

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: P974927

Luminaire Tested: FLR2-24-45HE-L940-CP250

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974927
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-L940-CP250
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

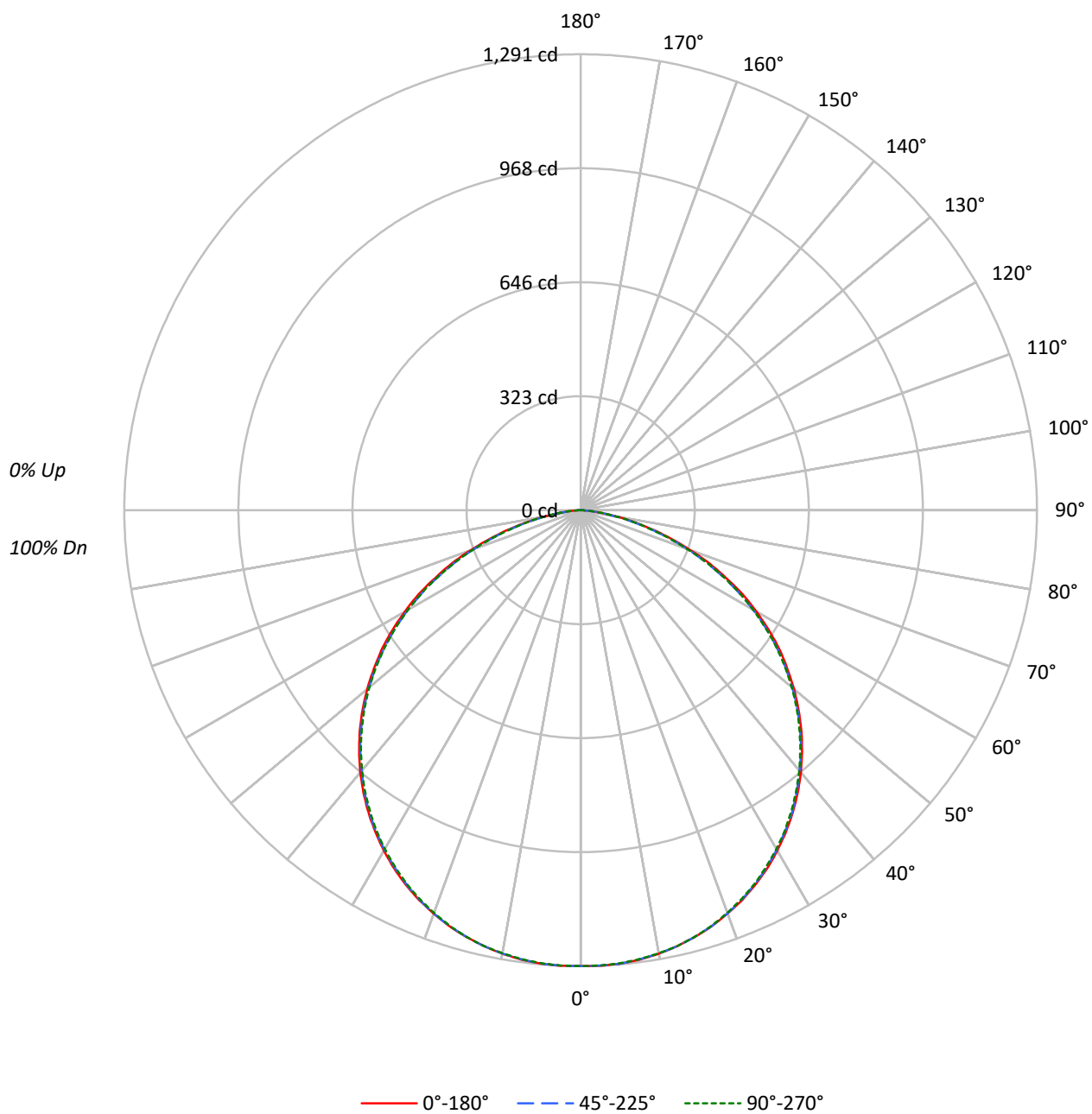
Lumens per Lamp: N/A
Luminaire Lumens: 3649.2 lumens
Efficiency: N/A
Efficacy: 105.2 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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

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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°	1737	1737	1737
5°	1741	1741	1739
10°	1742	1741	1741
15°	1742	1742	1742
20°	1741	1740	1737
25°	1737	1734	1731
30°	1730	1725	1721
35°	1718	1714	1708
40°	1703	1692	1690
45°	1681	1671	1666
50°	1650	1637	1632
55°	1611	1588	1586
60°	1543	1516	1516
65°	1444	1410	1415
70°	1299	1259	1256
75°	1091	1048	1043
80°	797	758	790
85°	451	415	421

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1681 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	122.6	3.4
10°-20°	353.1	9.7
20°-30°	538.3	14.8
30°-40°	652.2	17.9
40°-50°	677.5	18.6
50°-60°	606.1	16.6
60°-70°	441.7	12.1
70°-80°	218.7	6.0
80°-90°	39.1	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°	1014.0	27.8
0°-40°	1666.2	45.7
0°-60°	2949.7	80.8
0°-90°	3649.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3649.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1291	1291	1291	1291	1291	
5°	1289	1289	1289	1289	1288	123
15°	1251	1250	1250	1251	1250	353
25°	1170	1169	1168	1168	1166	539
35°	1046	1045	1043	1042	1040	654
45°	884	882	878	876	876	681
55°	687	682	677	677	676	612
65°	454	450	443	445	444	450
75°	210	207	202	205	201	224
85°	29	27	27	27	27	40
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1291.2	1291.2	1291.2	1291.2	1291.2
2.5°	1291.2	1290.7	1290.7	1291.2	1290.3
5°	1288.9	1289.3	1288.9	1288.9	1287.9
7.5°	1283.8	1283.3	1282.8	1283.3	1281.9
10°	1275.0	1275.0	1274.5	1275.0	1274.0
12.5°	1264.3	1264.3	1264.3	1264.8	1264.3
15°	1250.9	1250.4	1250.4	1251.3	1250.4
17.5°	1235.1	1234.7	1234.7	1234.2	1233.3
20°	1215.7	1215.7	1215.2	1214.7	1213.3
22.5°	1194.8	1194.4	1193.0	1193.0	1191.1
25°	1170.3	1168.9	1167.9	1167.5	1166.1
27.5°	1143.4	1141.5	1140.1	1139.2	1137.8
30°	1113.3	1111.4	1110.0	1108.6	1107.7
32.5°	1080.8	1079.9	1077.6	1077.1	1075.3
35°	1046.1	1044.7	1043.3	1041.5	1039.6
37.5°	1009.0	1007.6	1004.4	1003.5	1002.1
40°	969.7	967.8	963.6	963.6	962.2
42.5°	927.5	925.6	922.9	921.0	920.1
45°	883.5	881.6	878.4	876.5	875.6
47.5°	836.7	835.3	831.6	830.2	828.8
50°	788.1	786.2	782.0	781.1	779.7
52.5°	737.1	736.2	730.6	730.1	728.7
55°	686.6	681.5	676.9	676.9	675.9
57.5°	631.0	627.3	621.3	621.3	620.3
60°	573.5	570.3	563.4	564.3	563.4
62.5°	517.5	510.5	504.1	506.8	504.5
65°	453.6	449.9	442.9	444.8	444.3
67.5°	395.2	388.2	381.7	385.5	383.6
70°	330.3	326.6	320.1	323.8	319.2
72.5°	269.2	265.9	259.4	263.6	259.0
75°	209.9	206.6	201.5	205.2	200.6
77.5°	153.8	151.5	146.9	150.6	151.5
80°	102.8	100.1	97.8	101.0	101.9
82.5°	60.2	58.4	57.4	57.9	60.2
85°	29.2	26.9	26.9	27.3	27.3
87.5°	7.9	6.9	7.9	8.3	8.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)