

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: P974212

Luminaire Tested: FLR2-24-40-L835-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974212
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: FLR2-24-40-L835-CA080
Description: SHAPER SENSE CIRCLE

Light Source: FLR2-24-40-L835-CA080
Ballast/Driver: -

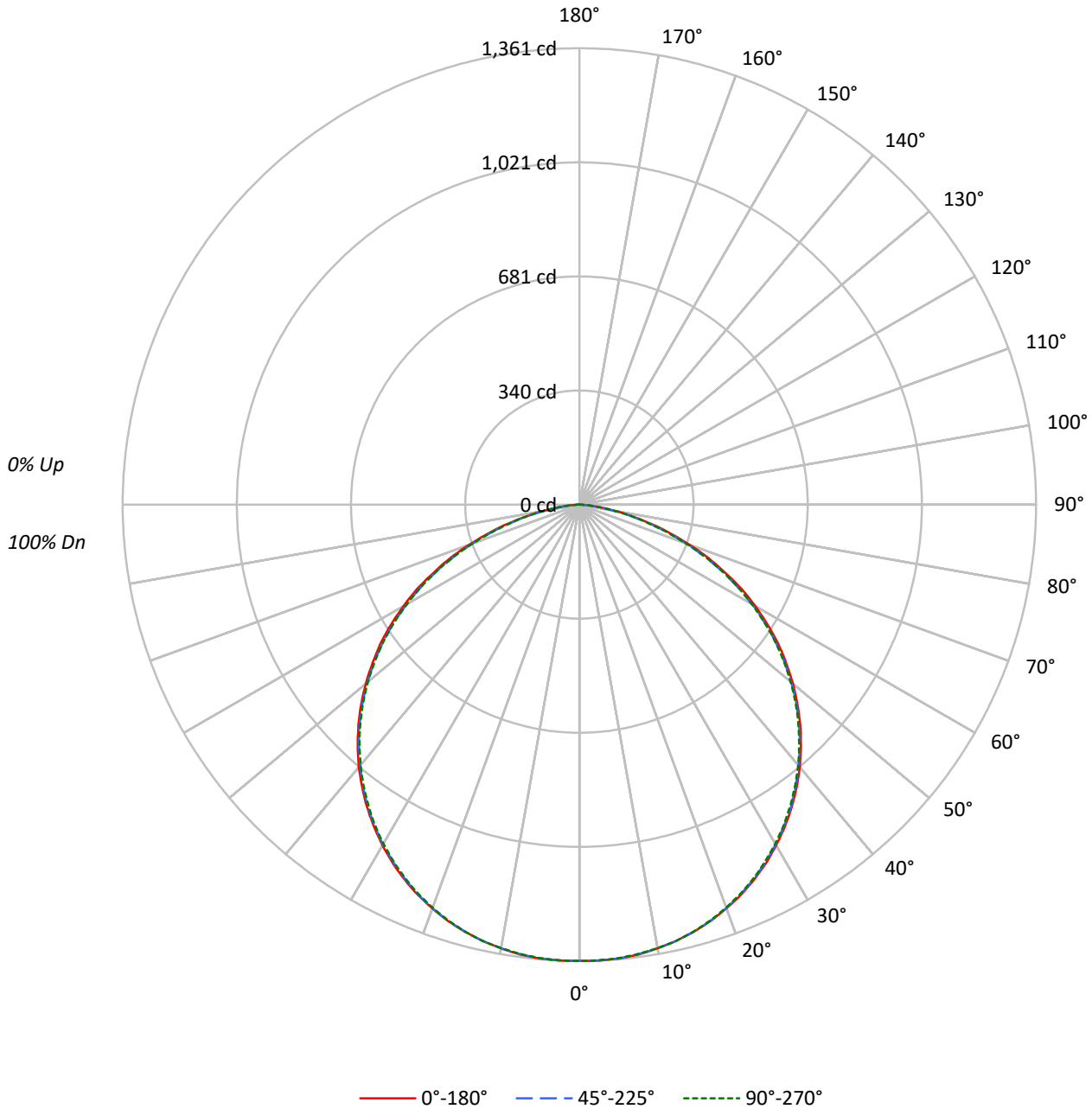
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3846.7 lumens
Efficiency: N/A
Efficacy: 127.0 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): 30.3
Input Voltage (V): 120
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: P974212
CATALOG NUMBER: FLR2-24-40-L835-CA080

Luminous Intensity Polar Plot





TEST NUMBER: P974212
 CATALOG NUMBER: FLR2-24-40-L835-CA080

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	105	100	97	106	102	99	95	98	95	92	94	92	89	91	89	87	85
2	99	91	85	79	97	89	83	78	86	81	76	83	78	75	80	76	73	71
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62	60
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	57	53	51
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	38
7	65	52	43	37	64	51	43	37	49	42	37	48	41	36	47	41	36	34
8	61	47	39	33	59	47	38	33	45	38	33	44	37	32	43	37	32	30
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	39	33	29	27
10	53	40	32	27	52	39	32	27	38	31	27	38	31	26	37	31	26	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1831	1831	1831
5°	1835	1835	1834
10°	1836	1836	1835
15°	1837	1836	1836
20°	1835	1834	1831
25°	1831	1828	1825
30°	1823	1818	1814
35°	1811	1806	1800
40°	1795	1784	1782
45°	1772	1762	1756
50°	1739	1725	1720
55°	1698	1674	1671
60°	1627	1598	1598
65°	1522	1486	1491
70°	1370	1328	1324
75°	1150	1104	1099
80°	840	798	832
85°	475	437	445

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1772 cd/sqm



TEST NUMBER: P974212
 CATALOG NUMBER: FLR2-24-40-L835-CA080

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	129.2	3.4
10°-20°	372.2	9.7
20°-30°	567.5	14.8
30°-40°	687.5	17.9
40°-50°	714.1	18.6
50°-60°	638.8	16.6
60°-70°	465.6	12.1
70°-80°	230.6	6.0
80°-90°	41.2	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°	1068.8	27.8
0°-40°	1756.3	45.7
0°-60°	3109.3	80.8
0°-90°	3846.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3846.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1361	1361	1361	1361	1361	
5°	1359	1359	1359	1359	1358	129
15°	1319	1318	1318	1319	1318	372
25°	1234	1232	1231	1231	1229	569
35°	1103	1101	1100	1098	1096	690
45°	931	929	926	924	923	718
55°	724	718	714	714	712	645
65°	478	474	467	469	468	474
75°	221	218	212	216	212	236
85°	31	28	28	29	29	43
90°	0	0	0	0	0	



TEST NUMBER: P974212
 CATALOG NUMBER: FLR2-24-40-L835-CA080

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1361.0	1361.0	1361.0	1361.0	1361.0
2.5°	1361.0	1360.6	1360.6	1361.0	1360.1
5°	1358.6	1359.1	1358.6	1358.6	1357.6
7.5°	1353.2	1352.7	1352.3	1352.7	1351.3
10°	1343.9	1343.9	1343.5	1343.9	1343.0
12.5°	1332.7	1332.7	1332.7	1333.2	1332.7
15°	1318.6	1318.1	1318.1	1319.0	1318.1
17.5°	1302.0	1301.5	1301.5	1301.0	1300.0
20°	1281.4	1281.4	1281.0	1280.5	1279.0
22.5°	1259.5	1259.0	1257.5	1257.5	1255.6
25°	1233.6	1232.1	1231.1	1230.7	1229.2
27.5°	1205.3	1203.3	1201.8	1200.9	1199.4
30°	1173.5	1171.6	1170.1	1168.6	1167.7
32.5°	1139.3	1138.4	1135.9	1135.4	1133.5
35°	1102.7	1101.2	1099.8	1097.8	1095.9
37.5°	1063.6	1062.2	1058.8	1057.8	1056.3
40°	1022.1	1020.2	1015.8	1015.8	1014.3
42.5°	977.7	975.7	972.8	970.8	969.9
45°	931.3	929.3	925.9	924.0	923.0
47.5°	882.0	880.5	876.6	875.1	873.7
50°	830.7	828.7	824.3	823.4	821.9
52.5°	777.0	776.0	770.1	769.6	768.2
55°	723.7	718.4	713.5	713.5	712.5
57.5°	665.1	661.2	654.9	654.9	653.9
60°	604.6	601.2	593.8	594.8	593.8
62.5°	545.5	538.2	531.3	534.3	531.8
65°	478.1	474.2	466.9	468.8	468.3
67.5°	416.6	409.2	402.4	406.3	404.4
70°	348.2	344.3	337.5	341.4	336.5
72.5°	283.7	280.3	273.5	277.9	273.0
75°	221.2	217.8	212.4	216.3	211.5
77.5°	162.1	159.7	154.8	158.7	159.7
80°	108.4	105.5	103.0	106.5	107.4
82.5°	63.5	61.5	60.6	61.0	63.5
85°	30.8	28.3	28.3	28.8	28.8
87.5°	8.3	7.3	8.3	8.8	9.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)