

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: P973990

Luminaire Tested: FLR2-22-60HE-L850-CP187

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973990
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-L850-CP187
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

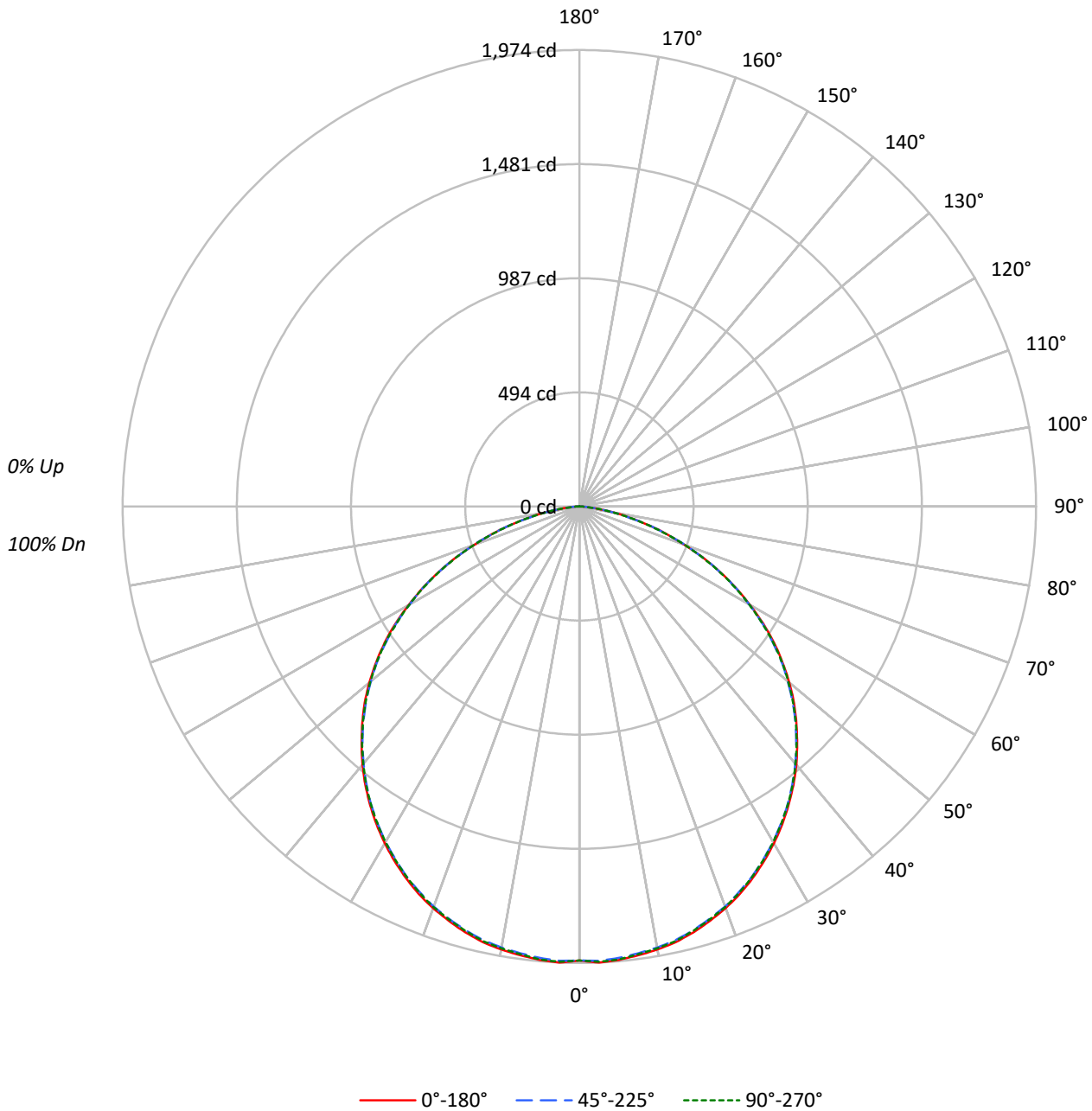
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5491.2 lumens
Efficiency: N/A
Efficacy: 115.8 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

TEST NUMBER: P973990
CATALOG NUMBER: FLR2-22-60HE-L850-CP187

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	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°	5284	5284	5284
5°	5317	5294	5311
10°	5316	5293	5302
15°	5312	5288	5295
20°	5293	5272	5279
25°	5265	5243	5247
30°	5227	5204	5208
35°	5180	5160	5163
40°	5125	5100	5104
45°	5049	5026	5036
50°	4960	4925	4935
55°	4820	4780	4797
60°	4582	4563	4563
65°	4278	4271	4255
70°	3788	3807	3798
75°	3190	3165	3140
80°	2294	2255	2236
85°	1198	1198	1161

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5049 cd/sqm



TEST NUMBER: P973990
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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	185.9	3.4
10°-20°	534.7	9.7
20°-30°	812.6	14.8
30°-40°	982.1	17.9
40°-50°	1019.4	18.6
50°-60°	911.4	16.6
60°-70°	662.6	12.1
70°-80°	325.9	5.9
80°-90°	56.5	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°	1533.2	27.9
0°-40°	2515.4	45.8
0°-60°	4446.2	81.0
0°-90°	5491.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5491.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1964	1964	1964	1964	1964	
5°	1968	1945	1960	1953	1966	187
15°	1907	1885	1898	1893	1900	538
25°	1773	1754	1766	1762	1767	817
35°	1577	1566	1571	1572	1572	986
45°	1327	1321	1321	1323	1323	1023
55°	1027	1021	1019	1021	1022	916
65°	672	674	671	671	668	663
75°	307	309	304	306	302	326
85°	39	40	39	39	38	57
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1963.6	1963.6	1963.6	1963.6	1963.6
2.5°	1974.5	1951.4	1966.0	1957.5	1970.9
5°	1968.4	1945.4	1959.9	1952.7	1966.0
7.5°	1957.5	1934.5	1949.0	1941.7	1952.7
10°	1945.4	1921.1	1936.9	1929.6	1940.5
12.5°	1929.6	1906.6	1921.1	1915.1	1924.8
15°	1906.6	1884.7	1898.1	1893.2	1900.5
17.5°	1878.7	1856.8	1870.2	1866.5	1872.6
20°	1848.4	1827.7	1841.1	1837.4	1843.5
22.5°	1814.4	1792.6	1804.7	1802.3	1807.1
25°	1773.2	1753.8	1765.9	1762.2	1767.1
27.5°	1729.5	1711.3	1721.0	1721.0	1723.4
30°	1682.2	1665.2	1674.9	1674.9	1676.1
32.5°	1631.3	1617.9	1624.0	1625.2	1625.2
35°	1576.7	1565.8	1570.6	1571.8	1571.8
37.5°	1519.7	1508.8	1512.4	1514.8	1514.8
40°	1459.0	1449.3	1451.8	1454.2	1453.0
42.5°	1393.5	1386.3	1387.5	1389.9	1389.9
45°	1326.8	1320.8	1320.8	1323.2	1323.2
47.5°	1258.9	1252.9	1250.4	1252.9	1252.9
50°	1184.9	1178.9	1176.4	1178.9	1178.9
52.5°	1107.3	1101.3	1101.3	1101.3	1102.5
55°	1027.3	1021.2	1018.8	1021.2	1022.4
57.5°	942.4	939.9	936.3	937.5	933.9
60°	851.4	851.4	847.8	850.2	847.8
62.5°	762.9	765.3	761.7	761.7	759.2
65°	671.9	674.3	670.7	670.7	668.3
67.5°	578.5	582.2	577.3	577.3	574.9
70°	481.5	488.8	483.9	485.1	482.7
72.5°	394.2	397.8	393.0	393.0	390.5
75°	306.8	309.3	304.4	305.6	302.0
77.5°	220.7	224.4	219.5	220.7	219.5
80°	148.0	149.2	145.5	146.8	144.3
82.5°	86.1	87.3	86.1	84.9	83.7
85°	38.8	40.0	38.8	38.8	37.6
87.5°	9.7	9.7	9.7	9.7	9.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)