

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: P973822

Luminaire Tested: FLR2-22-60HE-L835-CP187

Issue Date: 3/13/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P973822  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/13/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: FAIL-SAFE  
Catalog Number: FLR2-22-60HE-L835-CP187  
Description: SHAPER SENSE CIRCLE  
  
Light Source:  
Ballast/Driver: -

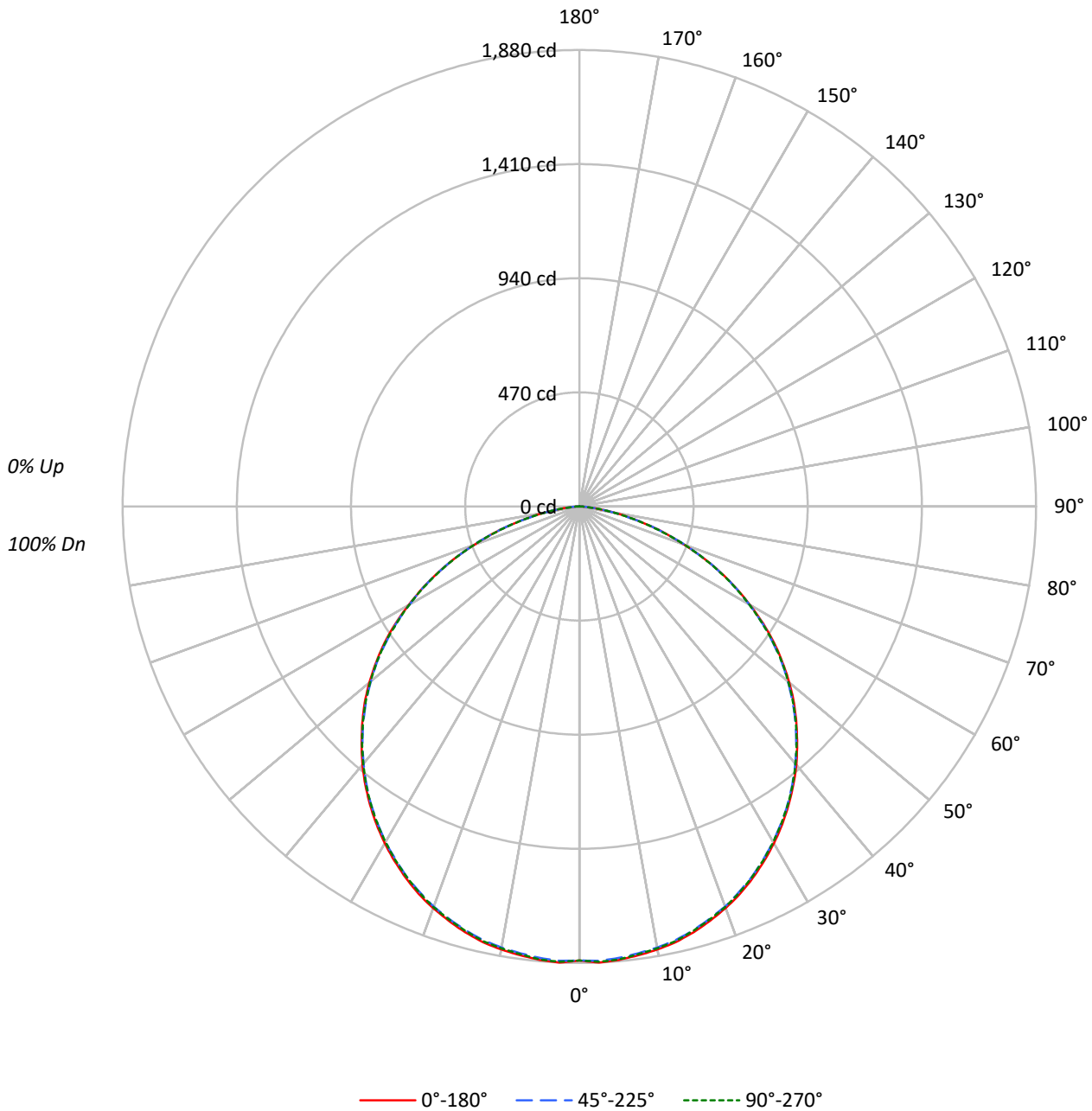
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5229.7 lumens  
Efficiency: N/A  
Efficacy: 110.3 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.38  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 47.4  
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	63	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	71	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	50	42	37	48	41	36	47	41	36	34
8	61	47	39	33	59	47	39	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	40	32	27	39	32	27	38	31	27	37	31	26	25

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	5032	5032	5032
5°	5064	5042	5058
10°	5062	5041	5050
15°	5059	5036	5042
20°	5041	5021	5028
25°	5014	4994	4997
30°	4978	4957	4960
35°	4933	4914	4918
40°	4881	4857	4861
45°	4809	4787	4796
50°	4724	4690	4700
55°	4590	4552	4568
60°	4364	4345	4345
65°	4074	4067	4052
70°	3608	3626	3617
75°	3038	3014	2990
80°	2183	2148	2131
85°	1142	1142	1105

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 4809 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	177.1	3.4
10°-20°	509.2	9.7
20°-30°	773.9	14.8
30°-40°	935.4	17.9
40°-50°	970.9	18.6
50°-60°	868.0	16.6
60°-70°	631.1	12.1
70°-80°	310.3	5.9
80°-90°	53.8	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°	1460.2	27.9
0°-40°	2395.6	45.8
0°-60°	4234.5	81.0
0°-90°	5229.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5229.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1870	1870	1870	1870	1870	
5°	1875	1853	1867	1860	1872	178
15°	1816	1795	1808	1803	1810	512
25°	1689	1670	1682	1678	1683	778
35°	1502	1491	1496	1497	1497	939
45°	1264	1258	1258	1260	1260	975
55°	978	973	970	973	974	872
65°	640	642	639	639	636	631
75°	292	294	290	291	288	310
85°	37	38	37	37	36	54
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1870.1	1870.1	1870.1	1870.1	1870.1
2.5°	1880.5	1858.5	1872.4	1864.3	1877.0
5°	1874.7	1852.7	1866.6	1859.7	1872.4
7.5°	1864.3	1842.3	1856.2	1849.3	1859.7
10°	1852.7	1829.6	1844.7	1837.7	1848.1
12.5°	1837.7	1815.8	1829.6	1823.9	1833.1
15°	1815.8	1795.0	1807.7	1803.1	1810.0
17.5°	1789.2	1768.4	1781.1	1777.7	1783.4
20°	1760.3	1740.7	1753.4	1749.9	1755.7
22.5°	1728.0	1707.2	1718.8	1716.4	1721.1
25°	1688.7	1670.2	1681.8	1678.3	1682.9
27.5°	1647.1	1629.8	1639.1	1639.1	1641.4
30°	1602.1	1585.9	1595.2	1595.2	1596.3
32.5°	1553.6	1540.9	1546.6	1547.8	1547.8
35°	1501.6	1491.2	1495.8	1497.0	1497.0
37.5°	1447.3	1436.9	1440.4	1442.7	1442.7
40°	1389.6	1380.3	1382.6	1384.9	1383.8
42.5°	1327.2	1320.3	1321.4	1323.7	1323.7
45°	1263.7	1257.9	1257.9	1260.2	1260.2
47.5°	1199.0	1193.2	1190.9	1193.2	1193.2
50°	1128.5	1122.7	1120.4	1122.7	1122.7
52.5°	1054.6	1048.8	1048.8	1048.8	1050.0
55°	978.4	972.6	970.3	972.6	973.7
57.5°	897.5	895.2	891.7	892.9	889.4
60°	810.9	810.9	807.4	809.7	807.4
62.5°	726.5	728.9	725.4	725.4	723.1
65°	639.9	642.2	638.8	638.8	636.4
67.5°	551.0	554.4	549.8	549.8	547.5
70°	458.6	465.5	460.9	462.0	459.7
72.5°	375.4	378.9	374.2	374.2	371.9
75°	292.2	294.5	289.9	291.1	287.6
77.5°	210.2	213.7	209.1	210.2	209.1
80°	140.9	142.1	138.6	139.8	137.5
82.5°	82.0	83.2	82.0	80.9	79.7
85°	37.0	38.1	37.0	37.0	35.8
87.5°	9.2	9.2	9.2	9.2	9.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)