

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: P973943

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

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973943
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: FLR2-22-20HE-L940-CP187
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

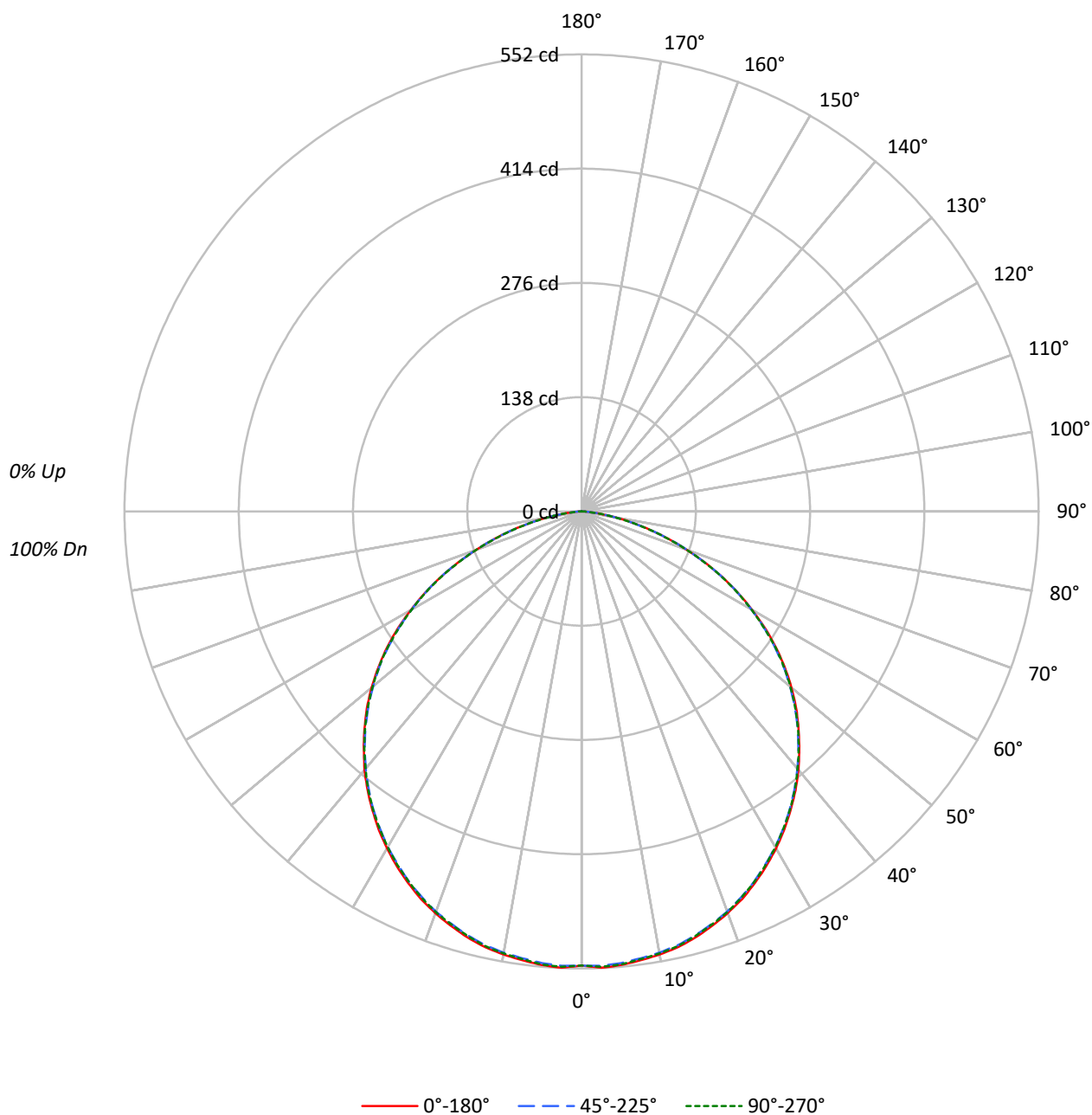
Lumens per Lamp: N/A
Luminaire Lumens: 1533.9 lumens
Efficiency: N/A
Efficacy: 103.6 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.38
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 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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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					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	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	63	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	71	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	50	42	37	48	41	36	47	41	36	34		
8	61	47	39	33	59	47	39	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	40	32	27	39	32	27	38	31	27	37	31	26	25		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1476	1476	1476
5°	1485	1479	1484
10°	1485	1479	1481
15°	1484	1477	1479
20°	1479	1473	1475
25°	1471	1465	1466
30°	1460	1454	1455
35°	1447	1441	1442
40°	1432	1424	1426
45°	1410	1404	1407
50°	1386	1376	1379
55°	1346	1335	1340
60°	1280	1274	1274
65°	1195	1193	1189
70°	1058	1064	1061
75°	891	884	878
80°	640	631	625
85°	333	333	324

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1410 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.9	3.4
10°-20°	149.4	9.7
20°-30°	227.0	14.8
30°-40°	274.4	17.9
40°-50°	284.8	18.6
50°-60°	254.6	16.6
60°-70°	185.1	12.1
70°-80°	91.0	5.9
80°-90°	15.8	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°	428.3	27.9
0°-40°	702.6	45.8
0°-60°	1242.0	81.0
0°-90°	1533.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1533.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	548	548	548	548	548	
5°	550	543	548	546	549	52
15°	533	526	530	529	531	150
25°	495	490	493	492	494	228
35°	440	437	439	439	439	276
45°	371	369	369	370	370	286
55°	287	285	285	285	286	256
65°	188	188	187	187	187	185
75°	86	86	85	85	84	91
85°	11	11	11	11	10	16
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	548.5	548.5	548.5	548.5	548.5
2.5°	551.6	545.1	549.2	546.8	550.5
5°	549.9	543.4	547.5	545.5	549.2
7.5°	546.8	540.4	544.4	542.4	545.5
10°	543.4	536.6	541.1	539.0	542.1
12.5°	539.0	532.6	536.6	535.0	537.7
15°	532.6	526.5	530.2	528.9	530.9
17.5°	524.8	518.7	522.4	521.4	523.1
20°	516.3	510.6	514.3	513.3	515.0
22.5°	506.8	500.7	504.1	503.4	504.8
25°	495.3	489.9	493.3	492.3	493.6
27.5°	483.1	478.0	480.7	480.7	481.4
30°	469.9	465.2	467.9	467.9	468.2
32.5°	455.7	452.0	453.6	454.0	454.0
35°	440.4	437.4	438.7	439.1	439.1
37.5°	424.5	421.5	422.5	423.2	423.2
40°	407.6	404.9	405.5	406.2	405.9
42.5°	389.3	387.2	387.6	388.3	388.3
45°	370.6	368.9	368.9	369.6	369.6
47.5°	351.7	350.0	349.3	350.0	350.0
50°	331.0	329.3	328.6	329.3	329.3
52.5°	309.3	307.6	307.6	307.6	308.0
55°	287.0	285.3	284.6	285.3	285.6
57.5°	263.2	262.6	261.5	261.9	260.9
60°	237.8	237.8	236.8	237.5	236.8
62.5°	213.1	213.8	212.8	212.8	212.1
65°	187.7	188.4	187.4	187.4	186.7
67.5°	161.6	162.6	161.3	161.3	160.6
70°	134.5	136.5	135.2	135.5	134.8
72.5°	110.1	111.1	109.8	109.8	109.1
75°	85.7	86.4	85.0	85.4	84.4
77.5°	61.7	62.7	61.3	61.7	61.3
80°	41.3	41.7	40.7	41.0	40.3
82.5°	24.1	24.4	24.1	23.7	23.4
85°	10.8	11.2	10.8	10.8	10.5
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)