

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: P974795

Luminaire Tested: FLR2-24-45HE-L935-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974795
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-CA080
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

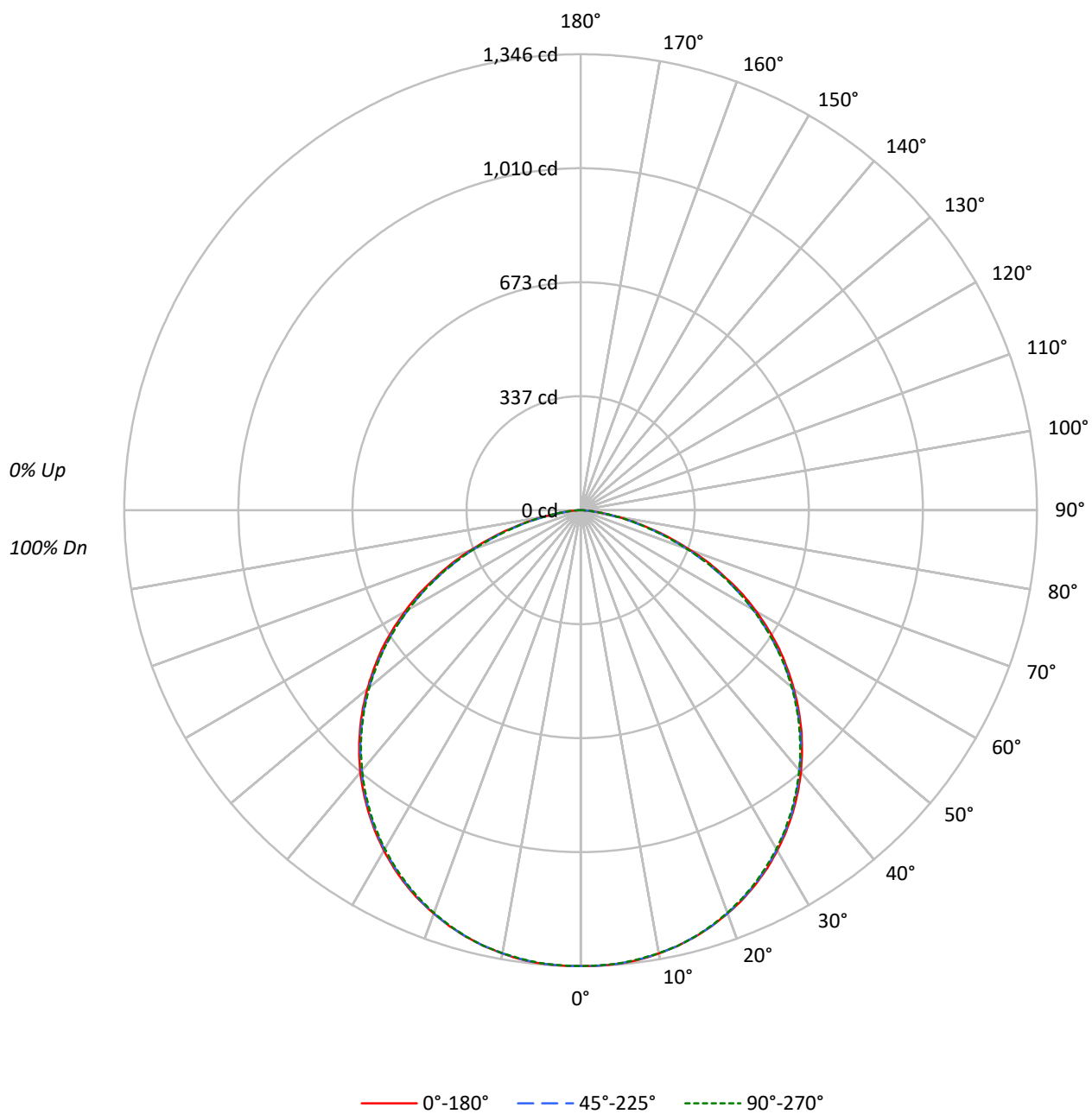
Lumens per Lamp: N/A
Luminaire Lumens: 3803.9 lumens
Efficiency: N/A
Efficacy: 109.6 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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°	1811	1811	1811
5°	1815	1815	1813
10°	1816	1815	1814
15°	1816	1816	1816
20°	1814	1814	1811
25°	1811	1807	1805
30°	1803	1798	1794
35°	1791	1786	1780
40°	1775	1764	1762
45°	1752	1742	1737
50°	1719	1706	1701
55°	1679	1655	1653
60°	1609	1580	1580
65°	1505	1470	1474
70°	1354	1313	1309
75°	1137	1092	1087
80°	831	790	823
85°	469	432	440

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1752 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	127.8	3.4
10°-20°	368.0	9.7
20°-30°	561.1	14.8
30°-40°	679.9	17.9
40°-50°	706.2	18.6
50°-60°	631.7	16.6
60°-70°	460.4	12.1
70°-80°	228.0	6.0
80°-90°	40.8	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°	1056.9	27.8
0°-40°	1736.8	45.7
0°-60°	3074.7	80.8
0°-90°	3803.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3803.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1346	1346	1346	1346	1346	
5°	1344	1344	1344	1344	1342	128
15°	1304	1303	1303	1304	1303	368
25°	1220	1218	1217	1217	1216	562
35°	1090	1089	1088	1086	1084	682
45°	921	919	916	914	913	710
55°	716	710	706	706	705	638
65°	473	469	462	464	463	469
75°	219	215	210	214	209	233
85°	30	28	28	28	28	42
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1345.9	1345.9	1345.9	1345.9	1345.9
2.5°	1345.9	1345.4	1345.4	1345.9	1344.9
5°	1343.5	1344.0	1343.5	1343.5	1342.5
7.5°	1338.2	1337.7	1337.2	1337.7	1336.2
10°	1329.0	1329.0	1328.5	1329.0	1328.0
12.5°	1317.9	1317.9	1317.9	1318.4	1317.9
15°	1303.9	1303.4	1303.4	1304.4	1303.4
17.5°	1287.5	1287.0	1287.0	1286.5	1285.5
20°	1267.2	1267.2	1266.7	1266.2	1264.8
22.5°	1245.5	1245.0	1243.5	1243.5	1241.6
25°	1219.9	1218.4	1217.4	1217.0	1215.5
27.5°	1191.9	1189.9	1188.5	1187.5	1186.1
30°	1160.5	1158.5	1157.1	1155.6	1154.7
32.5°	1126.7	1125.7	1123.3	1122.8	1120.9
35°	1090.4	1089.0	1087.5	1085.6	1083.7
37.5°	1051.8	1050.4	1047.0	1046.0	1044.6
40°	1010.8	1008.8	1004.5	1004.5	1003.0
42.5°	966.8	964.9	962.0	960.0	959.1
45°	920.9	919.0	915.6	913.7	912.7
47.5°	872.2	870.7	866.8	865.4	863.9
50°	821.4	819.5	815.2	814.2	812.8
52.5°	768.3	767.4	761.6	761.1	759.6
55°	715.7	710.4	705.5	705.5	704.6
57.5°	657.7	653.9	647.6	647.6	646.6
60°	597.9	594.5	587.2	588.2	587.2
62.5°	539.4	532.2	525.4	528.3	525.9
65°	472.8	468.9	461.7	463.6	463.1
67.5°	411.9	404.7	397.9	401.8	399.9
70°	344.3	340.5	333.7	337.6	332.7
72.5°	280.6	277.2	270.4	274.8	270.0
75°	218.8	215.4	210.1	213.9	209.1
77.5°	160.3	157.9	153.1	156.9	157.9
80°	107.2	104.3	101.9	105.3	106.2
82.5°	62.8	60.8	59.9	60.4	62.8
85°	30.4	28.0	28.0	28.5	28.5
87.5°	8.2	7.2	8.2	8.7	9.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)