

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: 4956

Luminaire Tested: **FCT-X19-340**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: 4956
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FCT-X19-340
Description: FAIL-SAFE 80/87 LENS
Light Source: F40T12 3200 LUMENS
Ballast/Driver: -

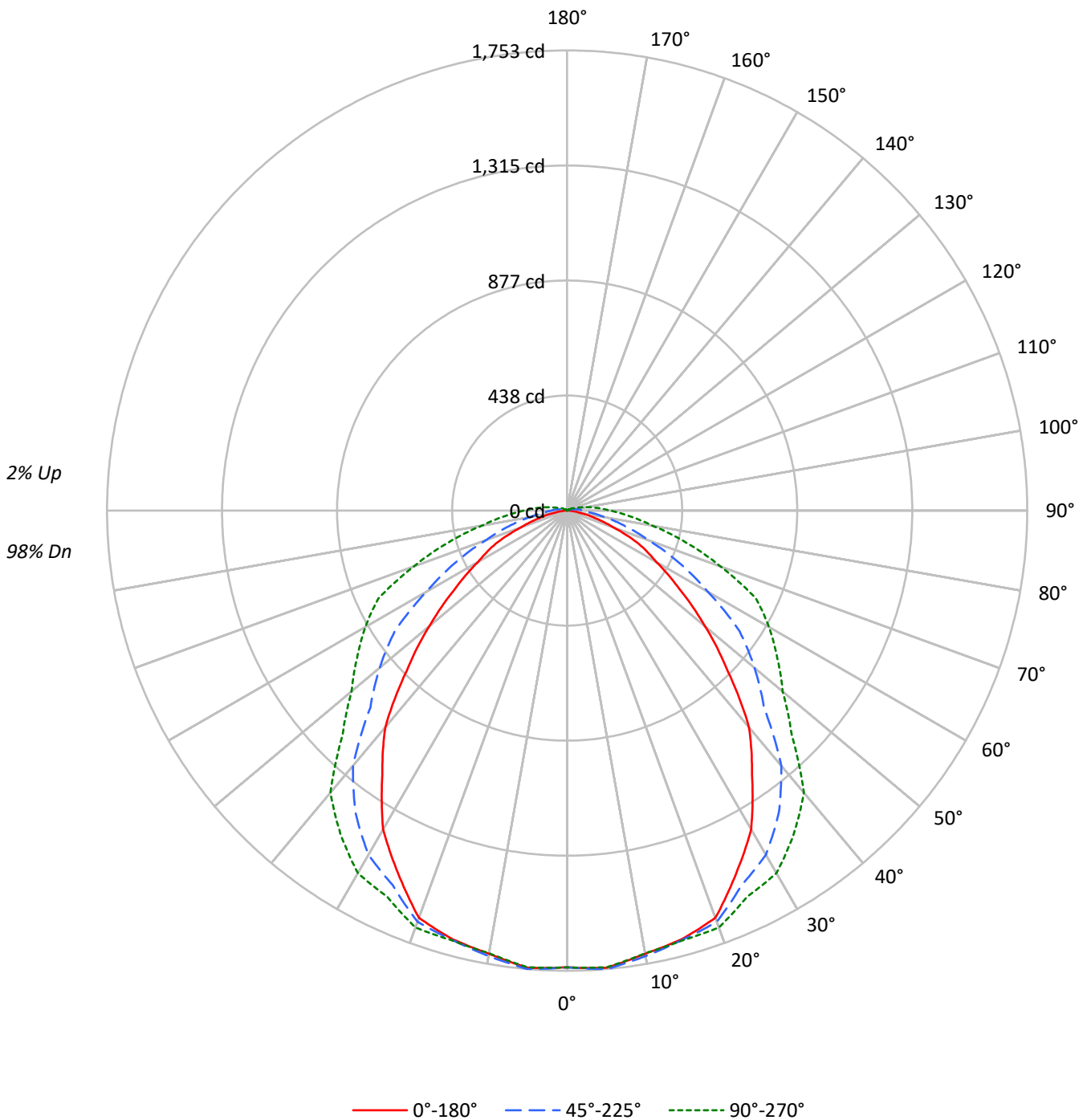
Summary

Lumens per Lamp: 3200 (3 lamps)
Luminaire Lumens: 4748.2 lumens
Efficiency: 49.5%
Efficacy: 33.4 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.35 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 1.25' x L: 4' x H: 0.45')
CIE Type: Direct

Input Watts (W): 142
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	59	59	59	59	57	57	57	57	54	54	54	52	52	52	50	50	50	49
1	54	51	49	47	52	50	48	46	48	46	45	46	44	43	44	43	42	41
2	49	45	42	39	48	44	41	38	42	39	37	40	38	36	39	37	35	34
3	45	40	36	32	43	39	35	32	37	34	31	36	33	31	34	32	30	29
4	41	35	31	28	40	35	31	27	33	30	27	32	29	27	31	28	26	25
5	38	32	27	24	37	31	27	24	30	26	23	29	26	23	28	25	23	22
6	35	29	24	21	34	28	24	21	27	23	21	26	23	20	25	22	20	19
7	32	26	22	19	32	25	21	19	25	21	18	24	21	18	23	20	18	17
8	30	24	20	17	29	23	19	17	23	19	16	22	19	16	21	18	16	15
9	28	22	18	15	28	21	18	15	21	17	15	20	17	15	20	17	15	14
10	27	20	16	14	26	20	16	14	19	16	14	19	16	13	18	15	13	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3746	3746	3746
5°	3741	3681	3658
10°	3674	3557	3519
15°	3656	3463	3445
20°	3634	3405	3423
25°	3440	3235	3301
30°	3273	3155	3283
35°	2992	2995	3159
40°	2768	2785	3028
45°	2370	2419	2709
50°	2023	2232	2512
55°	1691	2038	2422
60°	1416	1688	2355
65°	1239	1395	2282
70°	909	1080	1965
75°	639	848	1661
80°	371	630	1337
85°	205	456	1140



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp	0°	22.5°	45°	67.5°	90°	Flux
0°-10°	165.8	3.5	1.7	0°	1740	1740	1740	1740	
10°-20°	479.3	10.1	5.0	5°	1748	1752	1753	1748	166
20°-30°	729.8	15.4	7.6	15°	1690	1691	1693	1693	477
30°-40°	868.3	18.3	9.0	25°	1524	1536	1574	1609	703
40°-50°	820.8	17.3	8.5	35°	1228	1304	1406	1479	772
50°-60°	691.0	14.6	7.2	45°	866	913	1060	1168	673
60°-70°	500.0	10.5	5.2	55°	523	606	802	940	474
70°-80°	280.9	5.9	2.9	65°	302	329	470	694	293
80°-90°	127.1	2.7	1.3	75°	109	137	229	396	120
90°-100°	55.0	1.2	0.6	85°	19	51	89	180	22
100°-110°	23.4	0.5	0.2	90°	0	28	59	107	3
110°-120°	6.4	0.1	0.1	95°	0	18	45	81	0
120°-130°	0.4	0.0	0.0	105°	0	10	20	35	0
130°-140°	0.0	0.0	0.0	115°	0	0	0	15	0
140°-150°	0.0	0.0	0.0	125°	0	0	0	0	0
150°-160°	0.0	0.0	0.0	135°	0	0	0	0	0
160°-170°	0.0	0.0	0.0	145°	0	0	0	0	0
170°-180°	0.0	0.0	0.0	155°	0	0	0	0	0
0°-30°	1374.9	29.0	14.3	165°	0	0	0	0	0
0°-40°	2243.2	47.2	23.4	175°	0	0	0	0	0
0°-60°	3755.0	79.1	39.1	180°	0	0	0	0	0
0°-90°	4663.0	98.2	48.6						
90°-120°	84.7	1.8	0.9						
90°-150°	85.2	1.8	0.9						
90°-180°	85.0	1.8	0.9						
0°-180°	4748.2	100.0	49.5						



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1740	1740	1740	1740	1740
5°	1748	1752	1753	1748	1746
10°	1714	1723	1723	1713	1712
15°	1690	1691	1693	1693	1695
20°	1651	1653	1667	1684	1690
25°	1524	1536	1574	1609	1623
30°	1402	1442	1514	1573	1595
35°	1228	1304	1406	1479	1505
40°	1078	1156	1269	1373	1403
45°	866	913	1060	1168	1210
50°	685	763	932	1049	1072
55°	523	606	802	940	977
60°	393	450	619	829	888
65°	302	329	470	694	794
70°	189	209	329	518	621
75°	109	137	229	396	468
80°	49	84	147	276	328
85°	19	51	89	180	236
90°	0	28	59	107	162
95°	0	18	45	81	115
100°	0	10	29	53	72
105°	0	10	20	35	42
110°	0	9	11	20	25
115°	0	0	0	15	19
120°	0	0	0	0	0
125°	0	0	0	0	8
130°	0	0	0	0	0
135°	0	0	0	0	0
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)