

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: P974400

Luminaire Tested: FLR2-24-72-L850-CP080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974400
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: FLR2-24-72-L850-CP080
Description: SHAPER SENSE CIRCLE

Light Source: FLR2-24-72-L850-CP080
Ballast/Driver: -

Summary

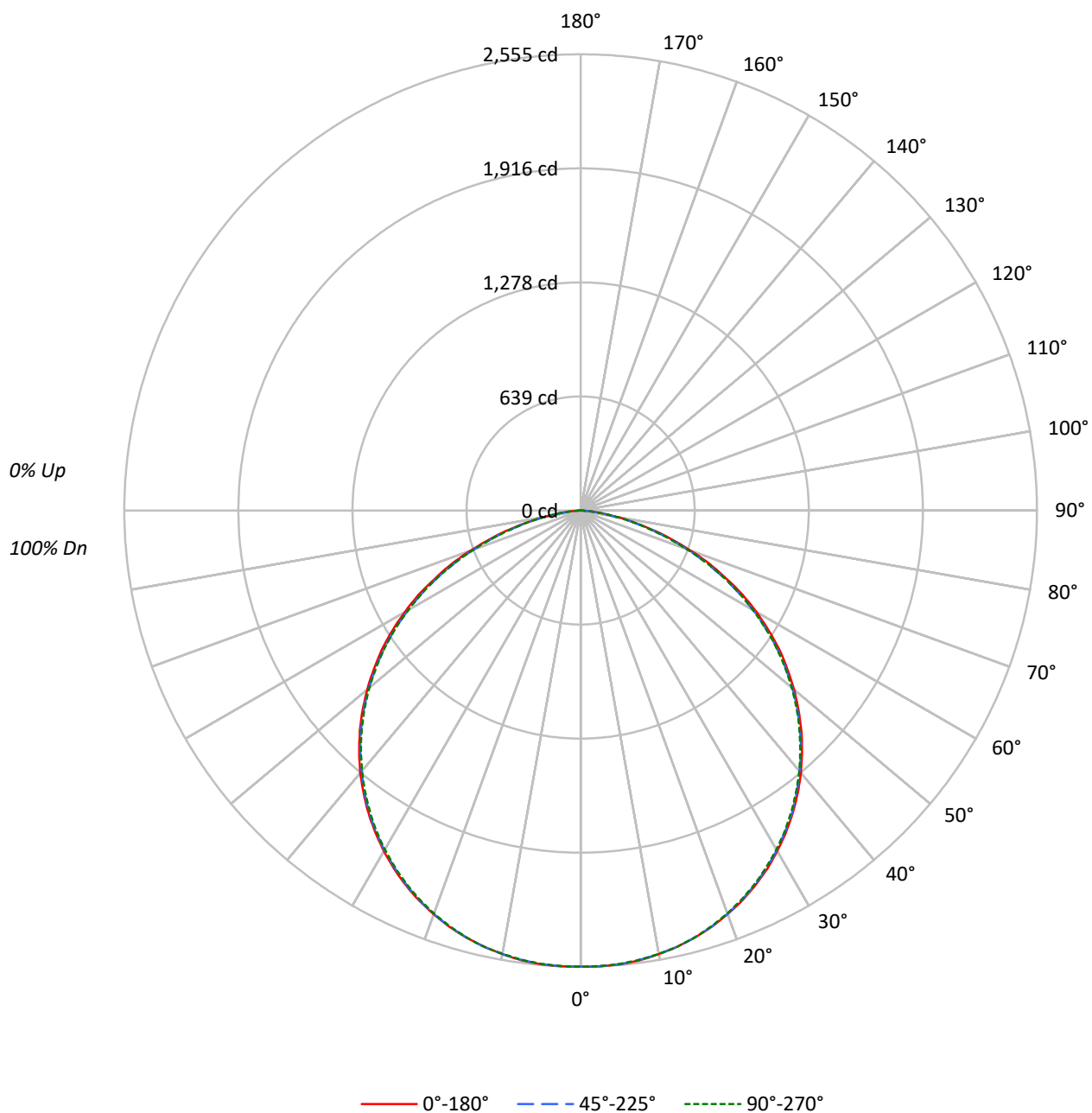
Lumens per Lamp: N/A
Luminaire Lumens: 7221.3 lumens
Efficiency: N/A
Efficacy: 118.6 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 60.9
Input Voltage (V): 120
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

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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°	3438	3438	3438
5°	3445	3445	3442
10°	3447	3446	3444
15°	3448	3447	3447
20°	3444	3443	3438
25°	3438	3431	3426
30°	3423	3413	3406
35°	3400	3391	3379
40°	3370	3349	3344
45°	3327	3307	3297
50°	3264	3239	3230
55°	3187	3142	3138
60°	3054	3000	3000
65°	2857	2790	2799
70°	2572	2492	2485
75°	2159	2073	2064
80°	1577	1499	1563
85°	892	821	835

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3327 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	242.5	3.4
10°-20°	698.7	9.7
20°-30°	1065.3	14.8
30°-40°	1290.6	17.9
40°-50°	1340.6	18.6
50°-60°	1199.3	16.6
60°-70°	874.1	12.1
70°-80°	432.9	6.0
80°-90°	77.4	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°	2006.5	27.8
0°-40°	3297.1	45.7
0°-60°	5837.0	80.8
0°-90°	7221.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7221.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2555	2555	2555	2555	2555	
5°	2550	2551	2550	2550	2549	243
15°	2475	2474	2474	2476	2474	699
25°	2316	2313	2311	2310	2308	1067
35°	2070	2067	2065	2061	2057	1295
45°	1748	1745	1738	1734	1733	1347
55°	1359	1349	1339	1339	1338	1210
65°	898	890	876	880	879	890
75°	415	409	399	406	397	443
85°	58	53	53	54	54	80
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2555.0	2555.0	2555.0	2555.0	2555.0
2.5°	2555.0	2554.1	2554.1	2555.0	2553.2
5°	2550.5	2551.4	2550.5	2550.5	2548.6
7.5°	2540.4	2539.5	2538.5	2539.5	2536.7
10°	2523.0	2523.0	2522.0	2523.0	2521.1
12.5°	2501.9	2501.9	2501.9	2502.8	2501.9
15°	2475.3	2474.4	2474.4	2476.2	2474.4
17.5°	2444.1	2443.2	2443.2	2442.3	2440.4
20°	2405.6	2405.6	2404.7	2403.8	2401.0
22.5°	2364.4	2363.4	2360.7	2360.7	2357.0
25°	2315.8	2313.0	2311.2	2310.3	2307.5
27.5°	2262.6	2258.9	2256.2	2254.3	2251.6
30°	2203.0	2199.3	2196.6	2193.8	2192.0
32.5°	2138.8	2137.0	2132.4	2131.5	2127.8
35°	2070.1	2067.3	2064.6	2060.9	2057.2
37.5°	1996.7	1994.0	1987.6	1985.7	1983.0
40°	1918.8	1915.1	1906.9	1906.9	1904.1
42.5°	1835.4	1831.7	1826.2	1822.5	1820.7
45°	1748.3	1744.6	1738.2	1734.5	1732.7
47.5°	1655.7	1652.9	1645.6	1642.9	1640.1
50°	1559.4	1555.8	1547.5	1545.7	1542.9
52.5°	1458.6	1456.8	1445.7	1444.8	1442.1
55°	1358.7	1348.6	1339.4	1339.4	1337.6
57.5°	1248.6	1241.3	1229.4	1229.4	1227.6
60°	1135.0	1128.5	1114.8	1116.6	1114.8
62.5°	1024.0	1010.3	997.4	1002.9	998.4
65°	897.5	890.2	876.4	880.1	879.2
67.5°	782.0	768.3	755.4	762.8	759.1
70°	653.7	646.3	633.5	640.8	631.7
72.5°	532.6	526.2	513.4	521.6	512.5
75°	415.3	408.9	398.8	406.1	397.0
77.5°	304.4	299.8	290.6	298.0	299.8
80°	203.5	198.0	193.4	199.9	201.7
82.5°	119.2	115.5	113.7	114.6	119.2
85°	57.8	53.2	53.2	54.1	54.1
87.5°	15.6	13.8	15.6	16.5	17.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)