

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-LD5-50HL-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-LD5-50HL-SLN-UNV-L830-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
SQUARE NARROW LENS
Light Source: -
Ballast/Driver: -

Summary

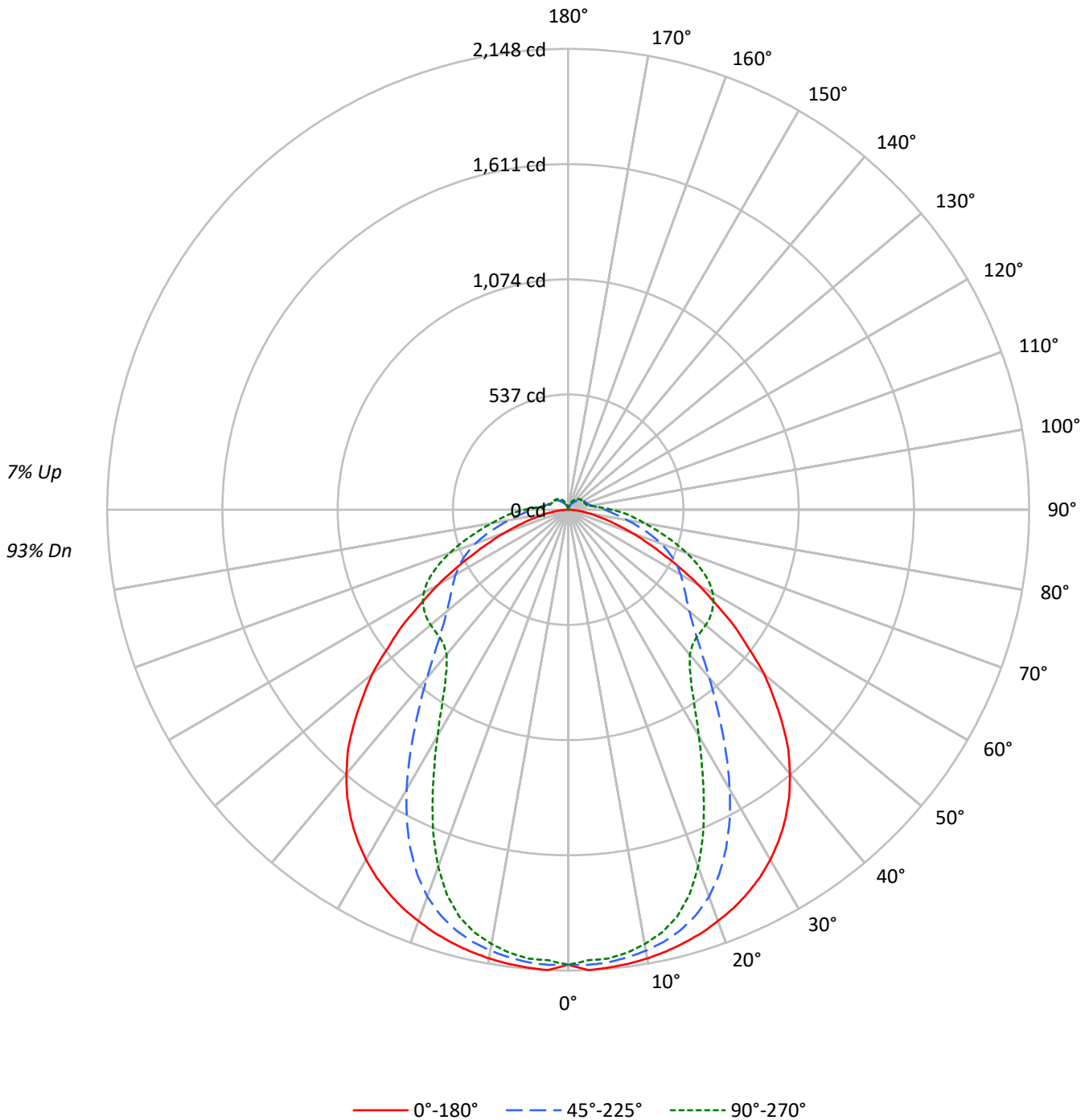
Lumens per Lamp: N/A
Luminaire Lumens: 5334.0 lumens
Efficiency: N/A
Efficacy: 144.2 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 0.96 / 1.11
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 37
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°	17140	17140	17140
5°	17337	16761	16499
10°	17332	16298	15820
15°	17337	15752	14918
20°	17345	14940	13397
25°	17352	13690	11345
30°	17269	12046	9331
35°	17024	10249	7820
40°	16525	8680	7069
45°	15650	7544	7015
50°	14457	6896	7262
55°	12730	6629	7516
60°	10742	6534	7620
65°	8639	6390	7383
70°	6939	6059	6808
75°	5232	5484	6042
80°	3862	4925	5374
85°	2582	4646	4944



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	200.7	3.8
10°-20°	567.2	10.6
20°-30°	792.9	14.9
30°-40°	822.4	15.4
40°-50°	759.8	14.2
50°-60°	678.3	12.7
60°-70°	549.7	10.3
70°-80°	365.6	6.9
80°-90°	209.4	3.9
90°-100°	115.8	2.2
100°-110°	78.4	1.5
110°-120°	65.3	1.2
120°-130°	53.1	1.0
130°-140°	38.3	0.7
140°-150°	23.1	0.4
150°-160°	11.1	0.2
160°-170°	2.9	0.1
170°-180°	0.0	0.0
0°-30°	1560.7	29.3
0°-40°	2383.1	44.7
0°-60°	3821.2	71.6
0°-90°	4946.0	92.7
90°-120°	259.6	4.9
90°-150°	374.1	7.0
90°-180°	388.0	7.3
0°-180°	5334.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2121	2121	2121	2121	2121	
5°	2143	2107	2118	2104	2101	204
15°	2090	2045	2028	1982	1962	590
25°	1974	1887	1741	1559	1495	910
35°	1763	1570	1248	1048	1001	1100
45°	1412	1119	850	820	844	1086
55°	944	714	664	772	820	839
65°	482	431	540	662	697	487
75°	187	234	364	446	465	205
85°	38	109	215	275	282	43
90°	2	76	170	205	203	3
95°	2	64	135	144	139	1
105°	1	56	97	94	89	1
115°	1	51	86	85	82	1
125°	1	43	76	79	77	1
135°	2	32	60	70	70	1
145°	2	20	42	54	58	1
155°	2	13	26	34	42	1
165°	2	7	13	17	22	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-50HL-SLN-UNV-L830-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2121.0	2121.0	2121.0	2121.0	2121.0
2.5°	2147.7	2112.7	2123.8	2114.6	2102.6
5°	2143.1	2107.2	2118.2	2103.5	2100.7
7.5°	2134.8	2098.9	2105.3	2087.8	2083.2
10°	2123.8	2086.0	2086.9	2062.0	2055.6
12.5°	2109.0	2067.5	2062.0	2027.9	2018.7
15°	2089.7	2045.4	2027.9	1981.8	1962.5
17.5°	2068.5	2016.9	1980.9	1909.9	1879.5
20°	2039.9	1981.8	1919.1	1811.3	1770.7
22.5°	2011.3	1939.4	1838.9	1695.2	1640.8
25°	1974.4	1886.9	1741.2	1558.7	1495.1
27.5°	1933.0	1825.1	1628.8	1418.6	1350.4
30°	1884.1	1750.5	1505.3	1281.3	1216.7
32.5°	1827.0	1666.6	1375.3	1157.8	1097.8
35°	1763.4	1569.8	1248.1	1048.1	1001.1
37.5°	1690.5	1463.8	1130.1	959.6	929.2
40°	1607.6	1348.6	1021.3	891.4	881.2
42.5°	1518.2	1236.1	928.2	847.1	856.3
45°	1412.2	1119.0	849.9	819.5	844.3
47.5°	1300.6	1004.7	786.3	803.8	839.7
50°	1192.8	898.7	736.5	793.7	836.1
52.5°	1059.1	803.8	696.9	784.4	830.5
55°	943.9	713.5	663.7	771.5	819.5
57.5°	811.2	632.3	634.2	754.9	802.9
60°	700.6	558.6	605.6	731.9	778.0
62.5°	588.1	492.2	574.3	701.5	743.0
65°	482.1	431.4	540.2	661.8	696.9
67.5°	393.6	376.1	501.4	613.9	643.4
70°	318.9	325.4	459.0	560.4	585.3
72.5°	245.2	278.4	413.0	503.3	524.5
75°	187.1	234.1	364.1	446.1	464.6
77.5°	138.3	195.4	319.9	394.5	410.2
80°	97.7	161.3	278.4	349.4	361.3
82.5°	65.4	132.7	244.3	308.8	319.9
85°	37.8	108.8	214.8	274.7	282.1
87.5°	15.7	90.3	190.8	239.7	243.3
90°	1.8	76.5	169.6	204.6	202.8
92.5°	1.8	69.1	151.2	171.5	166.8
95°	1.8	64.5	134.6	143.8	139.2
97.5°	1.8	61.8	119.8	123.5	118.9
100°	0.9	59.9	109.7	109.7	105.1
102.5°	0.9	58.1	102.3	99.6	95.9
105°	0.9	56.2	96.8	94.0	89.4
107.5°	0.9	55.3	93.1	90.3	85.7
110°	0.9	53.5	90.3	87.6	83.9



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-50HL-SLN-UNV-L830-CD1-U

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.9	52.5	88.5	86.6	82.0
115°	0.9	50.7	85.7	84.8	82.0
117.5°	0.9	48.9	83.9	83.9	81.1
120°	0.9	47.0	81.1	83.0	80.2
122.5°	0.9	45.2	78.4	81.1	78.4
125°	0.9	43.3	75.6	79.3	77.4
127.5°	1.8	40.6	71.9	77.4	75.6
130°	0.9	37.8	68.2	75.6	74.7
132.5°	1.8	35.0	64.5	72.8	72.8
135°	1.8	32.3	59.9	70.1	70.1
137.5°	1.8	28.6	55.3	66.4	67.3
140°	1.8	25.8	50.7	62.7	64.5
142.5°	1.8	23.0	46.1	59.0	61.8
145°	1.8	20.3	41.5	54.4	58.1
147.5°	1.8	18.4	36.9	48.9	54.4
150°	1.8	15.7	33.2	44.2	49.8
152.5°	1.8	13.8	29.5	39.6	46.1
155°	1.8	12.9	25.8	34.1	41.5
157.5°	1.8	11.1	22.1	29.5	36.9
160°	1.8	9.2	18.4	25.8	31.3
162.5°	1.8	8.3	15.7	21.2	27.7
165°	1.8	7.4	12.9	16.6	22.1
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)