

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: P974608

Luminaire Tested: FLR2-24-45HE-L930-CP187

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974608
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-CP187
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

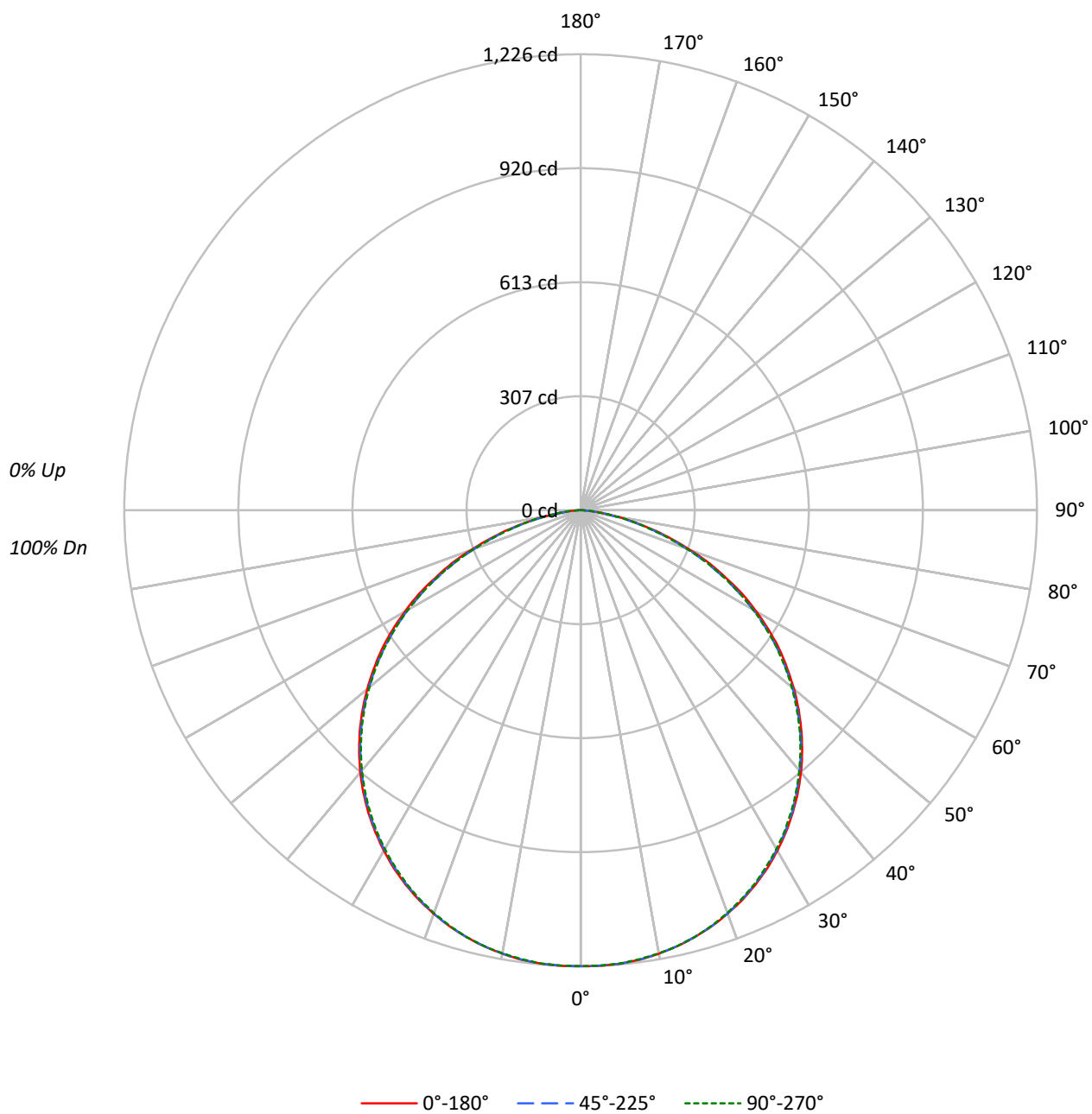
Lumens per Lamp: N/A
Luminaire Lumens: 3466.1 lumens
Efficiency: N/A
Efficacy: 99.9 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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

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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°	1650	1650	1650
5°	1653	1653	1652
10°	1655	1654	1653
15°	1655	1654	1654
20°	1653	1653	1650
25°	1650	1647	1644
30°	1643	1638	1635
35°	1632	1628	1622
40°	1618	1608	1605
45°	1597	1588	1583
50°	1567	1555	1550
55°	1530	1508	1506
60°	1466	1440	1440
65°	1372	1339	1344
70°	1234	1196	1193
75°	1036	995	990
80°	757	719	750
85°	428	394	401

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1597 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.4	3.4
10°-20°	335.4	9.7
20°-30°	511.3	14.8
30°-40°	619.5	17.9
40°-50°	643.5	18.6
50°-60°	575.6	16.6
60°-70°	419.5	12.1
70°-80°	207.8	6.0
80°-90°	37.1	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°	963.1	27.8
0°-40°	1582.6	45.7
0°-60°	2801.7	80.8
0°-90°	3466.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3466.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1226	1226	1226	1226	1226	
5°	1224	1225	1224	1224	1223	116
15°	1188	1188	1188	1188	1188	335
25°	1112	1110	1109	1109	1108	512
35°	994	992	991	989	987	621
45°	839	837	834	832	832	647
55°	652	647	643	643	642	581
65°	431	427	421	422	422	427
75°	199	196	191	195	190	213
85°	28	26	26	26	26	38
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1226.4	1226.4	1226.4	1226.4	1226.4
2.5°	1226.4	1225.9	1225.9	1226.4	1225.5
5°	1224.2	1224.6	1224.2	1224.2	1223.3
7.5°	1219.3	1218.9	1218.5	1218.9	1217.6
10°	1211.0	1211.0	1210.5	1211.0	1210.1
12.5°	1200.9	1200.9	1200.9	1201.3	1200.9
15°	1188.1	1187.7	1187.7	1188.5	1187.7
17.5°	1173.1	1172.7	1172.7	1172.3	1171.4
20°	1154.7	1154.7	1154.2	1153.8	1152.5
22.5°	1134.9	1134.4	1133.1	1133.1	1131.3
25°	1111.5	1110.2	1109.3	1108.9	1107.6
27.5°	1086.0	1084.3	1082.9	1082.1	1080.7
30°	1057.4	1055.6	1054.3	1053.0	1052.1
32.5°	1026.6	1025.7	1023.5	1023.1	1021.3
35°	993.6	992.3	991.0	989.2	987.4
37.5°	958.4	957.1	954.0	953.1	951.8
40°	921.0	919.2	915.3	915.3	914.0
42.5°	881.0	879.2	876.6	874.8	873.9
45°	839.2	837.4	834.3	832.5	831.7
47.5°	794.7	793.4	789.9	788.5	787.2
50°	748.5	746.7	742.8	741.9	740.6
52.5°	700.1	699.2	693.9	693.5	692.2
55°	652.1	647.3	642.9	642.9	642.0
57.5°	599.3	595.8	590.1	590.1	589.2
60°	544.8	541.7	535.1	536.0	535.1
62.5°	491.5	484.9	478.8	481.4	479.2
65°	430.8	427.3	420.7	422.4	422.0
67.5°	375.4	368.8	362.6	366.1	364.4
70°	313.7	310.2	304.1	307.6	303.2
72.5°	255.7	252.6	246.4	250.4	246.0
75°	199.3	196.3	191.4	194.9	190.5
77.5°	146.1	143.9	139.5	143.0	143.9
80°	97.7	95.0	92.8	95.9	96.8
82.5°	57.2	55.4	54.6	55.0	57.2
85°	27.7	25.5	25.5	26.0	26.0
87.5°	7.5	6.6	7.5	7.9	8.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)