

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: ITL44151

Luminaire Tested: **STN-196T8**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: ITL44151
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: STN-196T8
Description: WHITE PAINTED FABRICATED METAL STRIP BALLAST HOUSING.
Light Source: ONE 59-WATT F96T8/SPX35 FLUORESCENT.
Ballast/Driver: MAGNETEK TRIAD B259I120HP (BALLAST FACTOR 110.6 %).

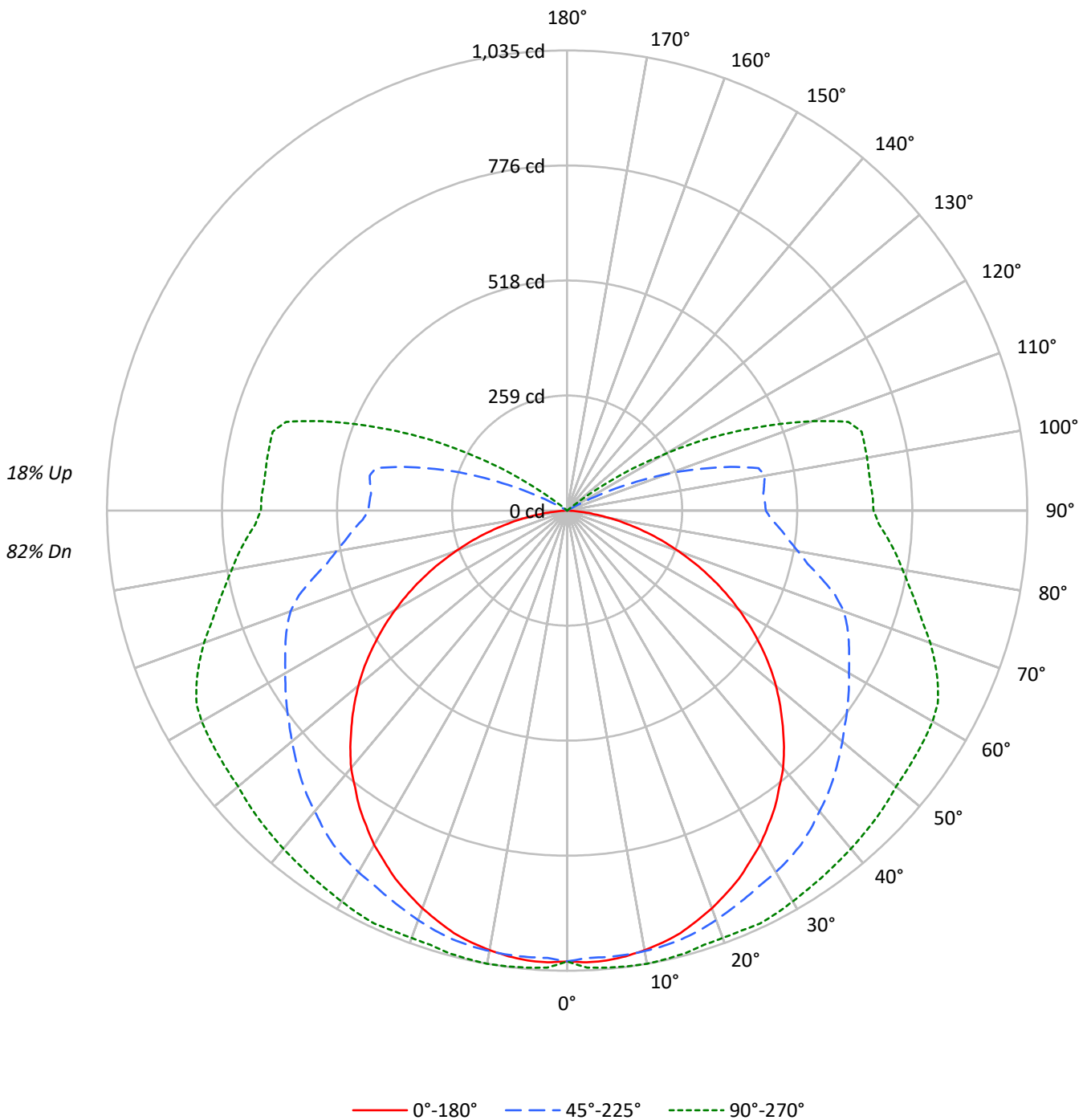
Summary

Lumens per Lamp: 5950 (1 lamp)
Luminaire Lumens: 5437.6 lumens
Efficiency: 91.4%
Efficacy: 74.7 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.51 / 1.56
Luminous Opening: Rectangular w/ Sides (W: 0.36' x L: 8' x H: 0.13')
CIE Type: Semi-Direct

Input Watts (W): 72.8
Input Voltage (V): NR
Input Current (A_{in}): 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: ITL44151
CATALOG NUMBER: STN-196T8

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	105	105	105	105	101	101	101	101	92	92	92	85	85	85	78	78	78	75
1	92	86	81	76	88	83	78	74	76	72	68	69	66	63	63	61	58	55
2	82	73	66	59	78	70	63	57	64	58	53	58	54	50	53	50	46	43
3	74	63	55	48	70	60	53	46	55	49	43	50	45	40	46	42	38	35
4	67	55	46	39	64	53	45	38	48	41	36	44	38	34	40	36	32	29
5	62	49	40	33	58	47	39	32	43	36	30	39	33	29	36	31	27	24
6	57	44	35	29	54	42	34	28	39	31	26	35	29	25	32	27	23	21
7	52	39	31	25	50	38	30	24	35	28	23	32	26	22	29	24	20	18
8	49	36	27	22	46	34	27	21	32	25	20	29	23	19	27	22	18	16
9	45	33	25	19	43	31	24	19	29	23	18	27	21	17	25	20	16	14
10	42	30	22	17	40	29	22	17	27	21	16	25	19	15	23	18	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3742	3742	3742
5°	3758	3650	3707
10°	3751	3602	3649
15°	3743	3561	3591
20°	3717	3511	3555
25°	3694	3473	3578
30°	3664	3472	3586
35°	3630	3487	3618
40°	3593	3482	3681
45°	3523	3501	3773
50°	3452	3529	3890
55°	3345	3598	4082
60°	3202	3707	4328
65°	3012	3897	4549
70°	2747	4140	4733
75°	2393	4259	4969
80°	1887	4485	5381
85°	1107	5080	6032



TEST NUMBER: ITL44151
 CATALOG NUMBER: STN-196T8

ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	96.7	1.8	1.6	0°	1014	1014	1014	1014	1014	
10°-20°	282.9	5.2	4.8	5°	1016	1004	1008	1018	1032	97
20°-30°	445.4	8.2	7.5	15°	984	985	998	1016	1030	277
30°-40°	571.5	10.5	9.6	25°	914	931	958	1000	1025	421
40°-50°	649.9	12.0	10.9	35°	815	849	917	974	1004	509
50°-60°	681.7	12.5	11.5	45°	686	743	848	939	981	529
60°-70°	666.9	12.3	11.2	55°	532	628	770	901	958	475
70°-80°	588.7	10.8	9.9	65°	357	492	699	868	920	353
80°-90°	483.9	8.9	8.1	75°	178	376	593	760	813	189
90°-100°	434.6	8.0	7.3	85°	31	236	482	666	724	39
100°-110°	352.4	6.5	5.9	90°	0	195	447	625	689	1
110°-120°	159.1	2.9	2.7	95°	0	199	443	620	685	0
120°-130°	23.9	0.4	0.4	105°	0	29	380	616	686	0
130°-140°	0.0	0.0	0.0	115°	0	0	107	313	422	0
140°-150°	0.0	0.0	0.0	125°	0	0	0	25	104	0
150°-160°	0.0	0.0	0.0	135°	0	0	0	0	0	0
160°-170°	0.0	0.0	0.0	145°	0	0	0	0	0	0
170°-180°	0.0	0.0	0.0	155°	0	0	0	0	0	0
0°-30°	824.9	15.2	13.9	165°	0	0	0	0	0	0
0°-40°	1396.4	25.7	23.5	175°	0	0	0	0	0	0
0°-60°	2728.0	50.2	45.8	180°	0	0	0	0	0	0
0°-90°	4467.5	82.2	75.1							
90°-120°	946.1	17.4	15.9							
90°-150°	970.0	17.8	16.3							
90°-180°	970.0	17.8	16.3							
0°-180°	5437.6	100.0	91.4							



TEST NUMBER: ITL44151
 CATALOG NUMBER: STN-196T8

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1014	1014	1014	1014	1014
2.5°	1017	1005	1007	1016	1029
5°	1016	1004	1008	1018	1032
7.5°	1011	1002	1008	1020	1034
10°	1004	998	1006	1020	1035
12.5°	995	992	1003	1019	1033
15°	984	985	998	1016	1030
17.5°	968	973	990	1010	1024
20°	952	961	980	1004	1023
22.5°	933	947	969	1001	1023
25°	914	931	958	1000	1025
27.5°	890	913	947	998	1021
30°	868	893	939	990	1015
32.5°	841	872	929	983	1009
35°	815	849	917	974	1004
37.5°	784	824	901	964	998
40°	756	796	883	956	993
42.5°	722	769	867	947	987
45°	686	743	848	939	981
47.5°	650	716	828	929	974
50°	613	688	808	920	966
52.5°	574	659	788	909	962
55°	532	628	770	901	958
57.5°	490	594	751	894	954
60°	446	560	732	888	949
62.5°	402	525	715	880	940
65°	357	492	699	868	920
67.5°	311	460	682	847	896
70°	266	432	662	820	869
72.5°	222	405	632	788	839
75°	178	376	593	760	813
77.5°	136	352	554	731	788
80°	97	317	527	707	766
82.5°	60	273	502	687	746
85°	31	236	482	666	724
87.5°	8	215	460	644	702
90°	0	195	447	625	689
92.5°	0	194	445	623	688
95°	0	199	443	620	685
97.5°	0	176	447	621	684
100°	0	125	451	622	685
102.5°	0	73	441	623	685
105°	0	29	380	616	686
107.5°	0	0	311	555	663
110°	0	0	244	474	588



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CATALOG NUMBER: STN-196T8

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0	0	170	395	504
115°	0	0	107	313	422
117.5°	0	0	44	233	341
120°	0	0	4	159	255
122.5°	0	0	0	87	178
125°	0	0	0	25	104
127.5°	0	0	0	0	34
130°	0	0	0	0	0
132.5°	0	0	0	0	0
135°	0	0	0	0	0
137.5°	0	0	0	0	0
140°	0	0	0	0	0
142.5°	0	0	0	0	0
145°	0	0	0	0	0
147.5°	0	0	0	0	0
150°	0	0	0	0	0
152.5°	0	0	0	0	0
155°	0	0	0	0	0
157.5°	0	0	0	0	0
160°	0	0	0	0	0
162.5°	0	0	0	0	0
165°	0	0	0	0	0
167.5°	0	0	0	0	0
170°	0	0	0	0	0
172.5°	0	0	0	0	0
175°	0	0	0	0	0
177.5°	0	0	0	0	0
180°	0	0	0	0	0

(END OF REPORT)