

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: P688020

Luminaire Tested: FLR-HA-22-L3C3 (HI)-35-CP375

Issue Date: 5/22/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P688020  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2207-724-15)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/22/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: FAIL-SAFE  
Catalog Number: FLR-HA-22-L3C3 (HI)-35-CP375  
Description: Fail-Safe - FLR Fully Luminous Recessed 2X2 3500K Luminaire at High Lumen setting for High Abuse  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

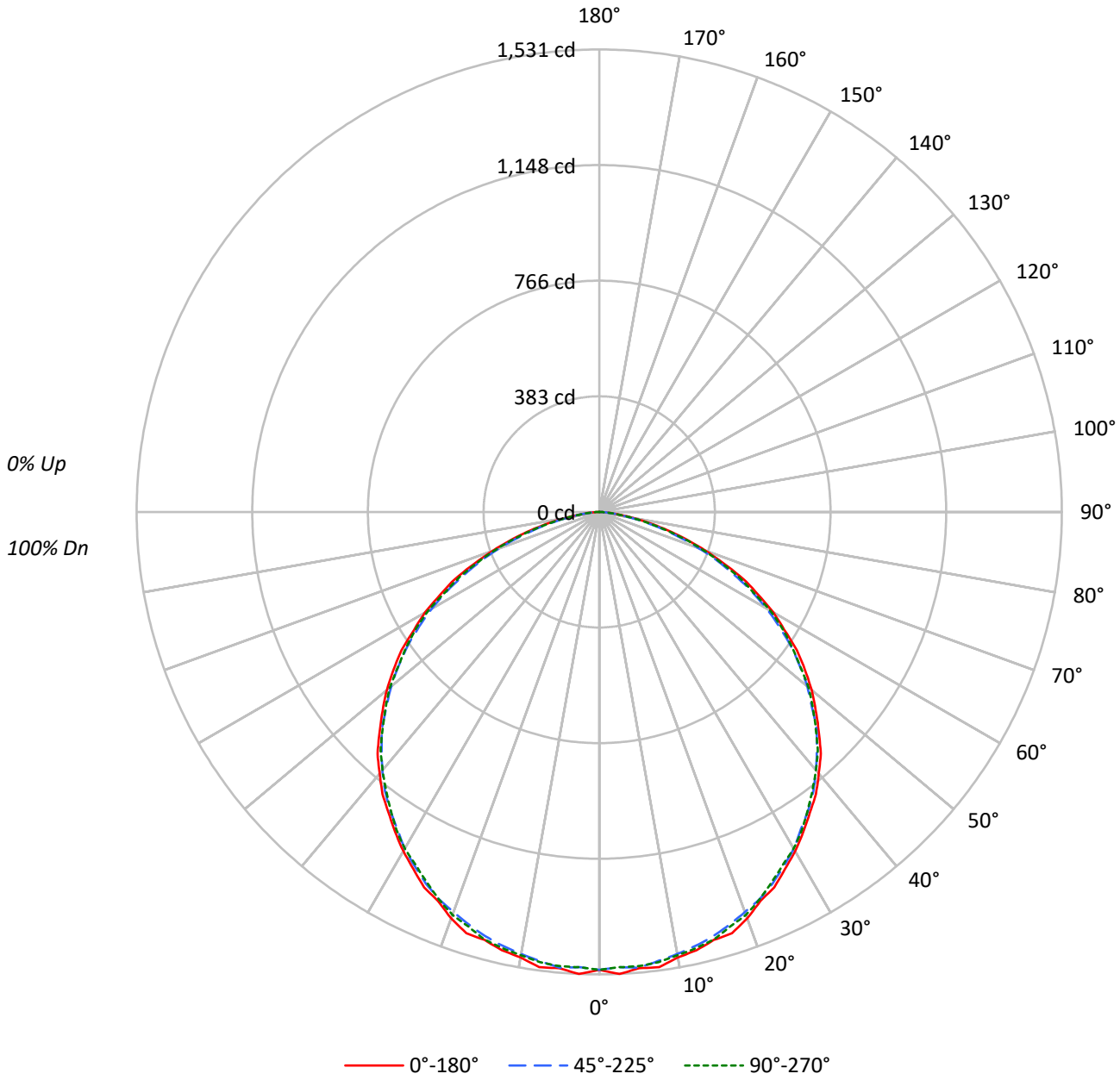
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4178.3 lumens  
Efficiency: N/A  
Efficacy: 102.9 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.26 / 1.38  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 40.6  
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	103	99	96	98	95	93	94	92	90	91	89	87	85
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	76	73	71
3	91	81	73	66	88	79	72	66	76	70	65	73	68	63	71	66	62	60
4	83	72	63	56	81	70	62	56	68	61	55	65	59	54	63	58	54	51
5	77	64	55	48	75	63	54	48	61	53	48	59	52	47	57	51	47	45
6	71	58	49	42	69	57	48	42	55	47	42	53	46	41	52	46	41	39
7	66	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34
8	61	48	39	33	59	47	39	33	46	38	33	44	38	33	43	37	33	31
9	57	44	35	30	56	43	35	30	42	35	30	41	34	30	40	34	29	28
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°	4080	4080	4080
5°	4095	4091	4077
10°	4092	4061	4072
15°	4087	4052	4082
20°	4101	4037	4065
25°	4072	4030	4013
30°	4029	4001	3998
35°	3992	3962	3954
40°	3971	3922	3919
45°	3910	3869	3857
50°	3843	3763	3787
55°	3745	3632	3651
60°	3585	3438	3518
65°	3359	3142	3242
70°	2941	2751	2856
75°	2435	2194	2314
80°	1725	1545	1609
85°	871	769	821

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 3910 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	143.5	3.4
10°-20°	411.8	9.9
20°-30°	625.3	15.0
30°-40°	754.7	18.1
40°-50°	782.4	18.7
50°-60°	693.1	16.6
60°-70°	494.8	11.8
70°-80°	234.4	5.6
80°-90°	38.4	0.9
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°	1180.6	28.3
0°-40°	1935.3	46.3
0°-60°	3410.8	81.6
0°-90°	4178.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4178.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1516	1516	1516	1516	1516	
5°	1516	1508	1514	1504	1509	145
15°	1467	1459	1454	1463	1465	416
25°	1371	1349	1357	1358	1352	630
35°	1215	1203	1206	1201	1204	762
45°	1028	1013	1017	1013	1013	793
55°	798	776	774	771	778	710
65°	528	493	493	497	509	516
75°	234	215	211	216	223	249
85°	28	26	25	24	27	42
90°	0	0	0	0	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1516.0	1516.0	1516.0	1516.0	1516.0
2.5°	1530.9	1504.3	1508.5	1511.8	1508.5
5°	1516.0	1508.5	1514.3	1503.5	1509.3
7.5°	1520.1	1501.8	1499.3	1496.0	1503.5
10°	1497.7	1486.9	1486.1	1491.9	1490.2
12.5°	1486.1	1476.9	1471.9	1472.8	1479.4
15°	1466.9	1458.6	1454.5	1462.8	1465.3
17.5°	1462.0	1432.9	1432.9	1434.6	1439.5
20°	1432.1	1413.0	1409.6	1413.0	1419.6
22.5°	1393.9	1387.2	1387.2	1389.7	1388.0
25°	1371.4	1349.0	1357.3	1358.1	1351.5
27.5°	1332.4	1324.1	1322.4	1319.1	1316.6
30°	1296.7	1283.4	1287.5	1287.5	1286.7
32.5°	1256.8	1247.7	1243.5	1244.3	1248.5
35°	1215.3	1202.8	1206.1	1201.1	1203.6
37.5°	1177.9	1161.3	1164.6	1162.1	1159.6
40°	1130.5	1117.2	1116.4	1112.3	1115.6
42.5°	1085.7	1066.6	1065.7	1066.6	1070.7
45°	1027.5	1012.6	1016.7	1013.4	1013.4
47.5°	971.9	961.9	954.4	955.3	958.6
50°	917.9	898.8	898.8	892.1	904.6
52.5°	858.1	839.0	836.5	839.0	837.3
55°	798.3	775.8	774.2	770.9	778.3
57.5°	726.0	704.4	706.1	707.7	718.5
60°	666.2	637.1	638.8	640.4	653.7
62.5°	592.3	568.2	567.3	569.8	573.2
65°	527.5	493.4	493.4	496.7	509.2
67.5°	445.2	424.5	423.6	427.8	432.8
70°	373.8	349.7	349.7	354.7	363.0
72.5°	302.4	282.4	279.1	286.6	292.4
75°	234.2	215.1	211.0	216.0	222.6
77.5°	167.8	155.3	152.0	157.0	158.7
80°	111.3	100.5	99.7	102.2	103.8
82.5°	64.0	57.3	54.8	57.3	58.1
85°	28.2	25.8	24.9	24.1	26.6
87.5°	6.6	6.6	6.6	6.6	7.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)