

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: P973129

Luminaire Tested: FLR2-14-20HE-L835-CP187

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973129
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-CP187
Description: 1*4 FLR-2.0 2000 Lumen High Efficacy at 3500CCT & 80CRI with Clear Polycarbonate (0.187" thickness)

Light Source:
Ballast/Driver: -

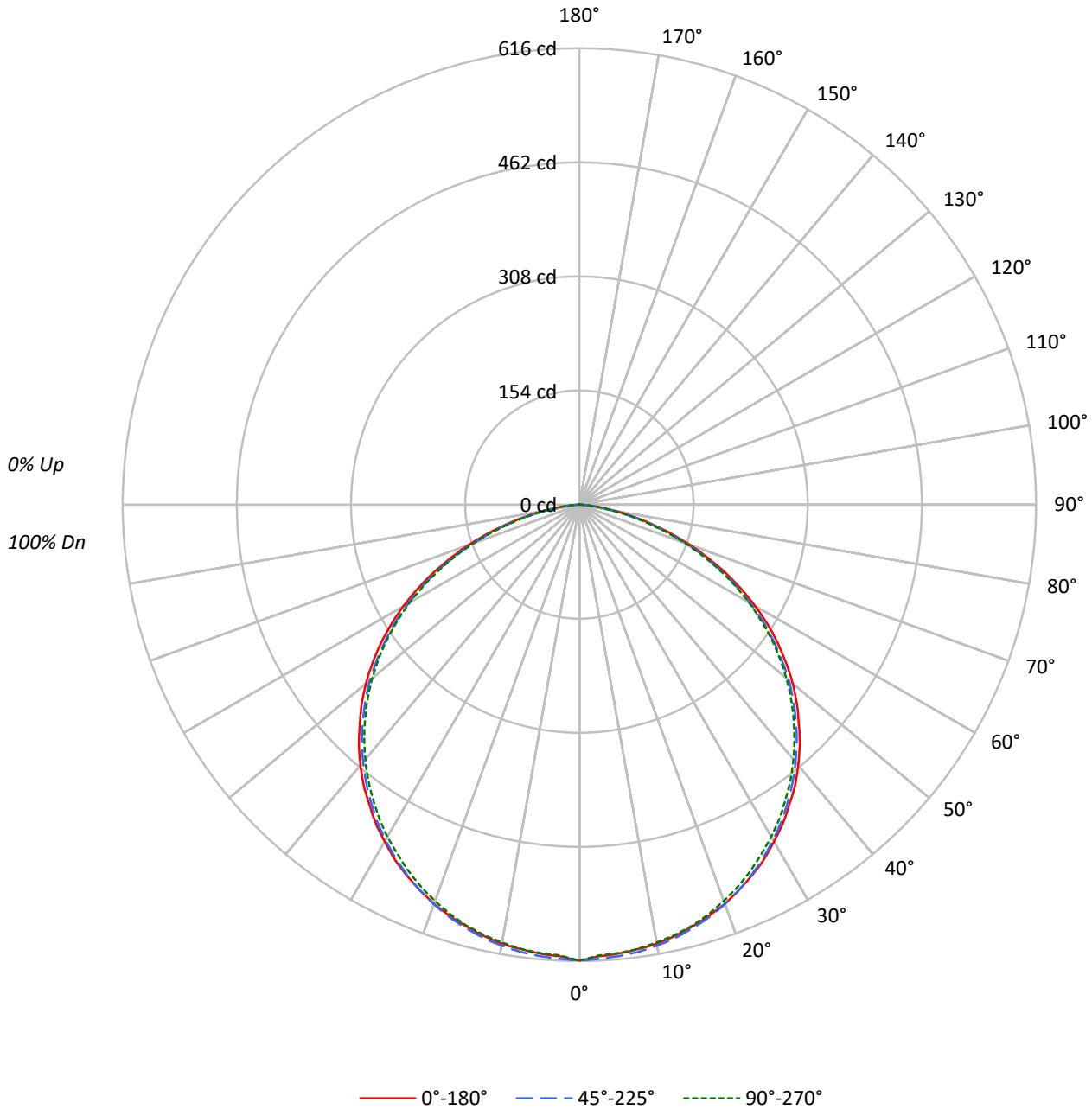
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1722.7 lumens
Efficiency: N/A
Efficacy: 116.4 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

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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°	1656	1656	1656
5°	1643	1653	1641
10°	1645	1652	1640
15°	1642	1649	1639
20°	1642	1644	1631
25°	1638	1635	1620
30°	1632	1624	1609
35°	1623	1610	1594
40°	1613	1594	1578
45°	1594	1572	1555
50°	1573	1544	1526
55°	1534	1498	1483
60°	1474	1433	1420
65°	1380	1340	1325
70°	1245	1194	1185
75°	1044	991	980
80°	758	707	687
85°	401	355	321

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1594 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.3	3.4
10°-20°	167.4	9.7
20°-30°	254.4	14.8
30°-40°	307.7	17.9
40°-50°	319.8	18.6
50°-60°	286.3	16.6
60°-70°	208.8	12.1
70°-80°	102.8	6.0
80°-90°	17.2	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°	480.1	27.9
0°-40°	787.8	45.7
0°-60°	1393.9	80.9
0°-90°	1722.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1722.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	616	616	616	616	616	
5°	608	615	612	618	608	58
15°	590	595	592	597	588	167
25°	552	555	551	553	546	254
35°	494	495	490	492	485	309
45°	419	418	413	414	409	323
55°	327	324	319	318	316	292
65°	217	214	210	209	208	214
75°	100	99	95	94	94	107
85°	13	12	12	10	10	19
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	615.5	615.5	615.5	615.5	615.5
2.5°	610.2	617.0	613.7	619.8	608.9
5°	608.4	615.0	611.9	617.8	607.6
7.5°	605.3	612.2	608.9	614.5	604.8
10°	602.0	608.1	604.6	610.2	600.2
12.5°	596.2	602.3	599.0	604.1	594.9
15°	589.5	594.9	591.8	596.9	588.3
17.5°	581.9	587.0	583.7	588.3	579.6
20°	573.5	577.6	574.0	577.8	569.4
22.5°	563.0	566.9	563.0	565.6	558.2
25°	551.8	554.6	550.8	553.4	545.7
27.5°	539.8	541.4	537.6	539.6	531.7
30°	525.1	526.9	522.8	525.3	517.7
32.5°	510.8	511.8	507.2	509.3	502.4
35°	494.0	495.0	490.2	492.2	485.3
37.5°	477.9	477.7	472.6	473.9	468.0
40°	459.3	459.1	453.7	454.8	449.2
42.5°	440.2	439.2	434.1	434.6	429.5
45°	418.8	418.3	413.0	413.7	408.6
47.5°	398.2	396.7	391.3	391.6	387.2
50°	375.8	373.5	368.9	368.4	364.6
52.5°	351.8	349.3	344.2	343.7	340.9
55°	326.9	324.1	319.2	318.5	316.2
57.5°	301.1	297.6	293.7	292.2	290.4
60°	273.9	270.6	266.2	264.7	263.9
62.5°	245.6	242.3	239.0	237.4	236.4
65°	216.8	214.3	210.4	208.9	208.1
67.5°	187.5	185.2	181.6	179.9	179.6
70°	158.2	155.9	151.8	150.8	150.6
72.5°	128.9	126.9	123.1	122.0	122.0
75°	100.4	98.6	95.3	94.3	94.3
77.5°	73.4	71.8	69.3	68.0	68.0
80°	48.9	47.9	45.6	44.6	44.3
82.5°	28.3	27.8	25.7	24.7	25.2
85°	13.0	12.5	11.5	10.2	10.4
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)