

Type/Model:	Harmony LSA
Serial No.:	
Registration:	

Input data

LOADING SCHEDULE CHART		Your Aircraft		
No.	Item	Arm (in) (1)	Weight (lb) (2)	Moment/100 (lb in) (3) = (1) x (2) / 100
1	Empty Airplane <i>See Weight and Balance Record delivered with your airplane</i>			
2	Crew	19,25		
3	Baggage Max 25 kg 55 lb	40,43		
4	Fuel Max 32 USgal Density 6 lb / USgal	24,54		

Sample Aircraft		
Arm (in) (1)	Weight (lb) (2)	Moment (lb in) (3) = (1) x (2)
5,83	802	46,7
19,25	379	73,0
40,43	55	22,3
24,54	87	21,4

TOTAL WEIGHT (lb) (7) = SUM (1+4)	TOTAL MOMENT/100 (lb in) (8) = SUM (1+4)

TOTAL WEIGHT (lb) (7) = SUM (1+4)	TOTAL MOMENT/100 (lb in) (8) = SUM (1+4)
1324	163

C.G. (in):	=	$\frac{\text{TOTAL MOMENT}}{\text{TOTAL WEIGHT}}$	=	
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=	$\frac{\text{TOTAL MOMENT}}{\text{TOTAL WEIGHT}}$	=	12,345
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C.G.' (% MAC):	=	$\frac{\text{C G (in)}}{\text{MAC}} \times 100$	=	
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=	$\frac{\text{C G (in)}}{\text{MAC}} \times 100$	=	26,4
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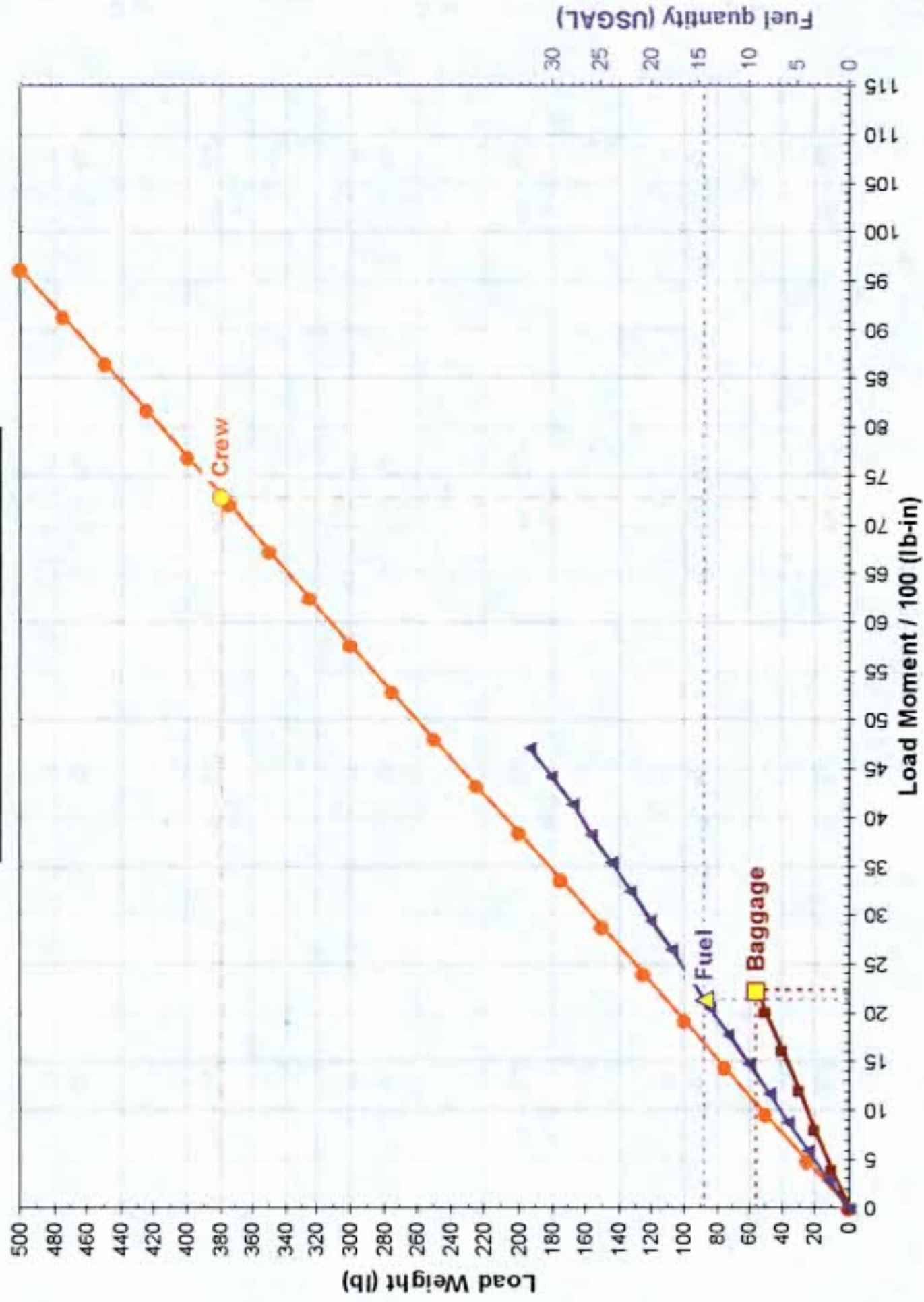
Explanation:
C G (in) Center of Gravity position from Datum origin (2.21 in behind Wing leading edge)
C G ' (%MAC) Center of Gravity position in percent of Mean Aerodynamic Chord
MAC (m) Mean Aerodynamic Chord (m) 46,6732

Limits:
1320 lb Maximum Takeoff Weight (with Vortex Generators - valid for the USA)
1268 lb Maximum Takeoff Weight (No Vortex Generators - valid for the USA)
14 ± 5 %MAC Empty Airplane C G Range
13 - 33 %MAC Operating C G range

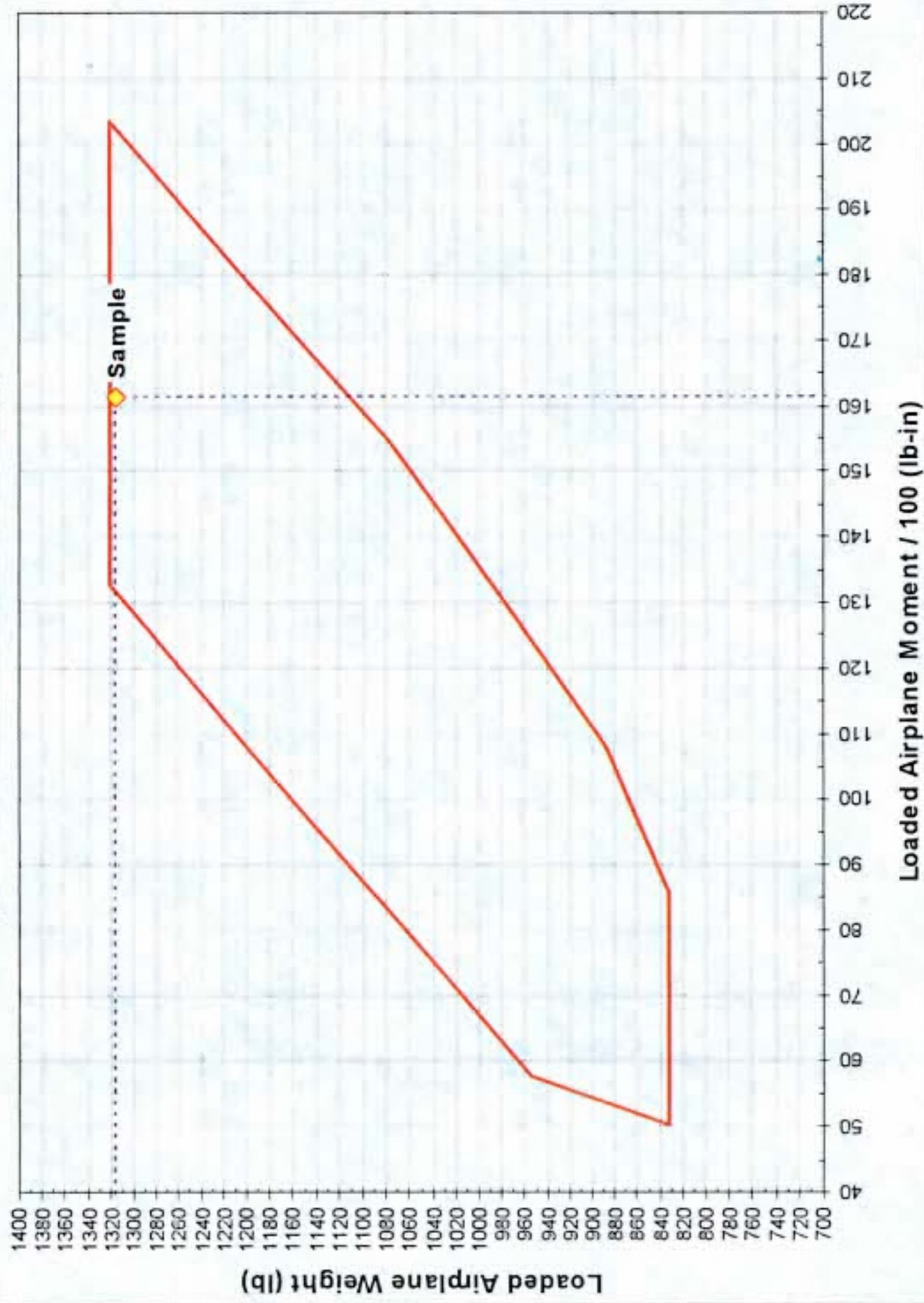
***) – for your empty airplane arm see Weight and Balance Record delivered with your airplane**

CREW		BAGGAGE		FUEL		
Weight (lb)	Moment/100 (lb-in)'	Weight (lb)	Moment/100 (lb-in)	Quantity (USGal)	Weight (lb)	Moment/100 (lb-in)
0	0,0	0	0,0	0,0	0,0	0,0
25	4,8	10	4,0	2,0	12,0	2,9
50	9,6	20	8,1	4,0	24,0	5,9
75	14,4	30	12,1	6,0	36,1	8,8
100	19,2	40	16,2	8,0	48,1	11,8
125	24,1	50	20,2	10,0	60,1	14,7
150	28,9	55	22,2	12,0	72,1	17,7
175	33,7			14,0	84,1	20,6
200	38,5			16,0	96,1	23,6
225	43,3			18,0	108,2	26,5
250	48,1			20,0	120,2	29,5
275	52,9			22,0	132,2	32,4
300	57,7			24,0	144,2	35,4
325	62,5			26,0	156,2	38,3
350	67,4			28,0	168,2	41,3
375	72,2			30,0	180,3	44,2
400	77,0			32,0	192,3	47,2
425	81,8					
450	86,6					
475	91,4					
500	96,2					

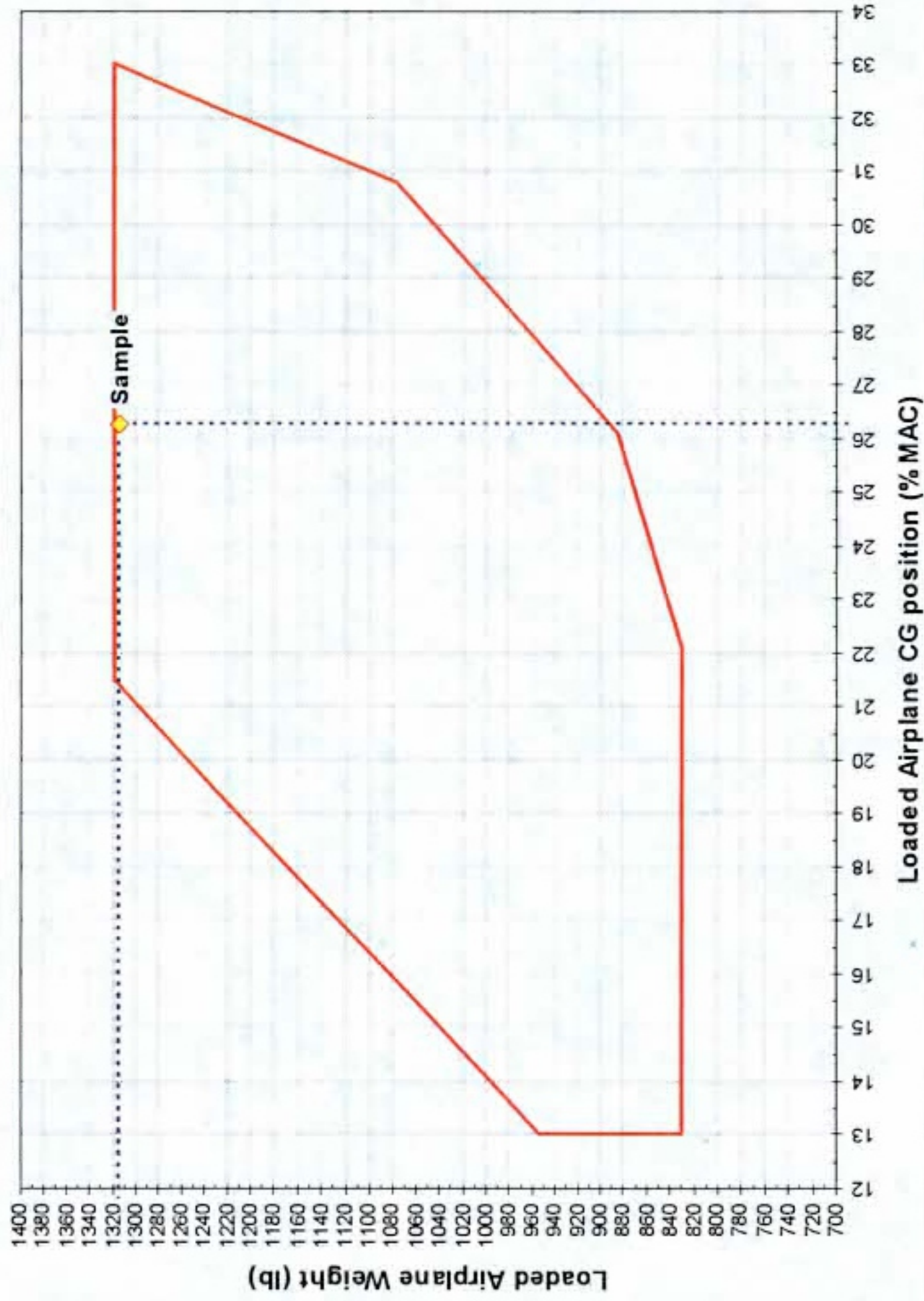
Harmony LSA Loading Graph



Harmony LSA CG Moment Envelope



Harmony LSA Operational Weight and CG Envelope



MAXIMUM WEIGHT OF CREW [lb]			Airplane S/N: 2012 1518							MTOW [lb]:1320	
Date	Empty weight [lb]	C.G. [% MAC]	FUELLING							Approved	
			Fuel volume	1	0.8	0.6	0.4	0.3	0.2	Date	Signature
			Fuel volume [US gals]	30	25	20	15	10	5		
			Fuel weight [lb]	180	150	120	90	60	30		
			55	232	262	292	322	352	382		
	853	11.84	28	259	289	319	349	379	409		
			0	287	317	347	377	407	437		
			55								
			28								
			0								
			55								
			28								
			0								
			55								
			28								
			0								

BAGGAGE [lb]