

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: P974546

Luminaire Tested: FLR2-24-80HE-L830-CP250

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974546
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-CP250
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

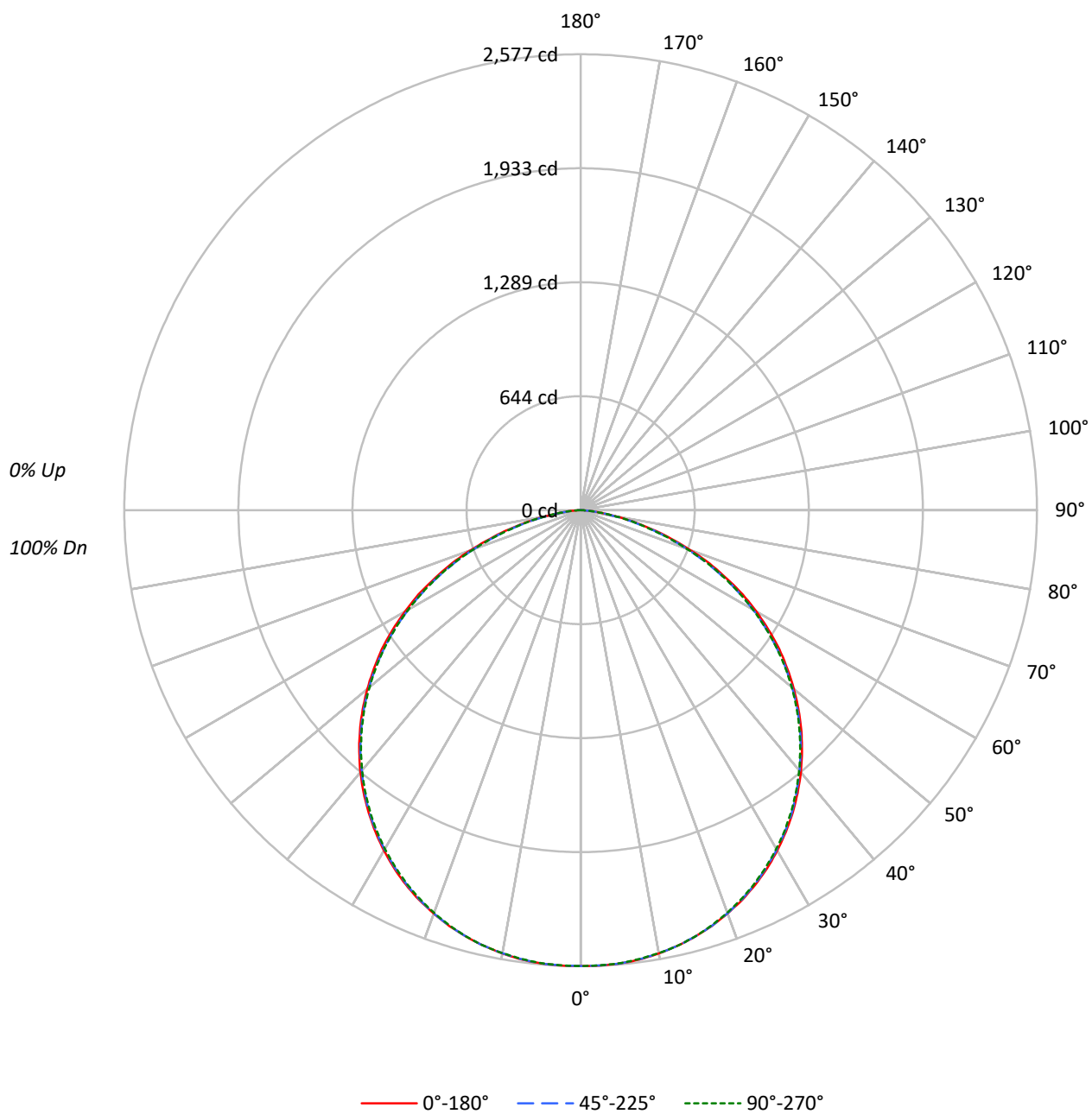
Lumens per Lamp: N/A
Luminaire Lumens: 7282.1 lumens
Efficiency: N/A
Efficacy: 114.7 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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: P974546

CATALOG NUMBER: FLR2-24-80HE-L830-CP250

Luminous Intensity Polar Plot



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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°	3467	3467	3467
5°	3474	3474	3471
10°	3476	3475	3473
15°	3477	3476	3476
20°	3474	3472	3467
25°	3467	3460	3454
30°	3452	3441	3434
35°	3429	3420	3408
40°	3399	3377	3373
45°	3355	3335	3325
50°	3292	3266	3257
55°	3214	3168	3164
60°	3080	3025	3025
65°	2882	2814	2823
70°	2593	2513	2506
75°	2177	2091	2081
80°	1590	1512	1576
85°	898	827	841

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3355 cd/sqm

TEST NUMBER: P974546
CATALOG NUMBER: FLR2-24-80HE-L830-CP250

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	244.6	3.4
10°-20°	704.6	9.7
20°-30°	1074.2	14.8
30°-40°	1301.5	17.9
40°-50°	1351.9	18.6
50°-60°	1209.4	16.6
60°-70°	881.4	12.1
70°-80°	436.5	6.0
80°-90°	78.0	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°	2023.3	27.8
0°-40°	3324.9	45.7
0°-60°	5886.2	80.8
0°-90°	7282.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7282.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2577	2577	2577	2577	2577	
5°	2572	2573	2572	2572	2570	245
15°	2496	2495	2495	2497	2495	705
25°	2335	2332	2331	2330	2327	1076
35°	2088	2085	2082	2078	2075	1306
45°	1763	1759	1753	1749	1747	1359
55°	1370	1360	1351	1351	1349	1221
65°	905	898	884	888	887	897
75°	419	412	402	410	400	447
85°	58	54	54	54	54	81
90°	0	0	0	0	0	

TEST NUMBER: P974546

CATALOG NUMBER: FLR2-24-80HE-L830-CP250

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2576.6	2576.6	2576.6	2576.6	2576.6
2.5°	2576.6	2575.6	2575.6	2576.6	2574.7
5°	2571.9	2572.9	2571.9	2571.9	2570.1
7.5°	2561.8	2560.8	2559.9	2560.8	2558.1
10°	2544.2	2544.2	2543.3	2544.2	2542.3
12.5°	2522.9	2522.9	2522.9	2523.9	2522.9
15°	2496.1	2495.2	2495.2	2497.0	2495.2
17.5°	2464.7	2463.8	2463.8	2462.8	2461.0
20°	2425.9	2425.9	2424.9	2424.0	2421.2
22.5°	2384.3	2383.3	2380.6	2380.6	2376.9
25°	2335.3	2332.5	2330.6	2329.7	2326.9
27.5°	2281.6	2277.9	2275.2	2273.3	2270.5
30°	2221.6	2217.9	2215.1	2212.3	2210.5
32.5°	2156.8	2155.0	2150.4	2149.4	2145.7
35°	2087.5	2084.7	2082.0	2078.3	2074.6
37.5°	2013.5	2010.8	2004.3	2002.4	1999.7
40°	1935.0	1931.3	1922.9	1922.9	1920.2
42.5°	1850.8	1847.1	1841.6	1837.9	1836.0
45°	1763.0	1759.3	1752.8	1749.1	1747.3
47.5°	1669.6	1666.9	1659.5	1656.7	1653.9
50°	1572.6	1568.9	1560.5	1558.7	1555.9
52.5°	1470.9	1469.0	1457.9	1457.0	1454.2
55°	1370.1	1359.9	1350.7	1350.7	1348.8
57.5°	1259.2	1251.8	1239.7	1239.7	1237.9
60°	1144.5	1138.0	1124.2	1126.0	1124.2
62.5°	1032.7	1018.8	1005.8	1011.4	1006.8
65°	905.1	897.7	883.8	887.5	886.6
67.5°	788.6	774.7	761.8	769.2	765.5
70°	659.2	651.8	638.8	646.2	637.0
72.5°	537.1	530.7	517.7	526.0	516.8
75°	418.8	412.3	402.2	409.5	400.3
77.5°	306.9	302.3	293.1	300.5	302.3
80°	205.2	199.7	195.1	201.5	203.4
82.5°	120.2	116.5	114.6	115.6	120.2
85°	58.2	53.6	53.6	54.5	54.5
87.5°	15.7	13.9	15.7	16.6	17.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)