

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: P188549

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188549
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24780)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24SR-LD2-59-C-UNV-L840-CD1-PG-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH PRIMARY GREEN SKYTRIM.

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

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3716.0 lumens
Efficiency: N/A
Efficacy: 74.0 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 2.25 / 2.05
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

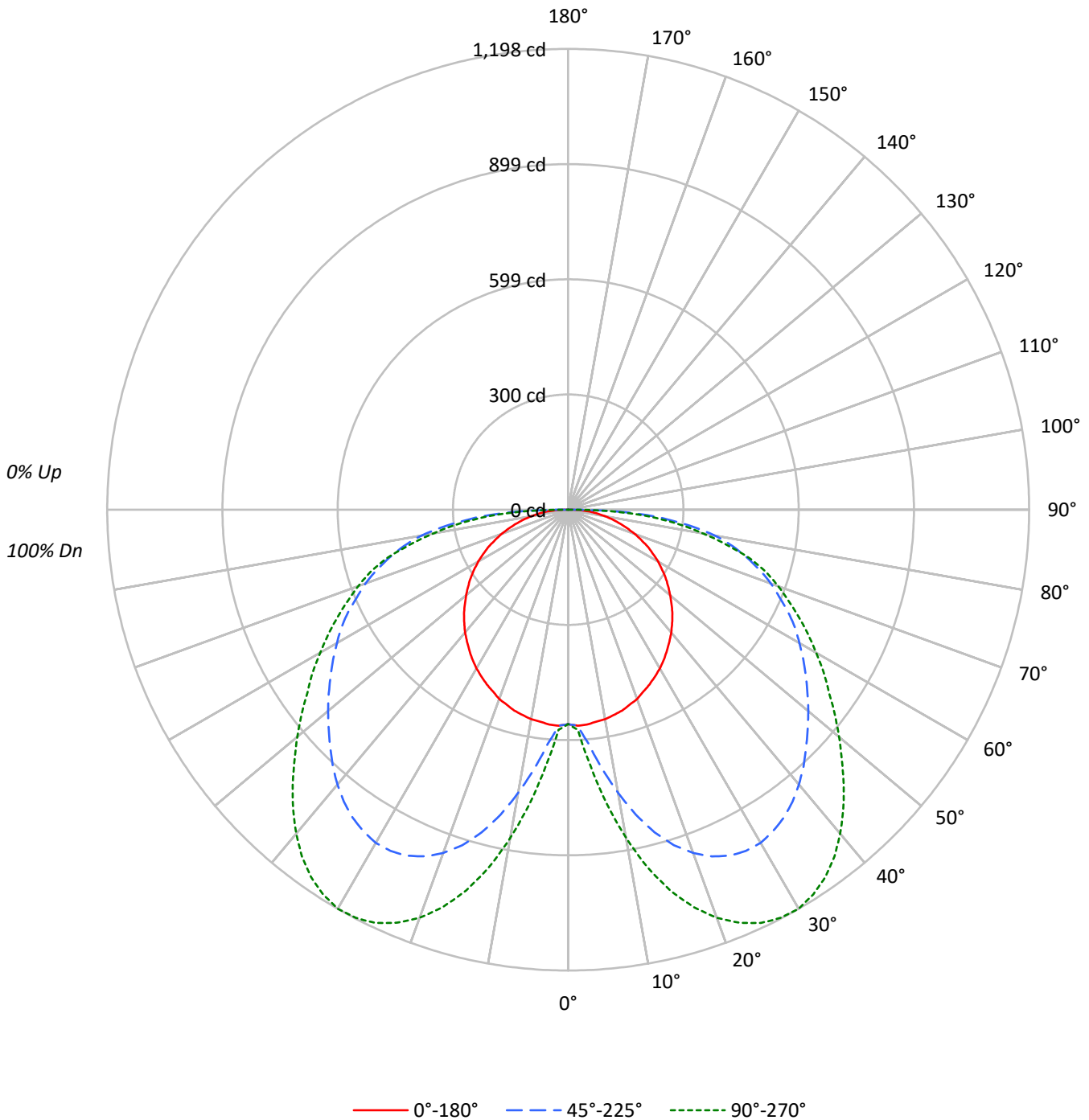
Input Watts (W): 50.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P188549

CATALOG NUMBER: 24SR-LD2-59-C-UNV-L840-CD1-PG-U

Luminous Intensity Polar Plot





TEST NUMBER: P188549

CATALOG NUMBER: 24SR-LD2-59-C-UNV-L840-CD1-PG-U

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	86	89	86	83	86	83	80	78
2	95	85	77	70	92	83	76	69	80	73	68	76	71	66	73	69	65	62
3	86	73	64	57	83	72	63	56	69	61	55	66	59	54	63	58	53	51
4	78	64	54	47	75	63	54	46	60	52	46	58	51	45	55	49	44	42
5	71	57	47	39	69	56	46	39	53	45	39	51	44	38	49	43	38	35
6	65	51	41	34	63	50	40	34	48	39	33	46	39	33	44	38	33	30
7	60	46	36	29	58	45	36	29	43	35	29	42	34	29	40	33	28	26
8	56	41	32	26	54	41	32	26	39	31	25	38	31	25	37	30	25	23
9	52	38	29	23	50	37	29	23	36	28	23	35	28	23	34	27	22	20
10	49	34	26	20	47	34	26	20	33	25	20	32	25	20	31	25	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	750	750	750
5°	757	825	904
10°	755	1021	1184
15°	753	1210	1427
20°	750	1360	1616
25°	743	1473	1760
30°	740	1554	1861
35°	735	1605	1914
40°	732	1638	1931
45°	729	1664	1926
50°	724	1706	1923
55°	726	1768	1940
60°	725	1867	2003
65°	727	2009	2106
70°	723	2205	2284
75°	725	2500	2540
80°	748	3002	2765
85°	875	3736	3358



TEST NUMBER: P188549

CATALOG NUMBER: 24SR-LD2-59-C-UNV-L840-CD1-PG-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.1	1.7
10°-20°	234.5	6.3
20°-30°	426.8	11.5
30°-40°	566.1	15.2
40°-50°	620.2	16.7
50°-60°	609.6	16.4
60°-70°	553.0	14.9
70°-80°	438.2	11.8
80°-90°	205.4	5.5
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°	723.4	19.5
0°-40°	1289.5	34.7
0°-60°	2519.4	67.8
0°-90°	3716.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3716.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	558	558	558	558	558	
5°	560	564	611	654	669	53
15°	541	672	868	986	1025	152
25°	501	740	992	1133	1185	231
35°	447	724	977	1116	1166	280
45°	383	651	874	980	1012	295
55°	309	571	754	812	827	276
65°	228	493	631	649	662	225
75°	139	381	481	482	489	147
85°	57	205	242	217	218	58
90°	0	0	0	0	0	



TEST NUMBER: P188549

CATALOG NUMBER: 24SR-LD2-59-C-UNV-L840-CD1-PG-U

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5
2.5°	562.1	560.5	560.5	560.5	559.0	559.0	559.0	560.5	560.5	562.1	565.1
5°	560.5	559.0	559.0	559.0	562.1	566.7	575.9	586.6	598.8	611.1	624.9
7.5°	555.9	555.9	555.9	560.5	574.3	592.7	615.7	638.7	658.6	680.0	699.9
10°	552.9	552.9	555.9	571.3	598.8	629.5	660.1	690.7	718.3	747.4	775.0
12.5°	546.8	546.8	555.9	585.0	623.3	663.2	701.4	739.7	776.5	811.7	842.3
15°	540.6	540.6	560.5	601.9	647.8	695.3	741.3	785.7	828.6	868.4	903.6
17.5°	531.4	533.0	563.6	614.1	669.3	722.9	773.4	824.0	869.9	914.3	951.1
20°	523.8	526.8	566.7	624.9	686.1	745.9	802.5	854.6	903.6	949.6	989.4
22.5°	511.5	517.7	568.2	632.5	698.4	762.7	820.9	876.0	928.1	975.6	1015.4
25°	500.8	508.5	566.7	635.6	707.6	773.4	833.2	889.8	943.4	992.4	1033.8
27.5°	488.6	500.8	565.1	637.1	710.6	778.0	839.3	897.5	951.1	1000.1	1043.0
30°	476.3	491.6	560.5	635.6	709.1	776.5	837.8	897.5	951.1	1000.1	1041.4
32.5°	462.5	479.4	551.4	627.9	703.0	768.8	830.1	888.3	943.4	990.9	1032.3
35°	447.2	467.1	540.6	617.2	690.7	756.6	816.3	874.5	928.1	977.1	1016.9
37.5°	431.9	454.9	528.4	605.0	676.9	741.3	799.5	857.7	909.7	957.2	995.5
40°	416.6	441.1	514.6	589.6	660.1	722.9	781.1	837.8	886.8	932.7	967.9
42.5°	399.7	427.3	499.3	572.8	640.2	701.4	759.6	814.8	862.3	905.1	938.8
45°	382.9	410.5	482.4	554.4	621.8	680.0	736.7	790.3	834.7	874.5	906.7
47.5°	364.5	395.1	467.1	536.0	600.4	660.1	715.2	764.2	808.7	843.9	874.5
50°	346.1	378.3	448.7	517.7	580.5	638.7	692.3	739.7	781.1	814.8	840.8
52.5°	327.7	361.4	431.9	499.3	562.1	618.7	670.8	715.2	753.5	784.1	810.2
55°	309.4	344.6	415.0	480.9	543.7	598.8	649.4	690.7	727.5	753.5	775.0
57.5°	289.5	327.7	398.2	464.1	525.3	580.5	627.9	667.8	701.4	724.4	742.8
60°	269.6	309.4	379.8	447.2	506.9	560.5	606.5	644.8	673.9	693.8	710.6
62.5°	248.1	291.0	363.0	428.8	488.6	540.6	583.5	617.2	646.3	664.7	673.9
65°	228.2	272.6	344.6	410.5	468.7	517.7	559.0	591.2	615.7	631.0	638.7
67.5°	205.2	252.7	324.7	390.5	445.7	493.2	531.4	562.1	583.5	594.2	600.4
70°	183.8	232.8	303.2	367.6	419.6	465.6	502.3	531.4	549.8	560.5	562.1
72.5°	160.8	211.4	281.8	343.1	393.6	436.5	471.7	497.7	513.1	522.3	523.8
75°	139.4	188.4	255.8	314.0	361.4	401.3	435.0	459.5	474.8	480.9	480.9
77.5°	117.9	163.9	228.2	283.3	327.7	364.5	395.1	419.6	431.9	438.0	438.0
80°	96.5	140.9	199.1	249.6	289.5	323.2	353.8	375.2	387.5	387.5	378.3
82.5°	76.6	114.9	165.4	211.4	245.0	275.7	304.8	318.6	321.6	318.6	310.9
85°	56.7	87.3	128.6	163.9	194.5	215.9	234.3	243.5	245.0	242.0	235.9
87.5°	32.2	50.5	73.5	96.5	116.4	127.1	142.4	145.5	145.5	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



TEST NUMBER: P188549

CATALOG NUMBER: 24SR-LD2-59-C-UNV-L840-CD1-PG-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5
2.5°	566.7	568.2	568.2	572.8	572.8	574.3	572.8	572.8
5°	634.1	640.2	649.4	658.6	661.6	667.8	666.2	669.3
7.5°	715.2	727.5	741.3	753.5	759.6	765.8	767.3	771.9
10°	796.4	811.7	828.6	845.4	854.6	859.2	865.3	866.9
12.5°	866.9	889.8	906.7	925.0	937.3	943.4	949.6	952.6
15°	931.2	954.1	975.6	995.5	1007.8	1016.9	1023.1	1024.6
17.5°	980.2	1006.2	1029.2	1050.6	1062.9	1073.6	1079.7	1082.8
20°	1018.5	1047.6	1070.5	1092.0	1105.8	1118.0	1127.2	1128.7
22.5°	1046.0	1075.1	1101.2	1122.6	1139.5	1151.7	1159.4	1162.4
25°	1065.9	1096.6	1122.6	1144.1	1160.9	1174.7	1182.3	1185.4
27.5°	1075.1	1107.3	1134.9	1154.8	1171.6	1185.4	1194.6	1196.1
30°	1076.7	1107.3	1134.9	1156.3	1173.2	1186.9	1194.6	1197.7
32.5°	1065.9	1098.1	1125.7	1145.6	1162.4	1176.2	1183.9	1185.4
35°	1050.6	1079.7	1105.8	1125.7	1142.5	1154.8	1162.4	1165.5
37.5°	1027.7	1055.2	1079.7	1098.1	1113.4	1125.7	1133.3	1136.4
40°	1000.1	1026.1	1049.1	1065.9	1079.7	1090.5	1096.6	1099.6
42.5°	967.9	992.4	1013.9	1027.7	1041.4	1050.6	1055.2	1058.3
45°	934.2	957.2	974.1	986.3	998.6	1006.2	1010.8	1012.3
47.5°	899.0	918.9	932.7	943.4	952.6	960.3	964.9	964.9
50°	863.8	880.6	891.4	902.1	909.7	914.3	917.4	918.9
52.5°	828.6	842.3	850.0	859.2	865.3	869.9	873.0	873.0
55°	791.8	802.5	808.7	816.3	822.4	825.5	828.6	827.0
57.5°	756.6	764.2	768.8	775.0	779.6	782.6	785.7	787.2
60°	719.8	725.9	727.5	733.6	738.2	741.3	742.8	744.3
62.5°	681.5	686.1	689.2	692.3	696.8	699.9	701.4	703.0
65°	643.2	646.3	646.3	652.4	657.0	658.6	660.1	661.6
67.5°	603.4	605.0	606.5	611.1	615.7	617.2	620.3	620.3
70°	563.6	563.6	565.1	569.7	574.3	575.9	578.9	580.5
72.5°	522.3	523.8	523.8	528.4	533.0	536.0	537.6	539.1
75°	479.4	479.4	480.9	482.4	484.0	485.5	485.5	488.6
77.5°	433.4	427.3	424.2	421.2	422.7	422.7	421.2	422.7
80°	369.1	361.4	356.8	355.3	356.8	355.3	355.3	356.8
82.5°	303.2	294.1	291.0	289.5	289.5	289.5	287.9	291.0
85°	228.2	222.1	219.0	215.9	217.5	217.5	215.9	217.5
87.5°	137.8	134.8	131.7	128.6	130.2	128.6	127.1	131.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)