

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: FAIL-SAFE

Report Number: 4289

Luminaire Tested: **FSWX7-U40**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: 4289
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FSWX7-U40
Description: FAIL-SAFE WALL MOUNT 1/40U
Light Source: F40WW/U3 2850 LUMENS
Ballast/Driver: -

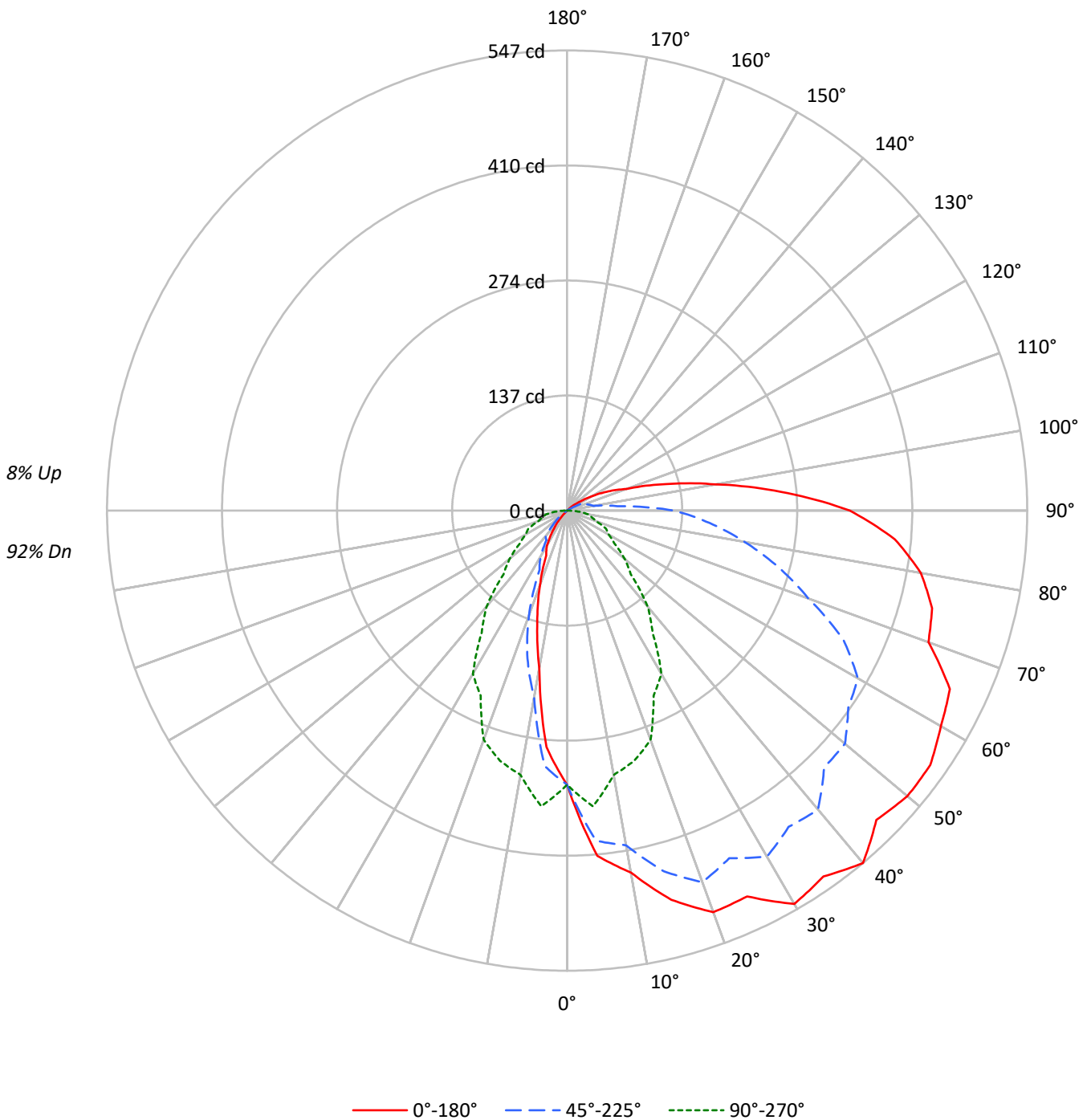
Summary

Lumens per Lamp: 2850 (1 lamp)
Luminaire Lumens: 1224.8 lumens
Efficiency: 43.0%
Efficacy: 21.5 lumens/watt
Spacing Criteria (0/90/45): 1.34 / 1.04 / 1.41
Luminous Opening: Rectangular w/ Sides (W: 1.88' x L: 0.29' x H: 0.29')
CIE Type: Direct

Input Watts (W): 57
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: 4289
CATALOG NUMBER: FSWX7-U40

Luminous Intensity Polar Plot





TEST NUMBER: 4289
 CATALOG NUMBER: FSWX7-U40

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	50	30	10	50	30	10	50	30	10	0																			
RCR																																														
0	50	50	50	50	49	49	49	49	46	46	46	43	43	43	41	41	41	40																												
1	44	42	39	37	43	40	38	36	38	36	34	36	34	33	34	32	31	30																												
2	40	36	32	29	38	34	31	29	32	30	27	30	28	26	29	27	25	24																												
3	36	31	27	24	35	30	26	23	28	25	22	26	24	22	25	23	21	20																												
4	33	27	23	20	32	26	22	19	25	21	19	23	20	18	22	20	18	16																												
5	30	24	20	17	29	23	19	17	22	19	16	21	18	16	20	17	15	14																												
6	28	22	17	15	27	21	17	14	20	16	14	19	16	14	18	15	13	12																												
7	26	20	16	13	25	19	15	13	18	15	12	17	14	12	16	14	12	11																												
8	24	18	14	11	23	17	14	11	16	13	11	16	13	11	15	12	10	9																												
9	22	16	13	10	22	16	12	10	15	12	10	14	12	10	14	11	9	8																												
10	21	15	12	9	20	15	11	9	14	11	9	13	11	9	13	10	8	8																												

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	6436	6436	6436
5°	7508	6903	5139
10°	7448	6226	3238
15°	7722	6045	2208
20°	7825	5769	1448
25°	7517	4938	877
30°	7805	4689	694
35°	7527	3850	425
40°	7666	3400	238
45°	7259	2588	0
50°	7399	2309	0
55°	7471	1946	0
60°	7414	1776	0
65°	7458	1790	0
70°	7039	1460	0
75°	7238	1452	0
80°	7277	1516	0
85°	7126	1066	0



TEST NUMBER: 4289
 CATALOG NUMBER: FSWX7-U40

ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	45°	90°	135°	180°	Flux
0°-10°	31.9	2.6	1.1	0°	326	326	326	326	326	
10°-20°	87.4	7.1	3.1	5°	412	394	353	305	282	39
20°-30°	126.7	10.3	4.4	15°	479	444	308	182	137	136
30°-40°	153.7	12.5	5.4	25°	506	456	243	78	59	239
40°-50°	162.9	13.3	5.7	35°	531	459	177	43	30	338
50°-60°	168.6	13.8	5.9	45°	520	432	107	24	0	409
60°-70°	160.2	13.1	5.6	55°	527	408	69	0	0	470
70°-80°	135.8	11.1	4.8	65°	502	362	51	0	0	490
80°-90°	105.0	8.6	3.7	75°	449	260	30	0	0	471
90°-100°	56.9	4.6	2.0	85°	391	170	13	0	0	325
100°-110°	23.2	1.9	0.8	90°	336	127	0	0	0	181
110°-120°	10.1	0.8	0.4	95°	255	60	0	0	0	194
120°-130°	2.5	0.2	0.1	105°	121	27	0	0	0	132
130°-140°	0.1	0.0	0.0	115°	54	22	0	0	0	54
140°-150°	0.0	0.0	0.0	125°	18	0	0	0	0	18
150°-160°	0.0	0.0	0.0	135°	0	0	0	0	0	2
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°	245.9	20.1	8.6	165°	0	0	0	0	0	0
0°-40°	399.6	32.6	14.0	175°	0	0	0	0	0	0
0°-60°	731.0	59.7	25.7	180°	0	0	0	0	0	0
0°-90°	1132.0	92.4	39.7							
90°-120°	90.1	7.4	3.2							
90°-150°	92.7	7.6	3.3							
90°-180°	93.0	7.6	3.3							
0°-180°	1224.8	100.0	43.0							



TEST NUMBER: 4289
 CATALOG NUMBER: FSWX7-U40

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	326	326	326	326	326	326	326	326	326
5°	412	407	394	376	353	328	305	287	282
10°	437	428	404	371	319	264	226	195	190
15°	479	471	444	395	308	231	182	148	137
20°	508	498	470	409	290	188	133	102	94
25°	506	492	456	389	243	132	78	62	59
30°	540	525	475	392	224	101	63	48	48
35°	531	512	459	357	177	62	43	35	30
40°	547	528	464	338	149	46	40	23	17
45°	520	498	432	284	107	34	24	0	0
50°	528	507	431	262	89	29	13	0	0
55°	527	506	408	232	69	25	0	0	0
60°	513	489	399	198	57	17	0	0	0
65°	502	476	362	168	51	6	0	0	0
70°	457	432	305	125	36	0	0	0	0
75°	449	421	260	97	30	0	0	0	0
80°	427	390	214	76	25	0	0	0	0
85°	391	333	170	60	13	0	0	0	0
90°	336	271	127	53	0	0	0	0	0
95°	255	180	60	27	0	0	0	0	0
100°	179	117	32	20	0	0	0	0	0
105°	121	72	27	8	0	0	0	0	0
110°	75	47	22	0	0	0	0	0	0
115°	54	38	22	0	0	0	0	0	0
120°	34	23	3	0	0	0	0	0	0
125°	18	11	0	0	0	0	0	0	0
130°	9	0	0	0	0	0	0	0	0
135°	0	0	0	0	0	0	0	0	0
140°	0	0	0	0	0	0	0	0	0
145°	0	0	0	0	0	0	0	0	0
150°	0	0	0	0	0	0	0	0	0
155°	0	0	0	0	0	0	0	0	0
160°	0	0	0	0	0	0	0	0	0
165°	0	0	0	0	0	0	0	0	0
170°	0	0	0	0	0	0	0	0	0
175°	0	0	0	0	0	0	0	0	0
180°	0	0	0	0	0	0	0	0	0

(END OF REPORT)