

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: P974209

Luminaire Tested: FLR2-24-20-L835-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974209
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-L835-CA080
Description: SHAPER SENSE CIRCLE

Light Source: FLR2-24-20-L835-CA080
Ballast/Driver: -

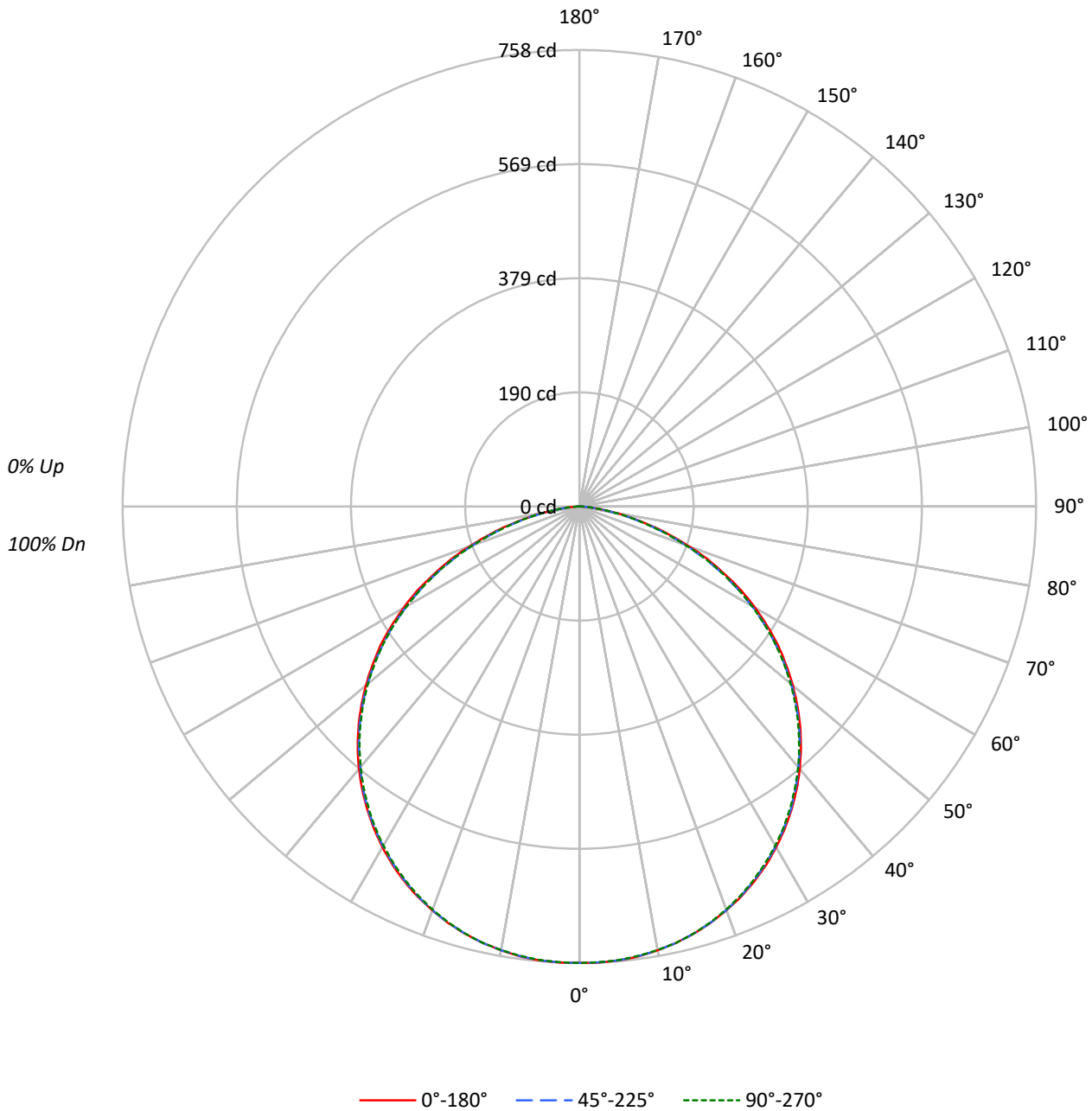
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2142.2 lumens
Efficiency: N/A
Efficacy: 128.3 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-L835-CA080

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	
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	
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°	1020	1020	1020
5°	1022	1022	1021
10°	1022	1022	1022
15°	1023	1022	1022
20°	1022	1021	1020
25°	1020	1018	1016
30°	1015	1012	1010
35°	1009	1006	1002
40°	1000	994	992
45°	987	981	978
50°	968	961	958
55°	945	932	931
60°	906	890	890
65°	848	828	830
70°	763	739	737
75°	640	615	612
80°	468	445	463
85°	264	244	247

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 987 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.9	3.4
10°-20°	207.3	9.7
20°-30°	316.0	14.8
30°-40°	382.9	17.9
40°-50°	397.7	18.6
50°-60°	355.8	16.6
60°-70°	259.3	12.1
70°-80°	128.4	6.0
80°-90°	23.0	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°	595.2	27.8
0°-40°	978.1	45.7
0°-60°	1731.5	80.8
0°-90°	2142.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2142.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	758	758	758	758	758	
5°	757	757	757	757	756	72
15°	734	734	734	735	734	207
25°	687	686	686	685	684	317
35°	614	613	612	611	610	384
45°	519	518	516	514	514	400
55°	403	400	397	397	397	359
65°	266	264	260	261	261	264
75°	123	121	118	120	118	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°	758.0	758.0	758.0	758.0	758.0
2.5°	758.0	757.7	757.7	758.0	757.4
5°	756.6	756.9	756.6	756.6	756.0
7.5°	753.6	753.3	753.1	753.3	752.5
10°	748.4	748.4	748.2	748.4	747.9
12.5°	742.2	742.2	742.2	742.4	742.2
15°	734.3	734.0	734.0	734.6	734.0
17.5°	725.0	724.8	724.8	724.5	724.0
20°	713.6	713.6	713.3	713.1	712.3
22.5°	701.4	701.1	700.3	700.3	699.2
25°	687.0	686.2	685.6	685.3	684.5
27.5°	671.2	670.1	669.3	668.7	667.9
30°	653.5	652.4	651.6	650.8	650.3
32.5°	634.5	633.9	632.6	632.3	631.2
35°	614.1	613.3	612.5	611.4	610.3
37.5°	592.3	591.5	589.6	589.1	588.2
40°	569.2	568.1	565.7	565.7	564.9
42.5°	544.5	543.4	541.7	540.7	540.1
45°	518.6	517.5	515.6	514.5	514.0
47.5°	491.2	490.3	488.2	487.4	486.5
50°	462.6	461.5	459.1	458.5	457.7
52.5°	432.7	432.1	428.9	428.6	427.8
55°	403.0	400.1	397.3	397.3	396.8
57.5°	370.4	368.2	364.7	364.7	364.2
60°	336.7	334.8	330.7	331.2	330.7
62.5°	303.8	299.7	295.9	297.5	296.2
65°	266.2	264.1	260.0	261.1	260.8
67.5°	232.0	227.9	224.1	226.3	225.2
70°	193.9	191.7	187.9	190.1	187.4
72.5°	158.0	156.1	152.3	154.7	152.0
75°	123.2	121.3	118.3	120.5	117.8
77.5°	90.3	88.9	86.2	88.4	88.9
80°	60.4	58.7	57.4	59.3	59.8
82.5°	35.4	34.3	33.7	34.0	35.4
85°	17.1	15.8	15.8	16.0	16.0
87.5°	4.6	4.1	4.6	4.9	5.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)