

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: P974712

Luminaire Tested: FLR2-24-90HE-L835-CP375

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974712
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-L835-CP375
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

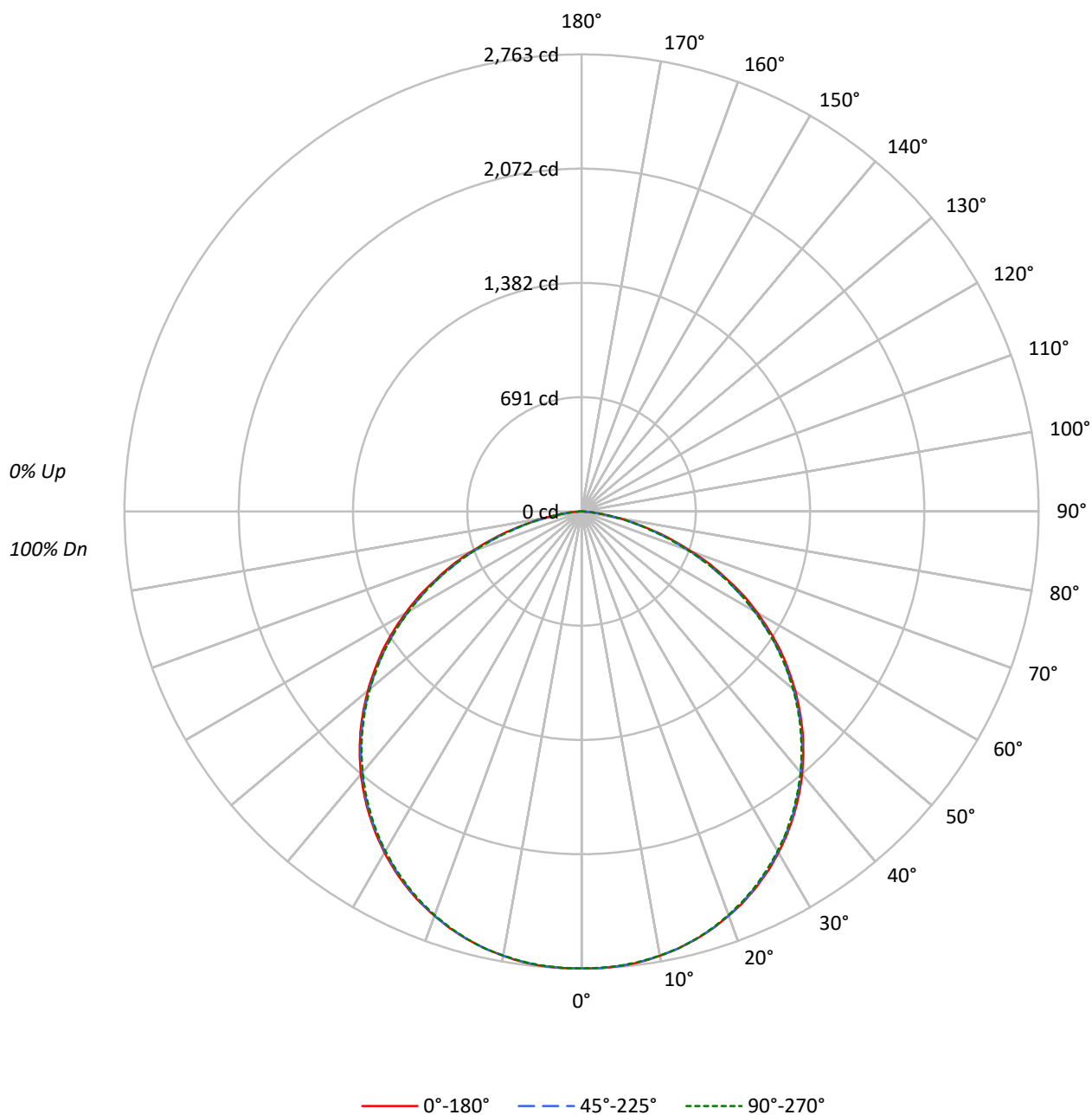
Lumens per Lamp: N/A
Luminaire Lumens: 7809.0 lumens
Efficiency: N/A
Efficacy: 111.1 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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°	3718	3718	3718
5°	3725	3725	3722
10°	3728	3726	3725
15°	3729	3727	3727
20°	3725	3723	3718
25°	3718	3710	3704
30°	3701	3691	3683
35°	3677	3667	3654
40°	3645	3622	3617
45°	3597	3577	3565
50°	3530	3503	3493
55°	3446	3398	3393
60°	3303	3244	3244
65°	3090	3018	3027
70°	2781	2695	2687
75°	2335	2242	2232
80°	1705	1621	1690
85°	965	888	903

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3597 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	262.3	3.4
10°-20°	755.5	9.7
20°-30°	1152.0	14.8
30°-40°	1395.7	17.9
40°-50°	1449.7	18.6
50°-60°	1296.9	16.6
60°-70°	945.2	12.1
70°-80°	468.1	6.0
80°-90°	83.7	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°	2169.8	27.8
0°-40°	3565.4	45.7
0°-60°	6312.1	80.8
0°-90°	7809.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7809.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2763	2763	2763	2763	2763	
5°	2758	2759	2758	2758	2756	262
15°	2677	2676	2676	2678	2676	756
25°	2504	2501	2499	2498	2495	1154
35°	2238	2236	2233	2229	2225	1400
45°	1891	1887	1880	1876	1874	1457
55°	1469	1458	1448	1448	1446	1309
65°	971	963	948	952	951	962
75°	449	442	431	439	429	479
85°	62	58	58	58	58	87
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2763.0	2763.0	2763.0	2763.0	2763.0
2.5°	2763.0	2762.0	2762.0	2763.0	2761.0
5°	2758.0	2759.0	2758.0	2758.0	2756.0
7.5°	2747.1	2746.1	2745.1	2746.1	2743.2
10°	2728.3	2728.3	2727.3	2728.3	2726.3
12.5°	2705.5	2705.5	2705.5	2706.5	2705.5
15°	2676.7	2675.7	2675.7	2677.7	2675.7
17.5°	2643.0	2642.0	2642.0	2641.0	2639.1
20°	2601.4	2601.4	2600.4	2599.4	2596.4
22.5°	2556.8	2555.8	2552.8	2552.8	2548.8
25°	2504.2	2501.3	2499.3	2498.3	2495.3
27.5°	2446.7	2442.8	2439.8	2437.8	2434.8
30°	2382.3	2378.3	2375.4	2372.4	2370.4
32.5°	2312.9	2310.9	2306.0	2305.0	2301.0
35°	2238.5	2235.6	2232.6	2228.6	2224.7
37.5°	2159.2	2156.3	2149.3	2147.3	2144.4
40°	2075.0	2071.0	2062.1	2062.1	2059.1
42.5°	1984.7	1980.8	1974.8	1970.9	1968.9
45°	1890.6	1886.6	1879.7	1875.7	1873.7
47.5°	1790.4	1787.5	1779.5	1776.6	1773.6
50°	1686.3	1682.4	1673.5	1671.5	1668.5
52.5°	1577.3	1575.3	1563.4	1562.4	1559.4
55°	1469.2	1458.3	1448.4	1448.4	1446.4
57.5°	1350.3	1342.3	1329.4	1329.4	1327.5
60°	1227.3	1220.4	1205.5	1207.5	1205.5
62.5°	1107.4	1092.5	1078.6	1084.6	1079.6
65°	970.6	962.6	947.8	951.7	950.7
67.5°	845.6	830.8	816.9	824.8	820.9
70°	706.9	698.9	685.0	693.0	683.1
72.5°	576.0	569.1	555.2	564.1	554.2
75°	449.1	442.2	431.3	439.2	429.3
77.5°	329.1	324.2	314.3	322.2	324.2
80°	220.1	214.1	209.2	216.1	218.1
82.5°	128.9	124.9	122.9	123.9	128.9
85°	62.5	57.5	57.5	58.5	58.5
87.5°	16.9	14.9	16.9	17.8	18.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)