

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: P973780

Luminaire Tested: FLR2-22-60HE-L930-CP187

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973780
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-L930-CP187
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

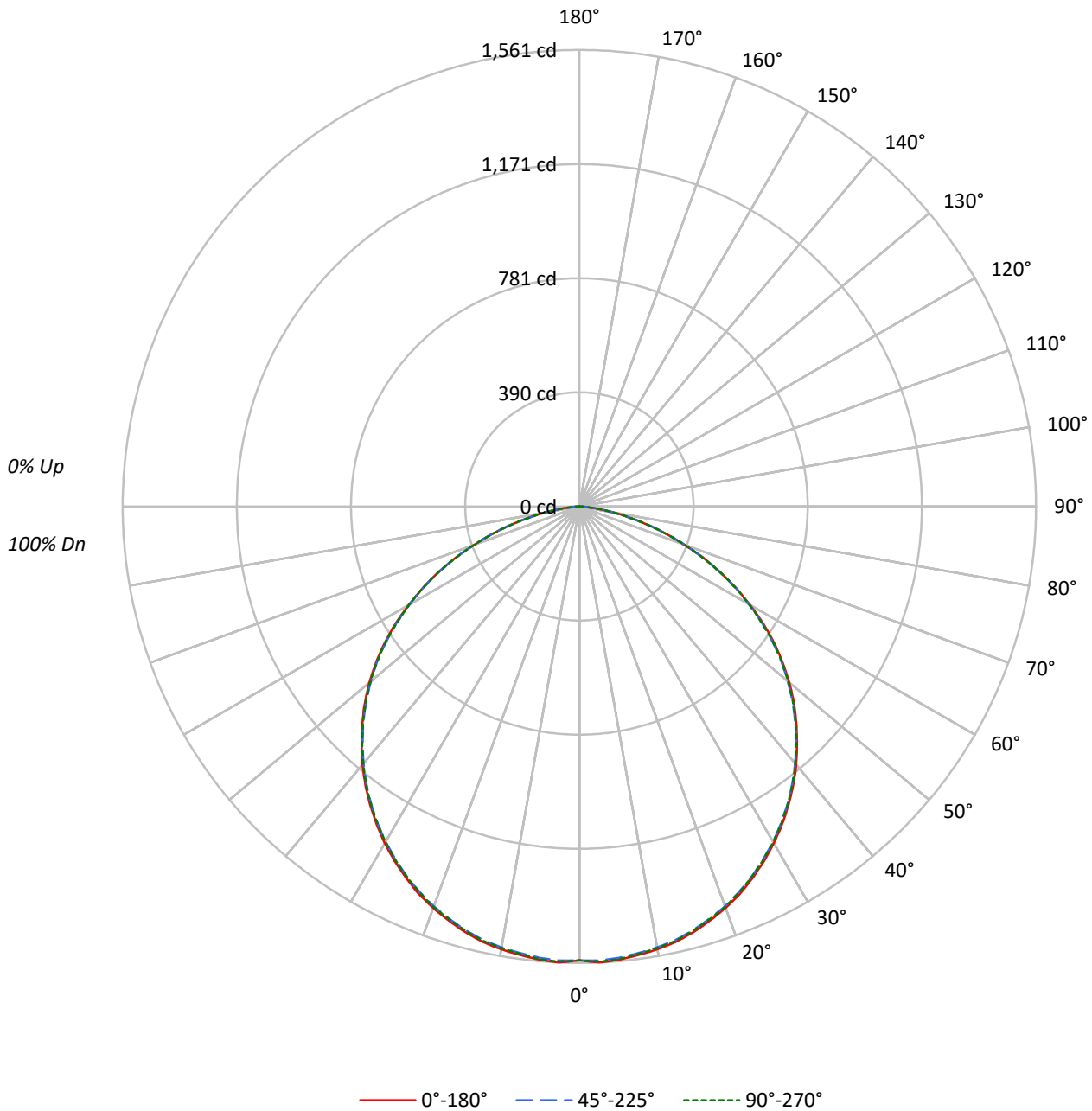
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4340.7 lumens
Efficiency: N/A
Efficacy: 91.6 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°	4177	4177	4177
5°	4203	4185	4198
10°	4202	4184	4191
15°	4199	4180	4185
20°	4184	4168	4173
25°	4162	4145	4147
30°	4132	4114	4117
35°	4094	4078	4082
40°	4051	4031	4034
45°	3991	3973	3981
50°	3921	3893	3901
55°	3810	3778	3792
60°	3622	3606	3606
65°	3382	3376	3364
70°	2995	3009	3002
75°	2522	2502	2482
80°	1813	1782	1768
85°	948	948	917

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3991 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	147.0	3.4
10°-20°	422.7	9.7
20°-30°	642.3	14.8
30°-40°	776.4	17.9
40°-50°	805.8	18.6
50°-60°	720.4	16.6
60°-70°	523.8	12.1
70°-80°	257.6	5.9
80°-90°	44.7	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°	1212.0	27.9
0°-40°	1988.3	45.8
0°-60°	3514.6	81.0
0°-90°	4340.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4340.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1552	1552	1552	1552	1552	
5°	1556	1538	1549	1544	1554	148
15°	1507	1490	1500	1497	1502	425
25°	1402	1386	1396	1393	1397	646
35°	1246	1238	1242	1242	1242	780
45°	1049	1044	1044	1046	1046	809
55°	812	807	805	807	808	724
65°	531	533	530	530	528	524
75°	243	244	241	242	239	257
85°	31	32	31	31	30	45
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1552.2	1552.2	1552.2	1552.2	1552.2
2.5°	1560.8	1542.6	1554.1	1547.4	1557.9
5°	1556.0	1537.8	1549.3	1543.5	1554.1
7.5°	1547.4	1529.2	1540.7	1534.9	1543.5
10°	1537.8	1518.6	1531.1	1525.3	1533.9
12.5°	1525.3	1507.1	1518.6	1513.8	1521.5
15°	1507.1	1489.8	1500.4	1496.6	1502.3
17.5°	1485.0	1467.8	1478.3	1475.5	1480.3
20°	1461.1	1444.8	1455.3	1452.5	1457.2
22.5°	1434.2	1417.0	1426.6	1424.7	1428.5
25°	1401.6	1386.3	1395.9	1393.0	1396.8
27.5°	1367.1	1352.7	1360.4	1360.4	1362.3
30°	1329.7	1316.3	1324.0	1324.0	1324.9
32.5°	1289.5	1278.9	1283.7	1284.7	1284.7
35°	1246.3	1237.7	1241.5	1242.5	1242.5
37.5°	1201.3	1192.6	1195.5	1197.4	1197.4
40°	1153.3	1145.7	1147.6	1149.5	1148.5
42.5°	1101.6	1095.8	1096.8	1098.7	1098.7
45°	1048.8	1044.0	1044.0	1046.0	1046.0
47.5°	995.1	990.4	988.4	990.4	990.4
50°	936.7	931.9	930.0	931.9	931.9
52.5°	875.3	870.5	870.5	870.5	871.5
55°	812.0	807.2	805.3	807.2	808.2
57.5°	744.9	743.0	740.1	741.1	738.2
60°	673.0	673.0	670.1	672.1	670.1
62.5°	603.0	604.9	602.1	602.1	600.2
65°	531.1	533.0	530.2	530.2	528.3
67.5°	457.3	460.2	456.3	456.3	454.4
70°	380.6	386.4	382.5	383.5	381.6
72.5°	311.6	314.5	310.6	310.6	308.7
75°	242.6	244.5	240.6	241.6	238.7
77.5°	174.5	177.4	173.5	174.5	173.5
80°	117.0	117.9	115.0	116.0	114.1
82.5°	68.1	69.0	68.1	67.1	66.2
85°	30.7	31.6	30.7	30.7	29.7
87.5°	7.7	7.7	7.7	7.7	7.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)