

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: P974890

Luminaire Tested: FLR2-24-20HE-L940-CP080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974890
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-CP080
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

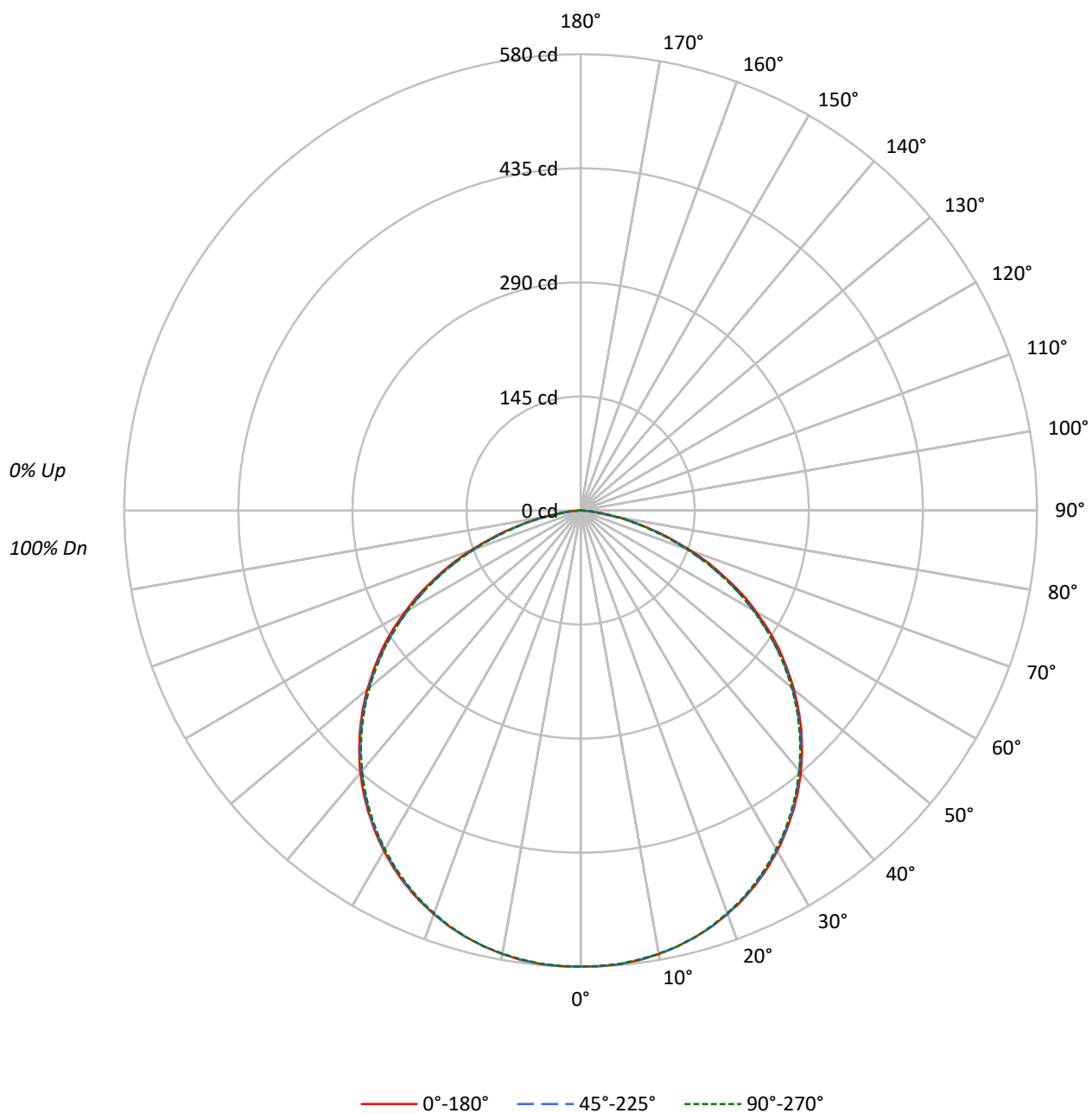
Lumens per Lamp: N/A
Luminaire Lumens: 1638.7 lumens
Efficiency: N/A
Efficacy: 110.0 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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°	780	780	780
5°	782	782	781
10°	782	782	782
15°	782	782	782
20°	782	781	780
25°	780	779	777
30°	777	774	773
35°	772	770	767
40°	765	760	759
45°	755	750	748
50°	741	735	733
55°	723	713	712
60°	693	681	681
65°	649	633	635
70°	583	566	564
75°	490	470	468
80°	358	340	355
85°	202	187	190

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 755 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.0	3.4
10°-20°	158.5	9.7
20°-30°	241.7	14.8
30°-40°	292.9	17.9
40°-50°	304.2	18.6
50°-60°	272.1	16.6
60°-70°	198.4	12.1
70°-80°	98.2	6.0
80°-90°	17.6	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°	455.3	27.8
0°-40°	748.2	45.7
0°-60°	1324.5	80.8
0°-90°	1638.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1638.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	580	580	580	580	580	
5°	579	579	579	579	578	55
15°	562	562	562	562	562	159
25°	526	525	524	524	524	242
35°	470	469	468	468	467	294
45°	397	396	394	394	393	306
55°	308	306	304	304	304	275
65°	204	202	199	200	200	202
75°	94	93	90	92	90	100
85°	13	12	12	12	12	18
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	579.8	579.8	579.8	579.8	579.8
2.5°	579.8	579.6	579.6	579.8	579.4
5°	578.8	579.0	578.8	578.8	578.3
7.5°	576.5	576.3	576.0	576.3	575.6
10°	572.5	572.5	572.3	572.5	572.1
12.5°	567.7	567.7	567.7	567.9	567.7
15°	561.7	561.5	561.5	561.9	561.5
17.5°	554.6	554.4	554.4	554.2	553.8
20°	545.9	545.9	545.7	545.5	544.8
22.5°	536.5	536.3	535.7	535.7	534.9
25°	525.5	524.9	524.5	524.2	523.6
27.5°	513.4	512.6	512.0	511.6	510.9
30°	499.9	499.1	498.5	497.8	497.4
32.5°	485.3	484.9	483.9	483.7	482.8
35°	469.7	469.1	468.5	467.7	466.8
37.5°	453.1	452.5	451.0	450.6	450.0
40°	435.4	434.6	432.7	432.7	432.1
42.5°	416.5	415.7	414.4	413.6	413.2
45°	396.7	395.9	394.4	393.6	393.2
47.5°	375.7	375.1	373.4	372.8	372.2
50°	353.9	353.0	351.2	350.7	350.1
52.5°	331.0	330.6	328.1	327.9	327.2
55°	308.3	306.0	303.9	303.9	303.5
57.5°	283.3	281.7	279.0	279.0	278.6
60°	257.5	256.1	253.0	253.4	253.0
62.5°	232.4	229.3	226.3	227.6	226.6
65°	203.7	202.0	198.9	199.7	199.5
67.5°	177.5	174.3	171.4	173.1	172.3
70°	148.3	146.7	143.8	145.4	143.3
72.5°	120.9	119.4	116.5	118.4	116.3
75°	94.2	92.8	90.5	92.2	90.1
77.5°	69.1	68.0	65.9	67.6	68.0
80°	46.2	44.9	43.9	45.4	45.8
82.5°	27.0	26.2	25.8	26.0	27.0
85°	13.1	12.1	12.1	12.3	12.3
87.5°	3.5	3.1	3.5	3.7	4.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)