

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: P974701

Luminaire Tested: FLR2-24-90HE-L835-CP250

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974701
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-CP250
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

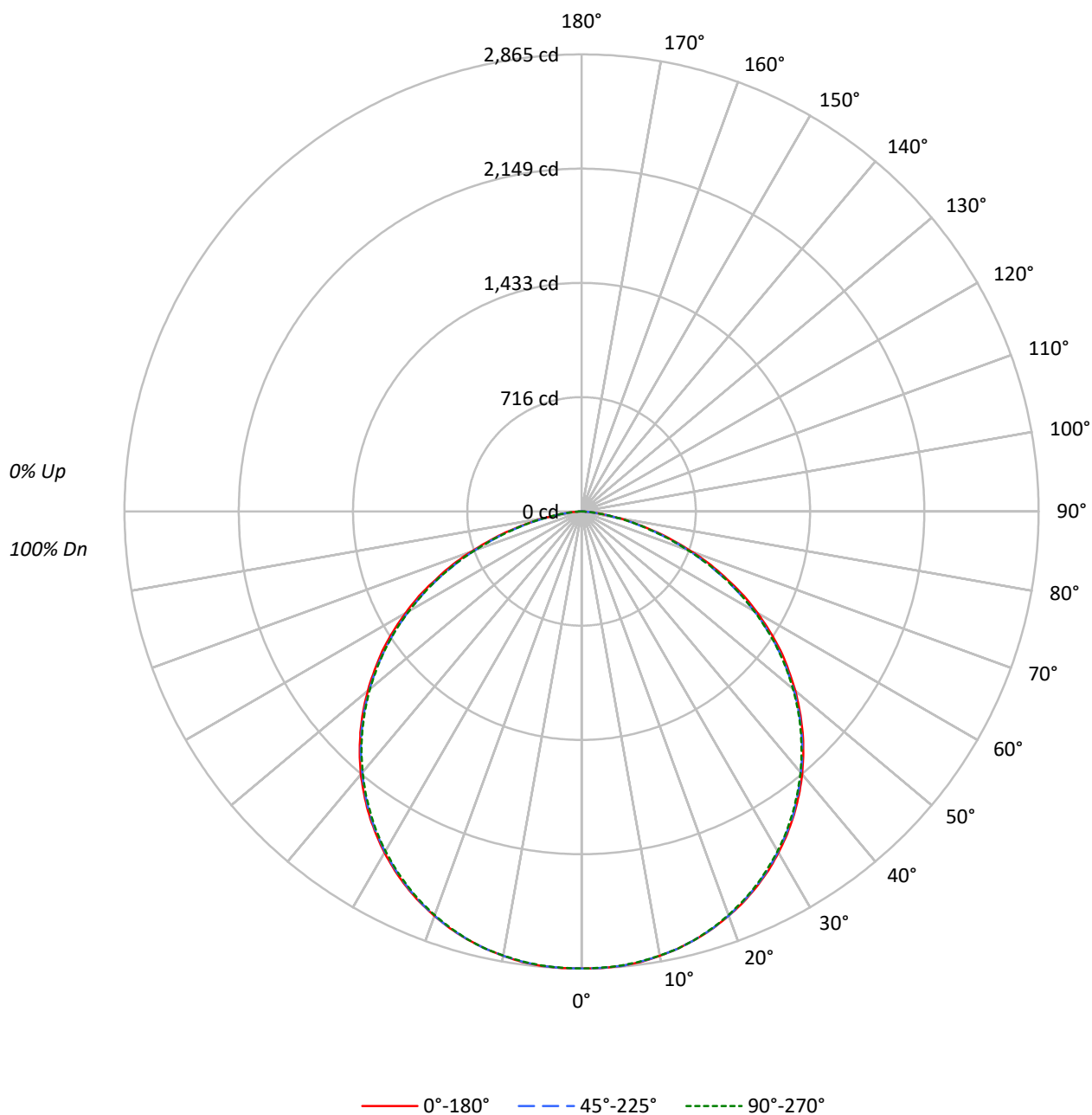
Lumens per Lamp: N/A
Luminaire Lumens: 8097.8 lumens
Efficiency: N/A
Efficacy: 115.2 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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°	3855	3855	3855
5°	3863	3863	3860
10°	3865	3864	3863
15°	3866	3865	3865
20°	3863	3861	3855
25°	3855	3848	3842
30°	3838	3827	3819
35°	3813	3803	3789
40°	3779	3756	3750
45°	3730	3709	3697
50°	3660	3632	3622
55°	3574	3523	3518
60°	3425	3364	3364
65°	3204	3129	3139
70°	2884	2795	2786
75°	2421	2325	2314
80°	1768	1681	1753
85°	1000	920	937

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3730 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	272.0	3.4
10°-20°	783.5	9.7
20°-30°	1194.6	14.8
30°-40°	1447.3	17.9
40°-50°	1503.4	18.6
50°-60°	1344.9	16.6
60°-70°	980.1	12.1
70°-80°	485.4	6.0
80°-90°	86.8	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°	2250.0	27.8
0°-40°	3697.3	45.7
0°-60°	6545.5	80.8
0°-90°	8097.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8097.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2865	2865	2865	2865	2865	
5°	2860	2861	2860	2860	2858	272
15°	2776	2775	2775	2777	2775	784
25°	2597	2594	2592	2591	2588	1197
35°	2321	2318	2315	2311	2307	1452
45°	1960	1956	1949	1945	1943	1511
55°	1524	1512	1502	1502	1500	1357
65°	1006	998	983	987	986	998
75°	466	458	447	455	445	497
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°	2865.2	2865.2	2865.2	2865.2	2865.2
2.5°	2865.2	2864.1	2864.1	2865.2	2863.1
5°	2860.0	2861.0	2860.0	2860.0	2858.0
7.5°	2848.7	2847.7	2846.7	2847.7	2844.6
10°	2829.2	2829.2	2828.1	2829.2	2827.1
12.5°	2805.5	2805.5	2805.5	2806.6	2805.5
15°	2775.7	2774.7	2774.7	2776.7	2774.7
17.5°	2740.8	2739.7	2739.7	2738.7	2736.6
20°	2697.6	2697.6	2696.6	2695.5	2692.4
22.5°	2651.3	2650.3	2647.2	2647.2	2643.1
25°	2596.8	2593.8	2591.7	2590.7	2587.6
27.5°	2537.2	2533.1	2530.0	2528.0	2524.9
30°	2470.4	2466.3	2463.2	2460.1	2458.1
32.5°	2398.4	2396.4	2391.2	2390.2	2386.1
35°	2321.3	2318.2	2315.2	2311.0	2306.9
37.5°	2239.1	2236.0	2228.8	2226.7	2223.7
40°	2151.7	2147.6	2138.3	2138.3	2135.2
42.5°	2058.1	2054.0	2047.9	2043.7	2041.7
45°	1960.5	1956.4	1949.2	1945.1	1943.0
47.5°	1856.6	1853.6	1845.3	1842.3	1839.2
50°	1748.7	1744.6	1735.3	1733.3	1730.2
52.5°	1635.6	1633.6	1621.2	1620.2	1617.1
55°	1523.6	1512.3	1502.0	1502.0	1499.9
57.5°	1400.2	1392.0	1378.6	1378.6	1376.5
60°	1272.7	1265.5	1250.1	1252.2	1250.1
62.5°	1148.3	1132.9	1118.5	1124.7	1119.5
65°	1006.5	998.2	982.8	986.9	985.9
67.5°	876.9	861.5	847.1	855.3	851.2
70°	733.0	724.8	710.4	718.6	708.3
72.5°	597.3	590.1	575.7	585.0	574.7
75°	465.7	458.5	447.2	455.4	445.1
77.5°	341.3	336.2	325.9	334.1	336.2
80°	228.2	222.1	216.9	224.1	226.2
82.5°	133.6	129.5	127.5	128.5	133.6
85°	64.8	59.6	59.6	60.7	60.7
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)