

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: P688017

Luminaire Tested: FLR-HA-22-35-35-CP375

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688017
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2207-724-15)
Test Lab: INNOVATION CENTER
Issue Date: 5/22/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: FAIL-SAFE
Catalog Number: FLR-HA-22-35-35-CP375
Description: Fail-Safe - FLR Fully Luminous Recessed 2X2 3500K Luminaire for High Abuse
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

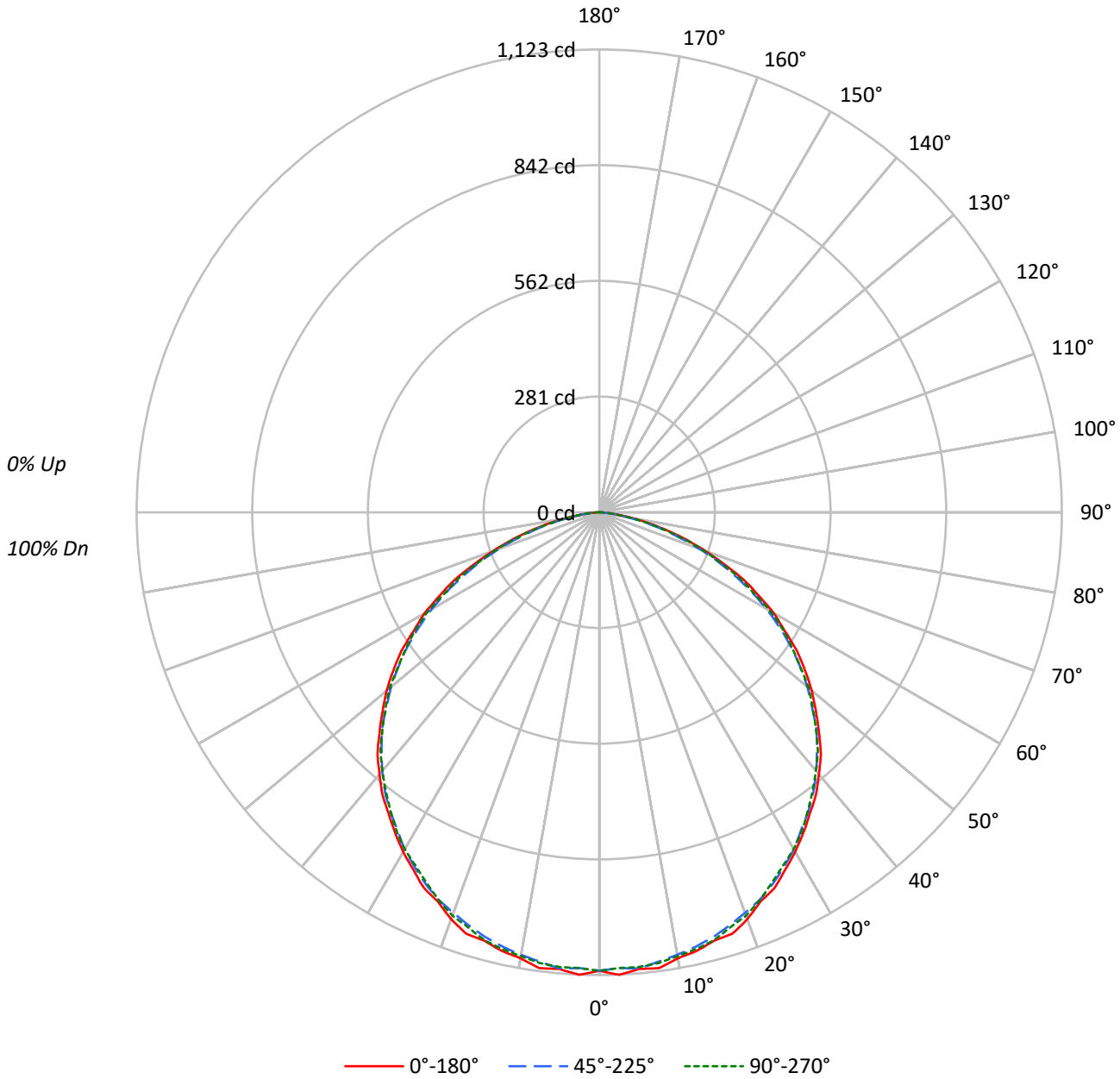
Lumens per Lamp: N/A
Luminaire Lumens: 3066.2 lumens
Efficiency: N/A
Efficacy: 97.6 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.26 / 1.38
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 31.4
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	103	99	96	98	95	93	94	92	90	91	89	87	85
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	76	73	71
3	91	81	73	66	88	79	72	66	76	70	65	73	68	63	71	66	62	60
4	83	72	63	56	81	70	62	56	68	61	55	65	59	54	63	58	54	51
5	77	64	55	48	75	63	54	48	61	53	48	59	52	47	57	51	47	45
6	71	58	49	42	69	57	48	42	55	47	42	53	46	41	52	46	41	39
7	66	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34
8	61	48	39	33	59	47	39	33	46	38	33	44	38	33	43	37	33	31
9	57	44	35	30	56	43	35	30	42	35	30	41	34	30	40	34	29	28
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2994	2994	2994
5°	3005	3002	2992
10°	3003	2980	2988
15°	2999	2973	2996
20°	3009	2962	2983
25°	2988	2957	2945
30°	2957	2936	2934
35°	2930	2908	2902
40°	2914	2878	2876
45°	2869	2839	2830
50°	2820	2761	2779
55°	2748	2665	2680
60°	2631	2523	2582
65°	2465	2306	2379
70°	2158	2019	2096
75°	1787	1609	1699
80°	1266	1133	1181
85°	639	565	602

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2869 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.3	3.4
10°-20°	302.2	9.9
20°-30°	458.9	15.0
30°-40°	553.8	18.1
40°-50°	574.2	18.7
50°-60°	508.6	16.6
60°-70°	363.1	11.8
70°-80°	172.0	5.6
80°-90°	28.2	0.9
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°	866.4	28.3
0°-40°	1420.2	46.3
0°-60°	2503.0	81.6
0°-90°	3066.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3066.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1112	1112	1112	1112	1112	
5°	1112	1107	1111	1103	1108	106
15°	1076	1070	1067	1073	1075	305
25°	1006	990	996	997	992	463
35°	892	883	885	881	883	559
45°	754	743	746	744	744	582
55°	586	569	568	566	571	521
65°	387	362	362	364	374	378
75°	172	158	155	158	163	183
85°	21	19	18	18	20	31
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1112.5	1112.5	1112.5	1112.5	1112.5
2.5°	1123.4	1103.9	1107.0	1109.4	1107.0
5°	1112.5	1107.0	1111.2	1103.3	1107.6
7.5°	1115.5	1102.1	1100.3	1097.8	1103.3
10°	1099.0	1091.1	1090.5	1094.8	1093.6
12.5°	1090.5	1083.8	1080.1	1080.8	1085.6
15°	1076.5	1070.4	1067.3	1073.4	1075.3
17.5°	1072.8	1051.5	1051.5	1052.7	1056.4
20°	1050.9	1036.9	1034.4	1036.9	1041.7
22.5°	1022.8	1018.0	1018.0	1019.8	1018.6
25°	1006.4	989.9	996.0	996.6	991.8
27.5°	977.7	971.6	970.4	968.0	966.2
30°	951.5	941.8	944.8	944.8	944.2
32.5°	922.3	915.6	912.5	913.1	916.2
35°	891.8	882.6	885.1	881.4	883.3
37.5°	864.4	852.2	854.6	852.8	851.0
40°	829.6	819.9	819.3	816.2	818.6
42.5°	796.7	782.7	782.1	782.7	785.7
45°	754.0	743.1	746.1	743.7	743.7
47.5°	713.2	705.9	700.4	701.0	703.4
50°	673.6	659.5	659.5	654.7	663.8
52.5°	629.7	615.7	613.8	615.7	614.4
55°	585.8	569.3	568.1	565.7	571.2
57.5°	532.8	516.9	518.1	519.3	527.3
60°	488.9	467.5	468.8	470.0	479.7
62.5°	434.6	416.9	416.3	418.2	420.6
65°	387.1	362.1	362.1	364.5	373.7
67.5°	326.7	311.5	310.9	313.9	317.6
70°	274.3	256.6	256.6	260.3	266.4
72.5°	221.9	207.3	204.8	210.3	214.6
75°	171.9	157.9	154.8	158.5	163.4
77.5°	123.1	114.0	111.6	115.2	116.4
80°	81.7	73.8	73.1	75.0	76.2
82.5°	46.9	42.1	40.2	42.1	42.7
85°	20.7	18.9	18.3	17.7	19.5
87.5°	4.9	4.9	4.9	4.9	5.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)