

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: P974304

Luminaire Tested: FLR2-24-72-L840-CP187

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974304
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-L840-CP187
Description: SHAPER SENSE CIRCLE

Light Source: FLR2-24-72-L840-CP187
Ballast/Driver: -

Summary

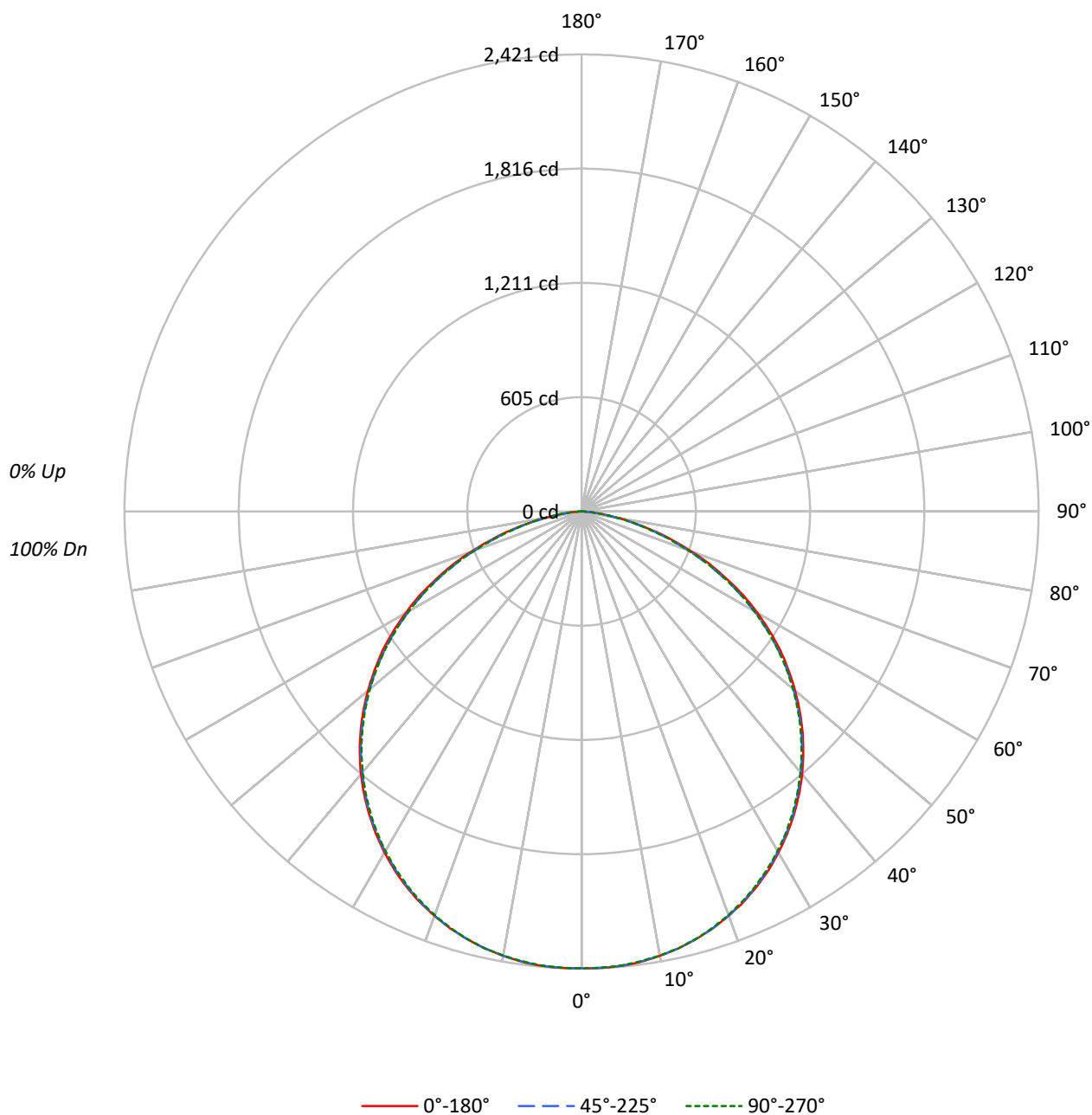
Lumens per Lamp: N/A
Luminaire Lumens: 6841.5 lumens
Efficiency: N/A
Efficacy: 112.3 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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°	3257	3257	3257
5°	3264	3264	3261
10°	3266	3265	3263
15°	3267	3265	3265
20°	3263	3262	3257
25°	3257	3251	3245
30°	3243	3233	3226
35°	3221	3213	3201
40°	3193	3173	3169
45°	3152	3134	3124
50°	3093	3069	3060
55°	3019	2977	2973
60°	2894	2842	2842
65°	2707	2643	2652
70°	2436	2361	2354
75°	2046	1964	1955
80°	1494	1420	1481
85°	844	778	790

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3152 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	229.8	3.4
10°-20°	661.9	9.7
20°-30°	1009.2	14.8
30°-40°	1222.8	17.9
40°-50°	1270.1	18.6
50°-60°	1136.2	16.6
60°-70°	828.1	12.1
70°-80°	410.1	6.0
80°-90°	73.3	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°	1900.9	27.8
0°-40°	3123.7	45.7
0°-60°	5530.0	80.8
0°-90°	6841.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6841.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2421	2421	2421	2421	2421	
5°	2416	2417	2416	2416	2415	230
15°	2345	2344	2344	2346	2344	662
25°	2194	2191	2190	2189	2186	1011
35°	1961	1959	1956	1952	1949	1227
45°	1656	1653	1647	1643	1642	1276
55°	1287	1278	1269	1269	1267	1147
65°	850	843	830	834	833	843
75°	394	387	378	385	376	420
85°	55	50	50	51	51	76
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2420.7	2420.7	2420.7	2420.7	2420.7
2.5°	2420.7	2419.8	2419.8	2420.7	2418.9
5°	2416.3	2417.2	2416.3	2416.3	2414.6
7.5°	2406.8	2405.9	2405.0	2405.9	2403.3
10°	2390.3	2390.3	2389.4	2390.3	2388.5
12.5°	2370.3	2370.3	2370.3	2371.1	2370.3
15°	2345.1	2344.2	2344.2	2346.0	2344.2
17.5°	2315.6	2314.7	2314.7	2313.8	2312.1
20°	2279.1	2279.1	2278.2	2277.3	2274.7
22.5°	2240.0	2239.1	2236.5	2236.5	2233.0
25°	2194.0	2191.4	2189.6	2188.7	2186.1
27.5°	2143.6	2140.1	2137.5	2135.8	2133.2
30°	2087.1	2083.7	2081.0	2078.4	2076.7
32.5°	2026.3	2024.6	2020.2	2019.4	2015.9
35°	1961.2	1958.6	1956.0	1952.5	1949.0
37.5°	1891.7	1889.1	1883.0	1881.3	1878.7
40°	1817.9	1814.4	1806.6	1806.6	1804.0
42.5°	1738.8	1735.4	1730.2	1726.7	1724.9
45°	1656.3	1652.9	1646.8	1643.3	1641.6
47.5°	1568.6	1566.0	1559.0	1556.4	1553.8
50°	1477.4	1473.9	1466.1	1464.4	1461.8
52.5°	1381.9	1380.1	1369.7	1368.8	1366.2
55°	1287.2	1277.6	1269.0	1269.0	1267.2
57.5°	1183.0	1176.0	1164.7	1164.7	1163.0
60°	1075.3	1069.2	1056.2	1057.9	1056.2
62.5°	970.2	957.1	945.0	950.2	945.9
65°	850.3	843.4	830.3	833.8	832.9
67.5°	740.9	727.8	715.7	722.6	719.2
70°	619.3	612.3	600.2	607.1	598.4
72.5°	504.6	498.5	486.4	494.2	485.5
75°	393.5	387.4	377.8	384.8	376.1
77.5°	288.4	284.0	275.3	282.3	284.0
80°	192.8	187.6	183.3	189.3	191.1
82.5°	112.9	109.4	107.7	108.6	112.9
85°	54.7	50.4	50.4	51.2	51.2
87.5°	14.8	13.0	14.8	15.6	16.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)