

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-LD5-90HL-SLN-UNV-L840-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-LD5-90HL-SLN-UNV-L840-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
SQUARE NARROW LENS
Light Source: -
Ballast/Driver: -

Summary

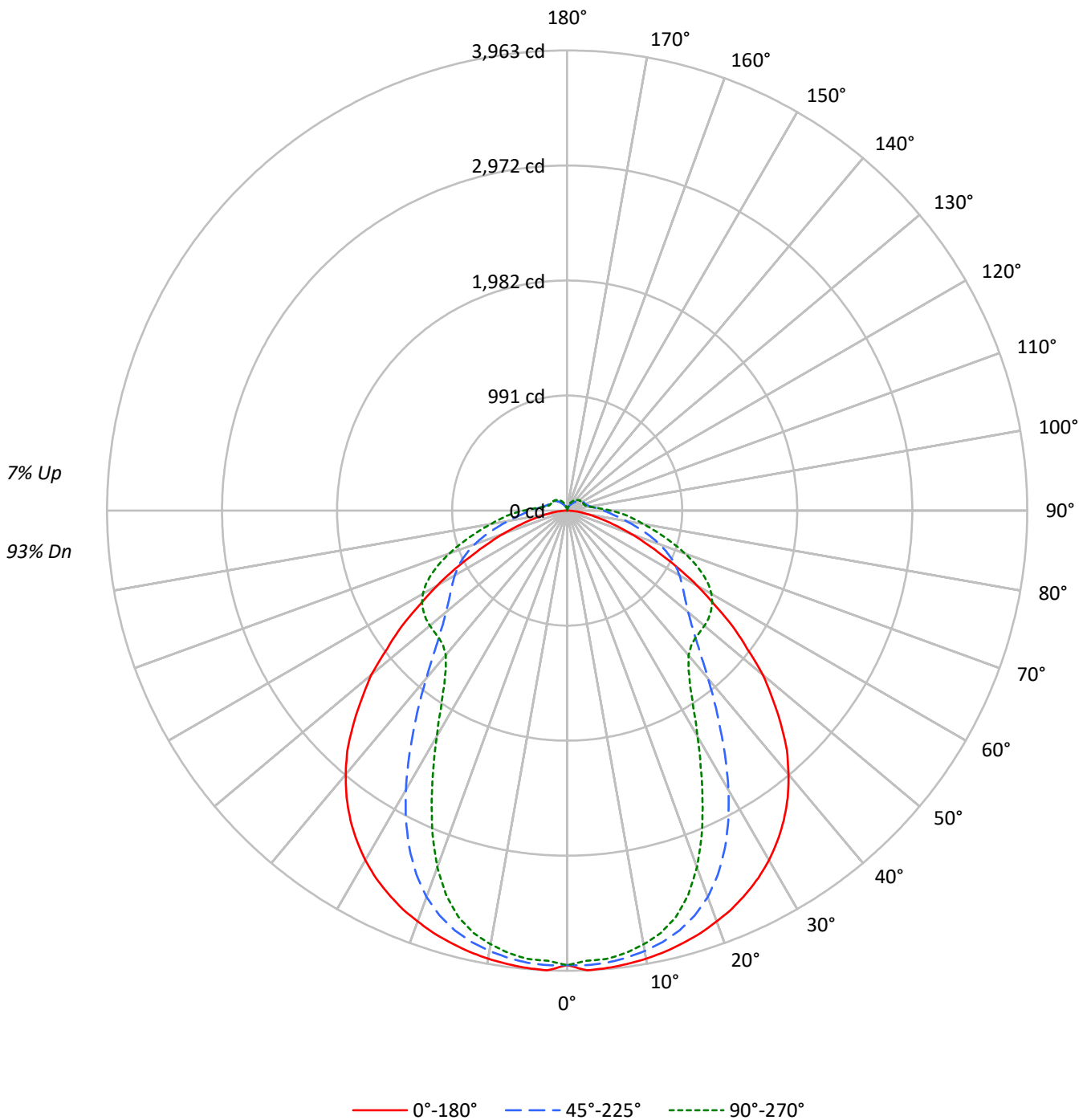
Lumens per Lamp: N/A
Luminaire Lumens: 9843.0 lumens
Efficiency: N/A
Efficacy: 124.6 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 0.96 / 1.11
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 79
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°	31629	31629	31629
5°	31993	30930	30446
10°	31983	30075	29194
15°	31993	29068	27528
20°	32008	27570	24722
25°	32020	25263	20936
30°	31868	22229	17219
35°	31414	18913	14431
40°	30494	16017	13045
45°	28879	13920	12947
50°	26678	12726	13401
55°	23491	12232	13870
60°	19820	12057	14061
65°	15942	11790	13622
70°	12805	11182	12563
75°	9655	10120	11149
80°	7127	9087	9918
85°	4762	8572	9122



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	370.3	3.8
10°-20°	1046.6	10.6
20°-30°	1463.1	14.9
30°-40°	1517.6	15.4
40°-50°	1402.0	14.2
50°-60°	1251.7	12.7
60°-70°	1014.4	10.3
70°-80°	674.7	6.9
80°-90°	386.4	3.9
90°-100°	213.8	2.2
100°-110°	144.8	1.5
110°-120°	120.5	1.2
120°-130°	98.0	1.0
130°-140°	70.7	0.7
140°-150°	42.6	0.4
150°-160°	20.5	0.2
160°-170°	5.3	0.1
170°-180°	0.0	0.0
0°-30°	2880.0	29.3
0°-40°	4397.6	44.7
0°-60°	7051.4	71.6
0°-90°	9126.9	92.7
90°-120°	479.1	4.9
90°-150°	690.4	7.0
90°-180°	716.0	7.3
0°-180°	9843.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3914	3914	3914	3914	3914	
5°	3955	3888	3909	3882	3876	376
15°	3856	3774	3742	3657	3621	1090
25°	3644	3482	3213	2876	2759	1679
35°	3254	2897	2303	1934	1847	2030
45°	2606	2065	1568	1512	1558	2004
55°	1742	1317	1225	1424	1512	1549
65°	890	796	997	1221	1286	899
75°	345	432	672	823	857	379
85°	70	201	396	507	520	80
90°	3	141	313	378	374	5
95°	3	119	248	265	257	3
105°	2	104	179	174	165	2
115°	2	94	158	156	151	2
125°	2	80	140	146	143	2
135°	3	60	111	129	129	2
145°	3	37	76	100	107	2
155°	3	24	48	63	76	2
165°	3	14	24	31	41	1
175°	0	0	0	0	0	0
180°	0	0	0	0	0	



TEST NUMBER: P#

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3914.0	3914.0	3914.0	3914.0	3914.0
2.5°	3963.3	3898.7	3919.1	3902.1	3880.0
5°	3954.8	3888.5	3908.9	3881.7	3876.5
7.5°	3939.5	3873.1	3885.1	3852.7	3844.2
10°	3919.1	3849.3	3851.0	3805.1	3793.2
12.5°	3891.9	3815.3	3805.1	3742.2	3725.2
15°	3856.1	3774.5	3742.2	3657.1	3621.4
17.5°	3817.0	3721.8	3655.4	3524.4	3468.3
20°	3764.3	3657.1	3541.5	3342.4	3267.6
22.5°	3711.6	3578.9	3393.5	3128.1	3027.8
25°	3643.5	3481.9	3213.2	2876.4	2759.0
27.5°	3567.0	3368.0	3005.6	2617.8	2491.9
30°	3476.8	3230.2	2777.7	2364.4	2245.3
32.5°	3371.4	3075.4	2537.9	2136.4	2025.9
35°	3254.0	2896.8	2303.1	1934.0	1847.3
37.5°	3119.6	2701.2	2085.4	1770.7	1714.6
40°	2966.5	2488.5	1884.7	1644.9	1626.1
42.5°	2801.5	2281.0	1712.9	1563.2	1580.2
45°	2605.9	2065.0	1568.3	1512.2	1558.1
47.5°	2400.1	1854.1	1450.9	1483.3	1549.6
50°	2201.1	1658.5	1359.1	1464.5	1542.8
52.5°	1954.4	1483.3	1285.9	1447.5	1532.6
55°	1741.8	1316.6	1224.7	1423.7	1512.2
57.5°	1496.9	1166.9	1170.3	1393.1	1481.6
60°	1292.7	1030.8	1117.5	1350.6	1435.6
62.5°	1085.2	908.3	1059.7	1294.5	1371.0
65°	889.6	796.1	996.8	1221.3	1285.9
67.5°	726.3	694.0	925.3	1132.9	1187.3
70°	588.5	600.4	847.1	1034.2	1080.1
72.5°	452.5	513.7	762.0	928.7	967.9
75°	345.3	432.1	671.9	823.3	857.3
77.5°	255.1	360.6	590.2	728.0	756.9
80°	180.3	297.7	513.7	644.7	666.8
82.5°	120.8	244.9	450.8	569.8	590.2
85°	69.7	200.7	396.3	506.9	520.5
87.5°	28.9	166.7	352.1	442.3	449.1
90°	3.4	141.2	313.0	377.6	374.2
92.5°	3.4	127.6	279.0	316.4	307.9
95°	3.4	119.1	248.3	265.4	256.8
97.5°	3.4	114.0	221.1	227.9	219.4
100°	1.7	110.6	202.4	202.4	193.9
102.5°	1.7	107.2	188.8	183.7	176.9
105°	1.7	103.8	178.6	173.5	165.0
107.5°	1.7	102.1	171.8	166.7	158.2
110°	1.7	98.7	166.7	161.6	154.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	1.7	97.0	163.3	159.9	151.4
115°	1.7	93.6	158.2	156.5	151.4
117.5°	1.7	90.2	154.8	154.8	149.7
120°	1.7	86.8	149.7	153.1	148.0
122.5°	1.7	83.3	144.6	149.7	144.6
125°	1.7	79.9	139.5	146.3	142.9
127.5°	3.4	74.8	132.7	142.9	139.5
130°	1.7	69.7	125.9	139.5	137.8
132.5°	3.4	64.6	119.1	134.4	134.4
135°	3.4	59.5	110.6	129.3	129.3
137.5°	3.4	52.7	102.1	122.5	124.2
140°	3.4	47.6	93.6	115.7	119.1
142.5°	3.4	42.5	85.0	108.9	114.0
145°	3.4	37.4	76.5	100.4	107.2
147.5°	3.4	34.0	68.0	90.2	100.4
150°	3.4	28.9	61.2	81.6	91.9
152.5°	3.4	25.5	54.4	73.1	85.0
155°	3.4	23.8	47.6	62.9	76.5
157.5°	3.4	20.4	40.8	54.4	68.0
160°	3.4	17.0	34.0	47.6	57.8
162.5°	3.4	15.3	28.9	39.1	51.0
165°	3.4	13.6	23.8	30.6	40.8
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)