

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: 227p126

Luminaire Tested: **SM-154-TBW**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 227p126
Test Lab: METALUX RESEARCH LABS
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: SM-154-TBW
Description: SM SERIES MICRO STRIP LUMINAIRE WITH WHITE BAFFLED REFLECTOR
Light Source: ONE - PHILIPS F54T5HO/830 - 4400 LUMENS - 54 WATTS
Ballast/Driver: ONE - UNIVERSAL B254PUNV-D

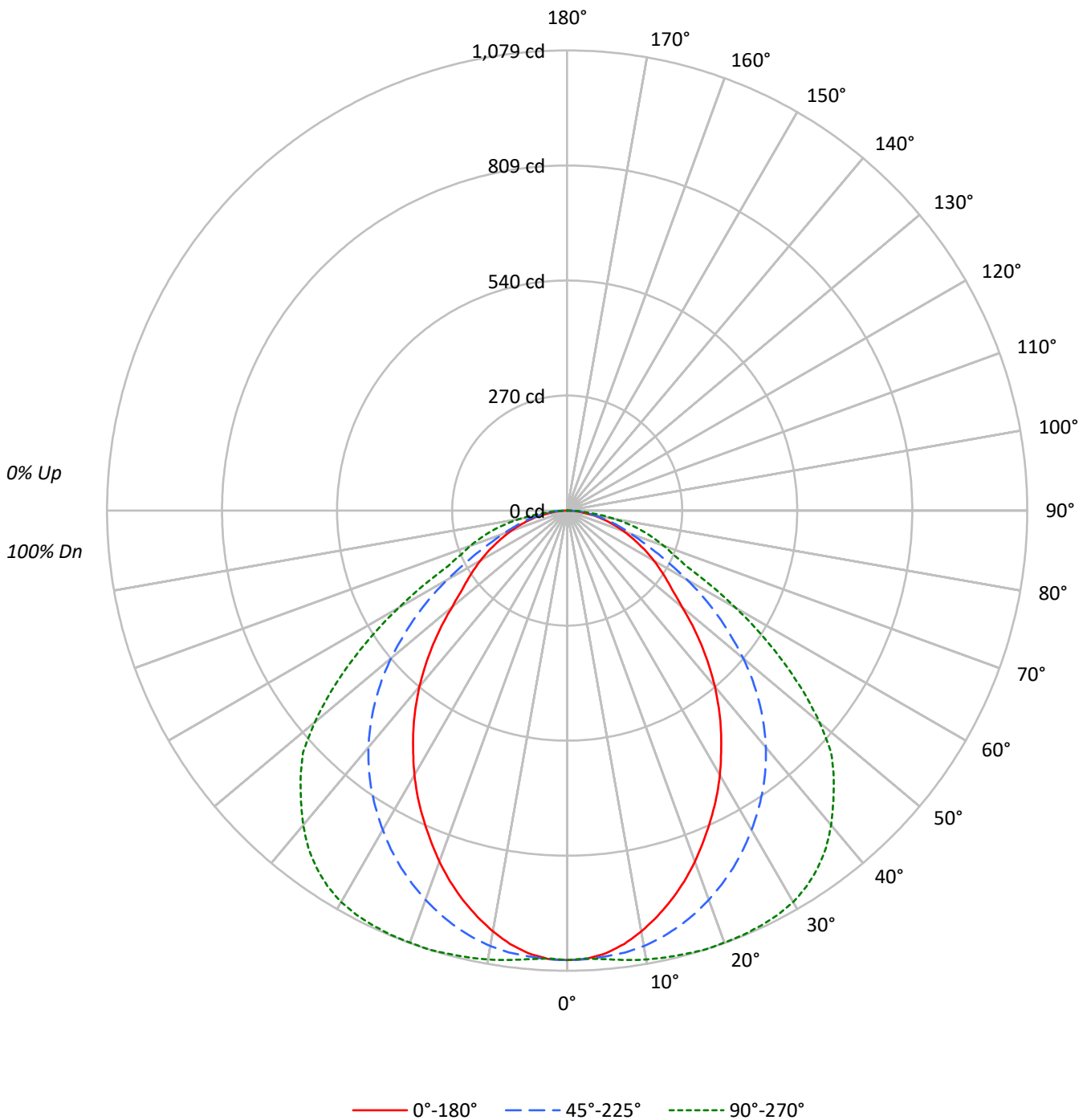
Summary

Lumens per Lamp: 4400 (1 lamp)
Luminaire Lumens: 2614.1 lumens
Efficiency: 59.4%
Efficacy: 45.1 lumens/watt
Spacing Criteria (0/90/45): 1.04 / 1.47 / 1.33
Luminous Opening: Rectangular (W 0.24' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 58
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

TEST NUMBER: 227p126
CATALOG NUMBER: SM-154-TBW

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	71	71	71	71	69	69	69	69	66	66	66	63	63	63	61	61	61	59
1	65	62	60	58	64	61	59	57	59	57	55	56	55	54	54	53	52	51
2	60	55	51	48	58	54	50	48	52	49	46	50	48	45	48	46	44	43
3	55	49	44	41	53	48	44	40	46	42	40	44	41	39	43	40	38	37
4	50	44	39	35	49	43	38	35	41	37	34	40	36	34	39	36	33	32
5	46	39	34	30	45	38	34	30	37	33	30	36	32	29	35	32	29	28
6	43	35	30	27	42	35	30	26	34	29	26	33	29	26	32	28	26	25
7	40	32	27	24	39	32	27	24	31	26	23	30	26	23	29	26	23	22
8	37	29	24	21	36	29	24	21	28	24	21	27	24	21	27	23	21	20
9	35	27	22	19	34	27	22	19	26	22	19	25	22	19	25	21	19	18
10	33	25	20	17	32	25	20	17	24	20	17	24	20	17	23	20	17	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12353	12353	12353
5°	12259	12342	12424
10°	11925	12341	12722
15°	11466	12255	13056
20°	10926	12111	13445
25°	10320	11936	13889
30°	9690	11706	14345
35°	9000	11446	14651
40°	8247	11092	14734
45°	7376	10575	14652
50°	6418	9828	14095
55°	5844	8848	12648
60°	5509	7618	10712
65°	5131	6323	8542
70°	4797	5449	8259
75°	4438	4981	8196
80°	4050	4590	7694
85°	3227	4841	5648



TEST NUMBER: 227p126
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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	99.8	3.8	2.3	0°	1054	1054	1054	1054	1054	
10°-20°	285.0	10.9	6.5	5°	1042	1042	1049	1058	1056	98
20°-30°	428.1	16.4	9.7	15°	945	963	1010	1058	1076	265
30°-40°	506.9	19.4	11.5	25°	798	836	923	1022	1074	367
40°-50°	497.5	19.0	11.3	35°	629	680	800	941	1024	392
50°-60°	389.9	14.9	8.9	45°	445	502	638	782	884	343
60°-70°	238.2	9.1	5.4	55°	286	309	433	547	619	258
70°-80°	128.4	4.9	2.9	65°	185	191	228	275	308	184
80°-90°	40.2	1.5	0.9	75°	98	99	110	136	181	104
90°-100°	0.0	0.0	0.0	85°	24	27	36	44	42	28
100°-110°	0.0	0.0	0.0	90°	0	0	0	0	0	
110°-120°	0.0	0.0	0.0							
120°-130°	0.0	0.0	0.0							
130°-140°	0.0	0.0	0.0							
140°-150°	0.0	0.0	0.0							
150°-160°	0.0	0.0	0.0							
160°-170°	0.0	0.0	0.0							
170°-180°	0.0	0.0	0.0							
0°-30°	812.9	31.1	18.5							
0°-40°	1319.8	50.5	30.0							
0°-60°	2207.2	84.4	50.2							
0°-90°	2614.1	100.0	59.4							
90°-120°	0.0	0.0	0.0							
90°-150°	0.0	0.0	0.0							
90°-180°	0.0	0.0	0.0							
0°-180°	2614.1	100.0	59.4							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1054	1054	1054	1054	1054
2.5°	1052	1049	1053	1056	1051
5°	1042	1042	1049	1058	1056
7.5°	1025	1028	1045	1062	1063
10°	1002	1010	1037	1063	1069
12.5°	975	988	1025	1061	1073
15°	945	963	1010	1058	1076
17.5°	912	936	992	1053	1079
20°	876	905	971	1045	1078
22.5°	837	871	948	1034	1077
25°	798	836	923	1022	1074
27.5°	758	799	895	1008	1069
30°	716	761	865	991	1060
32.5°	672	722	833	969	1045
35°	629	680	800	941	1024
37.5°	584	638	764	909	997
40°	539	594	725	872	963
42.5°	492	549	683	829	924
45°	445	502	638	782	884
47.5°	398	454	590	735	840
50°	352	404	539	684	773
52.5°	315	353	485	618	699
55°	286	309	433	547	619
57.5°	260	273	380	475	538
60°	235	244	325	405	457
62.5°	210	217	273	337	379
65°	185	191	228	275	308
67.5°	162	166	190	222	269
70°	140	142	159	191	241
72.5°	119	120	133	163	212
75°	98	99	110	136	181
77.5°	79	80	88	109	148
80°	60	62	68	83	114
82.5°	41	43	50	62	77
85°	24	27	36	44	42
87.5°	8	15	25	31	24
90°	0	0	0	0	0

(END OF REPORT)