

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 FEU4C759040 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 FEU4C759040 F4LC-SQ-H
 Description: 4 INCH 7500 LUMEN FAIL-SAFE LED DOWNLIGHT WITH, 4000K, 90CRI LEDS AND F4LC-SQ TRIM WITH H FINISH
 Light Source: -
 Ballast/Driver: -

Summary

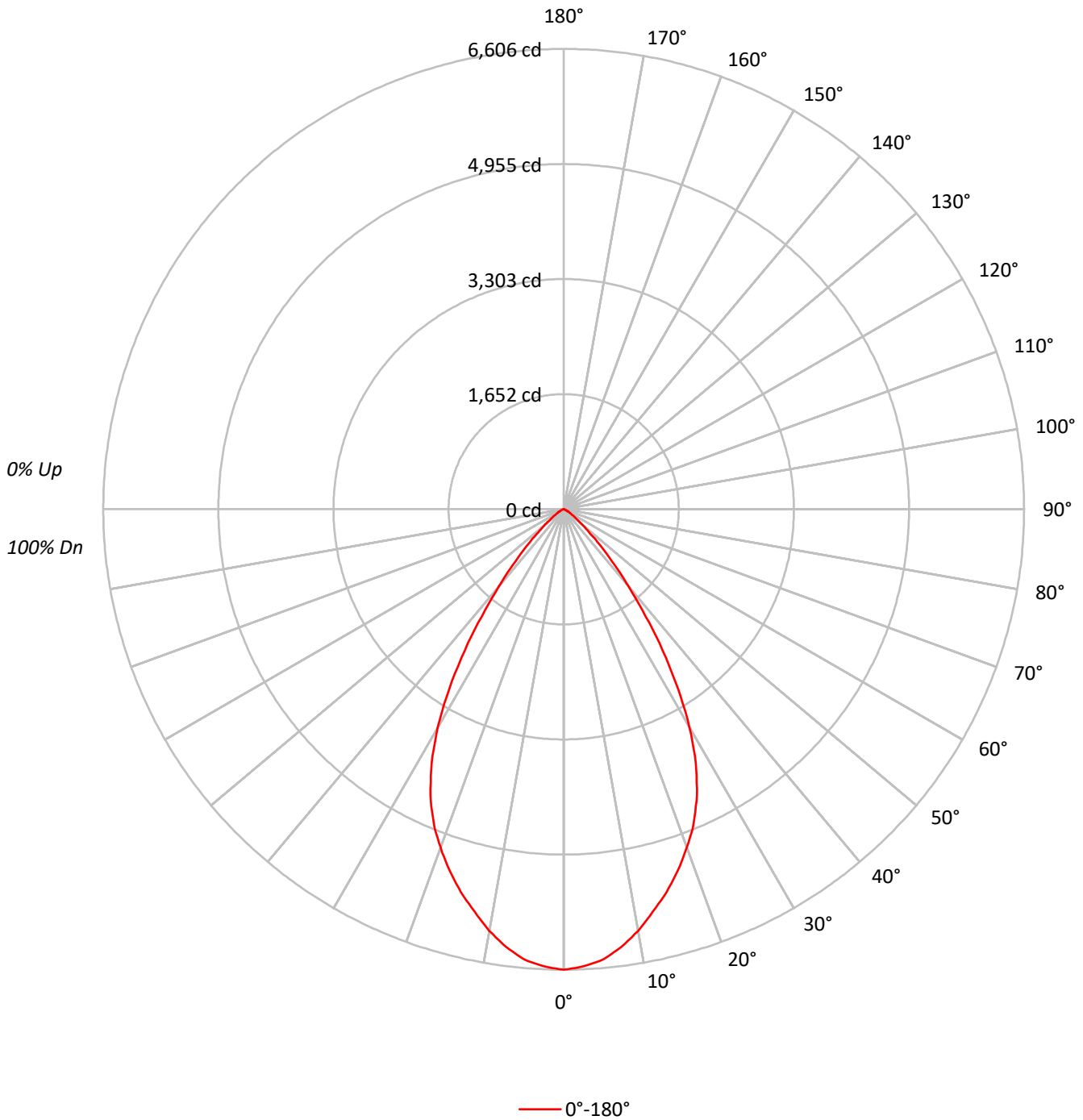
Lumens per Lamp: N/A
 Luminaire Lumens: 6662.1 lumens
 Efficiency: N/A
 Efficacy: 81.7 lumens/watt
 Spacing Criteria (0/90/45): 0.95 / 0.95 / 0.93
 Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
 CIE Type: Direct

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°	637386
5°	628130
10°	601885
15°	568479
20°	530647
25°	481706
30°	402178
35°	291357
40°	182386
45°	104252
50°	54355
55°	30465
60°	19414
65°	11484
70°	8520
75°	3765
80°	5612
85°	0

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	607.8	9.1
10°-20°	1594.6	23.9
20°-30°	2049.4	30.8
30°-40°	1541.9	23.1
40°-50°	619.3	9.3
50°-60°	176.1	2.6
60°-70°	55.7	0.8
70°-80°	15.9	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°	4251.8	63.8
0°-40°	5793.7	87.0
0°-60°	6589.0	98.9
0°-90°	6662.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6662.1	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	6606	
5°	6485	608
15°	5691	1595
25°	4525	2049
35°	2474	1542
45°	764	619
55°	181	176
65°	50	56
75°	10	16
85°	0	1
90°	0	

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CANDELA DISTRIBUTION (FULL):

	0°
0°	6605.8
2.5°	6565.6
5°	6485.1
7.5°	6334.2
10°	6143.1
12.5°	5912.2
15°	5690.9
17.5°	5439.4
20°	5167.9
22.5°	4876.6
25°	4524.6
27.5°	4102.1
30°	3609.7
32.5°	3056.5
35°	2473.5
37.5°	1930.3
40°	1448.0
42.5°	1065.8
45°	764.0
47.5°	523.0
50°	362.1
52.5°	251.5
55°	181.1
57.5°	130.8
60°	100.6
62.5°	70.4
65°	50.3
67.5°	40.2
70°	30.2
72.5°	20.1
75°	10.1
77.5°	10.1
80°	10.1
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0

(END OF REPORT)