

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: P973726

Luminaire Tested: FLR2-22-60HE-L830-CP080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973726
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-L830-CP080
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

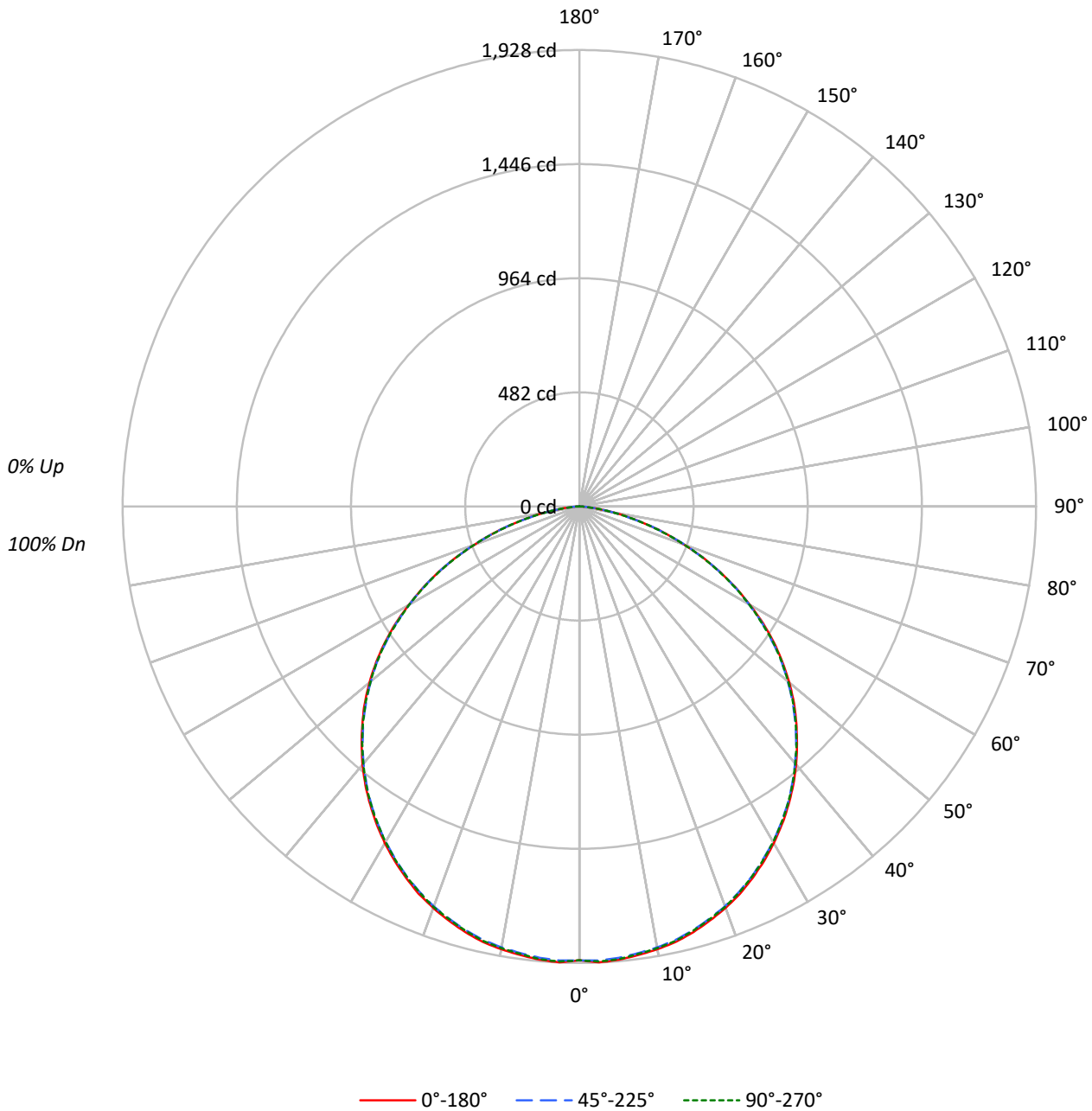
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5360.8 lumens
Efficiency: N/A
Efficacy: 113.1 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°	5158	5158	5158
5°	5191	5169	5185
10°	5190	5167	5176
15°	5185	5162	5169
20°	5168	5147	5154
25°	5140	5119	5122
30°	5103	5081	5084
35°	5056	5037	5041
40°	5004	4979	4983
45°	4929	4907	4916
50°	4843	4808	4818
55°	4705	4666	4683
60°	4473	4454	4454
65°	4176	4169	4154
70°	3699	3717	3707
75°	3115	3090	3065
80°	2239	2202	2183
85°	1170	1170	1133

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4929 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	181.5	3.4
10°-20°	522.0	9.7
20°-30°	793.3	14.8
30°-40°	958.8	17.9
40°-50°	995.2	18.6
50°-60°	889.7	16.6
60°-70°	646.9	12.1
70°-80°	318.1	5.9
80°-90°	55.2	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°	1496.8	27.9
0°-40°	2455.6	45.8
0°-60°	4340.6	81.0
0°-90°	5360.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5360.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1917	1917	1917	1917	1917	
5°	1922	1899	1913	1906	1919	183
15°	1861	1840	1853	1848	1855	525
25°	1731	1712	1724	1720	1725	798
35°	1539	1529	1533	1534	1534	963
45°	1295	1289	1289	1292	1292	999
55°	1003	997	995	997	998	894
65°	656	658	655	655	652	647
75°	300	302	297	298	295	318
85°	38	39	38	38	37	55
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1916.9	1916.9	1916.9	1916.9	1916.9
2.5°	1927.6	1905.1	1919.3	1911.0	1924.0
5°	1921.7	1899.2	1913.4	1906.3	1919.3
7.5°	1911.0	1888.5	1902.7	1895.6	1906.3
10°	1899.2	1875.5	1890.9	1883.8	1894.4
12.5°	1883.8	1861.3	1875.5	1869.6	1879.0
15°	1861.3	1840.0	1853.0	1848.3	1855.4
17.5°	1834.1	1812.7	1825.8	1822.2	1828.1
20°	1804.5	1784.3	1797.3	1793.8	1799.7
22.5°	1771.3	1750.0	1761.8	1759.5	1764.2
25°	1731.0	1712.1	1723.9	1720.4	1725.1
27.5°	1688.4	1670.7	1680.1	1680.1	1682.5
30°	1642.2	1625.7	1635.1	1635.1	1636.3
32.5°	1592.5	1579.5	1585.4	1586.6	1586.6
35°	1539.2	1528.6	1533.3	1534.5	1534.5
37.5°	1483.6	1472.9	1476.5	1478.8	1478.8
40°	1424.4	1414.9	1417.3	1419.6	1418.5
42.5°	1360.4	1353.3	1354.5	1356.9	1356.9
45°	1295.3	1289.4	1289.4	1291.8	1291.8
47.5°	1229.0	1223.1	1220.7	1223.1	1223.1
50°	1156.8	1150.9	1148.5	1150.9	1150.9
52.5°	1081.0	1075.1	1075.1	1075.1	1076.3
55°	1002.9	996.9	994.6	996.9	998.1
57.5°	920.0	917.6	914.1	915.3	911.7
60°	831.2	831.2	827.6	830.0	827.6
62.5°	744.8	747.1	743.6	743.6	741.2
65°	655.9	658.3	654.8	654.8	652.4
67.5°	564.8	568.3	563.6	563.6	561.2
70°	470.1	477.2	472.4	473.6	471.2
72.5°	384.8	388.4	383.6	383.6	381.3
75°	299.6	301.9	297.2	298.4	294.8
77.5°	215.5	219.0	214.3	215.5	214.3
80°	144.5	145.6	142.1	143.3	140.9
82.5°	84.1	85.2	84.1	82.9	81.7
85°	37.9	39.1	37.9	37.9	36.7
87.5°	9.5	9.5	9.5	9.5	9.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)