

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: **FLDSQ4C35D010 FEU4C359050 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: FLDSQ4C35D010 FEU4C359050 F4LC-SQ-H
Description: 4 INCH 3500 LUMEN FAIL-SAFE LED DOWNLIGHT WITH, 5000K, 90CRI LEDS
AND F4LC-SQ TRIM WITH H FINISH
Light Source: -
Ballast/Driver: -

Summary

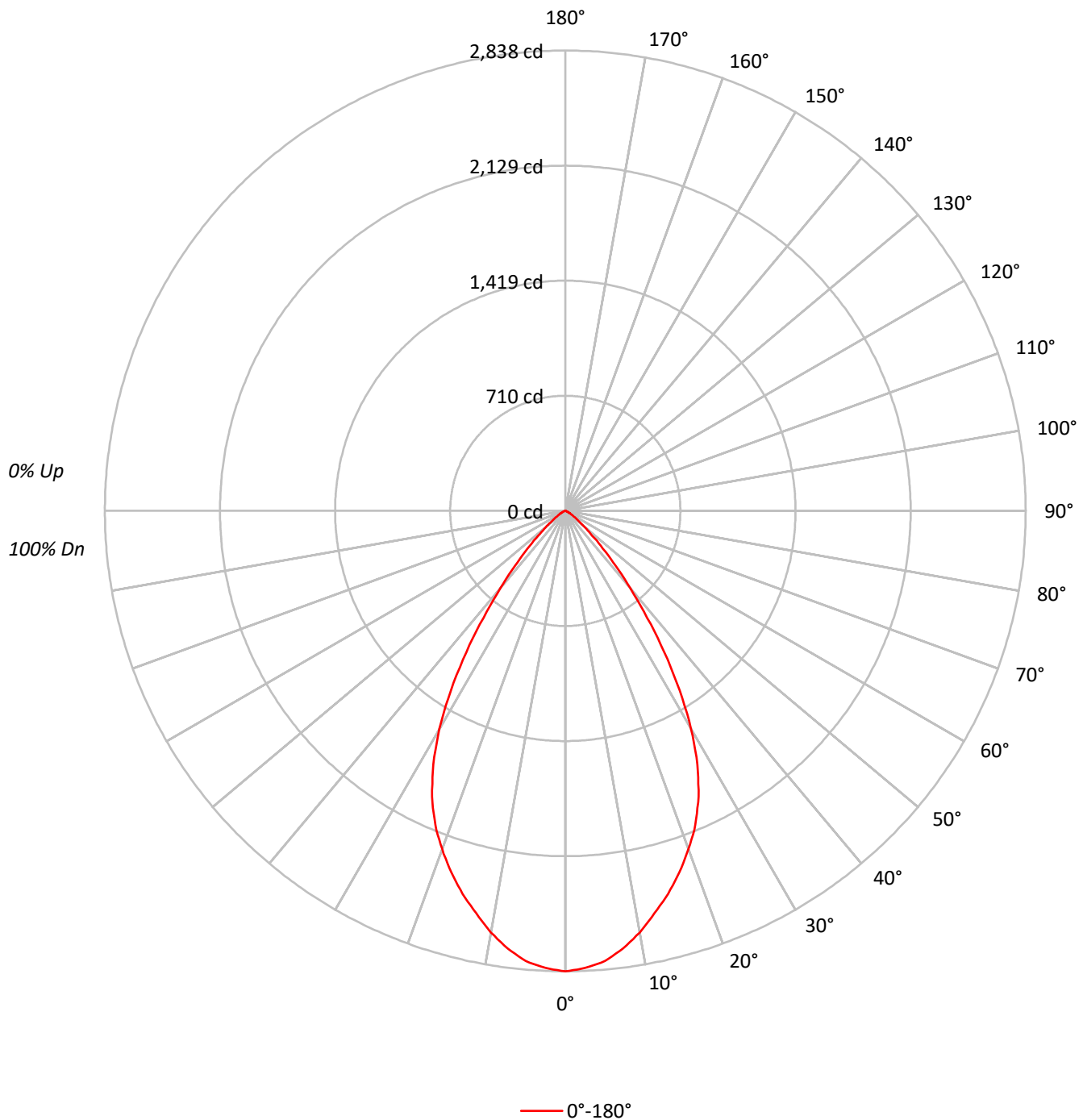
Lumens per Lamp: N/A
Luminaire Lumens: 2862.0 lumens
Efficiency: N/A
Efficacy: 70.8 lumens/watt
Spacing Criteria (0/90/45): 0.95 / 0.95 / 0.93
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 40.4
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°	273826
5°	269845
10°	258572
15°	244218
20°	227963
25°	206944
30°	172772
35°	125165
40°	78358
45°	44785
50°	23357
55°	13088
60°	8337
65°	4932
70°	3667
75°	1603
80°	2389
85°	0

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	261.1	9.1
10°-20°	685.1	23.9
20°-30°	880.4	30.8
30°-40°	662.4	23.1
40°-50°	266.0	9.3
50°-60°	75.6	2.6
60°-70°	23.9	0.8
70°-80°	6.8	0.2
80°-90°	0.6	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°	1826.6	63.8
0°-40°	2489.0	87.0
0°-60°	2830.7	98.9
0°-90°	2862.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2862.0	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2838	
5°	2786	261
15°	2445	685
25°	1944	880
35°	1063	662
45°	328	266
55°	78	76
65°	22	24
75°	4	7
85°	0	1
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	2837.9
2.5°	2820.6
5°	2786.0
7.5°	2721.2
10°	2639.1
12.5°	2539.9
15°	2444.8
17.5°	2336.8
20°	2220.1
22.5°	2095.0
25°	1943.8
27.5°	1762.3
30°	1550.7
32.5°	1313.1
35°	1062.6
37.5°	829.3
40°	622.1
42.5°	457.9
45°	328.2
47.5°	224.7
50°	155.6
52.5°	108.0
55°	77.8
57.5°	56.2
60°	43.2
62.5°	30.2
65°	21.6
67.5°	17.3
70°	13.0
72.5°	8.6
75°	4.3
77.5°	4.3
80°	4.3
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0

(END OF REPORT)