

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: P688385

Luminaire Tested: FLR-HA-22-L3C3 (LOW)-50-CA125

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688385
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2303-938-2)
Test Lab: INNOVATION CENTER
Issue Date: 5/22/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: FAIL-SAFE
Catalog Number: FLR-HA-22-L3C3 (LOW)-50-CA125
Description: Fail-Safe - FLR Fully Luminous Recessed 2X2 5000K Luminaire at Low Lumen setting for High Abuse
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

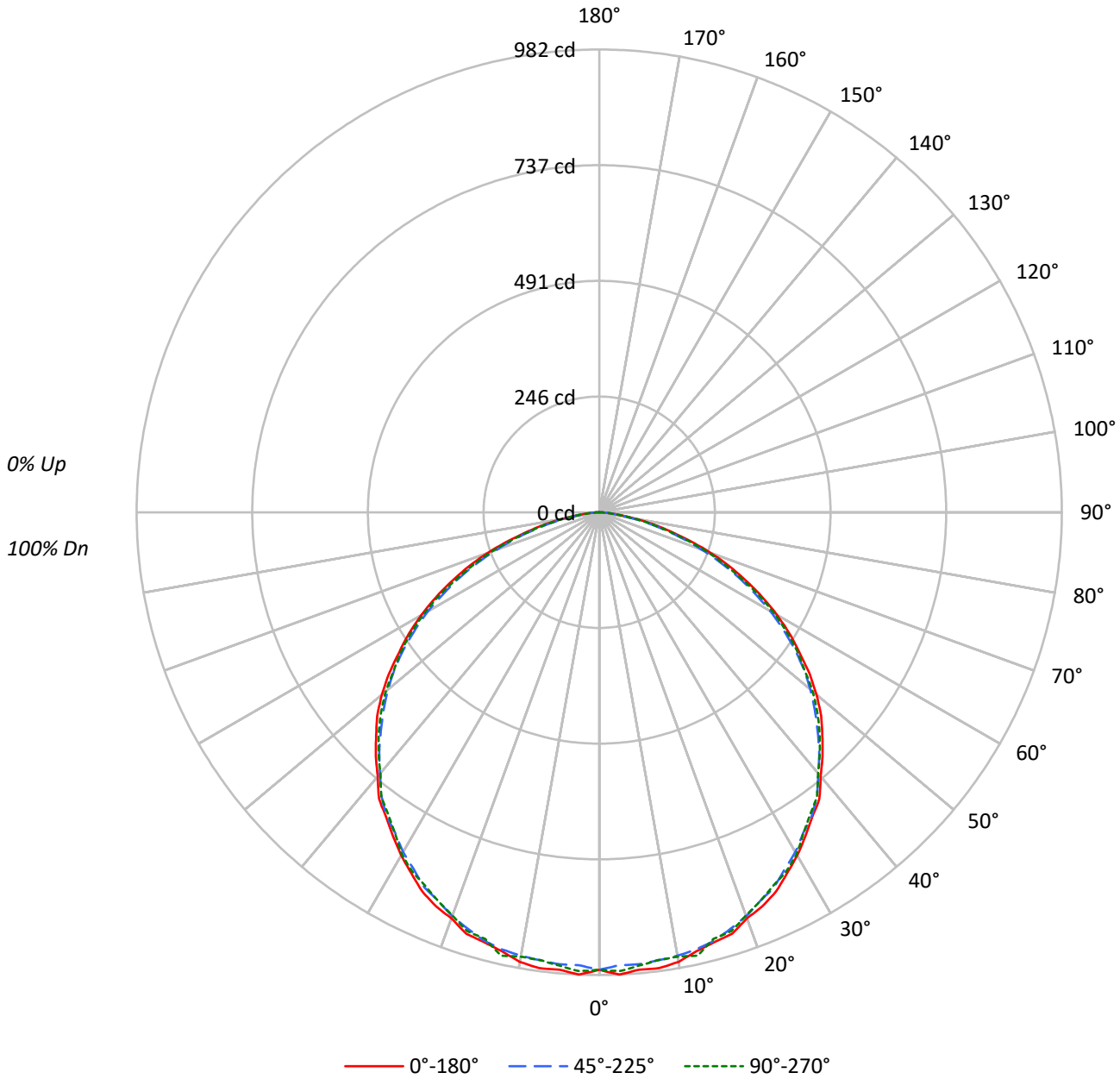
Lumens per Lamp: N/A
Luminaire Lumens: 2727.4 lumens
Efficiency: N/A
Efficacy: 124.5 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.38
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 21.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
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				10	0
RW	70	50	30	10	70	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
1	109	105	101	97	107	102	99	95	98	95	92	94	92	90	91	89	87	85
2	100	91	85	79	97	90	83	78	86	81	76	83	79	75	80	76	73	71
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	71	66	62	60
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53	51
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	44
6	71	57	48	42	69	56	48	42	55	47	41	53	46	41	51	45	41	39
7	65	52	43	37	64	51	43	37	50	42	37	48	41	36	47	41	36	34
8	61	47	39	33	59	47	39	33	45	38	33	44	37	33	43	37	32	30
9	57	43	35	30	55	43	35	30	42	35	29	41	34	29	40	34	29	27
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	26	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2612	2612	2612
5°	2632	2601	2609
10°	2647	2611	2617
15°	2631	2623	2610
20°	2626	2612	2608
25°	2637	2608	2596
30°	2612	2587	2604
35°	2591	2584	2567
40°	2569	2542	2538
45°	2549	2495	2517
50°	2521	2449	2476
55°	2432	2377	2405
60°	2345	2256	2306
65°	2192	2070	2120
70°	1980	1818	1899
75°	1619	1482	1533
80°	1161	1040	1085
85°	636	543	559

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2549 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.0	3.4
10°-20°	265.3	9.7
20°-30°	403.7	14.8
30°-40°	489.5	17.9
40°-50°	509.0	18.7
50°-60°	454.9	16.7
60°-70°	327.9	12.0
70°-80°	158.0	5.8
80°-90°	27.0	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°	761.0	27.9
0°-40°	1250.6	45.9
0°-60°	2214.4	81.2
0°-90°	2727.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2727.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	971	971	971	971	971	
5°	974	966	963	968	966	93
15°	944	938	941	936	937	267
25°	888	874	878	874	874	408
35°	789	780	787	782	781	495
45°	670	661	656	658	661	517
55°	518	512	507	505	513	465
65°	344	336	325	328	333	341
75°	156	151	142	144	147	168
85°	21	19	18	18	18	29
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	970.8	970.8	970.8	970.8	970.8
2.5°	982.0	974.2	962.0	967.8	974.7
5°	974.2	965.9	962.9	967.8	965.9
7.5°	975.7	962.9	959.0	964.4	958.5
10°	968.8	957.6	955.6	958.0	957.6
12.5°	954.1	951.7	950.2	946.3	963.4
15°	944.3	937.5	941.4	935.5	937.0
17.5°	938.0	921.8	926.7	925.7	932.1
20°	916.9	913.0	912.0	909.1	910.6
22.5°	905.2	895.9	892.9	892.0	892.9
25°	888.0	874.3	878.2	873.8	874.3
27.5°	863.6	848.4	853.3	852.8	859.6
30°	840.6	829.3	832.7	829.8	838.1
32.5°	814.6	804.8	806.3	805.8	806.8
35°	788.7	779.8	786.7	781.8	781.3
37.5°	767.6	750.0	759.3	753.9	759.8
40°	731.4	724.5	723.6	720.1	722.6
42.5°	701.5	692.7	691.2	693.2	693.2
45°	669.7	660.9	655.5	658.4	661.4
47.5°	638.9	627.6	620.7	622.2	628.1
50°	602.1	587.5	585.0	587.0	591.4
52.5°	562.5	550.7	547.3	546.8	548.8
55°	518.4	511.6	506.7	505.2	512.6
57.5°	478.8	468.5	462.6	465.1	471.9
60°	435.7	424.4	419.1	421.0	428.4
62.5°	390.7	379.4	371.1	375.0	383.3
65°	344.2	335.8	325.1	327.5	332.9
67.5°	299.1	289.8	278.6	280.0	285.9
70°	251.6	241.8	231.1	233.5	241.3
72.5°	201.7	195.3	185.5	186.5	193.4
75°	155.7	151.3	142.5	143.9	147.4
77.5°	115.5	109.7	102.8	104.3	108.7
80°	74.9	72.9	67.1	68.0	70.0
82.5°	42.6	42.6	40.1	39.2	41.6
85°	20.6	19.1	17.6	18.1	18.1
87.5°	4.9	5.4	4.9	4.4	4.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)