

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: P973676

Luminaire Tested: FLR2-22-45-L850-CP187

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973676
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: FLR2-22-45-L850-CP187
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

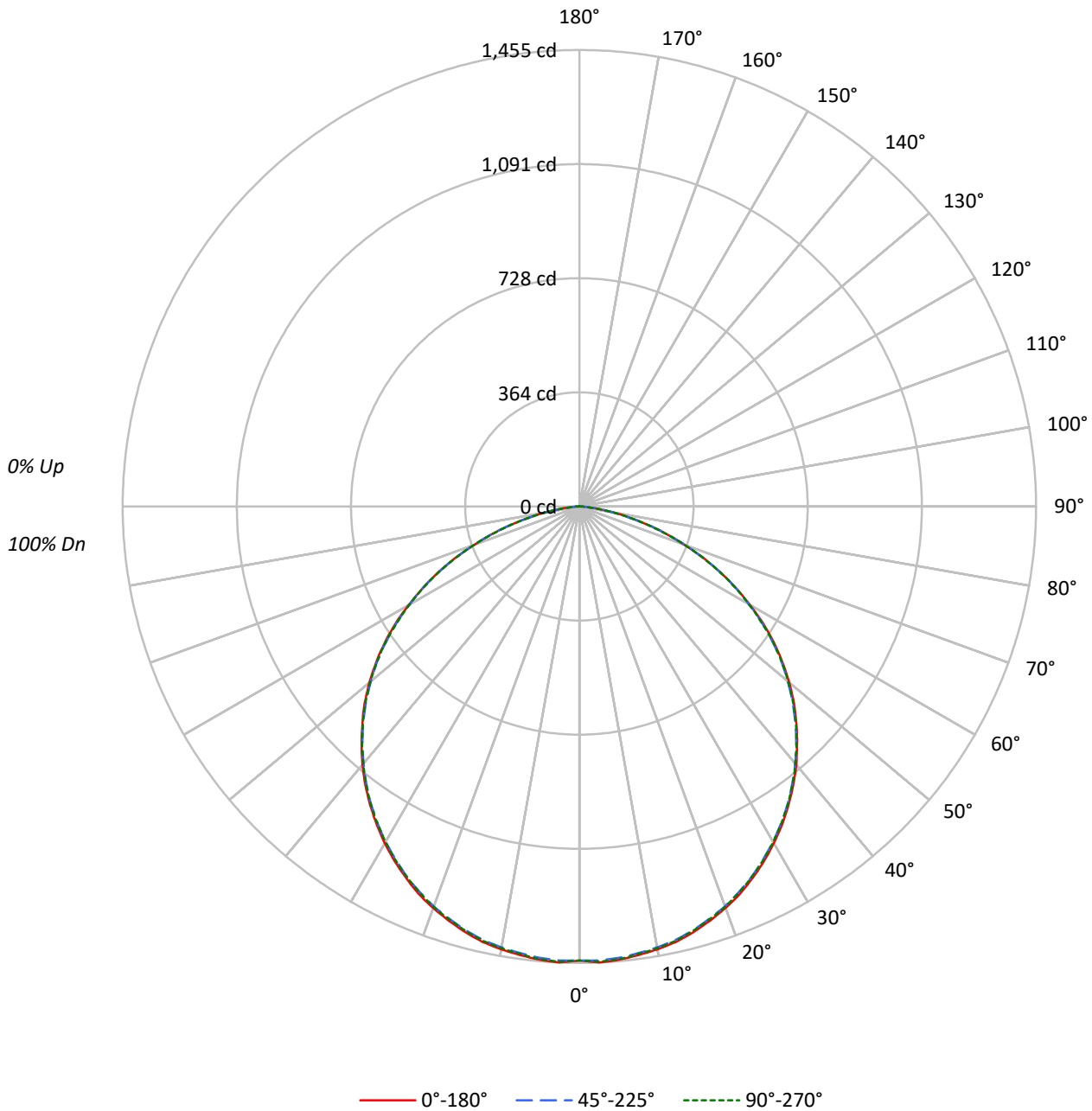
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4046.6 lumens
Efficiency: N/A
Efficacy: 112.1 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): 36.1
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																				
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°	3894	3894	3894
5°	3918	3901	3914
10°	3917	3900	3907
15°	3914	3897	3902
20°	3901	3885	3890
25°	3880	3864	3866
30°	3852	3835	3838
35°	3817	3802	3805
40°	3777	3758	3761
45°	3721	3704	3711
50°	3656	3630	3637
55°	3552	3522	3535
60°	3377	3362	3362
65°	3152	3147	3136
70°	2792	2806	2799
75°	2351	2332	2313
80°	1689	1663	1649
85°	883	883	855

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3721 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.0	3.4
10°-20°	394.0	9.7
20°-30°	598.8	14.8
30°-40°	723.8	17.9
40°-50°	751.2	18.6
50°-60°	671.6	16.6
60°-70°	488.3	12.1
70°-80°	240.1	5.9
80°-90°	41.7	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°	1129.9	27.9
0°-40°	1853.6	45.8
0°-60°	3276.5	81.0
0°-90°	4046.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4046.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1447	1447	1447	1447	1447	
5°	1451	1434	1444	1439	1449	138
15°	1405	1389	1399	1395	1400	396
25°	1307	1292	1301	1299	1302	602
35°	1162	1154	1157	1158	1158	727
45°	978	973	973	975	975	754
55°	757	753	751	753	753	675
65°	495	497	494	494	492	488
75°	226	228	224	225	222	240
85°	29	30	29	29	28	42
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1447.0	1447.0	1447.0	1447.0	1447.0
2.5°	1455.1	1438.1	1448.8	1442.5	1452.4
5°	1450.6	1433.6	1444.3	1439.0	1448.8
7.5°	1442.5	1425.6	1436.3	1430.9	1439.0
10°	1433.6	1415.7	1427.3	1422.0	1430.0
12.5°	1422.0	1405.0	1415.7	1411.3	1418.4
15°	1405.0	1388.9	1398.7	1395.2	1400.5
17.5°	1384.4	1368.4	1378.2	1375.5	1380.0
20°	1362.1	1346.9	1356.7	1354.1	1358.5
22.5°	1337.1	1321.0	1329.9	1328.1	1331.7
25°	1306.7	1292.4	1301.3	1298.6	1302.2
27.5°	1274.5	1261.1	1268.3	1268.3	1270.0
30°	1239.7	1227.1	1234.3	1234.3	1235.2
32.5°	1202.1	1192.3	1196.8	1197.6	1197.6
35°	1161.9	1153.9	1157.4	1158.3	1158.3
37.5°	1119.9	1111.8	1114.5	1116.3	1116.3
40°	1075.2	1068.1	1069.8	1071.6	1070.7
42.5°	1026.9	1021.6	1022.5	1024.3	1024.3
45°	977.8	973.3	973.3	975.1	975.1
47.5°	927.7	923.3	921.5	923.3	923.3
50°	873.2	868.7	867.0	868.7	868.7
52.5°	816.0	811.5	811.5	811.5	812.4
55°	757.0	752.6	750.8	752.6	753.4
57.5°	694.5	692.7	690.0	690.9	688.2
60°	627.4	627.4	624.7	626.5	624.7
62.5°	562.2	564.0	561.3	561.3	559.5
65°	495.1	496.9	494.3	494.3	492.5
67.5°	426.3	429.0	425.4	425.4	423.6
70°	354.8	360.2	356.6	357.5	355.7
72.5°	290.5	293.2	289.6	289.6	287.8
75°	226.1	227.9	224.3	225.2	222.5
77.5°	162.7	165.3	161.8	162.7	161.8
80°	109.0	109.9	107.3	108.1	106.4
82.5°	63.5	64.4	63.5	62.6	61.7
85°	28.6	29.5	28.6	28.6	27.7
87.5°	7.2	7.2	7.2	7.2	7.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)