

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: P973451

Luminaire Tested: FLR2-14-42-L940-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973451
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-L940-CA080
Description: 1*4 FLR-2.0 4200 LUMEN at 3500 CCT & 90CRI with Clear Acrylic (0.080" thickness)

Light Source:
Ballast/Driver: -

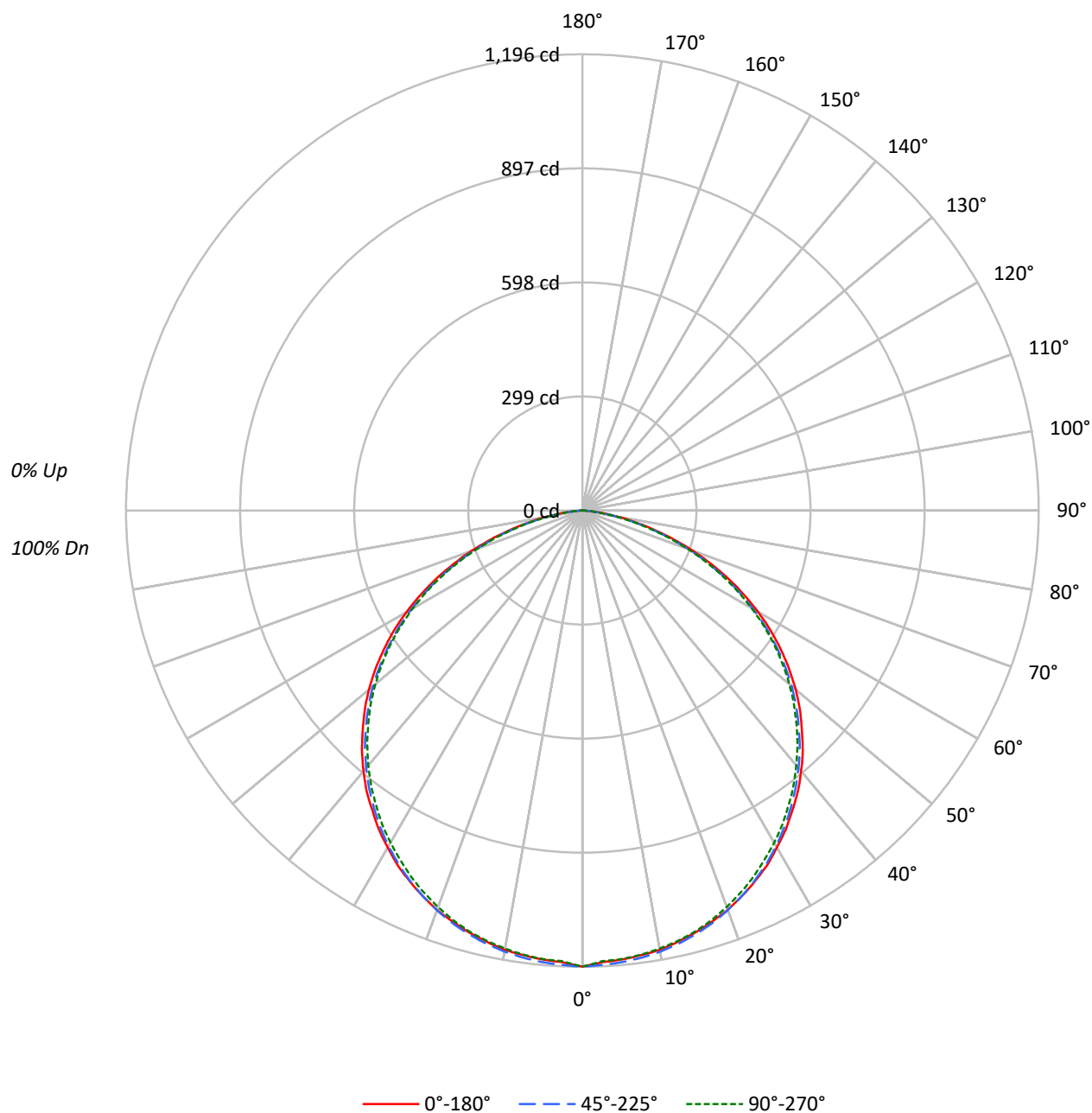
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3346.6 lumens
Efficiency: N/A
Efficacy: 105.6 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					20
RC	80				70					50					30					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	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°	3218	3218	3218
5°	3193	3211	3189
10°	3196	3209	3186
15°	3190	3203	3184
20°	3190	3193	3168
25°	3183	3177	3148
30°	3169	3156	3125
35°	3152	3128	3097
40°	3134	3096	3065
45°	3096	3053	3021
50°	3056	3000	2965
55°	2979	2909	2882
60°	2863	2784	2759
65°	2682	2603	2574
70°	2418	2321	2301
75°	2027	1925	1904
80°	1472	1373	1334
85°	778	689	627

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3096 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.3	3.4
10°-20°	325.3	9.7
20°-30°	494.1	14.8
30°-40°	597.7	17.9
40°-50°	621.2	18.6
50°-60°	556.2	16.6
60°-70°	405.7	12.1
70°-80°	199.8	6.0
80°-90°	33.4	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°	932.6	27.9
0°-40°	1530.4	45.7
0°-60°	2707.8	80.9
0°-90°	3346.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3346.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1196	1196	1196	1196	1196	
5°	1182	1195	1189	1200	1180	112
15°	1145	1156	1150	1160	1143	323
25°	1072	1077	1070	1075	1060	494
35°	960	962	952	956	943	601
45°	814	813	802	804	794	628
55°	635	630	620	619	614	567
65°	421	416	409	406	404	416
75°	195	192	185	183	183	208
85°	25	24	22	20	20	36
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1195.7	1195.7	1195.7	1195.7	1195.7
2.5°	1185.3	1198.7	1192.3	1204.1	1182.8
5°	1181.9	1194.7	1188.8	1200.2	1180.4
7.5°	1175.9	1189.3	1182.8	1193.7	1174.9
10°	1169.5	1181.4	1174.4	1185.3	1166.0
12.5°	1158.1	1170.0	1163.5	1173.4	1155.6
15°	1145.2	1155.6	1149.7	1159.6	1142.8
17.5°	1130.4	1140.3	1133.9	1142.8	1125.9
20°	1114.1	1122.0	1115.0	1122.5	1106.1
22.5°	1093.8	1101.2	1093.8	1098.7	1084.4
25°	1072.0	1077.4	1070.0	1075.0	1060.1
27.5°	1048.7	1051.7	1044.3	1048.2	1032.9
30°	1020.0	1023.5	1015.6	1020.5	1005.7
32.5°	992.3	994.3	985.4	989.3	976.0
35°	959.6	961.6	952.2	956.2	942.8
37.5°	928.5	928.0	918.1	920.5	909.2
40°	892.3	891.8	881.4	883.4	872.5
42.5°	855.2	853.2	843.3	844.3	834.4
45°	813.6	812.7	802.3	803.7	793.8
47.5°	773.6	770.6	760.2	760.7	752.3
50°	730.0	725.5	716.6	715.6	708.2
52.5°	683.5	678.5	668.6	667.6	662.2
55°	635.0	629.5	620.1	618.6	614.2
57.5°	585.0	578.1	570.6	567.7	564.2
60°	532.0	525.6	517.2	514.2	512.7
62.5°	477.1	470.7	464.2	461.3	459.3
65°	421.2	416.2	408.8	405.8	404.3
67.5°	364.3	359.8	352.9	349.4	348.9
70°	307.3	302.9	295.0	293.0	292.5
72.5°	250.4	246.5	239.0	237.1	237.1
75°	195.0	191.5	185.1	183.1	183.1
77.5°	142.5	139.6	134.6	132.1	132.1
80°	95.0	93.0	88.6	86.6	86.1
82.5°	54.9	53.9	50.0	48.0	49.0
85°	25.2	24.3	22.3	19.8	20.3
87.5°	6.4	5.9	4.5	3.5	4.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)