

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: P973216

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

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973216
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-CA080
Description: 1*4 FLR-2.0 4200 Lumen High Efficacy at 4000CCT & 80CRI with Clear Aryalic (0.080" thickness)

Light Source:
Ballast/Driver: -

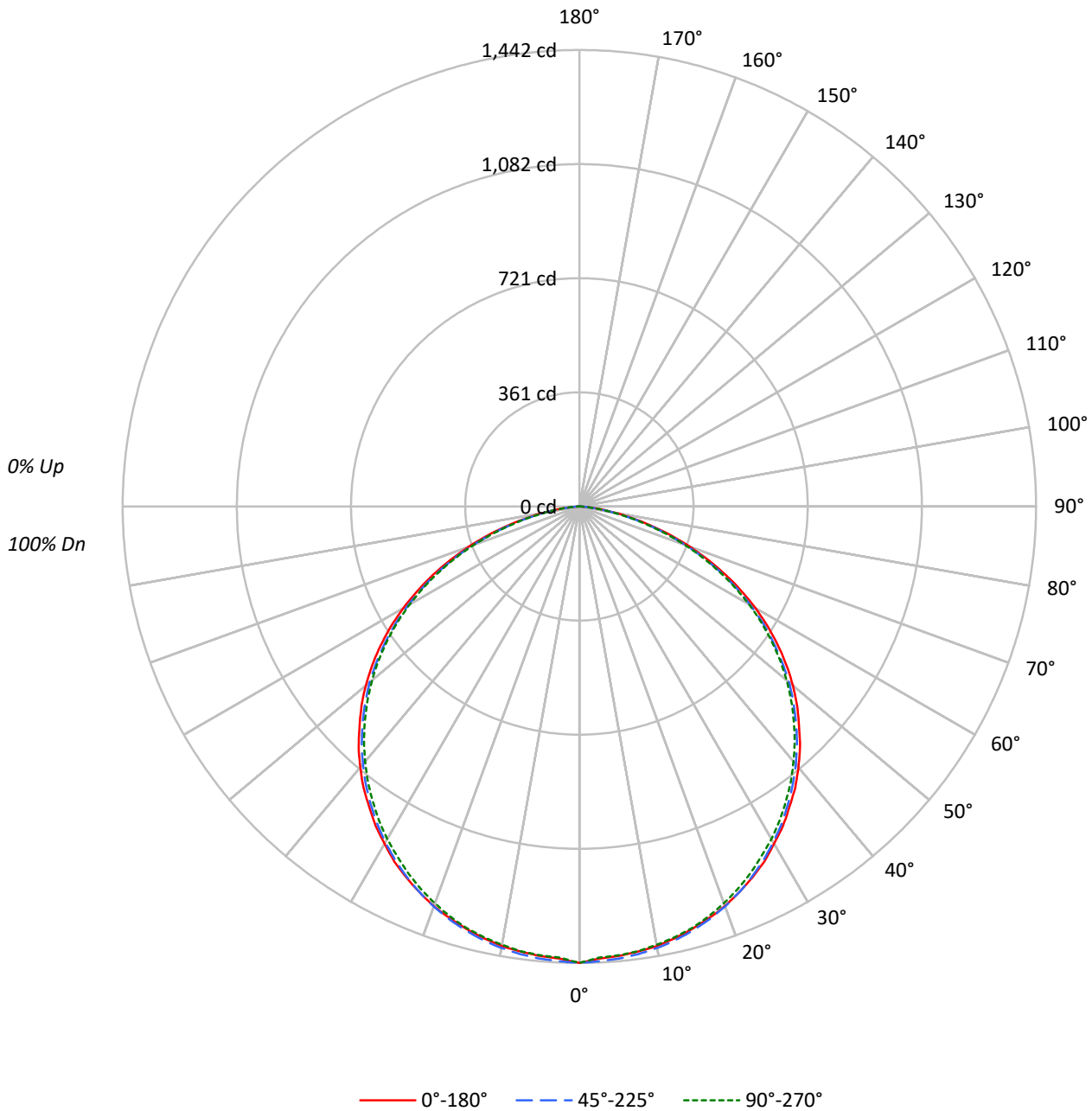
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4036.1 lumens
Efficiency: N/A
Efficacy: 126.5 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°	3880	3880	3880
5°	3850	3873	3845
10°	3854	3870	3842
15°	3848	3863	3840
20°	3848	3851	3820
25°	3839	3831	3796
30°	3823	3806	3769
35°	3802	3773	3735
40°	3781	3734	3697
45°	3734	3682	3643
50°	3686	3618	3576
55°	3593	3509	3475
60°	3453	3357	3328
65°	3234	3139	3105
70°	2917	2799	2776
75°	2445	2321	2296
80°	1776	1655	1610
85°	939	831	756

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3734 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.6	3.4
10°-20°	392.3	9.7
20°-30°	595.9	14.8
30°-40°	720.9	17.9
40°-50°	749.2	18.6
50°-60°	670.8	16.6
60°-70°	489.2	12.1
70°-80°	240.9	6.0
80°-90°	40.3	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°	1124.8	27.9
0°-40°	1845.6	45.7
0°-60°	3265.6	80.9
0°-90°	4036.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4036.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1442	1442	1442	1442	1442	
5°	1425	1441	1434	1447	1424	136
15°	1381	1394	1386	1398	1378	390
25°	1293	1299	1290	1296	1278	596
35°	1157	1160	1148	1153	1137	725
45°	981	980	968	969	957	758
55°	766	759	748	746	741	684
65°	508	502	493	489	488	502
75°	235	231	223	221	221	251
85°	30	29	27	24	24	44
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1442.0	1442.0	1442.0	1442.0	1442.0
2.5°	1429.5	1445.6	1437.9	1452.2	1426.5
5°	1425.3	1440.8	1433.7	1447.4	1423.5
7.5°	1418.2	1434.3	1426.5	1439.7	1417.0
10°	1410.4	1424.7	1416.4	1429.5	1406.2
12.5°	1396.7	1411.0	1403.2	1415.2	1393.7
15°	1381.2	1393.7	1386.5	1398.5	1378.2
17.5°	1363.3	1375.2	1367.4	1378.2	1357.9
20°	1343.6	1353.1	1344.8	1353.7	1334.0
22.5°	1319.1	1328.0	1319.1	1325.1	1307.7
25°	1292.8	1299.4	1290.4	1296.4	1278.5
27.5°	1264.8	1268.4	1259.4	1264.2	1245.7
30°	1230.2	1234.3	1224.8	1230.7	1212.8
32.5°	1196.7	1199.1	1188.4	1193.1	1177.0
35°	1157.3	1159.7	1148.4	1153.2	1137.0
37.5°	1119.7	1119.1	1107.2	1110.2	1096.5
40°	1076.2	1075.6	1063.0	1065.4	1052.3
42.5°	1031.4	1029.0	1017.1	1018.3	1006.3
45°	981.3	980.1	967.5	969.3	957.4
47.5°	932.9	929.3	916.8	917.4	907.2
50°	880.4	875.0	864.3	863.1	854.1
52.5°	824.3	818.3	806.4	805.2	798.6
55°	765.8	759.2	747.9	746.1	740.7
57.5°	705.5	697.1	688.2	684.6	680.4
60°	641.6	633.9	623.7	620.1	618.4
62.5°	575.4	567.6	559.9	556.3	553.9
65°	507.9	502.0	493.0	489.4	487.6
67.5°	439.3	433.9	425.6	421.4	420.8
70°	370.7	365.3	355.7	353.3	352.8
72.5°	302.0	297.2	288.3	285.9	285.9
75°	235.2	231.0	223.2	220.8	220.8
77.5°	171.9	168.3	162.3	159.4	159.4
80°	114.6	112.2	106.8	104.5	103.9
82.5°	66.3	65.1	60.3	57.9	59.1
85°	30.4	29.2	26.9	23.9	24.5
87.5°	7.8	7.2	5.4	4.2	5.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)