

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: P973337

Luminaire Tested: FLR2-14-42-L830-CP187

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973337
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-1)
Test Lab: INNOVATION CENTER
Issue Date: 3/13/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: FAIL-SAFE
Catalog Number: FLR2-14-42-L830-CP187
Description: 1*4 FLR-2.0 4200 LUMEN at 3000CCT & 80CRI with Clear Polycarbonate (0.187" thickness)

Light Source: 3000k CCT, 80 CRI LEDS
Ballast/Driver: -

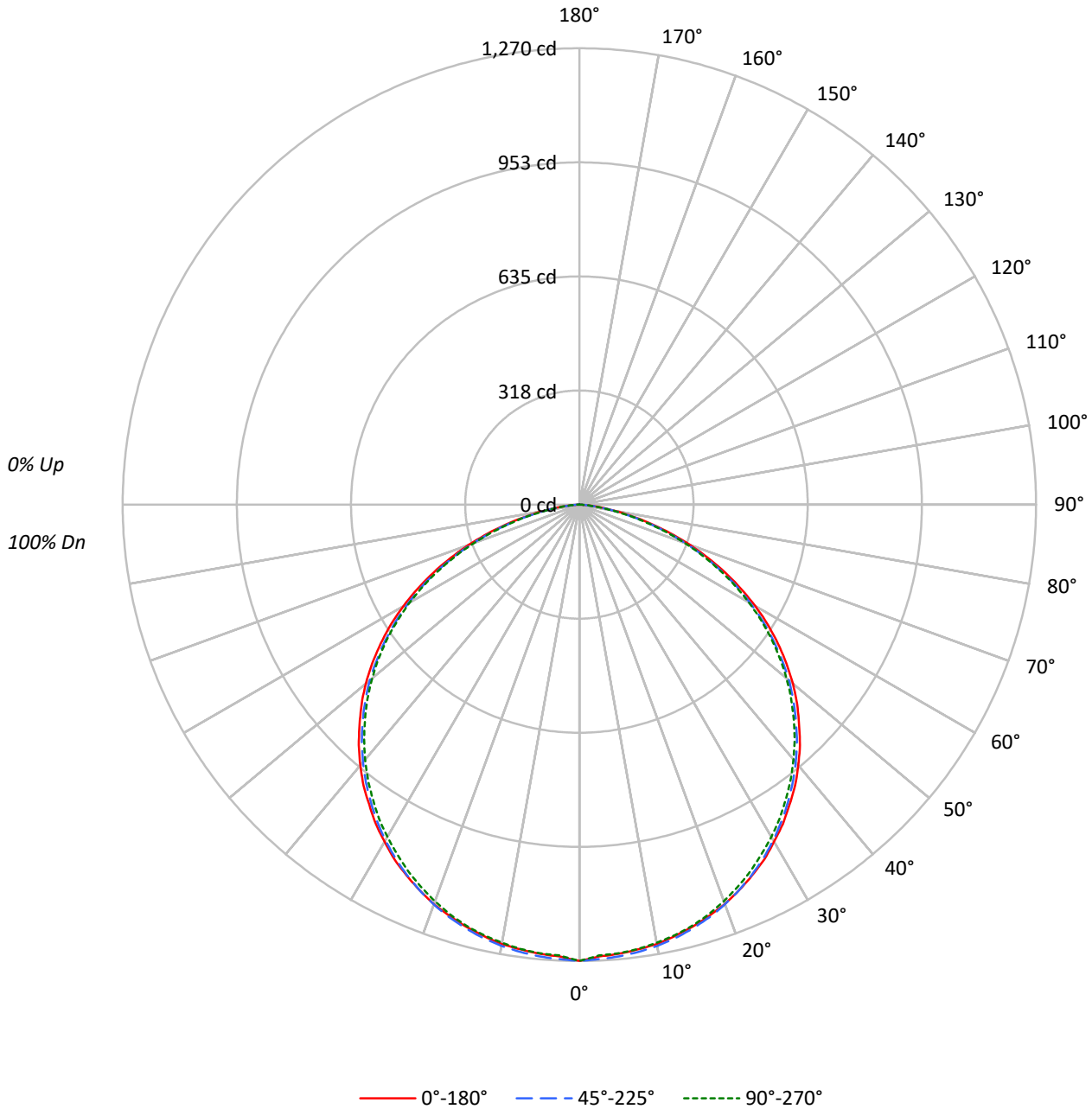
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3553.7 lumens
Efficiency: N/A
Efficacy: 112.1 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.25 / 1.38
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 31.7
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	62	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	70	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	49	42	37	48	41	36	47	41	36	34						34														
8	61	47	39	33	59	47	38	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	39	32	27	38	32	27	38	31	27	37	31	26	25						25														

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3417	3417	3417
5°	3390	3410	3386
10°	3393	3408	3383
15°	3388	3401	3381
20°	3388	3391	3364
25°	3380	3374	3342
30°	3365	3351	3318
35°	3347	3322	3289
40°	3328	3288	3255
45°	3288	3242	3208
50°	3245	3186	3148
55°	3164	3089	3060
60°	3040	2956	2930
65°	2848	2764	2734
70°	2568	2464	2444
75°	2153	2043	2021
80°	1564	1458	1416
85°	827	729	664

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3288 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.3	3.4
10°-20°	345.4	9.7
20°-30°	524.7	14.8
30°-40°	634.7	17.9
40°-50°	659.7	18.6
50°-60°	590.6	16.6
60°-70°	430.8	12.1
70°-80°	212.1	6.0
80°-90°	35.5	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°	990.3	27.9
0°-40°	1625.0	45.7
0°-60°	2875.3	80.9
0°-90°	3553.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3553.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1270	1270	1270	1270	1270	
5°	1255	1269	1262	1274	1253	119
15°	1216	1227	1221	1231	1214	343
25°	1138	1144	1136	1142	1126	525
35°	1019	1021	1011	1015	1001	638
45°	864	863	852	854	843	667
55°	674	668	658	657	652	602
65°	447	442	434	431	429	442
75°	207	203	196	194	194	221
85°	27	26	24	21	22	39
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1269.7	1269.7	1269.7	1269.7	1269.7
2.5°	1258.7	1272.8	1266.0	1278.6	1256.0
5°	1255.0	1268.6	1262.3	1274.4	1253.4
7.5°	1248.7	1262.9	1256.0	1267.6	1247.6
10°	1241.8	1254.4	1247.1	1258.7	1238.2
12.5°	1229.7	1242.4	1235.5	1246.0	1227.1
15°	1216.1	1227.1	1220.8	1231.3	1213.5
17.5°	1200.3	1210.8	1204.0	1213.5	1195.6
20°	1183.0	1191.4	1184.0	1191.9	1174.6
22.5°	1161.4	1169.3	1161.4	1166.7	1151.4
25°	1138.3	1144.1	1136.2	1141.5	1125.7
27.5°	1113.6	1116.8	1108.9	1113.1	1096.8
30°	1083.1	1086.8	1078.4	1083.7	1067.9
32.5°	1053.7	1055.8	1046.3	1050.5	1036.4
35°	1019.0	1021.1	1011.1	1015.3	1001.1
37.5°	985.9	985.4	974.9	977.5	965.4
40°	947.5	947.0	936.0	938.1	926.5
42.5°	908.1	906.0	895.5	896.6	886.0
45°	864.0	862.9	851.9	853.5	843.0
47.5°	821.4	818.3	807.2	807.7	798.8
50°	775.2	770.4	761.0	759.9	752.0
52.5°	725.8	720.5	710.0	708.9	703.2
55°	674.3	668.5	658.5	656.9	652.2
57.5°	621.2	613.8	605.9	602.8	599.1
60°	564.9	558.1	549.2	546.0	544.5
62.5°	506.6	499.8	493.0	489.8	487.7
65°	447.2	442.0	434.1	430.9	429.4
67.5°	386.8	382.1	374.7	371.0	370.5
70°	326.4	321.6	313.2	311.1	310.6
72.5°	265.9	261.7	253.8	251.7	251.7
75°	207.1	203.4	196.5	194.4	194.4
77.5°	151.4	148.2	142.9	140.3	140.3
80°	100.9	98.8	94.1	92.0	91.4
82.5°	58.3	57.3	53.1	51.0	52.0
85°	26.8	25.8	23.6	21.0	21.5
87.5°	6.8	6.3	4.7	3.7	4.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)