

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: P290088

Luminaire Tested: **4SSRK-LN-20-L830-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P290088  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-078-10)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 4SSRK-LN-20-L830-CD1-U  
Description: 2000 LUMEN, 4 FOOT SSRK LED LUMINAIRE WITH ROUND NARROW LENS AND 80 CRI 3000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2019.3 lumens  
Efficiency: N/A  
Efficacy: 147.4 lumens/watt  
Spacing Criteria (0/90/45): 1.28 / 1.03 / 1.16  
Luminous Opening: Rectangular w/ Sides (W: 0.04' x L: 4' x H: 0.17')  
CIE Type: Direct

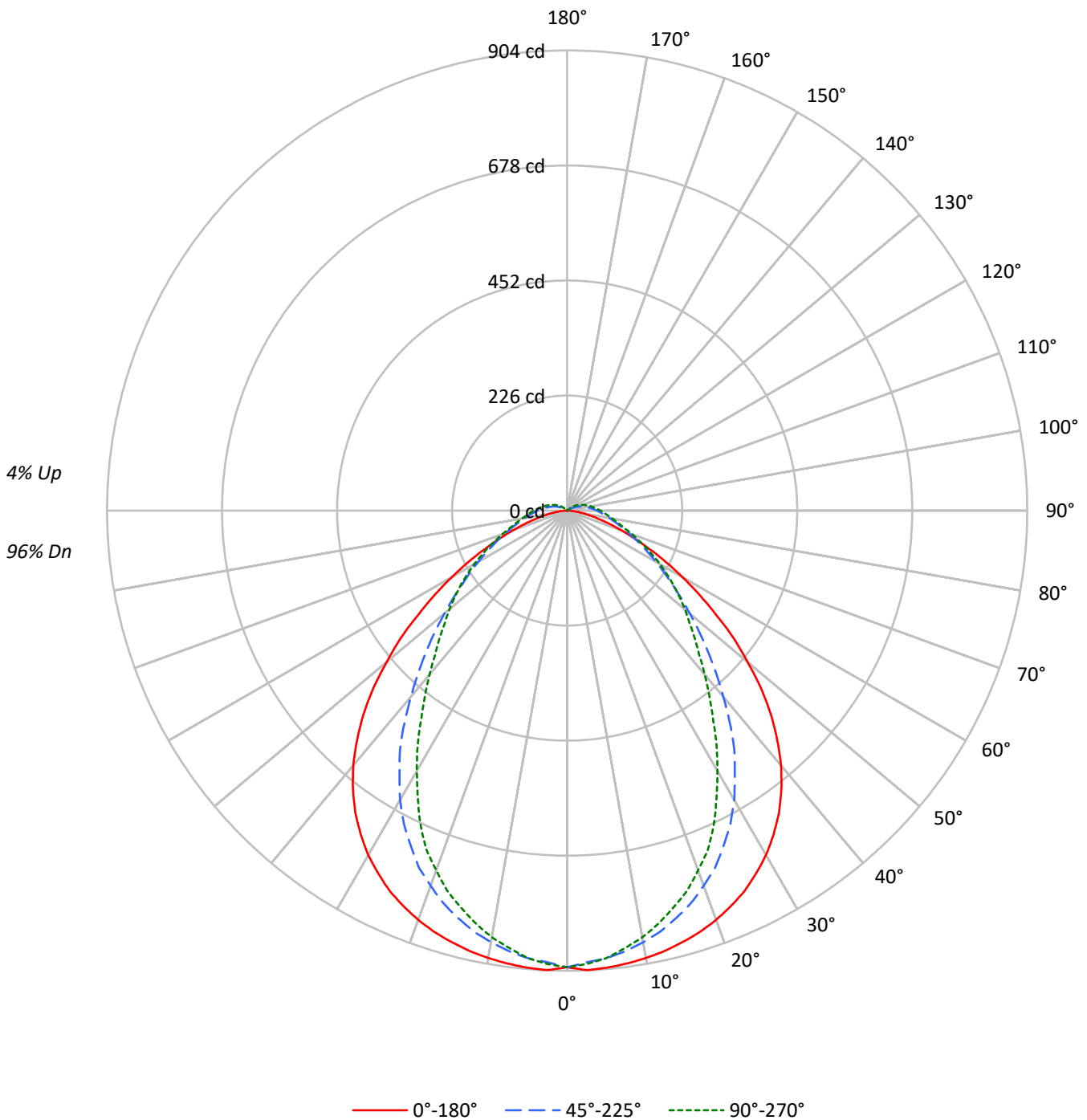
Input Watts (W): 13.7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	50	30	10	0	
RCR																						
0	118	118	118	118	115	115	115	115	109	109	109	103	103	103	98	98	98	96				
1	108	104	99	96	105	101	97	94	96	93	90	91	89	86	87	85	83	81				
2	99	91	85	80	96	89	83	78	85	80	76	81	77	74	78	74	71	69				
3	91	81	74	68	88	79	72	67	76	70	65	73	68	63	70	65	62	59				
4	84	73	65	58	81	71	64	58	68	62	56	65	60	55	63	58	54	52				
5	78	66	57	51	75	64	56	51	62	55	50	59	53	49	57	52	48	46				
6	72	60	51	45	70	58	51	45	56	49	44	54	48	43	52	47	43	41				
7	67	54	46	40	65	53	46	40	52	45	39	50	44	39	48	43	38	36				
8	63	50	42	36	61	49	41	36	47	41	36	46	40	35	44	39	35	33				
9	59	46	38	33	57	45	38	33	44	37	32	43	36	32	41	36	32	30				
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	38	33	29	27				

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	57931	57931	57931
5°	58219	45779	42390
10°	58103	37540	32741
15°	58023	31375	26050
20°	57932	26417	21048
25°	57655	22200	16957
30°	56896	18472	13309
35°	55578	15043	10359
40°	53258	11842	8140
45°	49601	9254	6468
50°	44328	7154	5267
55°	38035	5568	4279
60°	31503	4368	3439
65°	24914	3436	2717
70°	19230	2720	2136
75°	14145	2210	1700
80°	9927	1822	1410
85°	5722	1536	1202



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	84.2	4.2
10°-20°	235.8	11.7
20°-30°	339.9	16.8
30°-40°	368.1	18.2
40°-50°	326.1	16.1
50°-60°	248.1	12.3
60°-70°	165.3	8.2
70°-80°	102.1	5.1
80°-90°	64.0	3.2
90°-100°	42.0	2.1
100°-110°	25.8	1.3
110°-120°	13.3	0.7
120°-130°	4.4	0.2
130°-140°	0.3	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	659.9	32.7
0°-40°	1028.0	50.9
0°-60°	1602.2	79.3
0°-90°	1933.6	95.8
90°-120°	81.1	4.0
90°-150°	85.7	4.2
90°-180°	86.0	4.3
0°-180°	2019.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	897	897	897	897	897	
5°	901	896	883	886	883	86
15°	878	861	829	817	807	248
25°	825	786	727	696	682	379
35°	726	658	573	519	499	452
45°	566	477	391	361	354	434
55°	358	292	251	254	255	321
65°	178	156	160	170	170	179
75°	66	80	103	110	108	72
85°	11	41	70	77	76	14
90°	0	30	58	66	65	1
95°	1	21	48	56	56	1
105°	1	8	30	38	39	1
115°	1	1	15	24	26	1
125°	0	0	0	10	13	0
135°	0	0	0	0	0	0
145°	0	0	0	0	0	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	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°	897.0	897.0	897.0	897.0	897.0
2.5°	903.6	898.7	888.4	894.4	891.5
5°	901.3	895.6	882.7	886.1	882.7
7.5°	897.5	890.3	873.2	874.7	866.8
10°	892.5	883.0	860.9	858.5	851.4
12.5°	886.1	872.8	846.9	837.4	830.5
15°	877.5	860.9	828.6	817.4	807.2
17.5°	867.8	846.4	808.9	795.3	783.2
20°	855.7	828.8	784.2	765.4	752.1
22.5°	840.9	809.6	759.7	732.4	721.7
25°	824.8	786.1	726.7	695.6	681.8
27.5°	803.7	760.2	694.2	655.2	635.5
30°	781.3	729.6	656.4	611.5	590.6
32.5°	754.5	696.1	612.7	565.0	546.5
35°	725.5	657.6	572.6	518.7	499.4
37.5°	691.3	616.0	524.8	475.4	458.6
40°	653.8	570.9	477.3	433.9	420.6
42.5°	611.1	525.1	432.7	395.2	383.8
45°	565.7	477.1	390.9	361.2	354.1
47.5°	516.3	429.1	351.7	330.6	325.4
50°	463.1	381.2	313.7	302.1	302.3
52.5°	412.5	335.8	281.4	278.3	277.6
55°	357.9	292.1	251.3	254.3	255.1
57.5°	308.5	251.5	225.6	231.3	232.0
60°	261.5	215.2	201.2	209.9	211.1
62.5°	218.5	184.1	180.3	189.3	189.0
65°	177.6	155.8	160.3	169.6	170.3
67.5°	143.0	132.8	143.7	151.8	151.3
70°	113.5	112.1	127.5	136.1	135.6
72.5°	88.3	94.8	114.9	122.3	120.4
75°	65.5	79.8	103.3	110.2	108.5
77.5°	48.2	67.4	93.1	99.7	98.6
80°	33.0	57.2	84.3	91.2	89.8
82.5°	21.1	48.7	76.7	83.4	82.4
85°	11.4	41.1	69.8	76.9	75.8
87.5°	4.3	34.9	63.6	70.8	70.3
90°	0.5	29.9	58.2	65.5	65.1
92.5°	0.7	25.4	53.0	60.6	60.6
95°	1.2	21.1	48.2	55.8	55.6
97.5°	0.9	17.8	43.0	51.3	51.3
100°	0.9	14.7	38.2	46.5	47.0
102.5°	0.9	11.6	34.2	42.3	43.2
105°	0.7	8.3	30.2	38.5	39.4
107.5°	0.7	4.7	26.1	34.9	36.1
110°	0.7	1.2	22.6	31.1	32.5



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	0.7	0.7	19.0	27.5	29.0
115°	0.7	0.7	15.4	24.0	26.1
117.5°	0.5	0.5	11.4	20.9	22.8
120°	0.5	0.5	7.1	17.6	19.5
122.5°	0.5	0.5	3.1	14.0	16.6
125°	0.5	0.5	0.5	10.4	13.1
127.5°	0.5	0.5	0.2	6.2	9.3
130°	0.5	0.5	0.2	2.4	5.7
132.5°	0.5	0.5	0.2	0.2	1.7
135°	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0
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)