

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: P894717

Luminaire Tested: 8TMB-16HL-LVRF-UNV-L830

Issue Date: 11/11/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P894717  
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-L830  
Description: 16000 Lumen 8FT MICROBAY LINEAR BAY with LOUVER WITH FROSTED INLAY, 80CRI, 3000K (C)  
Light Source: -  
Ballast/Driver: -

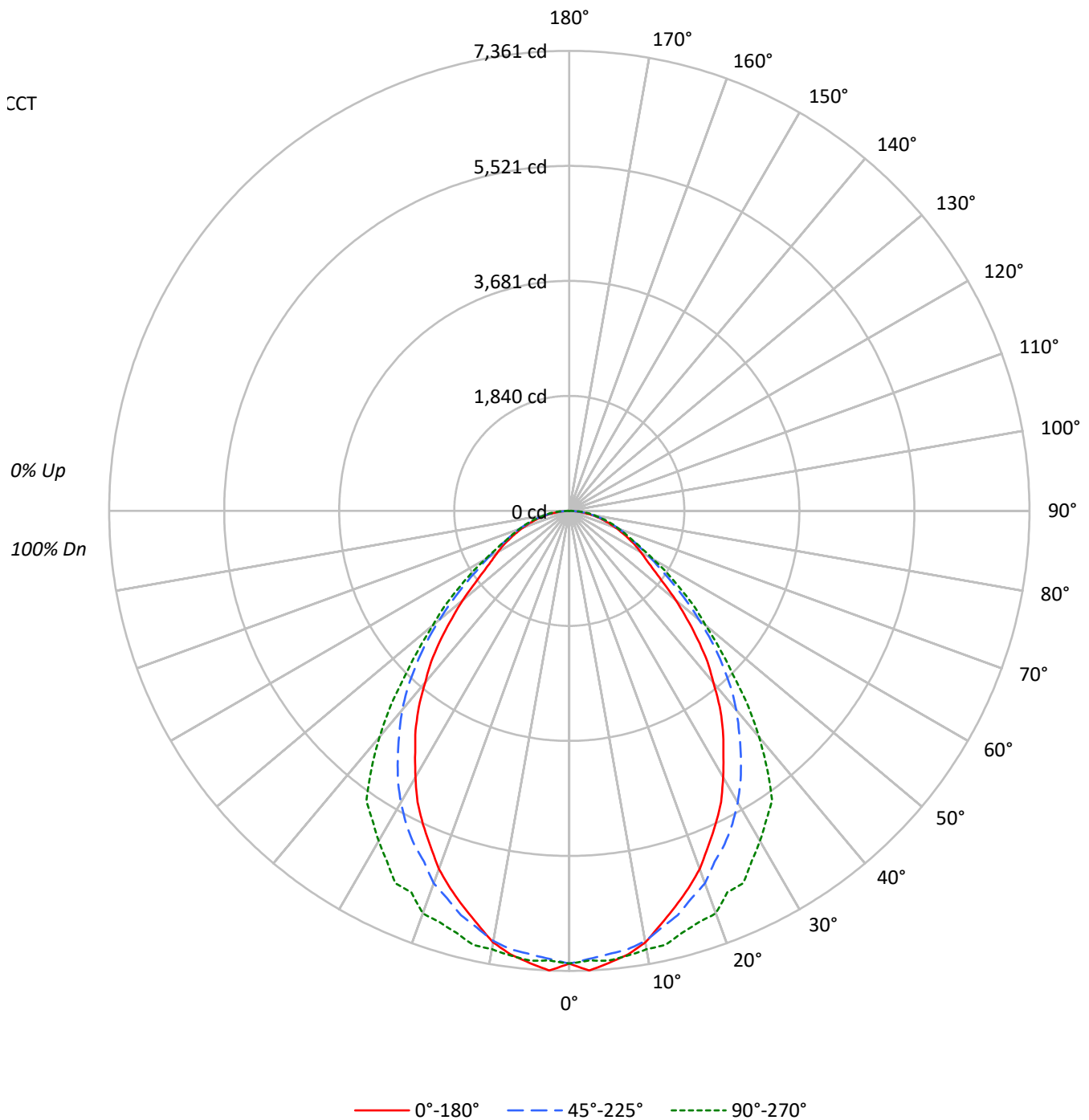
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 14684.0 lumens  
Efficiency: N/A  
Efficacy: 126.8 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°	25696	25696	25696
5°	25864	25362	25725
10°	25258	25180	25663
15°	24066	24598	25664
20°	23021	23944	25874
25°	21673	23029	25742
30°	20162	22069	24988
35°	18568	20716	24504
40°	16606	19254	21881
45°	14558	17317	18555
50°	12286	14962	15704
55°	10192	12522	13393
60°	9372	10647	11047
65°	8779	9361	9434
70°	8176	8872	8804
75°	7628	8280	8578
80°	7123	7697	8228
85°	5993	6522	9078

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 18555 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	683.6	4.7
10°-20°	1906.8	13.0
20°-30°	2746.0	18.7
30°-40°	3031.6	20.6
40°-50°	2601.4	17.7
50°-60°	1772.2	12.1
60°-70°	1114.8	7.6
70°-80°	634.7	4.3
80°-90°	192.9	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°	5336.4	36.3
0°-40°	8368.0	57.0
0°-60°	12741.5	86.8
0°-90°	14684.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	14684.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	7242	7242	7242	7242	7242	
5°	7262	7233	7121	7270	7223	685
15°	6552	6621	6696	7000	6987	1845
25°	5536	5646	5882	6357	6575	2542
35°	4287	4454	4783	5304	5657	2667
45°	2901	3094	3451	3659	3698	2235
55°	1648	1749	2024	2122	2165	1514
65°	1046	1063	1115	1169	1124	1039
75°	556	561	604	630	626	593
85°	147	152	160	190	223	169
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	7242.1	7242.1	7242.1	7242.1	7242.1
2.5°	7361.2	7285.4	7177.2	7281.1	7201.0
5°	7261.6	7233.4	7120.9	7270.2	7222.6
7.5°	7159.8	7099.2	7079.7	7239.9	7177.2
10°	7010.4	6975.8	6988.8	7194.5	7123.0
12.5°	6774.5	6798.3	6828.6	7090.5	7112.2
15°	6551.5	6620.7	6696.5	6999.6	6986.6
17.5°	6332.8	6428.0	6499.5	6889.2	6900.0
20°	6096.8	6150.9	6341.4	6718.2	6852.4
22.5°	5804.5	5910.6	6075.1	6545.0	6605.6
25°	5536.0	5646.5	5882.4	6356.6	6575.3
27.5°	5254.6	5356.3	5648.6	6133.6	6319.8
30°	4921.2	5057.6	5386.7	5880.3	6099.0
32.5°	4587.7	4786.9	5103.0	5609.7	5863.0
35°	4286.8	4453.5	4782.6	5304.4	5657.3
37.5°	3953.4	4128.8	4462.2	4971.0	5196.1
40°	3585.3	3773.7	4156.9	4568.3	4724.1
42.5°	3269.2	3431.6	3817.0	4107.1	4230.5
45°	2901.2	3093.9	3451.1	3658.9	3697.9
47.5°	2546.1	2766.9	3087.4	3184.8	3260.6
50°	2225.7	2398.9	2710.6	2771.3	2844.9
52.5°	1898.8	2082.8	2355.6	2416.2	2524.5
55°	1647.6	1749.4	2024.3	2121.8	2165.1
57.5°	1463.6	1528.5	1723.4	1846.8	1859.8
60°	1320.7	1353.2	1500.4	1593.5	1556.7
62.5°	1188.6	1214.6	1288.2	1359.7	1312.0
65°	1045.7	1063.0	1115.0	1169.1	1123.7
67.5°	911.5	931.0	978.6	1017.6	978.6
70°	788.1	803.2	855.2	872.5	848.7
72.5°	673.3	679.8	723.1	753.4	738.3
75°	556.4	560.7	604.0	630.0	625.7
77.5°	450.3	456.8	493.6	517.4	504.5
80°	348.6	352.9	376.7	411.4	402.7
82.5°	244.7	253.3	268.5	298.8	322.6
85°	147.2	151.6	160.2	190.5	223.0
87.5°	56.3	60.6	65.0	80.1	106.1
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	18.73	20.21	19.10	20.53	20.84	20.09	21.57	20.46	21.89	22.20
	3H	20.31	21.64	20.69	21.97	22.33	21.38	22.70	21.76	23.03	23.40
	4H	20.92	22.16	21.32	22.51	22.89	21.93	23.18	22.33	23.52	23.90
	6H	21.39	22.54	21.80	22.90	23.29	22.39	23.53	22.80	23.90	24.29
	8H	21.55	22.64	21.97	23.03	23.43	22.57	23.66	23.00	24.05	24.45
	12H	21.64	22.69	22.07	23.07	23.50	22.73	23.77	23.16	24.15	24.58
4H	2H	19.35	20.59	19.75	20.94	21.32	20.46	21.70	20.86	22.05	22.43
	3H	21.15	22.18	21.56	22.58	22.98	22.02	23.05	22.43	23.45	23.85
	4H	21.87	22.80	22.31	23.22	23.66	22.72	23.65	23.15	24.06	24.50
	6H	22.47	23.28	22.93	23.72	24.18	23.33	24.14	23.79	24.58	25.04
	8H	22.67	23.43	23.14	23.87	24.34	23.58	24.33	24.04	24.77	25.24
	12H	22.81	23.48	23.30	23.96	24.44	23.79	24.46	24.27	24.94	25.41
8H	4H	22.20	22.95	22.67	23.40	23.87	22.95	23.71	23.42	24.15	24.62
	6H	22.92	23.55	23.42	24.04	24.52	23.70	24.32	24.20	24.81	25.29
	8H	23.20	23.76	23.72	24.27	24.76	24.03	24.59	24.55	25.10	25.59
	12H	23.41	23.91	23.92	24.40	24.97	24.34	24.83	24.85	25.32	25.89
12H	4H	22.24	22.91	22.72	23.39	23.86	22.97	23.64	23.45	24.12	24.59
	6H	22.99	23.55	23.51	24.06	24.55	23.74	24.30	24.25	24.81	25.30
	8H	23.33	23.82	23.84	24.32	24.88	24.13	24.62	24.64	25.11	25.68