

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: P973533

Luminaire Tested: FLR2-22-20-L930-CP187

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973533
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-2)
Test Lab: INNOVATION CENTER
Issue Date: 3/13/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: FAIL-SAFE
Catalog Number: FLR2-22-20-L930-CP187
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

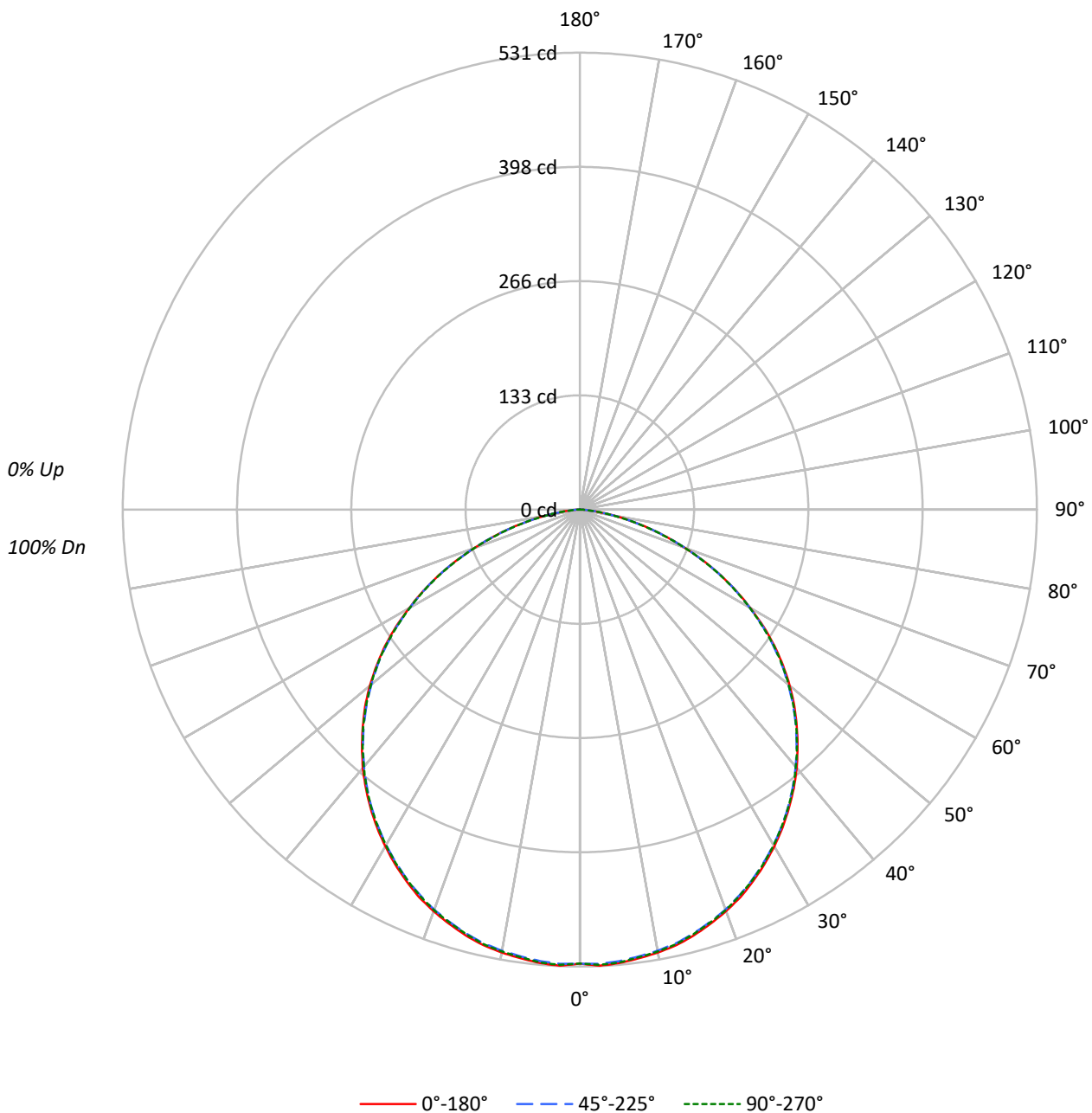
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1475.6 lumens
Efficiency: N/A
Efficacy: 97.7 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.38
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 15.1
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									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	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	63	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	71	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	50	42	37	48	41	36	47	41	36	34			34																
8	61	47	39	33	59	47	39	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	40	32	27	39	32	27	38	31	27	37	31	26	25			25																

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1420	1420	1420
5°	1429	1423	1427
10°	1429	1422	1425
15°	1427	1421	1423
20°	1422	1417	1419
25°	1415	1409	1410
30°	1404	1399	1400
35°	1392	1387	1388
40°	1377	1370	1371
45°	1357	1351	1353
50°	1333	1323	1326
55°	1295	1285	1289
60°	1231	1226	1226
65°	1150	1147	1144
70°	1018	1023	1020
75°	858	850	844
80°	617	606	601
85°	321	321	312

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1357 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.0	3.4
10°-20°	143.7	9.7
20°-30°	218.4	14.8
30°-40°	263.9	17.9
40°-50°	273.9	18.6
50°-60°	244.9	16.6
60°-70°	178.1	12.1
70°-80°	87.6	5.9
80°-90°	15.2	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°	412.0	27.9
0°-40°	675.9	45.8
0°-60°	1194.8	81.0
0°-90°	1475.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1475.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	528	528	528	528	528	
5°	529	523	527	525	528	50
15°	512	506	510	509	511	145
25°	476	471	474	474	475	220
35°	424	421	422	422	422	265
45°	356	355	355	356	356	275
55°	276	274	274	274	275	246
65°	181	181	180	180	180	178
75°	82	83	82	82	81	88
85°	10	11	10	10	10	15
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	527.6	527.6	527.6	527.6	527.6
2.5°	530.6	524.4	528.3	526.0	529.6
5°	529.0	522.8	526.7	524.7	528.3
7.5°	526.0	519.8	523.7	521.8	524.7
10°	522.8	516.2	520.5	518.5	521.5
12.5°	518.5	512.3	516.2	514.6	517.2
15°	512.3	506.5	510.0	508.7	510.7
17.5°	504.8	499.0	502.6	501.6	503.2
20°	496.7	491.1	494.7	493.8	495.4
22.5°	487.6	481.7	485.0	484.3	485.6
25°	476.5	471.3	474.5	473.5	474.8
27.5°	464.7	459.9	462.5	462.5	463.1
30°	452.0	447.5	450.1	450.1	450.4
32.5°	438.3	434.8	436.4	436.7	436.7
35°	423.7	420.7	422.1	422.4	422.4
37.5°	408.4	405.4	406.4	407.1	407.1
40°	392.1	389.5	390.1	390.8	390.4
42.5°	374.5	372.5	372.8	373.5	373.5
45°	356.5	354.9	354.9	355.6	355.6
47.5°	338.3	336.7	336.0	336.7	336.7
50°	318.4	316.8	316.1	316.8	316.8
52.5°	297.6	295.9	295.9	295.9	296.3
55°	276.0	274.4	273.8	274.4	274.7
57.5°	253.2	252.6	251.6	251.9	251.0
60°	228.8	228.8	227.8	228.5	227.8
62.5°	205.0	205.6	204.7	204.7	204.0
65°	180.6	181.2	180.2	180.2	179.6
67.5°	155.5	156.4	155.1	155.1	154.5
70°	129.4	131.3	130.0	130.4	129.7
72.5°	105.9	106.9	105.6	105.6	104.9
75°	82.5	83.1	81.8	82.1	81.2
77.5°	59.3	60.3	59.0	59.3	59.0
80°	39.8	40.1	39.1	39.4	38.8
82.5°	23.1	23.5	23.1	22.8	22.5
85°	10.4	10.8	10.4	10.4	10.1
87.5°	2.6	2.6	2.6	2.6	2.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)