

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: P974525

Luminaire Tested: FLR2-24-90HE-L830-CP125

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974525
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-L830-CP125
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

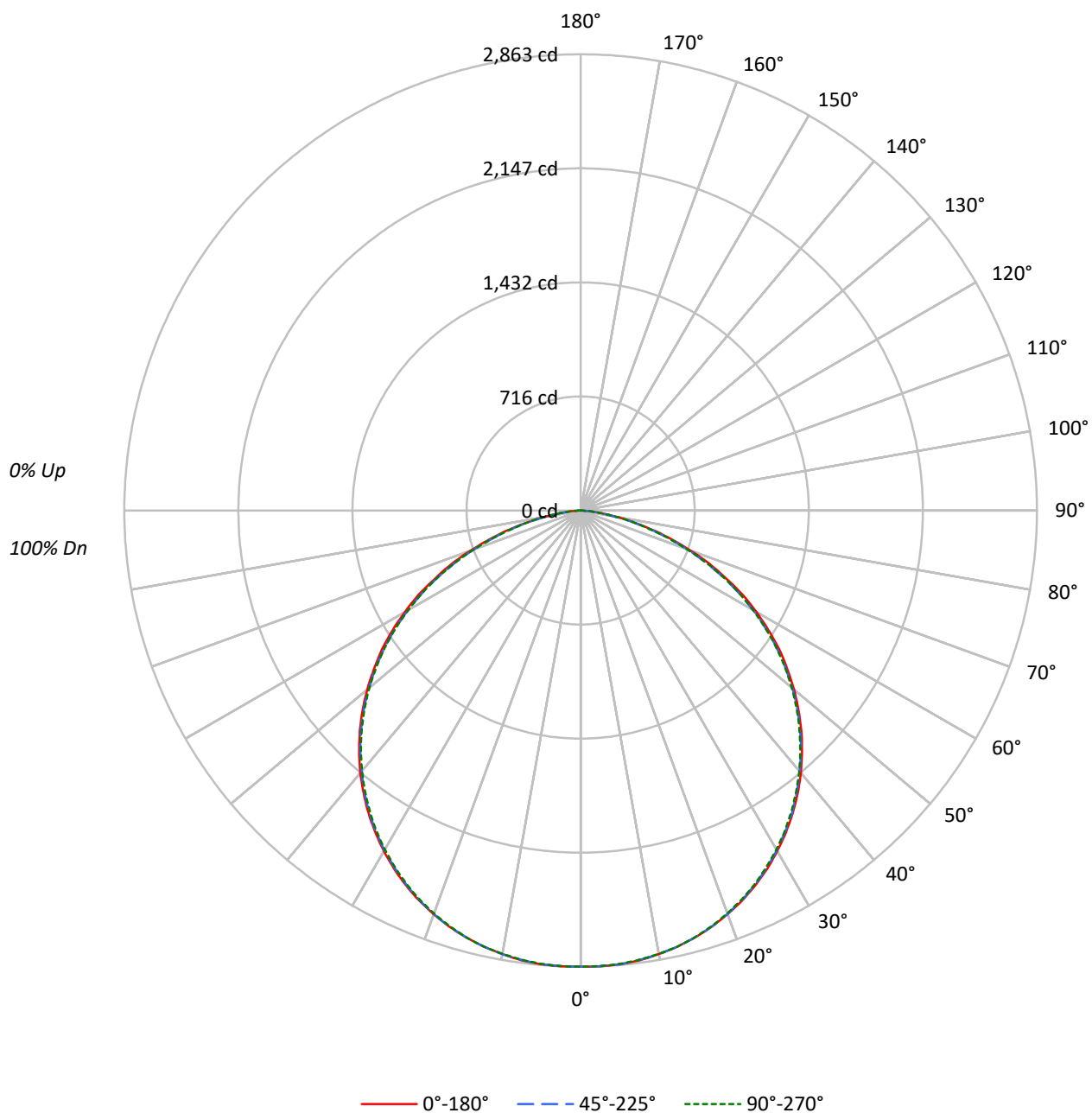
Lumens per Lamp: N/A
Luminaire Lumens: 8092.1 lumens
Efficiency: N/A
Efficacy: 115.1 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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		0
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		100
1	109	105	100	97	106	102	99	95	98	95	92		94	92	89		85
2	99	91	85	79	97	89	83	78	86	81	76		83	78	75		71
3	91	80	72	66	88	79	71	65	76	69	64		73	68	63		60
4	83	71	62	56	81	70	62	55	67	60	55		65	59	54		51
5	76	64	55	48	74	62	54	48	60	53	47		58	52	47		44
6	70	57	48	42	69	56	48	42	54	47	41		53	46	41		38
7	65	52	43	37	64	51	43	37	49	42	37		48	41	36		34
8	61	47	39	33	59	47	38	33	45	38	33		44	37	32		30
9	57	43	35	30	55	43	35	30	42	34	29		41	34	29		27
10	53	40	32	27	52	39	32	27	38	31	27		38	31	26		25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3852	3852	3852
5°	3860	3860	3857
10°	3863	3861	3860
15°	3864	3862	3862
20°	3860	3858	3853
25°	3852	3845	3839
30°	3835	3824	3816
35°	3810	3800	3787
40°	3777	3753	3748
45°	3728	3706	3694
50°	3658	3630	3619
55°	3571	3521	3516
60°	3422	3362	3362
65°	3202	3127	3137
70°	2882	2793	2784
75°	2419	2323	2312
80°	1767	1680	1751
85°	999	920	936

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3728 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	271.8	3.4
10°-20°	782.9	9.7
20°-30°	1193.7	14.8
30°-40°	1446.3	17.9
40°-50°	1502.3	18.6
50°-60°	1343.9	16.6
60°-70°	979.5	12.1
70°-80°	485.1	6.0
80°-90°	86.7	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°	2248.4	27.8
0°-40°	3694.7	45.7
0°-60°	6540.9	80.8
0°-90°	8092.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8092.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2863	2863	2863	2863	2863	
5°	2858	2859	2858	2858	2856	272
15°	2774	2773	2773	2775	2773	783
25°	2595	2592	2590	2589	2586	1196
35°	2320	2317	2314	2309	2305	1451
45°	1959	1955	1948	1944	1942	1510
55°	1522	1511	1501	1501	1499	1356
65°	1006	998	982	986	985	997
75°	465	458	447	455	445	496
85°	65	60	60	61	61	90
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2863.2	2863.2	2863.2	2863.2	2863.2
2.5°	2863.2	2862.1	2862.1	2863.2	2861.1
5°	2858.0	2859.0	2858.0	2858.0	2856.0
7.5°	2846.7	2845.7	2844.7	2845.7	2842.6
10°	2827.2	2827.2	2826.2	2827.2	2825.1
12.5°	2803.6	2803.6	2803.6	2804.6	2803.6
15°	2773.8	2772.7	2772.7	2774.8	2772.7
17.5°	2738.8	2737.8	2737.8	2736.8	2734.7
20°	2695.7	2695.7	2694.7	2693.6	2690.6
22.5°	2649.5	2648.4	2645.4	2645.4	2641.2
25°	2595.0	2591.9	2589.9	2588.9	2585.8
27.5°	2535.4	2531.3	2528.2	2526.2	2523.1
30°	2468.7	2464.5	2461.5	2458.4	2456.3
32.5°	2396.7	2394.7	2389.6	2388.5	2384.4
35°	2319.7	2316.6	2313.5	2309.4	2305.3
37.5°	2237.5	2234.4	2227.2	2225.2	2222.1
40°	2150.2	2146.1	2136.8	2136.8	2133.8
42.5°	2056.7	2052.6	2046.4	2042.3	2040.3
45°	1959.1	1955.0	1947.8	1943.7	1941.6
47.5°	1855.3	1852.3	1844.0	1841.0	1837.9
50°	1747.5	1743.4	1734.1	1732.1	1729.0
52.5°	1634.5	1632.4	1620.1	1619.1	1616.0
55°	1522.5	1511.2	1500.9	1500.9	1498.9
57.5°	1399.2	1391.0	1377.6	1377.6	1375.6
60°	1271.8	1264.6	1249.2	1251.3	1249.2
62.5°	1147.5	1132.1	1117.7	1123.9	1118.8
65°	1005.7	997.5	982.1	986.2	985.2
67.5°	876.3	860.9	846.5	854.7	850.6
70°	732.5	724.3	709.9	718.1	707.8
72.5°	596.9	589.7	575.3	584.5	574.3
75°	465.4	458.2	446.9	455.1	444.8
77.5°	341.1	335.9	325.7	333.9	335.9
80°	228.1	221.9	216.8	224.0	226.0
82.5°	133.6	129.4	127.4	128.4	133.6
85°	64.7	59.6	59.6	60.6	60.6
87.5°	17.5	15.4	17.5	18.5	19.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)