

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: P973241

Luminaire Tested: FLR2-14-42HE-L940-CP250

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973241
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-L940-CP250
Description: 1*4 FLR-2.0 4200 Lumen High Efficacy at 4000CCT & 90 CRI with Clear Polycarbonate (0.250" thickness)

Light Source:
Ballast/Driver: -

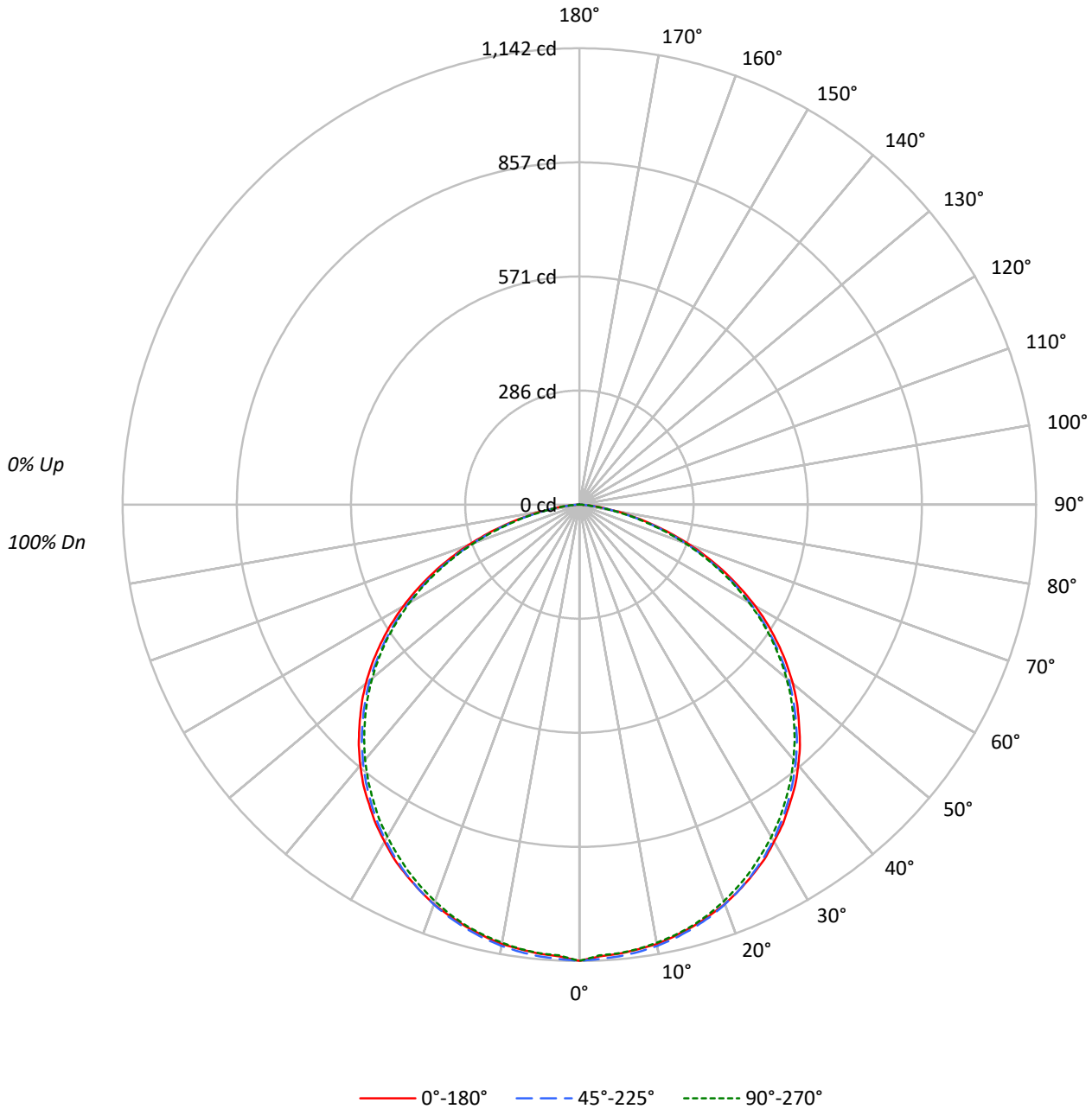
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3195.3 lumens
Efficiency: N/A
Efficacy: 100.2 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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CATALOG NUMBER: FLR2-14-42HE-L940-CP250

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°	3072	3072	3072
5°	3048	3066	3044
10°	3051	3064	3042
15°	3046	3058	3040
20°	3046	3049	3024
25°	3039	3033	3005
30°	3026	3013	2984
35°	3010	2987	2957
40°	2993	2956	2927
45°	2956	2915	2884
50°	2918	2864	2831
55°	2845	2778	2751
60°	2734	2658	2634
65°	2560	2485	2458
70°	2308	2216	2198
75°	1936	1837	1817
80°	1406	1311	1274
85°	744	658	599

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2956 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	108.1	3.4
10°-20°	310.5	9.7
20°-30°	471.8	14.8
30°-40°	570.7	17.9
40°-50°	593.1	18.6
50°-60°	531.0	16.6
60°-70°	387.3	12.1
70°-80°	190.7	6.0
80°-90°	31.9	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°	890.5	27.9
0°-40°	1461.2	45.7
0°-60°	2585.3	80.9
0°-90°	3195.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3195.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1142	1142	1142	1142	1142	
5°	1128	1141	1135	1146	1127	107
15°	1093	1103	1098	1107	1091	309
25°	1024	1029	1022	1026	1012	472
35°	916	918	909	913	900	574
45°	777	776	766	767	758	600
55°	606	601	592	591	586	541
65°	402	397	390	388	386	397
75°	186	183	177	175	175	198
85°	24	23	21	19	19	35
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1141.6	1141.6	1141.6	1141.6	1141.6
2.5°	1131.7	1144.5	1138.3	1149.7	1129.4
5°	1128.4	1140.7	1135.0	1145.9	1127.0
7.5°	1122.7	1135.5	1129.4	1139.8	1121.8
10°	1116.6	1127.9	1121.3	1131.7	1113.3
12.5°	1105.7	1117.1	1110.9	1120.4	1103.4
15°	1093.4	1103.4	1097.7	1107.2	1091.1
17.5°	1079.3	1088.7	1082.6	1091.1	1075.0
20°	1063.7	1071.2	1064.6	1071.7	1056.1
22.5°	1044.3	1051.4	1044.3	1049.0	1035.3
25°	1023.5	1028.7	1021.6	1026.3	1012.2
27.5°	1001.3	1004.1	997.1	1000.8	986.2
30°	973.9	977.2	969.6	974.4	960.2
32.5°	947.4	949.3	940.8	944.6	931.8
35°	916.2	918.1	909.2	912.9	900.2
37.5°	886.5	886.0	876.6	878.9	868.0
40°	852.0	851.5	841.6	843.5	833.1
42.5°	816.5	814.7	805.2	806.1	796.7
45°	776.8	775.9	766.0	767.4	757.9
47.5°	738.6	735.7	725.8	726.3	718.3
50°	697.0	692.7	684.2	683.3	676.2
52.5°	652.6	647.8	638.4	637.5	632.3
55°	606.3	601.1	592.1	590.7	586.4
57.5°	558.5	551.9	544.8	542.0	538.7
60°	508.0	501.8	493.8	491.0	489.5
62.5°	455.5	449.4	443.2	440.4	438.5
65°	402.1	397.4	390.3	387.5	386.1
67.5°	347.8	343.5	336.9	333.6	333.1
70°	293.4	289.2	281.6	279.7	279.3
72.5°	239.1	235.3	228.2	226.3	226.3
75°	186.2	182.9	176.7	174.8	174.8
77.5°	136.1	133.3	128.5	126.2	126.2
80°	90.7	88.8	84.6	82.7	82.2
82.5°	52.5	51.5	47.7	45.8	46.8
85°	24.1	23.2	21.3	18.9	19.4
87.5°	6.1	5.7	4.3	3.3	4.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)