

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: P974992

Luminaire Tested: FLR2-24-40HE-L850-CP187

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974992
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: FLR2-24-40HE-L850-CP187
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

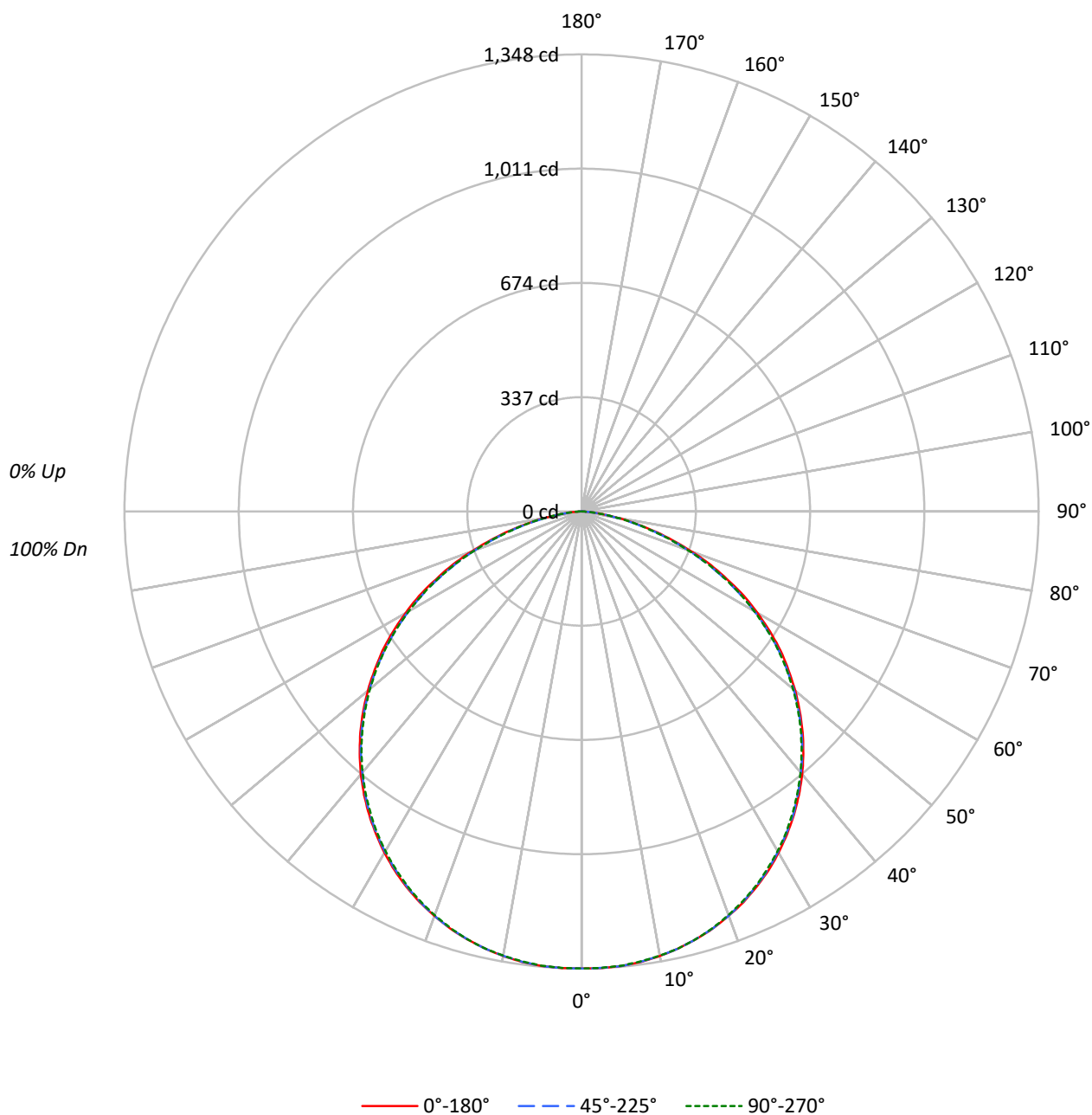
Lumens per Lamp: N/A
Luminaire Lumens: 3810.5 lumens
Efficiency: N/A
Efficacy: 127.4 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 29.9
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°	1814	1814	1814
5°	1818	1818	1816
10°	1819	1818	1818
15°	1819	1819	1819
20°	1818	1817	1814
25°	1814	1810	1808
30°	1806	1801	1797
35°	1794	1789	1783
40°	1778	1767	1765
45°	1755	1745	1740
50°	1723	1709	1704
55°	1682	1658	1656
60°	1612	1583	1583
65°	1508	1472	1477
70°	1357	1315	1311
75°	1139	1094	1089
80°	832	791	824
85°	471	434	440

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1755 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	128.0	3.4
10°-20°	368.7	9.7
20°-30°	562.1	14.8
30°-40°	681.0	17.9
40°-50°	707.4	18.6
50°-60°	632.8	16.6
60°-70°	461.2	12.1
70°-80°	228.4	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°	1058.8	27.8
0°-40°	1739.8	45.7
0°-60°	3080.0	80.8
0°-90°	3810.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3810.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1348	1348	1348	1348	1348	
5°	1346	1346	1346	1346	1345	128
15°	1306	1306	1306	1307	1306	369
25°	1222	1220	1220	1219	1218	563
35°	1092	1091	1089	1088	1086	683
45°	922	921	917	915	914	711
55°	717	712	707	707	706	639
65°	474	470	462	464	464	470
75°	219	216	210	214	210	234
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°	1348.2	1348.2	1348.2	1348.2	1348.2
2.5°	1348.2	1347.7	1347.7	1348.2	1347.3
5°	1345.8	1346.3	1345.8	1345.8	1344.8
7.5°	1340.5	1340.0	1339.5	1340.0	1338.6
10°	1331.3	1331.3	1330.8	1331.3	1330.3
12.5°	1320.2	1320.2	1320.2	1320.7	1320.2
15°	1306.1	1305.7	1305.7	1306.6	1305.7
17.5°	1289.7	1289.2	1289.2	1288.7	1287.8
20°	1269.4	1269.4	1268.9	1268.4	1267.0
22.5°	1247.6	1247.1	1245.7	1245.7	1243.7
25°	1222.0	1220.5	1219.5	1219.1	1217.6
27.5°	1193.9	1192.0	1190.5	1189.6	1188.1
30°	1162.5	1160.5	1159.1	1157.6	1156.7
32.5°	1128.6	1127.6	1125.2	1124.7	1122.8
35°	1092.3	1090.9	1089.4	1087.5	1085.5
37.5°	1053.6	1052.2	1048.8	1047.8	1046.4
40°	1012.5	1010.6	1006.2	1006.2	1004.8
42.5°	968.5	966.5	963.6	961.7	960.7
45°	922.5	920.6	917.2	915.3	914.3
47.5°	873.7	872.2	868.3	866.9	865.4
50°	822.9	820.9	816.6	815.6	814.2
52.5°	769.7	768.7	762.9	762.4	760.9
55°	716.9	711.6	706.8	706.8	705.8
57.5°	658.9	655.0	648.7	648.7	647.7
60°	598.9	595.5	588.2	589.2	588.2
62.5°	540.4	533.1	526.3	529.2	526.8
65°	473.6	469.7	462.5	464.4	463.9
67.5°	412.6	405.4	398.6	402.5	400.5
70°	344.9	341.0	334.3	338.1	333.3
72.5°	281.1	277.7	270.9	275.3	270.4
75°	219.1	215.8	210.4	214.3	209.5
77.5°	160.6	158.2	153.4	157.2	158.2
80°	107.4	104.5	102.1	105.5	106.4
82.5°	62.9	61.0	60.0	60.5	62.9
85°	30.5	28.1	28.1	28.5	28.5
87.5°	8.2	7.3	8.2	8.7	9.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)