

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: P894719

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

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894719
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-16HL-LVRF-UNV-L840
Description: 16000 Lumen 8FT MICROBAY LINEAR BAY with LOUVER WITH FROSTED INLAY, 80CRI, 4000K (C)
Light Source: -
Ballast/Driver: -

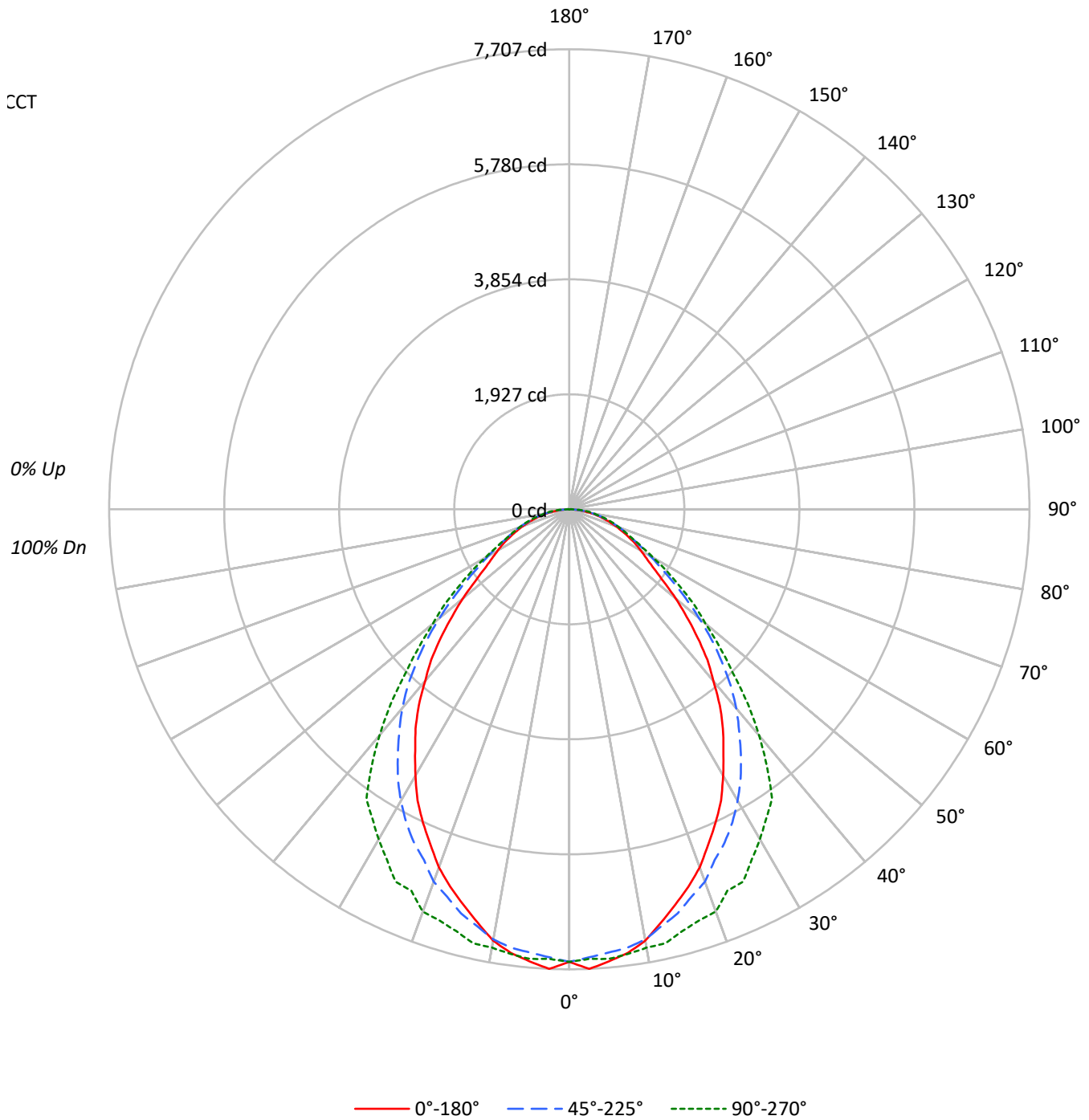
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15373.0 lumens
Efficiency: N/A
Efficacy: 132.8 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): 115.8
Input Voltage (V): 120
Input Current (Ain): 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	100	
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87	87	
2	102	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75	75	
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	75	70	67	65	65	
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	57	57	
5	80	68	60	54	78	67	60	54	65	59	53	63	58	53	62	57	52	50	50	
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	57	51	47	45	45	
7	70	57	49	43	68	56	49	43	55	48	43	53	47	42	52	46	42	40	40	
8	65	52	44	39	64	52	44	39	50	44	39	49	43	39	48	43	38	37	37	
9	61	48	41	36	60	48	40	35	47	40	35	46	40	35	45	39	35	33	33	
10	57	45	37	33	56	44	37	32	43	37	32	43	36	32	42	36	32	30	30	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	26902	26902	26902
5°	27077	26552	26932
10°	26443	26361	26868
15°	25195	25752	26868
20°	24101	25068	27088
25°	22690	24110	26950
30°	21108	23105	26160
35°	19440	21688	25654
40°	17386	20157	22908
45°	15241	18129	19426
50°	12862	15664	16441
55°	10670	13110	14021
60°	9812	11147	11565
65°	9192	9800	9877
70°	8560	9288	9217
75°	7985	8670	8981
80°	7456	8059	8615
85°	6273	6827	9506

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 19426 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	715.7	4.7
10°-20°	1996.2	13.0
20°-30°	2874.9	18.7
30°-40°	3173.9	20.6
40°-50°	2723.4	17.7
50°-60°	1855.3	12.1
60°-70°	1167.2	7.6
70°-80°	664.5	4.3
80°-90°	202.0	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°	5586.8	36.3
0°-40°	8760.7	57.0
0°-60°	13339.4	86.8
0°-90°	15373.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	15373.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7582	7582	7582	7582	7582	
5°	7602	7573	7455	7611	7562	718
15°	6859	6931	7011	7328	7314	1931
25°	5796	5911	6158	6655	6884	2662
35°	4488	4662	5007	5553	5923	2792
45°	3037	3239	3613	3831	3871	2340
55°	1725	1831	2119	2221	2267	1585
65°	1095	1113	1167	1224	1176	1088
75°	582	587	632	660	655	621
85°	154	159	168	200	234	177
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7581.9	7581.9	7581.9	7581.9	7581.9
2.5°	7706.6	7627.2	7513.9	7622.7	7538.8
5°	7602.3	7572.8	7455.0	7611.4	7561.5
7.5°	7495.8	7432.3	7411.9	7579.6	7513.9
10°	7339.4	7303.1	7316.7	7532.0	7457.3
12.5°	7092.3	7117.3	7149.0	7423.3	7445.9
15°	6858.9	6931.4	7010.7	7328.1	7314.5
17.5°	6629.9	6729.7	6804.5	7212.5	7223.8
20°	6382.9	6439.5	6639.0	7033.4	7173.9
22.5°	6076.9	6187.9	6360.2	6852.1	6915.5
25°	5795.8	5911.4	6158.5	6654.9	6883.8
27.5°	5501.1	5607.7	5913.7	6421.4	6616.3
30°	5152.1	5294.9	5639.4	6156.2	6385.1
32.5°	4803.0	5011.5	5342.5	5872.9	6138.1
35°	4488.0	4662.5	5007.0	5553.3	5922.7
37.5°	4138.9	4322.5	4671.5	5204.2	5439.9
40°	3753.6	3950.8	4352.0	4782.6	4945.8
42.5°	3422.6	3592.6	3996.1	4299.8	4429.0
45°	3037.3	3239.0	3613.0	3830.6	3871.4
47.5°	2665.6	2896.8	3232.2	3334.2	3413.6
50°	2330.1	2511.4	2837.8	2901.3	2978.4
52.5°	1987.8	2180.5	2466.1	2529.6	2642.9
55°	1724.9	1831.4	2119.3	2221.3	2266.6
57.5°	1532.2	1600.2	1804.2	1933.4	1947.0
60°	1382.7	1416.7	1570.8	1668.2	1629.7
62.5°	1244.4	1271.6	1348.7	1423.5	1373.6
65°	1094.8	1112.9	1167.3	1224.0	1176.4
67.5°	954.3	974.7	1024.5	1065.3	1024.5
70°	825.1	840.9	895.3	913.5	888.5
72.5°	704.9	711.7	757.1	788.8	772.9
75°	582.5	587.1	632.4	659.6	655.1
77.5°	471.5	478.3	516.8	541.7	528.1
80°	364.9	369.5	394.4	430.7	421.6
82.5°	256.1	265.2	281.1	312.8	337.7
85°	154.1	158.7	167.7	199.5	233.5
87.5°	58.9	63.5	68.0	83.9	111.1
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	18.89	20.37	19.26	20.69	21.00	20.25	21.73	20.62	22.05	22.36
	3H	20.47	21.80	20.85	22.12	22.49	21.54	22.86	21.92	23.19	23.55
	4H	21.08	22.32	21.48	22.67	23.05	22.09	23.33	22.49	23.68	24.06
	6H	21.55	22.69	21.96	23.06	23.45	22.54	23.69	22.96	24.06	24.45
	8H	21.70	22.80	22.13	23.19	23.59	22.73	23.82	23.16	24.21	24.61
	12H	21.80	22.85	22.23	23.23	23.66	22.89	23.93	23.32	24.31	24.74
4H	2H	19.51	20.75	19.91	21.10	21.48	20.62	21.86	21.02	22.21	22.59
	3H	21.31	22.34	21.72	22.74	23.14	22.18	23.20	22.59	23.61	24.01
	4H	22.03	22.96	22.47	23.38	23.82	22.88	23.81	23.31	24.22	24.66
	6H	22.63	23.44	23.09	23.88	24.34	23.49	24.29	23.95	24.74	25.20
	8H	22.83	23.59	23.30	24.03	24.50	23.74	24.49	24.20	24.93	25.40
	12H	22.97	23.64	23.45	24.12	24.59	23.95	24.62	24.43	25.10	25.57
8H	4H	22.36	23.11	22.82	23.56	24.03	23.11	23.87	23.58	24.31	24.78
	6H	23.08	23.71	23.58	24.20	24.68	23.86	24.48	24.36	24.97	25.45
	8H	23.36	23.92	23.88	24.43	24.92	24.19	24.75	24.70	25.26	25.75
	12H	23.57	24.07	24.08	24.56	25.13	24.50	24.99	25.01	25.48	26.05
12H	4H	22.40	23.07	22.88	23.55	24.02	23.13	23.80	23.61	24.28	24.75
	6H	23.15	23.71	23.67	24.22	24.71	23.90	24.46	24.41	24.97	25.45
	8H	23.49	23.98	24.00	24.48	25.04	24.28	24.78	24.79	25.27	25.84