

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: P974920

Luminaire Tested: FLR2-24-80HE-L940-CP187

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974920
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-3)
Test Lab: INNOVATION CENTER
Issue Date: 3/13/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: FAIL-SAFE
Catalog Number: FLR2-24-80HE-L940-CP187
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

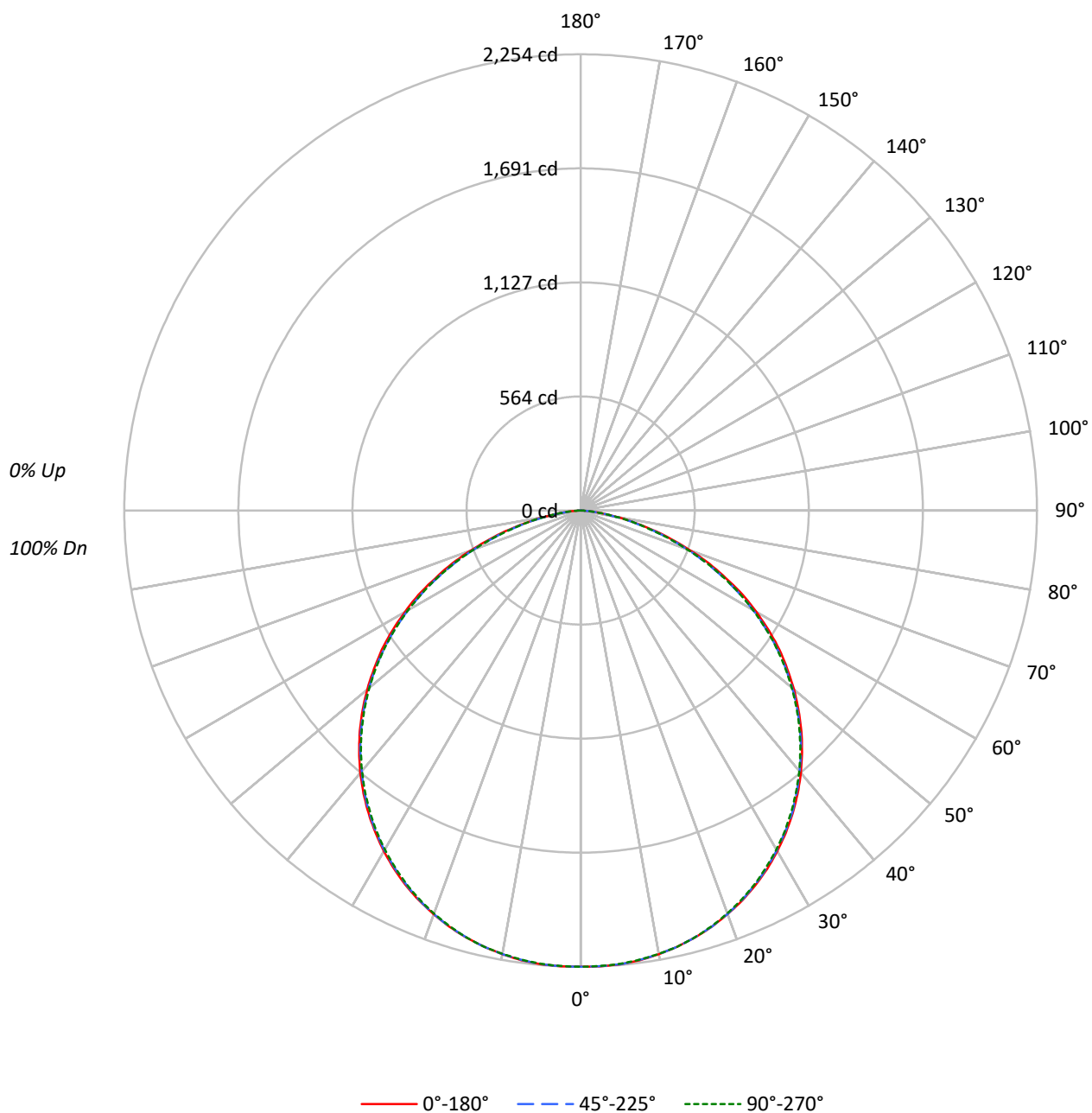
Lumens per Lamp: N/A
Luminaire Lumens: 6371.2 lumens
Efficiency: N/A
Efficacy: 100.3 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 63.5
Input Voltage (V):
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: P974920

CATALOG NUMBER: FLR2-24-80HE-L940-CP187

Luminous Intensity Polar Plot



TEST NUMBER: P974920

CATALOG NUMBER: FLR2-24-80HE-L940-CP187

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	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	100	97	106	102	99	95	98	95	92	94	92	89	91	89	87	85		85
2	99	91	85	79	97	89	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	57	53	51		51
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44		44
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	38		38
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	39	33	29	27		27
10	53	40	32	27	52	39	32	27	38	31	27	38	31	26	37	31	26	25		25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3033	3033	3033
5°	3039	3039	3037
10°	3041	3040	3039
15°	3042	3041	3041
20°	3039	3038	3033
25°	3033	3027	3022
30°	3020	3011	3005
35°	3000	2992	2981
40°	2973	2955	2951
45°	2935	2918	2909
50°	2880	2858	2849
55°	2812	2772	2768
60°	2695	2647	2647
65°	2521	2462	2470
70°	2269	2199	2192
75°	1905	1829	1821
80°	1392	1323	1378
85°	787	724	736

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2935 cd/sqm

TEST NUMBER: P974920

CATALOG NUMBER: FLR2-24-80HE-L940-CP187

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	214.0	3.4
10°-20°	616.4	9.7
20°-30°	939.9	14.8
30°-40°	1138.7	17.9
40°-50°	1182.8	18.6
50°-60°	1058.1	16.6
60°-70°	771.2	12.1
70°-80°	381.9	6.0
80°-90°	68.3	1.1
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°	1770.3	27.8
0°-40°	2909.0	45.7
0°-60°	5149.9	80.8
0°-90°	6371.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6371.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2254	2254	2254	2254	2254	
5°	2250	2251	2250	2250	2249	214
15°	2184	2183	2183	2185	2183	617
25°	2043	2041	2039	2038	2036	942
35°	1826	1824	1822	1818	1815	1142
45°	1542	1539	1534	1530	1529	1189
55°	1199	1190	1182	1182	1180	1068
65°	792	785	773	776	776	785
75°	366	361	352	358	350	391
85°	51	47	47	48	48	71
90°	0	0	0	0	0	

TEST NUMBER: P974920

CATALOG NUMBER: FLR2-24-80HE-L940-CP187

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2254.3	2254.3	2254.3	2254.3	2254.3
2.5°	2254.3	2253.5	2253.5	2254.3	2252.6
5°	2250.2	2251.0	2250.2	2250.2	2248.6
7.5°	2241.3	2240.5	2239.7	2240.5	2238.1
10°	2226.0	2226.0	2225.1	2226.0	2224.3
12.5°	2207.3	2207.3	2207.3	2208.2	2207.3
15°	2183.9	2183.1	2183.1	2184.7	2183.1
17.5°	2156.4	2155.6	2155.6	2154.8	2153.2
20°	2122.4	2122.4	2121.6	2120.8	2118.4
22.5°	2086.0	2085.2	2082.8	2082.8	2079.6
25°	2043.2	2040.7	2039.1	2038.3	2035.9
27.5°	1996.2	1993.0	1990.6	1989.0	1986.5
30°	1943.7	1940.4	1938.0	1935.6	1934.0
32.5°	1887.0	1885.4	1881.4	1880.6	1877.3
35°	1826.4	1824.0	1821.5	1818.3	1815.1
37.5°	1761.7	1759.2	1753.6	1752.0	1749.5
40°	1692.9	1689.7	1682.4	1682.4	1680.0
42.5°	1619.3	1616.1	1611.2	1608.0	1606.4
45°	1542.5	1539.2	1533.6	1530.3	1528.7
47.5°	1460.8	1458.4	1451.9	1449.5	1447.0
50°	1375.9	1372.6	1365.3	1363.7	1361.3
52.5°	1286.9	1285.3	1275.6	1274.7	1272.3
55°	1198.7	1189.8	1181.7	1181.7	1180.1
57.5°	1101.7	1095.2	1084.7	1084.7	1083.0
60°	1001.4	995.7	983.6	985.2	983.6
62.5°	903.5	891.4	880.0	884.9	880.8
65°	791.9	785.4	773.3	776.5	775.7
67.5°	689.9	677.8	666.5	673.0	669.7
70°	576.7	570.2	558.9	565.4	557.3
72.5°	469.9	464.3	453.0	460.2	452.1
75°	366.4	360.7	351.8	358.3	350.2
77.5°	268.5	264.5	256.4	262.9	264.5
80°	179.6	174.7	170.7	176.3	177.9
82.5°	105.2	101.9	100.3	101.1	105.2
85°	51.0	46.9	46.9	47.7	47.7
87.5°	13.8	12.1	13.8	14.6	15.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)