

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: 137P100

Luminaire Tested: **SMSL-240**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 137P100
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: SMSL-240
Description: Side Mounted Staggered Striplite
Light Source: Two-F40CW - 3150 Lumens ea. - 40 Watts ea.
Ballast/Driver: -

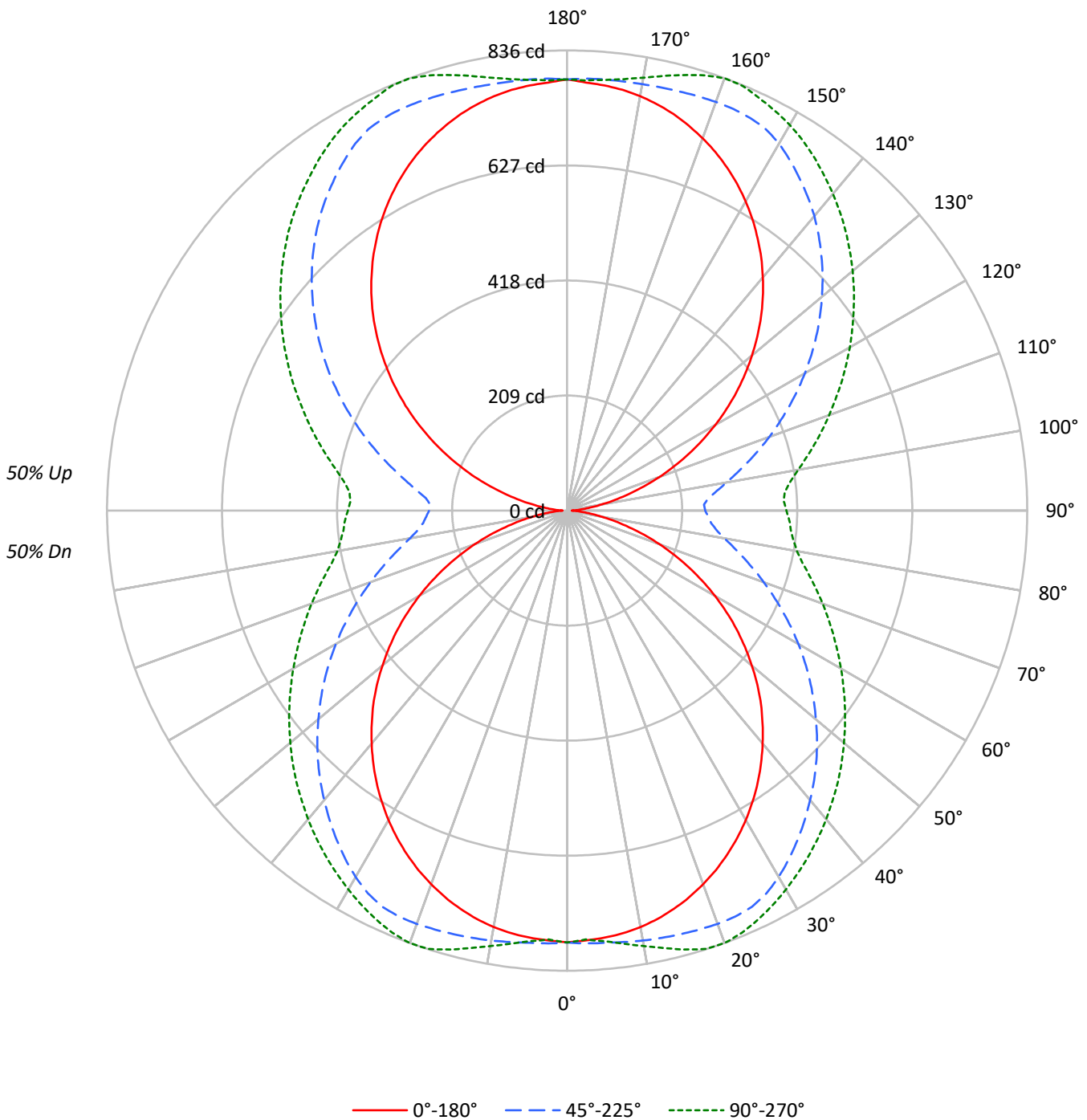
Summary

Lumens per Lamp: 3150 (2 lamps)
Luminaire Lumens: 6163.7 lumens
Efficiency: 97.8%
Efficacy: 67.3 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.48 / 1.53
Luminous Opening: Rectangular w/ Sides (W: 0.65' x L: 4.25' x H: 0.15')
CIE Type: General Diffuse

Input Watts (W): 91.6
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: 137P100
CATALOG NUMBER: SMSL-240

Luminous Intensity Polar Plot





TEST NUMBER: 137P100
 CATALOG NUMBER: SMSL-240

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	97	97	97	97	81	81	81	67	67	67	55	55	55	49
1	94	89	84	80	86	82	78	74	69	66	63	57	54	52	45	44	42	37
2	85	77	70	64	78	70	65	60	59	55	51	49	45	42	39	37	34	30
3	77	67	59	53	70	61	55	49	52	46	42	42	38	35	34	31	29	24
4	70	59	50	44	64	54	47	41	45	40	35	37	33	30	30	27	24	20
5	64	52	44	37	59	48	40	35	40	35	30	33	29	25	27	23	21	17
6	59	46	38	32	54	43	35	30	36	30	26	30	25	22	24	21	18	15
7	54	42	34	28	50	39	31	26	33	27	23	27	23	19	22	19	16	13
8	50	38	30	25	46	35	28	23	30	24	20	25	20	17	20	17	14	12
9	47	34	27	22	43	32	25	20	27	22	18	23	18	15	19	15	13	10
10	44	32	24	19	40	29	23	18	25	20	16	21	17	14	17	14	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3076	3076	3076
5°	3056	3053	3031
10°	3041	3058	3075
15°	3013	3082	3160
20°	2977	3124	3224
25°	2934	3164	3209
30°	2882	3146	3184
35°	2822	3096	3163
40°	2748	3045	3150
45°	2669	2999	3147
50°	2566	2951	3155
55°	2448	2913	3183
60°	2294	2884	3237
65°	2106	2871	3334
70°	1864	2893	3493
75°	1563	2983	3743
80°	1206	3202	4193
85°	846	3808	5122



TEST NUMBER: 137P100
 CATALOG NUMBER: SMSL-240

ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	75.1	1.2	1.2	0°	785	785	785	785	785	
10°-20°	224.4	3.6	3.6	5°	779	785	788	787	785	74
20°-30°	356.3	5.8	5.7	15°	749	767	797	818	826	211
30°-40°	445.0	7.2	7.1	25°	689	729	794	815	820	317
40°-50°	483.0	7.8	7.7	35°	604	672	730	756	765	377
50°-60°	468.2	7.6	7.4	45°	498	586	640	681	696	384
60°-70°	412.0	6.7	6.5	55°	376	463	538	595	616	335
70°-80°	332.5	5.4	5.3	65°	244	336	432	506	534	241
80°-90°	267.5	4.3	4.2	75°	116	214	332	422	456	125
90°-100°	264.6	4.3	4.2	85°	26	120	263	369	408	29
100°-110°	339.4	5.5	5.4	90°	9	102	251	359	398	6
110°-120°	422.4	6.9	6.7	95°	26	120	258	360	397	29
120°-130°	479.3	7.8	7.6	105°	116	219	340	432	465	124
130°-140°	491.4	8.0	7.8	115°	244	342	444	521	550	241
140°-150°	449.0	7.3	7.1	125°	376	470	553	614	636	336
150°-160°	355.9	5.8	5.6	135°	498	586	654	701	716	384
160°-170°	222.7	3.6	3.5	145°	604	665	736	774	783	377
170°-180°	74.9	1.2	1.2	155°	688	722	787	822	827	317
0°-30°	655.8	10.6	10.4	165°	746	761	788	813	819	210
0°-40°	1100.8	17.9	17.5	175°	775	781	786	788	785	74
0°-60°	2052.0	33.3	32.6	180°	783	783	783	783	783	
0°-90°	3064.1	49.7	48.6							
90°-120°	1026.4	16.7	16.3							
90°-150°	2446.1	39.7	38.8							
90°-180°	3100.0	50.3	49.2							
0°-180°	6163.7	100.0	97.8							



TEST NUMBER: 137P100
 CATALOG NUMBER: SMSL-240

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	784.6	784.6	784.6	784.6	784.6
2.5°	781.5	787.0	787.1	782.5	780.0
5°	778.9	785.0	788.2	787.0	785.4
7.5°	774.7	782.5	790.7	793.6	793.6
10°	768.5	779.2	793.2	801.1	803.3
12.5°	759.8	774.0	795.1	809.4	814.1
15°	749.1	767.4	796.7	818.3	825.6
17.5°	736.8	759.6	798.1	826.8	835.2
20°	722.4	750.5	799.0	830.3	836.2
22.5°	706.6	740.1	798.5	825.7	830.1
25°	689.1	728.7	794.2	815.4	820.1
27.5°	669.8	716.0	784.0	802.3	808.3
30°	649.2	702.4	768.8	788.1	795.1
32.5°	627.1	687.5	750.3	772.9	780.5
35°	603.7	671.5	730.2	756.5	765.4
37.5°	578.8	654.1	709.0	739.0	749.2
40°	552.5	634.4	686.8	720.5	732.1
42.5°	525.5	611.6	664.1	701.3	714.0
45°	498.0	585.5	640.5	681.3	695.9
47.5°	468.8	556.5	615.9	660.5	676.7
50°	438.0	526.2	589.9	639.0	656.6
52.5°	407.2	495.3	564.4	617.4	636.5
55°	375.7	463.4	538.3	594.9	615.9
57.5°	343.1	431.7	511.8	572.4	595.2
60°	310.0	399.9	485.1	549.8	574.5
62.5°	276.9	368.1	458.4	527.5	553.7
65°	243.7	336.2	431.6	505.5	533.6
67.5°	210.7	305.0	405.4	484.0	513.5
70°	178.0	273.5	380.0	462.9	494.0
72.5°	146.6	243.0	355.4	441.9	474.4
75°	116.4	213.8	332.2	422.0	455.5
77.5°	88.6	185.8	310.2	403.4	437.9
80°	63.8	160.3	289.9	387.4	423.8
82.5°	42.7	138.2	273.6	376.7	414.7
85°	26.2	120.3	262.8	369.2	408.0
87.5°	14.3	108.5	256.3	364.8	404.1
90°	8.8	102.2	250.7	359.1	398.2
92.5°	14.1	105.0	248.8	355.5	393.8
95°	25.9	120.1	257.5	359.9	397.2
97.5°	42.2	140.5	274.3	373.6	409.3
100°	63.3	164.5	294.0	391.4	426.3
102.5°	88.2	191.1	315.8	410.9	445.1
105°	115.9	219.2	339.9	431.5	465.3
107.5°	146.1	248.4	364.7	452.9	485.8
110°	178.0	278.9	390.6	475.7	506.4



TEST NUMBER: 137P100
CATALOG NUMBER: SMSL-240

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	210.6	310.2	417.0	498.3	527.5
115°	243.9	342.0	444.0	521.3	549.7
117.5°	277.0	374.1	471.3	544.7	571.1
120°	310.5	407.0	498.8	568.2	593.0
122.5°	343.6	438.9	525.8	591.4	614.3
125°	375.9	470.0	552.7	614.4	635.6
127.5°	407.5	500.1	578.9	637.1	656.7
130°	438.3	530.0	604.4	659.4	677.2
132.5°	468.9	559.2	629.4	680.5	696.8
135°	498.2	585.8	653.5	701.3	716.2
137.5°	526.4	609.2	676.6	720.5	734.2
140°	553.2	629.7	698.6	739.0	751.2
142.5°	579.2	648.2	718.4	756.6	767.3
145°	603.5	665.2	736.5	773.5	782.9
147.5°	627.0	681.0	754.0	788.1	797.2
150°	648.7	695.5	770.0	800.6	808.9
152.5°	669.1	708.8	781.4	811.4	818.4
155°	687.7	721.5	787.1	821.9	826.7
157.5°	704.6	733.0	789.7	828.4	834.7
160°	719.9	743.3	790.1	827.1	835.8
162.5°	733.7	752.5	789.3	821.4	829.2
165°	745.9	760.8	788.3	813.3	819.3
167.5°	756.0	768.1	787.3	805.0	808.7
170°	764.6	773.7	786.6	797.7	798.5
172.5°	771.0	778.0	786.3	792.2	790.6
175°	775.4	781.3	786.0	788.4	785.4
177.5°	778.4	783.3	785.6	785.8	782.3
180°	783.2	783.2	783.2	783.2	783.2

(END OF REPORT)