

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: P974281

Luminaire Tested: FLR2-24-20-L840-CP080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974281
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-3)
Test Lab: INNOVATION CENTER
Issue Date: 3/13/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: FAIL-SAFE
Catalog Number: FLR2-24-20-L840-CP080
Description: SHAPER SENSE CIRCLE

Light Source: FLR2-24-20-L840-CP080
Ballast/Driver: -

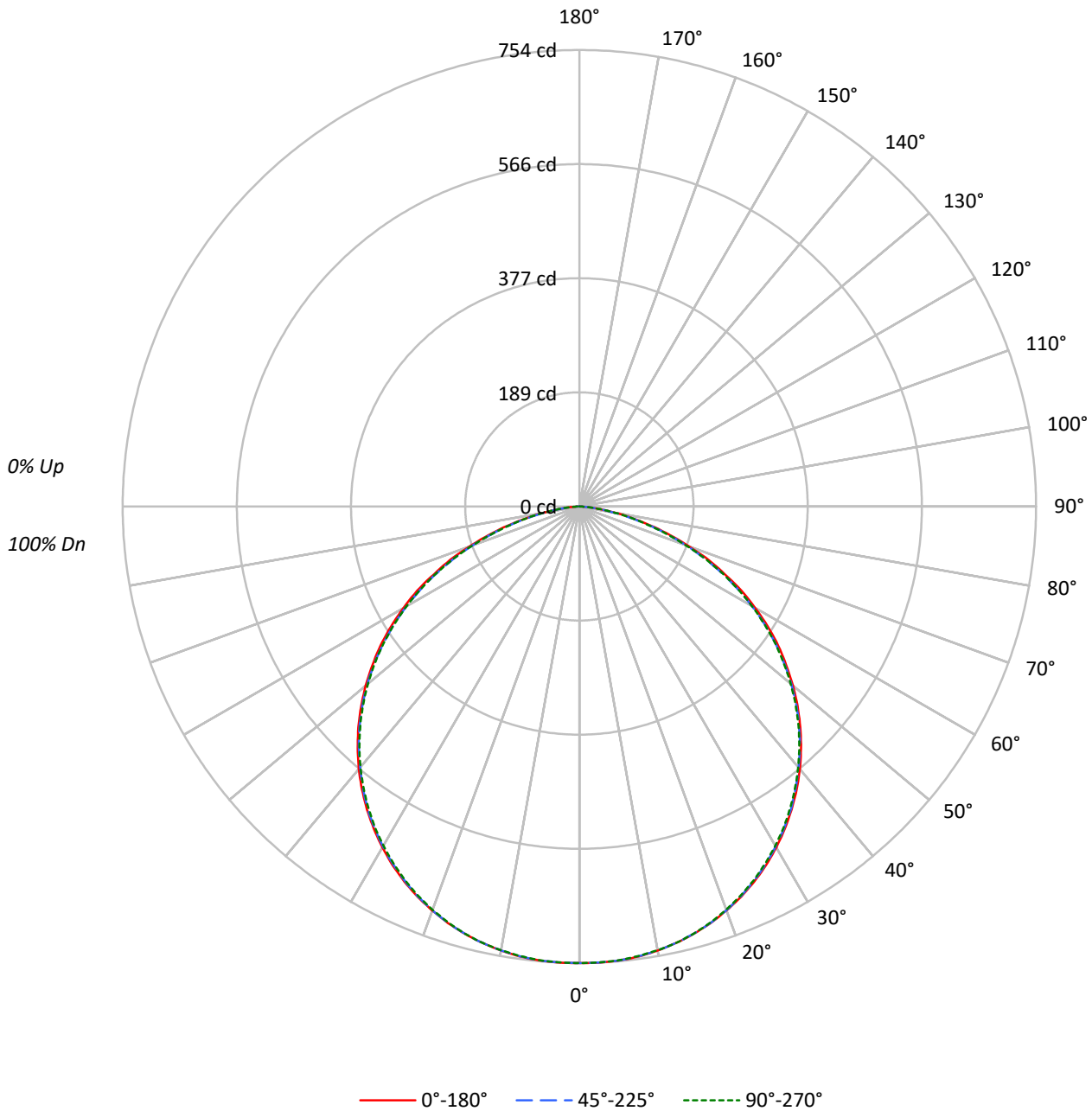
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2131.9 lumens
Efficiency: N/A
Efficacy: 127.7 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 16.7
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: FLR2-24-20-L840-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	100	97	106	102	99	95	98	95	92	94	92	89	91	89	87	85
2	99	91	85	79	97	89	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	57	53	51
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	38
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	39	33	29	27
10	53	40	32	27	52	39	32	27	38	31	27	38	31	26	37	31	26	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1015	1015	1015
5°	1017	1017	1016
10°	1018	1017	1017
15°	1018	1018	1018
20°	1017	1016	1015
25°	1015	1013	1011
30°	1010	1008	1005
35°	1004	1001	998
40°	995	989	987
45°	982	977	973
50°	964	956	953
55°	941	928	926
60°	902	886	886
65°	844	824	826
70°	759	736	734
75°	637	612	609
80°	466	442	461
85°	264	242	247

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 982 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.6	3.4
10°-20°	206.3	9.7
20°-30°	314.5	14.8
30°-40°	381.0	17.9
40°-50°	395.8	18.6
50°-60°	354.1	16.6
60°-70°	258.0	12.1
70°-80°	127.8	6.0
80°-90°	22.9	1.1
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°	592.3	27.8
0°-40°	973.4	45.7
0°-60°	1723.2	80.8
0°-90°	2131.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2131.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	754	754	754	754	754	
5°	753	753	753	753	752	72
15°	731	730	730	731	730	206
25°	684	683	682	682	681	315
35°	611	610	610	608	607	382
45°	516	515	513	512	512	398
55°	401	398	395	395	395	357
65°	265	263	259	260	260	263
75°	123	121	118	120	117	131
85°	17	16	16	16	16	24
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	754.3	754.3	754.3	754.3	754.3
2.5°	754.3	754.0	754.0	754.3	753.8
5°	752.9	753.2	752.9	752.9	752.4
7.5°	750.0	749.7	749.4	749.7	748.9
10°	744.8	744.8	744.6	744.8	744.3
12.5°	738.6	738.6	738.6	738.9	738.6
15°	730.8	730.5	730.5	731.0	730.5
17.5°	721.6	721.3	721.3	721.0	720.5
20°	710.2	710.2	709.9	709.6	708.8
22.5°	698.0	697.7	696.9	696.9	695.8
25°	683.7	682.9	682.3	682.0	681.2
27.5°	668.0	666.9	666.1	665.5	664.7
30°	650.4	649.3	648.5	647.7	647.1
32.5°	631.4	630.9	629.5	629.3	628.2
35°	611.1	610.3	609.5	608.4	607.3
37.5°	589.5	588.7	586.8	586.2	585.4
40°	566.5	565.4	563.0	563.0	562.1
42.5°	541.8	540.8	539.1	538.1	537.5
45°	516.1	515.0	513.2	512.1	511.5
47.5°	488.8	488.0	485.8	485.0	484.2
50°	460.4	459.3	456.9	456.3	455.5
52.5°	430.6	430.1	426.8	426.5	425.7
55°	401.1	398.1	395.4	395.4	394.9
57.5°	368.6	366.5	362.9	362.9	362.4
60°	335.1	333.2	329.1	329.7	329.1
62.5°	302.3	298.3	294.5	296.1	294.7
65°	265.0	262.8	258.7	259.8	259.6
67.5°	230.9	226.8	223.0	225.2	224.1
70°	193.0	190.8	187.0	189.2	186.5
72.5°	157.2	155.4	151.6	154.0	151.3
75°	122.6	120.7	117.7	119.9	117.2
77.5°	89.9	88.5	85.8	88.0	88.5
80°	60.1	58.5	57.1	59.0	59.5
82.5°	35.2	34.1	33.6	33.8	35.2
85°	17.1	15.7	15.7	16.0	16.0
87.5°	4.6	4.1	4.6	4.9	5.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)