

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 FEU4C359030 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 FEU4C359030 F4LC-SQ-H
Description: 4 INCH 3500 LUMEN FAIL-SAFE LED DOWNLIGHT WITH, 3000K, 90CRI LEDS
AND F4LC-SQ TRIM WITH H FINISH
Light Source: -
Ballast/Driver: -

Summary

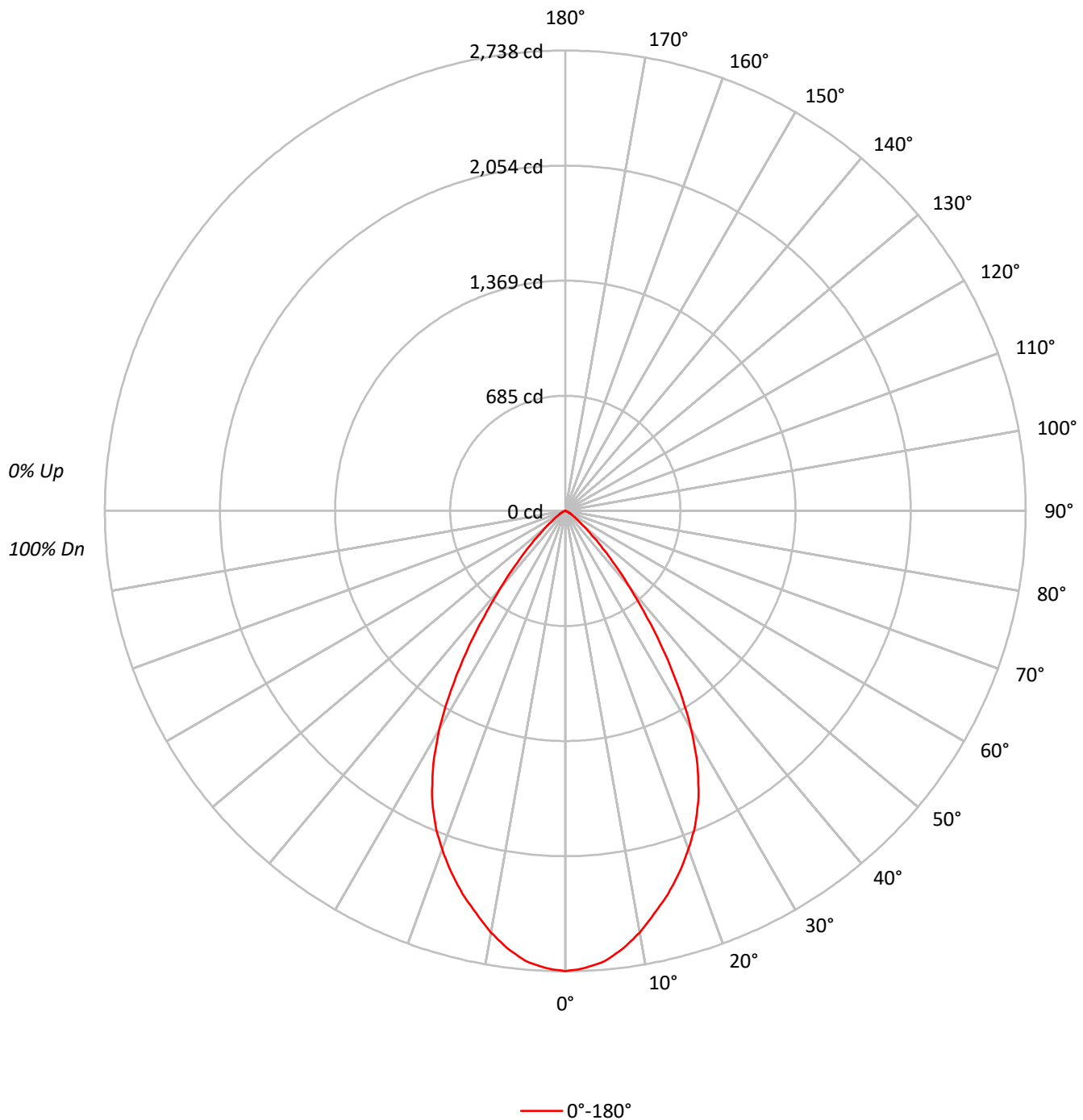
Lumens per Lamp: N/A
Luminaire Lumens: 2761.0 lumens
Efficiency: N/A
Efficacy: 68.3 lumens/watt
Spacing Criteria (0/90/45): 0.95 / 0.95 / 0.93
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

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°	264158
5°	260324
10°	249441
15°	235597
20°	219923
25°	199641
30°	166678
35°	120748
40°	75587
45°	43202
50°	22532
55°	12617
60°	8047
65°	4749
70°	3526
75°	1566
80°	2334
85°	0

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	251.9	9.1
10°-20°	660.9	23.9
20°-30°	849.4	30.8
30°-40°	639.0	23.1
40°-50°	256.6	9.3
50°-60°	73.0	2.6
60°-70°	23.1	0.8
70°-80°	6.6	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°	1762.1	63.8
0°-40°	2401.1	87.0
0°-60°	2730.8	98.9
0°-90°	2761.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2761.0	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2738	
5°	2688	252
15°	2358	661
25°	1875	849
35°	1025	639
45°	317	257
55°	75	73
65°	21	23
75°	4	7
85°	0	1
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	2737.7
2.5°	2721.0
5°	2687.7
7.5°	2625.1
10°	2545.9
12.5°	2450.3
15°	2358.5
17.5°	2254.3
20°	2141.8
22.5°	2021.1
25°	1875.2
27.5°	1700.1
30°	1496.0
32.5°	1266.7
35°	1025.1
37.5°	800.0
40°	600.1
42.5°	441.7
45°	316.6
47.5°	216.8
50°	150.1
52.5°	104.2
55°	75.0
57.5°	54.2
60°	41.7
62.5°	29.2
65°	20.8
67.5°	16.7
70°	12.5
72.5°	8.3
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)