

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: P974833

Luminaire Tested: FLR2-24-90HE-L840-CP125

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974833
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-L840-CP125
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

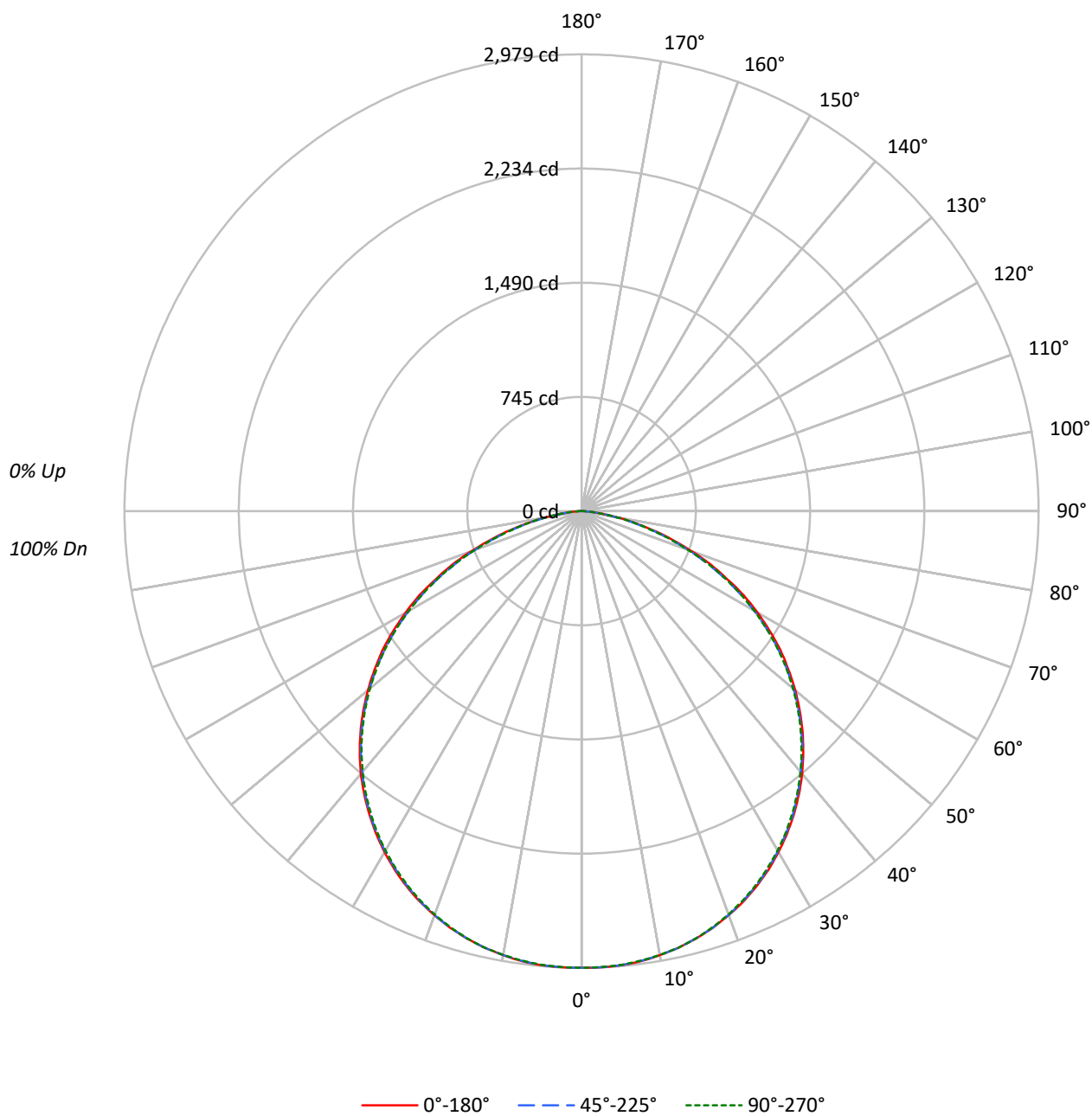
Lumens per Lamp: N/A
Luminaire Lumens: 8419.1 lumens
Efficiency: N/A
Efficacy: 119.8 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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°	4008	4008	4008
5°	4016	4016	4013
10°	4019	4017	4016
15°	4020	4018	4018
20°	4016	4014	4008
25°	4008	4000	3994
30°	3990	3979	3970
35°	3964	3954	3940
40°	3929	3905	3899
45°	3878	3856	3844
50°	3806	3777	3765
55°	3716	3663	3658
60°	3561	3497	3497
65°	3331	3253	3263
70°	2998	2906	2897
75°	2517	2417	2406
80°	1839	1747	1822
85°	1039	957	974

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3878 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	282.8	3.4
10°-20°	814.6	9.7
20°-30°	1241.9	14.8
30°-40°	1504.7	17.9
40°-50°	1563.0	18.6
50°-60°	1398.2	16.6
60°-70°	1019.0	12.1
70°-80°	504.7	6.0
80°-90°	90.2	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°	2339.3	27.8
0°-40°	3844.0	45.7
0°-60°	6805.2	80.8
0°-90°	8419.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8419.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2979	2979	2979	2979	2979	
5°	2974	2975	2974	2974	2971	283
15°	2886	2885	2885	2887	2885	815
25°	2700	2697	2694	2694	2690	1244
35°	2413	2410	2407	2403	2398	1510
45°	2038	2034	2026	2022	2020	1571
55°	1584	1572	1562	1562	1559	1411
65°	1046	1038	1022	1026	1025	1037
75°	484	477	465	474	463	516
85°	67	62	62	63	63	93
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2978.8	2978.8	2978.8	2978.8	2978.8
2.5°	2978.8	2977.8	2977.8	2978.8	2976.7
5°	2973.5	2974.6	2973.5	2973.5	2971.4
7.5°	2961.7	2960.7	2959.6	2960.7	2957.5
10°	2941.4	2941.4	2940.4	2941.4	2939.3
12.5°	2916.8	2916.8	2916.8	2917.9	2916.8
15°	2885.8	2884.8	2884.8	2886.9	2884.8
17.5°	2849.5	2848.4	2848.4	2847.4	2845.2
20°	2804.6	2804.6	2803.5	2802.5	2799.3
22.5°	2756.5	2755.4	2752.2	2752.2	2748.0
25°	2699.9	2696.7	2694.5	2693.5	2690.2
27.5°	2637.9	2633.6	2630.4	2628.3	2625.0
30°	2568.4	2564.1	2560.9	2557.7	2555.6
32.5°	2493.6	2491.4	2486.1	2485.0	2480.8
35°	2413.4	2410.2	2407.0	2402.7	2398.5
37.5°	2327.9	2324.7	2317.2	2315.1	2311.9
40°	2237.1	2232.8	2223.2	2223.2	2220.0
42.5°	2139.8	2135.5	2129.1	2124.8	2122.7
45°	2038.3	2034.0	2026.5	2022.2	2020.1
47.5°	1930.3	1927.1	1918.6	1915.3	1912.1
50°	1818.1	1813.8	1804.2	1802.0	1798.8
52.5°	1700.5	1698.4	1685.5	1684.5	1681.3
55°	1584.0	1572.3	1561.6	1561.6	1559.4
57.5°	1455.7	1447.2	1433.3	1433.3	1431.2
60°	1323.2	1315.7	1299.7	1301.8	1299.7
62.5°	1193.9	1177.9	1162.9	1169.3	1164.0
65°	1046.4	1037.8	1021.8	1026.1	1025.0
67.5°	911.7	895.7	880.7	889.3	885.0
70°	762.1	753.5	738.6	747.1	736.4
72.5°	621.0	613.5	598.5	608.2	597.5
75°	484.2	476.7	464.9	473.5	462.8
77.5°	354.9	349.5	338.8	347.4	349.5
80°	237.3	230.9	225.5	233.0	235.1
82.5°	138.9	134.7	132.5	133.6	138.9
85°	67.3	62.0	62.0	63.1	63.1
87.5°	18.2	16.0	18.2	19.2	20.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)