

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: 6944.0

Luminaire Tested: **FUS-X16-440**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: 6944.0
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FUS-X16-440
Description: FAIL-SAFE SSE .125 PRIS ACRYL/.375 CLR POLYC
Light Source: 3200 LUMENS
Ballast/Driver: -

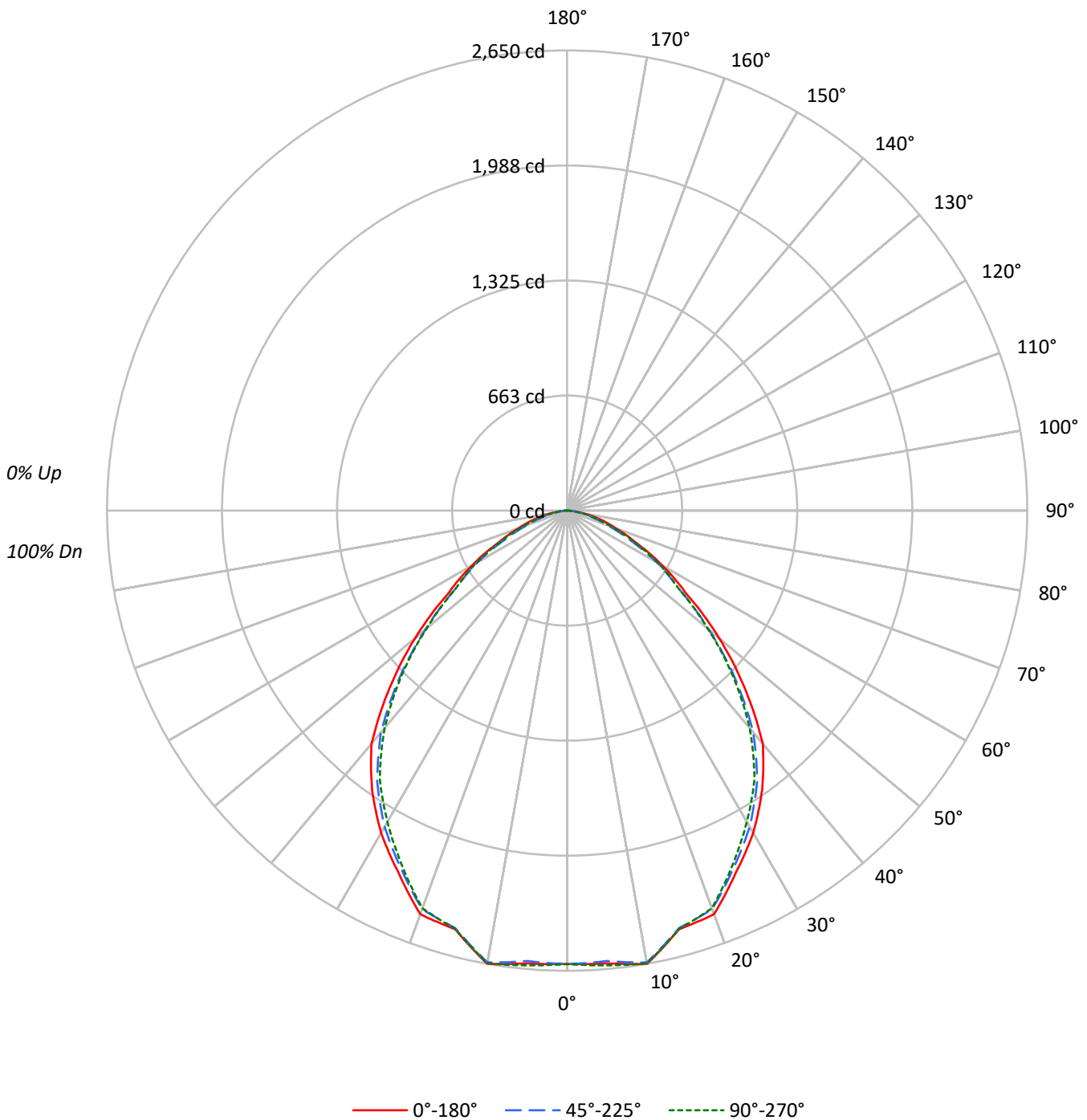
Summary

Lumens per Lamp: 3200 (4 lamps)
Luminaire Lumens: 5646.8 lumens
Efficiency: 44.1%
Efficacy: 34.6 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.18 / 1.26
Luminous Opening: Rectangular w/ Sides (W: 1.25' x L: 4' x H: 0.5')
CIE Type: Direct

Input Watts (W): 163
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

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									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	0																
RCR																																					
0	53	53	53	53	51	51	51	51	49	49	49	47	47	47	45	45	45	44																			
1	49	47	45	44	48	46	45	43	44	43	42	42	42	41	41	40	39	39																			
2	45	42	39	37	44	41	39	37	39	38	36	38	36	35	37	35	34	33																			
3	41	37	34	32	40	37	34	31	35	33	31	34	32	30	33	31	30	29																			
4	38	34	30	27	37	33	30	27	32	29	27	31	29	27	30	28	26	25																			
5	35	30	27	24	35	30	26	24	29	26	24	28	26	23	27	25	23	22																			
6	33	28	24	21	32	27	24	21	26	23	21	26	23	21	25	23	21	20																			
7	31	25	22	19	30	25	21	19	24	21	19	24	21	19	23	21	19	18																			
8	29	23	20	17	28	23	19	17	22	19	17	22	19	17	21	19	17	16																			
9	27	21	18	16	26	21	18	16	21	18	15	20	17	15	20	17	15	15																			
10	25	20	16	14	25	20	16	14	19	16	14	19	16	14	18	16	14	13																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5621	5621	5621
5°	5594	5450	5489
10°	5668	5421	5405
15°	5380	5045	5018
20°	5421	4929	4874
25°	5162	4594	4510
30°	4969	4303	4180
35°	4734	3978	3864
40°	4456	3572	3440
45°	3916	3035	2940
50°	3332	2470	2400
55°	2678	1921	1870
60°	2247	1562	1544
65°	1747	1117	1152
70°	1396	757	825
75°	1117	530	547
80°	733	319	307
85°	295	137	133



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	250.8	4.4	2.0	0°	2611	2611	2611	2611	2611	
10°-20°	712.5	12.6	5.6	5°	2617	2608	2604	2617	2629	251
20°-30°	1049.5	18.6	8.2	15°	2495	2502	2489	2488	2493	715
30°-40°	1190.1	21.1	9.3	25°	2300	2297	2269	2260	2253	1063
40°-50°	1062.4	18.8	8.3	35°	1959	1940	1907	1889	1882	1223
50°-60°	735.6	13.0	5.7	45°	1447	1400	1367	1346	1352	1116
60°-70°	424.3	7.5	3.3	55°	841	820	783	781	783	773
70°-80°	182.4	3.2	1.4	65°	435	430	394	415	420	446
80°-90°	39.1	0.7	0.3	75°	197	177	152	163	164	209
90°-100°	0.0	0.0	0.0	85°	29	29	29	30	30	43
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°	2012.9	35.6	15.7							
0°-40°	3203.0	56.7	25.0							
0°-60°	5001.0	88.6	39.1							
0°-90°	5646.8	100.0	44.1							
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°	5646.8	100.0	44.1							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2611	2611	2611	2611	2611
5°	2617	2608	2604	2617	2629
10°	2650	2659	2642	2662	2647
15°	2495	2502	2489	2488	2493
20°	2474	2452	2442	2445	2437
25°	2300	2297	2269	2260	2253
30°	2143	2124	2102	2077	2070
35°	1959	1940	1907	1889	1882
40°	1752	1695	1667	1640	1635
45°	1447	1400	1367	1346	1352
50°	1143	1115	1064	1053	1058
55°	841	820	783	781	783
60°	635	626	596	608	607
65°	435	430	394	415	420
70°	298	283	243	271	275
75°	197	177	152	163	164
80°	101	88	80	80	81
85°	29	29	29	30	30
90°	0	0	0	0	0

(END OF REPORT)