

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: P973902

Luminaire Tested: FLR2-22-25HE-L840-CP187

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973902
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: FLR2-22-25HE-L840-CP187
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

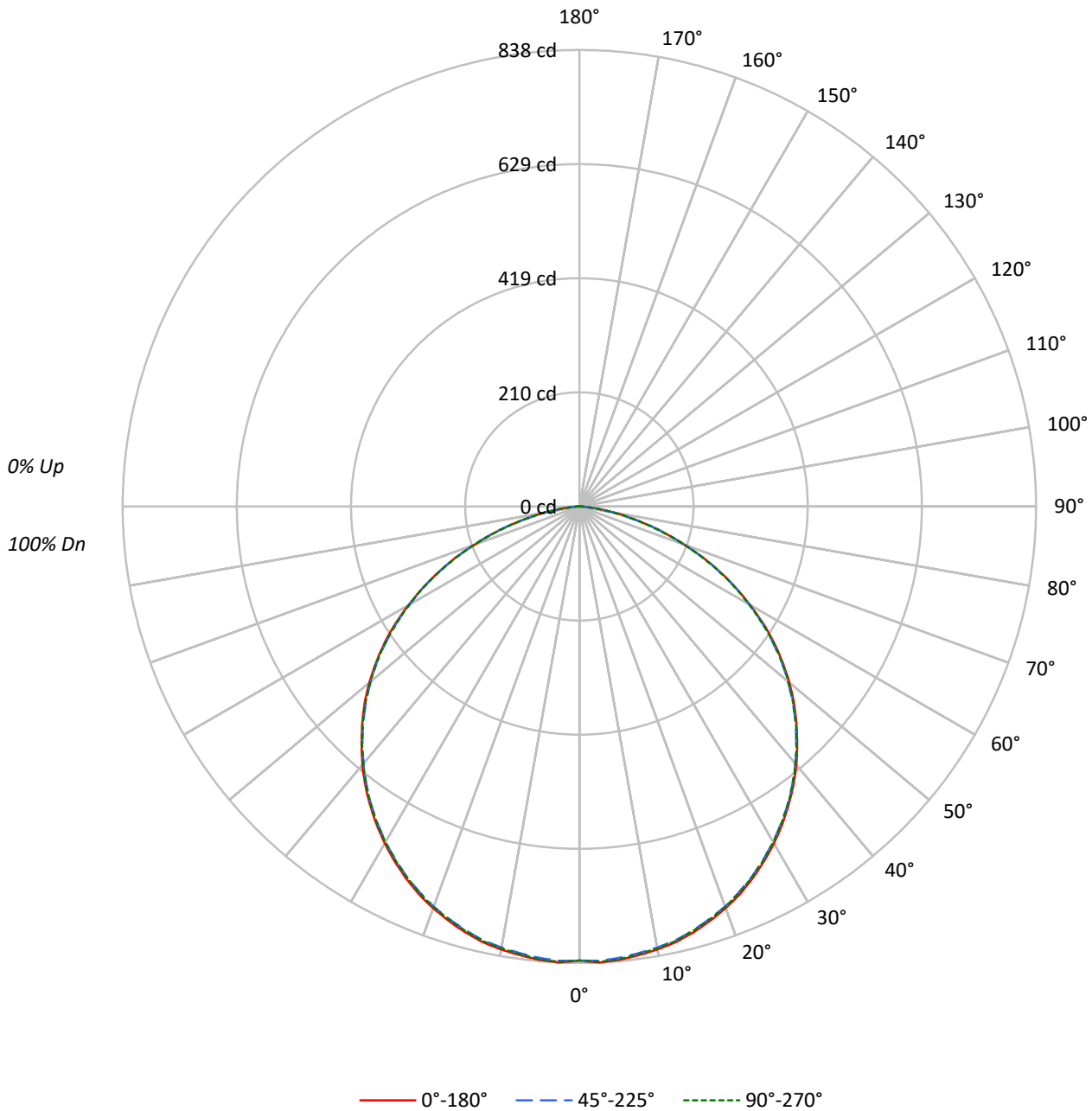
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2331.2 lumens
Efficiency: N/A
Efficacy: 121.4 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): 19.2
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°	2243	2243	2243
5°	2257	2248	2254
10°	2257	2247	2251
15°	2255	2245	2248
20°	2247	2238	2241
25°	2235	2226	2227
30°	2219	2210	2211
35°	2199	2190	2192
40°	2176	2165	2167
45°	2144	2134	2138
50°	2106	2091	2095
55°	2046	2029	2037
60°	1946	1937	1937
65°	1817	1813	1806
70°	1608	1616	1612
75°	1355	1343	1333
80°	973	958	950
85°	509	509	494

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2144 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.9	3.4
10°-20°	227.0	9.7
20°-30°	345.0	14.8
30°-40°	417.0	17.9
40°-50°	432.8	18.6
50°-60°	386.9	16.6
60°-70°	281.3	12.1
70°-80°	138.3	5.9
80°-90°	24.0	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°	650.9	27.9
0°-40°	1067.9	45.8
0°-60°	1887.6	81.0
0°-90°	2331.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2331.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	834	834	834	834	834	
5°	836	826	832	829	835	79
15°	809	800	806	804	807	228
25°	753	744	750	748	750	347
35°	669	665	667	667	667	419
45°	563	561	561	562	562	435
55°	436	434	432	434	434	389
65°	285	286	285	285	284	281
75°	130	131	129	130	128	138
85°	16	17	16	16	16	24
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	833.6	833.6	833.6	833.6	833.6
2.5°	838.3	828.5	834.6	831.0	836.7
5°	835.7	825.9	832.1	829.0	834.6
7.5°	831.0	821.3	827.4	824.3	829.0
10°	825.9	815.6	822.3	819.2	823.8
12.5°	819.2	809.4	815.6	813.0	817.1
15°	809.4	800.1	805.8	803.8	806.8
17.5°	797.6	788.3	794.0	792.4	795.0
20°	784.7	775.9	781.6	780.1	782.6
22.5°	770.3	761.0	766.2	765.1	767.2
25°	752.8	744.5	749.7	748.1	750.2
27.5°	734.2	726.5	730.6	730.6	731.7
30°	714.2	707.0	711.1	711.1	711.6
32.5°	692.5	686.9	689.4	690.0	690.0
35°	669.4	664.7	666.8	667.3	667.3
37.5°	645.2	640.5	642.1	643.1	643.1
40°	619.4	615.3	616.3	617.4	616.8
42.5°	591.6	588.5	589.0	590.1	590.1
45°	563.3	560.7	560.7	561.8	561.8
47.5°	534.5	531.9	530.9	531.9	531.9
50°	503.1	500.5	499.4	500.5	500.5
52.5°	470.1	467.5	467.5	467.5	468.0
55°	436.1	433.5	432.5	433.5	434.1
57.5°	400.1	399.0	397.5	398.0	396.5
60°	361.5	361.5	359.9	360.9	359.9
62.5°	323.9	324.9	323.4	323.4	322.3
65°	285.3	286.3	284.7	284.7	283.7
67.5°	245.6	247.1	245.1	245.1	244.1
70°	204.4	207.5	205.4	206.0	204.9
72.5°	167.3	168.9	166.8	166.8	165.8
75°	130.3	131.3	129.2	129.8	128.2
77.5°	93.7	95.3	93.2	93.7	93.2
80°	62.8	63.3	61.8	62.3	61.3
82.5°	36.6	37.1	36.6	36.0	35.5
85°	16.5	17.0	16.5	16.5	16.0
87.5°	4.1	4.1	4.1	4.1	4.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)