

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: P974668

Luminaire Tested: FLR2-24-90HE-L835-CP080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974668
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-CP080
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

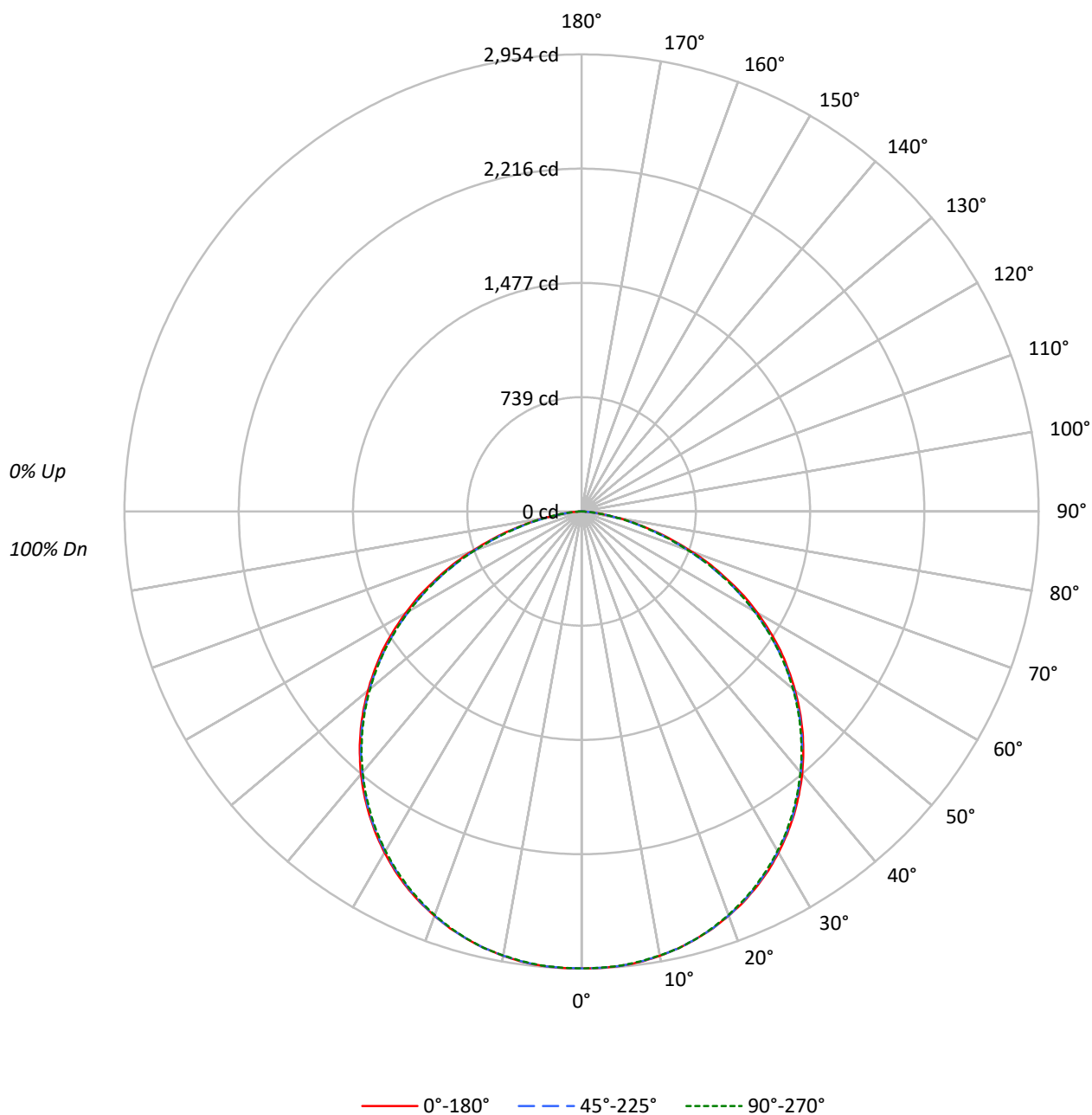
Lumens per Lamp: N/A
Luminaire Lumens: 8347.6 lumens
Efficiency: N/A
Efficacy: 118.7 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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°	3974	3974	3974
5°	3982	3982	3979
10°	3985	3983	3982
15°	3986	3984	3984
20°	3982	3980	3974
25°	3974	3966	3960
30°	3956	3945	3937
35°	3930	3920	3906
40°	3896	3872	3866
45°	3846	3823	3811
50°	3773	3745	3733
55°	3684	3632	3627
60°	3531	3468	3468
65°	3303	3225	3236
70°	2972	2881	2873
75°	2496	2397	2386
80°	1823	1733	1806
85°	1031	949	965

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3846 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	280.3	3.4
10°-20°	807.7	9.7
20°-30°	1231.4	14.8
30°-40°	1491.9	17.9
40°-50°	1549.7	18.6
50°-60°	1386.3	16.6
60°-70°	1010.4	12.1
70°-80°	500.4	6.0
80°-90°	89.4	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°	2319.4	27.8
0°-40°	3811.3	45.7
0°-60°	6747.4	80.8
0°-90°	8347.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8347.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2954	2954	2954	2954	2954	
5°	2948	2949	2948	2948	2946	280
15°	2861	2860	2860	2862	2860	808
25°	2677	2674	2672	2671	2667	1234
35°	2393	2390	2387	2382	2378	1497
45°	2021	2017	2009	2005	2003	1557
55°	1571	1559	1548	1548	1546	1399
65°	1038	1029	1013	1017	1016	1029
75°	480	473	461	470	459	512
85°	67	62	62	62	62	92
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2953.5	2953.5	2953.5	2953.5	2953.5
2.5°	2953.5	2952.5	2952.5	2953.5	2951.4
5°	2948.2	2949.3	2948.2	2948.2	2946.1
7.5°	2936.6	2935.5	2934.5	2935.5	2932.3
10°	2916.4	2916.4	2915.4	2916.4	2914.3
12.5°	2892.1	2892.1	2892.1	2893.1	2892.1
15°	2861.3	2860.3	2860.3	2862.4	2860.3
17.5°	2825.3	2824.2	2824.2	2823.2	2821.1
20°	2780.8	2780.8	2779.7	2778.7	2775.5
22.5°	2733.1	2732.1	2728.9	2728.9	2724.6
25°	2676.9	2673.8	2671.6	2670.6	2667.4
27.5°	2615.5	2611.2	2608.1	2605.9	2602.8
30°	2546.6	2542.4	2539.2	2536.0	2533.9
32.5°	2472.4	2470.3	2465.0	2463.9	2459.7
35°	2392.9	2389.7	2386.6	2382.3	2378.1
37.5°	2308.1	2305.0	2297.6	2295.4	2292.3
40°	2218.1	2213.8	2204.3	2204.3	2201.1
42.5°	2121.6	2117.4	2111.0	2106.8	2104.7
45°	2021.0	2016.7	2009.3	2005.1	2002.9
47.5°	1913.9	1910.7	1902.3	1899.1	1895.9
50°	1802.6	1798.4	1788.9	1786.7	1783.6
52.5°	1686.1	1684.0	1671.2	1670.2	1667.0
55°	1570.6	1558.9	1548.3	1548.3	1546.2
57.5°	1443.4	1434.9	1421.1	1421.1	1419.0
60°	1312.0	1304.6	1288.7	1290.8	1288.7
62.5°	1183.7	1167.9	1153.0	1159.4	1154.1
65°	1037.5	1029.0	1013.1	1017.4	1016.3
67.5°	904.0	888.1	873.2	881.7	877.5
70°	755.6	747.1	732.3	740.8	730.2
72.5°	615.7	608.3	593.5	603.0	592.4
75°	480.1	472.7	461.0	469.5	458.9
77.5°	351.8	346.5	335.9	344.4	346.5
80°	235.3	228.9	223.6	231.0	233.1
82.5°	137.8	133.5	131.4	132.5	137.8
85°	66.8	61.5	61.5	62.5	62.5
87.5°	18.0	15.9	18.0	19.1	20.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)