

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: P973882

Luminaire Tested: FLR2-22-60HE-L935-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973882
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-L935-CA080
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

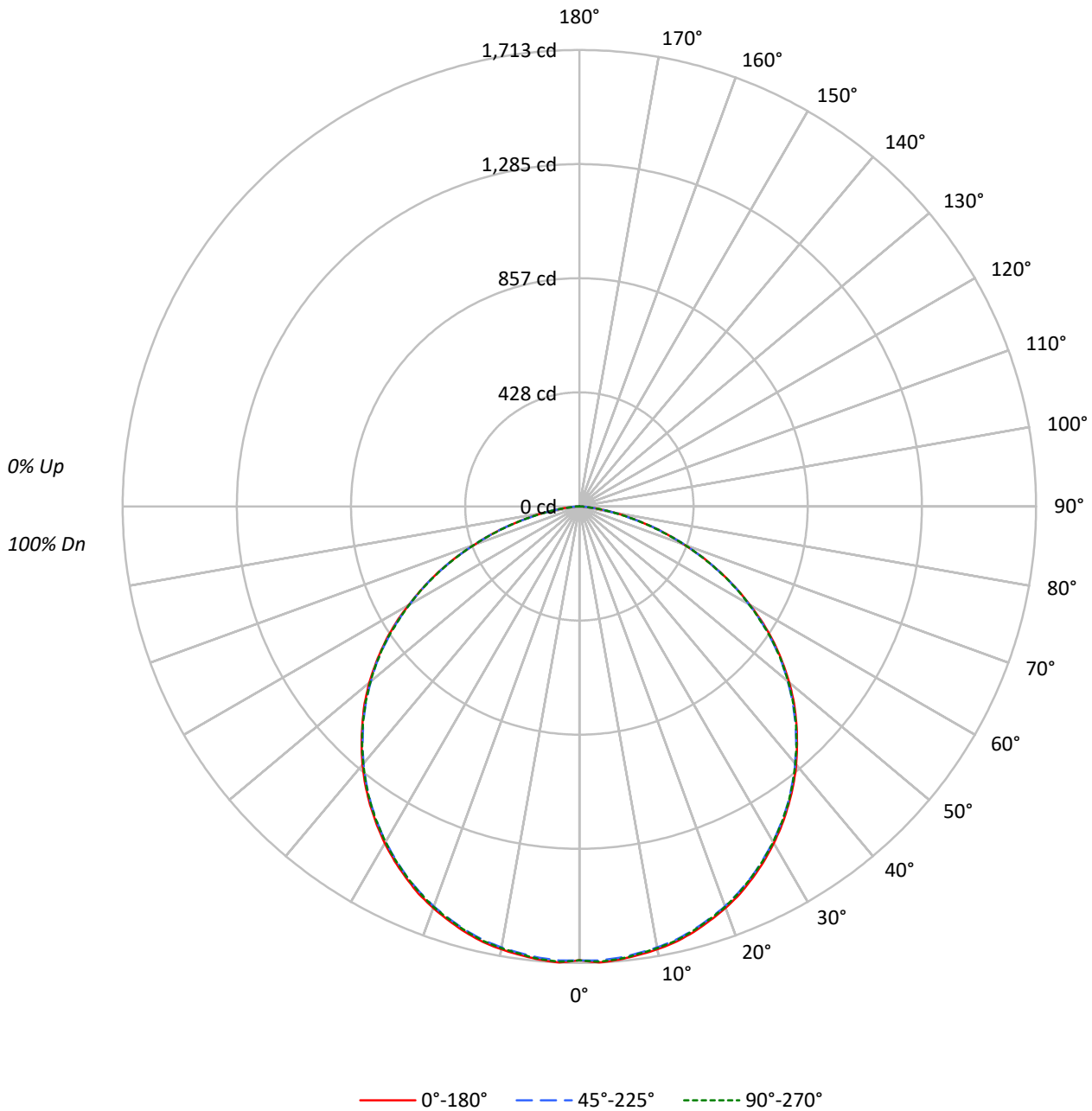
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4763.7 lumens
Efficiency: N/A
Efficacy: 100.5 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									70									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	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°	4584	4584	4584
5°	4613	4593	4607
10°	4611	4591	4600
15°	4608	4587	4593
20°	4592	4574	4580
25°	4567	4548	4552
30°	4534	4515	4518
35°	4493	4476	4480
40°	4446	4424	4428
45°	4381	4360	4368
50°	4303	4273	4281
55°	4181	4146	4161
60°	3975	3958	3958
65°	3712	3705	3691
70°	3286	3303	3295
75°	2768	2746	2724
80°	1990	1957	1940
85°	1041	1041	1007

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4381 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	161.3	3.4
10°-20°	463.9	9.7
20°-30°	704.9	14.8
30°-40°	852.0	17.9
40°-50°	884.4	18.6
50°-60°	790.7	16.6
60°-70°	574.8	12.1
70°-80°	282.7	5.9
80°-90°	49.0	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°	1330.1	27.9
0°-40°	2182.1	45.8
0°-60°	3857.1	81.0
0°-90°	4763.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4763.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1703	1703	1703	1703	1703	
5°	1708	1688	1700	1694	1706	162
15°	1654	1635	1647	1642	1649	467
25°	1538	1521	1532	1529	1533	709
35°	1368	1358	1362	1364	1364	856
45°	1151	1146	1146	1148	1148	888
55°	891	886	884	886	887	794
65°	583	585	582	582	580	575
75°	266	268	264	265	262	283
85°	34	35	34	34	33	49
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1703.4	1703.4	1703.4	1703.4	1703.4
2.5°	1712.9	1692.9	1705.5	1698.2	1709.7
5°	1707.6	1687.6	1700.3	1694.0	1705.5
7.5°	1698.2	1678.2	1690.8	1684.5	1694.0
10°	1687.6	1666.6	1680.3	1674.0	1683.4
12.5°	1674.0	1654.0	1666.6	1661.3	1669.8
15°	1654.0	1635.0	1646.6	1642.4	1648.7
17.5°	1629.8	1610.8	1622.4	1619.3	1624.5
20°	1603.5	1585.6	1597.2	1594.0	1599.3
22.5°	1574.0	1555.1	1565.6	1563.5	1567.7
25°	1538.2	1521.4	1531.9	1528.8	1533.0
27.5°	1500.4	1484.6	1493.0	1493.0	1495.1
30°	1459.3	1444.6	1453.0	1453.0	1454.1
32.5°	1415.1	1403.6	1408.8	1409.9	1409.9
35°	1367.8	1358.3	1362.5	1363.6	1363.6
37.5°	1318.3	1308.9	1312.0	1314.1	1314.1
40°	1265.7	1257.3	1259.4	1261.5	1260.5
42.5°	1208.9	1202.6	1203.7	1205.8	1205.8
45°	1151.1	1145.8	1145.8	1147.9	1147.9
47.5°	1092.1	1086.9	1084.8	1086.9	1086.9
50°	1027.9	1022.7	1020.6	1022.7	1022.7
52.5°	960.6	955.4	955.4	955.4	956.4
55°	891.2	885.9	883.8	885.9	887.0
57.5°	817.5	815.4	812.3	813.3	810.2
60°	738.6	738.6	735.5	737.6	735.5
62.5°	661.8	663.9	660.7	660.7	658.6
65°	582.9	585.0	581.8	581.8	579.7
67.5°	501.9	505.0	500.8	500.8	498.7
70°	417.7	424.0	419.8	420.9	418.8
72.5°	341.9	345.1	340.9	340.9	338.8
75°	266.2	268.3	264.1	265.1	262.0
77.5°	191.5	194.6	190.4	191.5	190.4
80°	128.4	129.4	126.3	127.3	125.2
82.5°	74.7	75.8	74.7	73.7	72.6
85°	33.7	34.7	33.7	33.7	32.6
87.5°	8.4	8.4	8.4	8.4	8.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)