

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: P973913

Luminaire Tested: FLR2-22-20HE-L840-CP375

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973913
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-2)
Test Lab: INNOVATION CENTER
Issue Date: 3/13/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: FAIL-SAFE
Catalog Number: FLR2-22-20HE-L840-CP375
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

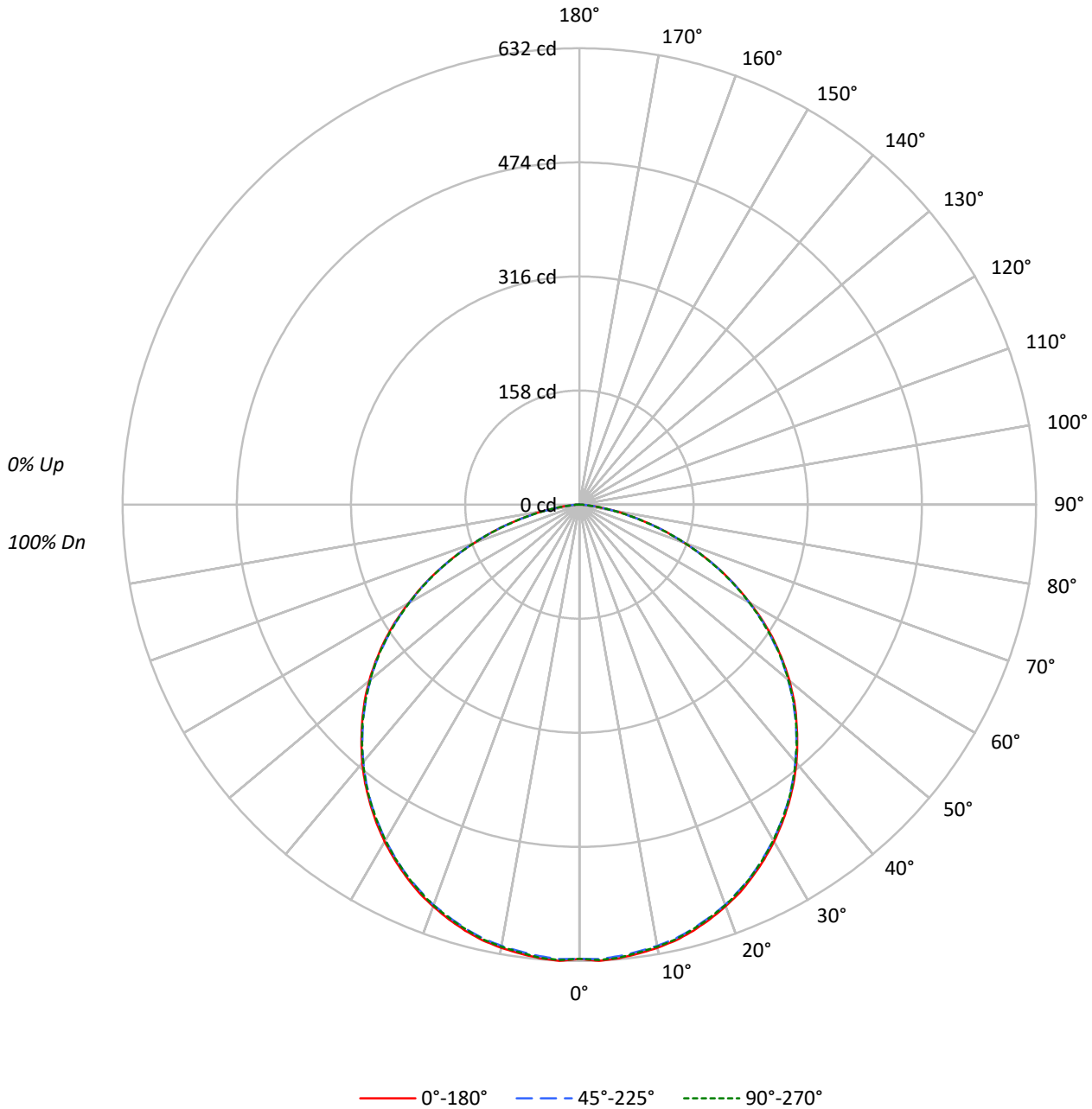
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1759.0 lumens
Efficiency: N/A
Efficacy: 118.9 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.38
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 14.8
Input Voltage (V): 120
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										
RC	80									70									50									30									10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	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	102	102	102	100						100														
1	109	105	101	97	107	102	99	95	98	95	92	94	92	89	91	89	87	85						85														
2	99	91	85	79	97	90	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	63	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51						51														
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	57	51	46	44						44														
6	71	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	39						39														
7	65	52	43	37	64	51	43	37	50	42	37	48	41	36	47	41	36	34						34														
8	61	47	39	33	59	47	39	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	40	34	29	27						27														
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	26	25						25														

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1693	1693	1693
5°	1703	1696	1701
10°	1703	1696	1699
15°	1701	1694	1696
20°	1696	1689	1691
25°	1686	1680	1681
30°	1675	1667	1668
35°	1659	1653	1654
40°	1642	1633	1635
45°	1617	1610	1613
50°	1589	1578	1581
55°	1544	1531	1536
60°	1468	1462	1462
65°	1370	1368	1363
70°	1213	1220	1216
75°	1022	1014	1005
80°	735	722	716
85°	383	383	371

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1617 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.6	3.4
10°-20°	171.3	9.7
20°-30°	260.3	14.8
30°-40°	314.6	17.9
40°-50°	326.6	18.6
50°-60°	291.9	16.6
60°-70°	212.3	12.1
70°-80°	104.4	5.9
80°-90°	18.1	1.0
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°	491.1	27.9
0°-40°	805.8	45.8
0°-60°	1424.3	81.0
0°-90°	1759.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1759.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	629	629	629	629	629	
5°	631	623	628	626	630	60
15°	611	604	608	606	609	172
25°	568	562	566	564	566	262
35°	505	502	503	504	504	316
45°	425	423	423	424	424	328
55°	329	327	326	327	328	293
65°	215	216	215	215	214	212
75°	98	99	98	98	97	104
85°	12	13	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°	629.0	629.0	629.0	629.0	629.0
2.5°	632.5	625.1	629.8	627.1	631.3
5°	630.6	623.2	627.8	625.5	629.8
7.5°	627.1	619.7	624.3	622.0	625.5
10°	623.2	615.4	620.5	618.1	621.6
12.5°	618.1	610.7	615.4	613.5	616.6
15°	610.7	603.7	608.0	606.5	608.8
17.5°	601.8	594.8	599.1	597.9	599.9
20°	592.1	585.5	589.8	588.6	590.5
22.5°	581.2	574.2	578.1	577.3	578.9
25°	568.0	561.8	565.7	564.5	566.1
27.5°	554.0	548.2	551.3	551.3	552.1
30°	538.9	533.4	536.5	536.5	536.9
32.5°	522.5	518.3	520.2	520.6	520.6
35°	505.1	501.6	503.1	503.5	503.5
37.5°	486.8	483.3	484.5	485.3	485.3
40°	467.4	464.3	465.0	465.8	465.4
42.5°	446.4	444.1	444.5	445.2	445.2
45°	425.0	423.1	423.1	423.9	423.9
47.5°	403.3	401.3	400.6	401.3	401.3
50°	379.6	377.6	376.9	377.6	377.6
52.5°	354.7	352.8	352.8	352.8	353.2
55°	329.1	327.1	326.3	327.1	327.5
57.5°	301.9	301.1	299.9	300.3	299.2
60°	272.7	272.7	271.6	272.3	271.6
62.5°	244.4	245.2	244.0	244.0	243.2
65°	215.2	216.0	214.8	214.8	214.1
67.5°	185.3	186.5	184.9	184.9	184.2
70°	154.2	156.6	155.0	155.4	154.6
72.5°	126.3	127.4	125.9	125.9	125.1
75°	98.3	99.1	97.5	97.9	96.7
77.5°	70.7	71.9	70.3	70.7	70.3
80°	47.4	47.8	46.6	47.0	46.2
82.5°	27.6	28.0	27.6	27.2	26.8
85°	12.4	12.8	12.4	12.4	12.0
87.5°	3.1	3.1	3.1	3.1	3.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)