

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: P973078

Luminaire Tested: FLR2-14-80HE-L830-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973078
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-L830-CA080
Description: 1*4 FLR-2.0 8000 Lumen High Efficacy at 3000CCT & 80CRI with Clear Aryalic (0.080" thickness)

Light Source:
Ballast/Driver: -

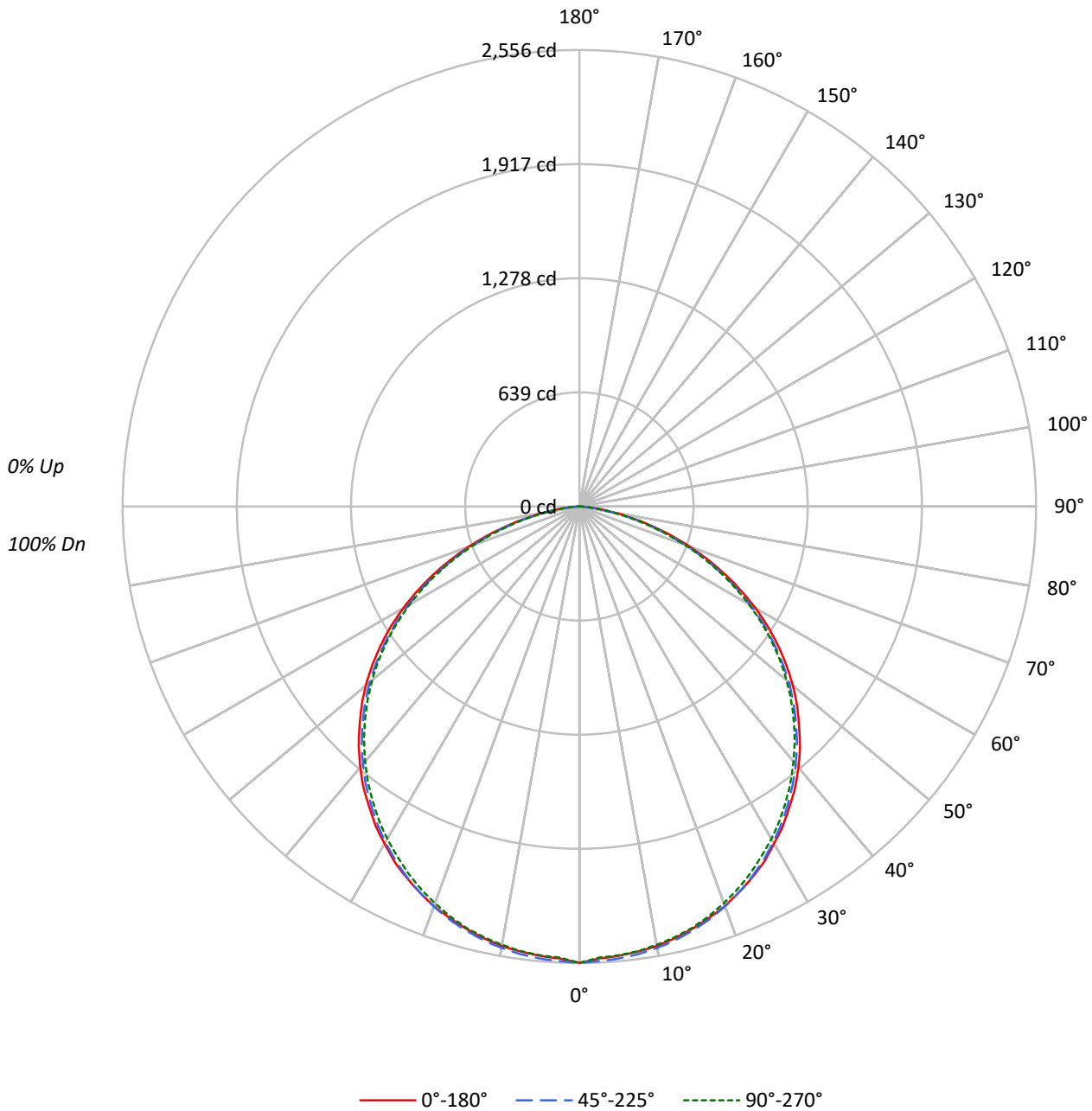
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7153.0 lumens
Efficiency: N/A
Efficacy: 115.6 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

TEST NUMBER: P973078
CATALOG NUMBER: FLR2-14-80HE-L830-CA080

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						100														
1	109	105	101	97	107	102	99	95	98	95	92	94	92	89	91	89	87	85						85														
2	99	91	85	79	97	90	83	78	86	81	76	83	78	75	80	76	73	71						71														
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62	60						60														
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51						51														
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	57	51	46	44						44														
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	39						39														
7	65	52	43	37	64	51	43	37	49	42	37	48	41	36	47	41	36	34						34														
8	61	47	39	33	59	47	38	33	45	38	33	44	37	32	43	37	32	30						30														
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	40	34	29	27						27														
10	53	40	32	27	52	39	32	27	38	32	27	38	31	27	37	31	26	25						25														

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6877	6877	6877
5°	6824	6864	6815
10°	6830	6859	6810
15°	6819	6846	6805
20°	6819	6825	6770
25°	6803	6790	6728
30°	6774	6745	6679
35°	6738	6686	6620
40°	6700	6618	6551
45°	6618	6525	6457
50°	6532	6412	6337
55°	6367	6218	6159
60°	6120	5949	5898
65°	5732	5564	5503
70°	5168	4961	4919
75°	4334	4113	4069
80°	3147	2934	2853
85°	1664	1470	1340

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6618 cd/sqm



TEST NUMBER: P973078
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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	242.1	3.4
10°-20°	695.2	9.7
20°-30°	1056.1	14.8
30°-40°	1277.6	17.9
40°-50°	1327.8	18.6
50°-60°	1188.8	16.6
60°-70°	867.1	12.1
70°-80°	427.0	6.0
80°-90°	71.4	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°	1993.4	27.9
0°-40°	3271.0	45.7
0°-60°	5787.6	80.9
0°-90°	7153.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7153.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2556	2556	2556	2556	2556	
5°	2526	2554	2541	2565	2523	240
15°	2448	2470	2457	2478	2442	691
25°	2291	2303	2287	2298	2266	1056
35°	2051	2055	2035	2044	2015	1284
45°	1739	1737	1715	1718	1697	1343
55°	1357	1346	1325	1322	1313	1211
65°	900	890	874	867	864	889
75°	417	409	396	391	391	444
85°	54	52	48	42	43	78
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2555.7	2555.7	2555.7	2555.7	2555.7
2.5°	2533.5	2562.0	2548.3	2573.7	2528.2
5°	2526.1	2553.6	2540.9	2565.2	2522.9
7.5°	2513.4	2541.9	2528.2	2551.5	2511.3
10°	2499.6	2525.0	2510.2	2533.5	2492.2
12.5°	2475.3	2500.7	2486.9	2508.1	2470.0
15°	2447.8	2470.0	2457.3	2478.5	2442.5
17.5°	2416.1	2437.2	2423.5	2442.5	2406.5
20°	2381.1	2398.1	2383.3	2399.1	2364.2
22.5°	2337.8	2353.6	2337.8	2348.4	2317.7
25°	2291.2	2302.9	2287.0	2297.6	2265.8
27.5°	2241.5	2247.9	2232.0	2240.5	2207.7
30°	2180.2	2187.6	2170.6	2181.2	2149.5
32.5°	2120.9	2125.2	2106.1	2114.6	2086.0
35°	2051.1	2055.3	2035.2	2043.7	2015.1
37.5°	1984.5	1983.4	1962.3	1967.5	1943.2
40°	1907.2	1906.2	1884.0	1888.2	1864.9
42.5°	1827.9	1823.7	1802.5	1804.6	1783.5
45°	1739.1	1736.9	1714.7	1717.9	1696.7
47.5°	1653.4	1647.0	1624.8	1625.9	1607.9
50°	1560.3	1550.8	1531.7	1529.6	1513.7
52.5°	1460.8	1450.3	1429.1	1427.0	1415.4
55°	1357.2	1345.5	1325.4	1322.3	1312.8
57.5°	1250.3	1235.5	1219.7	1213.3	1205.9
60°	1137.2	1123.4	1105.4	1099.1	1095.9
62.5°	1019.7	1006.0	992.2	985.9	981.7
65°	900.2	889.6	873.8	867.4	864.2
67.5°	778.6	769.0	754.2	746.8	745.8
70°	656.9	647.4	630.5	626.2	625.2
72.5°	535.3	526.8	510.9	506.7	506.7
75°	416.8	409.4	395.6	391.4	391.4
77.5°	304.7	298.3	287.7	282.4	282.4
80°	203.1	198.9	189.3	185.1	184.1
82.5°	117.4	115.3	106.8	102.6	104.7
85°	53.9	51.8	47.6	42.3	43.4
87.5°	13.8	12.7	9.5	7.4	9.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)