

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: P973433

Luminaire Tested: FLR2-14-42-L840-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973433
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-CA080
Description: 1*4 FLR-2.0 4200 LUMEN at 3500 CCT & 80CRI with Clear Acrylic (0.080" thickness)

Light Source:
Ballast/Driver: -

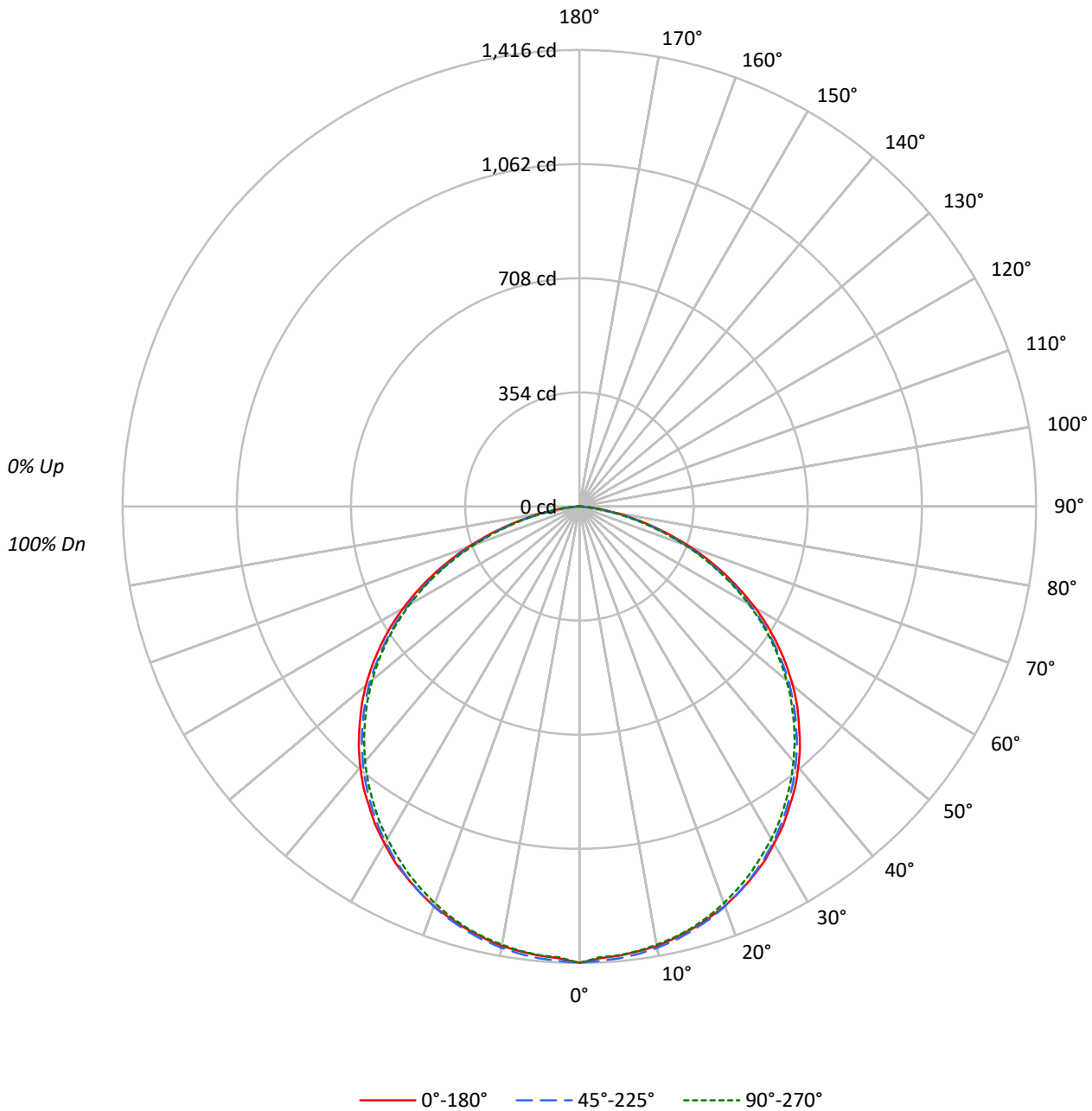
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3962.1 lumens
Efficiency: N/A
Efficacy: 125.0 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°	3809	3809	3809
5°	3780	3802	3775
10°	3783	3799	3772
15°	3777	3792	3769
20°	3777	3780	3750
25°	3768	3761	3727
30°	3752	3736	3700
35°	3732	3703	3667
40°	3711	3666	3629
45°	3666	3615	3577
50°	3618	3552	3510
55°	3527	3445	3411
60°	3390	3295	3267
65°	3175	3082	3048
70°	2863	2747	2725
75°	2401	2278	2254
80°	1743	1626	1581
85°	923	815	741

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3666 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.1	3.4
10°-20°	385.1	9.7
20°-30°	585.0	14.8
30°-40°	707.7	17.9
40°-50°	735.5	18.6
50°-60°	658.5	16.6
60°-70°	480.3	12.1
70°-80°	236.5	6.0
80°-90°	39.5	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°	1104.2	27.9
0°-40°	1811.8	45.7
0°-60°	3205.8	80.9
0°-90°	3962.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3962.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1416	1416	1416	1416	1416	
5°	1399	1414	1407	1421	1398	133
15°	1356	1368	1361	1373	1353	383
25°	1269	1276	1267	1273	1255	585
35°	1136	1138	1127	1132	1116	711
45°	963	962	950	952	940	744
55°	752	745	734	732	727	671
65°	499	493	484	480	479	493
75°	231	227	219	217	217	246
85°	30	29	26	23	24	43
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1415.6	1415.6	1415.6	1415.6	1415.6
2.5°	1403.3	1419.1	1411.5	1425.6	1400.4
5°	1399.2	1414.4	1407.4	1420.9	1397.5
7.5°	1392.2	1408.0	1400.4	1413.3	1391.0
10°	1384.6	1398.6	1390.4	1403.3	1380.5
12.5°	1371.1	1385.2	1377.5	1389.3	1368.2
15°	1355.9	1368.2	1361.1	1372.8	1352.9
17.5°	1338.3	1350.0	1342.4	1352.9	1333.0
20°	1318.9	1328.3	1320.1	1328.9	1309.6
22.5°	1294.9	1303.7	1294.9	1300.8	1283.8
25°	1269.1	1275.6	1266.8	1272.7	1255.1
27.5°	1241.6	1245.1	1236.3	1241.0	1222.8
30°	1207.6	1211.7	1202.3	1208.2	1190.6
32.5°	1174.8	1177.1	1166.6	1171.3	1155.5
35°	1136.1	1138.5	1127.3	1132.0	1116.2
37.5°	1099.2	1098.6	1086.9	1089.8	1076.4
40°	1056.4	1055.9	1043.6	1045.9	1033.0
42.5°	1012.5	1010.2	998.4	999.6	987.9
45°	963.3	962.1	949.8	951.6	939.8
47.5°	915.8	912.3	900.0	900.6	890.6
50°	864.3	859.0	848.4	847.3	838.5
52.5°	809.2	803.3	791.6	790.4	784.0
55°	751.8	745.3	734.2	732.4	727.1
57.5°	692.6	684.4	675.6	672.1	668.0
60°	629.9	622.3	612.3	608.8	607.0
62.5°	564.8	557.2	549.6	546.1	543.7
65°	498.6	492.8	484.0	480.5	478.7
67.5°	431.2	426.0	417.8	413.7	413.1
70°	363.9	358.6	349.2	346.9	346.3
72.5°	296.5	291.8	283.0	280.7	280.7
75°	230.9	226.8	219.1	216.8	216.8
77.5°	168.7	165.2	159.4	156.4	156.4
80°	112.5	110.2	104.9	102.5	102.0
82.5°	65.0	63.9	59.2	56.8	58.0
85°	29.9	28.7	26.4	23.4	24.0
87.5°	7.6	7.0	5.3	4.1	5.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)