

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: P974685

Luminaire Tested: FLR2-24-45HE-L835-CP187

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974685
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-L835-CP187
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

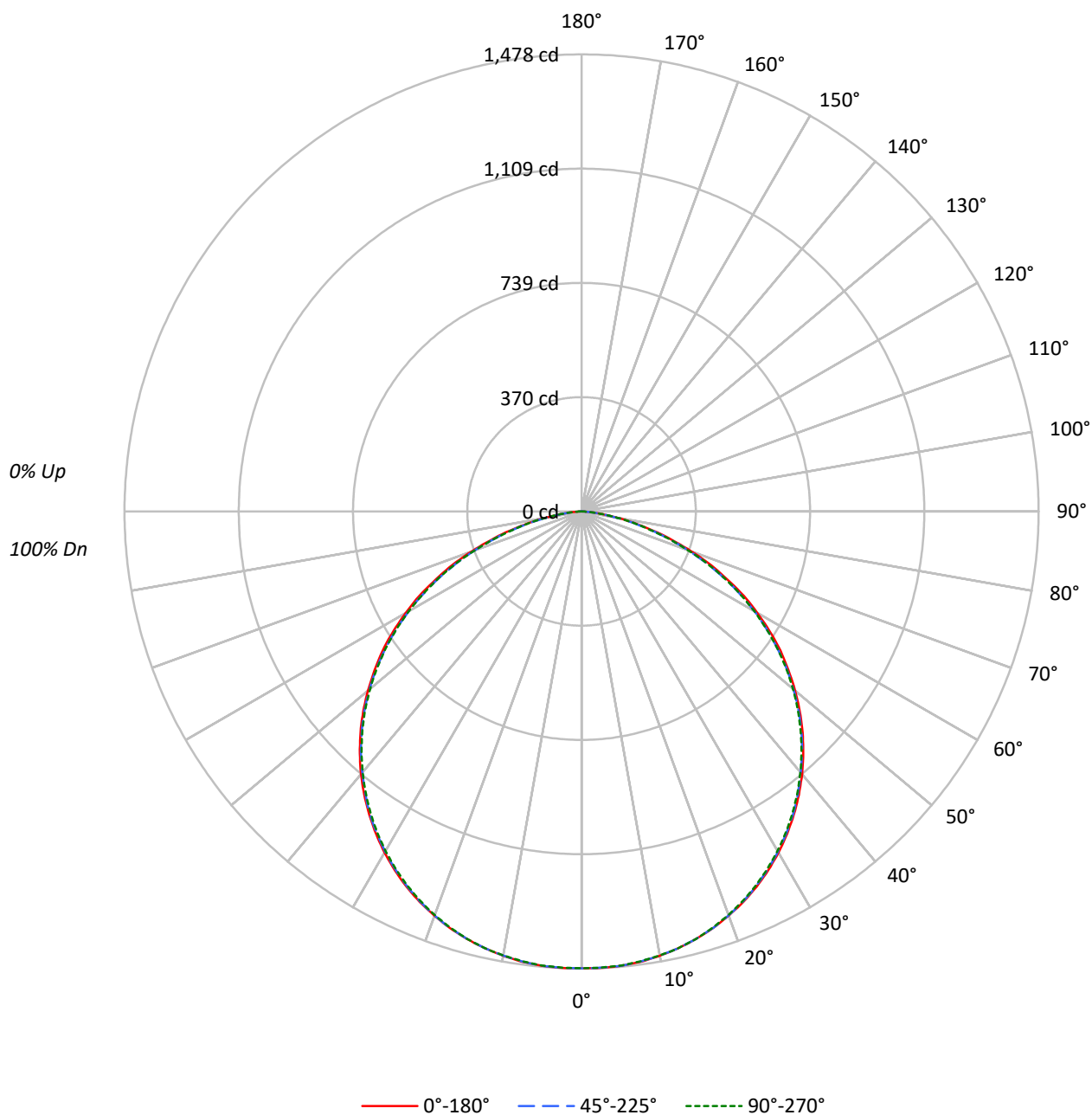
Lumens per Lamp: N/A
Luminaire Lumens: 4176.1 lumens
Efficiency: N/A
Efficacy: 120.3 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P974685

CATALOG NUMBER: FLR2-24-45HE-L835-CP187

Luminous Intensity Polar Plot



TEST NUMBER: P974685

CATALOG NUMBER: FLR2-24-45HE-L835-CP187

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°	1988	1988	1988
5°	1992	1992	1991
10°	1993	1993	1992
15°	1994	1993	1993
20°	1992	1991	1988
25°	1988	1984	1981
30°	1979	1974	1969
35°	1966	1961	1954
40°	1949	1937	1934
45°	1924	1913	1907
50°	1888	1873	1868
55°	1843	1817	1814
60°	1766	1735	1735
65°	1652	1613	1619
70°	1487	1441	1437
75°	1249	1199	1194
80°	912	867	903
85°	516	474	483

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1924 cd/sqm

TEST NUMBER: P974685

CATALOG NUMBER: FLR2-24-45HE-L835-CP187

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	140.3	3.4
10°-20°	404.0	9.7
20°-30°	616.0	14.8
30°-40°	746.4	17.9
40°-50°	775.3	18.6
50°-60°	693.6	16.6
60°-70°	505.5	12.1
70°-80°	250.3	6.0
80°-90°	44.7	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°	1160.3	27.8
0°-40°	1906.7	45.7
0°-60°	3375.5	80.8
0°-90°	4176.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4176.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1478	1478	1478	1478	1478	
5°	1475	1475	1475	1475	1474	140
15°	1431	1431	1431	1432	1431	404
25°	1339	1338	1336	1336	1334	617
35°	1197	1196	1194	1192	1190	749
45°	1011	1009	1005	1003	1002	779
55°	786	780	775	775	774	700
65°	519	515	507	509	508	515
75°	240	236	231	235	230	256
85°	33	31	31	31	31	46
90°	0	0	0	0	0	

TEST NUMBER: P974685

CATALOG NUMBER: FLR2-24-45HE-L835-CP187

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1477.6	1477.6	1477.6	1477.6	1477.6
2.5°	1477.6	1477.0	1477.0	1477.6	1476.5
5°	1474.9	1475.4	1474.9	1474.9	1473.9
7.5°	1469.1	1468.6	1468.0	1468.6	1467.0
10°	1459.0	1459.0	1458.5	1459.0	1458.0
12.5°	1446.8	1446.8	1446.8	1447.4	1446.8
15°	1431.4	1430.9	1430.9	1432.0	1430.9
17.5°	1413.4	1412.9	1412.9	1412.4	1411.3
20°	1391.2	1391.2	1390.6	1390.1	1388.5
22.5°	1367.3	1366.8	1365.2	1365.2	1363.1
25°	1339.2	1337.6	1336.5	1336.0	1334.4
27.5°	1308.4	1306.3	1304.7	1303.7	1302.1
30°	1274.0	1271.9	1270.3	1268.7	1267.6
32.5°	1236.9	1235.8	1233.2	1232.6	1230.5
35°	1197.1	1195.5	1193.9	1191.8	1189.7
37.5°	1154.7	1153.1	1149.4	1148.3	1146.7
40°	1109.6	1107.5	1102.7	1102.7	1101.2
42.5°	1061.4	1059.3	1056.1	1054.0	1052.9
45°	1011.0	1008.9	1005.2	1003.1	1002.0
47.5°	957.5	955.9	951.6	950.1	948.5
50°	901.8	899.7	894.9	893.9	892.3
52.5°	843.5	842.4	836.1	835.5	833.9
55°	785.7	779.9	774.6	774.6	773.5
57.5°	722.1	717.8	711.0	711.0	709.9
60°	656.3	652.6	644.7	645.7	644.7
62.5°	592.2	584.2	576.8	580.0	577.3
65°	519.0	514.8	506.8	509.0	508.4
67.5°	452.2	444.3	436.9	441.1	439.0
70°	378.0	373.8	366.3	370.6	365.3
72.5°	308.0	304.3	296.9	301.7	296.4
75°	240.2	236.5	230.6	234.9	229.6
77.5°	176.0	173.4	168.1	172.3	173.4
80°	117.7	114.5	111.9	115.6	116.6
82.5°	68.9	66.8	65.7	66.3	68.9
85°	33.4	30.7	30.7	31.3	31.3
87.5°	9.0	8.0	9.0	9.5	10.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)