

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: P974534

Luminaire Tested: FLR2-24-72HE-L830-CP187

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974534
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: FLR2-24-72HE-L830-CP187
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

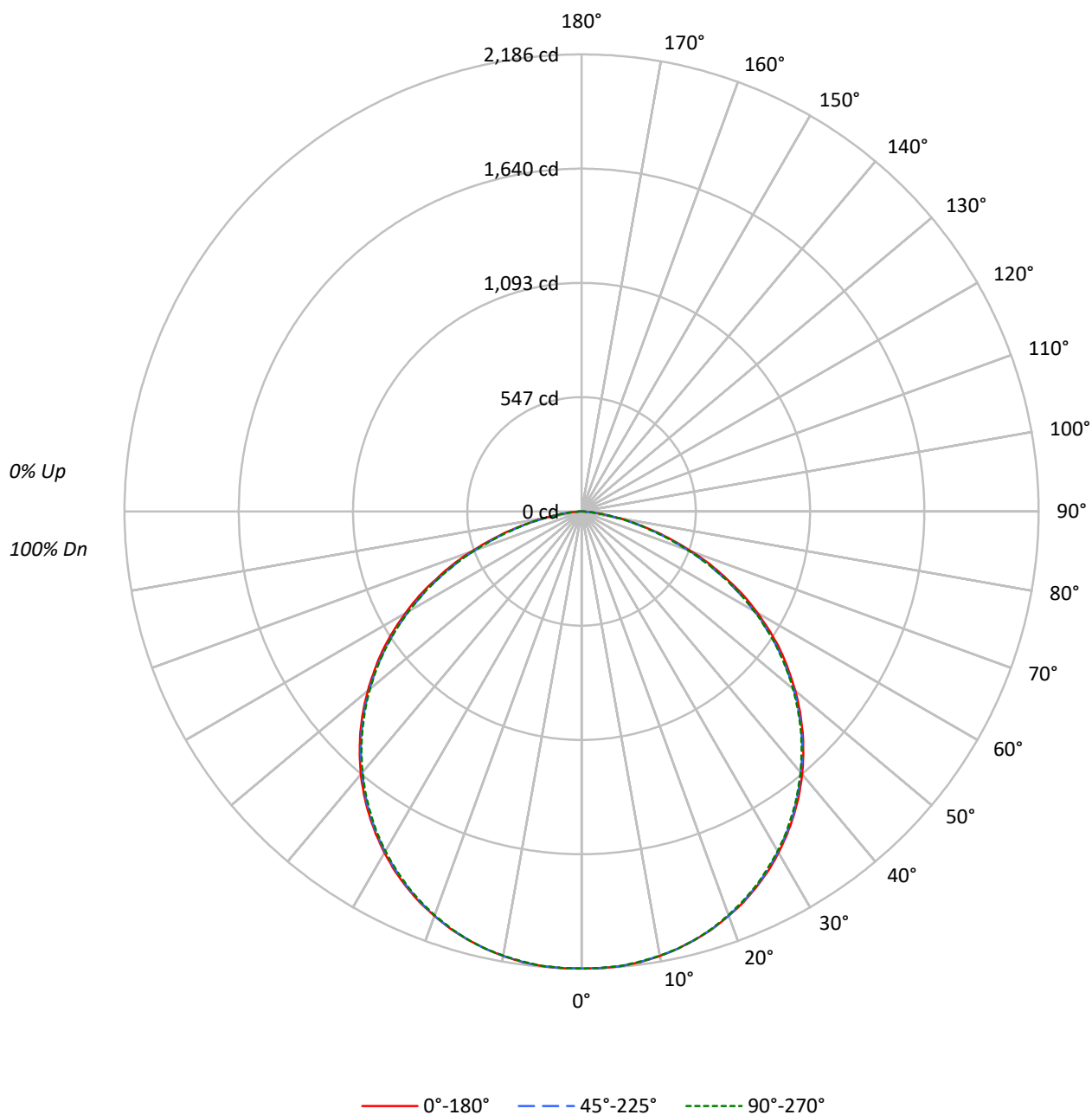
Lumens per Lamp: N/A
Luminaire Lumens: 6179.6 lumens
Efficiency: N/A
Efficacy: 115.3 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 53.6
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°	2942	2942	2942
5°	2948	2948	2946
10°	2950	2949	2948
15°	2951	2949	2949
20°	2948	2946	2942
25°	2942	2936	2932
30°	2929	2920	2914
35°	2910	2902	2892
40°	2884	2866	2862
45°	2847	2830	2821
50°	2793	2772	2764
55°	2727	2689	2685
60°	2613	2567	2567
65°	2445	2388	2395
70°	2201	2133	2126
75°	1848	1774	1766
80°	1350	1282	1337
85°	763	702	715

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2847 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	207.5	3.4
10°-20°	597.9	9.7
20°-30°	911.6	14.8
30°-40°	1104.5	17.9
40°-50°	1147.2	18.6
50°-60°	1026.3	16.6
60°-70°	748.0	12.1
70°-80°	370.4	6.0
80°-90°	66.2	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°	1717.0	27.8
0°-40°	2821.5	45.7
0°-60°	4995.0	80.8
0°-90°	6179.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6179.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2186	2186	2186	2186	2186	
5°	2183	2183	2183	2183	2181	208
15°	2118	2117	2117	2119	2117	598
25°	1982	1979	1978	1977	1975	913
35°	1772	1769	1767	1764	1760	1108
45°	1496	1493	1488	1484	1483	1153
55°	1163	1154	1146	1146	1145	1036
65°	768	762	750	753	752	761
75°	355	350	341	348	340	379
85°	49	46	46	46	46	68
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2186.5	2186.5	2186.5	2186.5	2186.5
2.5°	2186.5	2185.7	2185.7	2186.5	2184.9
5°	2182.6	2183.3	2182.6	2182.6	2181.0
7.5°	2173.9	2173.1	2172.4	2173.1	2170.8
10°	2159.0	2159.0	2158.2	2159.0	2157.4
12.5°	2141.0	2141.0	2141.0	2141.8	2141.0
15°	2118.2	2117.4	2117.4	2119.0	2117.4
17.5°	2091.5	2090.8	2090.8	2090.0	2088.4
20°	2058.6	2058.6	2057.8	2057.0	2054.7
22.5°	2023.3	2022.5	2020.2	2020.2	2017.0
25°	1981.7	1979.4	1977.8	1977.0	1974.7
27.5°	1936.2	1933.1	1930.7	1929.2	1926.8
30°	1885.2	1882.1	1879.7	1877.4	1875.8
32.5°	1830.3	1828.7	1824.8	1824.0	1820.9
35°	1771.5	1769.1	1766.8	1763.6	1760.5
37.5°	1708.7	1706.3	1700.9	1699.3	1696.9
40°	1642.0	1638.9	1631.8	1631.8	1629.5
42.5°	1570.6	1567.5	1562.8	1559.6	1558.1
45°	1496.1	1493.0	1487.5	1484.3	1482.8
47.5°	1416.9	1414.5	1408.2	1405.9	1403.5
50°	1334.5	1331.3	1324.3	1322.7	1320.4
52.5°	1248.2	1246.6	1237.2	1236.4	1234.1
55°	1162.7	1154.0	1146.2	1146.2	1144.6
57.5°	1068.5	1062.2	1052.0	1052.0	1050.5
60°	971.2	965.8	954.0	955.6	954.0
62.5°	876.3	864.5	853.6	858.3	854.3
65°	768.1	761.8	750.0	753.1	752.4
67.5°	669.2	657.4	646.4	652.7	649.6
70°	559.4	553.1	542.1	548.4	540.5
72.5°	455.8	450.3	439.3	446.4	438.6
75°	355.4	349.9	341.3	347.5	339.7
77.5°	260.5	256.5	248.7	255.0	256.5
80°	174.2	169.5	165.5	171.0	172.6
82.5°	102.0	98.9	97.3	98.1	102.0
85°	49.4	45.5	45.5	46.3	46.3
87.5°	13.3	11.8	13.3	14.1	14.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)