

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: P973123

Luminaire Tested: FLR2-14-80HE-L835-CP080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973123
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-1)
Test Lab: INNOVATION CENTER
Issue Date: 3/13/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: FAIL-SAFE
Catalog Number: FLR2-14-80HE-L835-CP080
Description: 1*4 FLR-2.0 8000 Lumen High Efficacy at 3500CCT & 80CRI with Clear Polycarbonate (0.080" thickness)

Light Source:
Ballast/Driver: -

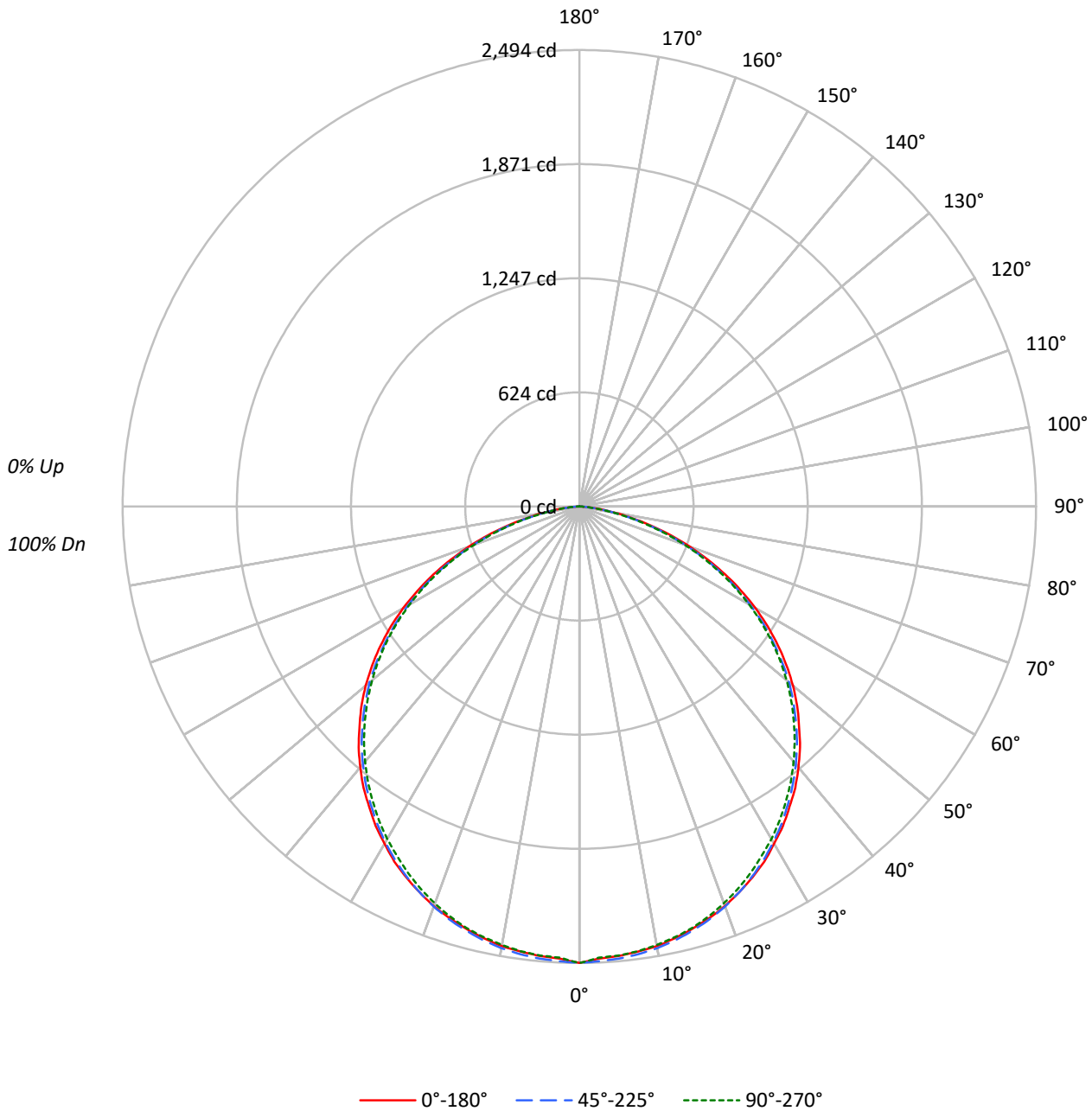
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6981.0 lumens
Efficiency: N/A
Efficacy: 112.8 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.25 / 1.38
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 61.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor:
Total Harmonic Distortion (THDi):
Frequency (hertz): 60
Stabilization Time: HR
Operation Time: HR
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										
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	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	89	91	89	87	85																				
2	99	91	85	79	97	90	83	78	86	81	76	83	78	75	80	76	73	71																				
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62	60																				
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51																				
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	57	51	46	44																				
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	39																				
7	65	52	43	37	64	51	43	37	49	42	37	48	41	36	47	41	36	34																				
8	61	47	39	33	59	47	38	33	45	38	33	44	37	32	43	37	32	30																				
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	40	34	29	27																				
10	53	40	32	27	52	39	32	27	38	32	27	38	31	27	37	31	26	25																				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6712	6712	6712
5°	6659	6699	6651
10°	6666	6694	6646
15°	6655	6681	6641
20°	6655	6661	6608
25°	6639	6627	6566
30°	6611	6583	6518
35°	6576	6525	6461
40°	6539	6459	6394
45°	6459	6369	6302
50°	6375	6258	6185
55°	6214	6069	6011
60°	5973	5806	5757
65°	5594	5430	5371
70°	5044	4841	4800
75°	4230	4014	3972
80°	3071	2864	2783
85°	1627	1436	1306

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6459 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	236.3	3.4
10°-20°	678.5	9.7
20°-30°	1030.8	14.8
30°-40°	1246.9	17.9
40°-50°	1295.9	18.6
50°-60°	1160.2	16.6
60°-70°	846.2	12.1
70°-80°	416.7	6.0
80°-90°	69.7	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°	1945.5	27.9
0°-40°	3192.3	45.7
0°-60°	5648.4	80.9
0°-90°	6981.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6981.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2494	2494	2494	2494	2494	
5°	2465	2492	2480	2504	2462	235
15°	2389	2411	2398	2419	2384	675
25°	2236	2248	2232	2242	2211	1031
35°	2002	2006	1986	1995	1967	1254
45°	1697	1695	1674	1677	1656	1310
55°	1325	1313	1294	1290	1281	1182
65°	879	868	853	847	844	868
75°	407	400	386	382	382	434
85°	53	51	46	41	42	76
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2494.2	2494.2	2494.2	2494.2	2494.2
2.5°	2472.6	2500.4	2487.0	2511.8	2467.4
5°	2465.3	2492.2	2479.8	2503.5	2462.2
7.5°	2453.0	2480.8	2467.4	2490.1	2450.9
10°	2439.5	2464.3	2449.9	2472.6	2432.3
12.5°	2415.8	2440.6	2427.1	2447.8	2410.6
15°	2388.9	2410.6	2398.2	2418.9	2383.8
17.5°	2358.0	2378.6	2365.2	2383.8	2348.7
20°	2323.9	2340.4	2326.0	2341.5	2307.4
22.5°	2281.6	2297.1	2281.6	2291.9	2262.0
25°	2236.1	2247.5	2232.0	2242.3	2211.4
27.5°	2187.6	2193.8	2178.3	2186.6	2154.6
30°	2127.7	2135.0	2118.5	2128.8	2097.8
32.5°	2069.9	2074.1	2055.5	2063.7	2035.9
35°	2001.8	2005.9	1986.3	1994.6	1966.7
37.5°	1936.8	1935.7	1915.1	1920.2	1896.5
40°	1861.4	1860.4	1838.7	1842.8	1820.1
42.5°	1784.0	1779.8	1759.2	1761.3	1740.6
45°	1697.2	1695.2	1673.5	1676.6	1655.9
47.5°	1613.6	1607.4	1585.7	1586.8	1569.2
50°	1522.8	1513.5	1494.9	1492.8	1477.3
52.5°	1425.7	1415.4	1394.8	1392.7	1381.3
55°	1324.6	1313.2	1293.6	1290.5	1281.2
57.5°	1220.3	1205.8	1190.3	1184.1	1176.9
60°	1109.8	1096.4	1078.8	1072.6	1069.6
62.5°	995.2	981.8	968.4	962.2	958.1
65°	878.6	868.2	852.8	846.6	843.5
67.5°	759.8	750.5	736.1	728.9	727.8
70°	641.1	631.8	615.3	611.2	610.1
72.5°	522.4	514.1	498.6	494.5	494.5
75°	406.8	399.5	386.1	382.0	382.0
77.5°	297.3	291.1	280.8	275.6	275.6
80°	198.2	194.1	184.8	180.7	179.6
82.5°	114.6	112.5	104.3	100.1	102.2
85°	52.7	50.6	46.5	41.3	42.3
87.5°	13.4	12.4	9.3	7.2	9.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)