

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: P974898

Luminaire Tested: FLR2-24-80HE-L940-CP080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974898
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: FLR2-24-80HE-L940-CP080
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

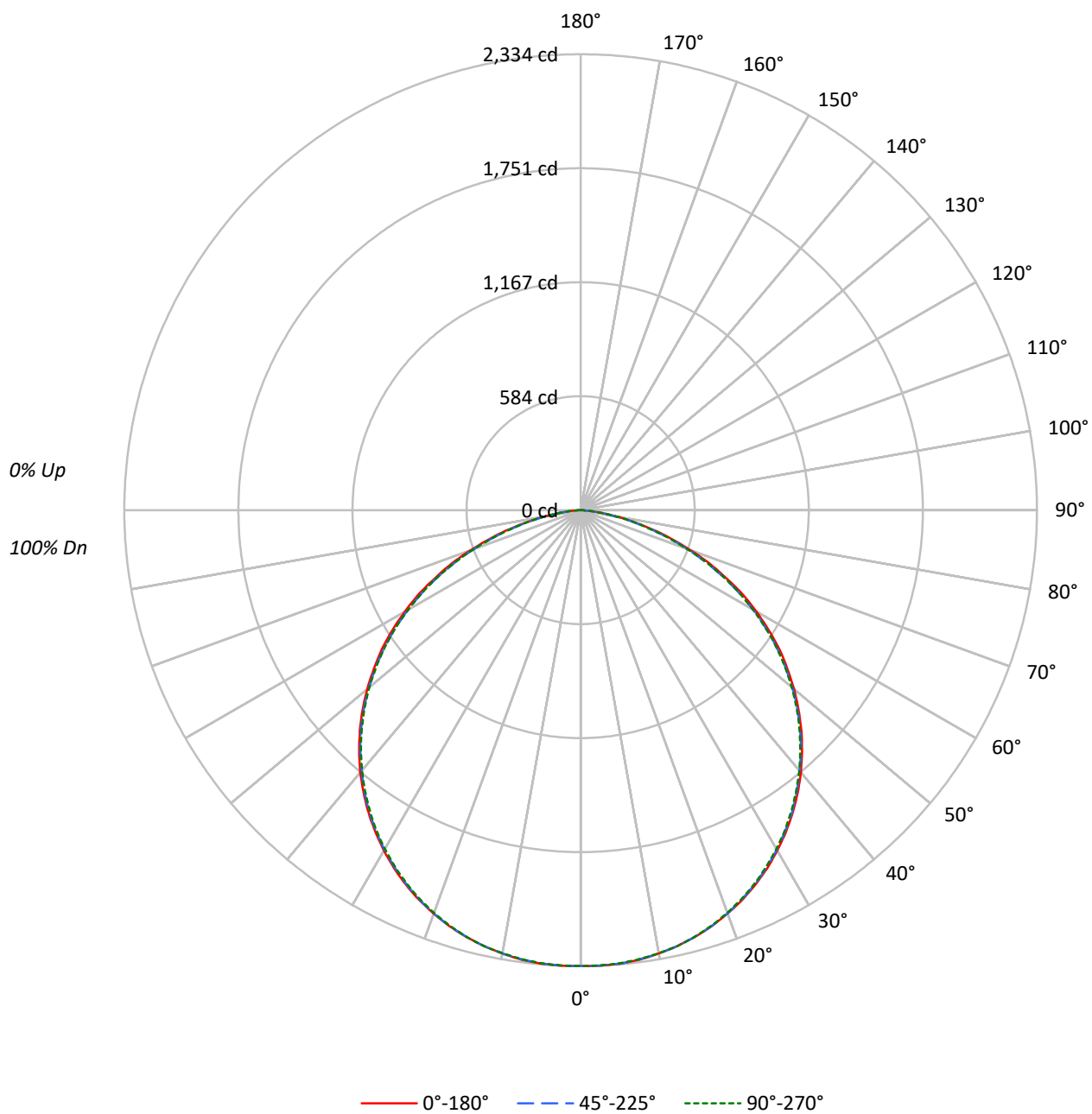
Lumens per Lamp: N/A
Luminaire Lumens: 6596.9 lumens
Efficiency: N/A
Efficacy: 103.9 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 63.5
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°	3141	3141	3141
5°	3147	3147	3145
10°	3149	3148	3147
15°	3150	3149	3149
20°	3147	3145	3141
25°	3141	3134	3130
30°	3127	3118	3111
35°	3106	3098	3087
40°	3079	3060	3055
45°	3039	3021	3012
50°	2982	2959	2950
55°	2912	2870	2866
60°	2790	2740	2740
65°	2610	2549	2557
70°	2349	2277	2270
75°	1972	1894	1885
80°	1440	1369	1427
85°	815	750	763

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3039 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	221.6	3.4
10°-20°	638.3	9.7
20°-30°	973.1	14.8
30°-40°	1179.0	17.9
40°-50°	1224.7	18.6
50°-60°	1095.6	16.6
60°-70°	798.5	12.1
70°-80°	395.4	6.0
80°-90°	70.7	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°	1832.9	27.8
0°-40°	3012.0	45.7
0°-60°	5332.3	80.8
0°-90°	6596.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6596.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2334	2334	2334	2334	2334	
5°	2330	2331	2330	2330	2328	222
15°	2261	2260	2260	2262	2260	638
25°	2116	2113	2111	2110	2108	975
35°	1891	1888	1886	1883	1879	1183
45°	1597	1594	1588	1584	1583	1231
55°	1241	1232	1224	1224	1222	1106
65°	820	813	801	804	803	813
75°	379	374	364	371	363	405
85°	53	49	49	49	49	73
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2334.1	2334.1	2334.1	2334.1	2334.1
2.5°	2334.1	2333.3	2333.3	2334.1	2332.4
5°	2329.9	2330.7	2329.9	2329.9	2328.2
7.5°	2320.7	2319.9	2319.0	2319.9	2317.3
10°	2304.8	2304.8	2303.9	2304.8	2303.1
12.5°	2285.5	2285.5	2285.5	2286.4	2285.5
15°	2261.2	2260.4	2260.4	2262.1	2260.4
17.5°	2232.8	2231.9	2231.9	2231.1	2229.4
20°	2197.6	2197.6	2196.7	2195.9	2193.4
22.5°	2159.9	2159.1	2156.5	2156.5	2153.2
25°	2115.5	2113.0	2111.3	2110.5	2108.0
27.5°	2066.9	2063.6	2061.1	2059.4	2056.9
30°	2012.5	2009.1	2006.6	2004.1	2002.4
32.5°	1953.9	1952.2	1948.0	1947.2	1943.8
35°	1891.1	1888.5	1886.0	1882.7	1879.3
37.5°	1824.1	1821.5	1815.7	1814.0	1811.5
40°	1752.9	1749.5	1742.0	1742.0	1739.5
42.5°	1676.7	1673.3	1668.3	1664.9	1663.3
45°	1597.1	1593.7	1587.9	1584.5	1582.9
47.5°	1512.5	1510.0	1503.3	1500.8	1498.3
50°	1424.6	1421.2	1413.7	1412.0	1409.5
52.5°	1332.5	1330.8	1320.7	1319.9	1317.4
55°	1241.2	1232.0	1223.6	1223.6	1221.9
57.5°	1140.7	1134.0	1123.1	1123.1	1121.4
60°	1036.8	1031.0	1018.4	1020.1	1018.4
62.5°	935.5	922.9	911.2	916.2	912.0
65°	819.9	813.2	800.6	804.0	803.2
67.5°	714.4	701.8	690.1	696.8	693.4
70°	597.1	590.4	578.7	585.4	577.0
72.5°	486.6	480.7	469.0	476.5	468.2
75°	379.4	373.5	364.3	371.0	362.6
77.5°	278.0	273.9	265.5	272.2	273.9
80°	185.9	180.9	176.7	182.6	184.2
82.5°	108.9	105.5	103.8	104.7	108.9
85°	52.8	48.6	48.6	49.4	49.4
87.5°	14.2	12.6	14.2	15.1	15.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)