

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: P188714

Luminaire Tested: **24SR-LD2-64-C-UNV-L840-CD1-TB-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188714
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-LD2-64-C-UNV-L840-CD1-TB-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH TAHITIAN BLUE SKYTRIM.

Light Source: EATON LED 4000K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4362.0 lumens
Efficiency: N/A
Efficacy: 78.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 2.07 / 1.9
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

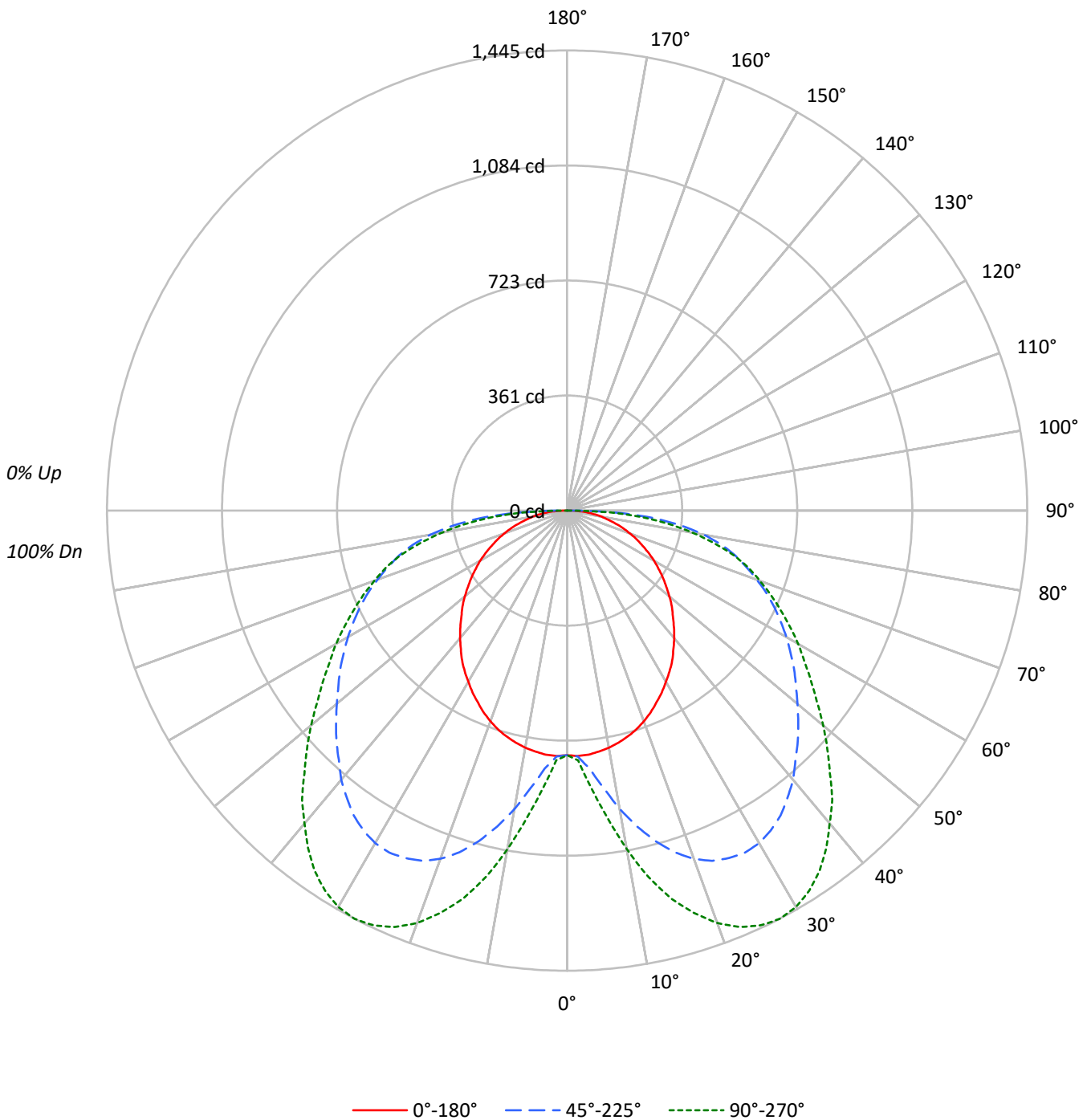
Input Watts (W): 55.5
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1033	1033	1033
5°	1040	1098	1182
10°	1033	1299	1475
15°	1023	1497	1757
20°	1008	1666	1974
25°	986	1787	2133
30°	964	1873	2233
35°	945	1920	2269
40°	919	1938	2253
45°	893	1950	2221
50°	877	1976	2197
55°	861	2042	2195
60°	848	2139	2256
65°	833	2285	2354
70°	825	2493	2533
75°	819	2842	2816
80°	845	3378	3092
85°	932	4193	3625



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.9	1.9
10°-20°	295.4	6.8
20°-30°	526.2	12.1
30°-40°	682.2	15.6
40°-50°	727.5	16.7
50°-60°	699.8	16.0
60°-70°	626.2	14.4
70°-80°	493.0	11.3
80°-90°	229.9	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°	903.4	20.7
0°-40°	1585.6	36.4
0°-60°	3012.9	69.1
0°-90°	4362.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4362.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	768	768	768	768	768	
5°	770	779	813	857	875	73
15°	734	874	1075	1215	1261	207
25°	664	928	1204	1385	1437	306
35°	575	883	1169	1336	1382	359
45°	470	771	1025	1144	1167	363
55°	367	662	870	927	936	328
65°	262	561	718	733	740	260
75°	158	432	547	539	542	167
85°	60	229	272	241	235	64
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°	768.0	768.0	768.0	768.0	768.0	768.0	768.0	768.0	768.0	768.0	768.0
2.5°	771.3	771.3	769.7	769.7	771.3	771.3	771.3	771.3	773.0	773.0	774.7
5°	769.7	768.0	768.0	771.3	776.4	781.4	786.4	794.8	801.5	813.3	823.3
7.5°	763.0	763.0	766.3	774.7	786.4	803.2	821.7	841.8	860.2	878.7	900.5
10°	756.3	756.3	764.6	779.7	803.2	833.4	863.6	893.8	922.3	950.8	974.2
12.5°	746.2	747.9	761.3	788.1	826.7	868.6	907.2	945.7	984.3	1016.2	1051.4
15°	734.5	737.8	757.9	798.2	848.5	898.8	945.7	992.7	1036.3	1074.9	1111.7
17.5°	721.0	726.1	754.6	806.6	865.3	922.3	981.0	1034.6	1081.6	1125.2	1167.1
20°	704.3	712.7	751.2	813.3	878.7	944.1	1006.1	1063.1	1116.8	1163.7	1210.7
22.5°	685.8	695.9	744.5	814.9	887.1	957.5	1026.2	1084.9	1141.9	1190.6	1239.2
25°	664.0	679.1	737.8	813.3	890.4	965.9	1036.3	1096.7	1155.3	1204.0	1257.6
27.5°	643.9	660.7	726.1	806.6	887.1	965.9	1036.3	1100.0	1160.4	1210.7	1262.7
30°	620.4	642.2	714.3	796.5	878.7	957.5	1029.6	1093.3	1152.0	1205.7	1259.3
32.5°	598.6	622.1	695.9	779.7	863.6	942.4	1016.2	1078.2	1136.9	1190.6	1242.5
35°	575.2	598.6	675.8	763.0	843.5	922.3	992.7	1056.4	1113.4	1168.8	1217.4
37.5°	548.3	575.2	654.0	739.5	818.3	897.1	965.9	1027.9	1084.9	1136.9	1183.9
40°	523.2	551.7	628.8	714.3	793.1	868.6	935.7	994.4	1049.7	1103.4	1145.3
42.5°	496.3	526.5	605.3	687.5	764.6	836.7	900.5	960.8	1014.5	1061.4	1103.4
45°	469.5	503.1	580.2	660.7	734.5	806.6	870.3	925.6	977.6	1024.6	1059.8
47.5°	446.0	479.6	553.4	633.8	707.6	776.4	838.4	892.1	942.4	984.3	1019.5
50°	419.2	452.7	528.2	607.0	679.1	747.9	806.6	858.5	905.5	944.1	977.6
52.5°	392.4	429.3	503.1	581.9	654.0	719.4	778.1	828.4	870.3	905.5	934.0
55°	367.2	404.1	479.6	556.7	628.8	694.2	749.5	798.2	838.4	870.3	892.1
57.5°	340.4	380.6	457.8	534.9	605.3	667.4	722.7	768.0	804.9	831.7	850.2
60°	315.2	357.2	436.0	511.4	581.9	643.9	695.9	739.5	771.3	794.8	809.9
62.5°	288.4	333.7	412.5	488.0	556.7	618.8	667.4	707.6	737.8	756.3	766.3
65°	261.6	310.2	389.0	464.5	531.6	590.2	637.2	674.1	700.9	717.7	726.1
67.5°	236.4	286.7	365.6	439.3	504.7	560.1	605.3	640.6	664.0	677.4	680.8
70°	209.6	261.6	340.4	412.5	476.2	528.2	571.8	602.0	623.8	633.8	637.2
72.5°	184.5	236.4	313.6	384.0	444.4	493.0	534.9	565.1	583.5	590.2	590.2
75°	157.6	209.6	285.1	352.1	407.5	456.1	494.7	521.5	538.3	546.7	543.3
77.5°	130.8	182.8	254.9	316.9	367.2	410.8	449.4	474.5	491.3	496.3	493.0
80°	109.0	155.9	219.7	276.7	323.6	363.9	399.1	424.2	439.3	436.0	427.6
82.5°	83.8	127.4	182.8	231.4	273.3	311.9	345.4	365.6	368.9	362.2	352.1
85°	60.4	93.9	139.2	177.7	214.6	243.1	266.6	280.0	280.0	271.6	264.9
87.5°	35.2	55.3	80.5	107.3	124.1	142.5	161.0	164.3	164.3	164.3	155.9
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°	768.0	768.0	768.0	768.0	768.0	768.0	768.0	768.0
2.5°	779.7	781.4	783.1	784.8	786.4	786.4	786.4	784.8
5°	833.4	843.5	851.8	861.9	865.3	868.6	872.0	875.3
7.5°	918.9	932.3	945.7	959.2	967.5	977.6	974.2	974.2
10°	1001.1	1026.2	1041.3	1058.1	1066.5	1076.5	1081.6	1079.9
12.5°	1081.6	1110.1	1131.9	1147.0	1160.4	1170.4	1173.8	1178.8
15°	1150.3	1178.8	1205.7	1224.1	1240.9	1250.9	1257.6	1261.0
17.5°	1207.3	1235.8	1266.0	1289.5	1304.6	1318.0	1321.4	1324.7
20°	1249.2	1286.1	1314.6	1339.8	1356.6	1370.0	1376.7	1378.4
22.5°	1282.8	1318.0	1349.9	1375.0	1393.5	1408.5	1415.3	1415.3
25°	1301.2	1338.1	1371.7	1398.5	1416.9	1430.3	1437.1	1437.1
27.5°	1307.9	1346.5	1378.4	1405.2	1425.3	1438.7	1443.8	1445.4
30°	1302.9	1341.5	1373.3	1398.5	1418.6	1430.3	1435.4	1437.1
32.5°	1286.1	1324.7	1354.9	1378.4	1396.8	1410.2	1415.3	1415.3
35°	1259.3	1294.5	1324.7	1348.2	1365.0	1375.0	1381.7	1381.7
37.5°	1224.1	1259.3	1286.1	1306.3	1321.4	1333.1	1336.4	1336.4
40°	1183.9	1214.0	1239.2	1259.3	1272.7	1281.1	1284.5	1282.8
42.5°	1138.6	1167.1	1187.2	1204.0	1215.7	1224.1	1229.1	1232.5
45°	1091.6	1118.5	1136.9	1150.3	1158.7	1163.7	1168.8	1167.1
47.5°	1049.7	1066.5	1083.2	1093.3	1101.7	1106.7	1108.4	1108.4
50°	1001.1	1016.2	1029.6	1038.0	1043.0	1046.4	1046.4	1049.7
52.5°	952.4	965.9	975.9	984.3	987.7	989.3	991.0	989.3
55°	908.8	917.2	923.9	930.6	934.0	935.7	939.0	935.7
57.5°	863.6	870.3	878.7	880.3	883.7	883.7	885.4	883.7
60°	818.3	823.3	826.7	828.4	833.4	835.1	835.1	838.4
62.5°	773.0	774.7	779.7	781.4	783.1	786.4	789.8	788.1
65°	727.8	729.4	731.1	734.5	737.8	741.2	741.2	739.5
67.5°	680.8	682.5	684.2	687.5	690.9	690.9	692.5	692.5
70°	635.5	635.5	637.2	638.9	642.2	643.9	645.6	643.9
72.5°	588.6	588.6	588.6	590.2	591.9	595.3	597.0	597.0
75°	539.9	539.9	539.9	538.3	539.9	543.3	541.6	541.6
77.5°	486.3	481.3	476.2	472.9	474.5	472.9	472.9	472.9
80°	419.2	410.8	404.1	400.8	399.1	400.8	399.1	399.1
82.5°	345.4	337.0	330.3	325.3	327.0	323.6	325.3	322.0
85°	256.6	249.8	243.1	239.8	241.5	241.5	239.8	234.8
87.5°	150.9	142.5	140.9	139.2	140.9	139.2	134.1	135.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)