

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: P974542

Luminaire Tested: FLR2-24-45HE-L830-CP250

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974542
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-3)
Test Lab: INNOVATION CENTER
Issue Date: 3/13/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: FAIL-SAFE
Catalog Number: FLR2-24-45HE-L830-CP250
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

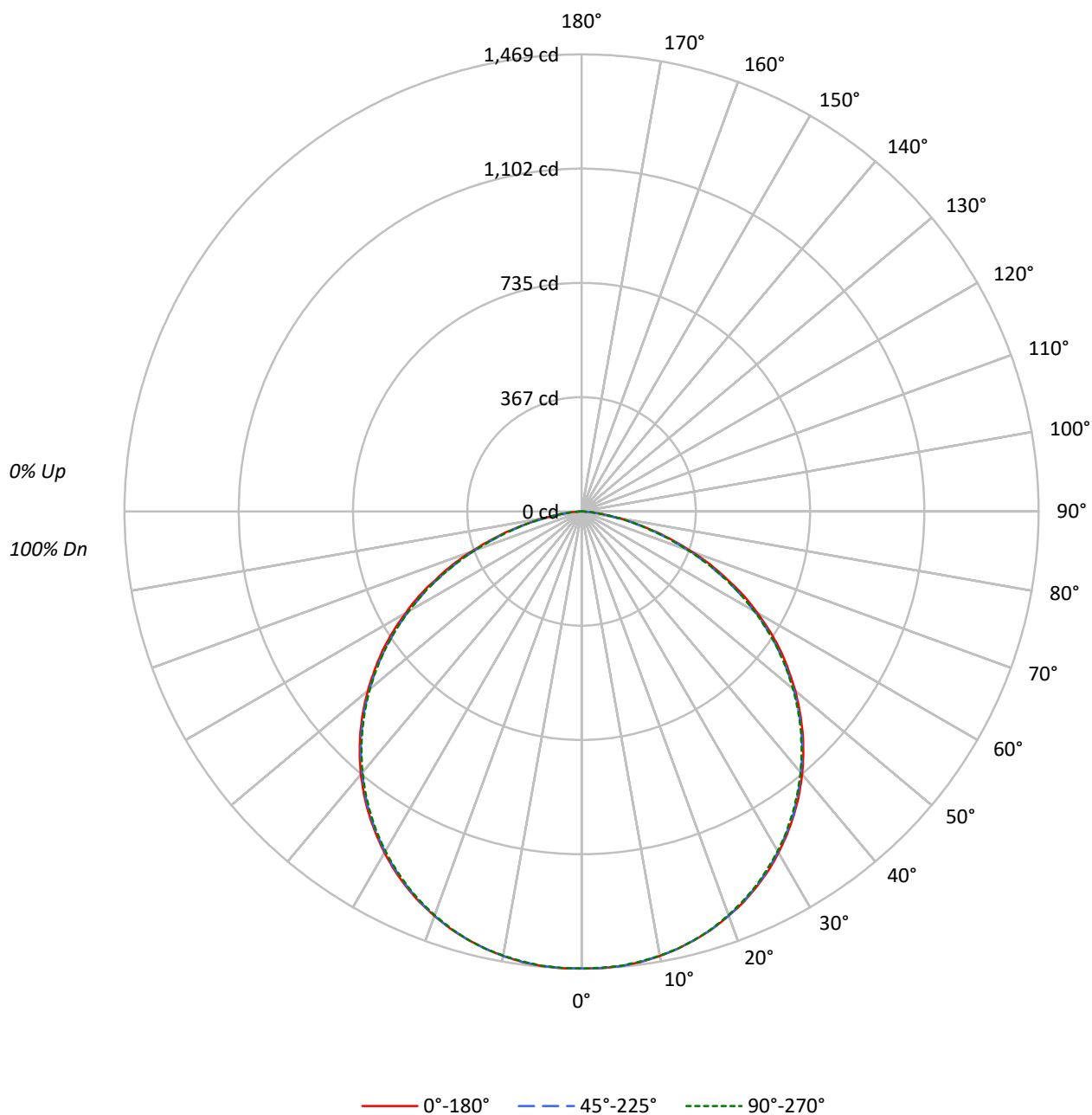
Lumens per Lamp: N/A
Luminaire Lumens: 4152.6 lumens
Efficiency: N/A
Efficacy: 119.7 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 34.7
Input Voltage (V):
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					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		100
1	109	105	100	97	106	102	99	95	98	95	92	94	92	89	91	89	87	85		85
2	99	91	85	79	97	89	83	78	86	81	76	83	78	75	80	76	73	71		71
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62	60		60
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	57	53	51		51
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44		44
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	38		38
7	65	52	43	37	64	51	43	37	49	42	37	48	41	36	47	41	36	34		34
8	61	47	39	33	59	47	38	33	45	38	33	44	37	32	43	37	32	30		30
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	39	33	29	27		27
10	53	40	32	27	52	39	32	27	38	31	27	38	31	26	37	31	26	25		25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1977	1977	1977
5°	1981	1981	1979
10°	1982	1981	1981
15°	1983	1982	1982
20°	1981	1980	1977
25°	1977	1973	1970
30°	1968	1962	1958
35°	1955	1950	1943
40°	1938	1926	1923
45°	1913	1902	1896
50°	1877	1863	1857
55°	1833	1807	1804
60°	1756	1725	1725
65°	1643	1605	1610
70°	1479	1433	1429
75°	1241	1192	1187
80°	907	862	899
85°	513	472	480

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1913 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	139.5	3.4
10°-20°	401.8	9.7
20°-30°	612.6	14.8
30°-40°	742.2	17.9
40°-50°	770.9	18.6
50°-60°	689.7	16.6
60°-70°	502.6	12.1
70°-80°	248.9	6.0
80°-90°	44.5	1.1
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°	1153.8	27.8
0°-40°	1896.0	45.7
0°-60°	3356.6	80.8
0°-90°	4152.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4152.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1469	1469	1469	1469	1469	
5°	1467	1467	1467	1467	1466	139
15°	1423	1423	1423	1424	1423	402
25°	1332	1330	1329	1328	1327	614
35°	1190	1189	1187	1185	1183	745
45°	1005	1003	1000	997	996	775
55°	781	776	770	770	769	696
65°	516	512	504	506	506	512
75°	239	235	229	234	228	255
85°	33	31	31	31	31	46
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1469.3	1469.3	1469.3	1469.3	1469.3
2.5°	1469.3	1468.7	1468.7	1469.3	1468.2
5°	1466.6	1467.2	1466.6	1466.6	1465.6
7.5°	1460.8	1460.3	1459.8	1460.3	1458.7
10°	1450.8	1450.8	1450.3	1450.8	1449.8
12.5°	1438.7	1438.7	1438.7	1439.2	1438.7
15°	1423.4	1422.9	1422.9	1423.9	1422.9
17.5°	1405.5	1405.0	1405.0	1404.4	1403.4
20°	1383.3	1383.3	1382.8	1382.3	1380.7
22.5°	1359.6	1359.1	1357.5	1357.5	1355.4
25°	1331.7	1330.1	1329.0	1328.5	1326.9
27.5°	1301.1	1299.0	1297.4	1296.4	1294.8
30°	1266.8	1264.7	1263.1	1261.6	1260.5
32.5°	1229.9	1228.9	1226.2	1225.7	1223.6
35°	1190.4	1188.8	1187.2	1185.1	1183.0
37.5°	1148.2	1146.6	1142.9	1141.9	1140.3
40°	1103.4	1101.3	1096.6	1096.6	1095.0
42.5°	1055.4	1053.3	1050.2	1048.0	1047.0
45°	1005.3	1003.2	999.5	997.4	996.4
47.5°	952.1	950.5	946.3	944.7	943.1
50°	896.7	894.6	889.9	888.8	887.3
52.5°	838.8	837.7	831.4	830.8	829.3
55°	781.3	775.5	770.2	770.2	769.2
57.5°	718.0	713.8	707.0	707.0	705.9
60°	652.7	649.0	641.1	642.1	641.1
62.5°	588.9	581.0	573.6	576.7	574.1
65°	516.1	511.9	504.0	506.1	505.6
67.5°	449.7	441.8	434.4	438.6	436.5
70°	375.9	371.7	364.3	368.5	363.2
72.5°	306.3	302.6	295.2	300.0	294.7
75°	238.8	235.1	229.3	233.5	228.3
77.5°	175.0	172.4	167.1	171.3	172.4
80°	117.0	113.9	111.2	114.9	116.0
82.5°	68.5	66.4	65.4	65.9	68.5
85°	33.2	30.6	30.6	31.1	31.1
87.5°	9.0	7.9	9.0	9.5	10.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)