

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: P894726

Luminaire Tested: 8TMB-16HL-RFLW-UNV-L835

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894726
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-L835
Description: 16000 Lumen 8FT MICROBAY LINEAR BAY with REFLECTOR WITH WHITE FINISH, 80CRI, 3500K
Light Source: -
Ballast/Driver: -

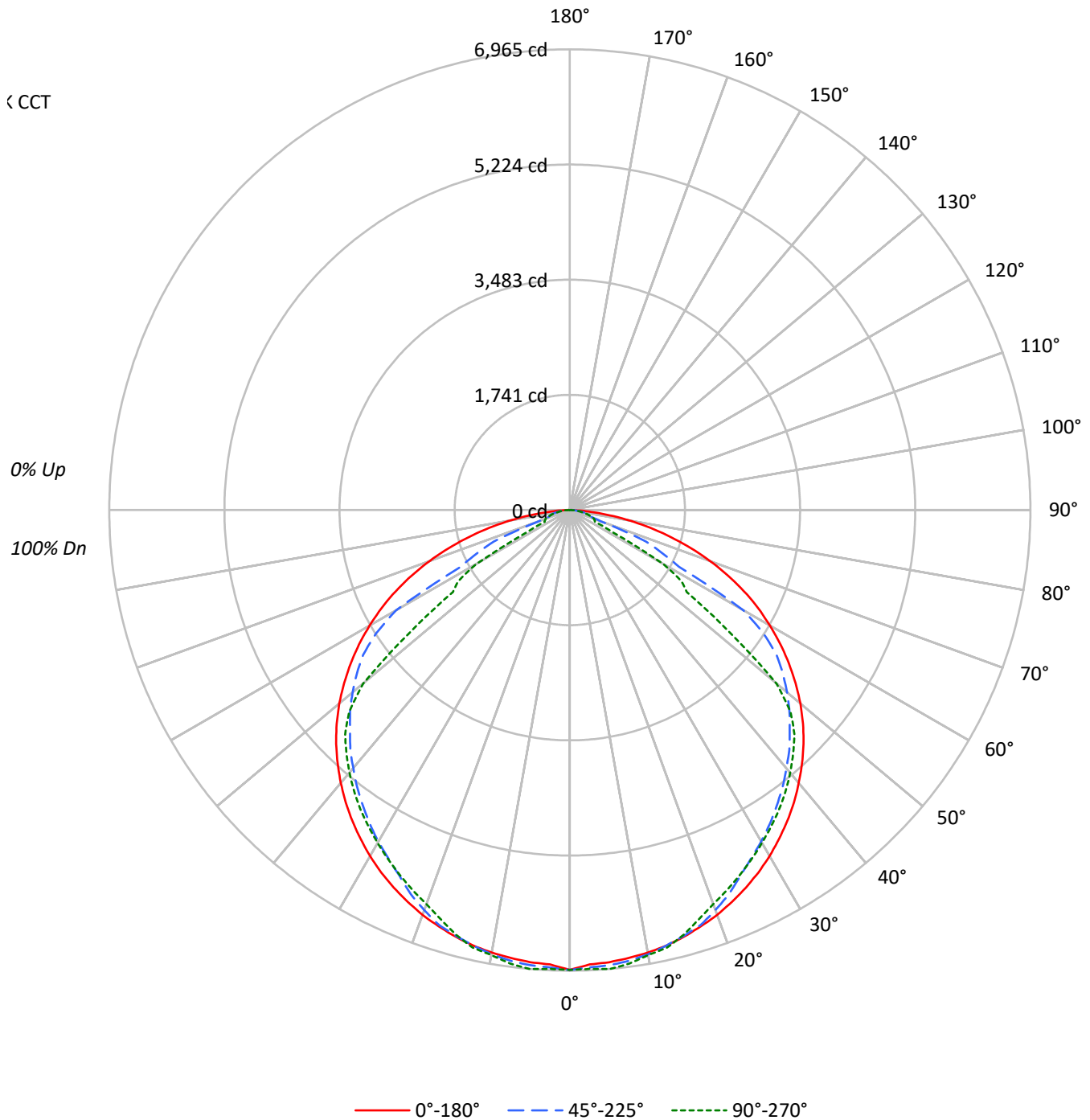
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18124.0 lumens
Efficiency: N/A
Efficacy: 156.5 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

TEST NUMBER: P894726
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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				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°	45018	45018	45018
5°	44605	44897	45274
10°	44670	44839	44923
15°	44768	44667	44567
20°	44881	44364	43685
25°	45003	43579	43488
30°	45174	43284	43460
35°	45337	43119	43644
40°	45528	43065	43826
45°	45772	43045	44006
50°	45842	43208	41115
55°	45640	43077	24380
60°	45254	39261	21142
65°	44513	23734	6402
70°	42752	9410	7342
75°	39610	7718	7503
80°	34274	8148	7029
85°	24355	7638	6687

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 50°
 Luminance: 45842 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	658.5	3.6
10°-20°	1885.8	10.4
20°-30°	2849.9	15.7
30°-40°	3477.1	19.2
40°-50°	3678.1	20.3
50°-60°	3046.5	16.8
60°-70°	1693.6	9.3
70°-80°	686.5	3.8
80°-90°	148.0	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°	5394.2	29.8
0°-40°	8871.3	48.9
0°-60°	15595.9	86.1
0°-90°	18124.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	18124.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6952	6952	6952	6952	6952	
5°	6862	6984	6907	6918	6965	653
15°	6678	6781	6663	6659	6648	1886
25°	6299	6344	6099	6061	6087	2905
35°	5735	5664	5455	5476	5521	3590
45°	4998	4741	4700	4758	4805	3853
55°	4043	3768	3816	2618	2160	3612
65°	2905	2663	1549	521	418	2865
75°	1583	883	308	304	300	1672
85°	328	109	103	94	90	412
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6952.1	6952.1	6952.1	6952.1	6952.1
2.5°	6877.1	6997.1	6922.1	6937.1	6943.5
5°	6862.1	6984.2	6907.1	6917.8	6965.0
7.5°	6830.0	6954.2	6872.8	6879.3	6915.7
10°	6793.6	6907.1	6819.3	6808.6	6832.1
12.5°	6744.3	6847.1	6744.3	6748.6	6778.6
15°	6677.9	6780.7	6662.9	6658.6	6647.9
17.5°	6598.6	6695.0	6579.3	6510.8	6487.2
20°	6512.9	6587.9	6437.9	6332.9	6339.4
22.5°	6410.1	6474.3	6285.8	6189.4	6217.3
25°	6298.7	6343.7	6099.4	6060.9	6086.6
27.5°	6176.6	6210.8	5938.7	5930.2	5951.6
30°	6041.6	6054.4	5788.8	5784.5	5812.3
32.5°	5891.6	5870.2	5628.1	5632.4	5668.8
35°	5735.2	5664.5	5454.6	5476.0	5521.0
37.5°	5570.3	5443.9	5283.2	5311.0	5360.3
40°	5386.0	5214.6	5094.6	5137.5	5184.6
42.5°	5197.5	4974.7	4912.5	4953.2	4998.2
45°	4998.2	4741.1	4700.4	4758.3	4805.4
47.5°	4781.8	4511.9	4505.5	4550.5	4529.0
50°	4550.5	4274.1	4289.1	4229.1	4081.3
52.5°	4301.9	4027.7	4057.7	3798.5	3070.1
55°	4042.7	3768.5	3815.6	2618.0	2159.5
57.5°	3777.1	3502.8	3472.8	2003.1	2001.0
60°	3494.3	3232.9	3031.5	1769.6	1632.5
62.5°	3209.3	2952.2	1861.7	1332.6	749.8
65°	2905.1	2663.0	1549.0	520.6	417.8
67.5°	2585.9	2369.5	1240.5	392.1	407.1
70°	2258.1	2065.3	497.0	379.2	387.8
72.5°	1923.9	1593.9	329.9	351.4	351.4
75°	1583.2	882.7	308.5	304.2	299.9
77.5°	1244.7	591.3	269.9	250.7	244.2
80°	919.1	212.1	218.5	195.0	188.5
82.5°	608.4	165.0	156.4	141.4	137.1
85°	327.8	109.3	102.8	94.3	90.0
87.5°	117.8	55.7	55.7	45.0	40.7
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	25.90	27.48	26.27	27.79	28.11	21.89	23.47	22.26	23.78	24.10
	3H	27.91	29.32	28.29	29.65	30.01	22.03	23.43	22.40	23.76	24.12
	4H	28.52	29.84	28.92	30.19	30.57	22.14	23.46	22.54	23.81	24.19
	6H	28.92	30.14	29.34	30.51	30.90	22.25	23.47	22.67	23.84	24.23
	8H	29.04	30.20	29.47	30.59	30.99	22.29	23.45	22.71	23.84	24.24
	12H	29.11	30.22	29.54	30.60	31.03	22.31	23.42	22.74	23.80	24.23
4H	2H	26.03	27.35	26.43	27.70	28.08	22.62	23.94	23.02	24.29	24.66
	3H	28.19	29.28	28.60	29.68	30.08	22.82	23.91	23.23	24.31	24.71
	4H	28.85	29.83	29.28	30.24	30.68	22.97	23.95	23.40	24.36	24.80
	6H	29.29	30.14	29.75	30.59	31.04	23.14	23.99	23.59	24.43	24.89
	8H	29.44	30.23	29.90	30.67	31.14	23.19	23.98	23.65	24.43	24.89
	12H	29.54	30.25	30.02	30.73	31.20	23.24	23.95	23.72	24.42	24.89
8H	4H	28.78	29.58	29.25	30.02	30.49	23.24	24.04	23.71	24.48	24.95
	6H	29.23	29.88	29.72	30.37	30.85	23.45	24.11	23.95	24.60	25.07
	8H	29.38	29.96	29.89	30.47	30.96	23.54	24.12	24.05	24.63	25.12
	12H	29.51	30.03	30.02	30.52	31.09	23.62	24.14	24.13	24.63	25.20
12H	4H	28.76	29.47	29.24	29.95	30.42	23.26	23.97	23.74	24.45	24.92
	6H	29.19	29.78	29.70	30.29	30.77	23.47	24.06	23.98	24.57	25.06
	8H	29.36	29.88	29.87	30.37	30.94	23.59	24.11	24.10	24.61	25.17