

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: P974846

Luminaire Tested: FLR2-24-20HE-L840-CP250

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974846
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-CP250
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

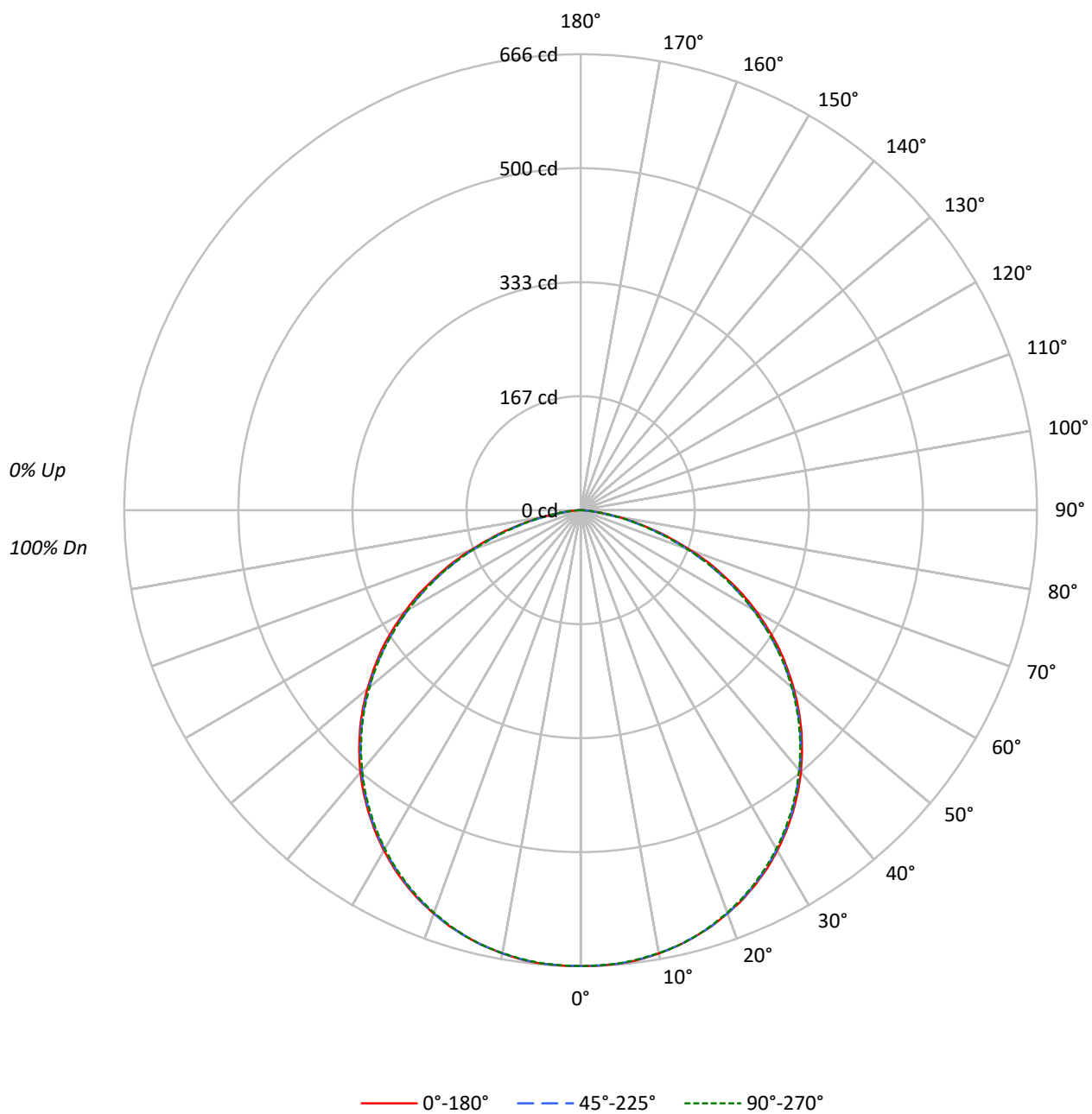
Lumens per Lamp: N/A
Luminaire Lumens: 1882.0 lumens
Efficiency: N/A
Efficacy: 126.3 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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°	896	896	896
5°	898	898	897
10°	898	898	898
15°	899	898	898
20°	898	897	896
25°	896	894	893
30°	892	889	888
35°	886	884	881
40°	878	873	872
45°	867	862	859
50°	851	844	842
55°	831	819	818
60°	796	782	782
65°	745	727	729
70°	670	649	648
75°	562	540	538
80°	411	391	408
85°	233	215	218

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 867 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.2	3.4
10°-20°	182.1	9.7
20°-30°	277.6	14.8
30°-40°	336.4	17.9
40°-50°	349.4	18.6
50°-60°	312.6	16.6
60°-70°	227.8	12.1
70°-80°	112.8	6.0
80°-90°	20.2	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°	522.9	27.8
0°-40°	859.3	45.7
0°-60°	1521.2	80.8
0°-90°	1882.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1882.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	666	666	666	666	666	
5°	665	665	665	665	664	63
15°	645	645	645	645	645	182
25°	604	603	602	602	601	278
35°	540	539	538	537	536	337
45°	456	455	453	452	452	351
55°	354	352	349	349	349	315
65°	234	232	228	229	229	232
75°	108	107	104	106	104	115
85°	15	14	14	14	14	21
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	665.9	665.9	665.9	665.9	665.9
2.5°	665.9	665.6	665.6	665.9	665.4
5°	664.7	664.9	664.7	664.7	664.2
7.5°	662.1	661.8	661.6	661.8	661.1
10°	657.5	657.5	657.3	657.5	657.0
12.5°	652.0	652.0	652.0	652.3	652.0
15°	645.1	644.9	644.9	645.3	644.9
17.5°	637.0	636.7	636.7	636.5	636.0
20°	626.9	626.9	626.7	626.5	625.7
22.5°	616.2	615.9	615.2	615.2	614.3
25°	603.5	602.8	602.3	602.1	601.4
27.5°	589.7	588.7	588.0	587.5	586.8
30°	574.1	573.2	572.5	571.7	571.3
32.5°	557.4	556.9	555.7	555.5	554.5
35°	539.5	538.8	538.1	537.1	536.1
37.5°	520.4	519.7	518.0	517.5	516.8
40°	500.1	499.1	497.0	497.0	496.2
42.5°	478.3	477.4	475.9	475.0	474.5
45°	455.6	454.7	453.0	452.0	451.6
47.5°	431.5	430.8	428.9	428.2	427.4
50°	406.4	405.5	403.3	402.8	402.1
52.5°	380.1	379.7	376.8	376.5	375.8
55°	354.1	351.5	349.1	349.1	348.6
57.5°	325.4	323.5	320.4	320.4	319.9
60°	295.8	294.1	290.5	291.0	290.5
62.5°	266.9	263.3	259.9	261.4	260.2
65°	233.9	232.0	228.4	229.4	229.1
67.5°	203.8	200.2	196.9	198.8	197.8
70°	170.4	168.4	165.1	167.0	164.6
72.5°	138.8	137.1	133.8	135.9	133.6
75°	108.2	106.6	103.9	105.8	103.5
77.5°	79.3	78.1	75.7	77.7	78.1
80°	53.0	51.6	50.4	52.1	52.6
82.5°	31.1	30.1	29.6	29.9	31.1
85°	15.1	13.9	13.9	14.1	14.1
87.5°	4.1	3.6	4.1	4.3	4.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)