

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: BALLABS TEST NO. 7459.0

Luminaire Tested: **FDX-340-80/86**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: BALLABS TEST NO. 7459.0
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FDX-340-80/86
Description: 3/40W BIAX LAMP 26" WALL MOUNT LUMINAIRE
Light Source: -
F40BX/SPX35/RS
Ballast/Driver: -

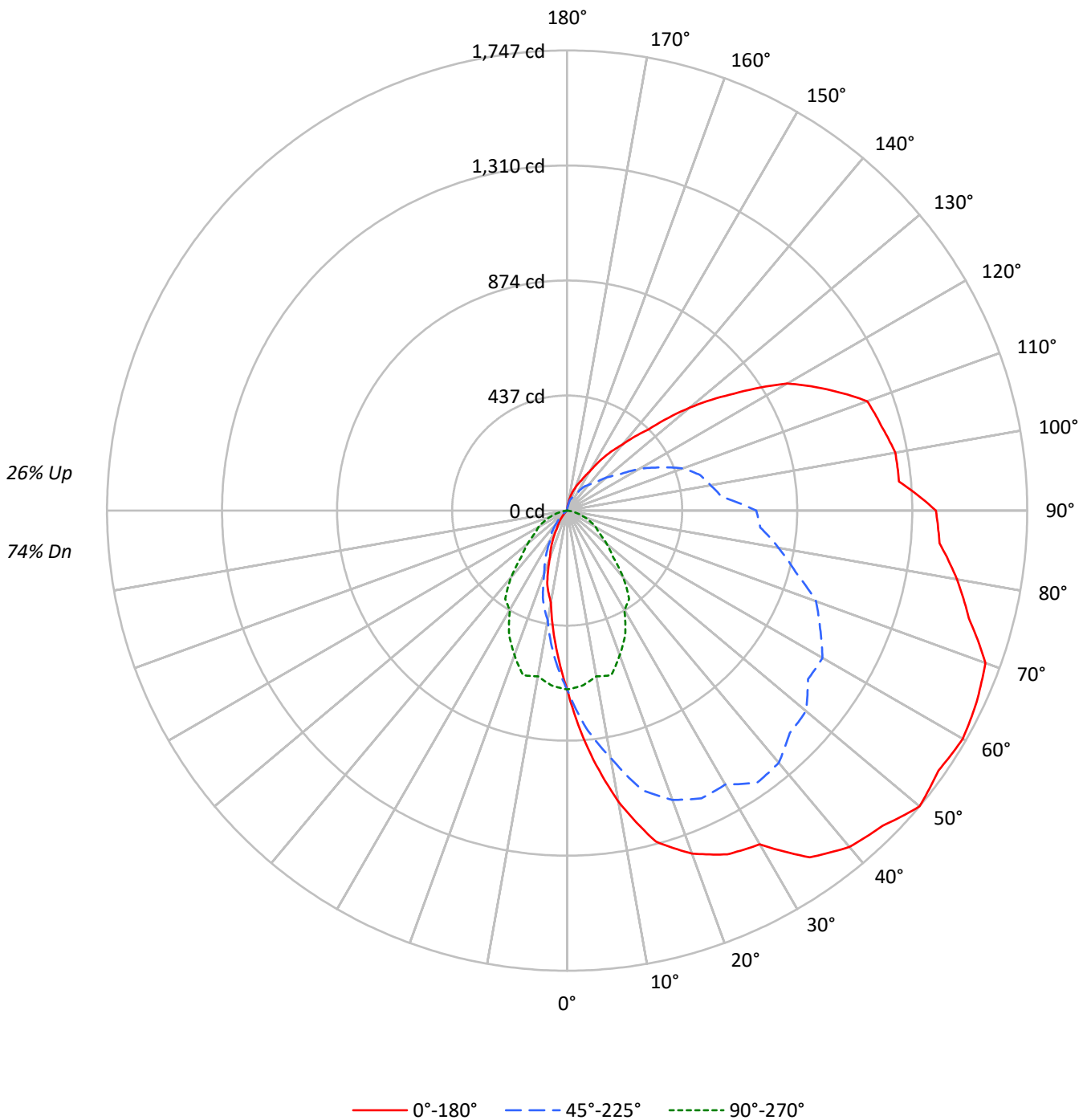
Summary

Lumens per Lamp: 3150 (3 lamps)
Luminaire Lumens: 4432.9 lumens
Efficiency: 46.9%
Efficacy: 38.2 lumens/watt
Spacing Criteria (0/90/45): 1.84 / 1.03 / 1.64
Luminous Opening: Rectangular w/ Sides (W: 1.92' x L: 0.33' x H: 0.83')
CIE Type: Semi-Direct

Input Watts (W): 116
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	50	50	50	50	45	45	45	41	41	41	37	37	37	35
1	46	43	41	38	44	41	39	37	37	35	33	33	31	30	29	28	27	25
2	41	37	33	30	39	35	31	28	31	28	26	28	25	24	25	23	21	19
3	37	32	27	24	35	30	26	23	27	24	21	24	21	19	21	19	17	16
4	34	28	23	20	32	26	22	19	24	20	17	21	18	16	19	16	14	13
5	31	25	20	17	29	23	19	16	21	17	15	19	16	13	17	14	12	11
6	29	22	17	14	27	21	17	14	19	15	13	17	14	12	15	12	11	9
7	26	20	15	12	25	19	15	12	17	13	11	15	12	10	14	11	9	8
8	24	18	14	11	23	17	13	10	15	12	10	14	11	9	12	10	8	7
9	23	16	12	10	21	16	12	9	14	11	9	13	10	8	11	9	7	6
10	21	15	11	9	20	14	11	8	13	10	8	12	9	7	11	8	7	6

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	11449	11449	11449
5°	12596	10876	7041
10°	13331	10162	4218
15°	13597	10117	3041
20°	13018	9048	1803
25°	12366	8060	1168
30°	11654	6771	613
35°	12022	6471	389
40°	11840	5339	178
45°	11530	4039	102
50°	11511	3387	0
55°	11065	2667	0
60°	10966	2405	0
65°	10757	1983	0
70°	10583	1483	0
75°	9953	1019	0
80°	9610	392	0
85°	9277	0	0



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	45°	90°	135°	180°	Flux
0°-10°	65.9	1.5	0.7	0°	679	679	679	679	679	
10°-20°	200.9	4.5	2.1	5°	907	829	667	558	507	92
20°-30°	310.2	7.0	3.3	15°	1301	1098	647	353	291	365
30°-40°	402.4	9.1	4.3	25°	1440	1205	521	192	136	664
40°-50°	459.3	10.4	4.9	35°	1607	1260	410	102	52	998
50°-60°	488.6	11.0	5.2	45°	1693	1195	243	37	15	1317
60°-70°	498.0	11.2	5.3	55°	1721	1116	147	8	0	1553
70°-80°	456.5	10.3	4.8	65°	1716	1060	96	5	0	1701
80°-90°	400.3	9.0	4.2	75°	1579	897	41	0	0	1679
90°-100°	341.8	7.7	3.6	85°	1419	736	0	0	0	1181
100°-110°	299.7	6.8	3.2	90°	1400	718	0	0	0	751
110°-120°	233.3	5.3	2.5	95°	1265	590	0	0	0	1061
120°-130°	143.8	3.2	1.5	105°	1236	522	0	0	0	1309
130°-140°	73.8	1.7	0.8	115°	1089	387	0	0	0	1082
140°-150°	37.2	0.8	0.4	125°	774	236	0	0	0	702
150°-160°	15.4	0.3	0.2	135°	435	148	0	0	0	352
160°-170°	5.3	0.1	0.1	145°	252	109	0	0	0	159
170°-180°	0.6	0.0	0.0	155°	125	66	0	0	0	61
0°-30°	577.0	13.0	6.1	165°	68	41	0	0	0	19
0°-40°	979.4	22.1	10.4	175°	15	11	0	0	0	2
0°-60°	1927.3	43.5	20.4	180°	0	0	0	0	0	
0°-90°	3282.1	74.0	34.7							
90°-120°	874.7	19.7	9.3							
90°-150°	1129.5	25.5	12.0							
90°-180°	1151.0	26.0	12.2							
0°-180°	4432.9	100.0	46.9							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	679	679	679	679	679	679	679	679	679
5°	907	890	829	752	667	626	558	526	507
10°	1122	1055	953	804	639	519	424	373	355
15°	1301	1258	1098	884	647	463	353	302	291
20°	1386	1323	1169	876	584	358	254	205	192
25°	1440	1394	1205	883	521	291	192	150	136
30°	1463	1408	1201	844	435	211	125	93	77
35°	1607	1517	1260	852	410	177	102	68	52
40°	1667	1553	1250	793	331	121	62	32	25
45°	1693	1571	1195	697	243	86	37	19	15
50°	1747	1611	1184	641	196	66	19	11	0
55°	1721	1568	1116	545	147	46	8	11	0
60°	1734	1585	1119	494	125	26	8	10	0
65°	1716	1572	1060	418	96	10	5	0	0
70°	1690	1522	1005	351	66	2	0	0	0
75°	1579	1414	897	293	41	0	0	0	0
80°	1503	1338	815	237	14	0	0	0	0
85°	1419	1241	736	196	0	0	0	0	0
90°	1400	1232	718	172	0	0	0	0	0
95°	1265	1070	590	134	0	0	0	0	0
100°	1265	1046	553	116	0	0	0	0	0
105°	1236	1032	522	106	0	0	0	0	0
110°	1213	991	468	93	0	0	0	0	0
115°	1089	861	387	79	0	0	0	0	0
120°	965	738	315	73	0	0	0	0	0
125°	774	571	236	60	0	0	0	0	0
130°	608	441	195	53	0	0	0	0	0
135°	435	313	148	47	0	0	0	0	0
140°	329	249	128	46	0	0	0	0	0
145°	252	200	109	43	0	0	0	0	0
150°	172	137	80	33	0	0	0	0	0
155°	125	102	66	26	0	0	0	0	0
160°	94	80	52	21	0	0	0	0	0
165°	68	59	41	19	0	0	0	0	0
170°	34	29	20	11	0	0	0	0	0
175°	15	14	11	10	0	0	0	0	0
180°	0	0	0	0	0	0	0	0	0

(END OF REPORT)