

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: P973218

Luminaire Tested: FLR2-14-80HE-L840-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973218
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: FLR2-14-80HE-L840-CA080
Description: 1*4 FLR-2.0 8000 Lumen High Efficacy at 4000CCT & 80CRI with Clear Aryalic (0.080" thickness)

Light Source:
Ballast/Driver: -

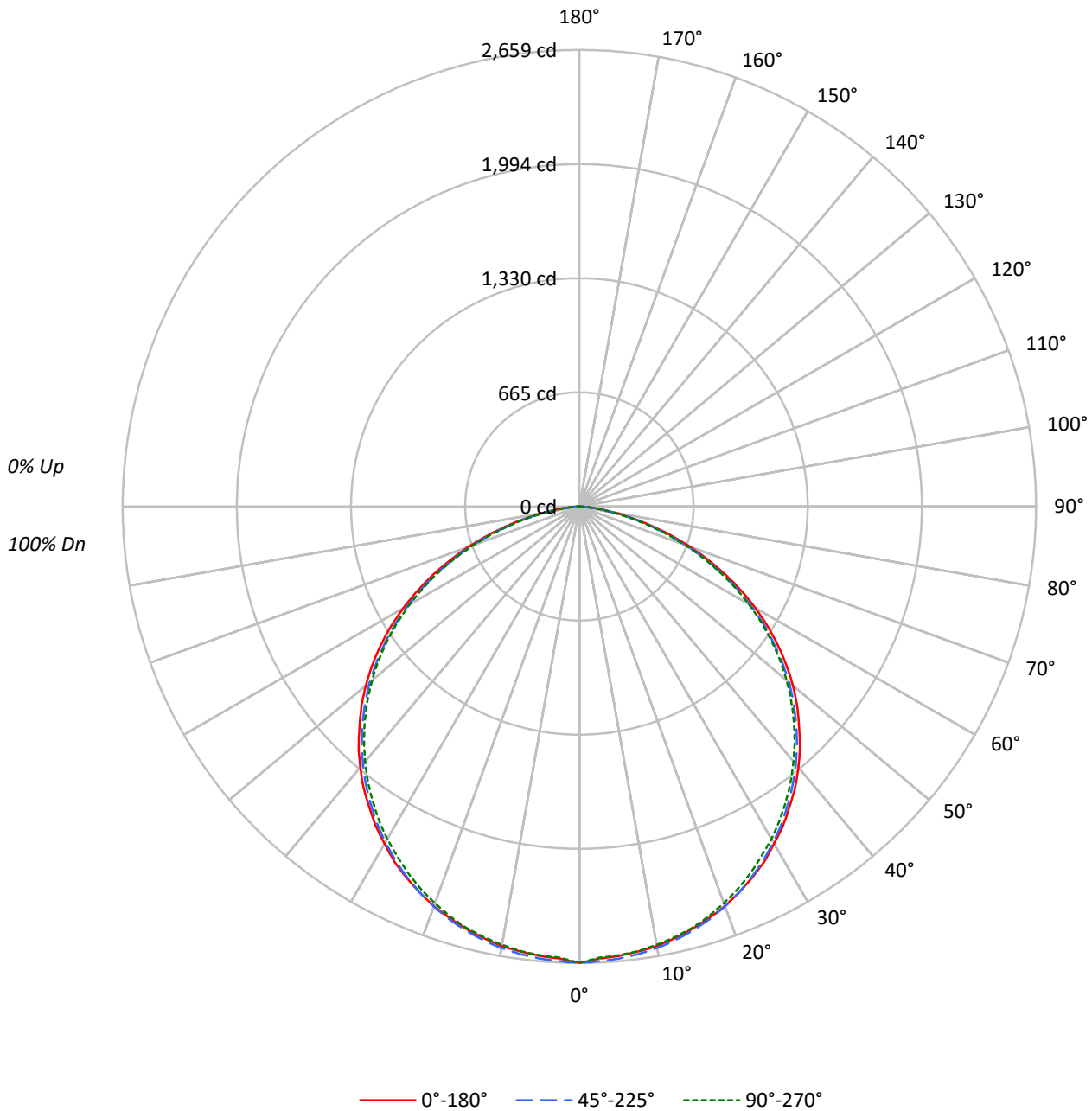
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7442.0 lumens
Efficiency: N/A
Efficacy: 120.2 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): 61.9
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

TEST NUMBER: P973218
CATALOG NUMBER: FLR2-14-80HE-L840-CA080

Luminous Intensity Polar Plot





TEST NUMBER: P973218
 CATALOG NUMBER: FLR2-14-80HE-L840-CA080

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°	7155	7155	7155
5°	7099	7141	7090
10°	7106	7136	7085
15°	7095	7122	7080
20°	7094	7101	7044
25°	7078	7065	7000
30°	7048	7017	6949
35°	7010	6956	6887
40°	6970	6885	6816
45°	6886	6789	6718
50°	6796	6671	6593
55°	6625	6470	6408
60°	6367	6190	6137
65°	5964	5789	5726
70°	5377	5161	5117
75°	4508	4279	4234
80°	3274	3053	2968
85°	1732	1528	1392

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6886 cd/sqm



TEST NUMBER: P973218
 CATALOG NUMBER: FLR2-14-80HE-L840-CA080

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	251.9	3.4
10°-20°	723.3	9.7
20°-30°	1098.8	14.8
30°-40°	1329.2	17.9
40°-50°	1381.4	18.6
50°-60°	1236.8	16.6
60°-70°	902.1	12.1
70°-80°	444.2	6.0
80°-90°	74.3	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°	2073.9	27.9
0°-40°	3403.1	45.7
0°-60°	6021.4	80.9
0°-90°	7442.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7442.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2659	2659	2659	2659	2659	
5°	2628	2657	2644	2669	2625	250
15°	2547	2570	2557	2579	2541	719
25°	2384	2396	2379	2390	2357	1099
35°	2134	2138	2118	2126	2097	1336
45°	1809	1807	1784	1787	1765	1397
55°	1412	1400	1379	1376	1366	1260
65°	937	926	909	902	899	925
75°	434	426	412	407	407	462
85°	56	54	50	44	45	81
90°	0	0	0	0	0	



TEST NUMBER: P973218
 CATALOG NUMBER: FLR2-14-80HE-L840-CA080

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2658.9	2658.9	2658.9	2658.9	2658.9
2.5°	2635.8	2665.5	2651.2	2677.7	2630.3
5°	2628.1	2656.7	2643.5	2668.9	2624.8
7.5°	2614.9	2644.6	2630.3	2654.5	2612.7
10°	2600.6	2627.0	2611.6	2635.8	2592.9
12.5°	2575.3	2601.7	2587.4	2609.4	2569.8
15°	2546.7	2569.8	2556.6	2578.6	2541.2
17.5°	2513.7	2535.7	2521.4	2541.2	2503.8
20°	2477.4	2495.0	2479.6	2496.1	2459.7
22.5°	2432.2	2448.7	2432.2	2443.2	2411.3
25°	2383.8	2395.9	2379.4	2390.4	2357.4
27.5°	2332.1	2338.7	2322.2	2331.0	2296.9
30°	2268.2	2276.0	2258.3	2269.3	2236.3
32.5°	2206.6	2211.0	2191.2	2200.0	2170.3
35°	2134.0	2138.4	2117.5	2126.3	2096.6
37.5°	2064.6	2063.5	2041.5	2047.0	2021.7
40°	1984.3	1983.2	1960.1	1964.5	1940.3
42.5°	1901.8	1897.4	1875.3	1877.6	1855.5
45°	1809.3	1807.1	1784.0	1787.3	1765.3
47.5°	1720.2	1713.6	1690.5	1691.6	1672.8
50°	1623.3	1613.4	1593.6	1591.4	1574.9
52.5°	1519.9	1508.9	1486.9	1484.7	1472.5
55°	1412.0	1399.9	1379.0	1375.7	1365.8
57.5°	1300.9	1285.5	1268.9	1262.3	1254.6
60°	1183.1	1168.8	1150.1	1143.5	1140.2
62.5°	1060.9	1046.6	1032.3	1025.7	1021.3
65°	936.6	925.6	909.1	902.5	899.2
67.5°	810.0	800.1	784.7	777.0	775.9
70°	683.4	673.5	655.9	651.5	650.4
72.5°	556.9	548.1	531.6	527.2	527.2
75°	433.6	425.9	411.6	407.2	407.2
77.5°	317.0	310.4	299.4	293.8	293.8
80°	211.3	206.9	197.0	192.6	191.5
82.5°	122.2	120.0	111.2	106.8	109.0
85°	56.1	53.9	49.5	44.0	45.1
87.5°	14.3	13.2	9.9	7.7	9.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)