

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: P973633

Luminaire Tested: FLR2-22-20-L840-CA125

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973633
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-2)
Test Lab: INNOVATION CENTER
Issue Date: 3/13/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: FAIL-SAFE
Catalog Number: FLR2-22-20-L840-CA125
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

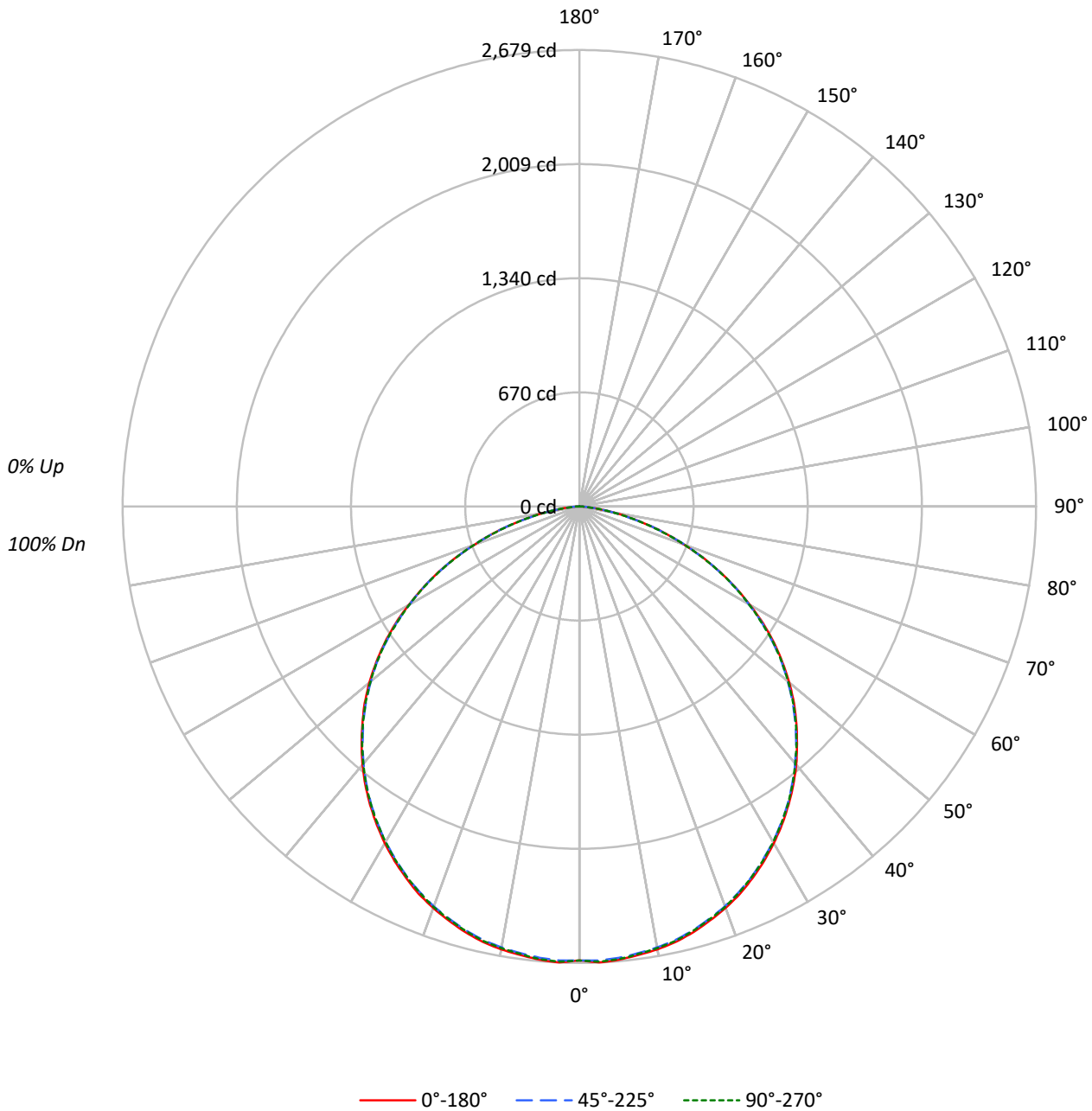
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7450.0 lumens
Efficiency: N/A
Efficacy: 493.4 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.38
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 15.1
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

TEST NUMBER: P973633
CATALOG NUMBER: FLR2-22-20-L840-CA125

Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20										
RC	80									70									50									30									10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	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	101	97	107	102	99	95	98	95	92	94	92	89	91	89	87	85						85														
2	99	91	85	79	97	90	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	63	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51						51														
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	57	51	46	44						44														
6	71	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	39						39														
7	65	52	43	37	64	51	43	37	50	42	37	48	41	36	47	41	36	34						34														
8	61	47	39	33	59	47	39	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	40	34	29	27						27														
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	26	25						25														

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7169	7169	7169
5°	7214	7183	7205
10°	7212	7180	7194
15°	7206	7174	7183
20°	7181	7153	7162
25°	7143	7114	7119
30°	7092	7061	7066
35°	7027	7000	7005
40°	6954	6919	6925
45°	6851	6819	6832
50°	6730	6682	6696
55°	6539	6485	6508
60°	6217	6190	6190
65°	5805	5794	5773
70°	5140	5165	5153
75°	4328	4294	4260
80°	3110	3061	3034
85°	1627	1627	1575

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6851 cd/sqm



TEST NUMBER: P973633
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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	252.3	3.4
10°-20°	725.5	9.7
20°-30°	1102.4	14.8
30°-40°	1332.5	17.9
40°-50°	1383.1	18.6
50°-60°	1236.5	16.6
60°-70°	899.0	12.1
70°-80°	442.1	5.9
80°-90°	76.7	1.0
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°	2080.1	27.9
0°-40°	3412.6	45.8
0°-60°	6032.2	81.0
0°-90°	7450.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7450.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2664	2664	2664	2664	2664	
5°	2671	2639	2659	2649	2667	254
15°	2587	2557	2575	2569	2578	730
25°	2406	2379	2396	2391	2398	1109
35°	2139	2124	2131	2132	2132	1338
45°	1800	1792	1792	1795	1795	1389
55°	1394	1386	1382	1386	1387	1242
65°	912	915	910	910	907	899
75°	416	420	413	415	410	442
85°	53	54	53	53	51	77
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2664.0	2664.0	2664.0	2664.0	2664.0
2.5°	2678.8	2647.6	2667.3	2655.8	2673.9
5°	2670.6	2639.3	2659.1	2649.2	2667.3
7.5°	2655.8	2624.5	2644.3	2634.4	2649.2
10°	2639.3	2606.4	2627.8	2618.0	2632.8
12.5°	2618.0	2586.7	2606.4	2598.2	2611.4
15°	2586.7	2557.1	2575.2	2568.6	2578.5
17.5°	2548.8	2519.2	2537.3	2532.4	2540.6
20°	2507.7	2479.7	2497.8	2492.9	2501.1
22.5°	2461.6	2432.0	2448.5	2445.2	2451.8
25°	2405.7	2379.4	2395.8	2390.9	2397.5
27.5°	2346.5	2321.8	2334.9	2334.9	2338.2
30°	2282.3	2259.2	2272.4	2272.4	2274.1
32.5°	2213.2	2195.1	2203.3	2204.9	2204.9
35°	2139.1	2124.3	2130.9	2132.5	2132.5
37.5°	2061.8	2047.0	2051.9	2055.2	2055.2
40°	1979.5	1966.3	1969.6	1972.9	1971.3
42.5°	1890.7	1880.8	1882.4	1885.7	1885.7
45°	1800.2	1791.9	1791.9	1795.2	1795.2
47.5°	1708.0	1699.8	1696.5	1699.8	1699.8
50°	1607.6	1599.4	1596.1	1599.4	1599.4
52.5°	1502.3	1494.1	1494.1	1494.1	1495.7
55°	1393.7	1385.5	1382.2	1385.5	1387.1
57.5°	1278.5	1275.2	1270.3	1272.0	1267.0
60°	1155.1	1155.1	1150.2	1153.5	1150.2
62.5°	1035.0	1038.3	1033.4	1033.4	1030.1
65°	911.6	914.9	909.9	909.9	906.7
67.5°	784.9	789.8	783.2	783.2	780.0
70°	653.3	663.1	656.5	658.2	654.9
72.5°	534.8	539.7	533.1	533.1	529.8
75°	416.3	419.6	413.0	414.7	409.7
77.5°	299.5	304.4	297.8	299.5	297.8
80°	200.7	202.4	197.5	199.1	195.8
82.5°	116.8	118.5	116.8	115.2	113.5
85°	52.7	54.3	52.7	52.7	51.0
87.5°	13.2	13.2	13.2	13.2	13.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)