

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: 5489

Luminaire Tested: **FDI-240-120V**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: 5489  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: FDI-240-120V  
Description: FAIL-SAFE 4' WALL MOUNT LUMINIAIRE  
Light Source: F40T12RS\WW 3200 LUMENS  
Ballast/Driver: -

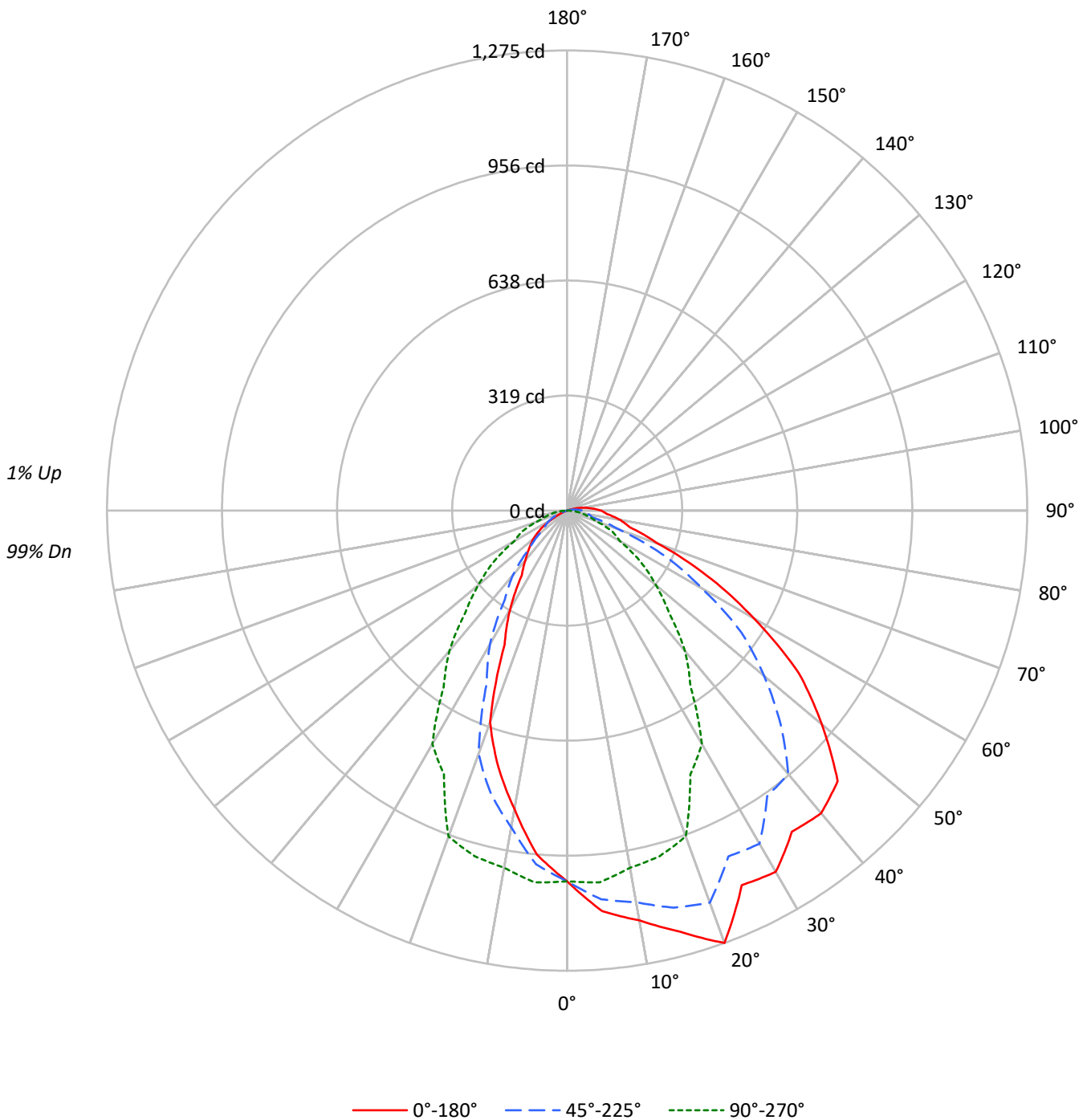
**Summary**

Lumens per Lamp: 3200 (2 lamps)  
Luminaire Lumens: 2121.4 lumens  
Efficiency: 33.1%  
Efficacy: 24.7 lumens/watt  
Spacing Criteria (0/90/45): 1.07 / 1.1 / 1.22  
Luminous Opening: Rectangular w/ Sides (W: 4' x L: 0.29' x H: 0.21')  
CIE Type: Direct

Input Watts (W): 86  
Input Voltage (V): NR  
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										
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	50	30	10	50	30	10	0														
RCR																																						
0	39	39	39	39	38	38	38	38	37	37	37	35	35	35	34	34	34	33	33	33	33	33	33	33														
1	36	35	34	33	35	34	33	32	33	32	31	31	31	30	30	30	29	28	28	28	28	28	28	28														
2	34	31	29	27	33	30	29	27	29	28	26	28	27	26	27	26	25	24	24	24	24	24	24	24														
3	31	28	25	23	30	27	25	23	26	24	23	25	24	22	24	23	22	21	21	21	21	21	21	21														
4	29	25	22	20	28	24	22	20	24	21	20	23	21	20	22	21	19	19	19	19	19	19	19	19														
5	26	23	20	18	26	22	20	18	21	19	17	21	19	17	20	18	17	16	16	16	16	16	16	16														
6	25	20	18	16	24	20	18	16	20	17	16	19	17	15	18	17	15	14	14	14	14	14	14	14														
7	23	19	16	14	22	18	16	14	18	16	14	17	15	14	17	15	14	13	13	13	13	13	13	13														
8	21	17	15	13	21	17	14	13	16	14	13	16	14	12	16	14	12	11	11	11	11	11	11	11														
9	20	16	13	12	20	16	13	12	15	13	11	15	13	11	15	13	11	10	10	10	10	10	10	10														
10	19	15	12	11	18	15	12	11	14	12	10	14	12	10	14	12	10	9	9	9	9	9	9	9														

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

	0°	90°	180°
0°	9530	9530	9530
5°	9758	9587	8383
10°	9634	9383	7019
15°	9719	9388	5921
20°	9964	9312	4877
25°	8764	8065	3138
30°	8735	7768	2388
35°	8163	6512	1646
40°	8251	5894	1356
45°	8068	4962	1134
50°	7137	4361	945
55°	6227	3762	716
60°	4915	2858	403
65°	3681	2743	172
70°	2423	2039	0
75°	1743	1739	0
80°	1559	1647	0
85°	1274	1198	0



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**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp		0°	45°	90°	135°	180°	Flux
0°-10°	97.4	4.6	1.5	0°	1027	1027	1027	1027	1027	
10°-20°	275.9	13.0	4.3	5°	1114	1081	1034	984	957	107
20°-30°	376.8	17.8	5.9	15°	1208	1139	991	814	736	345
30°-40°	405.2	19.1	6.3	25°	1145	1057	807	527	410	545
40°-50°	383.1	18.1	6.0	35°	1086	966	596	301	219	694
50°-60°	289.1	13.6	4.5	45°	1060	836	398	150	149	799
60°-70°	164.5	7.8	2.6	55°	783	590	250	74	90	689
70°-80°	71.2	3.4	1.1	65°	428	301	139	40	20	425
80°-90°	36.1	1.7	0.6	75°	180	72	58	0	0	205
90°-100°	17.9	0.8	0.3	85°	111	43	18	0	0	100
100°-110°	4.3	0.2	0.1	90°	94	42	0	0	0	50
110°-120°	0.0	0.0	0.0	95°	68	28	0	0	0	52
120°-130°	0.0	0.0	0.0	105°	22	0	0	0	0	24
130°-140°	0.0	0.0	0.0	115°	0	0	0	0	0	0
140°-150°	0.0	0.0	0.0	125°	0	0	0	0	0	0
150°-160°	0.0	0.0	0.0	135°	0	0	0	0	0	0
160°-170°	0.0	0.0	0.0	145°	0	0	0	0	0	0
170°-180°	0.0	0.0	0.0	155°	0	0	0	0	0	0
0°-30°	750.0	35.4	11.7	165°	0	0	0	0	0	0
0°-40°	1155.2	54.5	18.0	175°	0	0	0	0	0	0
0°-60°	1827.4	86.1	28.6	180°	0	0	0	0	0	0
0°-90°	2099.2	99.0	32.8							
90°-120°	22.2	1.0	0.3							
90°-150°	22.2	1.0	0.3							
90°-180°	22.0	1.0	0.3							
0°-180°	2121.4	100.0	33.1							



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1027	1027	1027	1027	1027	1027	1027	1027	1027
5°	1114	1107	1081	1055	1034	1007	984	970	957
10°	1153	1136	1102	1056	1005	946	891	855	840
15°	1208	1194	1139	1067	991	899	814	763	736
20°	1275	1223	1156	1071	961	832	717	640	624
25°	1145	1132	1057	949	807	653	527	438	410
30°	1156	1139	1066	936	747	570	428	343	316
35°	1086	1064	966	809	596	423	301	241	219
40°	1095	1053	953	738	508	336	234	192	180
45°	1060	993	836	625	398	236	150	141	149
50°	921	843	712	506	321	164	100	104	122
55°	783	705	590	367	250	107	74	73	90
60°	597	536	431	238	168	74	59	49	49
65°	428	381	301	160	139	56	40	25	20
70°	267	260	153	105	86	41	18	0	0
75°	180	187	72	72	58	22	0	0	0
80°	149	120	61	60	40	5	0	0	0
85°	111	92	43	42	18	0	0	0	0
90°	94	78	42	31	0	0	0	0	0
95°	68	54	28	10	0	0	0	0	0
100°	46	34	18	0	0	0	0	0	0
105°	22	16	0	0	0	0	0	0	0
110°	0	0	0	0	0	0	0	0	0
115°	0	0	0	0	0	0	0	0	0
120°	0	0	0	0	0	0	0	0	0
125°	0	0	0	0	0	0	0	0	0
130°	0	0	0	0	0	0	0	0	0
135°	0	0	0	0	0	0	0	0	0
140°	0	0	0	0	0	0	0	0	0
145°	0	0	0	0	0	0	0	0	0
150°	0	0	0	0	0	0	0	0	0
155°	0	0	0	0	0	0	0	0	0
160°	0	0	0	0	0	0	0	0	0
165°	0	0	0	0	0	0	0	0	0
170°	0	0	0	0	0	0	0	0	0
175°	0	0	0	0	0	0	0	0	0
180°	0	0	0	0	0	0	0	0	0

(END OF REPORT)