

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: P27110

Luminaire Tested: **FUSL-N12-2-LD4-1HI-40-UNV-80/86**

Test Date: 11/21/15



Test Information

Test Method: LM-79-08
Report Number: P27110
Test Lab: INNOVATION CENTER-P2
Test Date: 11/21/15
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FUSL-N12-2-LD4-1HI-40-UNV-80/86
Description: FAILSAFE LED 2' FUSL SLOPE SIDED CLAMSHELL CORRECTIONAL
FIXTURE
Light Source: (42) NICHIA 4000K LEDS
2UT217042A8404A
Ballast/Driver: (1) OSRAM ELECTRONIC DRIVER
OSRAM OT25W

Summary

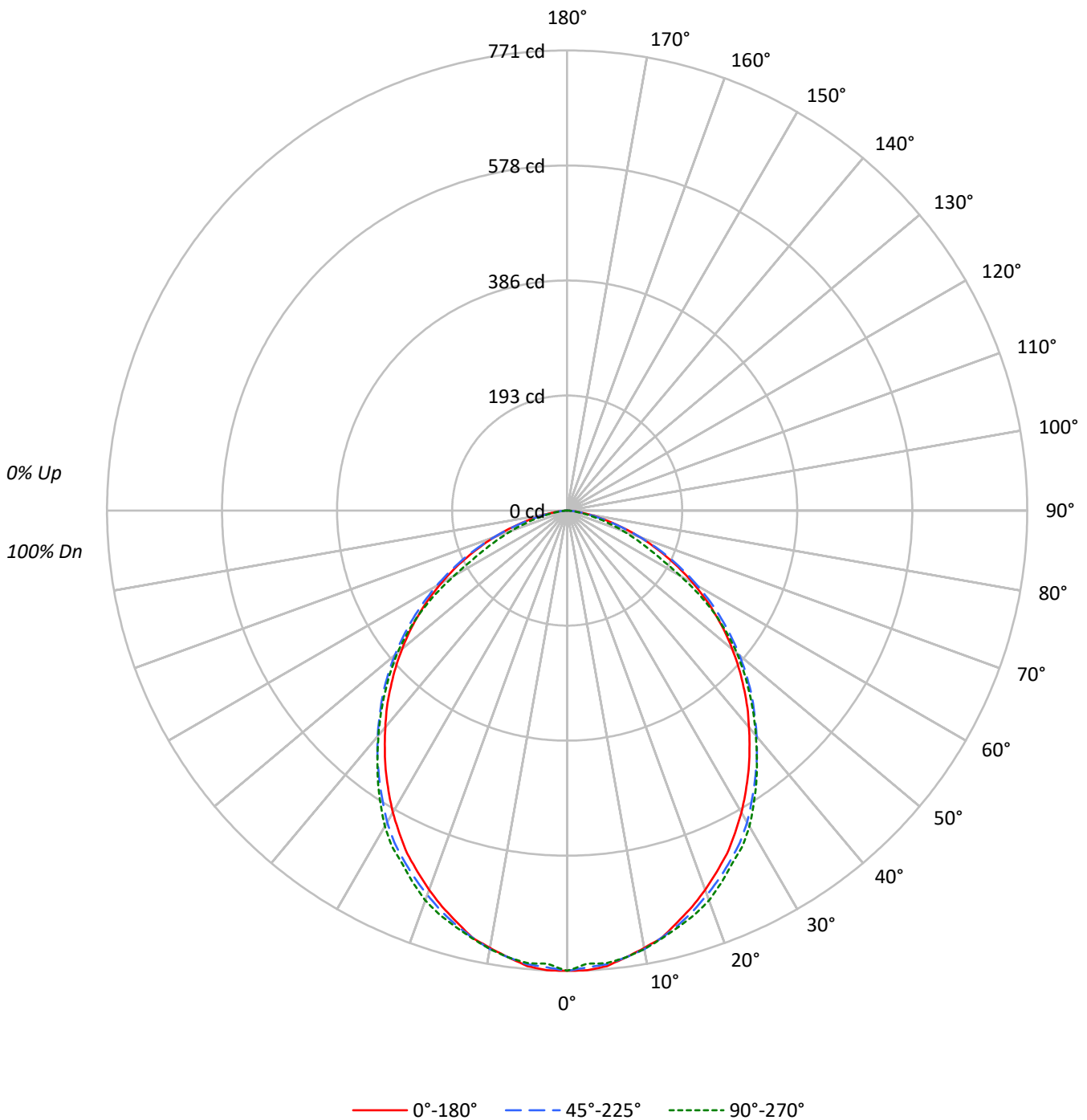
Lumens per Lamp: N/A
Luminaire Lumens: 1787.4 lumens
Efficiency: N/A
Efficacy: 80.2 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.18 / 1.27
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 22.3
Input Voltage (V): 120.00
Input Current (A_{in}): 0.18680
Voltage Rise (V): NR
Power Factor: 0.9975
Total Harmonic Distortion (THDi): 5.54%
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: 24 HR
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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	66	61	56	54
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	50	48
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42
7	67	55	46	40	66	54	46	40	52	45	40	51	44	39	49	44	39	37
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	33
9	59	46	38	33	57	45	38	33	44	37	32	43	37	32	42	36	32	30
10	55	42	35	30	54	42	35	30	41	34	29	40	34	29	39	33	29	28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4149	4149	4149
5°	4138	4122	4111
10°	4066	4077	4077
15°	3978	4006	4023
20°	3872	3923	3981
25°	3765	3842	3878
30°	3629	3747	3797
35°	3482	3607	3633
40°	3330	3471	3457
45°	3181	3326	3288
50°	3023	3157	3106
55°	2843	2956	2843
60°	2626	2723	2357
65°	2356	2432	1897
70°	2030	2046	1558
75°	1601	1560	1206
80°	1085	1023	806
85°	618	556	494



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.2	4.0
10°-20°	202.4	11.3
20°-30°	296.9	16.6
30°-40°	340.5	19.1
40°-50°	332.0	18.6
50°-60°	276.3	15.5
60°-70°	177.6	9.9
70°-80°	76.5	4.3
80°-90°	12.9	0.7
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°	571.6	32.0
0°-40°	912.1	51.0
0°-60°	1520.3	85.1
0°-90°	1787.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1787.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	771	771	771	771	771	
5°	766	764	763	760	761	72
15°	714	714	719	722	722	201
25°	634	635	647	654	653	291
35°	530	533	549	555	553	331
45°	418	425	437	435	432	323
55°	303	310	315	312	303	271
65°	185	189	191	165	149	184
75°	77	79	75	61	58	83
85°	10	10	9	8	8	14
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	771	771	771	771	771
2.5°	771	769	766	762	760
5°	766	764	763	760	761
7.5°	755	755	755	754	755
10°	744	745	746	744	746
12.5°	733	731	733	731	734
15°	714	714	719	722	722
17.5°	696	698	703	709	710
20°	676	678	685	690	695
22.5°	655	658	667	674	675
25°	634	635	647	654	653
27.5°	609	612	627	632	635
30°	584	586	603	610	611
32.5°	557	559	576	584	582
35°	530	533	549	555	553
37.5°	502	506	522	526	522
40°	474	479	494	496	492
42.5°	447	452	465	465	462
45°	418	425	437	435	432
47.5°	390	397	407	406	402
50°	361	369	377	375	371
52.5°	333	340	346	344	338
55°	303	310	315	312	303
57.5°	274	280	284	278	263
60°	244	250	253	240	219
62.5°	215	221	222	201	179
65°	185	189	191	165	149
67.5°	157	160	161	133	123
70°	129	132	130	106	99
72.5°	102	104	101	82	77
75°	77	79	75	61	58
77.5°	54	56	52	43	40
80°	35	37	33	28	26
82.5°	21	21	19	16	16
85°	10	10	9	8	8
87.5°	3	4	4	4	4
90°	0	0	0	0	0

(END OF REPORT)