

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: P974827

Luminaire Tested: FLR2-24-40HE-L840-CP125

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974827
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-L840-CP125
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

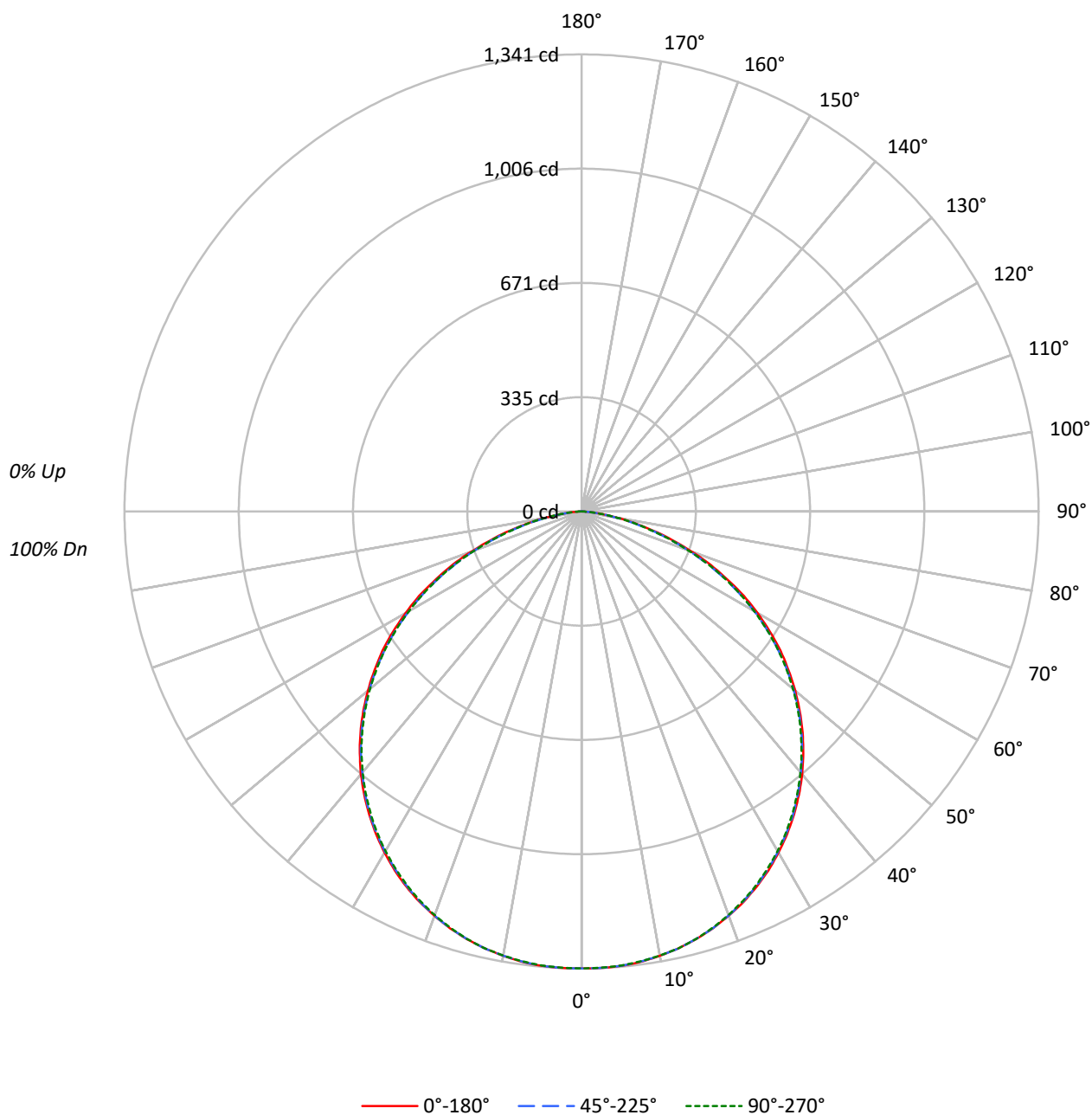
Lumens per Lamp: N/A
Luminaire Lumens: 3789.7 lumens
Efficiency: N/A
Efficacy: 126.7 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P974827

CATALOG NUMBER: FLR2-24-40HE-L840-CP125

Luminous Intensity Polar Plot



TEST NUMBER: P974827

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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°	1804	1804	1804
5°	1808	1808	1806
10°	1809	1808	1808
15°	1809	1809	1809
20°	1808	1807	1804
25°	1804	1801	1798
30°	1796	1791	1787
35°	1784	1780	1773
40°	1769	1758	1755
45°	1746	1736	1730
50°	1713	1700	1695
55°	1673	1649	1647
60°	1603	1574	1574
65°	1500	1465	1469
70°	1349	1308	1304
75°	1133	1088	1083
80°	828	786	820
85°	468	431	438

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1746 cd/sqm

TEST NUMBER: P974827

CATALOG NUMBER: FLR2-24-40HE-L840-CP125

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	127.3	3.4
10°-20°	366.7	9.7
20°-30°	559.0	14.8
30°-40°	677.3	17.9
40°-50°	703.6	18.6
50°-60°	629.4	16.6
60°-70°	458.7	12.1
70°-80°	227.2	6.0
80°-90°	40.6	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°	1053.0	27.8
0°-40°	1730.3	45.7
0°-60°	3063.3	80.8
0°-90°	3789.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3789.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1341	1341	1341	1341	1341	
5°	1338	1339	1338	1338	1338	127
15°	1299	1298	1298	1300	1298	367
25°	1215	1214	1213	1212	1211	560
35°	1086	1085	1084	1082	1080	680
45°	918	916	912	910	909	707
55°	713	708	703	703	702	635
65°	471	467	460	462	461	467
75°	218	215	209	213	208	232
85°	30	28	28	28	28	42
90°	0	0	0	0	0	

TEST NUMBER: P974827

CATALOG NUMBER: FLR2-24-40HE-L840-CP125

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1340.9	1340.9	1340.9	1340.9	1340.9
2.5°	1340.9	1340.4	1340.4	1340.9	1339.9
5°	1338.5	1339.0	1338.5	1338.5	1337.5
7.5°	1333.2	1332.7	1332.2	1332.7	1331.3
10°	1324.0	1324.0	1323.6	1324.0	1323.1
12.5°	1313.0	1313.0	1313.0	1313.5	1313.0
15°	1299.0	1298.5	1298.5	1299.5	1298.5
17.5°	1282.7	1282.2	1282.2	1281.7	1280.7
20°	1262.5	1262.5	1262.0	1261.5	1260.1
22.5°	1240.8	1240.3	1238.9	1238.9	1237.0
25°	1215.3	1213.9	1212.9	1212.4	1211.0
27.5°	1187.4	1185.5	1184.0	1183.1	1181.6
30°	1156.1	1154.2	1152.8	1151.3	1150.4
32.5°	1122.5	1121.5	1119.1	1118.6	1116.7
35°	1086.4	1084.9	1083.5	1081.6	1079.6
37.5°	1047.9	1046.4	1043.1	1042.1	1040.7
40°	1007.0	1005.1	1000.7	1000.7	999.3
42.5°	963.2	961.3	958.4	956.5	955.5
45°	917.5	915.6	912.2	910.3	909.3
47.5°	868.9	867.5	863.6	862.2	860.7
50°	818.4	816.5	812.1	811.2	809.7
52.5°	765.5	764.5	758.7	758.2	756.8
55°	713.0	707.7	702.9	702.9	702.0
57.5°	655.3	651.4	645.2	645.2	644.2
60°	595.6	592.3	585.0	586.0	585.0
62.5°	537.4	530.2	523.5	526.3	523.9
65°	471.0	467.2	460.0	461.9	461.4
67.5°	410.4	403.2	396.4	400.3	398.4
70°	343.0	339.2	332.5	336.3	331.5
72.5°	279.5	276.2	269.4	273.8	268.9
75°	217.9	214.6	209.3	213.1	208.3
77.5°	159.7	157.3	152.5	156.4	157.3
80°	106.8	103.9	101.5	104.9	105.8
82.5°	62.5	60.6	59.7	60.1	62.5
85°	30.3	27.9	27.9	28.4	28.4
87.5°	8.2	7.2	8.2	8.7	9.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)