

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: 4554

Luminaire Tested: **FUSX-12-240**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: 4554
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FUSX-12-240
Description: FAIL-SAFE SURF MT W/PRIS LENS
Light Source: F40T12RS/WW 3200 LUMENS
Ballast/Driver: -

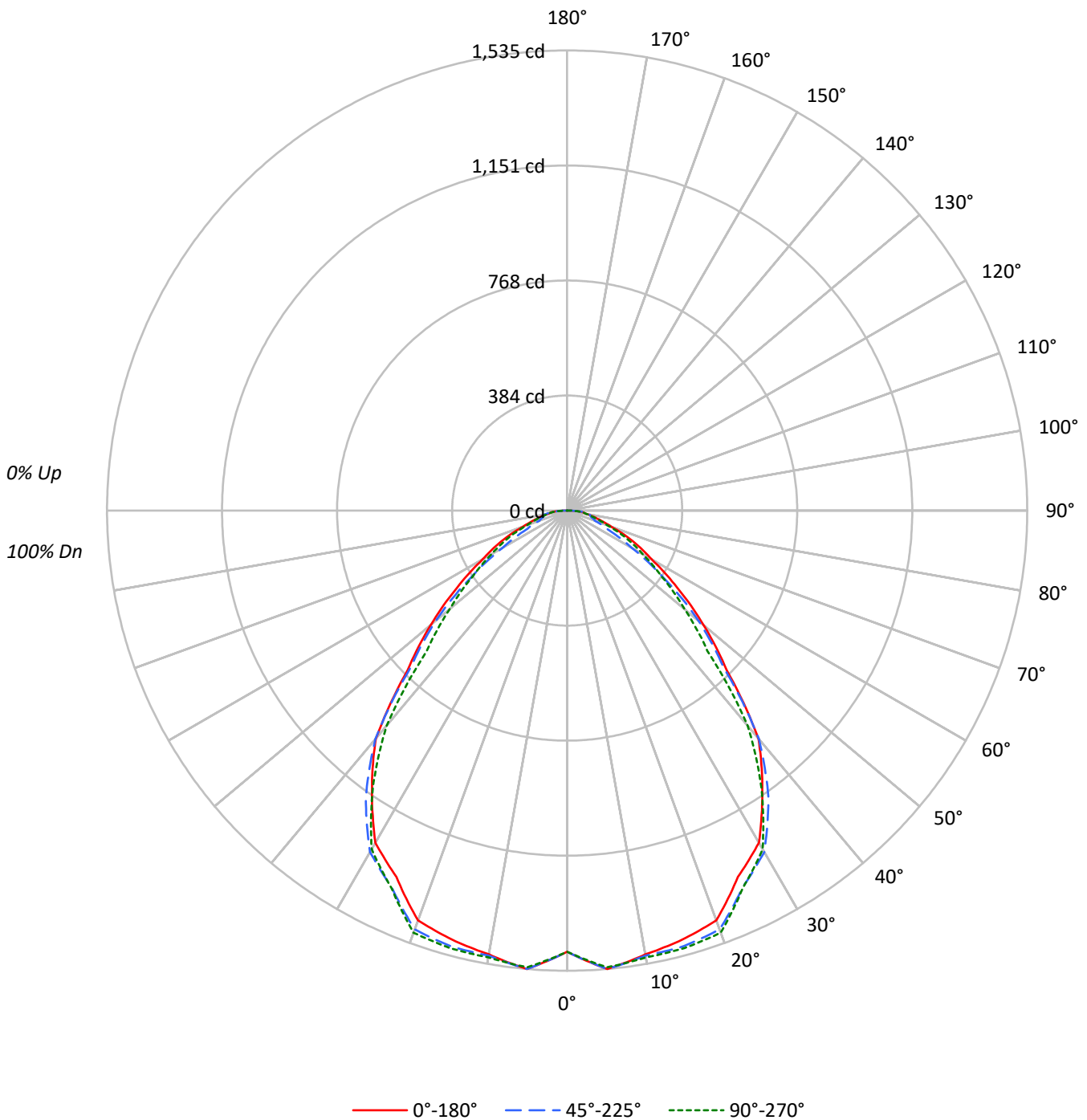
Summary

Lumens per Lamp: 3200 (2 lamps)
Luminaire Lumens: 3197.9 lumens
Efficiency: 50.0%
Efficacy: 33.7 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.27 / 1.27
Luminous Opening: Rectangular (W 0.63' x L: 3.92' x H: 0')
CIE Type: Direct

Input Watts (W): 95
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				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	59	59	59	59	58	58	58	58	56	56	56	53	53	53	51	51	51	50
1	55	53	51	50	54	52	50	49	50	49	47	48	47	46	46	45	45	44
2	51	48	45	42	50	47	44	42	45	43	41	43	42	40	42	40	39	38
3	47	43	39	36	46	42	39	36	40	38	35	39	37	35	38	36	34	33
4	44	38	35	32	43	38	34	32	37	34	31	36	33	31	35	32	30	29
5	41	35	31	28	40	34	31	28	33	30	28	32	30	27	32	29	27	26
6	38	32	28	25	37	31	28	25	30	27	25	30	27	24	29	26	24	23
7	35	29	25	22	34	29	25	22	28	25	22	27	24	22	27	24	22	21
8	33	27	23	20	32	26	23	20	26	22	20	25	22	20	25	22	20	19
9	31	25	21	18	30	24	21	18	24	21	18	23	20	18	23	20	18	17
10	29	23	19	17	28	23	19	17	22	19	17	22	19	17	21	19	17	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6415	6415	6415
5°	6717	6716	6691
10°	6654	6671	6699
15°	6688	6787	6818
20°	6748	6897	6950
25°	6484	6665	6675
30°	6439	6618	6564
35°	6041	6232	6017
40°	5648	5661	5328
45°	4633	4535	4079
50°	4022	3880	3472
55°	3399	3009	2939
60°	2831	2171	2541
65°	2489	1558	2241
70°	1978	1264	1797
75°	1761	1398	1622
80°	1687	1903	1631
85°	2400	2615	2295



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	144.7	4.5	2.3	0°	1472	1472	1472	1472	1472	
10°-20°	423.8	13.3	6.6	5°	1535	1529	1535	1537	1529	145
20°-30°	638.8	20.0	10.0	15°	1482	1482	1504	1510	1511	419
30°-40°	717.7	22.4	11.2	25°	1348	1355	1386	1395	1388	626
40°-50°	573.8	17.9	9.0	35°	1135	1153	1171	1153	1131	711
50°-60°	366.6	11.5	5.7	45°	752	742	736	694	662	595
60°-70°	187.2	5.9	2.9	55°	447	420	396	390	387	405
70°-80°	99.1	3.1	1.5	65°	241	180	151	170	217	238
80°-90°	46.3	1.4	0.7	75°	105	90	83	85	96	114
90°-100°	0.0	0.0	0.0	85°	48	48	52	44	46	44
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°	1207.3	37.8	18.9							
0°-40°	1925.0	60.2	30.1							
0°-60°	2865.3	89.6	44.8							
0°-90°	3197.9	100.0	50.0							
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°	3197.9	100.0	50.0							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1471.8	1471.8	1471.8	1471.8	1471.8
5°	1535.3	1529.4	1534.9	1537.2	1529.4
10°	1503.4	1495.2	1507.4	1513.6	1513.6
15°	1482.1	1481.7	1504.2	1510.5	1511.0
20°	1454.8	1461.4	1487.0	1500.7	1498.4
25°	1348.2	1355.4	1386.0	1395.1	1388.0
30°	1279.3	1293.9	1315.0	1312.8	1304.2
35°	1135.4	1153.3	1171.2	1153.3	1130.8
40°	992.6	1001.1	994.9	964.2	936.4
45°	751.6	742.4	735.8	694.5	661.8
50°	593.1	583.0	572.2	536.7	512.1
55°	447.3	420.1	396.0	389.8	386.7
60°	324.8	272.0	249.0	253.6	291.5
65°	241.3	180.4	151.1	169.5	217.3
70°	155.2	122.9	99.2	115.8	141.0
75°	104.6	89.5	83.0	85.3	96.3
80°	67.2	82.3	75.8	73.6	65.0
85°	48.0	48.0	52.3	44.1	45.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)