

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: P#

Luminaire Tested: **FLDSQ4C60D010 FEU4C609040 F4LC-SQ-H**

Issue Date: 12/13/2022

Tested By:

Approved By:



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Test Information

Test Method: LM-79-08
Report Number: P#
Test Lab: INNOVATION CENTER
Issue Date: 12/13/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FLDSQ4C60D010 FEU4C609040 F4LC-SQ-H
Description: 4 INCH 6000 LUMEN FAIL-SAFE LED DOWNLIGHT WITH, 4000K, 90CRI LEDS
AND F4LC-SQ TRIM WITH H FINISH
Light Source: -
Ballast/Driver: -

Summary

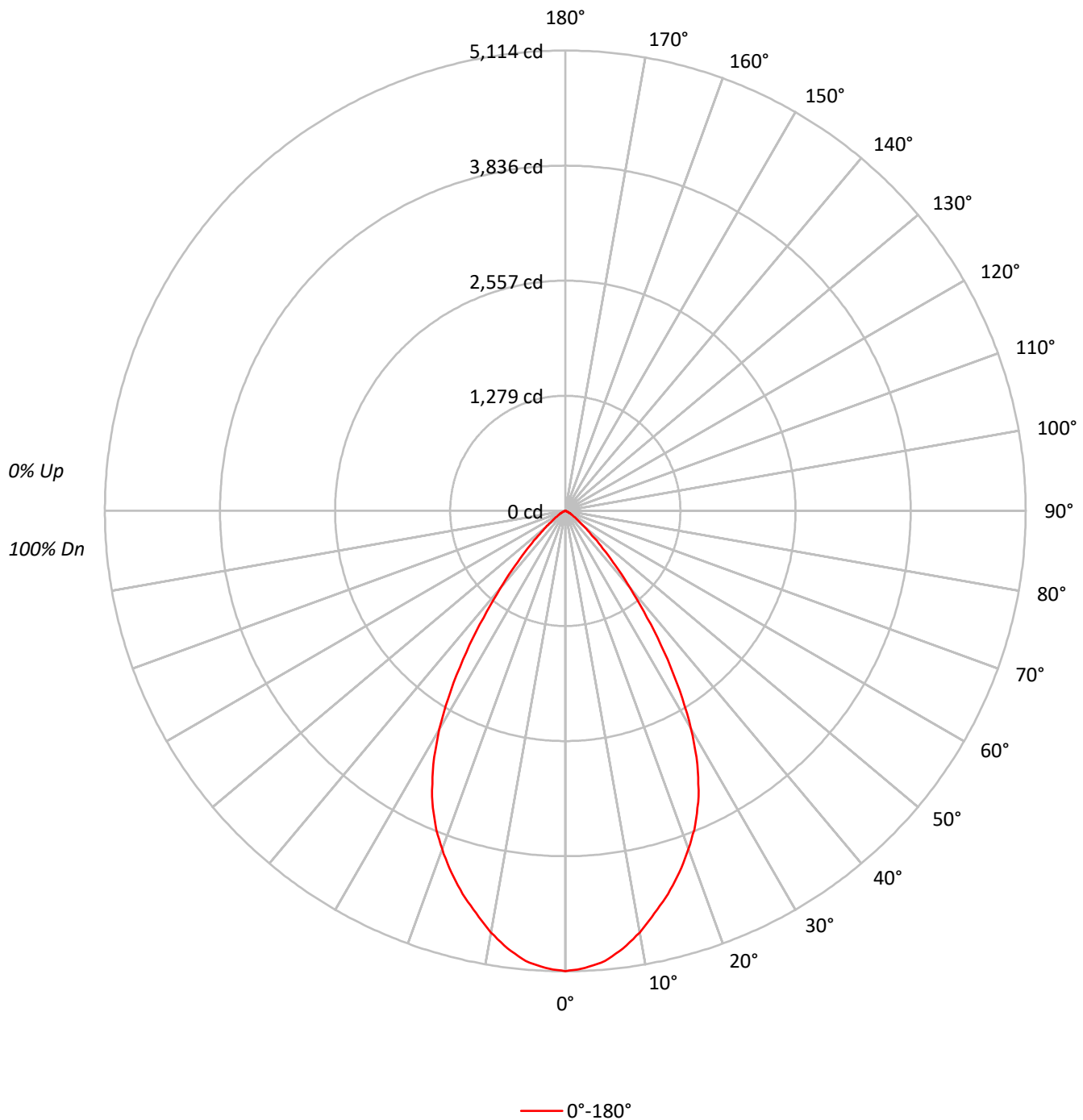
Lumens per Lamp: N/A
Luminaire Lumens: 5157.0 lumens
Efficiency: N/A
Efficacy: 71.6 lumens/watt
Spacing Criteria (0/90/45): 0.95 / 0.95 / 0.93
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 72
Input Voltage (V):
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

Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	GONIO 1 IN0055	4/22/2021	10/22/2021
Power Meter	XITRON 2801 IN0197	12/1/2020	12/1/2021
AC Power Source	CHROMA 61505 IN0196	12/1/2020	12/1/2021
DC Power Supply	AGILENT E3634A IN0198	11/30/2020	11/30/2021
Room Thermometer	ONSET IN0143	12/1/2020	12/1/2021

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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
RW	70	50	30	10	70	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		100
1	113	110	108	105	111	108	106	104	104	102	100		100	99	97		93
2	107	102	98	94	105	100	96	93	97	94	91		94	91	89		85
3	101	94	89	85	99	93	88	84	90	86	83		88	84	82		79
4	96	88	82	77	94	86	81	77	84	80	76		82	78	75		73
5	90	82	75	71	89	81	75	70	79	74	70		77	73	69		67
6	86	76	70	65	84	75	69	65	74	68	64		72	68	64		62
7	81	71	65	60	80	70	64	60	69	64	60		68	63	59		58
8	77	67	60	56	75	66	60	56	65	59	56		64	59	55		54
9	73	63	56	52	72	62	56	52	61	56	52		60	55	52		50
10	69	59	53	49	68	59	53	49	58	52	49		57	52	48		47

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	493396
5°	486224
10°	465912
15°	440057
20°	410766
25°	372879
30°	311318
35°	225535
40°	141186
45°	80700
50°	42076
55°	23585
60°	15033
65°	8881
70°	6601
75°	2908
80°	4334
85°	0

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	470.5	9.1
10°-20°	1234.4	23.9
20°-30°	1586.4	30.8
30°-40°	1193.6	23.1
40°-50°	479.4	9.3
50°-60°	136.3	2.6
60°-70°	43.1	0.8
70°-80°	12.3	0.2
80°-90°	1.1	0.0
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°	3291.3	63.8
0°-40°	4484.9	87.0
0°-60°	5100.5	98.9
0°-90°	5157.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5157.0	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	5114	
5°	5020	471
15°	4405	1234
25°	3502	1586
35°	1915	1194
45°	591	479
55°	140	136
65°	39	43
75°	8	12
85°	0	1
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	5113.5
2.5°	5082.3
5°	5020.0
7.5°	4903.3
10°	4755.3
12.5°	4576.6
15°	4405.3
17.5°	4210.6
20°	4000.4
22.5°	3774.9
25°	3502.4
27.5°	3175.4
30°	2794.2
32.5°	2366.0
35°	1914.7
37.5°	1494.3
40°	1120.9
42.5°	825.0
45°	591.4
47.5°	404.9
50°	280.3
52.5°	194.7
55°	140.2
57.5°	101.2
60°	77.9
62.5°	54.5
65°	38.9
67.5°	31.1
70°	23.4
72.5°	15.6
75°	7.8
77.5°	7.8
80°	7.8
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0

(END OF REPORT)