

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: P688043

Luminaire Tested: FLR-HA-24-L3C3 (MED)-50-CP375

Issue Date: 5/22/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P688043  
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-24-L3C3 (MED)-50-CP375  
Description: Fail-Safe - FLR Fully Luminous Recessed 2X4 5000K Luminaire at Medium Lumen setting for High Abuse  
Light Source: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: -

**Summary**

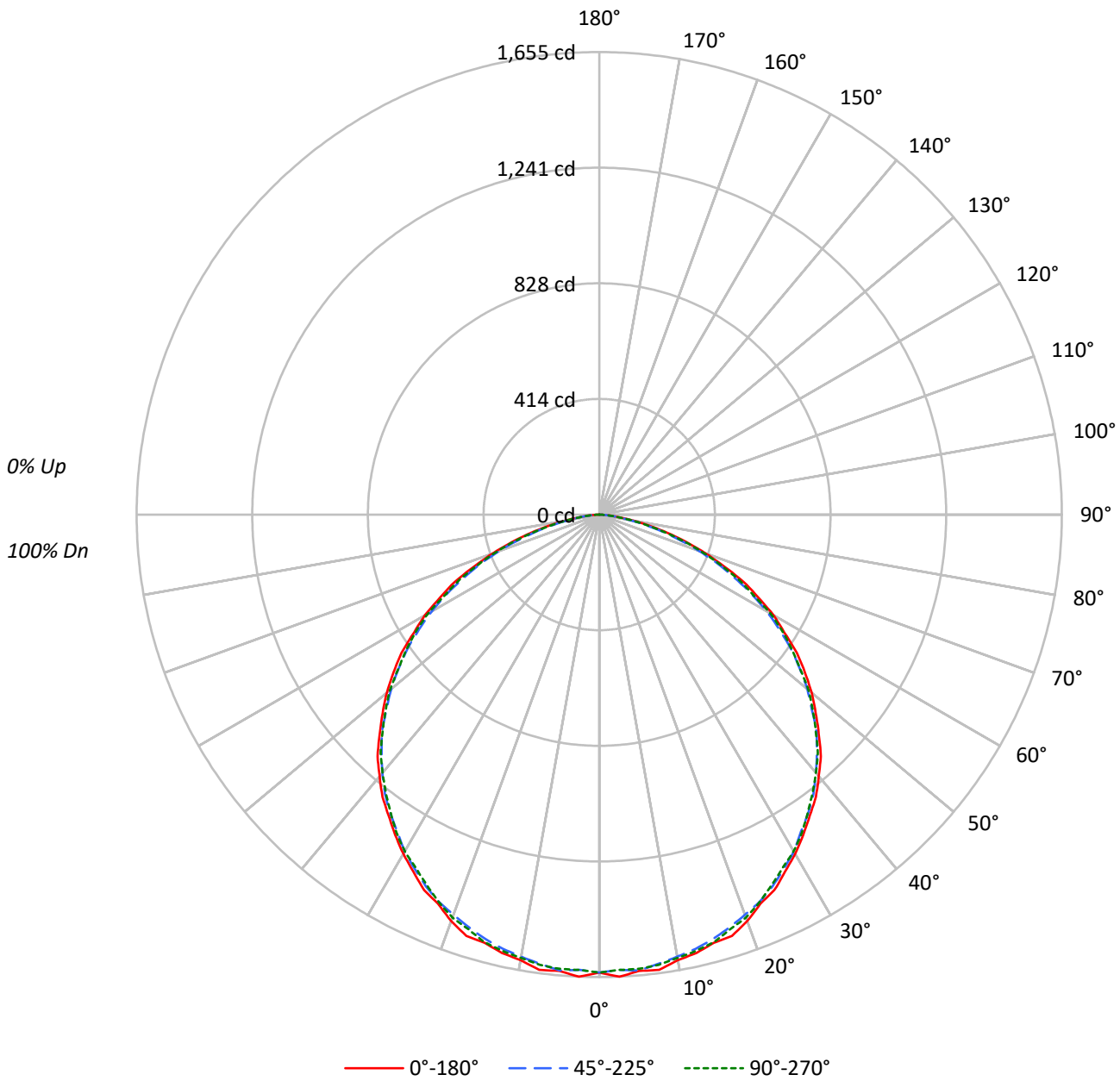
Lumens per Lamp: N/A  
Luminaire Lumens: 4517.1 lumens  
Efficiency: N/A  
Efficacy: 113.8 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.26 / 1.38  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 39.7  
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°	2205	2205	2205
5°	2213	2211	2204
10°	2212	2195	2201
15°	2209	2190	2207
20°	2217	2182	2197
25°	2201	2178	2169
30°	2178	2163	2161
35°	2158	2142	2137
40°	2147	2120	2118
45°	2114	2092	2085
50°	2077	2034	2047
55°	2024	1963	1974
60°	1938	1858	1902
65°	1815	1698	1753
70°	1590	1487	1544
75°	1316	1186	1251
80°	932	835	869
85°	471	415	443

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2114 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	155.1	3.4
10°-20°	445.2	9.9
20°-30°	676.0	15.0
30°-40°	815.9	18.1
40°-50°	845.8	18.7
50°-60°	749.3	16.6
60°-70°	534.9	11.8
70°-80°	253.4	5.6
80°-90°	41.5	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°	1276.3	28.3
0°-40°	2092.2	46.3
0°-60°	3687.3	81.6
0°-90°	4517.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4517.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1639	1639	1639	1639	1639	
5°	1639	1631	1637	1625	1632	156
15°	1586	1577	1572	1581	1584	450
25°	1483	1458	1467	1468	1461	681
35°	1314	1300	1304	1298	1301	824
45°	1111	1095	1099	1096	1096	858
55°	863	839	837	833	841	767
65°	570	533	533	537	550	557
75°	253	233	228	234	241	270
85°	30	28	27	26	29	45
90°	0	0	0	0	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1638.8	1638.8	1638.8	1638.8	1638.8
2.5°	1655.0	1626.3	1630.8	1634.4	1630.8
5°	1638.8	1630.8	1637.1	1625.4	1631.7
7.5°	1643.3	1623.6	1620.9	1617.3	1625.4
10°	1619.1	1607.4	1606.5	1612.8	1611.0
12.5°	1606.5	1596.6	1591.3	1592.2	1599.3
15°	1585.9	1576.9	1572.4	1581.4	1584.1
17.5°	1580.5	1549.0	1549.0	1550.8	1556.2
20°	1548.2	1527.5	1523.9	1527.5	1534.7
22.5°	1506.8	1499.7	1499.7	1502.4	1500.6
25°	1482.6	1458.4	1467.3	1468.2	1461.0
27.5°	1440.4	1431.4	1429.6	1426.0	1423.3
30°	1401.8	1387.4	1391.9	1391.9	1391.0
32.5°	1358.7	1348.8	1344.3	1345.2	1349.7
35°	1313.8	1300.3	1303.9	1298.5	1301.2
37.5°	1273.4	1255.4	1259.0	1256.3	1253.6
40°	1222.2	1207.8	1206.9	1202.4	1206.0
42.5°	1173.7	1153.0	1152.1	1153.0	1157.5
45°	1110.8	1094.7	1099.2	1095.6	1095.6
47.5°	1050.7	1039.9	1031.8	1032.7	1036.3
50°	992.3	971.6	971.6	964.5	977.9
52.5°	927.6	907.0	904.3	907.0	905.2
55°	863.0	838.7	836.9	833.3	841.4
57.5°	784.9	761.5	763.3	765.1	776.8
60°	720.2	688.8	690.6	692.4	706.7
62.5°	640.3	614.2	613.3	616.0	619.6
65°	570.2	533.4	533.4	537.0	550.5
67.5°	481.3	458.9	458.0	462.5	467.9
70°	404.1	378.1	378.1	383.4	392.4
72.5°	326.9	305.3	301.7	309.8	316.1
75°	253.2	232.6	228.1	233.5	240.7
77.5°	181.4	167.9	164.3	169.7	171.5
80°	120.3	108.7	107.8	110.5	112.2
82.5°	69.1	62.0	59.3	62.0	62.9
85°	30.5	27.8	26.9	26.0	28.7
87.5°	7.2	7.2	7.2	7.2	8.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)