

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: P27112

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

Test Date: 11/21/15



Test Information

Test Method: LM-79-08
Report Number: P27112
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-LD4-1LO-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

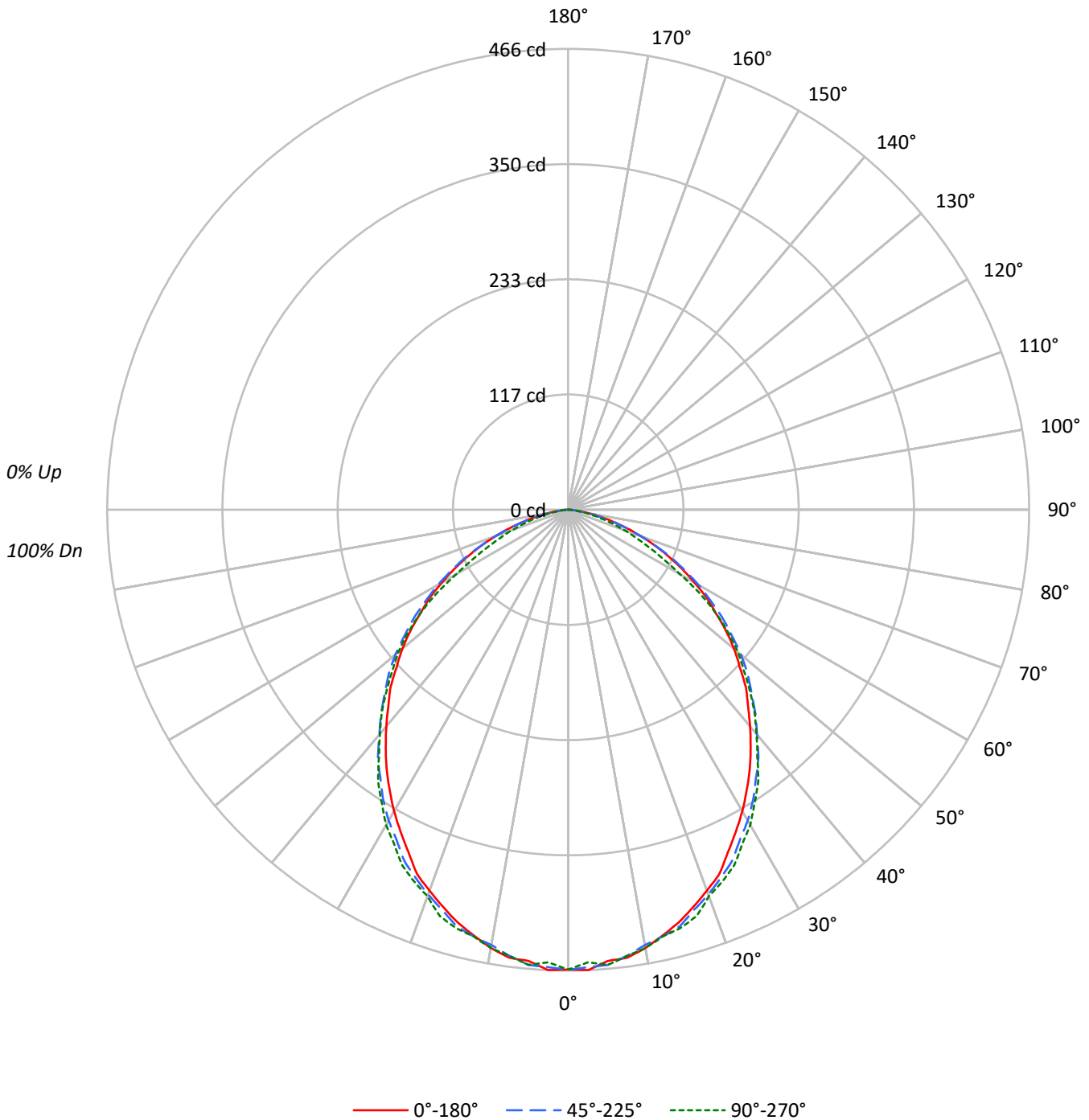
Lumens per Lamp: N/A
Luminaire Lumens: 1078.4 lumens
Efficiency: N/A
Efficacy: 84.9 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.18 / 1.27
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 12.7
Input Voltage (V): 120.04
Input Current (A_{in}): 0.10685
Voltage Rise (V): NR
Power Factor: 0.9916
Total Harmonic Distortion (THDi): 6.70%
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	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	66	61	56	54					54			
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	50	48					48			
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42					42			
7	67	55	46	40	66	54	46	40	52	45	40	51	44	40	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	57	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	29	40	34	29	39	33	29	28					28			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2503	2503	2503
5°	2474	2496	2496
10°	2459	2443	2459
15°	2407	2429	2440
20°	2348	2371	2383
25°	2268	2328	2358
30°	2188	2256	2287
35°	2102	2175	2201
40°	2009	2087	2080
45°	1933	1994	1979
50°	1834	1909	1876
55°	1708	1783	1708
60°	1582	1636	1410
65°	1426	1465	1146
70°	1227	1227	944
75°	977	936	728
80°	682	620	496
85°	371	309	309



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.6	4.0
10°-20°	122.2	11.3
20°-30°	179.3	16.6
30°-40°	205.5	19.1
40°-50°	200.2	18.6
50°-60°	166.5	15.4
60°-70°	107.0	9.9
70°-80°	46.2	4.3
80°-90°	7.9	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°	345.1	32.0
0°-40°	550.6	51.1
0°-60°	917.4	85.1
0°-90°	1078.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1078.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	465	465	465	465	465	
5°	458	461	462	460	462	44
15°	432	433	436	433	438	122
25°	382	382	392	396	397	176
35°	320	322	331	336	335	200
45°	254	256	262	263	260	195
55°	182	187	190	187	182	164
65°	112	115	115	99	90	111
75°	47	48	45	37	35	51
85°	6	6	5	5	5	8
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	465	465	465	465	465
2.5°	466	464	463	460	458
5°	458	461	462	460	462
7.5°	457	456	455	454	455
10°	450	449	447	449	450
12.5°	441	440	442	442	442
15°	432	433	436	433	438
17.5°	421	422	424	427	431
20°	410	409	414	419	416
22.5°	399	398	403	406	407
25°	382	382	392	396	397
27.5°	367	370	376	384	381
30°	352	353	363	367	368
32.5°	336	338	348	354	351
35°	320	322	331	336	335
37.5°	303	305	316	317	314
40°	286	289	297	299	296
42.5°	269	274	280	280	279
45°	254	256	262	263	260
47.5°	235	240	246	245	241
50°	219	222	228	226	224
52.5°	201	206	208	207	204
55°	182	187	190	187	182
57.5°	166	171	170	167	158
60°	147	151	152	145	131
62.5°	130	133	133	120	109
65°	112	115	115	99	90
67.5°	95	97	96	80	74
70°	78	80	78	63	60
72.5°	62	63	61	49	47
75°	47	48	45	37	35
77.5°	33	34	31	26	24
80°	22	22	20	17	16
82.5°	12	13	11	10	9
85°	6	6	5	5	5
87.5°	2	2	3	3	3
90°	0	0	0	0	0

(END OF REPORT)