

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: P973508

Luminaire Tested: FLR2-22-45-L830-CP187

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973508
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: FLR2-22-45-L830-CP187
Description: SHAPER SENSE CIRCLE
LIGHT LEVEL 2
Light Source:
Ballast/Driver: -

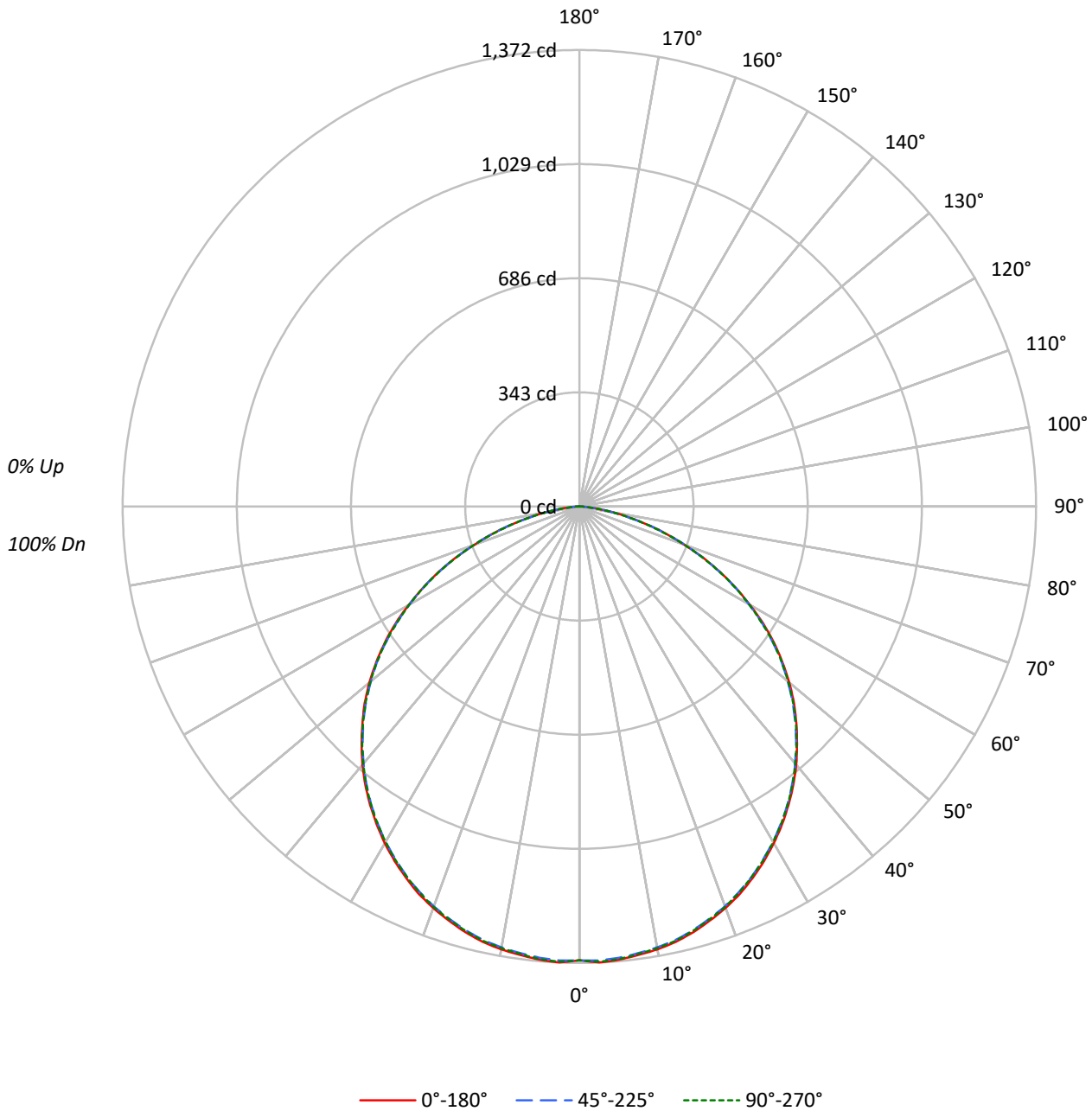
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3815.3 lumens
Efficiency: N/A
Efficacy: 105.7 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): 36.1
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°	3671	3671	3671
5°	3695	3679	3690
10°	3694	3677	3684
15°	3690	3674	3679
20°	3678	3663	3668
25°	3658	3643	3646
30°	3632	3616	3619
35°	3599	3585	3588
40°	3561	3543	3546
45°	3508	3492	3499
50°	3447	3422	3429
55°	3349	3321	3333
60°	3184	3170	3170
65°	2973	2967	2956
70°	2632	2645	2639
75°	2217	2199	2181
80°	1593	1567	1554
85°	834	834	806

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3508 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	129.2	3.4
10°-20°	371.5	9.7
20°-30°	564.6	14.8
30°-40°	682.4	17.9
40°-50°	708.3	18.6
50°-60°	633.3	16.6
60°-70°	460.4	12.1
70°-80°	226.4	5.9
80°-90°	39.3	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°	1065.3	27.9
0°-40°	1747.7	45.8
0°-60°	3089.3	81.0
0°-90°	3815.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3815.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1364	1364	1364	1364	1364	
5°	1368	1352	1362	1357	1366	130
15°	1325	1310	1319	1315	1320	374
25°	1232	1218	1227	1224	1228	568
35°	1096	1088	1091	1092	1092	685
45°	922	918	918	919	919	711
55°	714	710	708	710	710	636
65°	467	468	466	466	464	460
75°	213	215	212	212	210	226
85°	27	28	27	27	26	39
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1364.3	1364.3	1364.3	1364.3	1364.3
2.5°	1371.9	1355.9	1366.0	1360.1	1369.4
5°	1367.7	1351.7	1361.8	1356.7	1366.0
7.5°	1360.1	1344.1	1354.2	1349.2	1356.7
10°	1351.7	1334.8	1345.8	1340.7	1348.3
12.5°	1340.7	1324.7	1334.8	1330.6	1337.4
15°	1324.7	1309.5	1318.8	1315.4	1320.5
17.5°	1305.3	1290.2	1299.4	1296.9	1301.1
20°	1284.3	1269.9	1279.2	1276.7	1280.9
22.5°	1260.7	1245.5	1253.9	1252.2	1255.6
25°	1232.0	1218.5	1227.0	1224.4	1227.8
27.5°	1201.7	1189.0	1195.8	1195.8	1197.5
30°	1168.8	1157.0	1163.8	1163.8	1164.6
32.5°	1133.4	1124.2	1128.4	1129.2	1129.2
35°	1095.5	1087.9	1091.3	1092.1	1092.1
37.5°	1055.9	1048.3	1050.8	1052.5	1052.5
40°	1013.8	1007.0	1008.7	1010.4	1009.5
42.5°	968.3	963.2	964.0	965.7	965.7
45°	921.9	917.7	917.7	919.4	919.4
47.5°	874.7	870.5	868.8	870.5	870.5
50°	823.3	819.1	817.4	819.1	819.1
52.5°	769.4	765.2	765.2	765.2	766.0
55°	713.8	709.5	707.9	709.5	710.4
57.5°	654.8	653.1	650.6	651.4	648.9
60°	591.6	591.6	589.0	590.7	589.0
62.5°	530.1	531.7	529.2	529.2	527.5
65°	466.9	468.5	466.0	466.0	464.3
67.5°	402.0	404.5	401.1	401.1	399.4
70°	334.5	339.6	336.2	337.1	335.4
72.5°	273.9	276.4	273.0	273.0	271.3
75°	213.2	214.9	211.5	212.4	209.8
77.5°	153.4	155.9	152.5	153.4	152.5
80°	102.8	103.7	101.1	102.0	100.3
82.5°	59.8	60.7	59.8	59.0	58.1
85°	27.0	27.8	27.0	27.0	26.1
87.5°	6.7	6.7	6.7	6.7	6.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)