

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: P894708

Luminaire Tested: 8TMB-16HL-LVR-UNV-L950

Issue Date: 11/11/2024

**Test Information**

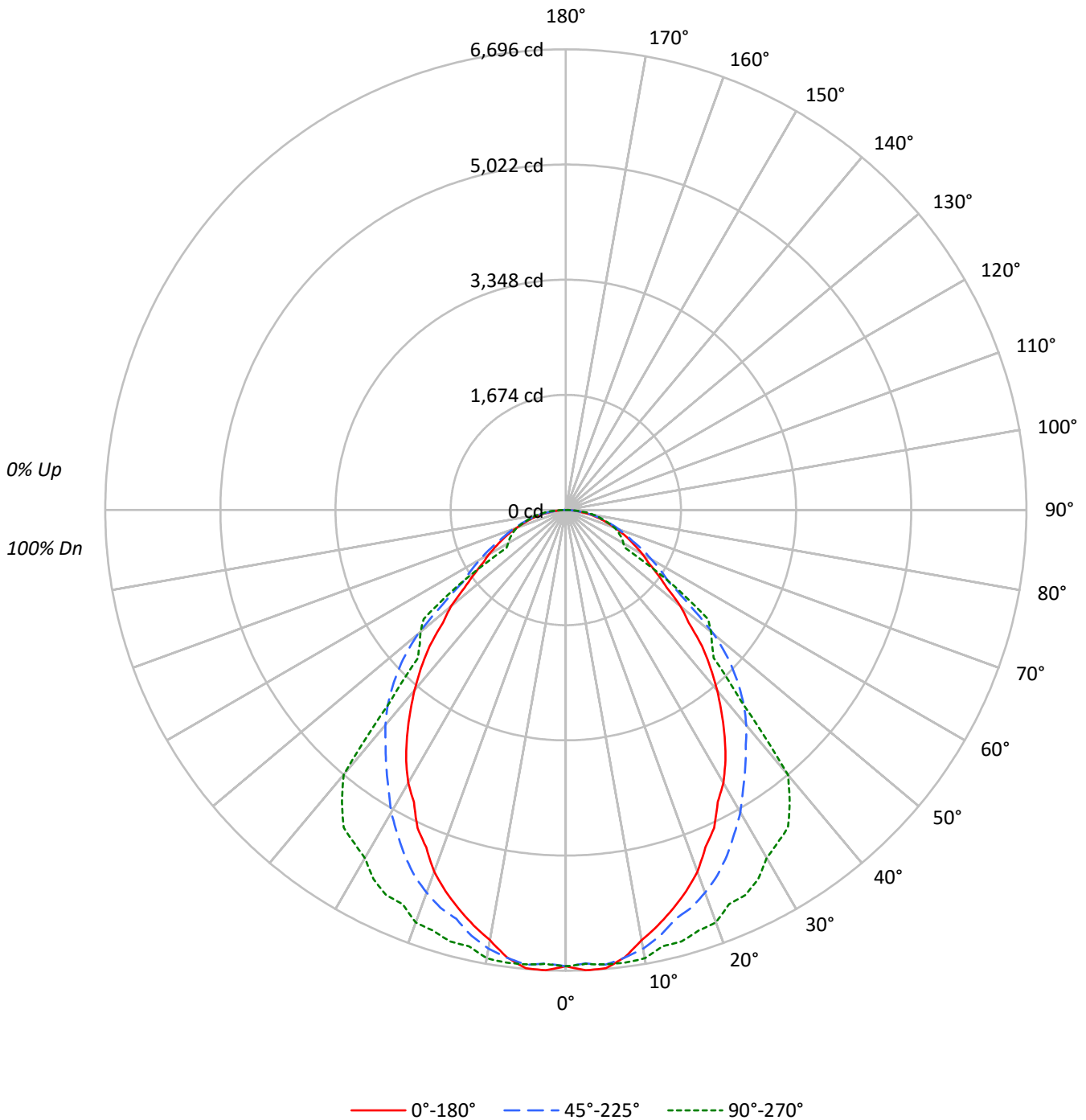
Test Method: LM-79-2019  
Report Number: P894708  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2407-175-6)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 8TMB-16HL-LVR-UNV-L950  
Description: 16000 Lumen 8FT MICROBAY LINEAR BAY with LOUVER, 90CRI, 5000K CCT  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 13881.0 lumens  
Efficiency: N/A  
Efficacy: 119.9 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 (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	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°	23529	23529	23529
5°	23813	23626	23612
10°	22875	23324	23836
15°	22056	22599	23851
20°	21127	22348	24091
25°	19961	21692	24177
30°	18759	20786	23930
35°	17445	19714	24396
40°	15849	18898	23264
45°	14043	17737	15255
50°	12019	15502	15222
55°	10072	11312	11842
60°	9163	10213	6855
65°	8585	9042	7325
70°	7900	8567	7839
75°	7422	8036	7983
80°	6925	7601	8555
85°	5948	6343	9119

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 17737 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	630.1	4.5
10°-20°	1763.1	12.7
20°-30°	2569.6	18.5
30°-40°	2939.7	21.2
40°-50°	2514.7	18.1
50°-60°	1658.3	11.9
60°-70°	1002.6	7.2
70°-80°	613.3	4.4
80°-90°	189.4	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°	4962.9	35.8
0°-40°	7902.6	56.9
0°-60°	12075.7	87.0
0°-90°	13881.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13881.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	6631	6631	6631	6631	6631	
5°	6686	6680	6633	6620	6630	627
15°	6004	6074	6152	6546	6493	1688
25°	5099	5177	5541	6014	6176	2332
35°	4028	4230	4551	5266	5632	2509
45°	2799	3015	3535	3303	3040	2143
55°	1628	1720	1829	2168	1914	1481
65°	1022	1048	1077	962	872	1011
75°	541	555	586	614	582	571
85°	146	144	156	185	224	166
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	6631.4	6631.4	6631.4	6631.4	6631.4
2.5°	6695.7	6676.2	6596.3	6672.3	6604.1
5°	6685.9	6680.1	6633.3	6619.7	6629.5
7.5°	6557.4	6571.0	6563.2	6709.3	6635.3
10°	6349.0	6376.3	6473.7	6678.1	6615.8
12.5°	6185.4	6206.8	6337.3	6641.1	6495.1
15°	6004.3	6074.4	6152.3	6545.7	6493.1
17.5°	5809.5	5875.8	6060.8	6417.2	6411.3
20°	5595.3	5718.0	5918.6	6249.7	6380.2
22.5°	5305.1	5470.7	5753.1	6173.7	6199.0
25°	5098.7	5176.6	5540.8	6014.0	6175.7
27.5°	4785.1	4933.1	5305.1	5784.2	6051.0
30°	4578.7	4701.4	5073.4	5649.8	5840.7
32.5°	4319.7	4465.7	4798.8	5503.8	5733.6
35°	4027.5	4230.1	4551.4	5266.2	5632.3
37.5°	3719.8	3920.4	4300.2	5069.5	5346.0
40°	3421.8	3593.2	4080.1	4833.8	5022.7
42.5°	3116.1	3301.1	3828.9	4368.4	3778.2
45°	2798.6	3014.8	3534.8	3303.0	3040.1
47.5°	2422.8	2687.6	3209.6	2654.5	2880.4
50°	2177.4	2321.5	2808.4	2502.6	2757.7
52.5°	1852.1	2046.9	2255.3	2337.1	2605.8
55°	1628.2	1719.7	1828.7	2167.6	1914.4
57.5°	1421.7	1503.5	1630.1	1528.8	1020.5
60°	1291.2	1328.2	1439.2	1092.6	966.0
62.5°	1143.2	1180.2	1262.0	1020.5	927.0
65°	1022.5	1047.8	1077.0	962.1	872.5
67.5°	893.9	907.6	938.7	888.1	819.9
70°	761.5	781.0	825.8	812.1	755.6
72.5°	644.6	662.2	701.1	720.6	668.0
75°	541.4	555.1	586.2	613.5	582.3
77.5°	430.4	444.0	484.9	514.2	500.5
80°	338.9	340.8	372.0	401.2	418.7
82.5°	237.6	241.5	264.9	296.0	331.1
85°	146.1	144.1	155.8	185.0	224.0
87.5°	56.5	54.5	64.3	77.9	114.9
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	18.80	20.28	19.16	20.59	20.91	18.48	19.96	18.84	20.27	20.58
	3H	20.36	21.68	20.74	22.01	22.37	20.09	21.42	20.47	21.75	22.11
	4H	20.96	22.20	21.36	22.55	22.93	20.84	22.08	21.24	22.43	22.81
	6H	21.41	22.56	21.83	22.93	23.32	21.51	22.66	21.92	23.02	23.42
	8H	21.57	22.66	22.00	23.05	23.45	21.79	22.88	22.22	23.27	23.67
	12H	21.67	22.71	22.10	23.09	23.52	22.01	23.05	22.44	23.43	23.86
4H	2H	19.39	20.63	19.79	20.98	21.36	19.14	20.38	19.54	20.73	21.11
	3H	21.18	22.21	21.59	22.61	23.01	21.02	22.05	21.43	22.45	22.85
	4H	21.91	22.83	22.34	23.25	23.69	21.92	22.84	22.35	23.26	23.70
	6H	22.49	23.30	22.95	23.74	24.20	22.72	23.53	23.18	23.97	24.43
	8H	22.69	23.44	23.15	23.89	24.35	23.05	23.81	23.52	24.25	24.72
	12H	22.83	23.50	23.31	23.98	24.45	23.33	24.00	23.81	24.48	24.95
8H	4H	22.23	22.98	22.69	23.43	23.89	22.24	22.99	22.70	23.44	23.90
	6H	22.94	23.56	23.44	24.06	24.53	23.19	23.81	23.69	24.30	24.78
	8H	23.21	23.77	23.72	24.28	24.77	23.61	24.17	24.12	24.68	25.17
	12H	23.42	23.92	23.93	24.41	24.97	23.97	24.47	24.48	24.96	25.53
12H	4H	22.27	22.94	22.75	23.42	23.89	22.26	22.94	22.75	23.42	23.89
	6H	23.01	23.57	23.52	24.08	24.57	23.24	23.80	23.76	24.31	24.80
	8H	23.34	23.84	23.85	24.33	24.89	23.72	24.22	24.23	24.71	25.27