

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: P974778

Luminaire Tested: FLR2-24-90HE-L935-CP250

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974778
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: FLR2-24-90HE-L935-CP250
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

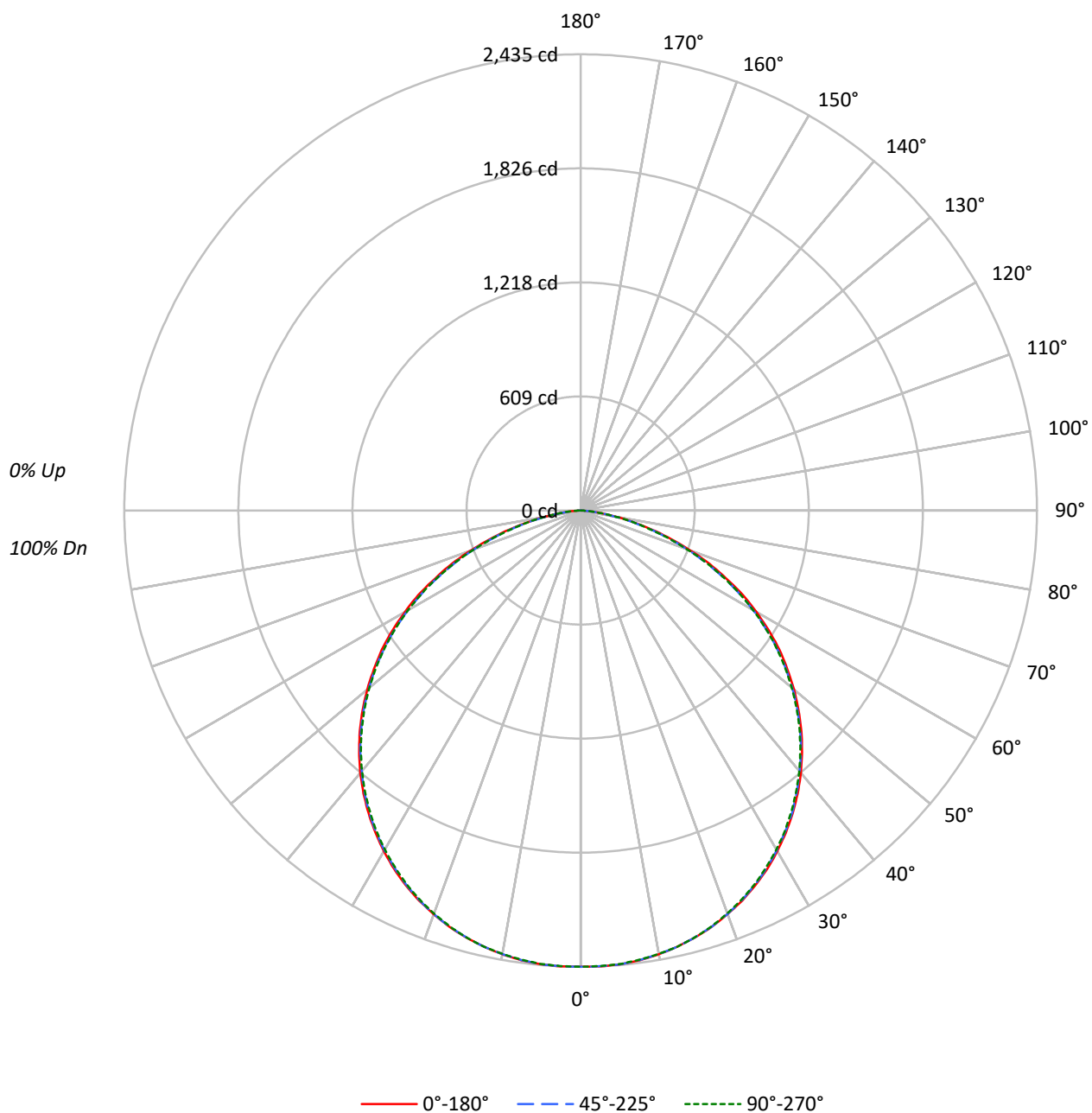
Lumens per Lamp: N/A
Luminaire Lumens: 6883.1 lumens
Efficiency: N/A
Efficacy: 97.9 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 70.3
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: P974778

CATALOG NUMBER: FLR2-24-90HE-L935-CP250

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°	3277	3277	3277
5°	3283	3283	3281
10°	3286	3284	3283
15°	3287	3285	3285
20°	3283	3282	3277
25°	3277	3270	3265
30°	3262	3253	3246
35°	3241	3232	3221
40°	3212	3192	3188
45°	3171	3153	3143
50°	3111	3087	3078
55°	3038	2995	2991
60°	2911	2859	2859
65°	2724	2660	2668
70°	2451	2375	2369
75°	2058	1976	1967
80°	1503	1429	1489
85°	851	783	797

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3171 cd/sqm

TEST NUMBER: P974778

CATALOG NUMBER: FLR2-24-90HE-L935-CP250

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	231.2	3.4
10°-20°	666.0	9.7
20°-30°	1015.4	14.8
30°-40°	1230.2	17.9
40°-50°	1277.8	18.6
50°-60°	1143.1	16.6
60°-70°	833.1	12.1
70°-80°	412.6	6.0
80°-90°	73.8	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°	1912.5	27.8
0°-40°	3142.7	45.7
0°-60°	5563.6	80.8
0°-90°	6883.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6883.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2435	2435	2435	2435	2435	
5°	2431	2432	2431	2431	2429	231
15°	2359	2358	2358	2360	2358	666
25°	2207	2205	2203	2202	2199	1017
35°	1973	1970	1968	1964	1961	1234
45°	1666	1663	1657	1653	1652	1284
55°	1295	1285	1277	1277	1275	1154
65°	856	848	835	839	838	848
75°	396	390	380	387	378	422
85°	55	51	51	52	52	76
90°	0	0	0	0	0	

TEST NUMBER: P974778

CATALOG NUMBER: FLR2-24-90HE-L935-CP250

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2435.4	2435.4	2435.4	2435.4	2435.4
2.5°	2435.4	2434.5	2434.5	2435.4	2433.6
5°	2431.0	2431.9	2431.0	2431.0	2429.3
7.5°	2421.4	2420.5	2419.7	2420.5	2417.9
10°	2404.8	2404.8	2403.9	2404.8	2403.0
12.5°	2384.7	2384.7	2384.7	2385.6	2384.7
15°	2359.4	2358.5	2358.5	2360.2	2358.5
17.5°	2329.6	2328.8	2328.8	2327.9	2326.2
20°	2292.9	2292.9	2292.1	2291.2	2288.6
22.5°	2253.6	2252.8	2250.1	2250.1	2246.6
25°	2207.3	2204.7	2202.9	2202.1	2199.4
27.5°	2156.6	2153.1	2150.5	2148.8	2146.1
30°	2099.8	2096.3	2093.7	2091.1	2089.3
32.5°	2038.7	2036.9	2032.5	2031.7	2028.2
35°	1973.1	1970.5	1967.9	1964.4	1960.9
37.5°	1903.2	1900.6	1894.5	1892.7	1890.1
40°	1828.9	1825.4	1817.6	1817.6	1815.0
42.5°	1749.4	1745.9	1740.7	1737.2	1735.4
45°	1666.4	1662.9	1656.8	1653.3	1651.6
47.5°	1578.1	1575.5	1568.5	1565.9	1563.3
50°	1486.4	1482.9	1475.0	1473.3	1470.7
52.5°	1390.3	1388.5	1378.0	1377.2	1374.5
55°	1295.0	1285.4	1276.7	1276.7	1274.9
57.5°	1190.2	1183.2	1171.8	1171.8	1170.1
60°	1081.8	1075.7	1062.6	1064.3	1062.6
62.5°	976.1	963.0	950.7	956.0	951.6
65°	855.5	848.5	835.4	838.9	838.0
67.5°	745.4	732.3	720.0	727.0	723.5
70°	623.0	616.1	603.8	610.8	602.1
72.5°	507.7	501.6	489.3	497.2	488.5
75°	395.8	389.7	380.1	387.1	378.4
77.5°	290.1	285.7	277.0	284.0	285.7
80°	194.0	188.7	184.4	190.5	192.2
82.5°	113.6	110.1	108.4	109.2	113.6
85°	55.1	50.7	50.7	51.6	51.6
87.5°	14.9	13.1	14.9	15.7	16.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)