

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: P974020

Luminaire Tested: FLR2-22-60HE-L950-CP080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974020
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-L950-CP080
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

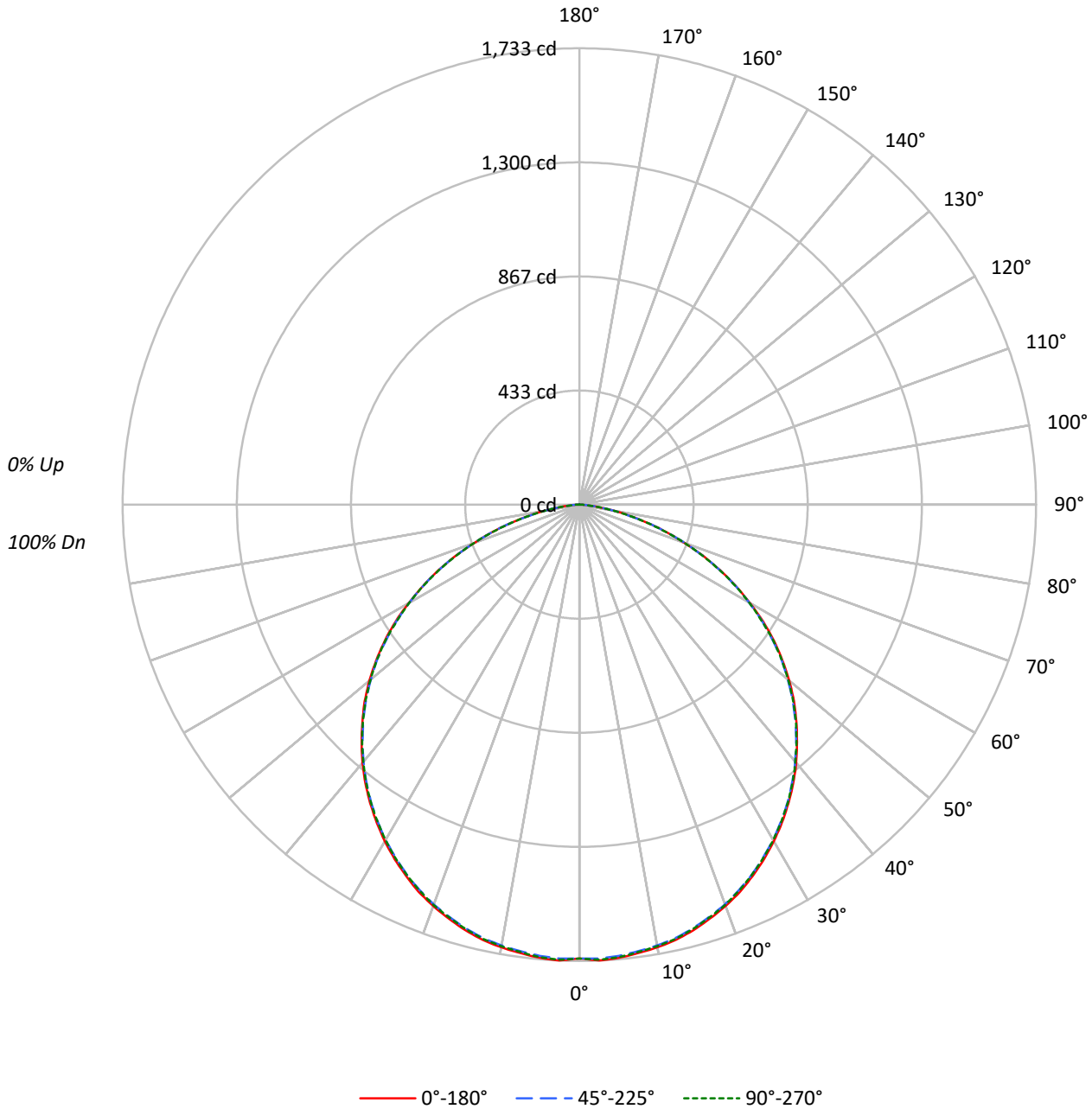
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4819.3 lumens
Efficiency: N/A
Efficacy: 101.7 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°	4637	4637	4637
5°	4667	4646	4661
10°	4665	4645	4654
15°	4662	4641	4647
20°	4645	4627	4633
25°	4621	4602	4605
30°	4588	4568	4571
35°	4546	4528	4532
40°	4498	4476	4480
45°	4432	4411	4419
50°	4353	4322	4331
55°	4230	4195	4210
60°	4021	4004	4004
65°	3755	3748	3734
70°	3325	3341	3333
75°	2800	2778	2755
80°	2013	1979	1963
85°	1053	1053	1019

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4432 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	163.2	3.4
10°-20°	469.3	9.7
20°-30°	713.1	14.8
30°-40°	862.0	17.9
40°-50°	894.7	18.6
50°-60°	799.9	16.6
60°-70°	581.6	12.1
70°-80°	286.0	5.9
80°-90°	49.6	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°	1345.6	27.9
0°-40°	2207.6	45.8
0°-60°	3902.1	81.0
0°-90°	4819.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4819.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1723	1723	1723	1723	1723	
5°	1728	1707	1720	1714	1725	164
15°	1673	1654	1666	1662	1668	472
25°	1556	1539	1550	1547	1551	717
35°	1384	1374	1378	1380	1380	866
45°	1164	1159	1159	1161	1161	898
55°	902	896	894	896	897	804
65°	590	592	589	589	586	582
75°	269	271	267	268	265	286
85°	34	35	34	34	33	50
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1723.3	1723.3	1723.3	1723.3	1723.3
2.5°	1732.9	1712.7	1725.4	1718.0	1729.7
5°	1727.6	1707.3	1720.1	1713.7	1725.4
7.5°	1718.0	1697.8	1710.5	1704.1	1713.7
10°	1707.3	1686.1	1699.9	1693.5	1703.1
12.5°	1693.5	1673.3	1686.1	1680.7	1689.2
15°	1673.3	1654.1	1665.8	1661.6	1668.0
17.5°	1648.8	1629.6	1641.3	1638.2	1643.5
20°	1622.2	1604.1	1615.8	1612.6	1617.9
22.5°	1592.4	1573.2	1583.9	1581.7	1586.0
25°	1556.2	1539.2	1549.8	1546.6	1550.9
27.5°	1517.9	1501.9	1510.4	1510.4	1512.5
30°	1476.4	1461.5	1470.0	1470.0	1471.0
32.5°	1431.7	1419.9	1425.3	1426.3	1426.3
35°	1383.8	1374.2	1378.4	1379.5	1379.5
37.5°	1333.7	1324.1	1327.3	1329.5	1329.5
40°	1280.5	1272.0	1274.1	1276.2	1275.2
42.5°	1223.0	1216.6	1217.7	1219.8	1219.8
45°	1164.5	1159.2	1159.2	1161.3	1161.3
47.5°	1104.9	1099.6	1097.4	1099.6	1099.6
50°	1039.9	1034.6	1032.5	1034.6	1034.6
52.5°	971.8	966.5	966.5	966.5	967.6
55°	901.6	896.2	894.1	896.2	897.3
57.5°	827.1	824.9	821.7	822.8	819.6
60°	747.2	747.2	744.0	746.2	744.0
62.5°	669.5	671.7	668.5	668.5	666.3
65°	589.7	591.8	588.6	588.6	586.5
67.5°	507.7	510.9	506.7	506.7	504.5
70°	422.6	429.0	424.7	425.8	423.6
72.5°	345.9	349.1	344.9	344.9	342.7
75°	269.3	271.4	267.2	268.2	265.0
77.5°	193.7	196.9	192.7	193.7	192.7
80°	129.9	130.9	127.7	128.8	126.7
82.5°	75.6	76.6	75.6	74.5	73.4
85°	34.1	35.1	34.1	34.1	33.0
87.5°	8.5	8.5	8.5	8.5	8.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)