

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: P188709

Luminaire Tested: **24SR-LD2-59-C-UNV-L840-CD1-TB-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P188709  
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-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: 3984.0 lumens  
Efficiency: N/A  
Efficacy: 79.4 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

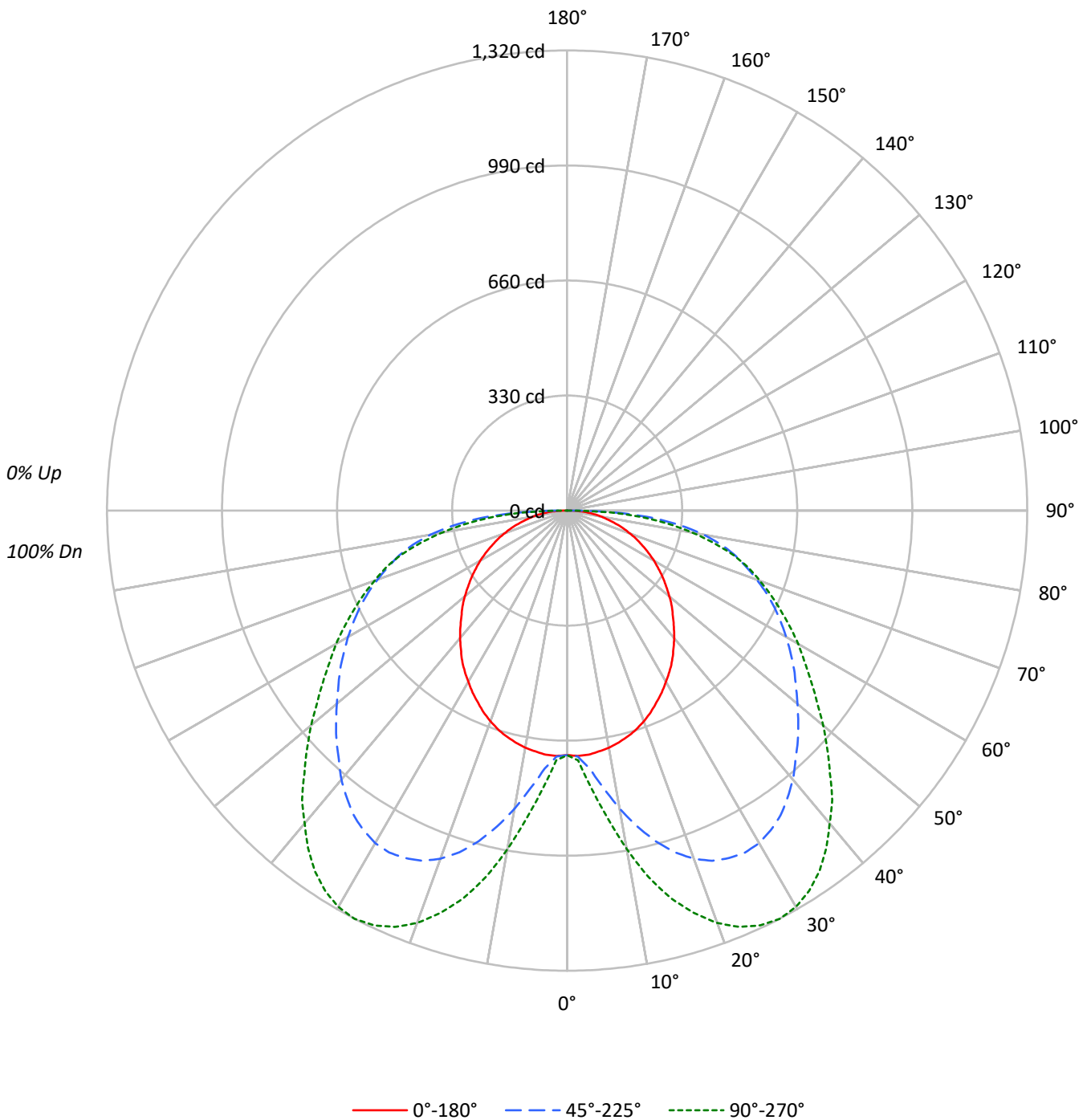
Input Watts (W): 50.2  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	944	944	944
5°	949	1003	1080
10°	944	1186	1348
15°	934	1367	1604
20°	921	1522	1803
25°	900	1632	1949
30°	880	1711	2039
35°	863	1753	2073
40°	839	1770	2058
45°	816	1781	2028
50°	801	1805	2007
55°	787	1865	2005
60°	775	1953	2061
65°	761	2087	2150
70°	753	2277	2314
75°	749	2596	2572
80°	771	3085	2824
85°	851	3830	3310



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	74.8	1.9
10°-20°	269.8	6.8
20°-30°	480.6	12.1
30°-40°	623.1	15.6
40°-50°	664.5	16.7
50°-60°	639.2	16.0
60°-70°	571.9	14.4
70°-80°	450.3	11.3
80°-90°	209.9	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°	825.1	20.7
0°-40°	1448.2	36.4
0°-60°	2751.8	69.1
0°-90°	3984.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3984.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	701	701	701	701	701	
5°	703	711	743	783	800	67
15°	671	798	982	1110	1152	189
25°	606	848	1100	1265	1312	280
35°	525	806	1068	1221	1262	328
45°	429	704	936	1044	1066	332
55°	335	604	795	847	855	300
65°	239	512	656	669	675	237
75°	144	394	499	492	495	152
85°	55	209	248	221	214	58
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°	701.4	701.4	701.4	701.4	701.4	701.4	701.4	701.4	701.4	701.4	701.4
2.5°	704.5	704.5	703.0	703.0	704.5	704.5	704.5	704.5	706.0	706.0	707.6
5°	703.0	701.4	701.4	704.5	709.1	713.7	718.3	725.9	732.1	742.8	752.0
7.5°	696.8	696.8	699.9	707.6	718.3	733.6	750.5	768.8	785.7	802.5	822.4
10°	690.7	690.7	698.4	712.2	733.6	761.2	788.7	816.3	842.3	868.4	889.8
12.5°	681.5	683.1	695.3	719.8	755.0	793.3	828.6	863.8	899.0	928.1	960.3
15°	670.8	673.9	692.3	729.0	775.0	820.9	863.8	906.7	946.5	981.7	1015.4
17.5°	658.6	663.2	689.2	736.7	790.3	842.3	895.9	945.0	987.8	1027.7	1065.9
20°	643.2	650.9	686.1	742.8	802.5	862.3	918.9	971.0	1020.0	1062.9	1105.8
22.5°	626.4	635.6	680.0	744.3	810.2	874.5	937.3	990.9	1043.0	1087.4	1131.8
25°	606.5	620.3	673.9	742.8	813.2	882.2	946.5	1001.6	1055.2	1099.6	1148.6
27.5°	588.1	603.4	663.2	736.7	810.2	882.2	946.5	1004.7	1059.8	1105.8	1153.2
30°	566.7	586.6	652.4	727.5	802.5	874.5	940.4	998.6	1052.2	1101.2	1150.2
32.5°	546.8	568.2	635.6	712.2	788.7	860.7	928.1	984.8	1038.4	1087.4	1134.9
35°	525.3	546.8	617.2	696.8	770.4	842.3	906.7	964.9	1016.9	1067.5	1111.9
37.5°	500.8	525.3	597.3	675.4	747.4	819.4	882.2	938.8	990.9	1038.4	1081.3
40°	477.8	503.9	574.3	652.4	724.4	793.3	854.6	908.2	958.7	1007.7	1046.0
42.5°	453.3	480.9	552.9	627.9	698.4	764.2	822.4	877.6	926.6	969.5	1007.7
45°	428.8	459.5	529.9	603.4	670.8	736.7	794.9	845.4	892.9	935.8	967.9
47.5°	407.4	438.0	505.4	578.9	646.3	709.1	765.8	814.8	860.7	899.0	931.2
50°	382.9	413.5	482.4	554.4	620.3	683.1	736.7	784.1	827.0	862.3	892.9
52.5°	358.4	392.1	459.5	531.4	597.3	657.0	710.6	756.6	794.9	827.0	853.1
55°	335.4	369.1	438.0	508.5	574.3	634.1	684.6	729.0	765.8	794.9	814.8
57.5°	310.9	347.7	418.1	488.6	552.9	609.5	660.1	701.4	735.1	759.6	776.5
60°	287.9	326.2	398.2	467.1	531.4	588.1	635.6	675.4	704.5	725.9	739.7
62.5°	263.4	304.8	376.8	445.7	508.5	565.1	609.5	646.3	673.9	690.7	699.9
65°	238.9	283.3	355.3	424.2	485.5	539.1	582.0	615.7	640.2	655.5	663.2
67.5°	215.9	261.9	333.9	401.3	461.0	511.5	552.9	585.0	606.5	618.7	621.8
70°	191.4	238.9	310.9	376.8	435.0	482.4	522.3	549.8	569.7	578.9	582.0
72.5°	168.5	215.9	286.4	350.7	405.9	450.3	488.6	516.1	533.0	539.1	539.1
75°	144.0	191.4	260.4	321.6	372.2	416.6	451.8	476.3	491.6	499.3	496.2
77.5°	119.5	166.9	232.8	289.5	335.4	375.2	410.5	433.4	448.7	453.3	450.3
80°	99.5	142.4	200.6	252.7	295.6	332.3	364.5	387.5	401.3	398.2	390.5
82.5°	76.6	116.4	166.9	211.4	249.6	284.9	315.5	333.9	336.9	330.8	321.6
85°	55.1	85.8	127.1	162.3	196.0	222.1	243.5	255.8	255.8	248.1	242.0
87.5°	32.2	50.5	73.5	98.0	113.3	130.2	147.0	150.1	150.1	150.1	142.4
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°	701.4	701.4	701.4	701.4	701.4	701.4	701.4	701.4
2.5°	712.2	713.7	715.2	716.8	718.3	718.3	718.3	716.8
5°	761.2	770.4	778.0	787.2	790.3	793.3	796.4	799.5
7.5°	839.3	851.5	863.8	876.0	883.7	892.9	889.8	889.8
10°	914.3	937.3	951.1	966.4	974.1	983.2	987.8	986.3
12.5°	987.8	1013.9	1033.8	1047.6	1059.8	1069.0	1072.1	1076.7
15°	1050.6	1076.7	1101.2	1118.0	1133.3	1142.5	1148.6	1151.7
17.5°	1102.7	1128.7	1156.3	1177.7	1191.5	1203.8	1206.8	1209.9
20°	1141.0	1174.7	1200.7	1223.7	1239.0	1251.3	1257.4	1258.9
22.5°	1171.6	1203.8	1232.9	1255.9	1272.7	1286.5	1292.6	1292.6
25°	1188.5	1222.2	1252.8	1277.3	1294.1	1306.4	1312.5	1312.5
27.5°	1194.6	1229.8	1258.9	1283.4	1301.8	1314.1	1318.6	1320.2
30°	1190.0	1225.2	1254.3	1277.3	1295.7	1306.4	1311.0	1312.5
32.5°	1174.7	1209.9	1237.5	1258.9	1275.8	1288.0	1292.6	1292.6
35°	1150.2	1182.3	1209.9	1231.4	1246.7	1255.9	1262.0	1262.0
37.5°	1118.0	1150.2	1174.7	1193.1	1206.8	1217.6	1220.6	1220.6
40°	1081.3	1108.8	1131.8	1150.2	1162.4	1170.1	1173.2	1171.6
42.5°	1039.9	1065.9	1084.3	1099.6	1110.4	1118.0	1122.6	1125.7
45°	997.0	1021.5	1038.4	1050.6	1058.3	1062.9	1067.5	1065.9
47.5°	958.7	974.1	989.4	998.6	1006.2	1010.8	1012.3	1012.3
50°	914.3	928.1	940.4	948.0	952.6	955.7	955.7	958.7
52.5°	869.9	882.2	891.4	899.0	902.1	903.6	905.1	903.6
55°	830.1	837.7	843.9	850.0	853.1	854.6	857.7	854.6
57.5°	788.7	794.9	802.5	804.1	807.1	807.1	808.6	807.1
60°	747.4	752.0	755.0	756.6	761.2	762.7	762.7	765.8
62.5°	706.0	707.6	712.2	713.7	715.2	718.3	721.4	719.8
65°	664.7	666.2	667.7	670.8	673.9	676.9	676.9	675.4
67.5°	621.8	623.3	624.9	627.9	631.0	631.0	632.5	632.5
70°	580.5	580.5	582.0	583.5	586.6	588.1	589.6	588.1
72.5°	537.6	537.6	537.6	539.1	540.6	543.7	545.2	545.2
75°	493.2	493.2	493.2	491.6	493.2	496.2	494.7	494.7
77.5°	444.1	439.5	435.0	431.9	433.4	431.9	431.9	431.9
80°	382.9	375.2	369.1	366.0	364.5	366.0	364.5	364.5
82.5°	315.5	307.8	301.7	297.1	298.6	295.6	297.1	294.1
85°	234.3	228.2	222.1	219.0	220.5	220.5	219.0	214.4
87.5°	137.8	130.2	128.6	127.1	128.6	127.1	122.5	124.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)