

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: P973512

Luminaire Tested: FLR2-22-45-L830-CP250

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973512
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-CP250
Description: SHAPER SENSE CIRCLE
LIGHT LEVEL 3
Light Source:
Ballast/Driver: -

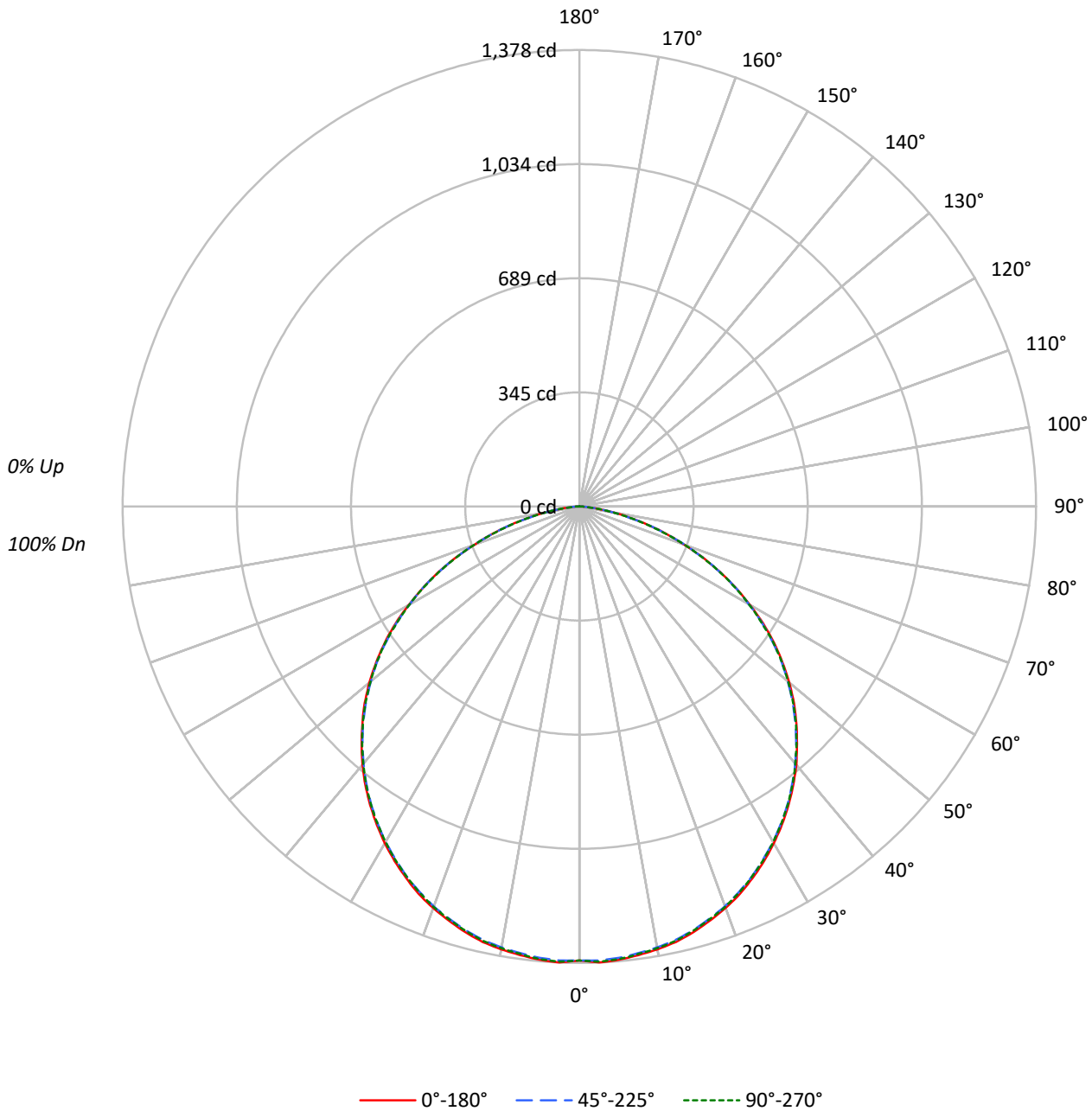
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3832.3 lumens
Efficiency: N/A
Efficacy: 106.2 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): 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°	3688	3688	3688
5°	3711	3695	3706
10°	3710	3694	3701
15°	3707	3690	3695
20°	3694	3680	3684
25°	3674	3659	3662
30°	3648	3632	3635
35°	3615	3601	3604
40°	3577	3559	3562
45°	3524	3508	3514
50°	3462	3437	3444
55°	3363	3336	3347
60°	3198	3185	3185
65°	2986	2981	2970
70°	2644	2657	2651
75°	2226	2209	2192
80°	1601	1574	1561
85°	837	837	809

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3524 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	129.8	3.4
10°-20°	373.2	9.7
20°-30°	567.1	14.8
30°-40°	685.4	17.9
40°-50°	711.5	18.6
50°-60°	636.1	16.6
60°-70°	462.5	12.1
70°-80°	227.4	5.9
80°-90°	39.4	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°	1070.0	27.9
0°-40°	1755.5	45.8
0°-60°	3103.0	81.0
0°-90°	3832.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3832.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1370	1370	1370	1370	1370	
5°	1374	1358	1368	1363	1372	131
15°	1331	1315	1325	1321	1326	375
25°	1238	1224	1232	1230	1233	570
35°	1100	1093	1096	1097	1097	688
45°	926	922	922	924	924	714
55°	717	713	711	713	714	639
65°	469	471	468	468	466	462
75°	214	216	212	213	211	227
85°	27	28	27	27	26	40
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1370.4	1370.4	1370.4	1370.4	1370.4
2.5°	1378.0	1361.9	1372.1	1366.1	1375.4
5°	1373.8	1357.7	1367.8	1362.7	1372.1
7.5°	1366.1	1350.1	1360.2	1355.1	1362.7
10°	1357.7	1340.7	1351.7	1346.7	1354.3
12.5°	1346.7	1330.6	1340.7	1336.5	1343.3
15°	1330.6	1315.3	1324.7	1321.3	1326.4
17.5°	1311.1	1295.9	1305.2	1302.7	1306.9
20°	1290.0	1275.6	1284.9	1282.3	1286.6
22.5°	1266.3	1251.0	1259.5	1257.8	1261.2
25°	1237.5	1223.9	1232.4	1229.9	1233.2
27.5°	1207.0	1194.3	1201.1	1201.1	1202.8
30°	1174.0	1162.1	1168.9	1168.9	1169.8
32.5°	1138.4	1129.1	1133.4	1134.2	1134.2
35°	1100.4	1092.7	1096.1	1097.0	1097.0
37.5°	1060.6	1053.0	1055.5	1057.2	1057.2
40°	1018.3	1011.5	1013.2	1014.9	1014.0
42.5°	972.5	967.5	968.3	970.0	970.0
45°	926.0	921.8	921.8	923.5	923.5
47.5°	878.6	874.4	872.7	874.4	874.4
50°	827.0	822.7	821.0	822.7	822.7
52.5°	772.8	768.6	768.6	768.6	769.4
55°	716.9	712.7	711.0	712.7	713.5
57.5°	657.7	656.0	653.4	654.3	651.7
60°	594.2	594.2	591.7	593.3	591.7
62.5°	532.4	534.1	531.6	531.6	529.9
65°	468.9	470.6	468.1	468.1	466.4
67.5°	403.7	406.3	402.9	402.9	401.2
70°	336.0	341.1	337.7	338.6	336.9
72.5°	275.1	277.6	274.2	274.2	272.5
75°	214.1	215.8	212.5	213.3	210.8
77.5°	154.0	156.6	153.2	154.0	153.2
80°	103.3	104.1	101.6	102.4	100.7
82.5°	60.1	60.9	60.1	59.2	58.4
85°	27.1	27.9	27.1	27.1	26.2
87.5°	6.8	6.8	6.8	6.8	6.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)