

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: P188567

Luminaire Tested: **24SR-LD2-39-C-UNV-L830-CD1-PL-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188567
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24637)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24SR-LD2-39-C-UNV-L830-CD1-PL-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH PEARL SKYTRIM.

Light Source: EATON LED 3000K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3728.0 lumens
Efficiency: N/A
Efficacy: 116.9 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.98 / 1.87
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

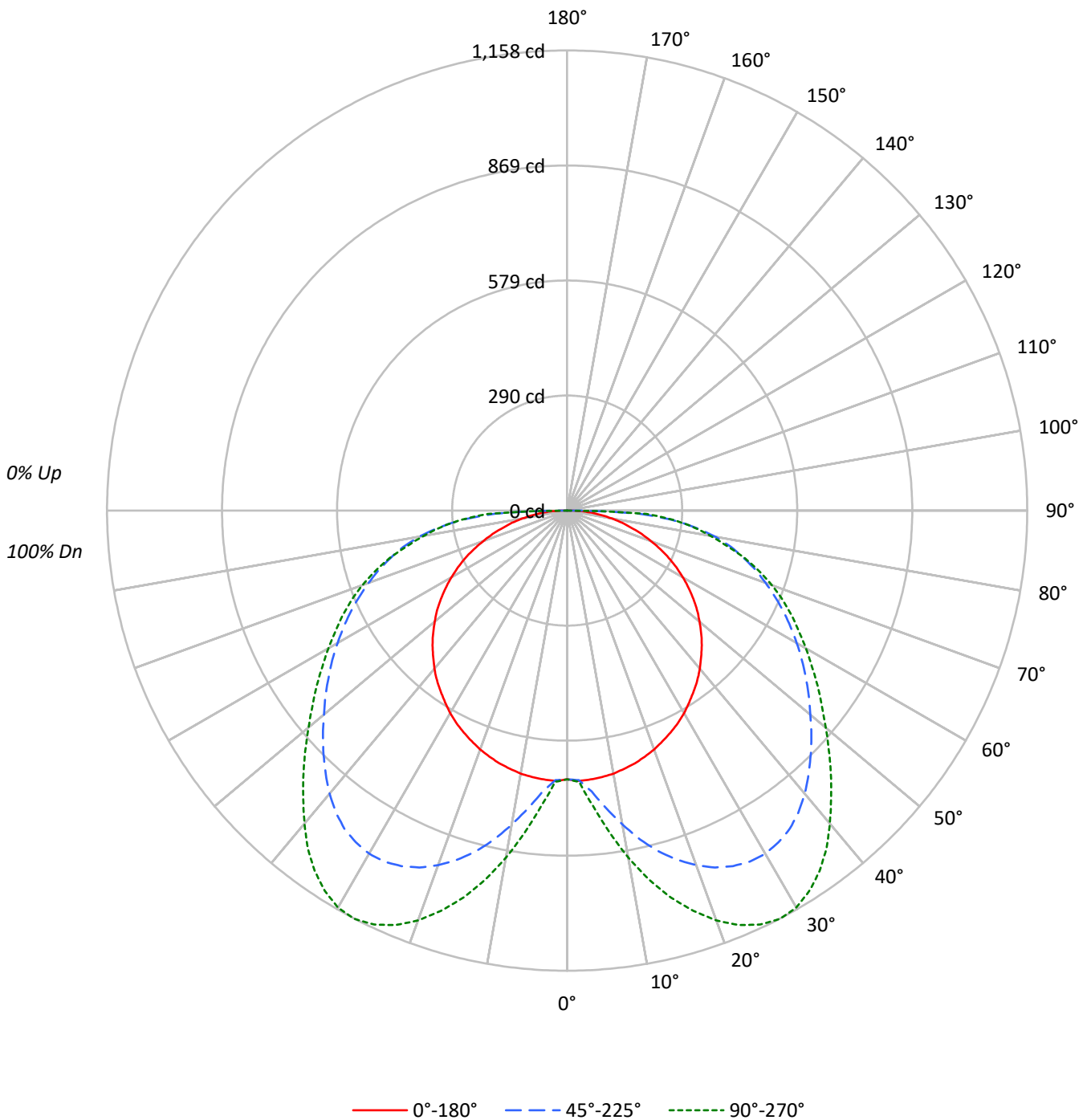
Input Watts (W): 31.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	90	103	98	93	88	93	89	85		89	86	83		86	83	80	78
2	95	85	77	70	92	83	76	70	80	73	68		76	71	66		73	69	65	62
3	86	74	64	57	83	72	63	56	69	61	55		66	60	54		63	58	53	51
4	78	64	55	47	75	63	54	47	60	52	46		58	51	45		56	50	45	42
5	71	57	47	40	69	56	47	40	54	45	39		52	44	39		50	43	38	36
6	65	51	41	34	63	50	41	34	48	40	34		46	39	33		45	38	33	31
7	60	46	36	30	59	45	36	30	43	35	29		42	35	29		40	34	29	27
8	56	42	32	26	54	41	32	26	39	32	26		38	31	26		37	30	26	23
9	52	38	29	23	51	37	29	23	36	28	23		35	28	23		34	27	23	21
10	49	35	26	21	48	34	26	21	33	26	21		32	25	21		31	25	20	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	910	910	910
5°	917	958	1008
10°	918	1096	1211
15°	917	1237	1404
20°	916	1360	1571
25°	915	1465	1707
30°	914	1549	1792
35°	912	1605	1819
40°	913	1633	1806
45°	912	1650	1787
50°	911	1673	1778
55°	910	1720	1805
60°	906	1796	1867
65°	899	1911	1983
70°	883	2090	2157
75°	870	2389	2405
80°	877	2928	2837
85°	957	4057	4133



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.3	1.9
10°-20°	244.2	6.5
20°-30°	432.8	11.6
30°-40°	569.6	15.3
40°-50°	617.6	16.6
50°-60°	601.2	16.1
60°-70°	540.2	14.5
70°-80°	427.9	11.5
80°-90°	224.3	6.0
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°	747.3	20.0
0°-40°	1316.8	35.3
0°-60°	2535.7	68.0
0°-90°	3728.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3728.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	676	676	676	676	676	
5°	679	679	710	737	746	65
15°	658	744	888	977	1008	186
25°	616	784	987	1107	1150	284
35°	555	764	977	1077	1107	348
45°	479	693	867	924	939	370
55°	388	603	733	759	770	346
65°	282	505	600	612	623	279
75°	167	380	460	460	463	178
85°	62	202	263	263	268	66
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°	676.1	676.1	676.1	676.1	676.1	676.1	676.1	676.1	676.1	676.1	676.1
2.5°	681.0	680.1	679.1	678.1	677.1	676.1	676.1	676.1	677.1	679.1	682.0
5°	679.1	678.1	677.1	677.1	678.1	680.1	686.0	692.8	699.7	709.6	720.4
7.5°	676.1	675.1	675.1	677.1	685.0	696.8	710.6	725.3	740.1	755.8	770.6
10°	672.2	671.2	672.2	681.0	698.8	718.4	739.1	759.8	779.5	802.1	822.8
12.5°	665.3	665.3	670.2	687.9	713.5	740.1	766.7	794.2	819.8	847.4	871.0
15°	658.4	658.4	669.2	695.8	728.3	759.8	793.2	825.7	856.2	887.7	915.3
17.5°	649.5	649.5	668.2	701.7	739.1	777.5	815.9	852.3	886.7	921.2	950.7
20°	639.7	641.7	666.3	706.6	748.9	792.2	833.6	873.9	912.3	949.7	982.2
22.5°	627.9	631.8	663.3	708.6	756.8	802.1	847.4	890.7	931.0	972.3	1004.8
25°	616.1	622.0	659.4	708.6	759.8	809.0	856.2	901.5	944.8	987.1	1022.5
27.5°	603.3	611.2	653.5	705.6	760.8	810.9	860.2	907.4	952.7	996.0	1032.4
30°	588.5	598.4	644.6	699.7	756.8	808.0	859.2	908.4	953.6	996.9	1032.4
32.5°	571.8	584.6	633.8	690.9	748.9	801.1	852.3	901.5	947.7	990.1	1023.5
35°	555.1	570.8	622.0	680.1	738.1	790.3	841.5	891.6	936.9	977.3	1006.8
37.5°	538.3	555.1	607.2	665.3	723.4	775.5	827.7	875.9	919.2	956.6	983.2
40°	519.6	538.3	590.5	649.5	706.6	758.8	810.0	856.2	895.6	930.0	954.6
42.5°	499.0	519.6	572.8	631.8	687.9	739.1	788.3	831.6	869.0	899.5	920.2
45°	479.3	500.9	554.1	613.1	668.2	718.4	765.7	806.0	839.5	867.0	884.8
47.5°	457.6	480.3	535.4	592.5	646.6	695.8	741.1	777.5	810.0	833.6	849.3
50°	435.0	459.6	514.7	571.8	624.9	673.2	716.5	749.9	779.5	799.1	813.9
52.5°	412.4	437.9	493.1	550.1	603.3	649.5	690.9	723.4	748.9	766.7	779.5
55°	387.8	416.3	471.4	528.5	579.7	625.9	665.3	694.8	718.4	733.2	745.0
57.5°	362.2	392.7	449.8	506.8	558.0	602.3	639.7	667.3	687.9	700.7	709.6
60°	336.6	369.1	426.1	483.2	533.4	577.7	613.1	638.7	657.4	667.3	674.1
62.5°	310.0	344.5	402.5	459.6	510.8	552.1	585.6	609.2	625.9	633.8	640.7
65°	282.5	318.9	377.9	435.0	486.2	524.6	557.0	578.7	593.4	600.3	604.3
67.5°	253.9	292.3	352.3	409.4	458.6	496.0	526.5	548.2	560.0	565.9	568.8
70°	224.4	264.7	324.8	381.9	429.1	464.5	494.0	513.7	525.5	531.4	532.4
72.5°	196.8	236.2	297.2	352.3	397.6	432.0	459.6	480.3	492.1	497.0	497.0
75°	167.3	206.7	266.7	319.9	363.2	396.6	424.2	443.9	454.7	459.6	459.6
77.5°	141.7	178.1	234.2	285.4	325.8	358.2	384.8	405.5	417.3	422.2	422.2
80°	113.2	148.6	200.8	248.0	285.4	314.9	342.5	364.1	375.9	377.9	375.0
82.5°	87.6	120.1	164.4	206.7	241.1	268.7	296.2	313.9	322.8	324.8	323.8
85°	62.0	88.6	126.0	160.4	189.0	214.5	234.2	251.0	259.8	262.8	264.7
87.5°	36.4	51.2	74.8	101.4	123.0	139.8	151.6	166.3	175.2	181.1	187.0
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°	676.1	676.1	676.1	676.1	676.1	676.1	676.1	676.1
2.5°	681.0	682.0	683.0	683.0	683.0	684.0	683.0	683.0
5°	724.3	730.2	735.2	738.1	741.1	746.0	745.0	746.0
7.5°	778.5	788.3	799.1	805.0	809.0	814.9	816.8	816.8
10°	834.6	848.3	861.1	870.0	875.9	884.8	885.7	886.7
12.5°	887.7	904.4	919.2	929.0	937.9	945.8	949.7	950.7
15°	933.0	953.6	970.4	983.2	992.0	1000.9	1005.8	1007.8
17.5°	973.3	995.0	1013.7	1028.4	1039.3	1048.1	1054.0	1056.0
20°	1004.8	1028.4	1049.1	1064.9	1077.6	1087.5	1095.4	1097.3
22.5°	1030.4	1055.0	1076.7	1094.4	1107.2	1119.0	1125.9	1128.8
25°	1049.1	1075.7	1098.3	1115.0	1128.8	1139.7	1146.5	1149.5
27.5°	1059.9	1086.5	1108.2	1124.9	1138.7	1148.5	1155.4	1158.4
30°	1059.9	1085.5	1107.2	1122.9	1135.7	1145.6	1150.5	1153.4
32.5°	1049.1	1073.7	1093.4	1107.2	1119.0	1128.8	1132.8	1134.7
35°	1031.4	1053.0	1070.8	1082.6	1092.4	1101.3	1105.2	1107.2
37.5°	1005.8	1025.5	1039.3	1050.1	1058.0	1066.8	1069.8	1071.7
40°	973.3	992.0	1001.9	1011.7	1018.6	1026.5	1028.4	1028.4
42.5°	937.9	953.6	963.5	970.4	975.3	980.2	983.2	983.2
45°	900.5	914.3	921.2	927.1	932.0	935.9	938.9	938.9
47.5°	863.1	873.9	879.8	883.8	887.7	891.6	893.6	893.6
50°	825.7	833.6	838.5	841.5	845.4	848.3	850.3	849.3
52.5°	788.3	794.2	798.1	801.1	803.1	806.0	807.0	808.0
55°	750.9	754.8	757.8	759.8	763.7	766.7	767.6	769.6
57.5°	714.5	716.5	720.4	721.4	725.3	728.3	729.3	730.2
60°	677.1	679.1	682.0	684.0	688.9	690.9	691.9	693.8
62.5°	640.7	641.7	645.6	649.5	653.5	655.4	656.4	657.4
65°	604.3	607.2	610.2	613.1	617.1	620.0	621.0	623.0
67.5°	568.8	570.8	574.7	577.7	580.7	583.6	585.6	586.6
70°	532.4	534.4	537.3	539.3	542.3	545.2	548.2	548.2
72.5°	497.0	497.0	499.0	500.9	503.9	505.9	506.8	506.8
75°	458.6	457.6	459.6	460.6	460.6	460.6	461.6	462.6
77.5°	417.3	413.3	411.4	411.4	412.4	410.4	411.4	412.4
80°	370.0	366.1	365.1	365.1	366.1	365.1	366.1	366.1
82.5°	319.9	319.9	316.9	317.9	318.9	316.9	318.9	320.8
85°	261.8	262.8	261.8	264.7	264.7	264.7	265.7	267.7
87.5°	188.0	193.9	191.9	195.8	194.9	195.8	196.8	199.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)