

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: P974856

Luminaire Tested: FLR2-24-100HE-L840-CP250

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974856
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: FLR2-24-100HE-L840-CP250
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

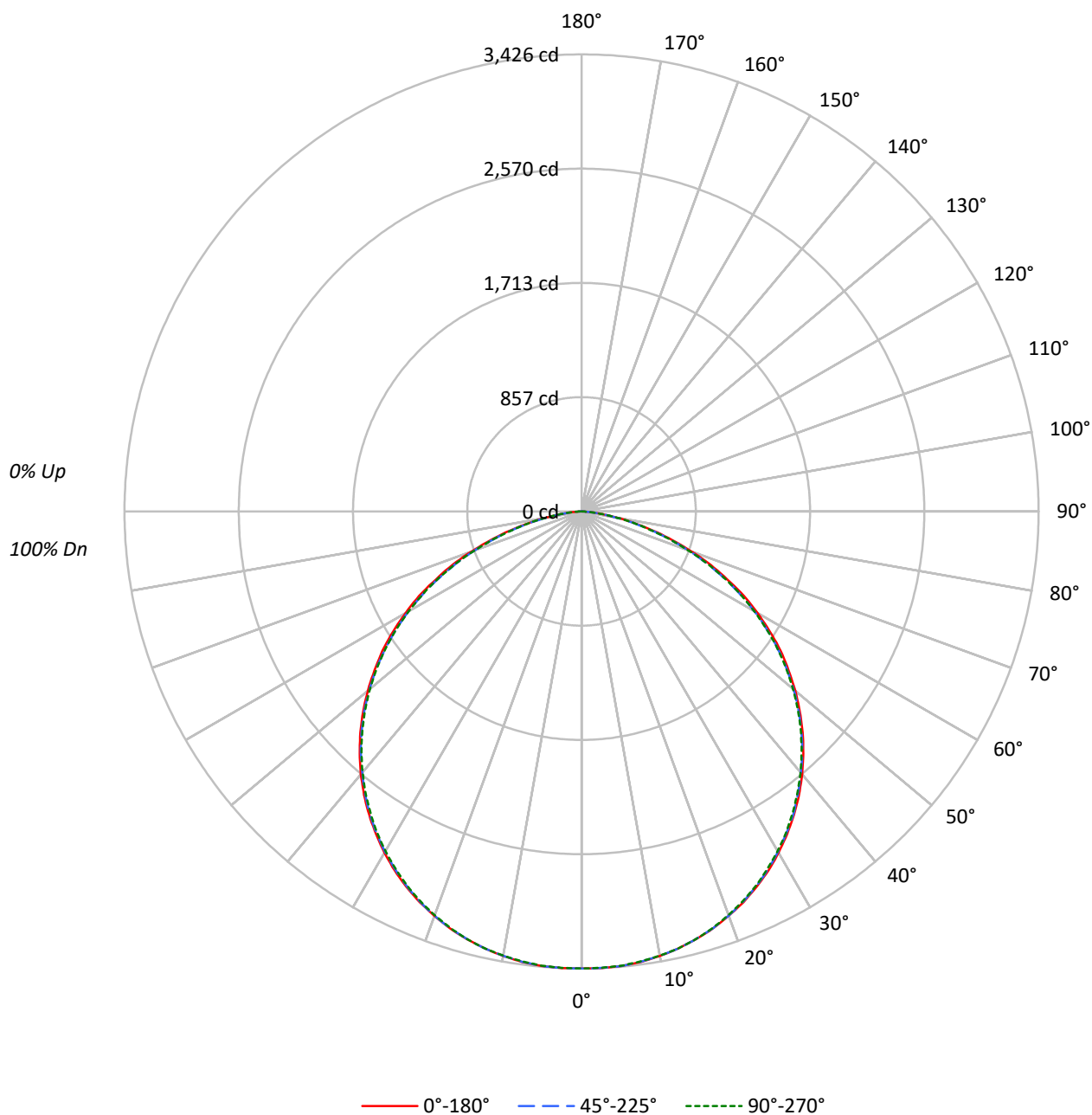
Lumens per Lamp: N/A
Luminaire Lumens: 9684.3 lumens
Efficiency: N/A
Efficacy: 117.2 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 82.6
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: P974856

CATALOG NUMBER: FLR2-24-100HE-L840-CP250

Luminous Intensity Polar Plot



TEST NUMBER: P974856

CATALOG NUMBER: FLR2-24-100HE-L840-CP250

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°	4610	4610	4610
5°	4620	4620	4616
10°	4623	4621	4619
15°	4624	4622	4622
20°	4619	4618	4611
25°	4611	4601	4594
30°	4590	4577	4567
35°	4560	4548	4532
40°	4520	4492	4485
45°	4461	4436	4422
50°	4378	4344	4331
55°	4274	4214	4208
60°	4096	4023	4023
65°	3832	3742	3754
70°	3448	3342	3332
75°	2895	2780	2768
80°	2115	2010	2096
85°	1196	1101	1119

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4461 cd/sqm

TEST NUMBER: P974856

CATALOG NUMBER: FLR2-24-100HE-L840-CP250

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	325.2	3.4
10°-20°	937.0	9.7
20°-30°	1428.6	14.8
30°-40°	1730.8	17.9
40°-50°	1797.9	18.6
50°-60°	1608.3	16.6
60°-70°	1172.2	12.1
70°-80°	580.5	6.0
80°-90°	103.8	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°	2690.8	27.8
0°-40°	4421.6	45.7
0°-60°	7827.9	80.8
0°-90°	9684.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9684.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3426	3426	3426	3426	3426	
5°	3420	3422	3420	3420	3418	325
15°	3320	3318	3318	3321	3318	937
25°	3106	3102	3100	3098	3094	1431
35°	2776	2772	2769	2764	2759	1736
45°	2345	2340	2331	2326	2324	1807
55°	1822	1808	1796	1796	1794	1623
65°	1204	1194	1175	1180	1179	1193
75°	557	548	535	545	532	594
85°	78	71	71	72	72	107
90°	0	0	0	0	0	

TEST NUMBER: P974856

CATALOG NUMBER: FLR2-24-100HE-L840-CP250

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3426.5	3426.5	3426.5	3426.5	3426.5
2.5°	3426.5	3425.3	3425.3	3426.5	3424.0
5°	3420.4	3421.6	3420.4	3420.4	3417.9
7.5°	3406.8	3405.6	3404.4	3405.6	3401.9
10°	3383.5	3383.5	3382.2	3383.5	3381.0
12.5°	3355.2	3355.2	3355.2	3356.4	3355.2
15°	3319.5	3318.3	3318.3	3320.8	3318.3
17.5°	3277.7	3276.5	3276.5	3275.3	3272.8
20°	3226.1	3226.1	3224.9	3223.6	3220.0
22.5°	3170.8	3169.5	3165.9	3165.9	3160.9
25°	3105.6	3101.9	3099.5	3098.2	3094.5
27.5°	3034.3	3029.4	3025.7	3023.2	3019.5
30°	2954.4	2949.5	2945.8	2942.1	2939.6
32.5°	2868.3	2865.9	2859.7	2858.5	2853.6
35°	2776.1	2772.4	2768.7	2763.8	2758.9
37.5°	2677.8	2674.1	2665.5	2663.0	2659.3
40°	2573.3	2568.3	2557.3	2557.3	2553.6
42.5°	2461.4	2456.5	2449.1	2444.2	2441.7
45°	2344.6	2339.7	2331.1	2326.1	2323.7
47.5°	2220.4	2216.7	2206.9	2203.2	2199.5
50°	2091.3	2086.4	2075.3	2072.9	2069.2
52.5°	1956.1	1953.6	1938.9	1937.6	1933.9
55°	1822.1	1808.5	1796.2	1796.2	1793.8
57.5°	1674.5	1664.7	1648.7	1648.7	1646.2
60°	1522.1	1513.5	1495.0	1497.5	1495.0
62.5°	1373.3	1354.9	1337.7	1345.0	1338.9
65°	1203.6	1193.8	1175.4	1180.3	1179.1
67.5°	1048.7	1030.3	1013.1	1022.9	1018.0
70°	876.6	866.8	849.6	859.4	847.1
72.5°	714.3	705.7	688.5	699.6	687.3
75°	556.9	548.3	534.8	544.6	532.4
77.5°	408.2	402.0	389.7	399.6	402.0
80°	272.9	265.6	259.4	268.0	270.5
82.5°	159.8	154.9	152.5	153.7	159.8
85°	77.5	71.3	71.3	72.5	72.5
87.5°	20.9	18.4	20.9	22.1	23.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)