

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: 122P100

Luminaire Tested: **SN-120HTS**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-41-14  
Report Number: 122P100  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: SN-120HTS  
Description: SN Series Commercial Narrow Striplite  
Light Source: F20T12/CW - 1250 Lumens - 20 Watts  
Ballast/Driver: -

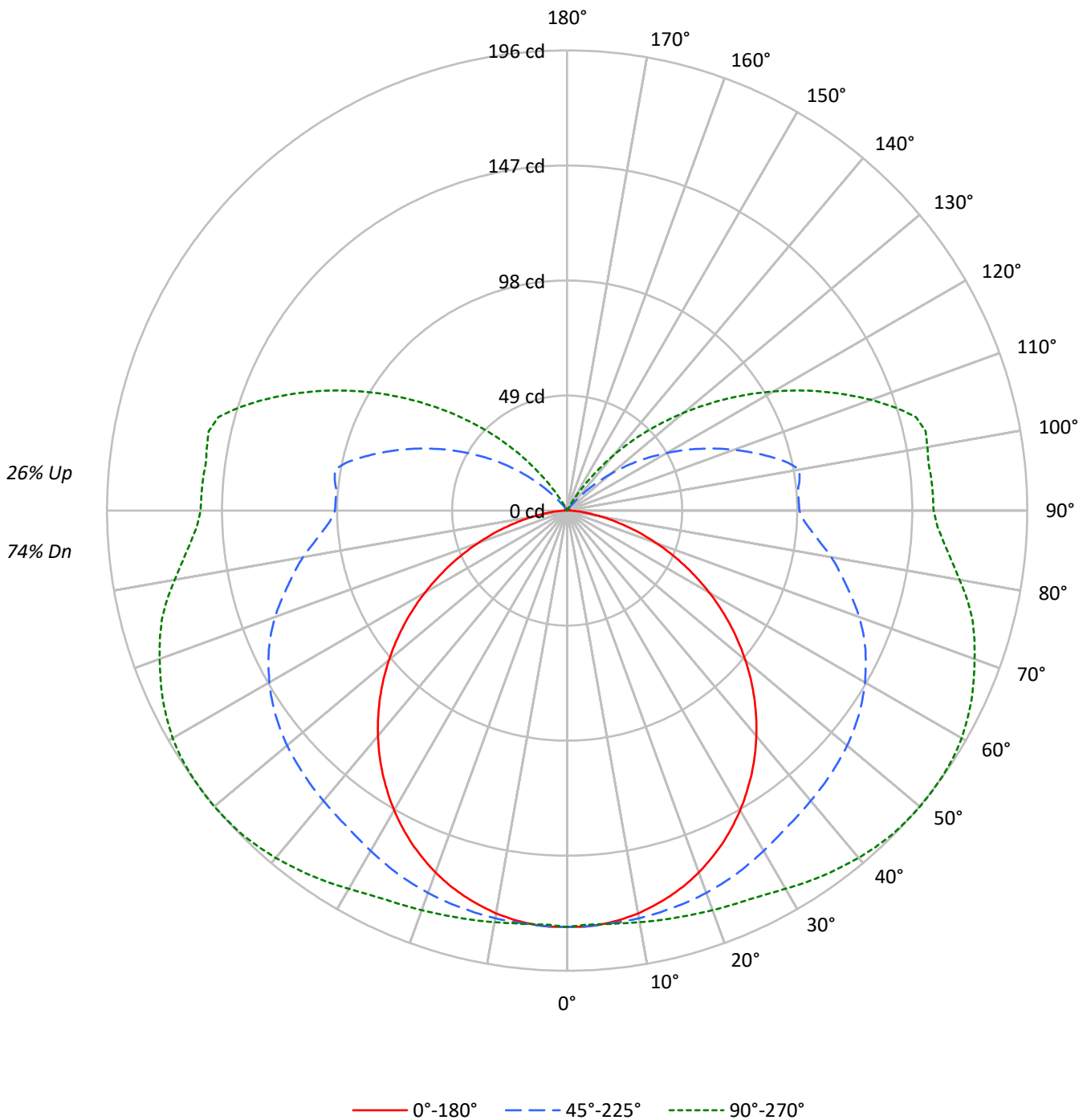
**Summary**

Lumens per Lamp: 1250 (1 lamp)  
Luminaire Lumens: 1154.5 lumens  
Efficiency: 92.4%  
Efficacy: 41.4 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.65 / 1.64  
Luminous Opening: Rectangular w/ Sides (W: 0.23' x L: 2' x H: 0.24')  
CIE Type: Semi-Direct

Input Watts (W): 27.9  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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

TEST NUMBER: 122P100  
CATALOG NUMBER: SN-120HTS

### 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	104	104	104	104	99	99	99	99	89	89	89	81	81	81	72	72	72	69
1	91	85	80	75	86	81	76	72	72	69	65	65	62	59	58	55	53	49
2	81	72	65	58	77	68	62	56	61	56	51	55	50	46	48	45	42	38
3	73	62	54	47	69	59	51	45	53	46	41	47	42	37	42	37	34	30
4	67	54	45	39	63	52	43	37	46	39	34	41	35	31	36	32	28	25
5	61	48	39	32	57	46	37	31	41	34	29	36	31	26	32	28	24	21
6	56	43	34	28	53	41	33	27	37	30	25	33	27	22	29	24	20	18
7	52	39	30	24	49	37	29	23	33	26	21	30	24	20	26	22	18	16
8	48	35	27	21	45	33	26	20	30	23	19	27	21	17	24	19	16	14
9	45	32	24	19	42	30	23	18	27	21	17	25	19	15	22	18	14	12
10	42	29	22	17	39	28	21	16	25	19	15	23	18	14	21	16	13	11

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

	0°	45°	90°
0°	4163	4163	4163
5°	4124	3891	3818
10°	4068	3670	3583
15°	4002	3484	3408
20°	3927	3330	3277
25°	3840	3194	3182
30°	3738	3074	3143
35°	3623	2979	3141
40°	3492	2923	3151
45°	3342	2889	3170
50°	3167	2868	3188
55°	2964	2851	3212
60°	2722	2832	3238
65°	2430	2812	3254
70°	2076	2782	3271
75°	1667	2737	3303
80°	1175	2721	3307
85°	625	2704	3349



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**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	16.9	1.5	1.3	0°	177	177	177	177	177	
10°-20°	49.5	4.3	4.0	5°	177	177	177	177	177	17
20°-30°	78.7	6.8	6.3	15°	170	172	175	178	180	48
30°-40°	102.9	8.9	8.2	25°	156	161	171	179	183	72
40°-50°	120.9	10.5	9.7	35°	137	146	164	183	190	86
50°-60°	130.7	11.3	10.5	45°	113	127	159	186	195	87
60°-70°	131.1	11.4	10.5	55°	85	108	152	184	196	76
70°-80°	121.5	10.5	9.7	65°	55	90	140	177	190	54
80°-90°	105.1	9.1	8.4	75°	27	71	123	164	179	28
90°-100°	98.0	8.5	7.8	85°	6	48	105	146	161	6
100°-110°	86.6	7.5	6.9	90°	1	42	99	141	156	1
110°-120°	59.6	5.2	4.8	95°	1	43	99	140	156	1
120°-130°	34.1	3.0	2.7	105°	1	27	89	137	154	1
130°-140°	15.0	1.3	1.2	115°	1	12	62	104	120	1
140°-150°	3.5	0.3	0.3	125°	1	2	37	70	83	1
150°-160°	0.4	0.0	0.0	135°	1	1	13	38	47	1
160°-170°	0.0	0.0	0.0	145°	1	1	1	10	15	1
170°-180°	0.0	0.0	0.0	155°	1	1	1	1	1	0
0°-30°	145.1	12.6	11.6	165°	0	0	0	0	0	0
0°-40°	248.0	21.5	19.8	175°	0	0	0	0	0	0
0°-60°	499.6	43.3	40.0	180°	0	0	0	0	0	0
0°-90°	857.3	74.3	68.6							
90°-120°	244.2	21.1	19.5							
90°-150°	296.8	25.7	23.7							
90°-180°	297.0	25.7	23.8							
0°-180°	1154.5	100.0	92.4							



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	177.3	177.3	177.3	177.3	177.3
2.5°	177.4	177.6	177.3	177.0	176.6
5°	176.8	177.1	177.0	177.0	176.8
7.5°	175.7	176.2	176.7	177.2	177.3
10°	174.2	175.0	176.3	177.6	178.0
12.5°	172.2	173.5	175.8	178.0	178.8
15°	169.9	171.6	175.0	178.3	179.5
17.5°	167.2	169.5	174.3	178.8	180.3
20°	164.0	167.0	173.3	179.0	181.1
22.5°	160.4	164.2	172.1	179.2	182.0
25°	156.5	161.1	170.7	179.4	182.8
27.5°	152.1	157.6	169.1	179.7	184.2
30°	147.4	154.0	167.4	180.4	186.0
32.5°	142.3	150.0	165.6	181.5	188.0
35°	137.0	145.9	164.0	182.7	189.9
37.5°	131.3	141.6	162.7	183.7	191.5
40°	125.4	136.9	161.4	184.6	193.1
42.5°	119.2	132.1	160.2	185.3	194.4
45°	112.7	127.2	158.8	185.7	195.4
47.5°	106.0	122.2	157.3	185.8	195.9
50°	99.1	117.1	155.7	185.5	196.2
52.5°	92.0	112.2	153.8	184.9	196.1
55°	84.8	107.5	151.7	184.0	195.8
57.5°	77.4	103.0	149.2	182.9	195.2
60°	70.0	98.6	146.5	181.4	194.0
62.5°	62.5	94.3	143.4	179.4	192.2
65°	55.0	90.1	140.2	176.9	190.1
67.5°	47.6	85.7	136.5	173.9	187.5
70°	40.2	81.2	132.4	170.5	184.7
72.5°	33.3	76.1	127.8	167.2	181.9
75°	26.6	70.8	123.1	164.0	178.7
77.5°	20.3	65.1	118.7	160.0	174.5
80°	14.6	58.9	114.3	155.0	169.7
82.5°	9.6	53.1	109.2	150.3	165.2
85°	5.5	48.5	104.7	146.1	161.2
87.5°	2.4	44.4	101.0	142.7	157.9
90°	1.0	42.0	98.9	140.9	156.1
92.5°	1.1	41.9	98.7	140.6	155.9
95°	1.1	43.2	98.7	140.5	155.7
97.5°	1.1	40.6	99.8	140.5	155.2
100°	1.1	35.9	100.5	141.2	155.8
102.5°	1.1	31.5	95.7	141.8	156.4
105°	1.1	27.3	89.1	136.9	153.8
107.5°	1.0	23.4	82.4	129.3	146.3
110°	1.0	19.6	75.7	121.2	137.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	1.0	15.9	69.0	112.9	128.9
115°	1.0	12.3	62.2	104.3	119.9
117.5°	1.0	8.9	55.6	95.7	110.8
120°	1.0	5.8	49.1	87.1	101.5
122.5°	1.0	3.2	42.8	78.6	92.2
125°	1.0	1.7	36.6	70.1	82.9
127.5°	1.0	1.0	30.4	61.8	73.7
130°	1.0	1.0	24.4	53.5	64.8
132.5°	1.0	1.0	18.7	45.5	55.8
135°	1.0	1.0	13.3	37.7	47.3
137.5°	1.0	1.0	8.4	30.0	38.8
140°	1.0	1.0	4.3	22.6	30.7
142.5°	1.0	1.0	2.0	15.7	22.6
145°	1.0	1.0	1.0	9.5	15.2
147.5°	1.0	1.0	1.0	4.4	8.7
150°	1.0	1.0	1.0	1.7	3.7
152.5°	1.0	1.0	1.0	0.9	1.2
155°	1.0	1.0	1.0	0.9	0.8
157.5°	1.1	1.0	1.0	0.9	0.8
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)