

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: P974032

Luminaire Tested: FLR2-22-60HE-L950-CP187

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974032
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-CP187
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

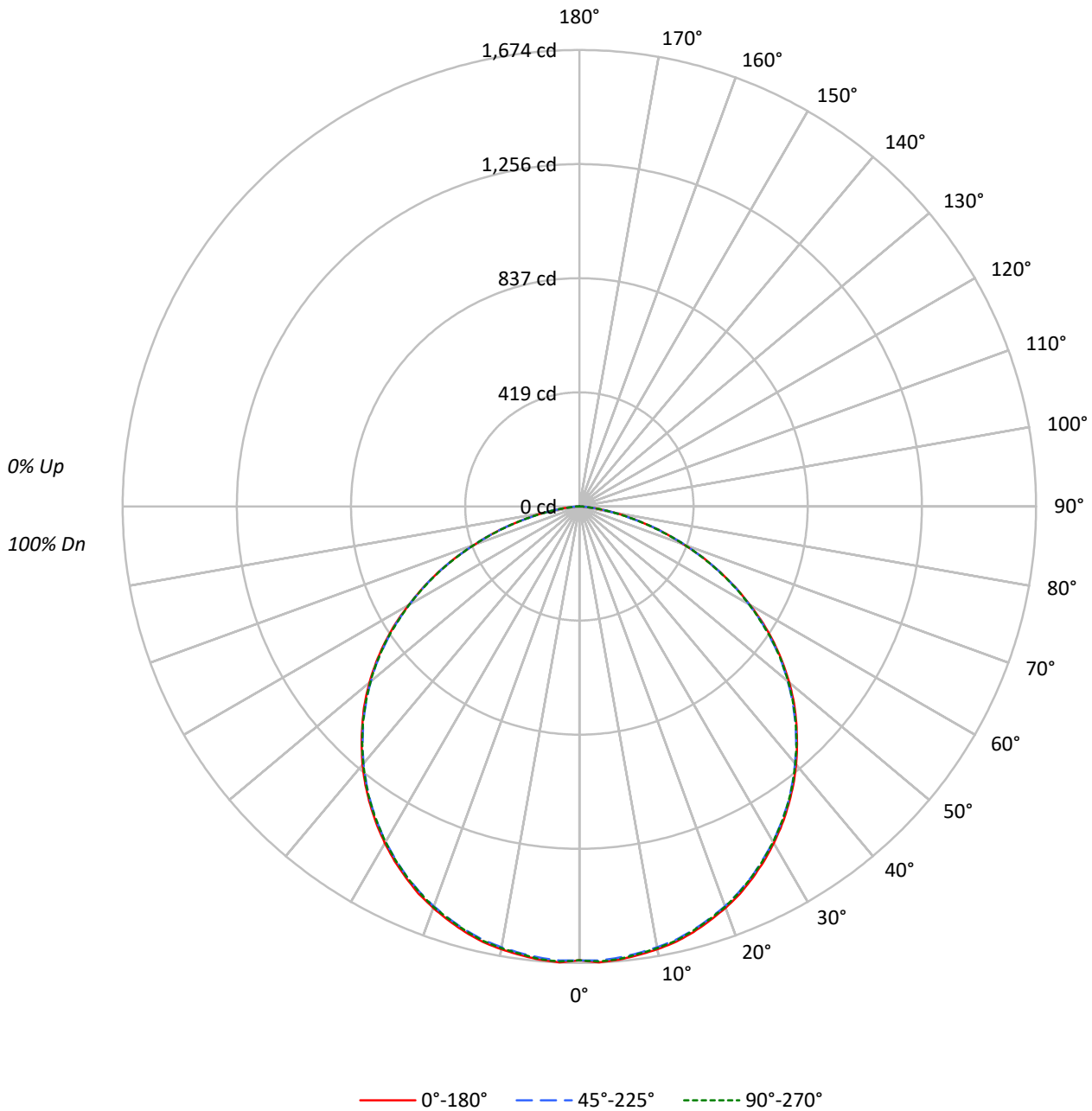
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4654.4 lumens
Efficiency: N/A
Efficacy: 98.2 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 (A_{in}): 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°	4479	4479	4479
5°	4507	4488	4501
10°	4506	4486	4494
15°	4502	4482	4488
20°	4487	4469	4475
25°	4463	4444	4447
30°	4431	4411	4415
35°	4390	4373	4377
40°	4344	4323	4326
45°	4280	4260	4268
50°	4205	4175	4183
55°	4085	4051	4066
60°	3884	3867	3867
65°	3626	3620	3606
70°	3211	3227	3220
75°	2704	2682	2662
80°	1943	1912	1895
85°	1016	1016	985

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4280 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	157.6	3.4
10°-20°	453.2	9.7
20°-30°	688.7	14.8
30°-40°	832.5	17.9
40°-50°	864.1	18.6
50°-60°	772.5	16.6
60°-70°	561.7	12.1
70°-80°	276.2	5.9
80°-90°	47.9	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°	1299.6	27.9
0°-40°	2132.1	45.8
0°-60°	3768.7	81.0
0°-90°	4654.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4654.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1664	1664	1664	1664	1664	
5°	1668	1649	1661	1655	1666	159
15°	1616	1598	1609	1605	1611	456
25°	1503	1486	1497	1494	1498	693
35°	1336	1327	1331	1332	1332	836
45°	1125	1120	1120	1122	1122	868
55°	871	866	864	866	867	776
65°	570	572	568	568	566	562
75°	260	262	258	259	256	276
85°	33	34	33	33	32	48
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1664.4	1664.4	1664.4	1664.4	1664.4
2.5°	1673.6	1654.1	1666.4	1659.2	1670.5
5°	1668.5	1648.9	1661.3	1655.1	1666.4
7.5°	1659.2	1639.7	1652.0	1645.9	1655.1
10°	1648.9	1628.4	1641.7	1635.6	1644.8
12.5°	1635.6	1616.0	1628.4	1623.2	1631.5
15°	1616.0	1597.5	1608.9	1604.7	1610.9
17.5°	1592.4	1573.9	1585.2	1582.1	1587.3
20°	1566.7	1549.2	1560.5	1557.4	1562.6
22.5°	1537.9	1519.4	1529.7	1527.6	1531.7
25°	1503.0	1486.5	1496.8	1493.7	1497.8
27.5°	1466.0	1450.5	1458.8	1458.8	1460.8
30°	1425.9	1411.5	1419.7	1419.7	1420.7
32.5°	1382.7	1371.4	1376.5	1377.5	1377.5
35°	1336.4	1327.2	1331.3	1332.3	1332.3
37.5°	1288.1	1278.9	1281.9	1284.0	1284.0
40°	1236.7	1228.5	1230.5	1232.6	1231.6
42.5°	1181.2	1175.0	1176.1	1178.1	1178.1
45°	1124.7	1119.5	1119.5	1121.6	1121.6
47.5°	1067.1	1061.9	1059.9	1061.9	1061.9
50°	1004.4	999.2	997.2	999.2	999.2
52.5°	938.6	933.4	933.4	933.4	934.5
55°	870.7	865.6	863.5	865.6	866.6
57.5°	798.8	796.7	793.6	794.7	791.6
60°	721.7	721.7	718.6	720.6	718.6
62.5°	646.6	648.7	645.6	645.6	643.5
65°	569.5	571.6	568.5	568.5	566.4
67.5°	490.4	493.4	489.3	489.3	487.3
70°	408.1	414.3	410.2	411.2	409.2
72.5°	334.1	337.2	333.1	333.1	331.0
75°	260.1	262.1	258.0	259.1	256.0
77.5°	187.1	190.2	186.1	187.1	186.1
80°	125.4	126.4	123.4	124.4	122.3
82.5°	73.0	74.0	73.0	72.0	70.9
85°	32.9	33.9	32.9	32.9	31.9
87.5°	8.2	8.2	8.2	8.2	8.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)