

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: P188573

Luminaire Tested: **24SR-LD2-45-C-UNV-L835-CD1-PL-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188573
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-LD2-45-C-UNV-L835-CD1-PL-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH PEARL SKYTRIM.

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

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4338.0 lumens
Efficiency: N/A
Efficacy: 118.2 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

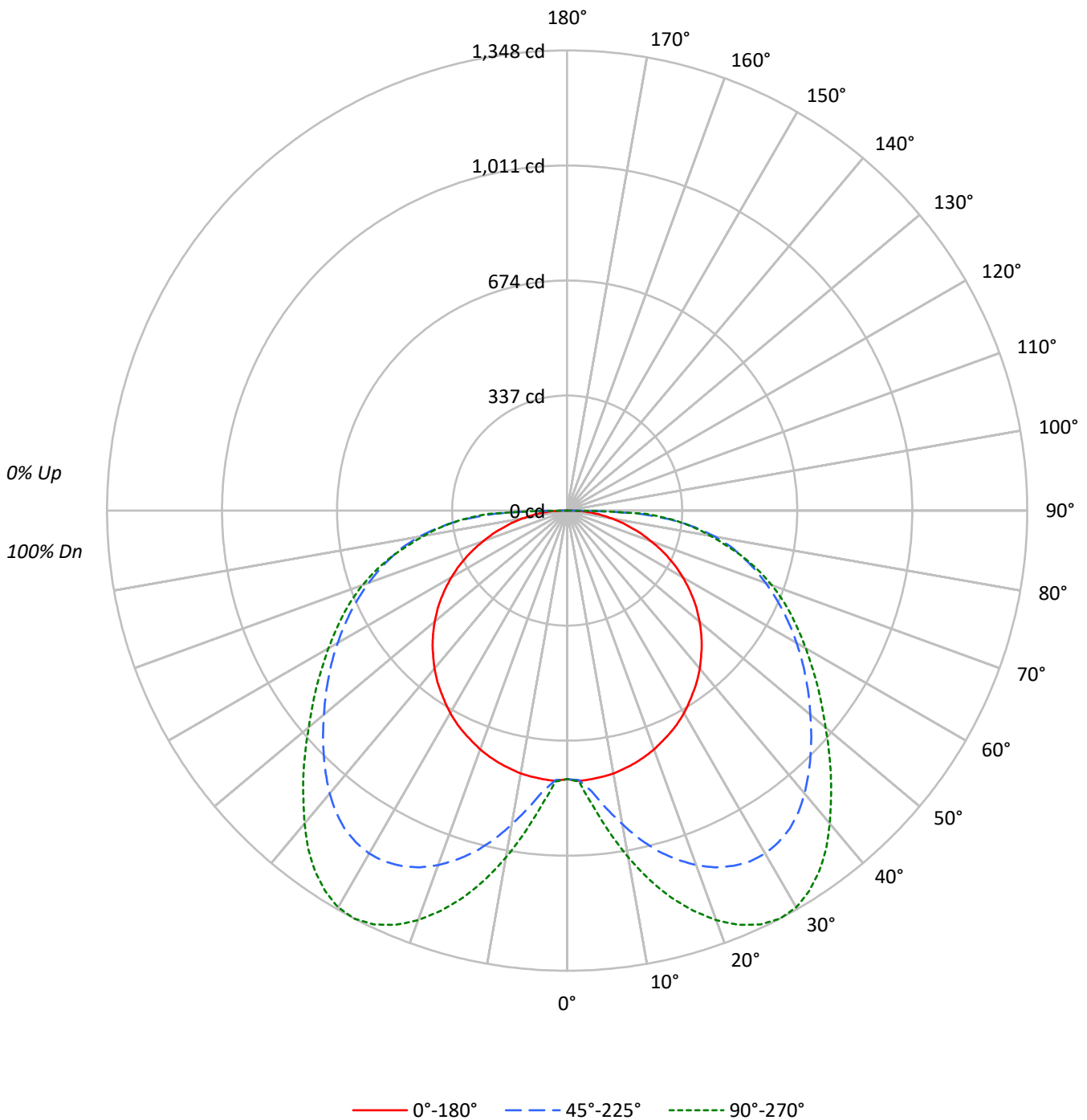
Input Watts (W): 36.7
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P188573

CATALOG NUMBER: 24SR-LD2-45-C-UNV-L835-CD1-PL-U

Luminous Intensity Polar Plot





TEST NUMBER: P188573

CATALOG NUMBER: 24SR-LD2-45-C-UNV-L835-CD1-PL-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	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°	1058	1058	1058
5°	1067	1115	1172
10°	1069	1275	1410
15°	1067	1439	1634
20°	1066	1582	1828
25°	1064	1705	1986
30°	1064	1802	2085
35°	1061	1868	2116
40°	1062	1901	2102
45°	1061	1920	2079
50°	1060	1946	2069
55°	1058	2001	2101
60°	1054	2089	2173
65°	1046	2224	2308
70°	1027	2433	2509
75°	1012	2780	2798
80°	1020	3408	3301
85°	1113	4721	4809



TEST NUMBER: P188573

CATALOG NUMBER: 24SR-LD2-45-C-UNV-L835-CD1-PL-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.8	1.9
10°-20°	284.1	6.5
20°-30°	503.6	11.6
30°-40°	662.8	15.3
40°-50°	718.7	16.6
50°-60°	699.6	16.1
60°-70°	628.6	14.5
70°-80°	497.9	11.5
80°-90°	260.9	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°	869.5	20.0
0°-40°	1532.3	35.3
0°-60°	2950.6	68.0
0°-90°	4338.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4338.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	787	787	787	787	787	
5°	790	790	826	857	868	75
15°	766	866	1033	1137	1173	216
25°	717	913	1149	1288	1338	331
35°	646	889	1137	1253	1288	405
45°	558	807	1009	1075	1092	430
55°	451	701	853	883	896	403
65°	329	588	699	712	725	325
75°	195	442	535	535	538	207
85°	72	235	306	306	312	77
90°	0	0	0	0	0	



TEST NUMBER: P188573

CATALOG NUMBER: 24SR-LD2-45-C-UNV-L835-CD1-PL-U

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	786.7	786.7	786.7	786.7	786.7	786.7	786.7	786.7	786.7	786.7	786.7
2.5°	792.5	791.3	790.2	789.0	787.9	786.7	786.7	786.7	787.9	790.2	793.6
5°	790.2	789.0	787.9	787.9	789.0	791.3	798.2	806.2	814.2	825.7	838.3
7.5°	786.7	785.6	785.6	787.9	797.1	810.8	826.8	844.0	861.2	879.5	896.7
10°	782.2	781.0	782.2	792.5	813.1	836.0	860.0	884.1	907.0	933.3	957.4
12.5°	774.1	774.1	779.9	800.5	830.3	861.2	892.1	924.2	953.9	986.0	1013.5
15°	766.1	766.1	778.7	809.6	847.4	884.1	923.0	960.8	996.3	1033.0	1065.0
17.5°	755.8	755.8	777.6	816.5	860.0	904.7	949.4	991.7	1031.8	1071.9	1106.3
20°	744.4	746.7	775.3	822.2	871.5	921.9	970.0	1016.9	1061.6	1105.1	1142.9
22.5°	730.6	735.2	771.9	824.5	880.7	933.3	986.0	1036.4	1083.3	1131.4	1169.2
25°	716.9	723.8	767.3	824.5	884.1	941.3	996.3	1049.0	1099.4	1148.6	1189.9
27.5°	702.0	711.2	760.4	821.1	885.2	943.6	1000.9	1055.9	1108.5	1158.9	1201.3
30°	684.8	696.3	750.1	814.2	880.7	940.2	999.7	1057.0	1109.7	1160.1	1201.3
32.5°	665.4	680.2	737.5	803.9	871.5	932.2	991.7	1049.0	1102.8	1152.1	1191.0
35°	645.9	664.2	723.8	791.3	858.9	919.6	979.1	1037.5	1090.2	1137.2	1171.5
37.5°	626.4	645.9	706.6	774.1	841.7	902.4	963.1	1019.2	1069.6	1113.1	1144.0
40°	604.7	626.4	687.1	755.8	822.2	882.9	942.5	996.3	1042.1	1082.2	1110.8
42.5°	580.6	604.7	666.5	735.2	800.5	860.0	917.3	967.7	1011.2	1046.7	1070.8
45°	557.7	582.9	644.7	713.5	777.6	836.0	891.0	937.9	976.8	1008.9	1029.5
47.5°	532.5	558.9	623.0	689.4	752.4	809.6	862.3	904.7	942.5	970.0	988.3
50°	506.2	534.8	598.9	665.4	727.2	783.3	833.7	872.6	907.0	929.9	947.1
52.5°	479.8	509.6	573.7	640.2	702.0	755.8	803.9	841.7	871.5	892.1	907.0
55°	451.2	484.4	548.5	615.0	674.5	728.3	774.1	808.5	836.0	853.2	866.9
57.5°	421.4	456.9	523.4	589.8	649.3	700.9	744.4	776.4	800.5	815.4	825.7
60°	391.7	429.4	495.9	562.3	620.7	672.2	713.5	743.2	765.0	776.4	784.5
62.5°	360.7	400.8	468.4	534.8	594.4	642.5	681.4	708.9	728.3	737.5	745.5
65°	328.7	371.0	439.8	506.2	565.7	610.4	648.2	673.4	690.5	698.6	703.1
67.5°	295.5	340.1	410.0	476.4	533.7	577.2	612.7	637.9	651.6	658.5	661.9
70°	261.1	308.1	377.9	444.3	499.3	540.5	574.9	597.8	611.5	618.4	619.5
72.5°	229.0	274.8	345.8	410.0	462.7	502.7	534.8	558.9	572.6	578.3	578.3
75°	194.7	240.5	310.3	372.2	422.6	461.5	493.6	516.5	529.1	534.8	534.8
77.5°	164.9	207.3	272.6	332.1	379.1	416.8	447.8	471.8	485.6	491.3	491.3
80°	131.7	172.9	233.6	288.6	332.1	366.5	398.5	423.7	437.5	439.8	436.3
82.5°	101.9	139.7	191.2	240.5	280.6	312.6	344.7	365.3	375.6	377.9	376.8
85°	72.1	103.1	146.6	186.7	219.9	249.7	272.6	292.0	302.3	305.8	308.1
87.5°	42.4	59.5	87.0	118.0	143.1	162.6	176.4	193.5	203.8	210.7	217.6
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: P188573

CATALOG NUMBER: 24SR-LD2-45-C-UNV-L835-CD1-PL-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	786.7	786.7	786.7	786.7	786.7	786.7	786.7	786.7
2.5°	792.5	793.6	794.8	794.8	794.8	795.9	794.8	794.8
5°	842.9	849.7	855.5	858.9	862.3	868.1	866.9	868.1
7.5°	905.8	917.3	929.9	936.8	941.3	948.2	950.5	950.5
10°	971.1	987.2	1002.0	1012.3	1019.2	1029.5	1030.7	1031.8
12.5°	1033.0	1052.4	1069.6	1081.1	1091.4	1100.5	1105.1	1106.3
15°	1085.6	1109.7	1129.2	1144.0	1154.4	1164.7	1170.4	1172.7
17.5°	1132.6	1157.8	1179.5	1196.7	1209.3	1219.6	1226.5	1228.8
20°	1169.2	1196.7	1220.8	1239.1	1254.0	1265.4	1274.6	1276.9
22.5°	1199.0	1227.6	1252.8	1273.5	1288.3	1302.1	1310.1	1313.5
25°	1220.8	1251.7	1278.0	1297.5	1313.5	1326.1	1334.1	1337.6
27.5°	1233.4	1264.3	1289.5	1309.0	1325.0	1336.4	1344.5	1347.9
30°	1233.4	1263.1	1288.3	1306.7	1321.5	1333.0	1338.7	1342.2
32.5°	1220.8	1249.4	1272.3	1288.3	1302.1	1313.5	1318.1	1320.4
35°	1200.2	1225.4	1246.0	1259.7	1271.2	1281.5	1286.0	1288.3
37.5°	1170.4	1193.3	1209.3	1221.9	1231.1	1241.4	1244.8	1247.1
40°	1132.6	1154.4	1165.8	1177.3	1185.3	1194.4	1196.7	1196.7
42.5°	1091.4	1109.7	1121.1	1129.2	1134.9	1140.6	1144.0	1144.0
45°	1047.8	1063.9	1071.9	1078.8	1084.5	1089.1	1092.5	1092.5
47.5°	1004.3	1016.9	1023.8	1028.4	1033.0	1037.5	1039.8	1039.8
50°	960.8	970.0	975.7	979.1	983.7	987.2	989.4	988.3
52.5°	917.3	924.2	928.7	932.2	934.5	937.9	939.1	940.2
55°	873.8	878.4	881.8	884.1	888.7	892.1	893.2	895.5
57.5°	831.4	833.7	838.3	839.4	844.0	847.4	848.6	849.7
60°	787.9	790.2	793.6	795.9	801.6	803.9	805.1	807.4
62.5°	745.5	746.7	751.2	755.8	760.4	762.7	763.8	765.0
65°	703.1	706.6	710.0	713.5	718.0	721.5	722.6	724.9
67.5°	661.9	664.2	668.8	672.2	675.7	679.1	681.4	682.5
70°	619.5	621.8	625.3	627.6	631.0	634.4	637.9	637.9
72.5°	578.3	578.3	580.6	582.9	586.3	588.6	589.8	589.8
75°	533.7	532.5	534.8	535.9	535.9	535.9	537.1	538.2
77.5°	485.6	481.0	478.7	478.7	479.8	477.5	478.7	479.8
80°	430.6	426.0	424.9	424.9	426.0	424.9	426.0	426.0
82.5°	372.2	372.2	368.8	369.9	371.0	368.8	371.0	373.3
85°	304.6	305.8	304.6	308.1	308.1	308.1	309.2	311.5
87.5°	218.7	225.6	223.3	227.9	226.7	227.9	229.0	232.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)