

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: P973778

Luminaire Tested: FLR2-22-45HE-L930-CP187

Issue Date: 3/13/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P973778  
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: FLR2-22-45HE-L930-CP187  
Description: SHAPER SENSE CIRCLE  
  
Light Source:  
Ballast/Driver: -

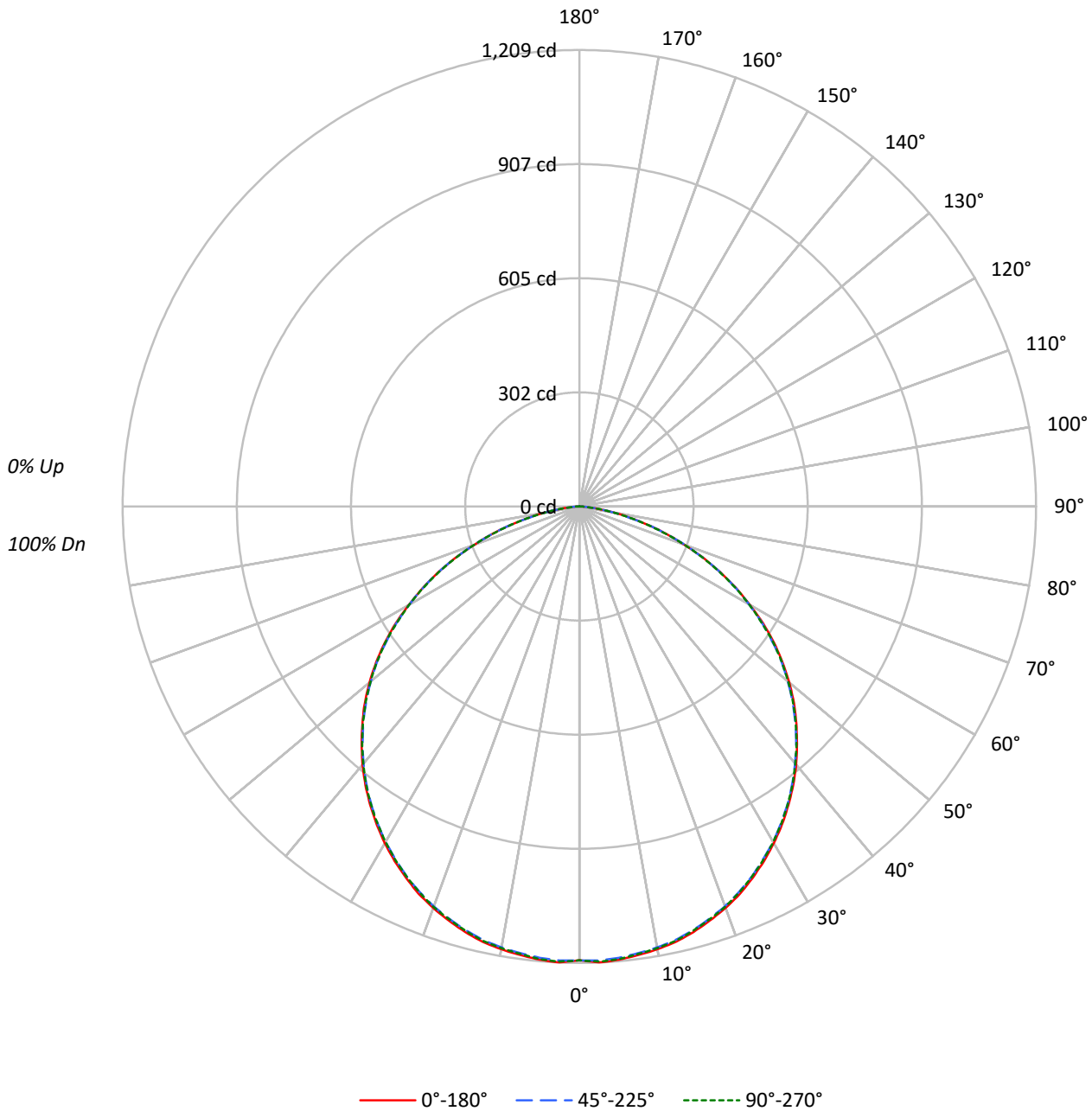
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3361.7 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): 36.2  
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°	3235	3235	3235
5°	3255	3241	3251
10°	3254	3240	3246
15°	3252	3237	3241
20°	3241	3228	3232
25°	3223	3210	3212
30°	3200	3186	3188
35°	3171	3159	3161
40°	3138	3122	3125
45°	3091	3077	3083
50°	3037	3015	3021
55°	2951	2926	2936
60°	2805	2793	2793
65°	2619	2614	2605
70°	2319	2331	2325
75°	1954	1938	1922
80°	1404	1381	1370
85°	735	735	710

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 3091 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	113.8	3.4
10°-20°	327.4	9.7
20°-30°	497.5	14.8
30°-40°	601.3	17.9
40°-50°	624.1	18.6
50°-60°	558.0	16.6
60°-70°	405.7	12.1
70°-80°	199.5	5.9
80°-90°	34.6	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°	938.6	27.9
0°-40°	1539.9	45.8
0°-60°	2722.0	81.0
0°-90°	3361.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3361.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1202	1202	1202	1202	1202	
5°	1205	1191	1200	1195	1204	115
15°	1167	1154	1162	1159	1164	329
25°	1086	1074	1081	1079	1082	500
35°	965	959	962	962	962	604
45°	812	809	809	810	810	627
55°	629	625	624	625	626	561
65°	411	413	411	411	409	406
75°	188	189	186	187	185	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°	1202.1	1202.1	1202.1	1202.1	1202.1
2.5°	1208.8	1194.7	1203.6	1198.4	1206.6
5°	1205.1	1191.0	1199.9	1195.4	1203.6
7.5°	1198.4	1184.3	1193.2	1188.8	1195.4
10°	1191.0	1176.1	1185.8	1181.3	1188.0
12.5°	1181.3	1167.2	1176.1	1172.4	1178.4
15°	1167.2	1153.9	1162.0	1159.1	1163.5
17.5°	1150.1	1136.8	1144.9	1142.7	1146.4
20°	1131.6	1119.0	1127.1	1124.9	1128.6
22.5°	1110.8	1097.4	1104.9	1103.4	1106.3
25°	1085.5	1073.7	1081.1	1078.9	1081.8
27.5°	1058.8	1047.7	1053.6	1053.6	1055.1
30°	1029.9	1019.5	1025.4	1025.4	1026.1
32.5°	998.7	990.5	994.2	995.0	995.0
35°	965.3	958.6	961.5	962.3	962.3
37.5°	930.4	923.7	925.9	927.4	927.4
40°	893.2	887.3	888.8	890.3	889.5
42.5°	853.1	848.7	849.4	850.9	850.9
45°	812.3	808.6	808.6	810.1	810.1
47.5°	770.7	767.0	765.5	767.0	767.0
50°	725.4	721.7	720.2	721.7	721.7
52.5°	677.9	674.2	674.2	674.2	674.9
55°	628.9	625.2	623.7	625.2	625.9
57.5°	576.9	575.4	573.2	574.0	571.7
60°	521.2	521.2	519.0	520.5	519.0
62.5°	467.0	468.5	466.3	466.3	464.8
65°	411.3	412.8	410.6	410.6	409.1
67.5°	354.2	356.4	353.4	353.4	351.9
70°	294.8	299.2	296.3	297.0	295.5
72.5°	241.3	243.5	240.6	240.6	239.1
75°	187.9	189.3	186.4	187.1	184.9
77.5°	135.1	137.4	134.4	135.1	134.4
80°	90.6	91.3	89.1	89.8	88.4
82.5°	52.7	53.5	52.7	52.0	51.2
85°	23.8	24.5	23.8	23.8	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)