

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: P284629

Luminaire Tested: **4SNLED-LD5-46HL-SLW-UNV-L930-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P284629
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P#)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 45NLED-LD5-46HL-SLW-UNV-L930-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
SQUARE FROSTED LENS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3611.0 lumens
Efficiency: N/A
Efficacy: 97.6 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.56 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Semi-Direct

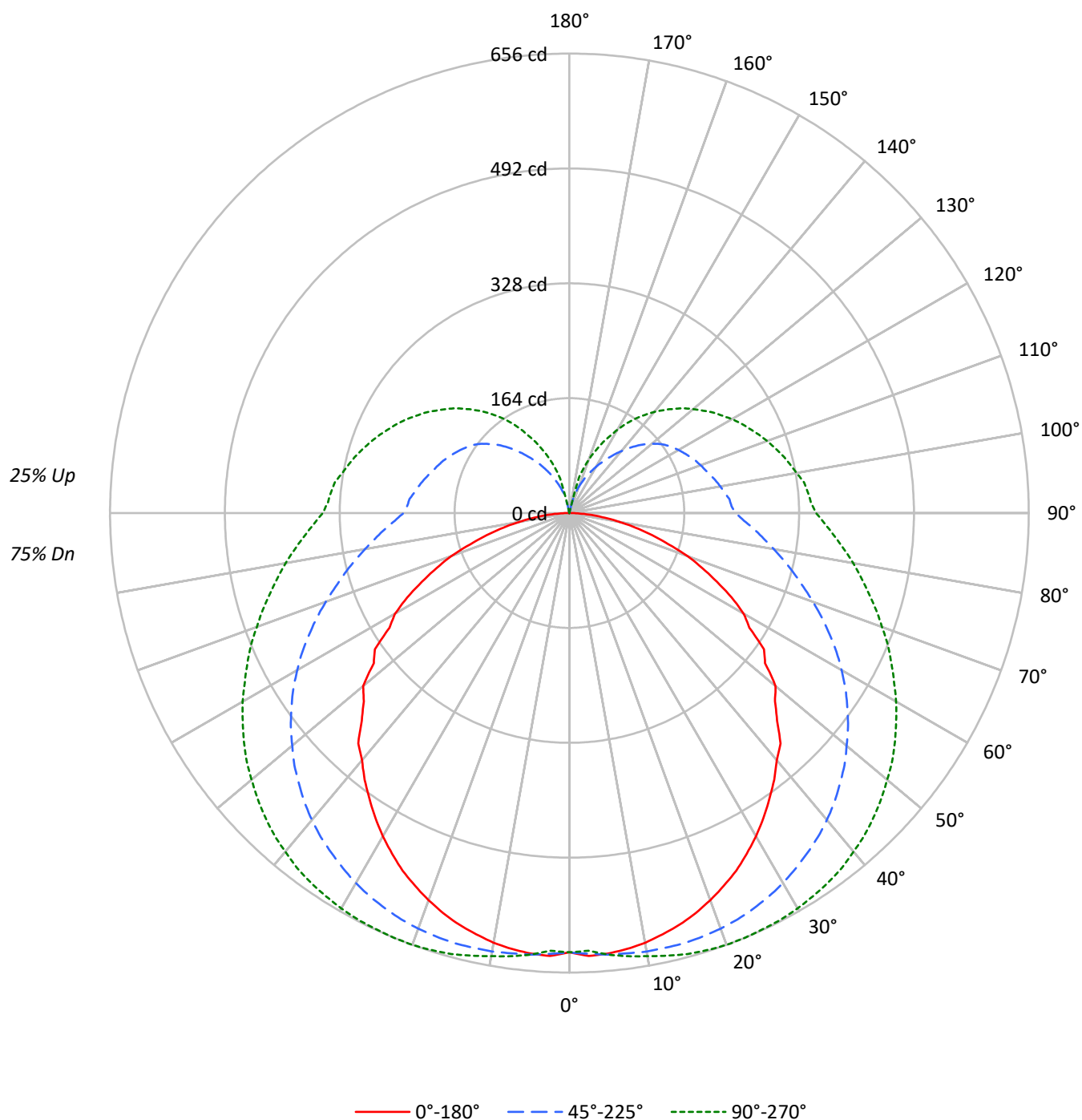
Input Watts (W): 37
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	0
RCR																				
0	113	113	113	113	107	107	107	107	97	97	97	88	88	88	79	79	79	75		
1	100	94	89	84	95	89	84	80	80	76	73	72	69	66	64	62	60	56		
2	90	80	72	66	85	76	69	63	68	63	58	61	57	53	55	51	48	44		
3	81	69	60	53	76	66	58	51	59	53	47	53	48	43	47	43	39	36		
4	74	61	51	44	69	58	49	43	52	45	39	47	41	36	42	37	33	30		
5	67	54	44	37	63	51	43	36	46	39	33	42	35	31	37	32	28	25		
6	62	48	39	32	58	46	37	31	41	34	29	37	31	27	34	28	24	22		
7	57	43	34	28	54	41	33	27	37	30	25	34	28	23	30	25	21	19		
8	53	39	31	25	50	37	29	24	34	27	22	31	25	21	28	23	19	17		
9	49	36	27	22	47	34	26	21	31	24	20	28	23	18	26	21	17	15		
10	46	33	25	20	44	31	24	19	29	22	18	26	21	16	24	19	15	13		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5068	5068	5068
5°	5107	5008	4971
10°	5082	4964	4943
15°	5048	4937	4954
20°	5000	4915	4963
25°	4952	4897	4971
30°	4884	4882	4998
35°	4808	4865	5032
40°	4736	4861	5064
45°	4647	4849	5104
50°	4659	4839	5146
55°	4576	4839	5206
60°	4410	4842	5277
65°	4165	4848	5375
70°	3897	4884	5526
75°	3420	4997	5751
80°	2886	5238	6120
85°	2145	5726	6661



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.3	1.7
10°-20°	178.6	4.9
20°-30°	283.9	7.9
30°-40°	364.4	10.1
40°-50°	411.5	11.4
50°-60°	419.9	11.6
60°-70°	389.0	10.8
70°-80°	329.3	9.1
80°-90°	262.9	7.3
90°-100°	223.2	6.2
100°-110°	198.9	5.5
110°-120°	169.4	4.7
120°-130°	134.5	3.7
130°-140°	95.4	2.6
140°-150°	57.0	1.6
150°-160°	26.6	0.7
160°-170°	6.3	0.2
170°-180°	0.0	0.0
0°-30°	522.8	14.5
0°-40°	887.2	24.6
0°-60°	1718.5	47.6
0°-90°	2699.7	74.8
90°-120°	591.5	16.4
90°-150°	878.4	24.3
90°-180°	911.0	25.2
0°-180°	3611.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	627	627	627	627	627	
5°	631	626	633	633	633	60
15°	608	613	636	647	652	172
25°	564	582	623	645	655	259
35°	498	535	592	629	644	312
45°	419	476	546	594	614	326
55°	339	396	484	544	568	298
65°	232	310	410	480	507	231
75°	122	216	332	413	442	130
85°	31	139	265	350	380	34
90°	2	114	237	322	352	3
95°	0	107	229	313	342	0
105°	0	98	209	288	316	0
115°	0	92	190	259	284	0
125°	0	79	169	228	250	0
135°	0	59	136	193	210	0
145°	0	38	95	144	165	0
155°	1	24	59	88	110	0
165°	1	13	26	36	52	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	627.2	627.2	627.2	627.2	627.2
2.5°	632.9	626.2	629.7	628.8	625.3
5°	631.3	626.2	632.9	632.9	632.9
7.5°	627.8	624.4	633.8	637.2	638.2
10°	622.8	622.8	635.6	640.7	642.3
12.5°	615.9	618.5	635.6	643.2	647.3
15°	608.4	613.4	635.6	647.3	651.7
17.5°	599.0	607.5	633.8	648.2	654.2
20°	588.0	600.8	631.3	648.2	656.0
22.5°	576.1	592.4	627.8	646.6	656.0
25°	563.5	582.1	622.8	644.8	655.1
27.5°	548.2	572.0	616.9	642.3	654.2
30°	532.8	560.1	610.0	638.8	651.7
32.5°	515.9	547.3	601.5	633.8	648.2
35°	498.0	534.7	592.4	628.8	644.1
37.5°	480.2	519.3	583.0	621.9	638.8
40°	460.7	504.0	572.0	613.4	631.3
42.5°	446.3	487.9	560.1	605.0	623.7
45°	419.3	476.0	546.3	594.0	614.3
47.5°	398.0	453.1	532.8	583.0	604.0
50°	384.4	434.4	516.8	570.1	592.4
52.5°	352.2	421.8	501.5	557.6	581.1
55°	339.3	396.4	484.5	543.8	567.6
57.5°	304.5	378.5	467.6	528.7	553.2
60°	287.6	353.8	448.8	513.4	538.8
62.5°	261.3	332.7	430.2	496.4	522.7
65°	232.4	309.8	409.9	480.2	507.4
67.5°	205.4	286.9	390.4	463.2	492.1
70°	179.1	263.1	370.0	446.3	475.1
72.5°	148.4	239.3	350.3	430.2	459.1
75°	122.3	216.4	331.8	413.3	442.2
77.5°	96.6	194.4	313.9	398.0	426.8
80°	73.0	173.1	296.1	381.9	411.5
82.5°	50.8	155.2	280.0	366.6	395.4
85°	31.4	139.2	264.7	350.3	380.1
87.5°	14.4	124.8	249.4	335.2	365.7
90°	1.6	113.8	236.8	322.4	352.2
92.5°	0.9	110.4	231.7	316.4	345.3
95°	0.0	106.9	229.2	313.0	341.9
97.5°	0.0	103.5	223.3	308.0	337.7
100°	0.0	101.9	218.9	300.4	329.3
102.5°	0.0	99.4	213.9	293.5	322.4
105°	0.0	98.5	208.8	287.6	315.8
107.5°	0.0	96.6	203.6	280.0	308.0
110°	0.0	95.0	199.4	273.2	300.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	93.4	195.1	266.5	292.6
115°	0.0	91.6	190.0	258.7	284.2
117.5°	0.0	89.1	185.0	251.2	276.6
120°	0.0	85.6	180.0	244.3	268.1
122.5°	0.0	82.2	174.7	235.8	258.7
125°	0.0	79.0	168.8	228.3	250.3
127.5°	0.0	73.7	162.1	219.8	240.2
130°	0.0	68.7	153.6	211.3	230.8
132.5°	0.9	63.7	145.2	202.0	221.4
135°	0.0	58.6	135.8	192.6	210.4
137.5°	0.0	54.3	125.5	182.5	199.4
140°	0.0	49.2	115.4	170.6	188.4
142.5°	0.0	43.3	105.3	157.8	176.5
145°	0.0	38.2	95.0	144.3	164.6
147.5°	0.9	33.9	85.6	129.8	151.8
150°	0.9	30.5	76.5	115.4	137.4
152.5°	0.9	27.2	67.1	101.9	123.0
155°	0.9	23.8	58.6	88.2	109.5
157.5°	0.9	20.4	49.2	74.6	95.0
160°	0.9	17.9	40.8	62.7	81.5
162.5°	0.9	15.3	33.2	49.2	67.1
165°	0.9	12.8	26.3	36.4	51.7
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)