

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: P973146

Luminaire Tested: FLR2-14-42HE-L835-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973146
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-CA080
Description: 1*4 FLR-2.0 4200 Lumen High Efficacy at 3500CCT & 80CRI with Clear Aryalic (0.080" thickness)

Light Source:
Ballast/Driver: -

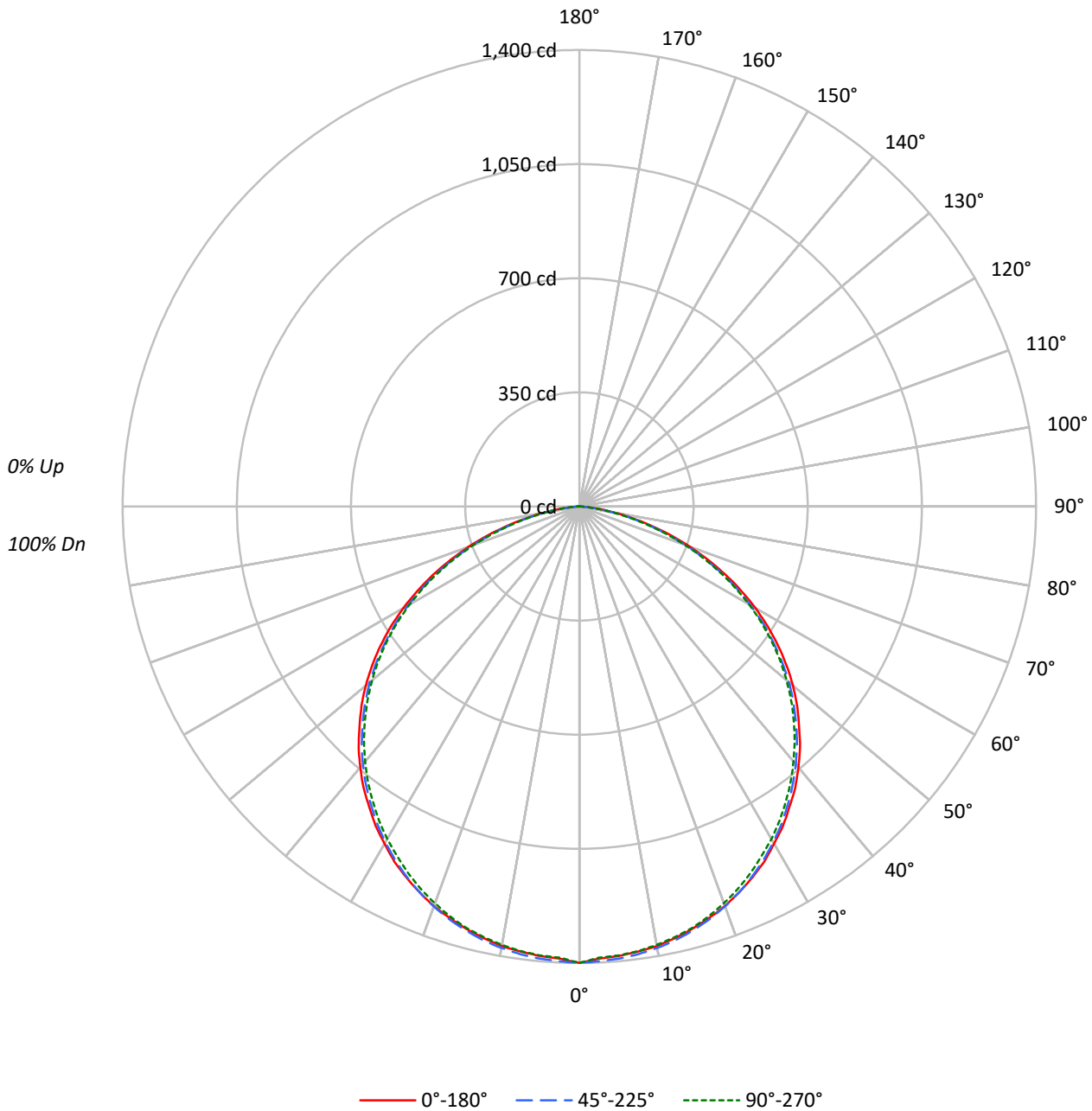
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3918.5 lumens
Efficiency: N/A
Efficacy: 122.8 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										
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°	3767	3767	3767
5°	3738	3760	3733
10°	3742	3757	3731
15°	3736	3750	3728
20°	3735	3739	3709
25°	3727	3720	3686
30°	3711	3695	3659
35°	3691	3663	3626
40°	3670	3626	3589
45°	3626	3575	3537
50°	3578	3513	3471
55°	3488	3407	3374
60°	3352	3259	3231
65°	3140	3048	3014
70°	2832	2718	2695
75°	2374	2253	2229
80°	1725	1607	1562
85°	914	806	735

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3626 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	132.6	3.4
10°-20°	380.8	9.7
20°-30°	578.6	14.8
30°-40°	699.9	17.9
40°-50°	727.4	18.6
50°-60°	651.2	16.6
60°-70°	475.0	12.1
70°-80°	233.9	6.0
80°-90°	39.1	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°	1092.0	27.9
0°-40°	1791.9	45.7
0°-60°	3170.5	80.9
0°-90°	3918.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3918.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1400	1400	1400	1400	1400	
5°	1384	1399	1392	1405	1382	132
15°	1341	1353	1346	1358	1338	379
25°	1255	1262	1253	1259	1241	579
35°	1124	1126	1115	1120	1104	704
45°	953	952	939	941	930	736
55°	744	737	726	724	719	664
65°	493	487	479	475	473	487
75°	228	224	217	214	214	243
85°	30	28	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°	1400.0	1400.0	1400.0	1400.0	1400.0
2.5°	1387.9	1403.5	1396.0	1409.9	1385.0
5°	1383.8	1398.9	1391.9	1405.3	1382.1
7.5°	1376.9	1392.5	1385.0	1397.7	1375.7
10°	1369.3	1383.2	1375.1	1387.9	1365.3
12.5°	1356.0	1369.9	1362.4	1374.0	1353.1
15°	1340.9	1353.1	1346.1	1357.7	1338.0
17.5°	1323.5	1335.1	1327.6	1338.0	1318.3
20°	1304.4	1313.7	1305.6	1314.3	1295.2
22.5°	1280.7	1289.4	1280.7	1286.5	1269.7
25°	1255.2	1261.5	1252.9	1258.6	1241.3
27.5°	1227.9	1231.4	1222.7	1227.4	1209.4
30°	1194.3	1198.4	1189.1	1194.9	1177.5
32.5°	1161.9	1164.2	1153.8	1158.4	1142.7
35°	1123.6	1125.9	1114.9	1119.6	1103.9
37.5°	1087.1	1086.5	1074.9	1077.8	1064.5
40°	1044.8	1044.2	1032.1	1034.4	1021.6
42.5°	1001.4	999.0	987.4	988.6	977.0
45°	952.7	951.5	939.3	941.1	929.5
47.5°	905.7	902.3	890.1	890.7	880.8
50°	854.7	849.5	839.1	837.9	829.2
52.5°	800.3	794.5	782.9	781.7	775.4
55°	743.5	737.1	726.1	724.4	719.1
57.5°	685.0	676.8	668.1	664.7	660.6
60°	622.9	615.4	605.6	602.1	600.3
62.5°	558.6	551.1	543.6	540.1	537.8
65°	493.1	487.3	478.7	475.2	473.4
67.5°	426.5	421.3	413.2	409.1	408.5
70°	359.9	354.6	345.4	343.1	342.5
72.5°	293.2	288.6	279.9	277.6	277.6
75°	228.3	224.3	216.7	214.4	214.4
77.5°	166.9	163.4	157.6	154.7	154.7
80°	111.3	108.9	103.7	101.4	100.8
82.5°	64.3	63.2	58.5	56.2	57.4
85°	29.6	28.4	26.1	23.2	23.8
87.5°	7.5	7.0	5.2	4.1	5.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)