

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: P974945

Luminaire Tested: FLR2-24-20HE-L940-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974945
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-L940-CA080
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

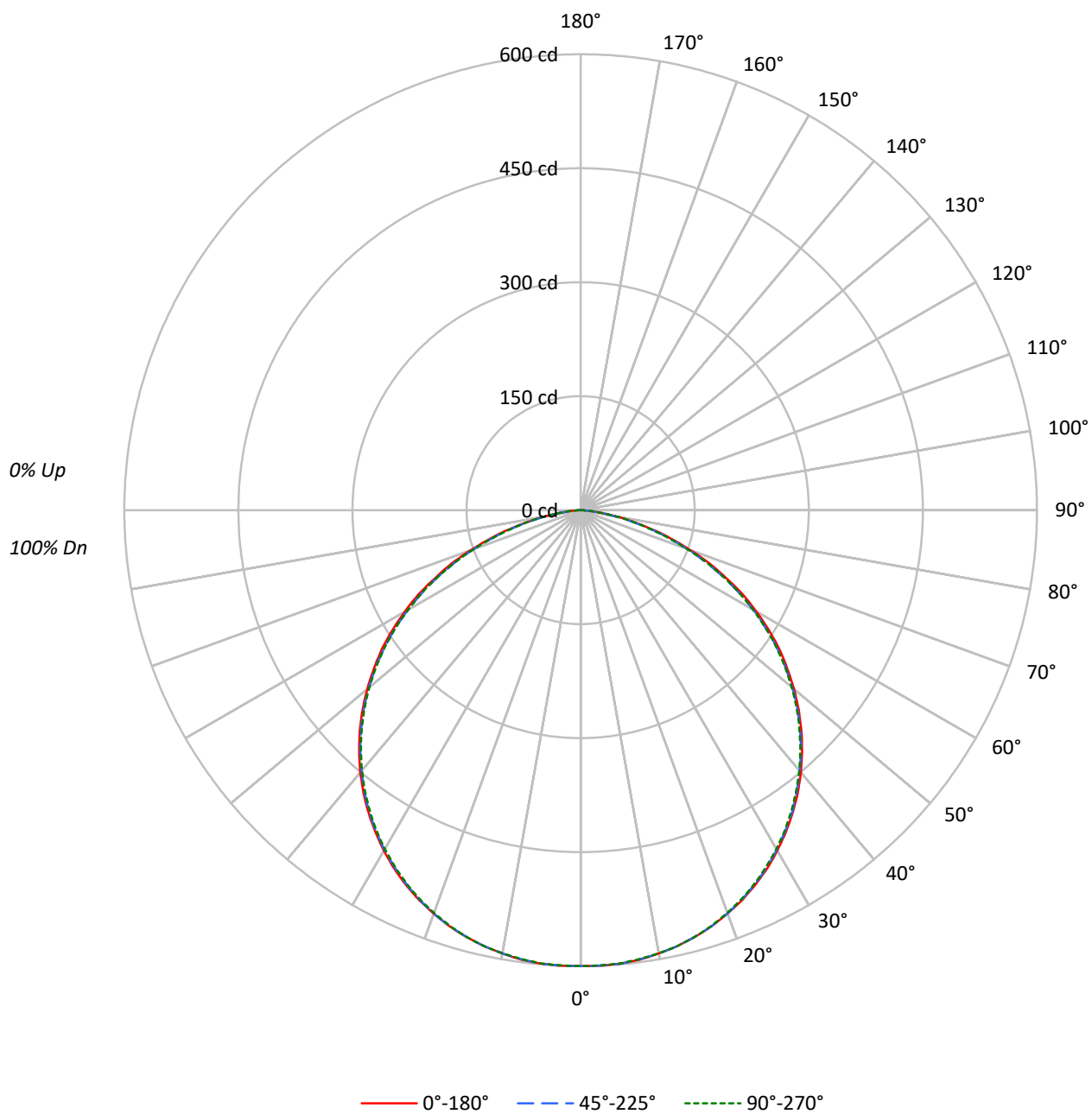
Lumens per Lamp: N/A
Luminaire Lumens: 1696.0 lumens
Efficiency: N/A
Efficacy: 113.8 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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: P974945

CATALOG NUMBER: FLR2-24-20HE-L940-CA080

Luminous Intensity Polar Plot



TEST NUMBER: P974945

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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°	807	807	807
5°	809	809	808
10°	810	809	809
15°	810	809	809
20°	809	809	807
25°	807	806	804
30°	804	802	800
35°	799	796	794
40°	791	787	785
45°	781	777	774
50°	767	761	759
55°	749	738	737
60°	717	704	704
65°	671	655	657
70°	604	585	584
75°	507	487	485
80°	370	352	367
85°	210	193	196

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 781 cd/sqm

TEST NUMBER: P974945
CATALOG NUMBER: FLR2-24-20HE-L940-CA080

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.0	3.4
10°-20°	164.1	9.7
20°-30°	250.2	14.8
30°-40°	303.1	17.9
40°-50°	314.9	18.6
50°-60°	281.7	16.6
60°-70°	205.3	12.1
70°-80°	101.7	6.0
80°-90°	18.2	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°	471.2	27.8
0°-40°	774.4	45.7
0°-60°	1370.9	80.8
0°-90°	1696.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1696.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	600	600	600	600	600	
5°	599	599	599	599	599	57
15°	581	581	581	582	581	164
25°	544	543	543	543	542	251
35°	486	486	485	484	483	304
45°	411	410	408	407	407	316
55°	319	317	315	315	314	284
65°	211	209	206	207	206	209
75°	98	96	94	95	93	104
85°	14	12	12	13	13	19
90°	0	0	0	0	0	

TEST NUMBER: P974945

CATALOG NUMBER: FLR2-24-20HE-L940-CA080

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	600.1	600.1	600.1	600.1	600.1
2.5°	600.1	599.9	599.9	600.1	599.6
5°	599.0	599.2	599.0	599.0	598.6
7.5°	596.6	596.4	596.2	596.4	595.8
10°	592.5	592.5	592.3	592.5	592.1
12.5°	587.6	587.6	587.6	587.8	587.6
15°	581.3	581.1	581.1	581.6	581.1
17.5°	574.0	573.8	573.8	573.6	573.2
20°	565.0	565.0	564.8	564.5	563.9
22.5°	555.3	555.1	554.4	554.4	553.6
25°	543.9	543.2	542.8	542.6	541.9
27.5°	531.4	530.5	529.9	529.5	528.8
30°	517.4	516.5	515.9	515.2	514.8
32.5°	502.3	501.9	500.8	500.6	499.7
35°	486.2	485.5	484.9	484.0	483.2
37.5°	469.0	468.3	466.8	466.4	465.7
40°	450.6	449.8	447.9	447.9	447.2
42.5°	431.1	430.2	428.9	428.0	427.6
45°	410.6	409.7	408.2	407.4	406.9
47.5°	388.9	388.2	386.5	385.8	385.2
50°	366.2	365.4	363.4	363.0	362.4
52.5°	342.6	342.1	339.5	339.3	338.7
55°	319.1	316.7	314.6	314.6	314.1
57.5°	293.3	291.5	288.7	288.7	288.3
60°	266.6	265.0	261.8	262.3	261.8
62.5°	240.5	237.3	234.3	235.6	234.5
65°	210.8	209.1	205.8	206.7	206.5
67.5°	183.7	180.4	177.4	179.1	178.3
70°	153.5	151.8	148.8	150.5	148.4
72.5°	125.1	123.6	120.6	122.5	120.4
75°	97.5	96.0	93.7	95.4	93.2
77.5°	71.5	70.4	68.3	70.0	70.4
80°	47.8	46.5	45.4	46.9	47.4
82.5°	28.0	27.1	26.7	26.9	28.0
85°	13.6	12.5	12.5	12.7	12.7
87.5°	3.7	3.2	3.7	3.9	4.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)