

Scaled data based on original data using  
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: P645790

Luminaire Tested: **FLDSQ4C15D010 FEU4C159030 F4LC-SQ-WH-D2W**

Issue Date: 12/13/2022

**Test Information**

Test Method: LM-79-08  
Report Number: P645790  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2105-247-14)  
Test Lab: INNOVATION CENTER  
Issue Date: 12/13/2022  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: FLDSQ4C15D010 FEU4C159030 F4LC-SQ-WH-D2W  
Description: 4 INCH 1500 LUMEN FAIL-SAFE LED DOWNLIGHT WITH, 3000K, 90CRI LEDS AND F4LC-SQW TRIM WITH H FINISH, DIM TO WARM  
Light Source: -  
Ballast/Driver: -

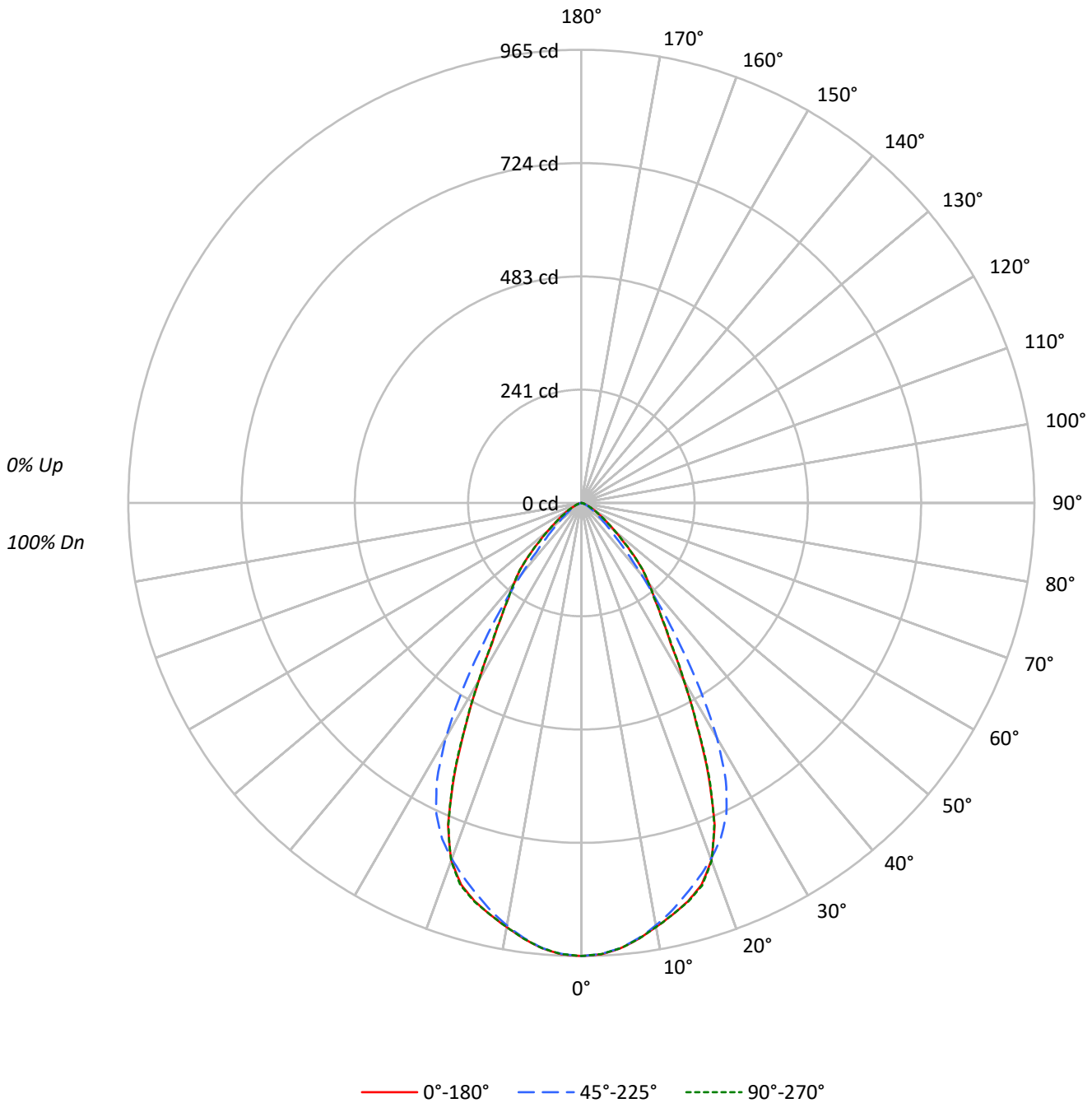
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1021.0 lumens  
Efficiency: N/A  
Efficacy: 64.6 lumens/watt  
Spacing Criteria (0/90/45): 0.93 / 0.93 / 0.94  
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 15.8  
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



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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	107	105	110	108	105	103	104	102	100	100	98	97	96	95	94	92
2	107	101	97	93	104	99	95	92	96	93	90	93	90	88	90	88	86	84
3	101	93	88	84	98	92	87	83	89	85	82	87	83	80	85	82	79	77
4	95	87	80	76	93	85	80	75	83	78	74	81	77	74	79	76	73	71
5	89	80	74	69	88	79	73	69	78	72	68	76	71	68	74	70	67	66
6	85	75	68	64	83	74	68	63	72	67	63	71	66	63	70	65	62	61
7	80	70	63	59	79	69	63	59	68	62	58	67	62	58	65	61	58	56
8	76	65	59	55	74	65	59	54	64	58	54	63	58	54	62	57	54	52
9	72	61	55	51	71	61	55	51	60	54	51	59	54	50	58	54	50	49
10	68	58	52	48	67	57	51	47	57	51	47	56	51	47	55	50	47	46

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	93083	93083	93083
5°	92228	92170	92199
10°	89865	89502	89865
15°	87706	86117	87796
20°	83151	82843	83305
25°	68211	77825	68563
30°	48633	64298	48711
35°	35078	42605	35184
40°	28126	24751	28126
45°	21465	14451	21301
50°	14155	9232	14110
55°	9521	6191	9421
60°	6407	4226	6465
65°	4384	2991	4315
70°	2906	2144	2906
75°	1939	1603	1939
80°	1334	1167	1334
85°	996	996	996



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	89.7	8.8
10°-20°	244.5	23.9
20°-30°	305.7	29.9
30°-40°	205.6	20.1
40°-50°	108.6	10.6
50°-60°	44.1	4.3
60°-70°	16.4	1.6
70°-80°	5.3	0.5
80°-90°	1.1	0.1
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°	639.9	62.7
0°-40°	845.5	82.8
0°-60°	998.2	97.8
0°-90°	1021.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1021.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	965	965	965	965	965	
5°	952	951	952	952	952	90
15°	878	871	862	870	879	246
25°	641	677	731	678	644	288
35°	298	313	362	313	299	192
45°	157	149	106	149	156	121
55°	57	48	37	48	56	52
65°	19	16	13	16	19	20
75°	5	5	4	5	5	6
85°	1	1	1	1	1	1
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	964.7	964.7	964.7	964.7	964.7
2.5°	962.2	961.6	961.3	961.3	961.6
5°	952.2	951.3	951.6	951.6	951.9
7.5°	936.1	935.8	934.8	936.1	936.1
10°	917.2	915.7	913.5	916.0	917.2
12.5°	897.7	893.2	889.5	893.2	897.7
15°	878.0	870.7	862.1	870.3	878.9
17.5°	852.1	844.8	835.4	846.3	854.5
20°	809.8	810.4	806.8	809.8	811.3
22.5°	742.0	755.7	774.8	756.0	739.8
25°	640.7	676.6	731.0	677.8	644.0
27.5°	532.1	577.7	666.8	580.4	535.4
30°	436.5	477.0	577.1	479.7	437.2
32.5°	353.5	383.6	469.1	387.3	357.4
35°	297.8	312.7	361.7	313.3	298.7
37.5°	255.2	255.2	268.6	256.4	254.0
40°	223.3	213.6	196.5	213.3	223.3
42.5°	193.5	178.9	142.7	178.3	194.1
45°	157.3	149.4	105.9	148.8	156.1
47.5°	120.8	115.3	79.7	114.7	121.7
50°	94.3	85.8	61.5	85.2	94.0
52.5°	72.4	63.3	47.5	63.3	71.8
55°	56.6	47.5	36.8	47.5	56.0
57.5°	43.5	36.2	28.0	35.6	43.2
60°	33.2	27.1	21.9	27.1	33.5
62.5°	25.2	20.7	16.7	20.4	24.9
65°	19.2	15.5	13.1	15.5	18.9
67.5°	14.0	11.6	10.0	11.6	14.3
70°	10.3	8.8	7.6	8.5	10.3
72.5°	7.6	6.4	5.8	6.4	7.6
75°	5.2	4.6	4.3	4.6	5.2
77.5°	3.7	3.3	3.0	3.3	3.7
80°	2.4	2.1	2.1	2.4	2.4
82.5°	1.5	1.5	1.5	1.5	1.5
85°	0.9	0.9	0.9	0.9	0.9
87.5°	0.6	0.6	0.6	0.6	0.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)