

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: P974533

Luminaire Tested: FLR2-24-65HE-L830-CP187

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974533
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: FLR2-24-65HE-L830-CP187
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

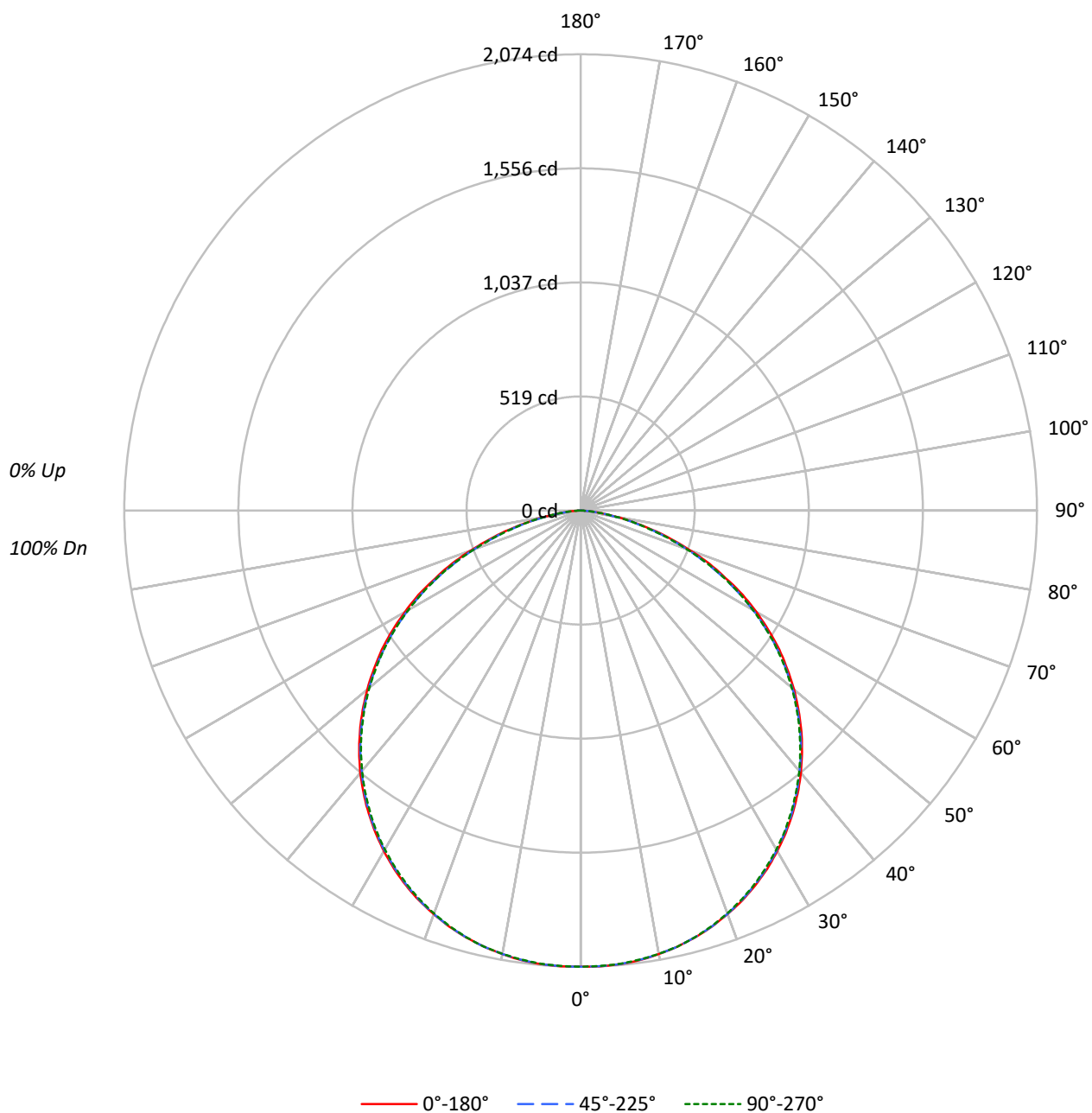
Lumens per Lamp: N/A
Luminaire Lumens: 5861.6 lumens
Efficiency: N/A
Efficacy: 117.5 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 49.9
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: P974533

CATALOG NUMBER: FLR2-24-65HE-L830-CP187

Luminous Intensity Polar Plot



TEST NUMBER: P974533

CATALOG NUMBER: FLR2-24-65HE-L830-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°	2791	2791	2791
5°	2796	2796	2794
10°	2798	2797	2796
15°	2799	2798	2798
20°	2796	2795	2791
25°	2791	2785	2781
30°	2778	2770	2764
35°	2760	2753	2743
40°	2736	2719	2715
45°	2700	2685	2676
50°	2650	2629	2622
55°	2587	2550	2547
60°	2479	2435	2435
65°	2319	2265	2272
70°	2087	2023	2017
75°	1752	1683	1675
80°	1280	1216	1268
85°	724	667	678

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2700 cd/sqm

TEST NUMBER: P974533

CATALOG NUMBER: FLR2-24-65HE-L830-CP187

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	196.9	3.4
10°-20°	567.1	9.7
20°-30°	864.7	14.8
30°-40°	1047.6	17.9
40°-50°	1088.2	18.6
50°-60°	973.5	16.6
60°-70°	709.5	12.1
70°-80°	351.4	6.0
80°-90°	62.8	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°	1628.7	27.8
0°-40°	2676.3	45.7
0°-60°	4738.0	80.8
0°-90°	5861.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5861.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2074	2074	2074	2074	2074	
5°	2070	2071	2070	2070	2069	197
15°	2009	2008	2008	2010	2008	567
25°	1880	1878	1876	1875	1873	866
35°	1680	1678	1676	1673	1670	1051
45°	1419	1416	1411	1408	1406	1094
55°	1103	1095	1087	1087	1086	983
65°	728	723	711	714	714	722
75°	337	332	324	330	322	359
85°	47	43	43	44	44	65
90°	0	0	0	0	0	

TEST NUMBER: P974533

CATALOG NUMBER: FLR2-24-65HE-L830-CP187

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2074.0	2074.0	2074.0	2074.0	2074.0
2.5°	2074.0	2073.2	2073.2	2074.0	2072.5
5°	2070.2	2071.0	2070.2	2070.2	2068.7
7.5°	2062.0	2061.3	2060.6	2061.3	2059.1
10°	2047.9	2047.9	2047.2	2047.9	2046.4
12.5°	2030.8	2030.8	2030.8	2031.5	2030.8
15°	2009.2	2008.5	2008.5	2010.0	2008.5
17.5°	1983.9	1983.2	1983.2	1982.4	1980.9
20°	1952.7	1952.7	1951.9	1951.2	1948.9
22.5°	1919.2	1918.4	1916.2	1916.2	1913.2
25°	1879.7	1877.5	1876.0	1875.3	1873.0
27.5°	1836.6	1833.6	1831.4	1829.9	1827.6
30°	1788.2	1785.2	1783.0	1780.8	1779.3
32.5°	1736.1	1734.6	1730.9	1730.2	1727.2
35°	1680.3	1678.1	1675.8	1672.9	1669.9
37.5°	1620.8	1618.5	1613.3	1611.8	1609.6
40°	1557.5	1554.5	1547.8	1547.8	1545.6
42.5°	1489.8	1486.8	1482.4	1479.4	1477.9
45°	1419.1	1416.1	1410.9	1407.9	1406.4
47.5°	1343.9	1341.7	1335.8	1333.5	1331.3
50°	1265.8	1262.8	1256.1	1254.6	1252.4
52.5°	1183.9	1182.5	1173.5	1172.8	1170.6
55°	1102.8	1094.6	1087.2	1087.2	1085.7
57.5°	1013.5	1007.6	997.9	997.9	996.4
60°	921.3	916.1	904.9	906.4	904.9
62.5°	831.2	820.1	809.6	814.1	810.4
65°	728.5	722.6	711.4	714.4	713.6
67.5°	634.8	623.6	613.2	619.1	616.2
70°	530.6	524.6	514.2	520.2	512.7
72.5°	432.4	427.1	416.7	423.4	416.0
75°	337.1	331.9	323.7	329.7	322.2
77.5°	247.1	243.3	235.9	241.8	243.3
80°	165.2	160.7	157.0	162.2	163.7
82.5°	96.7	93.8	92.3	93.0	96.7
85°	46.9	43.2	43.2	43.9	43.9
87.5°	12.7	11.2	12.7	13.4	14.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)