

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: P688377

Luminaire Tested: FLR-HA-22-35-35-CA125

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688377
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-22-35-35-CA125
Description: Fail-Safe - FLR Fully Luminous Recessed 2X2 3500K Luminaire for High Abuse
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

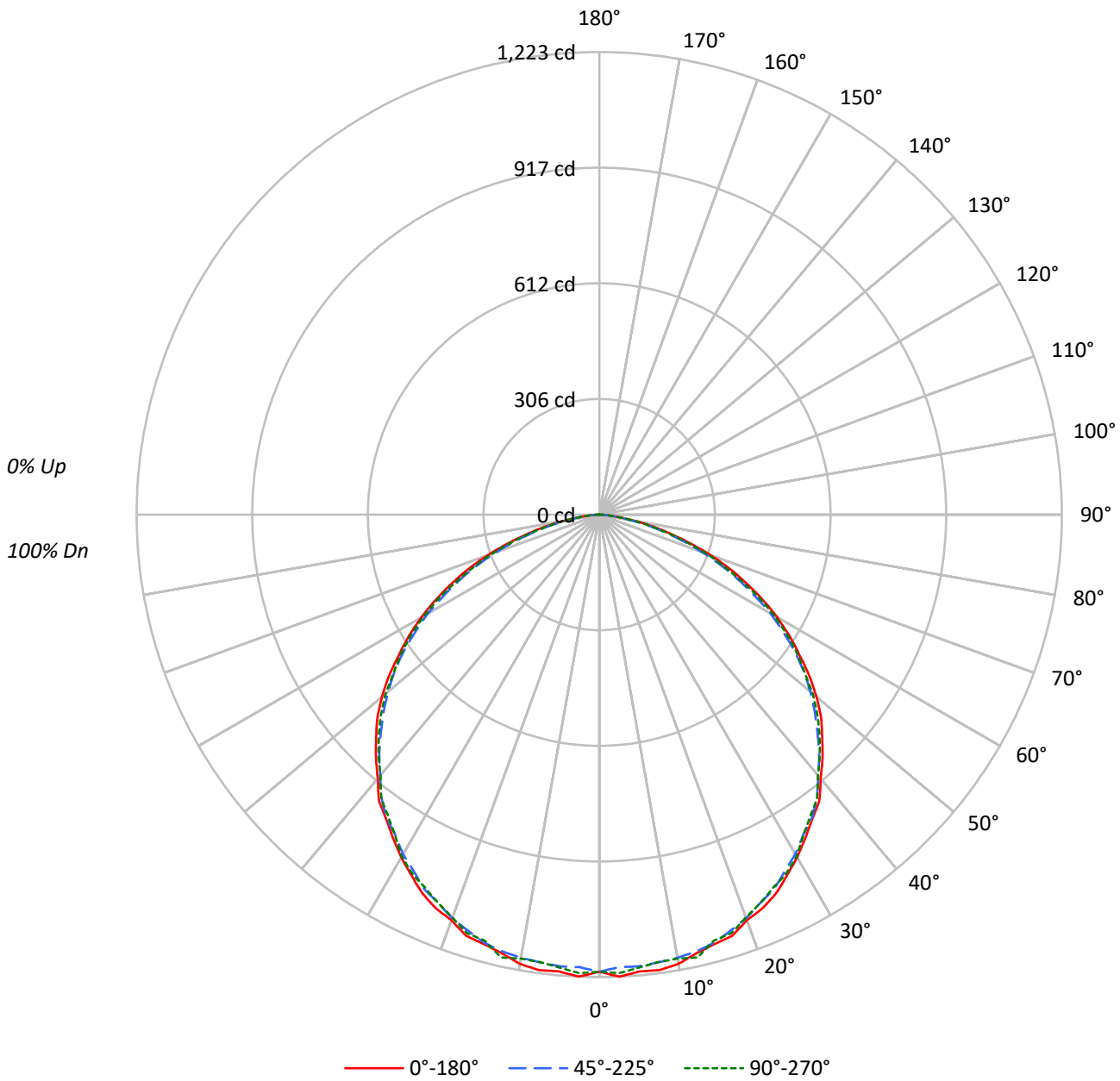
Lumens per Lamp: N/A
Luminaire Lumens: 3396.0 lumens
Efficiency: N/A
Efficacy: 108.2 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.38
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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°	3253	3253	3253
5°	3277	3239	3249
10°	3296	3251	3258
15°	3276	3266	3250
20°	3269	3252	3247
25°	3283	3247	3233
30°	3252	3222	3242
35°	3226	3218	3196
40°	3199	3165	3160
45°	3174	3106	3134
50°	3139	3049	3082
55°	3028	2960	2994
60°	2920	2808	2871
65°	2728	2577	2639
70°	2465	2264	2364
75°	2015	1844	1908
80°	1446	1294	1351
85°	790	676	698

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3174 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.6	3.4
10°-20°	330.3	9.7
20°-30°	502.7	14.8
30°-40°	609.5	17.9
40°-50°	633.7	18.7
50°-60°	566.4	16.7
60°-70°	408.3	12.0
70°-80°	196.7	5.8
80°-90°	33.7	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°	947.6	27.9
0°-40°	1557.1	45.9
0°-60°	2757.2	81.2
0°-90°	3396.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3396.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1209	1209	1209	1209	1209	
5°	1213	1203	1199	1205	1203	116
15°	1176	1167	1172	1165	1167	333
25°	1106	1089	1094	1088	1089	508
35°	982	971	980	973	973	616
45°	834	823	816	820	824	644
55°	646	637	631	629	638	579
65°	428	418	405	408	414	424
75°	194	188	177	179	184	209
85°	26	24	22	23	23	36
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1208.7	1208.7	1208.7	1208.7	1208.7
2.5°	1222.8	1213.0	1197.8	1205.1	1213.6
5°	1213.0	1202.6	1199.0	1205.1	1202.6
7.5°	1214.8	1199.0	1194.1	1200.8	1193.5
10°	1206.3	1192.3	1189.8	1192.9	1192.3
12.5°	1188.0	1185.0	1183.1	1178.3	1199.6
15°	1175.8	1167.3	1172.2	1164.8	1166.7
17.5°	1167.9	1147.8	1153.9	1152.7	1160.6
20°	1141.7	1136.8	1135.6	1131.9	1133.8
22.5°	1127.1	1115.5	1111.8	1110.6	1111.8
25°	1105.7	1088.7	1093.5	1088.0	1088.7
27.5°	1075.2	1056.3	1062.4	1061.8	1070.4
30°	1046.6	1032.6	1036.8	1033.2	1043.5
32.5°	1014.3	1002.1	1003.9	1003.3	1004.5
35°	982.0	971.0	979.5	973.4	972.8
37.5°	955.8	933.8	945.4	938.7	946.0
40°	910.7	902.1	900.9	896.6	899.7
42.5°	873.5	862.5	860.7	863.1	863.1
45°	833.9	822.9	816.2	819.8	823.5
47.5°	795.5	781.4	772.9	774.7	782.1
50°	749.7	731.5	728.4	730.8	736.3
52.5°	700.4	685.7	681.5	680.9	683.3
55°	645.5	637.0	630.9	629.1	638.2
57.5°	596.1	583.3	576.0	579.1	587.6
60°	542.5	528.5	521.8	524.2	533.4
62.5°	486.4	472.4	462.0	466.9	477.3
65°	428.5	418.2	404.7	407.8	414.5
67.5°	372.4	360.9	346.8	348.7	356.0
70°	313.3	301.1	287.7	290.8	300.5
72.5°	251.1	243.2	231.0	232.2	240.8
75°	193.8	188.4	177.4	179.2	183.5
77.5°	143.9	136.5	128.0	129.8	135.3
80°	93.3	90.8	83.5	84.7	87.2
82.5°	53.0	53.0	50.0	48.8	51.8
85°	25.6	23.8	21.9	22.6	22.6
87.5°	6.1	6.7	6.1	5.5	6.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)