

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: P974328

Luminaire Tested: FLR2-24-72-L840-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974328
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: FLR2-24-72-L840-CA080
Description: SHAPER SENSE CIRCLE

Light Source: FLR2-24-72-L840-CA080
Ballast/Driver: -

Summary

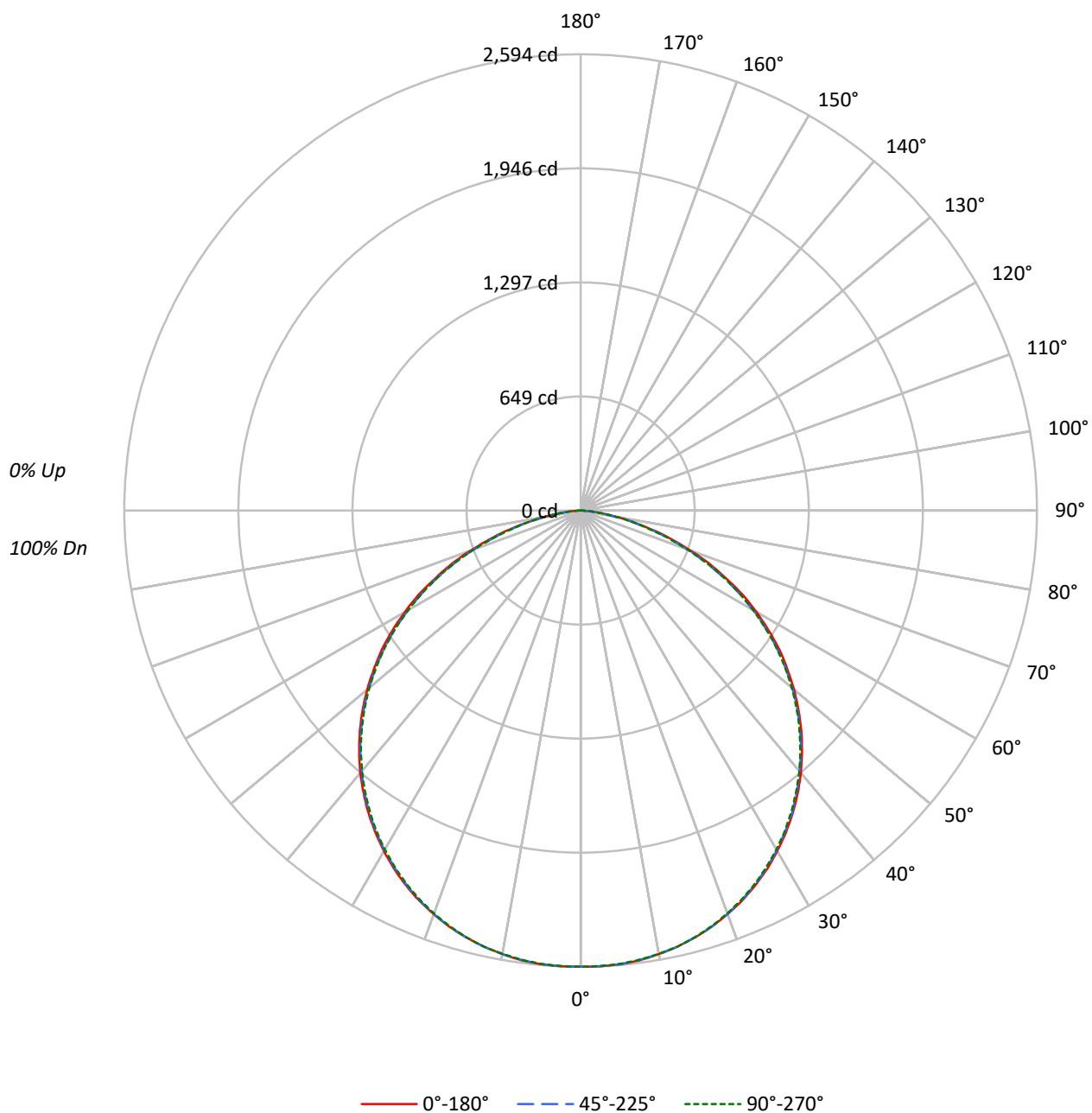
Lumens per Lamp: N/A
Luminaire Lumens: 7331.6 lumens
Efficiency: N/A
Efficacy: 120.4 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 60.9
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

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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°	3490	3490	3490
5°	3497	3497	3495
10°	3500	3498	3497
15°	3501	3499	3499
20°	3497	3496	3490
25°	3490	3484	3478
30°	3475	3465	3458
35°	3452	3443	3431
40°	3422	3400	3395
45°	3377	3358	3347
50°	3314	3289	3279
55°	3236	3190	3186
60°	3101	3046	3046
65°	2901	2833	2842
70°	2611	2530	2523
75°	2192	2105	2095
80°	1601	1522	1587
85°	905	834	848

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3377 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	246.2	3.4
10°-20°	709.3	9.7
20°-30°	1081.5	14.8
30°-40°	1310.3	17.9
40°-50°	1361.1	18.6
50°-60°	1217.6	16.6
60°-70°	887.4	12.1
70°-80°	439.5	6.0
80°-90°	78.6	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°	2037.1	27.8
0°-40°	3347.4	45.7
0°-60°	5926.1	80.8
0°-90°	7331.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7331.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2594	2594	2594	2594	2594	
5°	2589	2590	2589	2589	2588	246
15°	2513	2512	2512	2514	2512	710
25°	2351	2348	2346	2346	2343	1084
35°	2102	2099	2096	2092	2089	1315
45°	1775	1771	1765	1761	1759	1368
55°	1379	1369	1360	1360	1358	1229
65°	911	904	890	894	893	903
75°	422	415	405	412	403	450
85°	59	54	54	55	55	81
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2594.1	2594.1	2594.1	2594.1	2594.1
2.5°	2594.1	2593.1	2593.1	2594.1	2592.2
5°	2589.4	2590.3	2589.4	2589.4	2587.5
7.5°	2579.2	2578.2	2577.3	2578.2	2575.4
10°	2561.5	2561.5	2560.5	2561.5	2559.6
12.5°	2540.1	2540.1	2540.1	2541.0	2540.1
15°	2513.1	2512.1	2512.1	2514.0	2512.1
17.5°	2481.4	2480.5	2480.5	2479.6	2477.7
20°	2442.3	2442.3	2441.4	2440.5	2437.7
22.5°	2400.5	2399.5	2396.7	2396.7	2393.0
25°	2351.1	2348.3	2346.5	2345.5	2342.7
27.5°	2297.1	2293.4	2290.6	2288.8	2286.0
30°	2236.6	2232.9	2230.1	2227.3	2225.5
32.5°	2171.5	2169.6	2165.0	2164.0	2160.3
35°	2101.7	2098.9	2096.1	2092.4	2088.6
37.5°	2027.2	2024.4	2017.9	2016.0	2013.3
40°	1948.1	1944.4	1936.0	1936.0	1933.2
42.5°	1863.4	1859.7	1854.1	1850.4	1848.5
45°	1775.0	1771.3	1764.7	1761.0	1759.2
47.5°	1681.0	1678.2	1670.7	1667.9	1665.1
50°	1583.2	1579.5	1571.1	1569.3	1566.5
52.5°	1480.9	1479.0	1467.8	1466.9	1464.1
55°	1379.4	1369.2	1359.9	1359.9	1358.0
57.5°	1267.7	1260.3	1248.2	1248.2	1246.3
60°	1152.3	1145.8	1131.8	1133.7	1131.8
62.5°	1039.7	1025.7	1012.7	1018.3	1013.6
65°	911.2	903.8	889.8	893.5	892.6
67.5°	793.9	780.0	767.0	774.4	770.7
70°	663.6	656.2	643.2	650.6	641.3
72.5°	540.8	534.3	521.2	529.6	520.3
75°	421.6	415.1	404.9	412.3	403.0
77.5°	309.0	304.4	295.1	302.5	304.4
80°	206.6	201.0	196.4	202.9	204.8
82.5°	121.0	117.3	115.4	116.3	121.0
85°	58.6	54.0	54.0	54.9	54.9
87.5°	15.8	14.0	15.8	16.8	17.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)