

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: P974535

Luminaire Tested: FLR2-24-80HE-L830-CP187

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974535
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-L830-CP187
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

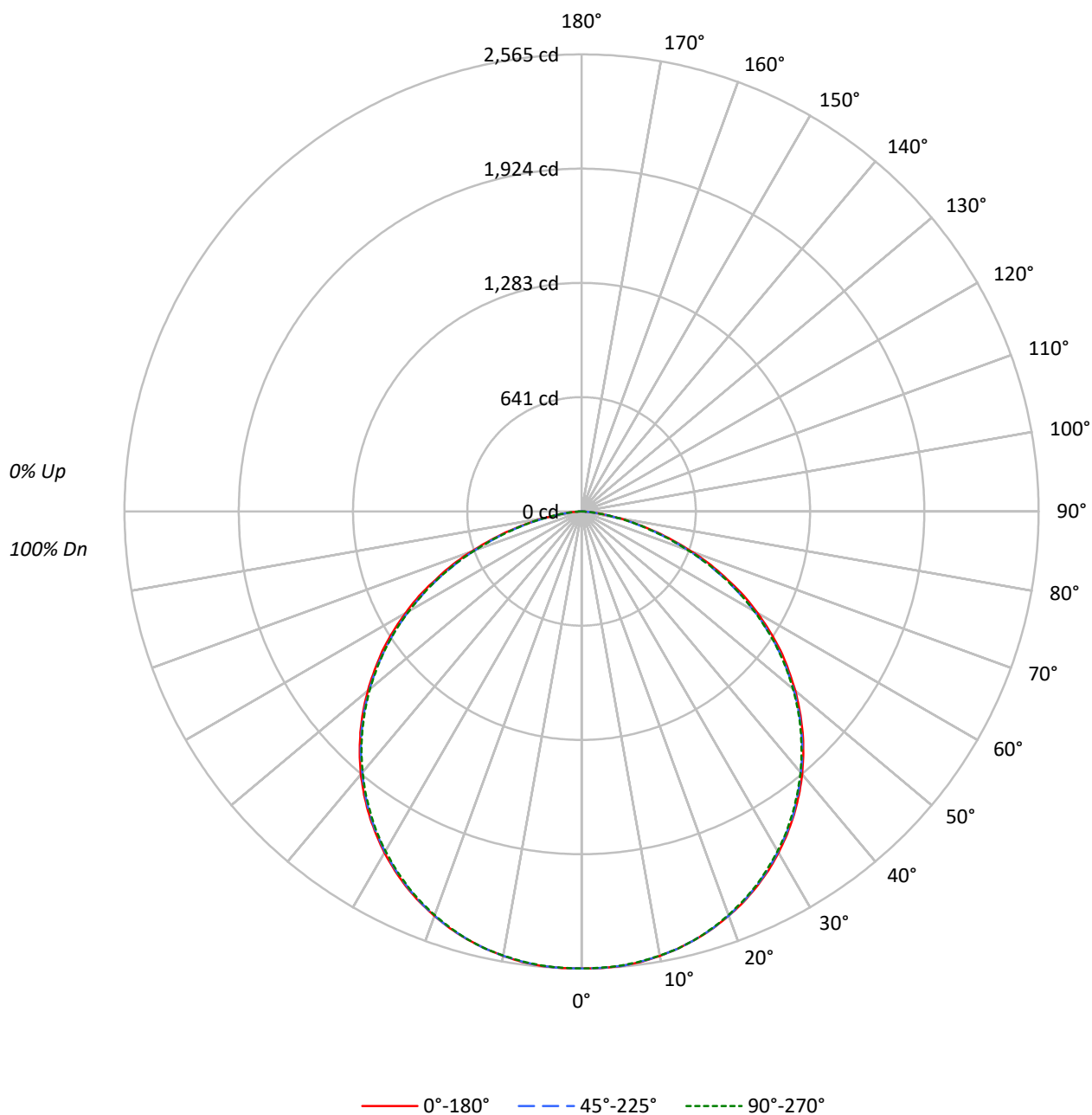
Lumens per Lamp: N/A
Luminaire Lumens: 7250.0 lumens
Efficiency: N/A
Efficacy: 114.2 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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: P974535

CATALOG NUMBER: FLR2-24-80HE-L830-CP187

Luminous Intensity Polar Plot



TEST NUMBER: P974535

CATALOG NUMBER: FLR2-24-80HE-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°	3451	3451	3451
5°	3458	3458	3456
10°	3461	3459	3458
15°	3462	3460	3460
20°	3458	3457	3452
25°	3452	3445	3439
30°	3436	3426	3419
35°	3414	3405	3393
40°	3384	3363	3358
45°	3340	3321	3310
50°	3277	3252	3243
55°	3200	3154	3150
60°	3066	3012	3012
65°	2869	2801	2810
70°	2582	2502	2495
75°	2167	2082	2072
80°	1583	1505	1569
85°	895	824	838

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3340 cd/sqm

TEST NUMBER: P974535

CATALOG NUMBER: FLR2-24-80HE-L830-CP187

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	243.5	3.4
10°-20°	701.5	9.7
20°-30°	1069.5	14.8
30°-40°	1295.8	17.9
40°-50°	1346.0	18.6
50°-60°	1204.1	16.6
60°-70°	877.5	12.1
70°-80°	434.6	6.0
80°-90°	77.7	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°	2014.4	27.8
0°-40°	3310.2	45.7
0°-60°	5860.2	80.8
0°-90°	7250.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7250.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2565	2565	2565	2565	2565	
5°	2561	2562	2561	2561	2559	244
15°	2485	2484	2484	2486	2484	702
25°	2325	2322	2320	2319	2317	1072
35°	2078	2076	2073	2069	2065	1300
45°	1755	1752	1745	1741	1740	1353
55°	1364	1354	1345	1345	1343	1215
65°	901	894	880	884	883	893
75°	417	410	400	408	398	445
85°	58	53	53	54	54	80
90°	0	0	0	0	0	

TEST NUMBER: P974535

CATALOG NUMBER: FLR2-24-80HE-L830-CP187

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2565.2	2565.2	2565.2	2565.2	2565.2
2.5°	2565.2	2564.3	2564.3	2565.2	2563.4
5°	2560.6	2561.5	2560.6	2560.6	2558.8
7.5°	2550.5	2549.5	2548.6	2549.5	2546.8
10°	2533.0	2533.0	2532.1	2533.0	2531.1
12.5°	2511.8	2511.8	2511.8	2512.7	2511.8
15°	2485.1	2484.2	2484.2	2486.0	2484.2
17.5°	2453.8	2452.9	2452.9	2452.0	2450.1
20°	2415.2	2415.2	2414.2	2413.3	2410.6
22.5°	2373.7	2372.8	2370.1	2370.1	2366.4
25°	2325.0	2322.2	2320.4	2319.4	2316.7
27.5°	2271.6	2267.9	2265.1	2263.3	2260.5
30°	2211.8	2208.1	2205.3	2202.6	2200.7
32.5°	2147.3	2145.5	2140.9	2140.0	2136.3
35°	2078.3	2075.5	2072.8	2069.1	2065.4
37.5°	2004.7	2001.9	1995.5	1993.6	1990.9
40°	1926.4	1922.7	1914.5	1914.5	1911.7
42.5°	1842.7	1839.0	1833.5	1829.8	1827.9
45°	1755.2	1751.5	1745.1	1741.4	1739.6
47.5°	1662.3	1659.5	1652.1	1649.4	1646.6
50°	1565.6	1561.9	1553.7	1551.8	1549.1
52.5°	1464.4	1462.5	1451.5	1450.6	1447.8
55°	1364.1	1353.9	1344.7	1344.7	1342.9
57.5°	1253.6	1246.2	1234.3	1234.3	1232.4
60°	1139.5	1133.0	1119.2	1121.1	1119.2
62.5°	1028.1	1014.3	1001.4	1006.9	1002.3
65°	901.1	893.7	879.9	883.6	882.7
67.5°	785.1	771.3	758.4	765.8	762.1
70°	656.3	648.9	636.0	643.4	634.2
72.5°	534.8	528.3	515.4	523.7	514.5
75°	416.9	410.5	400.4	407.7	398.5
77.5°	305.6	301.0	291.8	299.1	301.0
80°	204.3	198.8	194.2	200.7	202.5
82.5°	119.7	116.0	114.1	115.1	119.7
85°	58.0	53.4	53.4	54.3	54.3
87.5°	15.6	13.8	15.6	16.6	17.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)