

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: P688036

Luminaire Tested: FLR-HA-24-L3C3 (HI)-40-CP375

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688036
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 (HI)-40-CP375
Description: Fail-Safe - FLR Fully Luminous Recessed 2X4 4000K Luminaire at High Lumen setting for High Abuse
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

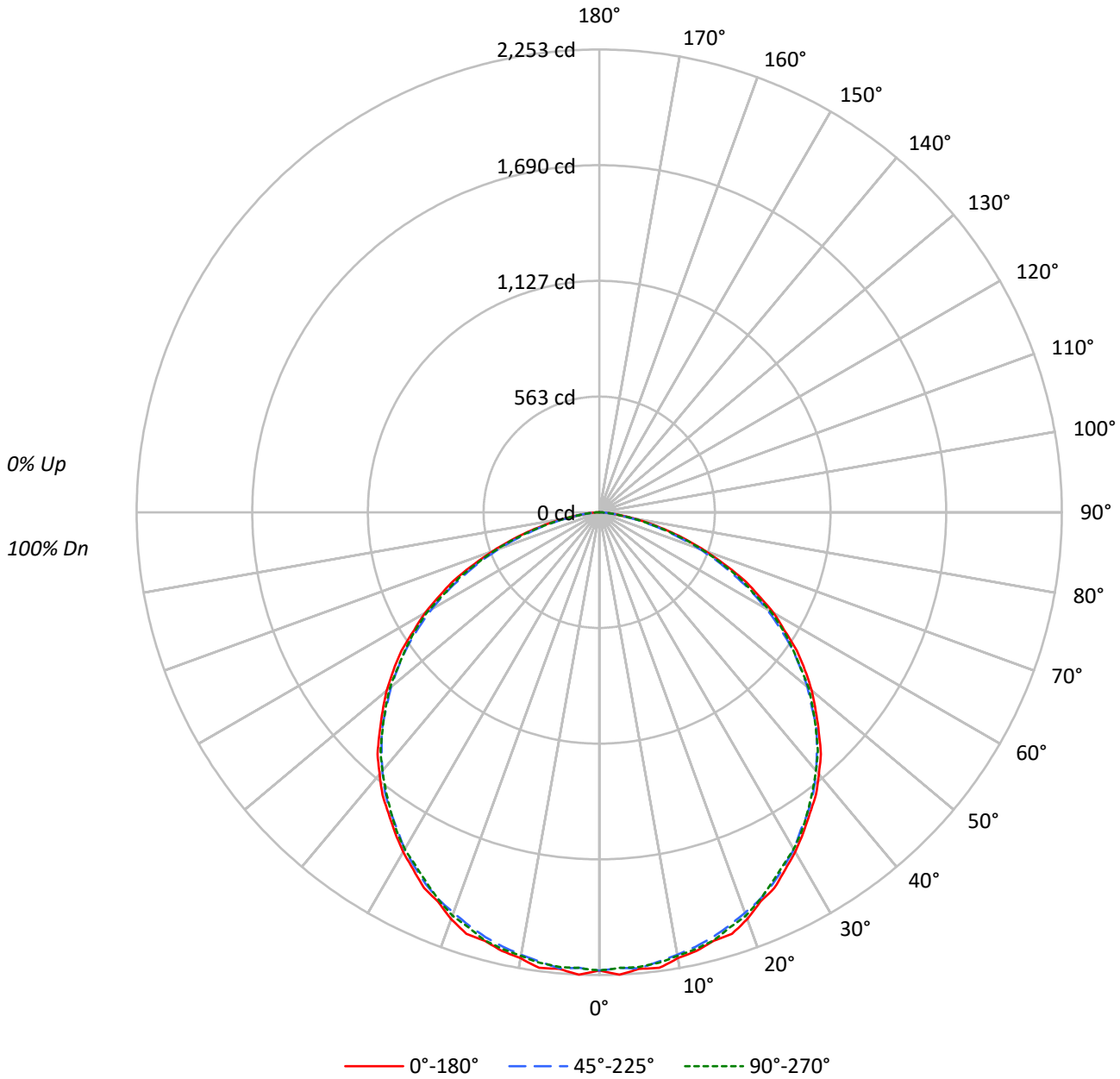
Lumens per Lamp: N/A
Luminaire Lumens: 6150.1 lumens
Efficiency: N/A
Efficacy: 121.3 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.26 / 1.38
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 50.7
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°	3002	3002	3002
5°	3014	3010	3001
10°	3012	2988	2997
15°	3008	2982	3004
20°	3018	2971	2992
25°	2997	2966	2953
30°	2965	2944	2942
35°	2938	2916	2910
40°	2923	2886	2884
45°	2878	2848	2838
50°	2828	2769	2787
55°	2756	2673	2687
60°	2639	2530	2589
65°	2472	2312	2386
70°	2164	2025	2102
75°	1792	1615	1704
80°	1269	1137	1184
85°	642	567	604

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2878 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	211.2	3.4
10°-20°	606.2	9.9
20°-30°	920.4	15.0
30°-40°	1110.8	18.1
40°-50°	1151.6	18.7
50°-60°	1020.2	16.6
60°-70°	728.2	11.8
70°-80°	345.0	5.6
80°-90°	56.5	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°	1737.8	28.3
0°-40°	2848.6	46.3
0°-60°	5020.4	81.6
0°-90°	6150.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6150.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2231	2231	2231	2231	2231	
5°	2231	2220	2229	2213	2222	213
15°	2159	2147	2141	2153	2157	612
25°	2019	1986	1998	1999	1989	928
35°	1789	1770	1775	1768	1772	1121
45°	1512	1490	1496	1492	1492	1168
55°	1175	1142	1140	1135	1146	1045
65°	776	726	726	731	750	759
75°	345	317	311	318	328	367
85°	42	38	37	36	39	62
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2231.4	2231.4	2231.4	2231.4	2231.4
2.5°	2253.4	2214.2	2220.4	2225.2	2220.4
5°	2231.4	2220.4	2228.9	2213.0	2221.6
7.5°	2237.5	2210.6	2206.9	2202.0	2213.0
10°	2204.5	2188.6	2187.3	2195.9	2193.5
12.5°	2187.3	2173.9	2166.6	2167.8	2177.6
15°	2159.2	2147.0	2140.9	2153.1	2156.8
17.5°	2151.9	2109.1	2109.1	2111.5	2118.9
20°	2107.9	2079.8	2074.9	2079.8	2089.5
22.5°	2051.6	2041.8	2041.8	2045.5	2043.1
25°	2018.6	1985.6	1997.8	1999.1	1989.3
27.5°	1961.2	1948.9	1946.5	1941.6	1937.9
30°	1908.6	1889.0	1895.1	1895.1	1893.9
32.5°	1849.9	1836.4	1830.3	1831.6	1837.7
35°	1788.8	1770.4	1775.3	1768.0	1771.6
37.5°	1733.7	1709.3	1714.2	1710.5	1706.8
40°	1664.0	1644.5	1643.3	1637.1	1642.0
42.5°	1598.0	1569.9	1568.7	1569.9	1576.0
45°	1512.4	1490.4	1496.5	1491.7	1491.7
47.5°	1430.5	1415.8	1404.8	1406.1	1411.0
50°	1351.0	1322.9	1322.9	1313.1	1331.5
52.5°	1263.0	1234.9	1231.2	1234.9	1232.4
55°	1175.0	1142.0	1139.5	1134.6	1145.6
57.5°	1068.6	1036.8	1039.3	1041.7	1057.6
60°	980.6	937.8	940.2	942.7	962.2
62.5°	871.8	836.3	835.1	838.7	843.6
65°	776.4	726.3	726.3	731.2	749.5
67.5°	655.3	624.8	623.6	629.7	637.0
70°	550.2	514.7	514.7	522.1	534.3
72.5°	445.0	415.7	410.8	421.8	430.4
75°	344.8	316.7	310.6	317.9	327.7
77.5°	247.0	228.6	223.7	231.1	233.5
80°	163.8	147.9	146.7	150.4	152.8
82.5°	94.1	84.4	80.7	84.4	85.6
85°	41.6	37.9	36.7	35.5	39.1
87.5°	9.8	9.8	9.8	9.8	11.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)