

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: P688125

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

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688125
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 (HI)-35-CP250
Description: Fail-Safe - FLR Fully Luminous Recessed 2X4 3500K Luminaire at High Lumen setting for High Abuse
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

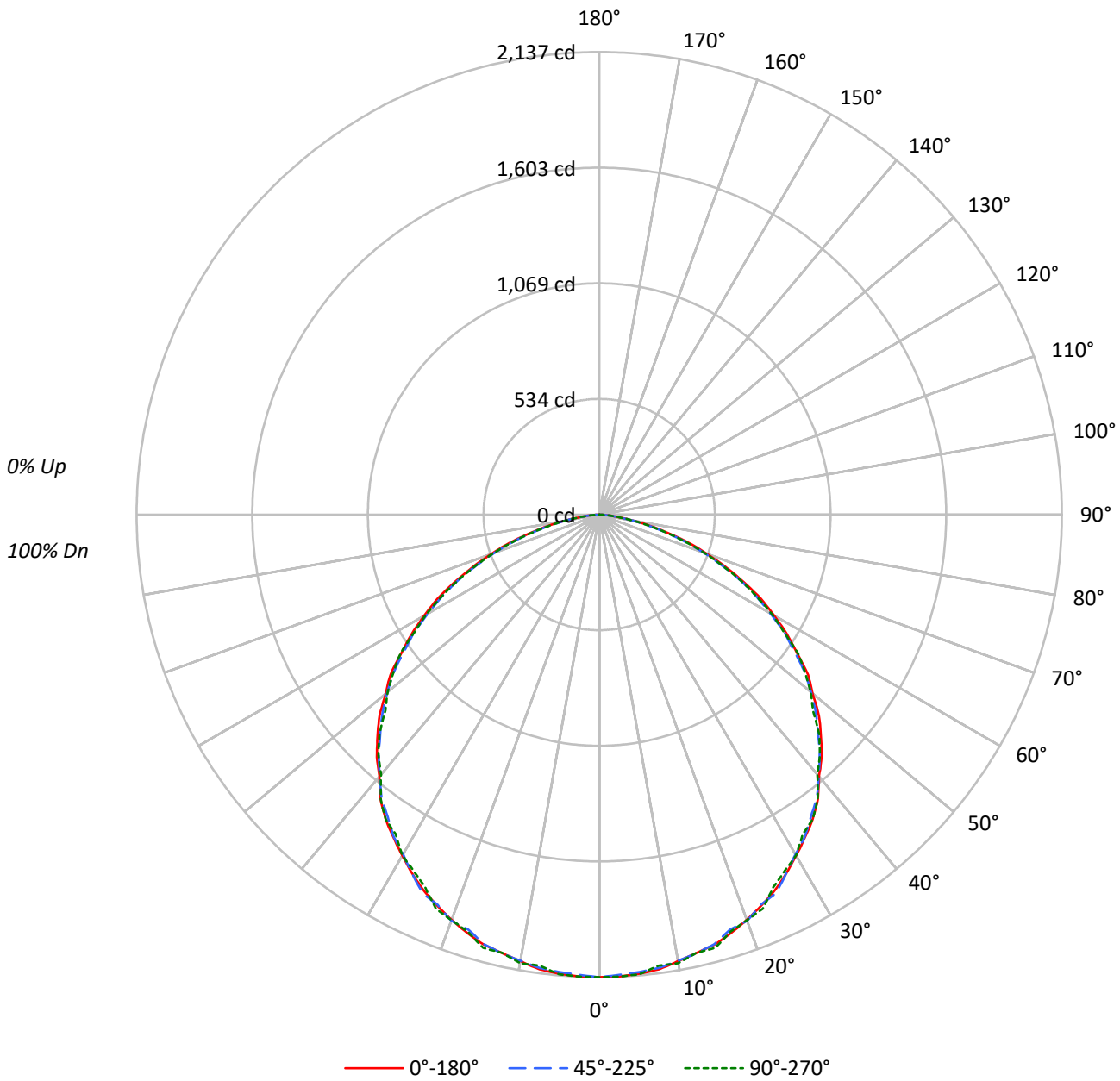
Lumens per Lamp: N/A
Luminaire Lumens: 5924.0 lumens
Efficiency: N/A
Efficacy: 112.2 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.26 / 1.38
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 52.8
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°	2876	2876	2876
5°	2876	2865	2879
10°	2863	2860	2875
15°	2866	2862	2887
20°	2854	2860	2855
25°	2846	2866	2822
30°	2827	2816	2825
35°	2824	2800	2824
40°	2775	2772	2753
45°	2755	2721	2734
50°	2693	2672	2669
55°	2616	2579	2632
60°	2509	2454	2481
65°	2339	2289	2292
70°	2073	2015	2037
75°	1706	1641	1665
80°	1196	1170	1188
85°	613	579	579

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2755 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	202.1	3.4
10°-20°	579.7	9.8
20°-30°	881.4	14.9
30°-40°	1066.0	18.0
40°-50°	1104.6	18.6
50°-60°	986.1	16.6
60°-70°	708.1	12.0
70°-80°	339.6	5.7
80°-90°	56.4	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°	1663.2	28.1
0°-40°	2729.2	46.1
0°-60°	4819.9	81.4
0°-90°	5924.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5924.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2137	2137	2137	2137	2137	
5°	2129	2136	2121	2122	2132	202
15°	2058	2060	2054	2054	2072	580
25°	1917	1912	1931	1907	1901	883
35°	1719	1706	1705	1698	1719	1073
45°	1448	1438	1430	1429	1437	1116
55°	1115	1103	1099	1097	1122	999
65°	735	713	719	709	720	727
75°	328	307	316	316	320	355
85°	40	38	38	38	38	59
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2137.3	2137.3	2137.3	2137.3	2137.3
2.5°	2136.1	2138.4	2128.2	2125.9	2136.1
5°	2129.3	2136.1	2121.4	2122.5	2131.6
7.5°	2119.1	2114.6	2112.3	2120.2	2102.1
10°	2095.2	2105.5	2093.0	2087.3	2104.3
12.5°	2074.8	2075.9	2077.1	2079.3	2073.7
15°	2057.8	2060.0	2054.4	2054.4	2072.5
17.5°	2027.1	2031.7	2010.1	2023.7	2019.2
20°	1993.0	1988.5	1997.6	1994.2	1994.2
22.5°	1955.6	1955.6	1951.0	1953.3	1971.5
25°	1917.0	1912.4	1930.6	1906.7	1901.1
27.5°	1870.4	1865.8	1870.4	1857.9	1855.6
30°	1819.3	1807.9	1812.5	1813.6	1818.2
32.5°	1769.3	1758.0	1765.9	1758.0	1750.0
35°	1719.4	1705.7	1704.6	1697.8	1719.4
37.5°	1659.2	1644.4	1650.1	1628.5	1658.0
40°	1579.7	1570.6	1578.5	1571.7	1567.2
42.5°	1520.6	1510.4	1507.0	1502.4	1509.3
45°	1447.9	1437.7	1429.8	1428.6	1436.6
47.5°	1377.5	1351.4	1358.2	1348.0	1338.9
50°	1286.7	1279.9	1276.5	1266.2	1275.3
52.5°	1216.3	1191.3	1197.0	1187.9	1198.1
55°	1115.2	1102.7	1099.3	1097.0	1122.0
57.5°	1027.7	1011.9	1014.1	1008.4	1011.9
60°	932.4	917.6	911.9	910.8	922.1
62.5°	842.6	812.0	816.5	815.4	821.1
65°	734.8	713.2	718.9	708.6	720.0
67.5°	631.4	609.8	612.1	609.8	615.5
70°	526.9	503.1	512.2	507.6	517.8
72.5°	436.1	407.7	415.6	407.7	416.8
75°	328.2	306.6	315.7	315.7	320.2
77.5°	241.9	222.6	229.4	227.1	231.7
80°	154.4	146.5	151.0	147.6	153.3
82.5°	88.6	82.9	82.9	85.2	86.3
85°	39.7	37.5	37.5	37.5	37.5
87.5°	10.2	10.2	10.2	10.2	10.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)