

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: P973248

Luminaire Tested: FLR2-14-80HE-L940-CP375

Issue Date: 3/13/2025

**Test Information**

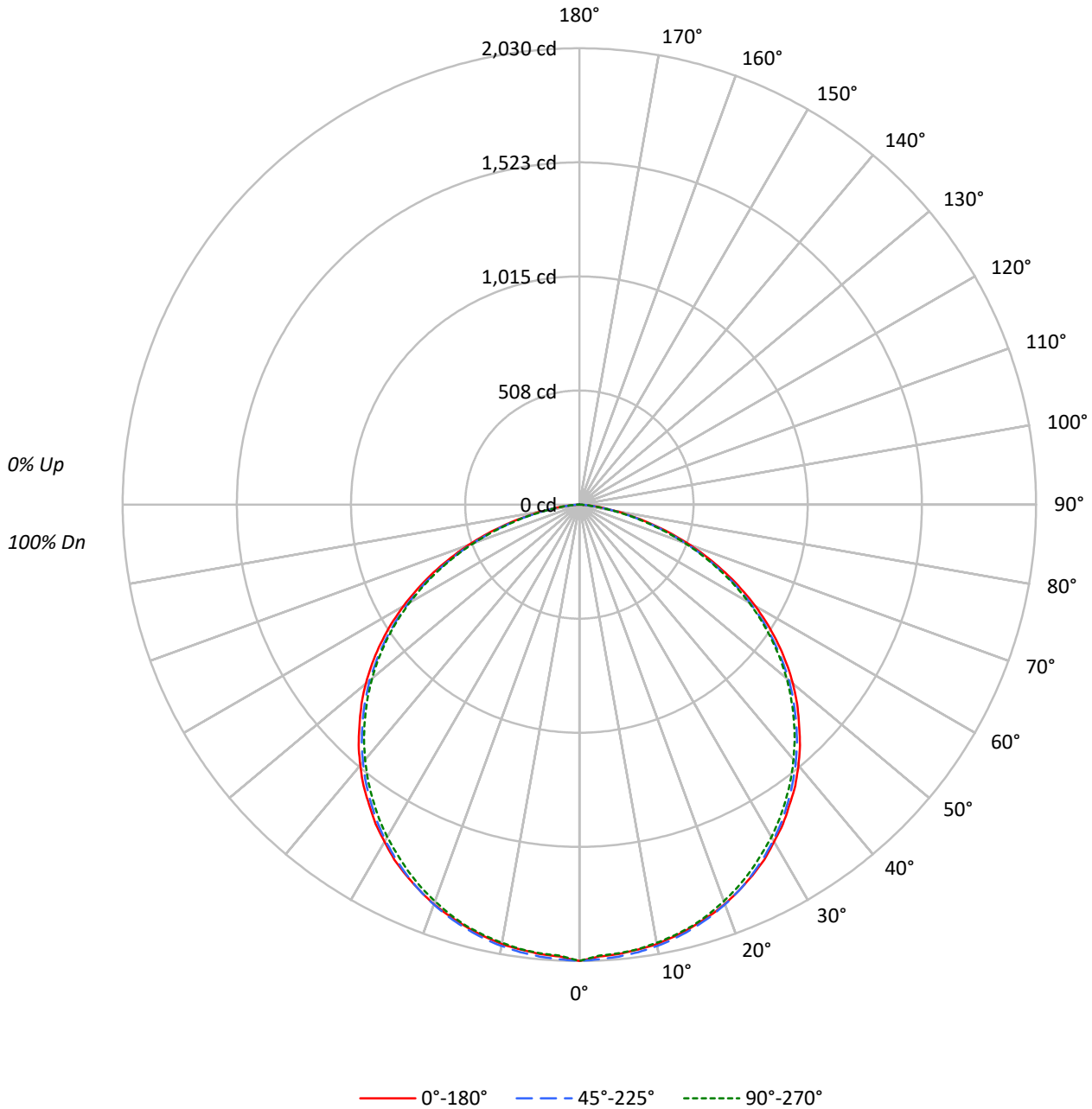
Test Method: LM-79-2019  
Report Number: P973248  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/13/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: FAIL-SAFE  
Catalog Number: FLR2-14-80HE-L940-CP375  
Description: 1\*4 FLR-2.0 8000 Lumen High Efficacy at 4000CCT & 90 CRI with Clear Polycarbonate (0.375" thickness)  
  
Light Source:  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5681.6 lumens  
Efficiency: N/A  
Efficacy: 91.8 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	
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	
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°	5463	5463	5463
5°	5420	5452	5413
10°	5425	5448	5409
15°	5417	5438	5405
20°	5416	5421	5378
25°	5404	5394	5344
30°	5381	5357	5305
35°	5352	5311	5258
40°	5322	5257	5204
45°	5257	5183	5129
50°	5188	5094	5034
55°	5058	4939	4892
60°	4861	4725	4685
65°	4553	4419	4371
70°	4105	3940	3907
75°	3441	3267	3232
80°	2500	2331	2266
85°	1325	1167	1062

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 5257 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	192.3	3.4
10°-20°	552.2	9.7
20°-30°	838.9	14.8
30°-40°	1014.8	17.9
40°-50°	1054.7	18.6
50°-60°	944.3	16.6
60°-70°	688.7	12.1
70°-80°	339.1	6.0
80°-90°	56.7	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°	1583.4	27.9
0°-40°	2598.1	45.7
0°-60°	4597.1	80.9
0°-90°	5681.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5681.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2030	2030	2030	2030	2030	
5°	2006	2028	2018	2038	2004	191
15°	1944	1962	1952	1969	1940	549
25°	1820	1829	1817	1825	1800	839
35°	1629	1633	1617	1623	1601	1020
45°	1381	1380	1362	1364	1348	1067
55°	1078	1069	1053	1050	1043	962
65°	715	707	694	689	686	706
75°	331	325	314	311	311	353
85°	43	41	38	34	34	62
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2030.0	2030.0	2030.0	2030.0	2030.0
2.5°	2012.3	2035.0	2024.1	2044.3	2008.1
5°	2006.5	2028.3	2018.2	2037.6	2003.9
7.5°	1996.4	2019.1	2008.1	2026.6	1994.7
10°	1985.5	2005.6	1993.9	2012.3	1979.6
12.5°	1966.1	1986.3	1975.4	1992.2	1961.9
15°	1944.3	1961.9	1951.9	1968.7	1940.1
17.5°	1919.1	1935.9	1925.0	1940.1	1911.5
20°	1891.4	1904.8	1893.0	1905.6	1877.9
22.5°	1856.9	1869.5	1856.9	1865.3	1840.9
25°	1819.9	1829.2	1816.6	1825.0	1799.8
27.5°	1780.4	1785.5	1772.9	1779.6	1753.6
30°	1731.7	1737.6	1724.1	1732.6	1707.3
32.5°	1684.7	1688.0	1672.9	1679.6	1656.9
35°	1629.2	1632.6	1616.6	1623.3	1600.6
37.5°	1576.3	1575.4	1558.6	1562.8	1543.5
40°	1514.9	1514.1	1496.4	1499.8	1481.3
42.5°	1451.9	1448.6	1431.7	1433.4	1416.6
45°	1381.3	1379.7	1362.0	1364.5	1347.7
47.5°	1313.3	1308.2	1290.6	1291.4	1277.1
50°	1239.3	1231.8	1216.7	1215.0	1202.4
52.5°	1160.4	1152.0	1135.1	1133.5	1124.2
55°	1078.0	1068.8	1052.8	1050.3	1042.7
57.5°	993.1	981.4	968.8	963.7	957.9
60°	903.2	892.3	878.0	873.0	870.5
62.5°	810.0	799.1	788.1	783.1	779.7
65°	715.0	706.6	694.0	689.0	686.5
67.5°	618.4	610.8	599.1	593.2	592.4
70°	521.8	514.2	500.8	497.4	496.6
72.5°	425.2	418.4	405.8	402.5	402.5
75°	331.0	325.2	314.2	310.9	310.9
77.5°	242.0	236.9	228.5	224.3	224.3
80°	161.3	158.0	150.4	147.0	146.2
82.5°	93.3	91.6	84.9	81.5	83.2
85°	42.9	41.2	37.8	33.6	34.4
87.5°	10.9	10.1	7.6	5.9	7.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)