

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P188710

Luminaire Tested: **24SR-LD2-59-C-UNV-L850-CD1-TB-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188710
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33587)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24SR-LD2-59-C-UNV-L850-CD1-TB-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH TAHITIAN BLUE SKYTRIM.

Light Source: EATON LED 5000K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4336.0 lumens
Efficiency: N/A
Efficacy: 86.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 2.07 / 1.9
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

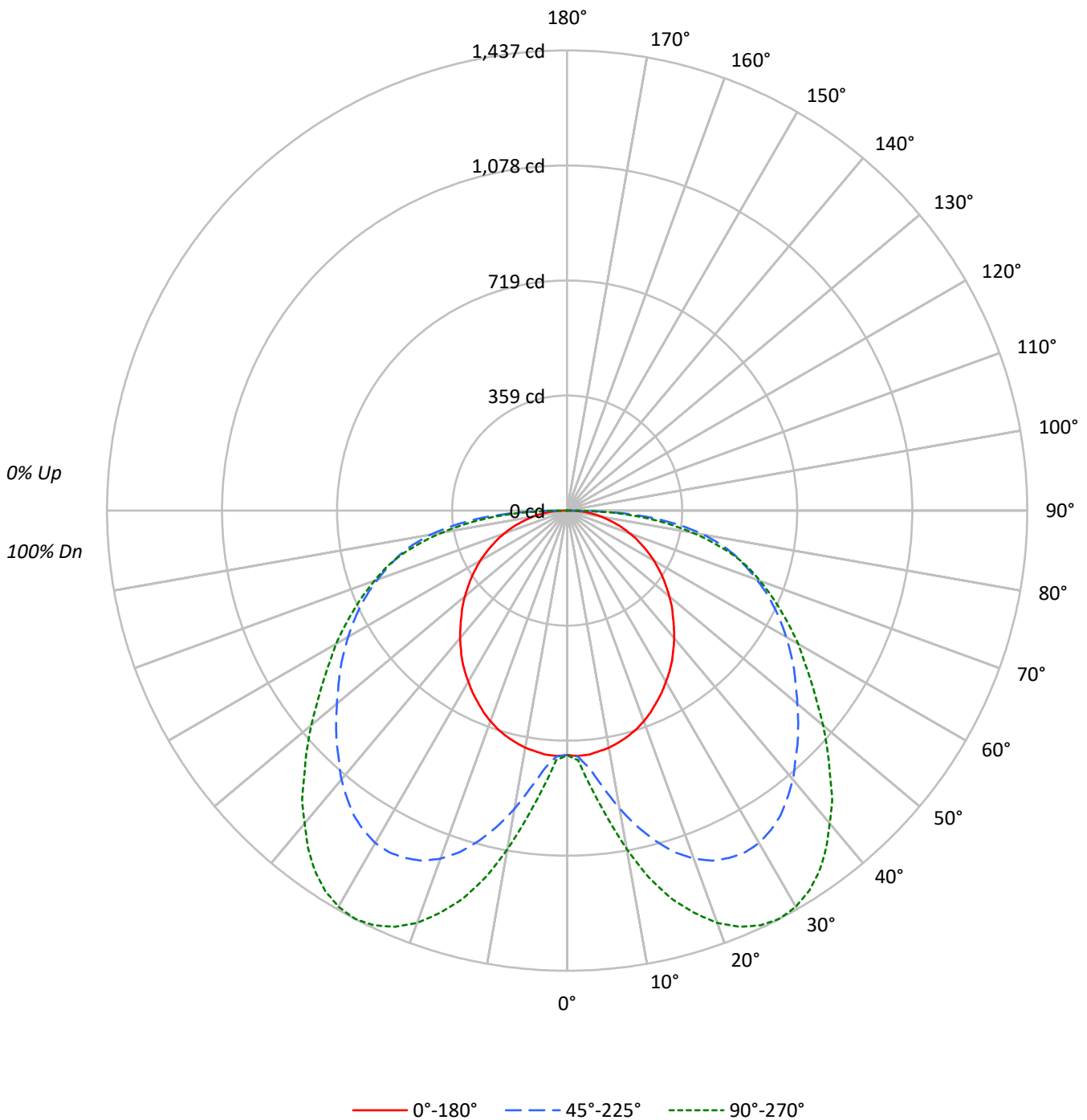
Input Watts (W): 50.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	106	100	95	91	103	98	93	89	94	90	86	90	86	83	86	83	81	79
2	95	86	78	71	93	84	77	70	80	74	69	77	72	67	74	69	65	63
3	86	74	65	58	83	73	64	57	69	62	56	67	60	55	64	59	54	52
4	78	65	55	48	76	64	54	47	61	53	47	59	52	46	56	50	45	43
5	72	58	48	40	69	56	47	40	54	46	40	52	45	39	50	44	39	36
6	66	51	42	35	64	50	41	35	49	40	34	47	39	34	45	39	34	31
7	61	46	37	30	59	45	37	30	44	36	30	42	35	30	41	34	29	27
8	56	42	33	27	55	41	33	27	40	32	26	39	31	26	37	31	26	24
9	53	38	30	24	51	38	29	24	37	29	24	35	28	23	34	28	23	21
10	49	35	27	21	48	35	27	21	34	26	21	33	26	21	32	25	21	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1027	1027	1027
5°	1033	1092	1175
10°	1027	1291	1467
15°	1017	1488	1746
20°	1002	1656	1962
25°	980	1777	2121
30°	958	1862	2219
35°	939	1908	2256
40°	914	1926	2240
45°	888	1938	2207
50°	872	1964	2184
55°	856	2029	2182
60°	843	2126	2243
65°	828	2271	2340
70°	820	2479	2518
75°	815	2825	2799
80°	839	3358	3074
85°	926	4168	3603



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.4	1.9
10°-20°	293.6	6.8
20°-30°	523.0	12.1
30°-40°	678.2	15.6
40°-50°	723.2	16.7
50°-60°	695.6	16.0
60°-70°	622.5	14.4
70°-80°	490.1	11.3
80°-90°	228.5	5.3
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°	898.0	20.7
0°-40°	1576.2	36.4
0°-60°	2995.0	69.1
0°-90°	4336.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4336.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	763	763	763	763	763	
5°	765	774	808	852	870	73
15°	730	868	1068	1208	1254	206
25°	660	923	1197	1377	1428	304
35°	572	878	1162	1328	1374	357
45°	467	766	1018	1137	1160	361
55°	365	658	865	922	930	326
65°	260	558	713	728	735	258
75°	157	429	543	536	538	166
85°	60	228	270	240	233	63
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	763.4	763.4	763.4	763.4	763.4	763.4	763.4	763.4	763.4	763.4	763.4
2.5°	766.8	766.8	765.1	765.1	766.8	766.8	766.8	766.8	768.4	768.4	770.1
5°	765.1	763.4	763.4	766.8	771.8	776.8	781.8	790.1	796.8	808.4	818.4
7.5°	758.4	758.4	761.7	770.1	781.8	798.4	816.8	836.8	855.1	873.4	895.1
10°	751.7	751.7	760.1	775.1	798.4	828.4	858.4	888.4	916.8	945.1	968.4
12.5°	741.7	743.4	756.7	783.4	821.8	863.4	901.8	940.1	978.4	1010.1	1045.1
15°	730.1	733.4	753.4	793.4	843.4	893.4	940.1	986.8	1030.1	1068.4	1105.1
17.5°	716.7	721.7	750.1	801.8	860.1	916.8	975.1	1028.4	1075.1	1118.5	1160.1
20°	700.1	708.4	746.7	808.4	873.4	938.4	1000.1	1056.8	1110.1	1156.8	1203.5
22.5°	681.7	691.7	740.1	810.1	881.8	951.8	1020.1	1078.5	1135.1	1183.5	1231.8
25°	660.1	675.1	733.4	808.4	885.1	960.1	1030.1	1090.1	1148.5	1196.8	1250.1
27.5°	640.1	656.7	721.7	801.8	881.8	960.1	1030.1	1093.5	1153.5	1203.5	1255.1
30°	616.7	638.4	710.1	791.8	873.4	951.8	1023.4	1086.8	1145.1	1198.5	1251.8
32.5°	595.1	618.4	691.7	775.1	858.4	936.8	1010.1	1071.8	1130.1	1183.5	1235.1
35°	571.7	595.1	671.7	758.4	838.4	916.8	986.8	1050.1	1106.8	1161.8	1210.1
37.5°	545.1	571.7	650.1	735.1	813.4	891.8	960.1	1021.8	1078.5	1130.1	1176.8
40°	520.1	548.4	625.1	710.1	788.4	863.4	930.1	988.4	1043.4	1096.8	1138.5
42.5°	493.4	523.4	601.7	683.4	760.1	831.8	895.1	955.1	1008.4	1055.1	1096.8
45°	466.7	500.1	576.7	656.7	730.1	801.8	865.1	920.1	971.8	1018.4	1053.4
47.5°	443.4	476.7	550.1	630.1	703.4	771.8	833.4	886.8	936.8	978.4	1013.4
50°	416.7	450.0	525.1	603.4	675.1	743.4	801.8	853.4	900.1	938.4	971.8
52.5°	390.0	426.7	500.1	578.4	650.1	715.1	773.4	823.4	865.1	900.1	928.4
55°	365.0	401.7	476.7	553.4	625.1	690.1	745.1	793.4	833.4	865.1	886.8
57.5°	338.4	378.4	455.0	531.7	601.7	663.4	718.4	763.4	800.1	826.8	845.1
60°	313.4	355.0	433.4	508.4	578.4	640.1	691.7	735.1	766.8	790.1	805.1
62.5°	286.7	331.7	410.0	485.1	553.4	615.1	663.4	703.4	733.4	751.7	761.7
65°	260.0	308.4	386.7	461.7	528.4	586.7	633.4	670.1	696.7	713.4	721.7
67.5°	235.0	285.0	363.4	436.7	501.7	556.7	601.7	636.7	660.1	673.4	676.7
70°	208.4	260.0	338.4	410.0	473.4	525.1	568.4	598.4	620.1	630.1	633.4
72.5°	183.4	235.0	311.7	381.7	441.7	490.1	531.7	561.7	580.1	586.7	586.7
75°	156.7	208.4	283.4	350.0	405.0	453.4	491.7	518.4	535.1	543.4	540.1
77.5°	130.0	181.7	253.4	315.0	365.0	408.4	446.7	471.7	488.4	493.4	490.1
80°	108.3	155.0	218.4	275.0	321.7	361.7	396.7	421.7	436.7	433.4	425.0
82.5°	83.3	126.7	181.7	230.0	271.7	310.0	343.4	363.4	366.7	360.0	350.0
85°	60.0	93.3	138.3	176.7	213.4	241.7	265.0	278.4	278.4	270.0	263.4
87.5°	35.0	55.0	80.0	106.7	123.3	141.7	160.0	163.4	163.4	163.4	155.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	763.4	763.4	763.4	763.4	763.4	763.4	763.4	763.4
2.5°	775.1	776.8	778.4	780.1	781.8	781.8	781.8	780.1
5°	828.4	838.4	846.8	856.8	860.1	863.4	866.8	870.1
7.5°	913.4	926.8	940.1	953.4	961.8	971.8	968.4	968.4
10°	995.1	1020.1	1035.1	1051.8	1060.1	1070.1	1075.1	1073.5
12.5°	1075.1	1103.5	1125.1	1140.1	1153.5	1163.5	1166.8	1171.8
15°	1143.5	1171.8	1198.5	1216.8	1233.5	1243.5	1250.1	1253.5
17.5°	1200.1	1228.5	1258.5	1281.8	1296.8	1310.1	1313.5	1316.8
20°	1241.8	1278.5	1306.8	1331.8	1348.5	1361.8	1368.5	1370.1
22.5°	1275.1	1310.1	1341.8	1366.8	1385.2	1400.2	1406.8	1406.8
25°	1293.5	1330.1	1363.5	1390.2	1408.5	1421.8	1428.5	1428.5
27.5°	1300.1	1338.5	1370.1	1396.8	1416.8	1430.2	1435.2	1436.8
30°	1295.1	1333.5	1365.1	1390.2	1410.2	1421.8	1426.8	1428.5
32.5°	1278.5	1316.8	1346.8	1370.1	1388.5	1401.8	1406.8	1406.8
35°	1251.8	1286.8	1316.8	1340.1	1356.8	1366.8	1373.5	1373.5
37.5°	1216.8	1251.8	1278.5	1298.5	1313.5	1325.1	1328.5	1328.5
40°	1176.8	1206.8	1231.8	1251.8	1265.1	1273.5	1276.8	1275.1
42.5°	1131.8	1160.1	1180.1	1196.8	1208.5	1216.8	1221.8	1225.1
45°	1085.1	1111.8	1130.1	1143.5	1151.8	1156.8	1161.8	1160.1
47.5°	1043.4	1060.1	1076.8	1086.8	1095.1	1100.1	1101.8	1101.8
50°	995.1	1010.1	1023.4	1031.8	1036.8	1040.1	1040.1	1043.4
52.5°	946.8	960.1	970.1	978.4	981.8	983.4	985.1	983.4
55°	903.4	911.8	918.4	925.1	928.4	930.1	933.4	930.1
57.5°	858.4	865.1	873.4	875.1	878.4	878.4	880.1	878.4
60°	813.4	818.4	821.8	823.4	828.4	830.1	830.1	833.4
62.5°	768.4	770.1	775.1	776.8	778.4	781.8	785.1	783.4
65°	723.4	725.1	726.7	730.1	733.4	736.7	736.7	735.1
67.5°	676.7	678.4	680.1	683.4	686.7	686.7	688.4	688.4
70°	631.7	631.7	633.4	635.1	638.4	640.1	641.7	640.1
72.5°	585.1	585.1	585.1	586.7	588.4	591.7	593.4	593.4
75°	536.7	536.7	536.7	535.1	536.7	540.1	538.4	538.4
77.5°	483.4	478.4	473.4	470.1	471.7	470.1	470.1	470.1
80°	416.7	408.4	401.7	398.4	396.7	398.4	396.7	396.7
82.5°	343.4	335.0	328.4	323.4	325.0	321.7	323.4	320.0
85°	255.0	248.4	241.7	238.4	240.0	240.0	238.4	233.4
87.5°	150.0	141.7	140.0	138.3	140.0	138.3	133.3	135.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)