

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: P973238

Luminaire Tested: FLR2-14-80HE-L940-CP187

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973238
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-L940-CP187
Description: 1*4 FLR-2.0 8000 Lumen High Efficacy at 4000CCT & 90 CRI with Clear Polycarbonate (0.187" thickness)

Light Source:
Ballast/Driver: -

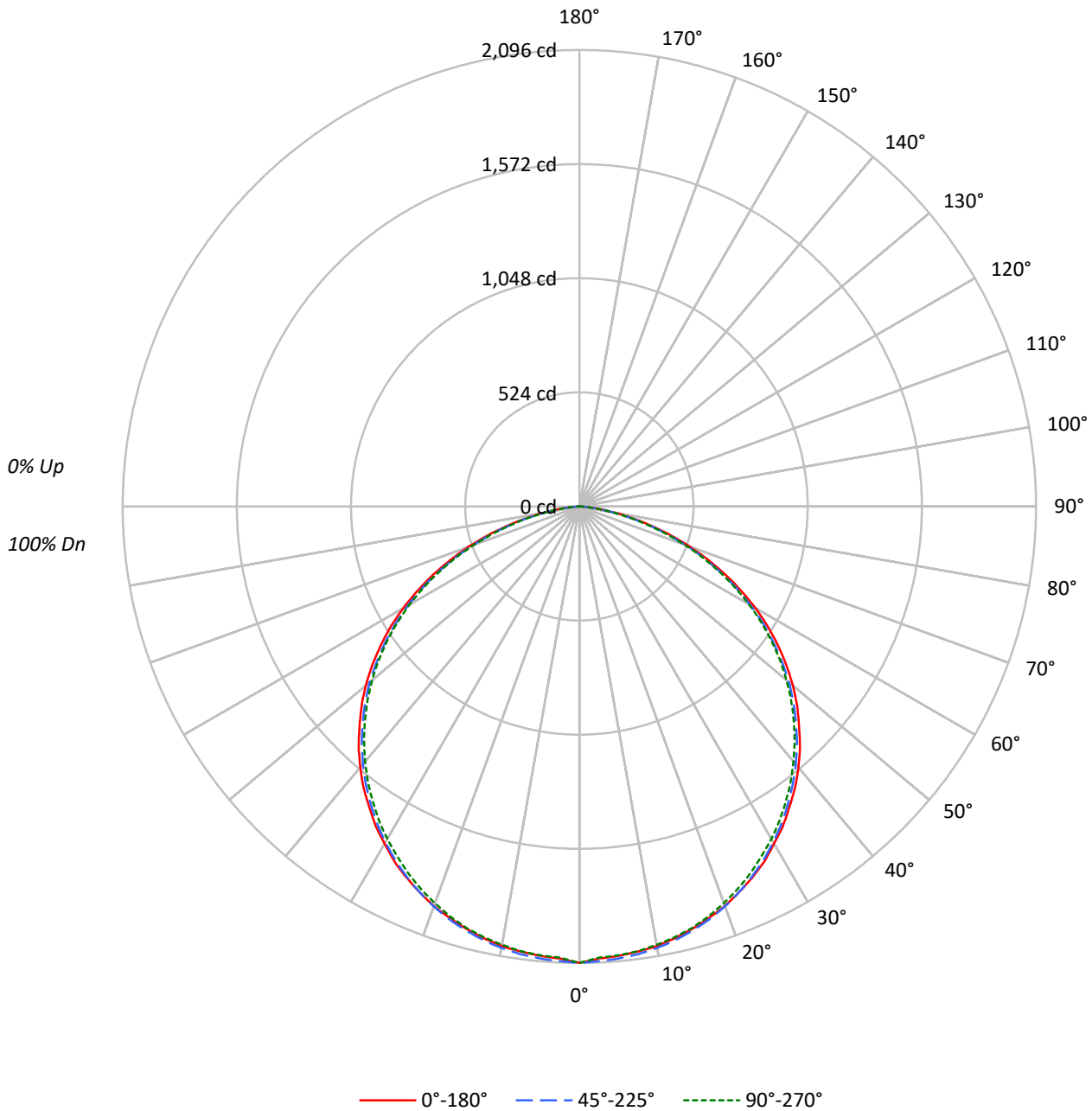
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5865.8 lumens
Efficiency: N/A
Efficacy: 94.8 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

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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				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°	5640	5640	5640
5°	5596	5628	5589
10°	5601	5625	5584
15°	5592	5614	5580
20°	5592	5597	5552
25°	5579	5568	5517
30°	5555	5531	5477
35°	5526	5483	5429
40°	5494	5427	5372
45°	5427	5351	5295
50°	5357	5259	5197
55°	5221	5099	5050
60°	5019	4879	4837
65°	4700	4562	4513
70°	4238	4068	4034
75°	3554	3373	3337
80°	2582	2407	2338
85°	1365	1204	1099

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5427 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	198.5	3.4
10°-20°	570.1	9.7
20°-30°	866.1	14.8
30°-40°	1047.7	17.9
40°-50°	1088.8	18.6
50°-60°	974.9	16.6
60°-70°	711.0	12.1
70°-80°	350.1	6.0
80°-90°	58.6	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°	1634.7	27.9
0°-40°	2682.3	45.7
0°-60°	4746.0	80.9
0°-90°	5865.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5865.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2096	2096	2096	2096	2096	
5°	2072	2094	2084	2104	2069	197
15°	2007	2026	2015	2032	2003	567
25°	1879	1888	1875	1884	1858	866
35°	1682	1686	1669	1676	1652	1053
45°	1426	1424	1406	1409	1391	1101
55°	1113	1103	1087	1084	1076	993
65°	738	730	716	711	709	729
75°	342	336	324	321	321	364
85°	44	42	39	35	36	64
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2095.8	2095.8	2095.8	2095.8	2095.8
2.5°	2077.6	2101.0	2089.7	2110.5	2073.2
5°	2071.5	2094.0	2083.6	2103.6	2068.9
7.5°	2061.1	2084.5	2073.2	2092.3	2059.3
10°	2049.8	2070.6	2058.5	2077.6	2043.7
12.5°	2029.8	2050.7	2039.4	2056.7	2025.5
15°	2007.3	2025.5	2015.1	2032.5	2003.0
17.5°	1981.3	1998.6	1987.3	2003.0	1973.5
20°	1952.6	1966.5	1954.4	1967.4	1938.8
22.5°	1917.1	1930.1	1917.1	1925.8	1900.6
25°	1878.9	1888.5	1875.4	1884.1	1858.1
27.5°	1838.1	1843.3	1830.3	1837.3	1810.4
30°	1787.8	1793.9	1780.0	1788.7	1762.7
32.5°	1739.3	1742.7	1727.1	1734.0	1710.6
35°	1682.0	1685.5	1669.0	1675.9	1652.5
37.5°	1627.3	1626.5	1609.1	1613.5	1593.5
40°	1564.0	1563.2	1544.9	1548.4	1529.3
42.5°	1499.0	1495.5	1478.1	1479.9	1462.5
45°	1426.1	1424.4	1406.1	1408.7	1391.4
47.5°	1355.8	1350.6	1332.4	1333.3	1318.5
50°	1279.5	1271.7	1256.1	1254.3	1241.3
52.5°	1198.0	1189.3	1171.9	1170.2	1160.7
55°	1112.9	1103.4	1086.9	1084.3	1076.5
57.5°	1025.3	1013.2	1000.2	995.0	988.9
60°	932.5	921.2	906.5	901.3	898.7
62.5°	836.2	825.0	813.7	808.5	805.0
65°	738.2	729.5	716.5	711.3	708.7
67.5°	638.4	630.6	618.5	612.4	611.6
70°	538.7	530.9	517.0	513.5	512.7
72.5°	438.9	432.0	419.0	415.5	415.5
75°	341.8	335.7	324.4	321.0	321.0
77.5°	249.8	244.6	235.9	231.6	231.6
80°	166.6	163.1	155.3	151.8	150.9
82.5°	96.3	94.6	87.6	84.1	85.9
85°	44.2	42.5	39.0	34.7	35.6
87.5°	11.3	10.4	7.8	6.1	7.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)