

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: P895029

Luminaire Tested: 8TMB-4SL-RFLW-UNV-L830

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P895029
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2408-210-3)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 8TMB-4SL-RFLW-UNV-L830
Description: 4000 Lumen 8FT MICROBAY LINEAR BAY with REFLECTOR WITH WHITE FINISH, 80CRI, 3000K
Light Source: -
Ballast/Driver: -

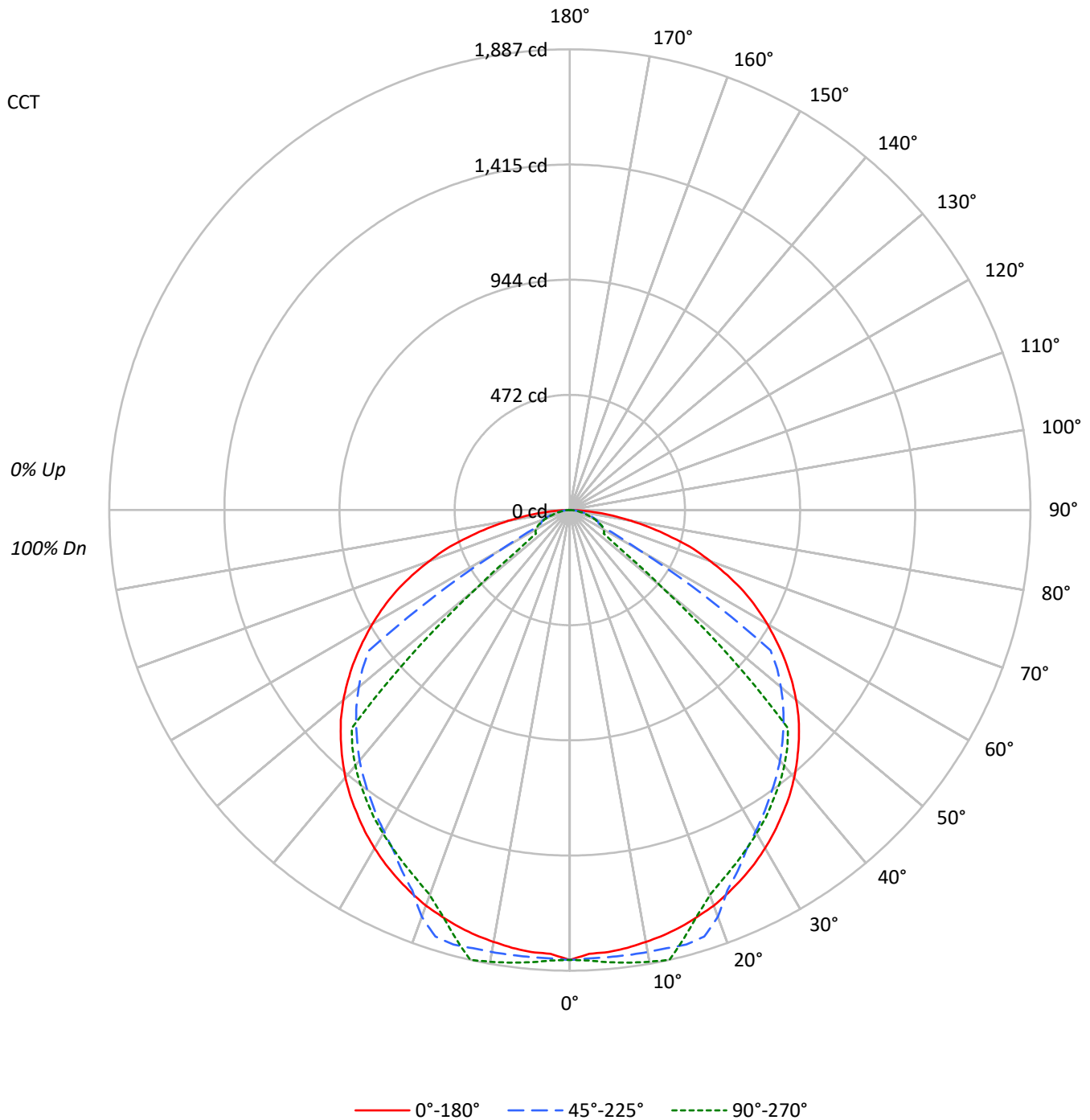
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4494.0 lumens
Efficiency: N/A
Efficacy: 162.8 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.24 / 1.38
Luminous Opening: Rectangular (W 0.21' x L: 7.98' x H: 0')
CIE Type: Direct

Input Watts (W): 27.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: 0.99
Total Harmonic Distortion (THDi): 4.5
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

TEST NUMBER: P895029
CATALOG NUMBER: 8TMB-4SL-RFLW-UNV-L830

Luminous Intensity Polar Plot





TEST NUMBER: P895029

CATALOG NUMBER: 8TMB-4SL-RFLW-UNV-L830

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	99	108	104	101	98	100	97	94	96	94	92	92	91	89	89	89	89	87
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	79	77	77	77	77	75
3	93	84	76	70	91	82	75	70	79	73	69	77	72	67	74	70	66	66	66	66	64
4	86	75	67	61	84	74	66	60	71	65	59	69	63	59	67	62	58	58	58	58	56
5	79	67	59	53	77	66	58	53	64	57	52	62	56	51	61	55	51	51	51	51	49
6	73	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	45	45	45	43
7	68	55	47	41	67	55	47	41	53	46	41	52	45	41	50	45	40	40	40	40	38
8	64	51	43	37	62	50	42	37	49	42	37	48	41	37	46	41	36	36	36	36	35
9	60	47	39	33	58	46	39	33	45	38	33	44	38	33	43	37	33	33	33	33	31
10	56	43	35	30	55	43	35	30	42	35	30	41	34	30	40	34	30	30	30	30	28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11932	11932	11932
5°	11812	11949	12087
10°	11810	12087	12352
15°	11842	12353	12154
20°	11882	12216	11562
25°	11912	11640	11444
30°	11961	11376	11439
35°	12010	11308	11476
40°	12092	11325	11556
45°	12152	11339	11572
50°	12198	11368	5003
55°	12167	11331	1908
60°	12096	4324	2080
65°	12011	2007	2137
70°	11602	2160	2001
75°	10838	2062	1744
80°	9535	1812	1495
85°	7534	1568	1256

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 50°
 Luminance: 12198 cd/sqm



TEST NUMBER: P895029
 CATALOG NUMBER: 8TMB-4SL-RFLW-UNV-L830

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	176.0	3.9
10°-20°	510.9	11.4
20°-30°	762.4	17.0
30°-40°	924.1	20.6
40°-50°	946.2	21.1
50°-60°	629.2	14.0
60°-70°	358.6	8.0
70°-80°	150.7	3.4
80°-90°	35.9	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°	1449.3	32.2
0°-40°	2373.3	52.8
0°-60°	3948.8	87.9
0°-90°	4494.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4494.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1843	1843	1843	1843	1843	
5°	1817	1853	1838	1843	1860	173
15°	1766	1815	1843	1836	1813	499
25°	1667	1748	1629	1593	1602	769
35°	1519	1547	1430	1437	1452	952
45°	1327	1247	1238	1253	1264	1024
55°	1078	987	1004	220	169	962
65°	784	702	131	140	140	771
75°	433	91	82	72	70	460
85°	101	25	21	17	17	122
90°	0	0	0	0	0	



TEST NUMBER: P895029

CATALOG NUMBER: 8TMB-4SL-RFLW-UNV-L830

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1842.6	1842.6	1842.6	1842.6	1842.6
2.5°	1819.3	1857.4	1838.3	1840.5	1846.8
5°	1817.2	1853.1	1838.3	1842.6	1859.5
7.5°	1808.8	1846.8	1838.3	1851.0	1870.0
10°	1796.1	1840.5	1838.3	1859.5	1878.5
12.5°	1783.4	1827.8	1838.3	1870.0	1886.9
15°	1766.5	1815.1	1842.6	1836.2	1813.0
17.5°	1745.4	1802.4	1832.0	1741.1	1739.0
20°	1724.2	1785.5	1772.8	1686.2	1677.8
22.5°	1696.8	1768.6	1686.2	1627.0	1637.6
25°	1667.2	1747.5	1629.2	1593.2	1601.7
27.5°	1635.5	1726.4	1567.9	1555.2	1565.8
30°	1599.6	1696.8	1521.4	1517.2	1529.8
32.5°	1561.5	1639.7	1477.0	1479.1	1493.9
35°	1519.3	1546.7	1430.5	1436.9	1451.7
37.5°	1477.0	1460.1	1386.2	1396.7	1411.5
40°	1430.5	1392.5	1339.7	1350.2	1367.1
42.5°	1379.8	1320.7	1289.0	1303.7	1318.5
45°	1327.0	1246.7	1238.2	1253.0	1263.6
47.5°	1272.1	1183.3	1185.4	1196.0	895.9
50°	1210.8	1119.9	1128.4	781.8	496.6
52.5°	1145.3	1054.4	1071.3	435.3	251.5
55°	1077.7	986.8	1003.7	219.8	169.0
57.5°	1005.8	919.2	655.0	158.5	166.9
60°	934.0	847.3	333.9	156.4	160.6
62.5°	860.0	775.5	158.5	150.0	152.1
65°	783.9	701.5	131.0	139.5	139.5
67.5°	699.4	623.3	124.7	124.7	122.6
70°	612.8	517.7	114.1	107.8	105.7
72.5°	532.5	198.6	99.3	88.7	86.6
75°	433.2	90.9	82.4	71.8	69.7
77.5°	344.4	76.1	65.5	57.1	54.9
80°	255.7	59.2	48.6	42.3	40.1
82.5°	177.5	40.1	33.8	27.5	27.5
85°	101.4	25.4	21.1	16.9	16.9
87.5°	40.1	12.7	10.6	6.3	6.3
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P895029
 CATALOG NUMBER: 8TMB-4SL-RFLW-UNV-L830

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	21.54	23.06	21.90	23.37	23.69	9.31	10.83	9.67	11.14	11.45
	3H	23.56	24.92	23.94	25.25	25.61	11.62	12.98	12.00	13.31	13.67
	4H	24.02	25.29	24.42	25.64	26.02	12.33	13.60	12.73	13.95	14.33
	6H	24.43	25.60	24.84	25.97	26.36	12.82	13.99	13.23	14.36	14.75
	8H	24.58	25.69	25.00	26.08	26.48	12.95	14.07	13.38	14.46	14.86
	12H	24.68	25.74	25.11	26.13	26.55	13.04	14.11	13.47	14.49	14.92
4H	2H	21.38	22.65	21.78	23.00	23.38	10.10	11.38	10.50	11.72	12.10
	3H	23.58	24.63	23.99	25.03	25.43	12.61	13.66	13.03	14.06	14.46
	4H	24.03	24.97	24.46	25.39	25.83	13.43	14.37	13.87	14.79	15.23
	6H	24.50	25.31	24.96	25.76	26.22	14.03	14.84	14.48	15.28	15.74
	8H	24.69	25.45	25.15	25.89	26.36	14.20	14.96	14.66	15.40	15.87
	12H	24.84	25.52	25.32	26.00	26.47	14.31	14.99	14.80	15.47	15.94
8H	4H	23.95	24.71	24.41	25.16	25.62	14.27	15.03	14.74	15.48	15.95
	6H	24.41	25.04	24.91	25.53	26.01	14.90	15.52	15.39	16.02	16.49
	8H	24.61	25.17	25.12	25.68	26.17	15.10	15.66	15.61	16.17	16.66
	12H	24.79	25.30	25.30	25.79	26.35	15.25	15.75	15.76	16.25	16.81
12H	4H	23.92	24.60	24.40	25.08	25.55	14.34	15.02	14.83	15.50	15.97
	6H	24.36	24.93	24.88	25.44	25.93	14.99	15.55	15.50	16.06	16.55
	8H	24.59	25.09	25.10	25.58	26.14	15.24	15.74	15.75	16.24	16.80