

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: P974740

Luminaire Tested: FLR2-24-45HE-L935-CP080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974740
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-L935-CP080
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

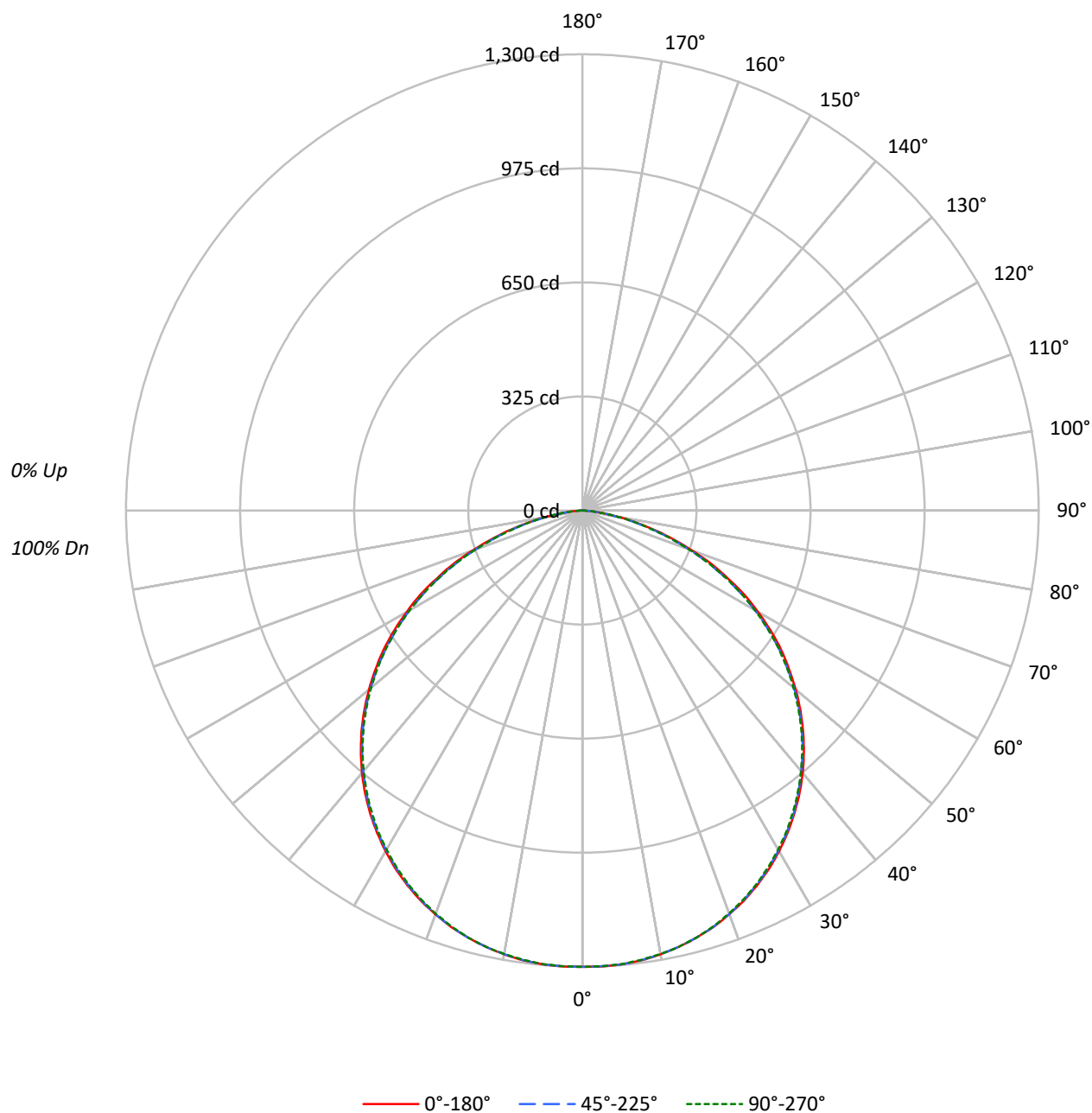
Lumens per Lamp: N/A
Luminaire Lumens: 3675.4 lumens
Efficiency: N/A
Efficacy: 105.9 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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: P974740

CATALOG NUMBER: FLR2-24-45HE-L935-CP080

Luminous Intensity Polar Plot



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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°	1750	1750	1750
5°	1753	1753	1752
10°	1754	1754	1753
15°	1755	1754	1754
20°	1753	1752	1750
25°	1750	1746	1743
30°	1742	1737	1733
35°	1731	1726	1720
40°	1715	1705	1702
45°	1693	1683	1678
50°	1661	1649	1644
55°	1622	1599	1597
60°	1554	1527	1527
65°	1454	1420	1425
70°	1309	1268	1265
75°	1099	1055	1050
80°	803	763	796
85°	454	418	425

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1693 cd/sqm

TEST NUMBER: P974740

CATALOG NUMBER: FLR2-24-45HE-L935-CP080

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.4	3.4
10°-20°	355.6	9.7
20°-30°	542.2	14.8
30°-40°	656.9	17.9
40°-50°	682.3	18.6
50°-60°	610.4	16.6
60°-70°	444.9	12.1
70°-80°	220.3	6.0
80°-90°	39.4	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°	1021.2	27.8
0°-40°	1678.1	45.7
0°-60°	2970.8	80.8
0°-90°	3675.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3675.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1300	1300	1300	1300	1300	
5°	1298	1298	1298	1298	1297	123
15°	1260	1259	1259	1260	1259	356
25°	1179	1177	1176	1176	1174	543
35°	1054	1052	1051	1049	1047	659
45°	890	888	885	883	882	686
55°	692	686	682	682	681	616
65°	457	453	446	448	448	453
75°	211	208	203	207	202	225
85°	29	27	27	28	28	41
90°	0	0	0	0	0	

TEST NUMBER: P974740

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1300.4	1300.4	1300.4	1300.4	1300.4
2.5°	1300.4	1299.9	1299.9	1300.4	1299.5
5°	1298.1	1298.5	1298.1	1298.1	1297.1
7.5°	1292.9	1292.5	1292.0	1292.5	1291.1
10°	1284.1	1284.1	1283.6	1284.1	1283.1
12.5°	1273.3	1273.3	1273.3	1273.8	1273.3
15°	1259.8	1259.4	1259.4	1260.3	1259.4
17.5°	1244.0	1243.5	1243.5	1243.0	1242.1
20°	1224.4	1224.4	1223.9	1223.4	1222.0
22.5°	1203.4	1202.9	1201.5	1201.5	1199.6
25°	1178.6	1177.2	1176.3	1175.8	1174.4
27.5°	1151.6	1149.7	1148.3	1147.4	1146.0
30°	1121.2	1119.4	1118.0	1116.6	1115.6
32.5°	1088.6	1087.6	1085.3	1084.8	1083.0
35°	1053.6	1052.2	1050.8	1048.9	1047.0
37.5°	1016.3	1014.9	1011.6	1010.7	1009.3
40°	976.6	974.7	970.5	970.5	969.1
42.5°	934.1	932.3	929.5	927.6	926.7
45°	889.8	887.9	884.7	882.8	881.9
47.5°	842.7	841.3	837.5	836.1	834.7
50°	793.7	791.8	787.6	786.7	785.3
52.5°	742.4	741.4	735.8	735.4	734.0
55°	691.5	686.4	681.7	681.7	680.8
57.5°	635.5	631.8	625.7	625.7	624.8
60°	577.6	574.4	567.4	568.3	567.4
62.5°	521.2	514.2	507.7	510.5	508.1
65°	456.8	453.1	446.1	447.9	447.5
67.5°	398.0	391.0	384.5	388.2	386.3
70°	332.7	329.0	322.4	326.2	321.5
72.5°	271.1	267.8	261.3	265.5	260.8
75°	211.4	208.1	203.0	206.7	202.0
77.5°	154.9	152.6	147.9	151.6	152.6
80°	103.6	100.8	98.5	101.7	102.7
82.5°	60.7	58.8	57.9	58.3	60.7
85°	29.4	27.1	27.1	27.5	27.5
87.5°	7.9	7.0	7.9	8.4	8.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)