

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: P974505

Luminaire Tested: FLR2-24-20HE-L830-CP080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974505
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-CP080
Description: SHAPER SENSE CIRCLE
LIGHT LEVEL 1
Light Source:
Ballast/Driver: -

Summary

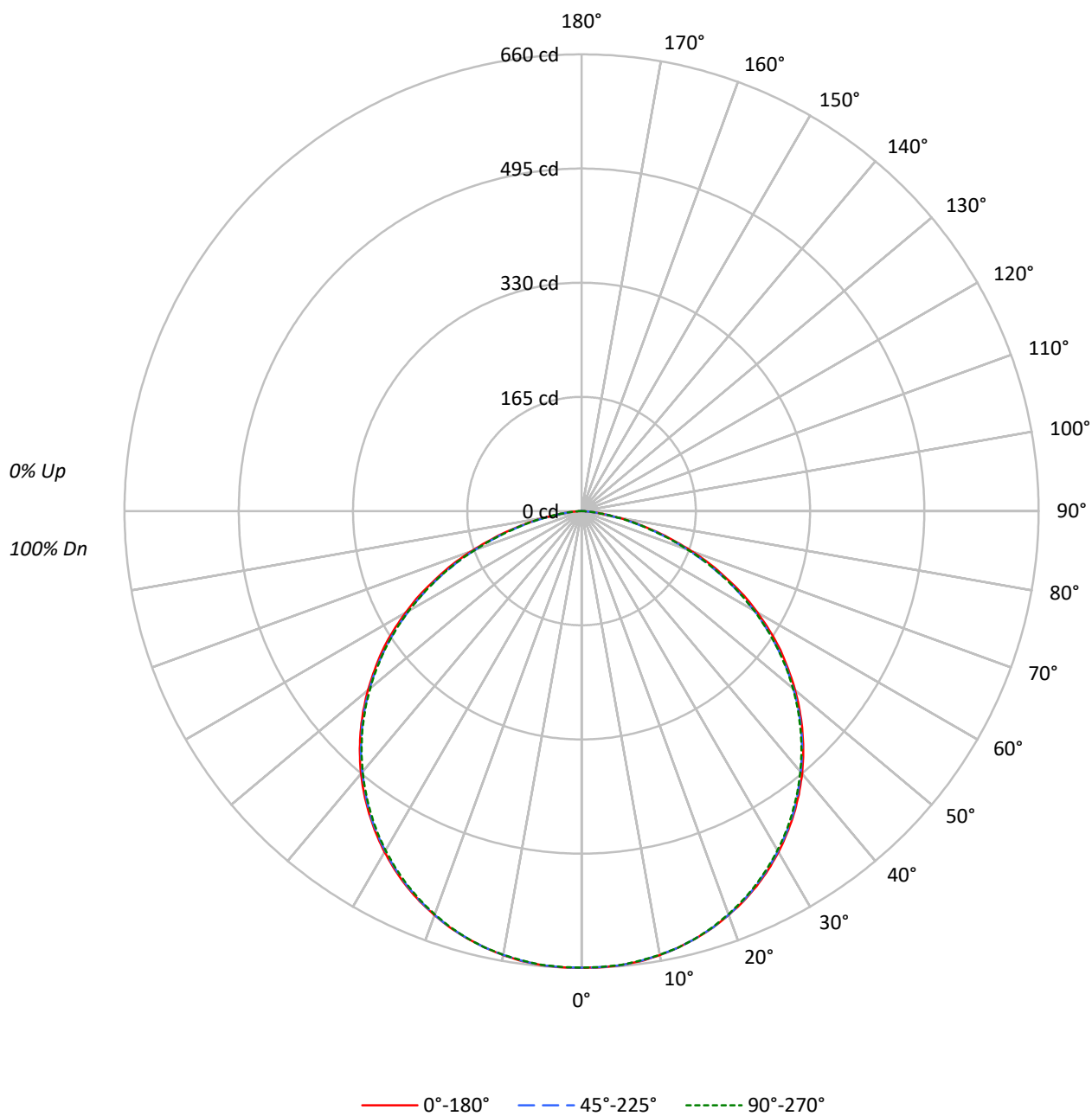
Lumens per Lamp: N/A
Luminaire Lumens: 1864.7 lumens
Efficiency: N/A
Efficacy: 125.1 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P974505

CATALOG NUMBER: FLR2-24-20HE-L830-CP080

Luminous Intensity Polar Plot



TEST NUMBER: P974505

CATALOG NUMBER: FLR2-24-20HE-L830-CP080

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°	888	888	888
5°	890	890	889
10°	890	890	889
15°	890	890	890
20°	889	889	888
25°	888	886	885
30°	884	881	879
35°	878	876	873
40°	870	865	864
45°	859	854	851
50°	843	836	834
55°	823	811	810
60°	789	775	775
65°	738	720	723
70°	664	644	642
75°	557	535	533
80°	408	387	404
85°	230	211	216

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 859 cd/sqm

TEST NUMBER: P974505
CATALOG NUMBER: FLR2-24-20HE-L830-CP080

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.6	3.4
10°-20°	180.4	9.7
20°-30°	275.1	14.8
30°-40°	333.3	17.9
40°-50°	346.2	18.6
50°-60°	309.7	16.6
60°-70°	225.7	12.1
70°-80°	111.8	6.0
80°-90°	20.0	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°	518.1	27.8
0°-40°	851.4	45.7
0°-60°	1507.2	80.8
0°-90°	1864.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1864.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	660	660	660	660	660	
5°	659	659	659	659	658	63
15°	639	639	639	639	639	180
25°	598	597	597	597	596	276
35°	534	534	533	532	531	334
45°	451	450	449	448	447	348
55°	351	348	346	346	345	313
65°	232	230	226	227	227	230
75°	107	106	103	105	102	114
85°	15	14	14	14	14	21
90°	0	0	0	0	0	

TEST NUMBER: P974505

CATALOG NUMBER: FLR2-24-20HE-L830-CP080

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	659.8	659.8	659.8	659.8	659.8
2.5°	659.8	659.5	659.5	659.8	659.3
5°	658.6	658.8	658.6	658.6	658.1
7.5°	656.0	655.7	655.5	655.7	655.0
10°	651.5	651.5	651.2	651.5	651.0
12.5°	646.0	646.0	646.0	646.3	646.0
15°	639.2	638.9	638.9	639.4	638.9
17.5°	631.1	630.9	630.9	630.6	630.2
20°	621.2	621.2	620.9	620.7	620.0
22.5°	610.5	610.3	609.6	609.6	608.6
25°	598.0	597.3	596.8	596.6	595.8
27.5°	584.2	583.3	582.6	582.1	581.4
30°	568.9	567.9	567.2	566.5	566.0
32.5°	552.3	551.8	550.6	550.4	549.4
35°	534.5	533.8	533.1	532.2	531.2
37.5°	515.6	514.9	513.2	512.8	512.0
40°	495.5	494.5	492.4	492.4	491.7
42.5°	473.9	473.0	471.6	470.6	470.1
45°	451.4	450.5	448.8	447.9	447.4
47.5°	427.5	426.8	424.9	424.2	423.5
50°	402.7	401.7	399.6	399.1	398.4
52.5°	376.6	376.2	373.3	373.1	372.4
55°	350.8	348.2	345.9	345.9	345.4
57.5°	322.4	320.5	317.5	317.5	317.0
60°	293.1	291.4	287.9	288.3	287.9
62.5°	264.4	260.9	257.6	259.0	257.8
65°	231.8	229.9	226.3	227.3	227.0
67.5°	201.9	198.4	195.1	197.0	196.0
70°	168.8	166.9	163.6	165.5	163.1
72.5°	137.5	135.9	132.6	134.7	132.3
75°	107.2	105.6	103.0	104.9	102.5
77.5°	78.6	77.4	75.0	76.9	77.4
80°	52.6	51.1	49.9	51.6	52.1
82.5°	30.8	29.8	29.4	29.6	30.8
85°	14.9	13.7	13.7	14.0	14.0
87.5°	4.0	3.6	4.0	4.3	4.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)