

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: P#

Luminaire Tested: **4SNLED-LD5-41SL-SLN-UNV-L830-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P#
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P27402)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4SNLED-LD5-41SL-SLN-UNV-L830-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
SQUARE NARROW LENS
Light Source: -
Ballast/Driver: -

Summary

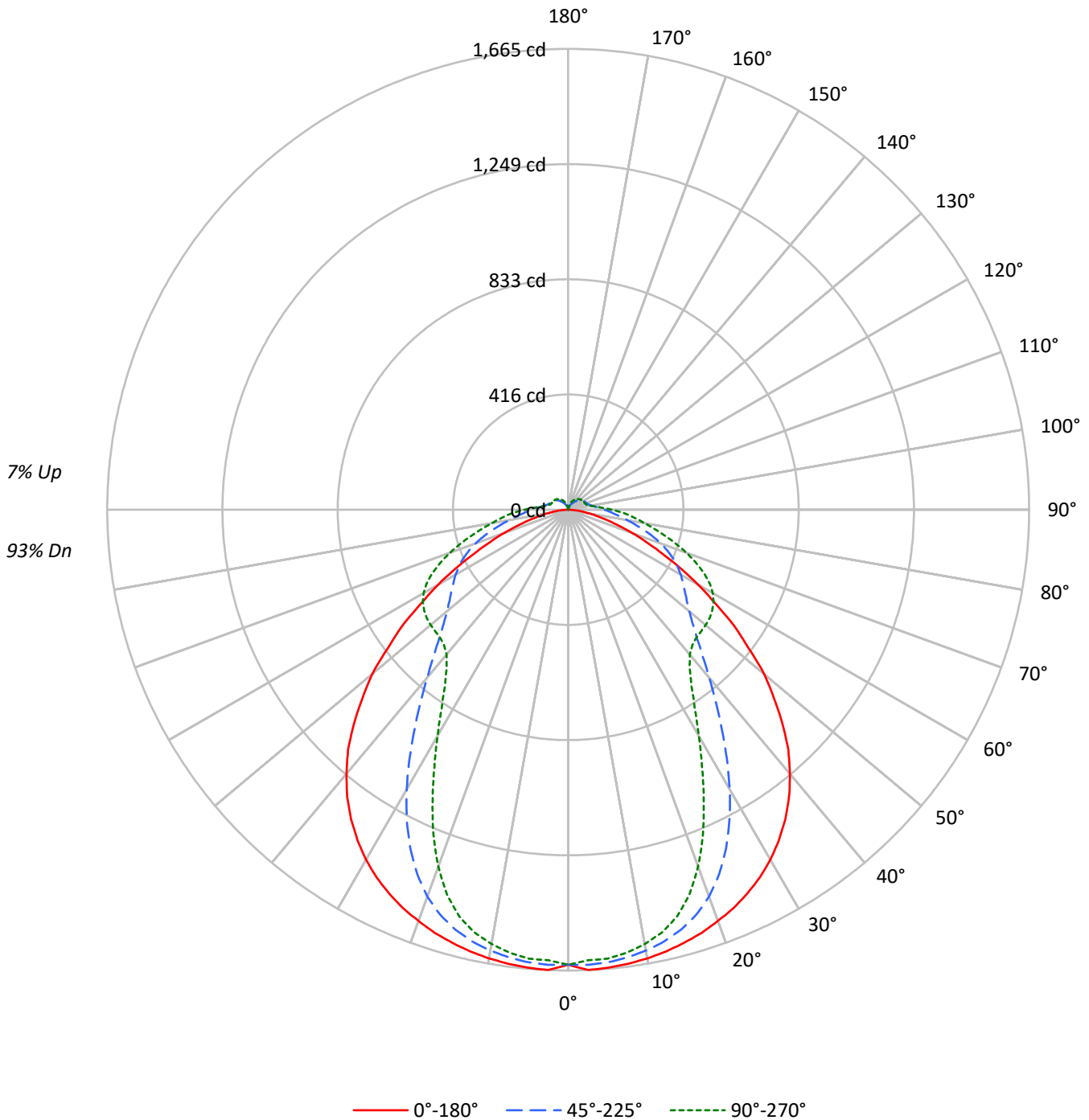
Lumens per Lamp: N/A
Luminaire Lumens: 4134.0 lumens
Efficiency: N/A
Efficacy: 133.4 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 0.96 / 1.11
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 31
Input Voltage (V): NR
Input Current (Ain): 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	117	117	117	117	114	114	114	114	107	107	107	101	101	101	95	95	95	93
1	107	102	97	93	103	99	94	91	93	90	87	88	85	83	83	81	79	76
2	97	89	82	76	94	86	80	75	81	76	72	77	73	69	73	70	66	64
3	89	78	70	64	86	76	69	63	72	66	61	68	63	59	65	61	57	54
4	82	70	61	55	79	68	60	54	65	58	52	61	55	51	58	53	49	47
5	75	63	54	47	73	61	53	47	58	51	46	55	49	44	53	48	43	41
6	70	57	48	42	67	55	47	41	53	46	40	51	44	39	48	43	39	36
7	65	52	43	37	63	51	42	37	48	41	36	46	40	35	44	39	35	32
8	61	47	39	33	59	46	39	33	44	37	32	43	36	32	41	35	31	29
9	57	44	36	30	55	43	35	30	41	34	29	40	33	29	38	33	28	27
10	53	40	33	28	52	40	32	27	38	32	27	37	31	27	35	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13284	13284	13284
5°	13437	12991	12787
10°	13433	12631	12261
15°	13437	12208	11562
20°	13443	11579	10383
25°	13449	10610	8793
30°	13384	9336	7232
35°	13194	7943	6060
40°	12807	6727	5479
45°	12129	5847	5438
50°	11204	5345	5629
55°	9866	5138	5825
60°	8324	5064	5906
65°	6695	4951	5722
70°	5379	4696	5276
75°	4054	4250	4683
80°	2992	3818	4165
85°	2002	3602	3831



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	155.5	3.8
10°-20°	439.6	10.6
20°-30°	614.5	14.9
30°-40°	637.4	15.4
40°-50°	588.8	14.2
50°-60°	525.7	12.7
60°-70°	426.1	10.3
70°-80°	283.4	6.9
80°-90°	162.3	3.9
90°-100°	89.8	2.2
100°-110°	60.8	1.5
110°-120°	50.6	1.2
120°-130°	41.2	1.0
130°-140°	29.7	0.7
140°-150°	17.9	0.4
150°-160°	8.6	0.2
160°-170°	2.2	0.1
170°-180°	0.0	0.0
0°-30°	1209.6	29.3
0°-40°	1847.0	44.7
0°-60°	2961.5	71.6
0°-90°	3833.3	92.7
90°-120°	201.2	4.9
90°-150°	289.9	7.0
90°-180°	301.0	7.3
0°-180°	4134.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1644	1644	1644	1644	1644	
5°	1661	1633	1642	1630	1628	158
15°	1620	1585	1572	1536	1521	458
25°	1530	1462	1350	1208	1159	705
35°	1367	1217	967	812	776	853
45°	1094	867	659	635	654	842
55°	732	553	514	598	635	650
65°	374	334	419	513	540	378
75°	145	182	282	346	360	159
85°	29	84	166	213	219	34
90°	1	59	132	159	157	2
95°	1	50	104	111	108	1
105°	1	44	75	73	69	1
115°	1	39	66	66	64	1
125°	1	34	59	61	60	1
135°	1	25	46	54	54	1
145°	1	16	32	42	45	1
155°	1	10	20	26	32	1
165°	1	6	10	13	17	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-41SL-SLN-UNV-L830-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1643.8	1643.8	1643.8	1643.8	1643.8
2.5°	1664.6	1637.4	1646.0	1638.8	1629.6
5°	1661.0	1633.1	1641.7	1630.3	1628.1
7.5°	1654.6	1626.7	1631.7	1618.1	1614.6
10°	1646.0	1616.7	1617.4	1598.1	1593.1
12.5°	1634.6	1602.4	1598.1	1571.7	1564.5
15°	1619.6	1585.3	1571.7	1536.0	1521.0
17.5°	1603.1	1563.1	1535.3	1480.2	1456.7
20°	1581.0	1536.0	1487.4	1403.8	1372.4
22.5°	1558.8	1503.1	1425.2	1313.8	1271.6
25°	1530.3	1462.4	1349.5	1208.1	1158.8
27.5°	1498.1	1414.5	1262.4	1099.5	1046.6
30°	1460.2	1356.7	1166.6	993.0	943.0
32.5°	1415.9	1291.6	1065.9	897.3	850.9
35°	1366.7	1216.6	967.3	812.3	775.8
37.5°	1310.2	1134.5	875.9	743.7	720.1
40°	1245.9	1045.2	791.6	690.8	683.0
42.5°	1176.6	958.0	719.4	656.5	663.7
45°	1094.5	867.3	658.7	635.1	654.4
47.5°	1008.0	778.7	609.4	623.0	650.8
50°	924.4	696.5	570.8	615.1	648.0
52.5°	820.9	623.0	540.1	608.0	643.7
55°	731.5	552.9	514.4	598.0	635.1
57.5°	628.7	490.1	491.5	585.1	622.2
60°	542.9	432.9	469.4	567.2	603.0
62.5°	455.8	381.5	445.1	543.7	575.8
65°	373.6	334.3	418.6	512.9	540.1
67.5°	305.1	291.5	388.6	475.8	498.7
70°	247.2	252.2	355.8	434.4	453.6
72.5°	190.0	215.8	320.1	390.1	406.5
75°	145.0	181.5	282.2	345.8	360.1
77.5°	107.2	151.5	247.9	305.8	317.9
80°	75.7	125.0	215.8	270.8	280.0
82.5°	50.7	102.9	189.3	239.3	247.9
85°	29.3	84.3	166.5	212.9	218.6
87.5°	12.1	70.0	147.9	185.7	188.6
90°	1.4	59.3	131.5	158.6	157.2
92.5°	1.4	53.6	117.2	132.9	129.3
95°	1.4	50.0	104.3	111.4	107.9
97.5°	1.4	47.9	92.9	95.7	92.2
100°	0.7	46.4	85.0	85.0	81.4
102.5°	0.7	45.0	79.3	77.2	74.3
105°	0.7	43.6	75.0	72.9	69.3
107.5°	0.7	42.9	72.2	70.0	66.4
110°	0.7	41.4	70.0	67.9	65.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.7	40.7	68.6	67.2	63.6
115°	0.7	39.3	66.4	65.7	63.6
117.5°	0.7	37.9	65.0	65.0	62.9
120°	0.7	36.4	62.9	64.3	62.2
122.5°	0.7	35.0	60.7	62.9	60.7
125°	0.7	33.6	58.6	61.4	60.0
127.5°	1.4	31.4	55.7	60.0	58.6
130°	0.7	29.3	52.9	58.6	57.9
132.5°	1.4	27.1	50.0	56.4	56.4
135°	1.4	25.0	46.4	54.3	54.3
137.5°	1.4	22.1	42.9	51.4	52.2
140°	1.4	20.0	39.3	48.6	50.0
142.5°	1.4	17.9	35.7	45.7	47.9
145°	1.4	15.7	32.1	42.1	45.0
147.5°	1.4	14.3	28.6	37.9	42.1
150°	1.4	12.1	25.7	34.3	38.6
152.5°	1.4	10.7	22.9	30.7	35.7
155°	1.4	10.0	20.0	26.4	32.1
157.5°	1.4	8.6	17.1	22.9	28.6
160°	1.4	7.1	14.3	20.0	24.3
162.5°	1.4	6.4	12.1	16.4	21.4
165°	1.4	5.7	10.0	12.9	17.1
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)