

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: P973723

Luminaire Tested: FLR2-22-35HE-L830-CP080

Issue Date: 3/13/2025

**Test Information**

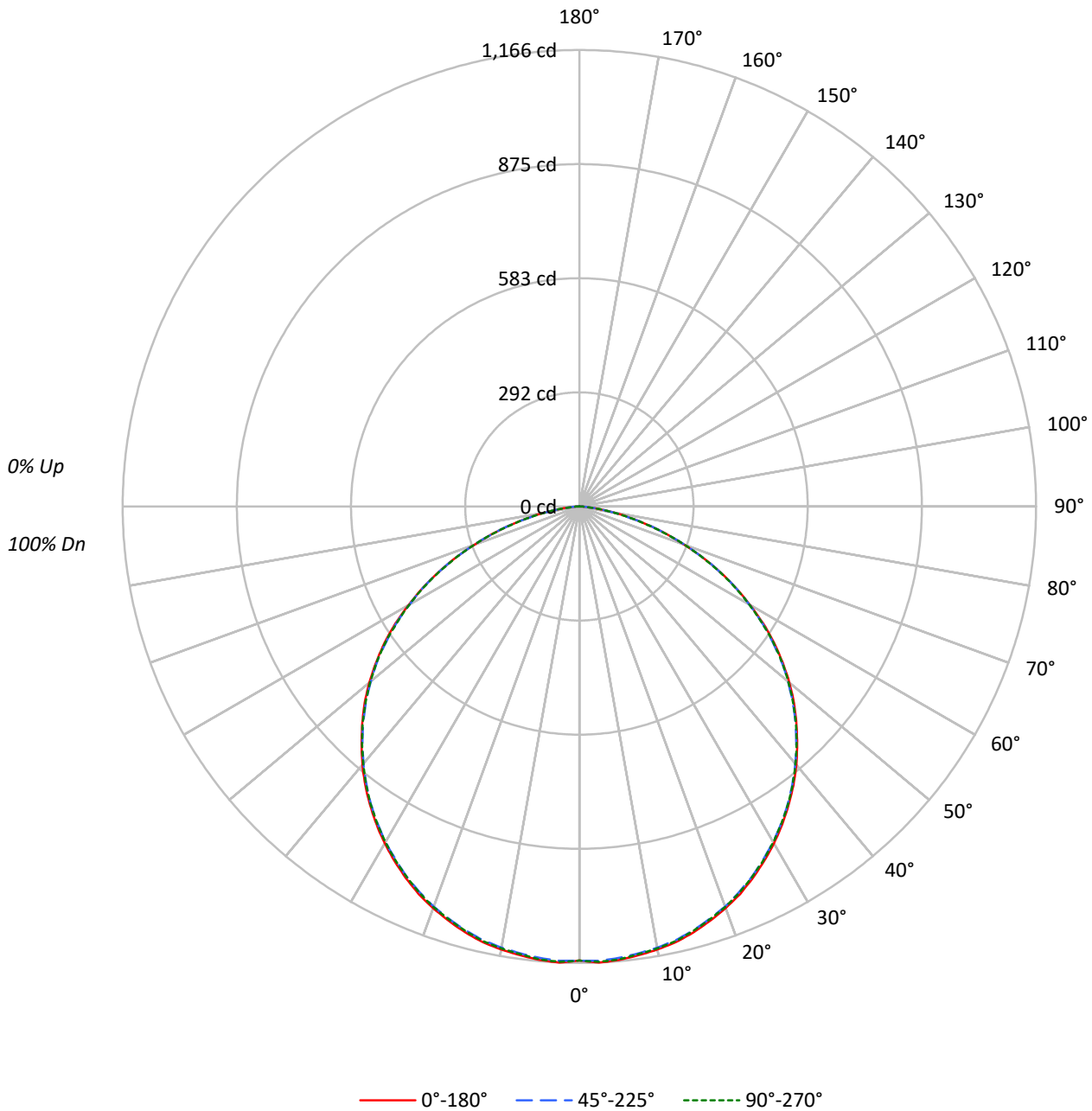
Test Method: LM-79-2019  
Report Number: P973723  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/13/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: FAIL-SAFE  
Catalog Number: FLR2-22-35HE-L830-CP080  
Description: SHAPER SENSE CIRCLE  
  
Light Source:  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3243.9 lumens  
Efficiency: N/A  
Efficacy: 119.3 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): 27.2  
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°	3122	3122	3122
5°	3141	3128	3137
10°	3140	3127	3133
15°	3138	3124	3128
20°	3127	3115	3119
25°	3110	3097	3100
30°	3088	3075	3077
35°	3060	3048	3051
40°	3028	3013	3015
45°	2983	2969	2975
50°	2930	2910	2915
55°	2847	2823	2834
60°	2707	2695	2695
65°	2527	2523	2514
70°	2238	2249	2244
75°	1885	1869	1855
80°	1354	1333	1322
85°	707	707	685

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2983 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	109.8	3.4
10°-20°	315.9	9.7
20°-30°	480.0	14.8
30°-40°	580.2	17.9
40°-50°	602.2	18.6
50°-60°	538.4	16.6
60°-70°	391.5	12.1
70°-80°	192.5	5.9
80°-90°	33.4	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°	905.7	27.9
0°-40°	1486.0	45.8
0°-60°	2626.6	81.0
0°-90°	3243.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3243.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1160	1160	1160	1160	1160	
5°	1163	1149	1158	1154	1161	111
15°	1126	1113	1121	1118	1123	318
25°	1048	1036	1043	1041	1044	483
35°	931	925	928	929	929	583
45°	784	780	780	782	782	605
55°	607	603	602	603	604	541
65°	397	398	396	396	395	391
75°	181	183	180	181	178	192
85°	23	24	23	23	22	33
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1160.0	1160.0	1160.0	1160.0	1160.0
2.5°	1166.4	1152.8	1161.4	1156.4	1164.3
5°	1162.9	1149.2	1157.8	1153.5	1161.4
7.5°	1156.4	1142.8	1151.4	1147.1	1153.5
10°	1149.2	1134.9	1144.2	1139.9	1146.4
12.5°	1139.9	1126.3	1134.9	1131.3	1137.1
15°	1126.3	1113.4	1121.3	1118.4	1122.7
17.5°	1109.8	1096.9	1104.8	1102.7	1106.2
20°	1091.9	1079.7	1087.6	1085.5	1089.1
22.5°	1071.9	1059.0	1066.1	1064.7	1067.6
25°	1047.5	1036.0	1043.2	1041.0	1043.9
27.5°	1021.7	1011.0	1016.7	1016.7	1018.1
30°	993.8	983.7	989.5	989.5	990.2
32.5°	963.7	955.8	959.4	960.1	960.1
35°	931.4	925.0	927.8	928.6	928.6
37.5°	897.8	891.3	893.5	894.9	894.9
40°	861.9	856.2	857.6	859.1	858.3
42.5°	823.2	818.9	819.7	821.1	821.1
45°	783.8	780.2	780.2	781.7	781.7
47.5°	743.7	740.1	738.7	740.1	740.1
50°	700.0	696.4	695.0	696.4	696.4
52.5°	654.1	650.6	650.6	650.6	651.3
55°	606.9	603.3	601.8	603.3	604.0
57.5°	556.7	555.3	553.1	553.8	551.7
60°	503.0	503.0	500.8	502.3	500.8
62.5°	450.7	452.1	450.0	450.0	448.5
65°	396.9	398.4	396.2	396.2	394.8
67.5°	341.8	343.9	341.0	341.0	339.6
70°	284.4	288.7	285.9	286.6	285.2
72.5°	232.9	235.0	232.1	232.1	230.7
75°	181.3	182.7	179.8	180.6	178.4
77.5°	130.4	132.5	129.7	130.4	129.7
80°	87.4	88.1	86.0	86.7	85.3
82.5°	50.9	51.6	50.9	50.2	49.4
85°	22.9	23.6	22.9	22.9	22.2
87.5°	5.7	5.7	5.7	5.7	5.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)