

Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: FAIL-SAFE

Report Number: P688128

Luminaire Tested: FLR-HA-24-L3C3 (LOW)-35-CP250

Issue Date: 5/22/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P688128  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2207-724-14)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/22/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: FAIL-SAFE  
Catalog Number: FLR-HA-24-L3C3 (LOW)-35-CP250  
Description: Fail-Safe - FLR Fully Luminous Recessed 2X4 3500K Luminaire at Low Lumen setting for High Abuse  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

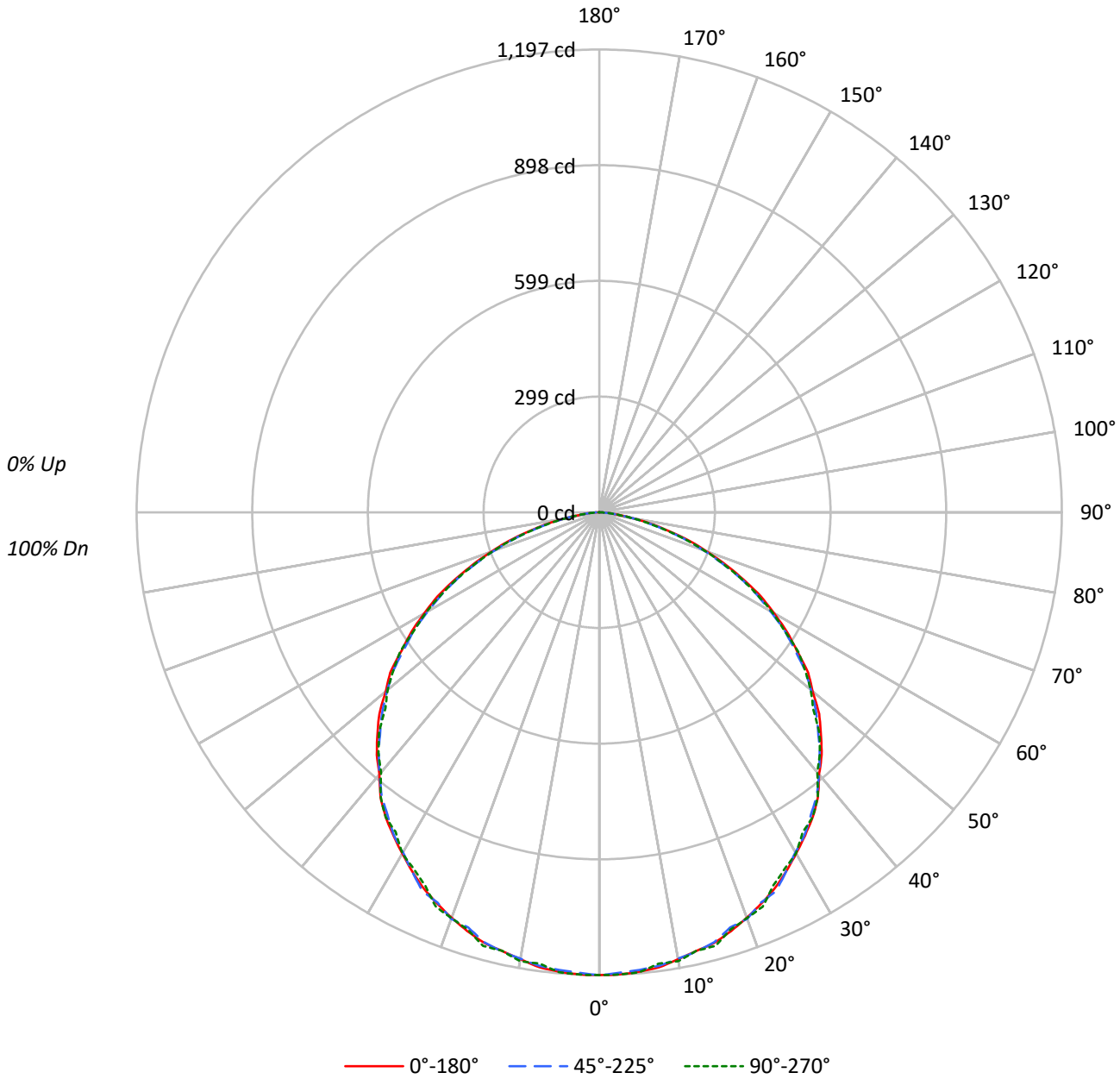
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3318.8 lumens  
Efficiency: N/A  
Efficacy: 119.4 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.26 / 1.38  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 27.8  
Input Voltage (V): 120  
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: 24 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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	105	101	97	107	102	99	95	98	95	92	94	92	90	91	89	87	85
2	100	92	85	79	97	90	84	78	86	81	77	83	79	75	80	76	73	71
3	91	81	73	66	88	79	72	66	76	70	64	73	68	63	71	66	62	60
4	83	71	63	56	81	70	62	56	68	61	55	65	59	54	63	58	53	51
5	76	64	55	48	74	63	54	48	61	53	48	59	52	47	57	51	46	44
6	71	57	49	42	69	56	48	42	55	47	42	53	46	41	51	45	41	39
7	65	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34
8	61	47	39	33	59	47	39	33	45	38	33	44	38	33	43	37	32	31
9	57	44	35	30	55	43	35	30	42	35	30	41	34	29	40	34	29	27
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25

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

	0°	45°	90°
0°	1611	1611	1611
5°	1611	1605	1613
10°	1604	1602	1611
15°	1606	1603	1617
20°	1599	1602	1600
25°	1594	1606	1581
30°	1583	1578	1583
35°	1582	1569	1582
40°	1554	1553	1542
45°	1544	1524	1531
50°	1509	1497	1496
55°	1466	1445	1475
60°	1405	1375	1390
65°	1310	1282	1284
70°	1161	1129	1141
75°	956	920	933
80°	670	656	666
85°	344	324	324

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1544 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	113.2	3.4
10°-20°	324.8	9.8
20°-30°	493.8	14.9
30°-40°	597.2	18.0
40°-50°	618.9	18.6
50°-60°	552.4	16.6
60°-70°	396.7	12.0
70°-80°	190.3	5.7
80°-90°	31.6	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°	931.8	28.1
0°-40°	1529.0	46.1
0°-60°	2700.3	81.4
0°-90°	3318.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3318.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1197	1197	1197	1197	1197	
5°	1193	1197	1188	1189	1194	113
15°	1153	1154	1151	1151	1161	325
25°	1074	1071	1082	1068	1065	495
35°	963	956	955	951	963	601
45°	811	805	801	800	805	625
55°	625	618	616	615	629	560
65°	412	400	403	397	403	407
75°	184	172	177	177	179	199
85°	22	21	21	21	21	33
90°	0	0	0	0	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1197.3	1197.3	1197.3	1197.3	1197.3
2.5°	1196.7	1198.0	1192.3	1191.0	1196.7
5°	1192.9	1196.7	1188.4	1189.1	1194.2
7.5°	1187.2	1184.6	1183.4	1187.8	1177.6
10°	1173.8	1179.5	1172.5	1169.4	1178.9
12.5°	1162.4	1163.0	1163.6	1164.9	1161.7
15°	1152.8	1154.1	1150.9	1150.9	1161.1
17.5°	1135.6	1138.2	1126.1	1133.7	1131.2
20°	1116.5	1114.0	1119.1	1117.2	1117.2
22.5°	1095.6	1095.6	1093.0	1094.3	1104.5
25°	1073.9	1071.4	1081.6	1068.2	1065.0
27.5°	1047.8	1045.3	1047.8	1040.8	1039.6
30°	1019.2	1012.8	1015.4	1016.0	1018.6
32.5°	991.2	984.9	989.3	984.9	980.4
35°	963.2	955.6	955.0	951.1	963.2
37.5°	929.5	921.2	924.4	912.3	928.9
40°	885.0	879.9	884.3	880.5	878.0
42.5°	851.9	846.2	844.3	841.7	845.5
45°	811.2	805.4	801.0	800.4	804.8
47.5°	771.7	757.1	760.9	755.2	750.1
50°	720.8	717.0	715.1	709.4	714.5
52.5°	681.4	667.4	670.6	665.5	671.2
55°	624.8	617.8	615.9	614.6	628.6
57.5°	575.8	566.9	568.1	565.0	566.9
60°	522.3	514.1	510.9	510.2	516.6
62.5°	472.1	454.9	457.4	456.8	460.0
65°	411.6	399.5	402.7	397.0	403.4
67.5°	353.7	341.6	342.9	341.6	344.8
70°	295.2	281.8	286.9	284.4	290.1
72.5°	244.3	228.4	232.9	228.4	233.5
75°	183.9	171.8	176.9	176.9	179.4
77.5°	135.5	124.7	128.5	127.2	129.8
80°	86.5	82.1	84.6	82.7	85.9
82.5°	49.6	46.4	46.4	47.7	48.4
85°	22.3	21.0	21.0	21.0	21.0
87.5°	5.7	5.7	5.7	5.7	5.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)