

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: **FLDSQ4C75D010 FEU4C759050 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: FLDSQ4C75D010 FEU4C759050 F4LC-SQ-H
 Description: 4 INCH 7500 LUMEN FAIL-SAFE LED DOWNLIGHT WITH, 5000K, 90CRI LEDS AND F4LC-SQ TRIM WITH H FINISH
 Light Source: -
 Ballast/Driver: -

Summary

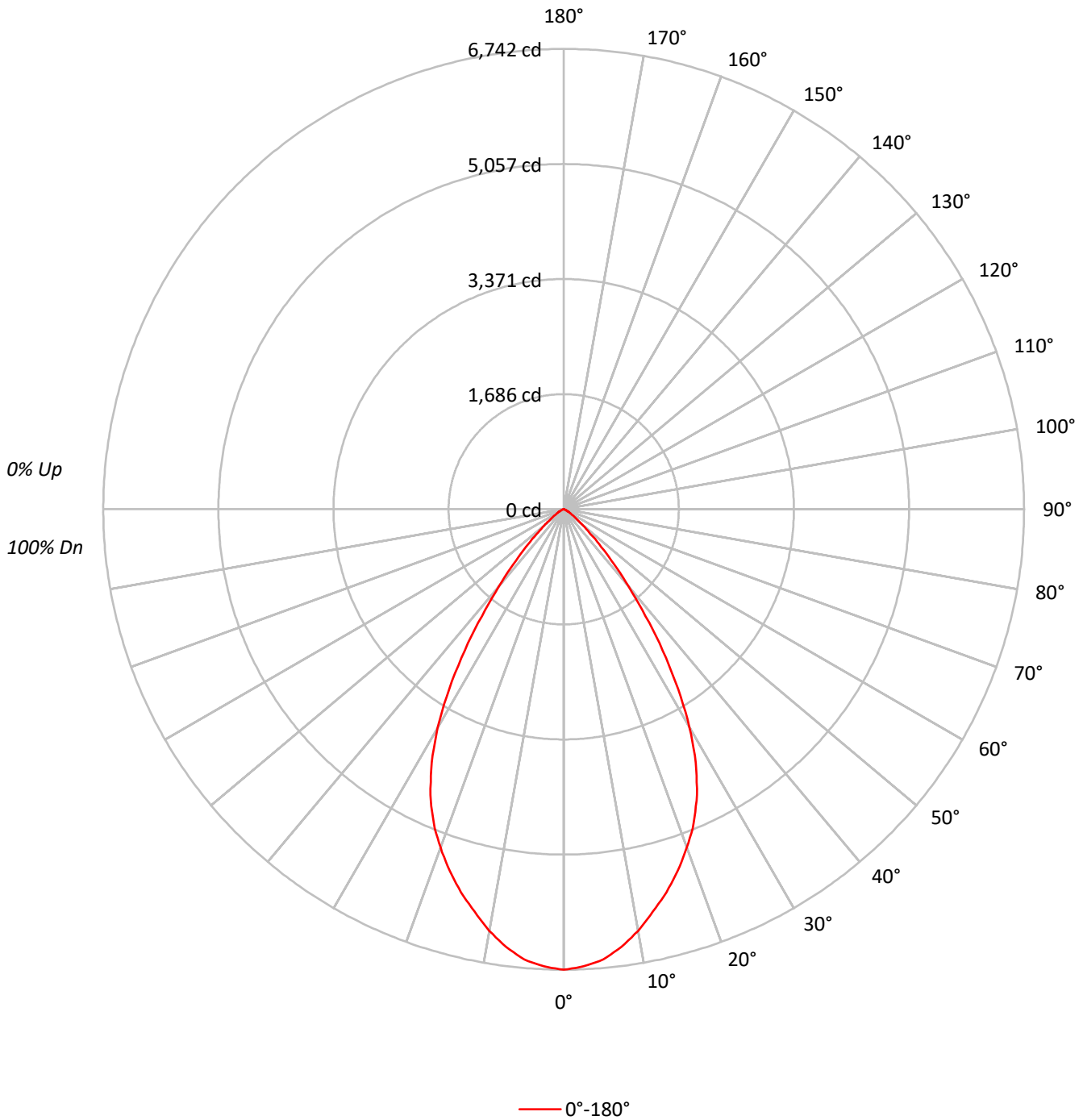
Lumens per Lamp: N/A
 Luminaire Lumens: 6799.1 lumens
 Efficiency: N/A
 Efficacy: 83.4 lumens/watt
 Spacing Criteria (0/90/45): 0.95 / 0.95 / 0.93
 Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
 CIE Type: Direct

Input Watts (W): 81.5
 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	0
RW	70	50	30	10	70	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
1	113	110	108	105	111	108	106	104	104	102	100	100	99	97	97	96	95	93
2	107	102	98	94	105	100	96	93	97	94	91	94	91	89	91	89	87	85
3	101	94	89	85	99	93	88	84	90	86	83	88	84	82	86	83	80	79
4	96	88	82	77	94	86	81	77	84	80	76	82	78	75	80	77	74	73
5	90	82	75	71	89	81	75	70	79	74	70	77	73	69	75	72	69	67
6	86	76	70	65	84	75	69	65	74	68	64	72	68	64	71	67	64	62
7	81	71	65	60	80	70	64	60	69	64	60	68	63	59	67	62	59	58
8	77	67	60	56	75	66	60	56	65	59	56	64	59	55	63	58	55	54
9	73	63	56	52	72	62	56	52	61	56	52	60	55	52	59	55	52	50
10	69	59	53	49	68	59	53	49	58	52	49	57	52	48	56	52	48	47

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	650490
5°	641041
10°	614259
15°	580167
20°	541552
25°	491607
30°	410445
35°	297352
40°	186140
45°	106395
50°	55481
55°	31088
60°	19819
65°	11712
70°	8689
75°	3840
80°	5723
85°	0

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	620.3	9.1
10°-20°	1627.4	23.9
20°-30°	2091.5	30.8
30°-40°	1573.6	23.1
40°-50°	632.0	9.3
50°-60°	179.7	2.6
60°-70°	56.9	0.8
70°-80°	16.2	0.2
80°-90°	1.4	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°	4339.3	63.8
0°-40°	5912.9	87.0
0°-60°	6724.5	98.9
0°-90°	6799.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6799.1	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	6742	
5°	6618	620
15°	5808	1627
25°	4618	2092
35°	2524	1574
45°	780	632
55°	185	180
65°	51	57
75°	10	16
85°	0	1
90°	0	

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CANDELA DISTRIBUTION (FULL):

	0°
0°	6741.6
2.5°	6700.6
5°	6618.4
7.5°	6464.5
10°	6269.4
12.5°	6033.8
15°	5807.9
17.5°	5551.3
20°	5274.1
22.5°	4976.9
25°	4617.6
27.5°	4186.5
30°	3683.9
32.5°	3119.3
35°	2524.4
37.5°	1970.0
40°	1477.8
42.5°	1087.7
45°	779.7
47.5°	533.8
50°	369.6
52.5°	256.6
55°	184.8
57.5°	133.5
60°	102.7
62.5°	71.9
65°	51.3
67.5°	41.1
70°	30.8
72.5°	20.5
75°	10.3
77.5°	10.3
80°	10.3
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0

(END OF REPORT)