

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: P973134

Luminaire Tested: FLR2-14-20HE-L835-CP250

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973134
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: FLR2-14-20HE-L835-CP250
Description: 1*4 FLR-2.0 2000 Lumen High Efficacy at 3500CCT & 80CRI with Clear Polycarbonate (0.250" thickness)

Light Source:
Ballast/Driver: -

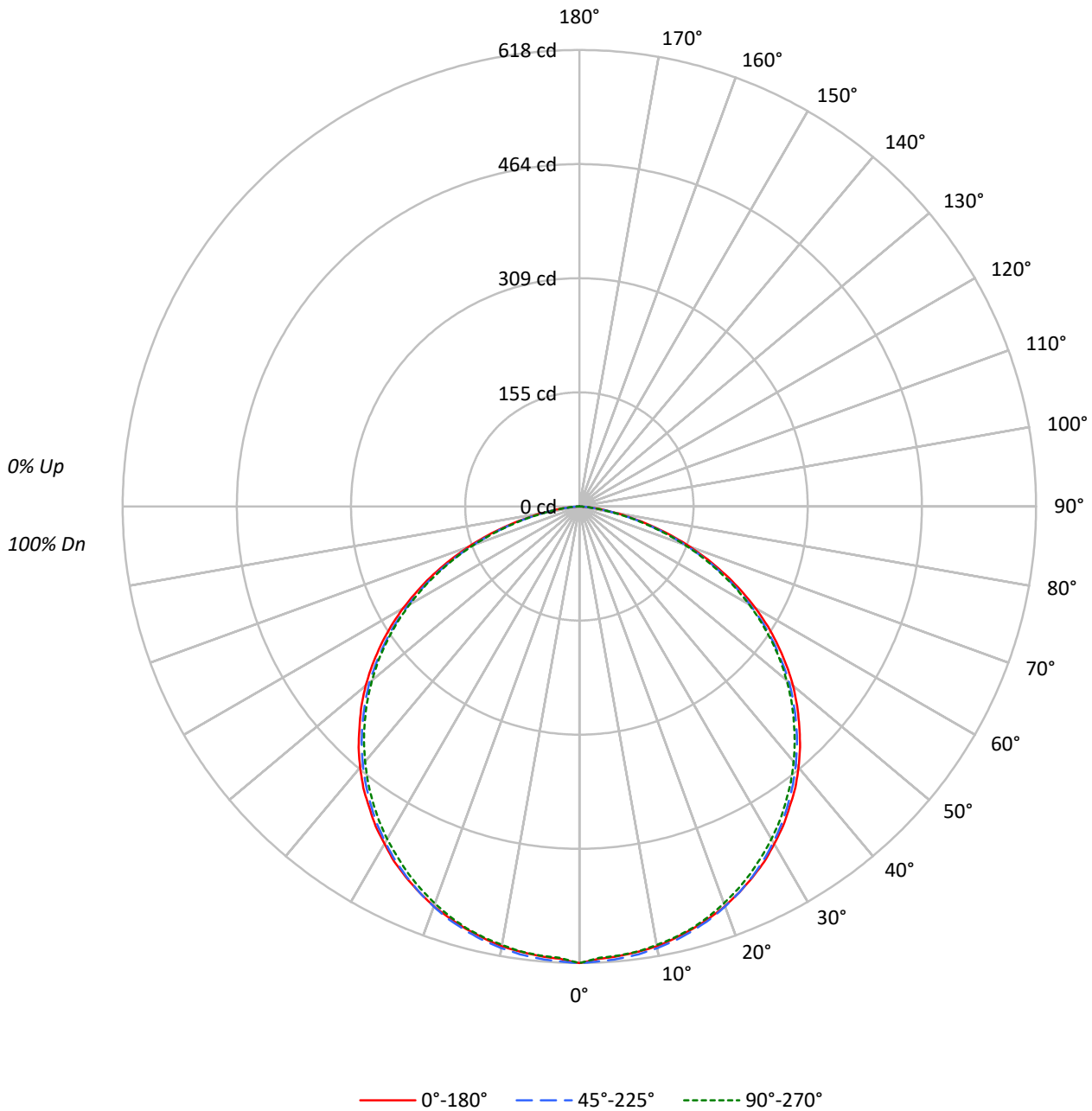
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1730.4 lumens
Efficiency: N/A
Efficacy: 116.9 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): 14.8
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: P973134
CATALOG NUMBER: FLR2-14-20HE-L835-CP250

Luminous Intensity Polar Plot





TEST NUMBER: P973134
 CATALOG NUMBER: FLR2-14-20HE-L835-CP250

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																				
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°	1664	1664	1664
5°	1651	1660	1649
10°	1652	1659	1647
15°	1650	1656	1646
20°	1649	1651	1638
25°	1646	1643	1627
30°	1639	1632	1616
35°	1630	1617	1601
40°	1621	1601	1585
45°	1601	1579	1562
50°	1580	1551	1533
55°	1540	1504	1490
60°	1481	1439	1427
65°	1387	1346	1331
70°	1250	1200	1190
75°	1048	995	985
80°	761	710	690
85°	404	355	324

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1601 cd/sqm



TEST NUMBER: P973134
 CATALOG NUMBER: FLR2-14-20HE-L835-CP250

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.6	3.4
10°-20°	168.2	9.7
20°-30°	255.5	14.8
30°-40°	309.1	17.9
40°-50°	321.2	18.6
50°-60°	287.6	16.6
60°-70°	209.8	12.1
70°-80°	103.3	6.0
80°-90°	17.3	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°	482.2	27.9
0°-40°	791.3	45.7
0°-60°	1400.1	80.9
0°-90°	1730.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1730.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	618	618	618	618	618	
5°	611	618	615	620	610	58
15°	592	598	594	600	591	167
25°	554	557	553	556	548	256
35°	496	497	492	494	488	311
45°	421	420	415	416	410	325
55°	328	326	321	320	318	293
65°	218	215	211	210	209	215
75°	101	99	96	95	95	107
85°	13	12	12	10	10	19
90°	0	0	0	0	0	



TEST NUMBER: P973134
 CATALOG NUMBER: FLR2-14-20HE-L835-CP250

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	618.2	618.2	618.2	618.2	618.2
2.5°	612.9	619.8	616.4	622.6	611.6
5°	611.1	617.7	614.7	620.5	610.3
7.5°	608.0	614.9	611.6	617.2	607.5
10°	604.7	610.8	607.2	612.9	602.9
12.5°	598.8	604.9	601.6	606.7	597.5
15°	592.1	597.5	594.4	599.6	590.9
17.5°	584.5	589.6	586.3	590.9	582.2
20°	576.0	580.1	576.5	580.4	571.9
22.5°	565.5	569.4	565.5	568.1	560.7
25°	554.3	557.1	553.2	555.8	548.1
27.5°	542.2	543.8	539.9	542.0	534.1
30°	527.4	529.2	525.1	527.7	520.0
32.5°	513.1	514.1	509.5	511.5	504.6
35°	496.2	497.2	492.3	494.4	487.5
37.5°	480.1	479.8	474.7	476.0	470.1
40°	461.4	461.1	455.7	456.8	451.1
42.5°	442.2	441.2	436.0	436.6	431.4
45°	420.7	420.2	414.8	415.6	410.5
47.5°	400.0	398.4	393.1	393.3	389.0
50°	377.4	375.1	370.5	370.0	366.2
52.5°	353.4	350.8	345.7	345.2	342.4
55°	328.3	325.5	320.6	319.9	317.6
57.5°	302.5	298.9	295.0	293.5	291.7
60°	275.1	271.8	267.4	265.9	265.1
62.5°	246.7	243.4	240.0	238.5	237.5
65°	217.8	215.2	211.4	209.8	209.1
67.5°	188.3	186.0	182.5	180.7	180.4
70°	158.9	156.6	152.5	151.5	151.2
72.5°	129.5	127.4	123.6	122.6	122.6
75°	100.8	99.0	95.7	94.7	94.7
77.5°	73.7	72.2	69.6	68.3	68.3
80°	49.1	48.1	45.8	44.8	44.5
82.5°	28.4	27.9	25.8	24.8	25.3
85°	13.1	12.5	11.5	10.2	10.5
87.5°	3.3	3.1	2.3	1.8	2.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)