

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: P974538

Luminaire Tested: FLR2-24-20HE-L830-CP250

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974538
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: FLR2-24-20HE-L830-CP250
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

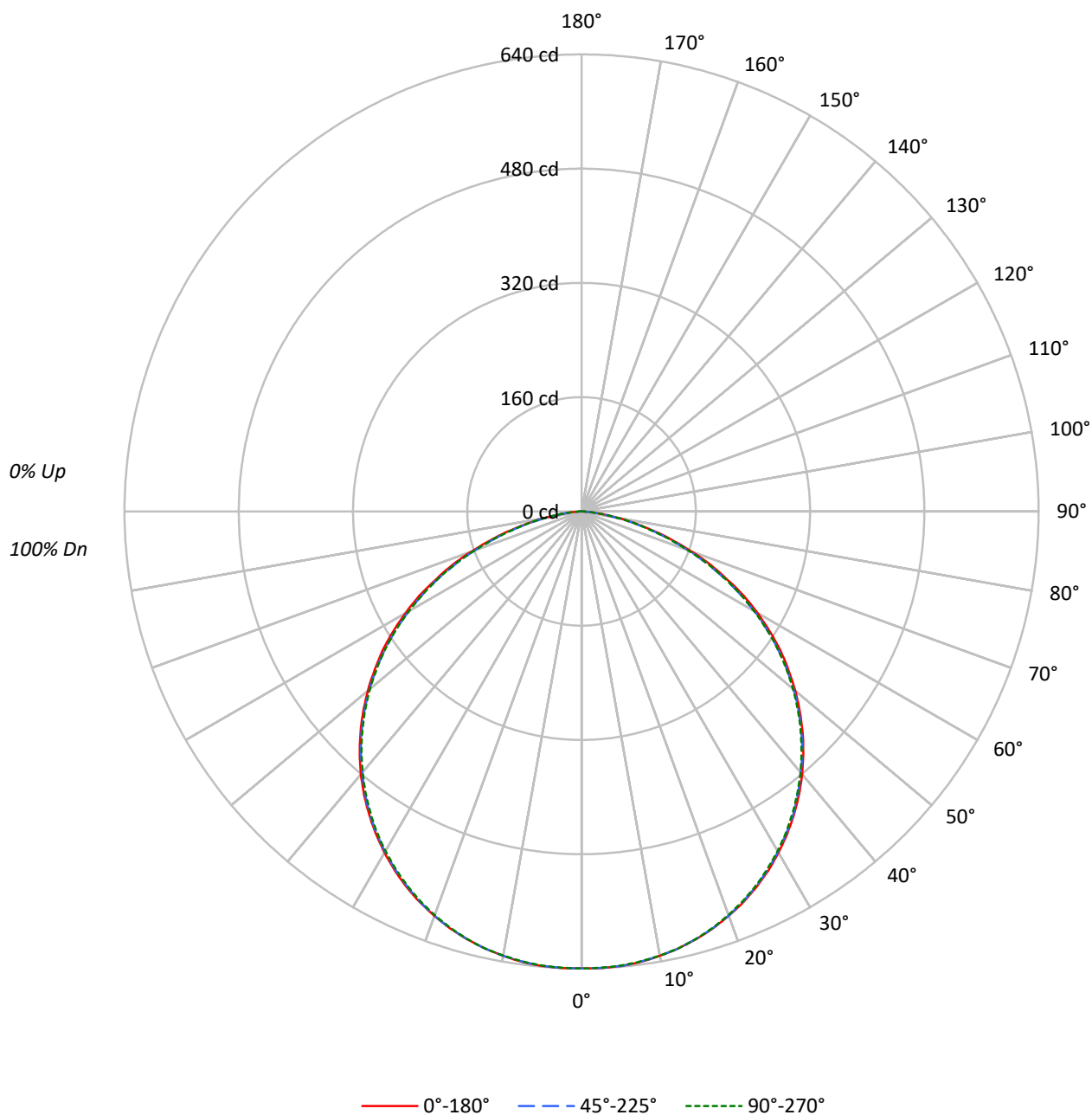
Lumens per Lamp: N/A
Luminaire Lumens: 1808.9 lumens
Efficiency: N/A
Efficacy: 121.4 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 14.9
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°	861	861	861
5°	863	863	862
10°	863	863	863
15°	864	863	863
20°	863	863	861
25°	861	859	858
30°	857	855	853
35°	852	850	846
40°	844	839	838
45°	833	828	826
50°	818	811	809
55°	798	787	786
60°	765	751	751
65°	716	699	701
70°	644	624	622
75°	541	519	517
80°	395	376	391
85°	224	205	208

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 833 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.8	3.4
10°-20°	175.0	9.7
20°-30°	266.8	14.8
30°-40°	323.3	17.9
40°-50°	335.8	18.6
50°-60°	300.4	16.6
60°-70°	218.9	12.1
70°-80°	108.4	6.0
80°-90°	19.4	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°	502.6	27.8
0°-40°	825.9	45.7
0°-60°	1462.1	80.8
0°-90°	1808.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1808.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	640	640	640	640	640	
5°	639	639	639	639	638	61
15°	620	620	620	620	620	175
25°	580	579	579	579	578	267
35°	518	518	517	516	515	324
45°	438	437	435	434	434	337
55°	340	338	336	336	335	303
65°	225	223	220	220	220	223
75°	104	102	100	102	99	111
85°	14	13	13	14	14	20
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	640.0	640.0	640.0	640.0	640.0
2.5°	640.0	639.8	639.8	640.0	639.6
5°	638.9	639.1	638.9	638.9	638.4
7.5°	636.3	636.1	635.9	636.1	635.4
10°	632.0	632.0	631.8	632.0	631.5
12.5°	626.7	626.7	626.7	626.9	626.7
15°	620.0	619.8	619.8	620.3	619.8
17.5°	612.2	612.0	612.0	611.8	611.3
20°	602.6	602.6	602.4	602.1	601.4
22.5°	592.3	592.0	591.3	591.3	590.4
25°	580.1	579.4	578.9	578.7	578.0
27.5°	566.8	565.8	565.2	564.7	564.0
30°	551.8	550.9	550.2	549.5	549.1
32.5°	535.8	535.3	534.2	533.9	533.0
35°	518.5	517.9	517.2	516.2	515.3
37.5°	500.2	499.5	497.9	497.4	496.7
40°	480.6	479.7	477.7	477.7	477.0
42.5°	459.8	458.8	457.5	456.5	456.1
45°	437.9	437.0	435.4	434.5	434.0
47.5°	414.7	414.1	412.2	411.5	410.8
50°	390.6	389.7	387.6	387.2	386.5
52.5°	365.4	364.9	362.2	361.9	361.2
55°	340.3	337.8	335.5	335.5	335.1
57.5°	312.8	310.9	308.0	308.0	307.5
60°	284.3	282.7	279.2	279.7	279.2
62.5°	256.5	253.1	249.9	251.2	250.1
65°	224.8	223.0	219.5	220.5	220.2
67.5°	195.9	192.4	189.2	191.1	190.1
70°	163.7	161.9	158.7	160.5	158.2
72.5°	133.4	131.8	128.6	130.7	128.4
75°	104.0	102.4	99.9	101.7	99.4
77.5°	76.2	75.1	72.8	74.6	75.1
80°	51.0	49.6	48.5	50.1	50.5
82.5°	29.9	28.9	28.5	28.7	29.9
85°	14.5	13.3	13.3	13.5	13.5
87.5°	3.9	3.4	3.9	4.1	4.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)