0	6552.1
35°	4790.7	4977.0	5344.8	5927.9	6322.3
37.5°	4418.1	4614.1	4986.7	5555.3	5806.9
40°	4006.8	4217.3	4645.5	5105.2	5279.4
42.5°	3653.5	3835.0	4265.6	4589.9	4727.8
45°	3242.2	3457.5	3856.7	4089.0	4132.6
47.5°	2845.4	3092.2	3450.3	3559.1	3643.8
50°	2487.3	2680.9	3029.3	3097.0	3179.3
52.5°	2121.9	2327.6	2632.5	2700.2	2821.2
55°	1841.3	1955.0	2262.3	2371.1	2419.5
57.5°	1635.6	1708.2	1926.0	2063.9	2078.4
60°	1475.9	1512.2	1676.7	1780.8	1739.6
62.5°	1328.3	1357.4	1439.6	1519.5	1466.2
65°	1168.6	1188.0	1246.1	1306.6	1255.7
67.5°	1018.6	1040.4	1093.6	1137.2	1093.6
70°	880.7	897.6	955.7	975.1	948.5
72.5°	752.5	759.7	808.1	842.0	825.1
75°	621.8	626.7	675.1	704.1	699.2
77.5°	503.3	510.5	551.7	578.3	563.8
80°	389.5	394.4	421.0	459.7	450.0
82.5°	273.4	283.1	300.0	333.9	360.5
85°	164.5	169.4	179.0	212.9	249.2
87.5°	62.9	67.7	72.6	89.5	118.6
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P894814
 CATALOG NUMBER: 8TMB-18HL-LVRF-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	19.12	20.60	19.48	20.91	21.23	20.48	21.96	20.85	22.27	22.59
	3H	20.70	22.02	21.08	22.35	22.71	21.77	23.09	22.14	23.42	23.78
	4H	21.30	22.55	21.70	22.90	23.27	22.32	23.56	22.72	23.91	24.29
	6H	21.78	22.92	22.19	23.29	23.68	22.77	23.92	23.18	24.29	24.68
	8H	21.93	23.02	22.36	23.41	23.81	22.96	24.05	23.39	24.44	24.84
	12H	22.03	23.07	22.46	23.46	23.88	23.11	24.16	23.54	24.54	24.97
4H	2H	19.73	20.97	20.13	21.32	21.70	20.85	22.09	21.25	22.44	22.82
	3H	21.54	22.57	21.95	22.97	23.37	22.40	23.43	22.81	23.83	24.23
	4H	22.26	23.19	22.69	23.60	24.04	23.11	24.03	23.54	24.45	24.89
	6H	22.86	23.66	23.32	24.11	24.57	23.72	24.52	24.17	24.96	25.43
	8H	23.06	23.81	23.52	24.26	24.72	23.96	24.72	24.43	25.16	25.63
	12H	23.20	23.87	23.68	24.35	24.82	24.18	24.85	24.66	25.33	25.80
8H	4H	22.59	23.34	23.05	23.78	24.25	23.34	24.09	23.80	24.54	25.01
	6H	23.31	23.93	23.81	24.43	24.90	24.08	24.71	24.58	25.20	25.68
	8H	23.59	24.15	24.10	24.66	25.15	24.42	24.98	24.93	25.49	25.98
	12H	23.80	24.30	24.31	24.79	25.35	24.72	25.22	25.23	25.71	26.28
12H	4H	22.63	23.30	23.11	23.78	24.25	23.35	24.03	23.84	24.51	24.98
	6H	23.38	23.94	23.89	24.45	24.94	24.12	24.68	24.64	25.19	25.68
	8H	23.72	24.21	24.23	24.70	25.27	24.51	25.01	25.02	25.50	26.07