

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: P974117

Luminaire Tested: FLR2-24-45-L930-CP080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974117
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-3)
Test Lab: INNOVATION CENTER
Issue Date: 3/13/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: FAIL-SAFE
Catalog Number: FLR2-24-45-L930-CP080
Description: SHAPER SENSE CIRCLE

Light Source: FLR2-24-45-L930-CP080
Ballast/Driver: -

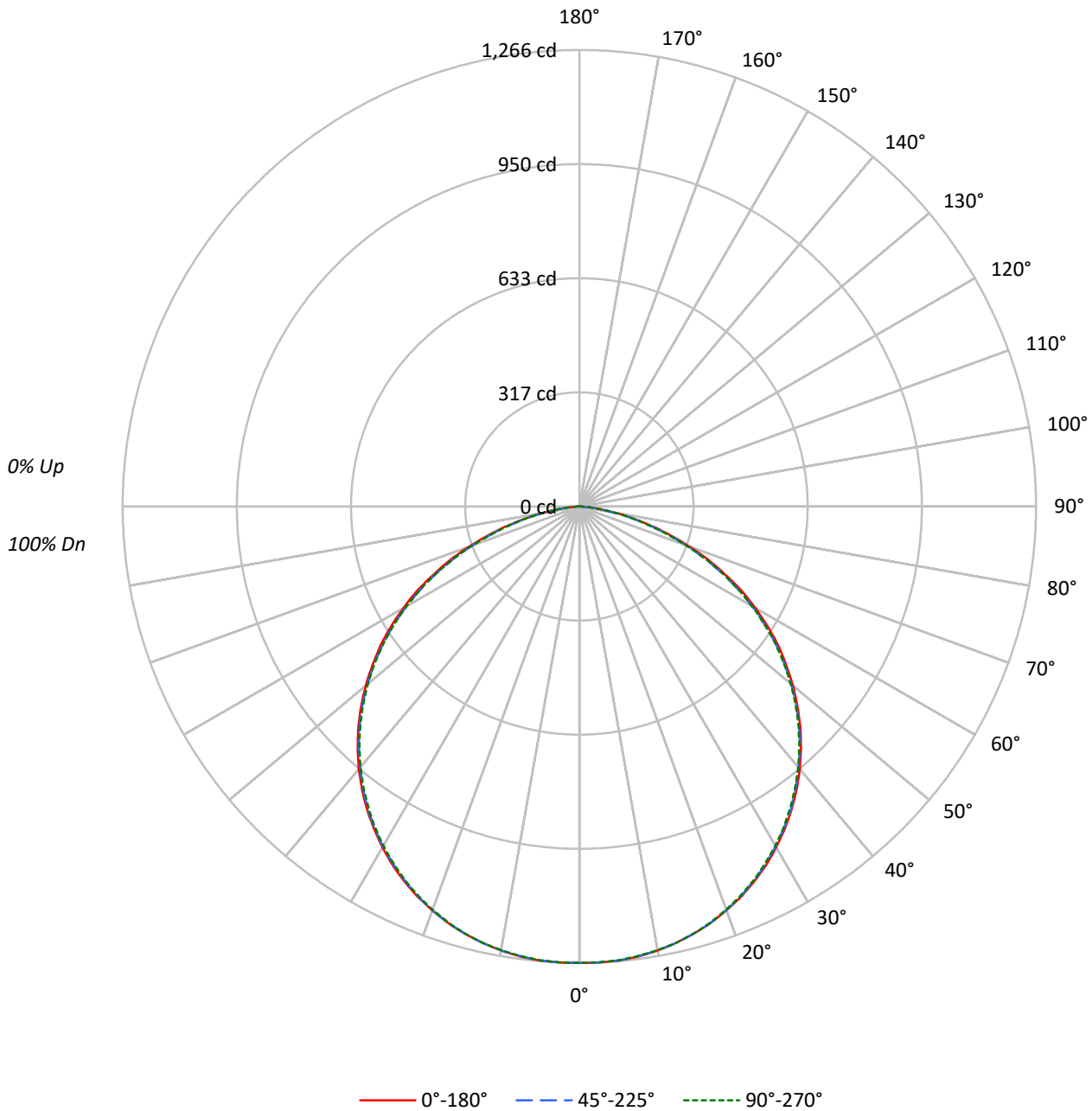
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3578.6 lumens
Efficiency: N/A
Efficacy: 100.5 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35.6
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	
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	105	100	97	106	102	99	95	98	95	92	94	92	89	91	89	87	85
2	99	91	85	79	97	89	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	62	56	81	70	62	55	67	60	55	65	59	54	63	57	53	51
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	38
7	65	52	43	37	64	51	43	37	49	42	37	48	41	36	47	41	36	34
8	61	47	39	33	59	47	38	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	39	33	29	27
10	53	40	32	27	52	39	32	27	38	31	27	38	31	26	37	31	26	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1704	1704	1704
5°	1707	1707	1706
10°	1708	1708	1707
15°	1709	1708	1708
20°	1707	1706	1704
25°	1704	1700	1698
30°	1696	1691	1688
35°	1685	1680	1675
40°	1670	1660	1657
45°	1649	1639	1634
50°	1618	1605	1600
55°	1579	1557	1555
60°	1513	1487	1487
65°	1416	1383	1387
70°	1274	1235	1231
75°	1070	1027	1023
80°	782	743	775
85°	442	408	414

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1649 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.2	3.4
10°-20°	346.2	9.7
20°-30°	527.9	14.8
30°-40°	639.6	17.9
40°-50°	664.4	18.6
50°-60°	594.3	16.6
60°-70°	433.2	12.1
70°-80°	214.5	6.0
80°-90°	38.3	1.1
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°	994.3	27.8
0°-40°	1633.9	45.7
0°-60°	2892.6	80.8
0°-90°	3578.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3578.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1266	1266	1266	1266	1266	
5°	1264	1264	1264	1264	1263	120
15°	1227	1226	1226	1227	1226	346
25°	1148	1146	1145	1145	1144	529
35°	1026	1024	1023	1021	1020	642
45°	866	865	861	860	859	668
55°	673	668	664	664	663	600
65°	445	441	434	436	436	441
75°	206	203	198	201	197	219
85°	29	26	26	27	27	40
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1266.2	1266.2	1266.2	1266.2	1266.2
2.5°	1266.2	1265.7	1265.7	1266.2	1265.3
5°	1263.9	1264.4	1263.9	1263.9	1263.0
7.5°	1258.9	1258.5	1258.0	1258.5	1257.1
10°	1250.3	1250.3	1249.8	1250.3	1249.4
12.5°	1239.8	1239.8	1239.8	1240.3	1239.8
15°	1226.7	1226.2	1226.2	1227.1	1226.2
17.5°	1211.2	1210.8	1210.8	1210.3	1209.4
20°	1192.1	1192.1	1191.7	1191.2	1189.9
22.5°	1171.7	1171.2	1169.9	1169.9	1168.1
25°	1147.6	1146.2	1145.3	1144.9	1143.5
27.5°	1121.3	1119.4	1118.1	1117.2	1115.8
30°	1091.7	1089.9	1088.5	1087.2	1086.3
32.5°	1059.9	1059.0	1056.7	1056.3	1054.5
35°	1025.9	1024.5	1023.1	1021.3	1019.5
37.5°	989.5	988.1	985.0	984.1	982.7
40°	950.9	949.1	945.0	945.0	943.6
42.5°	909.5	907.7	905.0	903.2	902.3
45°	866.4	864.6	861.4	859.6	858.7
47.5°	820.5	819.1	815.5	814.1	812.8
50°	772.8	771.0	766.9	766.0	764.6
52.5°	722.8	721.9	716.5	716.0	714.6
55°	673.3	668.3	663.8	663.8	662.9
57.5°	618.8	615.1	609.2	609.2	608.3
60°	562.4	559.3	552.5	553.4	552.5
62.5°	507.5	500.7	494.3	497.0	494.8
65°	444.8	441.1	434.3	436.1	435.7
67.5°	387.5	380.7	374.4	378.0	376.2
70°	323.9	320.3	313.9	317.6	313.0
72.5°	264.0	260.8	254.4	258.5	254.0
75°	205.8	202.6	197.6	201.3	196.7
77.5°	150.8	148.6	144.0	147.7	148.6
80°	100.9	98.1	95.9	99.0	100.0
82.5°	59.1	57.2	56.3	56.8	59.1
85°	28.6	26.4	26.4	26.8	26.8
87.5°	7.7	6.8	7.7	8.2	8.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)