

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: P973121

Luminaire Tested: FLR2-14-42HE-L835-CP080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973121
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: FLR2-14-42HE-L835-CP080
Description: 1*4 FLR-2.0 4200 Lumen High Efficacy at 3500CCT & 80CRI with Clear Polycarbonate (0.080" thickness)

Light Source:
Ballast/Driver: -

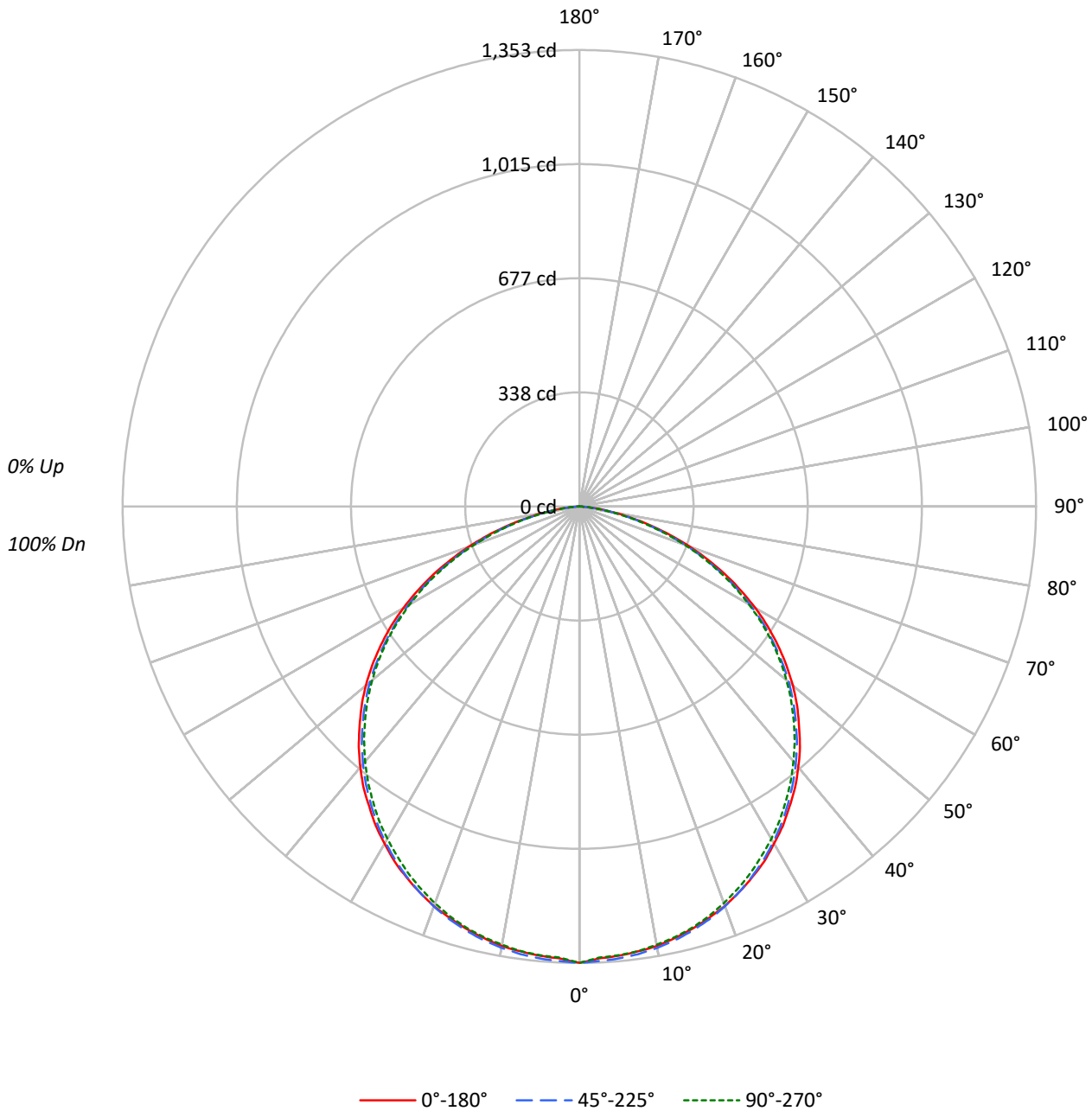
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3786.1 lumens
Efficiency: N/A
Efficacy: 118.7 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): 31.9
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	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°	3640	3640	3640
5°	3612	3633	3607
10°	3615	3630	3604
15°	3609	3623	3602
20°	3609	3613	3584
25°	3601	3594	3561
30°	3586	3570	3535
35°	3566	3539	3504
40°	3546	3503	3468
45°	3503	3454	3418
50°	3458	3394	3354
55°	3370	3292	3260
60°	3239	3149	3122
65°	3034	2945	2912
70°	2736	2626	2603
75°	2294	2177	2154
80°	1666	1553	1509
85°	883	778	710

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3503 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	128.1	3.4
10°-20°	368.0	9.7
20°-30°	559.0	14.8
30°-40°	676.2	17.9
40°-50°	702.8	18.6
50°-60°	629.2	16.6
60°-70°	458.9	12.1
70°-80°	226.0	6.0
80°-90°	37.8	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°	1055.1	27.9
0°-40°	1731.3	45.7
0°-60°	3063.3	80.9
0°-90°	3786.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3786.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1353	1353	1353	1353	1353	
5°	1337	1352	1345	1358	1335	127
15°	1296	1307	1301	1312	1293	366
25°	1213	1219	1210	1216	1199	559
35°	1086	1088	1077	1082	1067	680
45°	920	919	908	909	898	711
55°	718	712	702	700	695	641
65°	476	471	462	459	457	471
75°	221	217	209	207	207	235
85°	29	27	25	22	23	41
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1352.7	1352.7	1352.7	1352.7	1352.7
2.5°	1341.0	1356.1	1348.8	1362.2	1338.2
5°	1337.0	1351.6	1344.9	1357.8	1335.4
7.5°	1330.3	1345.4	1338.2	1350.5	1329.2
10°	1323.0	1336.5	1328.6	1341.0	1319.1
12.5°	1310.2	1323.6	1316.3	1327.5	1307.4
15°	1295.6	1307.4	1300.6	1311.8	1292.8
17.5°	1278.8	1290.0	1282.7	1292.8	1273.8
20°	1260.3	1269.3	1261.5	1269.9	1251.4
22.5°	1237.4	1245.8	1237.4	1243.0	1226.7
25°	1212.7	1218.9	1210.5	1216.1	1199.3
27.5°	1186.4	1189.8	1181.4	1185.9	1168.5
30°	1154.0	1157.9	1148.9	1154.5	1137.7
32.5°	1122.6	1124.8	1114.8	1119.2	1104.1
35°	1085.6	1087.9	1077.2	1081.7	1066.6
37.5°	1050.4	1049.8	1038.6	1041.4	1028.5
40°	1009.5	1008.9	997.2	999.4	987.1
42.5°	967.5	965.3	954.1	955.2	944.0
45°	920.5	919.4	907.6	909.3	898.1
47.5°	875.1	871.8	860.0	860.6	851.0
50°	825.9	820.8	810.7	809.6	801.2
52.5°	773.2	767.6	756.4	755.3	749.1
55°	718.4	712.2	701.6	699.9	694.8
57.5°	661.8	654.0	645.6	642.2	638.3
60°	601.9	594.6	585.1	581.7	580.1
62.5°	539.7	532.5	525.2	521.8	519.6
65°	476.5	470.9	462.5	459.1	457.4
67.5°	412.1	407.0	399.2	395.3	394.7
70°	347.7	342.7	333.7	331.5	330.9
72.5°	283.3	278.8	270.4	268.2	268.2
75°	220.6	216.7	209.4	207.2	207.2
77.5°	161.3	157.9	152.3	149.5	149.5
80°	107.5	105.3	100.2	98.0	97.4
82.5°	62.1	61.0	56.5	54.3	55.4
85°	28.6	27.4	25.2	22.4	23.0
87.5°	7.3	6.7	5.0	3.9	5.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)