

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 FEU4C359040 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 FEU4C359040 F4LC-SQ-H
Description: 4 INCH 3500 LUMEN FAIL-SAFE LED DOWNLIGHT WITH, 4000K, 90CRI LEDS
AND F4LC-SQ TRIM WITH H FINISH
Light Source: -
Ballast/Driver: -

Summary

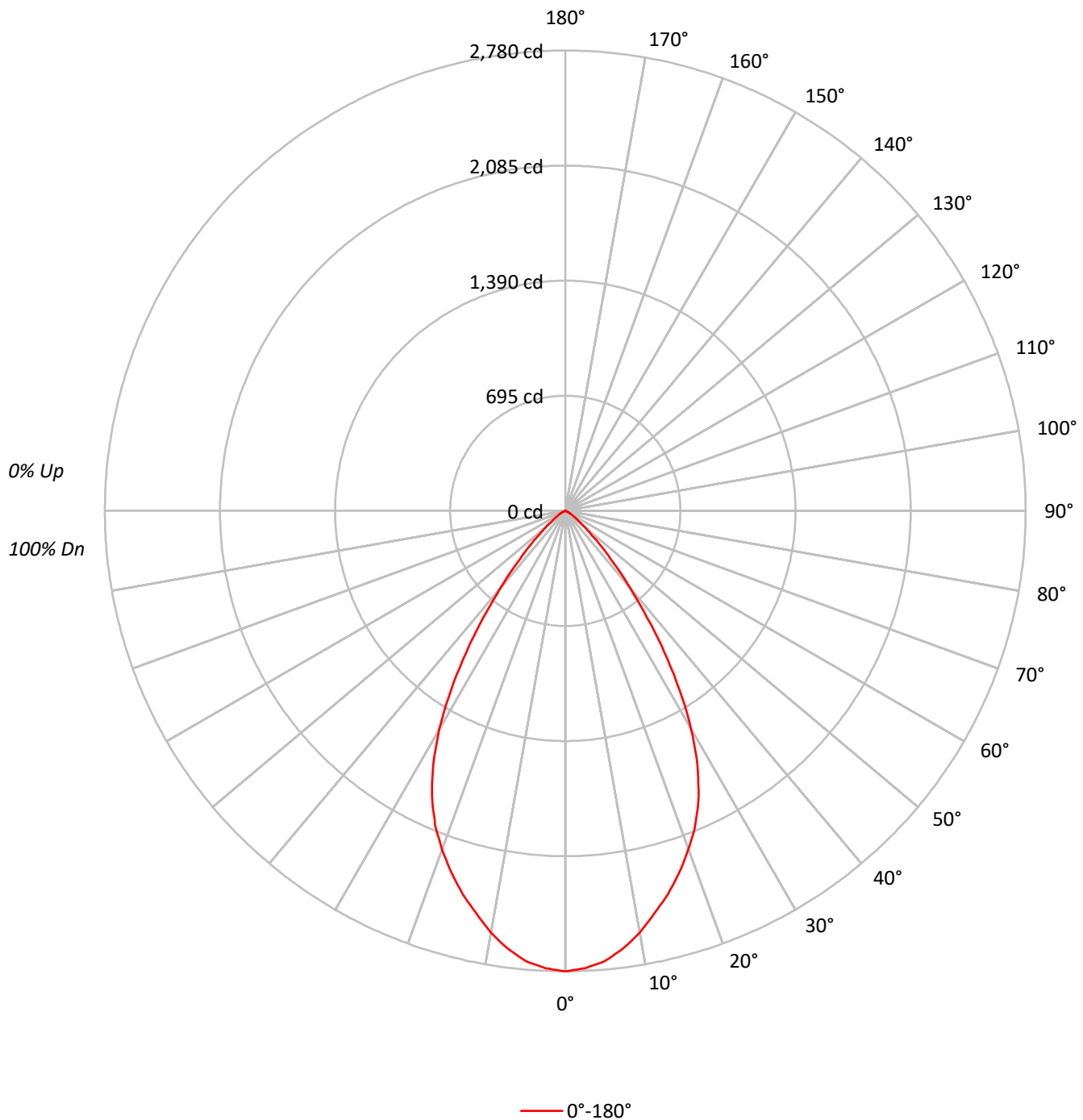
Lumens per Lamp: N/A
Luminaire Lumens: 2804.0 lumens
Efficiency: N/A
Efficacy: 69.4 lumens/watt
Spacing Criteria (0/90/45): 0.95 / 0.95 / 0.93
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

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		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	113	110	108	105	111	108	106	104	104	102	100		100	99	97		97
2	107	102	98	94	105	100	96	93	97	94	91		94	91	89		91
3	101	94	89	85	99	93	88	84	90	86	83		88	84	82		86
4	96	88	82	77	94	86	81	77	84	80	76		82	78	75		80
5	90	82	75	71	89	81	75	70	79	74	70		77	73	69		75
6	86	76	70	65	84	75	69	65	74	68	64		72	68	64		71
7	81	71	65	60	80	70	64	60	69	64	60		68	63	59		67
8	77	67	60	56	75	66	60	56	65	59	56		64	59	55		63
9	73	63	56	52	72	62	56	52	61	56	52		60	55	52		59
10	69	59	53	49	68	59	53	49	58	52	49		57	52	48		56

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	268268
5°	264372
10°	253330
15°	239273
20°	223342
25°	202749
30°	169274
35°	122632
40°	76771
45°	43884
50°	22877
55°	12819
60°	8163
65°	4840
70°	3583
75°	1566
80°	2334
85°	0

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	255.8	9.1
10°-20°	671.2	23.9
20°-30°	862.6	30.8
30°-40°	649.0	23.1
40°-50°	260.6	9.3
50°-60°	74.1	2.6
60°-70°	23.4	0.8
70°-80°	6.7	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°	1789.6	63.8
0°-40°	2438.5	87.0
0°-60°	2773.3	98.9
0°-90°	2804.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2804.0	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2780	
5°	2730	256
15°	2395	671
25°	1904	863
35°	1041	649
45°	322	261
55°	76	74
65°	21	23
75°	4	7
85°	0	1
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	2780.3
2.5°	2763.4
5°	2729.5
7.5°	2666.0
10°	2585.6
12.5°	2488.4
15°	2395.3
17.5°	2289.4
20°	2175.1
22.5°	2052.5
25°	1904.4
27.5°	1726.6
30°	1519.3
32.5°	1286.4
35°	1041.1
37.5°	812.5
40°	609.5
42.5°	448.6
45°	321.6
47.5°	220.1
50°	152.4
52.5°	105.8
55°	76.2
57.5°	55.0
60°	42.3
62.5°	29.6
65°	21.2
67.5°	16.9
70°	12.7
72.5°	8.5
75°	4.2
77.5°	4.2
80°	4.2
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0

(END OF REPORT)