

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: P973427

Luminaire Tested: FLR2-14-42-L840-CP375

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973427
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-L840-CP375
Description: 1*4 FLR-2.0 4200 LUMEN at 4000 CCT & 80CRI with Clear Polycarbonate (0.375" thickness)

Light Source:
Ballast/Driver: -

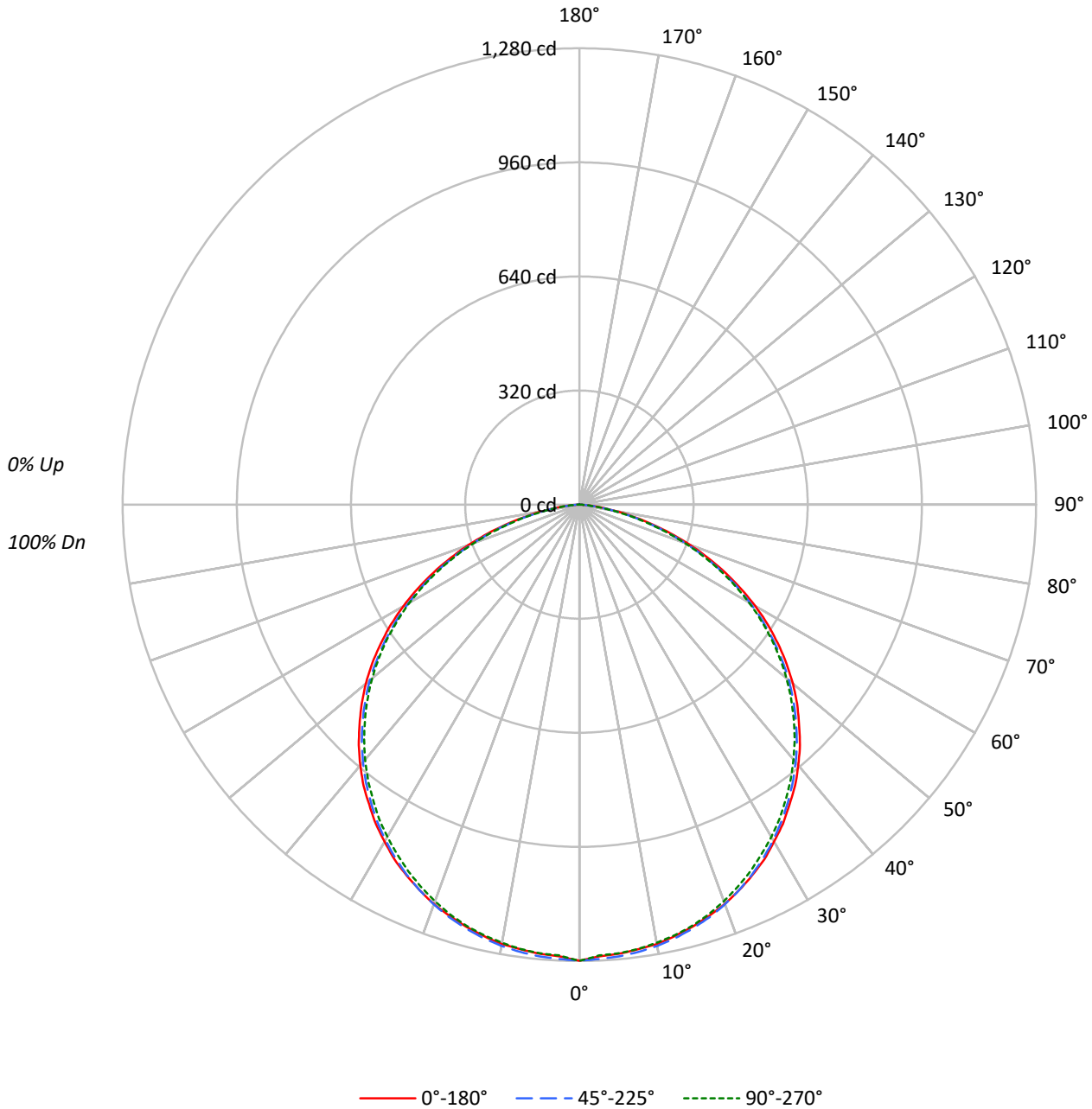
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3581.2 lumens
Efficiency: N/A
Efficacy: 113.0 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				10	0
RW	70	50	30	10	70	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
1	109	105	101	97	107	102	99	95	98	95	92	94	92	89	91	89	87	85
2	99	91	85	79	97	90	83	78	86	81	76	83	78	75	80	76	73	71
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62	60
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	57	51	46	44
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	39
7	65	52	43	37	64	51	43	37	49	42	37	48	41	36	47	41	36	34
8	61	47	39	33	59	47	38	33	45	38	33	44	37	32	43	37	32	30
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	40	34	29	27
10	53	40	32	27	52	39	32	27	38	32	27	38	31	27	37	31	26	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3443	3443	3443
5°	3416	3436	3412
10°	3420	3434	3409
15°	3414	3428	3407
20°	3414	3417	3390
25°	3406	3400	3368
30°	3392	3377	3344
35°	3373	3347	3314
40°	3354	3313	3280
45°	3314	3267	3233
50°	3270	3211	3173
55°	3188	3113	3083
60°	3064	2978	2953
65°	2870	2786	2755
70°	2588	2483	2463
75°	2170	2060	2038
80°	1576	1469	1429
85°	834	735	670

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3314 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	121.2	3.4
10°-20°	348.0	9.7
20°-30°	528.8	14.8
30°-40°	639.6	17.9
40°-50°	664.8	18.6
50°-60°	595.2	16.6
60°-70°	434.1	12.1
70°-80°	213.8	6.0
80°-90°	35.8	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°	998.0	27.9
0°-40°	1637.6	45.7
0°-60°	2897.6	80.9
0°-90°	3581.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3581.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1280	1280	1280	1280	1280	
5°	1265	1278	1272	1284	1263	120
15°	1226	1237	1230	1241	1223	346
25°	1147	1153	1145	1150	1134	529
35°	1027	1029	1019	1023	1009	643
45°	871	870	858	860	850	672
55°	680	674	664	662	657	606
65°	451	445	438	434	433	445
75°	209	205	198	196	196	222
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°	1279.5	1279.5	1279.5	1279.5	1279.5
2.5°	1268.4	1282.7	1275.8	1288.5	1265.8
5°	1264.7	1278.5	1272.1	1284.3	1263.1
7.5°	1258.3	1272.6	1265.8	1277.4	1257.3
10°	1251.5	1264.2	1256.8	1268.4	1247.7
12.5°	1239.3	1252.0	1245.1	1255.7	1236.6
15°	1225.5	1236.6	1230.3	1240.9	1222.9
17.5°	1209.6	1220.2	1213.3	1222.9	1204.9
20°	1192.1	1200.6	1193.2	1201.1	1183.7
22.5°	1170.4	1178.4	1170.4	1175.7	1160.4
25°	1147.1	1153.0	1145.0	1150.3	1134.4
27.5°	1122.2	1125.4	1117.5	1121.7	1105.3
30°	1091.5	1095.2	1086.7	1092.0	1076.2
32.5°	1061.9	1064.0	1054.4	1058.7	1044.4
35°	1026.9	1029.0	1019.0	1023.2	1008.9
37.5°	993.5	993.0	982.4	985.1	972.9
40°	954.9	954.3	943.2	945.3	933.7
42.5°	915.2	913.0	902.4	903.5	892.9
45°	870.7	869.6	858.5	860.1	849.5
47.5°	827.8	824.6	813.5	814.0	805.0
50°	781.2	776.4	766.9	765.8	757.9
52.5°	731.4	726.1	715.5	714.4	708.6
55°	679.5	673.7	663.6	662.0	657.2
57.5°	626.0	618.6	610.6	607.5	603.7
60°	569.3	562.4	553.4	550.3	548.7
62.5°	510.5	503.7	496.8	493.6	491.5
65°	450.7	445.4	437.5	434.3	432.7
67.5°	389.8	385.0	377.6	373.9	373.4
70°	328.9	324.1	315.6	313.5	313.0
72.5°	268.0	263.7	255.8	253.7	253.7
75°	208.7	205.0	198.1	196.0	196.0
77.5°	152.5	149.3	144.1	141.4	141.4
80°	101.7	99.6	94.8	92.7	92.2
82.5°	58.8	57.7	53.5	51.4	52.4
85°	27.0	26.0	23.8	21.2	21.7
87.5°	6.9	6.4	4.8	3.7	4.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)