

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: P894729

Luminaire Tested: 8TMB-16HL-RFLW-UNV-L930

Issue Date: 11/11/2024

**Test Information**

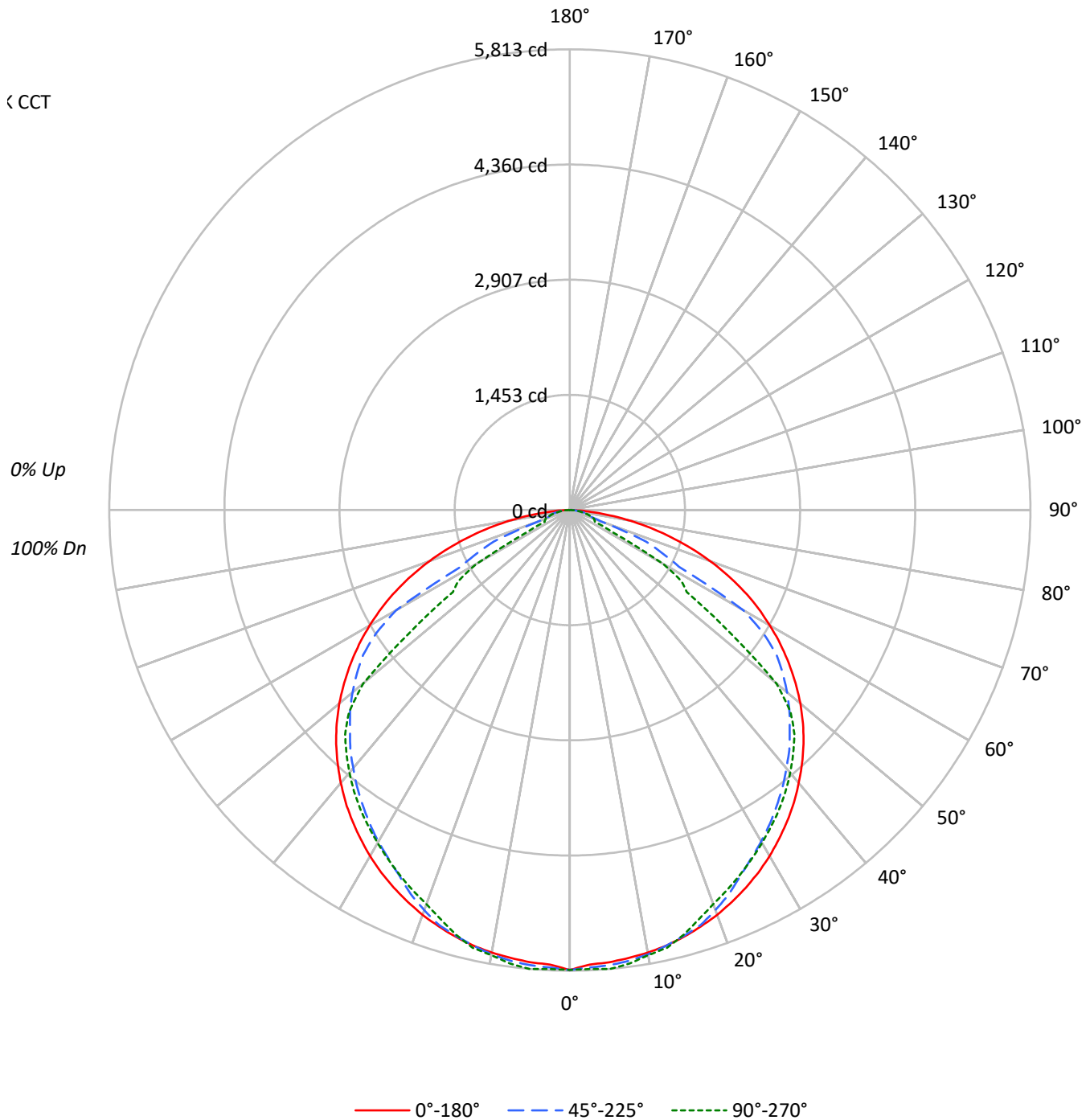
Test Method: LM-79-2019  
Report Number: P894729  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2408-210-7)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 8TMB-16HL-RFLW-UNV-L930  
Description: 16000 Lumen 8FT MICROBAY LINEAR BAY with REFLECTOR WITH WHITE FINISH, 90CRI, 3000K  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 15127.0 lumens  
Efficiency: N/A  
Efficacy: 130.6 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°	37574	37574	37574
5°	37229	37473	37787
10°	37284	37424	37495
15°	37365	37281	37197
20°	37459	37028	36461
25°	37561	36373	36297
30°	37704	36126	36273
35°	37840	35989	36427
40°	38000	35944	36579
45°	38203	35927	36730
50°	38261	36063	34316
55°	38093	35954	20348
60°	37770	32768	17647
65°	37152	19809	5343
70°	35683	7853	6129
75°	33060	6442	6262
80°	28606	6802	5870
85°	20328	6375	5580

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 50°  
 Luminance: 38261 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	549.6	3.6
10°-20°	1574.0	10.4
20°-30°	2378.6	15.7
30°-40°	2902.1	19.2
40°-50°	3069.9	20.3
50°-60°	2542.7	16.8
60°-70°	1413.5	9.3
70°-80°	573.0	3.8
80°-90°	123.5	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°	4502.2	29.8
0°-40°	7404.4	48.9
0°-60°	13017.0	86.1
0°-90°	15127.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	15127.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5802	5802	5802	5802	5802	
5°	5727	5829	5765	5774	5813	545
15°	5574	5659	5561	5558	5549	1574
25°	5257	5295	5091	5059	5080	2425
35°	4787	4728	4553	4570	4608	2997
45°	4172	3957	3923	3971	4011	3216
55°	3374	3145	3185	2185	1802	3015
65°	2425	2223	1293	434	349	2391
75°	1321	737	258	254	250	1395
85°	274	91	86	79	75	344
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	5802.5	5802.5	5802.5	5802.5	5802.5
2.5°	5739.9	5840.0	5777.5	5790.0	5795.3
5°	5727.4	5829.3	5764.9	5773.9	5813.2
7.5°	5700.6	5804.3	5736.3	5741.7	5772.1
10°	5670.2	5764.9	5691.6	5682.7	5702.4
12.5°	5629.0	5714.9	5629.0	5632.6	5657.7
15°	5573.6	5659.4	5561.1	5557.5	5548.6
17.5°	5507.5	5587.9	5491.4	5434.1	5414.5
20°	5435.9	5498.5	5373.3	5285.7	5291.1
22.5°	5350.1	5403.7	5246.4	5165.9	5189.2
25°	5257.1	5294.7	5090.8	5058.6	5080.1
27.5°	5155.2	5183.8	4956.7	4949.6	4967.4
30°	5042.5	5053.3	4831.5	4828.0	4851.2
32.5°	4917.4	4899.5	4697.4	4701.0	4731.4
35°	4786.8	4727.8	4552.6	4570.5	4608.0
37.5°	4649.2	4543.7	4409.5	4432.8	4473.9
40°	4495.4	4352.3	4252.2	4287.9	4327.3
42.5°	4338.0	4152.0	4100.2	4134.2	4171.7
45°	4171.7	3957.1	3923.2	3971.4	4010.8
47.5°	3991.1	3765.8	3760.4	3798.0	3780.1
50°	3798.0	3567.3	3579.8	3529.8	3406.4
52.5°	3590.6	3361.7	3386.7	3170.4	2562.4
55°	3374.2	3145.3	3184.7	2185.1	1802.4
57.5°	3152.5	2923.6	2898.6	1671.9	1670.1
60°	2916.4	2698.3	2530.2	1477.0	1362.6
62.5°	2678.6	2464.0	1553.9	1112.2	625.8
65°	2424.7	2222.7	1292.8	434.5	348.7
67.5°	2158.3	1977.7	1035.3	327.2	339.7
70°	1884.7	1723.8	414.8	316.5	323.7
72.5°	1605.7	1330.4	275.4	293.3	293.3
75°	1321.4	736.7	257.5	253.9	250.3
77.5°	1038.9	493.5	225.3	209.2	203.8
80°	767.1	177.0	182.4	162.7	157.4
82.5°	507.8	137.7	130.5	118.0	114.4
85°	273.6	91.2	85.8	78.7	75.1
87.5°	98.3	46.5	46.5	37.6	34.0
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	25.28	26.85	25.64	27.16	27.48	21.27	22.84	21.63	23.15	23.47
	3H	27.28	28.69	27.66	29.02	29.38	21.40	22.81	21.78	23.13	23.49
	4H	27.90	29.21	28.29	29.56	29.94	21.52	22.84	21.92	23.18	23.56
	6H	28.30	29.51	28.71	29.88	30.27	21.63	22.84	22.04	23.21	23.60
	8H	28.41	29.57	28.84	29.96	30.36	21.66	22.82	22.08	23.21	23.61
	12H	28.48	29.59	28.91	29.98	30.41	21.68	22.79	22.11	23.17	23.60
4H	2H	25.41	26.73	25.81	27.07	27.45	21.99	23.31	22.39	23.66	24.04
	3H	27.57	28.65	27.98	29.05	29.45	22.19	23.28	22.60	23.68	24.08
	4H	28.22	29.20	28.65	29.61	30.05	22.34	23.32	22.78	23.74	24.17
	6H	28.67	29.52	29.12	29.96	30.42	22.51	23.36	22.97	23.80	24.26
	8H	28.81	29.60	29.27	30.04	30.51	22.56	23.36	23.02	23.80	24.27
	12H	28.91	29.62	29.39	30.10	30.57	22.61	23.32	23.09	23.80	24.27
8H	4H	28.16	28.95	28.62	29.39	29.86	22.62	23.41	23.08	23.85	24.32
	6H	28.60	29.26	29.10	29.75	30.22	22.82	23.48	23.32	23.97	24.45
	8H	28.75	29.34	29.26	29.85	30.33	22.91	23.50	23.42	24.01	24.49
	12H	28.88	29.40	29.39	29.89	30.46	22.99	23.52	23.50	24.01	24.57
12H	4H	28.13	28.84	28.61	29.32	29.79	22.63	23.34	23.11	23.82	24.29
	6H	28.56	29.15	29.07	29.66	30.14	22.84	23.43	23.35	23.94	24.43
	8H	28.73	29.25	29.24	29.74	30.31	22.96	23.49	23.47	23.98	24.54