

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: 122P103

Luminaire Tested: **APS-NS232**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: 122P103
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: APS-NS232
Description: 2 LAMP, 32W Commercial Narrow Striplight
Light Source: Two F032/735 - 2800 Lumens ea. - 32 Watts ea.
Ballast/Driver: 2 LAMP ALL PRO BALLAST - L.O.B.F. = 87.16

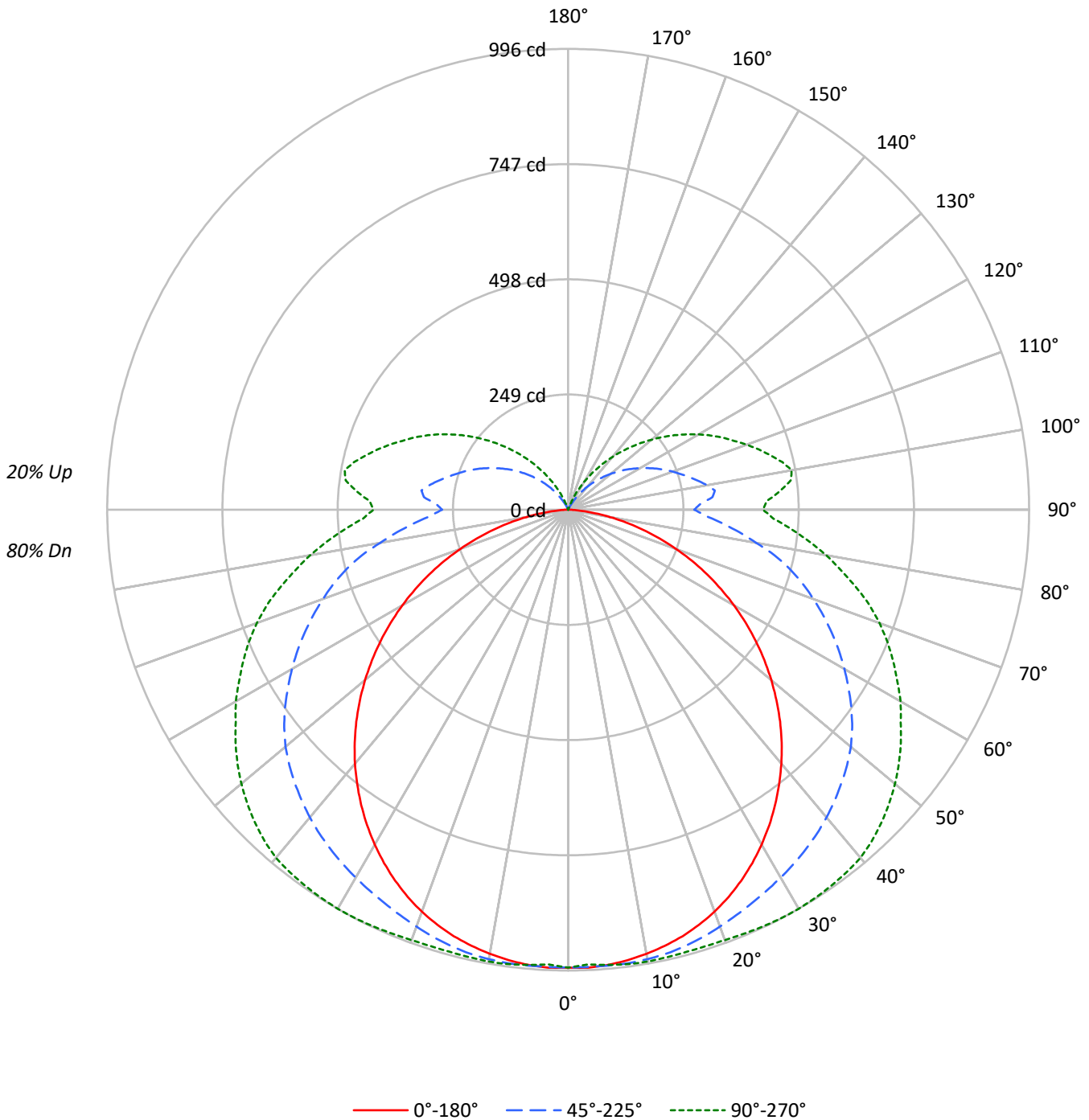
Summary

Lumens per Lamp: 2800 (2 lamps)
Luminaire Lumens: 5043.5 lumens
Efficiency: 90.1%
Efficacy: 85.3 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.53 / 1.57
Luminous Opening: Rectangular (W 0.19' x L: 3.85' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 59.1
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	103	103	103	103	99	99	99	99	90	90	90	83	83	83	76	76	76	72
1	91	86	81	77	87	82	78	74	75	72	68	68	66	63	62	60	58	55
2	82	73	66	60	78	70	64	58	64	59	54	58	54	50	53	50	47	44
3	74	64	55	49	70	61	53	47	55	49	44	51	45	41	46	42	38	35
4	67	56	47	41	64	53	45	39	49	42	37	44	39	35	41	36	32	30
5	62	49	41	34	58	47	39	33	43	37	31	40	34	29	36	31	27	25
6	57	44	36	30	54	42	34	29	39	32	27	36	30	25	33	28	24	22
7	52	40	31	26	50	38	30	25	35	28	24	32	27	22	30	25	21	19
8	49	36	28	23	46	35	27	22	32	25	21	29	24	20	27	22	19	17
9	45	33	25	20	43	32	24	20	29	23	19	27	22	18	25	20	17	15
10	42	30	23	18	40	29	22	18	27	21	17	25	20	16	23	18	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14741	14741	14741
5°	14766	14787	14765
10°	14740	14919	14998
15°	14717	15058	15254
20°	14656	15199	15689
25°	14538	15421	16339
30°	14375	15792	17129
35°	14174	16283	18032
40°	13933	16879	19100
45°	13637	17593	20159
50°	13273	18473	21360
55°	12841	19393	22787
60°	12330	20528	24702
65°	11687	22133	27307
70°	10813	24558	31160
75°	9628	28550	36987
80°	7891	35400	48558
85°	5178	56961	82783



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	94.4	1.9	1.7	0°	990	990	990	990	990	
10°-20°	275.9	5.5	4.9	5°	988	986	989	995	988	94
20°-30°	434.9	8.6	7.8	15°	954	962	976	993	989	269
30°-40°	558.9	11.1	10.0	25°	885	903	938	985	994	408
40°-50°	632.6	12.5	11.3	35°	780	814	896	972	992	487
50°-60°	642.1	12.7	11.5	45°	647	708	835	932	957	499
60°-70°	590.8	11.7	10.6	55°	494	592	747	846	878	442
70°-80°	484.4	9.6	8.6	65°	332	468	628	738	775	328
80°-90°	335.7	6.7	6.0	75°	167	331	496	606	643	177
90°-100°	294.8	5.8	5.3	85°	30	181	333	446	484	38
100°-110°	265.1	5.3	4.7	90°	1	123	272	383	421	2
110°-120°	195.0	3.9	3.5	95°	1	141	313	423	459	1
120°-130°	128.7	2.6	2.3	105°	1	97	271	406	453	1
130°-140°	71.7	1.4	1.3	115°	1	64	210	326	368	1
140°-150°	30.5	0.6	0.5	125°	1	35	150	246	281	1
150°-160°	7.0	0.1	0.1	135°	2	11	93	166	192	2
160°-170°	0.7	0.0	0.0	145°	3	3	40	90	108	2
170°-180°	0.2	0.0	0.0	155°	3	3	6	26	35	1
0°-30°	805.3	16.0	14.4	165°	4	3	2	1	0	1
0°-40°	1364.2	27.0	24.4	175°	4	4	2	1	0	0
0°-60°	2639.0	52.3	47.1	180°	2	2	2	2	2	
0°-90°	4049.8	80.3	72.3							
90°-120°	754.9	15.0	13.5							
90°-150°	985.8	19.5	17.6							
90°-180°	994.0	19.7	17.8							
0°-180°	5043.5	100.0	90.1							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	989.7	989.7	989.7	989.7	989.7
2.5°	991.0	988.8	989.1	993.1	983.5
5°	987.6	986.1	989.0	995.4	987.5
7.5°	982.1	982.8	988.7	997.2	990.8
10°	974.6	978.2	986.4	997.4	991.6
12.5°	965.4	971.4	982.8	995.5	990.4
15°	954.4	962.2	976.5	992.6	989.2
17.5°	940.7	950.7	968.5	989.8	988.9
20°	924.6	936.8	958.9	987.4	989.8
22.5°	905.9	921.1	948.7	986.3	992.0
25°	884.6	903.2	938.3	985.1	994.2
27.5°	861.3	883.4	928.3	983.8	995.8
30°	835.8	861.6	918.2	981.6	995.9
32.5°	808.6	838.5	907.5	977.7	994.5
35°	779.5	813.9	895.5	972.4	991.7
37.5°	748.7	788.3	882.8	965.4	987.9
40°	716.6	761.9	868.1	957.5	982.3
42.5°	682.9	734.9	852.4	947.4	971.2
45°	647.4	707.7	835.2	932.2	957.0
47.5°	610.7	679.6	817.4	914.3	940.5
50°	572.8	651.4	797.2	893.9	921.8
52.5°	534.2	621.7	773.5	871.3	900.7
55°	494.5	591.7	746.8	846.4	877.5
57.5°	454.5	561.8	718.2	819.5	851.8
60°	413.9	530.5	689.1	792.9	829.2
62.5°	372.7	499.2	659.4	766.1	801.7
65°	331.6	468.2	628.0	737.8	774.8
67.5°	289.8	435.0	596.2	708.8	746.5
70°	248.3	400.6	563.9	678.2	715.5
72.5°	207.3	366.2	531.2	644.4	682.0
75°	167.3	330.8	496.1	606.2	642.7
77.5°	128.4	295.3	456.9	564.6	603.4
80°	92.0	261.4	412.7	526.1	566.1
82.5°	58.6	223.7	372.7	485.9	525.0
85°	30.3	180.9	333.3	446.4	484.4
87.5°	9.5	145.1	296.5	406.1	443.8
90°	1.4	122.6	272.1	382.8	420.8
92.5°	1.2	138.0	285.6	392.4	429.5
95°	1.1	140.8	313.1	422.6	459.0
97.5°	1.1	128.8	319.7	444.5	484.8
100°	1.1	116.9	304.5	444.4	490.5
102.5°	1.0	106.3	287.9	426.4	474.0
105°	0.9	96.7	271.1	406.2	452.6
107.5°	0.9	87.8	255.5	386.4	432.1
110°	0.9	79.6	240.5	365.0	410.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.9	71.5	225.1	345.8	388.4
115°	1.0	63.9	209.9	326.3	368.4
117.5°	1.0	56.5	194.6	306.2	347.3
120°	1.2	49.1	179.5	286.1	325.3
122.5°	1.4	42.0	164.7	265.8	303.0
125°	1.4	34.9	149.9	245.5	280.7
127.5°	1.5	28.2	135.3	225.3	258.2
130°	1.7	21.8	121.0	205.2	235.7
132.5°	1.8	15.7	106.9	185.3	213.6
135°	2.1	10.7	93.0	165.7	191.6
137.5°	2.2	6.9	79.5	146.2	170.0
140°	2.4	4.7	66.3	127.3	149.1
142.5°	2.5	3.2	53.5	108.6	128.4
145°	2.7	2.6	40.5	90.5	108.1
147.5°	2.8	2.4	28.6	73.1	88.6
150°	2.9	2.5	18.1	56.2	69.8
152.5°	3.0	2.6	10.4	40.4	51.9
155°	3.2	2.8	5.7	26.0	35.2
157.5°	3.3	2.9	3.0	13.4	20.2
160°	3.5	3.0	2.1	5.8	9.0
162.5°	3.6	3.1	1.9	1.7	3.0
165°	3.7	3.1	2.0	0.6	0.0
167.5°	3.7	3.3	2.1	0.6	0.0
170°	3.8	3.3	2.2	0.7	0.0
172.5°	3.9	3.5	2.3	0.8	0.0
175°	4.1	3.5	2.4	0.9	0.0
177.5°	4.1	3.6	2.5	1.0	0.0
180°	2.3	2.3	2.3	2.3	2.3

(END OF REPORT)