

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: P973206

Luminaire Tested: FLR2-14-42HE-L840-CP250

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973206
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-L840-CP250
Description: 1*4 FLR-2.0 4200 Lumen High Efficacy at 4000CCT & 80CRI with Clear Polycarbonate (0.250" thickness)

Light Source:
Ballast/Driver: -

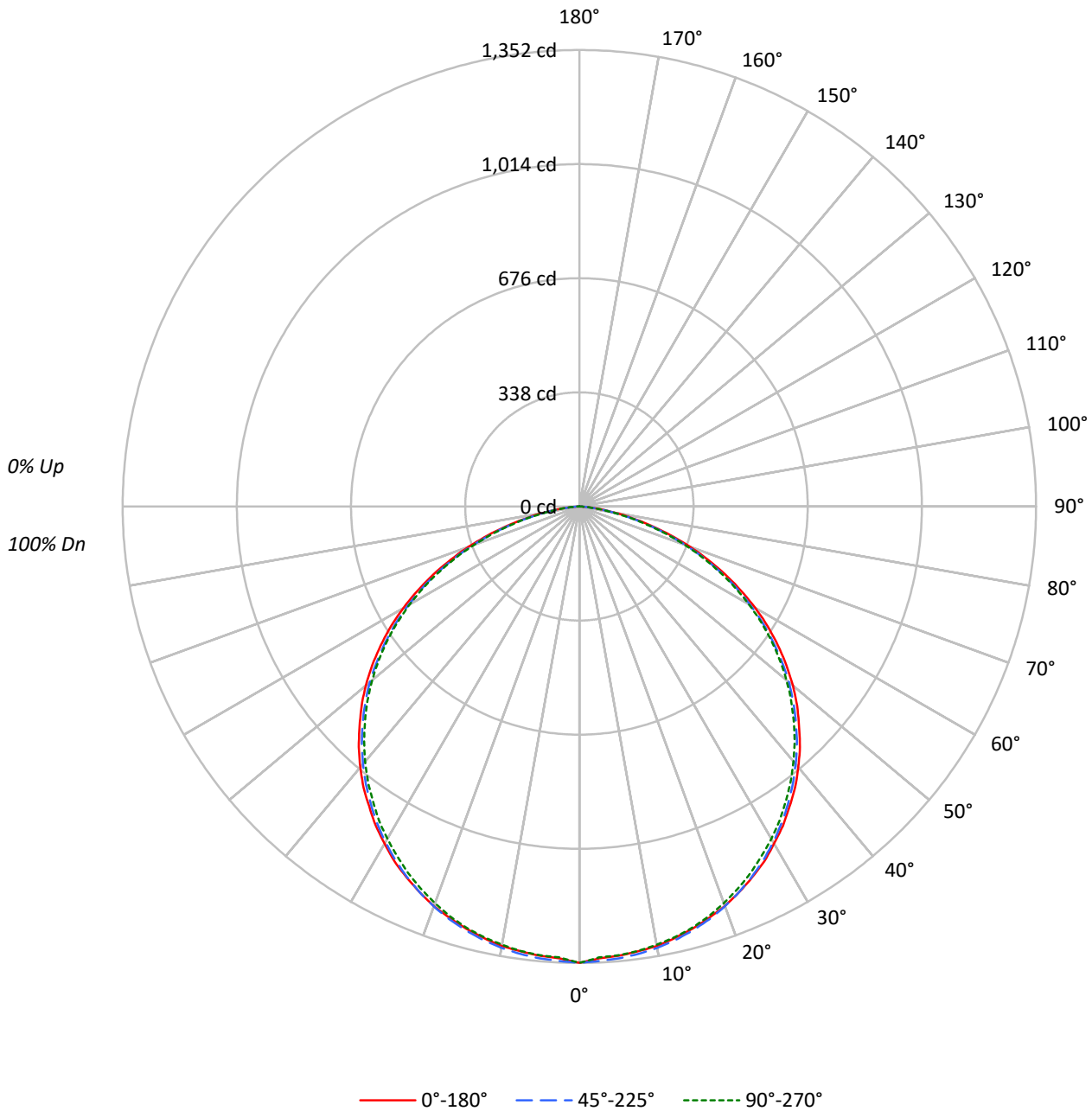
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3783.0 lumens
Efficiency: N/A
Efficacy: 118.6 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): 31.9
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°	3637	3637	3637
5°	3609	3630	3604
10°	3612	3628	3601
15°	3606	3621	3599
20°	3606	3609	3580
25°	3598	3591	3558
30°	3583	3567	3532
35°	3564	3536	3501
40°	3543	3500	3465
45°	3500	3451	3415
50°	3455	3391	3352
55°	3368	3289	3257
60°	3237	3146	3119
65°	3032	2942	2911
70°	2733	2623	2601
75°	2292	2175	2152
80°	1664	1551	1508
85°	880	778	707

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3500 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	128.0	3.4
10°-20°	367.7	9.7
20°-30°	558.6	14.8
30°-40°	675.7	17.9
40°-50°	702.2	18.6
50°-60°	628.7	16.6
60°-70°	458.6	12.1
70°-80°	225.8	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°	1054.2	27.9
0°-40°	1729.9	45.7
0°-60°	3060.8	80.9
0°-90°	3783.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3783.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1352	1352	1352	1352	1352	
5°	1336	1350	1344	1357	1334	127
15°	1294	1306	1300	1311	1292	366
25°	1212	1218	1210	1215	1198	559
35°	1085	1087	1076	1081	1066	679
45°	920	919	907	908	897	710
55°	718	712	701	699	694	641
65°	476	470	462	459	457	470
75°	220	216	209	207	207	235
85°	28	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°	1351.6	1351.6	1351.6	1351.6	1351.6
2.5°	1339.9	1355.0	1347.7	1361.1	1337.1
5°	1335.9	1350.5	1343.8	1356.6	1334.3
7.5°	1329.2	1344.3	1337.1	1349.4	1328.1
10°	1322.0	1335.4	1327.6	1339.9	1318.0
12.5°	1309.1	1322.5	1315.2	1326.4	1306.3
15°	1294.5	1306.3	1299.6	1310.8	1291.7
17.5°	1277.8	1288.9	1281.7	1291.7	1272.7
20°	1259.3	1268.2	1260.4	1268.8	1250.3
22.5°	1236.4	1244.8	1236.4	1242.0	1225.7
25°	1211.7	1217.9	1209.5	1215.1	1198.3
27.5°	1185.5	1188.8	1180.4	1184.9	1167.6
30°	1153.0	1156.9	1148.0	1153.6	1136.8
32.5°	1121.7	1123.9	1113.8	1118.3	1103.2
35°	1084.8	1087.0	1076.4	1080.8	1065.7
37.5°	1049.5	1048.9	1037.8	1040.6	1027.7
40°	1008.7	1008.1	996.4	998.6	986.3
42.5°	966.7	964.5	953.3	954.4	943.2
45°	919.7	918.6	906.9	908.5	897.3
47.5°	874.4	871.0	859.3	859.9	850.3
50°	825.2	820.1	810.1	808.9	800.6
52.5°	772.6	767.0	755.8	754.7	748.5
55°	717.8	711.6	701.0	699.3	694.3
57.5°	661.3	653.4	645.0	641.7	637.8
60°	601.4	594.1	584.6	581.3	579.6
62.5°	539.3	532.0	524.8	521.4	519.2
65°	476.1	470.5	462.1	458.7	457.1
67.5°	411.7	406.7	398.9	395.0	394.4
70°	347.4	342.4	333.4	331.2	330.6
72.5°	283.1	278.6	270.2	268.0	268.0
75°	220.4	216.5	209.2	207.0	207.0
77.5°	161.1	157.8	152.2	149.4	149.4
80°	107.4	105.2	100.1	97.9	97.3
82.5°	62.1	61.0	56.5	54.3	55.4
85°	28.5	27.4	25.2	22.4	22.9
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)