

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: P974879

Luminaire Tested: FLR2-24-20HE-L840-CA125

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974879
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-L840-CA125
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

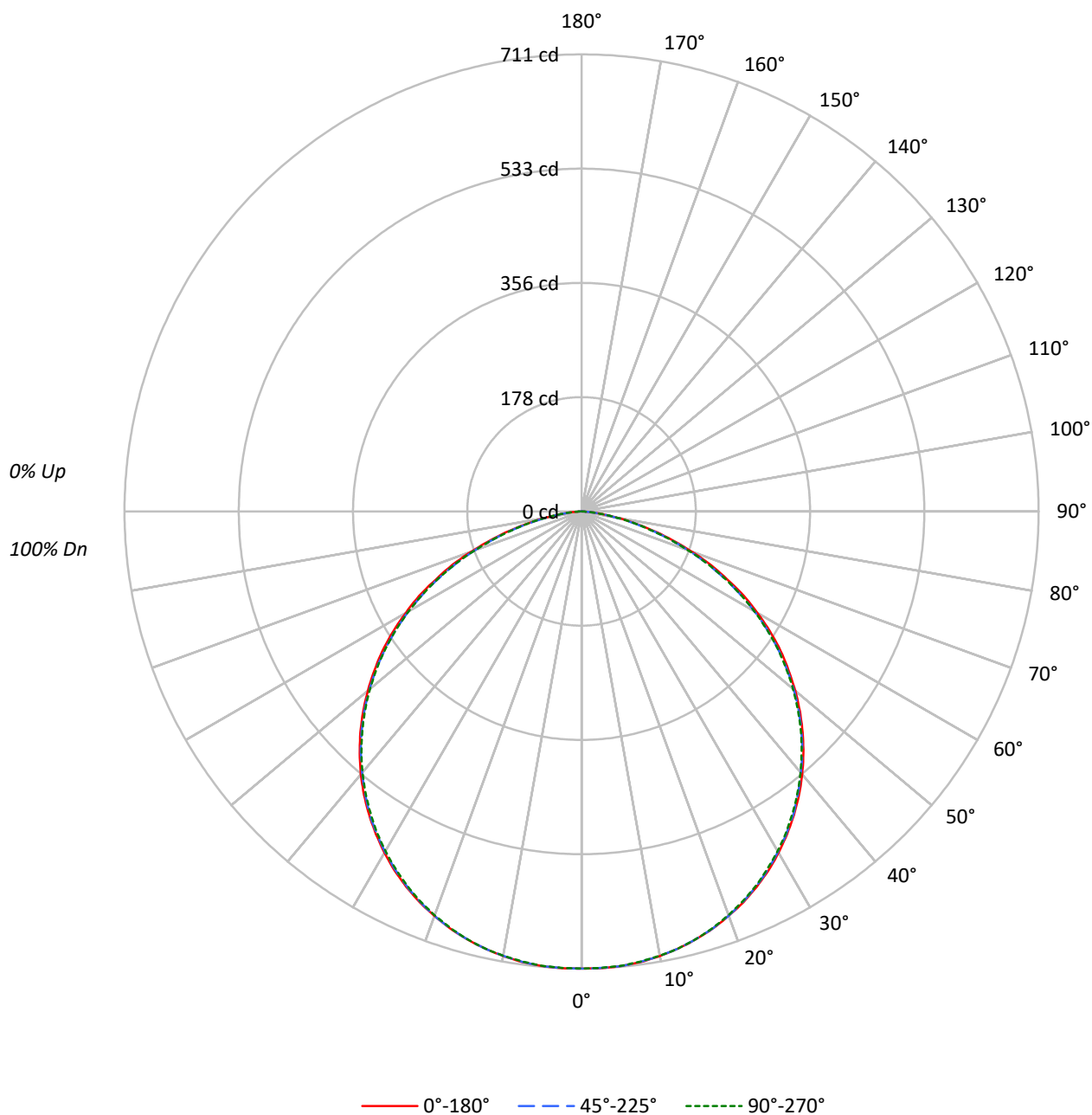
Lumens per Lamp: N/A
Luminaire Lumens: 2010.0 lumens
Efficiency: N/A
Efficacy: 134.9 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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		0
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		100
1	109	105	100	97	106	102	99	95	98	95	92		94	92	89		85
2	99	91	85	79	97	89	83	78	86	81	76		83	78	75		71
3	91	80	72	66	88	79	71	65	76	69	64		73	68	63		60
4	83	71	62	56	81	70	62	55	67	60	55		65	59	54		51
5	76	64	55	48	74	62	54	48	60	53	47		58	52	47		44
6	70	57	48	42	69	56	48	42	54	47	41		53	46	41		38
7	65	52	43	37	64	51	43	37	49	42	37		48	41	36		34
8	61	47	39	33	59	47	38	33	45	38	33		44	37	32		30
9	57	43	35	30	55	43	35	30	42	34	29		41	34	29		27
10	53	40	32	27	52	39	32	27	38	31	27		38	31	26		25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	957	957	957
5°	959	959	958
10°	960	959	959
15°	960	959	959
20°	959	958	957
25°	957	955	954
30°	953	950	948
35°	946	944	941
40°	938	932	931
45°	926	921	918
50°	909	902	899
55°	887	875	873
60°	850	835	835
65°	795	777	779
70°	716	694	692
75°	601	577	574
80°	439	417	435
85°	249	228	233

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 926 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.5	3.4
10°-20°	194.5	9.7
20°-30°	296.5	14.8
30°-40°	359.2	17.9
40°-50°	373.2	18.6
50°-60°	333.8	16.6
60°-70°	243.3	12.1
70°-80°	120.5	6.0
80°-90°	21.5	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°	558.5	27.8
0°-40°	917.8	45.7
0°-60°	1624.7	80.8
0°-90°	2010.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2010.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	711	711	711	711	711	
5°	710	710	710	710	709	68
15°	689	689	689	689	689	195
25°	645	644	643	643	642	297
35°	576	575	575	574	573	360
45°	487	486	484	483	482	375
55°	378	375	373	373	372	337
65°	250	248	244	245	245	248
75°	116	114	111	113	110	123
85°	16	15	15	15	15	22
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	711.2	711.2	711.2	711.2	711.2
2.5°	711.2	710.9	710.9	711.2	710.7
5°	709.9	710.2	709.9	709.9	709.4
7.5°	707.1	706.9	706.6	706.9	706.1
10°	702.3	702.3	702.0	702.3	701.8
12.5°	696.4	696.4	696.4	696.7	696.4
15°	689.0	688.7	688.7	689.3	688.7
17.5°	680.3	680.1	680.1	679.8	679.3
20°	669.6	669.6	669.4	669.1	668.3
22.5°	658.1	657.9	657.1	657.1	656.1
25°	644.6	643.8	643.3	643.1	642.3
27.5°	629.8	628.8	628.0	627.5	626.7
30°	613.2	612.2	611.4	610.7	610.1
32.5°	595.3	594.8	593.6	593.3	592.3
35°	576.2	575.4	574.7	573.7	572.6
37.5°	555.8	555.0	553.2	552.7	552.0
40°	534.1	533.1	530.8	530.8	530.0
42.5°	510.9	509.9	508.3	507.3	506.8
45°	486.6	485.6	483.8	482.8	482.3
47.5°	460.9	460.1	458.1	457.3	456.5
50°	434.1	433.0	430.8	430.2	429.5
52.5°	406.0	405.5	402.4	402.2	401.4
55°	378.2	375.4	372.8	372.8	372.3
57.5°	347.6	345.5	342.2	342.2	341.7
60°	315.9	314.1	310.3	310.8	310.3
62.5°	285.0	281.2	277.6	279.2	277.9
65°	249.8	247.8	244.0	245.0	244.7
67.5°	217.7	213.8	210.3	212.3	211.3
70°	181.9	179.9	176.3	178.4	175.8
72.5°	148.3	146.5	142.9	145.2	142.6
75°	115.6	113.8	111.0	113.0	110.5
77.5°	84.7	83.4	80.9	82.9	83.4
80°	56.7	55.1	53.8	55.6	56.1
82.5°	33.2	32.2	31.6	31.9	33.2
85°	16.1	14.8	14.8	15.1	15.1
87.5°	4.3	3.8	4.3	4.6	4.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)