

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: P973852

Luminaire Tested: FLR2-22-60HE-L935-CP080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973852
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-CP080
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

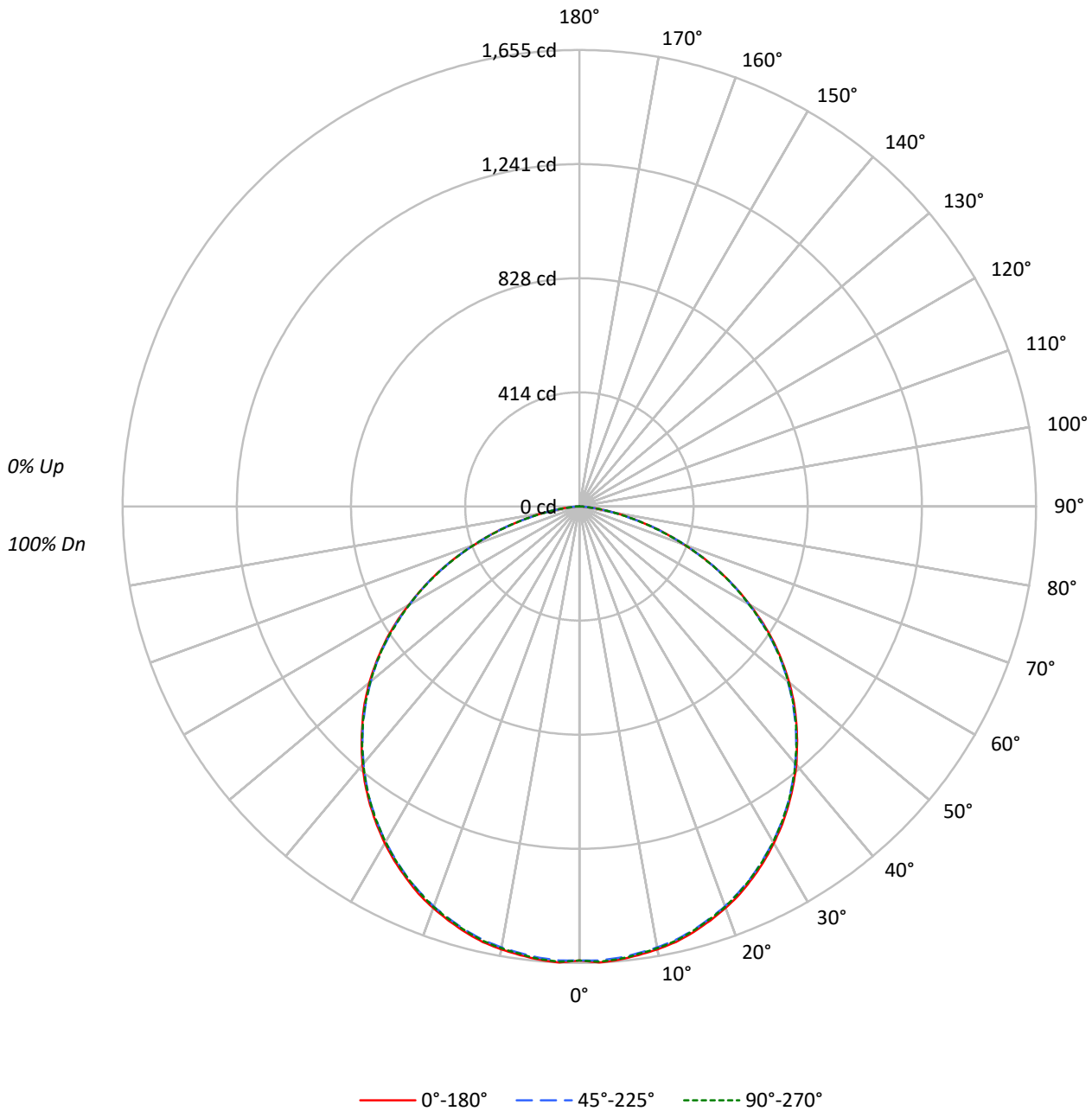
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4602.7 lumens
Efficiency: N/A
Efficacy: 97.1 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°	4429	4429	4429
5°	4457	4438	4451
10°	4456	4436	4444
15°	4452	4432	4438
20°	4437	4419	4425
25°	4413	4395	4398
30°	4381	4362	4365
35°	4342	4325	4328
40°	4296	4275	4278
45°	4232	4213	4221
50°	4158	4128	4137
55°	4039	4006	4021
60°	3841	3824	3824
65°	3586	3580	3566
70°	3175	3191	3183
75°	2674	2653	2632
80°	1922	1891	1875
85°	1003	1003	973

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4232 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	155.9	3.4
10°-20°	448.2	9.7
20°-30°	681.1	14.8
30°-40°	823.2	17.9
40°-50°	854.5	18.6
50°-60°	763.9	16.6
60°-70°	555.4	12.1
70°-80°	273.1	5.9
80°-90°	47.4	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°	1285.1	27.9
0°-40°	2108.4	45.8
0°-60°	3726.8	81.0
0°-90°	4602.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4602.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1646	1646	1646	1646	1646	
5°	1650	1631	1643	1637	1648	157
15°	1598	1580	1591	1587	1593	451
25°	1486	1470	1480	1477	1481	685
35°	1322	1312	1316	1318	1318	827
45°	1112	1107	1107	1109	1109	858
55°	861	856	854	856	857	767
65°	563	565	562	562	560	555
75°	257	259	255	256	253	273
85°	32	34	32	32	32	48
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1645.9	1645.9	1645.9	1645.9	1645.9
2.5°	1655.0	1635.7	1647.9	1640.8	1652.0
5°	1649.9	1630.6	1642.8	1636.7	1647.9
7.5°	1640.8	1621.5	1633.7	1627.6	1636.7
10°	1630.6	1610.3	1623.5	1617.4	1626.5
12.5°	1617.4	1598.1	1610.3	1605.2	1613.3
15°	1598.1	1579.8	1591.0	1586.9	1593.0
17.5°	1574.7	1556.4	1567.6	1564.5	1569.6
20°	1549.3	1532.0	1543.2	1540.1	1545.2
22.5°	1520.8	1502.5	1512.7	1510.6	1514.7
25°	1486.2	1470.0	1480.1	1477.1	1481.2
27.5°	1449.7	1434.4	1442.5	1442.5	1444.6
30°	1410.0	1395.8	1403.9	1403.9	1404.9
32.5°	1367.3	1356.1	1361.2	1362.2	1362.2
35°	1321.6	1312.4	1316.5	1317.5	1317.5
37.5°	1273.8	1264.6	1267.7	1269.7	1269.7
40°	1223.0	1214.8	1216.9	1218.9	1217.9
42.5°	1168.1	1162.0	1163.0	1165.0	1165.0
45°	1112.1	1107.1	1107.1	1109.1	1109.1
47.5°	1055.2	1050.1	1048.1	1050.1	1050.1
50°	993.2	988.1	986.1	988.1	988.1
52.5°	928.1	923.1	923.1	923.1	924.1
55°	861.0	856.0	853.9	856.0	857.0
57.5°	789.9	787.9	784.8	785.8	782.8
60°	713.6	713.6	710.6	712.6	710.6
62.5°	639.4	641.5	638.4	638.4	636.4
65°	563.2	565.2	562.2	562.2	560.1
67.5°	484.9	488.0	483.9	483.9	481.9
70°	403.6	409.7	405.6	406.6	404.6
72.5°	330.4	333.4	329.4	329.4	327.3
75°	257.2	259.2	255.2	256.2	253.1
77.5°	185.0	188.1	184.0	185.0	184.0
80°	124.0	125.0	122.0	123.0	121.0
82.5°	72.2	73.2	72.2	71.2	70.1
85°	32.5	33.5	32.5	32.5	31.5
87.5°	8.1	8.1	8.1	8.1	8.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)