

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: P974868

Luminaire Tested: FLR2-24-20HE-L840-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974868
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-CA080
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

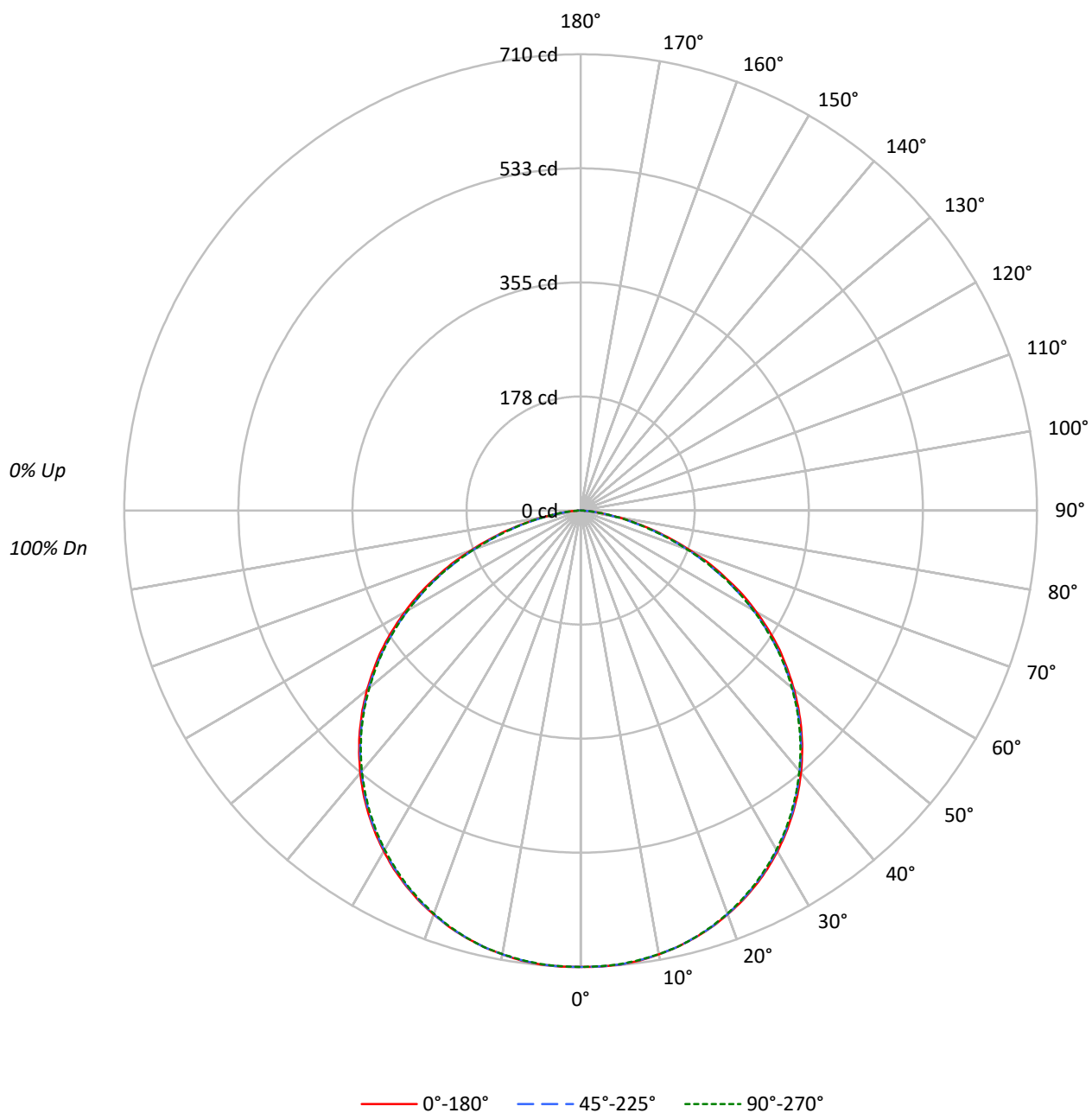
Lumens per Lamp: N/A
Luminaire Lumens: 2007.9 lumens
Efficiency: N/A
Efficacy: 134.8 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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

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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°	956	956	956
5°	958	958	957
10°	958	958	958
15°	959	958	958
20°	958	957	956
25°	956	954	953
30°	952	949	947
35°	945	943	940
40°	937	931	930
45°	925	920	917
50°	908	901	898
55°	886	874	872
60°	849	834	834
65°	795	776	778
70°	715	693	691
75°	600	577	574
80°	439	417	435
85°	249	228	232

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 925 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.4	3.4
10°-20°	194.3	9.7
20°-30°	296.2	14.8
30°-40°	358.9	17.9
40°-50°	372.8	18.6
50°-60°	333.5	16.6
60°-70°	243.0	12.1
70°-80°	120.4	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°	557.9	27.8
0°-40°	916.8	45.7
0°-60°	1623.0	80.8
0°-90°	2007.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2007.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	710	710	710	710	710	
5°	709	709	709	709	709	67
15°	688	688	688	688	688	194
25°	644	643	643	642	642	297
35°	576	575	574	573	572	360
45°	486	485	483	482	482	375
55°	378	375	372	372	372	337
65°	250	248	244	245	244	247
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°	710.4	710.4	710.4	710.4	710.4
2.5°	710.4	710.2	710.2	710.4	709.9
5°	709.2	709.4	709.2	709.2	708.7
7.5°	706.4	706.1	705.8	706.1	705.3
10°	701.5	701.5	701.3	701.5	701.0
12.5°	695.7	695.7	695.7	695.9	695.7
15°	688.3	688.0	688.0	688.5	688.0
17.5°	679.6	679.3	679.3	679.1	678.6
20°	668.9	668.9	668.6	668.4	667.6
22.5°	657.4	657.2	656.4	656.4	655.4
25°	643.9	643.1	642.6	642.4	641.6
27.5°	629.1	628.1	627.3	626.8	626.1
30°	612.5	611.5	610.8	610.0	609.5
32.5°	594.7	594.2	592.9	592.7	591.6
35°	575.6	574.8	574.1	573.0	572.0
37.5°	555.2	554.4	552.6	552.1	551.4
40°	533.5	532.5	530.2	530.2	529.4
42.5°	510.3	509.3	507.8	506.8	506.3
45°	486.1	485.1	483.3	482.3	481.8
47.5°	460.4	459.6	457.6	456.8	456.0
50°	433.6	432.6	430.3	429.8	429.0
52.5°	405.6	405.1	402.0	401.7	401.0
55°	377.8	375.0	372.4	372.4	371.9
57.5°	347.2	345.1	341.8	341.8	341.3
60°	315.6	313.8	310.0	310.5	310.0
62.5°	284.7	280.9	277.3	278.9	277.6
65°	249.6	247.5	243.7	244.7	244.5
67.5°	217.4	213.6	210.0	212.1	211.1
70°	181.8	179.7	176.1	178.2	175.6
72.5°	148.1	146.3	142.7	145.0	142.5
75°	115.5	113.7	110.9	112.9	110.4
77.5°	84.6	83.4	80.8	82.8	83.4
80°	56.6	55.1	53.8	55.6	56.1
82.5°	33.1	32.1	31.6	31.9	33.1
85°	16.1	14.8	14.8	15.0	15.0
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)