

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: 6054.0

Luminaire Tested: **FAS-X12-240BX-80**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: 6054.0
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FAS-X12-240BX-80
Description: FAIL-SAFE
Light Source: F40BX 3150 LUMENS
Ballast/Driver: -

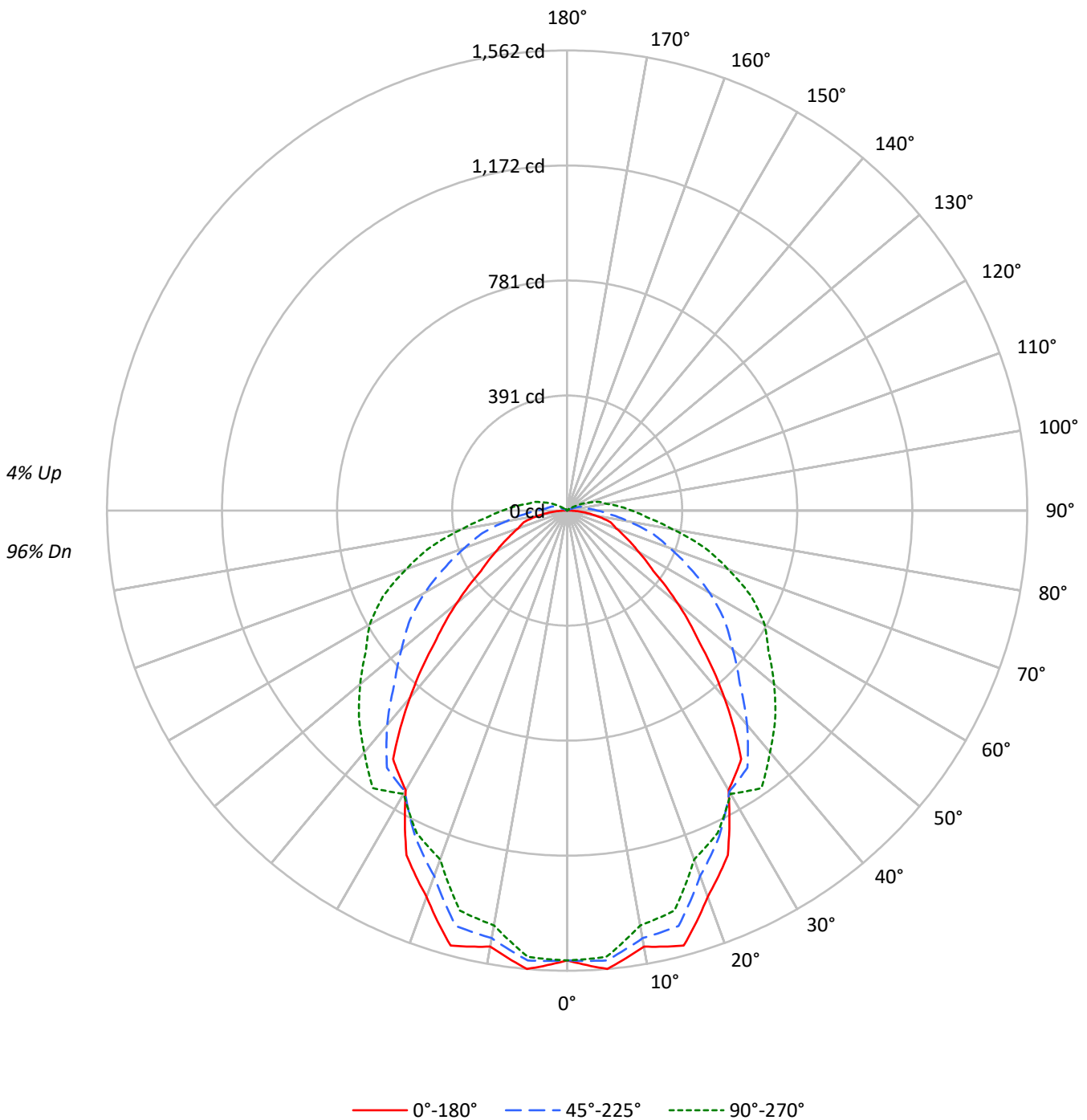
Summary

Lumens per Lamp: 3150 (2 lamps)
Luminaire Lumens: 4080.8 lumens
Efficiency: 64.8%
Efficacy: 52.3 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1.1 / 1.26
Luminous Opening: Rectangular w/ Sides (W: 1' x L: 2' x H: 0.45')
CIE Type: Direct

Input Watts (W): 78
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	76	76	76	76	74	74	74	74	70	70	70		67	67	67		64	64	64	62
1	69	66	63	60	67	64	61	59	61	59	57		58	56	54		55	54	52	51
2	63	57	53	49	61	56	52	48	53	50	46		51	48	45		48	46	44	42
3	57	50	45	41	55	49	44	40	47	43	39		45	41	38		43	40	37	35
4	53	45	39	35	51	44	38	34	42	37	33		40	36	33		38	35	32	30
5	48	40	34	30	47	39	34	30	37	33	29		36	32	28		34	31	28	26
6	45	36	30	26	43	35	30	26	34	29	26		33	28	25		31	28	25	23
7	42	33	27	23	40	32	27	23	31	26	23		30	26	22		29	25	22	21
8	39	30	25	21	38	29	24	21	28	24	20		27	23	20		26	23	20	19
9	36	28	22	19	35	27	22	19	26	22	18		25	21	18		24	21	18	17
10	34	26	20	17	33	25	20	17	24	20	17		24	19	17		23	19	16	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8218	8218	8218
5°	8276	7950	7906
10°	7900	7430	7240
15°	8035	7212	6991
20°	7385	6441	6201
25°	6933	5931	5929
30°	6028	5364	5476
35°	5846	5249	5745
40°	4911	4766	5462
45°	3958	4266	5244
50°	3229	3917	4998
55°	2528	3644	4764
60°	2161	3288	4682
65°	1916	2882	4472
70°	1721	2519	4088
75°	1718	2228	3733
80°	1334	1756	3159
85°	847	1406	2754



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	144.2	3.5	2.3	0°	1527	1527	1527	1527	1527	
10°-20°	403.6	9.9	6.4	5°	1562	1538	1533	1524	1521	147
20°-30°	564.1	13.8	9.0	15°	1529	1509	1460	1424	1406	421
30°-40°	660.2	16.2	10.5	25°	1290	1269	1221	1207	1208	584
40°-50°	636.7	15.6	10.1	35°	1030	1050	1066	1111	1150	624
50°-60°	558.5	13.7	8.9	45°	637	684	828	941	999	499
60°-70°	453.8	11.1	7.2	55°	356	441	653	793	834	331
70°-80°	313.2	7.7	5.0	65°	223	290	458	634	690	223
80°-90°	178.7	4.4	2.8	75°	152	149	298	431	481	153
90°-100°	95.6	2.3	1.5	85°	49	85	147	247	274	50
100°-110°	50.9	1.2	0.8	90°	0	67	102	192	219	7
110°-120°	18.2	0.4	0.3	95°	0	44	73	137	173	0
120°-130°	2.5	0.1	0.0	105°	0	1	53	85	113	0
130°-140°	0.5	0.0	0.0	115°	0	0	5	37	53	0
140°-150°	0.0	0.0	0.0	125°	0	0	0	4	5	0
150°-160°	0.0	0.0	0.0	135°	0	0	0	0	7	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°	1111.9	27.2	17.6	165°	0	0	0	0	0	0
0°-40°	1772.1	43.4	28.1	175°	0	0	0	0	0	0
0°-60°	2967.3	72.7	47.1	180°	0	0	0	0	0	0
0°-90°	3913.0	95.9	62.1							
90°-120°	164.7	4.0	2.6							
90°-150°	167.8	4.1	2.7							
90°-180°	168.0	4.1	2.7							
0°-180°	4080.8	100.0	64.8							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1527	1527	1527	1527	1527
5°	1562	1538	1533	1524	1521
10°	1503	1508	1474	1442	1430
15°	1529	1509	1460	1424	1406
20°	1395	1354	1320	1271	1260
25°	1290	1269	1221	1207	1208
30°	1096	1110	1101	1101	1110
35°	1030	1050	1066	1111	1150
40°	831	866	950	1038	1071
45°	637	684	828	941	999
50°	489	541	734	871	917
55°	356	441	653	793	834
60°	279	370	558	713	774
65°	223	290	458	634	690
70°	177	213	370	523	581
75°	152	149	298	431	481
80°	98	110	210	320	362
85°	49	85	147	247	274
90°	0	67	102	192	219
95°	0	44	73	137	173
100°	0	22	62	99	134
105°	0	1	53	85	113
110°	0	0	29	58	80
115°	0	0	5	37	53
120°	0	0	0	14	28
125°	0	0	0	4	5
130°	0	0	0	0	7
135°	0	0	0	0	7
140°	0	0	0	0	0
145°	0	0	0	0	0
150°	0	0	0	0	0
155°	0	0	0	0	0
160°	0	0	0	0	0
165°	0	0	0	0	0
170°	0	0	0	0	0
175°	0	0	0	0	0
180°	0	0	0	0	0

(END OF REPORT)