

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: P974767

Luminaire Tested: FLR2-24-90HE-L935-CP187

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974767
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: FLR2-24-90HE-L935-CP187
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

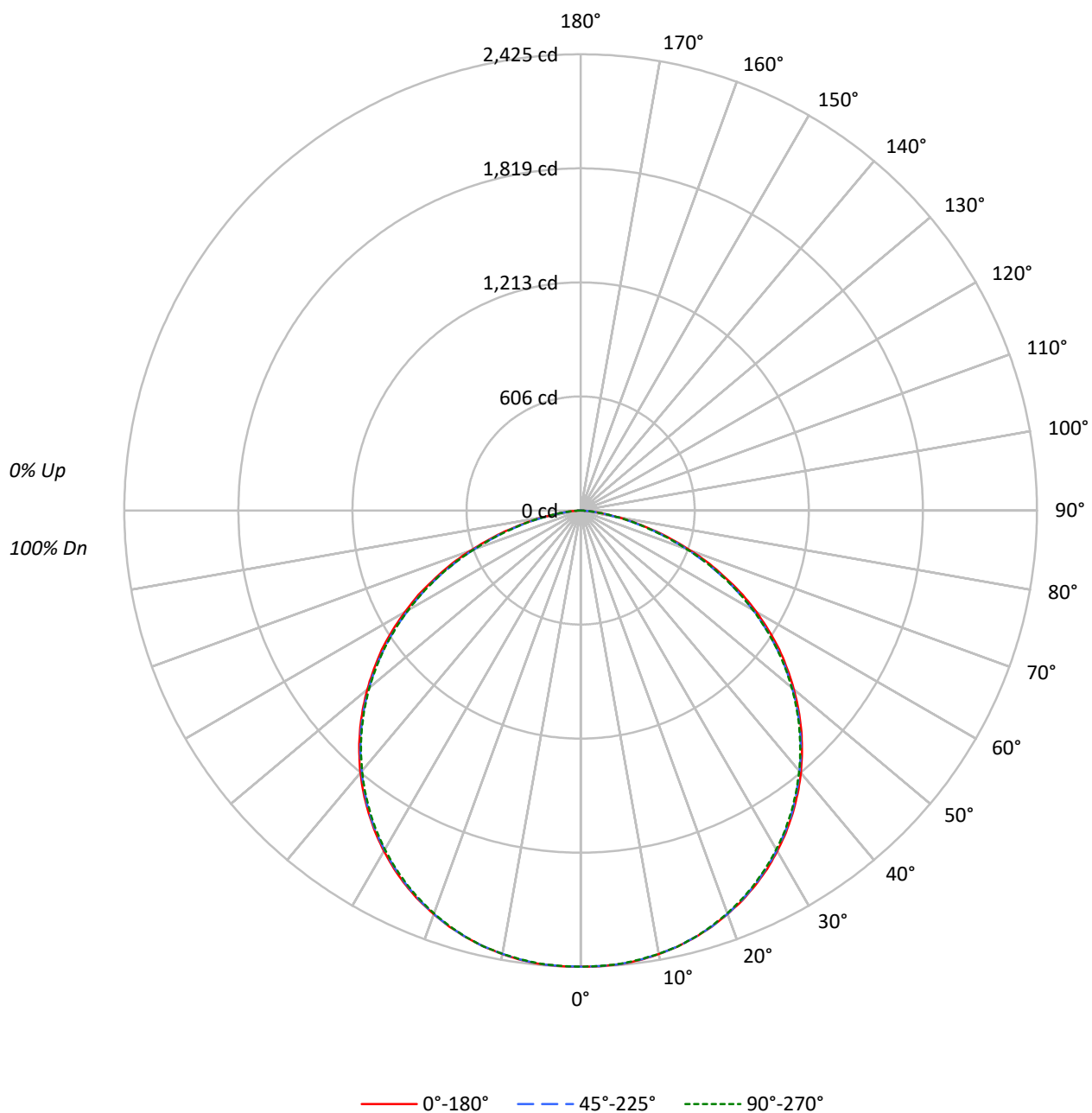
Lumens per Lamp: N/A
Luminaire Lumens: 6852.8 lumens
Efficiency: N/A
Efficacy: 97.5 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 70.3
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

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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°	3262	3262	3262
5°	3269	3269	3267
10°	3271	3270	3269
15°	3272	3271	3271
20°	3269	3267	3262
25°	3263	3256	3251
30°	3248	3239	3232
35°	3227	3218	3207
40°	3198	3178	3174
45°	3157	3139	3129
50°	3098	3074	3065
55°	3024	2981	2978
60°	2898	2847	2847
65°	2712	2648	2656
70°	2440	2365	2358
75°	2049	1967	1958
80°	1496	1423	1483
85°	846	780	792

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3157 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	230.1	3.4
10°-20°	663.0	9.7
20°-30°	1010.9	14.8
30°-40°	1224.8	17.9
40°-50°	1272.2	18.6
50°-60°	1138.1	16.6
60°-70°	829.4	12.1
70°-80°	410.8	6.0
80°-90°	73.4	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°	1904.1	27.8
0°-40°	3128.8	45.7
0°-60°	5539.1	80.8
0°-90°	6852.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6852.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2425	2425	2425	2425	2425	
5°	2420	2421	2420	2420	2419	230
15°	2349	2348	2348	2350	2348	663
25°	2198	2195	2193	2192	2190	1013
35°	1964	1962	1959	1956	1952	1229
45°	1659	1656	1650	1646	1644	1279
55°	1289	1280	1271	1271	1269	1149
65°	852	845	832	835	834	844
75°	394	388	378	385	377	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°	2424.6	2424.6	2424.6	2424.6	2424.6
2.5°	2424.6	2423.8	2423.8	2424.6	2422.9
5°	2420.3	2421.2	2420.3	2420.3	2418.6
7.5°	2410.7	2409.9	2409.0	2409.9	2407.2
10°	2394.2	2394.2	2393.3	2394.2	2392.5
12.5°	2374.2	2374.2	2374.2	2375.1	2374.2
15°	2349.0	2348.1	2348.1	2349.8	2348.1
17.5°	2319.4	2318.5	2318.5	2317.6	2315.9
20°	2282.8	2282.8	2282.0	2281.1	2278.5
22.5°	2243.7	2242.8	2240.2	2240.2	2236.7
25°	2197.6	2195.0	2193.2	2192.4	2189.7
27.5°	2147.1	2143.6	2141.0	2139.3	2136.7
30°	2090.6	2087.1	2084.5	2081.9	2080.1
32.5°	2029.7	2027.9	2023.6	2022.7	2019.2
35°	1964.4	1961.8	1959.2	1955.7	1952.2
37.5°	1894.8	1892.2	1886.1	1884.4	1881.8
40°	1820.9	1817.4	1809.6	1809.6	1807.0
42.5°	1741.7	1738.2	1733.0	1729.5	1727.8
45°	1659.1	1655.6	1649.5	1646.0	1644.3
47.5°	1571.2	1568.6	1561.6	1559.0	1556.4
50°	1479.8	1476.4	1468.5	1466.8	1464.2
52.5°	1384.1	1382.4	1372.0	1371.1	1368.5
55°	1289.3	1279.7	1271.0	1271.0	1269.3
57.5°	1184.9	1178.0	1166.6	1166.6	1164.9
60°	1077.0	1070.9	1057.9	1059.6	1057.9
62.5°	971.8	958.7	946.5	951.8	947.4
65°	851.7	844.8	831.7	835.2	834.3
67.5°	742.1	729.0	716.9	723.8	720.3
70°	620.3	613.3	601.2	608.1	599.4
72.5°	505.5	499.4	487.2	495.0	486.3
75°	394.1	388.0	378.4	385.4	376.7
77.5°	288.8	284.5	275.8	282.7	284.5
80°	193.1	187.9	183.6	189.7	191.4
82.5°	113.1	109.6	107.9	108.7	113.1
85°	54.8	50.5	50.5	51.3	51.3
87.5°	14.8	13.0	14.8	15.7	16.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)