

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: P974416

Luminaire Tested: FLR2-24-72-L850-CP187

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974416
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-CP187
Description: SHAPER SENSE CIRCLE

Light Source: FLR2-24-72-L850-CP187
Ballast/Driver: -

Summary

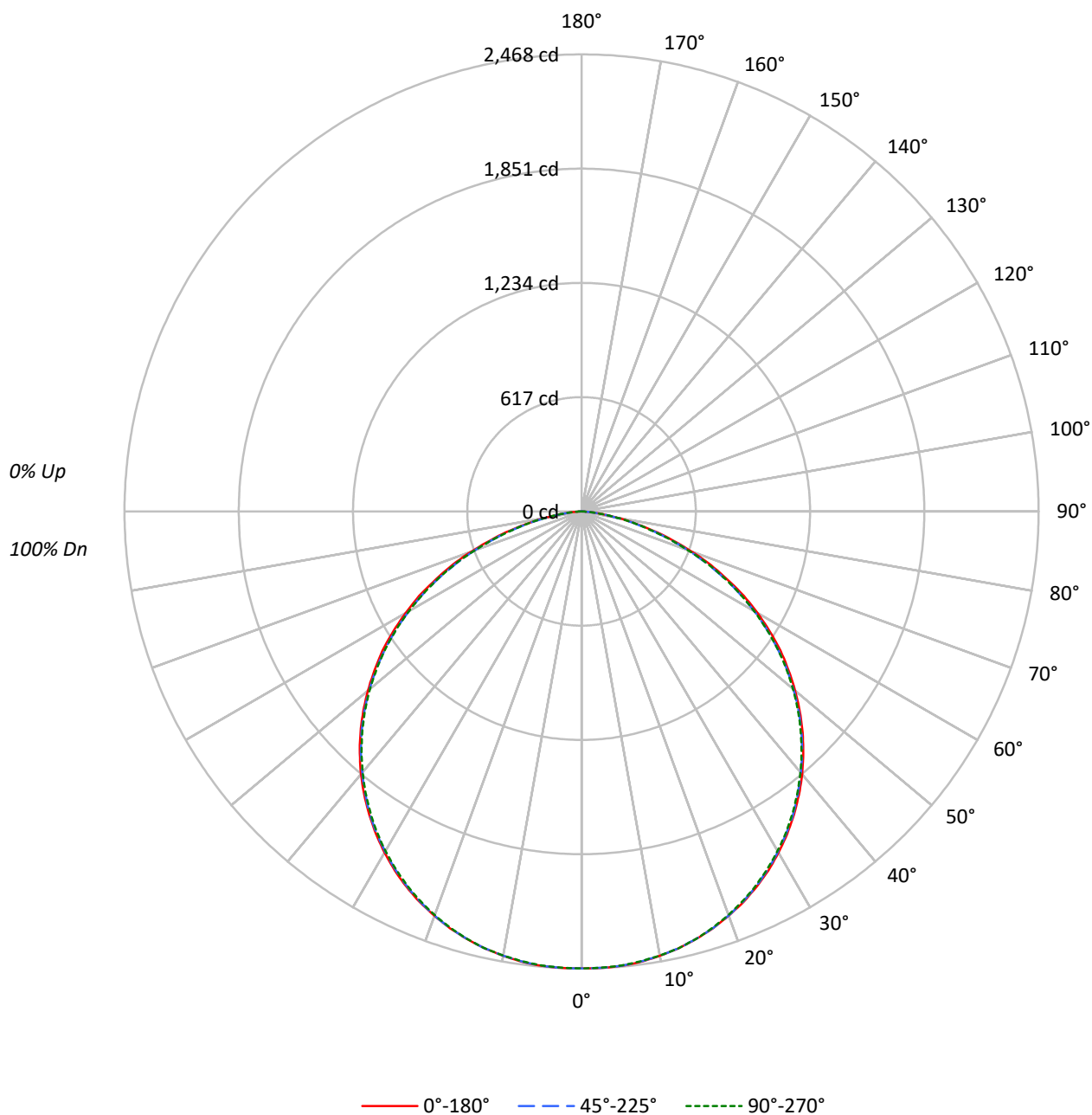
Lumens per Lamp: N/A
Luminaire Lumens: 6974.3 lumens
Efficiency: N/A
Efficacy: 114.5 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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°	3320	3320	3320
5°	3327	3327	3325
10°	3329	3328	3327
15°	3330	3329	3329
20°	3327	3325	3320
25°	3320	3314	3309
30°	3306	3296	3289
35°	3284	3275	3264
40°	3255	3235	3230
45°	3213	3194	3184
50°	3153	3129	3119
55°	3078	3035	3030
60°	2950	2897	2897
65°	2760	2695	2703
70°	2484	2407	2400
75°	2085	2002	1993
80°	1523	1447	1509
85°	861	794	806

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3213 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	234.2	3.4
10°-20°	674.8	9.7
20°-30°	1028.8	14.8
30°-40°	1246.5	17.9
40°-50°	1294.8	18.6
50°-60°	1158.3	16.6
60°-70°	844.2	12.1
70°-80°	418.1	6.0
80°-90°	74.7	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°	1937.8	27.8
0°-40°	3184.3	45.7
0°-60°	5637.4	80.8
0°-90°	6974.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6974.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2468	2468	2468	2468	2468	
5°	2463	2464	2463	2463	2462	234
15°	2391	2390	2390	2392	2390	675
25°	2237	2234	2232	2231	2229	1031
35°	1999	1997	1994	1990	1987	1251
45°	1688	1685	1679	1675	1673	1301
55°	1312	1302	1294	1294	1292	1169
65°	867	860	846	850	849	859
75°	401	395	385	392	383	428
85°	56	51	51	52	52	77
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2467.7	2467.7	2467.7	2467.7	2467.7
2.5°	2467.7	2466.8	2466.8	2467.7	2465.9
5°	2463.2	2464.1	2463.2	2463.2	2461.5
7.5°	2453.5	2452.6	2451.7	2452.6	2449.9
10°	2436.7	2436.7	2435.8	2436.7	2434.9
12.5°	2416.3	2416.3	2416.3	2417.2	2416.3
15°	2390.6	2389.7	2389.7	2391.5	2389.7
17.5°	2360.5	2359.6	2359.6	2358.7	2357.0
20°	2323.3	2323.3	2322.4	2321.6	2318.9
22.5°	2283.5	2282.6	2279.9	2279.9	2276.4
25°	2236.6	2233.9	2232.1	2231.2	2228.6
27.5°	2185.2	2181.7	2179.0	2177.2	2174.6
30°	2127.7	2124.1	2121.5	2118.8	2117.0
32.5°	2065.7	2063.9	2059.5	2058.6	2055.1
35°	1999.3	1996.6	1994.0	1990.4	1986.9
37.5°	1928.4	1925.8	1919.6	1917.8	1915.2
40°	1853.2	1849.6	1841.7	1841.7	1839.0
42.5°	1772.6	1769.1	1763.7	1760.2	1758.4
45°	1688.5	1684.9	1678.7	1675.2	1673.4
47.5°	1599.1	1596.4	1589.3	1586.7	1584.0
50°	1506.1	1502.6	1494.6	1492.8	1490.2
52.5°	1408.7	1406.9	1396.3	1395.4	1392.8
55°	1312.2	1302.4	1293.6	1293.6	1291.8
57.5°	1205.9	1198.9	1187.3	1187.3	1185.6
60°	1096.1	1089.9	1076.7	1078.4	1076.7
62.5°	989.0	975.7	963.3	968.6	964.2
65°	866.8	859.7	846.5	850.0	849.1
67.5°	755.3	742.0	729.6	736.7	733.1
70°	631.3	624.2	611.8	618.9	610.1
72.5°	514.4	508.2	495.8	503.8	494.9
75°	401.1	394.9	385.2	392.2	383.4
77.5°	294.0	289.5	280.7	287.8	289.5
80°	196.6	191.2	186.8	193.0	194.8
82.5°	115.1	111.6	109.8	110.7	115.1
85°	55.8	51.4	51.4	52.2	52.2
87.5°	15.1	13.3	15.1	15.9	16.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)