

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: P894707

Luminaire Tested: 8TMB-16HL-LVR-UNV-L940

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894707
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-L940
Description: 16000 Lumen 8FT MICROBAY LINEAR BAY with LOUVER, 90CRI, 4000K CCT
Light Source: -
Ballast/Driver: -

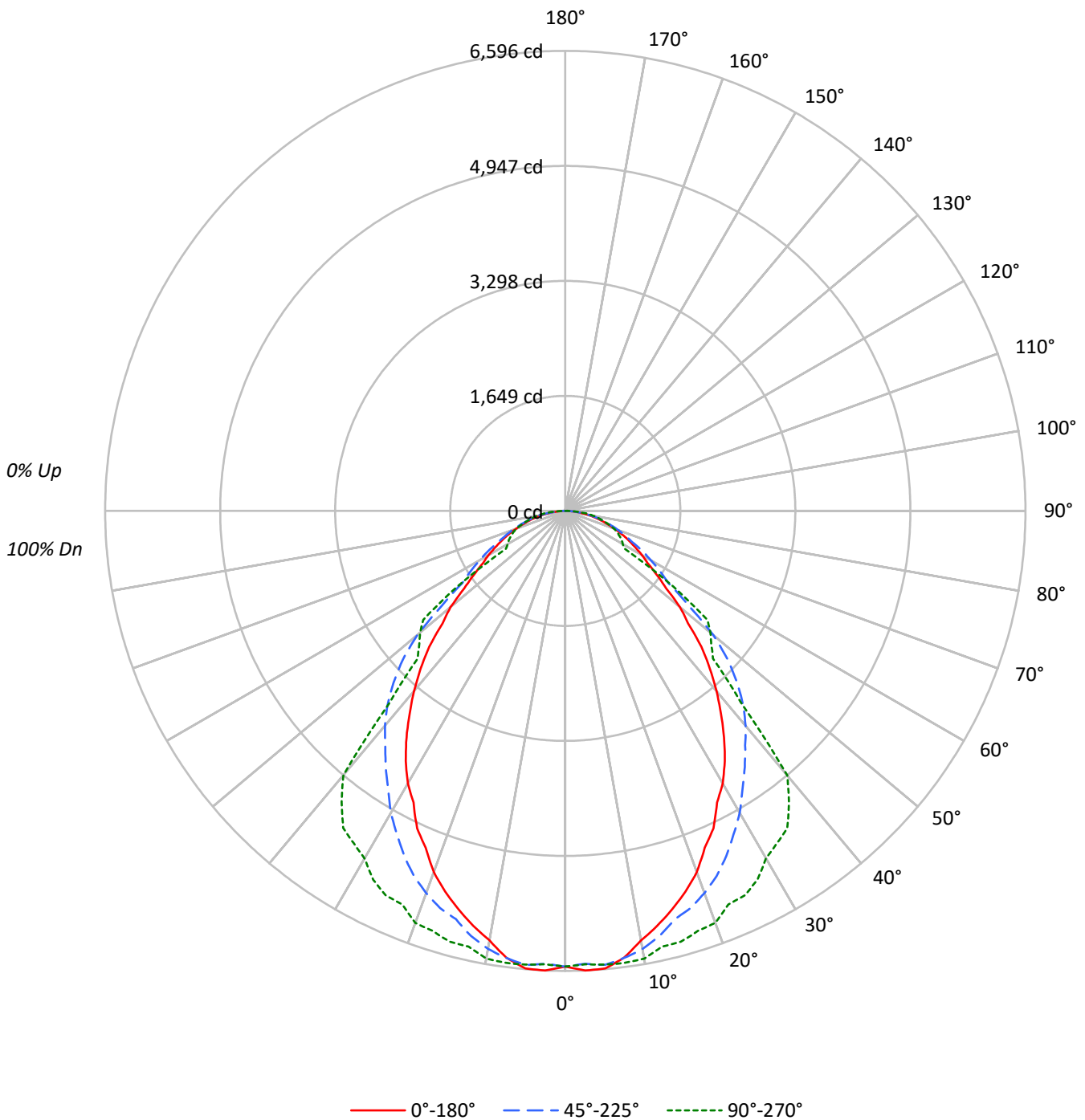
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13675.0 lumens
Efficiency: N/A
Efficacy: 118.1 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
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	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	87
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	77	77	75
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	75	70	67	67	67	65
4	86	76	68	62	84	74	67	61	72	66	60	70	64	60	68	63	59	59	59	57
5	80	68	60	54	78	67	60	54	65	59	53	63	57	53	62	56	52	52	52	50
6	74	62	54	48	73	61	54	48	60	53	48	58	52	47	56	51	47	47	47	45
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	42	42	40
8	65	52	44	39	63	52	44	39	50	43	39	49	43	38	48	42	38	38	38	36
9	61	48	41	35	59	48	40	35	47	40	35	46	39	35	45	39	35	35	35	33
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32	32	32	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	23180	23180	23180
5°	23460	23275	23262
10°	22535	22978	23482
15°	21728	22264	23497
20°	20814	22016	23733
25°	19665	21370	23818
30°	18480	20477	23574
35°	17186	19422	24034
40°	15614	18618	22919
45°	13835	17474	15028
50°	11840	15272	14997
55°	9922	11145	11667
60°	9027	10062	6753
65°	8457	8908	7217
70°	7783	8439	7722
75°	7312	7917	7865
80°	6821	7489	8429
85°	5858	6249	8981

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 17474 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	620.8	4.5
10°-20°	1737.0	12.7
20°-30°	2531.5	18.5
30°-40°	2896.0	21.2
40°-50°	2477.4	18.1
50°-60°	1633.7	11.9
60°-70°	987.7	7.2
70°-80°	604.2	4.4
80°-90°	186.6	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°	4889.3	35.8
0°-40°	7785.3	56.9
0°-60°	11896.5	87.0
0°-90°	13675.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13675.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6533	6533	6533	6533	6533	
5°	6587	6581	6535	6522	6531	617
15°	5915	5984	6061	6449	6397	1663
25°	5023	5100	5458	5925	6084	2298
35°	3968	4167	4484	5188	5549	2472
45°	2757	2970	3482	3254	2995	2111
55°	1604	1694	1802	2136	1886	1459
65°	1007	1032	1061	948	860	996
75°	533	547	578	604	574	563
85°	144	142	154	182	221	163
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6533.0	6533.0	6533.0	6533.0	6533.0
2.5°	6596.3	6577.1	6498.5	6573.3	6506.1
5°	6586.7	6581.0	6534.9	6521.5	6531.1
7.5°	6460.1	6473.5	6465.8	6609.7	6536.8
10°	6254.8	6281.6	6377.6	6579.0	6517.6
12.5°	6093.6	6114.7	6243.3	6542.6	6398.7
15°	5915.2	5984.3	6061.0	6448.6	6396.8
17.5°	5723.3	5788.6	5970.8	6321.9	6316.2
20°	5512.3	5633.1	5830.8	6156.9	6285.5
22.5°	5226.4	5389.5	5667.7	6082.1	6107.0
25°	5023.0	5099.8	5458.5	5924.8	6084.0
27.5°	4714.1	4859.9	5226.4	5698.4	5961.2
30°	4510.7	4631.6	4998.1	5566.0	5754.0
32.5°	4255.6	4399.5	4727.5	5422.1	5648.5
35°	3967.8	4167.3	4483.9	5188.0	5548.7
37.5°	3664.6	3862.2	4236.4	4994.2	5266.7
40°	3371.1	3539.9	4019.6	4762.1	4948.2
42.5°	3069.8	3252.1	3772.1	4303.5	3722.2
45°	2757.1	2970.1	3482.3	3254.0	2995.0
47.5°	2386.8	2647.7	3161.9	2615.1	2837.7
50°	2145.0	2287.0	2766.7	2465.5	2716.8
52.5°	1824.6	2016.5	2221.8	2302.4	2567.1
55°	1604.0	1694.2	1801.6	2135.5	1886.0
57.5°	1400.6	1481.2	1605.9	1506.1	1005.4
60°	1272.1	1308.5	1417.9	1076.4	951.6
62.5°	1126.2	1162.7	1243.3	1005.4	913.3
65°	1007.3	1032.2	1061.0	947.8	859.6
67.5°	880.7	894.1	924.8	874.9	807.7
70°	750.2	769.4	813.5	800.1	744.4
72.5°	635.1	652.3	690.7	709.9	658.1
75°	533.4	546.8	577.5	604.4	573.7
77.5°	424.0	437.5	477.7	506.5	493.1
80°	333.8	335.8	366.5	395.2	412.5
82.5°	234.1	237.9	260.9	291.6	326.2
85°	143.9	142.0	153.5	182.3	220.6
87.5°	55.6	53.7	63.3	76.7	113.2
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	18.75	20.23	19.11	20.54	20.85	18.42	19.90	18.79	20.22	20.53
	3H	20.31	21.63	20.69	21.96	22.32	20.04	21.37	20.42	21.69	22.06
	4H	20.91	22.15	21.31	22.50	22.88	20.79	22.03	21.19	22.38	22.76
	6H	21.36	22.51	21.78	22.88	23.27	21.46	22.60	21.87	22.97	23.36
	8H	21.52	22.61	21.94	23.00	23.40	21.74	22.83	22.16	23.22	23.62
	12H	21.61	22.66	22.05	23.04	23.47	21.96	23.00	22.39	23.38	23.81
4H	2H	19.34	20.58	19.74	20.93	21.31	19.09	20.33	19.49	20.68	21.06
	3H	21.13	22.16	21.54	22.56	22.96	20.97	22.00	21.38	22.40	22.80
	4H	21.86	22.78	22.29	23.20	23.64	21.87	22.79	22.30	23.21	23.65
	6H	22.44	23.24	22.90	23.69	24.15	22.67	23.48	23.13	23.92	24.38
	8H	22.64	23.39	23.10	23.83	24.30	23.00	23.75	23.47	24.20	24.67
	12H	22.77	23.45	23.26	23.93	24.40	23.27	23.95	23.76	24.43	24.90
8H	4H	22.18	22.93	22.64	23.37	23.84	22.19	22.94	22.65	23.38	23.85
	6H	22.89	23.51	23.39	24.00	24.48	23.14	23.76	23.63	24.25	24.73
	8H	23.16	23.72	23.67	24.23	24.72	23.55	24.11	24.07	24.63	25.11
	12H	23.37	23.86	23.88	24.36	24.92	23.92	24.42	24.43	24.91	25.48
12H	4H	22.22	22.89	22.70	23.37	23.84	22.21	22.88	22.70	23.36	23.84
	6H	22.96	23.52	23.47	24.03	24.52	23.19	23.75	23.70	24.26	24.75
	8H	23.29	23.78	23.80	24.28	24.84	23.67	24.16	24.18	24.66	25.22