

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: P688309

Luminaire Tested: FLR-HA-24-L3C3 (LOW)-40-CP125

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688309
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2207-724-12)
Test Lab: INNOVATION CENTER
Issue Date: 5/22/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: FAIL-SAFE
Catalog Number: FLR-HA-24-L3C3 (LOW)-40-CP125
Description: Fail-Safe - FLR Fully Luminous Recessed 2X4 4000K Luminaire at Low Lumen setting for High Abuse
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

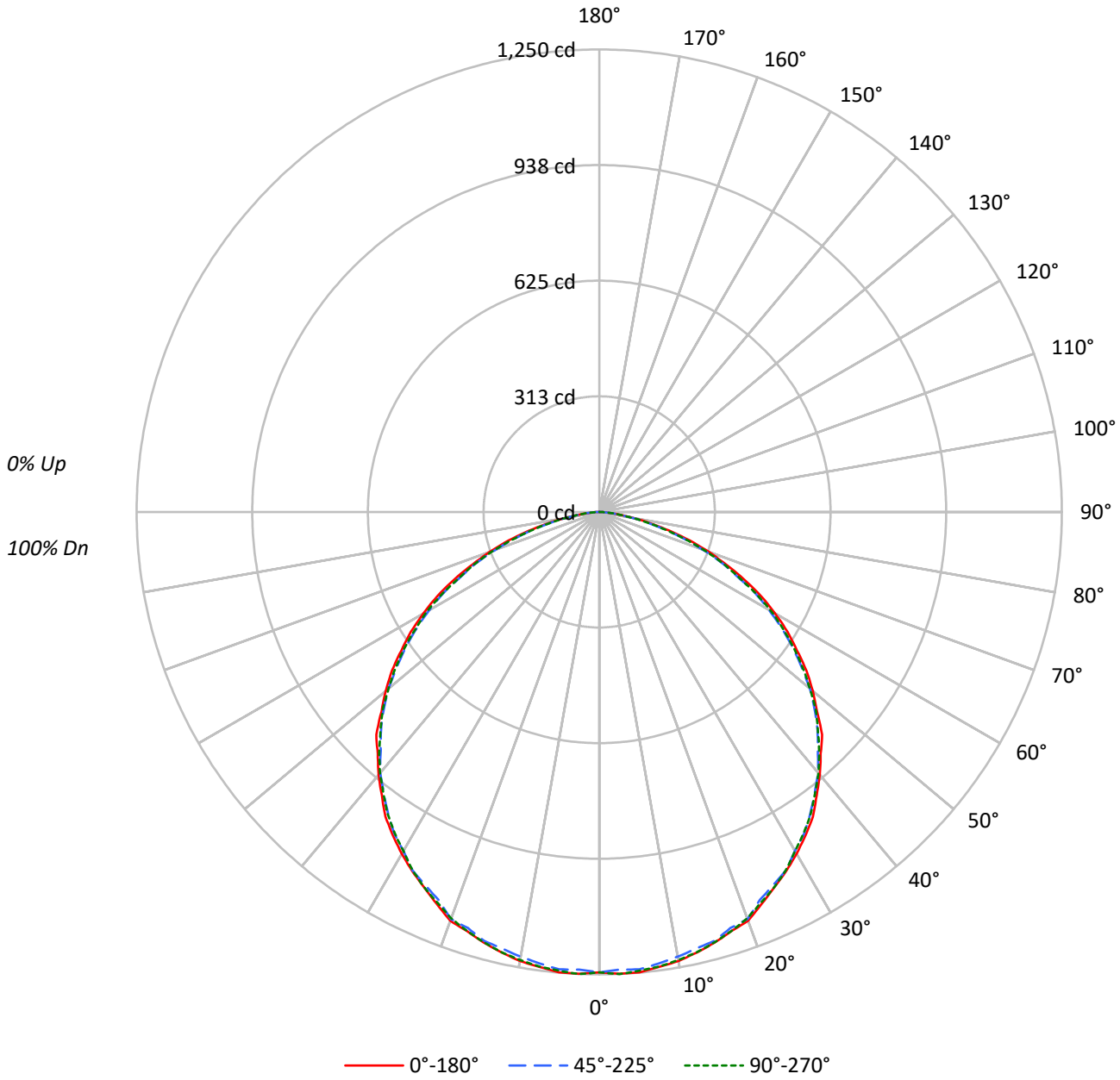
Lumens per Lamp: N/A
Luminaire Lumens: 3452.3 lumens
Efficiency: N/A
Efficacy: 127.4 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.38
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 27.1
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	95	98	95	92	94	92	90	91	89	87	85
2	100	92	85	79	97	90	84	78	86	81	77	83	79	75	80	76	73	71
3	91	81	73	66	88	79	72	66	76	70	64	73	68	63	71	66	62	60
4	83	71	63	56	81	70	62	56	68	61	55	65	59	54	63	58	54	51
5	77	64	55	48	74	63	54	48	61	53	48	59	52	47	57	51	47	44
6	71	57	49	42	69	56	48	42	55	47	42	53	46	41	51	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	45	38	33	44	38	33	43	37	33	31
9	57	44	35	30	56	43	35	30	42	35	30	41	34	29	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°	1674	1674	1674
5°	1687	1676	1682
10°	1684	1668	1680
15°	1679	1672	1678
20°	1684	1677	1674
25°	1662	1652	1662
30°	1657	1643	1644
35°	1653	1634	1637
40°	1628	1616	1618
45°	1621	1587	1589
50°	1577	1555	1555
55°	1530	1496	1506
60°	1477	1426	1445
65°	1376	1305	1317
70°	1233	1163	1181
75°	1016	954	951
80°	711	670	670
85°	384	344	344

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1621 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	118.0	3.4
10°-20°	338.7	9.8
20°-30°	514.7	14.9
30°-40°	622.6	18.0
40°-50°	644.5	18.7
50°-60°	572.6	16.6
60°-70°	411.4	11.9
70°-80°	196.7	5.7
80°-90°	33.2	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°	971.4	28.1
0°-40°	1594.0	46.2
0°-60°	2811.0	81.4
0°-90°	3452.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3452.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1244	1244	1244	1244	1244	
5°	1249	1240	1241	1242	1245	119
15°	1205	1197	1200	1198	1204	341
25°	1120	1114	1113	1117	1119	517
35°	1006	1000	995	993	997	627
45°	852	839	834	831	835	652
55°	652	646	638	634	642	584
65°	432	428	410	399	414	427
75°	195	192	184	168	183	210
85°	25	24	22	21	22	35
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1244.4	1244.4	1244.4	1244.4	1244.4
2.5°	1249.7	1240.5	1238.5	1250.3	1250.3
5°	1249.0	1240.5	1241.1	1242.5	1245.1
7.5°	1240.5	1235.9	1231.3	1235.9	1239.2
10°	1232.6	1222.1	1220.8	1222.8	1230.0
12.5°	1219.5	1207.7	1209.0	1212.3	1218.8
15°	1205.1	1197.2	1200.5	1197.9	1204.4
17.5°	1188.0	1188.0	1179.5	1177.5	1187.4
20°	1176.2	1159.8	1171.0	1161.2	1169.0
22.5°	1146.7	1137.5	1134.9	1142.8	1142.8
25°	1119.8	1113.9	1112.6	1117.2	1119.2
27.5°	1094.3	1091.0	1092.3	1091.7	1091.7
30°	1066.7	1058.2	1057.6	1057.6	1058.2
32.5°	1037.2	1031.3	1030.7	1026.7	1028.7
35°	1006.4	999.9	994.6	993.3	996.6
37.5°	965.1	957.2	956.6	957.9	957.9
40°	927.1	918.6	919.9	915.3	921.2
42.5°	885.8	878.6	874.0	872.7	879.9
45°	851.7	839.2	834.0	831.4	835.3
47.5°	797.9	794.6	789.4	784.8	794.0
50°	753.3	755.3	742.8	738.3	742.8
52.5°	706.1	697.6	689.1	681.2	694.3
55°	652.4	645.8	637.9	634.0	641.9
57.5°	603.2	596.0	584.2	575.0	588.8
60°	548.8	542.2	529.8	519.9	537.0
62.5°	493.0	485.8	474.0	458.3	476.0
65°	432.1	427.5	409.8	399.3	413.7
67.5°	370.4	367.8	357.3	339.6	360.6
70°	313.4	308.2	295.7	280.0	300.3
72.5°	257.0	247.8	238.7	223.6	240.6
75°	195.4	192.1	183.6	167.8	182.9
77.5°	141.6	138.3	132.4	120.6	132.4
80°	91.8	91.1	86.5	78.0	86.5
82.5°	52.5	52.5	49.2	45.9	49.2
85°	24.9	23.6	22.3	21.0	22.3
87.5°	6.6	6.6	6.6	6.6	7.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)