

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: P973645

Luminaire Tested: FLR2-22-20-L940-CP187

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973645
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-L940-CP187
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

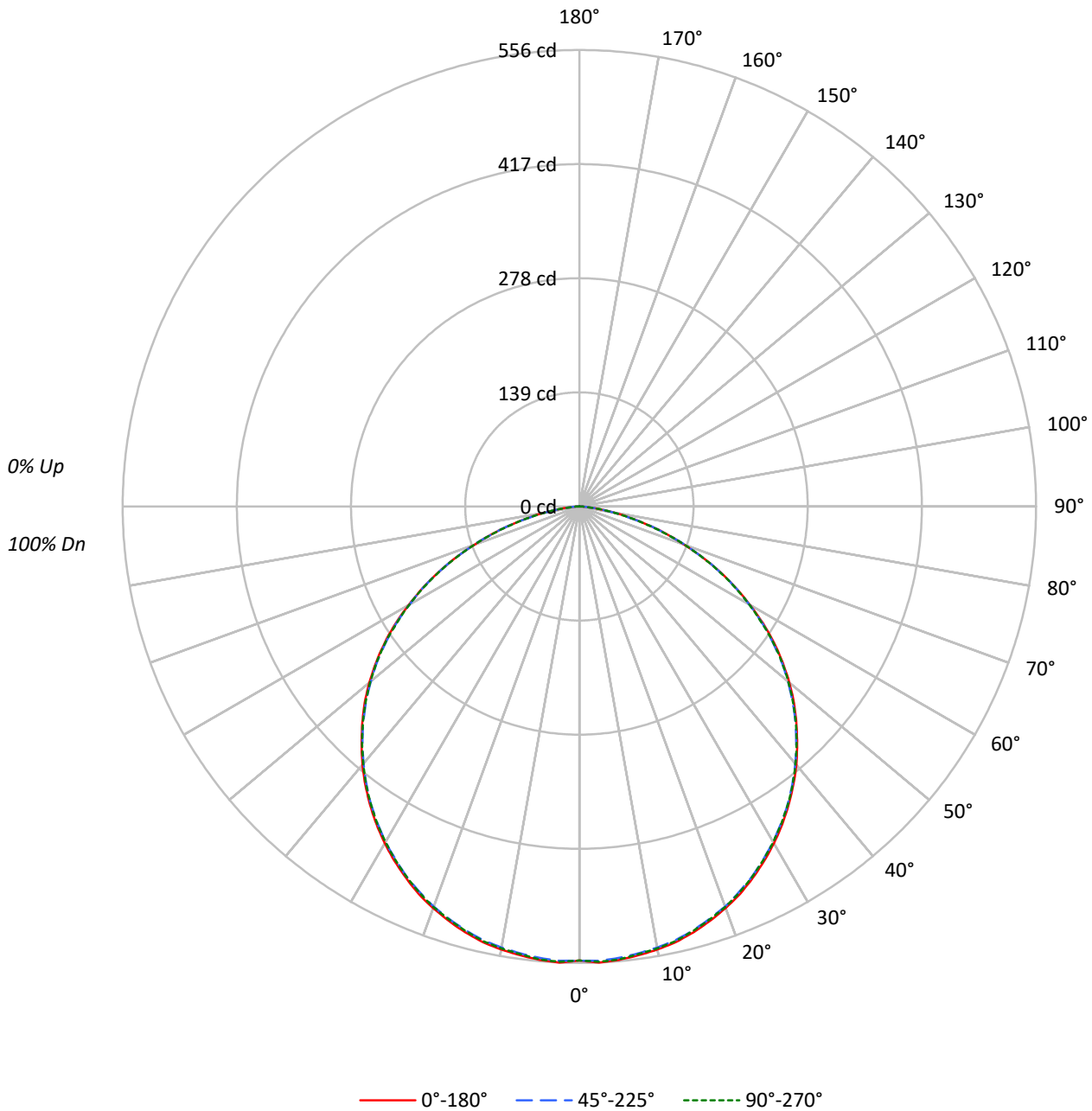
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1546.7 lumens
Efficiency: N/A
Efficacy: 102.4 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									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	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°	1488	1488	1488
5°	1498	1491	1496
10°	1497	1491	1494
15°	1496	1489	1491
20°	1491	1485	1487
25°	1483	1477	1478
30°	1472	1466	1467
35°	1459	1453	1454
40°	1444	1436	1438
45°	1422	1416	1418
50°	1397	1387	1390
55°	1357	1346	1351
60°	1291	1285	1285
65°	1205	1203	1198
70°	1067	1072	1070
75°	898	891	885
80°	646	635	631
85°	337	337	327

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1422 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.4	3.4
10°-20°	150.6	9.7
20°-30°	228.9	14.8
30°-40°	276.6	17.9
40°-50°	287.1	18.6
50°-60°	256.7	16.6
60°-70°	186.6	12.1
70°-80°	91.8	5.9
80°-90°	15.9	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°	431.9	27.9
0°-40°	708.5	45.8
0°-60°	1252.4	81.0
0°-90°	1546.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1546.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	553	553	553	553	553	
5°	554	548	552	550	554	53
15°	537	531	535	533	535	152
25°	499	494	497	496	498	230
35°	444	441	442	443	443	278
45°	374	372	372	373	373	288
55°	289	288	287	288	288	258
65°	189	190	189	189	188	187
75°	86	87	86	86	85	92
85°	11	11	11	11	11	16
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	553.1	553.1	553.1	553.1	553.1
2.5°	556.2	549.7	553.8	551.4	555.1
5°	554.4	548.0	552.1	550.0	553.8
7.5°	551.4	544.9	549.0	546.9	550.0
10°	548.0	541.1	545.6	543.5	546.6
12.5°	543.5	537.0	541.1	539.4	542.1
15°	537.0	530.9	534.6	533.3	535.3
17.5°	529.2	523.0	526.8	525.7	527.5
20°	520.6	514.8	518.6	517.5	519.3
22.5°	511.1	504.9	508.3	507.6	509.0
25°	499.4	494.0	497.4	496.4	497.7
27.5°	487.1	482.0	484.8	484.8	485.4
30°	473.8	469.0	471.8	471.8	472.1
32.5°	459.5	455.7	457.4	457.8	457.8
35°	444.1	441.0	442.4	442.7	442.7
37.5°	428.0	425.0	426.0	426.7	426.7
40°	411.0	408.2	408.9	409.6	409.3
42.5°	392.5	390.5	390.8	391.5	391.5
45°	373.7	372.0	372.0	372.7	372.7
47.5°	354.6	352.9	352.2	352.9	352.9
50°	333.8	332.1	331.4	332.1	332.1
52.5°	311.9	310.2	310.2	310.2	310.5
55°	289.3	287.6	287.0	287.6	288.0
57.5°	265.4	264.8	263.7	264.1	263.0
60°	239.8	239.8	238.8	239.5	238.8
62.5°	214.9	215.6	214.5	214.5	213.9
65°	189.3	189.9	188.9	188.9	188.2
67.5°	163.0	164.0	162.6	162.6	161.9
70°	135.6	137.7	136.3	136.6	136.0
72.5°	111.0	112.0	110.7	110.7	110.0
75°	86.4	87.1	85.7	86.1	85.1
77.5°	62.2	63.2	61.8	62.2	61.8
80°	41.7	42.0	41.0	41.3	40.7
82.5°	24.3	24.6	24.3	23.9	23.6
85°	10.9	11.3	10.9	10.9	10.6
87.5°	2.7	2.7	2.7	2.7	2.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)