

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: P974560

Luminaire Tested: FLR2-24-20HE-L830-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974560
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-CA080
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

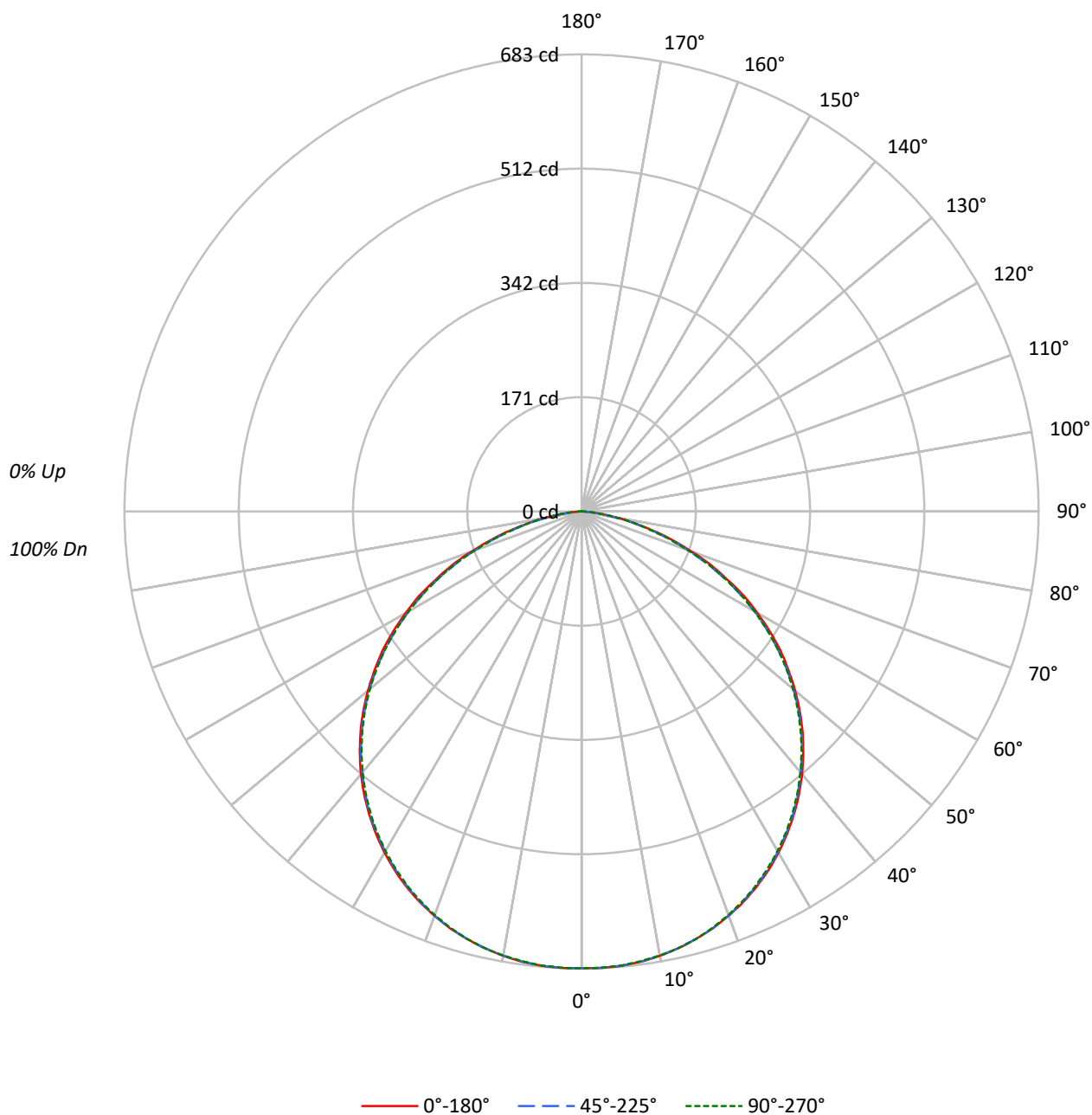
Lumens per Lamp: N/A
Luminaire Lumens: 1929.9 lumens
Efficiency: N/A
Efficacy: 129.5 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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: P974560

CATALOG NUMBER: FLR2-24-20HE-L830-CA080

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		
1	109	105	100	97	106	102	99	95	98	95	92	94	92	89	91	89	87	85		
2	99	91	85	79	97	89	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	62	56	81	70	62	55	67	60	55	65	59	54	63	57	53	51		
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44		
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	38		
7	65	52	43	37	64	51	43	37	49	42	37	48	41	36	47	41	36	34		
8	61	47	39	33	59	47	38	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	39	33	29	27		
10	53	40	32	27	52	39	32	27	38	31	27	38	31	26	37	31	26	25		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	919	919	919
5°	921	921	920
10°	921	921	921
15°	921	921	921
20°	921	920	919
25°	919	917	916
30°	915	912	910
35°	909	906	903
40°	901	895	894
45°	889	884	881
50°	872	866	863
55°	852	840	839
60°	816	802	802
65°	764	746	748
70°	687	666	664
75°	577	554	552
80°	422	401	418
85°	238	219	224

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 889 cd/sqm

TEST NUMBER: P974560
CATALOG NUMBER: FLR2-24-20HE-L830-CA080

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.8	3.4
10°-20°	186.7	9.7
20°-30°	284.7	14.8
30°-40°	344.9	17.9
40°-50°	358.3	18.6
50°-60°	320.5	16.6
60°-70°	233.6	12.1
70°-80°	115.7	6.0
80°-90°	20.7	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°	536.2	27.8
0°-40°	881.2	45.7
0°-60°	1560.0	80.8
0°-90°	1929.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1929.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	683	683	683	683	683	
5°	682	682	682	682	681	65
15°	662	661	661	662	661	187
25°	619	618	618	617	617	285
35°	553	552	552	551	550	346
45°	467	466	464	464	463	360
55°	363	360	358	358	358	324
65°	240	238	234	235	235	238
75°	111	109	107	108	106	118
85°	15	14	14	14	14	21
90°	0	0	0	0	0	

TEST NUMBER: P974560

CATALOG NUMBER: FLR2-24-20HE-L830-CA080

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	682.8	682.8	682.8	682.8	682.8
2.5°	682.8	682.6	682.6	682.8	682.4
5°	681.6	681.9	681.6	681.6	681.1
7.5°	678.9	678.7	678.4	678.7	677.9
10°	674.3	674.3	674.0	674.3	673.8
12.5°	668.6	668.6	668.6	668.9	668.6
15°	661.5	661.3	661.3	661.8	661.3
17.5°	653.2	653.0	653.0	652.7	652.2
20°	642.9	642.9	642.7	642.4	641.7
22.5°	631.9	631.6	630.9	630.9	629.9
25°	618.9	618.2	617.7	617.4	616.7
27.5°	604.7	603.7	603.0	602.5	601.7
30°	588.8	587.8	587.0	586.3	585.8
32.5°	571.6	571.1	569.9	569.7	568.7
35°	553.2	552.5	551.8	550.8	549.8
37.5°	533.6	532.9	531.2	530.7	530.0
40°	512.8	511.8	509.6	509.6	508.9
42.5°	490.5	489.5	488.1	487.1	486.6
45°	467.2	466.3	464.5	463.6	463.1
47.5°	442.5	441.8	439.8	439.1	438.3
50°	416.8	415.8	413.6	413.1	412.4
52.5°	389.8	389.3	386.4	386.1	385.4
55°	363.1	360.4	358.0	358.0	357.5
57.5°	333.7	331.7	328.6	328.6	328.1
60°	303.3	301.6	297.9	298.4	297.9
62.5°	273.7	270.0	266.6	268.0	266.8
65°	239.9	237.9	234.2	235.2	235.0
67.5°	209.0	205.3	201.9	203.8	202.9
70°	174.7	172.7	169.3	171.3	168.8
72.5°	142.4	140.6	137.2	139.4	137.0
75°	111.0	109.3	106.6	108.5	106.1
77.5°	81.3	80.1	77.7	79.6	80.1
80°	54.4	52.9	51.7	53.4	53.9
82.5°	31.9	30.9	30.4	30.6	31.9
85°	15.4	14.2	14.2	14.5	14.5
87.5°	4.2	3.7	4.2	4.4	4.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)