

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: P973744

Luminaire Tested: FLR2-22-60HE-L830-CP250

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973744
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-CP250
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

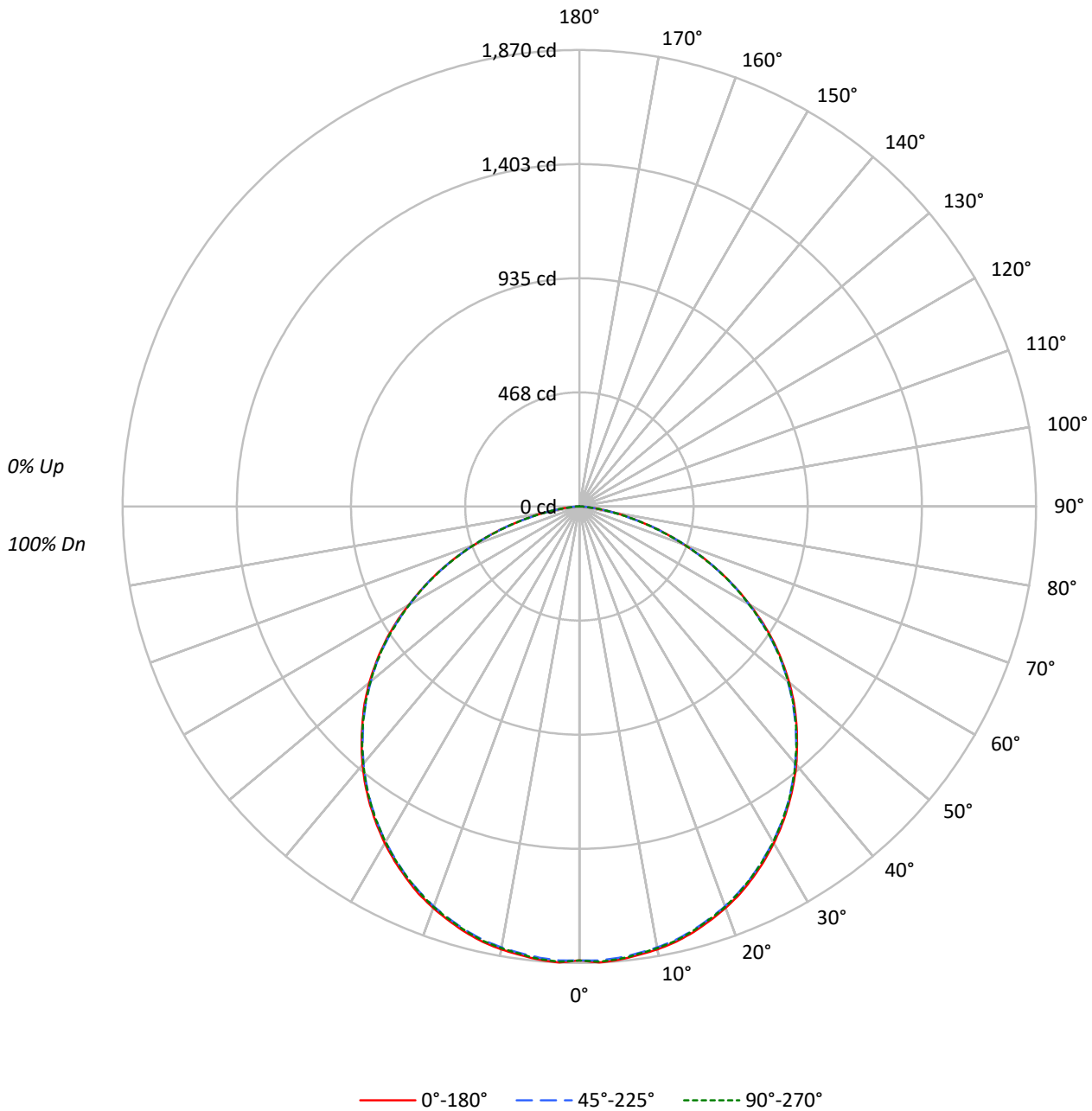
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5200.4 lumens
Efficiency: N/A
Efficacy: 109.7 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°	5004	5004	5004
5°	5036	5014	5029
10°	5034	5012	5021
15°	5030	5008	5014
20°	5013	4993	5000
25°	4986	4966	4969
30°	4950	4929	4932
35°	4905	4886	4890
40°	4854	4830	4834
45°	4782	4760	4769
50°	4698	4664	4674
55°	4564	4526	4543
60°	4339	4321	4321
65°	4052	4045	4030
70°	3588	3606	3596
75°	3021	2997	2974
80°	2171	2135	2118
85°	1136	1136	1099

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4782 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	176.1	3.4
10°-20°	506.4	9.7
20°-30°	769.5	14.8
30°-40°	930.1	17.9
40°-50°	965.4	18.6
50°-60°	863.1	16.6
60°-70°	627.5	12.1
70°-80°	308.6	5.9
80°-90°	53.5	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°	1452.0	27.9
0°-40°	2382.1	45.8
0°-60°	4210.7	81.0
0°-90°	5200.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5200.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1860	1860	1860	1860	1860	
5°	1864	1842	1856	1849	1862	177
15°	1806	1785	1798	1793	1800	509
25°	1679	1661	1672	1669	1674	774
35°	1493	1483	1487	1489	1489	934
45°	1257	1251	1251	1253	1253	969
55°	973	967	965	967	968	867
65°	636	639	635	635	633	628
75°	291	293	288	289	286	308
85°	37	38	37	37	36	54
90°	0	0	0	0	0	



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 CATALOG NUMBER: FLR2-22-60HE-L830-CP250

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1859.6	1859.6	1859.6	1859.6	1859.6
2.5°	1869.9	1848.1	1861.9	1853.8	1866.5
5°	1864.2	1842.3	1856.1	1849.2	1861.9
7.5°	1853.8	1832.0	1845.8	1838.9	1849.2
10°	1842.3	1819.4	1834.3	1827.4	1837.7
12.5°	1827.4	1805.6	1819.4	1813.6	1822.8
15°	1805.6	1784.9	1797.5	1793.0	1799.8
17.5°	1779.2	1758.5	1771.1	1767.7	1773.4
20°	1750.5	1730.9	1743.6	1740.1	1745.9
22.5°	1718.3	1697.6	1709.1	1706.8	1711.4
25°	1679.2	1660.9	1672.4	1668.9	1673.5
27.5°	1637.9	1620.7	1629.9	1629.9	1632.1
30°	1593.1	1577.0	1586.2	1586.2	1587.4
32.5°	1544.9	1532.2	1538.0	1539.1	1539.1
35°	1493.2	1482.8	1487.4	1488.6	1488.6
37.5°	1439.2	1428.8	1432.3	1434.6	1434.6
40°	1381.8	1372.6	1374.9	1377.2	1376.0
42.5°	1319.7	1312.8	1314.0	1316.3	1316.3
45°	1256.6	1250.8	1250.8	1253.1	1253.1
47.5°	1192.2	1186.5	1184.2	1186.5	1186.5
50°	1122.2	1116.4	1114.1	1116.4	1116.4
52.5°	1048.7	1042.9	1042.9	1042.9	1044.1
55°	972.9	967.1	964.8	967.1	968.3
57.5°	892.5	890.2	886.7	887.9	884.4
60°	806.3	806.3	802.9	805.2	802.9
62.5°	722.5	724.8	721.3	721.3	719.0
65°	636.3	638.6	635.2	635.2	632.9
67.5°	547.9	551.3	546.7	546.7	544.4
70°	456.0	462.9	458.3	459.4	457.1
72.5°	373.3	376.7	372.1	372.1	369.8
75°	290.6	292.9	288.3	289.4	286.0
77.5°	209.0	212.5	207.9	209.0	207.9
80°	140.1	141.3	137.8	139.0	136.7
82.5°	81.6	82.7	81.6	80.4	79.3
85°	36.8	37.9	36.8	36.8	35.6
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)