

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: P235484

Luminaire Tested: **4WSNLED-LD4-32SL-F-UNV-L830-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P235484
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1707-169-11)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4WSNLED-LD4-32SL-F-UNV-L830-CD1-U
Description: 4FT WSNLED WRAPAROUND
Light Source: (224) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

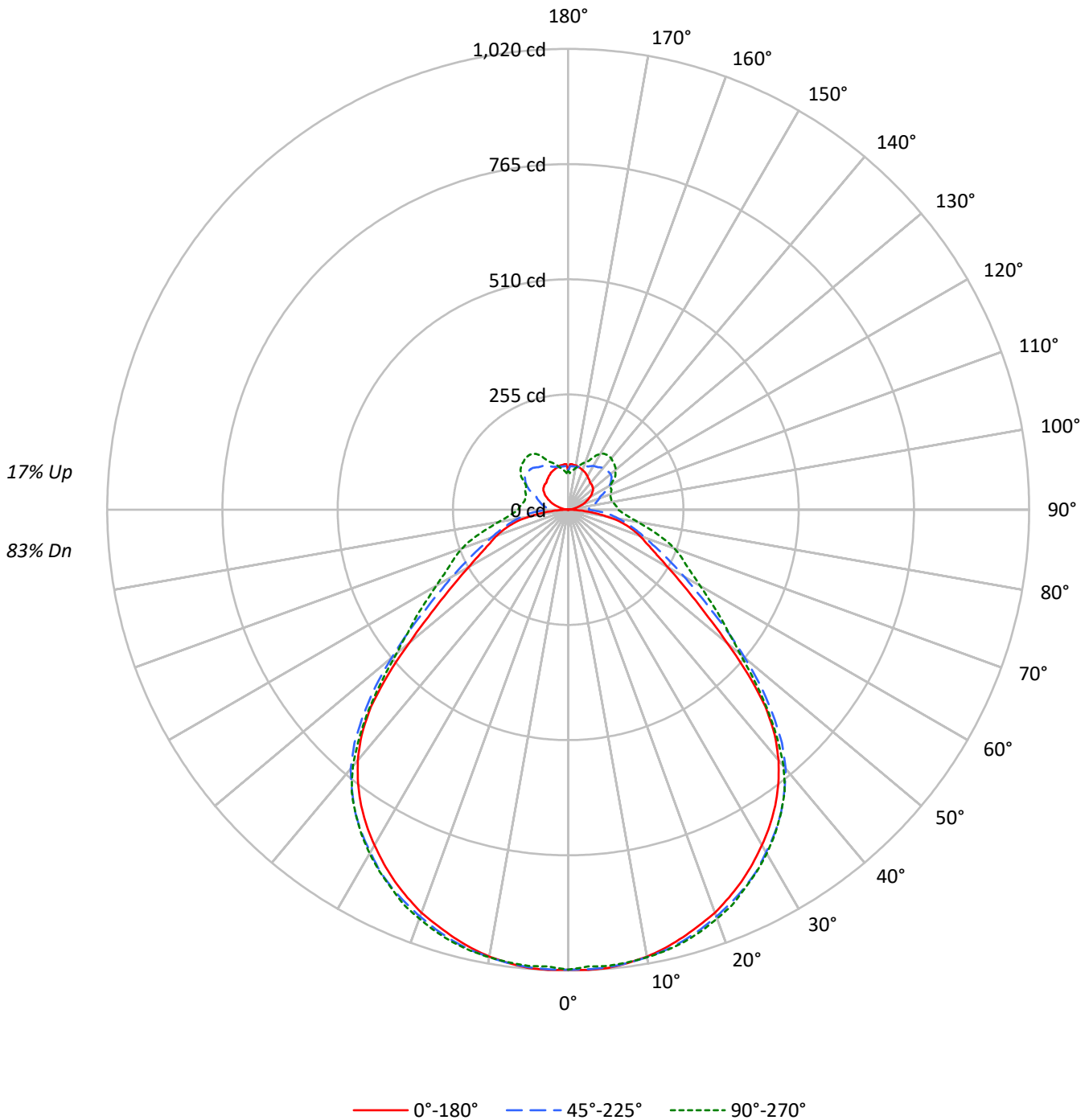
Lumens per Lamp: N/A
Luminaire Lumens: 3162.1 lumens
Efficiency: N/A
Efficacy: 111.3 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.28 / 1.35
Luminous Opening: Rectangular w/ Sides (W: 1' x L: 4' x H: 0.12')
CIE Type: Semi-Direct

Input Watts (W): 28.4
Input Voltage (V): 120
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	115	115	115	115	110	110	110	110	101	101	101	93	93	93	86	86	86	83
1	105	100	96	92	100	96	93	89	89	86	83	82	80	78	76	74	72	69
2	96	88	82	76	92	85	79	74	78	74	70	73	69	65	67	64	62	59
3	88	78	70	64	84	75	68	62	70	64	59	65	60	56	60	56	53	50
4	81	69	61	55	77	67	59	53	62	56	51	58	53	48	54	50	46	43
5	74	62	54	47	71	60	52	46	56	49	44	52	47	42	49	44	40	38
6	69	56	48	42	66	54	46	41	51	44	39	48	42	37	44	40	36	33
7	64	51	43	37	61	49	42	36	46	40	35	43	38	33	41	36	32	30
8	59	47	38	33	57	45	38	32	42	36	31	40	34	30	38	32	29	27
9	56	43	35	30	53	41	34	29	39	33	28	37	31	27	35	30	26	24
10	52	39	32	27	50	38	31	26	36	30	25	34	29	25	32	27	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2740	2740	2740
5°	2743	2720	2708
10°	2729	2696	2689
15°	2707	2672	2670
20°	2688	2638	2638
25°	2657	2607	2594
30°	2617	2558	2547
35°	2569	2502	2479
40°	2479	2407	2356
45°	2277	2193	2108
50°	1854	1886	1807
55°	1506	1563	1627
60°	1297	1335	1490
65°	1206	1182	1445
70°	1220	1091	1462
75°	1240	1059	1422
80°	1149	1079	1416
85°	835	1128	1616



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.6	3.1
10°-20°	278.1	8.8
20°-30°	423.2	13.4
30°-40°	507.5	16.0
40°-50°	483.1	15.3
50°-60°	344.0	10.9
60°-70°	233.9	7.4
70°-80°	157.8	5.0
80°-90°	90.5	2.9
90°-100°	58.4	1.8
100°-110°	65.8	2.1
110°-120°	81.7	2.6
120°-130°	93.7	3.0
130°-140°	89.1	2.8
140°-150°	72.1	2.3
150°-160°	49.7	1.6
160°-170°	28.0	0.9
170°-180°	9.0	0.3
0°-30°	797.9	25.2
0°-40°	1305.3	41.3
0°-60°	2132.4	67.4
0°-90°	2614.6	82.7
90°-120°	205.9	6.5
90°-150°	460.9	14.6
90°-180°	547.0	17.3
0°-180°	3162.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1018	1018	1018	1018	1018	
5°	1018	1012	1017	1015	1014	97
15°	980	978	988	992	991	277
25°	908	909	923	926	925	418
35°	799	804	821	821	821	498
45°	617	632	640	640	623	467
55°	335	369	386	389	409	306
65°	202	216	230	243	288	203
75°	133	112	144	172	201	139
85°	37	52	83	115	127	41
90°	0	23	46	87	110	3
95°	3	21	48	89	106	4
105°	21	32	64	89	98	23
115°	44	70	87	98	106	44
125°	64	86	116	126	127	58
135°	75	90	122	141	144	58
145°	81	90	115	141	148	51
155°	90	92	106	122	126	41
165°	96	96	98	100	103	27
175°	101	101	96	84	86	10
180°	86	86	86	86	86	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1018.1	1018.1	1018.1	1018.1	1018.1
2.5°	1019.6	1015.0	1018.1	1018.1	1012.0
5°	1018.1	1012.0	1016.6	1015.0	1013.5
7.5°	1012.0	1007.4	1012.0	1013.5	1010.5
10°	1004.3	999.7	1005.9	1007.4	1005.9
12.5°	993.6	990.6	998.2	1001.3	999.7
15°	979.8	978.3	987.5	992.1	990.6
17.5°	964.5	963.0	973.7	979.8	978.3
20°	949.2	947.7	958.4	963.0	963.0
22.5°	929.3	929.3	941.6	946.2	947.7
25°	907.9	909.4	923.2	926.3	924.7
27.5°	883.4	884.9	901.8	903.3	903.3
30°	857.4	860.4	875.7	877.3	878.8
32.5°	829.8	832.9	849.7	849.7	851.2
35°	799.2	803.8	820.6	820.6	820.6
37.5°	764.0	770.1	785.4	785.4	786.9
40°	724.2	733.3	748.7	747.1	741.0
42.5°	676.7	688.9	699.7	698.1	684.4
45°	617.0	632.3	640.0	640.0	623.1
47.5°	540.4	563.4	577.2	571.1	557.3
50°	459.3	493.0	509.8	506.8	496.0
52.5°	390.4	428.7	445.5	444.0	447.0
55°	335.3	369.0	385.8	388.9	408.8
57.5°	290.9	321.5	335.3	344.5	369.0
60°	254.1	281.7	295.5	304.7	336.8
62.5°	225.1	246.5	260.3	271.0	309.3
65°	202.1	215.9	229.6	243.4	287.8
67.5°	183.7	186.8	202.1	222.0	269.5
70°	168.4	157.7	180.7	203.6	249.6
72.5°	151.6	133.2	162.3	185.3	226.6
75°	133.2	111.8	143.9	171.5	200.6
77.5°	113.3	93.4	128.6	156.2	176.1
80°	87.3	79.6	113.3	142.4	156.2
82.5°	61.2	65.8	98.0	130.1	139.3
85°	36.7	52.1	82.7	114.8	127.1
87.5°	16.8	38.3	62.8	99.5	117.9
90°	0.0	23.0	45.9	87.3	110.2
92.5°	1.5	23.0	45.9	88.8	108.7
95°	3.1	21.4	47.5	88.8	105.6
97.5°	6.1	21.4	52.1	87.3	102.6
100°	10.7	23.0	56.6	87.3	99.5
102.5°	15.3	24.5	61.2	88.8	98.0
105°	21.4	32.2	64.3	88.8	98.0
107.5°	27.6	42.9	68.9	90.3	98.0
110°	33.7	55.1	73.5	91.9	99.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	39.8	64.3	76.5	96.5	102.6
115°	44.4	70.4	87.3	98.0	105.6
117.5°	50.5	75.0	98.0	99.5	105.6
120°	55.1	79.6	105.6	105.6	107.2
122.5°	61.2	82.7	111.8	117.9	116.4
125°	64.3	85.7	116.4	125.5	127.1
127.5°	68.9	87.3	120.9	130.1	131.7
130°	72.0	88.8	122.5	134.7	137.8
132.5°	73.5	88.8	122.5	137.8	140.9
135°	75.0	90.3	122.5	140.9	143.9
137.5°	76.5	88.8	122.5	142.4	145.4
140°	76.5	88.8	120.9	142.4	148.5
142.5°	78.1	88.8	117.9	142.4	148.5
145°	81.1	90.3	114.8	140.9	148.5
147.5°	82.7	90.3	113.3	137.8	147.0
150°	85.7	90.3	111.8	133.2	142.4
152.5°	87.3	90.3	108.7	128.6	136.3
155°	90.3	91.9	105.6	122.5	125.5
157.5°	91.9	91.9	104.1	116.4	116.4
160°	93.4	93.4	101.0	110.2	111.8
162.5°	94.9	94.9	99.5	104.1	107.2
165°	96.5	96.5	98.0	99.5	102.6
167.5°	98.0	98.0	96.5	93.4	98.0
170°	99.5	99.5	96.5	88.8	93.4
172.5°	99.5	101.0	96.5	85.7	88.8
175°	101.0	101.0	96.5	84.2	85.7
177.5°	101.0	101.0	96.5	81.1	81.1
180°	85.7	85.7	85.7	85.7	85.7

(END OF REPORT)