

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: P188708

Luminaire Tested: **24SR-LD2-59-C-UNV-L835-CD1-TB-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188708
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-L835-CD1-TB-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH TAHITIAN BLUE SKYTRIM.

Light Source: EATON LED 3500K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3906.0 lumens
Efficiency: N/A
Efficacy: 77.8 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

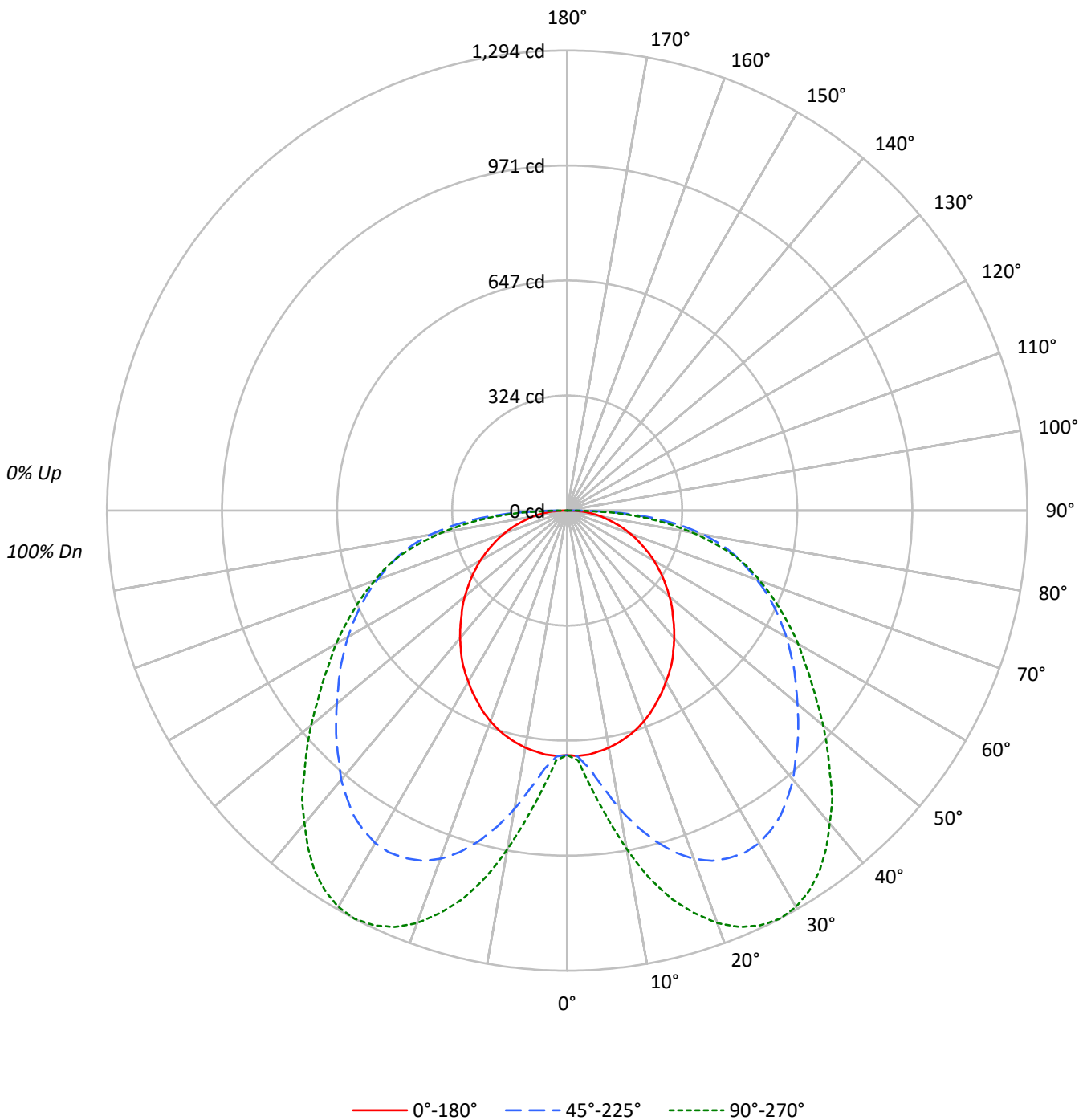
Input Watts (W): 50.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	925	925	925
5°	931	984	1059
10°	925	1163	1321
15°	916	1341	1573
20°	903	1492	1767
25°	883	1601	1910
30°	863	1677	1999
35°	846	1719	2032
40°	823	1735	2018
45°	800	1746	1989
50°	786	1770	1968
55°	771	1828	1966
60°	760	1915	2020
65°	746	2046	2108
70°	738	2233	2268
75°	734	2545	2521
80°	756	3025	2769
85°	835	3756	3245



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.3	1.9
10°-20°	264.5	6.8
20°-30°	471.1	12.1
30°-40°	610.9	15.6
40°-50°	651.5	16.7
50°-60°	626.6	16.0
60°-70°	560.7	14.4
70°-80°	441.5	11.3
80°-90°	205.8	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°	808.9	20.7
0°-40°	1419.9	36.4
0°-60°	2698.0	69.1
0°-90°	3906.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3906.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	688	688	688	688	688	
5°	689	697	728	767	784	65
15°	658	782	962	1088	1129	185
25°	595	831	1078	1240	1287	274
35°	515	791	1047	1197	1237	322
45°	420	690	917	1024	1045	326
55°	329	592	779	830	838	294
65°	234	502	643	656	662	232
75°	141	387	490	483	485	149
85°	54	205	243	216	210	57
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°	687.7	687.7	687.7	687.7	687.7	687.7	687.7	687.7	687.7	687.7	687.7
2.5°	690.7	690.7	689.2	689.2	690.7	690.7	690.7	690.7	692.2	692.2	693.7
5°	689.2	687.7	687.7	690.7	695.2	699.7	704.2	711.7	717.7	728.3	737.3
7.5°	683.2	683.2	686.2	693.7	704.2	719.2	735.8	753.8	770.3	786.8	806.3
10°	677.2	677.2	684.7	698.2	719.2	746.3	773.3	800.3	825.9	851.4	872.4
12.5°	668.2	669.7	681.7	705.7	740.3	777.8	812.3	846.9	881.4	909.9	941.5
15°	657.7	660.7	678.7	714.7	759.8	804.8	846.9	888.9	928.0	962.5	995.5
17.5°	645.7	650.2	675.7	722.2	774.8	825.9	878.4	926.5	968.5	1007.5	1045.1
20°	630.6	638.2	672.7	728.3	786.8	845.4	900.9	952.0	1000.0	1042.1	1084.1
22.5°	614.1	623.1	666.7	729.8	794.3	857.4	918.9	971.5	1022.6	1066.1	1109.6
25°	594.6	608.1	660.7	728.3	797.3	864.9	928.0	982.0	1034.6	1078.1	1126.2
27.5°	576.6	591.6	650.2	722.2	794.3	864.9	928.0	985.0	1039.1	1084.1	1130.7
30°	555.6	575.1	639.7	713.2	786.8	857.4	922.0	979.0	1031.6	1079.6	1127.7
32.5°	536.1	557.1	623.1	698.2	773.3	843.9	909.9	965.5	1018.0	1066.1	1112.6
35°	515.0	536.1	605.1	683.2	755.3	825.9	888.9	946.0	997.0	1046.6	1090.1
37.5°	491.0	515.0	585.6	662.2	732.8	803.3	864.9	920.4	971.5	1018.0	1060.1
40°	468.5	494.0	563.1	639.7	710.2	777.8	837.9	890.4	940.0	988.0	1025.6
42.5°	444.5	471.5	542.1	615.6	684.7	749.3	806.3	860.4	908.4	950.5	988.0
45°	420.4	450.5	519.5	591.6	657.7	722.2	779.3	828.9	875.4	917.4	949.0
47.5°	399.4	429.4	495.5	567.6	633.7	695.2	750.8	798.8	843.9	881.4	912.9
50°	375.4	405.4	473.0	543.6	608.1	669.7	722.2	768.8	810.8	845.4	875.4
52.5°	351.4	384.4	450.5	521.0	585.6	644.2	696.7	741.8	779.3	810.8	836.4
55°	328.8	361.9	429.4	498.5	563.1	621.6	671.2	714.7	750.8	779.3	798.8
57.5°	304.8	340.9	409.9	479.0	542.1	597.6	647.2	687.7	720.7	744.8	761.3
60°	282.3	319.8	390.4	458.0	521.0	576.6	623.1	662.2	690.7	711.7	725.2
62.5°	258.3	298.8	369.4	437.0	498.5	554.1	597.6	633.7	660.7	677.2	686.2
65°	234.2	277.8	348.4	415.9	476.0	528.5	570.6	603.6	627.6	642.7	650.2
67.5°	211.7	256.8	327.3	393.4	452.0	501.5	542.1	573.6	594.6	606.6	609.6
70°	187.7	234.2	304.8	369.4	426.4	473.0	512.0	539.1	558.6	567.6	570.6
72.5°	165.2	211.7	280.8	343.9	397.9	441.5	479.0	506.0	522.5	528.5	528.5
75°	141.1	187.7	255.3	315.3	364.9	408.4	443.0	467.0	482.0	489.5	486.5
77.5°	117.1	163.7	228.2	283.8	328.8	367.9	402.4	424.9	440.0	444.5	441.5
80°	97.6	139.6	196.7	247.8	289.8	325.8	357.4	379.9	393.4	390.4	382.9
82.5°	75.1	114.1	163.7	207.2	244.8	279.3	309.3	327.3	330.3	324.3	315.3
85°	54.1	84.1	124.6	159.2	192.2	217.7	238.7	250.8	250.8	243.3	237.2
87.5°	31.5	49.6	72.1	96.1	111.1	127.6	144.1	147.2	147.2	147.2	139.6
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°	687.7	687.7	687.7	687.7	687.7	687.7	687.7	687.7
2.5°	698.2	699.7	701.2	702.7	704.2	704.2	704.2	702.7
5°	746.3	755.3	762.8	771.8	774.8	777.8	780.8	783.8
7.5°	822.8	834.9	846.9	858.9	866.4	875.4	872.4	872.4
10°	896.4	918.9	932.5	947.5	955.0	964.0	968.5	967.0
12.5°	968.5	994.0	1013.5	1027.1	1039.1	1048.1	1051.1	1055.6
15°	1030.1	1055.6	1079.6	1096.1	1111.1	1120.2	1126.2	1129.2
17.5°	1081.1	1106.6	1133.7	1154.7	1168.2	1180.2	1183.2	1186.2
20°	1118.7	1151.7	1177.2	1199.7	1214.8	1226.8	1232.8	1234.3
22.5°	1148.7	1180.2	1208.7	1231.3	1247.8	1261.3	1267.3	1267.3
25°	1165.2	1198.2	1228.3	1252.3	1268.8	1280.8	1286.8	1286.8
27.5°	1171.2	1205.7	1234.3	1258.3	1276.3	1288.3	1292.8	1294.3
30°	1166.7	1201.2	1229.8	1252.3	1270.3	1280.8	1285.3	1286.8
32.5°	1151.7	1186.2	1213.3	1234.3	1250.8	1262.8	1267.3	1267.3
35°	1127.7	1159.2	1186.2	1207.2	1222.3	1231.3	1237.3	1237.3
37.5°	1096.1	1127.7	1151.7	1169.7	1183.2	1193.7	1196.7	1196.7
40°	1060.1	1087.1	1109.6	1127.7	1139.7	1147.2	1150.2	1148.7
42.5°	1019.6	1045.1	1063.1	1078.1	1088.6	1096.1	1100.6	1103.6
45°	977.5	1001.5	1018.0	1030.1	1037.6	1042.1	1046.6	1045.1
47.5°	940.0	955.0	970.0	979.0	986.5	991.0	992.5	992.5
50°	896.4	909.9	922.0	929.5	934.0	937.0	937.0	940.0
52.5°	852.9	864.9	873.9	881.4	884.4	885.9	887.4	885.9
55°	813.8	821.3	827.4	833.4	836.4	837.9	840.9	837.9
57.5°	773.3	779.3	786.8	788.3	791.3	791.3	792.8	791.3
60°	732.8	737.3	740.3	741.8	746.3	747.8	747.8	750.8
62.5°	692.2	693.7	698.2	699.7	701.2	704.2	707.2	705.7
65°	651.7	653.2	654.7	657.7	660.7	663.7	663.7	662.2
67.5°	609.6	611.1	612.6	615.6	618.6	618.6	620.1	620.1
70°	569.1	569.1	570.6	572.1	575.1	576.6	578.1	576.6
72.5°	527.0	527.0	527.0	528.5	530.0	533.0	534.6	534.6
75°	483.5	483.5	483.5	482.0	483.5	486.5	485.0	485.0
77.5°	435.4	430.9	426.4	423.4	424.9	423.4	423.4	423.4
80°	375.4	367.9	361.9	358.9	357.4	358.9	357.4	357.4
82.5°	309.3	301.8	295.8	291.3	292.8	289.8	291.3	288.3
85°	229.7	223.7	217.7	214.7	216.2	216.2	214.7	210.2
87.5°	135.1	127.6	126.1	124.6	126.1	124.6	120.1	121.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)