

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: P688131

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

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688131
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 (MED)-35-CP250
Description: Fail-Safe - FLR Fully Luminous Recessed 2X4 3500K Luminaire at Medium Lumen setting for High Abuse
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

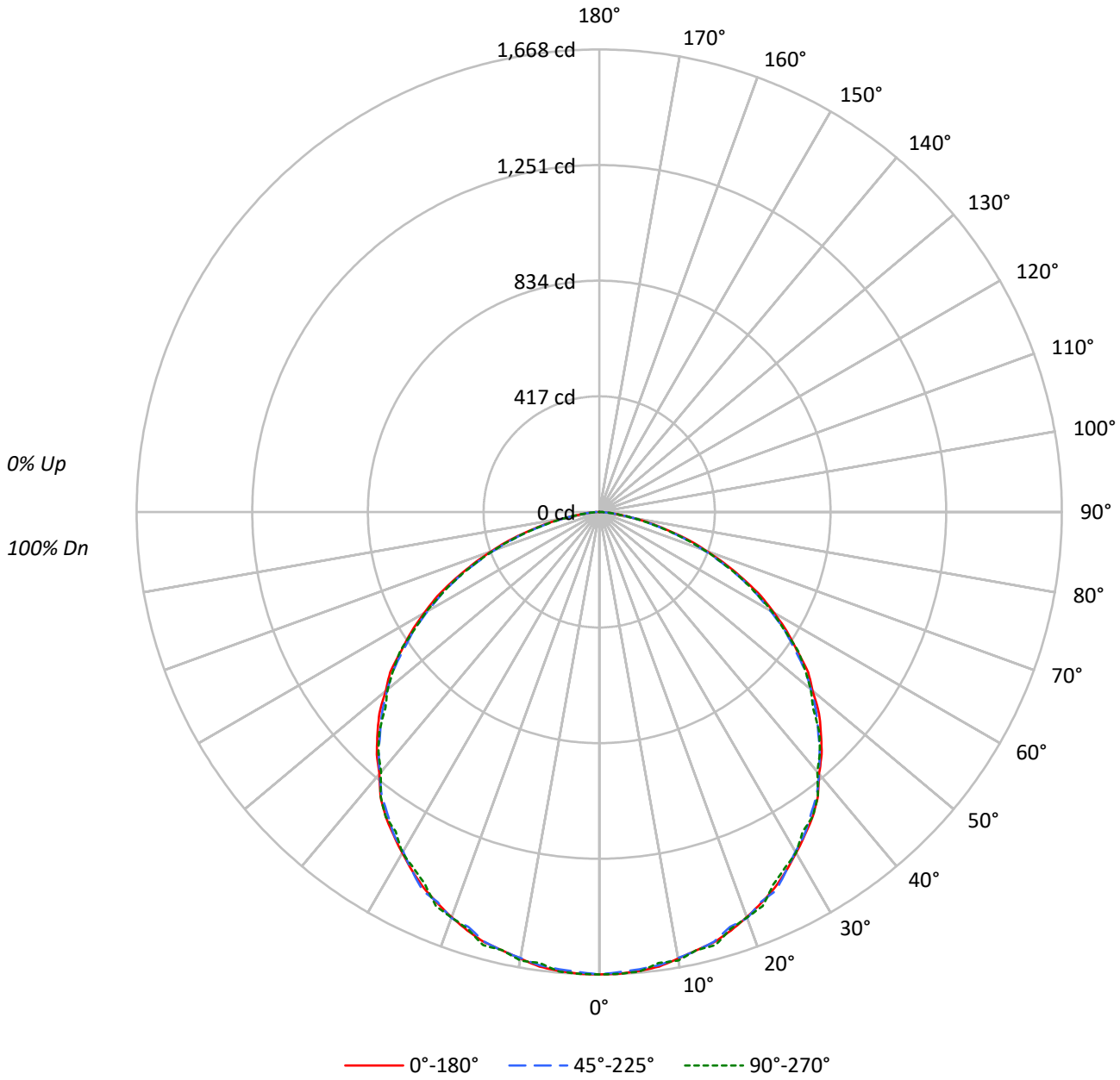
Lumens per Lamp: N/A
Luminaire Lumens: 4624.2 lumens
Efficiency: N/A
Efficacy: 116.5 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.26 / 1.38
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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	50	30	10
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°	2245	2245	2245
5°	2245	2237	2247
10°	2234	2232	2244
15°	2238	2234	2254
20°	2228	2233	2229
25°	2221	2237	2203
30°	2206	2198	2205
35°	2204	2186	2204
40°	2166	2164	2149
45°	2151	2124	2134
50°	2102	2086	2084
55°	2042	2013	2054
60°	1958	1915	1937
65°	1826	1786	1789
70°	1618	1573	1590
75°	1332	1281	1300
80°	934	914	927
85°	479	452	452

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2151 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	157.7	3.4
10°-20°	452.5	9.8
20°-30°	688.0	14.9
30°-40°	832.1	18.0
40°-50°	862.3	18.6
50°-60°	769.7	16.6
60°-70°	552.7	12.0
70°-80°	265.1	5.7
80°-90°	44.0	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°	1298.3	28.1
0°-40°	2130.4	46.1
0°-60°	3762.3	81.4
0°-90°	4624.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4624.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1668	1668	1668	1668	1668	
5°	1662	1667	1656	1657	1664	158
15°	1606	1608	1604	1604	1618	453
25°	1496	1493	1507	1488	1484	689
35°	1342	1332	1331	1325	1342	837
45°	1130	1122	1116	1115	1121	871
55°	870	861	858	856	876	780
65°	574	557	561	553	562	567
75°	256	239	246	246	250	277
85°	31	29	29	29	29	46
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1668.3	1668.3	1668.3	1668.3	1668.3
2.5°	1667.4	1669.2	1661.2	1659.4	1667.4
5°	1662.1	1667.4	1655.9	1656.8	1663.9
7.5°	1654.1	1650.6	1648.8	1655.0	1640.8
10°	1635.5	1643.5	1633.7	1629.3	1642.6
12.5°	1619.5	1620.4	1621.3	1623.1	1618.7
15°	1606.3	1608.0	1603.6	1603.6	1617.8
17.5°	1582.3	1585.9	1569.0	1579.7	1576.1
20°	1555.7	1552.2	1559.3	1556.6	1556.6
22.5°	1526.5	1526.5	1522.9	1524.7	1538.9
25°	1496.3	1492.8	1507.0	1488.4	1483.9
27.5°	1460.0	1456.4	1460.0	1450.2	1448.5
30°	1420.1	1411.2	1414.8	1415.7	1419.2
32.5°	1381.1	1372.2	1378.4	1372.2	1366.0
35°	1342.1	1331.5	1330.6	1325.2	1342.1
37.5°	1295.1	1283.6	1288.0	1271.2	1294.2
40°	1233.1	1226.0	1232.2	1226.9	1223.3
42.5°	1187.0	1179.0	1176.3	1172.8	1178.1
45°	1130.2	1122.2	1116.0	1115.2	1121.4
47.5°	1075.3	1054.9	1060.2	1052.2	1045.1
50°	1004.4	999.0	996.4	988.4	995.5
52.5°	949.4	929.9	934.3	927.2	935.2
55°	870.5	860.7	858.1	856.3	875.8
57.5°	802.2	789.8	791.6	787.2	789.8
60°	727.8	716.3	711.8	710.9	719.8
62.5°	657.7	633.8	637.4	636.5	640.9
65°	573.5	556.7	561.1	553.1	562.0
67.5°	492.9	476.0	477.8	476.0	480.5
70°	411.3	392.7	399.8	396.2	404.2
72.5°	340.4	318.2	324.4	318.2	325.3
75°	256.2	239.3	246.4	246.4	250.0
77.5°	188.8	173.7	179.1	177.3	180.8
80°	120.6	114.4	117.9	115.2	119.7
82.5°	69.1	64.7	64.7	66.5	67.4
85°	31.0	29.3	29.3	29.3	29.3
87.5°	8.0	8.0	8.0	8.0	8.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)