

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: P973859

Luminaire Tested: FLR2-22-20HE-L935-CP187

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973859
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-L935-CP187
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

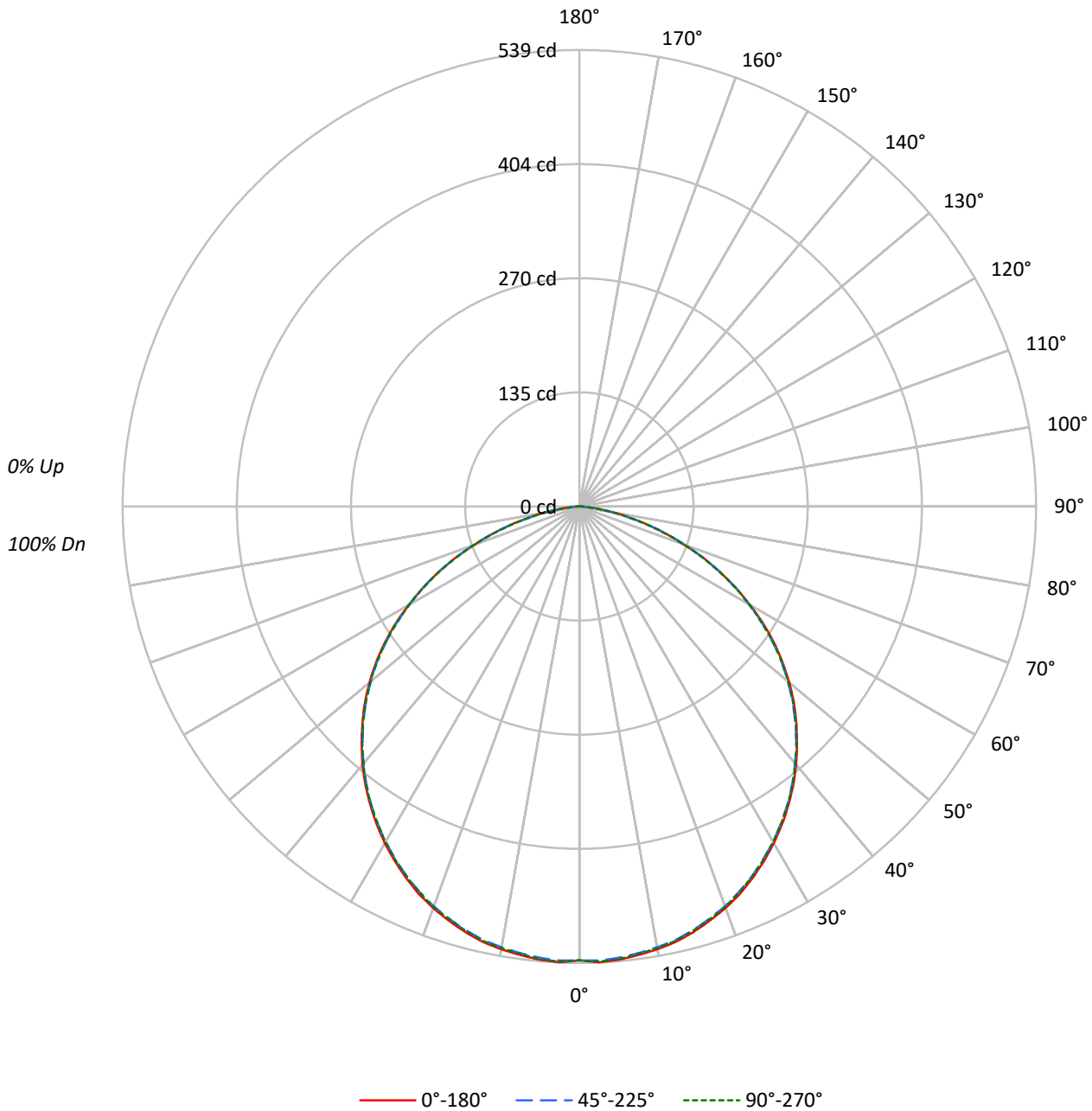
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1498.6 lumens
Efficiency: N/A
Efficacy: 101.3 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				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	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°	1442	1442	1442
5°	1451	1445	1449
10°	1451	1444	1447
15°	1450	1443	1445
20°	1445	1439	1441
25°	1437	1431	1432
30°	1427	1420	1421
35°	1414	1408	1409
40°	1399	1392	1393
45°	1378	1372	1374
50°	1354	1344	1347
55°	1316	1304	1309
60°	1251	1245	1245
65°	1168	1165	1161
70°	1034	1039	1036
75°	870	864	857
80°	626	615	611
85°	327	327	318

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1378 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.7	3.4
10°-20°	145.9	9.7
20°-30°	221.8	14.8
30°-40°	268.0	17.9
40°-50°	278.2	18.6
50°-60°	248.7	16.6
60°-70°	180.9	12.1
70°-80°	88.9	5.9
80°-90°	15.4	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°	418.4	27.9
0°-40°	686.5	45.8
0°-60°	1213.4	81.0
0°-90°	1498.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1498.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	536	536	536	536	536	
5°	537	531	535	533	537	51
15°	520	514	518	517	519	147
25°	484	479	482	481	482	223
35°	430	427	429	429	429	269
45°	362	360	360	361	361	279
55°	280	279	278	279	279	250
65°	183	184	183	183	182	181
75°	84	84	83	83	82	89
85°	11	11	11	11	10	15
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	535.9	535.9	535.9	535.9	535.9
2.5°	538.9	532.6	536.6	534.2	537.9
5°	537.2	530.9	534.9	532.9	536.6
7.5°	534.2	528.0	531.9	529.9	532.9
10°	530.9	524.3	528.6	526.6	529.6
12.5°	526.6	520.3	524.3	522.7	525.3
15°	520.3	514.4	518.0	516.7	518.7
17.5°	512.7	506.8	510.4	509.4	511.1
20°	504.5	498.8	502.5	501.5	503.1
22.5°	495.2	489.2	492.5	491.9	493.2
25°	483.9	478.6	481.9	481.0	482.3
27.5°	472.0	467.0	469.7	469.7	470.4
30°	459.1	454.5	457.1	457.1	457.4
32.5°	445.2	441.6	443.2	443.5	443.5
35°	430.3	427.3	428.7	429.0	429.0
37.5°	414.7	411.8	412.8	413.4	413.4
40°	398.2	395.6	396.2	396.9	396.5
42.5°	380.3	378.3	378.7	379.3	379.3
45°	362.1	360.5	360.5	361.1	361.1
47.5°	343.6	341.9	341.3	341.9	341.9
50°	323.4	321.7	321.1	321.7	321.7
52.5°	302.2	300.6	300.6	300.6	300.9
55°	280.4	278.7	278.0	278.7	279.0
57.5°	257.2	256.5	255.5	255.9	254.9
60°	232.4	232.4	231.4	232.0	231.4
62.5°	208.2	208.9	207.9	207.9	207.2
65°	183.4	184.0	183.0	183.0	182.4
67.5°	157.9	158.9	157.6	157.6	156.9
70°	131.4	133.4	132.1	132.4	131.7
72.5°	107.6	108.6	107.2	107.2	106.6
75°	83.7	84.4	83.1	83.4	82.4
77.5°	60.2	61.2	59.9	60.2	59.9
80°	40.4	40.7	39.7	40.1	39.4
82.5°	23.5	23.8	23.5	23.2	22.8
85°	10.6	10.9	10.6	10.6	10.3
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)