

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: P974952

Luminaire Tested: FLR2-24-72HE-L940-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974952
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-L940-CA080
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

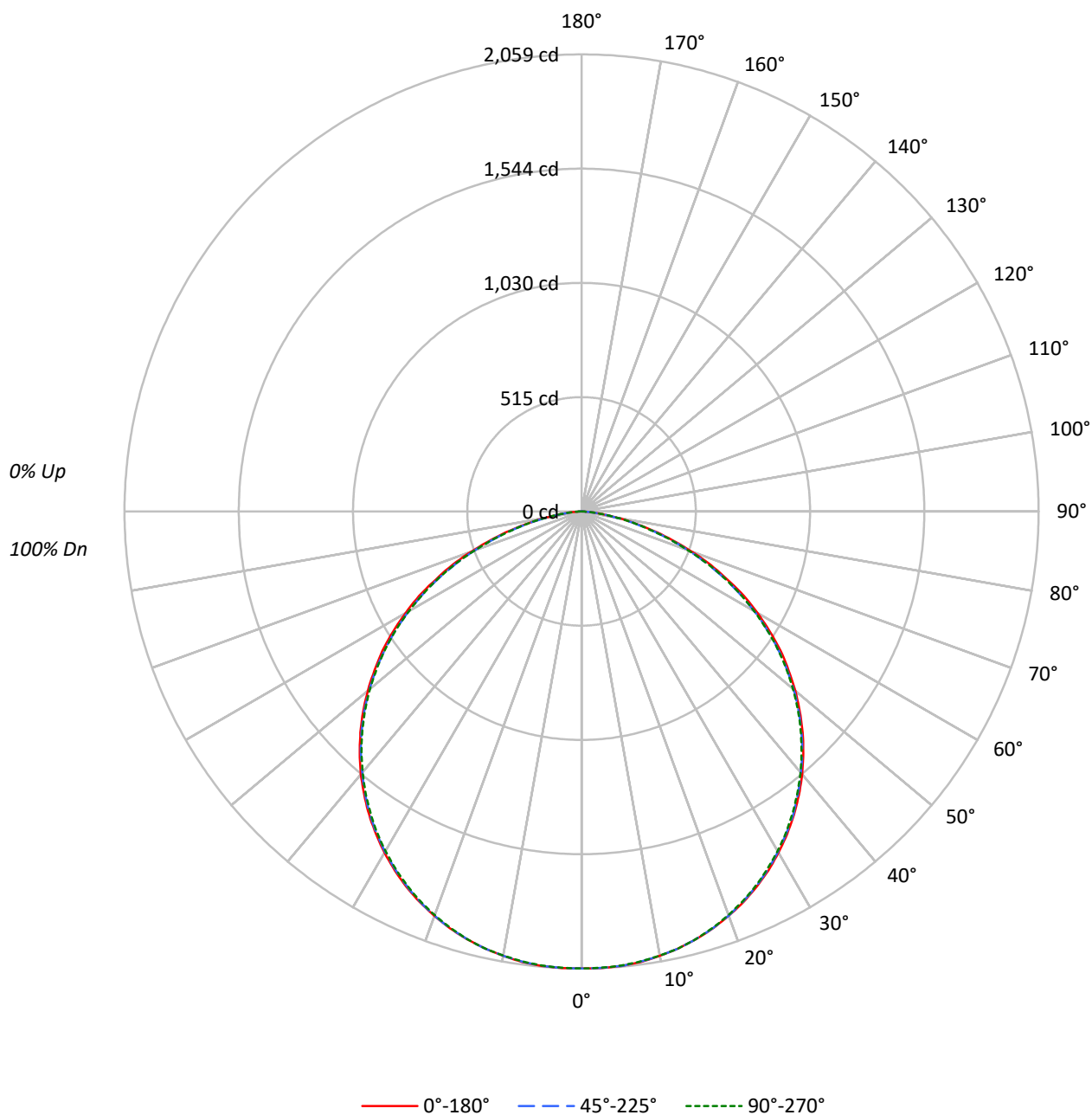
Lumens per Lamp: N/A
Luminaire Lumens: 5819.6 lumens
Efficiency: N/A
Efficacy: 108.6 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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°	2770	2770	2770
5°	2776	2776	2774
10°	2778	2777	2776
15°	2779	2778	2778
20°	2776	2775	2771
25°	2771	2765	2761
30°	2758	2750	2745
35°	2740	2733	2723
40°	2716	2699	2695
45°	2681	2665	2657
50°	2631	2610	2603
55°	2568	2532	2529
60°	2461	2418	2418
65°	2303	2249	2256
70°	2072	2008	2002
75°	1740	1671	1663
80°	1271	1208	1259
85°	718	662	673

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2681 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	195.4	3.4
10°-20°	563.1	9.7
20°-30°	858.5	14.8
30°-40°	1040.1	17.9
40°-50°	1080.4	18.6
50°-60°	966.5	16.6
60°-70°	704.4	12.1
70°-80°	348.8	6.0
80°-90°	62.4	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°	1617.0	27.8
0°-40°	2657.1	45.7
0°-60°	4704.0	80.8
0°-90°	5819.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5819.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2059	2059	2059	2059	2059	
5°	2055	2056	2055	2055	2054	196
15°	1995	1994	1994	1996	1994	563
25°	1866	1864	1863	1862	1860	860
35°	1668	1666	1664	1661	1658	1043
45°	1409	1406	1401	1398	1396	1086
55°	1095	1087	1079	1079	1078	976
65°	723	717	706	709	708	717
75°	335	330	321	327	320	357
85°	46	43	43	44	44	64
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2059.1	2059.1	2059.1	2059.1	2059.1
2.5°	2059.1	2058.4	2058.4	2059.1	2057.6
5°	2055.4	2056.1	2055.4	2055.4	2053.9
7.5°	2047.3	2046.5	2045.8	2046.5	2044.3
10°	2033.2	2033.2	2032.5	2033.2	2031.8
12.5°	2016.2	2016.2	2016.2	2017.0	2016.2
15°	1994.8	1994.1	1994.1	1995.6	1994.1
17.5°	1969.7	1969.0	1969.0	1968.2	1966.7
20°	1938.7	1938.7	1937.9	1937.2	1935.0
22.5°	1905.4	1904.7	1902.5	1902.5	1899.5
25°	1866.3	1864.0	1862.6	1861.8	1859.6
27.5°	1823.4	1820.5	1818.2	1816.8	1814.5
30°	1775.4	1772.4	1770.2	1768.0	1766.5
32.5°	1723.7	1722.2	1718.5	1717.8	1714.8
35°	1668.3	1666.0	1663.8	1660.9	1657.9
37.5°	1609.1	1606.9	1601.8	1600.3	1598.1
40°	1546.3	1543.4	1536.7	1536.7	1534.5
42.5°	1479.1	1476.2	1471.7	1468.8	1467.3
45°	1408.9	1406.0	1400.8	1397.8	1396.4
47.5°	1334.3	1332.1	1326.2	1324.0	1321.7
50°	1256.7	1253.8	1247.1	1245.6	1243.4
52.5°	1175.5	1174.0	1165.1	1164.4	1162.2
55°	1094.9	1086.8	1079.4	1079.4	1077.9
57.5°	1006.3	1000.4	990.8	990.8	989.3
60°	914.7	909.5	898.4	899.9	898.4
62.5°	825.3	814.2	803.8	808.3	804.6
65°	723.3	717.4	706.3	709.3	708.5
67.5°	630.2	619.1	608.8	614.7	611.7
70°	526.8	520.9	510.5	516.4	509.0
72.5°	429.3	424.1	413.7	420.4	413.0
75°	334.7	329.5	321.4	327.3	319.9
77.5°	245.3	241.6	234.2	240.1	241.6
80°	164.0	159.6	155.9	161.1	162.5
82.5°	96.0	93.1	91.6	92.4	96.0
85°	46.5	42.9	42.9	43.6	43.6
87.5°	12.6	11.1	12.6	13.3	14.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)