

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: 6659.0

Luminaire Tested: **FMC-D-150I-120-93/96-SF1**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: 6659.0  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: FMC-D-150I-120-93/96-SF1  
Description: FAIL-SAFE CORNER MOUNT FIXT  
SECURITY FIXTURE  
Light Source: 150 WATT INC. LAMP 150A21IF  
92% REFL  
Ballast/Driver: -

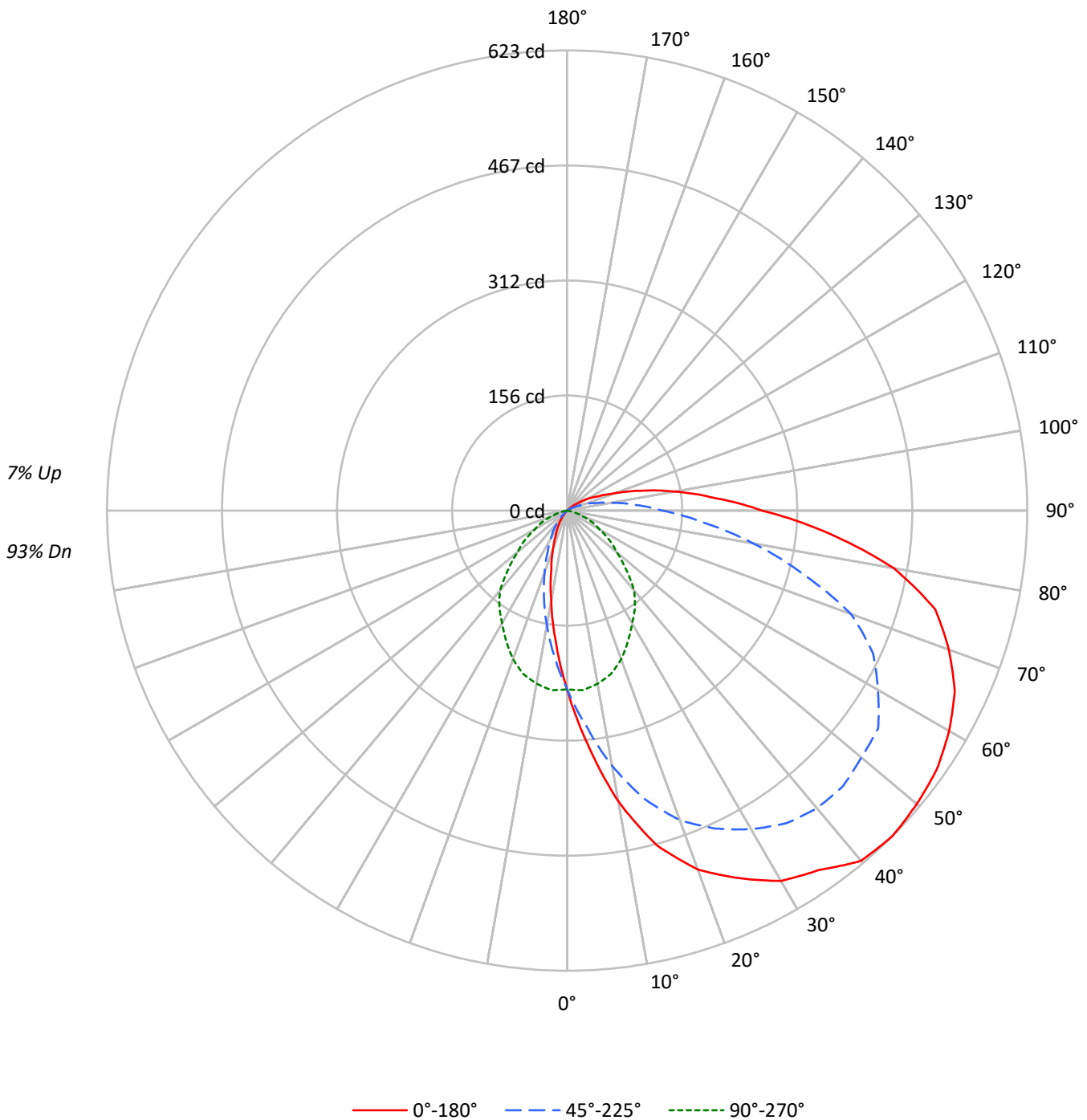
**Summary**

Lumens per Lamp: 2850 (1 lamp)  
Luminaire Lumens: 1285.4 lumens  
Efficiency: 45.1%  
Efficacy: 8.6 lumens/watt  
Spacing Criteria (0/90/45): 1.87 / 1.1 / 1.82  
Luminous Opening: Rectangular w/ Sides (W: 1.25' x L: 0.33' x H: 0.33')  
CIE Type: Direct

Input Watts (W): 150  
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				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	53	53	53	53	51	51	51	51	48	48	48	46	46	46	43	43	43	42
1	47	44	41	39	45	42	40	38	40	38	36	38	36	34	35	34	33	32
2	42	37	33	30	40	36	32	30	34	31	28	32	29	27	30	28	26	25
3	37	32	28	24	36	31	27	24	29	26	23	27	24	22	26	23	21	20
4	34	28	23	20	33	27	23	20	25	22	19	24	21	18	23	20	18	16
5	31	25	20	17	30	24	20	16	22	19	16	21	18	15	20	17	15	14
6	29	22	17	14	27	21	17	14	20	16	14	19	16	13	18	15	13	12
7	26	20	15	12	25	19	15	12	18	15	12	17	14	12	16	13	11	10
8	24	18	14	11	23	17	13	11	16	13	10	16	13	10	15	12	10	9
9	23	16	12	10	22	16	12	10	15	12	9	14	11	9	14	11	9	8
10	21	15	11	9	21	15	11	9	14	11	8	13	10	8	13	10	8	7

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

	0°	90°	180°
0°	6258	6258	6258
5°	7567	6190	4225
10°	8929	5969	2768
15°	9902	5722	1752
20°	10431	5368	1130
25°	10683	4949	701
30°	10961	4555	454
35°	11029	4257	260
40°	11362	3890	73
45°	11392	3263	0
50°	11343	2687	0
55°	11345	2286	0
60°	11301	1769	0
65°	11267	1480	0
70°	11097	917	0
75°	10895	601	0
80°	10023	59	0
85°	8498	0	0



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**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp		0°	45°	90°	135°	180°	Flux
0°-10°	23.6	1.8	0.8	0°	242	242	242	242	242	
10°-20°	72.7	5.7	2.6	5°	317	292	244	198	177	32
20°-30°	118.9	9.2	4.2	15°	469	404	229	121	83	133
30°-40°	159.2	12.4	5.6	25°	549	475	195	63	36	255
40°-50°	186.2	14.5	6.5	35°	594	517	160	32	14	375
50°-60°	195.5	15.2	6.9	45°	623	528	113	8	0	481
60°-70°	185.7	14.4	6.5	55°	611	514	70	0	0	546
70°-80°	154.5	12.0	5.4	65°	579	457	38	0	0	572
80°-90°	100.5	7.8	3.5	75°	516	330	12	0	0	537
90°-100°	52.6	4.1	1.8	85°	356	185	0	0	0	310
100°-110°	24.3	1.9	0.9	90°	264	129	0	0	0	148
110°-120°	9.3	0.7	0.3	95°	199	91	0	0	0	155
120°-130°	2.4	0.2	0.1	105°	104	39	0	0	0	112
130°-140°	0.1	0.0	0.0	115°	45	12	0	0	0	47
140°-150°	0.0	0.0	0.0	125°	17	0	0	0	0	17
150°-160°	0.0	0.0	0.0	135°	0	0	0	0	0	1
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°	215.2	16.7	7.6	165°	0	0	0	0	0	0
0°-40°	374.3	29.1	13.1	175°	0	0	0	0	0	0
0°-60°	756.0	58.8	26.5	180°	0	0	0	0	0	0
0°-90°	1196.7	93.1	42.0							
90°-120°	86.2	6.7	3.0							
90°-150°	88.7	6.9	3.1							
90°-180°	89.0	6.9	3.1							
0°-180°	1285.4	100.0	45.1							



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	242	242	242	242	242	242	242	242	242
5°	317	310	292	268	244	219	198	182	177
10°	400	388	351	290	238	193	158	137	124
15°	469	454	404	311	229	167	121	92	83
20°	517	498	446	332	214	141	89	66	56
25°	549	530	475	343	195	110	63	42	36
30°	579	561	498	348	176	89	44	30	24
35°	594	584	517	352	160	71	32	17	14
40°	619	594	526	343	141	51	17	6	4
45°	623	600	528	334	113	37	8	0	0
50°	618	597	520	308	88	25	0	0	0
55°	611	592	514	258	70	15	0	0	0
60°	597	578	486	207	50	4	0	0	0
65°	579	556	457	163	38	1	0	0	0
70°	550	528	409	125	21	0	0	0	0
75°	516	487	330	94	12	0	0	0	0
80°	449	409	256	69	1	0	0	0	0
85°	356	317	185	51	0	0	0	0	0
90°	264	232	129	34	0	0	0	0	0
95°	199	167	91	17	0	0	0	0	0
100°	148	124	61	6	0	0	0	0	0
105°	104	85	39	0	0	0	0	0	0
110°	68	55	27	0	0	0	0	0	0
115°	45	37	12	0	0	0	0	0	0
120°	32	20	4	0	0	0	0	0	0
125°	17	11	0	0	0	0	0	0	0
130°	7	2	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)