

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: P973648

Luminaire Tested: FLR2-22-45-L940-CP187

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973648
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-L940-CP187
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

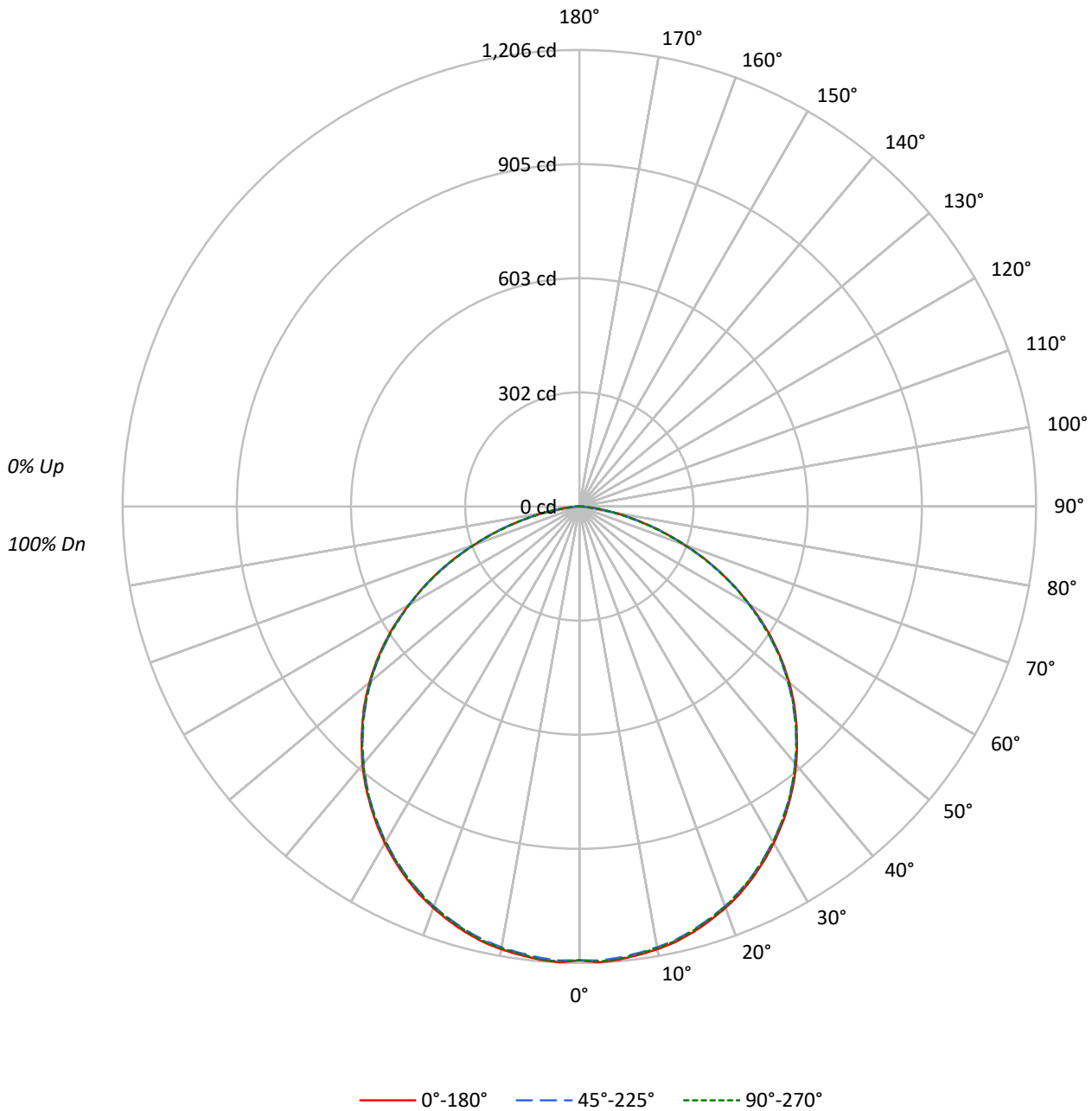
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3352.9 lumens
Efficiency: N/A
Efficacy: 92.9 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					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°	3226	3226	3226
5°	3247	3233	3243
10°	3246	3232	3238
15°	3243	3229	3233
20°	3232	3219	3223
25°	3215	3201	3204
30°	3191	3178	3180
35°	3163	3150	3153
40°	3130	3114	3117
45°	3083	3069	3075
50°	3029	3007	3013
55°	2943	2919	2929
60°	2798	2786	2786
65°	2613	2607	2598
70°	2313	2325	2319
75°	1948	1933	1917
80°	1399	1378	1365
85°	732	732	710

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3083 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.5	3.4
10°-20°	326.5	9.7
20°-30°	496.1	14.8
30°-40°	599.7	17.9
40°-50°	622.5	18.6
50°-60°	556.5	16.6
60°-70°	404.6	12.1
70°-80°	199.0	5.9
80°-90°	34.5	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°	936.2	27.9
0°-40°	1535.9	45.8
0°-60°	2714.8	81.0
0°-90°	3352.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3352.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1199	1199	1199	1199	1199	
5°	1202	1188	1197	1192	1200	114
15°	1164	1151	1159	1156	1160	328
25°	1083	1071	1078	1076	1079	499
35°	963	956	959	960	960	602
45°	810	806	806	808	808	625
55°	627	624	622	624	624	559
65°	410	412	410	410	408	405
75°	187	189	186	187	184	199
85°	24	24	24	24	23	35
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1198.9	1198.9	1198.9	1198.9	1198.9
2.5°	1205.6	1191.5	1200.4	1195.2	1203.4
5°	1201.9	1187.8	1196.7	1192.3	1200.4
7.5°	1195.2	1181.2	1190.1	1185.6	1192.3
10°	1187.8	1173.0	1182.7	1178.2	1184.9
12.5°	1178.2	1164.1	1173.0	1169.3	1175.3
15°	1164.1	1150.8	1159.0	1156.0	1160.4
17.5°	1147.1	1133.8	1141.9	1139.7	1143.4
20°	1128.6	1116.0	1124.2	1121.9	1125.6
22.5°	1107.9	1094.5	1101.9	1100.5	1103.4
25°	1082.7	1070.8	1078.2	1076.0	1079.0
27.5°	1056.0	1044.9	1050.8	1050.8	1052.3
30°	1027.1	1016.8	1022.7	1022.7	1023.4
32.5°	996.0	987.9	991.6	992.3	992.3
35°	962.7	956.0	959.0	959.8	959.8
37.5°	927.9	921.2	923.5	924.9	924.9
40°	890.9	885.0	886.4	887.9	887.2
42.5°	850.9	846.4	847.2	848.7	848.7
45°	810.2	806.5	806.5	807.9	807.9
47.5°	768.7	765.0	763.5	765.0	765.0
50°	723.5	719.8	718.3	719.8	719.8
52.5°	676.1	672.4	672.4	672.4	673.2
55°	627.2	623.5	622.1	623.5	624.3
57.5°	575.4	573.9	571.7	572.4	570.2
60°	519.9	519.9	517.6	519.1	517.6
62.5°	465.8	467.3	465.1	465.1	463.6
65°	410.3	411.7	409.5	409.5	408.0
67.5°	353.2	355.5	352.5	352.5	351.0
70°	294.0	298.4	295.5	296.2	294.7
72.5°	240.7	242.9	239.9	239.9	238.5
75°	187.4	188.8	185.9	186.6	184.4
77.5°	134.8	137.0	134.0	134.8	134.0
80°	90.3	91.1	88.9	89.6	88.1
82.5°	52.6	53.3	52.6	51.8	51.1
85°	23.7	24.4	23.7	23.7	23.0
87.5°	5.9	5.9	5.9	5.9	5.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)