

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: P973198

Luminaire Tested: FLR2-14-80HE-L840-CP125

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973198
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-1)
Test Lab: INNOVATION CENTER
Issue Date: 3/13/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: FAIL-SAFE
Catalog Number: FLR2-14-80HE-L840-CP125
Description: 1*4 FLR-2.0 8000 Lumen High Efficacy at 4000CCT & 80CRI with Clear Polycarbonate (0.125" thickness)

Light Source:
Ballast/Driver: -

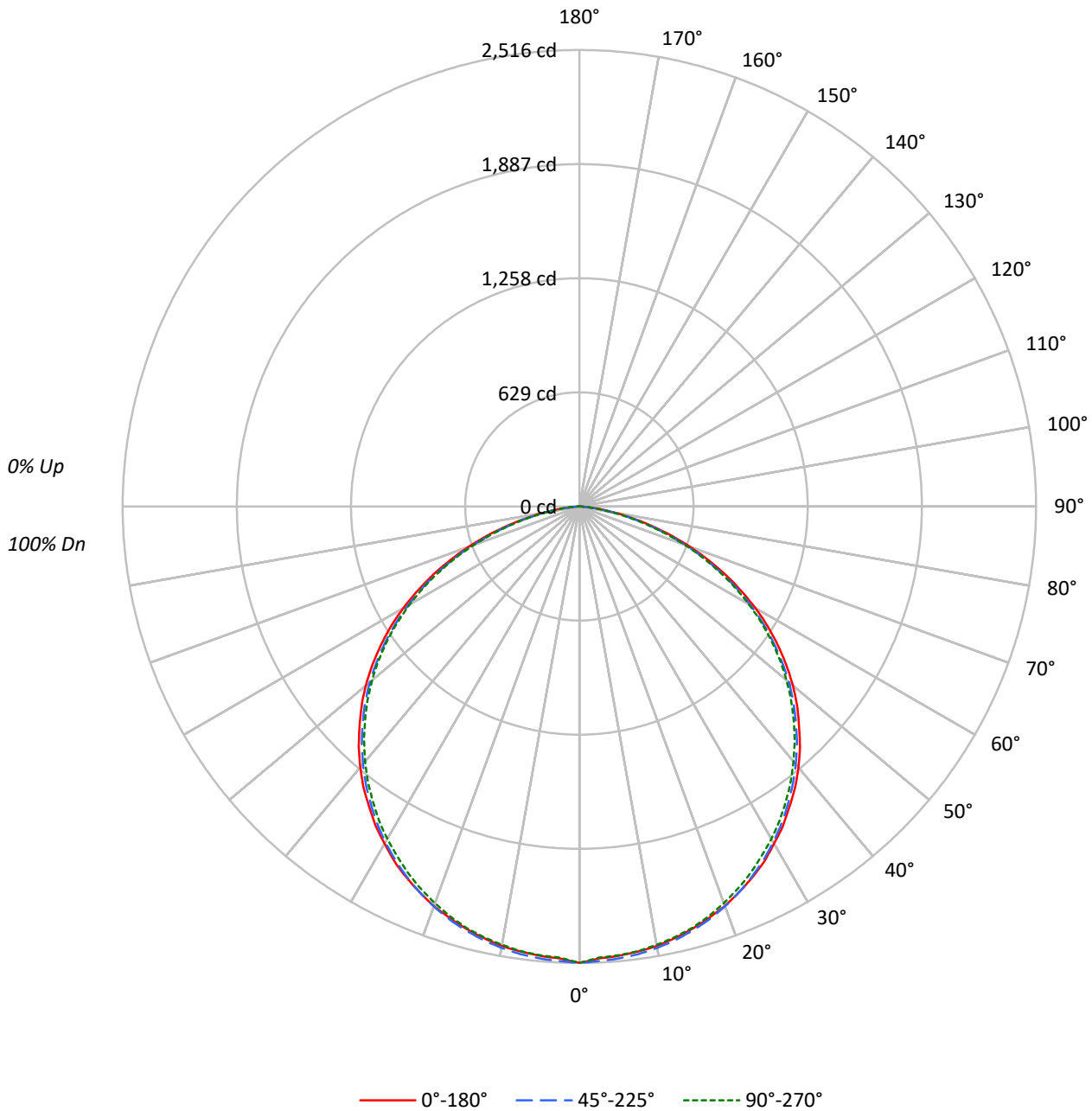
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7040.8 lumens
Efficiency: N/A
Efficacy: 113.7 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.25 / 1.38
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 61.9
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

TEST NUMBER: P973198
CATALOG NUMBER: FLR2-14-80HE-L840-CP125

Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	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	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					100															
1	109	105	101	97	107	102	99	95	98	95	92	94	92	89	91	89	87	85					85															
2	99	91	85	79	97	90	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	58	53	51					51															
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	57	51	46	44					44															
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	39					39															
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	40	34	29	27					27															
10	53	40	32	27	52	39	32	27	38	32	27	38	31	27	37	31	26	25					25															

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6769	6769	6769
5°	6717	6756	6708
10°	6723	6751	6703
15°	6712	6739	6698
20°	6712	6718	6664
25°	6696	6684	6622
30°	6668	6639	6574
35°	6632	6581	6516
40°	6595	6514	6448
45°	6514	6423	6356
50°	6430	6312	6238
55°	6267	6121	6062
60°	6024	5856	5806
65°	5642	5477	5417
70°	5087	4883	4842
75°	4265	4049	4006
80°	3098	2889	2808
85°	1639	1448	1318

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6514 cd/sqm



TEST NUMBER: P973198
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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	238.3	3.4
10°-20°	684.3	9.7
20°-30°	1039.6	14.8
30°-40°	1257.5	17.9
40°-50°	1307.0	18.6
50°-60°	1170.2	16.6
60°-70°	853.5	12.1
70°-80°	420.3	6.0
80°-90°	70.3	1.0
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°	1962.1	27.9
0°-40°	3219.7	45.7
0°-60°	5696.8	80.9
0°-90°	7040.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7040.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2516	2516	2516	2516	2516	
5°	2486	2514	2501	2525	2483	237
15°	2409	2431	2419	2440	2404	680
25°	2255	2267	2251	2262	2230	1040
35°	2019	2023	2003	2012	1984	1264
45°	1712	1710	1688	1691	1670	1322
55°	1336	1324	1305	1302	1292	1192
65°	886	876	860	854	851	875
75°	410	403	389	385	385	437
85°	53	51	47	42	43	77
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2515.6	2515.6	2515.6	2515.6	2515.6
2.5°	2493.7	2521.9	2508.3	2533.3	2488.5
5°	2486.5	2513.5	2501.0	2525.0	2483.3
7.5°	2474.0	2502.1	2488.5	2511.4	2471.9
10°	2460.4	2485.4	2470.8	2493.7	2453.1
12.5°	2436.5	2461.5	2447.9	2468.8	2431.3
15°	2409.4	2431.3	2418.8	2439.6	2404.2
17.5°	2378.2	2399.0	2385.5	2404.2	2368.8
20°	2343.8	2360.5	2345.9	2361.5	2327.1
22.5°	2301.1	2316.7	2301.1	2311.5	2281.3
25°	2255.3	2266.8	2251.1	2261.5	2230.3
27.5°	2206.4	2212.6	2197.0	2205.3	2173.0
30°	2146.0	2153.3	2136.6	2147.0	2115.8
32.5°	2087.7	2091.8	2073.1	2081.4	2053.3
35°	2018.9	2023.1	2003.3	2011.7	1983.5
37.5°	1953.3	1952.3	1931.5	1936.7	1912.7
40°	1877.3	1876.3	1854.4	1858.6	1835.7
42.5°	1799.2	1795.1	1774.3	1776.3	1755.5
45°	1711.8	1709.7	1687.8	1691.0	1670.1
47.5°	1627.4	1621.2	1599.3	1600.4	1582.7
50°	1535.8	1526.4	1507.7	1505.6	1490.0
52.5°	1437.9	1427.5	1406.7	1404.6	1393.2
55°	1335.9	1324.4	1304.7	1301.5	1292.2
57.5°	1230.7	1216.2	1200.5	1194.3	1187.0
60°	1119.3	1105.8	1088.1	1081.8	1078.7
62.5°	1003.7	990.2	976.7	970.4	966.3
65°	886.1	875.7	860.1	853.8	850.7
67.5°	766.3	757.0	742.4	735.1	734.1
70°	646.6	637.2	620.6	616.4	615.4
72.5°	526.9	518.5	502.9	498.7	498.7
75°	410.2	403.0	389.4	385.3	385.3
77.5°	299.9	293.6	283.2	278.0	278.0
80°	199.9	195.8	186.4	182.2	181.2
82.5°	115.6	113.5	105.2	101.0	103.1
85°	53.1	51.0	46.9	41.6	42.7
87.5°	13.5	12.5	9.4	7.3	9.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)