

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: P973119

Luminaire Tested: FLR2-14-20HE-L835-CP080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973119
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-CP080
Description: 1*4 FLR-2.0 2000 Lumen High Efficacy at 3500CCT & 80CRI with Clear Polycarbonate (0.080" thickness)

Light Source:
Ballast/Driver: -

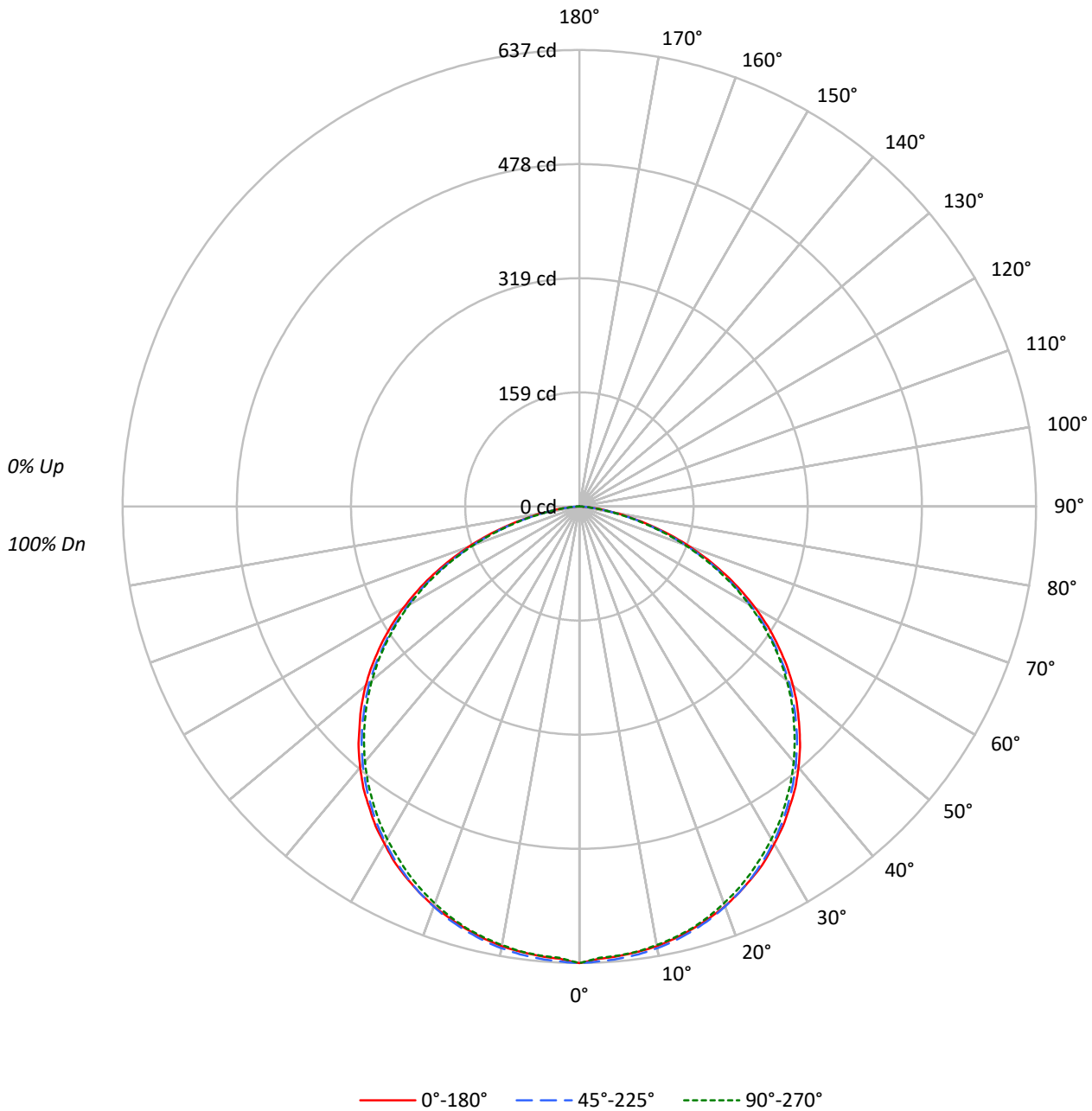
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1783.8 lumens
Efficiency: N/A
Efficacy: 120.5 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): 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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CATALOG NUMBER: FLR2-14-20HE-L835-CP080

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°	1715	1715	1715
5°	1702	1712	1699
10°	1703	1711	1698
15°	1701	1707	1697
20°	1700	1702	1688
25°	1697	1693	1678
30°	1689	1682	1665
35°	1680	1667	1651
40°	1671	1650	1634
45°	1650	1627	1610
50°	1629	1599	1580
55°	1588	1551	1536
60°	1526	1484	1471
65°	1429	1387	1372
70°	1289	1237	1227
75°	1080	1026	1015
80°	784	731	711
85°	417	367	333

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1650 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.4	3.4
10°-20°	173.4	9.7
20°-30°	263.4	14.8
30°-40°	318.6	17.9
40°-50°	331.1	18.6
50°-60°	296.5	16.6
60°-70°	216.2	12.1
70°-80°	106.5	6.0
80°-90°	17.8	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°	497.1	27.9
0°-40°	815.7	45.7
0°-60°	1443.2	80.9
0°-90°	1783.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1783.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	637	637	637	637	637	
5°	630	637	634	640	629	60
15°	610	616	613	618	609	172
25°	571	574	570	573	565	263
35°	512	512	508	510	502	320
45°	434	433	428	428	423	335
55°	338	336	330	330	327	302
65°	224	222	218	216	216	222
75°	104	102	99	98	98	111
85°	14	13	12	11	11	19
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	637.3	637.3	637.3	637.3	637.3
2.5°	631.8	638.9	635.5	641.8	630.5
5°	629.9	636.8	633.6	639.7	629.1
7.5°	626.8	633.9	630.5	636.3	626.2
10°	623.3	629.7	626.0	631.8	621.5
12.5°	617.3	623.6	620.2	625.4	615.9
15°	610.4	615.9	612.8	618.1	609.1
17.5°	602.5	607.8	604.3	609.1	600.1
20°	593.8	598.0	594.3	598.3	589.6
22.5°	583.0	586.9	583.0	585.6	578.0
25°	571.4	574.3	570.3	572.9	565.0
27.5°	559.0	560.6	556.6	558.7	550.5
30°	543.7	545.5	541.3	543.9	536.0
32.5°	528.9	530.0	525.2	527.3	520.2
35°	511.5	512.5	507.5	509.6	502.5
37.5°	494.9	494.6	489.3	490.6	484.6
40°	475.6	475.3	469.8	470.9	465.1
42.5°	455.8	454.8	449.5	450.0	444.7
45°	433.7	433.1	427.6	428.4	423.1
47.5°	412.3	410.7	405.2	405.4	401.0
50°	389.1	386.7	382.0	381.4	377.5
52.5°	364.3	361.7	356.4	355.9	352.9
55°	338.4	335.5	330.5	329.7	327.4
57.5°	311.8	308.1	304.1	302.6	300.7
60°	283.6	280.1	275.7	274.1	273.3
62.5°	254.3	250.9	247.4	245.9	244.8
65°	224.5	221.8	217.9	216.3	215.5
67.5°	194.1	191.8	188.1	186.2	186.0
70°	163.8	161.4	157.2	156.2	155.9
72.5°	133.5	131.4	127.4	126.4	126.4
75°	103.9	102.1	98.7	97.6	97.6
77.5°	76.0	74.4	71.8	70.4	70.4
80°	50.6	49.6	47.2	46.2	45.9
82.5°	29.3	28.8	26.6	25.6	26.1
85°	13.5	12.9	11.9	10.6	10.8
87.5°	3.4	3.2	2.4	1.8	2.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)