

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: G3-1708-221-1

Luminaire Tested: **FUSL-N12-4-LD4-3HI-40-UNV-80/86-EDC1**

Test Date: 11/16/17



Test Information

Test Method: LM-79-08
Report Number: G3-1708-221-1
Test Lab: INNOVATION CENTER(G3)
Test Date: 11/16/17
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FUSL-N12-4-LD4-3HI-40-UNV-80/86-EDC1
Description: FUSL CONFINEMENT/CORRECTIONAL LED LUMINAIRE
Light Source: (336) NICHIA 4000K LEDS
757-GV1
Ballast/Driver: (3) OSRAM ELECTRONIC DRIVER @ 900 mA
OTi50/120-277/1A4 DIM L

Summary

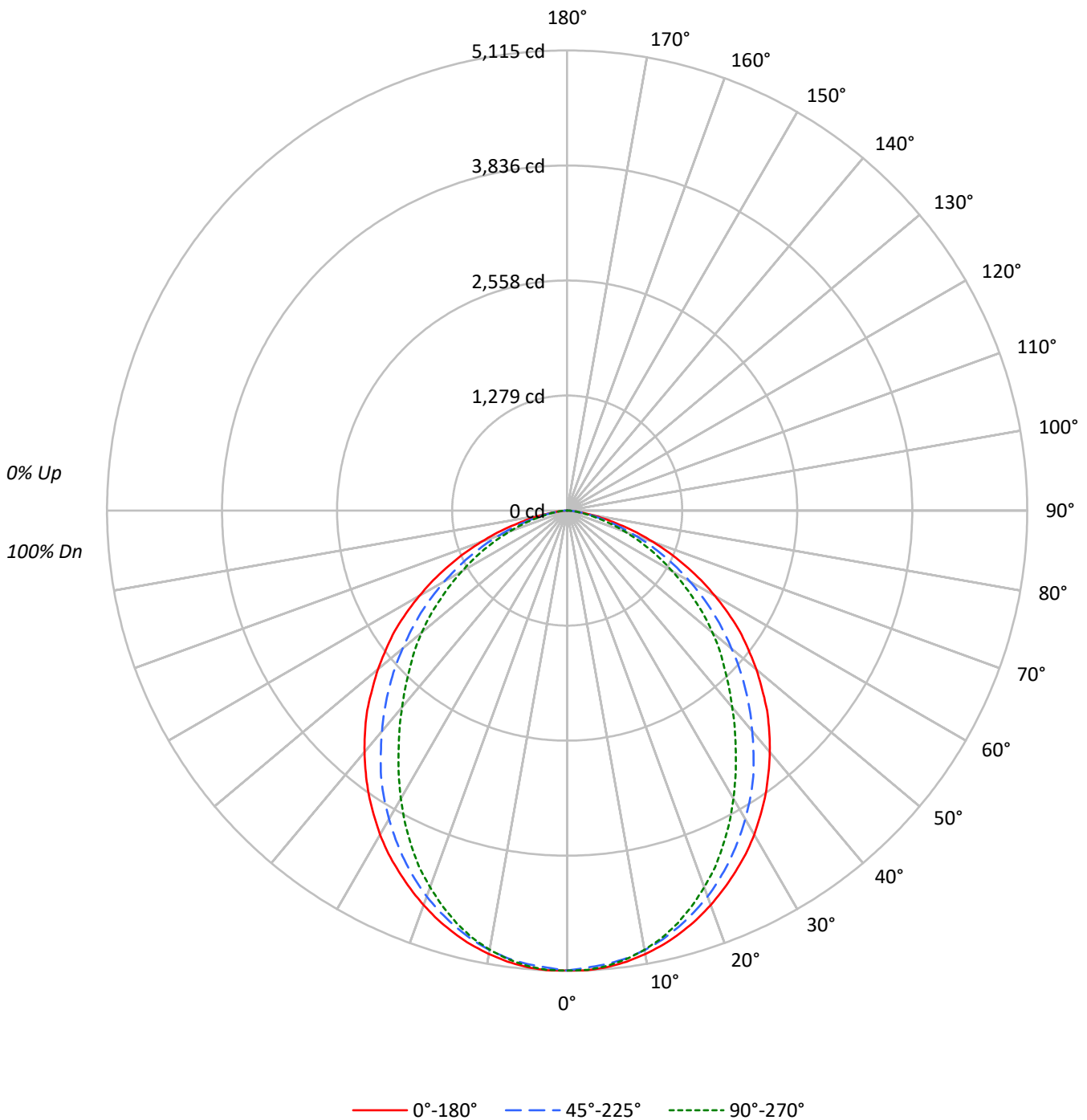
Lumens per Lamp: N/A
Luminaire Lumens: 11832.3 lumens
Efficiency: N/A
Efficacy: 92.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.1 / 1.25
Luminous Opening: Rectangular (W 0.46' x L: 3.58' x H: 0')
CIE Type: Direct

Input Watts (W): 127.8
Input Voltage (V): 120.0
Input Current (Ain): 1.07
Voltage Rise (V): NR
Power Factor: 0.9997
Total Harmonic Distortion (THDi): 7.68%
Frequency (hertz): 60
Stabilization Time: 0.5 HR
Operation Time: 7 HR
Ambient Temperature (°C): 25.9
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	50	30	10	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86					86			
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73					73			
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63					63			
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	60	56	54					54			
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	49	47					47			
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42					42			
7	67	54	46	40	66	54	46	40	52	45	40	51	44	39	49	44	39	37					37			
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	33					33			
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30					30			
10	55	42	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28					28			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	33510	33510	33510
5°	33513	33296	33428
10°	33315	33016	32989
15°	32989	32508	32209
20°	32550	31846	31072
25°	32021	30980	29663
30°	31475	29961	27971
35°	30779	28867	26139
40°	29987	27386	24418
45°	29131	25971	22884
50°	27988	24328	21514
55°	26772	22670	19676
60°	24866	20619	17696
65°	22455	18315	15647
70°	19412	15292	13126
75°	15269	11851	10332
80°	10077	8115	7398
85°	4587	5339	6016



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	481.7	4.1
10°-20°	1352.8	11.4
20°-30°	1970.4	16.7
30°-40°	2240.0	18.9
40°-50°	2167.9	18.3
50°-60°	1799.4	15.2
60°-70°	1196.3	10.1
70°-80°	527.9	4.5
80°-90°	95.9	0.8
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	3804.9	32.2
0°-40°	6044.9	51.1
0°-60°	10012.2	84.6
0°-90°	11832.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11832.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5113	5113	5113	5113	5113	
5°	5094	5088	5061	5084	5081	483
15°	4862	4848	4791	4773	4747	1371
25°	4428	4410	4284	4173	4102	2041
35°	3847	3808	3608	3368	3267	2404
45°	3143	3072	2802	2567	2469	2418
55°	2343	2236	1984	1808	1722	2084
65°	1448	1362	1181	1055	1009	1437
75°	603	546	468	427	408	652
85°	61	68	71	77	80	97
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5113	5113	5113	5113	5113
2.5°	5115	5110	5085	5111	5110
5°	5094	5088	5061	5084	5081
7.5°	5058	5051	5021	5036	5029
10°	5006	4998	4961	4968	4957
12.5°	4942	4932	4885	4879	4865
15°	4862	4848	4791	4773	4747
17.5°	4771	4759	4682	4651	4610
20°	4667	4653	4566	4496	4455
22.5°	4551	4532	4429	4346	4293
25°	4428	4410	4284	4173	4102
27.5°	4302	4278	4126	3993	3908
30°	4159	4123	3959	3789	3696
32.5°	4004	3973	3789	3578	3484
35°	3847	3808	3608	3368	3267
37.5°	3677	3632	3402	3162	3062
40°	3505	3456	3201	2958	2854
42.5°	3326	3263	3004	2764	2660
45°	3143	3072	2802	2567	2469
47.5°	2938	2866	2599	2374	2299
50°	2745	2666	2386	2188	2110
52.5°	2539	2455	2185	1998	1921
55°	2343	2236	1984	1808	1722
57.5°	2120	2023	1781	1611	1536
60°	1897	1796	1573	1426	1350
62.5°	1679	1584	1375	1241	1178
65°	1448	1362	1181	1055	1009
67.5°	1232	1141	987	887	838
70°	1013	933	798	717	685
72.5°	809	733	629	566	535
75°	603	546	468	427	408
77.5°	426	384	332	304	290
80°	267	246	215	202	196
82.5°	148	140	128	127	125
85°	61	68	71	77	80
87.5°	16	31	41	43	45
90°	0	0	0	0	0

(END OF REPORT)