

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: P892107

Luminaire Tested: **FLR-HA-14-40-40-CP080**

Issue Date: 10/22/2024



**Test Information**

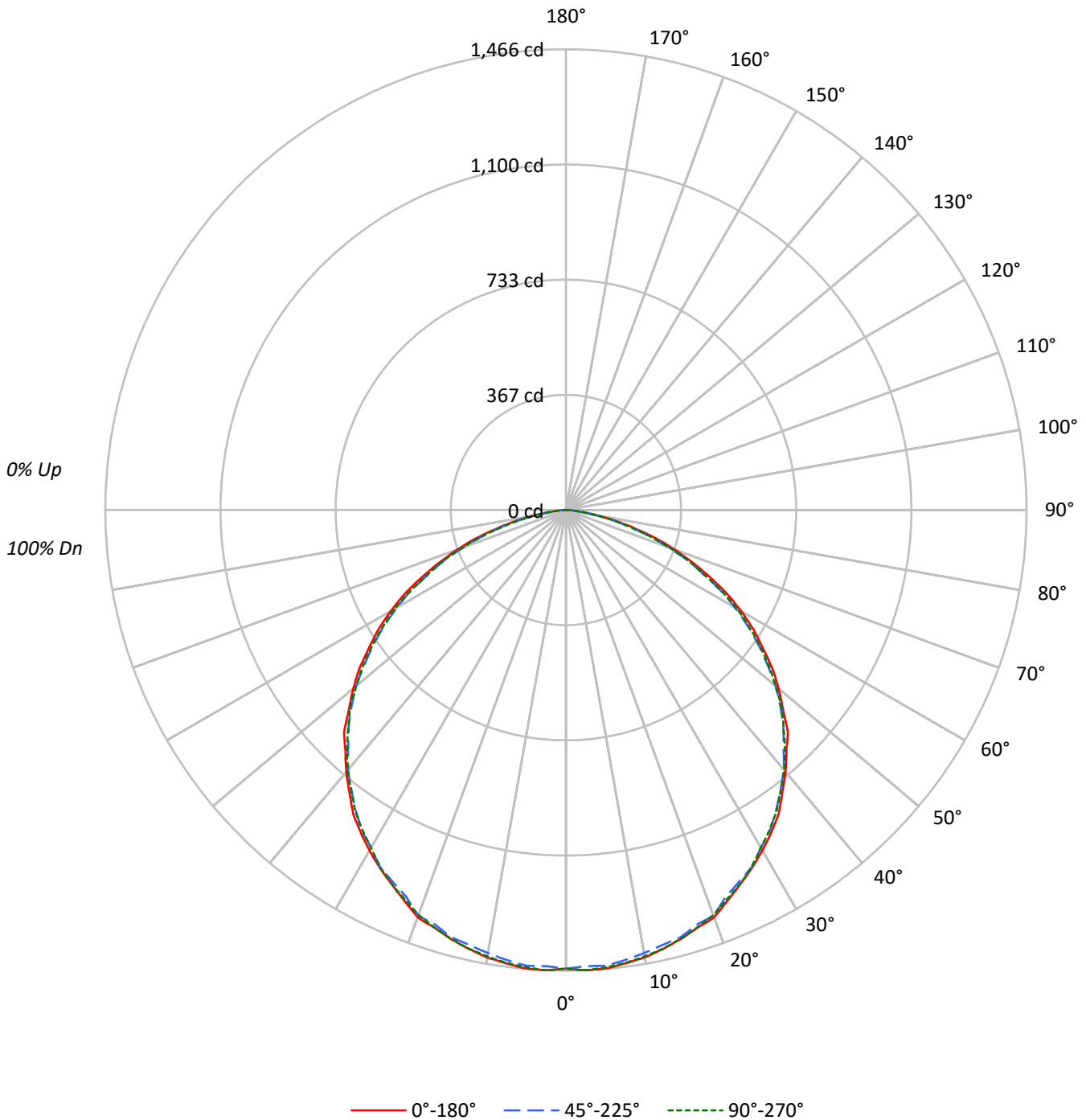
Test Method: LM-79-08  
Report Number: P892107  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2207-724-12)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/22/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: FLR-HA-14-40-40-CP080  
Description: Fail-Safe - FLR Fully Luminous Recessed 1X4 4000K Luminaire for High Abuse  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4048.8 lumens  
Efficiency: N/A  
Efficacy: 102.8 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.38  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 39.4  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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				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	0
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	102	102	100
1	109	105	101	97	107	103	99	95	98	95	92	94	92	90	91	89	87	87	87	87	85
2	100	92	85	79	97	90	84	78	86	81	77	83	79	75	80	76	73	73	73	73	71
3	91	81	73	66	88	79	72	66	76	70	64	73	68	63	71	66	62	62	62	62	60
4	83	71	63	56	81	70	62	56	68	61	55	65	59	54	63	58	54	54	54	54	51
5	77	64	55	48	74	63	54	48	61	53	48	59	52	47	57	51	47	47	47	47	44
6	71	57	49	42	69	56	48	42	55	47	42	53	46	41	51	46	41	41	41	41	39
7	66	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	36	36	36	34
8	61	48	39	33	59	47	39	33	45	38	33	44	38	33	43	37	33	33	33	33	31
9	57	44	35	30	56	43	35	30	42	35	30	41	34	29	40	34	29	29	29	29	28
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	27	27	27	25

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

	0°	45°	90°
0°	3927	3927	3927
5°	3957	3932	3944
10°	3950	3912	3942
15°	3937	3922	3935
20°	3950	3933	3926
25°	3899	3874	3897
30°	3887	3854	3856
35°	3877	3832	3840
40°	3819	3790	3795
45°	3801	3722	3728
50°	3699	3647	3647
55°	3590	3510	3532
60°	3464	3344	3390
65°	3226	3060	3089
70°	2891	2729	2771
75°	2382	2239	2230
80°	1667	1573	1573
85°	902	806	806



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	138.4	3.4
10°-20°	397.2	9.8
20°-30°	603.7	14.9
30°-40°	730.2	18.0
40°-50°	755.8	18.7
50°-60°	671.5	16.6
60°-70°	482.5	11.9
70°-80°	230.7	5.7
80°-90°	38.9	1.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1139.3	28.1
0°-40°	1869.4	46.2
0°-60°	3296.7	81.4
0°-90°	4048.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4048.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1459	1459	1459	1459	1459	
5°	1465	1455	1456	1457	1460	139
15°	1413	1404	1408	1405	1412	399
25°	1313	1306	1305	1310	1313	607
35°	1180	1173	1166	1165	1169	736
45°	999	984	978	975	980	764
55°	765	757	748	744	753	685
65°	507	501	481	468	485	501
75°	229	225	215	197	214	246
85°	29	28	26	25	26	41
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1459.4	1459.4	1459.4	1459.4	1459.4
2.5°	1465.6	1454.8	1452.5	1466.3	1466.3
5°	1464.8	1454.8	1455.6	1457.1	1460.2
7.5°	1454.8	1449.4	1444.0	1449.4	1453.3
10°	1445.6	1433.3	1431.7	1434.0	1442.5
12.5°	1430.2	1416.4	1417.9	1421.7	1429.4
15°	1413.3	1404.1	1407.9	1404.8	1412.5
17.5°	1393.3	1393.3	1383.3	1381.0	1392.5
20°	1379.5	1360.2	1373.3	1361.8	1371.0
22.5°	1344.9	1334.1	1331.0	1340.2	1340.2
25°	1313.3	1306.4	1304.9	1310.3	1312.6
27.5°	1283.3	1279.5	1281.0	1280.3	1280.3
30°	1251.0	1241.0	1240.3	1240.3	1241.0
32.5°	1216.4	1209.5	1208.8	1204.1	1206.4
35°	1180.3	1172.6	1166.5	1164.9	1168.8
37.5°	1131.9	1122.6	1121.9	1123.4	1123.4
40°	1087.3	1077.3	1078.8	1073.4	1080.3
42.5°	1038.8	1030.4	1025.0	1023.4	1031.9
45°	998.8	984.2	978.1	975.0	979.6
47.5°	935.8	931.9	925.8	920.4	931.2
50°	883.5	885.8	871.2	865.8	871.2
52.5°	828.1	818.1	808.1	798.9	814.3
55°	765.1	757.4	748.2	743.6	752.8
57.5°	707.4	699.0	685.1	674.3	690.5
60°	643.6	635.9	621.3	609.8	629.8
62.5°	578.2	569.8	555.9	537.5	558.2
65°	506.7	501.3	480.6	468.3	485.2
67.5°	434.4	431.4	419.1	398.3	422.9
70°	367.5	361.4	346.8	328.3	352.2
72.5°	301.4	290.7	279.9	262.2	282.2
75°	229.1	225.3	215.3	196.8	214.5
77.5°	166.1	162.2	155.3	141.5	155.3
80°	107.6	106.9	101.5	91.5	101.5
82.5°	61.5	61.5	57.7	53.8	57.7
85°	29.2	27.7	26.1	24.6	26.1
87.5°	7.7	7.7	7.7	7.7	8.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)