

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: P973088

Luminaire Tested: FLR2-14-80HE-L930-CP080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973088
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-L930-CP080
Description: 1*4 FLR-2.0 8000 Lumen High Efficacy at 3000CCT & 90 CRI with Clear Polycarbonate (0.080" thickness)

Light Source:
Ballast/Driver: -

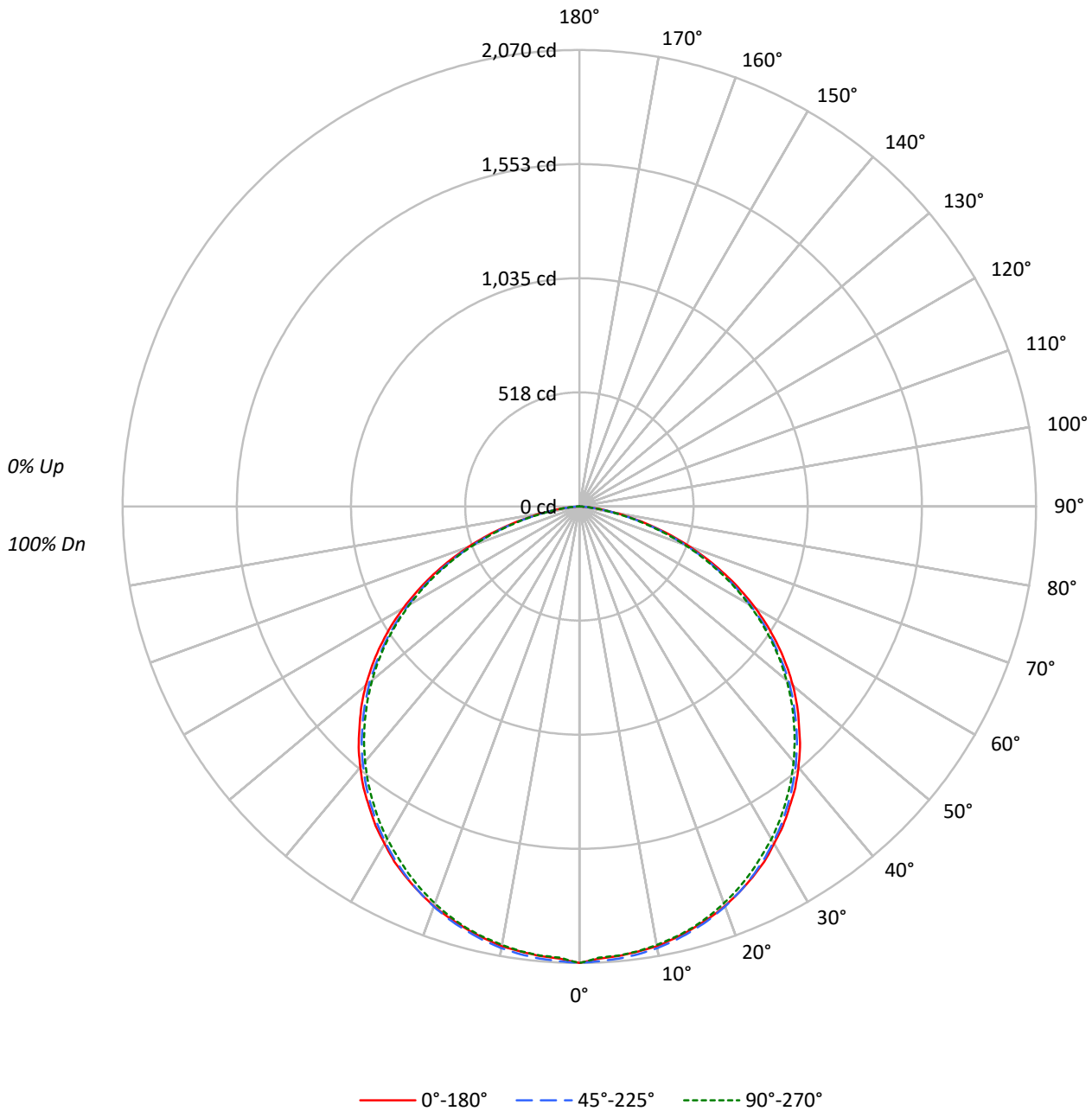
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5794.3 lumens
Efficiency: N/A
Efficacy: 93.6 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										
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°	5571	5571	5571
5°	5527	5560	5521
10°	5533	5556	5516
15°	5524	5545	5512
20°	5523	5529	5484
25°	5511	5501	5450
30°	5487	5464	5410
35°	5458	5416	5363
40°	5427	5361	5307
45°	5361	5286	5230
50°	5291	5195	5133
55°	5158	5037	4989
60°	4957	4819	4778
65°	4643	4507	4458
70°	4187	4018	3984
75°	3510	3332	3296
80°	2549	2377	2311
85°	1349	1192	1084

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5361 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	196.1	3.4
10°-20°	563.1	9.7
20°-30°	855.5	14.8
30°-40°	1034.9	17.9
40°-50°	1075.6	18.6
50°-60°	963.0	16.6
60°-70°	702.4	12.1
70°-80°	345.9	6.0
80°-90°	57.8	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°	1614.7	27.9
0°-40°	2649.6	45.7
0°-60°	4688.2	80.9
0°-90°	5794.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5794.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2070	2070	2070	2070	2070	
5°	2046	2068	2058	2078	2044	195
15°	1983	2001	1990	2008	1978	560
25°	1856	1865	1853	1861	1835	856
35°	1662	1665	1649	1656	1632	1040
45°	1409	1407	1389	1392	1374	1088
55°	1099	1090	1074	1071	1063	981
65°	729	721	708	703	700	720
75°	338	332	320	317	317	360
85°	44	42	39	34	35	63
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2070.2	2070.2	2070.2	2070.2	2070.2
2.5°	2052.2	2075.4	2064.2	2084.8	2047.9
5°	2046.2	2068.5	2058.2	2077.9	2043.7
7.5°	2035.9	2059.1	2047.9	2066.8	2034.2
10°	2024.8	2045.4	2033.4	2052.2	2018.8
12.5°	2005.1	2025.7	2014.5	2031.7	2000.8
15°	1982.8	2000.8	1990.5	2007.7	1978.5
17.5°	1957.1	1974.3	1963.1	1978.5	1949.4
20°	1928.8	1942.5	1930.6	1943.4	1915.1
22.5°	1893.7	1906.6	1893.7	1902.3	1877.4
25°	1856.0	1865.4	1852.6	1861.1	1835.4
27.5°	1815.7	1820.9	1808.0	1814.9	1788.3
30°	1766.0	1772.0	1758.3	1766.9	1741.2
32.5°	1718.0	1721.5	1706.0	1712.9	1689.8
35°	1661.5	1664.9	1648.6	1655.5	1632.4
37.5°	1607.5	1606.7	1589.5	1593.8	1574.1
40°	1545.0	1544.1	1526.1	1529.5	1510.7
42.5°	1480.7	1477.3	1460.1	1461.8	1444.7
45°	1408.7	1407.0	1389.0	1391.6	1374.4
47.5°	1339.3	1334.2	1316.2	1317.0	1302.5
50°	1263.9	1256.2	1240.8	1239.0	1226.2
52.5°	1183.4	1174.8	1157.6	1155.9	1146.5
55°	1099.4	1090.0	1073.7	1071.1	1063.4
57.5°	1012.8	1000.8	988.0	982.8	976.8
60°	921.1	910.0	895.4	890.3	887.7
62.5°	826.0	814.9	803.8	798.6	795.2
65°	729.2	720.6	707.8	702.6	700.1
67.5°	630.7	623.0	611.0	605.0	604.1
70°	532.1	524.4	510.7	507.3	506.4
72.5°	433.6	426.7	413.9	410.4	410.4
75°	337.6	331.6	320.5	317.0	317.0
77.5°	246.8	241.6	233.1	228.8	228.8
80°	164.5	161.1	153.4	150.0	149.1
82.5°	95.1	93.4	86.5	83.1	84.8
85°	43.7	42.0	38.6	34.3	35.1
87.5°	11.1	10.3	7.7	6.0	7.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)