

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: P973924

Luminaire Tested: FLR2-22-60HE-L840-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973924
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-2)
Test Lab: INNOVATION CENTER
Issue Date: 3/13/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: FAIL-SAFE
Catalog Number: FLR2-22-60HE-L840-CA080
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

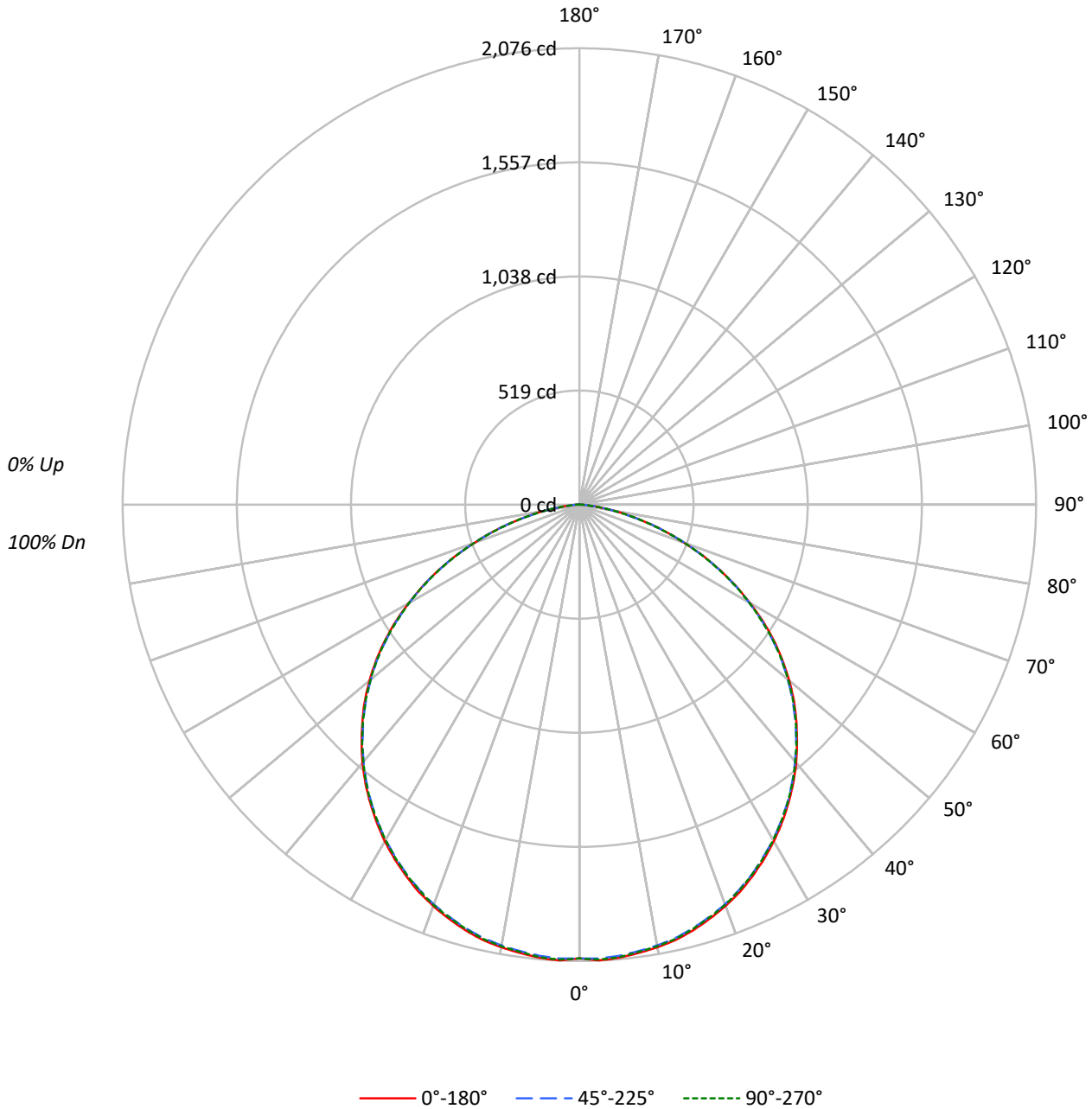
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5772.5 lumens
Efficiency: N/A
Efficacy: 121.8 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.38
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 47.4
Input Voltage (V): 120
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									
RC	80									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	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	101	97	107	102	99	95	98	95	92	94	92	89	91	89	87	85				85															
2	99	91	85	79	97	90	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	63	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51				51															
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	57	51	46	44				44															
6	71	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	39				39															
7	65	52	43	37	64	51	43	37	50	42	37	48	41	36	47	41	36	34				34															
8	61	47	39	33	59	47	39	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	40	34	29	27				27															
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	26	25				25															

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5555	5555	5555
5°	5590	5565	5583
10°	5588	5564	5574
15°	5584	5559	5566
20°	5564	5542	5550
25°	5535	5512	5516
30°	5495	5471	5475
35°	5445	5424	5428
40°	5388	5361	5365
45°	5308	5284	5294
50°	5215	5177	5188
55°	5066	5025	5043
60°	4817	4796	4796
65°	4497	4490	4473
70°	3983	4002	3992
75°	3354	3327	3301
80°	2410	2371	2351
85°	1260	1260	1220

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5308 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	195.5	3.4
10°-20°	562.1	9.7
20°-30°	854.2	14.8
30°-40°	1032.5	17.9
40°-50°	1071.6	18.6
50°-60°	958.1	16.6
60°-70°	696.6	12.1
70°-80°	342.6	5.9
80°-90°	59.4	1.0
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°	1611.8	27.9
0°-40°	2644.2	45.8
0°-60°	4673.9	81.0
0°-90°	5772.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5772.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2064	2064	2064	2064	2064	
5°	2069	2045	2060	2053	2067	197
15°	2004	1981	1995	1990	1998	566
25°	1864	1844	1856	1852	1858	859
35°	1657	1646	1651	1652	1652	1037
45°	1395	1388	1388	1391	1391	1076
55°	1080	1074	1071	1074	1075	963
65°	706	709	705	705	702	697
75°	323	325	320	321	318	342
85°	41	42	41	41	40	60
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2064.2	2064.2	2064.2	2064.2	2064.2
2.5°	2075.6	2051.4	2066.7	2057.8	2071.8
5°	2069.3	2045.0	2060.3	2052.7	2066.7
7.5°	2057.8	2033.6	2048.9	2041.2	2052.7
10°	2045.0	2019.5	2036.1	2028.5	2039.9
12.5°	2028.5	2004.2	2019.5	2013.2	2023.4
15°	2004.2	1981.3	1995.3	1990.2	1997.9
17.5°	1974.9	1952.0	1966.0	1962.2	1968.5
20°	1943.0	1921.4	1935.4	1931.6	1937.9
22.5°	1907.3	1884.4	1897.1	1894.6	1899.7
25°	1864.0	1843.6	1856.3	1852.5	1857.6
27.5°	1818.1	1799.0	1809.2	1809.2	1811.7
30°	1768.4	1750.5	1760.7	1760.7	1762.0
32.5°	1714.8	1700.8	1707.2	1708.4	1708.4
35°	1657.4	1646.0	1651.1	1652.3	1652.3
37.5°	1597.5	1586.0	1589.9	1592.4	1592.4
40°	1533.8	1523.6	1526.1	1528.7	1527.4
42.5°	1464.9	1457.3	1458.6	1461.1	1461.1
45°	1394.8	1388.4	1388.4	1391.0	1391.0
47.5°	1323.4	1317.0	1314.5	1317.0	1317.0
50°	1245.6	1239.3	1236.7	1239.3	1239.3
52.5°	1164.0	1157.7	1157.7	1157.7	1158.9
55°	1079.9	1073.5	1071.0	1073.5	1074.8
57.5°	990.6	988.1	984.3	985.5	981.7
60°	895.0	895.0	891.2	893.7	891.2
62.5°	801.9	804.5	800.7	800.7	798.1
65°	706.3	708.9	705.1	705.1	702.5
67.5°	608.2	612.0	606.9	606.9	604.3
70°	506.2	513.8	508.7	510.0	507.4
72.5°	414.4	418.2	413.1	413.1	410.5
75°	322.6	325.1	320.0	321.3	317.5
77.5°	232.0	235.9	230.8	232.0	230.8
80°	155.5	156.8	153.0	154.3	151.7
82.5°	90.5	91.8	90.5	89.2	88.0
85°	40.8	42.1	40.8	40.8	39.5
87.5°	10.2	10.2	10.2	10.2	10.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)