

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: 6740.0

Luminaire Tested: **FUS-D12-240-120-80/89-SSE**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: 6740.0
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FUS-D12-240-120-80/89-SSE
Description: FAIL-SAFE 13X50 SLOPE SIDED SURFACE MOUNT
PRISMATIC LENS WATTS=84, 89% REFL
Light Source: 2/40
F40T12RS/WW

Ballast/Driver: -

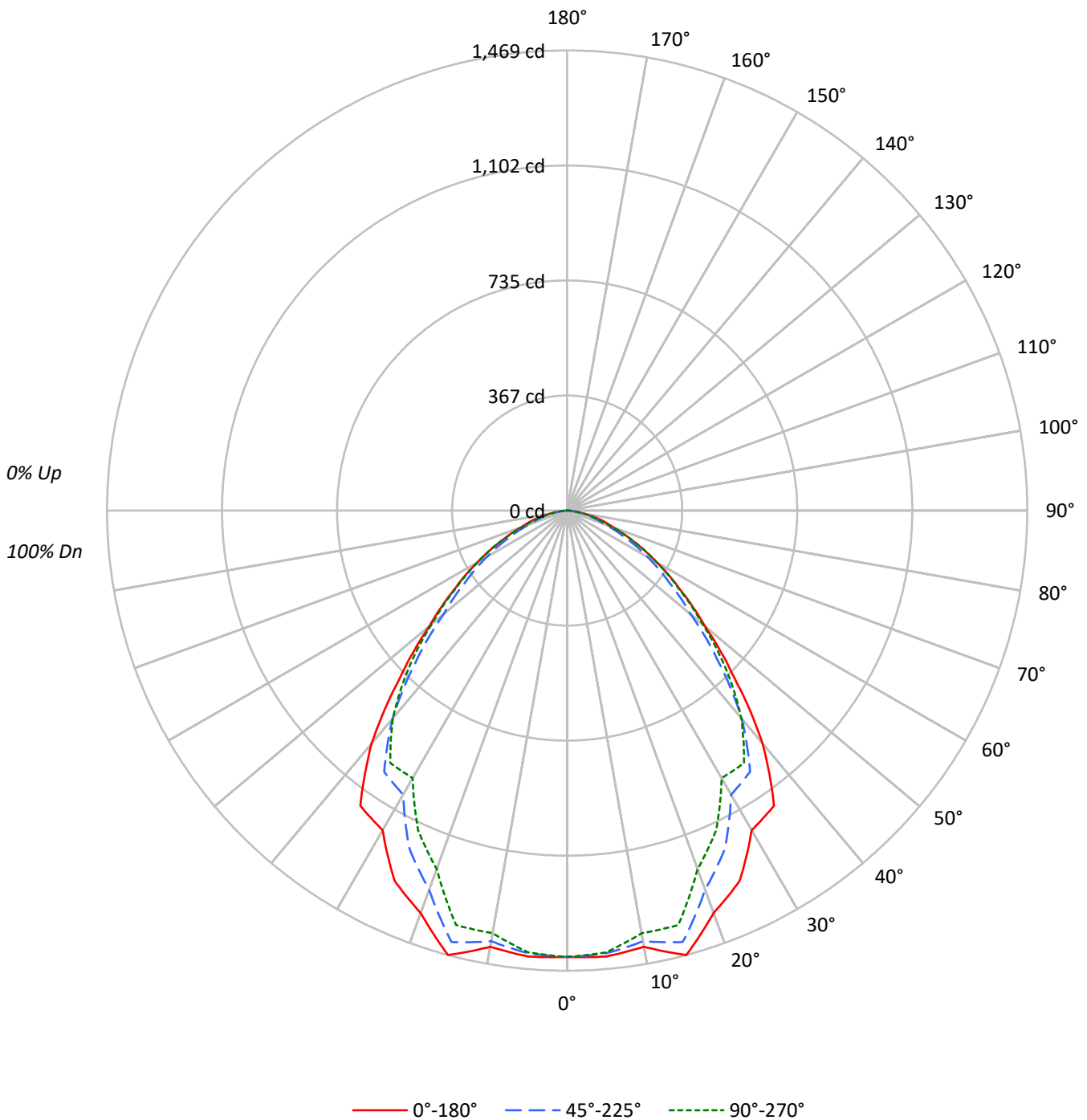
Summary

Lumens per Lamp: 3200 (2 lamps)
Luminaire Lumens: 2973.4 lumens
Efficiency: 46.5%
Efficacy: 35.4 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.07 / 1.23
Luminous Opening: Rectangular (W 0.57' x L: 3.92' x H: 0')
CIE Type: Direct

Input Watts (W): 84
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

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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	55	55	55	55	54	54	54	54	52	52	52	49	49	49	47	47	47	46
1	51	50	48	46	50	48	47	46	47	45	44	45	44	43	43	42	42	41
2	47	44	41	39	46	43	41	39	42	40	38	40	38	37	39	37	36	35
3	44	39	36	33	43	39	36	33	37	35	33	36	34	32	35	33	32	31
4	40	35	32	29	39	35	31	29	34	31	28	33	30	28	32	30	28	27
5	37	32	28	26	37	32	28	25	31	28	25	30	27	25	29	27	25	24
6	35	29	25	23	34	29	25	23	28	25	22	27	24	22	26	24	22	21
7	32	27	23	20	32	26	23	20	26	22	20	25	22	20	24	22	20	19
8	30	24	21	18	30	24	21	18	24	20	18	23	20	18	22	20	18	17
9	28	23	19	17	28	22	19	17	22	19	16	21	18	16	21	18	16	16
10	27	21	17	15	26	21	17	15	20	17	15	20	17	15	19	17	15	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6834	6834	6834
5°	6879	6831	6817
10°	6886	6798	6672
15°	7294	7080	6802
20°	6977	6573	6216
25°	6900	6302	5958
30°	6523	5798	5460
35°	6739	5960	5761
40°	6079	5428	5415
45°	5114	4639	4876
50°	4283	3835	4215
55°	3687	3303	3637
60°	3165	2849	3165
65°	2667	2326	2701
70°	2187	1781	2075
75°	1983	1538	1723
80°	1436	1188	1215
85°	880	770	880



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	134.9	4.5	2.1	0°	1425	1425	1425	1425	1425	
10°-20°	391.0	13.2	6.1	5°	1429	1431	1419	1416	1416	136
20°-30°	549.6	18.5	8.6	15°	1469	1457	1426	1386	1370	405
30°-40°	632.9	21.3	9.9	25°	1304	1273	1191	1145	1126	594
40°-50°	548.9	18.5	8.6	35°	1151	1094	1018	989	984	697
50°-60°	378.1	12.7	5.9	45°	754	718	684	696	719	588
60°-70°	221.1	7.4	3.5	55°	441	419	395	422	435	399
70°-80°	96.2	3.2	1.5	65°	235	221	205	220	238	236
80°-90°	20.9	0.7	0.3	75°	107	93	83	84	93	111
90°-100°	0.0	0.0	0.0	85°	16	16	14	16	16	23
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°	1075.5	36.2	16.8							
0°-40°	1708.3	57.5	26.7							
0°-60°	2635.3	88.6	41.2							
0°-90°	2973.4	100.0	46.5							
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°	2973.4	100.0	46.5							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1425	1425	1425	1425	1425
5°	1429	1431	1419	1416	1416
10°	1414	1414	1396	1383	1370
15°	1469	1457	1426	1386	1370
20°	1367	1350	1288	1246	1218
25°	1304	1273	1191	1145	1126
30°	1178	1129	1047	1001	986
35°	1151	1094	1018	989	984
40°	971	919	867	862	865
45°	754	718	684	696	719
50°	574	547	514	535	565
55°	441	419	395	422	435
60°	330	312	297	318	330
65°	235	221	205	220	238
70°	156	142	127	135	148
75°	107	93	83	84	93
80°	52	49	43	43	44
85°	16	16	14	16	16
90°	0	0	0	0	0

(END OF REPORT)