

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: P974619

Luminaire Tested: FLR2-24-45HE-L930-CP250

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974619
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: FLR2-24-45HE-L930-CP250
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

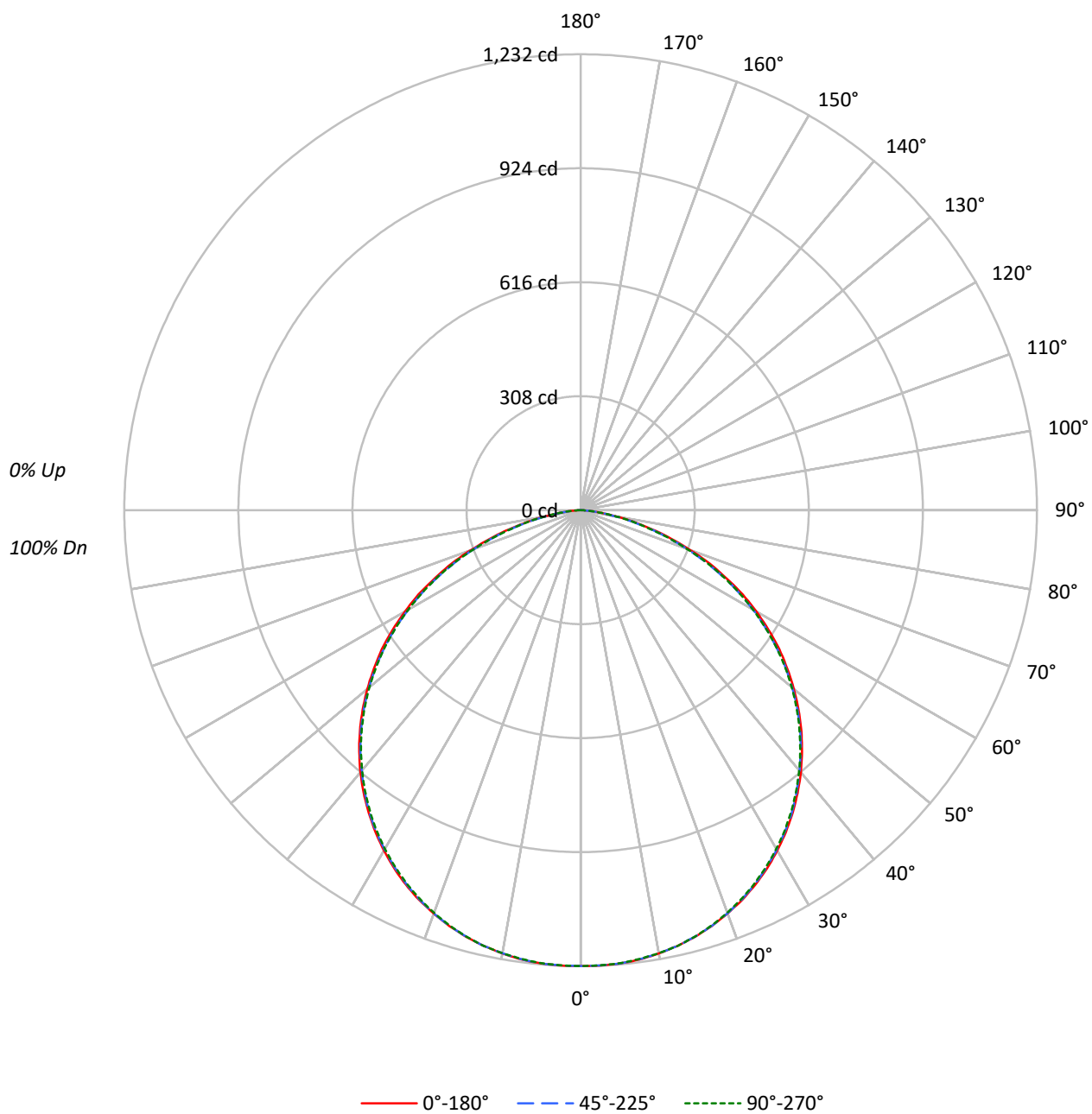
Lumens per Lamp: N/A
Luminaire Lumens: 3481.5 lumens
Efficiency: N/A
Efficacy: 100.3 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 34.7
Input Voltage (V):
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

TEST NUMBER: P974619

CATALOG NUMBER: FLR2-24-45HE-L930-CP250

Luminous Intensity Polar Plot



TEST NUMBER: P974619

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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	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	100	97	106	102	99	95	98	95	92	94	92	89	91	89	87	85		85
2	99	91	85	79	97	89	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	62	56	81	70	62	55	67	60	55	65	59	54	63	57	53	51		51
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44		44
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	38		38
7	65	52	43	37	64	51	43	37	49	42	37	48	41	36	47	41	36	34		34
8	61	47	39	33	59	47	38	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	39	33	29	27		27
10	53	40	32	27	52	39	32	27	38	31	27	38	31	26	37	31	26	25		25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1657	1657	1657
5°	1661	1661	1660
10°	1662	1661	1661
15°	1662	1662	1662
20°	1661	1660	1657
25°	1658	1654	1652
30°	1650	1645	1642
35°	1639	1635	1629
40°	1625	1615	1612
45°	1604	1595	1590
50°	1574	1562	1557
55°	1536	1515	1513
60°	1473	1446	1446
65°	1378	1345	1350
70°	1240	1201	1198
75°	1041	1000	995
80°	760	723	753
85°	429	395	403

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1604 cd/sqm

TEST NUMBER: P974619

CATALOG NUMBER: FLR2-24-45HE-L930-CP250

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.9	3.4
10°-20°	336.8	9.7
20°-30°	513.6	14.8
30°-40°	622.2	17.9
40°-50°	646.3	18.6
50°-60°	578.2	16.6
60°-70°	421.4	12.1
70°-80°	208.7	6.0
80°-90°	37.3	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°	967.3	27.8
0°-40°	1589.6	45.7
0°-60°	2814.1	80.8
0°-90°	3481.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3481.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1232	1232	1232	1232	1232	
5°	1230	1230	1230	1230	1229	117
15°	1193	1193	1193	1194	1193	337
25°	1116	1115	1114	1114	1112	515
35°	998	997	995	994	992	624
45°	843	841	838	836	835	650
55°	655	650	646	646	645	584
65°	433	429	422	424	424	429
75°	200	197	192	196	191	213
85°	28	26	26	26	26	39
90°	0	0	0	0	0	

TEST NUMBER: P974619

CATALOG NUMBER: FLR2-24-45HE-L930-CP250

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1231.8	1231.8	1231.8	1231.8	1231.8
2.5°	1231.8	1231.4	1231.4	1231.8	1230.9
5°	1229.6	1230.0	1229.6	1229.6	1228.7
7.5°	1224.7	1224.3	1223.9	1224.3	1223.0
10°	1216.3	1216.3	1215.9	1216.3	1215.5
12.5°	1206.2	1206.2	1206.2	1206.6	1206.2
15°	1193.4	1192.9	1192.9	1193.8	1192.9
17.5°	1178.3	1177.9	1177.9	1177.5	1176.6
20°	1159.8	1159.8	1159.3	1158.9	1157.6
22.5°	1139.9	1139.4	1138.1	1138.1	1136.3
25°	1116.5	1115.1	1114.2	1113.8	1112.5
27.5°	1090.8	1089.1	1087.7	1086.8	1085.5
30°	1062.1	1060.3	1059.0	1057.7	1056.8
32.5°	1031.2	1030.3	1028.1	1027.6	1025.8
35°	998.0	996.7	995.4	993.6	991.8
37.5°	962.6	961.3	958.2	957.3	956.0
40°	925.1	923.3	919.3	919.3	918.0
42.5°	884.9	883.1	880.4	878.7	877.8
45°	842.9	841.1	838.0	836.2	835.4
47.5°	798.2	796.9	793.4	792.0	790.7
50°	751.8	750.0	746.1	745.2	743.9
52.5°	703.2	702.3	697.0	696.6	695.2
55°	655.0	650.2	645.7	645.7	644.9
57.5°	602.0	598.4	592.7	592.7	591.8
60°	547.2	544.1	537.5	538.3	537.5
62.5°	493.7	487.1	480.9	483.5	481.3
65°	432.7	429.2	422.5	424.3	423.9
67.5°	377.0	370.4	364.2	367.7	366.0
70°	315.1	311.6	305.4	308.9	304.5
72.5°	256.8	253.7	247.5	251.5	247.1
75°	200.2	197.1	192.3	195.8	191.4
77.5°	146.7	144.5	140.1	143.6	144.5
80°	98.1	95.5	93.3	96.4	97.2
82.5°	57.5	55.7	54.8	55.2	57.5
85°	27.8	25.6	25.6	26.1	26.1
87.5°	7.5	6.6	7.5	8.0	8.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)