

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: P973193

Luminaire Tested: FLR2-14-80HE-L840-CP080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973193
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-CP080
Description: 1*4 FLR-2.0 8000 Lumen High Efficacy at 4000CCT & 80CRI with Clear Polycarbonate (0.080" thickness)

Light Source:
Ballast/Driver: -

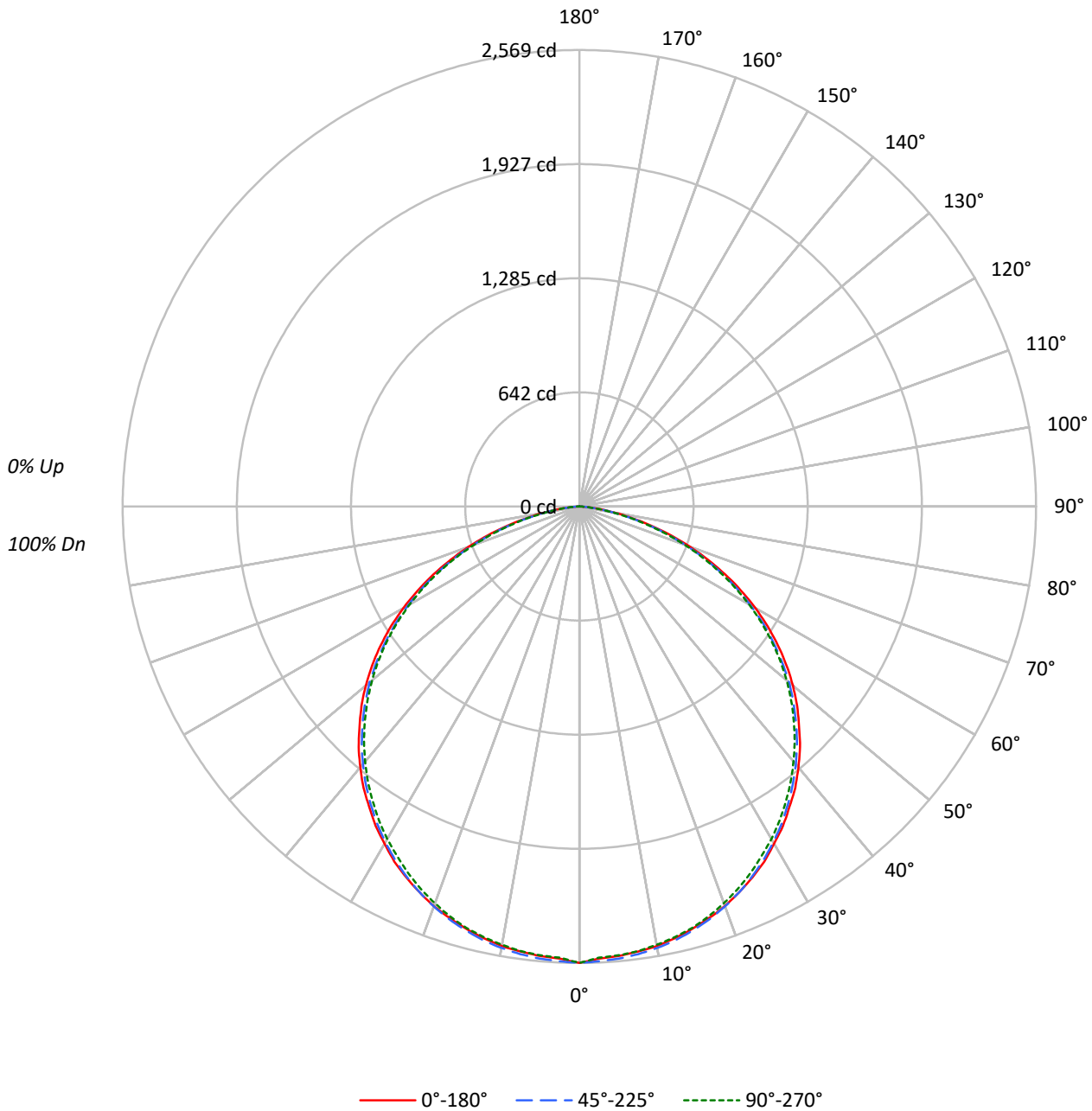
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7190.5 lumens
Efficiency: N/A
Efficacy: 116.2 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: P973193
CATALOG NUMBER: FLR2-14-80HE-L840-CP080

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6913	6913	6913
5°	6859	6900	6851
10°	6866	6895	6846
15°	6855	6882	6840
20°	6855	6861	6806
25°	6839	6826	6763
30°	6810	6780	6714
35°	6774	6721	6655
40°	6735	6653	6585
45°	6653	6560	6491
50°	6566	6446	6370
55°	6401	6251	6191
60°	6152	5980	5929
65°	5762	5592	5532
70°	5195	4987	4944
75°	4356	4135	4090
80°	3164	2949	2867
85°	1673	1479	1346

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6653 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	243.3	3.4
10°-20°	698.8	9.7
20°-30°	1061.7	14.8
30°-40°	1284.3	17.9
40°-50°	1334.7	18.6
50°-60°	1195.0	16.6
60°-70°	871.6	12.1
70°-80°	429.2	6.0
80°-90°	71.8	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°	2003.8	27.9
0°-40°	3288.1	45.7
0°-60°	5817.9	80.9
0°-90°	7190.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7190.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2569	2569	2569	2569	2569	
5°	2539	2567	2554	2579	2536	242
15°	2461	2483	2470	2491	2455	695
25°	2303	2315	2299	2310	2278	1062
35°	2062	2066	2046	2054	2026	1291
45°	1748	1746	1724	1727	1706	1350
55°	1364	1353	1332	1329	1320	1218
65°	905	894	878	872	869	894
75°	419	412	398	393	393	447
85°	54	52	48	42	44	78
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2569.1	2569.1	2569.1	2569.1	2569.1
2.5°	2546.7	2575.5	2561.6	2587.2	2541.4
5°	2539.3	2566.9	2554.2	2578.6	2536.1
7.5°	2526.5	2555.2	2541.4	2564.8	2524.4
10°	2512.7	2538.2	2523.3	2546.7	2505.3
12.5°	2488.3	2513.8	2500.0	2521.2	2482.9
15°	2460.6	2482.9	2470.2	2491.4	2455.3
17.5°	2428.7	2450.0	2436.2	2455.3	2419.1
20°	2393.6	2410.6	2395.7	2411.7	2376.6
22.5°	2350.0	2366.0	2350.0	2360.7	2329.8
25°	2303.2	2314.9	2299.0	2309.6	2277.7
27.5°	2253.3	2259.6	2243.7	2252.2	2219.2
30°	2191.6	2199.0	2182.0	2192.6	2160.7
32.5°	2132.0	2136.3	2117.1	2125.7	2096.9
35°	2061.9	2066.1	2045.9	2054.4	2025.7
37.5°	1994.9	1993.8	1972.5	1977.8	1953.4
40°	1917.2	1916.2	1893.8	1898.1	1874.7
42.5°	1837.5	1833.2	1812.0	1814.1	1792.8
45°	1748.2	1746.0	1723.7	1726.9	1705.6
47.5°	1662.0	1655.6	1633.3	1634.4	1616.3
50°	1568.5	1558.9	1539.7	1537.6	1521.7
52.5°	1468.5	1457.9	1436.6	1434.5	1422.8
55°	1364.3	1352.6	1332.4	1329.2	1319.6
57.5°	1256.9	1242.0	1226.1	1219.7	1212.2
60°	1143.1	1129.3	1111.2	1104.8	1101.6
62.5°	1025.1	1011.3	997.4	991.0	986.8
65°	904.9	894.3	878.3	872.0	868.8
67.5°	782.6	773.1	758.2	750.7	749.7
70°	660.3	650.8	633.8	629.5	628.4
72.5°	538.1	529.6	513.6	509.3	509.3
75°	419.0	411.5	397.7	393.4	393.4
77.5°	306.2	299.9	289.2	283.9	283.9
80°	204.2	199.9	190.3	186.1	185.0
82.5°	118.0	115.9	107.4	103.1	105.3
85°	54.2	52.1	47.9	42.5	43.6
87.5°	13.8	12.8	9.6	7.4	9.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)