

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: P894732

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

Issue Date: 11/11/2024

**Test Information**

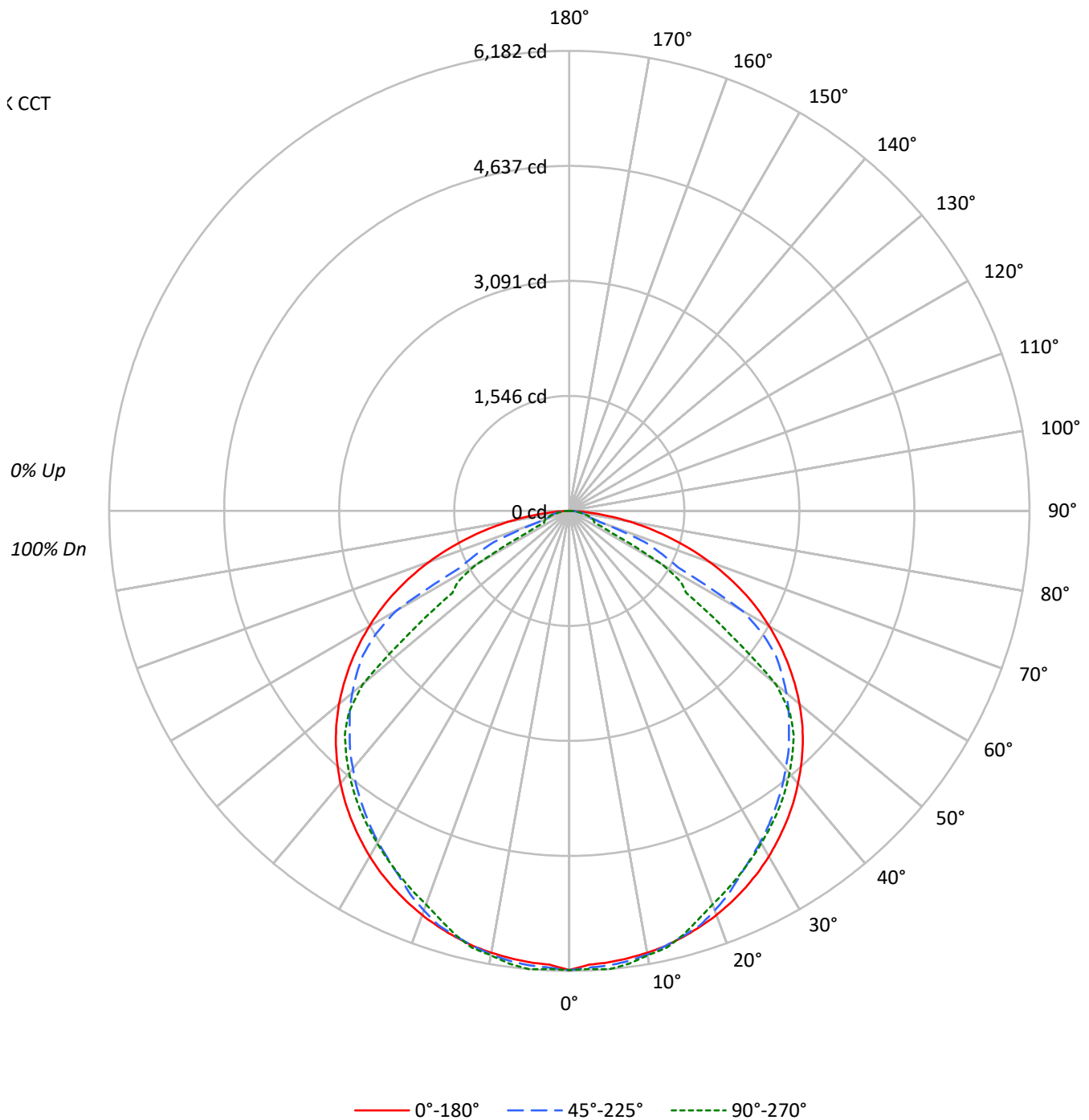
Test Method: LM-79-2019  
Report Number: P894732  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2408-210-7)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 8TMB-16HL-RFLW-UNV-L950  
Description: 16000 Lumen 8FT MICROBAY LINEAR BAY with REFLECTOR WITH WHITE FINISH, 90CRI, 5000K  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 16086.0 lumens  
Efficiency: N/A  
Efficacy: 138.9 lumens/watt  
Spacing Criteria (0/90/45): 1.29 / 1.25 / 1.38  
Luminous Opening: Rectangular (W 0.21' 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	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	98	107	103	100	97	99	96	94	95	93	91	92	90	88	88	88	88	86
2	101	93	87	82	98	91	85	81	88	83	79	85	81	77	82	78	75	75	75	75	73
3	92	82	75	69	90	81	74	68	78	72	67	75	70	66	73	68	65	65	65	65	62
4	85	73	65	59	82	72	64	58	70	63	57	67	61	57	65	60	56	56	56	56	54
5	78	66	57	51	76	65	56	50	62	55	50	61	54	49	59	53	49	49	49	49	47
6	72	59	51	44	70	58	50	44	56	49	44	55	48	43	53	48	43	43	43	43	41
7	67	54	45	39	65	53	45	39	51	44	39	50	43	39	49	43	38	38	38	38	36
8	62	49	41	35	61	48	40	35	47	40	35	46	39	35	45	39	34	34	34	34	32
9	58	45	37	32	57	44	37	31	43	36	31	42	36	31	41	35	31	31	31	31	29
10	54	42	34	29	53	41	34	29	40	33	28	39	33	28	38	32	28	28	28	28	26

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	39956	39956	39956
5°	39589	39849	40183
10°	39647	39797	39872
15°	39734	39645	39555
20°	39834	39375	38772
25°	39943	38679	38598
30°	40094	38416	38573
35°	40239	38270	38736
40°	40409	38223	38898
45°	40625	38205	39058
50°	40687	38350	36492
55°	40508	38233	21639
60°	40165	34846	18765
65°	39507	21065	5681
70°	37945	8351	6517
75°	35157	6850	6660
80°	30418	7234	6239
85°	21613	6783	5936

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 50°  
 Luminance: 40687 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	584.5	3.6
10°-20°	1673.8	10.4
20°-30°	2529.4	15.7
30°-40°	3086.1	19.2
40°-50°	3264.5	20.3
50°-60°	2703.9	16.8
60°-70°	1503.1	9.3
70°-80°	609.3	3.8
80°-90°	131.4	0.8
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°	4787.6	29.8
0°-40°	7873.8	48.9
0°-60°	13842.2	86.1
0°-90°	16086.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	16086.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	6170	6170	6170	6170	6170	
5°	6090	6199	6130	6140	6182	579
15°	5927	6018	5914	5910	5900	1674
25°	5590	5630	5414	5379	5402	2579
35°	5090	5028	4841	4860	4900	3186
45°	4436	4208	4172	4223	4265	3420
55°	3588	3345	3387	2324	1917	3206
65°	2578	2364	1375	462	371	2543
75°	1405	783	274	270	266	1484
85°	291	97	91	84	80	365
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	6170.4	6170.4	6170.4	6170.4	6170.4
2.5°	6103.8	6210.3	6143.7	6157.0	6162.8
5°	6090.5	6198.9	6130.4	6139.9	6181.8
7.5°	6062.0	6172.3	6100.0	6105.7	6138.0
10°	6029.6	6130.4	6052.5	6043.0	6063.9
12.5°	5985.9	6077.2	5985.9	5989.7	6016.3
15°	5927.0	6018.2	5913.7	5909.9	5900.3
17.5°	5856.6	5942.2	5839.5	5778.6	5757.7
20°	5780.5	5847.1	5714.0	5620.8	5626.5
22.5°	5689.3	5746.3	5579.0	5493.4	5518.1
25°	5590.4	5630.3	5413.6	5379.3	5402.2
27.5°	5482.0	5512.4	5270.9	5263.3	5282.4
30°	5362.2	5373.6	5137.8	5134.0	5158.8
32.5°	5229.1	5210.1	4995.2	4999.0	5031.4
35°	5090.3	5027.6	4841.2	4860.2	4900.2
37.5°	4943.9	4831.7	4689.1	4713.8	4757.5
40°	4780.4	4628.2	4521.8	4559.8	4601.6
42.5°	4613.0	4415.3	4360.1	4396.3	4436.2
45°	4436.2	4208.0	4171.9	4223.2	4265.1
47.5°	4244.1	4004.6	3998.8	4038.8	4019.8
50°	4038.8	3793.5	3806.8	3753.6	3622.4
52.5°	3818.2	3574.8	3601.4	3371.4	2724.8
55°	3588.1	3344.7	3386.6	2323.6	1916.7
57.5°	3352.3	3108.9	3082.3	1777.9	1776.0
60°	3101.3	2869.4	2690.6	1570.6	1448.9
62.5°	2848.4	2620.3	1652.4	1182.7	665.5
65°	2578.4	2363.6	1374.8	462.1	370.8
67.5°	2295.1	2103.1	1101.0	348.0	361.3
70°	2004.2	1833.0	441.1	336.6	344.2
72.5°	1707.5	1414.7	292.8	311.8	311.8
75°	1405.2	783.4	273.8	270.0	266.2
77.5°	1104.8	524.8	239.6	222.5	216.8
80°	815.7	188.2	194.0	173.0	167.3
82.5°	540.0	146.4	138.8	125.5	121.7
85°	290.9	97.0	91.3	83.7	79.9
87.5°	104.6	49.4	49.4	39.9	36.1
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	25.49	27.06	25.86	27.38	27.69	21.48	23.05	21.85	23.37	23.68
	3H	27.50	28.90	27.87	29.23	29.59	21.61	23.02	21.99	23.35	23.71
	4H	28.11	29.43	28.51	29.78	30.15	21.73	23.05	22.13	23.40	23.78
	6H	28.51	29.73	28.92	30.09	30.48	21.84	23.06	22.25	23.42	23.81
	8H	28.63	29.79	29.05	30.18	30.58	21.87	23.03	22.30	23.42	23.82
	12H	28.70	29.81	29.13	30.19	30.62	21.90	23.01	22.33	23.39	23.82
4H	2H	25.62	26.94	26.02	27.29	27.66	22.21	23.52	22.60	23.87	24.25
	3H	27.78	28.87	28.19	29.27	29.67	22.40	23.49	22.81	23.89	24.29
	4H	28.43	29.41	28.87	29.83	30.26	22.56	23.54	22.99	23.95	24.39
	6H	28.88	29.73	29.34	30.17	30.63	22.72	23.57	23.18	24.01	24.47
	8H	29.02	29.81	29.48	30.26	30.72	22.78	23.57	23.24	24.01	24.48
	12H	29.12	29.83	29.61	30.31	30.78	22.82	23.53	23.30	24.01	24.48
8H	4H	28.37	29.16	28.83	29.61	30.07	22.83	23.62	23.29	24.07	24.53
	6H	28.81	29.47	29.31	29.96	30.44	23.04	23.69	23.53	24.18	24.66
	8H	28.96	29.55	29.47	30.06	30.55	23.12	23.71	23.63	24.22	24.71
	12H	29.09	29.62	29.60	30.11	30.67	23.21	23.73	23.72	24.22	24.78
12H	4H	28.34	29.05	28.83	29.53	30.00	22.84	23.55	23.33	24.03	24.50
	6H	28.77	29.36	29.28	29.87	30.36	23.05	23.64	23.57	24.15	24.64
	8H	28.94	29.47	29.45	29.96	30.52	23.18	23.70	23.69	24.19	24.76