

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: P973766

Luminaire Tested: FLR2-22-45HE-L930-CP080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973766
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-CP080
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

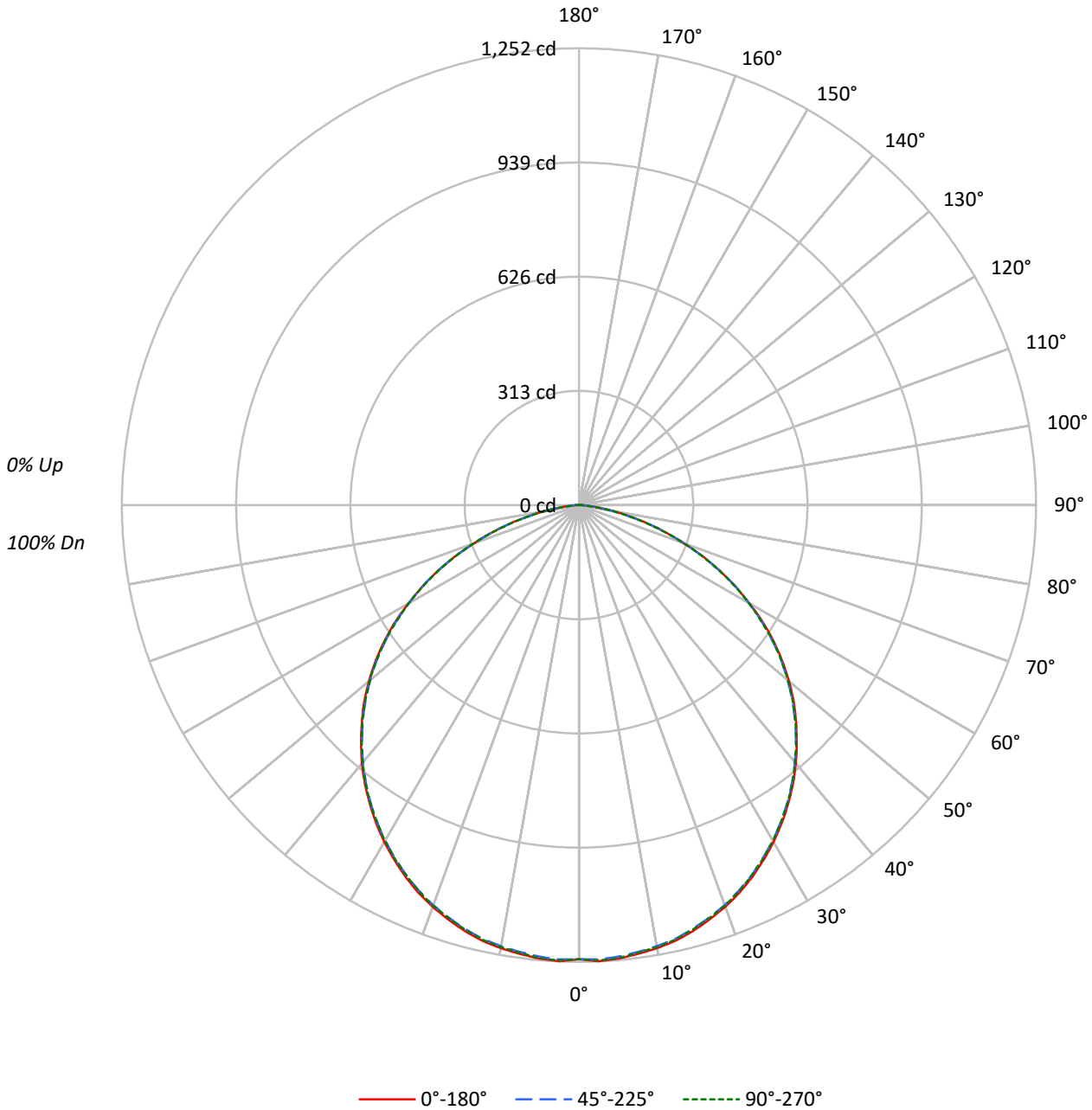
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3480.8 lumens
Efficiency: N/A
Efficacy: 96.2 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°	3349	3349	3349
5°	3371	3356	3366
10°	3370	3355	3361
15°	3367	3352	3356
20°	3355	3342	3346
25°	3337	3324	3326
30°	3313	3299	3301
35°	3283	3271	3273
40°	3249	3233	3235
45°	3201	3186	3192
50°	3144	3122	3129
55°	3055	3030	3041
60°	2905	2892	2892
65°	2712	2707	2697
70°	2401	2414	2408
75°	2022	2007	1990
80°	1454	1430	1418
85°	760	760	735

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3201 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.9	3.4
10°-20°	338.9	9.7
20°-30°	515.1	14.8
30°-40°	622.6	17.9
40°-50°	646.2	18.6
50°-60°	577.7	16.6
60°-70°	420.0	12.1
70°-80°	206.6	5.9
80°-90°	35.8	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°	971.9	27.9
0°-40°	1594.5	45.8
0°-60°	2818.4	81.0
0°-90°	3480.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3480.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1245	1245	1245	1245	1245	
5°	1248	1233	1242	1238	1246	119
15°	1209	1195	1203	1200	1205	341
25°	1124	1112	1119	1117	1120	518
35°	999	992	996	996	996	625
45°	841	837	837	839	839	649
55°	651	647	646	647	648	580
65°	426	428	425	425	424	420
75°	194	196	193	194	191	206
85°	25	25	25	25	24	36
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1244.7	1244.7	1244.7	1244.7	1244.7
2.5°	1251.6	1237.0	1246.2	1240.8	1249.3
5°	1247.8	1233.2	1242.4	1237.8	1246.2
7.5°	1240.8	1226.2	1235.5	1230.9	1237.8
10°	1233.2	1217.8	1227.8	1223.2	1230.1
12.5°	1223.2	1208.6	1217.8	1213.9	1220.1
15°	1208.6	1194.7	1203.2	1200.1	1204.7
17.5°	1190.9	1177.0	1185.5	1183.2	1187.0
20°	1171.7	1158.6	1167.0	1164.7	1168.6
22.5°	1150.1	1136.3	1144.0	1142.4	1145.5
25°	1124.0	1111.7	1119.4	1117.1	1120.1
27.5°	1096.3	1084.8	1090.9	1090.9	1092.5
30°	1066.3	1055.6	1061.7	1061.7	1062.5
32.5°	1034.0	1025.6	1029.4	1030.2	1030.2
35°	999.4	992.5	995.6	996.4	996.4
37.5°	963.3	956.4	958.7	960.2	960.2
40°	924.9	918.7	920.3	921.8	921.0
42.5°	883.4	878.7	879.5	881.0	881.0
45°	841.1	837.2	837.2	838.8	838.8
47.5°	798.0	794.2	792.6	794.2	794.2
50°	751.1	747.3	745.7	747.3	747.3
52.5°	701.9	698.1	698.1	698.1	698.8
55°	651.2	647.3	645.8	647.3	648.1
57.5°	597.4	595.8	593.5	594.3	592.0
60°	539.7	539.7	537.4	538.9	537.4
62.5°	483.6	485.1	482.8	482.8	481.3
65°	425.9	427.5	425.1	425.1	423.6
67.5°	366.7	369.0	366.0	366.0	364.4
70°	305.2	309.8	306.8	307.5	306.0
72.5°	249.9	252.2	249.1	249.1	247.6
75°	194.5	196.0	193.0	193.7	191.4
77.5°	139.9	142.2	139.2	139.9	139.2
80°	93.8	94.6	92.3	93.0	91.5
82.5°	54.6	55.4	54.6	53.8	53.0
85°	24.6	25.4	24.6	24.6	23.8
87.5°	6.2	6.2	6.2	6.2	6.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)