

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: P894703

Luminaire Tested: 8TMB-16HL-LVR-UNV-L840

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894703
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-16HL-LVR-UNV-L840
Description: 16000 Lumen 8FT MICROBAY LINEAR BAY with LOUVER, 80CRI, 4000K CCT
Light Source: -
Ballast/Driver: -

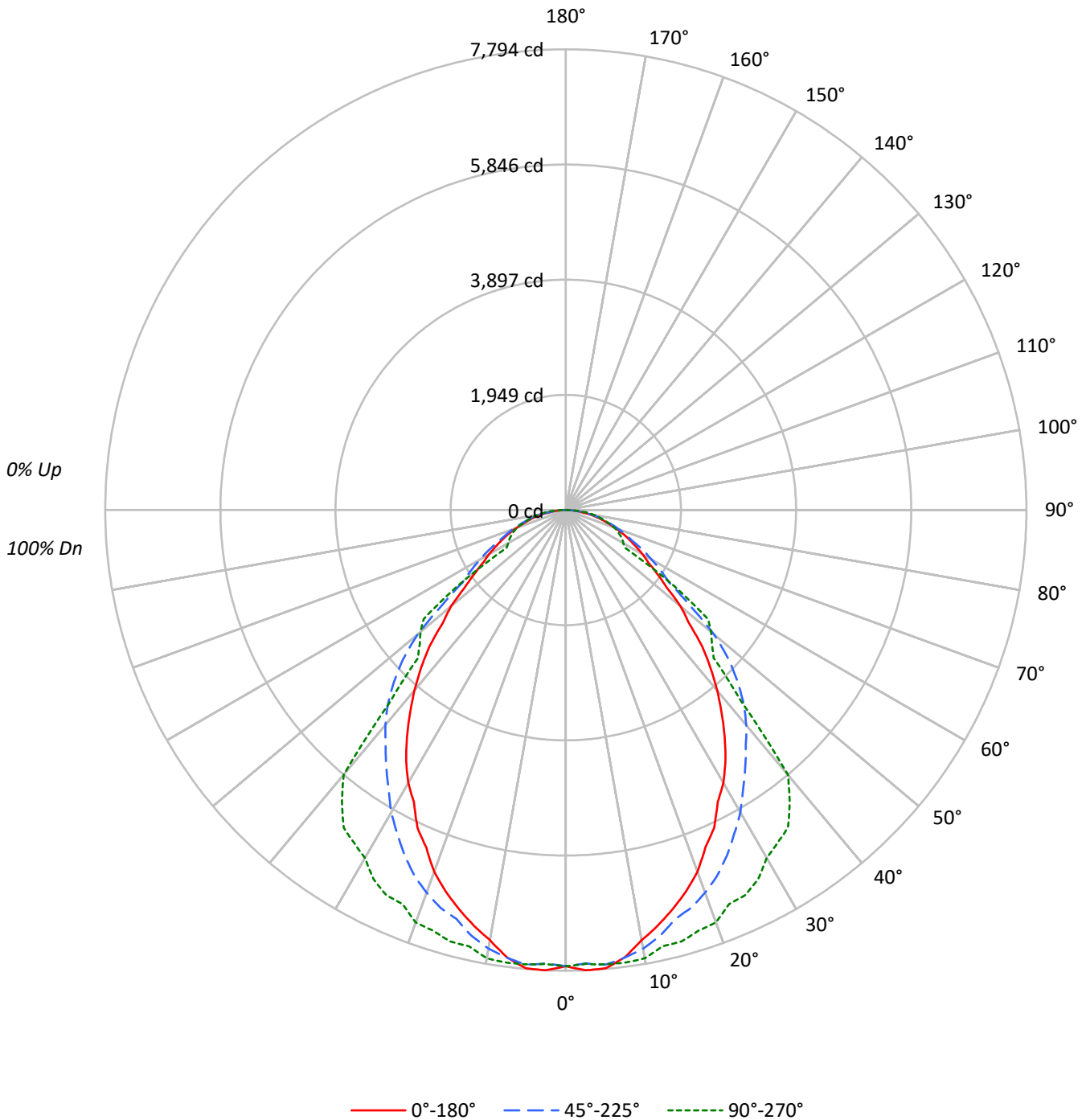
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16157.0 lumens
Efficiency: N/A
Efficacy: 139.5 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): 115.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: 0.999
Total Harmonic Distortion (THDi): 4.23
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	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	101	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	86	76	68	62	84	74	67	61	72	66	60	70	64	60	68	63	59	59	59	59	57
5	80	68	60	54	78	67	60	54	65	59	53	63	57	53	62	56	52	52	52	52	50
6	74	62	54	48	73	61	54	48	60	53	48	58	52	47	56	51	47	47	47	47	45
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	42	42	42	40
8	65	52	44	39	63	52	44	39	50	43	39	49	43	38	48	42	38	38	38	38	36
9	61	48	41	35	59	48	40	35	47	40	35	46	39	35	45	39	35	35	35	35	33
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32	32	32	32	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	27387	27387	27387
5°	27718	27500	27484
10°	26625	27148	27744
15°	25672	26305	27762
20°	24591	26012	28041
25°	23234	25249	28142
30°	21835	24194	27853
35°	20306	22947	28396
40°	18448	21997	27079
45°	16346	20645	17756
50°	13990	18044	17718
55°	11723	13167	13784
60°	10665	11888	7979
65°	9992	10525	8527
70°	9195	9972	9124
75°	8639	9354	9292
80°	8059	8847	9959
85°	6921	7385	10613

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 20645 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	733.5	4.5
10°-20°	2052.2	12.7
20°-30°	2991.0	18.5
30°-40°	3421.7	21.2
40°-50°	2927.1	18.1
50°-60°	1930.2	11.9
60°-70°	1166.9	7.2
70°-80°	713.9	4.4
80°-90°	220.5	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°	5776.7	35.8
0°-40°	9198.3	56.9
0°-60°	14055.7	87.0
0°-90°	16157.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	16157.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7719	7719	7719	7719	7719	
5°	7782	7775	7721	7705	7716	729
15°	6989	7070	7161	7619	7558	1965
25°	5935	6025	6449	7000	7188	2715
35°	4688	4924	5298	6130	6556	2920
45°	3258	3509	4114	3845	3539	2494
55°	1895	2002	2129	2523	2228	1724
65°	1190	1220	1254	1120	1016	1176
75°	630	646	682	714	678	665
85°	170	168	181	215	261	193
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7718.7	7718.7	7718.7	7718.7	7718.7
2.5°	7793.5	7770.9	7677.9	7766.3	7687.0
5°	7782.2	7775.4	7721.0	7705.1	7716.5
7.5°	7632.6	7648.4	7639.4	7809.4	7723.3
10°	7390.0	7421.8	7535.1	7773.1	7700.6
12.5°	7199.6	7224.5	7376.4	7730.1	7560.0
15°	6988.8	7070.4	7161.1	7619.0	7557.8
17.5°	6762.1	6839.2	7054.5	7469.4	7462.6
20°	6512.7	6655.6	6889.0	7274.4	7426.3
22.5°	6175.0	6367.7	6696.4	7186.0	7215.5
25°	5934.7	6025.4	6449.3	7000.1	7188.3
27.5°	5569.7	5742.0	6175.0	6732.6	7043.2
30°	5329.4	5472.2	5905.2	6576.2	6798.4
32.5°	5027.9	5198.0	5585.6	6406.2	6673.7
35°	4687.9	4923.7	5297.7	6129.6	6555.8
37.5°	4329.7	4563.2	5005.3	5900.7	6222.6
40°	3982.9	4182.4	4749.1	5626.4	5846.3
42.5°	3627.0	3842.4	4456.7	5084.6	4397.7
45°	3257.5	3509.1	4114.4	3844.6	3538.6
47.5°	2820.0	3128.3	3735.8	3089.8	3352.7
50°	2534.4	2702.1	3268.8	2912.9	3209.9
52.5°	2155.8	2382.5	2625.0	2720.3	3033.1
55°	1895.1	2001.7	2128.6	2523.0	2228.3
57.5°	1654.8	1750.0	1897.4	1779.5	1187.8
60°	1502.9	1546.0	1675.2	1271.7	1124.4
62.5°	1330.7	1373.7	1468.9	1187.8	1079.0
65°	1190.1	1219.6	1253.6	1119.8	1015.6
67.5°	1040.5	1056.4	1092.6	1033.7	954.4
70°	886.3	909.0	961.2	945.3	879.5
72.5°	750.3	770.7	816.1	838.7	777.5
75°	630.2	646.1	682.3	714.1	677.8
77.5°	501.0	516.8	564.5	598.5	582.6
80°	394.4	396.7	433.0	467.0	487.4
82.5°	276.6	281.1	308.3	344.6	385.4
85°	170.0	167.7	181.4	215.4	260.7
87.5°	65.7	63.5	74.8	90.7	133.7
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	19.33	20.81	19.69	21.12	21.43	19.00	20.48	19.37	20.80	21.11
	3H	20.89	22.21	21.26	22.54	22.90	20.62	21.95	21.00	22.27	22.64
	4H	21.49	22.73	21.89	23.08	23.46	21.37	22.61	21.77	22.96	23.34
	6H	21.94	23.09	22.36	23.46	23.85	22.04	23.18	22.45	23.55	23.94
	8H	22.10	23.19	22.52	23.58	23.98	22.32	23.41	22.74	23.80	24.20
	12H	22.19	23.24	22.63	23.62	24.05	22.54	23.58	22.97	23.96	24.39
4H	2H	19.92	21.16	20.32	21.51	21.89	19.67	20.91	20.07	21.26	21.63
	3H	21.71	22.74	22.12	23.14	23.54	21.55	22.58	21.96	22.98	23.38
	4H	22.44	23.36	22.87	23.78	24.22	22.45	23.37	22.88	23.79	24.23
	6H	23.02	23.82	23.48	24.27	24.73	23.25	24.06	23.71	24.50	24.96
	8H	23.22	23.97	23.68	24.41	24.88	23.58	24.33	24.05	24.78	25.25
	12H	23.35	24.03	23.84	24.51	24.98	23.85	24.53	24.34	25.00	25.48
8H	4H	22.76	23.51	23.22	23.95	24.42	22.77	23.52	23.23	23.96	24.43
	6H	23.47	24.09	23.96	24.58	25.06	23.72	24.34	24.21	24.83	25.31
	8H	23.74	24.30	24.25	24.81	25.30	24.13	24.69	24.65	25.21	25.69
	12H	23.95	24.44	24.46	24.94	25.50	24.50	25.00	25.01	25.49	26.06
12H	4H	22.80	23.47	23.28	23.95	24.42	22.79	23.46	23.27	23.94	24.42
	6H	23.54	24.10	24.05	24.61	25.10	23.77	24.33	24.28	24.84	25.33
	8H	23.87	24.36	24.38	24.86	25.42	24.25	24.74	24.76	25.24	25.80